# CITY OF SPARKS

# SANITARY SEWER IMPROVEMENT PROJECT - McCARRAN BLVD. & PRATER WAY

BID #24/25-0012, PWP #WA-2025-205

## FEBRUARY 2025

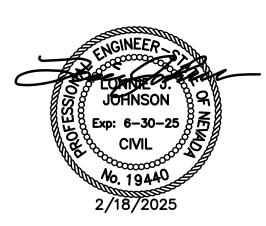
#### BASIS OF BEARINGS:

NEVADA STATE PLANE COORDINATE SYSTEM, NAD 83/94, WEST ZONE, MODIFIED BY A GRID TO GROUND COMBINED SCALE FACTOR OF 1.000197939 BASED ON THE WASHOE COUNTY GPS NETWORK.

#### BASIS OF ELEVATIONS (VERTICAL DATUM):

NAVD 88 BASED ON CITY OF SPARKS BENCHMARK #77 ELEVATION 4407.56.

#### PREPARED & SUBMITTED BY:



LONNIE J. JOHNSON, I PROJECT MANAGER

DATE



# PROJECT LOCATION MAP SECTION 3, TOWNSHIP 19 NORTH, RANGE 20 EAST SECTION 4, TOWNSHIP 19 NORTH, RANGE 20 EAST



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PROJECT No. 49-23-033

#### CITY OF SPARKS OFFICIALS:

ED LAWSON
DONALD ABOTT
DIAN VANDERWELL
PAUL ANDERSON
CHARLENE BYBEE
JOE RODRIGUEZ
DION LOUTHAN

MAYOR
COUNCIL MEMBER WARD 1
COUNCIL MEMBER WARD 2
COUNCIL MEMBER WARD 3
COUNCIL MEMBER WARD 4
COUNCIL MEMBER WARD 5
CITY MANAGER



#### J-U-B ENGINEERS, INC.

5190 Neil Road, Suite 500, Reno, NV 89502 p 775 852 1440 w www.jub.com



THE LANGDON GROUP



GATEWAY MAPPING INC.

J-U-B FAMILY OF COMPANIES

CAUTION — NOTICE TO CONTRACTOR

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND FEATURES AS SHOWN ON THESE PLANS IS BASED ON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE.

2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THESE LOCATIONS AND/OR ELEVATIONS AT THE PROPOSED POINTS OF CONNECTION AND IN AREAS OF POSSIBLE CONFLICT PRIOR TO BEGINNING CONSTRUCTION. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES BETWEEN THE CONDITIONS EXISTING IN THE FIELD AND THE INFORMATION SHOWN ON THESE DRAWINGS, HE SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.

3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE OR RELOCATE ALL EXISTING UTILITIES AND FEATURES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. CONTRACTOR SHALL OBTAIN APPROVALS FROM THE GOVERNING AGENCIES, THE ENGINEER, AND THE UTILITY COMPANIES PRIOR TO SUCH REMOVAL AND/OR RELOCATION.

4. THE CONTRACTOR ASSUMES ALL RISK FOR ANY CONSTRUCTION PERFORMED WITH PRELIMINARY OR NONAPPROVED PLANS.

5. CONTRACTOR TO PROVIDE TRAFFIC CONTROL IN CONFORM—ANCE WITH THE LATEST EDITION OF MUTCD WHENEVER CONSTRUCTION IS IN PROGRESS WITHIN THE PUBLIC TRAVEL WAY.

#### REUSE OF DOCUMENTS

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Bubject DRAWING:

G-001

SHEET: 1 OF 10

LAST UPDATED: 2/18/2025

PROVEL

.E. DATE.

#### **GENERAL NOTES**

- 1. WITHIN CITY OF SPARKS. ROW, ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE DETAILS CONTAINED IN THESE PLANS, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC), 2012 EDITION, AND THE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION (SDPWC), LATEST EDITION, AS ADOPTED BY CITY OF SPARKS, AND SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER. ALL SPECIFICATIONS REFERENCED HEREIN REFER TO THE SSPWC UNLESS INDICATED OTHERWISE.
- 2. WITHIN NDOT ROW ALL CONSTRUCTION SHALL CONFORM TO THE 2014 NDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (SSRBC OR "SILVER BOOK") AND 2022 STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION.
- 3. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL, THROUGHOUT CONSTRUCTION, IN ACCORDANCE WITH APPLICABLE PARTS OF SPECIFICATION SECTION 332, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD, LATEST EDITION) AND IN COMPLIANCE WITH THE NDOT ENCROACHMENT PERMIT.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE GENERAL SAFETY DURING CONSTRUCTION, AND ALL WORK SHALL CONFORM TO PERTINENT SAFETY REGULATIONS AND CODES. THE CONTRACTOR SHALL FENCE AND OR BARRICADE THE CONSTRUCTION AREA AS REQUIRED TO PROTECT ADJACENT SITES, VEHICULAR TRAFFIC, AND PEDESTRIAN TRAFFIC. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE PROVISIONS OF OSHA AND NRS CHAPTER 618, IN THE CONSTRUCTION PRACTICES FOR ALL EMPLOYEES DIRECTLY ENGAGED IN THE CONSTRUCTION OF THIS PROJECT.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND/OR PROTECTION OF ALL EXISTING AND PROPOSED PIPING, UTILITIES, TRAFFIC SIGNAL EQUIPMENT (BOTH ABOVE GROUND AND BELOW GROUND), STRUCTURES ADJACENT TO STREETS, AND ALL OTHER EXISTING IMPROVEMENTS THROUGHOUT CONSTRUCTION.
- 6. THE CONTRACTOR SHALL PURSUE WORK IN A CONTINUOUS AND DILIGENT MANNER TO ENSURE A TIMELY COMPLETION OF THE PROJECT.
- 7. ALL CONSTRUCTION SHALL BE CLOSELY COORDINATED WITH THE CITY OF SPARKS AND NDOT SO THAT THE QUALITY OF WORK CAN BE CHECKED FOR APPROVAL.
- 8. THE CONTRACTOR SHALL INCORPORATE ADEQUATE DRAINAGE PROCEDURES DURING THE CONSTRUCTION PROCESS TO ELIMINATE EXCESSIVE PONDING AND/OR EROSION.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE SITE IN A NEAT AND ORDERLY MANNER THROUGHOUT THE CONSTRUCTION PROCESS. ALL MATERIALS SHALL BE STORED WITHIN APPROVED CONSTRUCTION AREAS.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTINUOUS DUST CONTROL THROUGHOUT THE CONSTRUCTION OF ALL ITEMS SHOWN ON THESE DRAWINGS IN CONFORMITY WITH SECTION 40.030 OF WASHOE COUNTY AIR POLLUTION REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REGULAR CLEANING OF ALL MUD, DIRT, DEBRIS, ETC., FROM ANY AND ALL ADJACENT STREETS AND SIDEWALKS.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, ALL PERMITS AS REQUIRED BY CITY OF SPARKS AND NDOT. THE DUST CONTROL PERMIT SHALL BE AT THE CONTRACTOR'S EXPENSE. THE ENCROACHMENT, EXCAVATION, AND LANE CLOSURE PERMITS ARE "NO FEE" PERMITS FOR CITY PROJECTS WITHIN CITY OF SPARKS ROW.
- 12. CONSTRUCTION HOURS SHALL BE AS REQUIRED BY NDOT. IT IS ANTICIPATED THAT NIGHT WORK AND "MARATHON" WEEKENDS, AS NEEDED, WILL BE REQUIRED TO COMPLETE CONSTRUCTION WITHIN THE NDOT RIGHT-OF-WAY. REFERENCE NDOT REQUIREMENTS WITH ENCROACHMENT PERMIT.
- 13. SHOULD ANY PREHISTORIC OR HISTORIC REMAINS OR ARTIFACTS BE DISCOVERED DURING SITE DEVELOPMENT, WORK SHALL BE TEMPORARILY HALTED AT THE SPECIFIC SITE AND THE STATE HISTORIC PRESERVATION OFFICE OF THE DEPARTMENT OF MUSEUMS, LIBRARY AND ARTS, SHALL BE NOTIFIED TO RECORD AND PHOTOGRAPH THE SITE. THE PERIOD OF TEMPORARY DELAY SHALL BE LIMITED TO A MAXIMUM OF TWO (2) WORKING DAYS FROM THE DATE OF NOTIFICATION.
- 14. A PRECONSTRUCTION CONFERENCE WILL BE HELD WITH THE CITY OF SPARKS AND NDOT PRIOR TO ANY CONSTRUCTION.
- 15. NO MATERIALS OF ANY KIND SHALL BE STOCKPILED OR CONSTRUCTION EQUIPMENT PARKED ON CONCRETE OR ASPHALT SURFACES.
- 16. CONSTRUCTION OF STREET IMPROVEMENTS MUST ALLOW FOR THE PERPETUATION OF ALL EXISTING LEGAL ACCESSES AND EXISTING DRIVEWAYS. TEMPORARY CLOSURES, IF NEEDED, WITH ALTERNATE ACCESS SHALL BE REVIEWED AND APPROVED WITH THE CITY OF SPARKS AND NDOT PRIOR TO IMPLEMENTATION. PROPERTY OWNERS AND CITY OF SPARKS FIRE AND POLICE SHALL BE NOTIFIED 48 HOURS IN ADVANCE.
- 17. THE CONTRACTOR SHALL FURNISH PRODUCT SUBMITTALS FOR IMPROVEMENTS INCLUDING MANUFACTURER'S SPECIFICATIONS, SHOP DRAWINGS, CONCRETE MIX DESIGNS, ASPHALT MIX DESIGNS, GRADATION CERTIFICATIONS, ETC. FOR REVIEW BY THE ENGINEER OF RECORD. SUBMITTALS SHALL BE FURNISHED PROMPTLY AFTER EXECUTION OF THE CONTRACT, BUT IN ALL CASES PRIOR TO DELIVERY OF SUCH MATERIALS.

- 18. THE CONTRACTOR UPON COMPLETION OF THE PROJECT, SHALL PREPARE AND SUBMIT RECORD DRAWINGS TO THE OWNER. SUBMITTAL SHALL BE IN THE FORM OF A USB DRIVE IN 300 DPI, MULTIPAGE PDF FORMAT.
- THE CONTRACTOR IS REQUIRED TO FILE A NOTICE OF INTENT (NOI) WITH THE NEVADA DEPARTMENT OF ENVIRONMENTAL PROTECTION. THE CONTRACTOR IS REQUIRED TO SUBMIT THE NOI. PAY THE ASSOCIATED FEES. AND PROVIDE A COPY OF THE NOI RECEIPT WITH THE EE PERMIT APPLICATION. BEST MANAGEMENT PRACTICES SHALL BE IN PLACE PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL COMPLY AND MAINTAIN THE CONSTRUCTION SITE INSPECTION CHECKLIST, LOCATED IN APPENDIX D OF THE TRUCKEE MEADOWS BMP HANDBOOK THE CHECKLIST SHALL BE ONSITE FOR REVIEW BY STATE AND LOCAL GOVERNMENT INSPECTORS. THE CONTRACTOR SHALL INSPECT THE SITE DAILY; PRIOR TO FORECASTED RAIN EVENTS AND WITHIN 24 HOURS OF ANY RAIN EVENT. IF AN INSPECTOR DETERMINES THAT INSTALLED STORM WATER CONTROLS PLACE THE CITY AT RISK OF VIOLATING ITS NPDES PERMIT, THE INSPECTOR MAY ORDER A CHANGE TO THE STORM WATER CONTROLS. IF THE CHANGE IS NOT ACCEPTABLE OR IS NOT IMMEDIATELY IMPLEMENTED, A VIOLATION POSSIBLY RESULTING IN A FINE MAY BE ISSUED. THE CONTRACTOR SHALL NOT DISPOSE OR PLACE DEBRIS IN ANY CITY OF SPARKS AND OR/ NDOT MANHOLE, CATCH BASIN OR FACILITY

#### **ASPHALT NOTES**

- 1. MIX DESIGNS SHALL BE SUBMITTED TO NDOT FOR REVIEW AND APPROVAL, AND SHALL MEET NDOT SPECIFICATIONS WITHIN NDOT ROW.
- MIX DESIGN SHALL BE SUBMITTED TO CITY OF SPARKS FOR REVIEW AND APPROVAL AND SHALL MEET THE SSPWC WITHIN SPARKS ROW.

