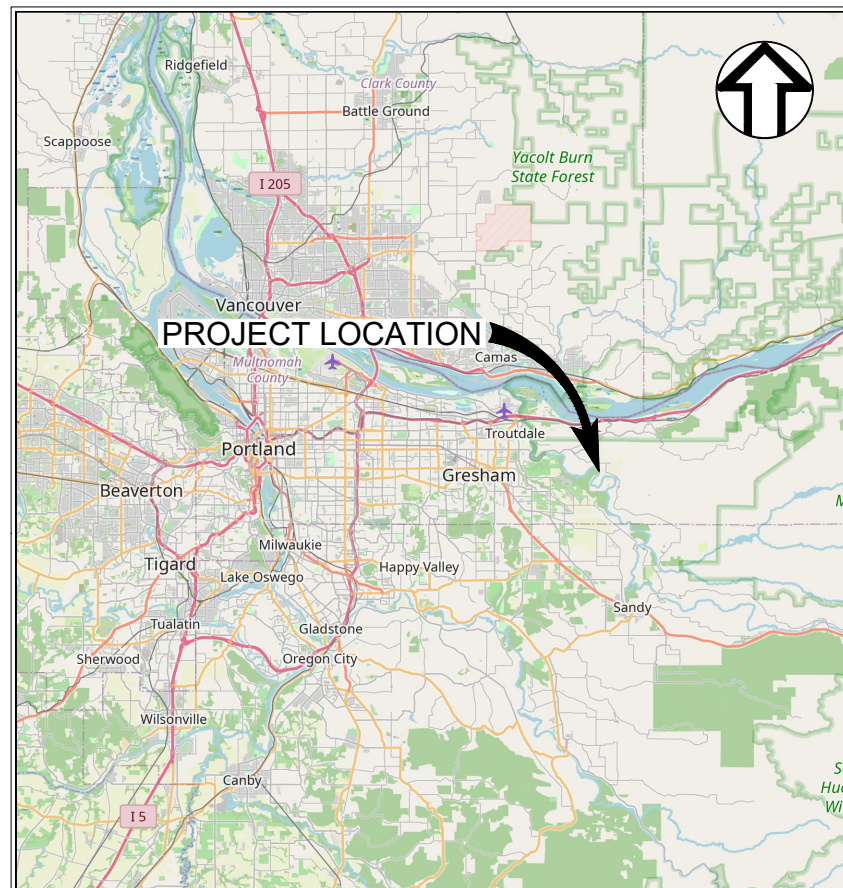


METRO

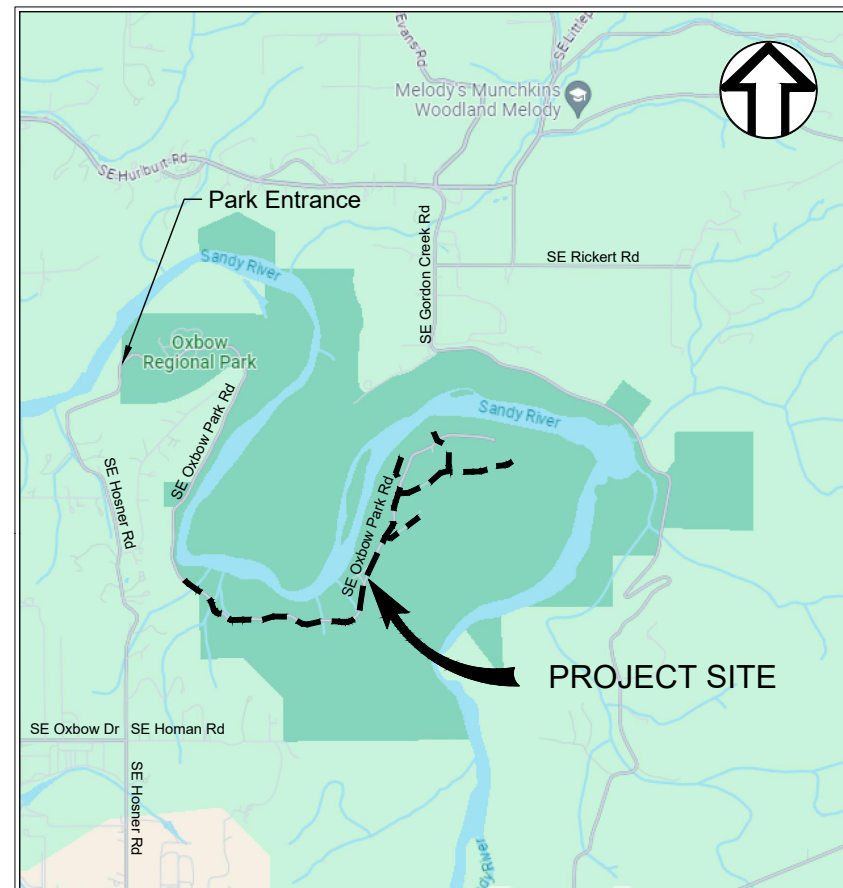
OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

MARCH 2024

SUBMITTAL FOR PERMITTING



LOCATION MAP
NOT TO SCALE



PROJECT SITE MAP
NOT TO SCALE



Civil Engineer: Wallis Engineering
215 W. 4th Ave., Suite 200
Vancouver, Washington 98660
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(360) 852-9158
jane.vail@walliseng.net



Owner: Metro
600 NE Grand Ave.
Portland, Oregon 97232-2736
Contact: Ben Hedstrom, Senior Regional Planner
(503) 382-7635
Ben.Hedstrom@oregonmetro.gov

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
DRAWN BY: C/ITS
REV BY: JK/JV

0" 1" ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

COVER

wallis engineering
PROJECT NO: 1544D
DATE: 03/2024

Metro
OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:
C1
1 OF 33

P:\15154D_Oxbow Water Distribution System\500 DWG\501 Plan Sheets\COVER.dwg, 3/5/2024 12:33:17 PM, James Parker

GENERAL NOTES

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE PLANS, CONTRACT DOCUMENTS, AND DETAILS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PROCURE ALL PERMITS, LICENSES, AND CERTIFICATES APPLICABLE TO TRADES REQUIRED TO COMPLETE THE PROJECT AND FOR THE USE OF SUCH WORK WHEN COMPLETED. COMPLIANCE SHALL BE AT ALL JURISDICTIONAL LEVELS, INCLUDING FEDERAL, STATE, COUNTY, AND LOCAL AS RELATED TO THE PERFORMANCE OF THIS WORK.
- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS, ELEVATIONS, SLOPES, AND LENGTHS PRIOR TO CONSTRUCTION. EXISTING UNDERGROUND UTILITY LOCATIONS ARE COMPILED FROM THE BEST AVAILABLE RECORDS. THE ENGINEER AND UTILITY OWNERS DO NOT GUARANTEE THE ACCURACY OR THE COMPLETENESS OF SUCH RECORDS. ADDITIONAL UTILITIES MAY EXIST WITHIN THE WORK AREA. DEPTHS ARE APPROXIMATE AND MAY VARY FROM THOSE INDICATED ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES. NO DELAYS WILL BE ALLOWED DUE TO NEGLIGENCE OF COORDINATION WITH UTILITY OWNERS. THE CONTRACTOR SHALL POTHOLE ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION AND SHALL COORDINATE WITH UTILITY OWNERS TO RELOCATE FACILITIES AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- OREGON LAW REQUIRES THE CONTRACTOR TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER AS SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. COPIES OF THE RULES MAY BE OBTAINED BY CALLING THE CENTER (ONE CALL UTILITY LOCATE NUMBER 503-246-6699). ALL EXCAVATION MUST COMPLY WITH ALL PROVISIONS OF ORS 757.541 THROUGH 757.751, INCLUDING REQUIRED NOTIFICATION OF ALL UNDERGROUND FACILITY OWNERS AT LEAST 48 BUSINESS HOURS BUT NOT MORE THAN 10 BUSINESS DAYS BEFORE COMMENCING ANY EXCAVATION.
- THE CONTRACTOR SHALL MAKE PROVISIONS TO KEEP SPECIFIED EXISTING UTILITIES IN SERVICE AND TO PROTECT ALL UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY DAMAGED UTILITIES USING MATERIALS AND METHODS APPROVED BY THE UTILITY OWNER. NO SERVICE INTERRUPTIONS SHALL BE PERMITTED WITHOUT PRIOR WRITTEN PERMISSION FROM THE UTILITY PROVIDER.
- THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH METRO PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE TWO WEEKS NOTICE TO SCHEDULE A PRECONSTRUCTION MEETING.
- THE CONTRACTOR SHALL NOTIFY METRO 48 HOURS IN ADVANCE OF STARTING CONSTRUCTION AND 24 HOURS BEFORE RESUMING WORK AFTER SHUTDOWNS EXCEPT FOR NORMAL RESUMPTION OF WORK FOLLOWING SATURDAYS, SUNDAYS, OR HOLIDAYS.
- HOURS OF CONSTRUCTION AND DAYS WHERE CONSTRUCTION IS PROHIBITED SHALL BE AS SET FORTH IN THE SPECIFICATIONS.
- THE CONTRACTOR SHALL SWEEP ALL PAVED SURFACES AFFECTED BY CONSTRUCTION ACTIVITIES AT THE END OF EVERY WORK DAY AND PERIODICALLY THROUGHOUT EACH DAY SUCH THAT VEHICLES ACCESSING THE SITE AND PERMANENT PAVEMENT ARE NOT AFFECTED.
- THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE SET OF CURRENT, APPROVED CONSTRUCTION PLANS ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO COMPLETE THE PROJECT IN A MANNER ACCEPTABLE TO THE OWNER AND IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, INCLUDING INCIDENTAL WORK AS MAY BE NECESSARY TO MEET THE INTENT OF THE PROJECT CONTRACT DOCUMENTS, PLANS, AND APPLICABLE AGENCY REQUIREMENTS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PERFORM ALL NECESSARY FIELD MEASUREMENT, INCLUDING BUT NOT LIMITED TO MEASUREMENTS REQUIRED TO VERIFY DIMENSIONS AND EXISTING CONSTRUCTION CONDITIONS INDICATED AND/OR SHOWN ON THE PLANS. SHOULD ANY ERROR OR INCONSISTENCY EXIST, THE CONTRACTOR SHALL NOT PROCEED WITH THE WORK AFFECTED UNTIL REPORTED TO THE PROJECT ENGINEER FOR CLARIFICATION AND/OR CORRECTION.
- ANY INSPECTION BY THE CITY, COUNTY, STATE, FEDERAL AGENCY OR PROJECT ENGINEER SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF ANY OBLIGATION TO PERFORM THE WORK IN COMPLIANCE WITH THE APPLICABLE CODES, REGULATIONS, PROJECT CONTRACT DOCUMENTS, AND CITY, COUNTY, AND STATE STANDARDS.
- THE CONTRACTOR SHALL TAKE NO ADVANTAGE OF ANY ERRORS, OMISSIONS, OR DISCREPANCIES IN THE PLANS. WHEN ERRORS, OMISSIONS, OR DISCREPANCIES ARE FOUND, THE ENGINEER AND METRO SHALL BE NOTIFIED IMMEDIATELY UPON DISCOVERY. WORK PERFORMED BY THE CONTRACTOR AS A RESULT OF AN ERROR, OMISSION, OR DISCREPANCY IN THE PLANS SHALL BE AT CONTRACTOR'S RISK AND EXPENSE WHERE SUCH ERROR, OMISSION, OR DISCREPANCY HAS NOT BEEN BROUGHT TO THE ATTENTION OF THE ENGINEER AND METRO.

