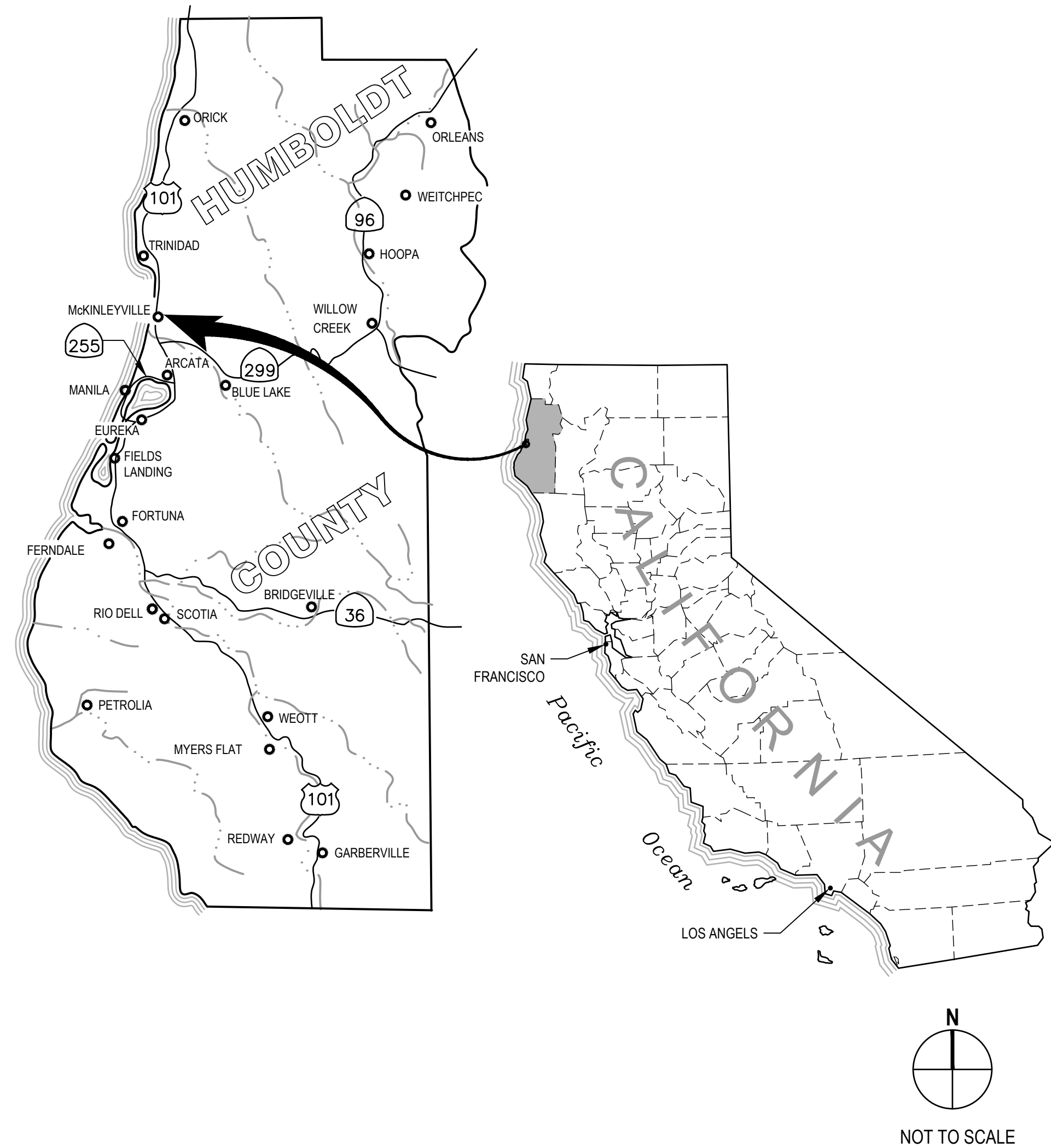


MCKINLEYVILLE COMMUNITY SERVICES DISTRICT

CENTRAL AVENUE WATER & SEWER REHABILITATION

NOVEMBER 2022

AREA MAP



LOCATION MAP



APPROVALS

MCKINLEYVILLE COMMUNITY SERVICES DISTRICT:

PAT KASPARI, PE
GENERAL MANAGER

PK
SIGNED

11/14/2022
DATE

BOARD OF DIRECTORS:
DAVID COUCH
JOELLEN CLARK-PETERSON
SCOTT BINDER
DENNIS MAYO
GREGORY ORSINI

PRESIDENT
VICE PRESIDENT
DIRECTOR
DIRECTOR
DIRECTOR

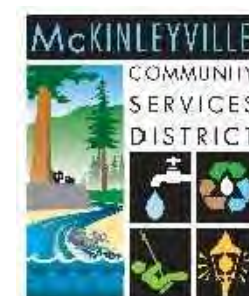
ENGINEER: GHD INC.

NATHAN STEVENS, PE

Nathan Stevens
SIGNED

11/14/2022
DATE

0	ISSUE FOR BID	NS	NS	2022-11-15	
No.	Issue	Checked	Approved	Date	
Author	M. GONZALES	Drafting Check	L. HALONEN	Project Manager	N. STEVENS
Designer	M. GONZALES	Design Check	L. HALONEN	Project Director	G. WATANABE



Bar is one inch on original size sheet
0 1"



GHD
GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330
www.ghd.com

Conditions of Use
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD. This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Client **MCKINLEYVILLE COMMUNITY SERVICES DISTRICT**
Project **CENTRAL AVENUE WATER & SEWER REHABILITATION**

Title **COVER SHEET**

Project No. **12560439** Date **2022-11-15** Scale **AS SHOWN**

Size **ANSI D**
Sheet No. **G-001** Sheet **1 of 18**

ABBREVIATIONS			
AB	ANCHOR BOLT	M	METER
AB	AGGREGATE BASE	MAX	MAXIMUM
AC	ASPHALT CONCRETE/ASBESTOS CEMENT	MCSD	MCKINLEYVILLE COMMUNITY SERVICES COMMUNITY
ACP	ASBESTOS CEMENT PIPE	MFR	MANUFACTURER
AGG	AGGREGATE	MG	MILLION GALLON
ARV	AIR VACUUM RELEASE VALVE	MH	MANHOLE
AVE	AVENUE	MIN	MINIMUM
AWWA	AMERICAN WATER WORKS ASSOCIATION	MJ	MECHANICAL JOINT
		MPG	MEDIUM PRESSURE GAS
		MISC	MISCELLANEOUS
B-	BORING	(N)	NEW
BC	BEGIN CURVE	N OR (N)	NORTH
BF	BLIND FLANGE	NIC	NOT IN CONTRACT
BFP	BACK FLOW PREVENTER	NO	NUMBER
BM	BENCH MARK	NTS	NOT TO SCALE
BLDG	BUILDING		
BO	BLOW OFF		
BOT	BOTTOM		
BVC	BEGIN VERTICAL CURVE		
		OC	ON CENTERS
C	CONDUIT	OPNG	OPENING
CB	CATCH BASIN		
CBC	CALIFORNIA BUILDING CODE	PC	POINT OF CURVATURE
CI	CAST IRON	PCC	PORTLAND CONCRETE CEMENT
CIPP	CURED-IN-PLACE PIPE	PE	POLYETHYLENE
CL	CENTERLINE	PI	POINT OF INTERSECTION
CLR	CLEAR, CLEARANCE	PL	PLATE, OR PROPERTY LINE
CO	CLEAN OUT	PLCS	PLACES
CMP	CORRUGATED METAL PIPE	PLWD	PLYWOOD
CMU	CONCRETE MASONRY UNIT	POC	POINT OF CONNECTION
CONC	CONCRETE	PP	POWER POLE
CONT	CONTINUOUS	PRV	PRESSURE REDUCING VALVE
CONT'D	CONTINUED	PSI	POUNDS PER SQUARE INCH
COR	CORNER	PT	POINT, POINT OF TANGENCY, OR PRESSURE TREATED
CU	CUBIC	PVC	POLYVINYL CHLORIDE PLASTIC PIPE
CV	CHECK VALVE	QTY	QUANTITY
d	PENNY (NAIL SIZE)	R	RADIUS
DIA, Ø	DIAMETER	RC	RELATIVE COMPACTION
DTL	DETAIL	RCP	REINFORCED CONCRETE PIPE
DI	DROP (DRAINAGE) INLET, OR DUCTILE IRON	RD	ROAD
DF	DOUGLAS FIR	RDWD	REDWOOD
DR	DRIVE	REQD	REQUIRED
DW	DOMESTIC WATER LINE	REQT	REQUIREMENT
DWG	DRAWING	RFC	RESTRAINED FLANGE COUPLING ADAPTER
		RPP	REDUCED PRESSURE PRINCIPAL
(E)	EXISTING	RT	RIGHT
E OR (E)	EAST, OR EASTING	R/W	RIGHT OF WAY
EA	EACH		
EC	END CURVE	S	SLOPE
EF	EACH FACE	S OR (S)	SOUTH
EP	EDGE PAVEMENT	SAT	SATURATED
EQ	EQUAL	SCH, OR	SCHEDULE
ER	EDGE ROAD	SCHED	SCHEDULE
EL/ELEV	ELEVATION	SD	STORM DRAIN
ELEC	ELECTRIC, OR ELECTRICAL	SDMH	STORM DRAIN MANHOLE
ENGR	ENGINEER	SDCB	STORM DRAIN CATCH BASIN
EVC	END VERTICAL CURVE	SHT	SHEET
EW	EACH WAY	SIM	SIMILAR
(F)	FUTURE	SS	SANITARY SEWER
FCA	FLANGED COUPLING ADAPTER	SSCO	SANITARY SEWER CLEAN OUT
FDC	FIRE DEPARTMENT CONNECTION	SSMH	SANITARY SEWER MANHOLE
FIN	FINISH	SSTL	SANITARY SEWER MANHOLE
FF	FINISH FLOOR	STA	STATION
FG	FINISH GRADE	STD	STANDARD
FH	FIRE HYDRANT	STL	STEEL
FL	FLOW LINE, FLANGE		
FLG	FLANGE	TC	TOP OF CURB
FLR	FLOOR	T, OR	
FM	FORCE MAIN	TEL	TELEPHONE
FO	FIBER OPTIC	THK	THICK
FP	FIRE PROTECTION	TG	TOP OF GRATE
FS	FINISHED SURFACE	TP	TEST PIT, SEE GEOTECHNICAL DOCUMENTATION
FT	FOOT, OR FEET	TS	TOP OF SLAB
FTG	FOOTING	TW	TOP OF WALL
		TYP	TYPICAL
G	GAS LINE	UBC	UNIFORM BUILDING CODE
GAL	GALLON	UNO	UNLESS NOTED OTHERWISE
GALV	GALVANIZED	UP	UTILITY POLE
GR	GRADE		
GRD	GROUND		
GV	GATE VALVE	V	VOLT(S)
		VCP	VITRIFIED CLAY PIPE
		VERT	VERTICAL
HB	HOSE BIBB	W OR (W)	WEST
HDD	HORIZONTAL DIRECTIONAL DRILLING	W	WITH
HDPE	HIGH-DENSITY POLYETHYLENE	W	WATER
HORZ	HORIZONTAL	WD	WIDE
HPG	HIGH PRESSURE GAS	WM	WATER METER
HPNS	HIGH PRESSURE NATURAL GAS	WV	WATER VALVE
HPS	HIGH PRESSURE SODIUM		
HWY	HIGHWAY	XING	CROSSING
IE	INVERT ELEVATION	YD	YARD
INV	INVERT		
IP	IRON PIPE		
IRR	IRRIGATION	&	AND
		@	AT
JCT	JUNCTION	°	DEGREE
JP	JUNCTION POLE (UTILITY)	Ø	DIAMETER
		'	FEET
L	LENGTH	"	INCHES
LAT	LATERAL	#	NUMBER
LF	LINEAR FEET	±	PLUS OR MINUS
LS	LIFT STATION		
LT	LEFT		

NOTE: CONTACT ENGINEER FOR ABBREVIATIONS NOT LISTED.

PLAN SYMBOLS		
SITE/TOPOGRAPHIC		
NEW	EXISTING	DESCRIPTION
		LIMITS OF CONSTRUCTION
		RIGHT OF WAY CENTERLINE
		RIGHT OF WAY LINES
		ADJACENT PROPERTY LINES
		FENCE
		EDGES OF ASPHALT PAVEMENT
		CONCRETE PAVING / SIDEWALK
		EDGE OF GRAVEL (TRAIL)
		CONTOUR LINE
		TOP OF BANK
		TOE OF BANK
		DRAINAGE/CREEK /DITCH/SWALE
		BRUSH/VEGETATION LINE
		TREE
		SIGN
		SURVEY CONTROL POINT
		FOUND RECORD SURVEY MONUMENT
UTILITY		
NEW/REHABILITATED	EXISTING	DESCRIPTION
		SANITARY SEWER LINE (SIZE & TYPE AS NOTED)
		WATER LINE (SIZE & TYPE AS NOTED)
		UNDERGROUND GAS LINE
		UNDERGROUND ELECTRIC LINES
		UNDERGROUND TELECOM
		UNDERGROUND FIBER OPTIC COMMUNICATION LINE
		OVERHEAD ELECTRIC LINES
		STORM DRAIN CULVERT
		ELECTRICAL VAULT OR PANEL
		STORM DRAINAGE INLET/ CATCH BASIN
		SANITARY SEWER MANHOLE
		SANITARY SEWER CLEANOUT
		WATER VALVE
		BACK FLOW PREVENTER
		FIRE HYDRANT
		WATER METER
		TELECOM MANHOLE
		LIGHT POLE
		GAS VALVE
		GAS METER
		AIR RELEASE VALVE
		TEE
		22.5° ELBOW
		45° ELBOW
		REDUCER

GENERAL SHEET SYMBOLS			
DETAIL NUMBER	KEYNOTE	SECTION NUMBER	DETAIL OR SECTION NUMBER
1	1	A	1
C-501	DEMOLITION NOTE	C-501	TITLE
DETAIL INDICATOR		SECTION INDICATOR	SCALE
SHEET ON WHICH DETAIL APPEARS		SHEET ON WHICH SECTION APPEARS	SHEET ON WHICH DETAIL OR SECTION APPEARS

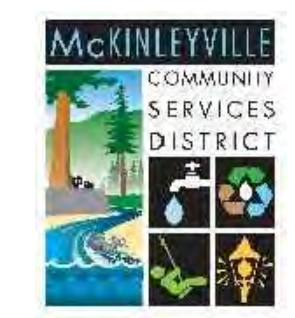
SHEET INDEX		
SHEET	SHEET NO.	TITLE
GENERAL		
1	G-001	COVER SHEET
2	G-002	ABBREVIATIONS, SYMBOLS, LEGEND, & SHEET INDEX
3	G-003	GENERAL NOTES
4	G-004	SEWER LATERAL DATA
5	G-005	SITE INDEX
CIVIL		
6	C-101	SEWER REHAB PLAN - LINE 6.5, 1 OF 2
7	C-102	SEWER REHAB PLAN - LINE 6.5, 2 OF 2 & LINES C, C1, D, & D1
8	C-103	WATER MAIN PLAN AND PROFILE - LINE 1.0, 1 OF 5
9	C-104	WATER MAIN PLAN AND PROFILE - LINE 1.0, 2 OF 5
10	C-105	WATER MAIN PLAN AND PROFILE - LINE 1.0, 3 OF 5
11	C-106	WATER MAIN PLAN AND PROFILE - LINE 1.0, 4 OF 5
12	C-107	WATER MAIN PLAN AND PROFILE - LINE 1.0, 5 OF 5
13	C-108	WATER MAIN PLAN AND PROFILE - LINE 2.0
14	C-109	WATER MAIN PLAN AND PROFILE - LINE 3.0
15	C-501	CIVIL DETAILS 1 OF 4
16	C-502	CIVIL DETAILS 2 OF 4
17	C-503	CIVIL DETAILS 3 OF 4
18	C-504	CIVIL DETAILS 4 OF 4

		Bar is one inch on original size sheet 		GHD Inc. 718 Third Street Eureka California 95501 USA T 1 707 443 8326 F 1 707 444 8330 www.ghd.com		Client MCKINLEYVILLE COMMUNITY SERVICES DISTRICT Project CENTRAL AVENUE WATER & SEWER REHABILITATION	Title ABBREVIATIONS, SYMBOLS, LEGEND, & SHEET INDEX	Size ANSI D
0 ISSUE FOR BID No. Issue	NS NS Checked Approved Date	2022-11-15	Author M. GONZALES Drafting Check L. HALONEN Designer M. GONZALES Design Check L. HALONEN	Project Manager N. STEVENS Project Director G. WATANABE	Project No. 12560439	Date 2022-11-15	Scale AS SHOWN	Sheet No. G-002 Sheet 2 of 18

LINE NUMBER	LATERAL NUMBER	DEPTH TO CLEANOUT (FT)	DISTANCE FROM MAIN TO CLEANOUT (FT)	ADDRESS	APN
6.5	1	5.5	47.5	2015-2019 CENTRAL	510-411-23
	2	5	49	2007 & 2009 CENTRAL	510-411-22
	3	7	42	2003 CENTRAL	510-411-24
	4	5	69	1961 CENTRAL	508-251-08
	5	6	32	1901 CENTRAL	509-231-15
	6	4	32	1811 CENTRAL	509-231-04
	7	4	32	1807 CENTRAL	509-231-04
	8	5.5	29	1803 CENTRAL	509-231-04
	9	5.5	33	1795 CENTRAL	509-221-22
	10	5.5	28	LOT BEHIND BMW	509-221-21
	11	5.5	29.5	BEHIND LUZMILAS	509-221-54
	12	6	27	1751 CENTRAL	509-221-02
	13	5.5	33	1711 - 1735 CENTRAL	509-221-45
C-1	14	4	18	1884 CENTRAL	508-251-12
	15	4.5	18	1900 CENTRAL	508-251-12
	16	5	24	1836 CENTRAL	508-251-05
	17	3.5	24	1834 CENTRAL	508-251-04
C	18	4.5	26	1822 CENTRAL	508-251-18
	19	5	26	1828 CENTRAL	508-251-18
D-1	20	UNKNOWN	6*	UNKNOWN	UNKNOWN
	21	6	10	1750 CENTRAL	508-242-023
	22	UNKNOWN	4*	UNKNOWN	UNKNOWN
D	23	5.5	8	1734 CENTRAL	508-241-24
	24	5	9	1726 CENTRAL	508-241-74

* ESTIMATED BASED ON BEST AVAILABLE INFORMATION.

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	NS	NS	2022-11-15
Author	M. GONZALES	Drafting Check	N. STEVENS	Project Manager
Designer	M. GONZALES	Design Check	N. STEVENS	Project Director
			G. WATANABE	



Bar is one inch on original size sheet
0 1"



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330
www.ghd.com



Client **MCKINLEYVILLE COMMUNITY SERVICES DISTRICT**
Project **CENTRAL AVENUE WATER & SEWER REHABILITATION**

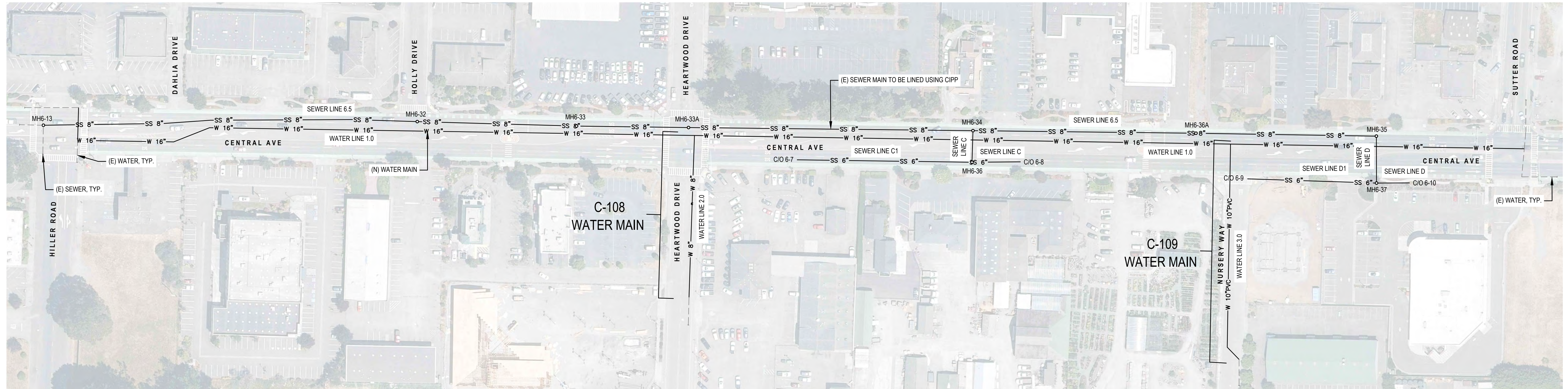
Title **SEWER LATERAL DATA**

Project No. **12560439** Date **2022-11-15** Scale **AS SHOWN**

Sheet No. **G-004** Sheet **4 of 18**

C-101
SEWER MAIN

C-102
SEWER MAIN



C-103
WATER MAIN

C-104
WATER MAIN

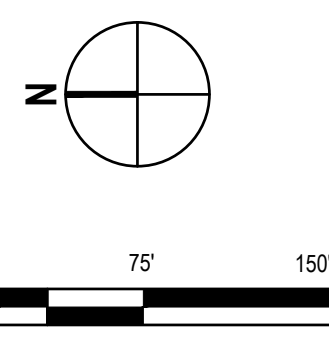
C-105
WATER MAIN

C-106
WATER MAIN

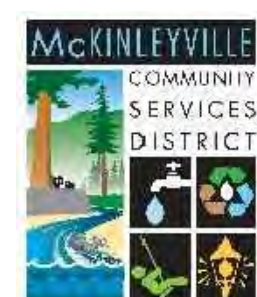
C-107
WATER MAIN

C-108
WATER MAIN

C-109
WATER MAIN



No.	Issue	NS	NS	2022-11-15
0	ISSUE FOR BID			
Author	M. GONZALES	Drafting Check	L. HALONEN	Checked
Designer	M. GONZALES	Design Check	L. HALONEN	Approved
		Project Manager	N. STEVENS	Date
		Project Director	G. WATANABE	



Bar is one inch on original size sheet
0 1"