#### BYPASS PUMPING NOTES

- BYPASS PUMPING SHALL BE MONITORED 24 HOURS A DAY, 7 DAYS A WEEK BY A MECHANICALLY QUALIFIED AND PROPERLY TRAINED PERSON THAT CAN QUICKLY AND EFFECTIVELY ADDRESS POTENTIAL EMERGENCY SITUATIONS WHILE THE SYSTEM IS IN OPERATION.
- 2. THE BYPASS PUMPING SYSTEM SHALL INCLUDE REDUNDANT BYPASS PUMP(S), INTAKE AND DISCHARGE PIPE(S), AND ANY OTHER EQUIPMENT REQUIRED TO PROVIDE CONTINUOUS WASTEWATER PUMPING AT ALL TIMES.
- 3. A BYPASS PUMPING PLAN SHALL BE SUBMITTED FOR REVIEW. THE BYPASS PUMPING PLAN SHALL BE SCHEMATIC IN NATURE AND THE CONTRACTOR SHALL SUBMIT THEIR PROPOSED PLAN TO THE CITY OF SPARKS FOR REVIEW AND APPROVAL PRIOR TO BEGINNING WORK.
- 4. ALL EXISTING IMPROVEMENTS REMOVED OR DAMAGED DURING THE BYPASS PUMPING OPERATION SHALL BE REPAIRED/REPLACED PER ORANGE BOOK REQUIREMENTS, THE CITY OF SPARKS REQUIREMENTS, AND PER THE PLANS AND SPECIFICATIONS.

#### **CONTACT PHONE NUMBERS**

CONTRACTOR - ( CONSTRUCTON)

ENGINEER - (J-U-B ENGINEERS, INC.)

LONNIE J. JOHNSON, P.E. J-U-B ENGINEERS, INC. - RENO, NV 5190 Neil Road, Suite 500 Reno, NV 89502 775-852-1440 office

PROJECT MANAGER - (CITY OF SPARKS)

BOB SCHRICKER, CCM 431 Prater Way Sparks, NV 89431

775-691-4573 office



CALL 2 BUSINESS DAYS IN ADVANCE BEFORE
YOU DIG, GRADE, OR EXCAVATE FOR THE
MARKING OF UNDERGROUND MEMBER
UTILITIES

#### **EXISTING UTILITIES**

I. APPROXIMATE LOCATIONS OF UTILITIES ARE SHOWN ON THE PLANS. THEY ARE TO BE USED FOR GENERAL INFORMATION ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE APPROPRIATE UTILITY COMPANIES WHEN CONSTRUCTION MIGHT INTERFERE WITH NORMAL OPERATION OF ANY UTILITIES. IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE THE APPROPRIATE UTILITY COMPANY FIELD-LOCATE ANY UTILITY INSTALLATIONS WHICH MIGHT BE AFFECTED BY CONSTRUCTION PRIOR TO BEGINNING WORK IN THAT AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SERVICE OF EXISTING UTILITIES AND FOR RESTORING ANY UTILITIES DAMAGED DUE TO CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER. DEPTHS AND ELEVATIONS OF UTILITIES ARE UNKNOWN UNLESS OTHERWISE SHOWN. CONTRACTOR SHALL FIELD VERIFY UTILITY DEPTHS AND ELEVATIONS; ANY DISCREPANCIES AND/OR CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

#### INSPECTION AND TESTING

- 1. THE CITY OF SPARKS SHALL BE RESPONSIBLE FOR MATERIALS TESTING INCLUDING BUT NOT LIMITED TO CONCRETE, COMPACTION AND ASPHALT & SUBGRADE. ALL TESTS SHALL MEET MINIMUM ENGINEER REQUIREMENTS. SEE THE CONTRACT DOCUMENTS AND DRAWINGS FOR FREQUENCY OF TESTING. RESULTS ARE TO BE DELIVERED TO SPECIAL INSPECTOR, OWNER AND ENGINEER.
- 2. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ENGINEER AND SPECIAL INSPECTOR FOR INSPECTIONS OF WORK AT APPROPRIATE INTERVALS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PAY FOR ADDITIONAL INSPECTIONS THAT ARE THE RESULT OF HIS WORKMANSHIP.

#### **DEMOLITION NOTES**

- THE REMOVAL OF EXISTING IMPROVEMENTS SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC, 2012), SECTION 301.00 WITHIN SPARKS ROW, AND THE SILVER BOOK WITHIN NDOT ROW.
- 2. EXISTING IMPROVEMENTS, ADJACENT PROPERTY, FENCING, WALLS, UTILITIES AND OTHER FACILITIES, TREES AND PLANTS THAT ARE NOT TO BE REMOVED SHALL BE PROTECTED FROM INJURY OR DAMAGE RESULTING FROM THE CONTRACTOR'S OPERATIONS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC, 2012), SECTIONS 301.04 AND 300.04 WITHIN SPARKS ROW, AND THE SILVER BOOK WITHIN NDOT ROW.
- 3. THE CONTRACTOR SHALL ADJUST ALL EXISTING MANHOLE RIMS, WATER & GAS VALVE COVERS, & UTILITY BOXES AND FRAME AND COVERS, BOTH HORIZONTALLY AND VERTICALLY, AS REQUIRED TO FIT THE NEW WORK. THE CONTRACTOR SHALL REPLACE ANY APPURTENANCE DAMAGED DURING RELOCATION AT THE COST OF THE CONTRACTOR.
- 4. ALL EXISTING FEATURES IN CONFLICT WITH PROPOSED SHALL BE REMOVED, RELOCATED AND/OR REPLACED. CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER AND THE GOVERNING AGENCIES PRIOR TO SUCH REMOVAL, RELOCATION AND/OR REPLACEMENT.
- 5. IF WORKING WITH TRANSITE (ACP) CONTRACTOR SHALL CONFORM TO THE TMWA GENERAL CONDITIONS 4.05.G. & 6.11.I.
  @TMWA.COM/ABOUT\_US/DOINGBUSINESSWITHTMWA/. THE CONTRACTOR SHALL HAVE POLLUTION LIABILITY INSURANCE COVERAGE FOR THIS WORK PER TMWA GENERAL CONDITION 5.02.G.4. LIABILITY INSURANCE SHALL SPECIFICALLY INCLUDE/ADDRESS EXPOSURE TO TRANSITE/ASBESTOS CEMENT PIPE.
- 5.1. CONTRACTOR MAY BE REQUIRED TO HANDLE, DISTURB OR REMOVE CERTAIN WATER PIPES CONSTRUCTED OF TRANSITE AND ASBESTOS CONTAINING MATERIALS REGULATED AS A POTENTIALLY HAZARDOUS MATERIAL AS PART OF THE WORK ASBESTOS OR TRANSITE PIPE WHICH HAS NOT BEEN CUT OR DAMAGED OR WHICH IS NOT TAPPED, CUT, DAMAGED OR REMOVED DURING PERFORMANCE OF THE WORK, SHALL NOT BE DEEMED "HAZARDOUS MATERIALS" FOR PURPOSES OF THESE GENERAL CONDITIONS. IF THE CONTRACTOR IS REQUIRED TO CUT, REMOVE OR TAP TRANSITE OR ASBESTOS PIPE AS PART OF THE WORK, DURING THE WORK CONTRACTOR MUST UTILIZE THE SERVICES OF PERSONNEL OR A SUBCONTRACTOR THAT HAS RECEIVED SPECIALIZED OSHA TRAINING IN THE HANDLING AND DISPOSAL OF ASBESTOS TO PERFORM ANY WORK ON SUCH PIPE, INCLUDING CUTTING, TAPPING. REPAIRING OR REMOVING. TMWA MUST BE PROVIDED WITH CHAIN OF CUSTODY FORMS FOR ALL TRANSITE OR ASBESTOS PIPE DISPOSED OF BY CONTRACTOR OR ITS SUBCONTRACTORS. ANY DISTURBANCE, REMOVAL, DISPOSAL HANDLING OR WORK ACTIVITY ON TRANSITE PIPE MUST BE DONE IN STRICT COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS GOVERNING THE SAFE HANDLING PRACTICES FOR DISTURBANCE, REMOVAL, HANDLING AND DISPOSAL OF ASBESTOS-CONTAINING MATERIAL, AND CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL COSTS AND ACTIONS NECESSARY TO COMPLY WITH SUCH LAWS AND REGULATIONS. CONTRACTOR SHALL PROVIDE THE DISPOSAL MANIFEST TO THE TMWA INSPECTOR SHOWING ALL TRANSITE PIPE MATERIAL HAS BEEN DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. CONTRACTOR SHALL INDEMNIFY AND HOLD TMWA HARMLESS FROM ANY CLAIMS, INJURIES, DEMANDS OR LIABILITIES ARISING FROM CONTRACTORS HANDLING, REMOVAL, DISPOSAL OR WORK ON OR ABOUT TRANSITE PIPE.

Z U

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S

ATER

PR

JUB PROJ. #: 49-23-033
DRAWN BY: CAS
DESIGN BY: CAS
CHECKED BY: LJJ

ONE INCH

AT FULL SIZE, IF NOT ONE
INCH, SCALE ACCORDINGI
LAST UPDATED: 2/18/2025

DRAWING: G-002

SHEET: 2 OF 10

#### LINE LEGEND

LINE DESCRIPTION	PROPOSED LINE	EXISTING LINE
POWER / COMMUNICAT		
OVERHEAD POWER	——————————————————————————————————————	——————————————————————————————————————
UNDERGROUND POWER	UP	— — — UP — — —
OVERHEAD TELEPHONE	—— ОНТ ——	— — — онт — — —
UNDERGROUND TELEPHONE	UT	ut
FIBER OPTIC	——— F/O ———	
CABLE TELEVISION	CTV	ctv
UNDERGROUND POWER, TEL, CABLE TV		— — — P,T,CTV — — —
STORM DRAIN		
STORM DRAIN (GENERAL)	SD	SD
STORM DRAIN	X"SD	X"SD
WATER	-	
WATER (GENERAL)		w
WATER (SPECIFIED SIZE)	X"W	x"w
WATER SERVICE		wsws
 IRRIGATION		L
IRRIGATION	——————————————————————————————————————	IRR
GRAVITY IRRIGATION	——— GIRR ———	_ — — — GIRR — — —
PRESSURE IRRIGATION	——— PIRR ———	— — — PIRR — — —
	PW	— — — PW — — — —
POTABLE WATER		
NON-POTABLE WATER	NPW	———— NPW ———
GAS		
NATURAL GAS	G	———— G ————
NATURAL GAS SERVICE	— G — G —	G G
HIGH PRESSURE GAS	——HPG——	
LIQUID GAS	LG	————LG————
SANITARY SEWER		
SANITARY SEWER (GENERAL)	ss	ss
SANITARY SEWER	———X"SS———	X"SS
SANITARY SEWER SERVICE	ssss	ss ss
SEWER FORCE MAIN	FM	— — — FM — — —
SITE		
FENCE	x	x
MAJOR CONTOUR	2521	
MINOR CONTOUR		
GRADE BREAK		———— GB ————
TOP OF BANK		ТОВ
TOE OF SLOPE		тое
CUT LIMITS		
FILL LIMITS		
DITCH		
STORM SWALE		
ROADWAY		
ROAD CENTERLINE		
ROAD ASPLIALT		
ROAD CRAVEL		— — — EP — — —
ROAD GRAVEL	———EG———	— — — EG — — —
TOP BACK OF CURB		
LIP OF GUTTER		

LINE DESCRIPTION	PROPOSED LINE	EXISTING LINE
BOUNDARY		
PROPERTY LINE	——————————————————————————————————————	——————————————————————————————————————
PROPERTY LINE		
RIGHT OF WAY		R/W
TEMPORARY EASEMENT	T/E	T/E
PERMANENT EASEMENT	———— P/E ————	——————————————————————————————————————
TOWNSHIP AND RANGE		
SECTION LINE		
QUARTER SECTION LINE		
1/16 SECTION LINE		
STATE LINE		
COUNTY LINE		
	1	1