WATER CONSTRUCTION NOTES

- THE EXISTING ON-SITE WATER DISTRIBUTION MAIN WILL BE OUT OF SERVICE BOTH DURING AND AFTER CONSTRUCTION AND WILL BE ABANDONED AFTER COMPLETION OF THE NEW MAIN.
- THE CONTRACTOR SHALL REMOVE OR ABANDON ANY SECTIONS OF EXISTING WATER LINES AS INDICATED IN THE PLANS ACCORDING TO THE PROCEDURES AND PROTOCOLS SET FORTH IN THE PLANS, SPECIFICATIONS, AND PERMITS.
- A PLUMBING PERMIT WILL BE REQUIRED FOR ALL WATER SERVICE WORK. PER THIS PERMIT, A LICENSED PLUMBER IS REQUIRED TO INSTALL SERVICE CONNECTIONS TO BUILDINGS.
- THE CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITY CROSSINGS AND WATER MAIN CONNECTION LOCATIONS A MINIMUM OF 400 FEET AHEAD OF WATER LINE CONSTRUCTION. REPORT ALL CONFLICTS TO THE ENGINEER IMMEDIATELY AND ALLOW TWO (2) WORKING DAYS TO RESOLVE CONFLICTS.
- UPON COMPLETION OF INSTALLATION OF THE WATER SYSTEM AND COMPLETION OF PRESSURE TESTING, ALL LINES SHALL BE FLUSHED AND DISINFECTED IN CONFORMANCE WITH OREGON HEALTH DIVISION GUIDELINES AND THE REQUIREMENTS OF THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY.
- THE CONTRACTOR SHALL PROTECT OPEN ENDS OF THE WATER PIPE UNDER CONSTRUCTION FROM CONTAMINATED WATER AND DEBRIS AT ALL TIMES. CONTRACTOR SHALL CAP AND/OR COVER OPEN PIPE ENDS AT THE END OF EACH WORK DAY.
- THE CONTRACTOR SHALL MAINTAIN A MINIMUM VERTICAL SEPARATION OF 18 INCHES FROM SANITARY SEWERS IN ACCORDANCE WITH OAR 333-061. IF THIS SEPARATION CANNOT BE MAINTAINED, THE EXISTING SANITARY SEWER SHALL BE EXPOSED AND INSPECTED BETWEEN THE ADJACENT JOINTS ON EACH SIDE OF THE WATER MAIN AND REPLACED IF LEAKS ARE PRESENT. THE CONTRACTOR SHALL ALSO MAINTAIN A MINIMUM OF 12" OF VERTICAL SEPARATION FROM STORM SEWERS AND 6" MINIMUM VERTICAL SEPARATION FROM ALL REMAINING EXISTING UTILITIES UNLESS OTHERWISE SPECIFIED. NOTIFY ENGINEER IMMEDIATELY IF MINIMUM SEPARATION CANNOT BE MAINTAINED.

PAVING NOTES

- THE CONTRACTOR SHALL ADJUST ALL VALVES BOXES AND VAULTS TO FINISHED GRADE.
- THE CONTRACTOR SHALL SAWCUT STRAIGHT MATCHLINES TO CREATE A CLEAN BUTT JOINT BETWEEN EXISTING AND NEW PAVEMENT. ALL NEW PAVEMENT JOINTS SHALL BE SEALED WITH RUBBERIZED SEALANT.
- AGGREGATE BASE AND ASPHALT CONCRETE PAVEMENT SHALL BE COMPACTED PER THE CURRENT OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S INDEPENDENT TESTING FIRM COMPACTION TESTING.
- ALL EXCAVATIONS WITHIN PAVED ROADWAYS SHALL BE TEMPORARILY RESURFACED OR PLATED AT THE END OF EACH WORK DAY AND PRIOR TO ALLOWING VEHICULAR TRAFFIC ONTO EXCAVATED AREAS. CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING, MAINTAINING, AND REMOVING TEMPORARY SURFACING PER THE SPECIFICATIONS.
- SUBSEQUENT SETTLEMENT OR CRACKING OF FINISHED SURFACE WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A FAILURE OF THE SUBGRADE AND REPAIRED AT NO COST TO METRO AND IN A MANNER ACCEPTABLE TO METRO.

HORIZONTAL DIRECTIONAL DRILLING NOTES

- THE CONTRACTOR SHALL MAINTAIN A PHYSICAL COPY OF THE CURRENT, APPROVED HYDROFRACTURE CONTINGENCY PLAN ON SITE AT ALL TIMES DURING DRILLING OPERATIONS.
- THE CONTRACTOR SHALL INSTALL AND CONTINUALLY MAINTAIN FENCING AROUND THE FULL PERIMETER OF DRILLING AREAS FOR THE DURATION OF DRILLING OPERATIONS.
- THE CONTRACTOR SHALL INSTALL AND MAINTAIN TREE PROTECTION FENCING PRIOR TO COMMENCING WORK AND SHALL PROTECT ALL EXISTING TREES FROM DAMAGE DURING WORK, MAINTAINING SEPARATION BETWEEN TREES AND PIPE DURING LAYDOWN, ASSEMBLY, AND PULLBACK.
- ALL HDPE PIPE MANUFACTURER'S PUBLISHED RECOMMENDATIONS, INCLUDING BUT NOT LIMITED TO MINIMUM BENDING RADII, FUSION PRACTICES, AND HANDLING SHALL BE OBSERVED DURING PIPE LAYDOWN, ASSEMBLY, AND PULLBACK.
- THE INTERIOR OF ALL BUTT FUSED HDPE PIPE JOINTS SHALL BE COMPLETELY DEBEADED.
- ALL DRILLING FLUID MANAGEMENT MEASURES, INCLUDING BUT NOT LIMITED TO SECONDARY CONTAINMENT, SHALL BE IN PLACE AND CONFIRMED AS OPERATIONAL PRIOR TO DRILLING COMMENCEMENT.

SURVEY NOTES

THE HORIZONTAL DATUM FOR THIS SURVEY IS BASED UPON OREGON STATE PLANE NORTH ZONE (3601). THE VERTICAL DATUM FOR THIS SURVEY IS BASED UPON THE CITY OF PORTLAND BENCHMARK NO. 4283, ELEVATION=654.72, COP. DATUM.