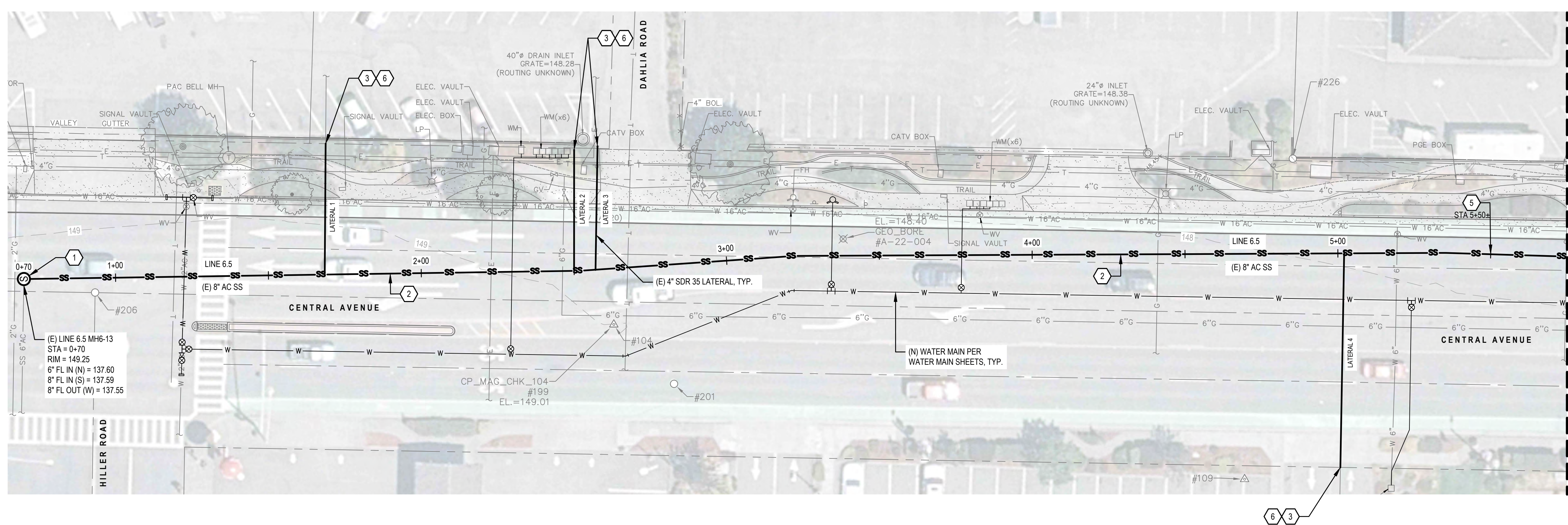


GHD
GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330



Client **MCKINLEYVILLE COMMUNITY SERVICES DISTRICT**
Project **CENTRAL AVENUE WATER & SEWER REHABILITATION**

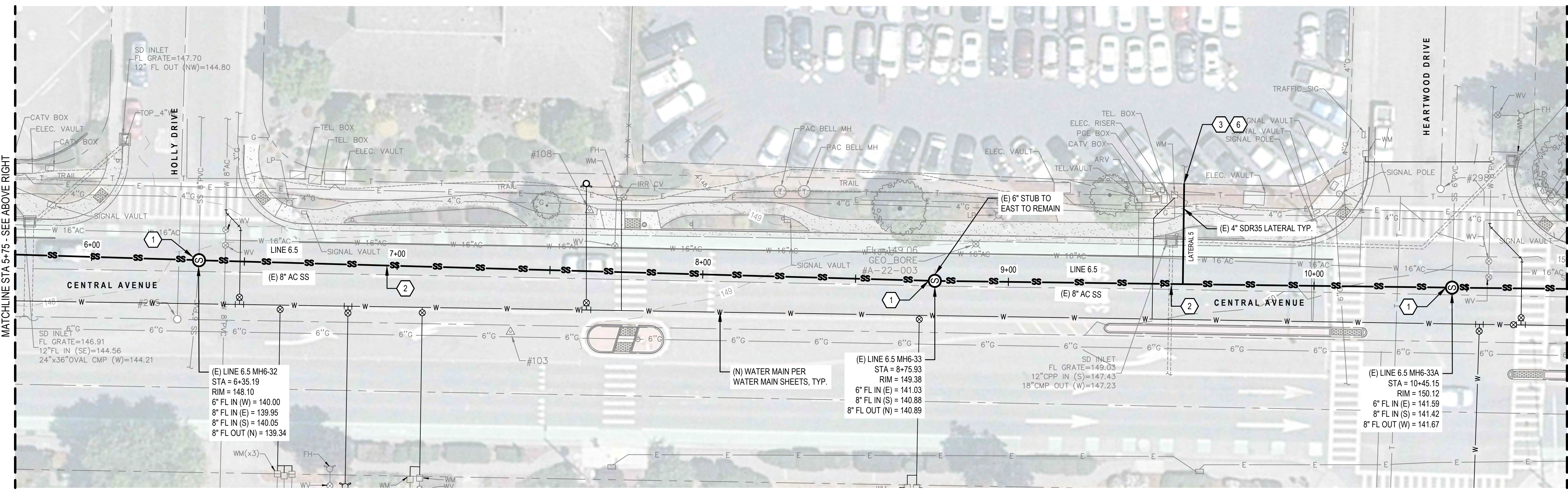
Title **SITE INDEX**
Scale **AS SHOWN**
Sheet No. **G-005**
5 of 18



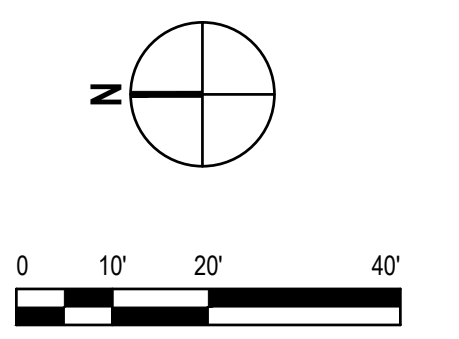
SEWER PLAN - CENTRAL AVE - LINE 6.5

- SHEET GENERAL NOTES**
- LOCATION OF EXISTING UTILITIES & STRUCTURES ARE FROM INFORMATION AVAILABLE AT TIME OF DESIGN. EXACT LOCATION AND COMPLETENESS ARE NOT GUARANTEED. CONTRACTOR SHALL NOTIFY THE OWNER AND UNDERGROUND SERVICES ALERT 1-800-227-2600 A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION AND POTHOLE FOR EXACT LOCATION.
 - CONTRACTOR SHALL RESTORE ANY PAVEMENT DAMAGE PER DETAIL 1/C-501.
 - ALL PARKING LOTS, SIDEWALKS, CURBS, ISLANDS, GUTTERS, DRIVEWAYS, FENCES, LANDSCAPING, PAVEMENT STRIPING, AND ALL OTHER ITEMS DISTURBED AS A RESULT OF REQUIRED CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND TO AN AS GOOD OR BETTER CONDITION, AND SHALL BE REPAIRED TO MATCH EXISTING ADJACENT FEATURES.

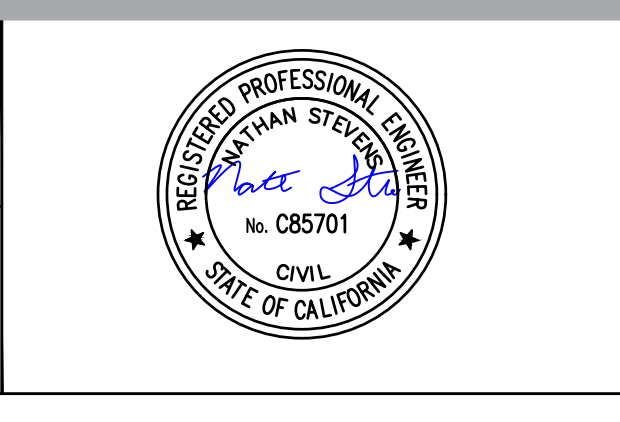
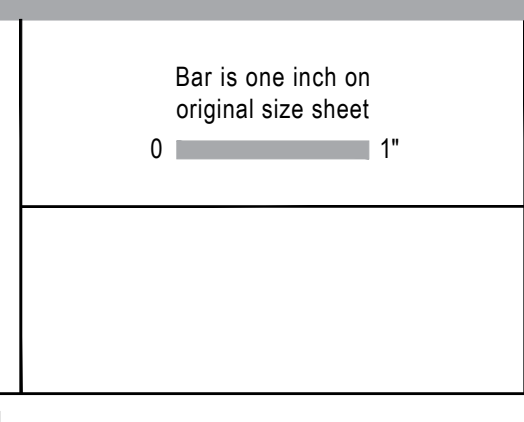
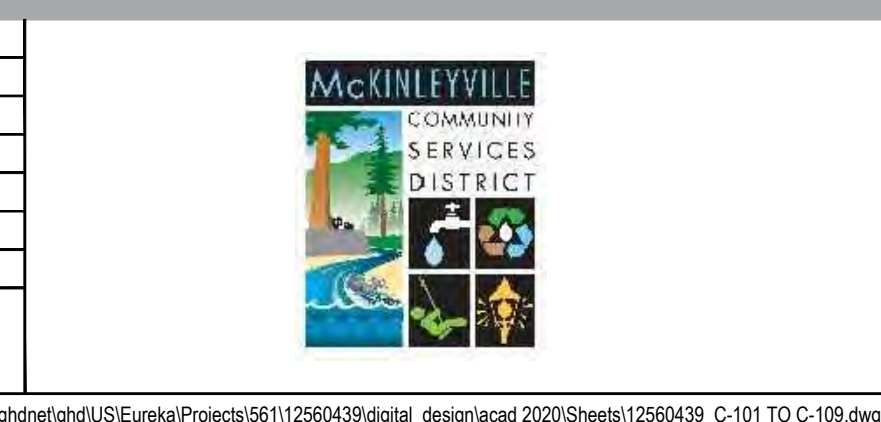
- SHEET KEYNOTES**
- REHABILITATE (E) MANHOLE PER SPECIFICATION 33 01 33 - MANHOLE REHABILITATION.
 - LINE (E) 8" AC MAIN USING CIPP
 - LINE (E) 4" LATERAL TO PROPERTY LINE / CLEANOUT USING CIPP
 - LINE (E) 6" AC MAIN USING CIPP
 - PERFORM SECTION REPAIR PER DETAIL 1/C-502 PRIOR TO CIPP LINING AT NECESSARY LOCATIONS TO EXTENTS AS CONFIRMED BY ENGINEER.
 - SEE SEWER LATERAL DATA ON G-004 FOR CLEANOUT LOCATION AND LATERAL LENGTH.



SEWER PLAN - CENTRAL AVE - LINE 6.5



0	ISSUE FOR BID	NS	NS	2022-11-15
No.	Issue	Checked	Approved	Date
Author	M. GONZALES	Drafting Check	L. HALONEN	Project Manager
Designer	M. GONZALES	Design Check	L. HALONEN	Project Director
			G. WATANABE	



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330

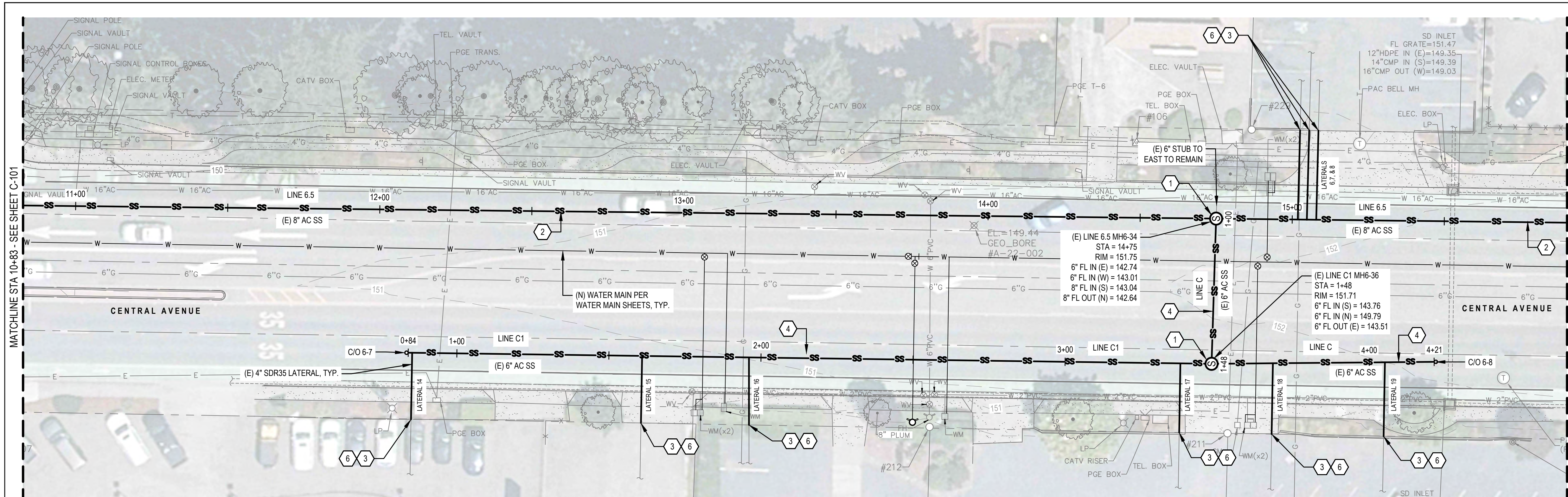
Conditions of Use
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD. This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

Client **MCKINLEYVILLE COMMUNITY SERVICES DISTRICT**
Project **CENTRAL AVENUE WATER & SEWER REHABILITATION**

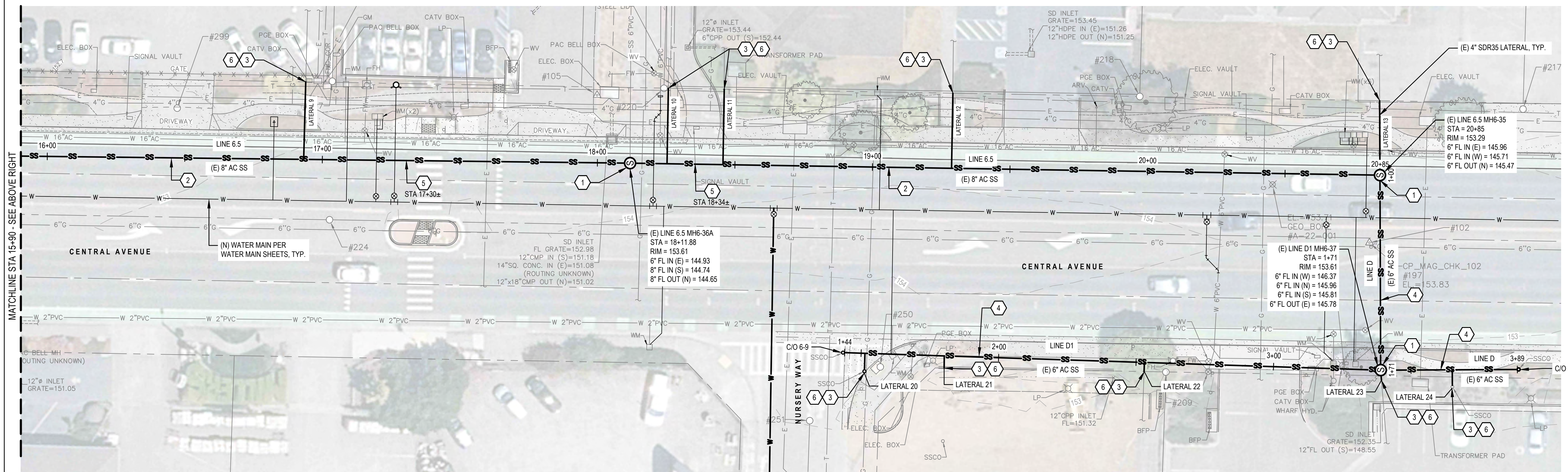
Project No. **12560439** Date **2022-11-15** Scale **AS SHOWN**

Title **SEWER REHAB PLAN - LINE 6.5, 1 OF 2**

Sheet No. **C-101** Sheet **6 of 18**



SEWER PLAN - CENTRAL AVE - LINE 6.5, LINE C, AND LINE C1

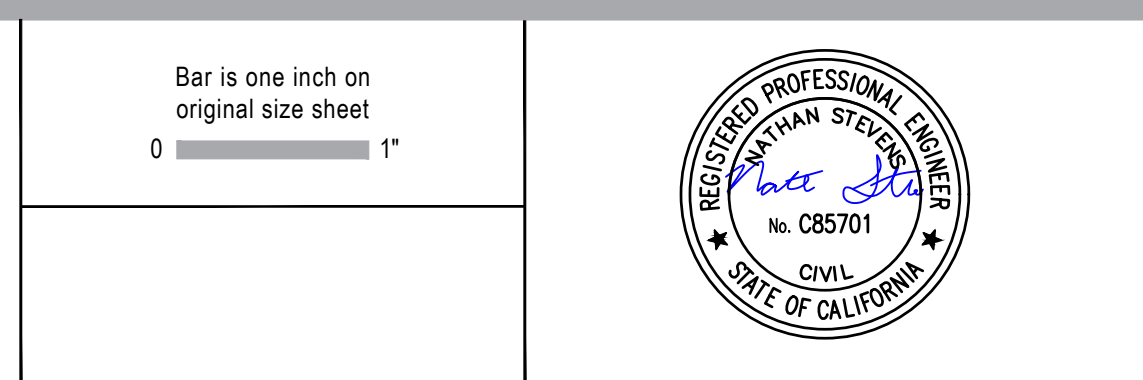
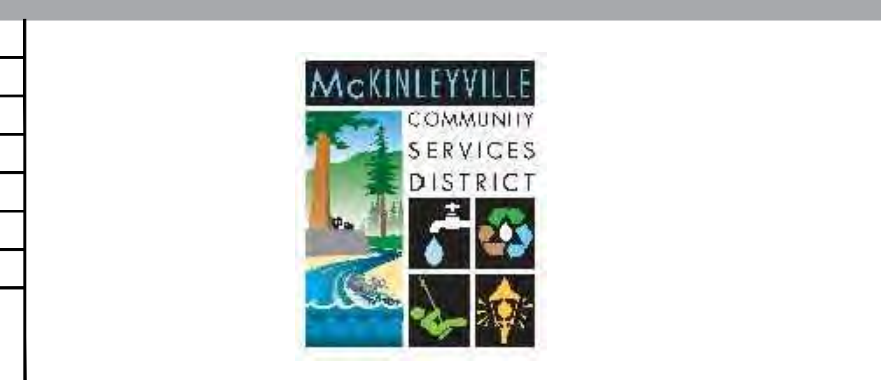


SEWER PLAN - CENTRAL AVE - LINE 6.5, LINE D, AND LINE D1

- SHEET GENERAL NOTES**
- LOCATION OF EXISTING UTILITIES & STRUCTURES ARE FROM INFORMATION AVAILABLE AT TIME OF DESIGN. EXACT LOCATION AND COMPLETENESS ARE NOT GUARANTEED. CONTRACTOR SHALL NOTIFY THE OWNER AND UNDERGROUND SERVICES ALERT 1-800-227-2600 A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION AND POTHOLE FOR EXACT LOCATION.
 - CONTRACTOR SHALL RESTORE ANY PAVEMENT DAMAGE PER DETAIL 1/C-501.
 - ALL PARKING LOTS, SIDEWALKS, CURBS, ISLANDS, GUTTERS, DRIVEWAYS, FENCES, LANDSCAPING, PAVEMENT STRIPING, AND ALL OTHER ITEMS DISTURBED AS A RESULT OF REQUIRED CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND TO AN AS GOOD OR BETTER CONDITION, AND SHALL BE REPAIRED TO MATCH EXISTING ADJACENT FEATURES.

- SHEET KEYNOTES**
- REHABILITATE (E) MANHOLE PER SPECIFICATION 33 01 33 - MANHOLE REHABILITATION.
 - LINE (E) 8" AC MAIN USING CIPP
 - LINE (E) 4" LATERAL TO PROPERTY LINE / CLEANOUT USING CIPP
 - LINE (E) 6" AC MAIN USING CIPP
 - PERFORM SECTION REPAIR PER DETAIL 1/C-502 PRIOR TO CIPP LINING AT NECESSARY LOCATIONS TO EXTENTS AS CONFIRMED BY ENGINEER.
 - SEE SEWER LATERAL DATA ON G-004 FOR CLEANOUT LOCATION AND LATERAL LENGTH.

0	ISSUE FOR BID	NS	NS	2022-11-15	
No.	Issue	Checked	Approved	Date	
Author	M. GONZALES	Drafting Check	L. HALONEN	Project Manager	N. STEVENS
Designer	M. GONZALES	Design Check	L. HALONEN	Project Director	G. WATANABE



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330

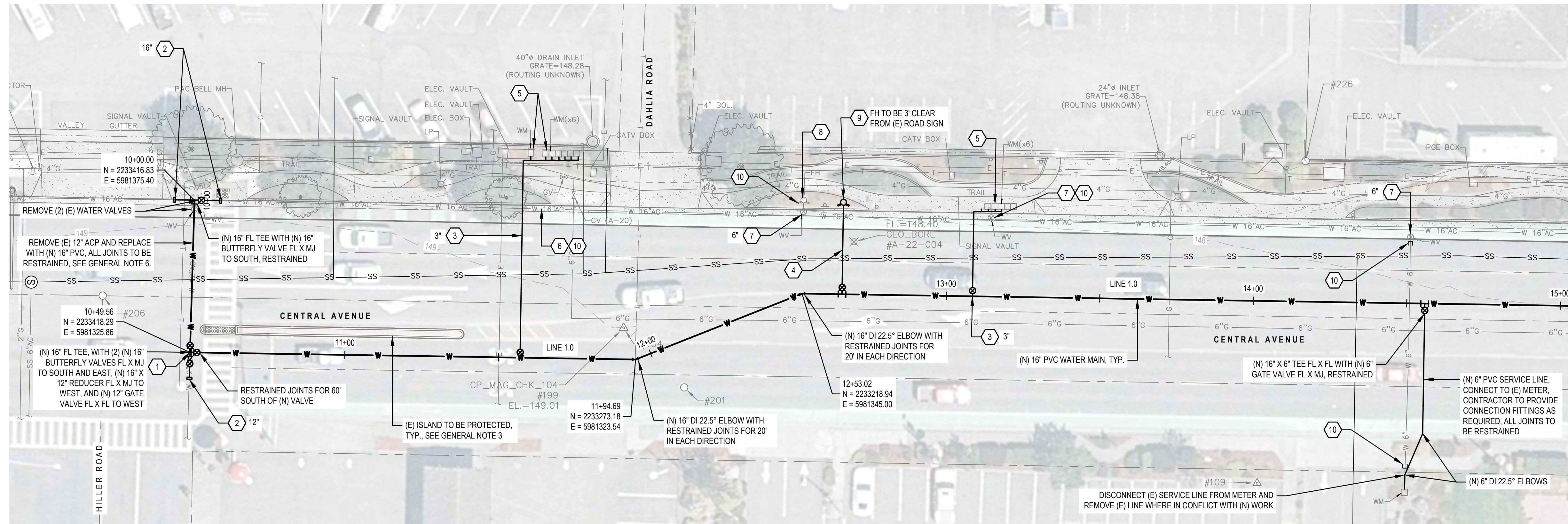
Conditions of Use
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD. This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

Client **MCKINLEYVILLE COMMUNITY SERVICES DISTRICT**
Project **CENTRAL AVENUE WATER & SEWER REHABILITATION**

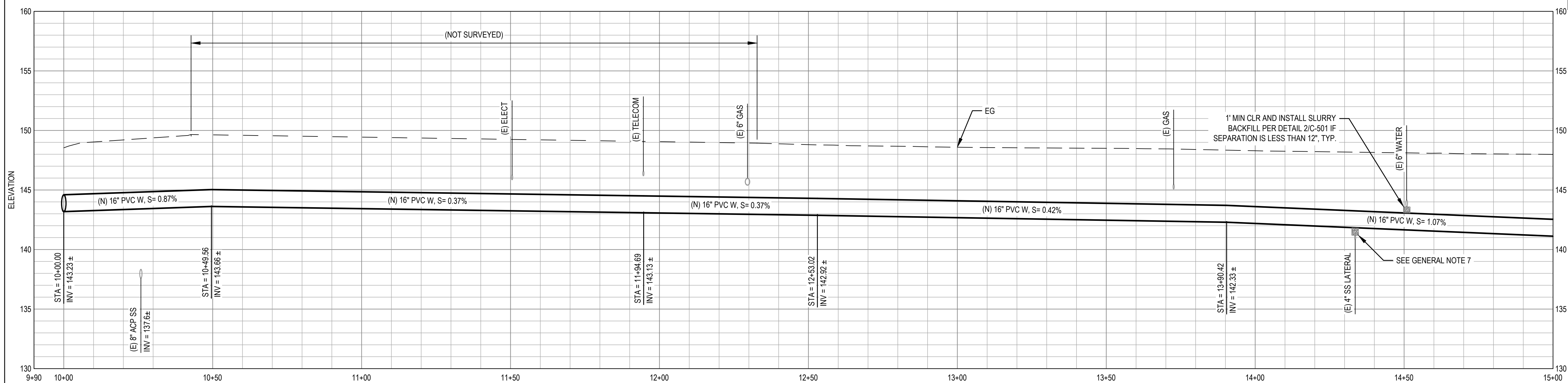
Project No. **12560439** Date **2022-11-15** Scale **AS SHOWN**

Title **SEWER REHAB PLAN - LINE 6.5, 2 OF 2 & LINES C, C1, D, & D1**

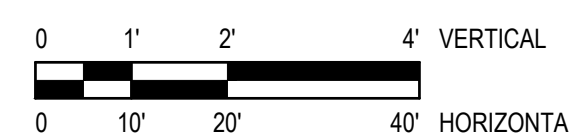
Sheet No. **C-102** of 18



WATER PLAN - CENTRAL AVE



WATER PROFILE - CENTRAL AVE



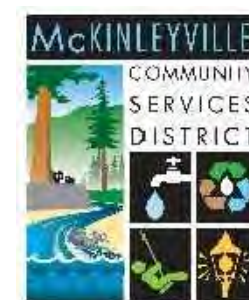
SHEET GENERAL NOTES

1. LOCATION OF EXISTING UTILITIES & STRUCTURES ARE FROM INFORMATION AVAILABLE AT TIME OF DESIGN. EXACT LOCATION AND COMPLETENESS ARE NOT GUARANTEED. CONTRACTOR SHALL NOTIFY THE OWNER AND UNDERGROUND SERVICES ALERT 1-800-227-2600 A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION AND POT HOLE FOR EXACT LOCATION.
2. CONTRACTOR SHALL RESTORE ANY PAVEMENT DAMAGE PER DETAIL 1/C-501.
3. ALL PARKING LOTS, SIDEWALKS, CURBS, ISLANDS, GUTTERS, DRIVEWAYS, FENCES, LANDSCAPING, PAVEMENT STRIPING, AND ALL OTHER ITEMS DISTURBED AS A RESULT OF REQUIRED CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND TO AN AS GOOD OR BETTER CONDITION, AND SHALL BE REPAIRED TO MATCH EXISTING ADJACENT FEATURES.
4. CONTRACTOR TO POTHOLE AND VERIFY (E) PIPE SIZES AND CONNECTIONS AT INTERTIES.
5. NOT ALL TRANSITION COUPLINGS AND FITTINGS SHOWN. CONTRACTOR TO PROVIDE TRANSITION COUPLINGS, INCLUDING BUT NOT LIMITED TO FLANGE COUPLING ADAPTERS AND MECHANICAL JOINT RESTRAINTS, AS REQUIRED TO PROVIDE A COMPLETE AND WORKING SYSTEM.
6. LISTED RESTRAINED LENGTHS ARE MINIMUMS. RESTRAINTS SHALL BE INSTALLED TO NEXT JOINT BEYOND ALL LISTED DISTANCES. RESTRAINTS ARE TO BE INSTALLED THE SPECIFIED LENGTH IN EACH DIRECTION FROM THE JOINT.
7. NEW WATER MAINS AND WATER SERVICE LINES SHALL BE SEPARATED 10' HORIZONTALLY AND 1' VERTICALLY ABOVE (E) SEWER MAINS PER CCR TITLE 22 SECTION 6452.