### NDOT LEGEND

# IMPROVEMENTS TO BE INSTALLED

IMPROVEMENTS TO BE REMOVED

IMPROVEMENTS TO REMAIN

## SHEET NUMBERING

SAMPLE: C-101 DISCIPLINE DESIGNATOR - SHEET TYPE DESIGNATOR - SHEET SEQUENCE NUMBER

DI	SCIPLINE DES	IGNATORS	
DISCIPLINE	DESIGNATOR	DESCRIPTION	
	G	ALL GENERAL	
GENERAL	GI	GENERAL INFORMATION	
GENERAL	GC GENERAL CONTRACTUAL		
	GR	GENERAL RESOURCE	
SURVEY/MAPPING	V	ALL SURVEY	
GEOTECHNICAL	В	ALL GEOTECHNICAL	
CIVIL	С	ALL CIVIL	
LANDSCAPE	L	ALL LANDSCAPE	
STRUCTURAL	S	ALL STRUCTURAL	
ARCHITECTURAL	А	ALL ARCHITECTURE	
EQUIPMENT	Q	ALL EQUIPMENT	
MECHANICAL	M	ALL MECHANICAL	
ELECTRICAL	E	ALL ELECTRICAL	
PLUMBING	Р	ALL PLUMBING	
PROCESS	D	ALL PROCESS	
RESOURCE	R	ALL RESOURCE	

SHEET TYPE DESIGNATORS				
SHEET TYPE				
GENERAL (SYMBOLS, LEGENDS, NOTES, ETC.)				
PLANS (HORIZONTAL VIEWS)				
ELEVATIONS, PROFILES, COMBINED PLAN & PROFILES				
SECTIONS (SECTIONAL VIEWS)				
LARGE-SCALE VIEWS (PLANS, ELEVATIONS, ECT.)				
DETAILS OR COMBINED DETAILS AND SECTIONS				
SCHEDULES AND DIAGRAMS				
USER DEFINED				
USER DEFINED				
3D REPRESENTATIONS (ISOMETRICS, PERSPECTIVES, PHOTOS)				

# SYMBOL LEGEND

SITE	EXISTING	PROPOSED
BOLLARD		
BOULDER		
DRINKING FOUNTAIN		
FLAGPOLE	(F)	(Ē)
GATE		
MAIL BOX	M	M
PARKING METER	<u>PM</u>	<u>PM</u>
POST	0	•
SIGN	<del>-</del> o-	-
SPOT ELEVATION		×
TREE (SHRUB)		
TREE (STUMP)	R	
TREE (CONIFEROUS)		
TREE (DECIDUOUS)		
TEST HOLE	(TH)	
WELL	(W)	(w)
WELL (MONITORING)	M	M
SANITARY SEWER		
CLEANOUT		•
SEWER STUB		<b>S</b>
SS MANHOLE	S	
IRRIGATION		
IRRIGATION VALVE	IRR 	IRR
IRRIGATION VALVE BOX		Φ
SPRINKLER		
UTILITIES		
MANHOLE (GENERIC)		•
PRESSURE CLEAN OUT AT GRADE		
THRUST BLOCK		
VAULT	V	V

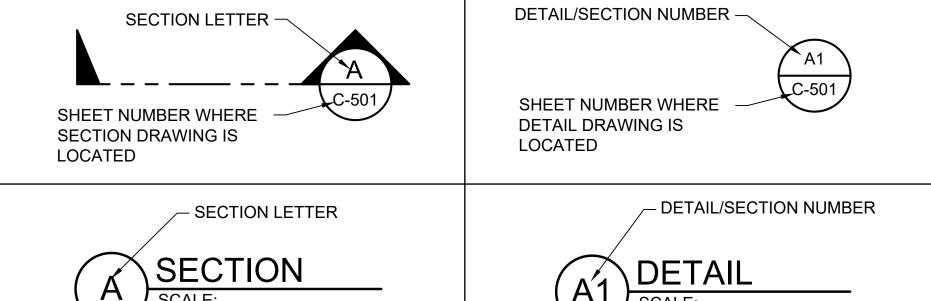
COMMUNICATION	EXISTING	PROPOSED
TELE. MANHOLE	T	•
TELE. PEDESTAL		₲
TELE. POLE	<del></del>	•
TV PEDESTAL		
GUY WIRE		Ψ
DOMESTIC WATER		
FIRE HYDRANT	8	₩
SPIGOT	$\triangleright$	•
YARD HYDRANT	9	•
WATER MANHOLE	w	
WATER METER	⊞	
WATER VALVE	₩ W	<b>~</b>
ELECTRIC		
ELEC. MANHOLE	Ē	
ELEC. METER	E H	E E
ELEC. TRANS.	E	E
JUNCTION BOX	J	J
POWER POLE	-	-
POWER STUB	Œ	©
STREET LIGHT	*	*
TRAFFIC SIGNAL POLE		
STORM DRAIN	_	
CATCH BASIN		
DRY WELL	DW	<b>™</b>
FLARE END	abla	
GREASE TRAP		
SD MANHOLE	<u> </u>	
NATURAL GAS		
GAS METER	G H	G H
GAS VALVE	G ⊠	G ₩

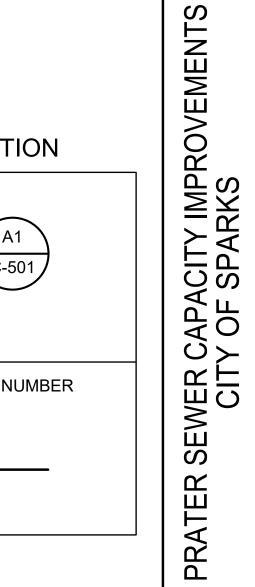
## SECTION AND DETAIL IDENTIFIERS

NOTE:
A DASH MAY BE PLACED IN THE LOWER PORTION
OF THE IDENTIFIER IF THE DETAIL DRAWING OR SECTION VIEW IS LOCATED ON THE SAME SHEET.

#### SECTION IDENTIFICATION

#### DETAIL IDENTIFICATION





FILE: 49-23-033\_G-003\_LEGEND JUB PROJ. #:49-23-033 DRAWN BY: CAS DESIGN BY: CAS CHECKED BY: LJJ

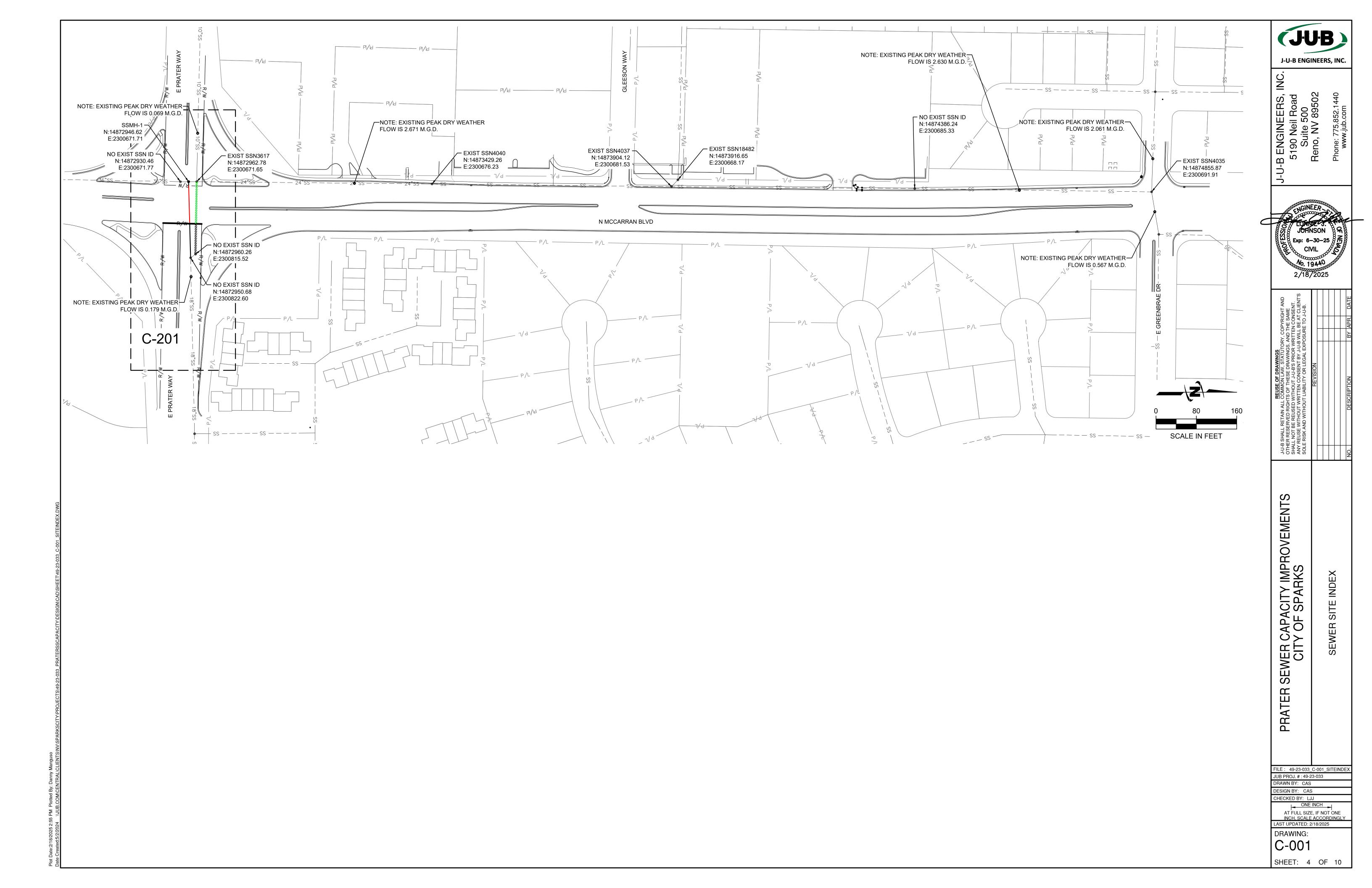
J-U-B ENGINEERS, INC.