TRIMBLE R10, R12, S5, S7, TSC 3 & TSC 7 ROBOTIC INSTRUMENTS WERE USED TO COMPLETE THIS SURVEY.

THE UNDERGROUND UTILITIES AS SHOWN ON THIS MAP HAVE BEEN LOCATED FROM FIELD SURVEY OF ABOVE GROUND STRUCTURES AND AS MARKED BY OTHERS. UTILITIES WERE LOCATED 4/18/22 THROUGH 5/09/22 BY APPLIED PROFESSIONAL SERVICES, INC. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY SURVEYOR.

EXISTING CONDITIONS MAP PREPARED BY SES 5/18/2022.
ADDITIONAL TOPO ADDED BY AT 11/29/2022.
ADDITIONAL TOPO ADDED BY SV 06/20/2023.

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C20	PLAN & PROFILE STA 61+00 TO STA 65+00
C21	PLAN & PROFILE STA 65+00 TO STA 69+00
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C31	PLAN & PROFILE STA 99+00 TO END
C32	PUMP HOUSE SITE PLAN
C33	EROSION CONTROL NOTES & DETAILS

PRELIMINARY

DATE	
BY	
REVISION	
NO.	
DESIGNED BY	JP
DRAWN BY	CJ/TS
REV BY	JK/JV
ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY	

GENERAL NOTES

wallis engineering
PROJECT NO: 1544D
DATE: 03/20/24

Metro
OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:

C2

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LEGEND

EXISTING

-----200-----	MAJOR CONTOUR
-----	MINOR CONTOUR
-----FRB-----	ESTIMATED FUTURE RIVER BANK
-----FLD-----	1% ANNUAL CHANCE FLOOD ELEVATION
-----	EDGE OF PAVED ROAD
-----EOG----- EOG-----	EDGE OF GRAVEL ROAD
-----	CENTERLINE OF ROAD
-----TOE----- TOE-----	TOE OF SLOPE
-----	TRAIL
-----O-----O-----O-----	FENCE
-----W4"-----	WATER LINE, SIZE NOTED WHERE KNOWN
-----	IRRIGATION PIPE, SIZE NOTED WHERE KNOWN
-----SAN----- SAN-----	SANITARY SEWER, SIZED NOTED WHERE KNOWN
-----STM-----	STORM SEWER, SIZED NOTED WHERE KNOWN
-----X-----X-----	STORM SEWER CULVERT
-----	VEGETATION EXTENTS
-----OHP-----	OVERHEAD POWER LINE
-----UG-----	UNDERGROUND POWER POLE
-----	WATER CONTROL VALVE VAULT
-----	CONCRETE PAD
-----	POTABLE WATER MANHOLE
-----	WATER VALVE
-----	DOWNSPOUT
-----	WATER STAND PIPE
-----	BLOW OFF HYDRANT
-----	GATE
-----	SIGN

PROPOSED

-----6" W-----	WATERLINE, SIZE NOTED
-----	WATER VALVE
-----	TEE
-----	BEND
-----	AIR RELEASE VALVE
-----	STANDPIPE
-----	YARD HYDRANT
-----	HDD ENTRY/EXIT POINT

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
 DRAWN BY: C/ITS
 REV BY: JK/JV

0 ONE INCH AT FULL SCALE.
 1" IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

LEGEND

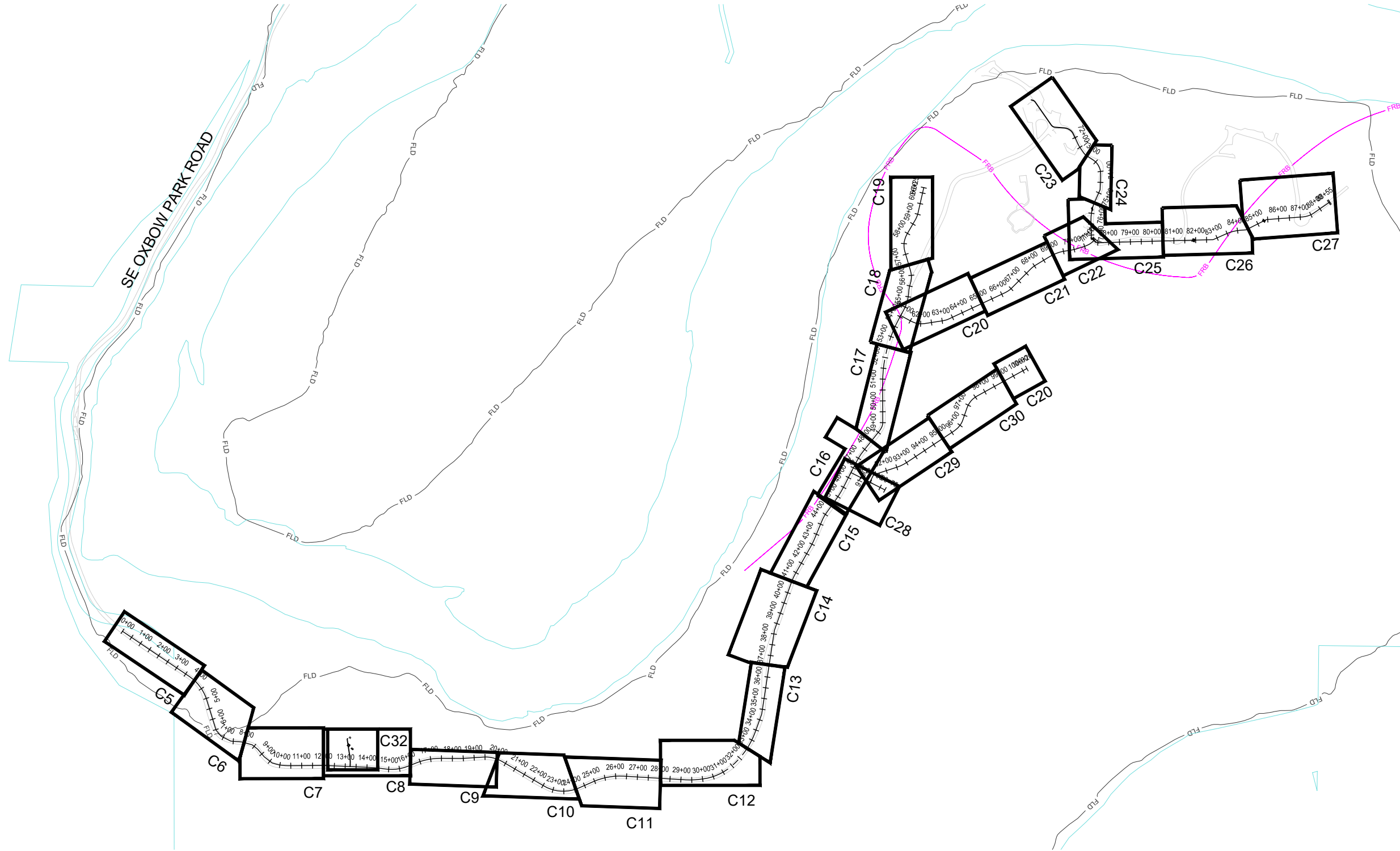
wallis *engineering

PROJECT NO: 1544D DATE: 03/2024

Metro

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

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PLAN



0 250 500
SCALE IN FEET

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
 DRAWN BY: C/ITS
 REV BY: JK/JV

0 1" ONE INCH AT FULL SCALE.
 IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

