SHELLY PARK RESTROOM

CITY OF SPARKS

SPARKS, WASHOE COUNTY, NEVADA 89434

PWP# WA-2023-329
BID# 22/23-034

CITY OF SPARKS APPROVAL:

4/10/23

JON R. ERICSON, P.E., P.T.O.E. — CITY ENGINEER — DATE:

OWNER/DEVELOPER

CITY OF SPARKS
431 PRATER WAY
SPARKS, NEVADA 89431
(775) 353-2345

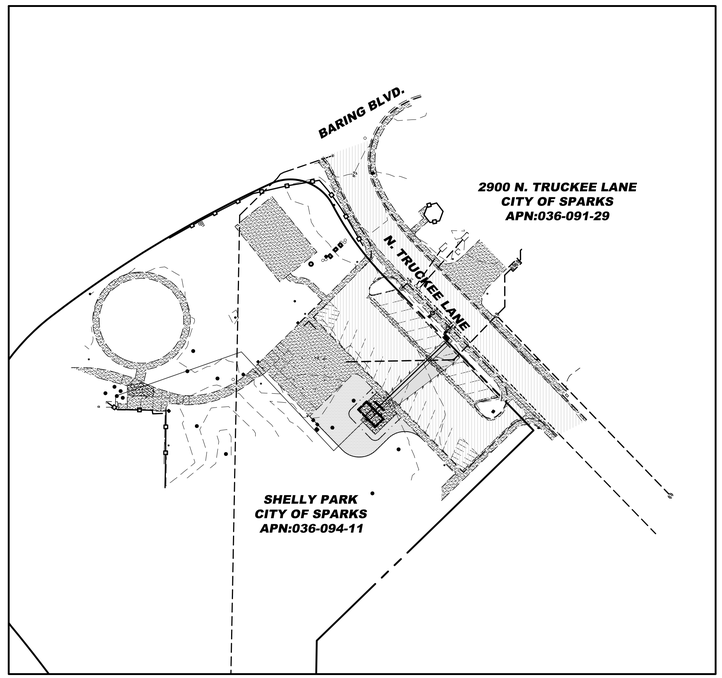
DESIGN ENGINEER

ODYSSEY ENGINEERING INC.
895 ROBERTA LANE, SUITE 104
RENO, NEVADA 89431
(775) 359-3303

LIST OF ABBREVIATIONS

A.C.	ASPHALTIC CONCRETE
B.C.	BEGIN CURVE
B.V.C.	BEGIN VERTICAL CURVE
B.S.	BACK OF SIDEWALK
C.B.	CATCH BASIN
℄	CENTERLINE
CH	CHORD
C.M.P.	CORRUGATED METAL PIPE
CONC.	CONCRETE
CONST.	CONSTRUCT
C.P.	CONCRETE PIPE
D.I.	DROP INLET
DET.	DETAILS
ELEV.	ELEVATION
E.C.	END OF CURVE
E.V.C.	END VERTICAL CURVE
EXIST.	EXISTING
E.G.	EXISTING GRADE
F.F.	FINISH FLOOR
F.F.C.	FRONT FACE CURB
F.G.	FINISH GRADE
F.H.	FIRE HYDRANT
FL	FLOW LINE
G	GAS
G.B.	GRADE BREAK
HORIZ.	HORIZONTAL
INT.	INTERSECTION
I.E.	INVERT ELEVATION
LT.	LEFT
L	LENGTH
L.F.	LINEAL FEET
M.H.	MANHOLE
P.	PAD ELEVATION
P.I.	POINT OF INTERSECTION
P.R.C.	POINT OF REVERSE CURVATURE
P.O.T.	POINT OF TANGENT
P.V.C.	POLYVINYL CHLORIDE PIPE
PL	PROPERTY LINE
(R)	RADIAL
R	RADIUS
REF.	REFERENCE
RET.	RETURN
R.C.P.	REINFORCED CONCRETE PIPE
RT.	RIGHT
R/W	RIGHT OF WAY
S.S.	SANITARY SEWER
S.W.	SIDEWALK
SHT.	SHEET
STA.	STATION
S.D.	STORM DRAIN
T	TANGENT
T.C.	TOP OF CURB
T.P.	TOP OF PAVEMENT
TYP.	TYPICAL
VERT.	VERTICAL
V.C.	VERTICAL CURVE
V.P.I.	VERTICAL POINT OF INTERSECTION
W	WATER

VICINITY MAP



CIVIL SHEET INDEX

ELECTRICAL SHEET INDEX

TMWA SHEET INDEX

CIVIL ENGINEER

odyssey ENGINEERING INCORPORATED

NOTE:

THE DEVELOPER SHALL COMPLY WITH THE CONSTRUCTION HOURS INCLUDED IN THE CITY OF SPARKS AND WASHOE COUNTY DEVELOPMENT HANDBOOK. THE DEVELOPER SHALL INSTALL SIGNS AT ALL ACCESS POINTS OF THE PROJECT THAT CLEARLY INDICATE THE HOURS OF ACTIVITY ON-SITE PRIOR TO THE START OF ANY CONSTRUCTION-RELATED ACTIVITIES TO THE APPROVAL OF THE ADMINISTRATOR. THE DEVELOPER SHALL MAINTAIN THESE SIGNS IN GOOD REPAIR FOR THE DURATION OF THE CONSTRUCTION OF THE PROJECT. ONCE CONSTRUCTION IS FINISHED, THE DEVELOPER SHALL REMOVE THESE SIGNS.

SPECIFICATIONS

ALL CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS, AND THE LATEST STANDARD DETAILS, FOR PUBLIC WORKS CONSTRUCTION (2012 EDITION AND ANY APPURTENANT SUPPLEMENTS) SPONSORED AND DISTRIBUTED BY RENO, SPARKS, AND WASHOE COUNTY.

ENGINEER'S CERTIFICATE

THESE PLANS, SHEETS 1 OF 3 THROUGH 3 OF 3, HAVE BEEN PREPARED IN ACCORDANCE WITH THE CITY COUNCIL CONDITIONS OF APPROVAL AND CITY CODE. IN THE EVENT OF CONFLICT BETWEEN ANY PORTION OF THESE PLANS AND CITY CODE, CITY STANDARDS SHALL PREVAIL.

TRAVIS C. PAGE — P.E. #28825

Know what's below. Call before you dig.

REV.	DATE	DESCRIPTION	BY	APP'D

DATE: APRIL 2023
DRAWN BY: ACAD 2023
DESIGNED BY: TCP
CHECKED BY: TCP

PERMIT PLANS

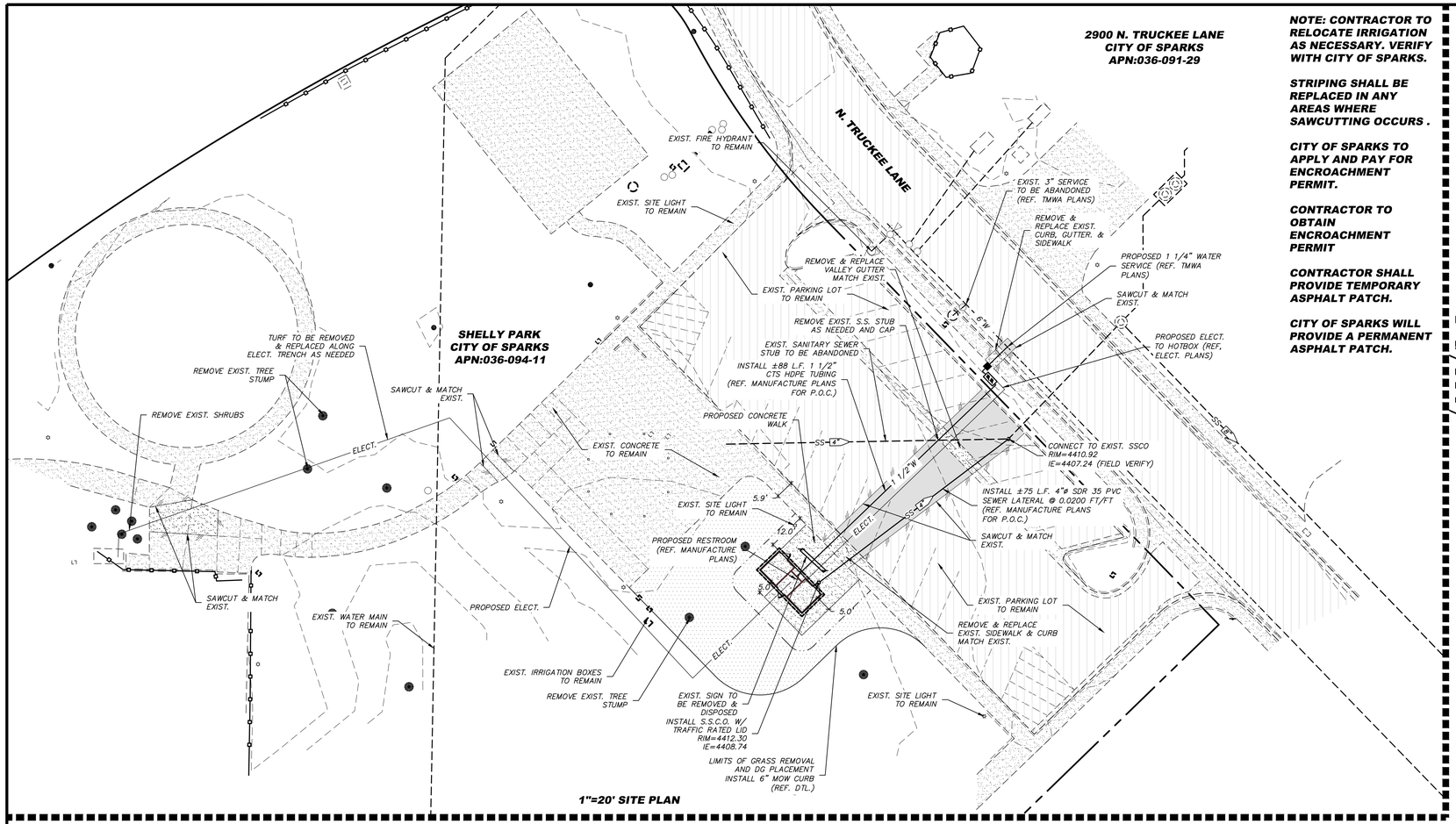
CITY OF SPARKS
SHELLY PARK RESTROOM
TITLE SHEET
WASHOE NEVADA
SPARKS

odyssey ENGINEERING INCORPORATED
895 ROBERTA LANE, SUITE 104, SPARKS, NV 89431
(775) 359-3303 FAX (775) 359-3759
ODYSSEY-RENO.COM

PROFESSIONAL ENGINEER — STATE OF NEVADA — TRAVIS C. PAGE — Exp. 12-31-23 — CIVIL — No. 28825 — 4/5/23

SCALE
HORIZ. AS SHOWN
VERT. —
JOB NO. XXXX

SHEET 1 OF 3



NOTE: CONTRACTOR TO RELOCATE IRRIGATION AS NECESSARY. VERIFY WITH CITY OF SPARKS.

STRIPING SHALL BE REPLACED IN ANY AREAS WHERE SAWCUTTING OCCURS .

CITY OF SPARKS TO APPLY AND PAY FOR ENCROACHMENT PERMIT.

CONTRACTOR TO OBTAIN ENCROACHMENT PERMIT

CONTRACTOR SHALL PROVIDE TEMPORARY ASPHALT PATCH.

CITY OF SPARKS WILL PROVIDE A PERMANENT ASPHALT PATCH.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

N

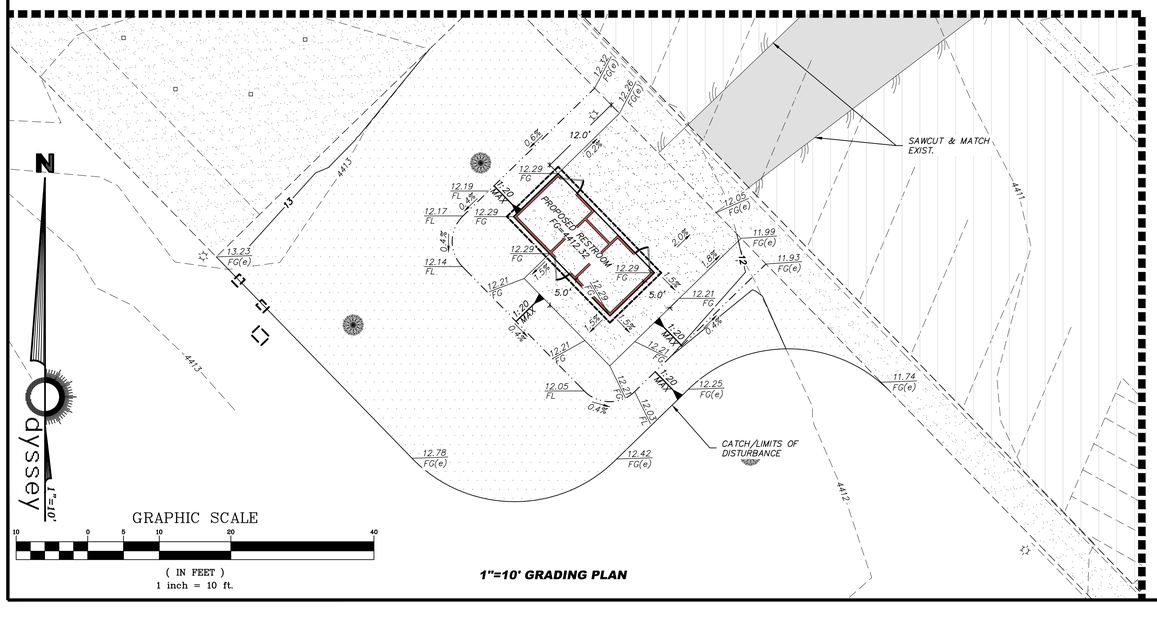
odyssey 1"=20'

GRADING NOTES:

1. ALL CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS, AND THE LATEST STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION 2016 EDITION (AND ANY APPURTENANT SUPPLEMENTS) SPONSORED AN DISTRIBUTED BY RENO, SPARKS, AND WASHOE COUNTY.
2. THE CONTRACTOR SHALL MAINTAIN A DUST CONTROL PROGRAM, INCLUDING WATERING OF OPEN AREAS. THE CONTRACTOR SHALL ALSO MAINTAIN CONFORMITY WITH SECTION 040.030 OF THE WASHOE COUNTY AIR POLLUTION REGULATIONS.
3. THE CONTRACTOR SHALL VERIFY IN FIELD, ALL ELEVATIONS, DIMENSIONS, FLOW LINES, EXISTING CONDITIONS, AND POINT OF CONNECTION WITH ADJOINING PROPERTY (PUBLIC OR PRIVATE). ANY DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CONTACT THE UTILITY COMPANIES FOR LOCATIONS OR POT-HOLING PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL DISPOSE OF ALL DEMOLITION DEBRIS PER FEDERAL, STATE AND LOCAL REGULATIONS AND ORDINANCES.
5. ALL UNDERGROUND UTILITIES SHOWN HEREON WERE TAKEN FROM SURFACE EVIDENCE AND AVAILABLE UTILITY COMPANY RECORDS. ALL UTILITIES SHOULD BE VERIFIED IN THE FIELD. ODYSSEY ENGINEERING INC. ASSUMES NO RESPONSIBILITY FOR ACCURACY OR COMPLETENESS OF SUCH RECORDS.
6. THE CONTRACTOR SHALL MAINTAIN AN ON-GOING PROCESS OF REMOVAL OF ALL SPILLAGE OF EXCAVATION MATERIAL ON ALL PAVED STREETS.
7. LAND GRADING SHALL BE DONE IN A METHOD TO PREVENT DUST FROM TRAVERSING THE PROPERTY LINE.
8. ALL REQUIRED UTILITY SHUT-DOWNS SHALL BE COORDINATED WITH APPROPRIATE UTILITY COMPANY AND OWNERS PERSONNEL.
9. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE, PERMIT AND IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN IN CONFORMANCE WITH FEDERAL, STATE AND LOCAL REQUIREMENTS. THE CONTRACTOR SHALL MAINTAIN EXISTING B.M.P. IMPROVEMENTS THAT ARE IN PLACE, AND SHALL PROVIDE AND MAINTAIN ADDITIONAL B.M.P.'S AS REQUIRED TO IMPLEMENT HIS S.W.P.P.P.
10. THE CONTRACTOR SHALL OBTAIN AND THE OWNER SHALL PAY FOR ALL NECESSARY PERMITS AND FEES REQUIRED FOR CONSTRUCTION.
11. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE SOILS ENGINEER, NEVADA ENERGY, CITY OF SPARKS, AND THE TRUCKEE MEADOWS WATER AUTHORITY 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
12. ADD 4400 FEET TO ALL TRUNCATED ELEVATIONS.
13. THE NATURAL VEGETATION AND EXISTING LANDSCAPING SHALL BE PRESERVED AS MUCH AS PRACTICAL DURING SITE IMPROVEMENTS CONSTRUCTION..
14. SLOPES STEEPER THAN 3:1 SHALL BE MECHANICALLY STABILIZED WITH RIP-RAP.
15. ANY ACCESS OR UNSUITABLE MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH THE LATEST CITY OF SPARKS REGULATIONS OR IN APPROVED AREAS.

UTILITY NOTES:

1. THE CONTRACTOR SHALL MAINTAIN A DUST CONTROL PROGRAM, INCLUDING WATERING OF OPEN AREAS. THE CONTRACTOR SHALL ALSO MAINTAIN CONFORMITY WITH SECTION 040.030 OF THE WASHOE COUNTY AIR POLLUTION REGULATIONS.
2. THE CONTRACTOR SHALL DISPOSE OF ALL DEMOLITION DEBRIS PER FEDERAL, STATE AND LOCAL REGULATIONS AND ORDINANCES.
3. NO MATERIAL OF ANY KIND SHALL BE STOCKPILED, OR CONSTRUCTION EQUIPMENT PARKED ON CONCRETE OR ASPHALT SURFACES MAINTAINED BY THE CITY OF SPARKS.
4. ALL UNDERGROUND UTILITIES SHOWN HEREON WERE TAKEN FROM SURFACE EVIDENCE AND AVAILABLE UTILITY COMPANY RECORDS. ALL UTILITIES SHOULD BE VERIFIED IN THE FIELD. ODYSSEY ENGINEERING INC. ASSUMES NO RESPONSIBILITY FOR ACCURACY OR COMPLETENESS OF SUCH RECORDS.
5. THE CONTRACTOR SHALL MAINTAIN AN ON-GOING PROCESS OF REMOVAL OF ALL SPILLAGE OF EXCAVATION MATERIAL ON ALL PAVED STREETS.
6. ALL REQUIRED UTILITY SHUT-DOWNS SHALL BE COORDINATED WITH APPROPRIATE UTILITY COMPANY AND OWNER'S PROJECT REPRESENTATIVE.
7. THE CONTRACTOR SHALL OBTAIN AND THE OWNER SHALL PAY FOR ALL NECESSARY PERMITS AND FEES REQUIRED FOR CONSTRUCTION.
8. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE SOILS ENGINEER, NEVADA ENERGY, CITY OF SPARKS, AND THE TRUCKEE MEADOWS WATER AUTHORITY 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
9. ADD 4400 FEET TO ALL TRUNCATED ELEVATIONS.
10. ALL SEWER MAINS AND LATERALS SHALL BE SDR 35 PVC.
11. REF. TRUCKEE MEADOWS WATER AUTHORITY PLANS FOR ALL WATER SYSTEM DESIGN, CONSTRUCTION, AND WATER/SS/SD SEPARATION DETAILS.
12. ANY CONFLICT WITH EXISTING UTILITIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
13. THE CONTRACTOR SHALL COORDINATE WITH NV ENERGY AND TRUCKEE MEADOWS WATER AUTHORITY PRIOR TO INSTALLATION OF ALL POWER, GAS AND WATER.
14. THE WATER SYSTEM INSTALLATION SHALL INCLUDE ALL MATERIALS AND LABOR REQUIRED TO COMPLETE THE SYSTEM IN CONFORMANCE WITH ALL PERTINENT WATER SUPPLY REGULATIONS, AND THE WATER BACKFLOW PREVENTION INSTALLATION REQUIREMENTS AND STANDARDS PROVIDED BY TRUCKEE MEADOWS WATER AUTHORITY. REFERENCE APPROVED TMWA PLANS FOR ACTUAL WATER DESIGN.
15. REFERENCE BUILDING PLANS FOR COORDINATION OF SEWER AND DOMESTIC CONNECTIONS.
16. THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, AND FIRE HYDRANTS AS PER TMWA CONSTRUCTION STANDARDS.
17. THE CONTRACTOR SHALL PROVIDE AN ELECTRIC SERVICE TO THE DOMESTIC WATER SERVICE REDUCED PRESSURE BACKFLOW PREVENTION HOT BOX.
18. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA SAFETY REQUIREMENTS.
19. THE CONTRACTOR SHALL REVIEW THE NV ENERGY GAS AND ELECTRIC PLANS DURING BIDDING TO DETERMINE ADDITIONAL TRENCH AND ASPHALT/CONCRETE PATCHING COSTS REQUIRED TO PROVIDE SERVICE WITH THIS SITE DEVELOPMENT NOT REFLECTED ON THESE PLANS.



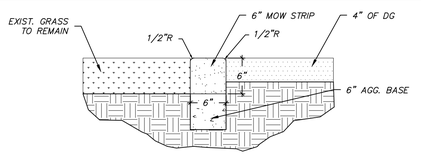
GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

LEGEND:

- EXISTING ASPHALT PAVING
- A.C. PAVING AREA (MATCH EXISTING SECTION)
- EXISTING CONCRETE
- PORTLAND CEMENT CONCRETE AREA 4" P.C.C (4000 p.s.i) W/ FIBERMESH &AND 5%-7% AIR ON 4" TYPE 2 CLASS B AGG. BASE AT 95% RELATIVE COMPACTION
- 4" OF DG
- CURB AND GUTTER (DASHED IF EXISTING)
- POST CURB (DASHED IF EXISTING)
- MANHOLE (DASHED IF EXISTING)
- TYPE 4-R CATCH BASIN (DASHED IF EXISTING)
- TYPE 3 CATCH BASIN (DASHED IF EXISTING)
- NYOPLAST YARD DRAIN (DASHED IF EXISTING)
- SITE LIGHT (DASHED IF EXISTING)
- 4396 EXISTING CONTOUR
- 96 PROPOSED CONTOUR
- (E) EXISTING
- 4396.03 EXISTING SPOT ELEVATION
- FF=96.50 ELEVATION @ FINISH FLOOR
- EXT.FG=96.00 ELEVATION @ EXTERIOR FINISH GRADE
- PAD=94.00 ELEVATION @ PAD GRADE
- IRRIGATION SLEEVE
- SD 12" STORM DRAIN (DASHED IF EXISTING)
- SS 8" SANITARY SEWER (DASHED IF EXISTING)
- SS 8" SANITARY SEWER LATERAL (DASHED IF EXISTING)
- 10"W/4"G WATER AND GAS (DASHED IF EXISTING)
- 10"W WATER (DASHED IF EXISTING)
- 4"G GAS (DASHED IF EXISTING)
- 6"RW RECLAIM IRRIGATION MAIN (DASHED IF EXISTING)
- WATER SERVICE (DASHED IF EXISTING)
- F.H. FIRE HYDRANT
- ELECT/TEL UNDERGROUND ELECTRIC/ TELEPHONE (DASHED IF EXISTING)
- ELECT UNDERGROUND ELECTRIC (DASHED IF EXISTING)
- TEL UNDERGROUND TELEPHONE (DASHED IF EXISTING)
- SITE LIGHT
- SAWCUT LINE
- GRADE BREAK
- 2.0% SLOPE IN PERCENT
- 96.43 FG ELEVATION @ FINISH GRADE
- 82.50 TC ELEVATION @ TOP OF CURB
- 96.43 GB ELEVATION @ GRADE BREAK
- 96.43 FL ELEVATION @ FLOW LINE



NOTES:

1. PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH @ 28 DAYS, MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH A MAX. WATER/CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% ±1.5%, SLUMP AT 1 TO 4 INCHES. ALL MATERIALS SHALL CONFORM TO SSPWC SECTION 202.
2. (A) ALL CONCRETE CURB/GUTTER/SIDEWALK/VALLEY GUTTER SHALL HAVE WEAKENED PLANE JOINTS EVERY 10 FEET.

   (B) EXPANSION JOINTS 1/2" WIDE SHALL BE LOCATED IN CURBS & GUTTERS @ EACH SIDE OF STRUCTURES, @ ENDS OF ALL CURB RETURNS, & ABUTTING HARDENED IN-PLACE CURB & GUTTER, EXCEPT THAT EXPANSION JOINTS SHALL NOT BE INSTALLED WITHIN 20' OF AN ISLAND NOSE. EXPANSION JOINTS SHALL BE 1/2" THICK, SHAPED TO THE CROSS SECTION OF THE CURB & GUTTER, & SHALL BE CONSTRUCTED @ RIGHT ANGLES TO THE CURB & GUTTER. JOINT FILLER MATERIAL SHALL CONFORM TO SECTION 202.10.
3. AGGREGATE BASE MATERIAL SHALL CONFORM TO THE SPECIFICATIONS FOR TYPE 2 AGGREGATE BASE AND BE COMPACTED TO MIN. 95% MAXIMUM DRY DENSITY (M.D.D.).

6" MOW STRIP

REV.	DATE	DESCRIPTION	BY	APP'D

DATE: APRIL 2023
DRAWN BY: ACAD 2023
DESIGNED BY: TCP
CHECKED BY: TCP

PERMIT PLANS

CITY OF SPARKS
SHELLY PARK RESTROOM
SITE & GRADING PLAN

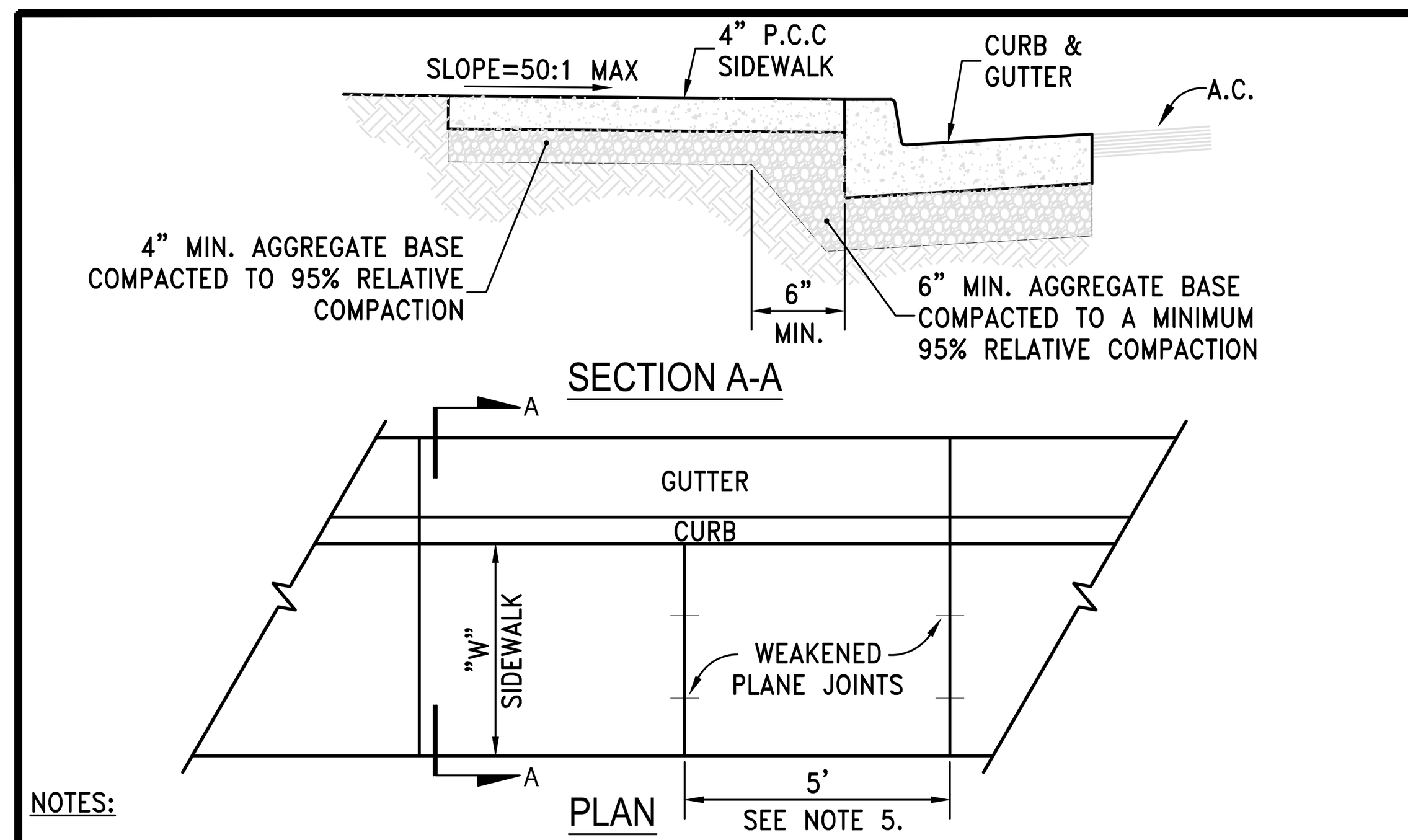
SPARKS WASHOE NEVADA

odyssey ENGINEERING INCORPORATED
895 ROBERTA LANE, SUITE 104, SPARKS, NV 89431
(775) 359-3303 FAX (775) 359-3308
ODYSSEY-RENO.COM

PROFESSIONAL ENGINEER - STATE OF NEVADA
TRAVIS C. PAGE
Exp. 12-31-23
CIVIL
No. 28825
4/3/23

SCALE
HORIZ. AS SHOWN
VERT. –
JOB NO. XXXX

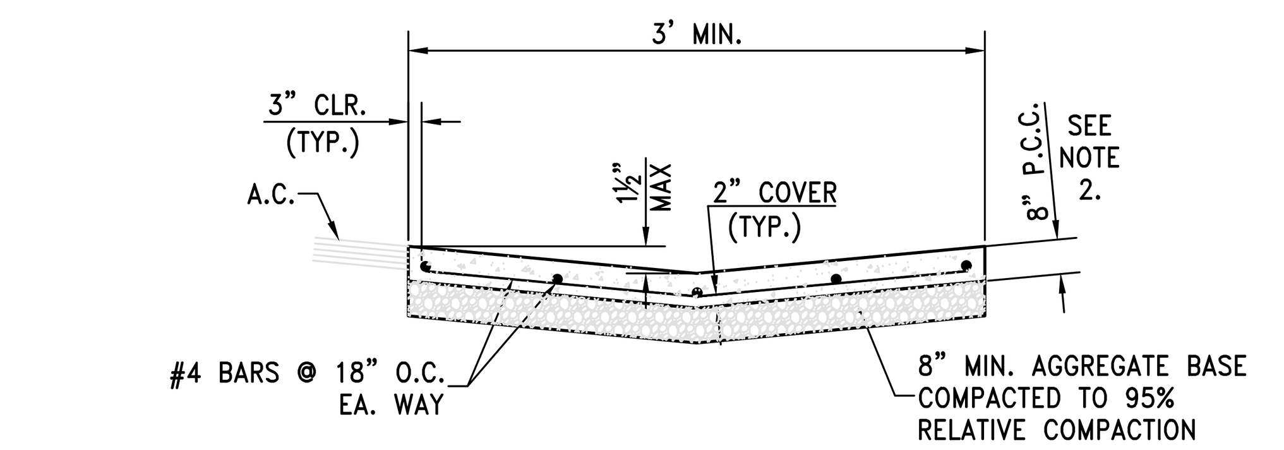
SHEET 2 OF 3



NOTES:

1. PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS, MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH MAX. WATER-CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% ±1.5%, SLUMP AT 1 TO 4 INCHES. MIX DESIGN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337 OF STANDARD SPECIFICATIONS OF PUBLIC WORKS CONSTRUCTION (SSPWC), AS ADOPTED BY CITY COUNCIL. CEMENT SHALL BE TYPE II. ALL CEMENT CONCRETE SHALL HAVE A COARSE AGGREGATE GRADATION CONFORMING TO SIZE No. 67. POLYPROPYLENE OR CELLULOSE FIBERS SHALL BE ADDED TO THE P.C.C. AT 1.5 LBS. PER CUBIC YARD. ALL MATERIALS SHALL CONFORM TO SSPWC, AS ADOPTED BY CITY COUNCIL.
2. AGGREGATE BASE MATERIAL UNDER SIDEWALKS SHALL BE TYPE 2, CLASS B CRUSHED AGGREGATE BASE. MATERIALS SHALL CONFORM TO SSPWC SECTION 200, AS ADOPTED BY CITY COUNCIL.
3. SIDEWALK WIDTH "W" SHALL BE 4 FT MIN. WITH 60" PASSING SPACE EVERY 200' ON RESIDENTIAL STREETS AND 6 FT MIN. ON COLLECTOR AND ARTERIAL STREETS.
4. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED AT 5 FT INTERVALS AND ACCORDANCE WITH SECTION 312 OF THE SSPWC, AS ADOTED BY CITY COUNCIL.
5. ALL ADJACENT CONCRETE REMOVAL SHALL BE TO NEAT SAW CUT LINES AT RIGHT ANGLES TO NEW SIDEWALK. DOWEL INTO EXISTING ADJACENT CONCRETE SIDEWALK WITH A MINIMUM OF TWO (2) No. 4 REINFORCEMENT BARS EQUALLY SPACED ACROSS WIDTH "W". DOWELS SHALL PENETRATE A MINIMUM OF 4" INTO EXISTING CONCRETE.
6. SIDEWALKS SHALL NOT BE POURED MONOLITHICALLY WITH CURBS.
7. TUNNELING AND/OR BORING IS NOT ALLOWED.