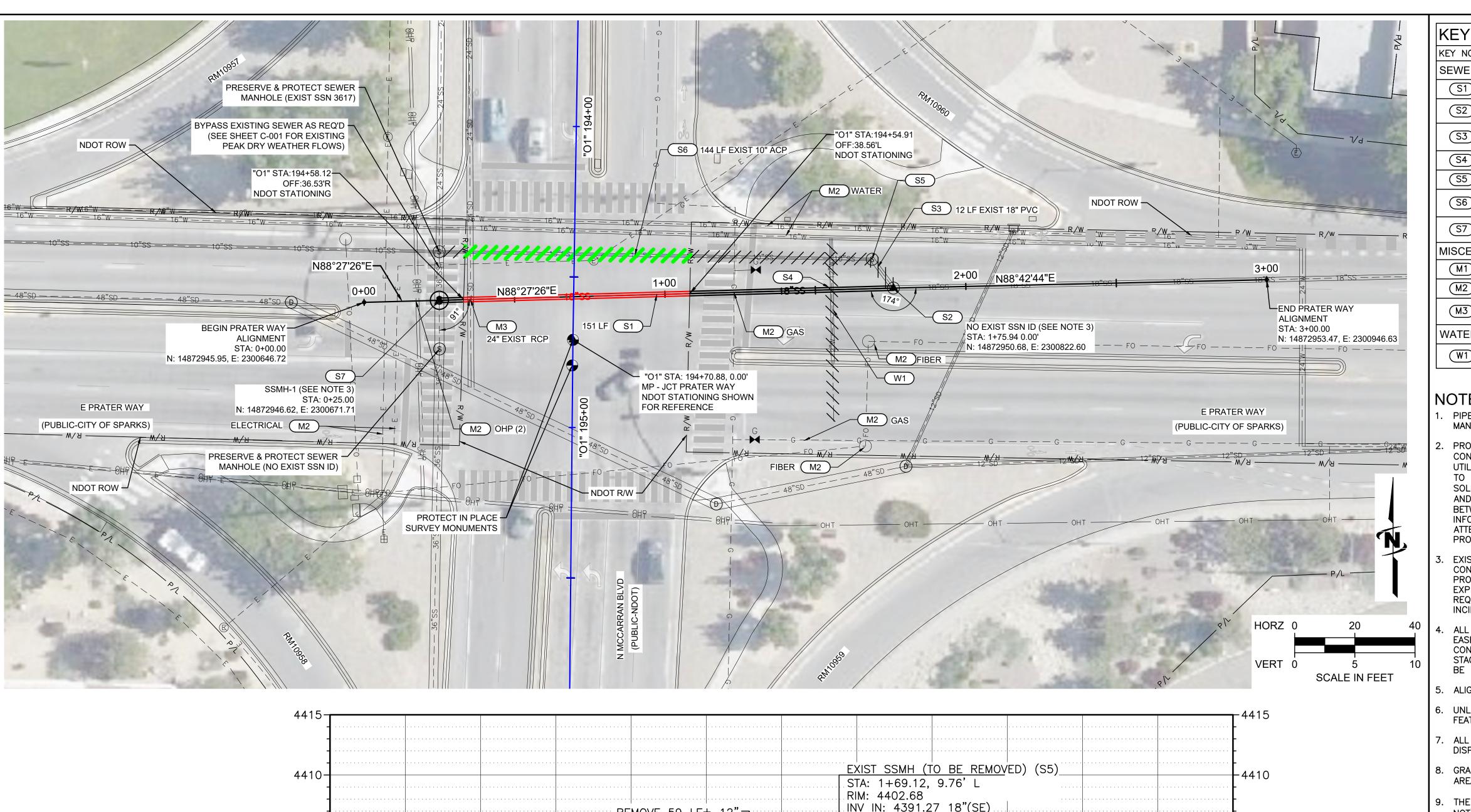
ONE INCH

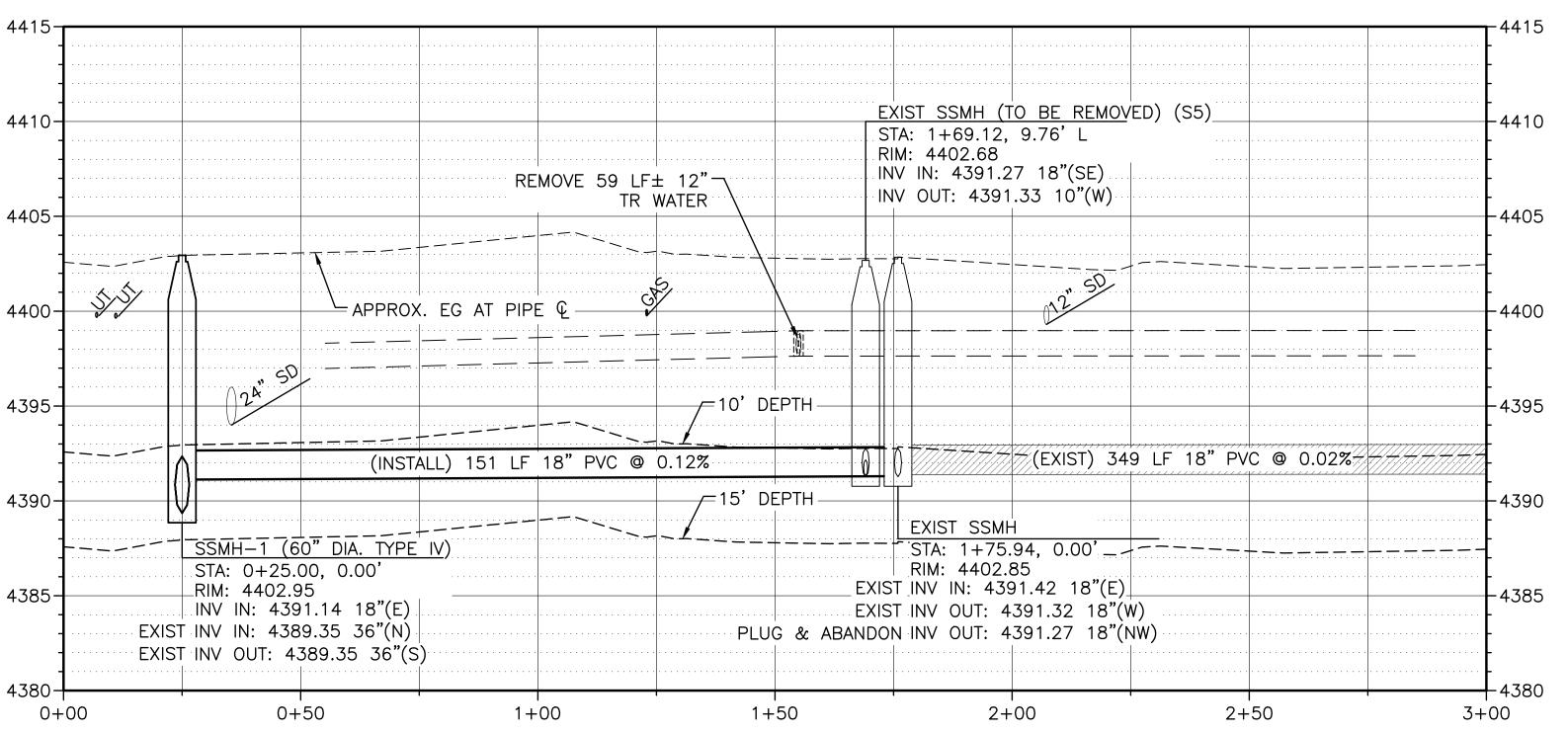
AT FULL SIZE, IF NOT ONE
INCH, SCALE ACCORDINGLY

LAST UPDATED: 2/18/2025 DRAWING: G-003

SHEET: 3 OF 10







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

**CALL 2 BUSINESS DAYS IN ADVANCE BEFORE** YOU DIG, GRADE, OR EXCAVATE FOR THE **MARKING OF UNDERGROUND MEMBER UTILITIES** 

#### KEY NOTES

KEY NOTE DESCRIPTION

SEWER/UTILITY KEY NOTES

18" PVC ASTM F679, PS 46 GRAVITY SEWER PIPE

CONNECT NEW 18" PVC TO EXISTING 18" PVC STUB TO WEST. GROUT FILL AND PLUG NW MH CHANNEL

REMOVE EXISTING 18" PVC

|POTABLE/NON-POTABLE CROSSING

REMOVE EXIST SEWER MANHOLE

EXIST SEWER PIPE TO BE LEFT AS DORMANT FACILITY IN PLACE, BACKFILL w/ CELLULAR CONCRETE PER SPECS

TYPE IV SEWER MANHOLE (SIZE AS INDICATED IN PROFILE), SEE DETAIL D1, SHEET C-501

MISCELLANEOUS KEY NOTES

RESERVED

RETAIN AND PROTECT MISCELLANEOUS ITEM

TEMPORARILY REMOVE AND RE-INSTALL MISCELLANEOUS ITEM (INCIDENTAL TO 18" SEWER PIPE)

WATER KEY NOTES

REMOVE 59 LF ABANDONED TRANSITE EX. 12" (ASBESTOS) WATER LINE

PIPE LENGTHS AND SLOPES ARE MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE.

PROTECTION OF ALL UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE EXACT LOCATION AND/OR ELEVATION OF EXISTING UTILITIES SHOWN ON THESE DRAWINGS IS APPROXIMATE AND ARE NOT TO BE RELIED ON AS EXACT OR COMPLETE. IT IS THE CONTRACTOR' SOLE RESPONSIBILITY TO POTHOLE AND VERIFY THE LOCATIONS AND/OR ELEVATIONS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS IN THE FIELD AND THE INFORMATION SHOWN ON THESE DRAWINGS SHALL BE BROUGHT TO TH ATTENTION OF THE PROJECT ENGINEER AND CITY OF SPARKS PRIOR T PROCEEDING WITH CONSTRUCTION.

EXISTING SEWER INVERTS ARE APPROXIMATE BASED ON FIELD DATA. CONTRACTOR TO FIELD VERIFY PRIOR TO CONSTRUCTION AND NOTIFY PROJECT ENGINEER OF ANY DISCREPANCIES IMMEDIATELY. ALL EXPLORATORY EXCAVATION AND TEMPORARY SURFACE RESTORATION REQUIRED TO FIELD VERIFY SEWER INVERTS TO BE CONSIDERED INCIDENTAL TO THE PROJECT.

ALL WORK SHALL BE CONFINED TO THE RIGHTS-OF-WAYS, PERMANENT EASEMENTS, AND TEMPORARY EASEMENTS SHOWN ON THE PLANS. CONTRACTOR IS RESPONSIBLE FOR SECURING ANY CONSTRUCTION STAGING AREAS AND TEMPORARY CONSTRUCTION EASEMENTS THAT MAY BE REQUIRED TO CONSTRUCT THE PROJECT.

5. ALIGNMENT STATIONING BASED ON CENTERLINE OF GRAVITY SEWER.

6. UNLESS OTHERWISE NOTED, RETAIN AND PROTECT ALL EXISTING FEATURES. REFER TO GENERAL NOTES.

ALL EXCESS MATERIAL EXCAVATED AND NOT REUSED MUST BE DISPOSED OF OFFSITE.

8. GRADE ALL STAGING AREAS AND NATURAL GROUND SURFACE REPAIR

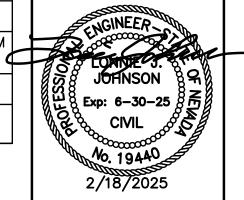
AREAS TO PREEXISTING GRADES/SLOPES. 9. THE LOCATIONS OF THE SANITARY SEWER SERVICES AS SHOWN (OR

NOT) ON THE PLANS WERE TAKEN FROM PIPE GRAPHIC REPORTS AND VIDEO OBTAINED FROM THE CITY OF SPARKS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL CLEANOUTS/LATERALS TO VERIFY THE SIZE WHICH TO CONNECT TO TH MAIN LINE IF ANY ARE LOCATED.

10. THE CONTRACTOR SHALL VERIFY THAT ALL SANITARY SEWER LATERALS ARE ACTIVE OR INACTIVE PRIOR TO THE INSTALLATION OF THE MAIN LINE. ALL ACTIVE LATERALS WHERE FLOW IS EVIDENT BY SIMPLE VISUAL INSPECTION SHALL BE DYE TESTED TO IDENTIFY SERVICE

11. IF NO INDICATIONS OF FLOW ARE PRESENT. A PUSH TYPE CAMERA WITH VIDEO TAPE INSPECTION CAPABILITY SHALL BE USED IN CONJUNCTION WITH CCTV AND DYE/SMOKE TESTING TO CONFIRM IF LATERAL IS ACTIVE OR INACTIVE. THE CONTRACTOR SHALL MAINTAIN A LOG OF ALL ACTIVE OR INACTIVE LATERALS PRIOR TO RECONNECTION OR ABANDONMENT PER THE SPECIFICATIONS AND AN INSPECTOR SHAL BE PRESENT DURING ALL LATERAL VERIFICATIONS AND CONNECTIONS T PROVIDE LOCATION MARK UP FOR GPS.