WATER PLAN KEY MAP

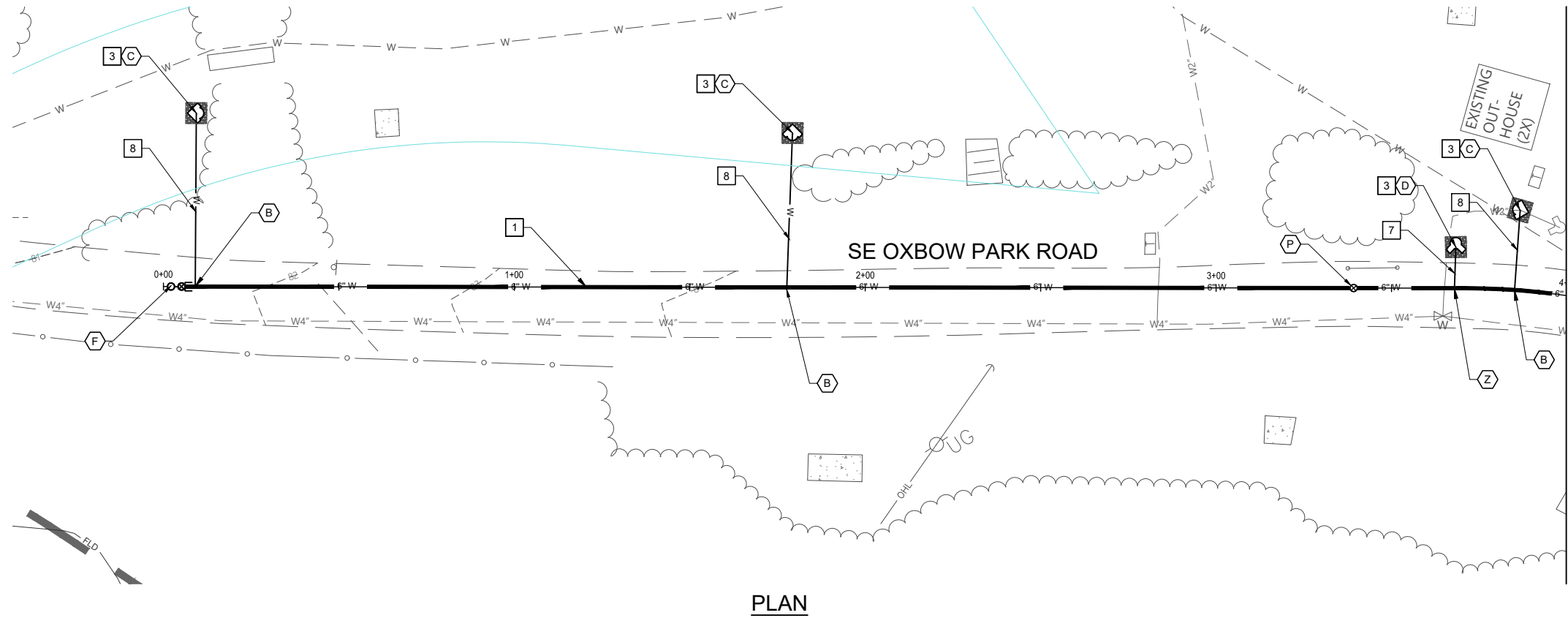
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PROJECT NO: 1544D
 DATE: 03/2024

Metro

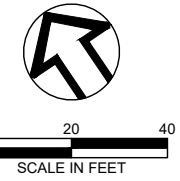
OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:
C4
 4 OF 33



PLAN

MATCHLINE ~ STA 4+00 SEE SHEET C6



VALVE & FITTING SCHEDULE

- B** INSTALL: (TYP 3)
1 ~ 3/4" SERVICE TAP ASSEMBLY
- C** INSTALL: (TYP 3)
1 ~ YARD HYDRANT ASSEMBLY
1 ~ 3/4" BACKFLOW PREVENTION VALVE ASSEMBLY
- D** INSTALL:
1 ~ 2" STANDPIPE ASSEMBLY
- F** INSTALL:
1 ~ 2" BLOWOFF ASSEMBLY
- P** INSTALL:
1 ~ 6" MJ GATE VALVE ASSEMBLY
- Z** INSTALL:
1 ~ 6" x 2" HDPE DR 11 REDUCING TEE

WATER CONSTRUCTION NOTES

- 1** INSTALL 6" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 3** CONSTRUCT 6' x 6' SPLASH PAD
- 7** INSTALL 2" COPPER TYPE K SERVICE CONNECTION
- 8** INSTALL 3/4" TYPE K COPPER SERVICE CONNECTION

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
 DRAWN BY: C/I/T/S
 REV BY: JK/JV

0 1" ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

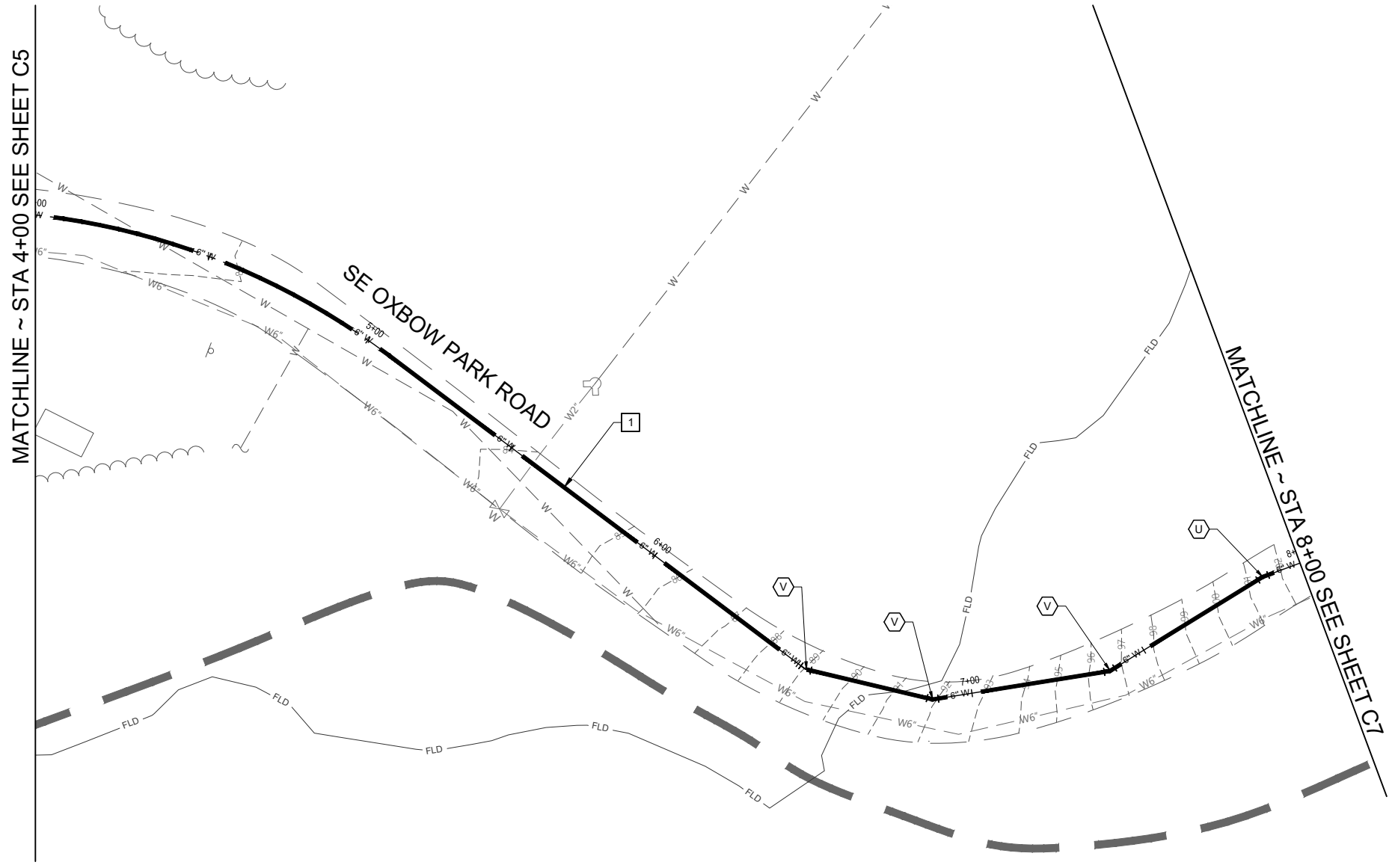
PLAN & PROFILE STA 0+00 TO STA 4+00

PROJECT NO: 1544D

DATE: 03/2024

Metro
OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:
C5
 5 OF 33



PLAN

MATCHLINE ~ STA 4+00 SEE SHEET C5

MATCHLINE ~ STA 8+00 SEE SHEET C7



0 20 40
SCALE IN FEET

VALVE & FITTING SCHEDULE

- U INSTALL:
1 - 6" HDPE DR 11 11.25° BEND
- V INSTALL: (TYP 3)
1 - 6" HDPE DR 11 22.5° BEND

WATER CONSTRUCTION NOTES

- 1 INSTALL 6" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
DRAWN BY: C/I/T/S
REV BY: JK/JV