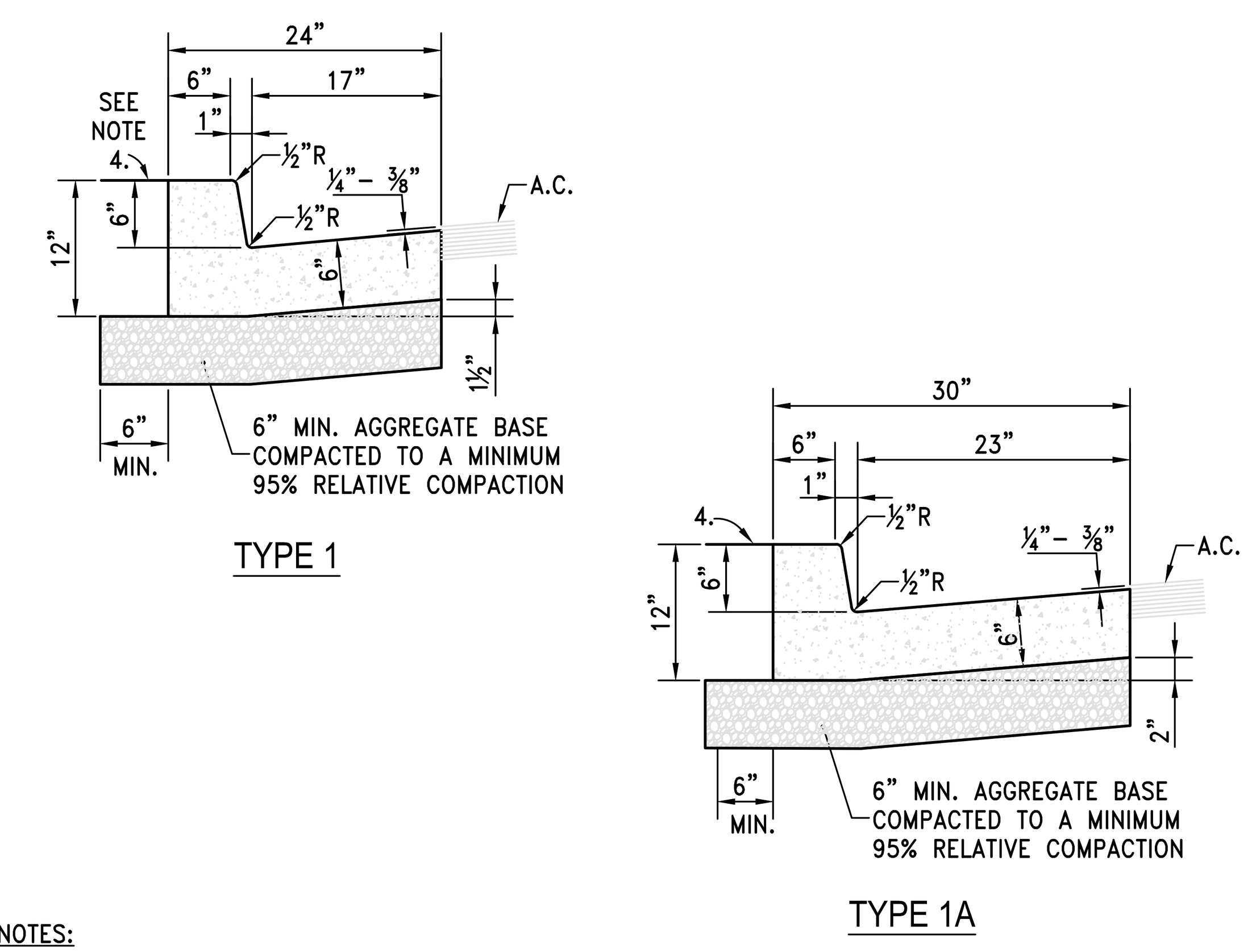
STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION		DRAWING No.
City of Sparks	SIDEWALK DETAIL	S-103
		APPROVED BY: JE · DATE: 1/2020



NOTES:

1. THIS GUTTER DESIGN IS FOR USE ON CITY STREETS UPON APPROVAL OF THE CITY ENGINEER.
2. PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS, MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH MAX. WATER-CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% ±1.5%, SLUMP AT 1 TO 4 INCHES. MIX DESIGN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337 OF STANDARD SPECIFICATIONS OF PUBLIC WORKS CONSTRUCTION (SSPWC), AS ADOPTED BY CITY COUNCIL. CEMENT SHALL BE TYPE II. ALL CEMENT CONCRETE SHALL HAVE A COARSE AGGREGATE GRADATION CONFORMING TO SIZE No. 67. POLYPROPYLENE OR CELLULOSE FIBERS SHALL BE ADDED TO THE P.C.C. AT 1.5 LBS. PER CUBIC YARD. ALL MATERIALS SHALL CONFORM TO SSPWC, AS ADOPTED BY CITY COUNCIL.
3. AGGREGATE BASE MATERIAL UNDER VALLEY GUTTERS SHALL BE TYPE 2, CLASS B CRUSHED AGGREGATE BASE. MATERIALS SHALL CONFORM TO SSPWC SECTION 200, AS ADOPTED BY CITY COUNCIL.
4. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED AT 10 FT INTERVALS AND ACCORDANCE WITH SECTION 312 OF THE SSPWC, AS ADOPTED BY CITY COUNCIL.

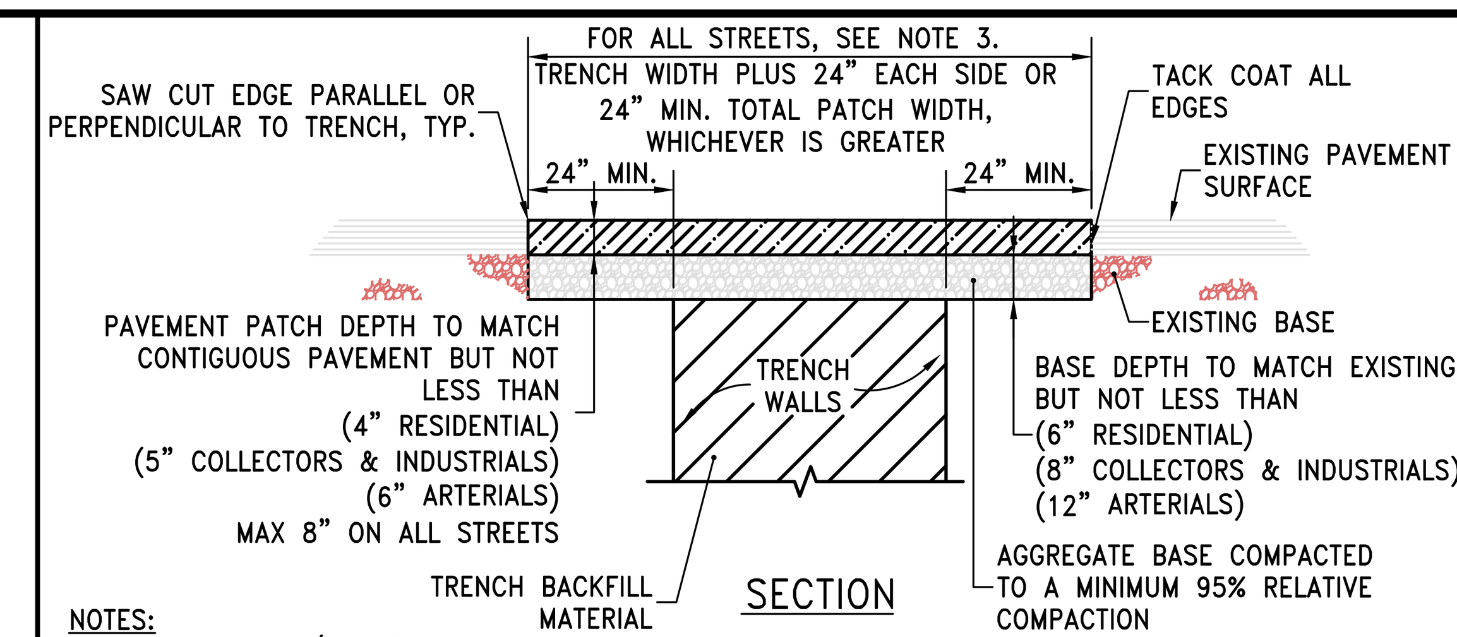
STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION		DRAWING No.
City of Sparks	LONGITUDINAL P.C.C. VALLEY GUTTER	S-108
		APPROVED BY: JE · DATE: 1/2020



NOTES:

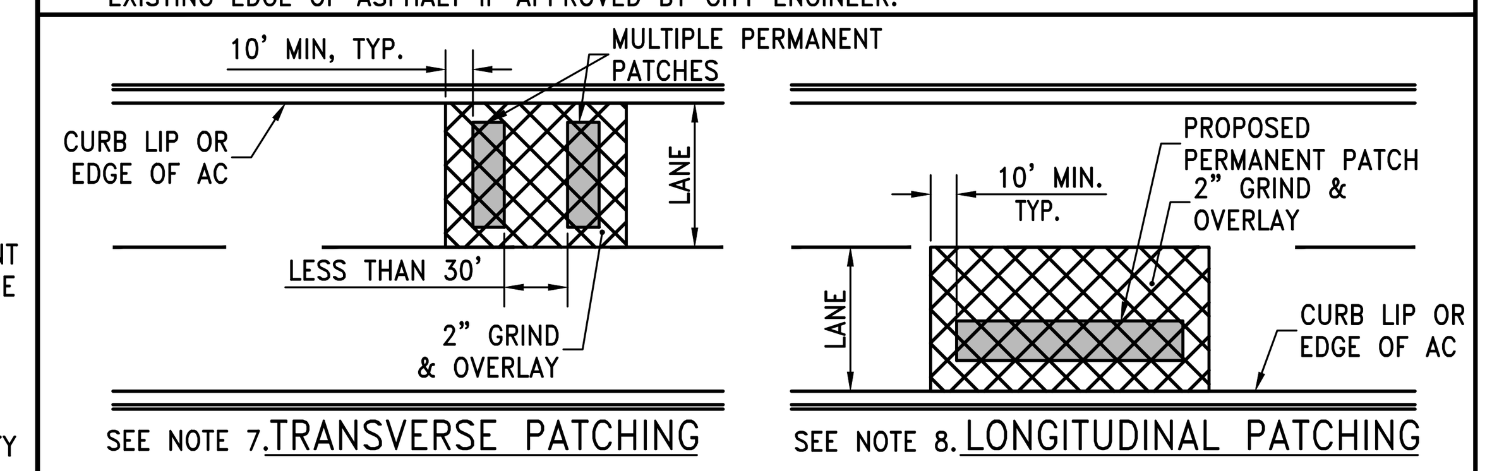
1. PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS, MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH MAX. WATER-CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% ±1.5%, SLUMP AT 1 TO 4 INCHES. MIX DESIGN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337 OF STANDARD SPECIFICATIONS OF PUBLIC WORKS CONSTRUCTION (SSPWC), AS ADOPTED BY CITY COUNCIL. CEMENT SHALL BE TYPE II. ALL CEMENT CONCRETE SHALL HAVE A COARSE AGGREGATE GRADATION CONFORMING TO SIZE No. 67. POLYPROPYLENE OR CELLULOSE FIBERS SHALL BE ADDED TO THE P.C.C. AT 1.5 LBS. PER CUBIC YARD. ALL MATERIALS SHALL CONFORM TO SSPWC, AS ADOPTED BY CITY COUNCIL.
2. AGGREGATE BASE MATERIAL UNDER AND BEHIND CURB AND GUTTER SHALL BE TYPE 2, CLASS B CRUSHED AGGREGATE BASE. MATERIALS SHALL CONFORM TO SSPWC SECTION 200, AS ADOPTED BY CITY COUNCIL.
3. WEAKENED PLANE JOINTS SHALL BE EVERY 10 FEET AND LOCATED ON THE BACK, TOP AND FACE OF THE CURB AND THE TOP OF THE GUTTER PAN.
4. CURB & GUTTER SECTIONS SHALL BE PLACED SEPARATELY FROM SIDEWALK SECTIONS. WHEN SIDEWALK IS NOT REQUIRED DIRECTLY BEHIND THE CURB, BACKFILL TO TOP OF CURB FOR A HORIZONTAL DISTANCE OF 12" FROM BACK FACE OF CURB AND COMPACT TO 90% RELATIVE COMPACTION.
5. FOR REPLACEMENT OF EXISTING CURB AND GUTTER, MATCH EXISTING TYPE.

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION		DRAWING No.
City of Sparks	P.C.C. CURB & GUTTER	S-109
		APPROVED BY: JE · DATE: 1/2020



NOTES:

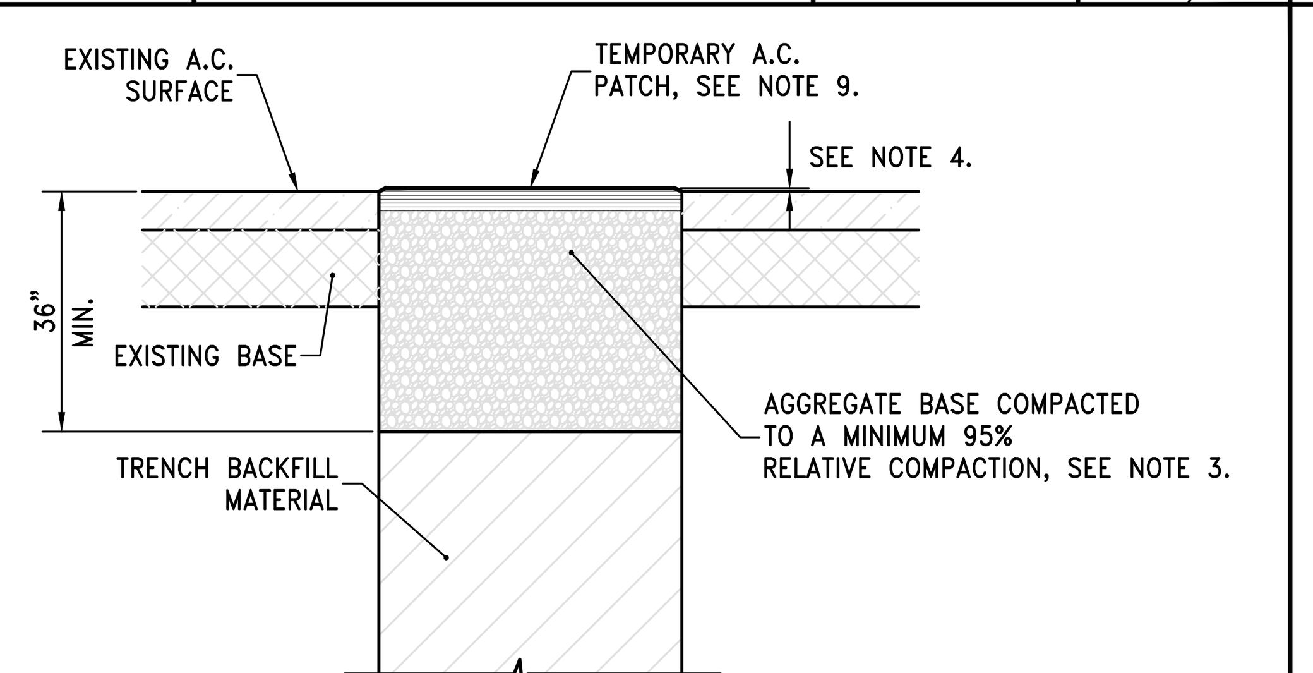
1. AN EXCAVATION/ENCROACHMENT PERMIT MUST BE OBTAINED FROM CITY OF SPARKS PRIOR TO CUTTING ANY PUBLIC RIGHT-OF-WAY.
2. IF SAW CUT IS WITHIN 2 FEET OF AN EXISTING PAVEMENT EDGE OR EXISTING PAVEMENT PATCH, REMOVE EXISTING PAVEMENT TO THAT EDGE AND REPLACE ENTIRE SECTION.
3. ALL PERMANENT PATCH REPLACEMENT REQUIREMENTS ARE MINIMUM WIDTHS ONLY AND INCLUDES ALL AREAS WHERE THE ASPHALT PAVEMENT HAS BEEN UNDERMINED. THE CITY ENGINEER MAY REQUIRE WIDER PATCH SECTIONS OR OTHERWISE ALTER THESE REQUIREMENTS.
4. AGGREGATE BASE MATERIAL UNDER BITUMINOUS PAVEMENT PATCH SHALL BE TYPE 2, CLASS B CRUSHED AGGREGATE BASE. MATERIALS SHALL CONFORM TO SSPWC SECTION 200, AS ADOPTED BY CITY COUNCIL.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF LOOP DETECTORS, ADJUSTMENT OF UTILITIES AND SURVEY MONUMENTS TO GRADE AND INSTALLATION OF PERMANENT PAVEMENT MARKINGS.
6. FOR P.C.C. CURB REPLACEMENT, SAW CUT EXISTING PAVEMENT 18 INCHES MIN. FROM GUTTER LIP LINE, REMOVE AND REPLACE PAVEMENT TO SAW CUT EDGES. CONCRETE MAY BE POURED NEAT AGAINST EXISTING EDGE OF ASPHALT IF APPROVED BY CITY ENGINEER.



ALL STREETS WITH PAVEMENT CONDITION INDEX (PCI) GREATER THAN 65:

7. TRANSVERSE PATCHES SHALL INCLUDE A GRIND AND OVERLAY WHEREVER THERE ARE MULTIPLE PATCHES WITHIN 30 FEET OF EACH OTHER. 2" MINIMUM FOR RESIDENTIAL, COLLECTORS & INDUSTRIALS. 3" MINIMUM FOR ARTERIALS.
8. LONGITUDINAL PATCHES SHALL INCLUDE GRIND AND OVERLAY TO THE LANE LINES (BIKE, PARKING, OR TRAVEL). 2" MINIMUM FOR RESIDENTIAL, COLLECTORS & INDUSTRIALS. 3" MINIMUM FOR ARTERIALS.
9. DRIVEWAY & INTERSECTION LIMITS TO BE DETERMINED BY STREET CUT COORDINATOR.

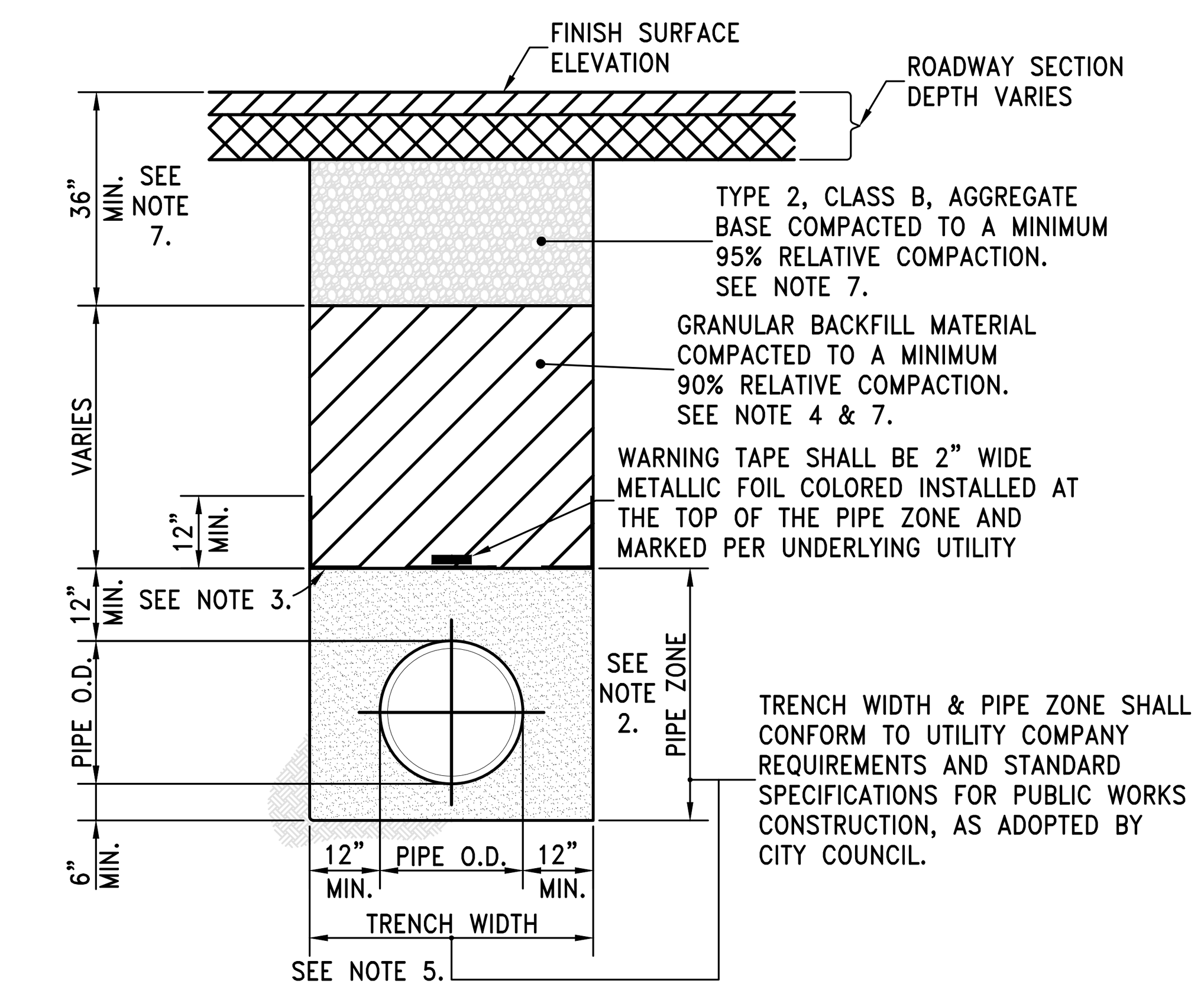
STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION		DRAWING No.
City of Sparks	PERMANENT BITUMINOUS PAVEMENT PATCH	S-115
		APPROVED BY: JE · DATE: 1/2020



NOTES:

1. PRIOR TO EXCAVATION, THE OUTLINE OF THE TRENCH SHALL BE VERTICALLY CUT FULL DEPTH THROUGH THE EXISTING ASPHALT SURFACE.
2. CARE SHALL BE EXERCISED TO PREVENT SLOUGHING AND OVERBREAK. IF THE TRENCH SLOUGHS, THE SURFACE SHALL BE WIDENED TO ELIMINATE THE UNDERMINED SECTION OF ASPHALT.
3. AGGREGATE BASE UNDER TEMPORARY PATCH SHALL BE A MINIMUM THICKNESS OF 36 INCHES BELOW THE EXISTING AC SURFACE. AGGREGATE BASE MATERIAL UNDER TEMPORARY PATCH SHALL BE TYPE 2, CLASS B CRUSHED AGGREGATE BASE. MATERIALS SHALL CONFORM TO SSPWC SECTION 200, AS ADOPTED BY CITY COUNCIL.
4. TEMPORARY PATCHES SHALL BE PLACED AND COMPACTED. THE COMPACTED PATCH SHALL BE APPROXIMATELY 1/8" TO 1/4" ABOVE THE LEVEL OF THE ADJACENT PAVEMENT. IF NOT PATCHED WITHIN 24 HOURS AFTER BACKFILLING, THE CITY MAY PATCH AND BACK-CHARGE THE PERMITTEE FOR ALL COSTS.
5. COMPACTION OF BACKFILL, BASE AND A.C. TEMPORARY PATCH SHALL BE PERFORMED WITH APPROVED MECHANICAL TAMPERS. EQUIPMENT WHEEL ROLLING IS NOT PERMITTED.
6. ENTIRE AREA SHALL BE CLEANED OF ALL DIRT, DUST, DEBRIS, ETC. BEFORE LEAVING SITE. ANY SITE LEFT UNCLEANED WILL BE CLEANED BY THE CITY AND ALL COSTS BACK-CHARGED TO THE CONTRACTOR.
7. ALL EXCAVATIONS SHALL BE COMPLETE OR BACKFILLED AT THE END OF THE SHIFT, INCLUDING TEMPORARY PATCH.
8. TEMPORARY PATCH WORK AND PATCH MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
9. ALL TEMPORARY PATCHES ON ALL STREETS SHALL BE HOT-MIX ASPHALT A MINIMUM OF 3" THICK.
10. PLATES MAY BE USED UPON APPROVAL FROM THE CITY ENGINEER.

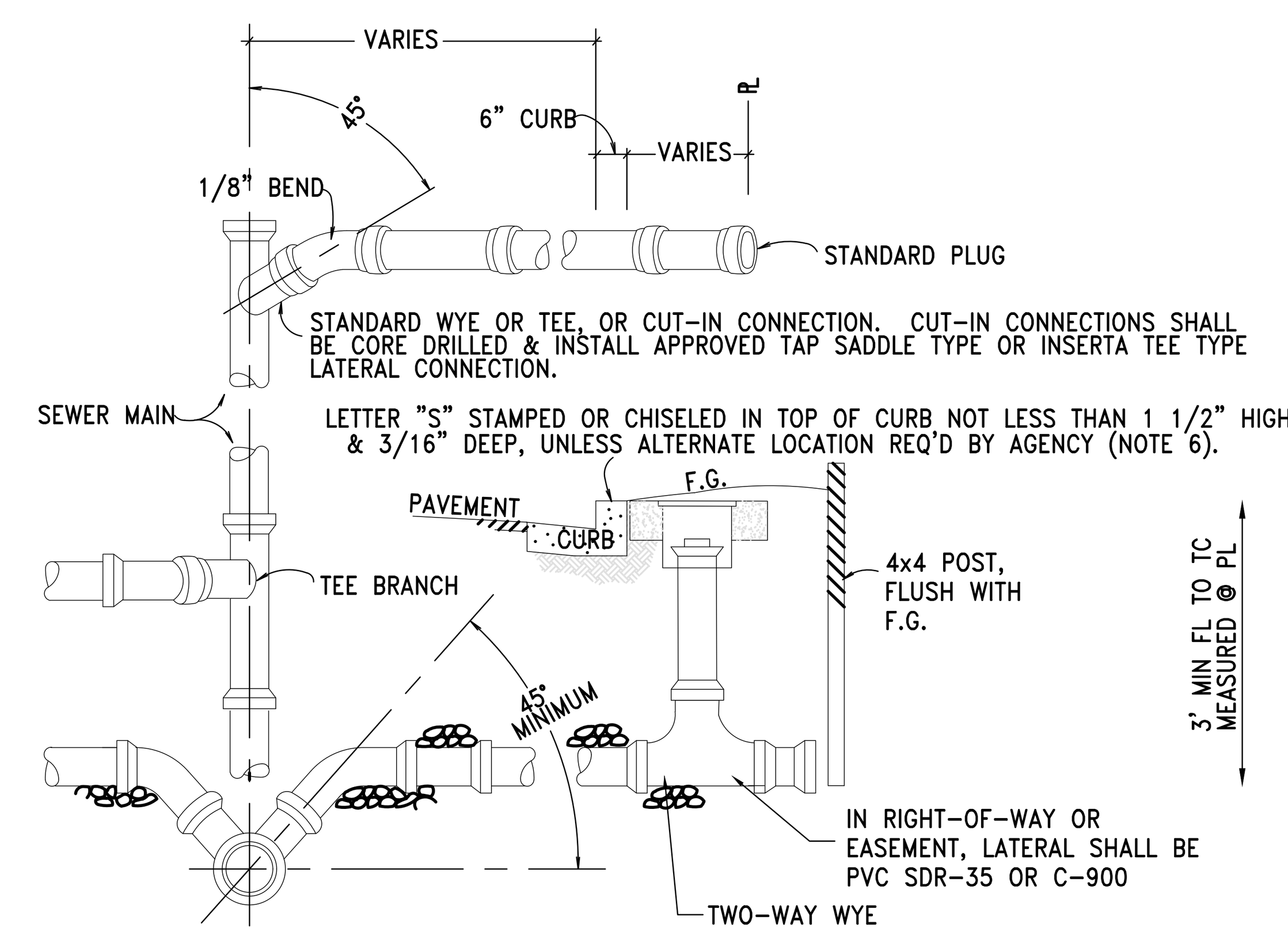
STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION		DRAWING No.
City of Sparks	TEMPORARY A.C. TRENCH PATCH	S-116
		APPROVED BY: JE · DATE: 1/2020



NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC), AS ADOPTED BY CITY COUNCIL.
2. BEDDING MATERIAL SHALL CONFORM TO OWNING-UTILITY COMPANY REQUIREMENTS AS APPROVED BY THE CITY OF SPARKS. FOR CITY-OWNED UTILITIES, BEDDING MATERIAL SHALL BE CLASS A OR C, COMPACTED TO MINIMUM 90% RELATIVE COMPACTION. MATERIALS SHALL CONFORM TO SSPWC SECTION 200, AS ADOPTED BY CITY COUNCIL.
3. CLASS C BEDDING REQUIRES INSTALLATION OF GEOTEXTILE FABRIC BETWEEN PIPE ZONE AND BACKFILL MATERIAL. GEOTEXTILE FABRIC SHALL BE MIRAFI 180N OR APPROVED EQUAL.
4. BACKFILL MATERIAL SHALL BE TYPE 2, CLASS B OR CLASS E AND COMPACTED TO MINIMUM 90% RELATIVE COMPACTION. MATERIALS SHALL CONFORM TO SSPWC SECTION 200, AS ADOPTED BY CITY COUNCIL.
5. ALL EXCAVATIONS SHALL CONFORM TO THE LATEST O.S.H.A. REQUIREMENTS.
6. EXISTING PIPE TO BE ABANDONED SHALL BE GROUT FILLED OR COMPLETELY REMOVED.
7. MINIMUM BACKFILL DEPTH REQUIREMENT IS FOR TRENCHING IN EXISTING PAVED STREETS. TRENCHING FOR <u>NEW DEVELOPMENT</u> WHERE STREETS HAVE NOT YET BEEN CONSTRUCTED, BACKFILL MATERIAL SHALL BE TYPE 2, CLASS B OR CLASS E AND COMPACTED TO MINIMUM 90% RELATIVE COMPACTION. MATERIALS SHALL CONFORM TO SSPWC SECTION 200, AS ADOPTED BY CITY COUNCIL.

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION		DRAWING No.
City of Sparks	TRENCH EXCAVATION/BACKFILL	S-117
		APPROVED BY: JE · DATE: 1/2020



NOTES

1. SEWER LATERALS SHALL HAVE A MINIMUM SLOPE OF 2%, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
2. LATERAL SHALL BE CUT BACK TO SOUND MATERIAL FOR COUPLING.
3. ALL CONNECTIONS TO THE CITY SEWER MAINS MUST BE CORE DRILLED.
4. ENCASE LATERAL CONNECTION IN CEMENT, STABILIZED SAND OR 2000 PSI CONCRETE FOLLOWING INSTALLATION. CONNECTION MUST BE INSPECTED BY CITY PRIOR TO BACKFILL.
5. NO LATERAL CONNECTIONS SHALL BE MADE TO SANITARY SEWER "INTERCEPTOR" LINES WITHOUT THE APPROVAL OF THE CITY ENGINEER.
6. ALL APPLICABLE SANITARY SEWER PIPE INSTALLATION WORK SHALL BE IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE.

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION		DRAWING No.
City of Sparks	SANITARY SEWER LATERAL	S-212A
		APPROVED BY: JE · DATE: 1/2020

NOTES:

1. SEWER LATERALS SHALL HAVE A MINIMUM PIPE DIAMETER OF 4-INCHES.
2. ALL PLASTIC PIPE USED FOR SEWER SERVICE LATERAL CONSTRUCTION SHALL BE SOLID WALL AND SHALL MEET THE REQUIREMENTS OF D-2412, HAVE A MINIMUM STIFFNESS OF 46 PSI AS DEFINED BY THE REQUIREMENTS OF ASTM D-3034.
3. SERVICE LATERALS SHALL HAVE A MINIMUM SLOPE OF 1/4-INCH PER FOOT UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
4. SEWER LATERALS SHALL HAVE A MINIMUM COVER OF 36-INCHES IN THE PUBLIC RIGHT-OF-WAY AND IN EASEMENTS UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. THE DEFINITION OF "COVER" IS THE DISTANCE FROM THE TOP OF PIPE TO FINISHED GRADE.
5. USE OF SEWER SERVICE TAP SADDLE CONNECTIONS SHALL NOT BE ALLOWED FOR NEW SEWER MAIN CONSTRUCTION. WHEN A TAP SADDLE CONNECTION IS TO BE USED ON AN EXISTING SEWER MAIN, IT SHALL BE A WYE SADDLE AND BE INSTALLED PER DETAIL S-212C.
6. SEWER LATERALS SHALL HAVE A CLEANOUT INSTALLED BETWEEN SIDEWALK AND RIGHT-OF-WAY. A G5 BOX CLEARLY MARKED "SEWER" SHALL BE INSTALLED OVER THE TOP OF THE CLEANOUT RISER CAP PIPE.
7. SEWER LATERALS SHALL NOT BE CONNECTED DIRECTLY TO OR WITHIN 5-FEET OF A MANHOLE STRUCTURE.
8. EXISTING SEWER LATERALS SHALL BE CUT BACK TO SOUND MATERIAL FOR COUPLING. PLACE 6-INCH THICK CONCRETE PAD UNDER CONNECTION.
9. SEWER LATERAL CONNECTION SHALL BE STABILIZED WITH APPROVED MATERIAL FOLLOWING INSTALLATION. CONNECTION TO CITY SEWER MAIN MUST BE INSPECTED BY THE CITY PRIOR TO BACKFILL.
10. NO LATERAL CONNECTIONS SHALL BE MADE DIRECTLY TO A SANITARY SEWER "INTERCEPTOR" UNLESS APPROVED BY THE CITY ENGINEER.
11. SEWER LATERALS SHALL NOT BE CONNECTED TO A SEWER MAIN UNLESS THE CONNECTION POINT IS BETWEEN TWO MANHOLE STRUCTURES.
12. EACH INDIVIDUAL PARCEL SHALL HAVE A MINIMUM OF ONE SEWER LATERAL. TWO OR MORE PARCELS SHALL NOT SHARE ONE SEWER LATERAL.
13. SANITARY SEWER LATERAL IDENTIFICATION AND LOCATING REQUIREMENTS SHALL BE PER SPARKS MUNICIPAL CODE 17.16.130 (SMC 17.16.130).
14. DISCONTINUANCE OF USE OF AN EXISTING SEWER LATERAL REQUIRES ABANDONMENT OF THE LATERAL. CUT, REMOVE 1-FOOT OF EXISTING LATERAL AND CAP BOTH ENDS OF THE EXISTING SEWER LATERAL TO BE ABANDONED WITHIN 6-INCHES OF THE SEWER MAIN. ABANDONMENT MUST BE INSPECTED BY CITY PRIOR TO BACKFILL.
15. PROPERTY OWNER SHALL BE RESPONSIBLE FOR OPERATION, MAINTENANCE AND REPAIR OF THE SEWER LATERAL WITHIN THE PUBLIC RIGHT-OF-WAY PER SPARKS MUNICIPAL CODE.

STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION		DRAWING No.
City of Sparks	NOTES - SANITARY SEWER LATERAL	S-212B
		APPROVED BY: JE · DATE: 1/2020

REV.	DATE	DESCRIPTION	BY	APP'D

DATE: APRIL 2023
DRAWN BY: ACAD 2023
DESIGNED BY: TCP
CHECKED BY: TCP

PERMIT PLANS

CITY OF SPARKS
SHELLY PARK RESTROOM DETAILS

SPARKS WASHOE NEVADA

odyssey ENGINEERING INCORPORATED
895 ROBERTA LANE, SUITE 104, SPARKS, NV 89431
(775) 359-3303 FAX (775) 359-3329
ODYSSEYRENO.COM

PROFESSIONAL ENGINEER STATE OF NEVADA
TRAVIS C. PAGE
Exp. 12-31-23
CIVIL
No. 28825
4/3/23

SCALE
HORIZ. AS SHOWN
VERT. –
JOB NO. XXXX

SHEET 3 OF 3

PART 1.0	GENERAL PROVISIONS
1.1	ELECTRICAL DESIGN DOCUMENT SET THE ELECTRICAL DESIGN DOCUMENT SET SHALL BE CONSIDERED AS A WHOLE AND THE SCOPE-OF-WORK SHALL BE CONSIDERED TO INCLUDE COMPLETE AND PROFESSIONAL PERFORMANCE OF ALL WORK, AND COMPLIANCE WITH ALL REQUIREMENTS PUT FORTH IN THE FOLLOWING: 1. THE GENERAL AND SPECIFIC TERMS OF THE ACCEPTED CONTRACT. 2. THE COMPLETE "FINAL" ELECTRICAL DRAWING SET. 3. ALL ELECTRICAL SPECIFICATIONS AND GENERAL REQUIREMENTS. 4. ALL FORMAL RESPONSES BY THIS ENGINEER TO REQUESTS-FOR-INFORMATION. 5. ALL FORMAL REVIEWS BY THIS ENGINEER OF EQUIPMENT SUBMITTALS. 6. ALL RELEVANT CODES AND ORDINANCES. ANY RULINGS OR INTERPRETATIONS BY GOVERNING AUTHORITIES AND AGENCIES SHALL BE CONSIDERED A PART OF THIS DIVISION INSOFAR AS THOSE RULINGS AND INTERPRETATIONS ARE COMMONLY IMPOSED UPON THE TRADE. THE ELECTRICAL DESIGN DOCUMENT SET SHALL BE CONSIDERED THE INTELLECTUAL PROPERTY OF JENSEN ENGINEERING, INC. (ALL RIGHTS RESERVED) AND SHALL NOT BE USED FOR ANY APPLICATION BEYOND THE PROJECT FOR WHICH THEY ARE PREPARED.
1.2	CODES AND STANDARDS FOR WORK ALL ELECTRICAL WORK SHALL BE PERFORMED BY LICENSED ELECTRICIANS AND TECHNICIANS. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST ADOPTED EDITIONS OF THE FOLLOWING CODES AND STANDARDS: NATIONAL ELECTRICAL CODE (NEC) INTERNATIONAL ENERGY CONSERVATION CODE (IECC) NATIONAL FIRE PROTECTION AGENCY (NFPA) INTERNATIONAL BUILDING CODE (IBC) AMERICANS WITH DISABILITIES ACT (ADA) OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) LISTED CODES AND STANDARDS SHALL BE CONSIDERED THE MINIMUM STANDARD FOR ELECTRICAL WORK. ELECTRICAL CONTRACTOR SHALL NOT OMIT ANY ITEMS, EQUIPMENT, COMPONENTS, ETC. DETAILED WITHIN THE ELECTRICAL DESIGN DOCUMENT SET WHICH MAY EXCEED THE LISTED CODES AND STANDARDS. NO PORTION OF THE ELECTRICAL DESIGN DOCUMENTS SHALL BE INTERPRETED TO DETAIL OR PERMIT WORK WHICH FAILS TO CONFIRM WITH THE LISTED CODES AND STANDARDS. WHERE CONFLICTS OR DEFICIENCIES OCCUR, THE STRICTER AND HIGHER CODES AND STANDARDS SHALL GOVERN. ADDITIONALLY, ALL ELECTRICAL WORK SHALL BE PERFORMED IN COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL CODES AND ORDINANCES INCLUDING THE LOCAL FIRE PREVENTION JURISDICTION AND THE LOCAL UTILITY COMPANIES.
1.3	WORK SPECIFIED ELSEWHERE ALL ELECTRICAL WORK PERFORMED, INCLUDING ELECTRICAL WORK PERFORMED AS PART OF OTHER DIVISIONS, SHALL COMPLY WITH THE REQUIREMENTS OF THIS DIVISION.
1.4	PERFORMANCE OF ELECTRICAL EQUIPMENT AND MATERIALS ALL ELECTRICAL EQUIPMENT AND MATERIALS USED FOR COMPLETION OF THE ELECTRICAL SCOPE OF WORK SHALL BE NEW AND IN NORMAL WORKING ORDER AT TIME OF INSTALLATION. ANY DEFECTIVE MATERIALS SHALL BE IDENTIFIED AND IMMEDIATELY REMOVED FROM THE PROJECT SITE. ALL ELECTRICAL WORK, EQUIPMENT, AND MATERIALS SHALL BE OF THE HIGHEST AVAILABLE QUALITY. APPEARANCE AND FINISH OF WORK SHALL BE HELD TO THE HIGHEST COMMONLY IMPOSED STANDARD. ELECTRICAL CONTRACTOR SHALL PROVIDE UNDERWRITERS LABORATORY (UL) LISTED EQUIPMENT AND MATERIALS WHEREVER STANDARDS FOR SAID ITEMS HAVE BEEN ESTABLISHED. USE AND INSTALLATION OF UNLISTED EQUIPMENT AND MATERIALS SHALL CONFORM TO LISTED STANDARDS TO THE MAXIMUM POSSIBLE EXTENT.
1.5	CLEAN WORK ELECTRICAL CONTRACTOR SHALL REGULARLY REMOVE DEBRIS, PACKAGING MATERIALS, ETC. FROM THE PROJECT SITE DURING CONSTRUCTION ACTIVITIES AS REQUIRED TO ENSURE AN ORGANIZED AND SAFE CONSTRUCTION SITE. CLEAN ALL RACEWAYS, FIXTURES, AND OTHER EQUIPMENT PRIOR TO FINAL ACCEPTANCE BY THE OWNER.
1.6	SUPPORTS AND FASTENINGS ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL REQUIRED SUPPORT AND HANGING HARDWARE, INCLUDING SEISMIC CONTROL, FOR ALL ELECTRICAL DISTRIBUTION EQUIPMENT, LIGHTING FIXTURES, FEEDERS AND BRANCH CIRCUITS, BOXES/BACK-BOXES, AND OTHER EQUIPMENT AS REQUIRED. SUPPORTS AND HANGERS SHALL BE SECURELY ATTACHED TO STRUCTURE USING UL LISTED ASSEMBLIES SUITABLE FOR THE STRUCTURAL ELEMENT. SUPPORTS AND HANGARS SHALL BE LISTED FOR FIVE TIMES THE STATIC LOAD. UTILITY EQUIPMENT SHALL BE SUPPORTED PER UTILITY WORK ORDER DRAWINGS.
1.7	INSPECTION ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE CONSTRUCTION TEAM AS REQUIRED TO ACCOMMODATE ON-SITE INSPECTORS AS REQUIRED. ELECTRICAL CONTRACTOR SHALL NOT CONCEAL, BURY, OR CLOSE-IN ANY WORK PERFORMED PRIOR TO INSPECTION AND APPROVAL.

PART 2.0	INCLUSIONS AND EXCLUSIONS
2.1	SITE INVESTIGATION ELECTRICAL CONTRACTOR SHALL INCLUDE THOROUGH INVESTIGATION OF THE EXISTING PROJECT SITE AS REQUIRED TO DETERMINE EXISTING CONDITIONS PRIOR TO SUBMITTING A BID.
2.2	LABOR, TOOLS, MATERIALS, ETC. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, APPARATUS, ETC., INCLUDING THOSE REASONABLY INFERRED, AS REQUIRED TO COMPLETE THE ELECTRICAL SCOPE-OF-WORK. ELECTRICAL CONTRACTOR SHALL RETAIN SUB-CONTRACTORS WHERE REQUIRED. ELECTRICAL CONTRACTOR SHALL INCLUDE ALL EXCAVATION, TRENCHING, SHORING, BACKFILL, ETC. AS REQUIRED FOR COMPLETION OF THE ELECTRICAL SCOPE-OF-WORK. UTILITY CONDUIT SYSTEMS SHALL COMPLY WITH THE SERVING UTILITY COMPANY STANDARDS AND WORK ORDER DRAWINGS.

PART 2.0	INCLUSIONS AND EXCLUSIONS (CONT...)
2.3	FEES ELECTRICAL CONTRACTOR SHALL INCLUDE ALL FEES AND ROYALTIES FOR PERMITS, TESTS, INSPECTIONS, ETC. FEES AND CHARGES FOR PERMANENT ELECTRICAL UTILITY CONNECTIONS SHALL NOT BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
2.4	TRADE COORDINATION ELECTRICAL CONTRACTOR SHALL COORDINATE THE ELECTRICAL INSTALLATION WORK WITH THE OWNER AND ALL OTHER TRADE CONTRACTORS AS REQUIRED. REFER TO PLANS AND SPECIFICATIONS OF ALL OTHER TRADES. ELECTRICAL CONTRACTOR SHALL CONSULT WITH OTHER CONTRACTORS AND THE OWNER AS REQUIRED TO ENSURE TIMELY PERFORMANCE OF ELECTRICAL WORK FOR OTHER TRADES AS REQUIRED. ALL INTERCONNECTION WIRING, DEDICATED CIRCUITS, ETC. SHALL BE CONSIDERED PART OF THE SCOPE-OF-WORK.
2.5	STANDARD TESTING ELECTRICAL CONTRACTOR SHALL PERFORM 1000 VOLT DC CONDUCTOR INSULATION TEST PER TEST EQUIPMENT MANUFACTURER'S RECOMMENDED TESTING PROCEDURES. TEST SHALL BE CARRIED OUT WITH CONDUCTORS INSTALLED IN-PLACE AND DISCONNECTED AT BOTH ENDS. MINIMUM INSULATION RESISTANCE SHALL BE 100 MEGAOHMS AFTER 30 SECONDS. ELECTRICAL CONTRACTOR SHALL CORRECT ANY DEFICIENCIES PRIOR TO ENERGIZING. ELECTRICAL CONTRACTOR SHALL PERFORM THREE-POINT FALL-OF-POTENTIAL GROUNDING ELECTRODE RESISTANCE TEST PER TEST EQUIPMENT MANUFACTURER'S RECOMMENDED TESTING PROCEDURES. MAXIMUM GROUND RESISTANCE VALUE(S) SHALL BE 5 OHMS. WHERE GROUND RESISTANCE EXCEEDS 5 OHMS, PROVIDE AND INSTALL AN ADDITIONAL COPPER-CLAD GROUND ROD. ELECTRICAL CONTRACTOR SHALL PERFORM POLARITY TESTS FOR ALL UTILIZATION EQUIPMENT, OUTLETS/RECEPTACLES, ETC. ELECTRICAL CONTRACTOR SHALL CHECK ALL BUS AND LUG CONNECTIONS FOR PROPER CONTACT PRESSURE USING CALIBRATED TORQUE WRENCH OR SCREW-DRVIER ACCORDING TO MANUFACTURER'S TIGHTENING RECOMMENDATIONS. TESTED ELEMENTS WHICH FAIL TO MEET THE LISTED REQUIREMENTS SHALL BE CONSIDERED DEFECTIVE AND SHALL BE PROMPTLY CORRECTED OR REMOVED FROM THE SITE.
2.6	FIRE DETECTION AND ANNUNCIATION ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A COMPLETE, TESTED AND TAGGED, AUTOMATIC FIRE DETECTION AND ANNUNCIATION SYSTEM PER THE LOCAL FIRE JURISDICTION. ELECTRICAL CONTRACTOR SHALL VERIFY THE SPECIFIC PROJECT REQUIREMENTS AND SHALL PROVIDE DETAILED PLANS WHICH CLEARLY INDICATE ALL METHODS AND COMPONENTS TO BE USED FOR APPROVAL OF THE FIRE JURISDICTION. THIS WORK SHALL BE PERFORMED AS PART OF A DEFERRED SUBMITTAL. SUBMITTALS TO THIS ENGINEER ARE NOT REQUIRED.
2.7	FINALIZING ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL PERMANENT PHENOLIC NAMEPLATES (BLACK FIELD, WHITE LETTERS) FOR ALL ELECTRICAL DISTRIBUTION EQUIPMENT INCLUDING SWITCHGEAR, PANELBOARDS, TRANSFORMERS, CONTROL PANELS, LOAD CENTERS, ETC. PROVIDE NEAT, CLEAR, PRINTED CIRCUIT DIRECTORIES FOR ALL ALL PANELBOARDS AND LOAD CENTERS. ELECTRICAL CONTRACTOR SHALL PROVIDE A NEAT AND COMPLETE SET OF "AS-BUILT" RECORD DRAWINGS TO THE OWNER WITHIN TEN DAYS OF FINAL ACCEPTANCE OF WORK. RECORD DRAWINGS SHALL INDICATE ANY DEVIATIONS FROM THE ELECTRICAL DESIGN DOCUMENTS, LOCATIONS OF CONDUIT STUBS AND CONCEALED ITEMS BASED ON FIELD DIMENSIONS. RECORD DRAWINGS SHALL BE OF QUALITY EQUAL TO OR HIGHER THAN THE ELECTRICAL DESIGN DOCUMENTS INCLUDING SIZE, CLARITY, MEDIUM TYPE, ETC.). ELECTRICAL CONTRACTOR SHALL PROVIDE ALL OPERATING AND MAINTENANCE MANUALS FOR EQUIPMENT USED TO THE OWNER UPON PROJECT COMPLETION. UPON OWNERS ACCEPTANCE OF OPERATING AND MAINTENANCE MANUALS, ELECTRICAL CONTRACTOR SHALL SCHEDULE A FINAL PROJECT WALK-THROUGH WITH THIS ENGINEER. ANY ITEMS NOTED AS DEFICIENT SHALL BE CORRECTED IMMEDIATELY.

PART 3.0	DRAWINGS, SPECIFICATIONS, PROCEDURES
3.1	CONTROL OF ACTIVITIES ALL SERVICES RENDERED BY THIS ENGINEER ARE PROFESSIONAL OPINIONS AND RECOMMENDATIONS ONLY. UNDER NO CIRCUMSTANCES IS IT THE INTENT OF THIS ENGINEER TO DIRECTLY CONTROL THE PHYSICAL ACTIVITIES OF THE CONTRACTOR OR THE CONTRACTOR'S EMPLOYEES OR AGENTS.
3.2	SITE ASSESSMENT ELECTRICAL CONTRACTOR SHALL INSPECT THE PROJECT SITE AND VERIFY THAT ALL PROPOSED ELECTRICAL EQUIPMENT IS SUITABLE FOR USE IN THE PROPOSED ENVIRONMENT AND THAT ADEQUATE SPACE FOR THE EQUIPMENT AND ANY ASSOCIATED CLEARANCE IS PRESENT. WHERE CONFLICT ARISES, ELECTRICAL CONTRACTOR SHALL NOTIFY THIS ENGINEER IMMEDIATELY AND SUBMIT A WRITTEN REQUEST-FOR-INFORMATION.
3.3	REQUEST-FOR-INFORMATION (RFI) WHERE CONFLICT OR AMBIGUITY ARISES, ELECTRICAL CONTRACTOR SHALL SUBMIT WRITTEN REQUEST-FOR-INFORMATION (RFI) DOCUMENTS TO THIS ENGINEER IMMEDIATELY. ELECTRICAL CONTRACTOR SHALL OBTAIN APPROVED WRITTEN RESPONSE PRIOR TO PERFORMING ANY RELATED WORK. ELECTRICAL CONTRACTOR SHALL NOT PERFORM ANY FIELD MODIFICATIONS OR DEVIATIONS FROM THE DESIGN DOCUMENTS WITHOUT APPROVED WRITTEN RESPONSE TO AN APPROPRIATELY SUBMITTED RFI.
3.4	PRODUCTS SPECIFIED ALL MANUFACTURERS AND PRODUCT CATALOG NUMBERS SPECIFIED IN THE ELECTRICAL DESIGN DOCUMENTS ARE EXAMPLES OF PRODUCTS WHICH MEET THE BASIC REQUIREMENTS OF THE PROJECT AND SHALL BE CONSIDERED THE MINIMUM PERFORMANCE AND QUALITY. ANY PROPOSED SUBSTITUTIONS SHALL BE OF EQUAL OR HIGHER QUALITY AND PERFORMANCE. ELECTRICAL CONTRACTOR SHALL VERIFY COLOR/FINISH CHARACTERISTICS WITH OWNER AND/OR ARCHITECT AND SHALL PROVIDE AND INSTALL ALL MOUNTING HARDWARE AND ACCESSORIES AS REQUIRED.

PART 3.0	DRAWINGS, SPECIFICATIONS, PROCEDURES (CONT...)
3.5	MANUFACTURER'S INSTRUCTIONS ELECTRICAL CONTRACTOR SHALL INSTALL ALL ELECTRICAL COMPONENTS AND SHALL PERFORM ALL ELECTRICAL WORK PER MANUFACTURER'S INSTRUCTIONS. WHERE CONFLICT ARISES, ELECTRICAL CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST-FOR-INFORMATION.
3.6	DATA-SHEET AND SHOP-DRAWING SUBMITTALS ELECTRICAL CONTRACTOR SHALL PROVIDE MANUFACTURER'S DATA-SHEETS AND SHOP-DRAWING SUBMITTALS FOR ALL ELECTRICAL DISTRIBUTION EQUIPMENT (SWITCHBOARDS, TRANSFORMERS, PANELBOARDS/LOADCENTERS, DISCONNECT SWITCHES, AND SO FORTH), WIRING DEVICES, LIGHTING FIXTURES AND LIGHTING CONTROL ELEMENTS. SUBMITTALS FOR GENERAL ELECTRICAL MATERIALS (CONDUIT, CONNECTORS, FITTINGS, SPLICE KITS, WIRE- CONNECTORS, CONDUCTORS, ETC.) ARE NOT REQUIRED. SUBMITTALS FOR UTILITY METERING EQUIPMENT SHALL BE PROVIDED TO THE SERVING UTILITY FOR REVIEW AND APPROVAL. SUBMITTALS SHALL BE PROVIDED TO THE OWNER AND THIS ENGINEER IN ELECTRONIC FORMAT AND HARD-COPY FORMAT UPON REQUEST. ELECTRICAL CONTRACTOR SHALL OBTAIN ENGINEER'S APPROVED WRITTEN REVIEW OF AND RESPONSE TO DATA-SHEET AND SHOP-DRAWING SUBMITTALS PRIOR TO PURCHASE OR USE OF SUBMITTED EQUIPMENT. SUBSTITUTION SUBMITTALS MUST BE PROVIDED NO FEWER THAN TEN WORKING DAYS PRIOR TO BID ACCEPTANCE. ELECTRICAL CONTRACTOR SHALL PROVIDE UPDATED ESTIMATES TO THE OWNER REFLECTING ANY APPROVED SUBSTITUTIONS IMMEDIATELY. ELECTRICAL CONTRACTOR SHALL PROCEED TO ORDER ELECTRICAL EQUIPMENT AND/OR RELEASE ELECTRICAL MATERIALS IMMEDIATELY UPON RECEIPT OF APPROVED SUBMITTAL REVIEW. NO SUBSTITUTIONS OR ALTERNATES WILL BE ACCEPTED AS A RESULT OF UNTIMELY WORK.
3.7	WARRANTY AND GUARANTEE ELECTRICAL CONTRACTOR SHALL GUARANTEE THE ELECTRICAL WORK PERFORMED TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE-YEAR FROM DATE OF FINAL ACCEPTANCE. LAMPS FOR LIGHTING FIXTURES ARE EXEMPT FROM THIS REQUIREMENT, HOWEVER, LAMPS SHALL BE IN NEW AND PERFECT OPERATING CONDITION AT THE TIME OF FINAL ACCEPTANCE. REPAIRS AND REPLACEMENTS FOR DEFECTIVE EQUIPMENT AND/OR MATERIALS AS COVERED BY CONTRACTOR GUARANTEE SHALL BE CONSIDERED WITHIN THE SCOPE-OF-WORK AND SHALL BE PERFORMED AT NO ADDITIONAL COST EXCEPT AS SPECIFIED ABOVE. ELECTRICAL CONTRACTOR SHALL PROVIDE MANUFACTURER'S WARRANTY FOR ALL PRODUCTS AND MATERIALS FOR WHICH SAID WARRANTY IS AVAILABLE AND SHALL PROVIDE ALL RELEVANT DOCUMENTATION TO THE OWNER AT TIME OF FINAL ACCEPTANCE.

PART 4.0	ELECTRICAL COMPONENTS, METHODS, AND MATERIALS
4.1	VANDAL PROTECTION ALL ELECTRICAL WORK THAT IS ACCESSIBLE TO THE PUBLIC SHALL BE TAMPER- PROOF AND VANDAL RESISTANT PER PROJECT REQUIREMENTS. COORDINATE WITH OWNER AND GENERAL CONTRACTOR AS REQUIRED TO VERIFY EXTENTS OF PUBLIC AREA AND REQUIRED LEVEL OF PROTECTION. ALL EQUIPMENT WITH OPERABLE DOORS OR SWITCHES SHALL BE LOCKING TYPE, OR PAD-LOCKING.
4.2	TERMINATIONS AND SPLICES TWIST-ON WIRE CONNECTORS SHALL BE SCOTCHLOK OR EQUIVALENT FOR WIRE SIZES #14 AWG THROUGH #8 AWG. SPLICES SHALL BE UL LISTED ASSEMBLIES SUITABLE FOR THE ENVIRONMENT. CONDUCTORS SHALL TERMIANTE AT UL-LISTED LUGS AND LANDINGS AT ALL UTILIZATION EQUIPMENT.
4.3	BACK-BOXES AND FACE-PLATES ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL SINGLE OR MULTI-GANG OUTLET BOXES AS REQUIRED FOR EACH RECEPTACLE, SWITCH, OR OTHER WIRING DEVICE AS INDICATED IN THE ELECTRICAL DESIGN DOCUMENTS. PROVIDE AND INSTALL ONE-PIECE THERMOPLASTIC FACEPLATE COVERS FOR ALL RECEPTACLES, SWITCHES, AND OTHER WIRING DEVICES. FACEPLATE COVERS SHALL BE SELECTED TO MATCH THE ASSOCIATED BACKBOX. VERIFY COLOR AND FINISH OF ALL FACEPLATE COVERS WITH OWNER, ARCHITECT, AND GENERAL CONTRACTOR PRIOR TO PURCHASE.
4.4	125-VOLT, 15-AMP AND 20-AMP RECEPTACLES ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL 125-VOLT, 15-AMP AND 20-AMP RECEPTACLES PER THE ELECTRICAL DESIGN DOCUMENTS. RECEPTACLES SHALL INCLUDE GROUNDING TERMINALS AND SHALL FEATURE COMMON NEMA CONFIGURATIONS. RECEPTACLES IN DWELLING UNITS AND GUEST ROOMS SHALL BE RESIDENTIAL GRADE. RECEPTACLES IN ALL COMMERCIAL SPACES SHALL BE COMMERCIAL GRADE. RECEPTACLES IN PATIENT CARE AREAS SHALL BE HOSPITAL GRADE. VERIFY COLOR OF ALL RECEPTACLES PRIOR TO PURCHASE.
4.5	LIGHTING SWITCHES ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL LIGHTING SWITCHES COMPLETELY PER MANUFACTURER'S INSTRUCTIONS. REFER TO ELECTRICAL SYMBOLS LIST. SINGLE-POLE, SINGLE-THROW TOGGLE SWITCHES SHALL BE DECORA STYLE. DIMMING SWITCHES SHALL BE SELECTED FOR COMPATIBILITY WITH LIGHTING LOAD. REFER TO MANUFACTURER'S DATA-SHEETS. OCCUPANT SENSING SWITCHES SHALL INCLUDE DUAL-TECHNOLOGY SENSING EQUIPMENT.
4.6	SPECIAL USE RECEPTACLES ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL SPECIAL USE RECEPTACLES PER ELECTRICAL DESIGN DOCUMENTS. SPECIAL USE RECEPTACLES SHALL FEATURE VOLTAGE CLASS AND NEMA CONFIGURATION AS LISTED.
4.7	OCCUPANT AND DAYLIGHT SENSORS ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL OCCUPANT AND DAYLIGHT SENSING EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS. INCLUDE ALL INTERCONNECTION WIRING, POWER-PACKS, ETC. AS REQUIRED. OCCUPANT SENSORS SHALL FEATURE DUAL-TECHNOLOGY SENSING EQUIPMENT.

PART 4.0	ELECTRICAL COMPONENTS, METHODS, AND MATERIALS (CONT...)
4.8	CONDUIT SYSTEMS CONDUIT ROUTES DEPICTED ON THE ELECTRICAL DESIGN DOCUMENTS SHALL BE CONSIDERED AS DIAGRAMS. ACTUAL ROUTES SHALL BE DETERMINED BY THE ELECTRICAL CONTRACTOR AT THE TIME OF INSTALLATION. ELECTRICAL CONTRACTOR SHALL NOT USE DIAGRAMS DEPICTED FOR ESTIMATION OR PRICING. ALL CONDUIT SYSTEMS SHALL BE SELECTED FOR USE PER NEC/CEC. NO CONDUIT TYPE SHALL BE APPLIED WHERE NOT PERMITTED FOR USE BY CODE, AND LOCAL ORDINANCE. PROVIDE AND INSTALL GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR IN ALL NON-METALLIC CONDUIT SYSTEMS. RIGID METALLIC CONDUIT (RMC) AND INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE PERMITTED FOR ALL LOCATIONS AND SHALL BE USED WHERE CONDUIT IS SUBJECT TO PHYSICAL DAMAGE (EXPOSED ON ROOF TOPS, CORROSIVE ATMOSPHERES, RISERS FROM GRADE TO EQUIPMENT, DRIVE-AISLES, ETC.). CONDUITS SHALL BE CONCEALED WHEREVER POSSIBLE. FOR UNDERGROUND CONDUIT SYSTEMS: RIGID NON-METALLIC (PVC SCHEDULE 40) CONDUIT, WITH RIGID STEEL ELBOWS. UNDERGROUND ELECTRICAL CONDUITS SHALL BE BURIED A MINIMUM OF 24" BELOW FINISHED GRADE, OR PER UTILITY WORK ORDER DRAWINGS. ELECTRICAL METALLIC TUBING (EMT) SHALL BE PERMITTED FOR USE IN INTERIOR AND EXTERIOR LOCATIONS WHERE NOT SUBJECT TO PHYSICAL DAMAGE. CONDUIT SHALL BE CONCEALED WHEREVER POSSIBLE. EMT SHALL NOT BE USED WHERE SUBJECT TO PHYSICAL DAMAGE. ALL FITTINGS SHALL BE STEEL. CONNECTORS SHALL HAVE INSULATED THROATS. FLEXIBLE METALLIC CONDUIT (FMC) SHALL BE USED ONLY IN DRY CONCEALED LOCATIONS INCLUDING MILLWORK/CASEWORK AND AS ALLOWED BY AUTHORITY HAVING JURISDICTION. FMC CABLES SHALL NOT OPERATE MORE THAN ONE CIRCUIT. FMC SHALL BE PERMITTED FOR USE FOR SHORT CONNECTIONS TO MOTORS AND VIBRATING EQUIPMENT IN DRY, INDOOR LOCATIONS. LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT (LFMC) SHALL BE USED FOR SHORT CONNECTIONS (3' MAX) TO MOTORS AND VIBRATING EQUIPMENT IN WET OR OUTDOOR LOCATIONS. LIQUIDTIGHT FLEXIBLE NON-METALLIC CONDUIT (LFNC) AND ELECTRICAL NON-METALLIC TUBING (ENT) ARE NOT PERMITTED FOR USE. NON-METALLIC JACKETED CABLING ("ROMEX") SHALL BE SUITABLE FOR USE IF ALLOWED BY AUTHORITY HAVING JURISDICTION FOR RESIDENTIAL INTERIOR CONCEALED LOCATIONS.

PART 4.0	ELECTRICAL COMPONENTS, METHODS, AND MATERIALS (CONTINUED)
4.9	CONDUCTORS ALL CONDUCTORS SHALL BE UL LISTED OR SHALL MEET UL LISTING STANDARDS. CONDUCTORS SHALL BE COPPER (UNLESS OTHERWISE NOTED), SOFT-DRAWING, AND CONCEALED IN CONDUIT. SIZES SHALL BE AMERICAN WIRE GAUGE. CONDUCTORS SIZED #10 AWG AND SMALLER SHALL BE SOLID. CONDUCTORS SIZED #8 AWG AND LARGER SHALL BE STRANDED. MINIMUM WIRE SIZE SHALL BE #12 AWG (UNLESS OTHERWISE NOTED). CONDUCTOR INSULATION SHALL BE 600 VOLT RATED. CONDUCTORS SHALL BE CONTINUOUS FROM ORIGIN TO TERMINATION WITHOUT SPLICES PER NEC/CEC. WHERE REQUIRED, SPLICES SHALL BE INSTALLED IN BOXES. WIRE/CABLE SHALL BE HANDLED TO AVOID DAMAGE TO CONDUCTOR AND INSULATION. WIRE/CABLE SHALL BE DELIVERED TO SITE IN STANDARD COILS OR REELS WITH SUITABLE PROTECTION FROM WEATHER AND DAMAGE DURING STORAGE, HANDLING, AND INSTALLATION. ELECTRICAL CONTRACTOR SHALL COLOR-CODE CONDUCTORS CONSISTENTLY THROUGHOUT THE PROJECT AS FOLLOWS:

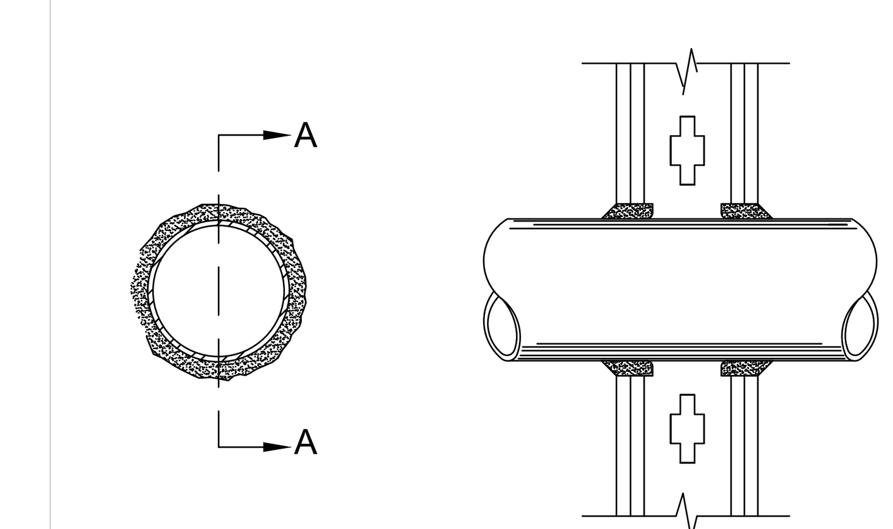
VOLTAGE	PHASE A	PHASE B	PHASE C	NEUTRAL	GROUND
208Y/120V	BLACK	RED	BLUE	WHITE	GREEN
480Y/277V	BROWN	ORANGE	YELLOW	GRAY	GREEN

4.10	ELECTRICAL DISTRIBUTION EQUIPMENT ALL ELECTRICAL EQUIPMENT (SWITCHGEAR, PANELBOARDS, CIRCUIT BREAKERS, ETC) SHALL BE OF THE SAME MANUFACTURE. ACCEPTABLE MANUFACTURES ARE: EATON, GE, SIEMENS, OR SQUARE-D (NO SUBSTITUTES). SERVICE EQUIPMENT SHALL BE FULLY ENCLOSED, FACTORY ASSEMBLED, AND SHALL OPERATE PER SERVING ELECTRICAL UTILITY STANDARDS.
4.11	GROUNDING AND BONDING PROVIDE AND INSTALL GROUNDING FOR ALL EQUIPMENT AND SYSTEM NEUTRAL IN ACCORDANCE WITH NEC/CEC ARTICLE 250.
4.12	SHORT CIRCUIT PROTECTION SHORT CIRCUIT INTERRUPTING VALUES, AS INDICATED ON THESE ELECTRICAL CONSTRUCTION DOCUMENTS, REFER TO BOTH SHORT-CIRCUIT WITHSTAND RATINGS FOR EQUIPMENT, AND SHORT-CIRCUIT INTERRUPTING CAPABILITY FOR CIRCUIT BREAKERS. SERIES RATING OF SHORT CIRCUIT WITHSTAND LEVELS IS ALLOWED ONLY IF SUPPORTED BY MANUFACTURER'S PUBLISHED DATA AND IS ALLOWED BY LOCAL CODE. ANY PROPOSED SERIES RATING OF ELECTRICAL COMPONENTS SHALL BE CLEARLY IDENTIFIED. ELECTRICAL CONTRACTOR SHALL PROVIDE SUPPORTING DOCUMENTATION FOR SERIES RATED EQUIPMENT IN THE ELECTRICAL SUBMITTAL DATA SHEETS.