J-U-B ENGINEERS, INC



# APACITY IMPROVEMENT OF SPARKS O> WER CIT ĺШ S

**PRATER** 

FILE: 49-23-033\_C-201\_PLAN&PROI JUB PROJ. #: 49-23-033 DRAWN BY: CAS

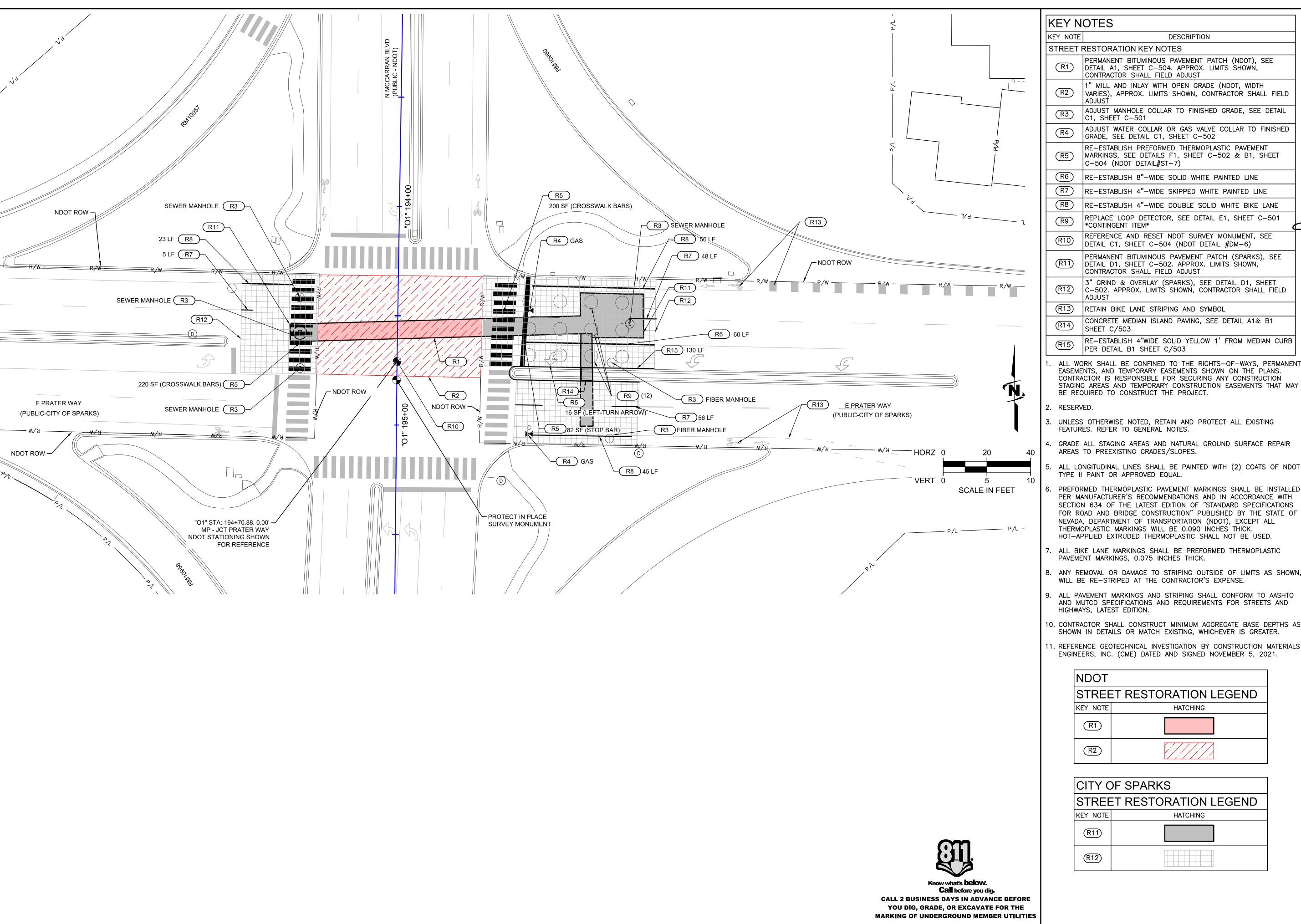
CHECKED BY: LJJ ONE INCH AT FULL SIZE, IF NOT ONE

LAST UPDATED: 2/18/2025

DRAWING: C-201

DESIGN BY: CAS

SHEET: 5 OF 10



DESCRIPTION

J-U-B ENGINEERS, INC

B ENGINEER 5190 Neil Ros Suite 500 Reno, NV 895

ENGINEER LOWNED. Exp: 6-30-25 CIVIL No. 1944

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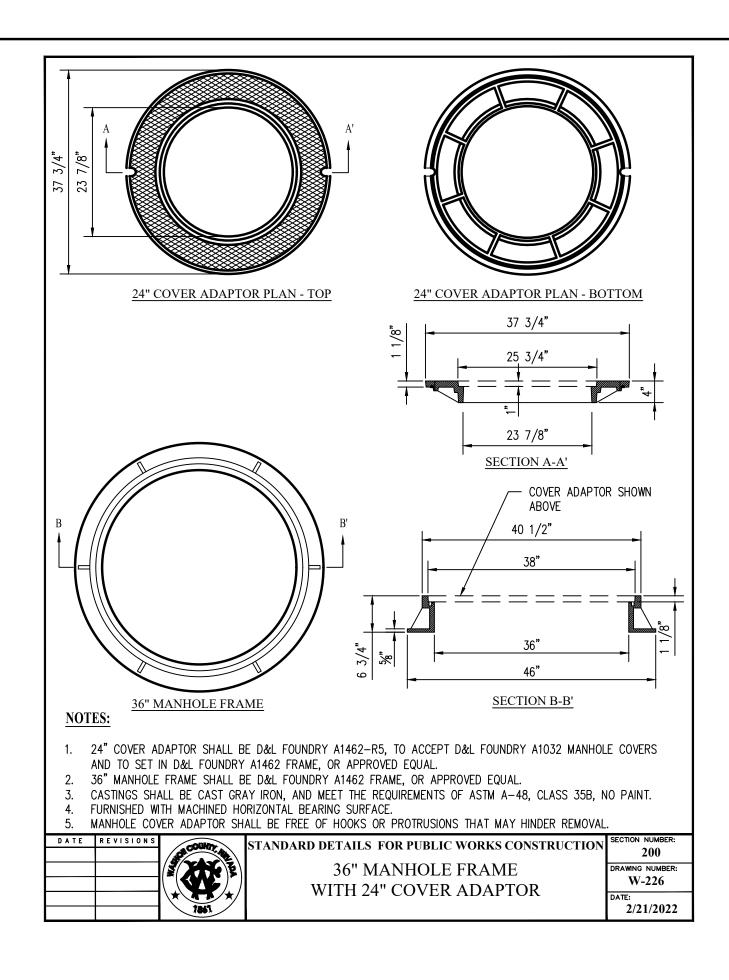
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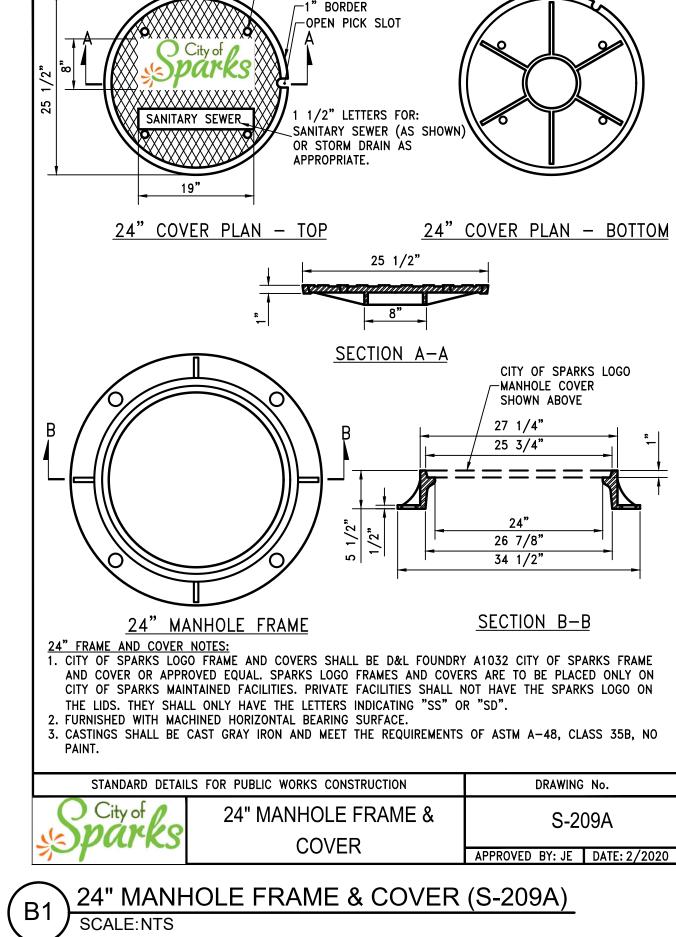
FILE: 49-23-033\_C-401\_STREET\_REST\_PLAN JUB PROJ. # : 49-23-033 DRAWN BY: CAS DESIGN BY: CAS CHECKED BY: LJJ

ONE INCH AT FULL SIZE, IF NOT ONE LAST UPDATED: 2/18/2025

DRAWING: C-401

SHEET: 6 OF 10





-FOUR 1" VENTS

ALL PRECAST MANHOLE COMPONENTS SHALL CONFORM TO ASTM C-478.

WATERTIGHT PER STANDARD DETAILS S-211A, S-211B AND S-211C.

CONCRETE BASE MAY BE USED IN LIEU OF CAST-IN-PLACE BASE.

"MANHOLES AND CATCH BASINS" OF THE STANDARD SPECIFICATIONS.

305 OF THE STANDARD SPECIFICATIONS.

1½" CLEAR, UNLESS OTHERWISE NOTED.

ADJACENT STRUCTURES.

SUCH AS "RAM-NEK" OR EQUAL AS PER MANUFACTURER'S RECOMMENDATIONS.

<del>. Precast concrete base may be used in lieu of cast—in—place base.</del>

THE MANHOLE. THE USE OF "OUTSIDE DROP" MANHOLES IS NOT PERMITTED.

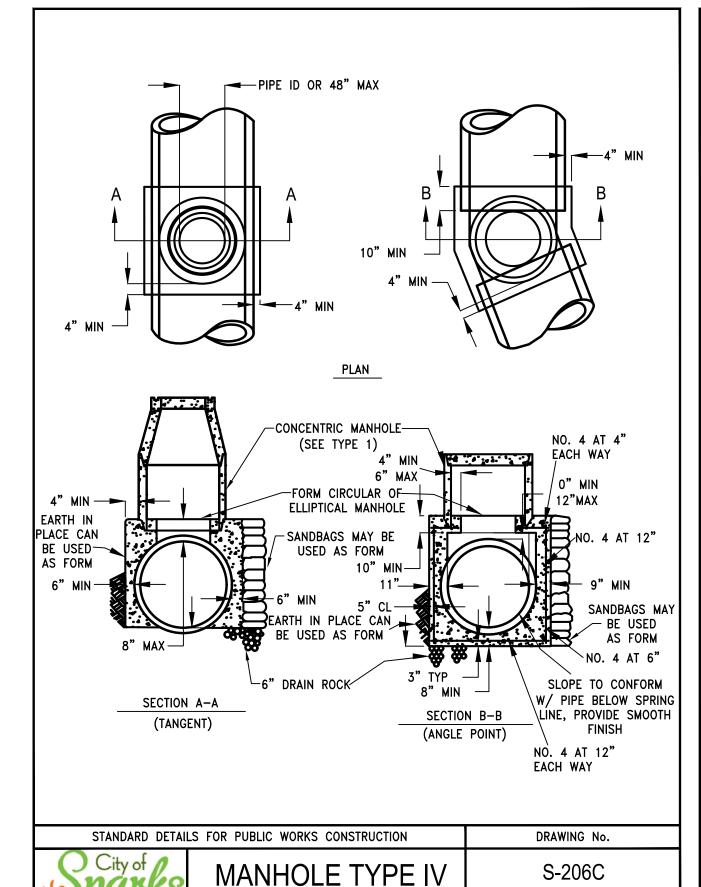
TYPE IV MANHOLES SHOULD ONLY BE USED AS APPROVED BY CITY ENGINEER.

NOTES - MANHOLE

TYPE I, TYPE V & TYPE IV

7. PRIOR TO BACKFILLING, ALL MANHOLES SHALL BE VACUUM TESTED PER ASTM C-1244.

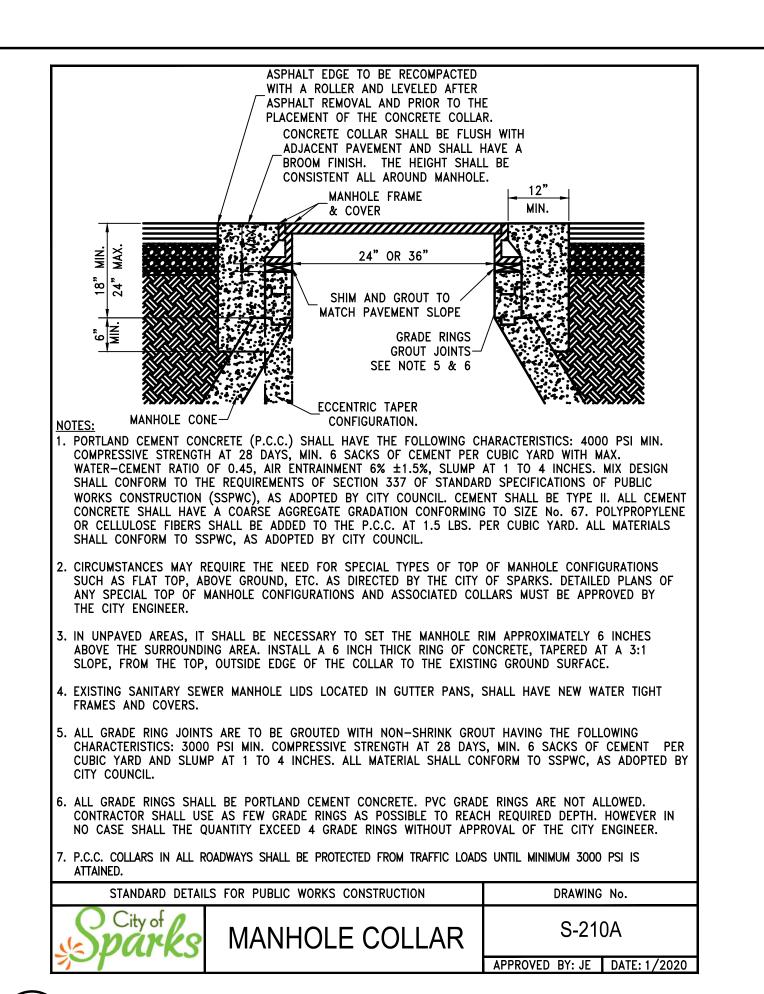
MATCH PIPE INVERTS TO MANHOLE INVERTS WHERE PIPES CONNECT TO MANHOLE BASE.