ONE INCH AT FULL SCALE.
IF NOT ONE INCH ADJUST
SCALE ACCORDINGLY

PLAN & PROFILE STA
4+00 TO STA 8+00

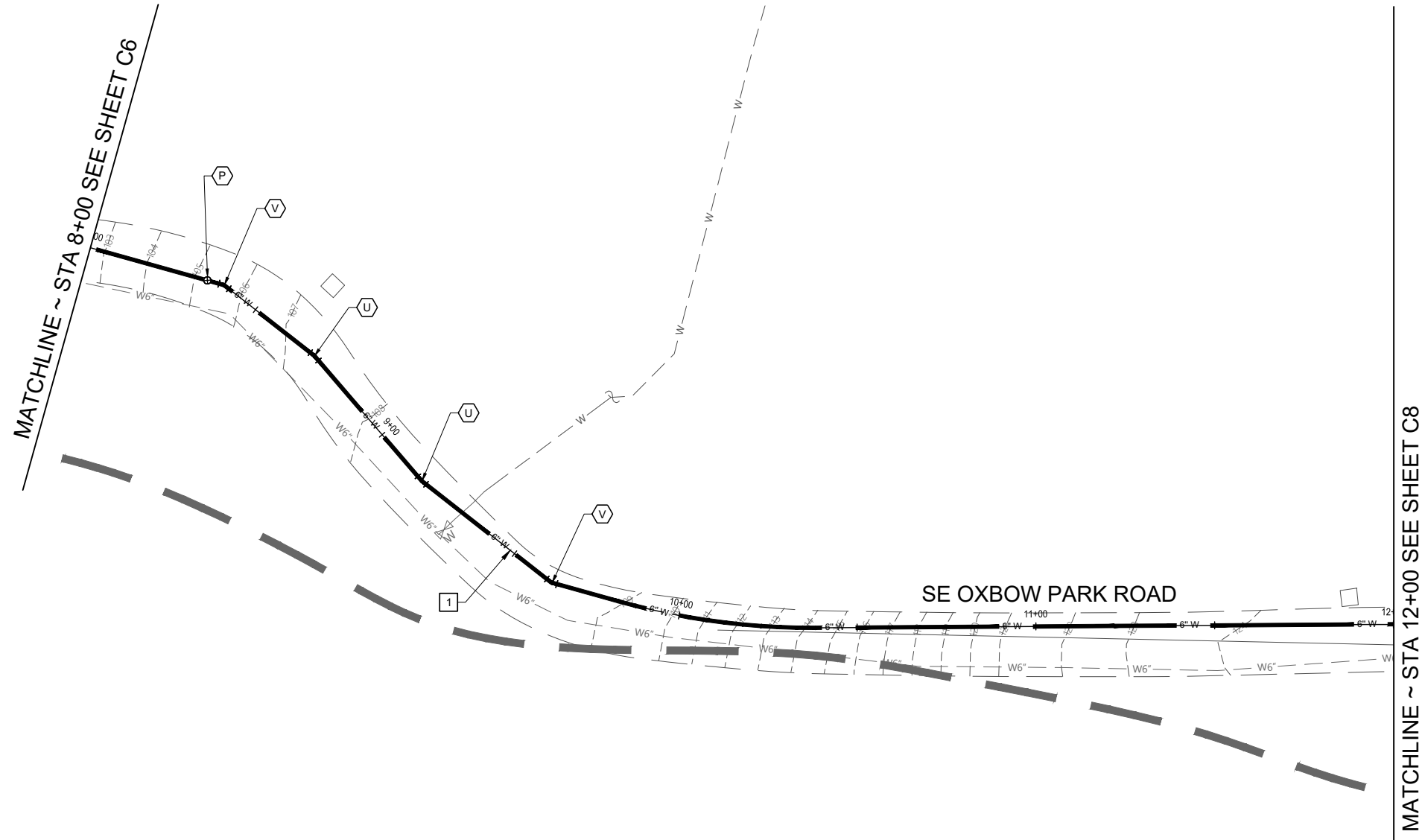
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PROJECT NO: 1544D
DATE: 03/2024

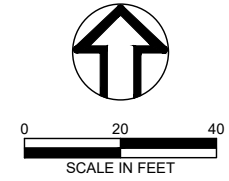
Metro

OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:
C6
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PLAN



VALVE & FITTING SCHEDULE

- P** INSTALL:
1 ~ 6" MJ GATE VALVE ASSEMBLY
- U** INSTALL: (TYP 2)
1 ~ 6" HDPE DR 11 11.25° BEND
- V** INSTALL: (TYP 2)
1 ~ 6" HDPE DR 11 22.5° BEND

WATER CONSTRUCTION NOTES

- 1** INSTALL 6" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
 DRAWN BY: C/ITS
 REV BY: JK/JV

ONE INCH AT FULL SCALE.
 IF NOT ONE INCH ADJUST
 SCALE ACCORDINGLY

PLAN & PROFILE STA
 8+00 TO STA 12+00

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 *engineering

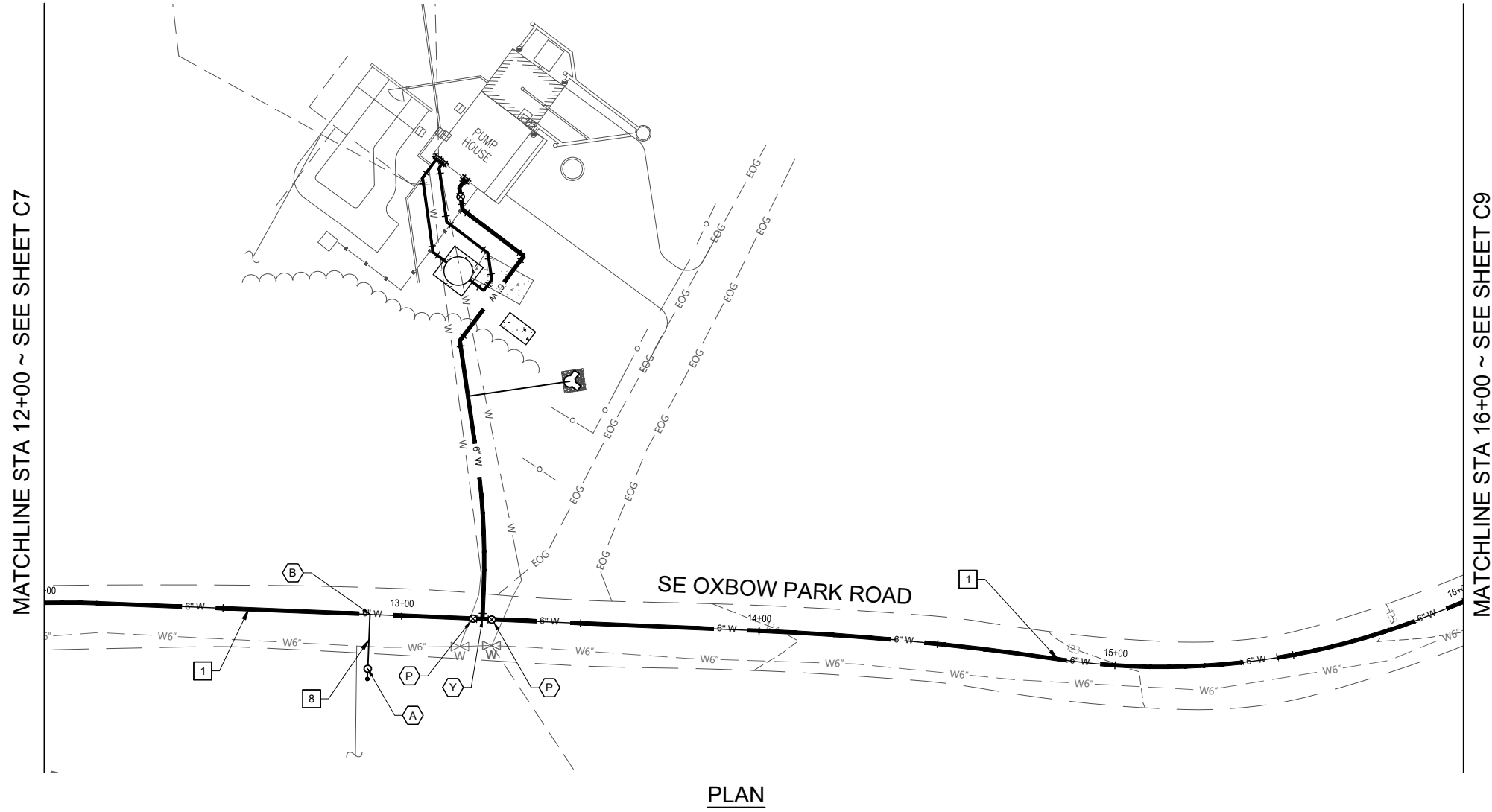
PROJECT NO: 1544D
 DATE: 03/2024

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OXBOW PARK WATER DISTRIBUTION
 SYSTEM REPLACEMENT

DRAWING NO:
C7

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PLAN

VALVE & FITTING SCHEDULE

- A INSTALL:
1 ~ 1" COMBINATION AIR RELEASE VALVE ASSEMBLY
- B INSTALL:
1 ~ 3/4" SERVICE TAP ASSEMBLY
- P INSTALL: (TYP 3)
1 ~ 6" MJ GATE VALVE ASSEMBLY
- Y INSTALL:
1 ~ 6" HDPE DR 11 TEE

WATER CONSTRUCTION NOTES

- 1 INSTALL 6" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 8 INSTALL 3/4" TYPE K COPPER SERVICE CONNECTION

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
DRAWN BY: C/I/T/S
REV BY: JK/JV