PART 5.0	PENETRATIONS
5.1	PENETRATIONS ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL SEALING FOR ALL CONDUIT PENETRATIONS. PROVIDE AND INSTALL UL LISTED ASSEMBLIES AND EMPLOY ARCHITECTURALLY APPROVED METHODS FOR WATER-TIGHT SEAL AT EXTERIOR WALLS AND FIRE-RATED SEAL AT FIRE-RATED WALLS. VERIFY FIRE- RATING PRIOR TO INSTALLATION. COORDINATE PENETRATION LOCATIONS WITH ARCHITECT AND GENERAL CONTRACTOR AS REQUIRED. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL FIRE-RATED WALL ASSEMBLIES WHERE REQUIRED. ONE, TWO, THREE, AND FOUR HOUR FIRE-RATED WALL ASSEMBLIES SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES: A. STUD WALL FRAMING MAY CONSIST OF WOOD STUDS (FOR A MAXIMUM OF TWO HOUR FIRE-RATED ASSEMBLIES) OR STEEL CHANNEL STUDS. WOOD STUDS SHALL CONSIST OF NOMINAL 2"x4" LUMBER SPACED 16" ON-CENTER. END PLATES AND CROSS-BRACES SHALL BE NOMINAL 2"x4" LUMBER. STEEL STUDS TO BE MINIMUM 3-5/8"x1-3/8" CHANNELS SPACES 24" ON-CENTER MAX. B. GYPSUM BOARD SHALL BE NOMINAL 1/2" OR 5/8" THICK, 4' WIDE WITH SQUARE OR TAPERED EDGES. WALLBOARD TYPE, THICKNESS, QUANTITY OF LAYERS, FASTENER TYPE, AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIAMETER OF OPENING IS 26". PENETRATIONS AT FIRE-RATED WALLS SHALL CONSIST OF ONE METALLIC PIPE. CONDUIT, OR TUBE INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRE STOP SYSTEM. THE ANNULAR SPACE BETWEEN PIPE, CONDUIT, OR TUBING AND PERIPHERY OF OPENING SHALL BE A MINIMUM OF 0" (POINT OF CONTACT) TO A MAXIMUM OF 2". PIPE, CONDUIT, OR TUBE SHALL BE RIGIDLY SUPPORTED ON BOTH SIDES OF THE WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS, OR TUBES MAY BE USED. A. STEEL PIPE: NOMINAL 24" DIAMETER (OR SMALLER) SCHEDULE 10 OR HEAVIER. B. CAST IRON SOIL PIPE: NOMINAL 24" DIAMETER (OR SMALLER) SERVICE WEIGHT OR HEAVIER. C. DUCTILE IRON PRESSURE PIPE: NOMINAL 12" DIAMTER (OR SMALLER) CLASS 50. D. CONDUIT: NOMINAL 6" DIAMETER (OR SMALLER) STEEL CONDUIT OR NOMINAL 4" DIAMETER (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING. E. COPPER TUBING: NOMINAL 6" DIAMETER (OR SMALLER) TYPE 'L' OR HEAVIER. F. COPPER PIPE: NOMINAL 6" DIAMETER (OR SMALLER) REGULAR OR HEAVIER. PLASTIC COVERING ON STEEL FLEXIBLE METAL GAS PIPING (NOMINAL 2" DIAMETER OR SMALLER) MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. PROVIDE CAVITY/VOID FILL MATERIAL (CAULK OR SEALANT) AS REQUIRED. CAULK OR SEALANT SHALL BE APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. CAULK OR SEALANT THICKNESS SHALL BE APPLIED TO SUIT FIRE-RATING. MINIMUM 5/8" THICK FOR ONE-HOUR RATING, 1-1/4" THICK FOR TWO-HOUR RATING, 1-7/8" FOR THREE-HOUR RATING, AND 2-1/2" THICK FOR FOUR-HOUR RATING. MINIMUM OF 1/4" THICK DIAMETER BEAD OF CAULK APPLIED TO GYPSUM BOARD/ PENETRANT INTERFACE AT POINT OF CONTACT LOCATION ON BOTH SIDES OF PENETRATED ASSEMBLY. THE HOURLY F-RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE-RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED. THE HOURLY T-RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE-RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED. SEE THE FOLLOWING TABLE:

MAX PIPE DIAMETER	F-RATING	T-RATING
1"	1 OR 2	0+, 1, OR 2
2"	3 OR 4	3 OR 4
4"	1 OR 2	0
6"	3 OR 4	0
12"	1 OR 2	0

SYSTEM NO: W-L-1001
F-RATINGS: ONE, TWO, THREE, AND FOUR HOUR (SEE ITEMS 2 AND 3).
T-RATINGS: ZERO, ONE, TWO, THREE, AND FOUR HOUR (SEE ITEM 3)
L-RATING AT AMBIENT: LESS THAN 1 CFM/sq.ft.



SECTION A-A

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REV.	DATE	DESCRIPTION	BY	APP'D

DATE: JUNE 2021
DRAWN BY: GAJ
DESIGNED BY: GAJ
CHECKED BY: GAJ

CITY OF SPARKS
SHELLY PARK RESTROOM
GENERAL ELECTRICAL SPECIFICATIONS
SPARKS WASHOE NEVADA

odyssey ENGINEERING INCORPORATED
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PROFESSIONAL ENGINEER – STATE OF NEVADA
GEORGE A. JENSEN
EXP: 06-30-2023
ELECTRICAL
No. 025453
14 JUNE 2022

SCALE
HORIZ. Shown
VERT. –
JOB NO. A162BN
SHEET
E001
OF
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SHEET NOTES

1. INSPECT PROJECT SITE AND IDENTIFY EXISTING PANELBOARD. PROVIDE AND INSTALL 100-AMP/2-POLE BREAKER AT EXISTING BREAKER SPACES #9, 11 FOR NEW RESTROOM BUILDING.

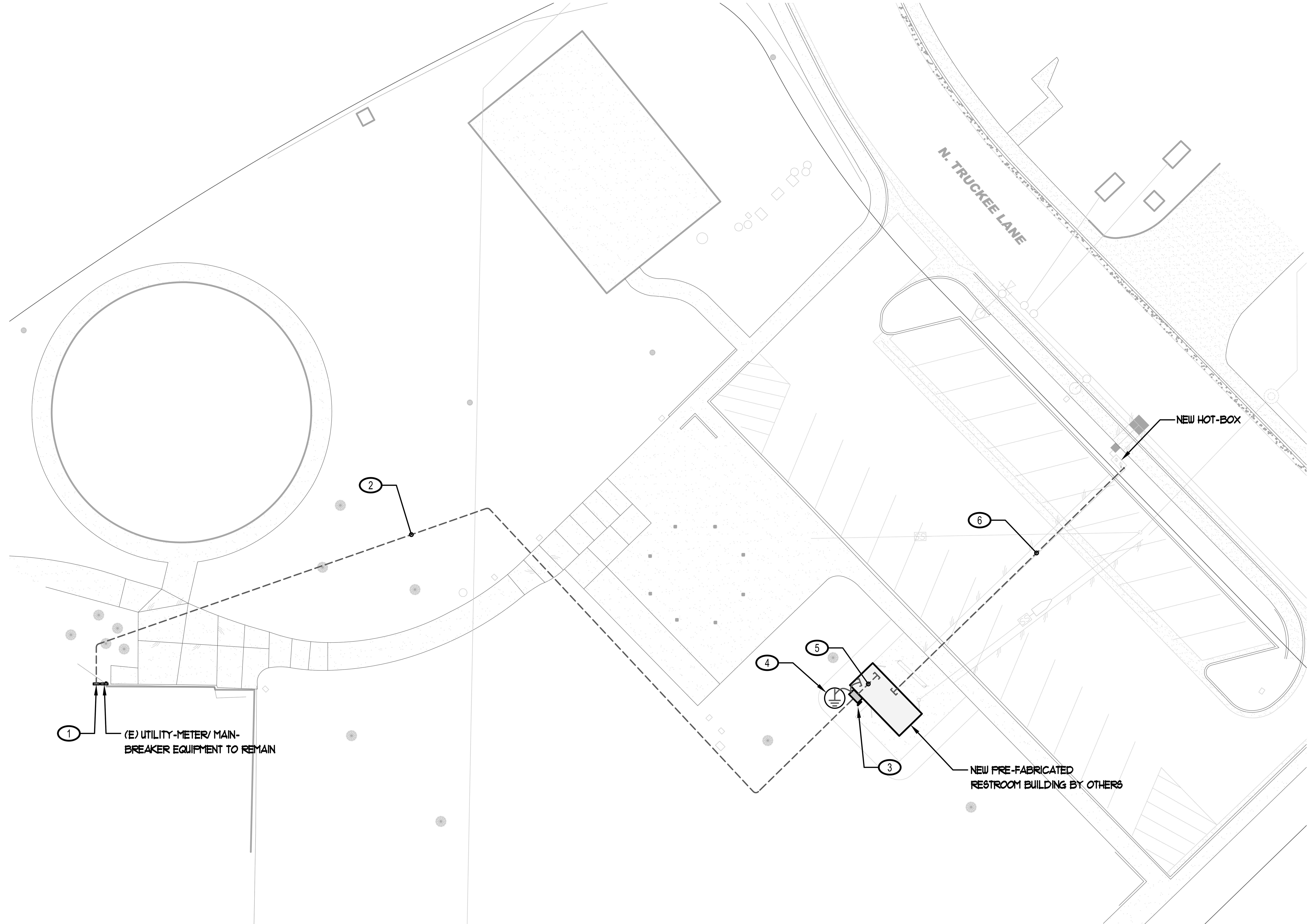
2. COORDINATE WITH GENERAL CONTRACTOR AS REQUIRED FOR INSTALLATION OF NEW ELECTRICAL FEEDER. VERIFY EXACT ROUTING. SAW-CUT EXISTING CONCRETE SIDEWALK WHERE REQUIRED. PROVIDE AND INSTALL ONE 2" CONDUIT WITH (3)-#2 Cu + (1)-#8 Cu GROUND AND EXTEND FROM EXISTING PANELBOARD (SEE SHEET NOTE #1) TO NEW DISCONNECT SWITCH ON BUILDING EXTERIOR. CONNECT COMPLETELY PER MANUFACTURER'S INSTRUCTIONS. REPAIR CONCRETE SIDEWALK TO MATCH PRE- CONSTRUCTION CONDITIONS.

3. PROVIDE AND INSTALL 200A/NF/2P, 250V, N3R DISCONNECT SAFETY SWITCH ON NEW RESTROOM BUILDING EXTERIOR. CONNECT ELECTRICAL FEEDER (SEE SHEET NOTE #2) COMPLETELY PER MANUFACTURER'S INSTRUCTIONS.

4. PROVIDE AND INSTALL GROUNDING ELECTRODE SYSTEM AT RESTROOM BUILDING PER NEC ARTICLE 250. PROVIDE AND INSTALL #3/0 Cu GROUNDING ELECTRODE CONDUCTOR AND BOND TO RESTROOM BUILDING DISCONNECT SWITCH AND BUILDING INTERIOR PANELBOARD GROUND-BUS (INTERIOR PANELBOARD BY OTHERS). BOND GROUNDING ELECTRODE CONDUCTOR TO ALL AVAILABLE APPROVED GROUNDING ELECTRODE SYSTEMS PER NEC ARTICLE 250.53 AS FOLLOWS:
   1. METAL UNDERGROUND WATER PIPING SYSTEMS (250.53(A)(1)).
   2. METAL FRAME OF THE BUILDING OR STRUCTURE (250.53(A)(2)).
   3. CONCRETE ENCASED ELECTRODE (250.53(A)(3)).
   4. GROUNDING RING SYSTEM (250.53(A)(4)).
   5. ROD AND PIPE ELECTRODE SYSTEMS (250.53(A)(5)).

5. EXTEND ELECTRICAL FEEDER (SEE SHEET NOTE #2) FROM NEW EXTERIOR DISCONNECT SWITCH TO BUILDING INTERIOR PANELBOARD AND CONNECT COMPLETELY PER MANUFACTURER'S INSTRUCTIONS. BUILDING INTERIOR PANELBOARD BY OTHERS.

6. COORDINATE WITH RESTROOM BUILDING MANUFACTURER AS REQUIRED TO INCORPORATE NEW HOT-BOX. PROVIDE AND INSTALL 20-AMP/1-POLE CIRCUIT BREAKER IN RESTROOM BUILDING PANELBOARD. PROVIDE AND INSTALL 1" UNDERGROUND CONDUIT WITH (2)-#12 Cu + (1)-#12 Cu GROUND FROM NEW RESTROOM BUILDING PANELBOARD TO NEW HOT-BOX VIA ELECTRICAL AS SHOWN. CONNECT COMPLETELY PER MANUFACTURER'S INSTRUCTIONS.



SHELLY PARK
CITY OF SPARKS

A PROPOSED SITE ELECTRICAL PLAN
1" = 20'-0" N

REV.	DATE	DESCRIPTION	BY	APP'D

DATE: JUNE 2021
DRAWN BY: GAJ
DESIGNED BY: GAJ
CHECKED BY: GAJ

CITY OF SPARKS
SHELLY PARK RESTROOM
PROPOSED ELECTRICAL SITE PLAN
SPARKS WASHOE NEVADA

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PROFESSIONAL ENGINEER STATE OF NEVADA
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[illegible]
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SCALE
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SHEET
E101
OF
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SHEET NOTES

(1) INSPECT PROJECT SITE AND IDENTIFY EXISTING PANELBOARD. PROVIDE AND INSTALL 100-AMP/2-POLE BREAKER AT EXISTING BREAKER SPACES #9, 11 FOR NEW RESTROOM BUILDING.

1-Phase, 3-Wire, Electrical Panelboard Schedule by Jensen Engineering, Inc.[4]

Project Name:	SHELLY PARK	Line to Neutral Voltage:	120	Bus Material:	EXISTING
Panel Name:	METER/MAIN	Line to Line Voltage:	240	Bus Rating:	EXISTING
Panel Location:	TENNIS COURT	Main Breaker or Lug Only:	Lug Only	Lug/Breaker Rating:	200 AMP
Short Circuit Rating:	EXISTING	New or Existing:	EXISTING	Mounting:	SURFACE

Ckt. No.	Load (VA)		Description	Load Power Factor	One-Way Ckt Length (ft)	Wire Size (AWG)	Corrected Z (Ω-to-Neutral)	VDROP (%)	Breaker Poles	Breaker Trip	Phase A	Phase B	Breaker Trip	Breaker Poles	VDROP (%)	Corrected Z (Ω-to-Neutral)	Wire Size (AWG)	One-Way Ckt Length (ft)	Load Power Factor	Description	Load (VA)		Ckt. No.
1			EXISTING LOAD TO REMAIN						2	30	●		40	2						EXISTING LOAD TO REMAIN			2
3												●											4
5			EXISTING LOAD TO REMAIN						2	30	●		40	2						EXISTING LOAD TO REMAIN			6
7												●											8
9	7760		NEW RESTROOM BUILDING[4]	0.85	285	2	0.20	3.02	2	100	●		40	2						EXISTING LOAD TO REMAIN			10
11		7760										●											12
13									1	20	●		40	2						EXISTING LOAD TO REMAIN			14
15									1	20		●											16
17									1	20	●		20	1						EXISTING LOAD TO REMAIN			18
19									1	20		●	20	1						EXISTING LOAD TO REMAIN			20
21									1	20	●		20	1									22
23									1	20		●	20	1									24
25									1	20	●		20	1									26
27									1	20		●	20	1									28
29									1	20	●		20	1									30
	7760	7760	Total Load (VA)																				

Notes:
1. Voltage drop calculated using Neher-McGrath method.
2. Resistance and Reactance taken from NEC/CEC Chapter 9, Table 9.
3. Conductor length estimated for voltage-drop calculation only. Not to be used for pricing.
4. See Existing Electrical Load Calculation.

Total Load (VA):	0	0
+25% of Lighting Load (VA):	0	0
+25% of Largest Motor Load (VA):	0	0
Combined Total Load (VA):	7760	7760
Average Line Current (Amps):	64.67	64.67
Average Total Current (Amps):	64.67	
Total Connected Load (kVA):	15.52	

EXISTING ELECTRICAL LOAD CALCULATION PER NEC 220.87

EXISTING LOAD (PER NV ENERGY):	5.24	kW
EXISTNG LOAD ASSUMING 0.85 POWER FACTOR:	6.16	kVA
EXISTING LOAD CALCULATED AT 125%:	7.71	kVA
ADDED LOADS:		
RESTROOM BUILDING:	15.52	kVA
IRRIGATION HOT-BOX:	0.87	kVA
TOTAL COMBINED LOAD:	24.10	kVA
AVERAGE LINE CURRENT AT 240 VOLT, 1-PHASE:	100.40	AMPS
EXISTING 200-AMP SERVICE ADEQUATE FOR USE		

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REV.	DATE	DESCRIPTION	BY	APP'D

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CITY OF SPARKS
SHELLY PARK RESTROOM
ELECTRICAL SCHEDULES
SPARKS WASHOE NEVADA

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PROFESSIONAL ENGINEER - STATE OF NEVADA
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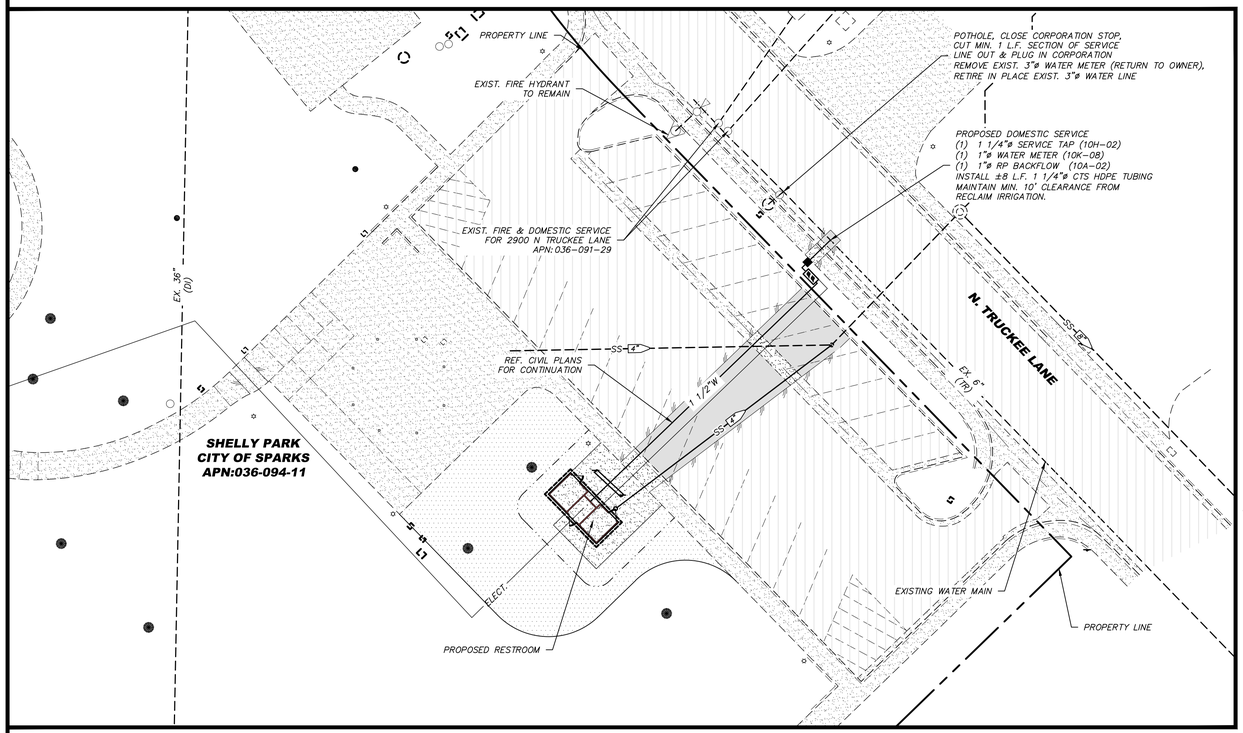
2901 N TRUCKEE LN_COMSVC



SITE PLAN

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

LEGEND:

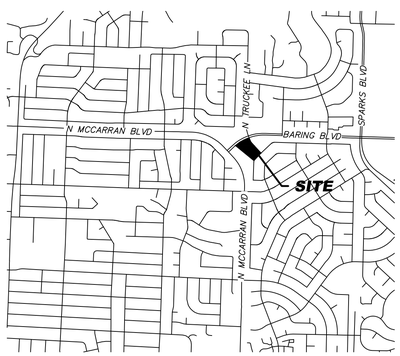
- 11° ELBOW
- 11° M.J. ELBOW
- 22° ELBOW
- 22° M.J. ELBOW
- 45° ELBOW
- 45° M.J. ELBOW
- 90° ELBOW
- 90° M.J. ELBOW
- BACKFLOW PREVENTOR
- CHECK VALVE
- FIRE HYDRANT
- FLUSH VALVE
- METER-DUAL
- METER-SINGLE
- REDUCER
- SERVICE-DUAL
- SERVICE-SINGLE
- TEE
- VALVE

NOTE:
TMWA WILL NOT ACCEPT ANY PIPE MANUFACTURED BY JM EAGLE, PW EAGLE, OR PW PIPE

NOTE:
POLYETHYLENE WRAP TO BE USED ON ALL DUCTILE IRON PIPE AND FITTINGS

NOTE:
ALL SERVICES TO HAVE PRIVATE PRESSURE REGULATING VALVES.

NOTE:
CONTRACTOR MUST OBTAIN ENCROACHMENT PERMIT FROM CITY OF SPARKS PRIOR TO STREET CUTTING WITHIN PUBLIC RIGHT-OF-WAY.



VICINITY MAP ~ NTS

Know what's below. Call before you dig.

TRUCKEE MEADOWS WATER AUTHORITY:

APPLICANT TO FURNISH AND/OR INSTALL:

ALL TRENCHING AND EXCAVATION PER TMWA ENGINEERING & CONSTRUCTION STANDARDS SECTIONS 4 AND 5.

ALL SURVEY STAKING NECESSARY TO CLARIFY RIGHT-OF-WAY, EASEMENTS, PROPERTY LINES, ELEVATIONS, ETC.

ALL NECESSARY PERMITS, PAVEMENT CUTTING, PAVEMENT REMOVAL, AND PAVEMENT REPLACEMENT.

APPLICANT TO INSTALL WATER METER SETTER AND ENCLOSURE.
WATER METER INSTALLED BY TMWA.

ALL REQUIRED LINE PRESSURE TESTS AND WELDING/FUSION QUALITY TESTS SHALL BE PERFORMED IN ACCORDANCE WITH AWWA C600, C605 AND TMWA ENGINEERING & CONSTRUCTION STANDARDS. MOST STRINGENT STANDARD SHALL APPLY. ALL PRESSURE TESTS SHALL BE PERFORMED BEFORE THE PIPING IS FLUSHED, DISINFECTED OR SAMPLED FOR AN ANALYSIS OF WATER QUALITY.

ADDRESSES OR BUILDING DESIGNATION.

LETTER TO VERIFY THAT ELEVATIONS ARE AT ENGINEERED SUB-GRADES PRIOR TO UTILITY CONSTRUCTION.

ALL PRIVATE DOMESTIC AND IRRIGATION LINES BEYOND THE POINT OF CONNECTION AT TMWA'S METER PROVISION AND ALL NECESSARY WATER PRESSURE REGULATION EQUIPMENT (REFER TO THE MOST CURRENT EDITION OF THE UNIFORM PLUMBING CODE WHICH HAS BEEN ADOPTED BY THE GOVERNMENTAL ENTITY HAVING JURISDICTION OVER THE PROJECT).

WATER MAINS SHALL NOT BE PLACED IN SERVICE UNTIL DISINFECTED PER AWWA STANDARD C651 AND AN ANALYSIS WHICH INDICATES IT MEETS PRIMARY STANDARDS FOR COLIFORM BACTERIA HAS BEEN OBTAINED. FINAL WATER QUALITY TESTS WILL BE FORWARDED TO THE REVIEWING AGENCY UPON COMPLETION OF ANALYSIS.

CONTRACTOR TO COORDINATE WITH TMWA INSPECTOR REGARDING DISCHARGE OF SPENT CHLORINATED WATER.

V-BIO POLYETHYLENE WRAP TO BE USED ON ALL DUCTILE IRON PIPE (DIP) AND FITTINGS PER AWWA STANDARD C105.

APPROX. 8' OF 1 1/4" AWWA C901 CTS HDPE TUBING WITH ALL FITTINGS AND APPURTENANCES. (INCLUDING ALL HOT TAPS 2" AND UNDER). DOMESTIC

SEPARATION BETWEEN WATER SERVICES:

C900 PVC PIPE, TRANSITE (AC) PIPE – SERVICE TAPS ON THE SAME SIDE OF PIPE SHALL HAVE A MINIMUM 36" SEPARATION. SERVICES STAGGERED SIDE TO SIDE OF PIPE SHALL HAVE A MINIMUM 18" SEPARATION. NO SERVICES ALLOWED WITHIN 24" OF CUT END OR PIPE TO BELL TRANSITION.

DUCTILE IRON PIPE, CAST IRON PIPE, STEEL PIPE – SERVICE TAPS ON THE SAME SIDE OF PIPE SHALL HAVE A MINIMUM 18" SEPARATION. SERVICES STAGGERED SIDE TO SIDE OF PIPE SHALL HAVE A MINIMUM 9" SEPARATION. NO SERVICES ALLOWED WITHIN 24" OF CUT END OR PIPE TO BELL TRANSITION.

■ 1 – 13" x 24" SINGLE WATER METER PROVISION ASSEMBLY(IES).

PRESSURE REGULATOR VALVE (PRV) – PRV'S ARE REQUIRED WITHIN THIS DEVELOPMENT TO REDUCE WATER PRESSURE IN DOMESTIC LINES AND IRRIGATION SYSTEMS. WATER PRESSURE MAY BE GREATER THAN 80 PSI WHEN THE SERVICE IS INITIALLY CONNECTED OR IN THE FUTURE AS A RESULT OF PRESSURE INCREASES PLANNED WITHIN THE AREA. THE APPLICANT IS RESPONSIBLE FOR THE INITIAL INSTALLATION AND MAINTENANCE OF THE ASSEMBLY(IES). WHEN A CHANGE IN OWNERSHIP OCCURS, FUTURE MAINTENANCE OF THE ASSEMBLY(IES) BECOMES THE RESPONSIBILITY OF THE NEW OWNER.

TMWA TO FURNISH AND/OR INSTALL:

FIELD INSPECTOR TO INSPECT MAINS AND SERVICES

■ 1 – 1" IPERL – SENSUS WATER METER(S) FOR DOMESTIC.

GENERAL COMMENTS:

CONTRACTOR TO CALL PROJECT COORDINATOR AT (775) 834-XXXX 48-HOURS PRIOR TO START OF CONSTRUCTION TO SCHEDULE ON-SITE INSPECTION.
(INCLUDE WORK ORDER NUMBER XX-XXXX)

APPLICANT TO NOTIFY TMWA OF ANY DESIGN AND/OR ADDRESS CHANGES.

ALL MATERIALS, INCLUDING BACKFILL, SHALL BE AT THE JOB SITE PRIOR TO START OF CONSTRUCTION AND SHALL COMPLY WITH TMWA ENGINEERING & CONSTRUCTION STANDARDS.

MAINTAIN POTABLE WATER AND SS/SD/NON-POTABLE HORIZONTAL AND VERTICAL CLEARANCES AS SPECIFIED IN NEVADA ADMINISTRATIVE CODE (NAC) SECTION 445A AND TMWA ENGINEERING & CONSTRUCTION STANDARDS SECTION 8.

AT ALL CROSSINGS, UNDERGROUND ELECTRIC FACILITIES SHALL BE LOCATED BELOW WATER MAINS AND/OR WATER SERVICES WITH A MINIMUM OF 2-FEET VERTICAL CLEARANCE.

ALL WORK SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH THE SPECIFICATIONS SET FORTH IN THE TMWA ENGINEERING & CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SECURE COPIES OF THE AFOREMENTIONED CONSTRUCTION SPECIFICATIONS ON HIS/HER OWN BEHALF. THE ENGINEERING & CONSTRUCTION STANDARDS MAY BE DOWNLOADED FROM: www.tmwa.com/standards

SYMBOLS ARE NOT TO SCALE AND DO NOT NECESSARILY REPRESENT ACTUAL LOCATIONS OF FACILITIES.

THESE DRAWINGS ARE BASED ON CIVIL PLANS DATED: DEC 2022

THIS MAP ILLUSTRATES DATA COLLECTED FROM VARIOUS SOURCES AND MAY NOT REPRESENT A SURVEY OF THE PREMISES. NO RESPONSIBILITY IS ASSUMED AS TO THE SUFFICIENCY OR ACCURACY OF THE DATA DISPLAYED HEREON.

CAUTION: CONTRACTOR IS RESPONSIBLE FOR LOCATING AND COORDINATING WORK AROUND ALL EXISTING UTILITIES. PRIOR TO EXCAVATION, CHECK TO ENSURE ADDITIONAL DEPTH IS NOT REQUIRED TO ACCOMMODATE INSTALLATION OF GAS FACILITIES.

SOILS RETENTION MAY BE REQUIRED AROUND WATER METER BOXES, FIRE HYDRANTS, AND OTHER FACILITIES IF SLOPES EXCEED 15%.

WATER METERS SHALL BE LOCATED WITHIN A PUBLIC UTILITY EASEMENT (PUE).

TOP OF WATER METER ENCLOSURE SHALL BE SET 0.2 FEET ABOVE HIGHEST FINISHED GRADE SURROUNDING ENCLOSURE WITHIN LANDSCAPED AREAS. FOR INSTALLATIONS IN CONCRETE OR OTHER PAVED AREAS, SET TOP OF LID FLUSH WITH SURROUNDING SURFACE.

APPLICANT TO ADVISE PLUMBING CONTRACTOR OF HIS/HER RESPONSIBILITY TO VERIFY WATER PRESSURE DURING STATIC CONDITIONS AT ALL SERVICE LOCATIONS. THE PLUMBING CONTRACTOR IS REQUIRED TO CONFORM TO THE MOST CURRENT EDITION OF THE UNIFORM PLUMBING CODE WHICH HAS BEEN ADOPTED BY THE GOVERNMENTAL ENTITY HAVING JURISDICTION OVER THE PROJECT. SPECIAL ATTENTION SHOULD BE GIVEN TO THE SECTION OF THE CODE CONCERNING STATIC WATER PRESSURE IN EXCESS OF 80 PSI.

UNUSED SERVICE LATERALS SHALL BE RETIRED BACK TO TMWA'S WATER MAIN.

WATER MAINS TO EXTEND A MINIMUM OF 10-FEET BEYOND END OF PAVING. MAINS ARE NOT TO BE INSTALLED UNDER SIDEWALK AND/OR CURB & GUTTER.

DURING CONSTRUCTION ALL OPEN ENDS OF PIPES OR FITTINGS SHALL BE SEALED AT THE END OF EACH WORKING DAY TO PREVENT THE ENTRY OF FOREIGN OBJECTS.

ALL PIPE AND APPURTENANCES SHALL BE NSF 61 CERTIFIED.

DOMESTIC SERVICES

RP USC APPROVED RP (REDUCED PRESSURE PRINCIPLE ASSEMBLY)

IF INITIAL TEST DONE BY TMWA FIELD PERSONNEL FAILS, RE-TESTING OF BACKFLOW PREVENTION ASSEMBLY IS REQUIRED WITHIN 7-10 DAYS AFTER METER IS SET OR SERVICE ACTIVATION. A COPY OF TEST RESULTS ARE TO BE FORWARDED TO TMWA WATER QUALITY/BACKFLOW PREVENTION PERSONNEL BY A CERTIFIED ASSEMBLY TESTER.