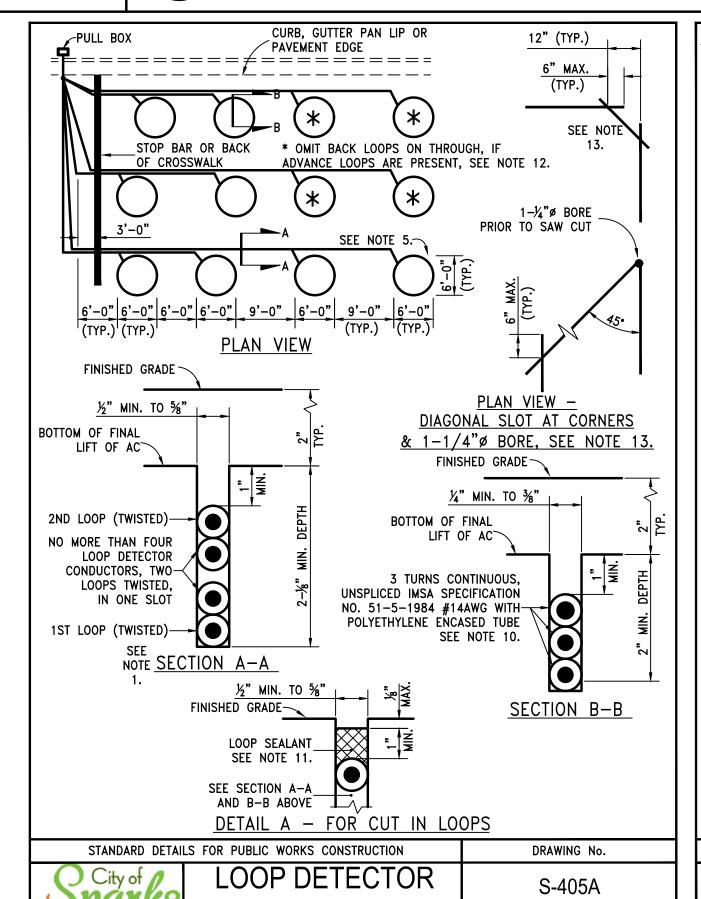
36" MANHOLE FRAME WITH 24" COVER ADAPTOR (W-226)

SCALE:NTS

PIPES SHALL NOT PROTRUDE MORE THAN 3" INSIDE MANHOLE SECTION AS MEASURED AT THE OUTSIDE EDGES OF THE PIPE, VERTICALLY ALIGNED WITH THE SPRINGLINE. PIPE CONNECTION TO MANHOLE SHALL BE MANHOLE BASE SHALL BE PORTLAND CEMENT CONCRETE (P.C.C.) AND SHALL HAVE THE FOLLOWING CHARACTERISTICS: 3000 PSI MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS, MINIMUM 6 SACKS OF CEMENT PER CUBIC YARD WITH SLUMP AT 1 TO 4 INCHES. ALL MATERIAL SHALL CONFORM TO STANDARD SPECIFICATIONS OF PUBLIC WORKS CONSTRUCTION (SSPWC), AS ADOPTED BY CITY COUNCIL. PRECAST TYPE I MANHOLE TO BE UTILIZED FOR PIPE DIAMETERS 12" OR SMALLER & DEPTHS NOT EXCEEDING 18 FT. TYPE V MANHOLE TO BE UTILIZED FOR PIPE DIAMETERS 15" THROUGH 27" OR DEPTHS EXCEEDING 18 FT. MANHOLE MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF SECTION 204 PRECAST MANHOLE SECTIONS, OTHER THAN GRADE RINGS, SHALL BE JOINED WITH FLEXIBLE GASKET MATERIAL EXCAVATION AND BACKFILL SHALL BE AS SPECIFIED FOR "TRENCH EXCAVATION AND BACKFILL" IN SECTION EXCAVATION SHALL BE AS NEARLY VERTICAL AS POSSIBLE (SHEET AND SHORE IF SOIL CONDITIONS REQUIRE) IN EXISTING STREET SECTIONS, ALLEY SECTIONS, AND CONFINED AREAS, SUCH AS LIMITED EASEMENTS OR O. MANHOLE PRECAST SECTION LENGTH SHALL BE ARRANGED TO FIT THE REQUIRED DEPTH. NO LATERALS OR PIPES LESS THAN 8" IN DIAMETER SHALL BE CONNECTED TO THE MANHOLE. SEE DETAIL FOR INSIDE DROP MANHOLE FOR SANITARY SEWERS WITH MORE THAN 2 FEET VERTICAL DROP AT FLAT TOP MANHOLE CONES REQUIRES PRIOR APPROVAL FROM THE CITY ENGINEER. . NO STEPS, LADDERS, OR OTHER CLIMBING DEVICES SHALL BE INSTALLED IN THE MANHOLE. WHEN PIPE CONNECTIONS TO EXISTING MANHOLES ARE ALLOWED, THEY SHALL BE MADE BY CORE DRILLING THE MANHOLE AND CONNECTING THE PIPE PENETRATION PER DETAIL S-211A & S-211B. DRAWING No. S-206D\* APPROVED BY: JE DATE: 1/2020



MANHOLE COLLAR (S-210A) SCALE: NTS



13.  9. ALL INDUCTIVE LOOPS ON A GIVEN CHANNEL SHALL BE CONNECTED IN SERIES. NO MORE THAN ONE LEAD IN CABLE SHALL BE CONNECTED TO A CABINET CHANNEL TERMINATION. NO MORE THAN SIX INDIVIDUAL LOOPS ARE TO BE CONNECTED TO ONE CHANNEL.  10. FOR LOOP LEAD IN CABLES GREATER THAN 500 FEET, LOOP IN LENGTH SHALL BE INSTALLED WITH FOUR (4) TURNS INSTEAD OF THREE (3).  11. LOOPS CUT INTO THE STREET SURFACE SHALL BE SEALED IN COMPLIANCE WITH THE CITY OF SPARKS SIGNAL SPECIFICATIONS LOCATED ON THE CITY OF SPARKS TRAFFIC ENGINEERING PAGE  12. LISTED BELOW ARE THE MIN. DISTANCES FOR ADVANCE LOOP DETECTOR PLACEMENT AS A FUNCTION OF POSTED SPEED LIMITS, MEASURED FROM THE STOP BAR TO THE REAR OF THE LOOP. SEE TABLE BELOW.  13. 6 FOOT SQUARE LOOPS MAY BE SUBSTITUTED UPON APPROVAL BY CITY ENGINEER FOR ROUND LOOPS.  SEE NOTE 12.  SPEED LIMIT DISTANCE (MPH) (FEET)  25 150  30 200  35 255  40 285  45 330  50 355  55 390   STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION DRAWING No.  NOTES - LOOP  S-405B									
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LOOP DETECTOR LAYOUT & NOTES - LOOP DETECTOR LAYOUT (S-405A & S-405B)

APPROVED BY: JE DATE: 1

Z W CITY IMPROVEMI SPARKS WER CIT Ш S **PRATEI** FILE: 49-23-033 C-501 DETAILS JUB PROJ. # : 49-23-033 DRAWN BY: CAS ESIGN BY: CAS CHECKED BY: LJJ AT FULL SIZE, IF NOT ONE

J-U-B ENGINEERS, INC

SCALE:NTS

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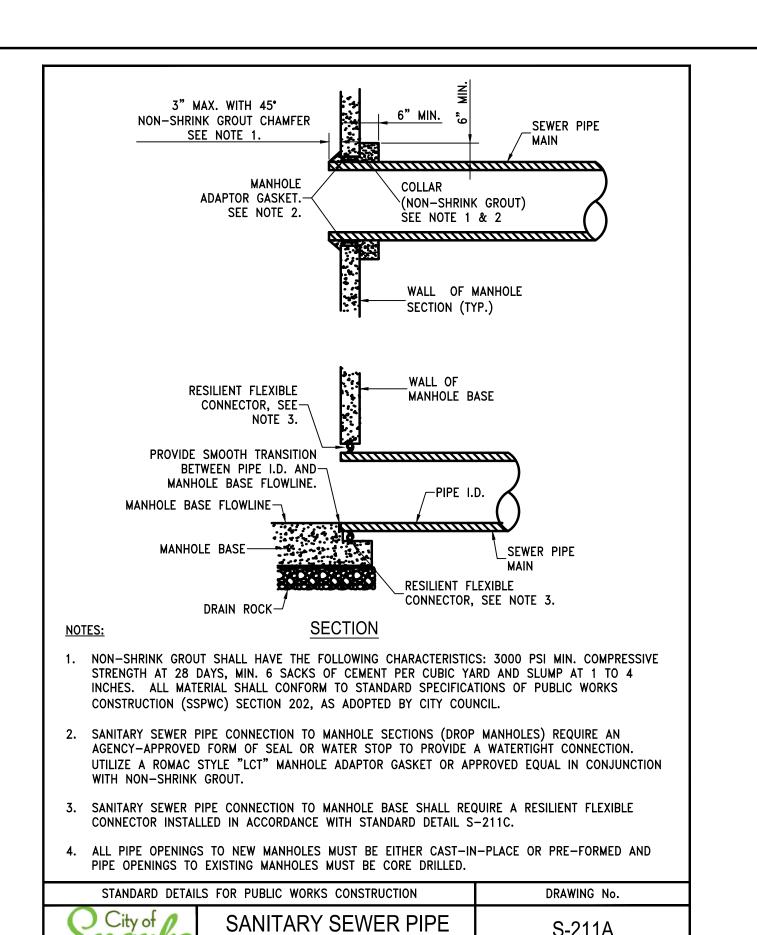
C-501

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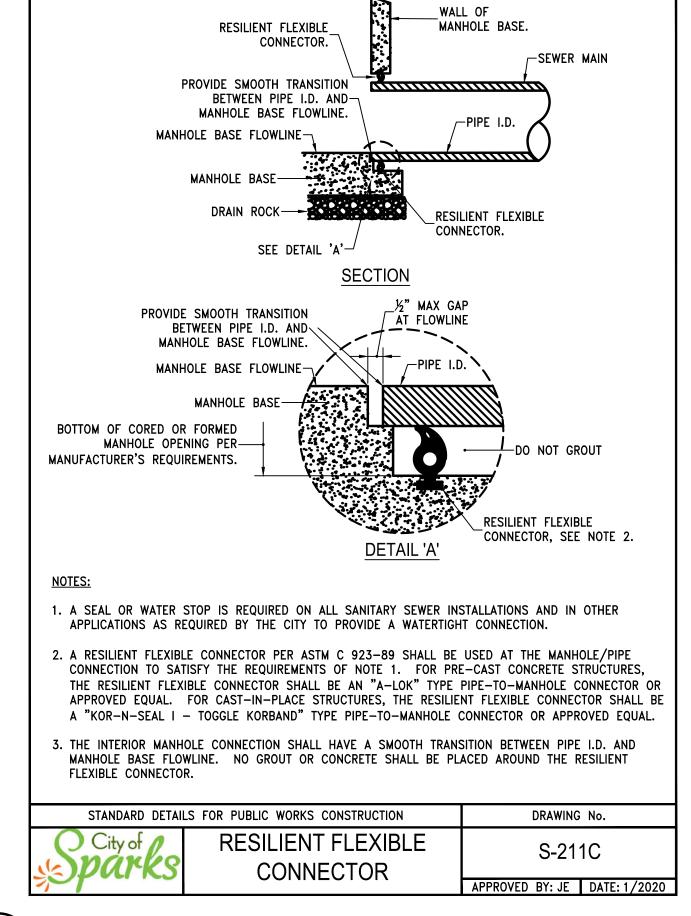
SHEET: 7 OF 10