SHEET KEYNOTES

1. (N) THRUST BLOCK PER 3/C-501.
2. (N) 5' ± LONG PVC WITH (N) TRANSITION COUPLING TO CONNECT TO (E) ACP, RESTRAINED.
3. (N) MULTI-METER WATER SERVICE LINE PER STD DETAIL WS-107/C-503.
4. (N) 6" FH SERVICE PER STD DETAIL W-13/C-503.
5. DISCONNECT (E) WATER SERVICE LINES FROM METERS, REMOVE FROM METER BOXES, REMOVE METER MANIFOLD (IF MULTI-METER SERVICE), PLUG AND ABANDON (E) SERVICE LINES.
6. LOCATE AND DISCONNECT (E) SERVICE LINE FROM (E) MAIN AND CLOSE (E) CORP STOP.
7. REMOVE (E) VALVE, VALVE BOX, AND RISER AT MAIN, VERIFY EXISTING FITTING AT MAIN, VERIFY BLIND FLANGE/CAP/PLUG REQUIRED, PREP INSTALLATION SURFACE AS REQUIRED, AND INSTALL (N) BLIND FLANGE/CAP/PLUG WITH GASKETS AND OTHER MATERIALS AS REQUIRED FOR A COMPLETE SEAL.
8. SALVAGE (E) FH.
9. INSTALL SALVAGED (E) FH ON (N) FH LATERAL PER STD DETAIL W-13/C-503.
10. CUT AND PLUG EACH END OF ABANDONED SECTION OF (E) PIPE PER DETAIL 4/C-501.
11. (N) 1" DOMESTIC WATER SERVICE LINE PER STD DETAIL WS-104/C-503 WITH ANGLE STOP AS REQUIRED TO CONNECT TO (E) METER.
12. (N) ARV PER DETAIL 3/C-502.

0 ISSUE FOR BID		NS	NS	2022-11-15	
No.	Issue	Checked	Approved	Date	
Author	M. GONZALES	Drafting Check	L. HALONEN	Project Manager	N. STEVENS
Designer	M. GONZALES	Design Check	L. HALONEN	Project Director	G. WATANABE



Bar is one inch on original size sheet
0 1"



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330

Conditions of Use

This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD. This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



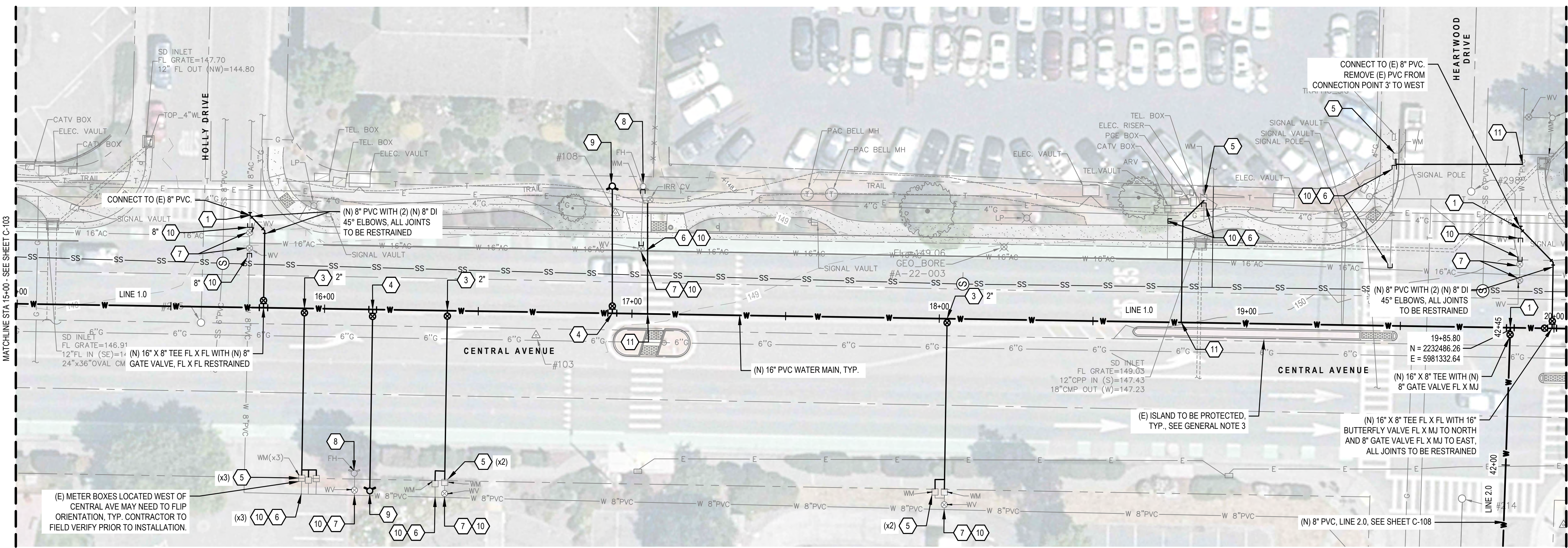
www.ghd.com

Client **MCKINLEYVILLE COMMUNITY SERVICES DISTRICT**
Project **CENTRAL AVENUE WATER & SEWER REHABILITATION**

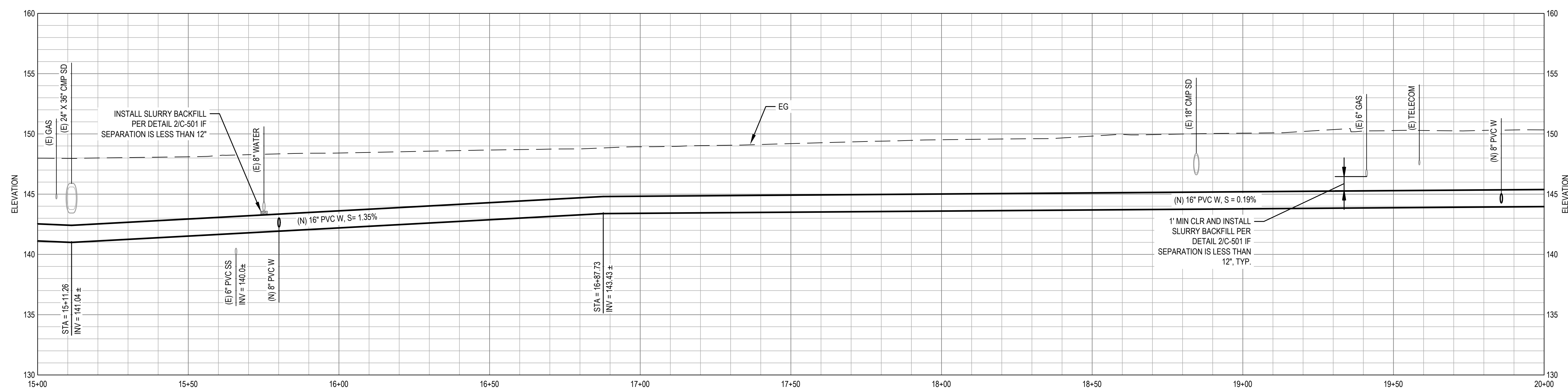
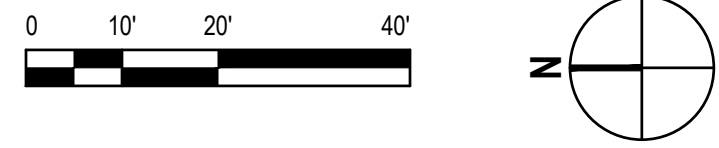
Title **WATER MAIN PLAN AND PROFILE - LINE 1.0, 1 OF 5**

Project No. **12560439** Date **2022-11-15** Scale **AS SHOWN**

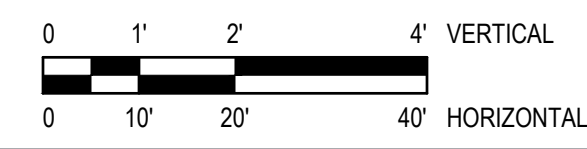
Sheet No. **C-103** Sheet **8 of 18**



WATER PLAN - CENTRAL AVE



WATER PROFILE - CENTRAL AVE



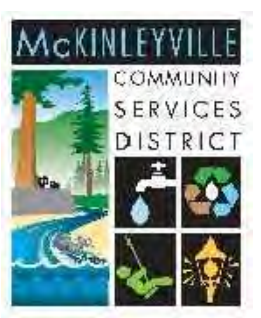
SHEET GENERAL NOTES

1. LOCATION OF EXISTING UTILITIES & STRUCTURES ARE FROM INFORMATION AVAILABLE AT TIME OF DESIGN. EXACT LOCATION AND COMPLETENESS ARE NOT GUARANTEED. CONTRACTOR SHALL NOTIFY THE OWNER AND UNDERGROUND SERVICES ALERT 1-800-227-2600 A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION AND POT HOLE FOR EXACT LOCATION.
2. CONTRACTOR SHALL RESTORE ANY PAVEMENT DAMAGE PER DETAIL 1/C-501.
3. ALL PARKING LOTS, SIDEWALKS, CURBS, ISLANDS, GUTTERS, DRIVEWAYS, FENCES, LANDSCAPING, PAVEMENT STRIPING, AND ALL OTHER ITEMS DISTURBED AS A RESULT OF REQUIRED CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND TO AN AS GOOD OR BETTER CONDITION, AND SHALL BE REPAIRED TO MATCH EXISTING ADJACENT FEATURES.
4. CONTRACTOR TO POTHOLE AND VERIFY (E) PIPE SIZES AND CONNECTIONS AT INTERTIES.
5. NOT ALL TRANSITION COUPLINGS AND FITTINGS SHOWN. CONTRACTOR TO PROVIDE TRANSITION COUPLINGS, INCLUDING BUT NOT LIMITED TO FLANGE COUPLING ADAPTERS AND MECHANICAL JOINT RESTRAINTS, AS REQUIRED TO PROVIDE A COMPLETE AND WORKING SYSTEM.
6. LISTED RESTRAINED LENGTHS ARE MINIMUMS. RESTRAINTS SHALL BE INSTALLED TO NEXT JOINT BEYOND ALL LISTED DISTANCES. RESTRAINTS ARE TO BE INSTALLED THE SPECIFIED LENGTH IN EACH DIRECTION AWAY FROM THE JOINT.
7. NEW WATER MAINS AND WATER SERVICE LINES SHALL BE SEPARATED 10' HORIZONTALLY AND 1' VERTICALLY ABOVE (E) SEWER MAINS PER CCR TITLE 22 SECTION 64572.

SHEET KEYNOTES

1. (N) THRUST BLOCK PER 3/C-501.
2. (N) 5' ± LONG PVC WITH (N) TRANSITION COUPLING TO CONNECT TO (E) ACP, RESTRAINED.
3. (N) MULTI-METER WATER SERVICE LINE PER STD DETAIL WS-107/C-503.
4. (N) 6" FH SERVICE PER STD DETAIL W-13/C-503.
5. DISCONNECT (E) WATER SERVICE LINES FROM METERS, REMOVE FROM METER BOXES, REMOVE METER MANIFOLD (IF MULTI-METER SERVICE), PLUG AND ABANDON (E) SERVICE LINES.
6. LOCATE AND DISCONNECT (E) SERVICE LINE FROM (E) MAIN AND CLOSE (E) CORP STOP.
7. REMOVE (E) VALVE, VALVE BOX, AND RISER AT MAIN, VERIFY EXISTING FITTING AT MAIN, VERIFY BLIND FLANGE/CAP/PLUG REQUIRED, PREP INSTALLATION SURFACE AS REQUIRED, AND INSTALL (N) BLIND FLANGE/CAP/PLUG WITH GASKETS AND OTHER MATERIALS AS REQUIRED FOR A COMPLETE SEAL.
8. SALVAGE (E) FH.
9. INSTALL SALVAGED (E) FH ON (N) FH LATERAL PER STD DETAIL W-13/C-503.
10. CUT AND PLUG EACH END OF ABANDONED SECTION OF (E) PIPE PER DETAIL 4/C-501.
11. (N) 1" DOMESTIC WATER SERVICE LINE PER STD DETAIL WS-104/C-503 WITH ANGLE STOP AS REQUIRED TO CONNECT TO (E) METER.
12. (N) ARV PER DETAIL 3/C-502.

0 ISSUE FOR BID		NS	NS	2022-11-15
No. Issue	Checked	Approved	Date	
Author M. GONZALES	Drafting Check L. HALONEN	Project Manager N. STEVENS		
Designer M. GONZALES	Design Check L. HALONEN	Project Director G. WATANABE		



Bar is one inch on original size sheet
0 1"



Conditions of Use
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD. This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

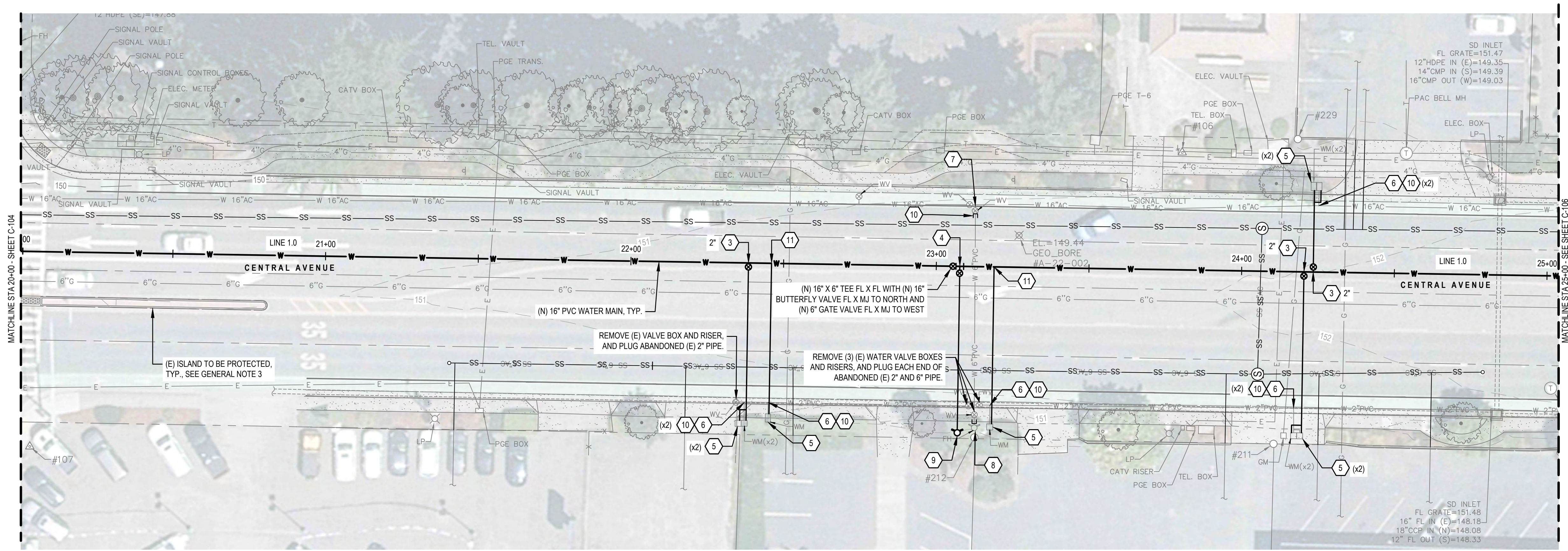


Client **MCKINLEYVILLE COMMUNITY SERVICES DISTRICT**
Project **CENTRAL AVENUE WATER & SEWER REHABILITATION**

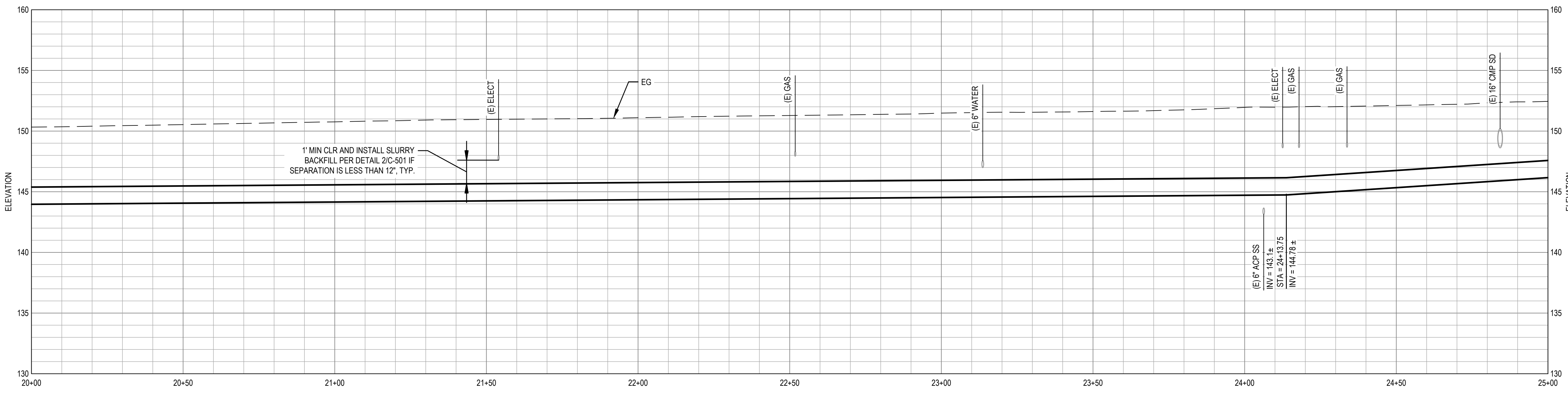
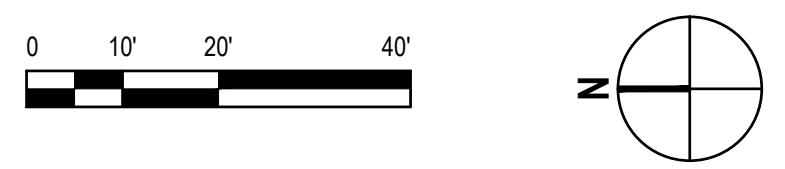
Title **WATER MAIN PLAN AND PROFILE - LINE 1.0, 2 OF 5**

Project No. **12560439** Date **2022-11-15** Scale **AS SHOWN**

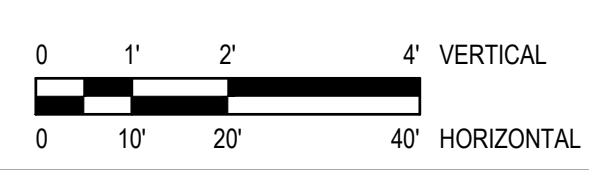
Sheet No. **C-104** Sheet **9 of 18**



WATER PLAN - CENTRAL AVE



WATER PROFILE - CENTRAL AVE



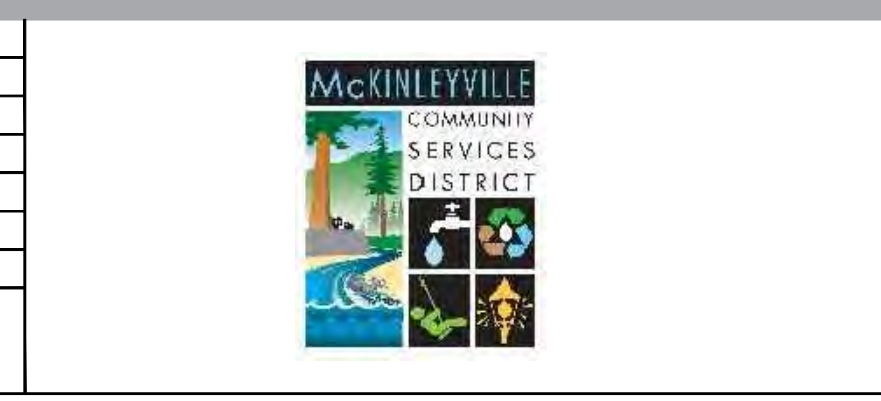
SHEET GENERAL NOTES

1. LOCATION OF EXISTING UTILITIES & STRUCTURES ARE FROM INFORMATION AVAILABLE AT TIME OF DESIGN. EXACT LOCATION AND COMPLETENESS ARE NOT GUARANTEED. CONTRACTOR SHALL NOTIFY THE OWNER AND UNDERGROUND SERVICES ALERT 1-800-227-2600 A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION AND POTHOLE FOR EXACT LOCATION.
2. CONTRACTOR SHALL RESTORE ANY PAVEMENT DAMAGE PER DETAIL 1/C-501.
3. ALL PARKING LOTS, SIDEWALKS, CURBS, ISLANDS, GUTTERS, DRIVEWAYS, FENCES, LANDSCAPING, PAVEMENT STRIPING, AND ALL OTHER ITEMS DISTURBED AS A RESULT OF REQUIRED CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND TO AN AS GOOD OR BETTER CONDITION, AND SHALL BE REPAIRED TO MATCH EXISTING ADJACENT FEATURES.
4. CONTRACTOR TO POTHOLE AND VERIFY (E) PIPE SIZES AND CONNECTIONS AT INTERTIES.
5. NOT ALL TRANSITION COUPLINGS AND FITTINGS SHOWN. CONTRACTOR TO PROVIDE TRANSITION COUPLINGS, INCLUDING BUT NOT LIMITED TO FLANGE COUPLING ADAPTERS AND MECHANICAL JOINT RESTRAINTS, AS REQUIRED TO PROVIDE A COMPLETE AND WORKING SYSTEM.
6. LISTED RESTRAINED LENGTHS ARE MINIMUMS. RESTRAINTS SHALL BE INSTALLED TO NEXT JOINT BEYOND ALL LISTED DISTANCES. RESTRAINTS ARE TO BE INSTALLED THE SPECIFIED LENGTH IN EACH DIRECTION AWAY FROM THE JOINT.
7. NEW WATER MAINS AND WATER SERVICE LINES SHALL BE SEPARATED 10' HORIZONTALLY AND 1' VERTICALLY ABOVE (E) SEWER MAINS PER CCR TITLE 22 SECTION 64572.