ABBREVIATIONS

ARV	AIR RELEASE VALVE
ASSY	ASSEMBLY
BOT	BOTTOM (OF PIPE)
BOV	BLOW-OFF VALVE
CL	CENTERLINE
CONST	CONSTRUCT
CTS	COPPER TUBE SIZE
DI OR DIP	DUCTILE IRON PIPE
DIA	DIAMETER
DCDA	DOUBLE CHECK DETECTOR ASSEMBLY
EX.	EXISTING
FCA	FLANGE COUPLING ADAPTER
FH	FIRE HYDRANT
FLG OR FL	FLANGE
FVA	FLUSH VALVE ASSEMBLY
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH POINT
IE	INVERT ELEVATION
MJ	MECHANICAL JOINT
MRJ	MECHANICALLY RESTRAINED JOINT
OD	OUTSIDE DIAMETER
PL OR P/L	PROPERTY LINE
PO	PUSH ON
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE PIPE
R	RADIUS
RFCA	RESTRAINED FLANGE COUPLING ADAPTER
ROW OR R/W	RIGHT OF WAY
RPBA	REDUCED PRESSURE BACKFLOW ASSEMBLY
STL	STEEL
TB	THRUST BLOCK
TS	TEST STATION
TYP	TYPICAL
W	WATER
W/	WITH
XING	CROSSING

CHLORINE DOSAGE

PIPE DIAMETER INCHES	NUMBERS OF 5 gram CALCIUM HYPOCHLORITE TABLETS REQUIRED FOR DOSE OF 25mg/L LENGTH OF PIPE SECTION		
	13 OR LESS	18	20
6	1	1	1
8	1	2	2
10	2	3	3
12	3	4	4

NOT FOR CONSTRUCTION

FOR TMWA USE ONLY
NEW BUSINESS WATER

WO#	Map #
New Main	
Date Installed:	Depth:
Pressure Test Date:	
PSI	Hours Tested:
Inspector:	
Contractor:	

Feet Laid	Size	Type	Main/Svc

Retired/ Abandoned/Removed

Feet Ret.	Size	Type	Main/Svc

# of Meter boxes Inst./Size:
# of Setters Inst./Size:

PROFESSIONAL ENGINEER STATE OF NEVADA
TRAVIS C. PAGE
Exp. 12-31-23
CIVIL
No. 28825
11/3/23

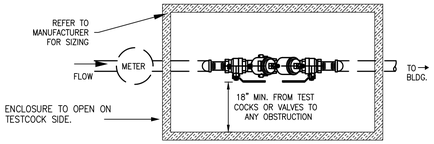
895 ROBERTA LANE, SUITE 104, SPARKS, NV 89431
(775) 359-3303 FAX (775) 359-3329
Odyssey ENGINEERING INCORPORATED

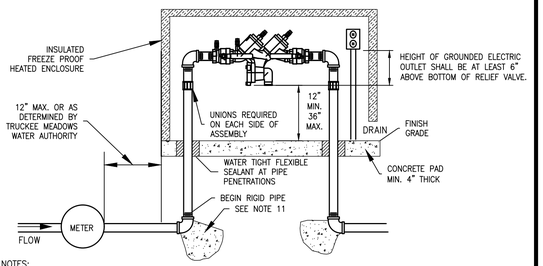
WORK ORDER NO. XX-XXXX
DESIGNED ODYSSEY ENGINEERING
DRAWN ACAD 2023
CHECKED APRIL 2023
DATE
SUBMITTED
RECOMMENDED
APPROVED

TRUCKEE MEADOWS WATER AUTHORITY
1355 CAPITAL BLVD. / PO BOX 30013
RENO, NEVADA 89502-3013
PH 775-834-8000 / FX 775-834-8003

2901 N TRUCKEE LN_COMSVC
WO#: XX-XXXX
WATER PLANS

SHEET NUMBER
WE-1
1 OF 2

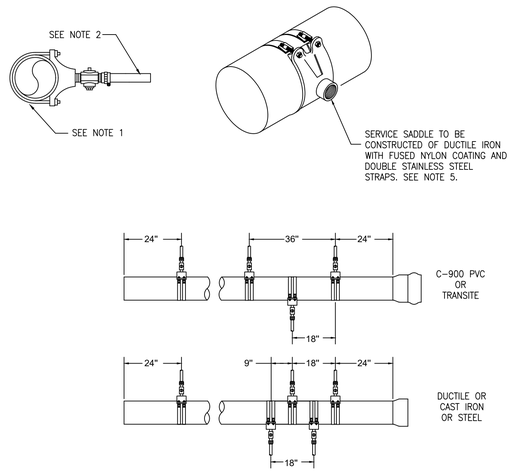




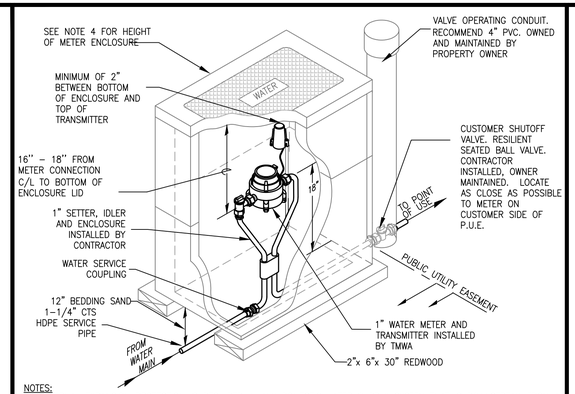
NOTES:
1. ASSEMBLY SHALL BE A USC APPROVED LEAD FREE DEVICE.
2. THE RP SHALL BE INSTALLED ABOVE GRADE.
3. GROUNDED ELECTRIC SUPPLY SHALL BE A MINIMUM OF 6" ABOVE BOTTOM OF RELIEF VALVE AND STUBBED TO THE OUTSIDE.
4. NO STOP AND WASTE VALVES.
5. FREEZE PROOF INSULATED BOX AND 1 SOURCE OF HEAT ARE REQUIRED. 2 SOURCES OF HEAT ARE STRONGLY RECOMMENDED.
6. INSULATED BOX SHALL SWING CLEAR OF ASSEMBLY TO PROVIDE CLEARANCES SHOWN OR INSULATED BOX SHALL BE SIZED TO PROVIDE CLEARANCES SHOWN.
7. SPRING LOADED LID REQUIRED ON LARGE BOXES.
8. THERMAL EXPANSION PROTECTION IS REQUIRED IN ANY DOMESTIC WATER SUPPLY SYSTEM THAT IS DOWNSTREAM FROM A BACKFLOW PREVENTION DEVICE. REFERENCE: UNIFORM PLUMBING CODE & NAC 445A.67235.
9. INSPECTION BY TMWA BACKFLOW PREVENTION GROUP PERSONNEL REQUIRED BEFORE METER IS SET OR SERVICE IS ACTIVATED.
10. IF INITIAL TEST DONE BY TMWA FIELD PERSONNEL FAILS, RETESTING OF BACKFLOW ASSEMBLY IS REQUIRED WITHIN 7 DAYS AFTER METER IS SET OR SERVICE ACTIVATION. COPY OF TEST RESULTS TO BE FORWARDED TO TMWA BACKFLOW PREVENTION GROUP BY A CERTIFIED ASSEMBLY TESTER WITHIN THAT SAME TIMEFRAME.
11. MINIMUM DIMENSIONS FOR THE THRUST BLOCK BEARING AREA FOR PIPE 2" AND SMALLER SHALL BE 8" X 8" AND 12" IN DEPTH. ALL OTHER SIZES TO BE DETERMINED BY ENGINEER.

TRUCKEE MEADOWS WATER AUTHORITY	DATE	APPENDIX 10A	DRAWING NUMBER
	7/2001	BACKFLOW PREVENTION ASSEMBLIES	10A-2
	REV	REDUCED PRESSURE PRINCIPLE ASSEMBLY FOR DOMESTIC USE EXTERNAL - HORIZONTAL	
	9/2016		

NOTES:
1. SERVICE CLAMP SIZE IS DEPENDENT UPON THE SIZE AND TYPE OF MAIN.
2. SDR-9 CTS HDPE TUBING, LENGTH AND DIAMETER TO BE DETERMINED BY ENGINEER. REFER TO APPROVED PLAN.
3. STOP CORP IP THREAD INLET, COMPRESSION OUTLET, DIAMETER TO MATCH TAP SIZE AS SHOWN ON PLAN.
4. INSERT RIGID STAINLESS STEEL LINER TO SDR-9 CTS HDPE TUBING.
5. SERVICE TAPS OFF OF EXISTING PVC MAINS SHALL USE TAPPED FULL CIRCLE REPAIR CLAMP, MINIMUM LENGTH: 15". MANUFACTURER SHALL BE APPROVED BY TMWA.



TRUCKEE MEADOWS WATER AUTHORITY	DATE	APPENDIX 10H	DRAWING NUMBER
	7/2001	SERVICE TAP INSTALLATIONS	10H-2
	REV	FOR 1", 1.25", 1.5" AND 2" SERVICE TAPS	
	9/2016		

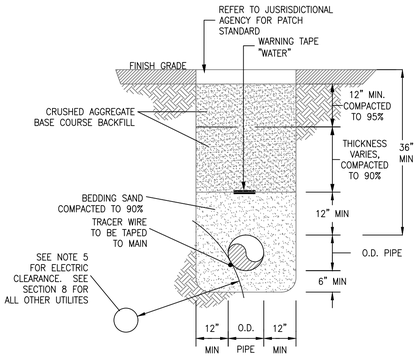


NOTES:
1. THERMAL EXPANSION PROTECTION IS REQUIRED IN ANY DOMESTIC WATER SUPPLY SYSTEM THAT IS DOWNSTREAM FROM A BACKFLOW PREVENTION DEVICE. REFERENCE: UNIFORM PLUMBING CODE.
2. METER AND TRANSMITTER SUPPLIED AND INSTALLED BY TMWA.
3. FOR DRIVEWAY OR TRAFFIC AREAS USE 13x24 ENCLOSURE APPROVED FOR TRAFFIC RATED H/20 LOADING. SEE DETAIL 10K-17.
4. TOP OF METER ENCLOSURE SHALL BE SET 0.2 FEET ABOVE HIGHEST FINISHED GRADE SURROUNDING ENCLOSURE WITHIN LANDSCAPED AREAS, AND SHALL BE SET FLUSH WITH SURROUNDING FINISH GRADE IN TRAFFIC AREAS.
5. ENCLOSURE TO BE BACKFILLED WITH WATER PIPE BEDDING SAND ONLY, SEE SECTION 5, TRENCH BEDDING & BACKFILL.
6. BLANKET TO BE INSTALLED ABOVE METER AND BELOW TRANSMITTER.

MATERIAL LIST

ITEM ID	QTY.	DESCRIPTION
MS–1.00	1.0	SETTER WATER METER, NEW 1" MIP ENDS
WSC–1.25x1.00–CTSxFIP	1.0	COUPLING SERVICE 1–1/4" CTS COMPRESSION X 1" FIP
SSL–1.25	1.0	LINER RIGID STAINLESS STEEL FOR 1–1/4" CTS HDPE TUBING
GSKT–1.00	2.0	GASKET–1" FOR WATER METER
WM–DISC–1.00	1.0	1" WATER METER – SUPPLIED AND INSTALLED BY TMWA
ENCL–13x24–NT	1.0	ENCLOSURE NON–TRAFFIC 13 X 24 WATER METERS, SEE NOTE 3
ENCL–13x24–LID–NT	1.0	COVER NON–TRAFFIC 13 X 24, SEE NOTE 3
ENCL–13x24–EXT–NT	1.0	EXTENSION BOX NON–TRAFFIC 13 X 24, SEE NOTE 3
INSL–BLKT–4x4	1.0	BLANKET INSULATION 4' X 4' FOR WATER METERS
RDWD–BRD–2x6x30	2.0	BOARD – REDWOOD 2" X 6" X 30"
IDLR–1.00	1.0	IDLER WATER METER 1" SETTER
ERT	1.0	REMOTE TRANSMITTER – SUPPLIED AND INSTALLED BY TMWA

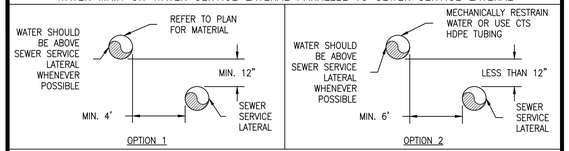
TRUCKEE MEADOWS WATER AUTHORITY	DATE	APPENDIX 10K	DRAWING NUMBER
	6/2004	WATER METERS - SMALL	10K-8
	REV	NEW COMMERCIAL INSTALLATION 1-1/4" SINGLE SERVICE FOR 1" SETTER, METER AND TRANSMITTER	
	7/2011		



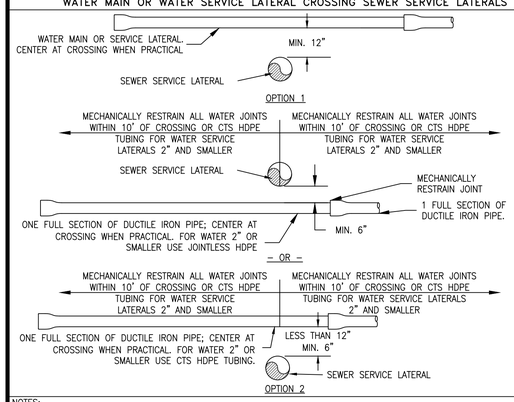
NOTES:
1. ALL TRENCHES MUST CONFORM TO APPLICABLE TMWA, CITY, STATE, COUNTY, AND OSHA SPECIFICATIONS AND REQUIREMENTS. IN THE CASE OF CONFLICT, THE MORE RIGID SPECIFICATION OR STANDARD SHALL APPLY.
2. BEDDING SAND SHALL BE COMPACTED TO 90% MAXIMUM DENSITY PER SECTION 5.05.03 AND SHALL BE A MINIMUM OF 12" ABOVE AND 6" BELOW THE MAIN. PER SECTION 5 OF TMWA STANDARDS.
3. CRUSHED AGGREGATE BASE COURSE BACKFILL SHALL BE PLACED IN 12" MAXIMUM LOOSE LIFTS. THE TOP 12" SHALL BE COMPACTED TO 95% MAXIMUM DENSITY. THE AREA ABOVE THE BEDDING SAND & BELOW 12" FROM FINISH GRADE SHALL BE COMPACTED TO 90% MAXIMUM DENSITY. PER SECTION 5 OF TMWA STANDARDS.
4. NON–METALLIC BLUE WARNING TAPE SHALL BE PLACED IN ALL TRENCHES AT LEAST 12" ABOVE THE WATER MAIN.
5. ELECTRIC UTILITIES MUST BE LOCATED BELOW WATER & MAINTAIN 2' MINIMUM RADIAL CLEARANCE FROM TMWA WATER FACILITIES. IF 2' RADIAL CLEARANCE CAN NOT BE MET ELECTRIC CONDUIT MUST BE CONCRETE ENCASED AT LEAST 18" EACH SIDE OF WATER CROSSING. FIBER OPTIC AND/OR COMMUNICATION CONDUITS SHALL NOT BE PLACE IN THE SAME TRENCH AS WATER.
6. ALL CHANGES MUST BE APPROVED BY THE TMWA INSPECTOR AND/OR THE TMWA ENGINEER.
7. SEPARATION FOR PIPES IN A JOINT TRENCH SHALL BE A MINIMUM OF 12".
8. TRACER WIRE SHALL BE #14 COPPER CLAD STAINLESS STEEL CORE WITH 30 MILS BLUE HDPE INSULATION. ALL WIRE SPLICES SHALL BE MADE USING A SPLIT BOLT CONNECTOR WRAPPED WITH AQUASEAL AND ELECTRIC TAPE. THE CONTRACTOR SHALL INSTALL A 3 POUND ANODE AT EVERY TEST STATION. TEST STATIONS SHALL BE LOCATED ALONG THE MAIN NO MORE THAN 500 FEET APART. REFER TO 10L–9.

TRUCKEE MEADOWS WATER AUTHORITY	DATE	APPENDIX 10L	DRAWING NUMBER
	7/2011	MISCELLANEOUS WATER DETAILS	10L-6
	REV	TRENCH DETAIL WATER ONLY	
	02/2014		

WATER MAIN OR WATER SERVICE LATERAL PARALLEL TO SEWER SERVICE LATERAL



WATER MAIN OR WATER SERVICE LATERAL CROSSING SEWER SERVICE LATERALS



NOTES:
1. OPTION 1 SHOULD BE UTILIZED WHEN POSSIBLE.
2. NON–PRESSURIZED SEWER SERVICE LATERALS SHALL BE SDR 35 PVC. IF SEWER SERVICE LATERALS ARE NON SDR 35 PVC, SEWER SERVICE LATERALS SHALL BE ENCASED IN 4" OF EXCAVATABLE SLURRY, USE EXTERNAL JOINT SEALANT OR OTHER MITIGATION TO ENSURE JOINTS ARE WATERTIGHT. WHERE THE SEWER SERVICE LATERALS ARE PRESSURIZED, THE SEWER SERVICE LATERALS SHALL HAVE MECHANICALLY RESTRAINED JOINTS OR SHALL USE WELDED OR FUSED PIPE.
3. ALL MECHANICALLY RESTRAINED WATER PIPES SHALL BE DUCTILE IRON WITH POLYETHYLENE WRAP PER AWWA C105.
4. FOR WATER SERVICE LATERALS 2" AND SMALLER THERE SHALL BE NO JOINTS OR FITTINGS BETWEEN THE WATER MAIN AND THE WATER METER.

TRUCKEE MEADOWS WATER AUTHORITY	DATE	APPENDIX 10L	DRAWING NUMBER
	02/2014	MISCELLANEOUS WATER DETAILS	10L-12
	REV	WATER MAIN OR WATER SERVICE LATERAL PARALLEL TO OR CROSSING SEWER SERVICE LATERAL	

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

NOT FOR CONSTRUCTION

PROFESSIONAL ENGINEER STATE OF NEVADA
TRAVIS C. PAGE
Exp. 12-31-23
CIVIL
No. 28825
4/3/23

895 ROBERTA LANE, SUITE 104, SPARKS, NV 89431
(775) 359-3303 FAX (775) 359-3329
Odyssey ENGINEERING INCORPORATED

WORK ORDER NO. XX-XXXX
DESIGNED ODYSSEY ENGINEERING
DRAWN ACAD 2023
DATE APRIL 2023
CHECKED
SUBMITTED
RECOMMENDED
APPROVED

TRUCKEE MEADOWS WATER AUTHORITY
1355 CAPITAL BLVD. / PO BOX 30013
RENO, NEVADA 89502–3013
PH 775–834–8000 / FX 775–834–8003

2901 N TRUCKEE LN_COMSVC
WO#: XX-XXXX
WATER DETAILS

SHEET NUMBER
WE-2
2 OF 2

Restroom Building

SHELLY PARK

Sparks, NV

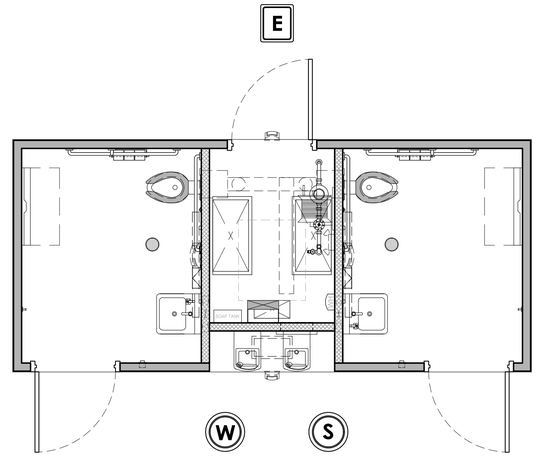
CODE COMPLIANCE

APPLICABLE CODES:	2018 INTERNATIONAL BUILDING CODE w/ NORTHERN NV AMENDMENTS 2018 UNIFORM PLUMBING CODE w/ NORTHERN NV AMENDMENTS 2017 NATIONAL ELECTRIC CODE w/ NORTHERN NV AMENDMENTS 2018 UNIFORM MECHANICAL CODE OF NEVADA 2018 INTERNATIONAL ENERGY CONSERVATION CODE w/ NORTHERN NV AMENDMENTS ACCESSIBILITY - WHICHEVER IS MORE STRINGENT ANSI A117.1-2009 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN
TYPE OF CONSTRUCTION:	V-B
DESCRIPTION:	RESTROOM BUILDING
OCCUPANCY:	U (WITH ACCESSIBILITY PROVISIONS)
FLOOR AREA: RESTROOMS, MECHANICAL ROOM & ALCOVE	168 s.f.
PRC JOB NUMBER:	10711
PRC MODEL NUMBER:	PS-022-DF-BF
NUMBER OF MODS:	1

GENERAL NOTES

- THE STRUCTURAL DESIGN DETAILS HEREIN ARE SPECIFIC TO THE BUILDING SIZE AND MODULE CONFIGURATION SHOWN ON THE FLOOR PLAN OF THESE DRAWINGS.
- LOCATION OF THIS BUILDING SHALL MEET REQUIRED PROPERTY CODE SETBACKS PER LOCAL JURISDICTION.
- ACCESSIBILITY TO THIS STRUCTURE SHALL BE IN CONFORMANCE WITH LOCAL CODE INCLUDING ALL PATHWAYS, RAMPS AND PATHS OF TRAVEL FROM PARKING TO THE BUILDING.
- SOIL BEARING REQUIREMENT IS 1500 PSF, SUB GRADE COMPACTION AT 90%.
- BUILDING PLUMBING SYSTEM IS BASED UPON FULL FLOW EXISTING WATER SERVICE. LOSS OF REQUIRED FLOW RATE OF 10 GPM OR PRESSURE BELOW 35 PSI MAX MAY NECESSITATE AN INTERMEDIATE WELL TANK AND CHECK VALVE IN LINE.
- ALL DIMENSIONS HEREIN ARE NOMINAL AND SUBJECT TO CHANGE AS LONG AS THEY DO NOT VIOLATE CODE.
- THIS BUILDING IS DESIGNATED AS A NON-HABITABLE SPACE AND IS NOT DESIGNED TO BE HEATED OR COOLED.
- THIS BUILDING DOES NOT CONFORM WITH IEC MINIMUM INSULATION REQUIREMENTS AS THIS IS A NON-HABITABLE STRUCTURE.
- THIS BUILDING IS NOT DESIGNED OR APPROVED FOR WUI LOCATION.
- ALL WORK REQUIRED TO BE COMPLETED ON SITE SUBJECT TO LOCAL REVIEW, APPROVAL AND INSPECTION (BY OWNER)
  - a. SITE CONCRETE FOUNDATION (IF APPLICABLE)
  - b. COMPACTED BUILDING PAD ENGINEERED
  - c. UNDER SLAB UTILITY PIPING (SEE NOTE)
  - d. ELECTRICAL SERVICE AS REQUIRED
  - e. WATER SERVICE AS REQUIRED
  - f. SEWER (DWV) SERVICE AS REQUIRED
  - g. CONCRETE WALKWAY COMPLIANT WITH PATH OF TRAVEL FROM ACCESSIBLE PARKING

  NOTE: PUBLIC RESTROOM COMPANY WILL ONLY FURNISH AND INSTALL UNDERGROUND UTILITIES (UNDER SLAB) EXTENDING 6 FEET (MAX.) BEYOND THE BUILDING LINE. MIN. OF 24" - MAX. OF 36" BELOW GRADE - U.N.O.
- SITE INSTALLATION DETAILS ARE NOTED ON SHEET S-1 FOR STRUCTURAL CONNECTIONS, A-2 FOR WEATHERIZATION FINISH, P-1 FOR PLUMBING CONNECTIONS & E-1 FOR ELECTRICAL CONNECTIONS IN ACCORDANCE w/ SECTION 4368.
  - a. SERVICE HOOKUPS (PLUMBING AND ELECTRICAL CONNECTIONS).
  - b. PATCH AND FINISH AT CRANE PICK LOCATIONS AS NEEDED.
  - c. INSTALL AND CONNECT PLUMBING DRAIN TRAPS ASSEMBLIES PER P-1 HEREIN.



Utility Location

NOTE: FINAL LOCATIONS OF P.O.C. TO BE COORDINATED WITH P.R.C. AND TO BE CONFIRMED ON SITE . UTILITY BOXES TO BE PROVIDED BY OTHERS.

PROJECT INFORMATION

SITE ADDRESS: **SHELLY PARK** - 2901 N Truckee Ln, Sparks, NV 89434

PROJECT OWNER:
CITY of SPARKS, NV
431 Prater Way
Sparks, NV 89431
CONTACT: Robert Bidart
POSITION: Senior Civil Engineer
PHONE: (775) 224-2976
FAX: (775) 784-9848
EMAIL: rbidart@cityofsparks.us

STRUCTURAL ENGINEER:
R & S TAVARES ASSOCIATES
1590 W. Bernardo Court, Suite 100
San Diego, CA 92127
CONTACT: Mariana Cardoso
POSITION: Controller
PHONE: (858) 444 3344
EMAIL: mariana@rstavares.com

DESIGNER / CERTIFIED MANUFACTURER:
PUBLIC RESTROOM COMPANY
2587 Business Parkway
Minden, NV 89423
CONTACT: Chad Kaufman
PHONE: (888) 888-2060
FAX: (888) 888-1448
E-MAIL: chad@publicrestroomcompany.com

APPROVED
NRS 461 OR NRS 489
FACTORY BUILT HOUSING
STATE OF NEVADA
BY
63102

DRAWING INDEX

SHEETS		PM PLAN REVIEW - 09/21/2022	PRC PLAN REVIEW - 12/13/2022	STRUCTURAL REVIEW - 12/21/2022	CONSTRUCTION DOCUMENTS - 01/12/2023			
T-1	TITLE SHEET	●	●	●	●			
AC	ACCESSIBILITY COMPLIANCE	●	●	●	●			
A-1	FLOOR PLAN, STRUCTURAL DESIGN & SCHEDULES	●	●	●	●			
A-1.1	TOP OF THE WALL CAP BEAM & ROOF FRAMING PLANS, BUILDING SECTIONS	●	●	●	●			
A-2	EXTERIOR ELEVATIONS & FINISH SCHEDULE	●	●	●	●			
A-3	EQUIPMENT PLAN, INTERIOR ELEVATIONS & SCHEDULES	●	●	●	●			
P-1	PLUMBING PLAN & SCHEDULES	●	●	●	●			
E-1	ELECTRICAL PLAN & SCHEDULES	●	●	●	●			
S-1	CONCRETE SLAB & STEEL PERIMETER PLAN & DETAILS	●	●	●	●			

DESIGN LOADS

STRUCTURAL DESIGN CRITERIA

GRAVITY LOADS		SEISMIC	
FLOOR LIVE	100 psf	SEISMIC DESIGN CATEGORY	D
		SITE CLASS	D
FLOOR DEAD	100 psf	IMPORTANCE CATEGORY	1.00
ROOF LIVE	20 psf	OCCUPANCY CATEGORY	II
ROOF DEAD	10 psf	MAPPED ACCELERATIONS	
EXTERIOR WALL DEAD	50 psf	S_S	1.436
		S_1	0.503
SNOW		SPECTRAL RESPONSE	
GROUND SNOW, P_g	0 psf	S_{DS}	1.149
FLAT-ROOF SNOW, P_f	0 psf	S_{D1}	0.60
IMPORTANCE FACTOR, I_s	1.00	SEISMIC FORCE RESISTING SYSTEM	A7
EXPOSURE FACTOR, C_e	1.00	DESIGN BASE SHEAR	0.90W
THERMAL FACTOR, C_t	1.00	RESPONSE MODIFICATION FACTOR	5.0
		ANALYSIS PROCEDURE	ASCE7-16
WIND			
WIND SPEED, Vult	110 mph	FLOOD	
EXPOSURE CATEGORY	C	BUILDING SHALL NOT BE LOCATED, IN WHOLE OR IN PART, IN A FLOOD HAZARD AREA AS ESTABLISHED BY THE AUTHORITY HAVING JURISDICTION UNLESS SET ON A FOUNDATION DESIGNED IN ACCORDANCE WITH ASCE/SEI 25. THE FLOOD RESISTANT FOUNDATION SHALL BE DESIGNED BY A REGISTERED DESIGN PROFESSIONAL AND CONSTRUCTED TO RESIST ALL FLOOD LOADS WITHOUT TRANSFERRING LOADS TO THE MODULAR STRUCTURE.	
RISK CATEGORY	II		
INTERNAL PRESSURE, GCpi	+/- 0.18		
MEAN ROOF HEIGHT	15 Ft		
BUILDING SHALL NOT BE PLACED ON THE UPPER HALF OF A HILL OR ESCARPMENT EXCEEDING 15 FEET IN HEIGHT			

COMPONENTS & CLADDING WIND LOADS (ASD)

COMPONENT	END ZONE (psf)	INTERIOR ZONE (psf)
WINDOWS & SIDING	+35.4 / -35.4	+28.6 / -28.6
DOORS	+35.4 / -35.4	+28.6 / -28.6
ROOF CLADDING	+71.2 / -71.2	+48.8 / -48.8
ROOF OVERHANGS	+84.6 / -84.6	+71.2 / -71.2

RALPH TAVARES No. 16707 CIVIL
RST# 21062-17
01.17.2023

DO NOT SCALE - DIMENSIONS PRESIDE
24x36 SHEET = SCALE AS NOTED
11x17 SHEET = NTS

CONSTRUCTION DOCUMENTS - 01/12/2023

SHELLY PARK - Sparks, NV

No.	Description	Date

CONSTRUCTION DOCUMENTS
01/12/2023

PUBLIC RESTROOM COMPANY
Building Better Places To Go.
2587 Business Pkwy, Minden, NV 89423
Ph: 888-888-2060 | Fax: 888-888-1448

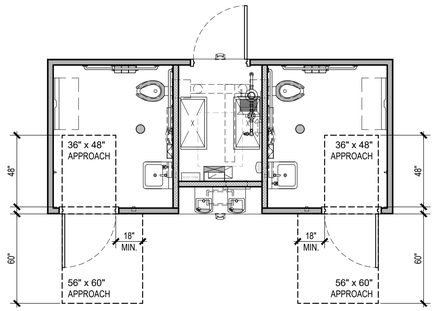
PROJECT OWNER:
CITY of SPARKS
Sparks, NV

PROJECT NAME AND LOCATION:
SHELLY PARK
Sparks, NV

SHEET TITLE:
TITLE SHEET

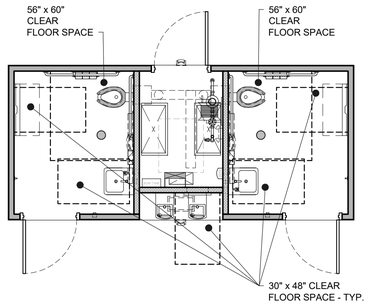
Drawn by:	NS	Job No.	10711
Checked by:	RR		
Current Date:	01/12/2023		T-1
Start Date:	09/13/2022		

12-Jan-23, 4:25 PM



DOOR APPROACH

SCALE: 1/4"=1'-0"



FIXTURE APPROACH

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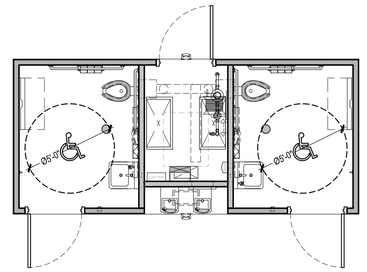
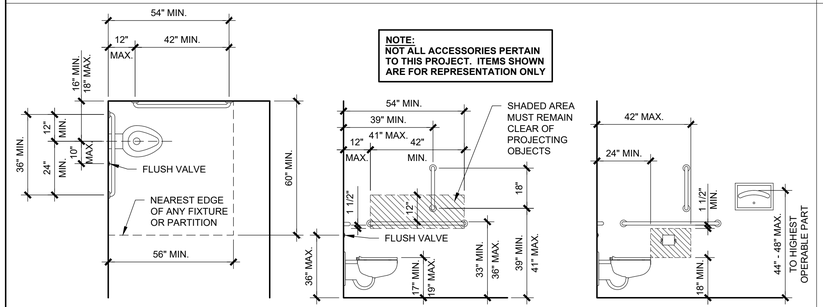


TURNING RADIUS

SCALE: 1/4"=1'-0"



NOTE:
NOT ALL ACCESSORIES PERTAIN TO THIS PROJECT. ITEMS SHOWN ARE FOR REPRESENTATION ONLY

NOTE:
- SPACE BETWEEN GRAB BAR AND WALL TO BE 1 1/2" CLEAR
- GRAB BAR DIAMETER TO BE 1 1/4" to 1 1/2"
- GRAB BAR MUST BE ABLE TO SUPPORT 250lb POINT LOAD AND NOT ROTATE WITHIN THE FITTINGS

	CODE SUMMARY HEIGHT A.F.F. / LOC	PUBLIC RESTROOM COMPANY STANDARDS*
GRAB BARS	33" MIN. / 36" MAX. TO TOP	34" TO TOP
TOILET LOCATION	16" MIN. / 18" MAX. TO CENTERLINE	17 1/2" TO CENTERLINE
TOILET/SEAT	17" MIN. / 19" MAX.	18" TO TOP OF SEATING SURFACE
TOILET FLUSH VALVE	40" MAX., 10" TO WIDE SIDE	CENTERLINES TO BE 28" AFF AND 10" FROM CENTER OF WC
SURFACE MOUNTED TOILET PAPER DISPENSER	HEIGHT OF DISPENSER OUTLET TO BE 18" MIN. A.F.F. & 1 1/2" MIN. FROM BOTTOM OF GRAB BAR. OUTLET TO BE LOCATED WITHIN AN AREA 24" MIN. - 42" MAX. FROM REAR WALL	8" FROM FRONT OF WATER CLOSET TO CENTER OF DISPENSER & 30" TO TOP OF FIXTURE

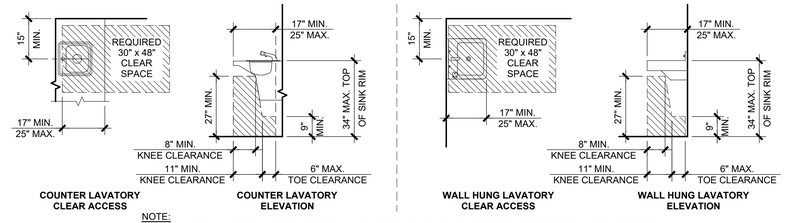
1 - TOILET DESIGN CRITERIA

ICC / ANSI A117.1 2009 ACCESSIBILITY STANDARDS

(SHOWING MINIMUMS AND MAXIMUMS)

* PUBLIC RESTROOM COMPANY STANDARDS ARE FOR PRODUCTION PERSONNEL TO BE USED AS A GUIDELINE TO ENSURE FIXTURES ARE INSTALLED WITHIN THE REQUIRED RANGES PER CODE, AND MAY NOT BE EXACT ONCE INSTALLED DUE TO FLOOR SLOPES, TOLERANCES, ETC.