ONE INCH AT FULL SCALE.
IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

PLAN & PROFILE STA 12+00 TO STA 16+00

wallis engineering

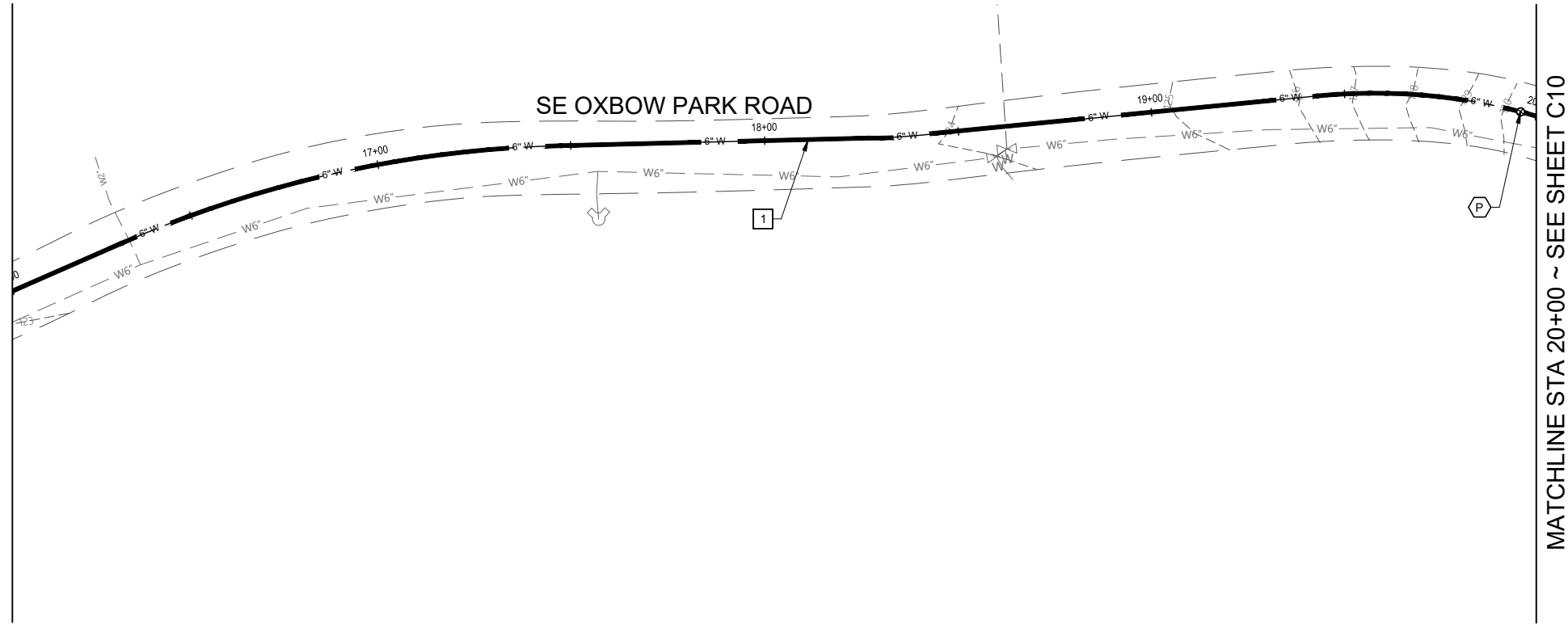
PROJECT NO: 1544D
DATE: 03/2024

Metro

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

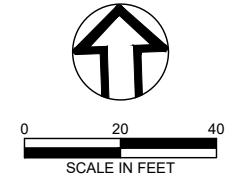
DRAWING NO:
C8
8 OF 33

MATCHLINE STA 16+00 ~ SEE SHEET C8



PLAN

MATCHLINE STA 20+00 ~ SEE SHEET C10



VALVE & FITTING SCHEDULE

P INSTALL: (TYP 3)
1 ~ 6" MJ GATE VALVE ASSEMBLY

WATER CONSTRUCTION NOTES

1 INSTALL 6" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP	
DRAWN BY: C/I/T/S	
REV BY: JK/JV	

PLAN & PROFILE STA
16+00 TO STA 20+00

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*engineering

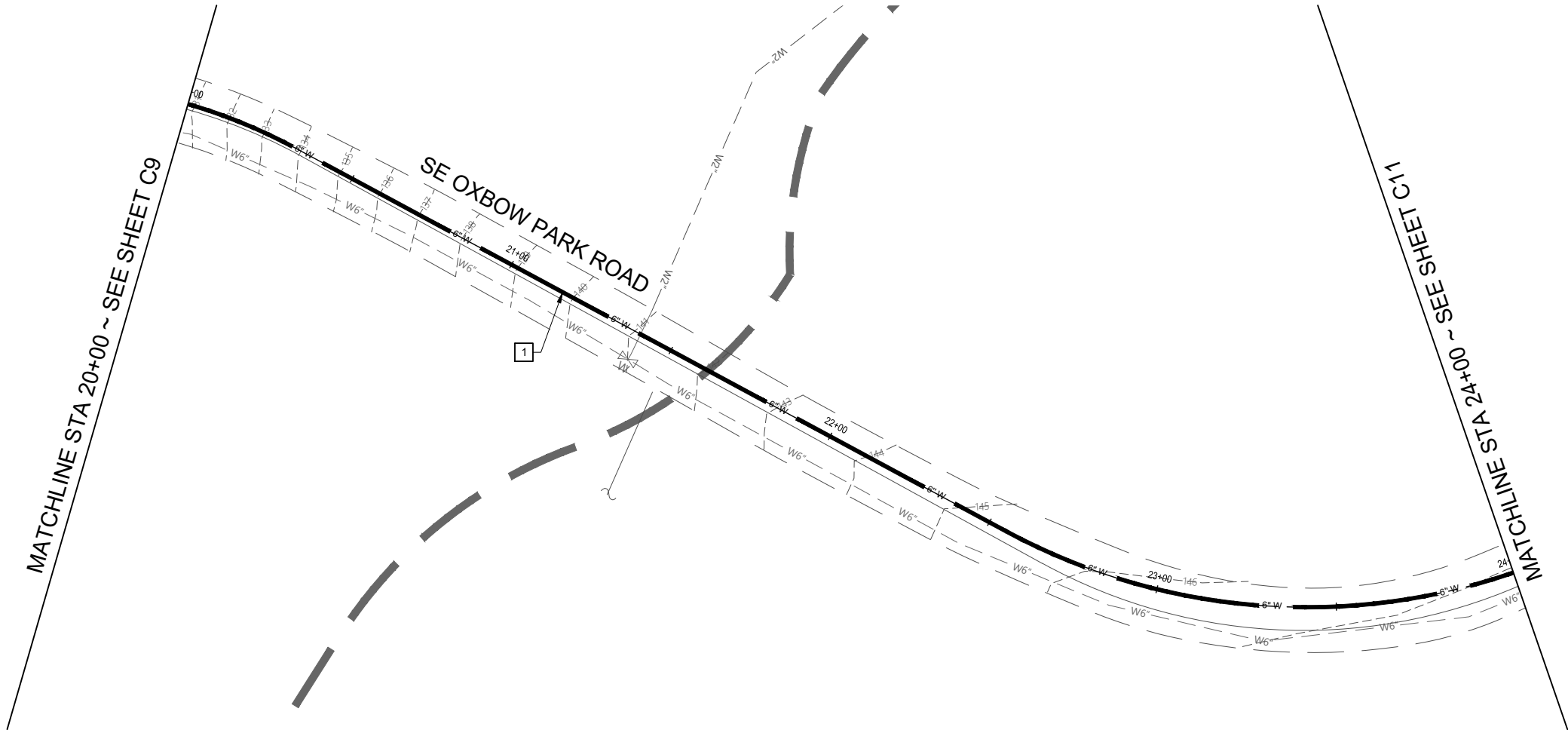
PROJECT NO: 1544D DATE: 03/2024

Metro

OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:
C9

9 OF 33



PLAN



0 20 40
SCALE IN FEET

WATER CONSTRUCTION NOTES

- 1 INSTALL 6" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP	
DRAWN BY: C/I/T/S	
REV BY: JK/JV	