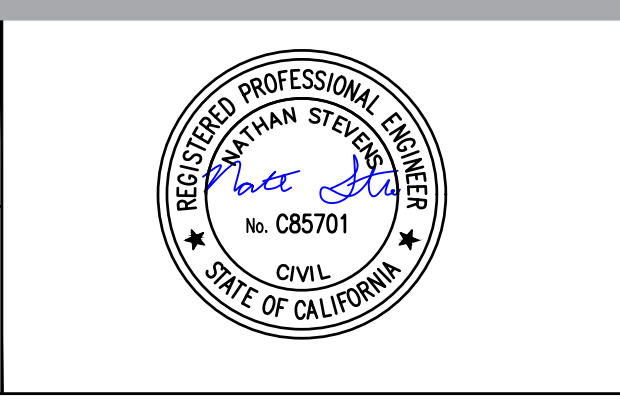
SHEET KEYNOTES

1. (N) THRUST BLOCK PER 3/C-501.
2. (N) 5' ± LONG PVC WITH (N) TRANSITION COUPLING TO CONNECT TO (E) ACP, RESTRAINED.
3. (N) MULTI-METER WATER SERVICE LINE PER STD DETAIL WS-107/C-503.
4. (N) 6" FH SERVICE PER STD DETAIL W-13/C-503.
5. DISCONNECT (E) WATER SERVICE LINES FROM METERS, REMOVE FROM METER BOXES, REMOVE METER MANIFOLD (IF MULTI-METER SERVICE), PLUG AND ABANDON (E) SERVICE LINES.
6. LOCATE AND DISCONNECT (E) SERVICE LINE FROM (E) MAIN AND CLOSE (E) CORP STOP.
7. REMOVE (E) VALVE, VALVE BOX, AND RISER AT MAIN, VERIFY EXISTING FITTING AT MAIN, VERIFY BLIND FLANGE/CAP/PLUG REQUIRED, PREP INSTALLATION SURFACE AS REQUIRED, AND INSTALL (N) BLIND FLANGE/CAP/PLUG WITH GASKETS AND OTHER MATERIALS AS REQUIRED FOR A COMPLETE SEAL.
8. SALVAGE (E) FH.
9. INSTALL SALVAGED (E) FH ON (N) FH LATERAL PER STD DETAIL W-13/C-503.
10. CUT AND PLUG EACH END OF ABANDONED SECTION OF (E) PIPE PER DETAIL 4/C-501.
11. (N) 1" DOMESTIC WATER SERVICE LINE PER STD DETAIL WS-104/C-503 WITH ANGLE STOP AS REQUIRED TO CONNECT TO (E) METER.
12. (N) ARV PER DETAIL 3/C-502.

0 ISSUE FOR BID		NS	NS	2022-11-15
No.	Issue	Checked	Approved	Date
Author	M. GONZALES	Drafting Check	L. HALONEN	Project Manager
Designer	M. GONZALES	Design Check	L. HALONEN	Project Director
				N. STEVENS
				G. WATANABE



Bar is one inch on original size sheet
0 1"



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330
www.ghd.com

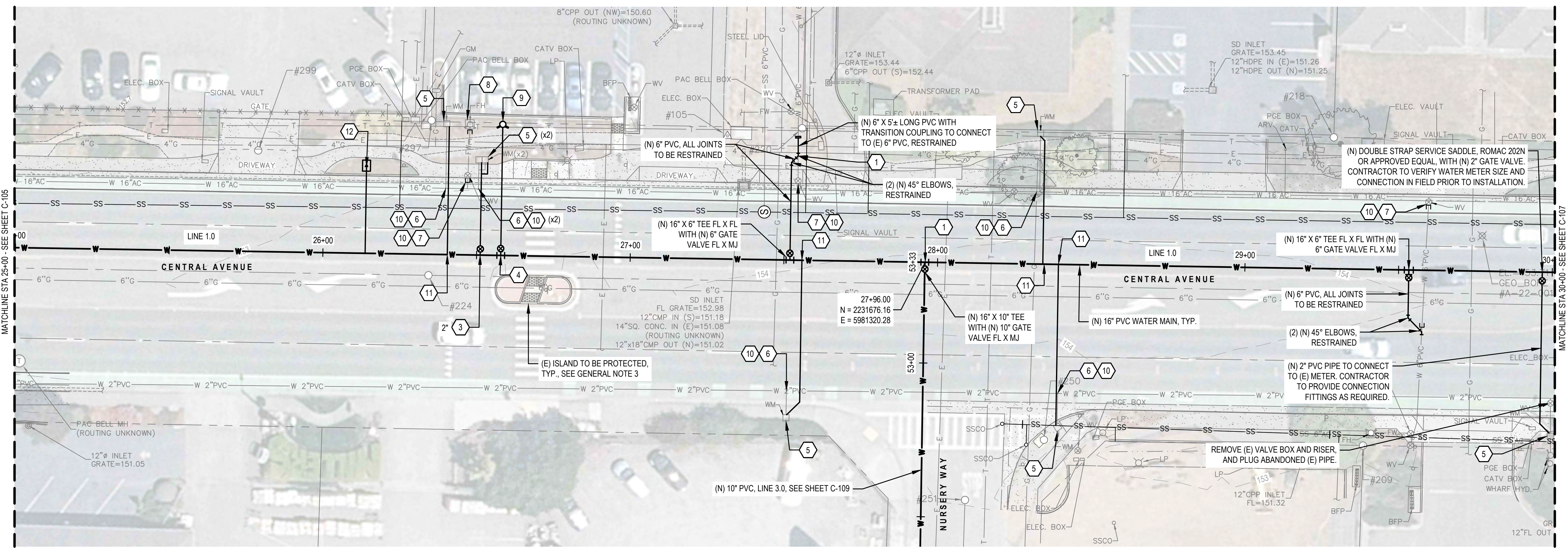
Conditions of Use
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD. This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

Client **MCKINLEYVILLE COMMUNITY SERVICES DISTRICT**
Project **CENTRAL AVENUE WATER & SEWER REHABILITATION**

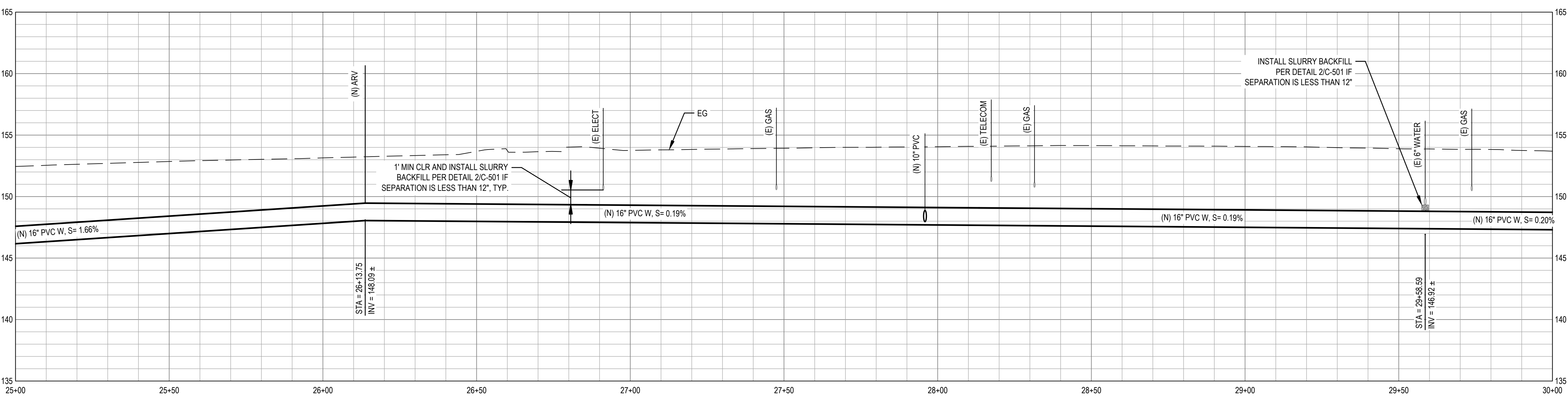
Project No. **12560439** Date **2022-11-15** Scale **AS SHOWN**

Title **WATER MAIN PLAN AND PROFILE - LINE 1.0, 3 OF 5**

Sheet No. **C-105** Sheet **10 of 18**



WATER PLAN - CENTRAL AVE



WATER PROFILE - CENTRAL AVE



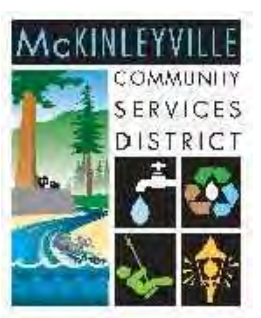
SHEET GENERAL NOTES

1. LOCATION OF EXISTING UTILITIES & STRUCTURES ARE FROM INFORMATION AVAILABLE AT TIME OF DESIGN. EXACT LOCATION AND COMPLETENESS ARE NOT GUARANTEED. CONTRACTOR SHALL NOTIFY THE OWNER AND UNDERGROUND SERVICES ALERT 1-800-227-2600 A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION AND POTHOLE FOR EXACT LOCATION.
2. CONTRACTOR SHALL RESTORE ANY PAVEMENT DAMAGE PER DETAIL 1/C-501.
3. ALL PARKING LOTS, SIDEWALKS, CURBS, ISLANDS, GUTTERS, DRIVEWAYS, FENCES, LANDSCAPING, PAVEMENT STRIPING, AND ALL OTHER ITEMS DISTURBED AS A RESULT OF REQUIRED CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND TO AN AS GOOD OR BETTER CONDITION, AND SHALL BE REPAIRED TO MATCH EXISTING ADJACENT FEATURES.
4. CONTRACTOR TO POTHOLE AND VERIFY (E) PIPE SIZES AND CONNECTIONS AT INTERTIES.
5. NOT ALL TRANSITION COUPLINGS AND FITTINGS SHOWN. CONTRACTOR TO PROVIDE TRANSITION COUPLINGS, INCLUDING BUT NOT LIMITED TO FLANGE COUPLING ADAPTERS AND MECHANICAL JOINT RESTRAINTS, AS REQUIRED TO PROVIDE A COMPLETE AND WORKING SYSTEM.
6. LISTED RESTRAINED LENGTHS ARE MINIMUMS. RESTRAINTS SHALL BE INSTALLED TO NEXT JOINT BEYOND ALL LISTED DISTANCES. RESTRAINTS ARE TO BE INSTALLED THE SPECIFIED LENGTH IN EACH DIRECTION AWAY FROM THE JOINT.
7. NEW WATER MAINS AND WATER SERVICE LINES SHALL BE SEPARATED 10' HORIZONTALLY AND 1' VERTICALLY ABOVE (E) SEWER MAINS PER CCR TITLE 22 SECTION 64572.

SHEET KEYNOTES

1. (N) THRUST BLOCK PER 3/C-501.
2. (N) 5' ± LONG PVC WITH (N) TRANSITION COUPLING TO CONNECT TO (E) ACP, RESTRAINED.
3. (N) MULTI-METER WATER SERVICE LINE PER STD DETAIL WS-107/C-503.
4. (N) 6" FH SERVICE PER STD DETAIL W-13/C-503.
5. DISCONNECT (E) WATER SERVICE LINES FROM METERS, REMOVE FROM METER BOXES, REMOVE METER MANIFOLD (IF MULTI-METER SERVICE), PLUG AND ABANDON (E) SERVICE LINES.
6. LOCATE AND DISCONNECT (E) SERVICE LINE FROM (E) MAIN AND CLOSE (E) CORP STOP.
7. REMOVE (E) VALVE, VALVE BOX, AND RISER AT MAIN, VERIFY EXISTING FITTING AT MAIN, VERIFY BLIND FLANGE/CAP/PLUG REQUIRED, PREP INSTALLATION SURFACE AS REQUIRED, AND INSTALL (N) BLIND FLANGE/CAP/PLUG WITH GASKETS AND OTHER MATERIALS AS REQUIRED FOR A COMPLETE SEAL.
8. SALVAGE (E) FH.
9. INSTALL SALVAGED (E) FH ON (N) FH LATERAL PER STD DETAIL W-13/C-503.
10. CUT AND PLUG EACH END OF ABANDONED SECTION OF (E) PIPE PER DETAIL 4/C-501.
11. (N) 1" DOMESTIC WATER SERVICE LINE PER STD DETAIL WS-104/C-503 WITH ANGLE STOP AS REQUIRED TO CONNECT TO (E) METER.
12. (N) ARV PER DETAIL 3/C-502.

0 ISSUE FOR BID		NS	NS	2022-11-15
No.	Issue	Checked	Approved	Date
Author	M. GONZALES	Drafting Check	L. HALONEN	Project Manager
Designer	M. GONZALES	Design Check	L. HALONEN	Project Director
			G. WATANABE	



Bar is one inch on original size sheet
0 1"



Conditions of Use
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD. This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

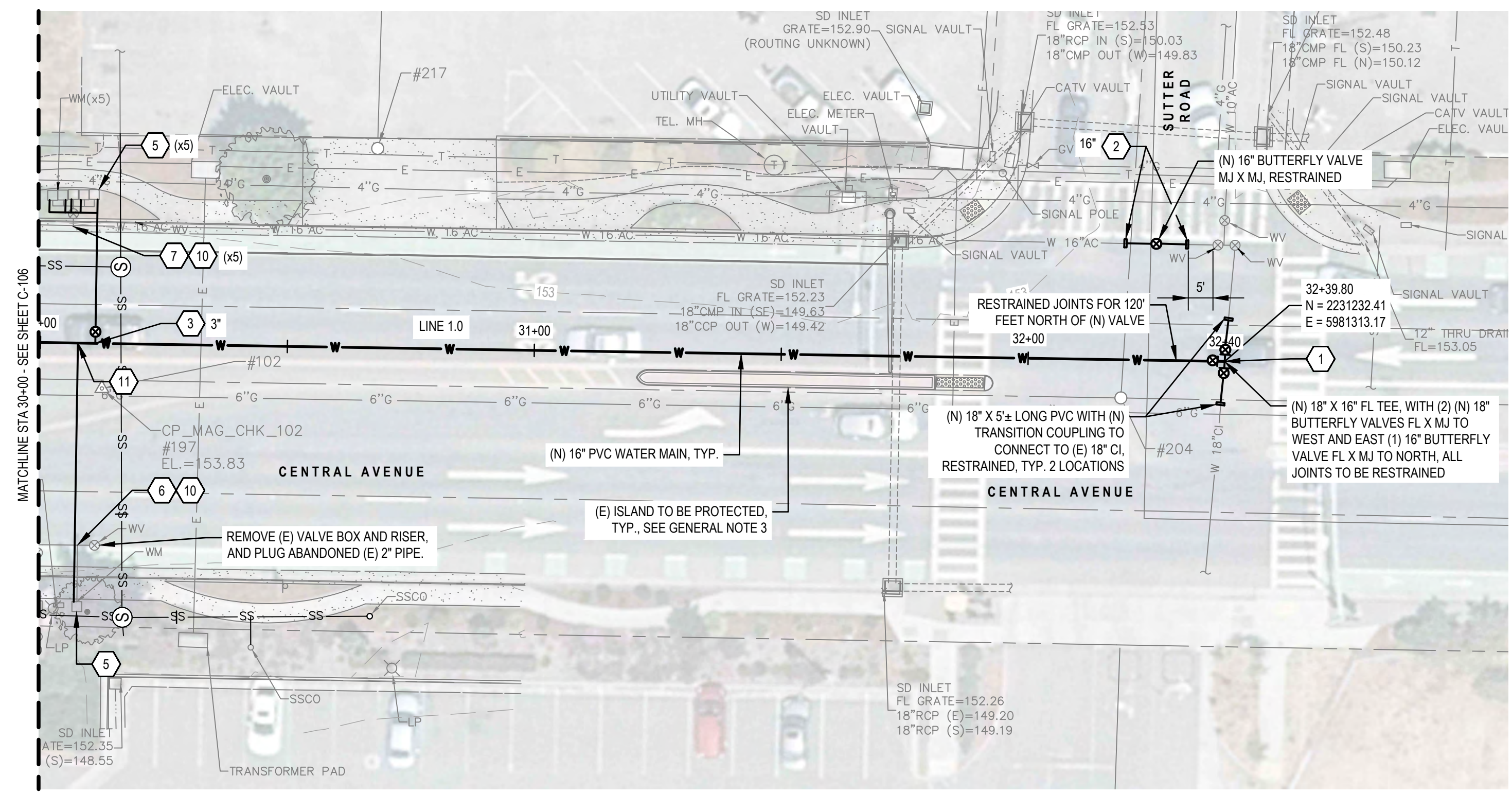


Client **MCKINLEYVILLE COMMUNITY SERVICES DISTRICT**
Project **CENTRAL AVENUE WATER & SEWER REHABILITATION**

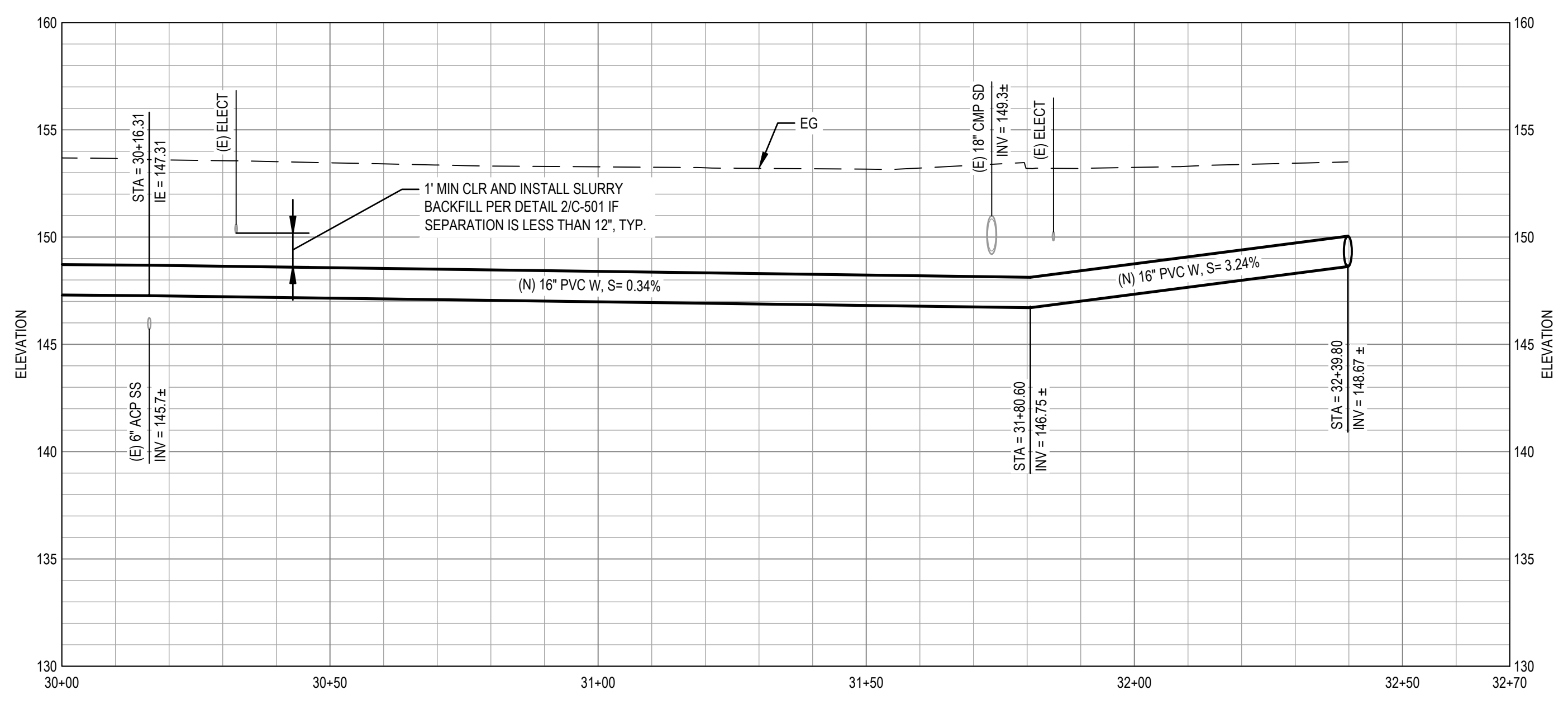
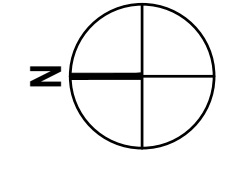
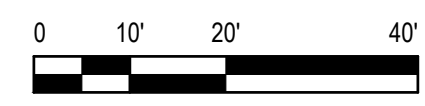
Title **WATER MAIN PLAN AND PROFILE - LINE 1.0, 4 OF 5**

Project No. **12560439** Date **2022-11-15** Scale **AS SHOWN**

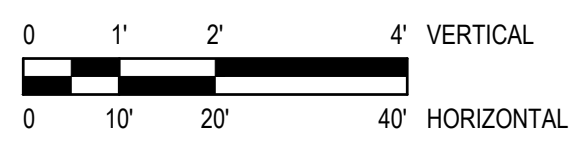
Sheet No. **C-106** Sheet **11 of 18**



WATER PLAN - CENTRAL AVE



WATER PROFILE - CENTRAL AVE



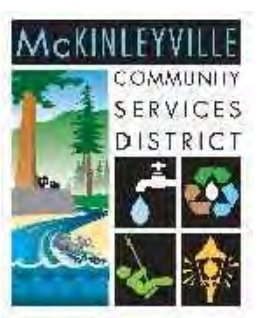
SHEET GENERAL NOTES

1. LOCATION OF EXISTING UTILITIES & STRUCTURES ARE FROM INFORMATION AVAILABLE AT TIME OF DESIGN. EXACT LOCATION AND COMPLETENESS ARE NOT GUARANTEED. CONTRACTOR SHALL NOTIFY THE OWNER AND UNDERGROUND SERVICES ALERT 1-800-227-2600 A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION AND POT HOLE FOR EXACT LOCATION.
2. CONTRACTOR SHALL RESTORE ANY PAVEMENT DAMAGE PER DETAIL 1/C-501.
3. ALL PARKING LOTS, SIDEWALKS, CURBS, ISLANDS, GUTTERS, DRIVEWAYS, FENCES, LANDSCAPING, PAVEMENT STRIPING, AND ALL OTHER ITEMS DISTURBED AS A RESULT OF REQUIRED CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND TO AN AS GOOD OR BETTER CONDITION, AND SHALL BE REPAIRED TO MATCH EXISTING ADJACENT FEATURES.
4. CONTRACTOR TO POTHOLE AND VERIFY (E) PIPE SIZES AND CONNECTIONS AT INTERTIES.
5. NOT ALL TRANSITION COUPLINGS AND FITTINGS SHOWN. CONTRACTOR TO PROVIDE TRANSITION COUPLINGS, INCLUDING BUT NOT LIMITED TO FLANGE COUPLING ADAPTERS AND MECHANICAL JOINT RESTRAINTS, AS REQUIRED TO PROVIDE A COMPLETE AND WORKING SYSTEM.
6. LISTED RESTRAINED LENGTHS ARE MINIMUMS. RESTRAINTS SHALL BE INSTALLED TO NEXT JOINT BEYOND ALL LISTED DISTANCES. RESTRAINTS ARE TO BE INSTALLED THE SPECIFIED LENGTH IN EACH DIRECTION AWAY FROM THE JOINT.
7. NEW WATER MAINS AND WATER SERVICE LINES SHALL BE SEPARATED 10' HORIZONTALLY AND 1' VERTICALLY ABOVE (E) SEWER MAINS PER CCR TITLE 22 SECTION 64572.

SHEET KEYNOTES

1. (N) THRUST BLOCK PER 3/C-501.
2. (N) 5' ± LONG PVC WITH (N) TRANSITION COUPLING TO CONNECT TO (E) ACP, RESTRAINED.
3. (N) MULTI-METER WATER SERVICE LINE PER STD DETAIL WS-107/C-503.
4. (N) 6" FH SERVICE PER STD DETAIL W-13/C-503.
5. DISCONNECT (E) WATER SERVICE LINES FROM METERS, REMOVE FROM METER BOXES, REMOVE METER MANIFOLD (IF MULTI-METER SERVICE), PLUG AND ABANDON (E) SERVICE LINES.
6. LOCATE AND DISCONNECT (E) SERVICE LINE FROM (E) MAIN AND CLOSE (E) CORP STOP.
7. REMOVE (E) VALVE, VALVE BOX, AND RISER AT MAIN, VERIFY EXISTING FITTING AT MAIN, VERIFY BLIND FLANGE/CAP/PLUG REQUIRED, PREP INSTALLATION SURFACE AS REQUIRED, AND INSTALL (N) BLIND FLANGE/CAP/PLUG WITH GASKETS AND OTHER MATERIALS AS REQUIRED FOR A COMPLETE SEAL.
8. SALVAGE (E) FH.
9. INSTALL SALVAGED (E) FH ON (N) FH LATERAL PER STD DETAIL W-13/C-503.
10. CUT AND PLUG EACH END OF ABANDONED SECTION OF (E) PIPE PER DETAIL 4/C-501.
11. (N) 1" DOMESTIC WATER SERVICE LINE PER STD DETAIL WS-104/C-503 WITH ANGLE STOP AS REQUIRED TO CONNECT TO (E) METER.
12. (N) ARV PER DETAIL 3/C-502.