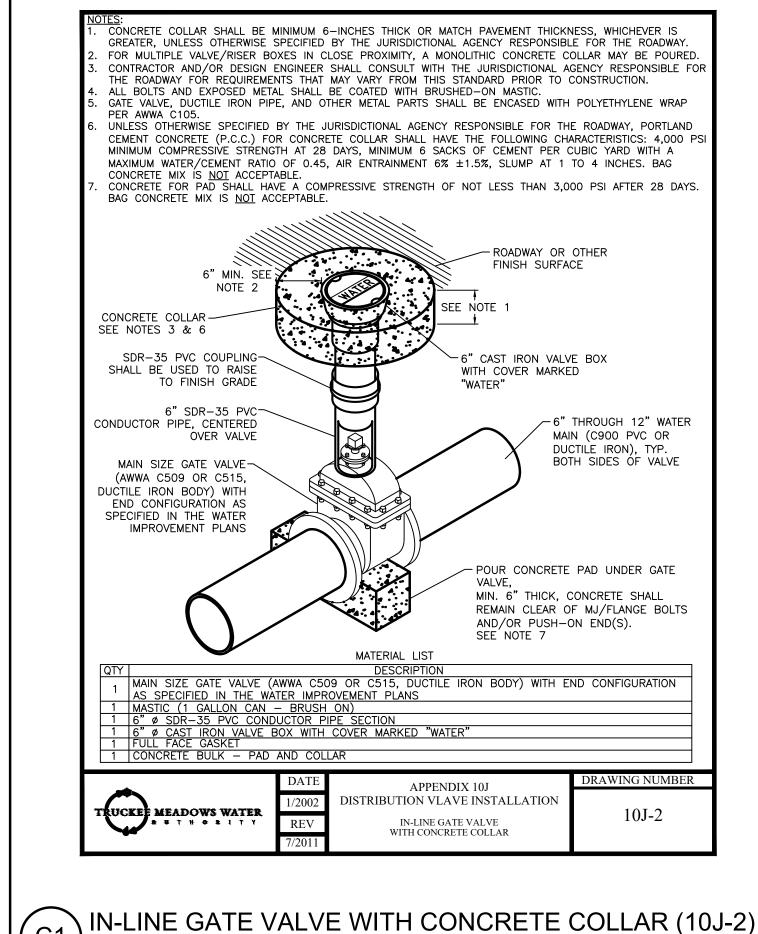
ALL SANITARY SEWER MANHOLE BARREL JOINTS TO BE WRAPPED WITH EXTERNAL JOINT WRAP M-860 OR APPROVED EQUAL. STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION MANHOLE TYPE IV APPROVED BY: JE DATE: 1/202

MANHOLE TYPE IV (S-206C & S-206D MODIFIED)

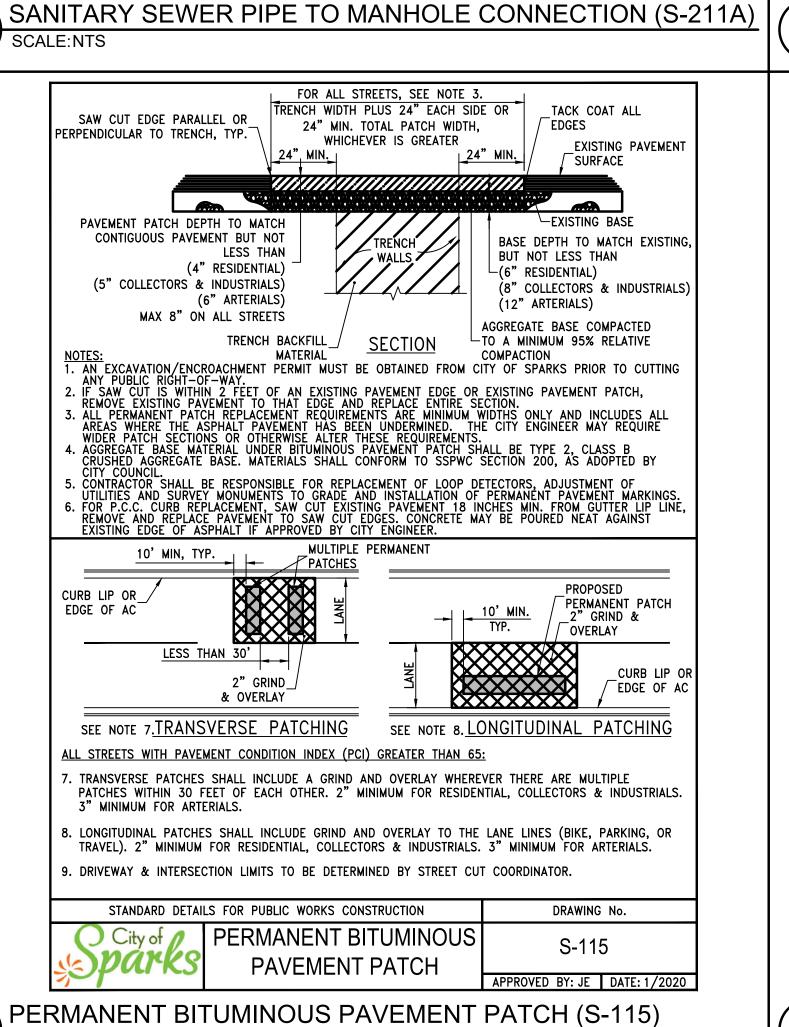


TO MANHOLE CONNECTION

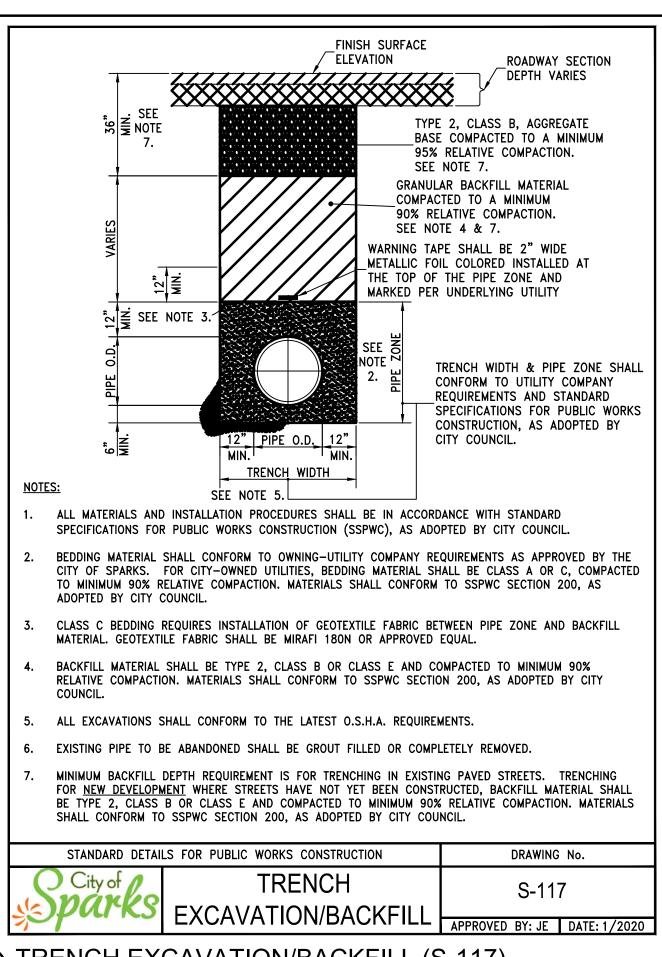


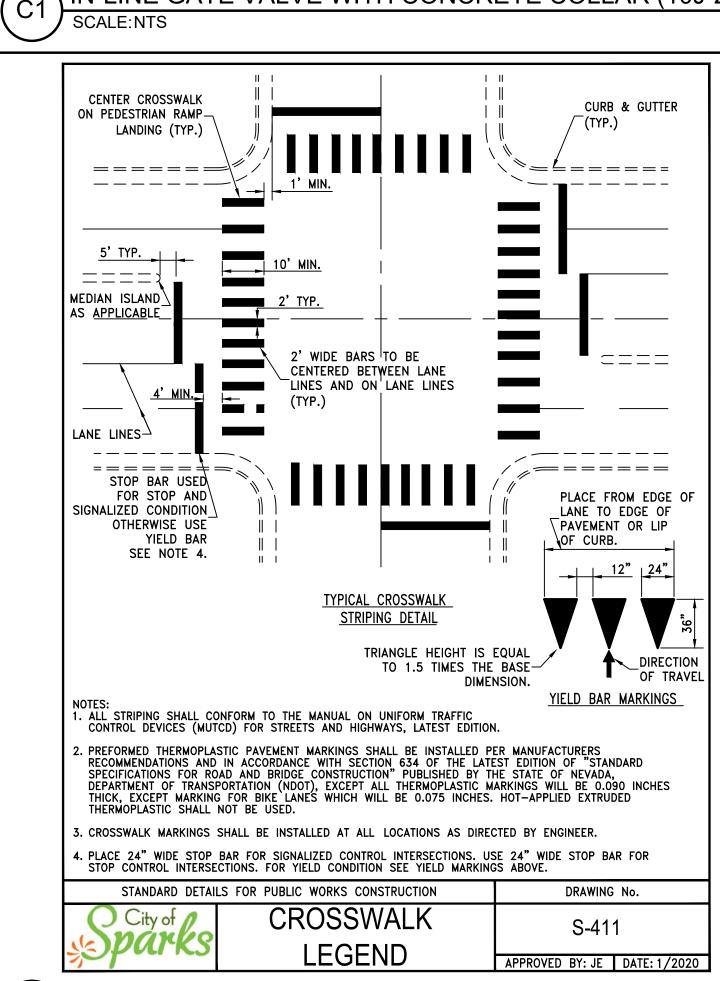


RESILIENT FLEXIBLE CONNECTOR (S-211C) SCALE:NTS



SCALE: NTS





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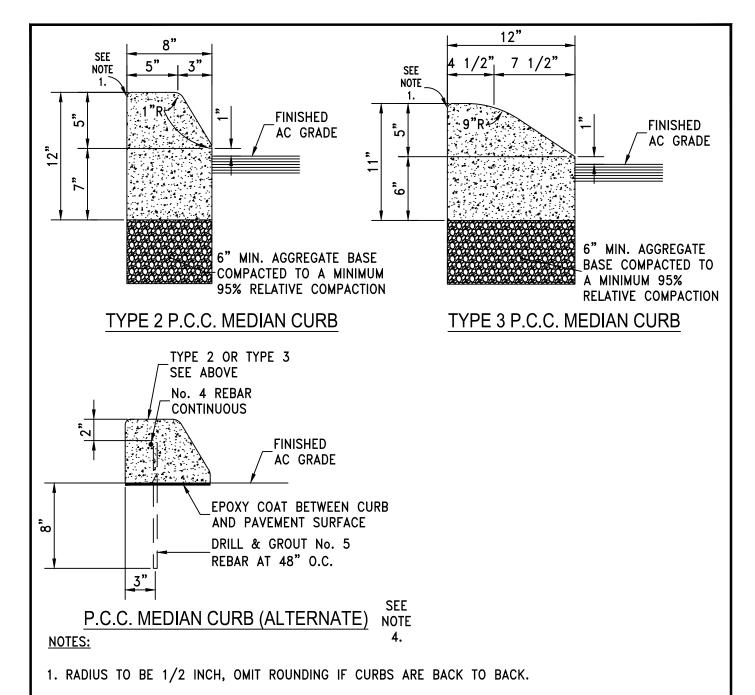
J-U-B ENGINEERS, INC

TRENCH EXCAVATION/BACKFILL (S-117)

SCALE: NTS

CROSSWALK LEGEND (S-411)