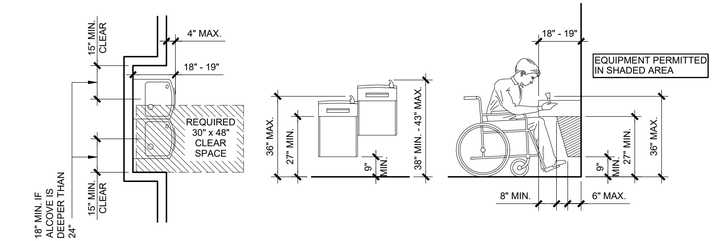
NOTE:
NOT ALL ACCESSORIES PERTAIN TO THIS PROJECT. ITEMS SHOWN ARE FOR REPRESENTATION ONLY



NOTE:
WATER SUPPLY AND DRAIN PIPES UNDER LAVATORIES ARE TO BE COVERED TO PROTECT AGAINST CONTACT

	CODE SUMMARY HEIGHT A.F.F. / LOC	PUBLIC RESTROOM COMPANY STANDARDS*
RIM HEIGHT (TOP OF LAV.)	34" MAX.	33" PREFERRED BUT MUST HAVE 27" KNEE SPACE MIN.
HEIGHT OF KNEE SPACE	27" MIN. AT FRONT APRON 27" MIN. AT 8" IN FROM FRONT	PER CODE
FRONT LAV TO TRAP	8" MIN.	PER CODE
TOE SPACE UNDER TRAP	9" MIN.	PER CODE
CONTROLS	DECK MOUNT AT 34" MAX.	33" PREFFERED
CLEAR SPACE	30" x 48"	PER CODE

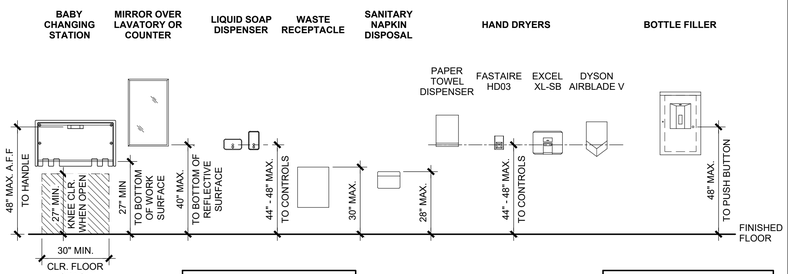
2 - LAVATORY DESIGN CRITERIA



	CODE SUMMARY HEIGHT A.F.F. / LOC
TOP OF BUBBLER OUTLET	36" MAX. @ WHEELCHAIR ACCESSIBLE 38" MIN. - 43" MAX. @ STANDING HEIGHT
KNEE CLEARANCE	27" MIN.
TOE CLEARANCE	9" MIN.
APPROACH	30" x 48"

NOTE: D.F. ACTIVATOR TO BE WITHIN 6" OF FRONT EDGE OF D.F.

3 - DRINKING FOUNTAIN



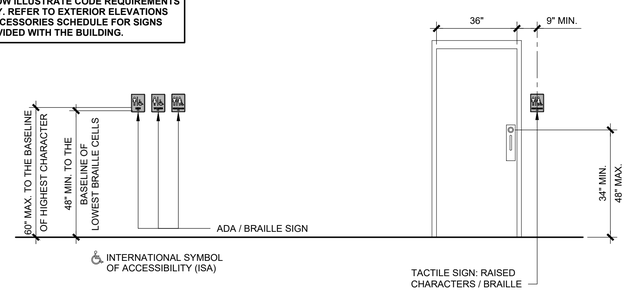
NOTE:
NOT ALL ACCESSORIES PERTAIN TO THIS PROJECT. ITEMS SHOWN ARE FOR REPRESENTATION ONLY

NOTE:
NO FIXTURES IN THIS VIEW PROTRUDE MORE THAN 4"

IF USED:
BOTTLE FILLER IS CENTERED OVER ACCESSIBLE DRINKING FOUNTAIN THAT IS < 20" DEEP

4 - ACCESSORIES MOUNTING HEIGHT

NOTE:
RESTROOM IDENTIFICATION SIGNS SHOWN BELOW ILLUSTRATE CODE REQUIREMENTS ONLY. REFER TO EXTERIOR ELEVATIONS & ACCESSORIES SCHEDULE FOR SIGNS PROVIDED WITH THE BUILDING.



DOOR SIGNAGE

5 - RESTROOM SIGNS AT DOORS AND GATES

RST# 21062-17
01.17.2023

DO NOT SCALE - DIMENSIONS PRESIDE
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CONSTRUCTION DOCUMENTS - 01/12/2023

SHELLY PARK - Sparks, NV

No.	Description	Date

CONSTRUCTION DOCUMENTS
01/12/2023

PUBLIC RESTROOM COMPANY
Building Better Places To Go.
2587 Business Pkwy, Minden, NV 89423
Ph: 888-888-2060 | Fax: 888-888-1448

PROJECT OWNER:
CITY of SPARKS
Sparks, NV

PROJECT NAME AND LOCATION:
SHELLY PARK
Sparks, NV

SHEET TITLE:
ACCESSIBILITY COMPLIANCE

Drawn by:	NS	Job No.	10711
Checked by:	RR		AC
Current Date:	01/12/2023		
Start Date:	09/13/2022		

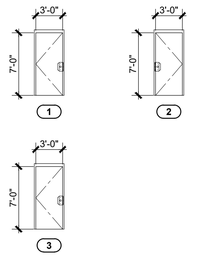
12-Jan-23 4:25 PM

DOOR, FRAME & HARDWARE SCHEDULE

DOOR NO.	ROOM NAME	SIZE	1 DOOR TYPE	2 FRAME TYPE	3.a HINGE	4 LOCK	5.a CLOSER	5.b PULL PLATE OUTSIDE	5.b PUSH PLATE INSIDE	5.c THRESH	5.d SWEEP	6 OTHER
1	ACCESSIBLE UNISEX RR-1	3'-0" x 7'-0"	1.a	2.a	CONT.	4.a.1	YES	YES	YES	YES	YES	6.a , 6.b
2	ACCESSIBLE UNISEX RR-2	3'-0" x 7'-0"	1.a	2.a	CONT.	4.a.1	YES	YES	YES	YES	YES	6.a , 6.b
3	MECHANICAL ROOM	3'-0" x 7'-0"	1.a	2.a	CONT.	4.a.1	NO	YES	YES	YES	YES	6.b , 6.c

SPECS:

1. **DOOR TYPES:**
   a) 14 GA. GALVANIZED HOLLOW METAL
2. **DOOR FRAMES:**
   a) 14 GA. GALVANIZED HOLLOW METAL WELDED JAMBS
3. **HINGE:**
   a) CONT = PEMKO KCFM-83" HD CONTINUOUS GEAR HINGE w/ STAINLESS STEEL VANDAL RESISTANT SCREWS (OR EQUAL).
4. **LOCK:**
   a) DEADBOLT: SCHLAGE B SERIES 626 w/ TEMPORARY CONSTRUCTION FULL SIZE INTERCHANGEABLE CORE (FSIC)
      1) B660 - KEY ONE SIDE, ADA THUMB TURN LOCKS AND UNLOCKS
5. **HARDWARE:**
   a) CLOSER: LCN 4211 (CUSH ARM)
   b) PUSH / PULL PLATES: ROCKWOOD VRT24C x 91CFC US32DMS WITH BLACK COOL COATING HANDLE
   c) THRESHOLD: PEMKO 270A (OR EQUAL)
   d) SWEEP: PEMKO 321 SSN (OR EQUAL)
6. **OTHER:**
   a) MAGNETIC LOCKS: SECURITRON SAM SYSTEM w/ SDC 463 SENSOR EMERGENCY EXIT BUTTON
   b) WEATHER STRIP: PEMKO 303_CS (OR EQUAL)
   c) CHECK CHAIN: IVES CS115-25 (OR EQUAL)



NOTE:
DIMENSIONS ARE FOR DOORS ONLY, FRAMES ARE NOT INCLUDED.

STRUCTURAL DESIGN

COMPONENT	DESCRIPTION	SPECIFIC MATERIAL LIST	NOTES
SLAB			
PERIMETER FRAMEWORK	STRUCTURAL STEEL	L 6"x6"x5/16"	
REINFORCEMENT	REBAR MAT DESIGN	#4 MIN. GRADE 60 TOP: 8" O.C. EACH WAY BOT: 16" O.C. EACH WAY	
CONCRETE	8" MAT DESIGN	DESIGN BASIS IS MIN. 2500 PSI	NOTE #1
REBAR CONNECTION TO CONCRETE SLAB	STARTER BARS CONNECTION TO CONCRETE SLAB SHALL BE WITH 2 PART EPOXY w/ 5" MIN. EMBED DEPTH	RED HEAD A7+ EPOXY (OR EQUAL)	USE OF ADHESIVE ANCHORAGE SYSTEM BY PROVISIONS OF CODE REPORT ESR-3903 AND MANUFACTURER RECOMMENDATIONS
WALLS			
FRAMING (EXT.)			
TO CAP BEAM	C.M.U. BLOCK	4 x 8 x 16 CONCRETE BLOCK. GROUT EVERY CELL w/ TYPE 'S' FINE GROUT. REINFORCING: HORIZONTAL - (2) 9 GA WIRES @ 8" O.C. (EVERY COURSE) VERTICAL - #3 REBAR @ 8" O.C. (EVERY CELL), EXCEPT USE #4 REBAR @ END OF WALLS, @ EACH SIDE OF OPENINGS, AND @ 10'-0" O.C. MAX.	USE TYPE 'S' FINE GROUT w/ A SLUMP OF 10"-11" FOR A "HIGH LIFT" GROUT POUR. GROUT POUR HEIGHT NOT TO EXCEED 12'-8"
CAP BEAM	STEEL	HSS 6 x 4 X 1/8 (A1085 / A 500 GRADE B)	
ABOVE CAP BEAM	WOOD	2x4 DF#2 OR BETTER STUDS @ 16" O.C.	
FRAMING (INT.)			
TO CAP BEAM	C.M.U.BLOCK	4 x 8 x 16 CONCRETE BLOCK. GROUT EVERY CELL w/ TYPE 'S' FINE GROUT. REINFORCING: HORIZONTAL - (2) 9 GA WIRES @ 8" O.C. (EVERY COURSE) VERTICAL - #3 REBAR @ 8" O.C. (EVERY CELL), EXCEPT USE #4 REBAR @ END OF WALLS, @ EACH SIDE OF OPENINGS, AND @ 10'-0" O.C. MAX.	USE TYPE 'S' FINE GROUT w/ A SLUMP OF 10"-11" FOR A "HIGH LIFT" GROUT POUR. GROUT POUR HEIGHT NOT TO EXCEED 12'-8"
CAP BEAM	STEEL	HSS 6 x 4 x 1/8 (A1085 / A 500 Grade B)	
ABOVE CAP BEAM	WOOD	2x4 DF#2 OR BETTER STUDS @ 16" O.C.	
SHEATHING (ABOVE CAP BEAM)			
ALL FRAMED WALLS (EXT.)	WOOD	7/16" SHEATHING BOTH SIDES	NOTE #2
ALL FRAMED WALLS (INT.)	WOOD	7/16" SHEATHING BOTH SIDES	NOTE #2
ROOF			
RAFTERS	WOOD	2x6 DF#2 OR BETTER @ 24" O.C.	
LOOKOUTS	WOOD	2x6 DF#2 OR BETTER @ 24" O.C.	
SHEATHING	WOOD	5/8" SHEATHING TOP & BOTTOM	
SUB-FASCIA	WOOD	2x6 DF#2 OR BETTER WRAPPED w/ 16 GA. FORMED STEEL	

NOTES:
1. INTEGRAL ADDITIVES FOR MOISTURE, STAINING & CORROSION RESISTANCE.
2. PAINT WALL SHEATHING FOR MOISTURE PROTECTION (MECHANICAL ROOM SIDE)

SHEAR WALL SCHEDULE

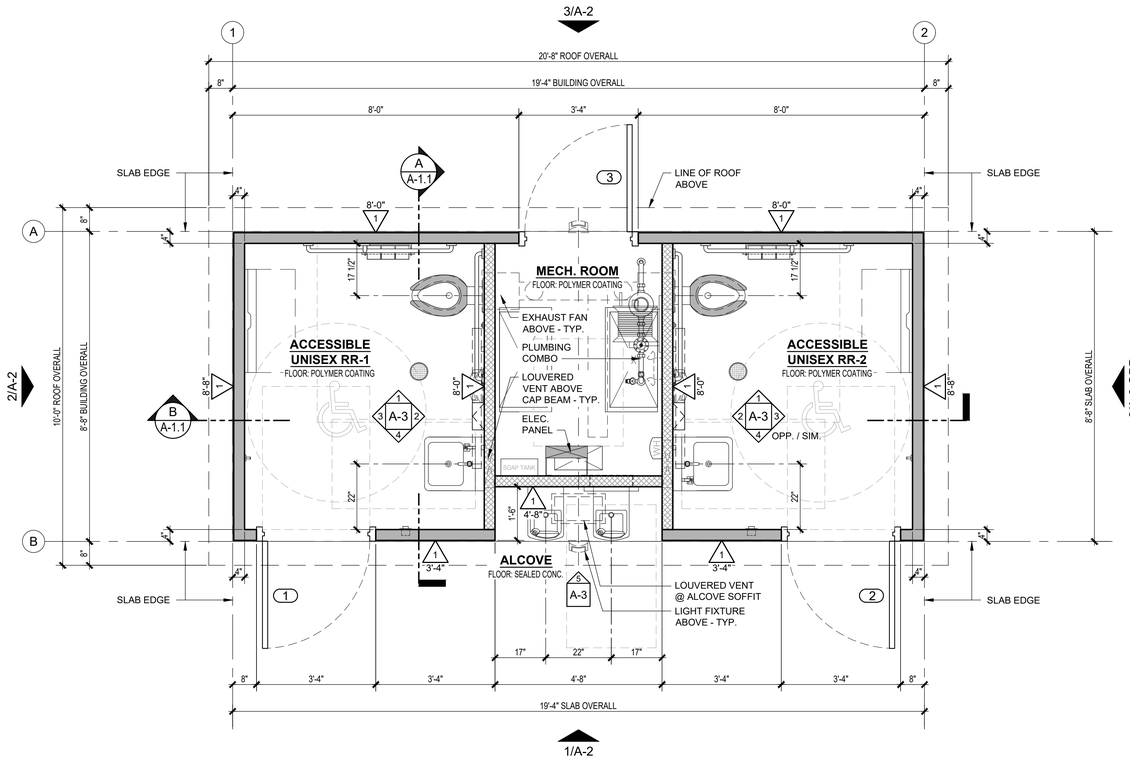
MARK & TYPE	BLOCK	REINFORCEMENT	CAP BEAM
1 C.M.U.	4 x 8 x 16 FULLY GROUTED	HORIZONTAL - (2) 9 GA WIRES @ 8" O.C. (EVERY COURSE) VERTICAL - #3 REBAR @ 8" O.C. (EVERY CELL), EXCEPT USE #4 REBAR @ END OF WALLS, @ EACH SIDE OF OPENINGS, AND @ 10'-0" O.C. MAX.	HSS 6 x 4 x 1/8

GENERAL SHEET NOTES:

1. LOCATION OF ALL PLUMBING & ELECTRICAL COMPONENTS IN THE MECHANICAL ROOM ARE SUBJECT TO CHANGE, FINAL LOCATIONS TBD.

WALL LEGEND:

- 4" C.M.U. SPLIT FACE
- 4" C.M.U. PRECISION



1/A-1 FLOOR PLAN
SCALE: 1/2"=1'-0"

RST# 21062-17
01.17.2023

DO NOT SCALE - DIMENSIONS PRESIDE
24x36 SHEET = SCALE AS NOTED
11x17 SHEET = NTS

CONSTRUCTION DOCUMENTS - 01/12/2023

SHELLY PARK - Sparks, NV

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12-Jan-23, 4:25 PM

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PUBLIC RESTROOM COMPANY
Building Better Places To Go.
2587 Business Pkwy, Minden, NV 89423
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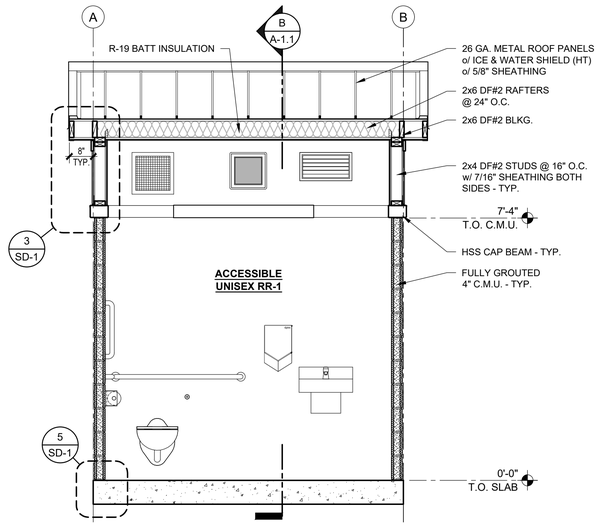
PROJECT OWNER:
CITY of SPARKS
Sparks, NV

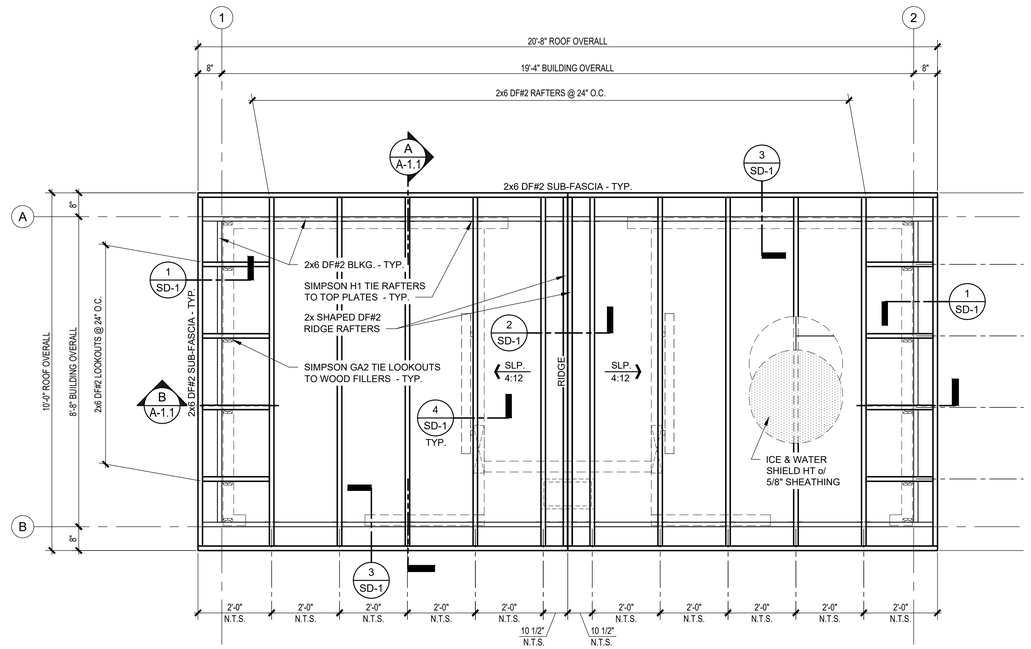
PROJECT NAME AND LOCATION:
SHELLY PARK
Sparks, NV

SHEET TITLE:
FLOOR PLAN, STRUCTURAL DESIGN & SCHEDULES

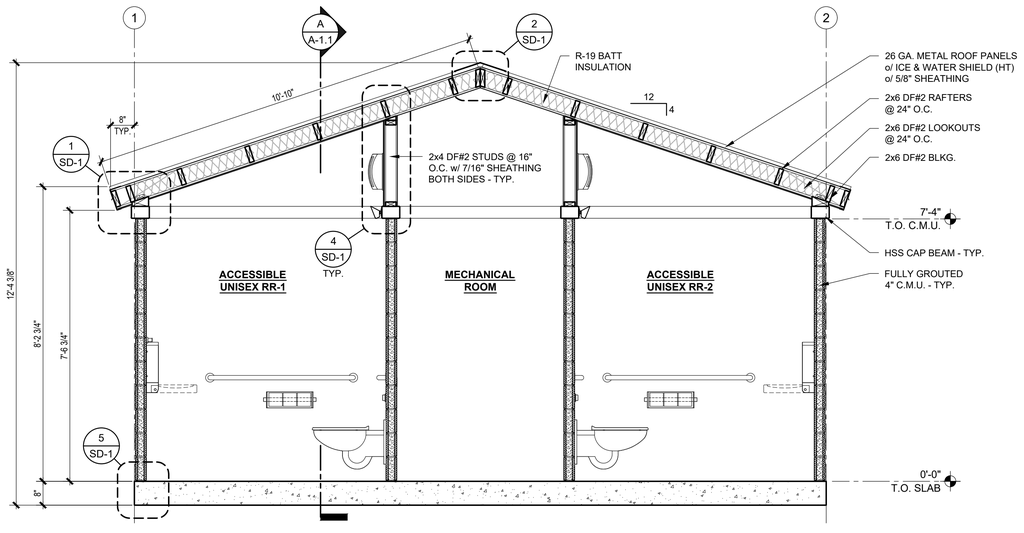
Drawn by:	NS	Job No.	10711
Checked by:	RR		
Current Date:	01/12/2023		A-1
Start Date:	09/13/2022		



A
A-1.1
BUILDING SECTION
SCALE: 1/2" = 1'-0"



1
A-1.1
ROOF FRAMING PLAN
SCALE: 1/2" = 1'-0"



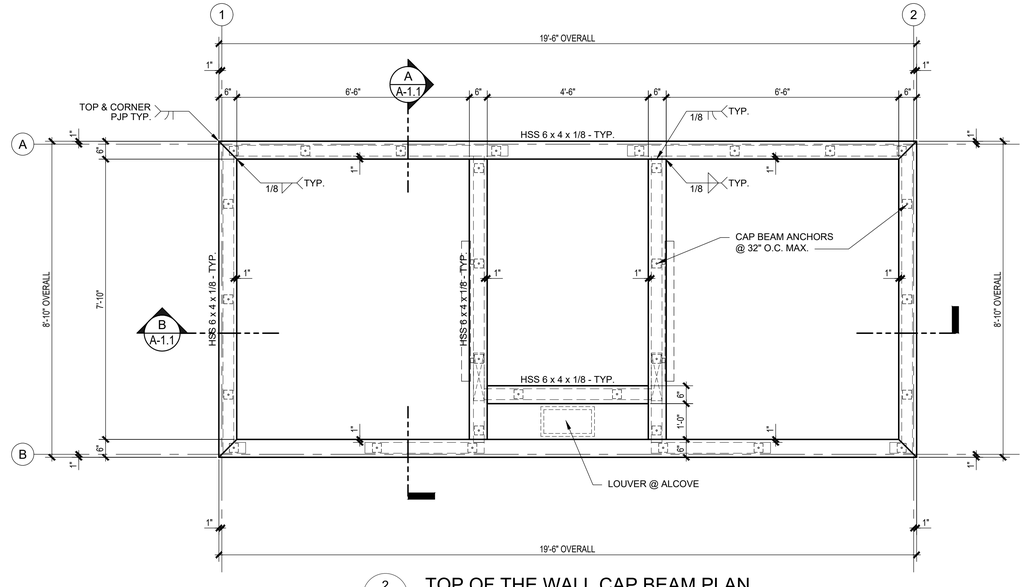
B
A-1.1
BUILDING SECTION
SCALE: 1/2" = 1'-0"

CAP BEAM NOTES:

1. ALL HSS CAP BEAMS OVER BUILDING EXTERIOR PERIMETER WALLS SHALL BE INSTALLED 1" FROM INSIDE FACE OF CAP BEAM TO INSIDE FACE OF C.M.U BLOCK WALLS.
2. ALL HSS CAP BEAMS OVER BUILDING INTERIOR WALLS SHALL BE INSTALLED AS NOTED OVER C.M.U. BLOCK WALLS BELOW
3. ALL STEEL INTERSECTIONS ARE TO BE WELDED w/ 1/8" CONTINUOUS WELD.
4. ADJUST CAP BEAM ANCHORS ACCORDINGLY IF LANDED ON DOOR OPENINGS. ANCHORS NOT TO EXCEED 32" O.C. SPACING.

GENERAL SHEET NOTES:

1. SD SHEETS REFERENCED HEREIN CONTAIN PROPRIETARY INFORMATION AND THEREFORE ARE NOT AN INTEGRAL PART OF THE PLANS. SD SHEETS SHALL BE UTILIZED FOR ENGINEERING PURPOSES AND INTERNAL USE ONLY.
2. SEE SHEET SD-1 FOR FASTENING SCHEDULE.



2
A-1.1
TOP OF THE WALL CAP BEAM PLAN
SCALE: 1/2" = 1'-0"

RST# 21062-17
01.17.2023

DO NOT SCALE - DIMENSIONS PRESIDE
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CONSTRUCTION DOCUMENTS - 01/12/2023

SHELLY PARK - Sparks, NV

No.	Description	Date

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CONSTRUCTION DOCUMENTS
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PUBLIC RESTROOM COMPANY
Building Better Places To Go.
2587 Business Pkwy, Minden, NV 89423
Ph: 888-888-2060 | Fax: 888-888-1448

PROJECT OWNER:
CITY of SPARKS
Sparks, NV

PROJECT NAME AND LOCATION:
SHELLY PARK
Sparks, NV

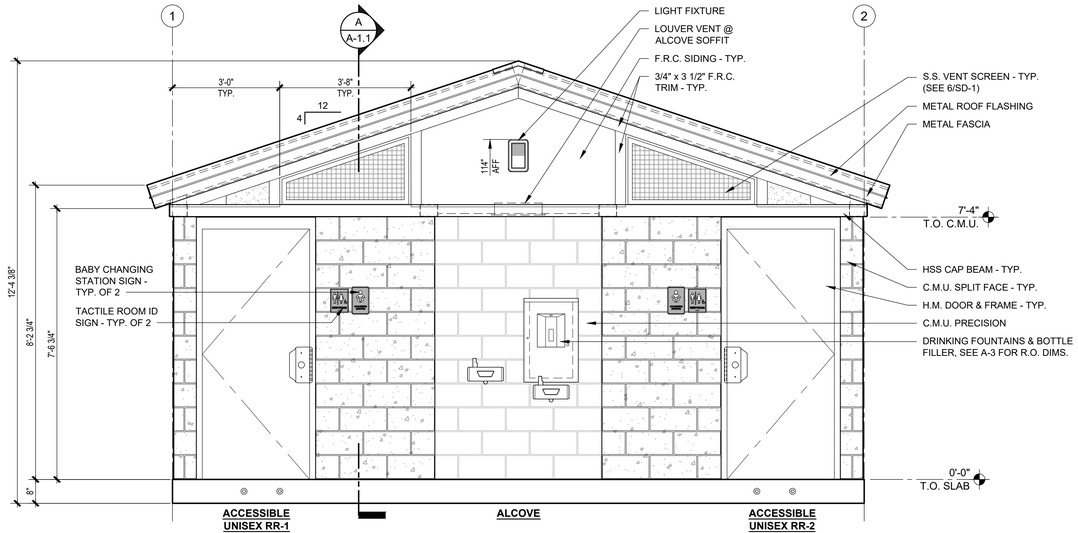
SHEET TITLE:
ROOF FRAMING & TOP OF THE WALL CAP BEAM PLANS, BUILDING SECTIONS

Drawn by:	NS	Job No.	10711
Checked by:	RR		
Current Date:	01/12/2023		A-1.1
Start Date:	09/13/2022		

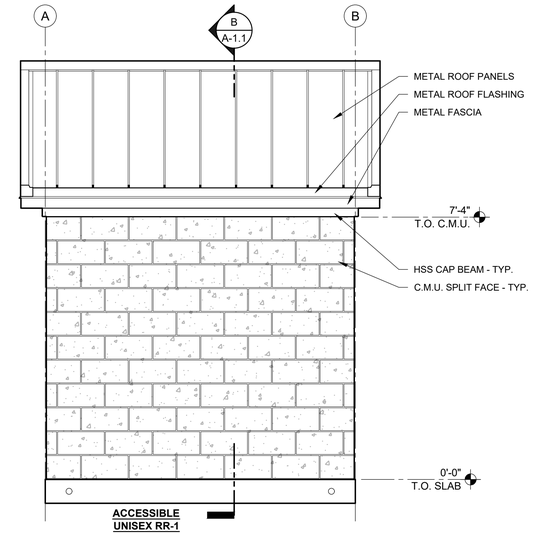
EXTERIOR FINISH SCHEDULE

TYPE	DESCRIPTION	FINISH	BRAND / COLOR	NOTES
WALLS				
C.M.U. TO CAP BEAM	C.M.U. - SPLIT FACE	INTEGRAL	BASALITE / TAN 102 (STANDARD TAN MORTAR); MATTE FINISH ANTI GRAFFITI COATING	SEALED w/ MONOPOLE ANTI GRAFFITI COATING
ALCOVE BACK & SIDE WALLS	C.M.U. - PRECISION	INTEGRAL	BASALITE / TAN 102 (STANDARD TAN MORTAR); MATTE FINISH ANTI GRAFFITI COATING	SEALED w/ MONOPOLE ANTI GRAFFITI COATING
CAP BEAM	STEEL	PAINTED	PITTSBURGH PITT-TECH / MATCH METAL SALES BROWN (12)	1 COAT PRIMER, 2 COATS FINISH - SEMI GLOSS
ABOVE CAP BEAM				
SIDING	F.R.C. BOARD w/ TEXTURED PATTERN	PAINTED	PITTSBURGH PITT-TECH / HAPPY TRAILS PPG 1084-4	1 COAT PRIMER, 2 COATS FINISH - SEMI GLOSS
TRIM	3/4" x 3 1/2" F.R.C. TRIM BOARDS	PAINTED	PITTSBURGH PITT-TECH / TO MATCH ROOFING COLOR	1 COAT PRIMER, 2 COATS FINISH - SEMI GLOSS
VENT FRAMES	1 1/2" x 1 1/2" 1/8" STAINLESS STEEL ANGLE BAR	PAINTED	MATCH TRIM COLOR	1 COAT PRIMER, 2 COATS FINISH - SEMI GLOSS
VENT SCREENS	STAINLESS STEEL WIRE MESH (1" x 1" x 3/16")	NATURAL	-	w/ REMOVABLE LEXAN COVERS

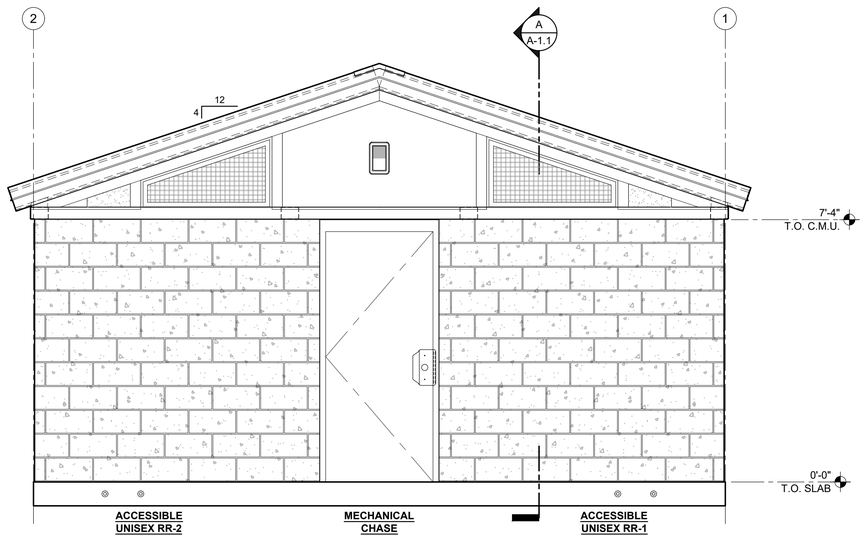
TYPE	DESCRIPTION	FINISH	BRAND / COLOR	NOTES
ROOF				
ROOFING	26 GA. 12" STRIATED STANDING SEAM METAL ROOF PANELS	PREFINISHED	METAL SALES "IMAGE II" / BROWN (12)	OVER ICE & WATER SHIELD HT
FLASHINGS	26 GA. METAL	PREFINISHED	METAL SALES "IMAGE II" / BROWN (12)	-
FASCIA	16 GA. METAL	PAINTED	PITTSBURGH PITT-TECH / ALMOND BRITTLE PPG 1095-3	1 COAT PRIMER, 2 COATS FINISH - SEMI GLOSS
SOFFITS	F.R.C. BOARD w/ TEXTURED PATTERN	PAINTED	PITTSBURGH PITT-TECH / ALMOND BRITTLE PPG 1095-3	1 COAT PRIMER, 2 COATS FINISH - SEMI GLOSS
DOORS & FRAMES				
ALL DOORS & FRAMES	HOLLOW METAL	PAINTED	PITTSBURGH PITT-TECH / TO MATCH ROOFING COLOR	1 COAT PRIMER, 2 COATS FINISH - SEMI GLOSS
OTHER				
LOUVERED VENT	16" x 8"	ALUMINUM	SUNVENT #157FL / NATURAL w/ OBD DAMPER	AT ALCOVE SOFFIT
MISC. FLASHINGS	GALV. METAL OVER CAP BEAM	PAINTED	MATCH ADJACENT COLOR	1 COAT PRIMER, 2 COATS FINISH - SEMI GLOSS