0 ISSUE FOR BID		NS	NS	2022-11-15
No.	Issue	Checked	Approved	Date
Author	M. GONZALES	Drafting Check	L. HALONEN	Project Manager
Designer	M. GONZALES	Design Check	L. HALONEN	Project Director
				N. STEVENS
				G. WATANABE



Bar is one inch on original size sheet
0 1"



Conditions of Use
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD. This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

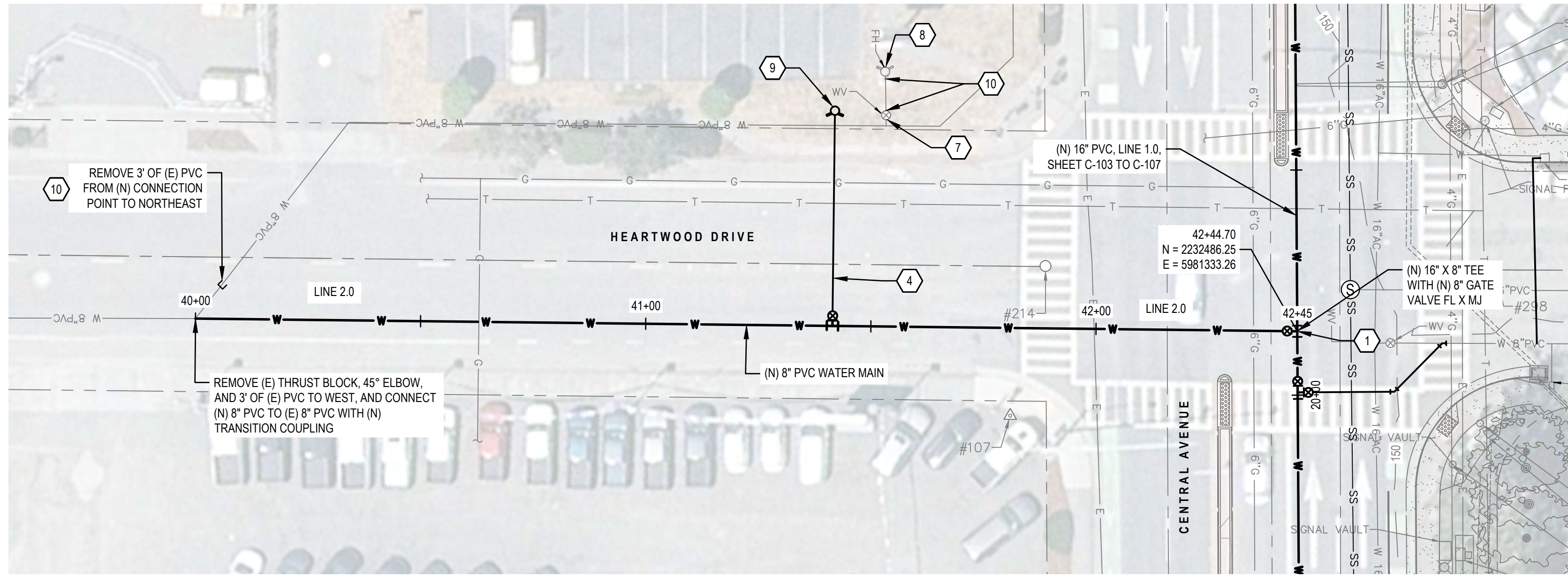


Client **MCKINLEYVILLE COMMUNITY SERVICES DISTRICT**
Project **CENTRAL AVENUE WATER & SEWER REHABILITATION**

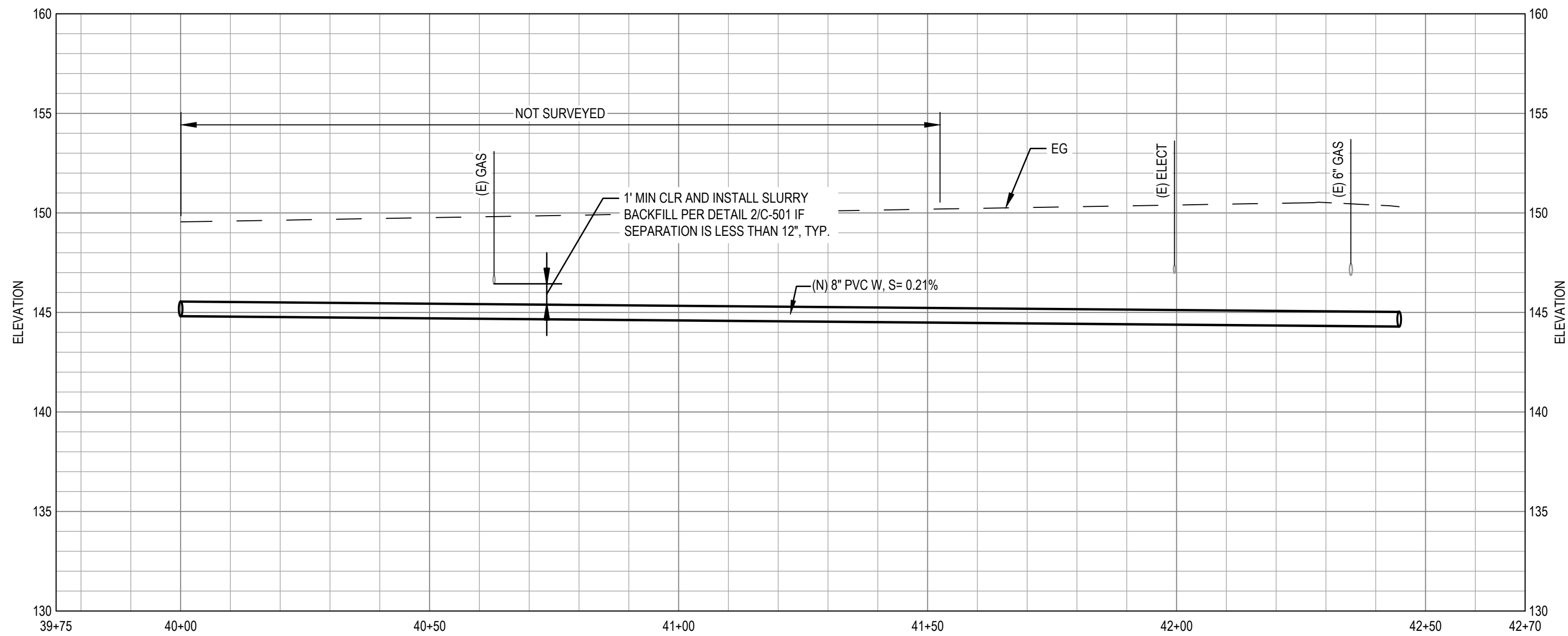
Title **WATER MAIN PLAN AND PROFILE - LINE 1.0, 5 OF 5**

Project No. **12560439** Date **2022-11-15** Scale **AS SHOWN**

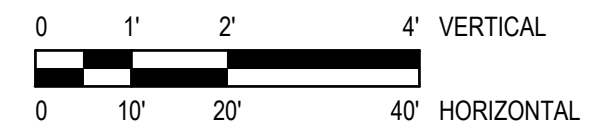
Sheet No. **C-107** Sheet **12 of 18**



WATER PLAN - HEARTWOOD DRIVE



WATER PROFILE - HEARTWOOD DRIVE



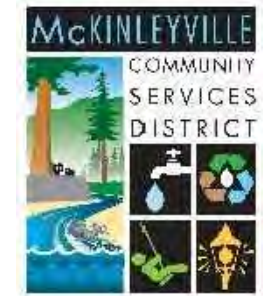
SHEET GENERAL NOTES

1. LOCATION OF EXISTING UTILITIES & STRUCTURES ARE FROM INFORMATION AVAILABLE AT TIME OF DESIGN. EXACT LOCATION AND COMPLETENESS ARE NOT GUARANTEED. CONTRACTOR SHALL NOTIFY THE OWNER AND UNDERGROUND SERVICES ALERT 1-800-227-2600 A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION AND POT HOLE FOR EXACT LOCATION.
2. CONTRACTOR SHALL RESTORE ANY PAVEMENT DAMAGE PER DETAIL 1/C-501.
3. ALL PARKING LOTS, SIDEWALKS, CURBS, ISLANDS, GUTTERS, DRIVEWAYS, FENCES, LANDSCAPING, PAVEMENT STRIPING, AND ALL OTHER ITEMS DISTURBED AS A RESULT OF REQUIRED CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND TO AN AS GOOD OR BETTER CONDITION, AND SHALL BE REPAIRED TO MATCH EXISTING ADJACENT FEATURES.
4. CONTRACTOR TO POTHOLE AND VERIFY (E) PIPE SIZES AND CONNECTIONS AT INTERTIES.
5. NOT ALL TRANSITION COUPLINGS AND FITTINGS SHOWN. CONTRACTOR TO PROVIDE TRANSITION COUPLINGS, INCLUDING BUT NOT LIMITED TO FLANGE COUPLING ADAPTERS AND MECHANICAL JOINT RESTRAINTS, AS REQUIRED TO PROVIDE A COMPLETE AND WORKING SYSTEM.
6. LISTED RESTRAINED LENGTHS ARE MINIMUMS. RESTRAINTS SHALL BE INSTALLED TO NEXT JOINT BEYOND ALL LISTED DISTANCES. RESTRAINTS ARE TO BE INSTALLED THE SPECIFIED LENGTH IN EACH DIRECTION AWAY FROM THE JOINT.
7. NEW WATER MAINS AND WATER SERVICE LINES SHALL BE SEPARATED 10' HORIZONTALLY AND 1' VERTICALLY ABOVE (E) SEWER MAINS PER CCR TITLE 22 SECTION 64572.

SHEET KEYNOTES

1. (N) THRUST BLOCK PER 3/C-501.
2. (N) 5' ± LONG PVC WITH (N) TRANSITION COUPLING TO CONNECT TO (E) ACP, RESTRAINED.
3. (N) MULTI-METER WATER SERVICE LINE PER STD DETAIL WS-107/C-503.
4. (N) 6" FH SERVICE PER STD DETAIL W-13/C-503.
5. DISCONNECT (E) WATER SERVICE LINES FROM METERS, REMOVE FROM METER BOXES, REMOVE METER MANIFOLD (IF MULTI-METER SERVICE), PLUG AND ABANDON (E) SERVICE LINES.
6. LOCATE AND DISCONNECT (E) SERVICE LINE FROM (E) MAIN AND CLOSE (E) CORP STOP.
7. REMOVE (E) VALVE, VALVE BOX, AND RISER AT MAIN, VERIFY EXISTING FITTING AT MAIN, VERIFY BLIND FLANGE/CAP/PLUG REQUIRED, PREP INSTALLATION SURFACE AS REQUIRED, AND INSTALL (N) BLIND FLANGE/CAP/PLUG WITH GASKETS AND OTHER MATERIALS AS REQUIRED FOR A COMPLETE SEAL.
8. SALVAGE (E) FH.
9. INSTALL SALVAGED (E) FH ON (N) FH LATERAL PER STD DETAIL W-13/C-503.
10. CUT AND PLUG EACH END OF ABANDONED SECTION OF (E) PIPE PER DETAIL 4/C-501.
11. (N) 1" DOMESTIC WATER SERVICE LINE PER STD DETAIL WS-104/C-503 WITH ANGLE STOP AS REQUIRED TO CONNECT TO (E) METER.
12. (N) ARV PER DETAIL 3/C-502.

0 ISSUE FOR BID		NS	NS	2022-11-15
No.	Issue	Checked	Approved	Date
Author	M. GONZALES	Drafting Check	L. HALONEN	Project Manager
Designer	M. GONZALES	Design Check	L. HALONEN	Project Director
			N. STEVENS	G. WATANABE



Bar is one inch on original size sheet
0 1"



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330



Client **MCKINLEYVILLE COMMUNITY SERVICES DISTRICT**
Project **CENTRAL AVENUE WATER & SEWER REHABILITATION**

Title **WATER MAIN PLAN AND PROFILE - LINE 2.0**

Project No. **12560439** Date **2022-11-15** Scale **AS SHOWN**

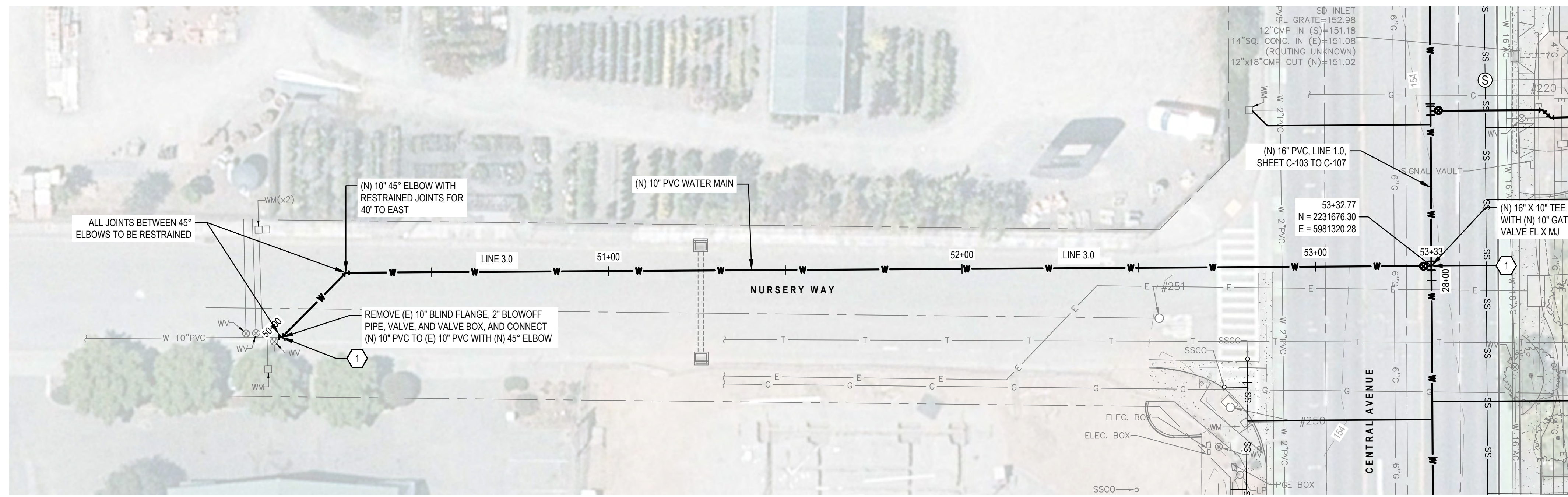
Sheet No. **C-108** Sheet **13 of 18**

SHEET GENERAL NOTES

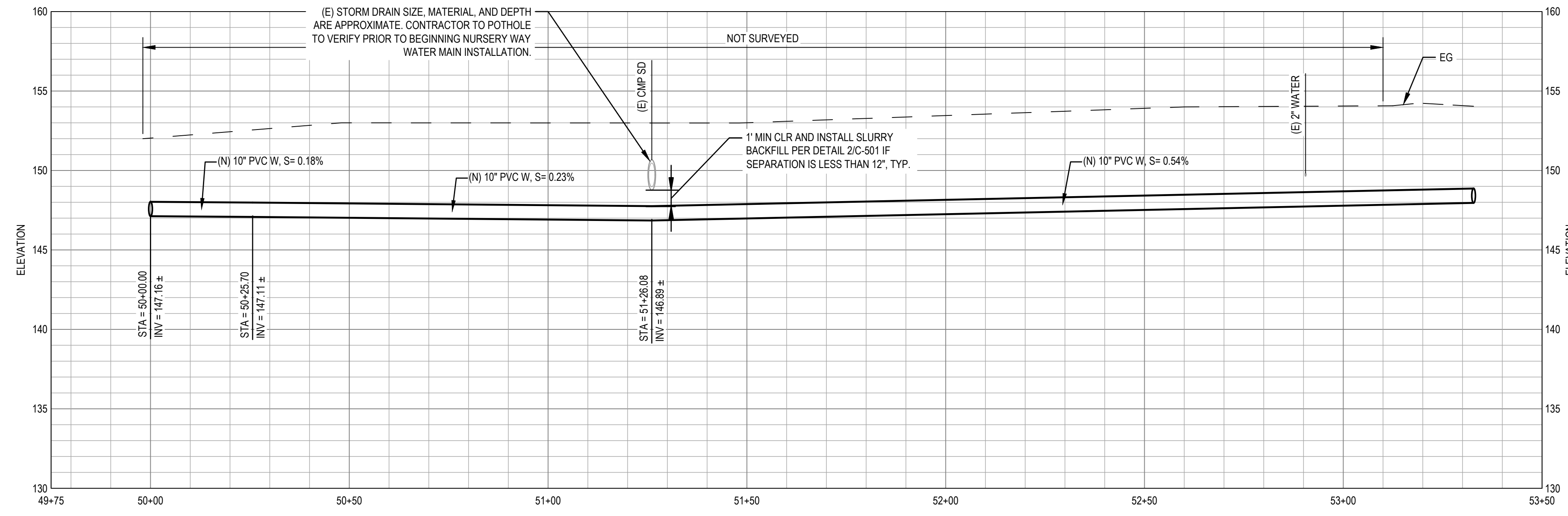
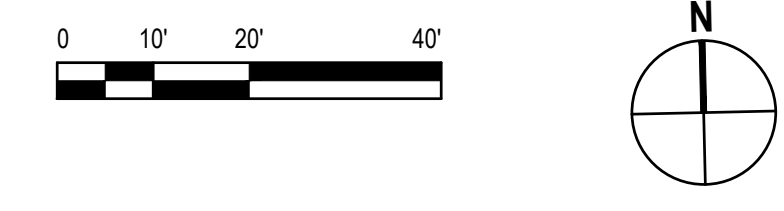
1. LOCATION OF EXISTING UTILITIES & STRUCTURES ARE FROM INFORMATION AVAILABLE AT TIME OF DESIGN. EXACT LOCATION AND COMPLETENESS ARE NOT GUARANTEED. CONTRACTOR SHALL NOTIFY THE OWNER AND UNDERGROUND SERVICES ALERT 1-800-227-2600 A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION AND POTHOLE FOR EXACT LOCATION.
2. CONTRACTOR SHALL RESTORE ANY PAVEMENT DAMAGE PER DETAIL 1/C-501.
3. ALL PARKING LOTS, SIDEWALKS, CURBS, ISLANDS, GUTTERS, DRIVEWAYS, FENCES, LANDSCAPING, PAVEMENT STRIPING, AND ALL OTHER ITEMS DISTURBED AS A RESULT OF REQUIRED CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND TO AN AS GOOD OR BETTER CONDITION, AND SHALL BE REPAIRED TO MATCH EXISTING ADJACENT FEATURES.
4. CONTRACTOR TO POTHOLE AND VERIFY (E) PIPE SIZES AND CONNECTIONS AT INTERTIES.
5. NOT ALL TRANSITION COUPLINGS AND FITTINGS SHOWN. CONTRACTOR TO PROVIDE TRANSITION COUPLINGS, INCLUDING BUT NOT LIMITED TO FLANGE COUPLING ADAPTERS AND MECHANICAL JOINT RESTRAINTS, AS REQUIRED TO PROVIDE A COMPLETE AND WORKING SYSTEM.
6. LISTED RESTRAINED LENGTHS ARE MINIMUMS. RESTRAINTS SHALL BE INSTALLED TO NEXT JOINT BEYOND ALL LISTED DISTANCES. RESTRAINTS ARE TO BE INSTALLED THE SPECIFIED LENGTH IN EACH DIRECTION AWAY FROM THE JOINT.
7. NEW WATER MAINS AND WATER SERVICE LINES SHALL BE SEPARATED 10' HORIZONTALLY AND 1' VERTICALLY ABOVE (E) SEWER MAINS PER CCR TITLE 22 SECTION 64572.

SHEET KEYNOTES

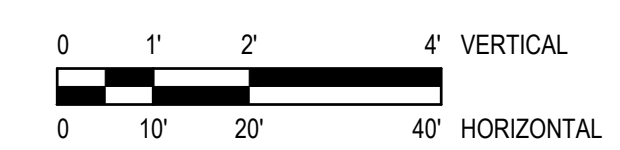
1. (N) THRUST BLOCK PER 3/C-501.
2. (N) 5' ± LONG PVC WITH (N) TRANSITION COUPLING TO CONNECT TO (E) ACP, RESTRAINED.
3. (N) MULTI-METER WATER SERVICE LINE PER STD DETAIL WS-107/C-503.
4. (N) 6" FH SERVICE PER STD DETAIL W-13/C-503.
5. DISCONNECT (E) WATER SERVICE LINES FROM METERS, REMOVE FROM METER BOXES, REMOVE METER MANIFOLD (IF MULTI-METER SERVICE), PLUG AND ABANDON (E) SERVICE LINES.
6. LOCATE AND DISCONNECT (E) SERVICE LINE FROM (E) MAIN AND CLOSE (E) CORP STOP.
7. REMOVE (E) VALVE, VALVE BOX, AND RISER AT MAIN, VERIFY EXISTING FITTING AT MAIN, VERIFY BLIND FLANGE/CAP/PLUG REQUIRED, PREP INSTALLATION SURFACE AS REQUIRED, AND INSTALL (N) BLIND FLANGE/CAP/PLUG WITH GASKETS AND OTHER MATERIALS AS REQUIRED FOR A COMPLETE SEAL.
8. SALVAGE (E) FH.
9. INSTALL SALVAGED (E) FH ON (N) FH LATERAL PER STD DETAIL W-13/C-503.
10. CUT AND PLUG EACH END OF ABANDONED SECTION OF (E) PIPE PER DETAIL 4/C-501.
11. (N) 1" DOMESTIC WATER SERVICE LINE PER STD DETAIL WS-104/C-503 WITH ANGLE STOP AS REQUIRED TO CONNECT TO (E) METER.
12. (N) ARV PER DETAIL 3/C-502.