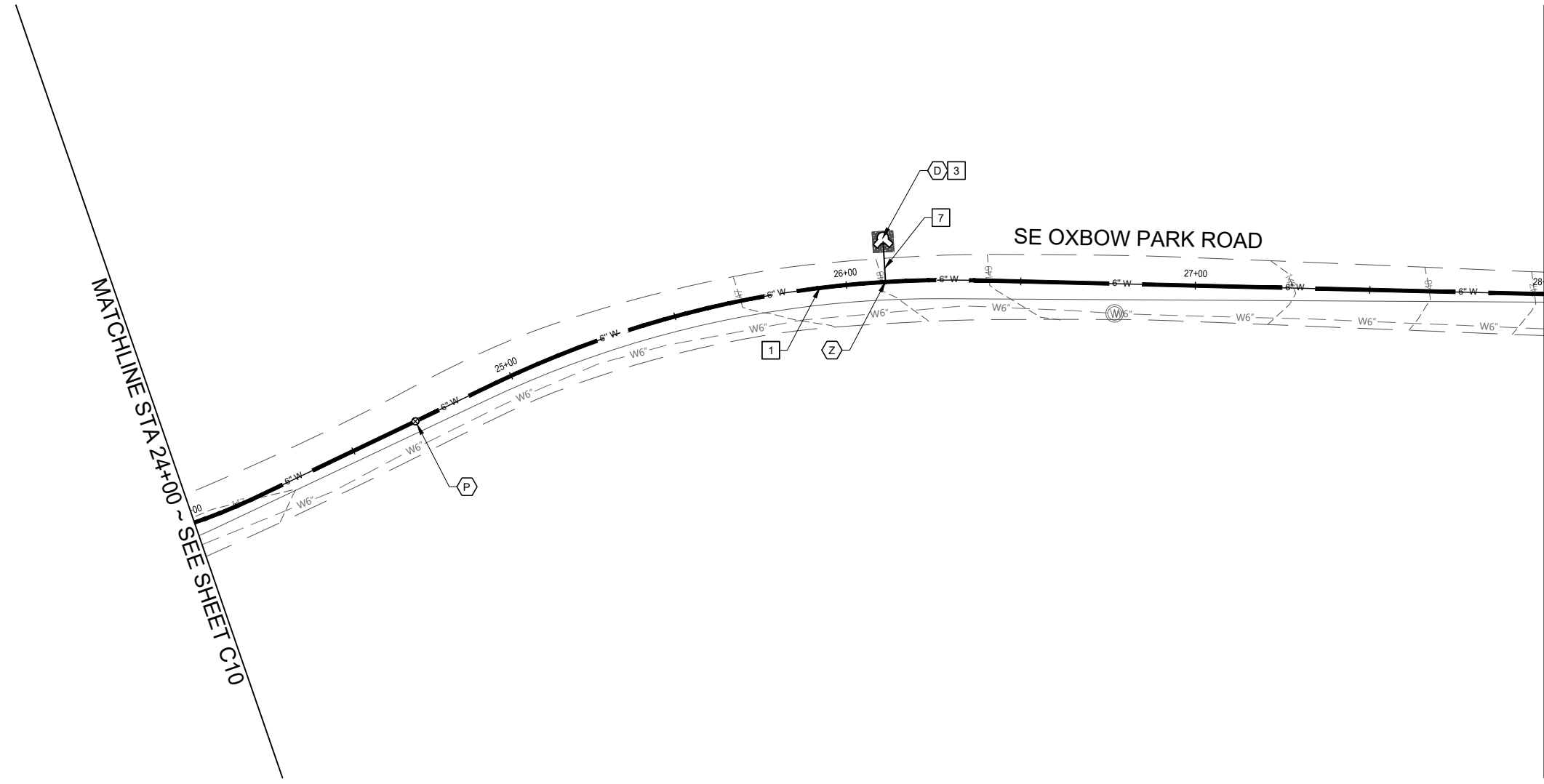
PLAN & PROFILE STA
20+00 TO STA 24+00



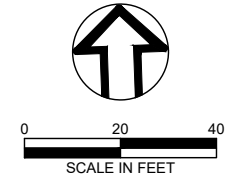
PROJECT NO: 1544D
DATE: 03/2024

Metro
OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:
C10
10 OF 33



PLAN



VALVE & FITTING SCHEDULE

- D** INSTALL:
1 - 2" STANDPIPE ASSEMBLY
- P** INSTALL: (TYP 3)
1 - 6" MJ GATE VALVE ASSEMBLY
- Z** INSTALL:
1 - 6" x 2" HDPE DR 11 REDUCING TEE

WATER CONSTRUCTION NOTES

- 1** INSTALL 6" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 3** CONSTRUCT 6' x 6' SPLASH PAD
- 7** INSTALL 2" COPPER TYPE K SERVICE CONNECTION

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
 DRAWN BY: C/ITS
 REV BY: JK/JV

0" 1" ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

PLAN & PROFILE STA 24+00 TO STA 28+00

wallis engineering

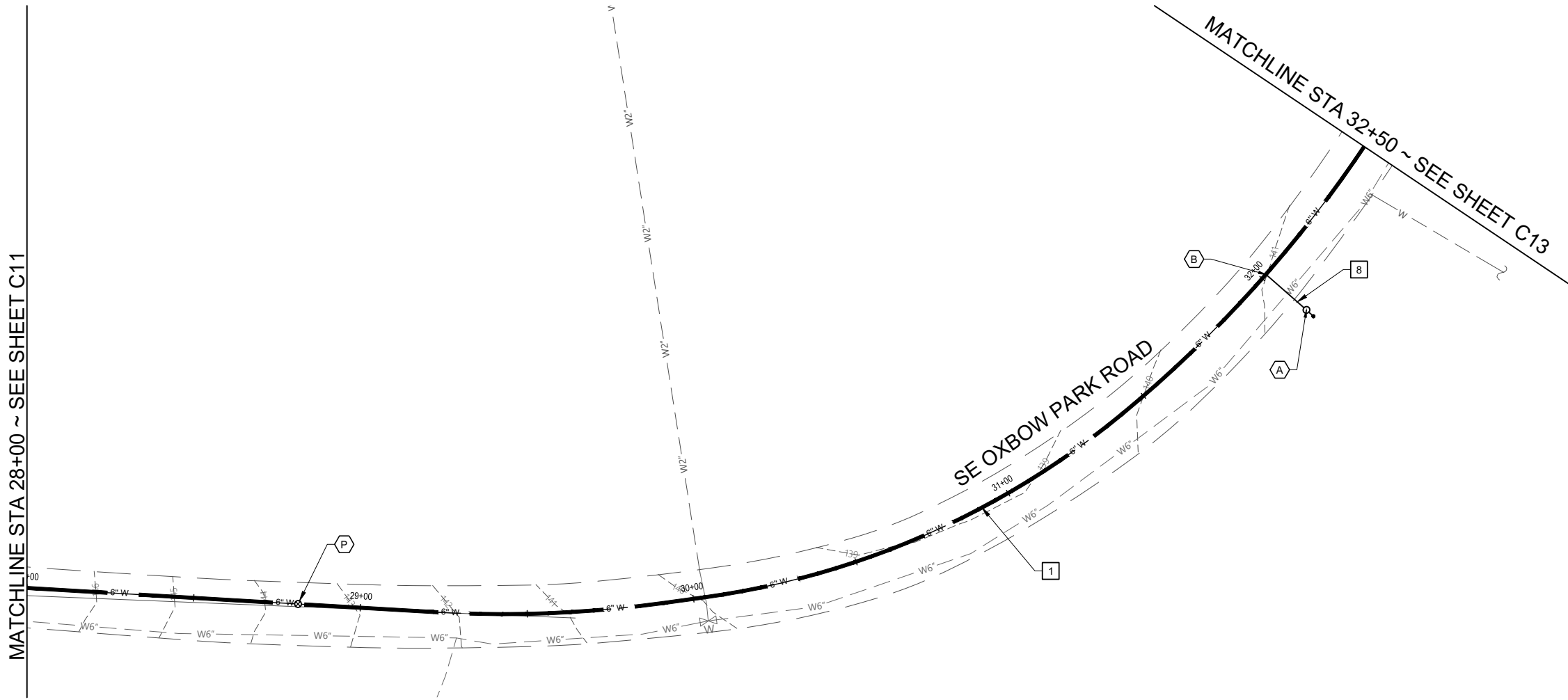
PROJECT NO: 1544D
 DATE: 03/2024

Metro

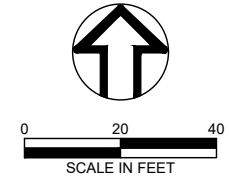
OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:
C11
 11 OF 33

MATCHLINE STA 28+00 ~ SEE SHEET C11



PLAN



VALVE & FITTING SCHEDULE

- A** INSTALL:
1 - 1" COMBINATION AIR RELEASE VALVE ASSEMBLY
- B** INSTALL:
1 - 3/4" SERVICE TAP ASSEMBLY
- P** INSTALL:
1 - 6" MJ GATE VALVE ASSEMBLY

WATER CONSTRUCTION NOTES

- 1** INSTALL 6" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 8** INSTALL 3/4" TYPE K COPPER SERVICE CONNECTION

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
 DRAWN BY: C/ITS
 REV BY: JK/JV