1 A-2 EXTERIOR ELEVATION
SCALE: 1/2" = 1'-0"



2 A-2 EXTERIOR ELEVATION
SCALE: 1/2" = 1'-0"



3 A-2 EXTERIOR ELEVATION
SCALE: 1/2" = 1'-0"

CONSTRUCTION DOCUMENTS - 01/12/2023

SHELLY PARK - Sparks, NV

RALPH TAVARES CIVIL No. 16707 STATE OF NEVADA PROFESSIONAL ENGINEER

RST# 21062-17
01.17.2023

DO NOT SCALE - DIMENSIONS PRESIDE
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Sparks, NV

PROJECT NAME AND LOCATION:
SHELLY PARK
Sparks, NV

SHEET TITLE:
EXTERIOR ELEVATIONS & FINISH SCHEDULE

Drawn by:	NS	Job No.	10711
Checked by:	RR		
Current Date:	01/12/2023		A-2
Start Date:	09/13/2022		

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RESTROOM ACCESSORIES & SPECIALTIES

MOUNT WITH VANDAL RESISTANT SS SCREWS

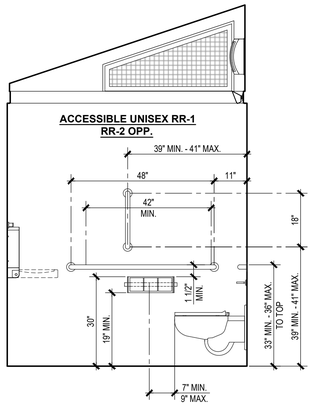
ACCESSORIES	QTY	SIZE / STYLE	MANUF. / ITEM #	PRC#	FINISH / COLOR / STYLE	NOTES
GRAB BAR	2	18"	BOBRICK B-6806-18 (OR EQ.)	H1115	STAINLESS STEEL	MOUNT 39"MIN. - 41" MAX. TO BOTTOM & CENTER
GRAB BAR	2	42"	BOBRICK B-6806-42 (OR EQ.)	H1118	STAINLESS STEEL	MOUNT 33" MIN. - 36" MAX. A.F.F. TO TOP
GRAB BAR	2	48"	BOBRICK B-6806-48 (OR EQ.)	H1119	STAINLESS STEEL	MOUNT 33" MIN. - 36" MAX. A.F.F. TO TOP
TOILET PAPER HOLDER	2	VANDAL RESISTANT 3-ROLL	ROYCE ROLLS TP-3	H1152	STAINLESS STEEL	MOUNT 30" A.F.F. TO TOP
HAND DRYER	2	SURFACE MOUNTED	DYSON AIRBLADE V	L1417	CAST ALUMINUM	MOUNT 40" MAX. A.F.F. TO CONTROLS
UTILITY HOOK	2	SURFACE MOUNTED	BOBRICK B-670 (OR EQ.)	H1143	STAINLESS STEEL	MOUNT 48" A.F.F. TO TOP OF HOOK
BABY CHANGING STATION	2	SURFACE MOUNTED	FOUNDATIONS 5410339	H1110	STAINLESS STEEL / POLY	MOUNT 34" MAX. A.F.F. TO TOP OF WORK SURFACE
SIGNS - TACTILE ROOM ID ACCESSIBLE "RESTROOM"	2	5 3/4" x 8 3/8" RECTANGULAR	SIGN ELEMENTS	H1223	ALUMINUM BLUE	MOUNT 60" A.F.F. TO CENTER - SEE SHEET A-2
SIGNS - TACTILE "BABY CHANGING STATION"	2	5 3/4" x 9 1/8" RECTANGULAR	SIGN ELEMENTS	H1320	ALUMINUM BLUE	TOP TO MATCH ADJACENT SIGN HEIGHT - SEE SHEET A-2
SOAP DISPENSER	2	THRU WALL VALVE	ASI #0353	H1421	STAINLESS STEEL	MOUNT @ LAVATORY BACKSPLASH
	1	RESERVOIR SOAP TANK	PROPRIETARY	H1420	STAINLESS STEEL	MOUNT IN MECHANICAL ROOM
LOUVERED VENT	1	16" x 8" w/ O.B. DAMPER	SUNVENT #157FL	C1001	ALUMINUM / NATURAL	AT ALCOVE SOFFIT
LOUVERED VENT	2	16" x 8"	SUNVENT #157FL	C1000	ALUMINUM / NATURAL	@ DEMISING WALLS ;INSTALL w/ BLADES FACING CEILING

INTERIOR FINISH SCHEDULE

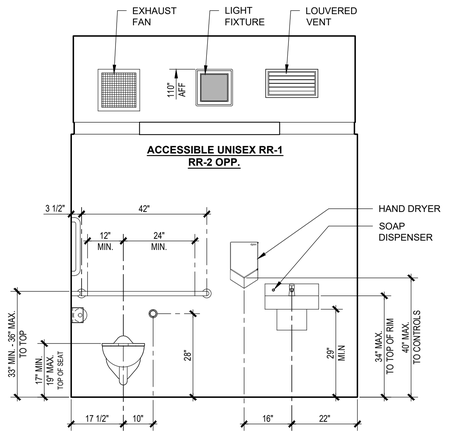
COMPONENT	DESCRIPTION	FINISH	BRAND / COLOR	NOTES
FLOOR				
RESTROOMS	CONCRETE	POLYMER COATING	CROWN POLYMERS / CROWNPRO 7072 SC	CHIP COLOR - A1434 TAN BLEND / B22-2102
MECHANICAL ROOM	CONCRETE	POLYMER COATING	CROWN POLYMERS / CROWNPRO 7072 SC	CHIP COLOR - A1434 TAN BLEND / B22-2102
WALLS				
RESTROOMS	C.M.U. - PRECISION	BLOCK FILLER / PAINTED	PITTSBURGH / PURE WHITE #90-374 PITT-TECH	2 COATS BLOCK FILLER, 2 COATS FINISH - SEMI GLOSS
	ANTI GRAFFITI COATING	MATTE	MONOPOLE	2 COATS
CAP BEAM	STEEL	PAINTED	PITTSBURGH / PURE WHITE #90-374 PITT-TECH	1 COAT PRIMER, 2 COATS FINISH - SEMI GLOSS
ABOVE CAP BEAM	F.R.C. w/ TEXTURED PATTERN	PAINTED	PITTSBURGH / PURE WHITE #90-374 PITT-TECH	1 COAT PRIMER, 2 COATS FINISH - SEMI GLOSS
MECHANICAL ROOM	C.M.U. - PRECISION	BLOCK FILLER / PAINTED	PITTSBURGH / PURE WHITE #90-374 PITT-TECH	1 COAT BLOCK FILLER, 1 COAT FINISH - SEMI GLOSS
CAP BEAM	STEEL	PAINTED	PITTSBURGH / PURE WHITE #90-374 PITT-TECH	1 COAT PRIMER, 2 COATS FINISH - SEMI GLOSS
ABOVE CAP BEAM	WOOD SHEATHING	PAINTED	PITTSBURGH / PURE WHITE #90-374 PITT-TECH	1 COAT PRIMER, 2 COATS FINISH - SEMI GLOSS
CEILING				
RESTROOMS	F.R.C. w/ TEXTURED PATTERN	PAINTED	PITTSBURGH / PURE WHITE #90-374 PITT-TECH	1 COAT PRIMER, 2 COATS FINISH - SEMI GLOSS
MECHANICAL ROOM	WOOD SHEATHING	PAINTED	PITTSBURGH / PURE WHITE #90-374 PITT-TECH	1 COAT PRIMER, 2 COATS FINISH - SEMI GLOSS

GENERAL SHEET NOTES:

1. LOCATION OF ALL PLUMBING & ELECTRICAL COMPONENTS IN THE MECHANICAL ROOM ARE SUBJECT TO CHANGE, FINAL LOCATIONS TBD.



1 A-3 INTERIOR ELEVATION
SCALE: 1/2" = 1'-0"



2 A-3 INTERIOR ELEVATION
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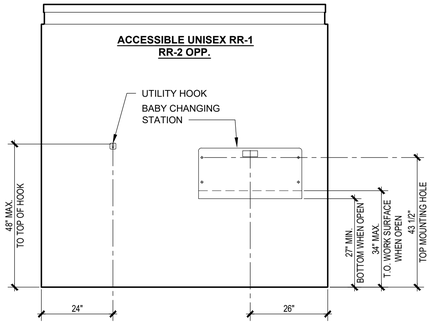
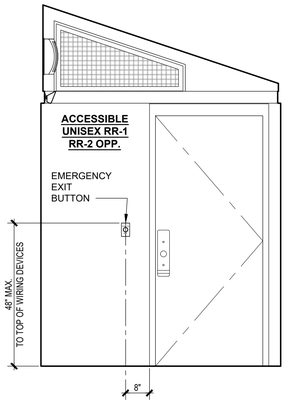
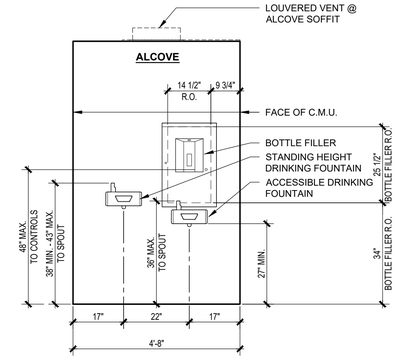


3 A-3 INTERIOR ELEVATION
SCALE: 1/2" = 1'-0"



4 A-3 INTERIOR ELEVATION
SCALE: 1/2" = 1'-0"



5 A-3 ALCOVE ELEVATION
SCALE: 1/2" = 1'-0"

CONSTRUCTION DOCUMENTS - 01/12/2023

SHELLY PARK - Sparks, NV

RST# 21062-17
01.17.2023

DO NOT SCALE - DIMENSIONS PRESIDE
24x36 SHEET = SCALE AS NOTED
11x17 SHEET = NTS

No.	Description	Date

CONSTRUCTION DOCUMENTS
01/12/2023

PUBLIC RESTROOM COMPANY
Building Better Places To Go.
2587 Business Pkwy, Minden, NV 89423
Ph: 888-888-2060 | Fax: 888-888-1448

PROJECT OWNER:
CITY of SPARKS
Sparks, NV

PROJECT NAME AND LOCATION:
SHELLY PARK
Sparks, NV

SHEET TITLE:
INTERIOR ELEVATIONS & SCHEDULES

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PLUMBING COMPONENTS SCHEDULE

QTY.	COMPONENT	DESCRIPTION	PRC #
2	WATER CLOSET - Stainless Steel, Wall Mount	ACORN 1675-W-1-HET 1.28 GPF-FVBO-ADA-PFS-316SS	K1299
2	FLUSH VALVE - Water Closet, Hydraulic Type	ZURN ZH6152AV-HET-7L-MB-WP	K1523
2	TOILET SEAT - Black	BEMIS 1955SSCT	K1323
2	LAVATORY - Stainless Steel, Wall Mount	ACORN 1652-FALRB-1-DMS-03-M-316SS	K1109
2	LAVATORY FAUCET - Metered	CHICAGO #333-E2805-665 PSHABCP	K1604
2	FLOOR DRAIN	ZURN ZN460-5B-2NH	K1700
2	TRAP PRIMER	PROFLO #PFPR500	K1705
2	TRAP PRIMER PVC REDUCING ADAPTER	PPA-2P625	K1587
2	DRINKING FOUNTAIN - (1) High - (1) Low	MURDOCK MODEL #GSE64-FG-316SS	K1398
1	BOTTLE FILLER	MURDOCK MODEL #BF3-316SS	K1419
1	PRESSURE GAUGE - 100 psi.	PROFLO PFXPG100K (FOR DOWNSTREAM)	K1689
1	PRESSURE GAUGE - 200 psi.	PROFLO PFXPG200K (FOR UPSTREAM)	K1689.5
1	WATER FILTER - 1 1/2"	KEYSTONE CG10	K1591/92/94
1	BALL VALVE - 1 1/2"	NIBCO S-FP-600N	K1566
1	BALL VALVE - 1 1/4" (Prep for future tank)	NIBCO S-FP-600N	K1563
TBD	BALL VALVE - 1/2" (Isolation, drain & bleed valve)	NIBCO S-FP-600N	K1560
1	CHECK VALVE - 11/2" - Spring Type; Sweat	NIBCO #S-480-Y-LF	K1568.7
1	PRESSURE REDUCING VALVE - 1 1/2"	WATTS LF25 AUB-GG (Lead Free)	K1559
TBD	HAMMER ARRESTOR	PPA SWA	K1590
2	HOSE BIBB - Interior, Utility Chase	ACORN #8121-LF	K1575
TBD	RELIEF VALVE - For WH-1/2" Relief / Bleed Valve	PEX COMPRESSION STRAIGHT STOP VALVE #ULF4420500	K7905
TBD	RELIEF VALVE - For COMBO-1/2" Relief / Bleed Valve	PEX COMPRESSION ANGLE STOP VALVE #ULF4410500	K7910
1	VENT CAP - 4"	SMITH 1748	K1582
1	CURB STOP - 1 1/2"	MUELLER H-15015	K1585
1	WATER HEATER - IN LINE	ELECTRIC TANKLESS - REFER TO SHEET E-1	-
2	THERMOSTATIC VALVE - Mixing Valve	ACORN THERMOSTATIC MIX. VALVE MODEL # ST70-12	K1615
1	EXPANSION TANK	PROFLO PFXT5	K1690
1	HOSE REEL	STRONGWAY #46434	K1595.5
1	COMMERCIAL GRADE HOSE	TEKNOR APEX HEAVY DUTY COMMERCIAL GRADE NEVERKINK HOSE #8617-100	K1596.7

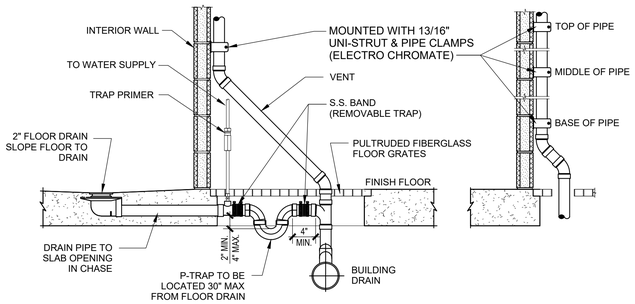
PIPE SCHEDULE

TYPE OF SERVICE		PEX PIPE	TYPE "L" COPPER	TYPE "K" COPPER	SCHED. 40 PVC WATER	CAST IRON "NO HUB"	SCHED. 40 PVC DWV	SCHED. 40 ABS DWV
		PIPE MATERIAL						
WATER	ABOVE GROUND	✓						
	BELOW GROUND			✓				
SANITARY DRAINAGE	ABOVE GROUND						✓	
	BELOW GROUND							✓
SANITARY VENT	ABOVE GROUND						✓	
	ABOVE ROOF					✓		

NOTES:

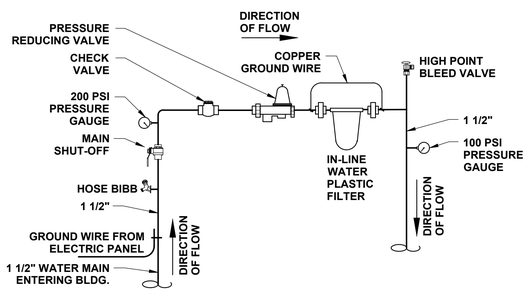
AS PER 2018 UNIFORM PLUMBING CODE CHAPTER 4 FLOW AND WATER CONSUMPTION:

- WATER CLOSET FLUSH VALVE SHALL NOT EXCEED 1.6 gpf.
- LAVATORY METERING FAUCETS SHALL NOT EXCEED 0.25 gal. PER CYCLE.

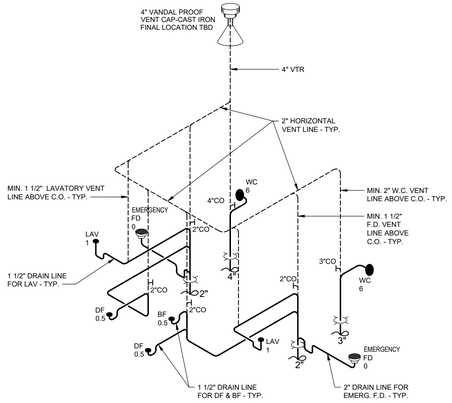


FLOOR DRAIN DETAIL

DWV PIPE SUPPORT



PRV & FILTER COMBO MANIFOLD



LEGEND:

CO = CLEAN OUT

VENT PIPE

WASTE PIPE

WASTE AND VENT PIPING:

- FIXTURE UNITS _____ 15.5
- SIZE OF BUILDING FLOOR DRAINS ____ 2"
- SIZE OF BUILDING MAIN SEWER ____ 4"
- AGGREGATE AREA _____ 12.566 SQ. IN.

D.W.V. ABOVE GRADE . . . . . PVC SCH 40 OR ABS SCH 40 — ABOVE GROUND

D.W.V. BELOW GRADE . . . . . PVC SCH 40 OR ABS SCH 40 — BELOW GROUND

GENERAL NOTES:

- SIZED TO 2018 UNIFORM PLUMBING CODE w/ NORTHERN NV AMENDMENTS
- D.W.V. MATERIAL - P.V.C. or A.B.S.
- D.W.V. UNDERGROUND MATERIAL - P.V.C. or A.B.S.
- CONTINUATION OF WASTE TO MAIN SEWER TO BE DONE ON SITE BY OTHERS.
- ALL FLOOR DRAINS SHALL TRAP IN UTILITY CHASE AND HAVE REMOVABLE TRAPS FOR WINTERIZATION.
- RESTROOM FLOOR DRAIN TRAPS TO CONNECT TO D.W.V. IN UTILITY CHASE WITH STAINLESS STEEL BAND & NO HUB COUPLING.
- V.T.R. SHALL BE CAST IRON WITH VANDAL CAP TO 24" BELOW ROOF.
- LAVATORY TRAPS IN UTILITY CHASE SHALL HAVE DRAIN PLUGS FOR WINTERIZATION.
- SLOPE ALL D.W.V. PIPING 1/4" NOM.DRAIN LINE TO BE SLOPED TO MAIN SEWER LINE.
- INSTALL GRATES AT FLOOR OPENING IF APPLICABLE.

4 / P-1 — WASTE & VENT PIPING ISOMETRIC

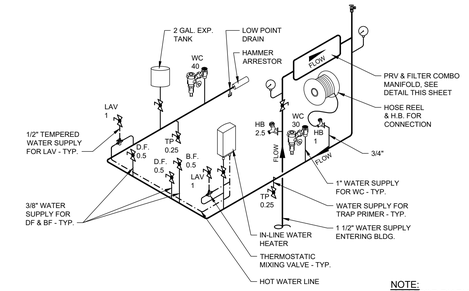
SCALE: NOT TO SCALE

NOTE : THIS WATER SYSTEM IS DESIGNED WITH A MAXIMUM DEVELOPED LENGTH OF 100ft. FROM THE METER TO THE BUILDING.

BUILDING PIPE SIZE IS 1 1/2"

GENERAL SHEET NOTE:

LOCATION OF ALL PLUMBING COMPONENTS IN THE UTILITY CHASE ARE SUBJECT TO CHANGE, FINAL LOCATIONS TBD.



LEGEND:

COLD WATER LINE

1/2" TEMPERED WATER LINE INSULATED

1/2" HOT WATER LINE INSULATED

WATER PIPING:

- FIXTURE UNITS _____ 77.5
- DEVELOPED LENGTH _____ 100'
- ELEVATION DIFFERENCE _____ 0'
- BUILDING REQ. PRESSURE _____ 46 to 60
- BUILDING WATER MAIN SIZE ____ 1 1/2"
- SITE WATER PRESSURE _____ TBD BY OTHERS
- METER SIZE _____ 2"

NOTE:
PREP FOR DIAPHRAGM TANK

WATER LINE ABOVE GRADE . . . . . PEX — ABOVE GROUND

WATER LINE BELOW GRADE . . . . . TYPE " K" COPPER — BELOW GROUND

GENERAL NOTES:

- SIZED TO 2018 UNIFORM PLUMBING CODE w/ NORTHERN NV AMENDMENTS
- POTABLE WATER MATERIAL - PEX
- HOT & TEMPERED WATER LINES (IF ANY) TO BE INSULATED
- HAMMER ARRESTORS INSTALLED TO CODE
- CONTINUATION OF WATER MAIN TO BE DONE ON SITE BY OTHERS
- SLOPE ALL WATER PIPING TO LOW POINT DRAIN DRAINS FOR WINTERIZATION.
- WATER HEATER SHALL BE ANCHORED OR STRAPPED PER CODE.

2 / P-1 — WATER PIPING ISOMETRIC

SCALE: NOT TO SCALE

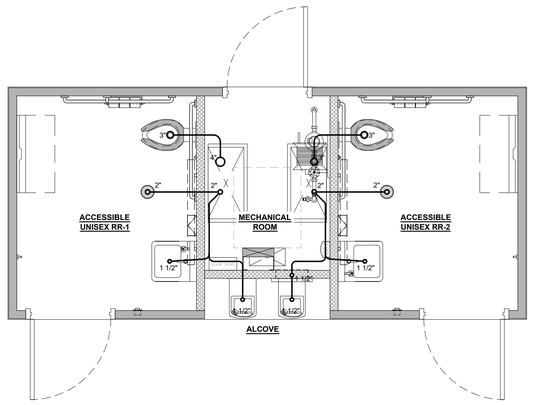
LEGEND:

WASTE PIPE - ABOVE GROUND

WASTE PIPE - BELOW GROUND

NOTE:
BELOW GROUND PLUMBING LAYOUT TO BE DETERMINED BASED ON FINAL UTILITY LOCATION PROVIDED BY OWNER / GENERAL CONTRACTOR

S — BY OTHERS - UTILITY BOX MARKED "SEWER" WITHIN 6 FT. OF BUILDING (FINAL LOCATION TBD) WASTE STUB & CLEAN OUT IN BOX



3 / P-1 — PLUMBING PLAN - WASTE

SCALE: NOT TO SCALE

LEGEND:

WATER MAIN - BELOW GROUND

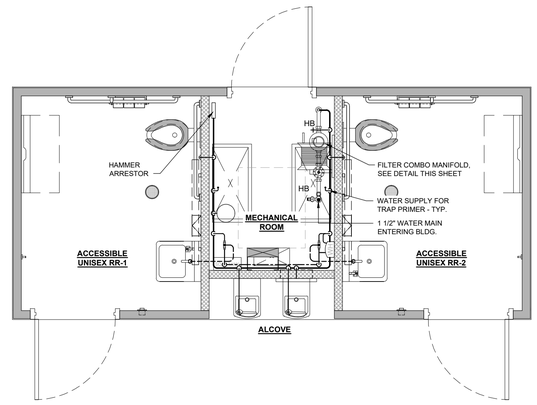
COLD WATER LINE

1/2" TEMPERED WATER LINE INSULATED

1/2" HOT WATER LINE INSULATED

NOTE:
BELOW GROUND PLUMBING LAYOUT TO BE DETERMINED BASED ON FINAL UTILITY LOCATION PROVIDED BY OWNER / GENERAL CONTRACTOR

W — BY OTHERS - UTILITY BOX MARKED "WATER" WITHIN 6 FT. OF BUILDING (FINAL LOCATION TBD) SHUT-OFF VALVE IN BOX



1 / P-1 — PLUMBING PLAN - WATER SUPPLY

SCALE: NOT TO SCALE

RALPH TAVARES — NEVADA — CIVIL — No. 15707

RST# 21062-17
01.17.2023

DO NOT SCALE - DIMENSIONS PRESIDE
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11x17 SHEET = NTS

CONSTRUCTION DOCUMENTS - 01/12/2023

SHELLY PARK - Sparks, NV

No.	Description	Date

CONSTRUCTION DOCUMENTS
01/12/2023

PUBLIC RESTROOM COMPANY
Building Better Places To Go.
2587 Business Pkwy, Minden, NV 89423
Ph: 888-888-2060 | Fax: 888-888-1448

PROJECT OWNER:
CITY of SPARKS
Sparks, NV

PROJECT NAME AND LOCATION:
SHELLY PARK
Sparks, NV

SHEET TITLE:
PLUMBING PLANS & SCHEDULES

Drawn by:	NS	Job No.	10711
Checked by:	RR		P-1
Current Date:	01/12/2023		
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ELECTRICAL COMPONENTS SCHEDULE

SYMBOL	QTY.	DESCRIPTION	MODEL	HEIGHT	COMMENTS	PRC #
ELECTRICAL PANEL	1	120/240 SINGLE PHASE w/ PLUG-ON BREAKERS; NEMA 1 ENCLOSURE	SQUARE D QO120M100 (OR EQUAL)	72" A.F.F. TOP OF PANEL	FURR-OUT AS NEEDED	L1902
LIGHT - RESTROOMS OCC	2	25 WATT LED	LUMINAIRE SWP1212-25W-4000K-120V-OP-BRZ-OCC	110" A.F.F.	BUILT-IN OCCUPANCY SENSOR / BYPASS SWITCH	L1168
LIGHT - EXTERIOR	2	15 WATT LED	LUMINAIRE YWP610-15W-4000K-120V-OP-BRZ	REFER TO SHEET A-2	PHOTOCELL / BYPASS SWITCH	L1162.5
LIGHT- MECH. ROOM ▨	1	30 WATT LED	GREENLIGHTING AL-42L	CEILING MOUNTED	MANUAL ON/OFF SWITCH	L1108
PHOTOCELL ⊙	1	PHOTOCELL	INTERMATIC EK4336S	RECESSED ABOVE CAP BEAM	CONTROLS EXTERIOR LIGHTS	L1896
RECEPTACLE - GFCI GFCI	1	DEDICATED 20 AMP GFCI RECEPTACLE	LEVITON GFNT2-W	48" A.F.F. TO TOP	-	L1876
SWITCH $	2	SINGLE POLE MANUAL ON/OFF SWITCH	(1) LEVITON 1221-2W / (1) LEVITON 1221-2R	MAX. 48" A.F.F. TO TOP	BYPASS SWITCH / UTILITY ROOM LIGHT SWITCH	L1868 / L1870
SWITCH $2	1	DOUBLE POLE MANUAL ON/OFF SWITCH	LEVITON 1222-2W	MAX. 48" A.F.F. TO TOP	BYPASS SWITCH	L1872
HAND DRYER HD	2	SURFACE MOUNTED ELECTRIC	DYSON AIRBLADE V	40" MAX. A.F.F. TO CONTROLS		L1417
IN-LINE WATER HEATER WH	1	IN-LINE TANKLESS ELECTRIC WATER HEATER	STEIBEL DHC-E 8/10	-	-	L1319.5
EMERGENCY LIGHT	1	EMERGENCY LIGHT	LITHONIA MODEL #ELM2L (OR EQUAL)	ABOVE CAP BEAM	WIRE AHEAD OF SWITCH	L1198
EXHAUST FAN	2	WALL MOUNTED EXHAUST FAN WITH METAL GRILLE	BROAN MODEL #L100MG, 120VAC	108" A.F.F. TO TOP OF GRILLE	6" ROUND DUCT CONNECTOR #1106466; CONTROLLED BY LIGHT OCC. SENSOR	L1350
ELECTROMAGNETIC DOOR LOCKS	2	ELECTROMAGNETIC DOOR LOCKS	SECURITRON SAM SYSTEM	-	BPS POWER SUPPLY & DT-7 TIMER	
EXIT BUTTON (DOOR LOCKS)	2	EMERGENCY EXIT BUTTON	SECURITRON SDC 643U (PUSH TO EXIT)	48" A.F.F. TO TOP	-	L1207
COVE HEATER	2	COVE HEATER WITH BUILD-IN THERMOSTAT	Q-MARK MODEL #RCC6012C w/ RCCT INTEGRAL THERMOSTAT	MOUNTED ON CAP BEAM	FOR FREEZE PROTECTION - CONTROLLED BY BUILT-IN THERMOSTAT	L1304
MECHANICAL ROOM HEATER	1	MECHANICAL ROOM HEATER w/ BUILT-IN THERMOSTAT	KING MODEL #U12100	MOUNTED IN MECH. ROOM	FOR FREEZE PROTECTION - CONTROLLED BY BUILT-IN THERMOSTAT	L1297

LIGHTING CONTROLS SCHEDULE

AREA	CONTROLS
RESTROOMS	OCCUPANCY SENSOR BUILT-IN TO LIGHT FIXTURE / BYPASS SWITCH "ON" OVERRIDES OCC. SENSOR FOR MAINTENANCE
MECHANICAL ROOM	MANUAL ON/OFF SWITCH
EXTERIOR	PHOTOCELL / BYPASS SWITCH "ON" OVERRIDES PHOTOCELL FOR MAINTENANCE

NOTES:

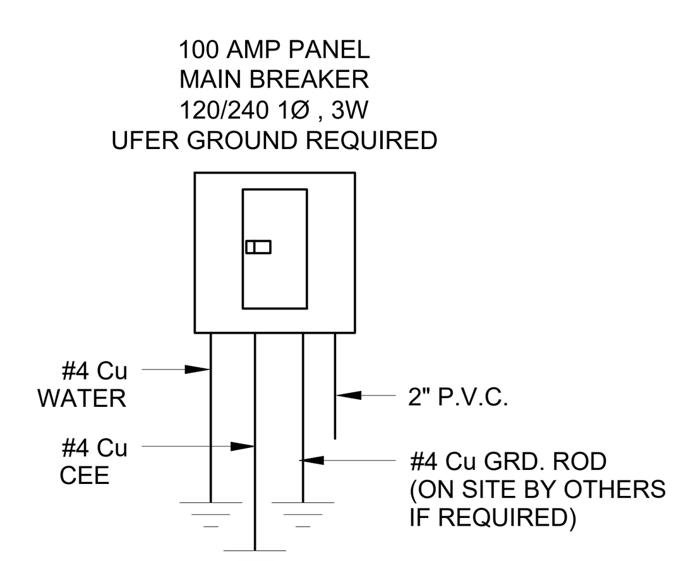
1. ALL CONDUCTORS ARE THNN SHIELDED COPPER WIRES.
2. RATING OF STANDARD PANEL IS 22,000 A.I.C.
3. WIRING METHOD IN METALLIC CONDUIT. (MC CABLE, EMT, METALLIC FLEX.
4. INSTALL CEE GROUND IN SLAB, TERMINATING IN UTILITY CHASE.
5. GREEN GROUNDING CONDUCTOR IN ALL RACEWAYS.