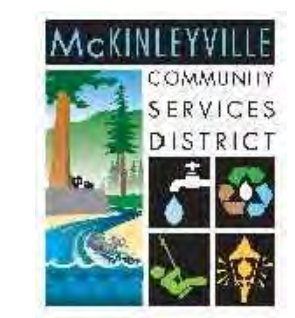
WATER PLAN - NURSERY WAY



WATER PROFILE - NURSERY WAY



0 ISSUE FOR BID		NS	NS	2022-11-15
No.	Issue	Checked	Approved	Date
Author	M. GONZALES	Drafting Check	N. STEVENS	Project Manager
Designer	M. GONZALES	Design Check	N. STEVENS	Project Director
			G. WATANABE	



Bar is one inch on original size sheet
0 1"



Conditions of Use
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD. This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

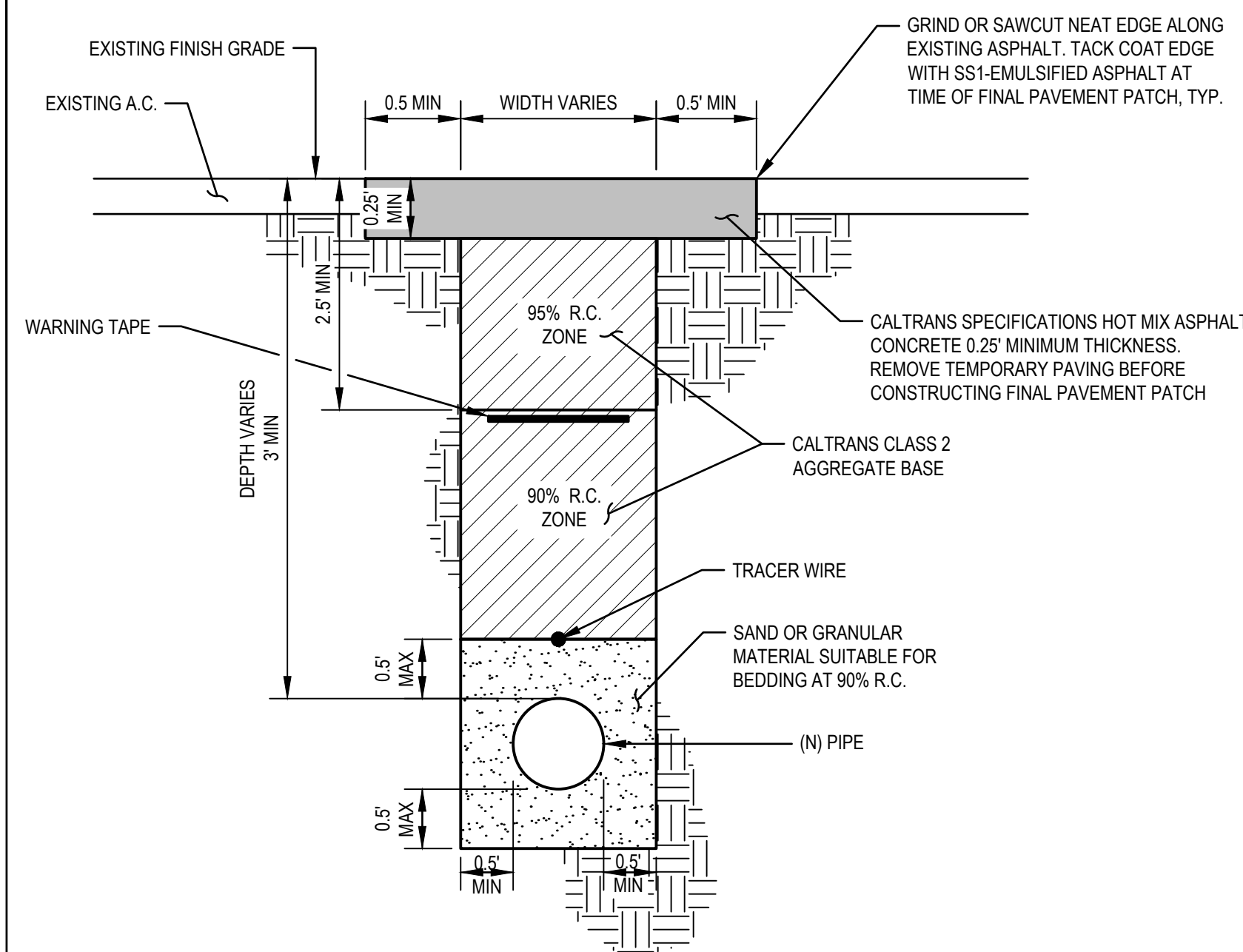


Client **MCKINLEYVILLE COMMUNITY SERVICES DISTRICT**
Project **CENTRAL AVENUE WATER & SEWER REHABILITATION**

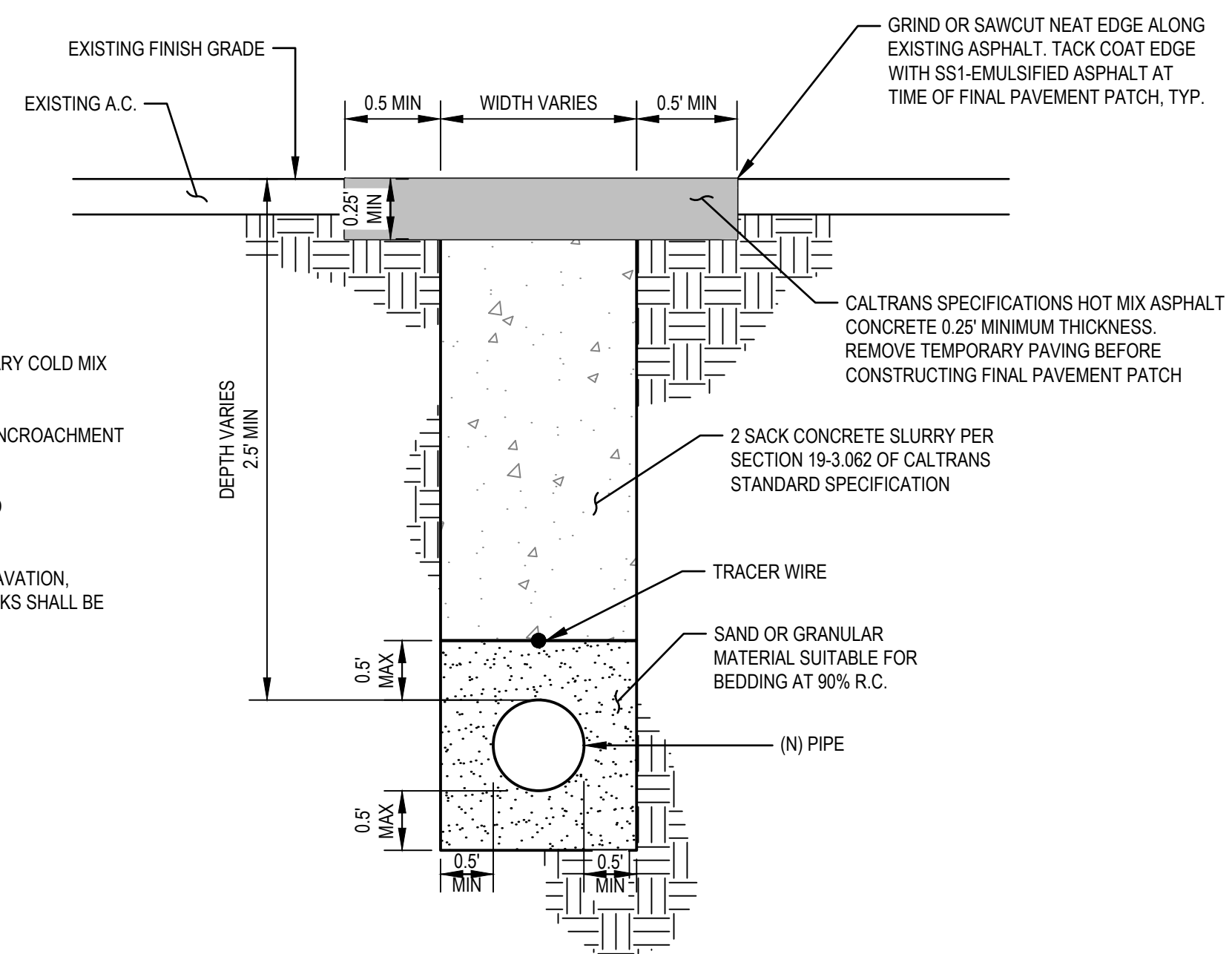
Title **WATER MAIN PLAN AND PROFILE - LINE 3.0**

Project No. **12560439** Date **2022-11-15** Scale **AS SHOWN**

Sheet No. **C-109** Sheet **14 of 18**



TYPE I TRENCH DETAIL - AGGREGATE BASE BACKFILL

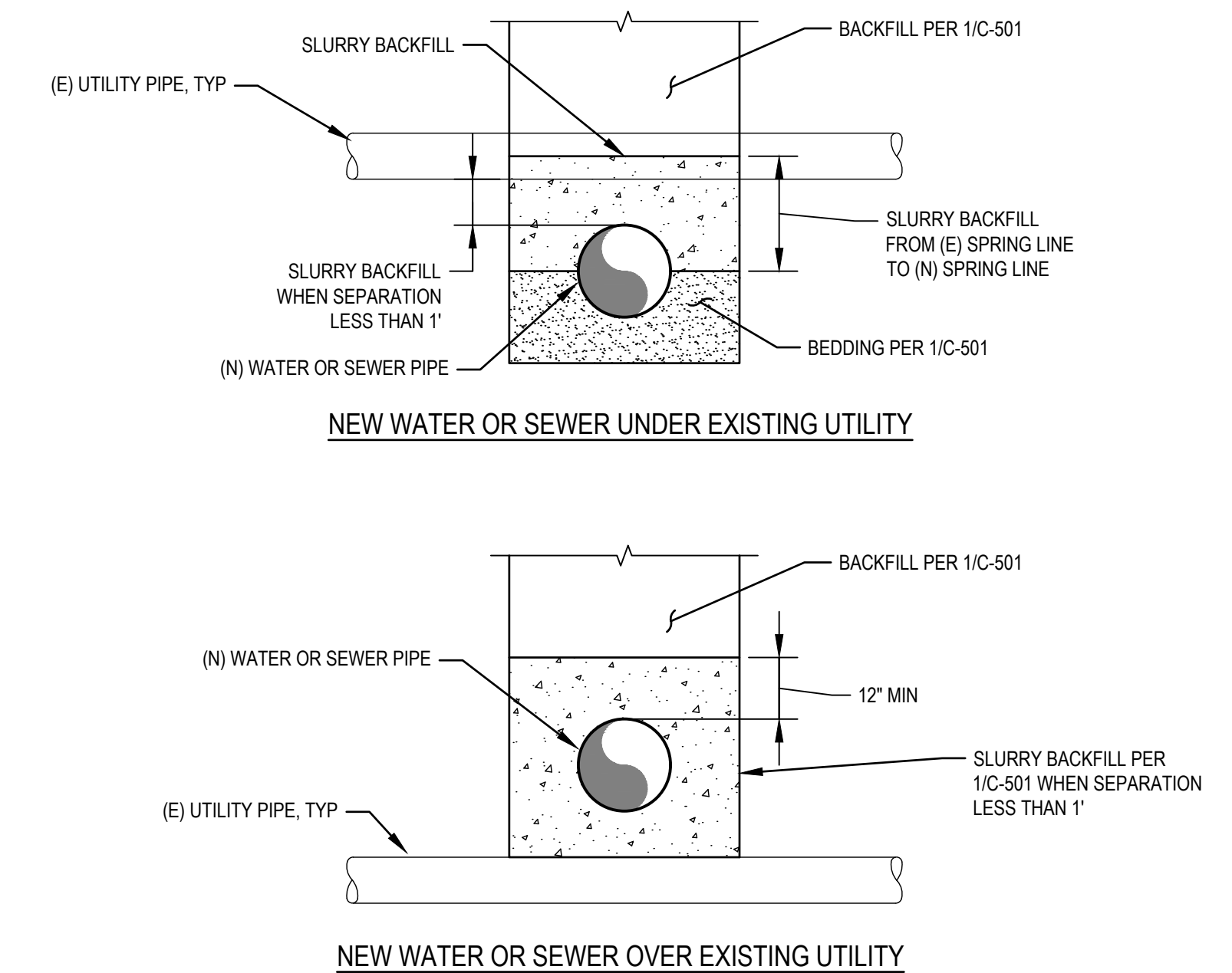


TYPE II TRENCH DETAIL - CONCRETE SLURRY BACKFILL

NOTES:

1. THE TRENCH SHALL HAVE AT LEAST 0.25 FEET OF TEMPORARY COLD MIX ASPHALT BEFORE OPENING ROAD TO TRAFFIC.
2. FOR ITEMS NOT SHOWN SEE ISSUED HUMBOLDT COUNTY ENCROACHMENT PERMIT (TO BE OBTAINED BY CONTRACTOR).
3. ALL MATERIALS SHALL COMPLY WITH CALTRANS STANDARD SPECIFICATIONS, CURRENT EDITION.
4. IF GROUNDWATER IS ENCOUNTERED DURING TRENCH EXCAVATION, ENGINEER AND THE COUNTY DEPARTMENT OF PUBLIC WORKS SHALL BE CONSULTED FOR SITE SPECIFIC CORRECTIVE MEASURES.

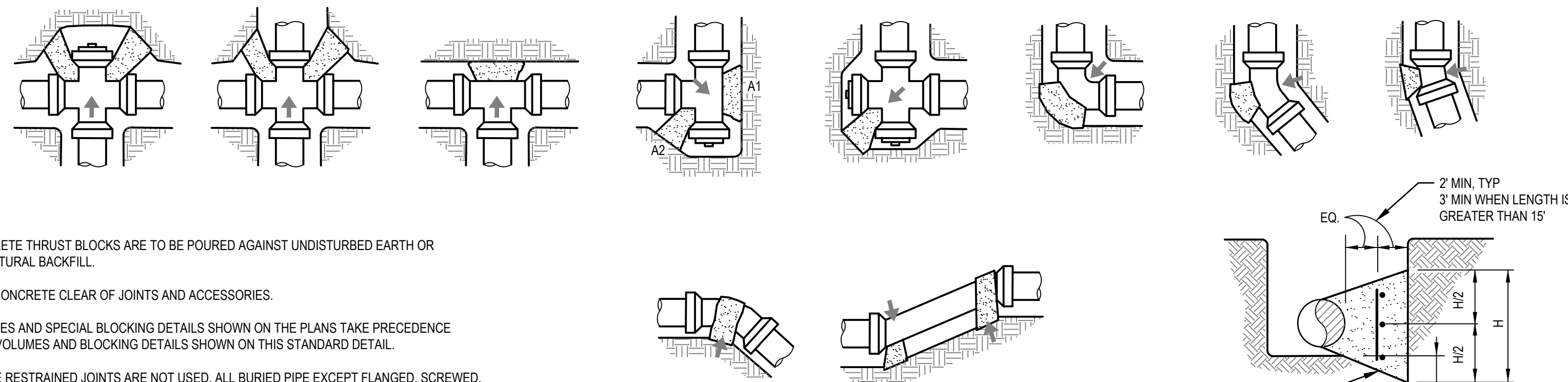
1 TYPICAL TRENCH DETAIL
SCALE: NTS



NOTES:

1. CONTRACTOR TO COORDINATE WITH UTILITY OWNER PRIOR TO PERFORMING SLURRY BACKFILL.
2. SLURRY BACKFILL SHALL EXTEND 5' MIN BEYOND EACH SIDE OF (E) UTILITY PIPE CROSSING IN (N) UTILITY TRENCH.
3. UTILITY CROSSINGS SHALL CONFORM TO WATER MAIN SEPARATION CRITERIA SEPARATION CRITERIA, CALIFORNIA CODE OF REGULATIONS, TITLE 22 SECTION 64572. THIS INCLUDES THAT (N) WATER MAINS SHALL BE INSTALLED A MIN. OF 1' ABOVE (E) SEWER MAINS, AND THAT PARALLEL WATER AND SEWER MAINS SHALL BE SEPARATED BY A MIN. OF 10' HORIZONTALLY.

2 UTILITY CROSSING
SCALE: NTS



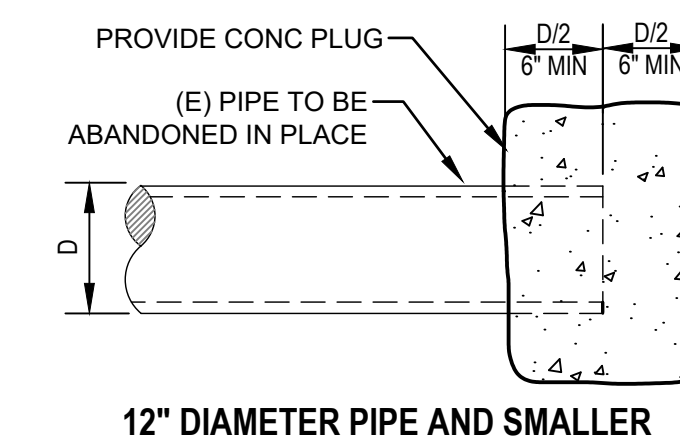
NOTES:

1. CONCRETE THRUST BLOCKS ARE TO BE POURED AGAINST UNDISTURBED EARTH OR STRUCTURAL BACKFILL.
2. KEEP CONCRETE CLEAR OF JOINTS AND ACCESSORIES.
3. VOLUMES AND SPECIAL BLOCKING DETAILS SHOWN ON THE PLANS TAKE PRECEDENCE OVER VOLUMES AND BLOCKING DETAILS SHOWN ON THIS STANDARD DETAIL.
4. WHERE RESTRAINED JOINTS ARE NOT USED, ALL BURIED PIPE EXCEPT FLANGED, SCREWED, SOLVENT WELDED PVC OR WELDED STEEL PIPE SPECIFIED TO BE PRESSURE TESTED SHALL BE PROVIDED WITH CONCRETE THRUST BLOCKS AT ALL DIRECTIONAL CHANGES UNLESS OTHERWISE NOTED.
5. THRUST BLOCKS SHALL NOT BE LOCATED OR SIZED TO ENCASE ADJACENT PIPES OR FITTINGS.
6. THE SIZE AND WEIGHT OF ALL UPLIFT THRUST BLOCKS SHALL BE AS DETERMINED BY ENGINEER.
7. THE BEARING AREAS ARE BASED ON TEST PRESSURE OF 150 PSI AND ALLOWABLE SOIL BEARING STRESS OF 1000 POUNDS PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION:
BEARING AREA = (TEST PRESSURE / 150) x (1000 / SOIL BEARING STRESS) x (TABLE VALUE)
8. CONTRACTOR TO PROVIDE ALL COMPONENTS.
9. ALL PIPE AND FITTINGS SHALL BE WRAPPED IN POLYETHYLENE TO PREVENT CORROSION AND CONCRETE ADHESION.
10. SEE WS-102 / C-504 FOR THRUST BLOCK REQUIREMENTS FOR VERTICAL BENDS.

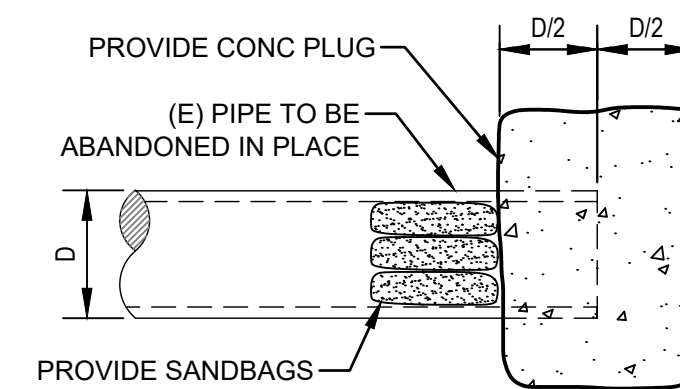
BEARING AREA OF THRUST BLOCK IN SQ. FT.

PIPE SIZE	TEE, WYE, PLUG OR CAP	90° BEND PLUGGED CROSS	TEE PLUGGED			45° BEND	22 1/2° BEND	11 1/4° BEND	PIPE SIZE	TEE, WYE, PLUG OR CAP	90° BEND PLUGGED CROSS	TEE PLUGGED			45° BEND	22 1/2° BEND	11 1/4° BEND
			A1	A2	A1							A2	A1	A2			
4	1.5	2	2	1.5	1.5	1	1	18	19	27	27	19	15	8	6		
6	3	4.5	4.5	3	2.5	1.5	1	20	24	34	34	24	18	10	8		
8	5	7	7	5	4	2	1	22	29	41	41	29	22	12	10		
10	8	12	12	8	7	3	2	24	34	48	48	34	26.5	14	12		
12	12	17	17	12	10	5	3	32	39	55	55	39	31.5	16	14		
16	15	21.5	21.5	15	12	6	4										

3 STANDARD THRUST BLOCK DETAILS
SCALE: NTS



12" DIAMETER PIPE AND SMALLER



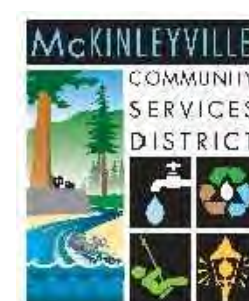
14" DIAMETER PIPE AND LARGER

NOTES:

1. PIPE PLUGS SHALL BE INSTALLED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
2. SHALL BE INSPECTED BY THE OWNER'S REPRESENTATIVE BEFORE COVERING.

4 PLUG AND ABANDON EXISTING WATER MAIN
SCALE: NTS

0 ISSUE FOR BID		NS	NS	2022-11-15
No.	Issue	Checked	Approved	Date
Author	M. GONZALES	Drafting Check	L. HALONEN	Project Manager
Designer	M. GONZALES	Design Check	L. HALONEN	Project Director
			G. WATANABE	



Bar is one inch on original size sheet
0 1"



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330

Conditions of Use

This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD. This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



www.ghd.com

Client **MCKINLEYVILLE COMMUNITY SERVICES DISTRICT**
Project **CENTRAL AVENUE WATER & SEWER REHABILITATION**

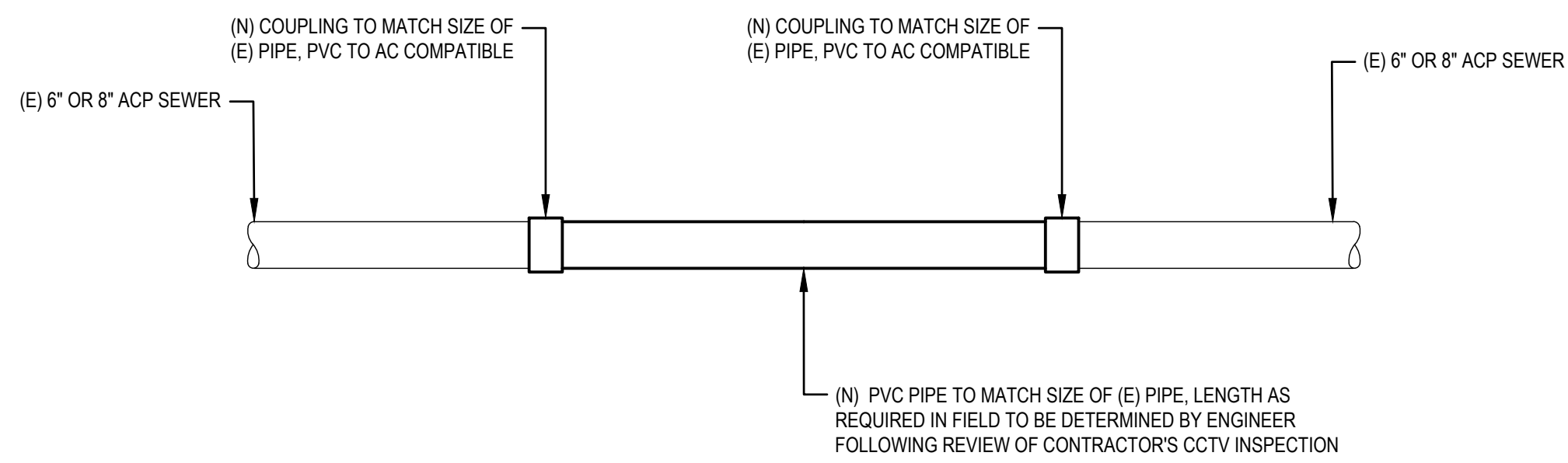
Title **CIVIL DETAILS 1 OF 4**

Project No. **12560439**

Date **2022-11-15**

Scale **AS SHOWN**

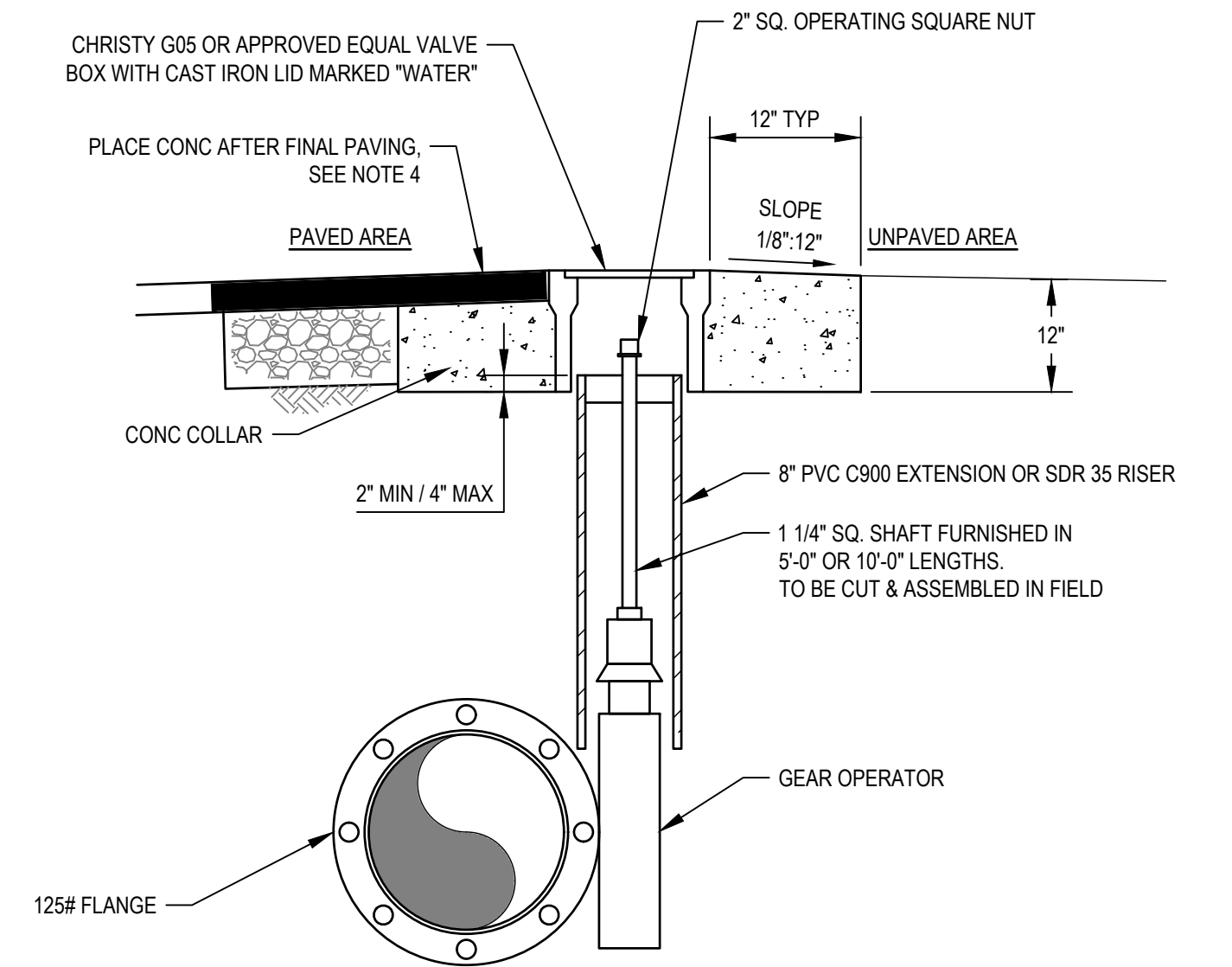
Sheet No. **C-501**
Sheet **15 of 18**



NOTE:

- BACKFILL OPEN CUT SEWER SECTION REPAIR PER TRENCH DETAIL 1/C-501.