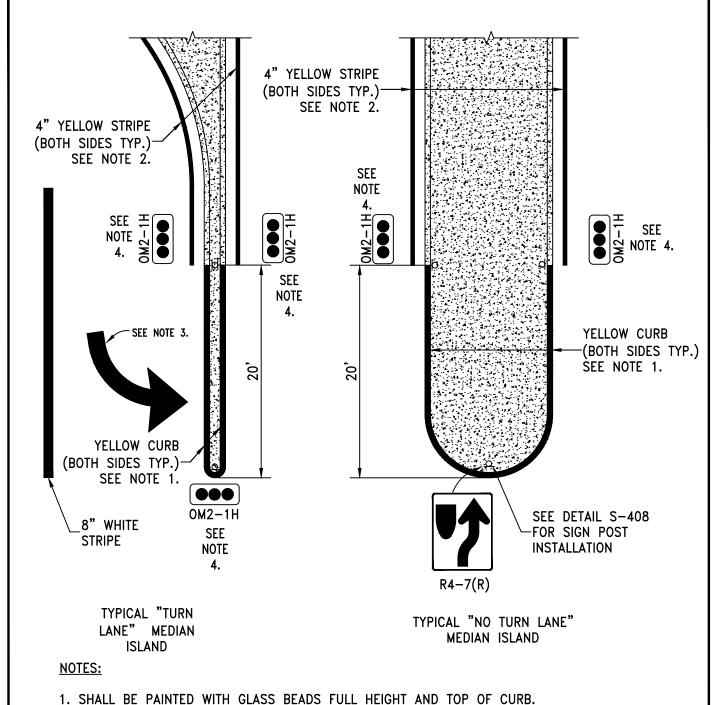
SCALE:NTS



- 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 MEDIAN CURBS SHALL BE TYPE 2, CLASS B CRUSHED AGGREGATE BASE. MATERIALS SHALL CONFORM TO SSPWC SECTION 200, AS ADOPTED BY CITY COUNCIL.
- A CLUE DOWN MAY BE ALLOWED WITH APPROVAL OF THE CITY ENGINEER

4. GLUE DOWN MAY BE ALLOWED WITH APPROVAL OF THE CITY ENGINE	-K.
STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	DRAWING No.
Sparks P.C.C. MEDIAN CURBS	S-110
	APPROVED BY: JE DATE: 1/2020

P.C.C. MEDIAN CURBS
SCALE:NTS

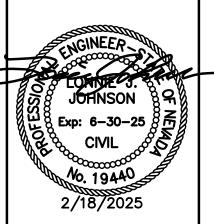


- 1. SHALL BE PAINTED WITH GLASS BEADS FULL HEIGHT AND TOP OF CURB.
- 2. 4" YELLOW STRIPE SHALL BE 1' FROM FACE OF CURB.
- 3. PAVEMENT MARKING ARROW(S) AND "ONLY" AS REQUIRED.
- 4. GUIDEPOST IN MEDIAN AREAS SHALL BE "SAFE HIT" OR APPROVED EQUAL, 8" CONCRETE ANCHOR WITH FLEXIBLE TYPE 2 GUIDEPOST.
- 5. ALL WORK SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.), AND A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS (GREEN BOOK).

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STANDARD DETAI	LS FOR PUBLIC WORKS CONSTRUCTION	DRAWING	No.
City of	MEDIAN ISLAND	S-41	0
SE DUITES	TDAEEIC CONTDOL		
	TRAFFIC CONTROL	APPROVED BY: JE	DATE: 1/2020



J-U-B ENGINEERS, INC.



, COPYRIGHT AND ND THE SAME TTEN CONSENT. WILL BE AT CLIENT'S SURE TO J-U-B.				BY APR. DATE	
REUSE OF DRAWINGS J-U-B SHALL RETAIN ALL COMMON LAW, STATUTORY, COPYRIGHT AND OTHER RESERVED RIGHTS OF THESE DRAWINGS, AND THE SAME SHALL NOT BE REUSED WITHOUT J-U-B'S PRIOR WRITTEN CONSENT. ANY REUSE WITHOUT WRITTEN CONSENT BY J-U-B WILL BE AT CLIENT'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO J-U-B.	REVISION			NOILL	

CAPACITY IMPROVEMEN' Y OF SPARKS SEWER (CIT)

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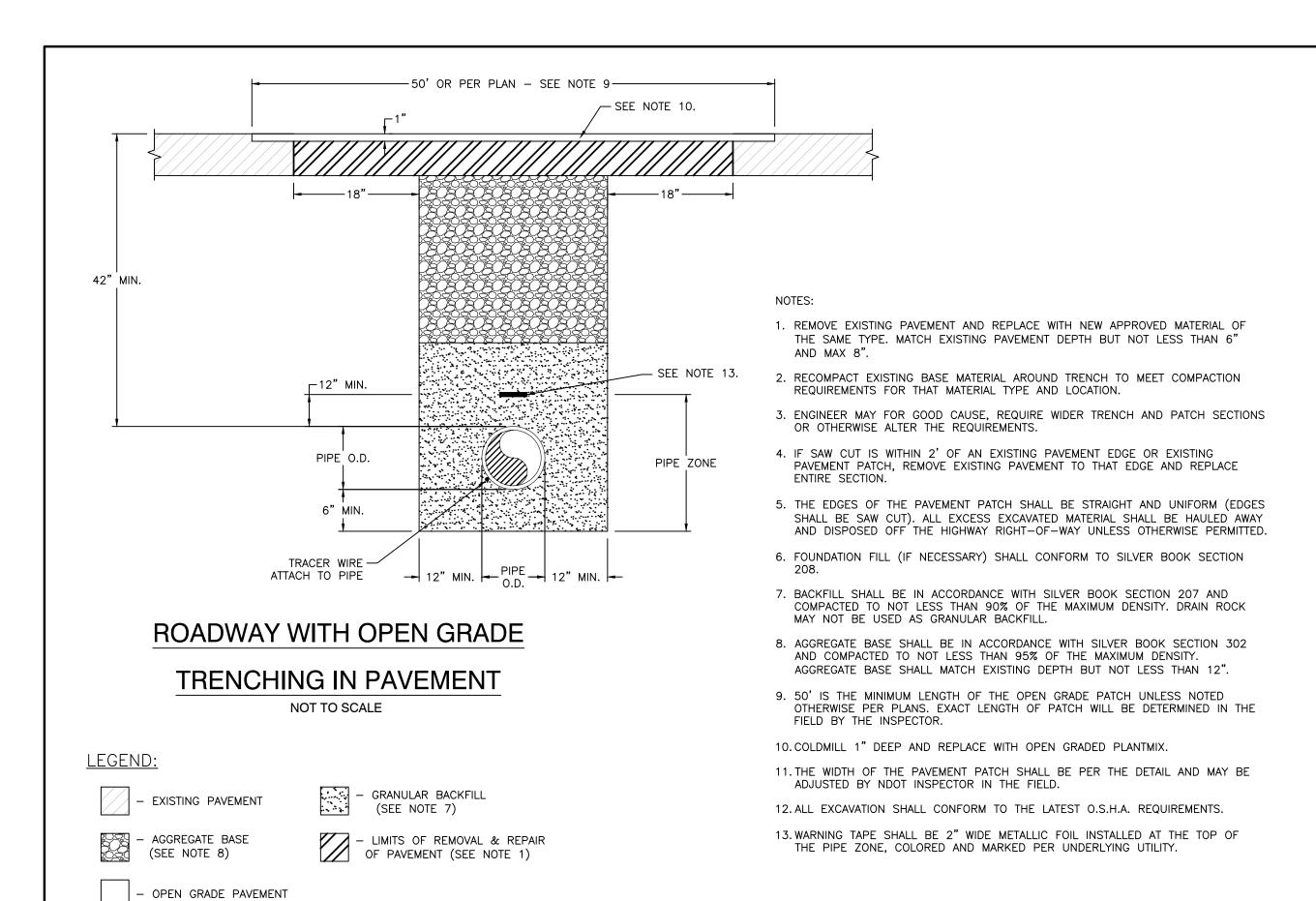
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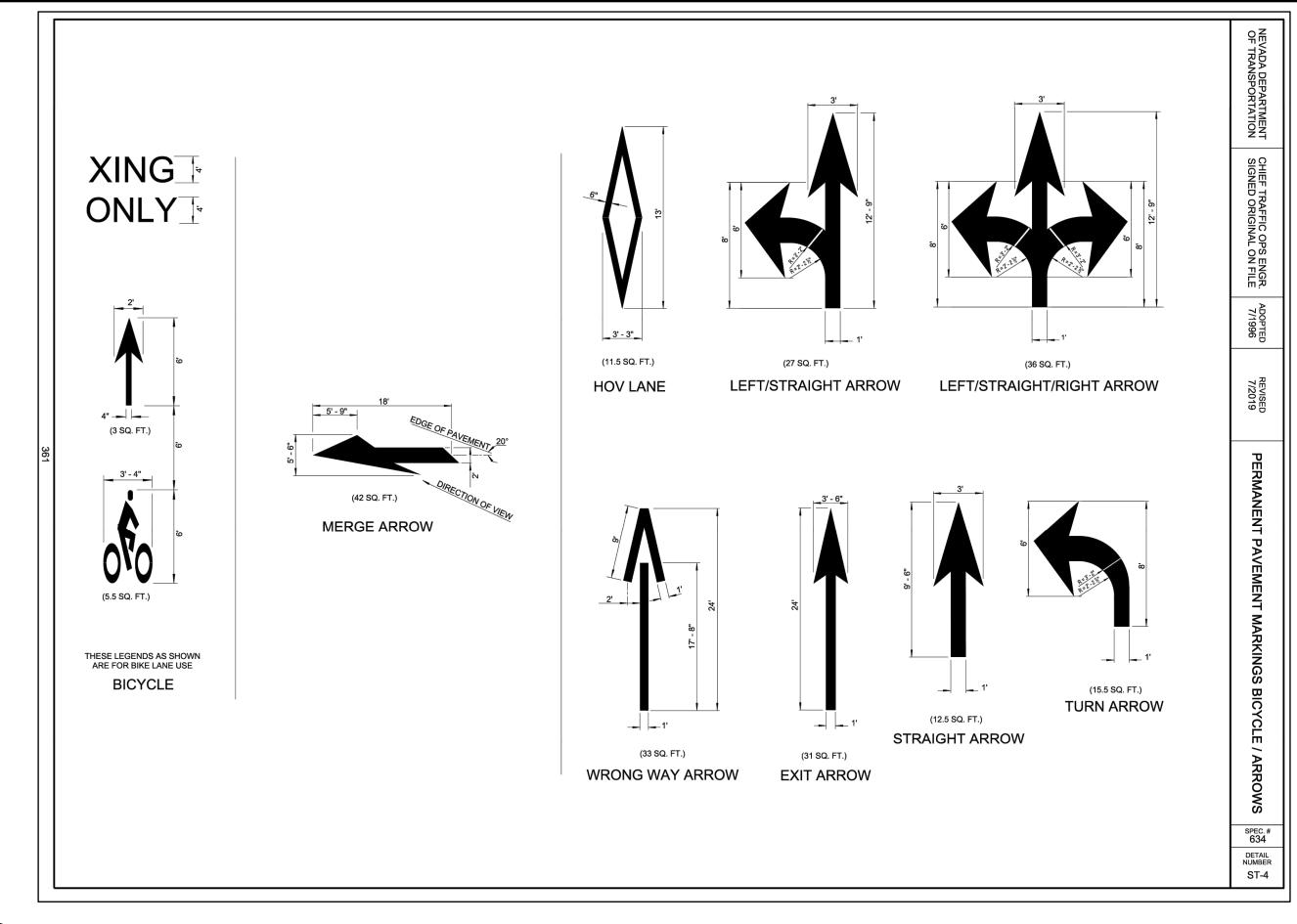
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NDOT ROW TRENCH EXCAVATION / BACKFILL

SURVEY MONUMENTS (NDOT DETAIL #DM-6)

SCALE:NTS



NOTES: Concrete shall be class A or AA. Monuments may be poured square or round. Monument stamping shall be done according to Location Division's "Special Instructions for Survey, Mapping, or GIS Consultants" manual. CHIEF ROAD DESIGN ENGR. SIGNED ORIGINAL ON FILE METAL CAP — 1 ½" MIN. No. 4 REBAR HOOP PLACE COLLAR 1/4" No. 4 REBAR HOOP BELOW FINISHED SURFACE 50" LENGTH, 14" DIA — 6" MIN. OVERLAP - 6" MIN. OVERLAP PLACE COLLAR 1/4" 1/4" RADIUS ALL AROUND — USE BONDBREAKER BETWEEN CONCRETE -SURFACES SURVEY COVER AND RING CAST IRON ALTERNATE PLACEMENT CAST IRON DETAIL NUMBER DM-6 PERMANENT PAVEMENT MARKINGS BICYCLE / ARROWS (NDOT DETAIL #ST-4)

SCALE:NTS

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OTHER RESERVED RIGH
OTHER RESERVED RIGH
SHAFT NOT BE REUSED
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ONE INCH
AT FULL SIZE, IF NOT ONE
INCH, SCALE ACCORDINGLY
LAST UPDATED: 2/18/2025

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J-U-B ENGINEERS, INC.

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C-504