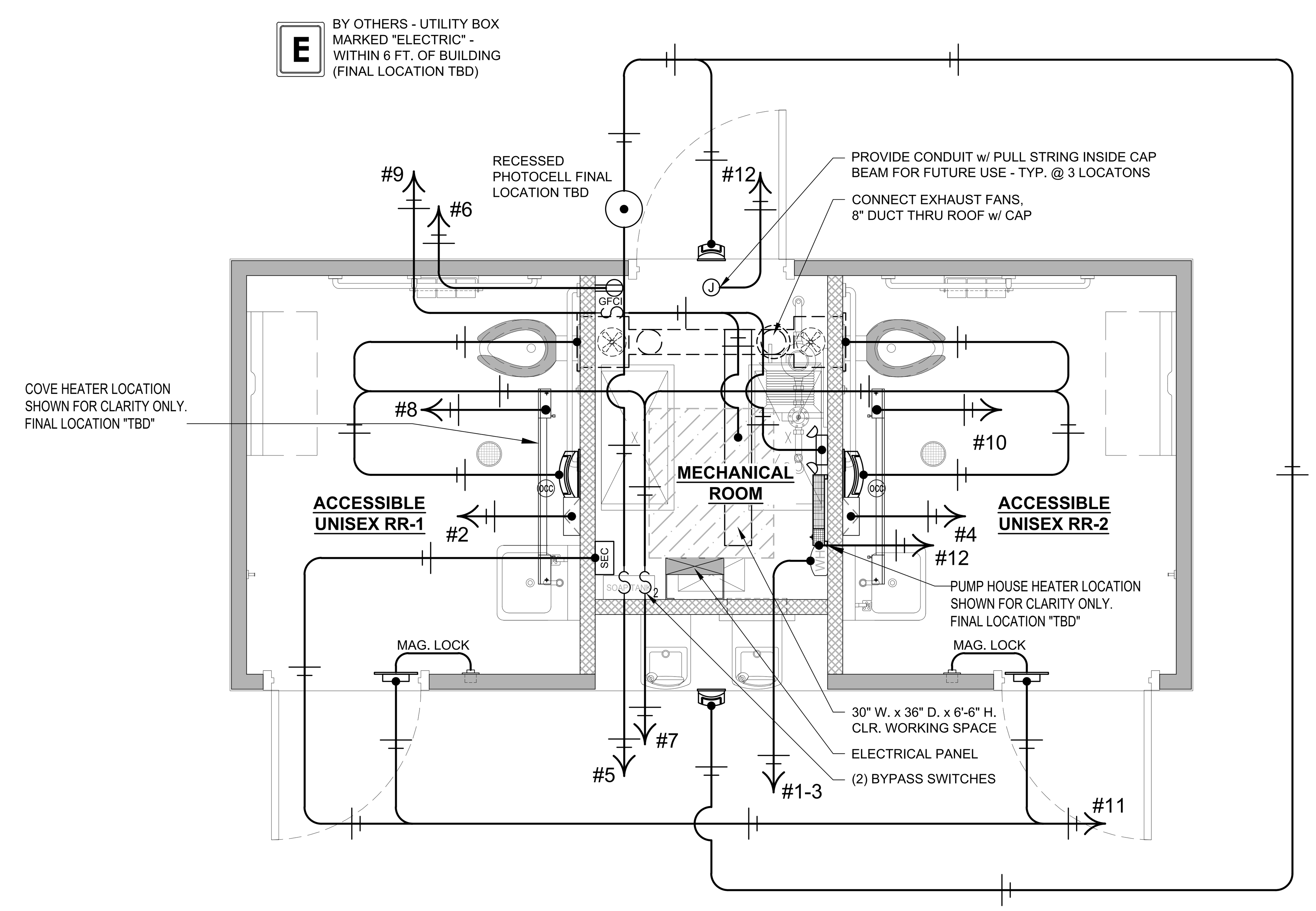
PANEL SCHEDULE

NOTE: ALL CONDUCTORS COPPER					MAIN BREAKER	100 AMP PANEL SINGLE PHASE				
CKT	DESCRIPTION	CIR. BREAKER TRIP AMPS	WIRE SIZE	TOTAL V.A.	100 AMP	TOTAL V.A.	WIRE SIZE	CIR. BREAKER TRIP AMPS	DESCRIPTION	CKT
1	IN-LINE WATER HEATER	40	8	4800		1000	12	20	HAND DRYER / ACCESSIBLE UNISEX RR-1	2
3	" "	"	"	4800		1000	12	20	HAND DRYER / ACCESSIBLE UNISEX RR-2	4
5	EXTERIOR LIGHTS	20	12	30		1500	12	20	DEDICATED RECEPTACLE - GFCI	6
7	RESTROOM LIGHTS / EXHAUST FANS	20	12	224		500	12	20	COVE HEATER	8
9	MECHANICAL ROOM LIGHTS	20	12	33		500	12	20	COVE HEATER	10
11	ELECTROMAGNETIC DOOR LOCKS	20	12	120		1000	12	20	PUMP HOUSE HEATER	12
13										14
15										16
17										18
19										20

ELECTRICAL LOAD CALCULATIONS

PANEL: 120/240 VOLTS		SINGLE PHASE	100 AMP MAIN BREAKER		
COMPONENT		CONNECTED LOAD (V.A.)	CALCULATED LOAD (V.A.)		
EXTERIOR LIGHTING		30	CONNECTED LOAD x 1.25		37.50
INTERIOR LIGHTING		83	CONNECTED LOAD x 1.25		103.75
(1) IN-LINE WATER HEATER		9600	CONNECTED LOAD x 1.00		9600.00
(1) DEDICATED RECEPTACLE - GFCI		1500	CONNECTED LOAD x 1.00		1500.00
(1) HAND DRYER (LARGEST MOTOR)		1000	CONNECTED LOAD x 1.25		1250.00
(1) HAND DRYER		1000	CONNECTED LOAD x 1.00		1000.00
(2) EXHAUST FANS		174	CONNECTED LOAD x 1.00		174.00
HEATER (FREEZE PROTECTION)		2000	CONNECTED LOAD x 1.25		2500.00
ELECTROMAGNETIC DOOR LOCKS		120	CONNECTED LOAD x 1.00		120.00
TOTAL LOAD		**15507**	**TOTAL LOAD**		**16285.25**
TOTAL CONNECTED LOAD	**KVA**	**15.507**	**TOTAL CALCULATED LOAD**	**KVA**	**16.285**
	AMPS	**64.613**		**AMPS**	**67.855**





E
BY OTHERS - UTILITY BOX MARKED "ELECTRIC" - WITHIN 6 FT. OF BUILDING (FINAL LOCATION TBD)
RECESSED PHOTOCELL FINAL LOCATION TBD
PROVIDE CONDUIT w/ PULL STRING INSIDE CAP BEAM FOR FUTURE USE - TYP. @ 3 LOCATONS
CONNECT EXHAUST FANS, 8" DUCT THRU ROOF w/ CAP
#9
#6
#12
GFCI
COVE HEATER LOCATION SHOWN FOR CLARITY ONLY. FINAL LOCATION "TBD"
#8
#10
ACCESSIBLE UNISEX RR-1
MECHANICAL ROOM
ACCESSIBLE UNISEX RR-2
#2
#4
#12
SEC
PUMP HOUSE HEATER LOCATION SHOWN FOR CLARITY ONLY. FINAL LOCATION "TBD"
MAG. LOCK
MAG. LOCK
30" W. x 36" D. x 6'-6" H. CLR. WORKING SPACE
ELECTRICAL PANEL
(2) BYPASS SWITCHES
#5
#7
#1-3
#11

1
E-1
ELECTRICAL PLAN
SCALE: NOT TO SCALE

PROFESSIONAL ENGINEER STATE OF NEVADA
RALPH M. TAVARES
CIVIL
No. 16707
RST# 21062-17
01.17.2023

DO NOT SCALE - DIMENSIONS PRESIDE
24x36 SHEET = SCALE AS NOTED
11x17 SHEET = NTS

No.	Description	Date

CONSTRUCTION DOCUMENTS
01/12/2023

PUBLIC RESTROOM COMPANY
Building Better Places To Go.
2587 Business Pkwy, Minden, NV 89423
Ph: 888-888-2060 | Fax: 888-888-1448

PROJECT OWNER:
CITY of SPARKS
Sparks, NV

PROJECT NAME AND LOCATION:
SHELLY PARK
Sparks, NV

SHEET TITLE:
ELECTRICAL PLAN & SCHEDULES

Drawn by:	NS	Job No.	10711
Checked by:	RR	E-1	
Current Date:	01/12/2023		
Start Date:	09/13/2022		

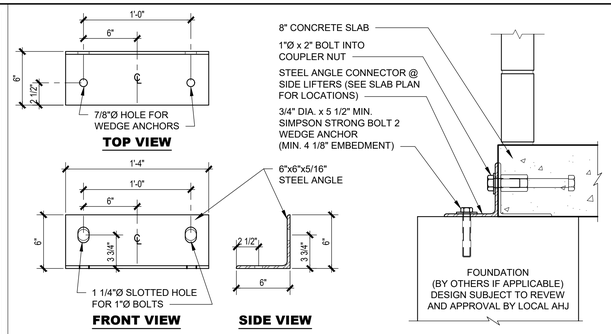
CONSTRUCTION DOCUMENTS - 01/12/2023
SHELLY PARK - Sparks, NV

NOTES: (LIGHT WEIGHT CONCRETE)

1. ALL REBAR TO BE GRADE 60.
2. ALL WELDABLE REINFORCEMENTS TO BE ASTM A706.
3. CONCRETE STRENGTH BASIS DESIGN IS MIN. 2500 PSI WITH SPECIAL ADDITIVE.
4. MINIMUM CONCRETE COVER = 1 1/2" FOR #4 AND #5 BARS.TOP BARS MAY BE LOWER ONLY WHERE REQUIRED BY SPECIFIED SLOPES.
5. PROVIDE (2) #5 BARS @ 8" O.C. TOP & BOTTOM AT PERIMETER OF EACH SLAB & PROVIDE (3) #5 BARS @ 8" O.C. TOP & BOTTOM AT EACH LIFTING LOCATION.
6. TOP MAT: ADD TRIMMER BARS NEXT TO BLOCK OUTS IF CLEARANCE TO REGULAR LAYOUT IS GREATER THAN 2". TRIMMER BARS EXTEND 18" PAST OPENING, OR TERMINATE WITH 90° HOOK AND 8" EXTENSION. CENTER OF TRIMMER BARS TO BLOCK OUTS TO BE 2", TYP.
7. PROVIDE (2) DIAGONAL 24" LONG #4 REBARS (1 @ TOP MAT & 1 @ BOTTOM MAT) @ EACH SLAB OPENING.
8. SMALL BLOCK OUTS (8" x 8" MAX.) MAY BE ADDED AS REQUIRED FOR SERVICES. ADD DIAGONAL TRIMMER BARS IF CLEARANCE TO REGULAR LAYOUT IS GREATER THAN 2".
9. SPLICES: #4 BARS - 20" LAP
   #5 BARS - 24" LAP
10. PROTECT PIPE & FLOOR DRAINS THAT WILL BE ENCASED IN THE CONCRETE BY PROVIDING AN APPROVED WRAP.
11. ONLY WHERE NOTED, IT IS ACCEPTABLE TO NOTCH HORIZONTAL LEG OF PERIMETER ANGLE.
12. ALL EXPOSED FACES OF SLAB PERIMETER STEEL ANGLES SHALL RECEIVE GALVANIZING PAINT COATING.

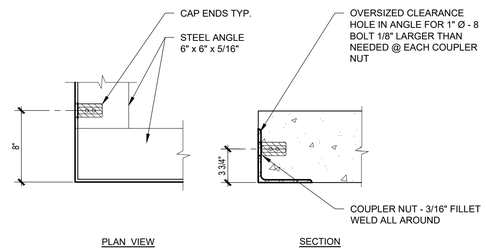
SLAB LOADS SCHEDULE

MARK	LOCATION	VERTICAL LOAD	LATERAL LOAD
A	WALL LINE (GRID) 1 & 2	1200 PLF	1480 LBS
B	WALL LINE (GRID) A & B	930 PLF	1380 LBS



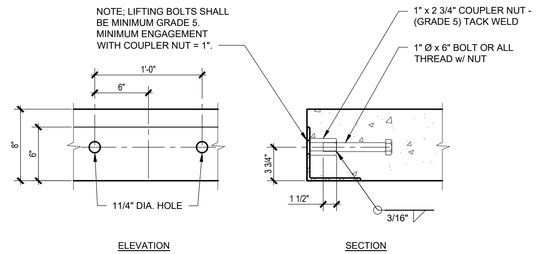
4 / S-1 SLAB TO FOUNDATION ANCHOR DETAIL

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



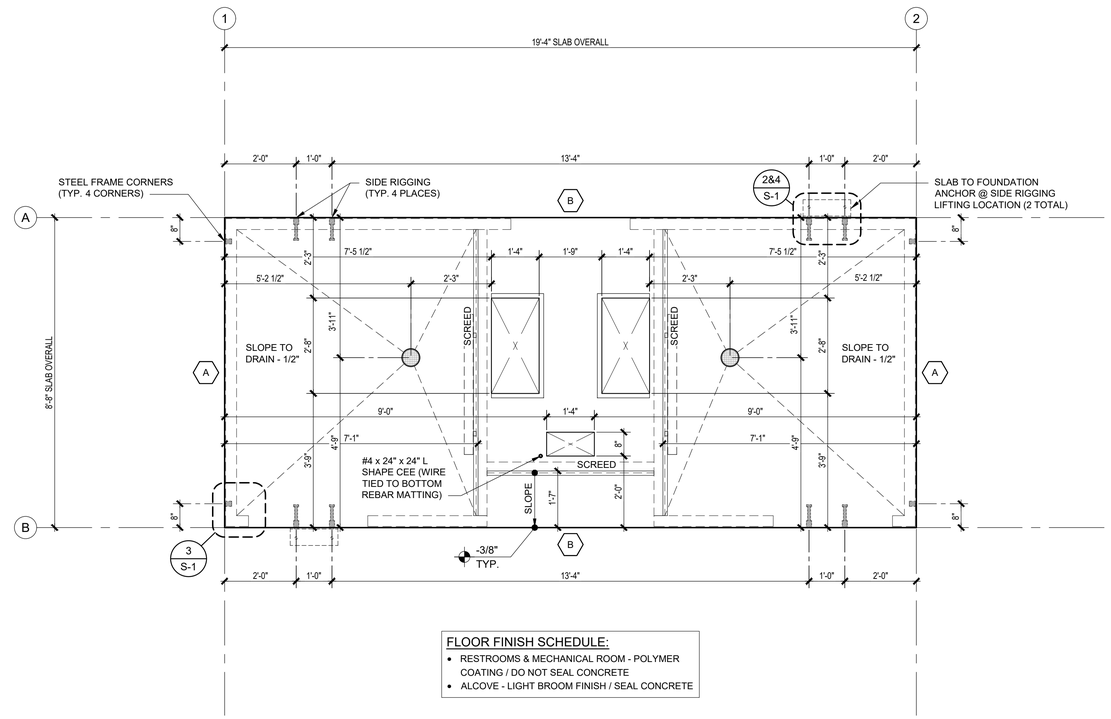
3 / S-1 CONCRETE SLAB EXTERIOR STEEL FRAME @ CORNER DETAIL

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



2 / S-1 RIGGING EMBEDDED ANCHOR DETAIL

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



FLOOR FINISH SCHEDULE:

- RESTROOMS & MECHANICAL ROOM - POLYMER COATING / DO NOT SEAL CONCRETE
- ALCOVE - LIGHT BROOM FINISH / SEAL CONCRETE

1 / S-1 CONCRETE SLAB & STEEL PERIMETER PLAN

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

CONSTRUCTION DOCUMENTS - 01/12/2023

SHELLY PARK - Sparks, NV

RST# 21062-17
01.17.2023

DO NOT SCALE - DIMENSIONS PRESIDE
24x36 SHEET = SCALE AS NOTED
11x17 SHEET = NTS

No.	Description	Date

CONSTRUCTION DOCUMENTS
01/12/2023

PUBLIC RESTROOM COMPANY
Building Better Places To Go.
2587 Business Pkwy, Minden, NV 89423
Ph: 888-888-2060 | Fax: 888-888-1448

PROJECT OWNER:
CITY of SPARKS
Sparks, NV

PROJECT NAME AND LOCATION:
SHELLY PARK
Sparks, NV

SHEET TITLE:
CONCRETE SLAB & STEEL PERIMETER PLAN & DETAILS

Drawn by:	NS	Job No.	10711
Checked by:	RR		
Current Date:	01/12/2023		S-1
Start Date:	09/13/2022		

12-Jan-23, 4:25 PM

OWNER / GENERAL CONTRACTOR AND PUBLIC RESTROOM COMPANY RESPONSIBILITIES

PUBLIC RESTROOM COMPANY RESPONSIBILITIES:

1. PROVIDE FULL ARCHITECTURAL PLANS AND ENGINEERING CALCULATIONS, STAMPED BY STATE GOVERNING AGENCY SUITABLE FOR GENERAL CONTRACTOR TO FILE FOR REQUIRED BUILDING PERMIT.
2. FURNISH AND INSTALL UNDERGROUND UTILITIES UNDER SLAB (INCLUDING TRENCHING) EXTENDING 6 FEET MAX. BEYOND THE BUILDING LINE, MIN. OF 24" - MAX OF 36" BELOW GRADE.
3. FURNISH AND INSTALL SLAB TO FOUNDATION ANCHORS PER DETAILS INCLUDED HEREIN. APPLICABLE ONLY TO BUILDINGS WITH FOUNDATIONS.

GENERAL NOTES:

1. THE DIFFERENCE IN THE ELEVATION BETWEEN THE FINISH FLOOR OF THE BUILDING AT EXTERIOR DOORS AND THE SIDEWALK OUTSIDE IS 1/4" MAX. PRC RECOMMENDS SIDEWALK TO BE FLUSH WITH FINISH FLOOR AT ALL DOORS.
2. THE PLAN & DETAILS HEREIN ARE SPECIFIC TO THE BUILDING SIZE AND MODULE CONFIGURATION OF THIS BUILDING MODEL.

OWNER / GENERAL CONTRACTOR RESPONSIBILITIES:

1. PREPARE BUILDING PAD AND OR FOUNDATION.
2. PROVIDE SITE PLAN & ENGINEERED FOUNDATION PLAN (IF APPLICABLE) AND ATTACH IT TO THE PUBLIC RESTROOM COMPANY'S DEPARTMENT OF HOUSING APPROVED DOCUMENTS AND OBTAIN NECESSARY PERMITS FROM LOCAL JURISDICTION.
3. VERIFY AND SCHEDULE NECESSARY INSPECTIONS WITH LOCAL JURISDICTION FOR SITE PERFORMED WORK BY OTHERS, AND FOR UNDER BUILDING SLAB PLUMBING CONNECTIONS MADE BY PRC.
4. COORDINATE SEWER INVERT ELEVATION WITH THE PUBLIC RESTROOM COMPANY PRIOR TO BUILDING INSTALLATION, VERIFY & COORDINATE LOCATION OF EXISTING UTILITIES INCLUDING WATER METER SIZE, TYPE, AND LOCATION OF EXISTING UTILITIES COMING INTO THE BUILDING SUPPLIED BY PRC
5. MAKE FINAL UTILITY CONNECTIONS (INCLUDING NECESSARY UTILITY BOXES).
6. PREPARE SITE FOR MINIMUM ALLOWABLE SOIL BEARING PRESSURE OF 1,500 psf, WITH SUB-GRADE COMPACTED TO 90% M.D.D.
7. SUPPLY AND STOCK PILE REQUIRED QUANTITY OF COARSE MASON SAND WITHIN BUILDING PROXIMITY FOR USE BY PRC FOR UTILITY TRENCH BACKFILL.
8. PROJECTS WITH FOOTINGS: PROVIDE SLEEVES IN FOOTINGS ACCORDING TO UTILITY LOCATION PLAN AND PAD / FOUNDATION PLAN DIRECTION.

GENERAL SITE CONDITION LIABILITY NOTE:

PUBLIC RESTROOM COMPANY (PRC) PROVIDES BUILDING PAD / FOUNDATION PLAN DRAWINGS FOR PLACEMENT OF OUR BUILDING ON SITE FOUNDATIONS / PADS FOR **REFERENCE ONLY**. PRC DRAWINGS DO NOT INCORPORATE SITE DESIGN FOR LOCAL CODES, SOILS CONDITIONS, FOOTING REQUIREMENTS, AND / OR ANY OTHER CONTRIBUTING SITE FACTORS UP TO AN INCLUDING HIGH WATER TABLES. IT IS THE RESPONSIBILITY OF THE OWNER / GENERAL CONTRACTOR TO PROVIDE A PROPER SITE DESIGN TO ACCOMMODATE THE BUILDING AS WELL AS PROVIDE PROPER SITE CRITERIA SO PRC MAY MODEL SEWER, WATER, AND ELECTRICAL DESIGNS WITHIN THE BUILDING. OUR BUILDING DESIGN INCLUDES AN 8" THICK REINFORCED CONCRETE SLAB AND ASSUMES FULL SLAB BEARING ON SOILS WITH A MINIMUM OF 1500 PSF BEARING CAPACITY. OUR BUILDING DESIGNS SURCHARGE THE SOIL BENEATH THE MAT SLAB AT APPROXIMATE 208 PSF. ANY BUILDING FOUNDATION IN ADDITION TO THE INTEGRAL MAT SLAB ARE SHOWN FOR **REFERENCE ONLY** AND SHOULD BE VERIFIED BY A LICENSED SOILS ENGINEER TO CONFORM WITH REQUIRED CODES.
PRC ASSUMES NO LIABILITY FOR THE OWNER OR GENERAL CONTRACTOR ACCEPTANCE OF THESE TYPICAL DRAWINGS WITHOUT VERIFICATION BY A LICENSED SOILS / FOUNDATION ENGINEER.

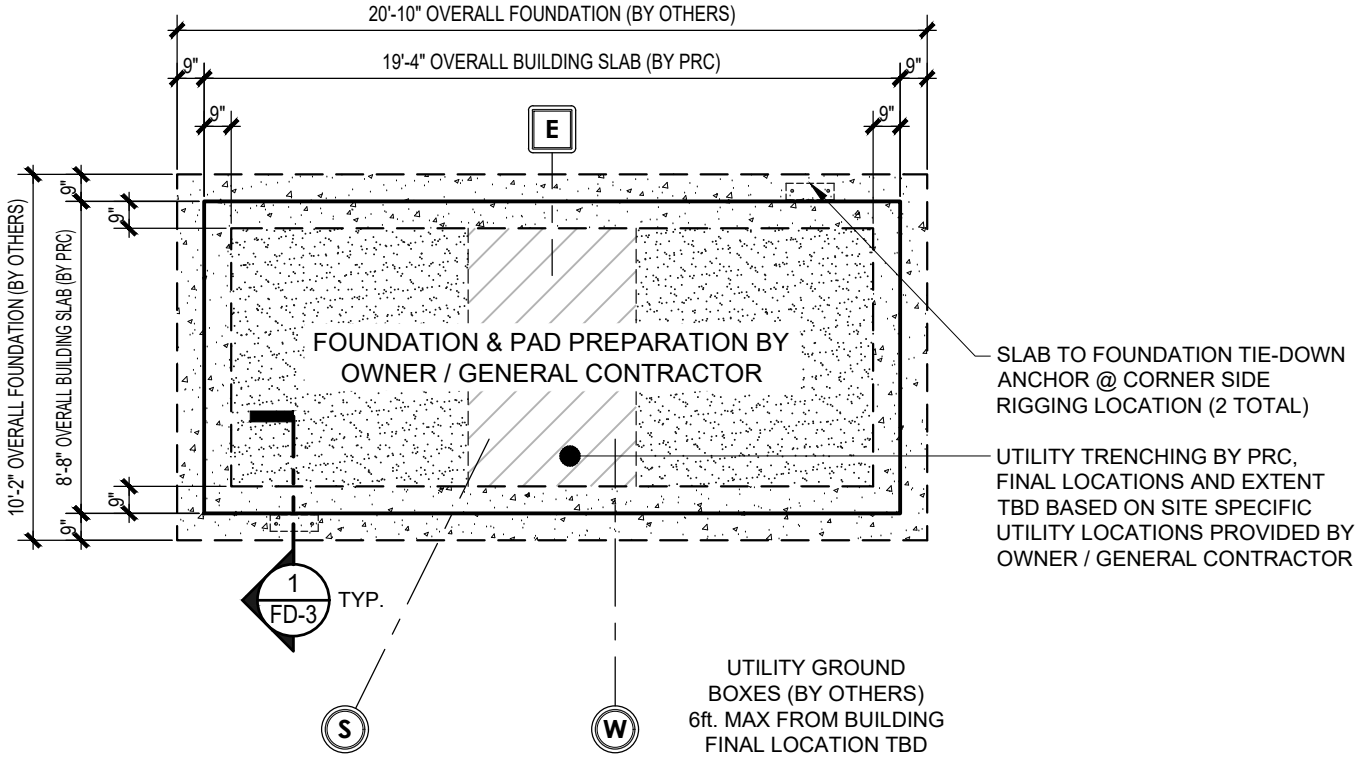
PUBLIC RESTROOM COMPANY
Building Better Places To Go.
Ph: 888-888-2060 | Fax: 888-888-1448

BUILDING TYPE:	**RESTROOM BUILDING**	DATE: 03/13/2023	DRAWN BY:
		PROJECT #: 10711	NS
PROJECT:	**SHELLY PARK** **SPARKS, NV**	SHEET:	**FD-1**
		1 OF 4	

~NOT FOR CONSTRUCTION ~ PRELIMINARY DESIGN DRAWING ONLY ~ DO NOT SCALE, DIMENSIONS PRESIDE

NOTES:

1. **BOTTOM OF PRE-FAB BLDG. MANUFACTURERS SLAB IS DEAD FLAT. TOP OF FOOTINGS & COMPACTED BACK FILL MUST BE DEAD LEVEL. POUR FOOTING WITH LASER TRANSIT TO VERIFY TOP OF FOOTING. IF SHIM PLATES ARE REQUIRED A CHANGE ORDER IS REQUIRED.**
2. **REQUIRED ALLOWABLE SOIL BEARING PRESSURE = 1500 PSF; FIELD VERIFIED BY OTHERS**



1 / FD-2 FOUNDATION / PAD PREPARATION PLAN

SCALE: NOT TO SCALE

PRELIMINARY FOR REFERENCE ONLY

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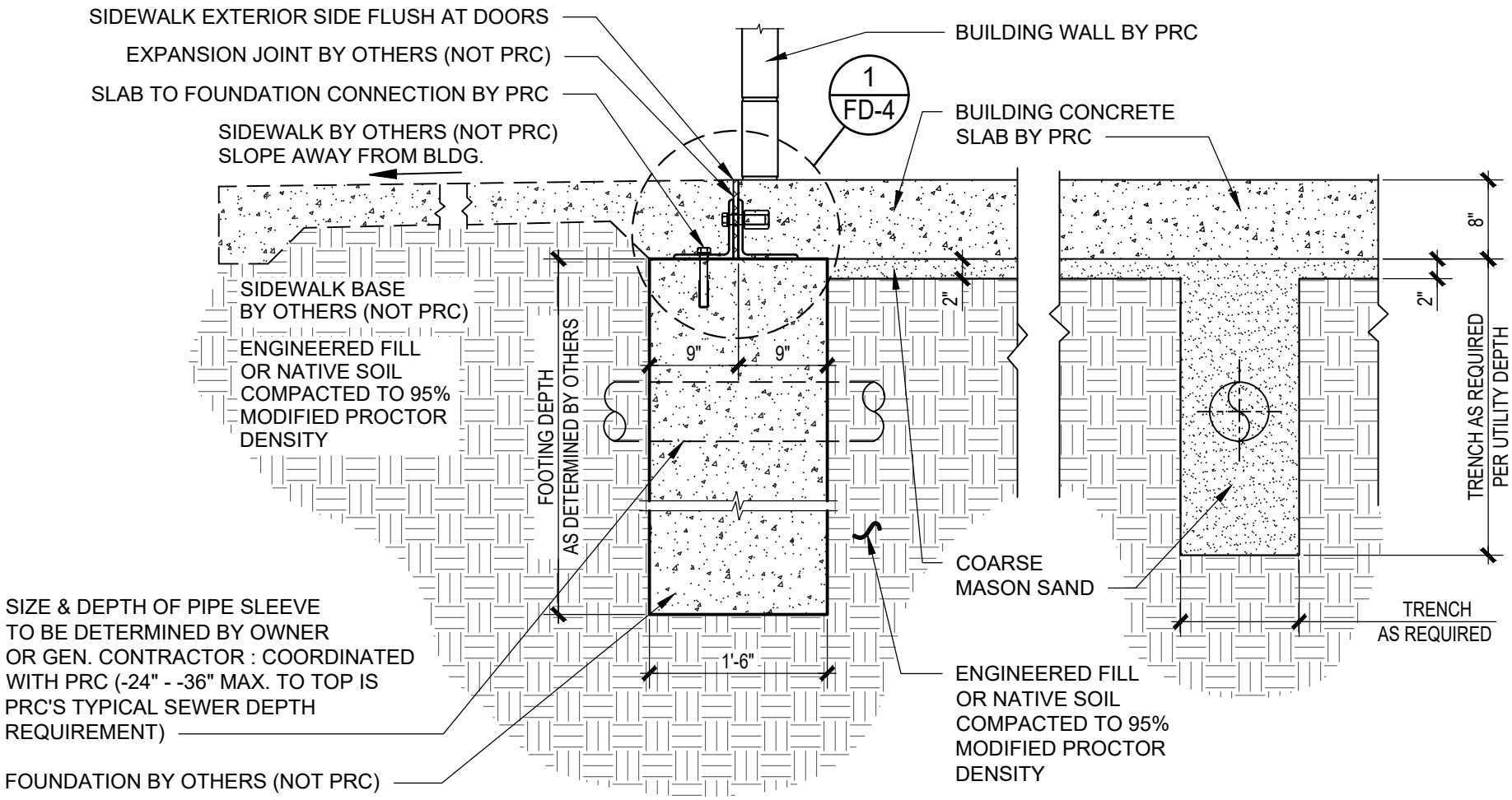
BUILDING TYPE: **RESTROOM BUILDING**		DATE: 03/13/2023	DRAWN BY: NS
		PROJECT #: 10711	
PROJECT: **SHELLY PARK SPARKS, NV**		SHEET: **FD-2**	
		2 OF 4	

~NOT FOR CONSTRUCTION ~ PRELIMINARY DESIGN DRAWING ONLY ~ DO NOT SCALE, DIMENSIONS PRESIDE

NOTES:

1. **BOTTOM OF PRE-FAB BLDG. MANUFACTURERS SLAB IS DEAD FLAT. TOP OF FOOTINGS & COMPACTED BACK FILL MUST BE DEAD LEVEL. POUR FOOTING WITH LASER TRANSIT TO VERIFY TOP OF FOOTING. IF SHIM PLATES ARE REQUIRED A CHANGE ORDER IS REQUIRED.**

2. **REQUIRED ALLOWABLE SOIL BEARING PRESSURE = 1500 PSF; FIELD VERIFIED BY OTHERS**



1 / FD-3 TYPICAL FOUNDATION SECTION DETAIL

SCALE: NOT TO SCALE

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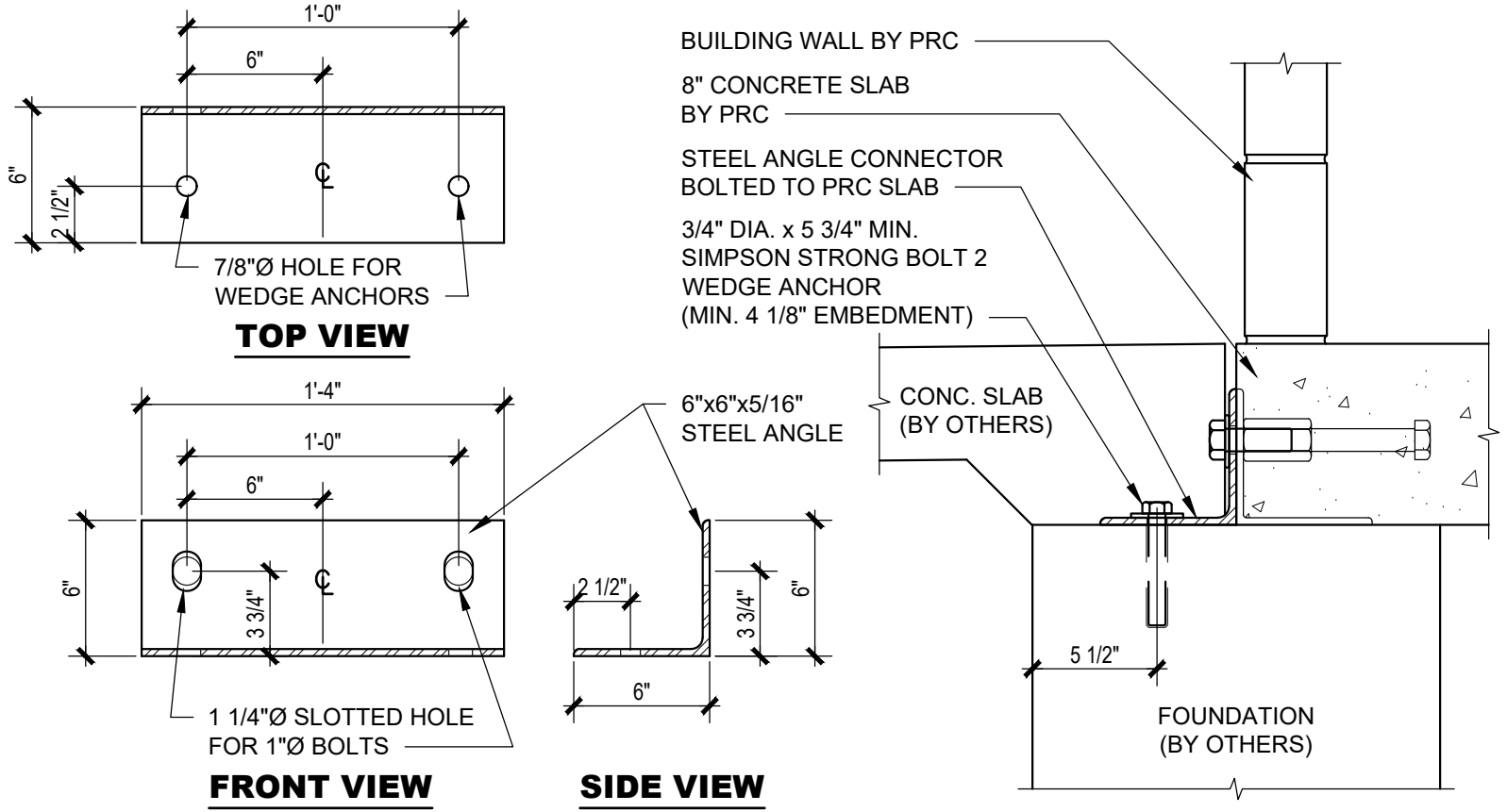
Ph: 888-888-2060 | Fax: 888-888-1448

BUILDING TYPE: **RESTROOM BUILDING**	DATE: 03/13/2023	DRAWN BY: NS
PROJECT: **SHELLY PARK SPARKS, NV**	PROJECT #: 10711	
	SHEET: 3 OF 4	**FD-3**

~NOT FOR CONSTRUCTION ~ PRELIMINARY DESIGN DRAWING ONLY ~ DO NOT SCALE, DIMENSIONS PRESIDE

NOTE:
QUANTITY AND LOCATIONS OF ANCHORS TO BE DETERMINED BY PRC ENGINEER



1
FD-4

SLAB TO FOUNDATION ANCHOR DETAIL (BY PRC)

SCALE: NOT TO SCALE

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Building Better Places To Go.
Ph: 888-888-2060 | Fax: 888-888-1448

BUILDING TYPE:	**RESTROOM BUILDING**	DATE: 03/13/2023	DRAWN BY: NS
PROJECT:	**SHELLY PARK** **SPARKS, NV**	PROJECT #: 10711	SHEET: **FD-4** 4 OF 4

~NOT FOR CONSTRUCTION ~ PRELIMINARY DESIGN DRAWING ONLY ~ DO NOT SCALE, DIMENSIONS PRESIDE