1 TYPICAL OPEN CUT SEWER SECTION REPAIR
SCALE: NTS



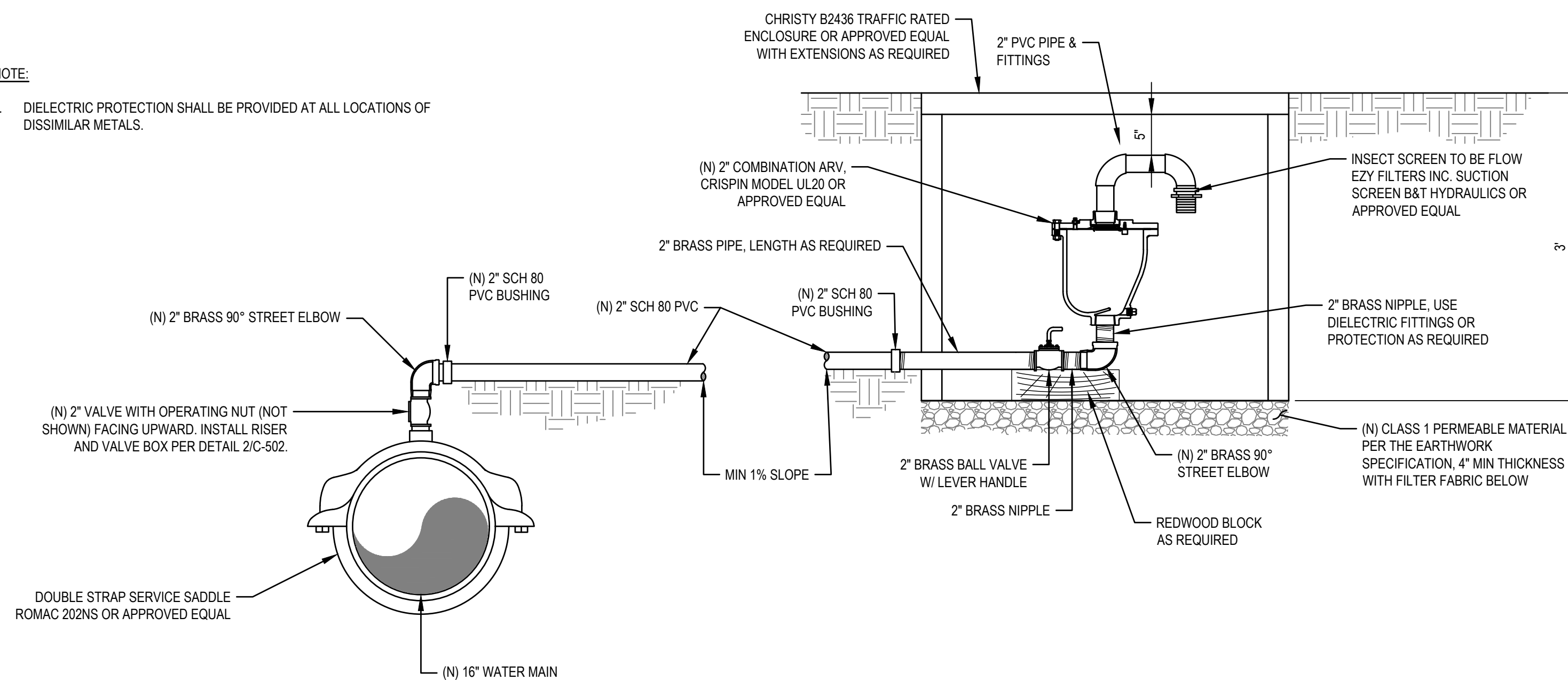
NOTES:

- VALVE BOX & LID SHALL BE RATED FOR AASHTO H-20 LOADINGS AS MANUFACTURED BY CHRISTY (NO. G05) OR APPROVED EQUAL.
- ALL LIDS & GRADE RINGS SHALL HAVE MACHINED SEATING SURFACES.
- EXTENSIONS SHALL BE AS MANUFACTURED FOR THE VALVE BOX SUPPLIED OR HDPE OR PVC PIPE OF CORRECT SIZE CAN BE USED.
- VALVE BOX IS PLACED AFTER ROADWAY IS PAVED, CONSTRUCT CONC BASE TO TOP OF PAVEMENT.

2 STANDARD BUTTERFLY VALVE INSTALLATION
NOT TO SCALE

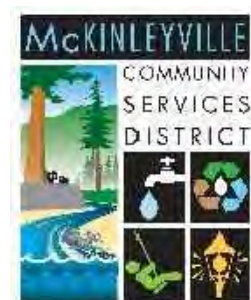
NOTE:

- DIELECTRIC PROTECTION SHALL BE PROVIDED AT ALL LOCATIONS OF DISSIMILAR METALS.



3 COMBINATION AIR & VACUUM RELEASE VALVE
SCALE: NTS

0 ISSUE FOR BID		NS	NS	2022-11-15
No.	Issue	Checked	Approved	Date
Author	M. GONZALES	Drafting Check	L. HALONEN	Project Manager
Designer	M. GONZALES	Design Check	L. HALONEN	Project Director
				N. STEVENS
				G. WATANABE



Bar is one inch on original size sheet
0 1"



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330

Conditions of Use

This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD. This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



Client **MCKINLEYVILLE COMMUNITY SERVICES DISTRICT**
Project **CENTRAL AVENUE WATER & SEWER REHABILITATION**

Title **CIVIL DETAILS 2 OF 4**

Project No. **12560439** Date **2022-11-15** Scale **AS SHOWN**

Size **ANSI D**
Sheet No. **C-502** Sheet **16 of 18**

I. MATERIAL SPECIFICATIONS:

- BEDDING MATERIAL:
 - PEA GRAVEL - CONFORMING TO CALTRANS SECTION 68-2.02F, PERMEABLE MATERIAL, CLASS 1, TYPE B.
 - CL 2 AB - CONFORMING TO CALTRANS SECTION 26-1.02, CLASS 2 AGGREGATE BASE, 3/4" MAXIMUM.
 - PERMEABLE - CONFORMING TO CALTRANS SECTION 68-2.02F, CLASS 2 PERMEABLE MATERIAL.
- AGGREGATE BASE:
 - CL 2 AB - CONFORMING TO CALTRANS SECTION 26-1.02, CLASS 2 AGGREGATE BASE, 3/4" MAXIMUM.
- DRAIN ROCK:
 - NO. 3 ROCK - SHALL BE A WASHED ROCK OF THE NOMINAL SIZE DESIGNATED AS 1" TO 2".
- GABION ROCK:
 - GABION ROCK - SHALL BE A WASHED OR NON-WASHED ROCK OF THE NOMINAL SIZE DESIGNATED AS 4" TO 12".
- NATIVE MATERIAL:
 - NATIVE MATERIAL - NATIVE MATERIAL USED AS BACKFILL SHALL BE FREE OF ORGANIC MATTER, REFUSE OR OTHER UNSATISFACTORY MATERIALS, STONES, OR LUMPS GREATER THAN OR EXCEEDING 3" IN GREATEST DIMENSION.
- SHALE MATERIAL:
 - SHALE MATERIAL - SHALE MATERIAL SHALL MEET THE QUALITY REQUIREMENTS FOR CL 2 AB AND CONTAIN ENOUGH FINE MATERIALS TO BE ABLE TO BE COMPACTED TO 95% RC IN A TIGHT SUSTAINABLE MATRIX.

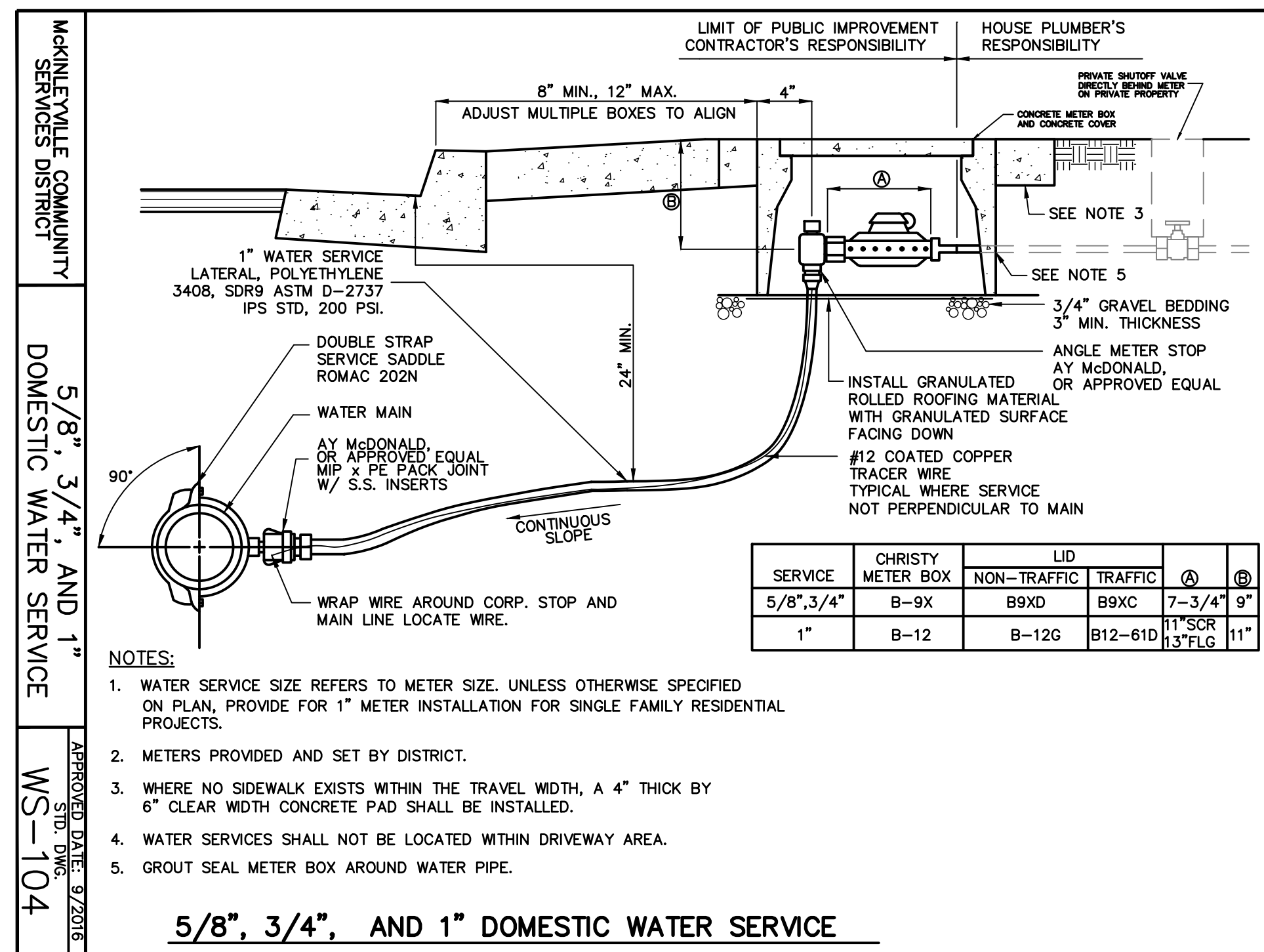
II. COMPACTION REQUIREMENTS:

- BEDDING MATERIAL:
 - PEA GRAVEL SHALL EITHER BE HAND TAMPED UNDER AND AT THE SIDES OF THE PIPES IN LIFTS NOT GREATER THAN 6" OR SHAPED AND COMPACTED PRIOR TO PIPE INSTALLATION.
 - CL 2 AB SHALL MEET THE ABOVE REQUIREMENTS AND SHALL ADDITIONALLY BE COMPACTED UNDER THE PIPE TO 90% RC AND UP TO THE SPRING LINE OF THE PIPE TO 90% RC IN TWO SEPARATE LIFTS RESULTING IN A FIRM UNYIELDING BEDDED TRENCH. JETTING SHALL NOT BE ALLOWED.
- AGGREGATE BASE:
 - AGGREGATE BASE SHALL BE COMPACTED WITH MECHANICAL HAND OPERATED, OR EQUIPMENT MOUNTED OR TOWED METHODS TO ACHIEVE THE REQUIRED COMPACTION. IN ANY EVENT, COMPACTION METHODS SHALL NOT DAMAGE THE PIPE, EXCEED THE LOADING CAPACITY OF THE PIPE, OR RESULT IN A CHANGE TO THE DESIGN PIPE SLOPE REQUIRED OR DEFLECTION UNITS. JETTING SHALL NOT BE ALLOWED.
- DRAIN ROCK:
 - DRAIN ROCK SHALL BE CONSOLIDATED WITH A SURFACE VIBRATOR.
- SHALE MATERIAL:
 - SHALE SHALL MEET THE COMPACTION REQUIREMENTS FOR CL 2 AB.
- NATIVE MATERIAL:
 - NATIVE MATERIAL COMPACTED TO 90% RC SHALL MEET THE COMPACTION REQUIREMENTS FOR CL 2 AB. NATIVE MATERIAL COMPACTED TO LESS THAN 90% RC MAY BE COMPACTED BY WHEEL ROLLING.

III. GENERAL NOTE:

- IN CASES WHERE REQUIREMENTS IN THIS DETAIL CONFLICT WITH REQUIREMENTS IN HUMBOLDT COUNTY ENCROACHMENT PERMIT, ENCROACHMENT PERMIT SHALL GOVERN.

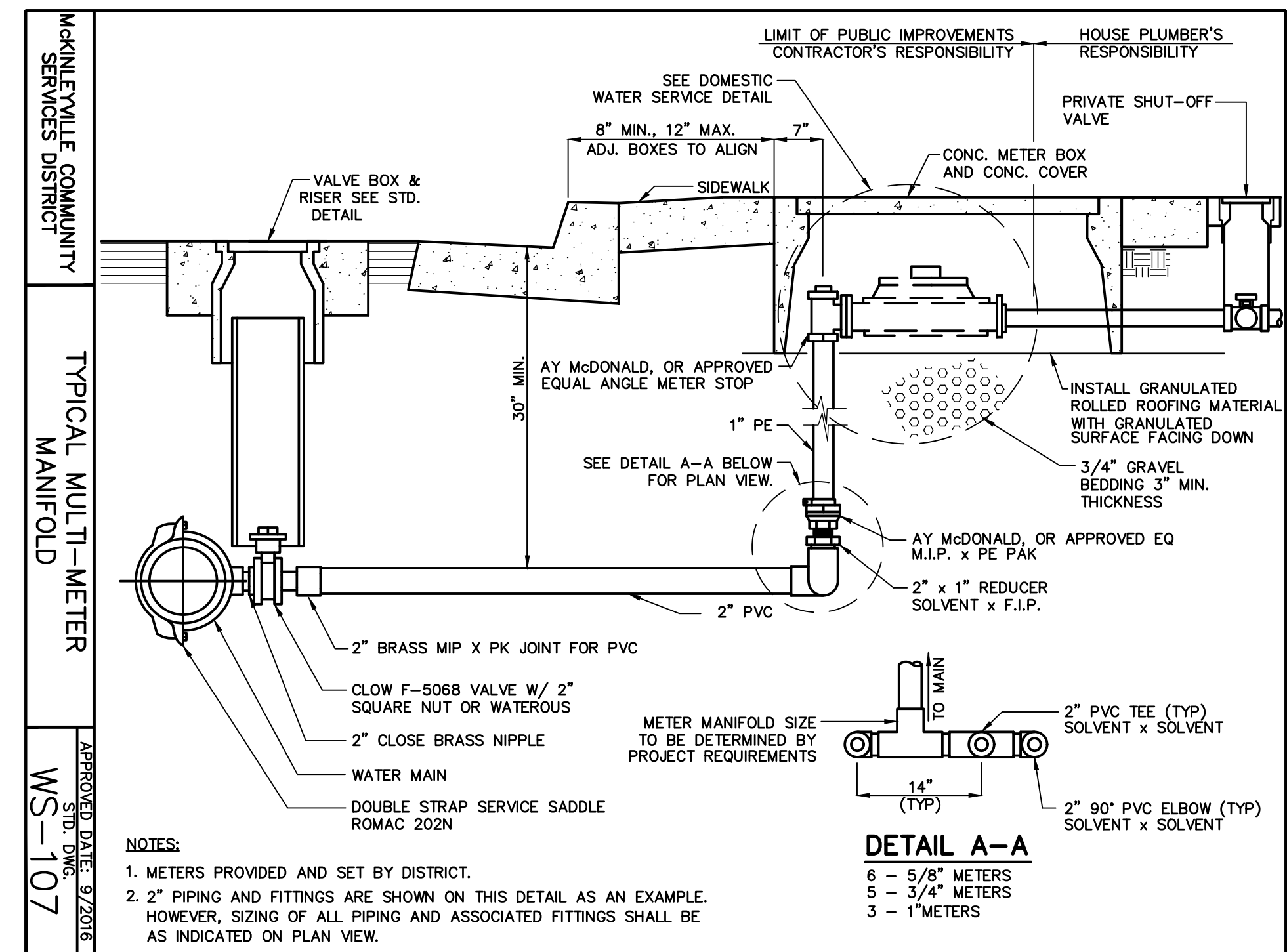
MCKINLEYVILLE COMMUNITY SERVICES DISTRICT WATER AND SEWER STANDARD TRENCH DETAIL NOTES APPROVED DATE: 9/2018 STD. DWG. WS-100B



SERVICE	CHRISTY METER BOX	LID	TRAFFIC	④	⑤
5/8", 3/4"	B-9X	B9XD	B9XC	7-3/4"	9"
1"	B-12	B-12G	B12-61D	11" SCR	11"

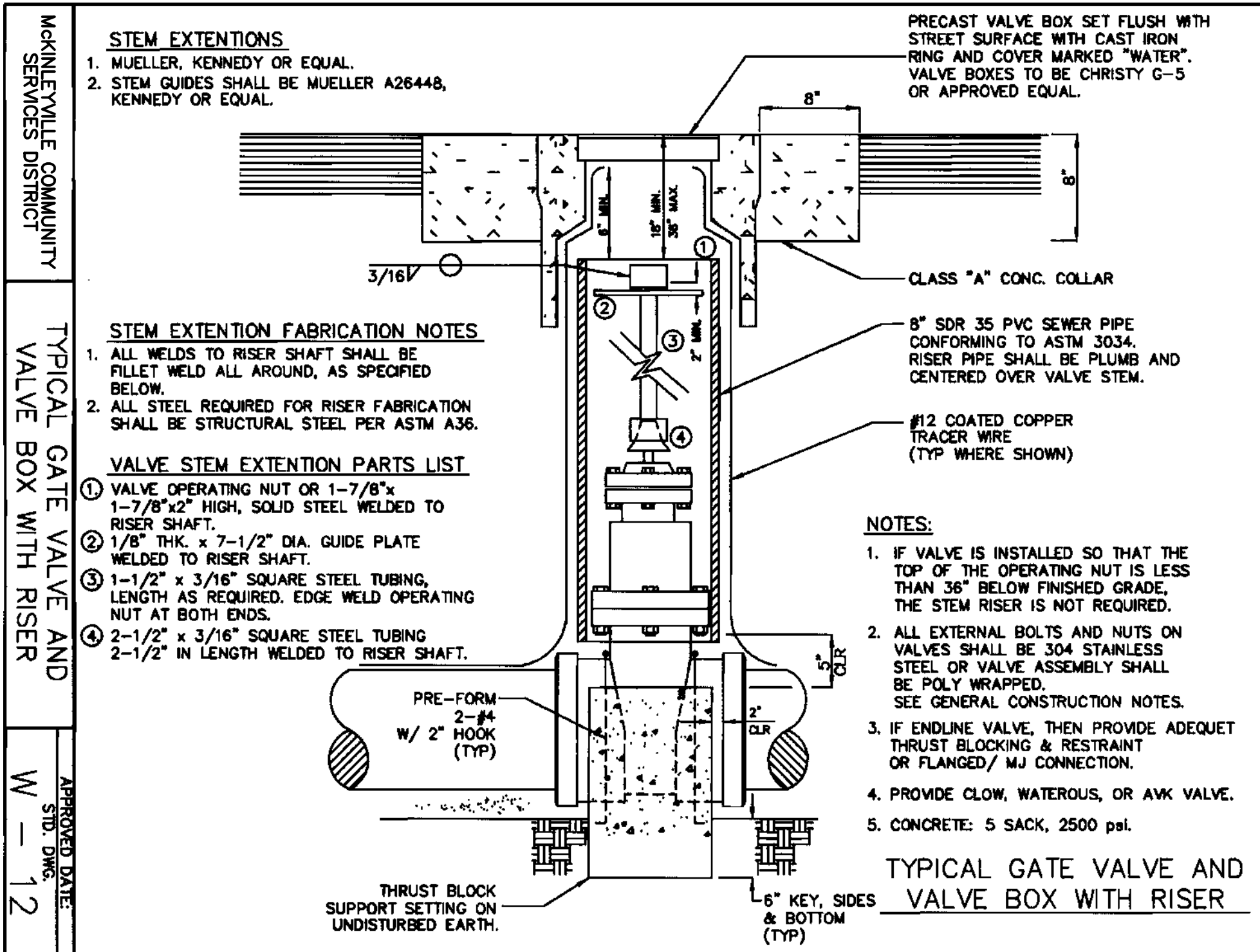
- NOTES:
- WATER SERVICE SIZE REFERS TO METER SIZE. UNLESS OTHERWISE SPECIFIED ON PLAN, PROVIDE FOR 1" METER INSTALLATION FOR SINGLE FAMILY RESIDENTIAL PROJECTS.
 - METERS PROVIDED AND SET BY DISTRICT.
 - WHERE NO SIDEWALK EXISTS WITHIN THE TRAVEL WIDTH, A 4" THICK BY 6" CLEAR WIDTH CONCRETE PAD SHALL BE INSTALLED.
 - WATER SERVICES SHALL NOT BE LOCATED WITHIN DRIVEWAY AREA.
 - GROUT SEAL METER BOX AROUND WATER PIPE.

5/8", 3/4", AND 1" DOMESTIC WATER SERVICE



- NOTES:
- METERS PROVIDED AND SET BY DISTRICT.
 - 2" PIPING AND FITTINGS ARE SHOWN ON THIS DETAIL AS AN EXAMPLE. HOWEVER, SIZING OF ALL PIPING AND ASSOCIATED FITTINGS SHALL BE AS INDICATED ON PLAN VIEW.

DETAIL A-A

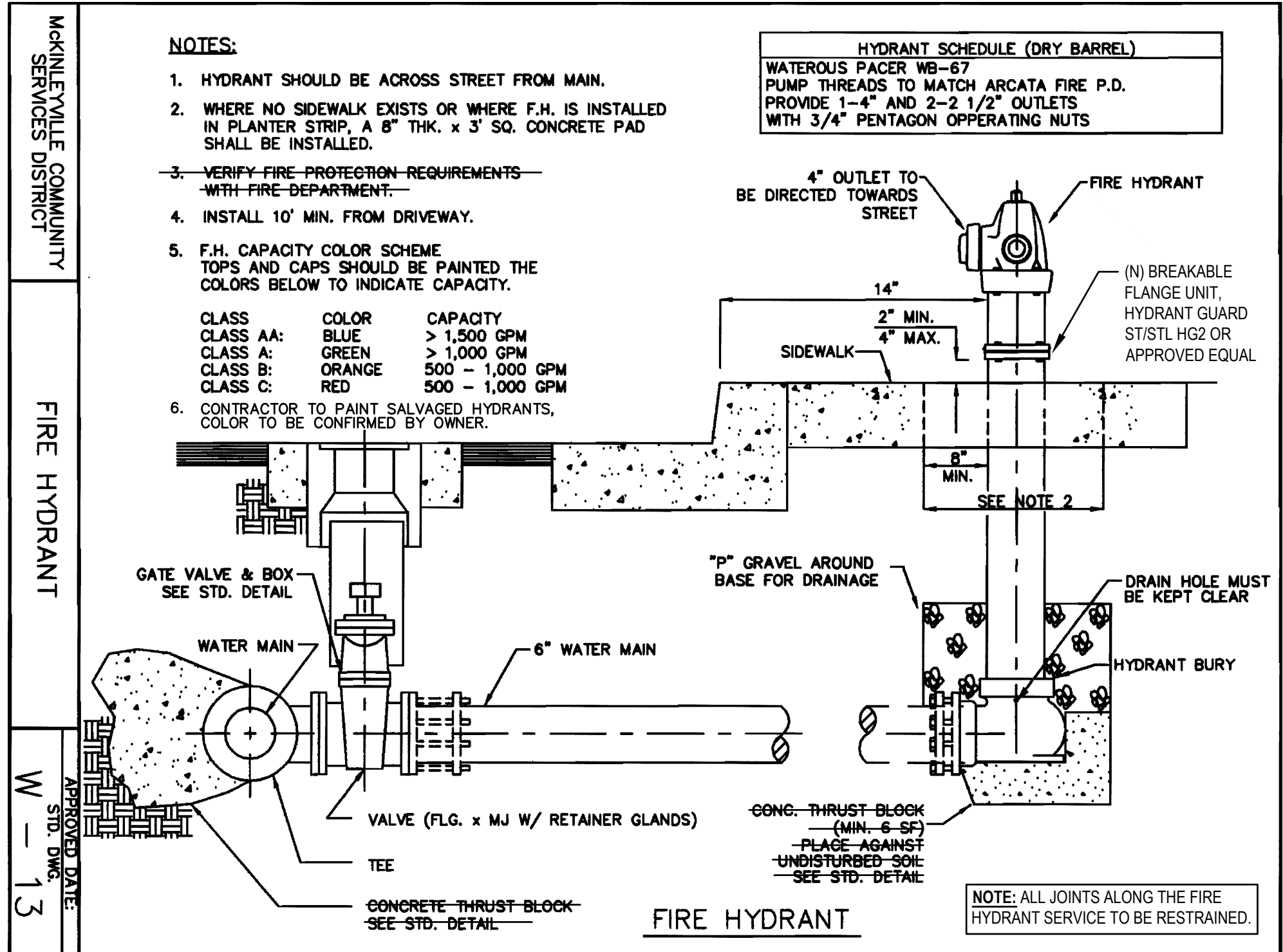


- STEM EXTENSIONS
- MUELLER, KENNEDY OR EQUAL.
 - STEM GUIDES SHALL BE MUELLER A26448, KENNEDY OR EQUAL.
- CLASS "A" CONC. COLLAR
- 8" SDR 35 PVC SEWER PIPE CONFORMING TO ASTM 3034. RISER PIPE SHALL BE PLUMB AND CENTERED OVER VALVE STEM.
- #12 COATED COPPER TRACER WIRE (TYP WHERE SHOWN)
- THRUST BLOCK SUPPORT SETTING ON UNDISTURBED EARTH.
- 6" KEY, SIDES & BOTTOM (TYP)

- STEM EXTENSION FABRICATION NOTES
- ALL WELDS TO RISER SHAFT SHALL BE RILLET WELD ALL AROUND, AS SPECIFIED BELOW.
 - ALL STEEL REQUIRED FOR RISER FABRICATION SHALL BE STRUCTURAL STEEL PER ASTM A36.
- VALVE STEM EXTENSION PARTS LIST
- VALVE OPERATING NUT OR 1-7/8" x 1-7/8" x 2" HIGH, SOLID STEEL WELDED TO RISER SHAFT.
 - 1/8" THK. x 7-1/2" DIA. GUIDE PLATE WELDED TO RISER SHAFT.
 - 1-1/2" x 3/16" SQUARE STEEL TUBING, LENGTH AS REQUIRED. EDGE WELD OPERATING NUT AT BOTH ENDS.
 - 2-1/2" x 3/16" SQUARE STEEL TUBING 2-1/2" IN LENGTH WELDED TO RISER SHAFT.

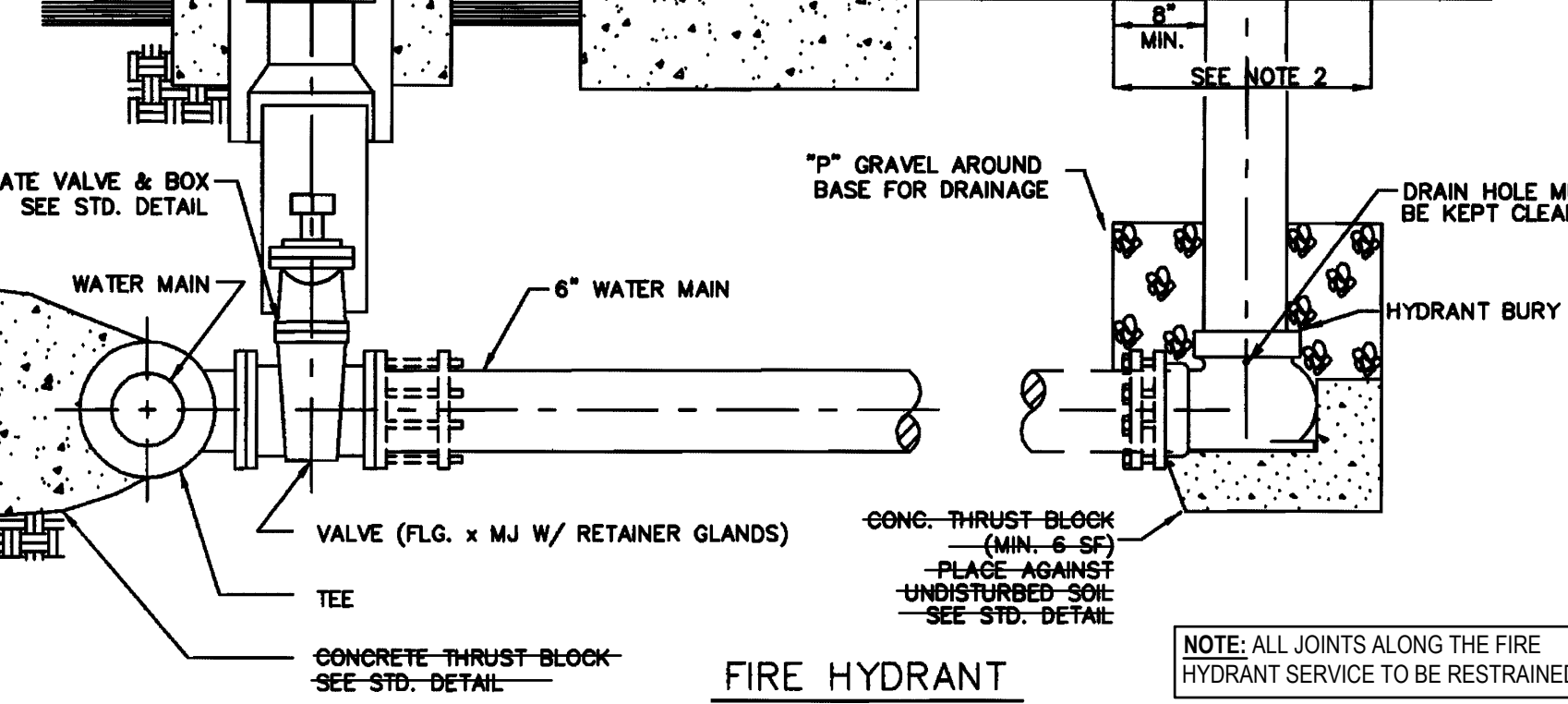
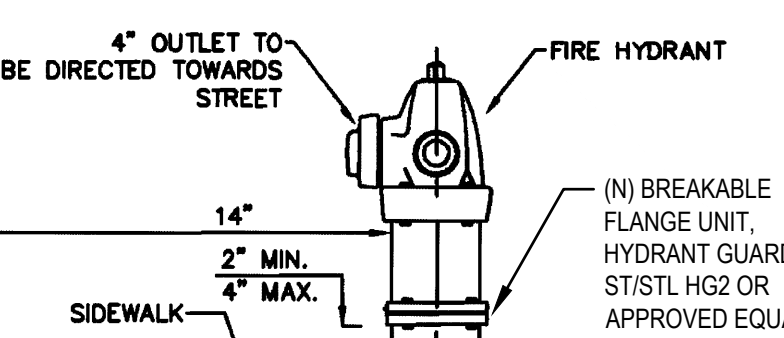
- NOTES:
- IF VALVE IS INSTALLED SO THAT THE TOP OF THE OPERATING NUT IS LESS THAN 36" BELOW FINISHED GRADE, THE STEM RISER IS NOT REQUIRED.
 - ALL EXTERNAL BOLTS AND NUTS ON VALVES SHALL BE 304 STAINLESS STEEL OR VALVE ASSEMBLY SHALL BE POLY WRAPPED. SEE GENERAL CONSTRUCTION NOTES.
 - IF ENDLINE VALVE, THEN PROVIDE ADEQUET THRUST BLOCKING & RESTRAINT OR FLANGED/ MJ CONNECTION.
 - PROVIDE CLOW, WATEROUS, OR AVK VALVE.
 - CONCRETE: 5 SACK, 2500 psi.

TYPICAL GATE VALVE AND VALVE BOX WITH RISER



- NOTES:
- HYDRANT SHOULD BE ACROSS STREET FROM MAIN.
 - WHERE NO SIDEWALK EXISTS OR WHERE F.H. IS INSTALLED IN PLANTER STRIP, A 6" THK. x 3' SQ. CONCRETE PAD SHALL BE INSTALLED.
 - VERIFY FIRE PROTECTION REQUIREMENTS WITH FIRE DEPARTMENT.
 - INSTALL 10' MIN. FROM DRIVEWAY.
 - F.H. CAPACITY COLOR SCHEME TOPS AND CAPS SHOULD BE PAINTED THE COLORS BELOW TO INDICATE CAPACITY.
- | CLASS | COLOR | CAPACITY |
|-----------|--------|-----------------|
| CLASS AA: | BLUE | > 1,500 GPM |
| CLASS A: | GREEN | > 1,000 GPM |
| CLASS B: | ORANGE | 500 - 1,000 GPM |
| CLASS C: | RED | 500 - 1,000 GPM |
- CONTRACTOR TO PAINT SALVAGED HYDRANTS, COLOR TO BE CONFIRMED BY OWNER.

HYDRANT SCHEDULE (DRY BARREL)
WATEROUS PACER WB-67
PUMP THREADS TO MATCH ARCATA FIRE P.D.
PROVIDE 1-4" AND 2-2 1/2" OUTLETS
WITH 3/4" PENTAGON OPERATING NUTS



FIRE HYDRANT

MCKINLEYVILLE COMMUNITY SERVICES DISTRICT

0 ISSUE FOR BID NS NS 2022-11-15

No. Issue Checked Approved Date

Author M. GONZALES Drafting Check L. HALONEN Project Manager N. STEVENS

Designer M. GONZALES Design Check L. HALONEN Project Director G. WATANABE

Bar is one inch on original size sheet

0 1"

REGISTERED PROFESSIONAL ENGINEER
NATHAN STEVENS
No. C85701
CIVIL
STATE OF CALIFORNIA

GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330

Conditions of Use
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD. This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

Client MCKINLEYVILLE COMMUNITY SERVICES DISTRICT

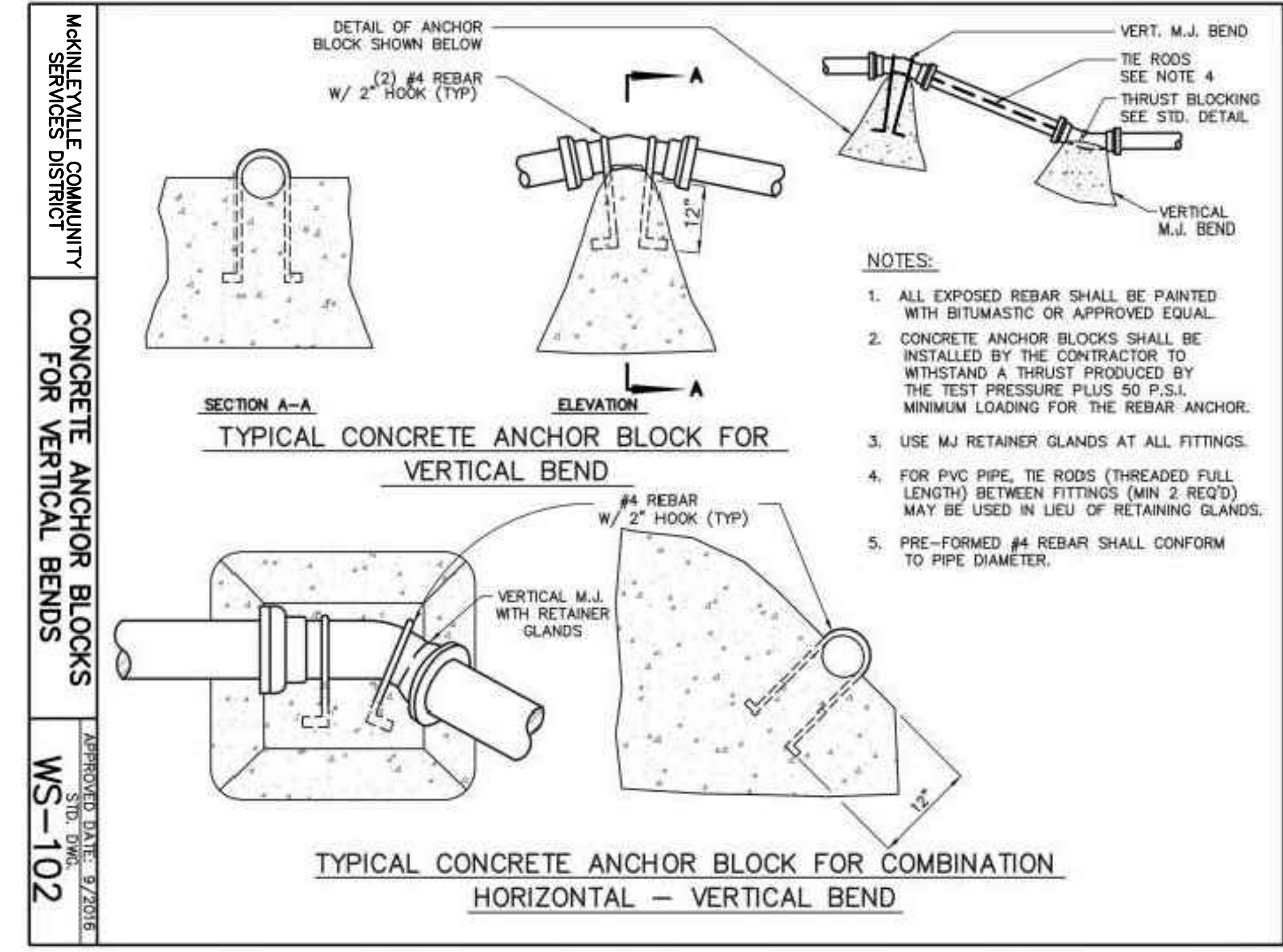
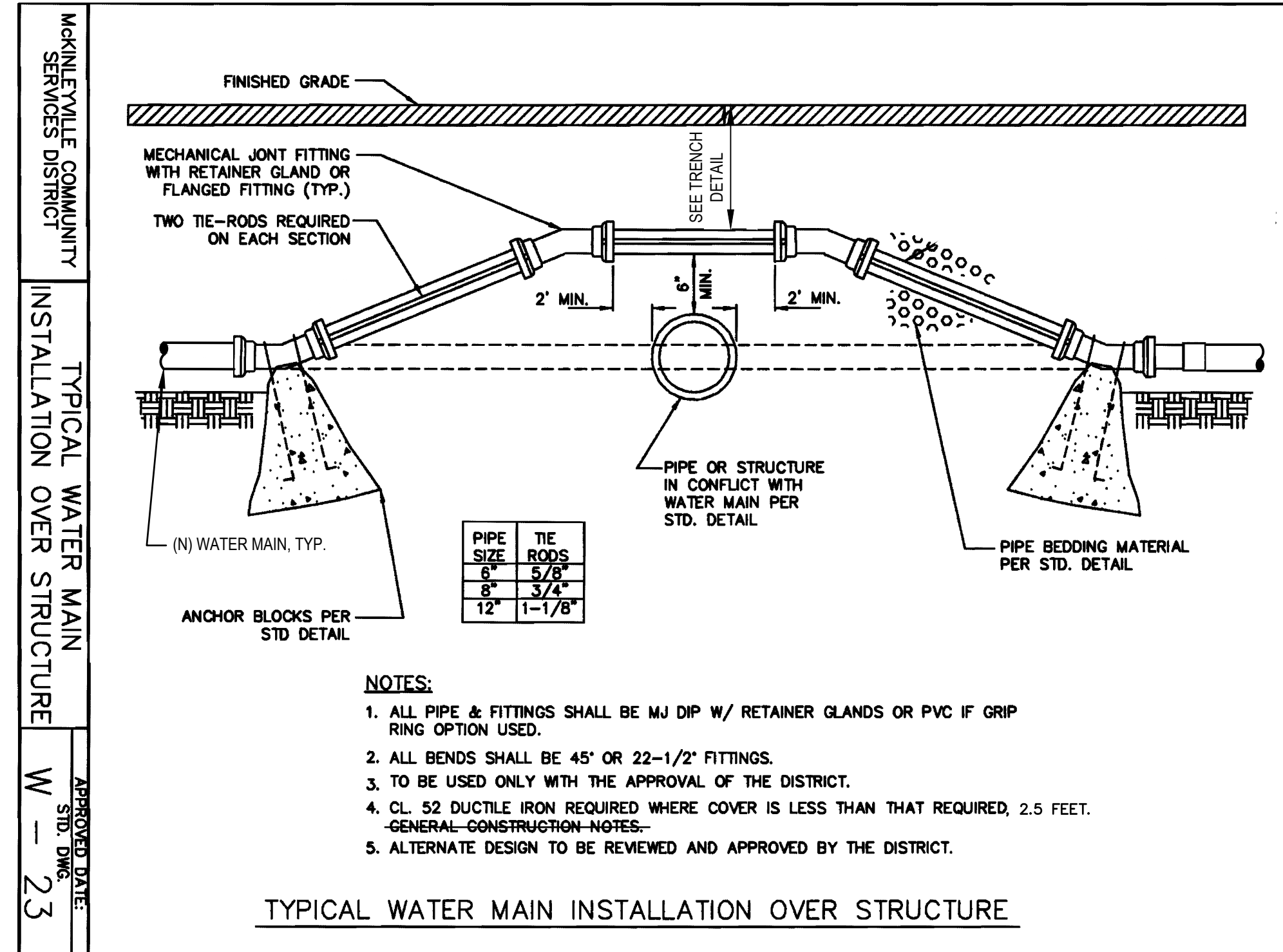
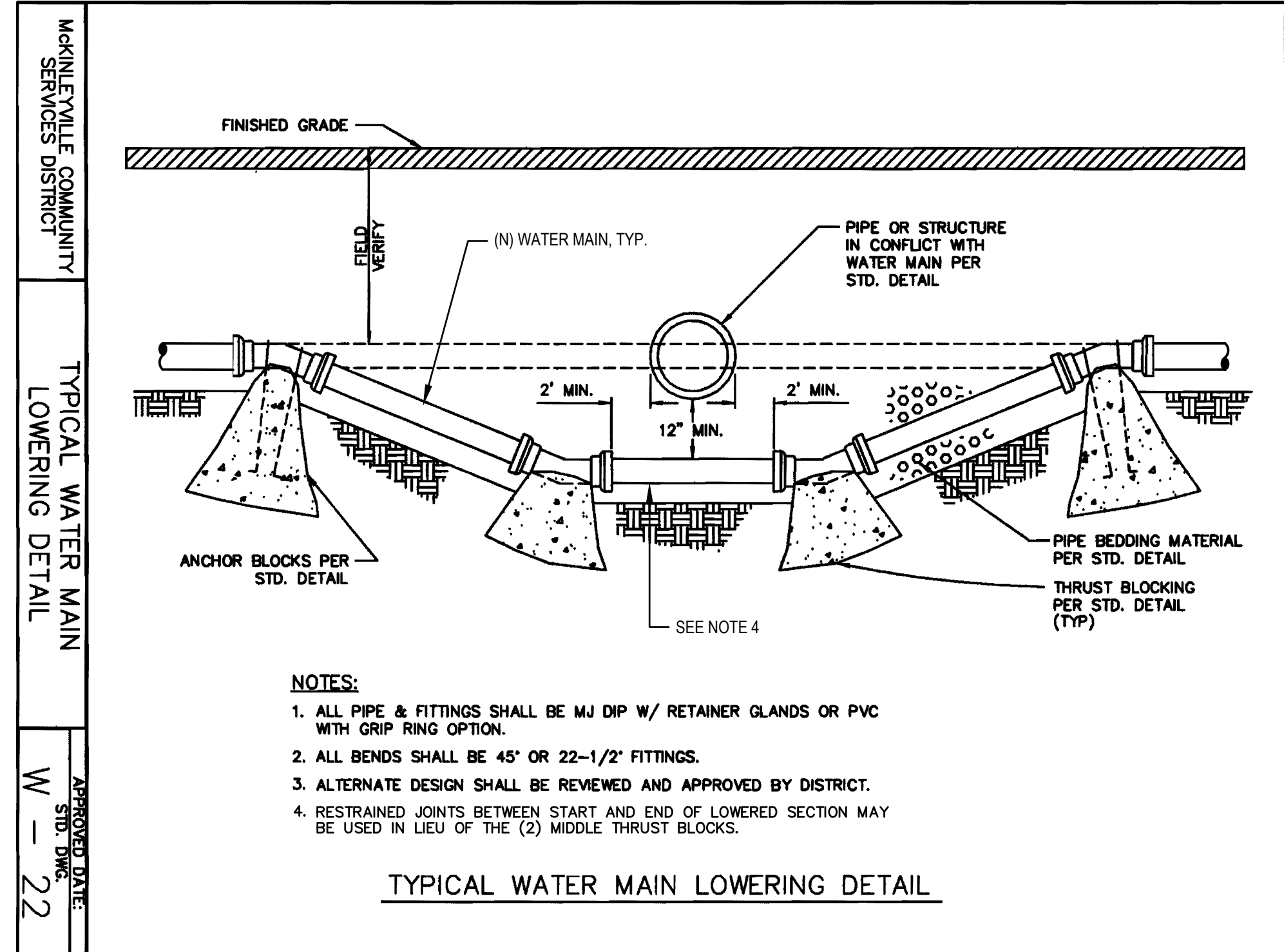
Project CENTRAL AVENUE WATER & SEWER REHABILITATION

Project No. 12560439 Date 2022-11-15 Scale AS SHOWN

Title CIVIL DETAILS 3 OF 4

Sheet No. C-503

17 of 18

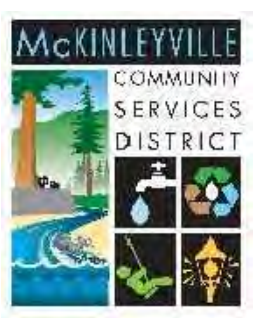


APPROVED DATE: W - 22

APPROVED DATE: W - 23

APPROVED DATE: 8/20/18
WS-102

No.	Issue	Author	Checked	Approved	Date
0	ISSUE FOR BID	M. GONZALES	L. HALONEN	N. STEVENS	2022-11-15
		M. GONZALES	L. HALONEN	G. WATANABE	



Bar is one inch on original size sheet
0 1"



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330



Client **MCKINLEYVILLE COMMUNITY SERVICES DISTRICT**
Project **CENTRAL AVENUE WATER & SEWER REHABILITATION**

Title **CIVIL DETAILS 4 OF 4**

Project No. **12560439** Date **2022-11-15** Scale **AS SHOWN**

Sheet No. **C-504** Sheet **18 of 18**