ONE INCH AT FULL SCALE.
 IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

PLAN & PROFILE STA
28+00 TO STA 32+50

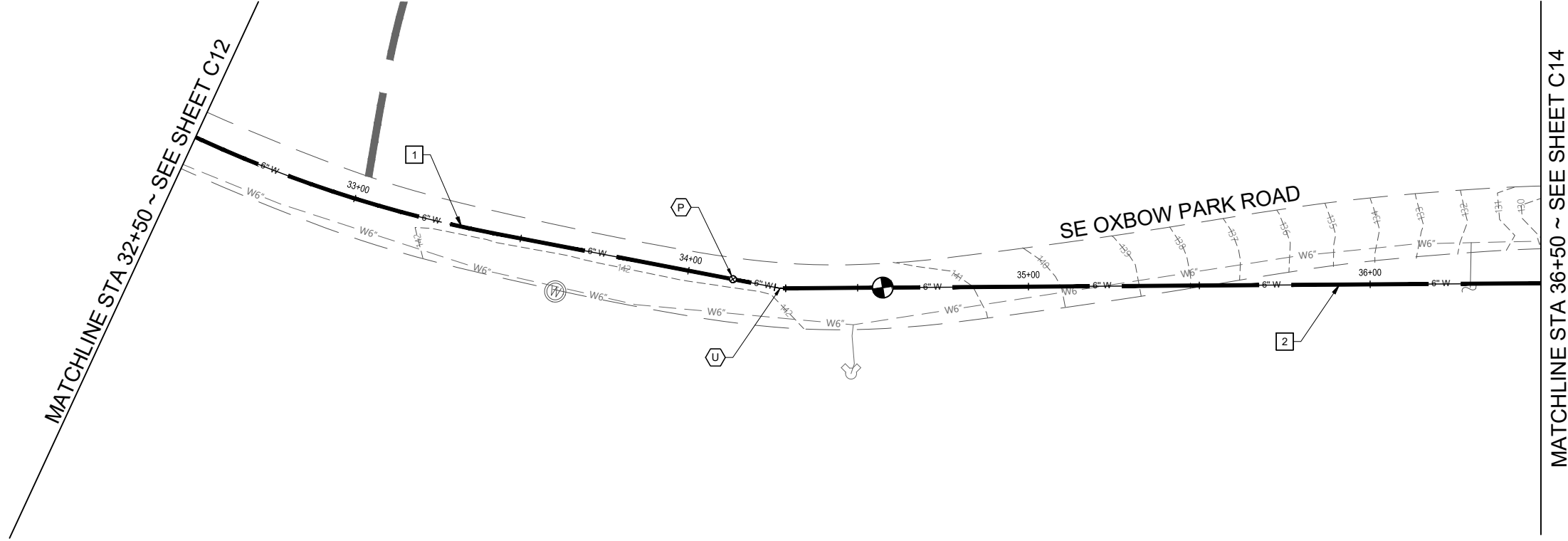
wallis engineering

PROJECT NO: 1544D
 DATE: 03/2024

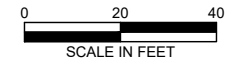
Metro

OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:
C12
12 OF 33



PLAN



VALVE & FITTING SCHEDULE

- P** INSTALL:
1 ~ 6" MJ GATE VALVE ASSEMBLY
- U** INSTALL:
1 ~ 6" HDPE DR 11 11.25° BEND

WATER CONSTRUCTION NOTES

- 1** INSTALL 6" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 2** INSTALL 6" HDPE DR 11 FUSED WATER MAIN BY HORIZONTAL DIRECTIONAL DRILLING

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
 DRAWN BY: C/ITS
 REV BY: JK/JV

ONE INCH AT FULL SCALE.
 IF NOT ONE INCH ADJUST
 SCALE ACCORDINGLY

PLAN & PROFILE STA
 32+50 TO STA 36+50

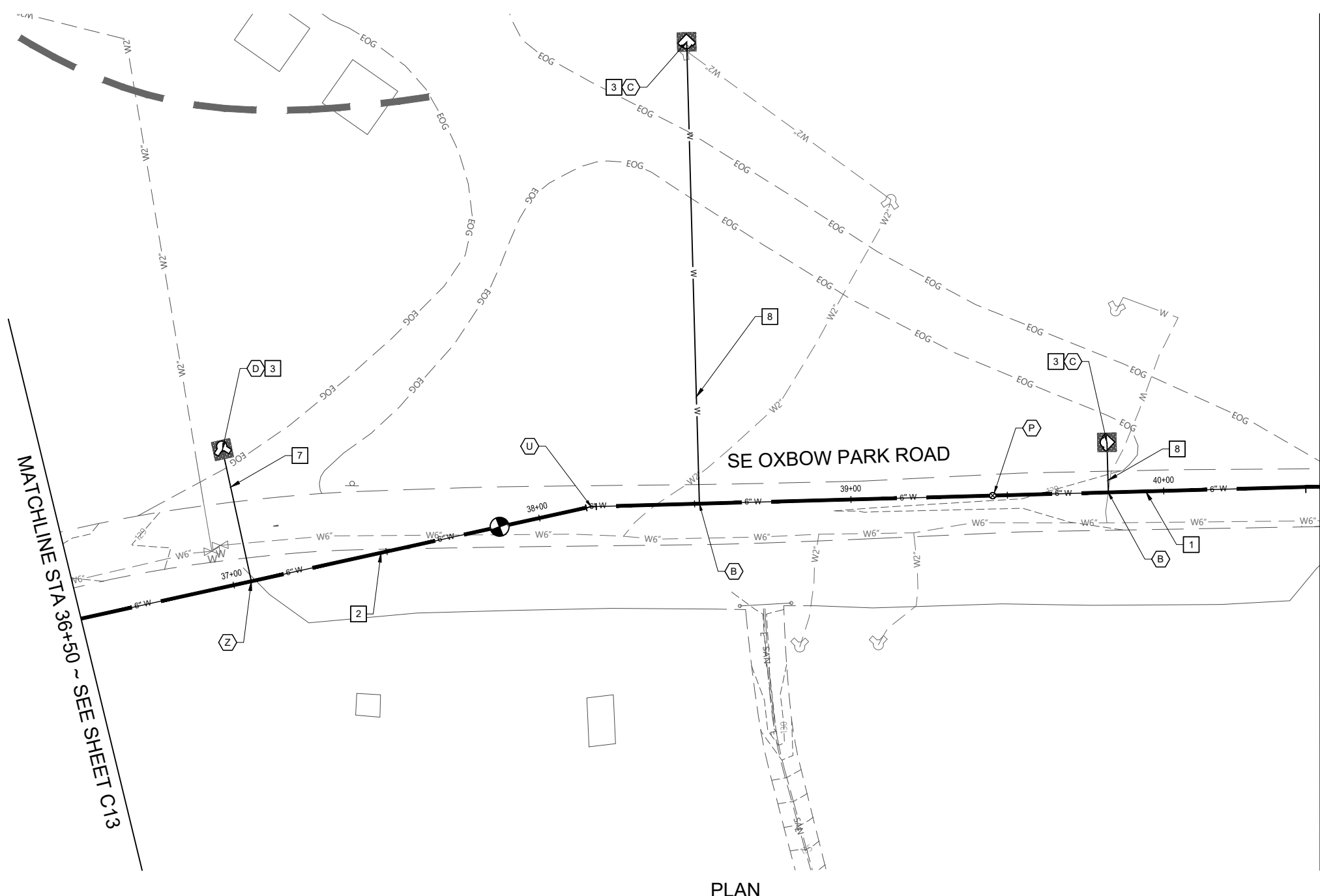
wallis
 *engineering

PROJECT NO: 1544D
 DATE: 03/2024

Metro

OXBOW PARK WATER DISTRIBUTION
 SYSTEM REPLACEMENT

DRAWING NO:
C13
 13 OF 33



PLAN



0 20 40
SCALE IN FEET

VALVE & FITTING SCHEDULE

- B** INSTALL: (TYP 2)
1 ~ 3/4" SERVICE TAP ASSEMBLY
- C** INSTALL: (TYP 2)
1 ~ YARD HYDRANT ASSEMBLY
1 ~ 3/4" BACKFLOW PREVENTION VALVE ASSEMBLY
- D** INSTALL:
1 ~ 2" STANDPIPE ASSEMBLY
- P** INSTALL:
1 ~ 6" MJ GATE VALVE ASSEMBLY
- U** INSTALL:
1 ~ 6" HDPE DR 11 11.25° BEND
- Z** INSTALL:
1 ~ 6" x 2" HDPE DR 11 REDUCING TEE

WATER CONSTRUCTION NOTES

- 1** INSTALL 6" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 2** INSTALL 6" HDPE DR 11 FUSED WATER MAIN BY HORIZONTAL DIRECTIONAL DRILLING
- 3** CONSTRUCT 6' x 6' SPLASH PAD
- 7** INSTALL 2" COPPER TYPE K SERVICE CONNECTION
- 8** INSTALL 3/4" TYPE K COPPER SERVICE CONNECTION

MATCHLINE STA 36+50 ~ SEE SHEET C13

MATCHLINE STA 40+50 ~ SEE SHEET C15

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
DRAWN BY: C/I/T/S
REV BY: JK/JV

ONE INCH AT FULL SCALE.
IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

PLAN & PROFILE STA 36+50 TO STA 40+50

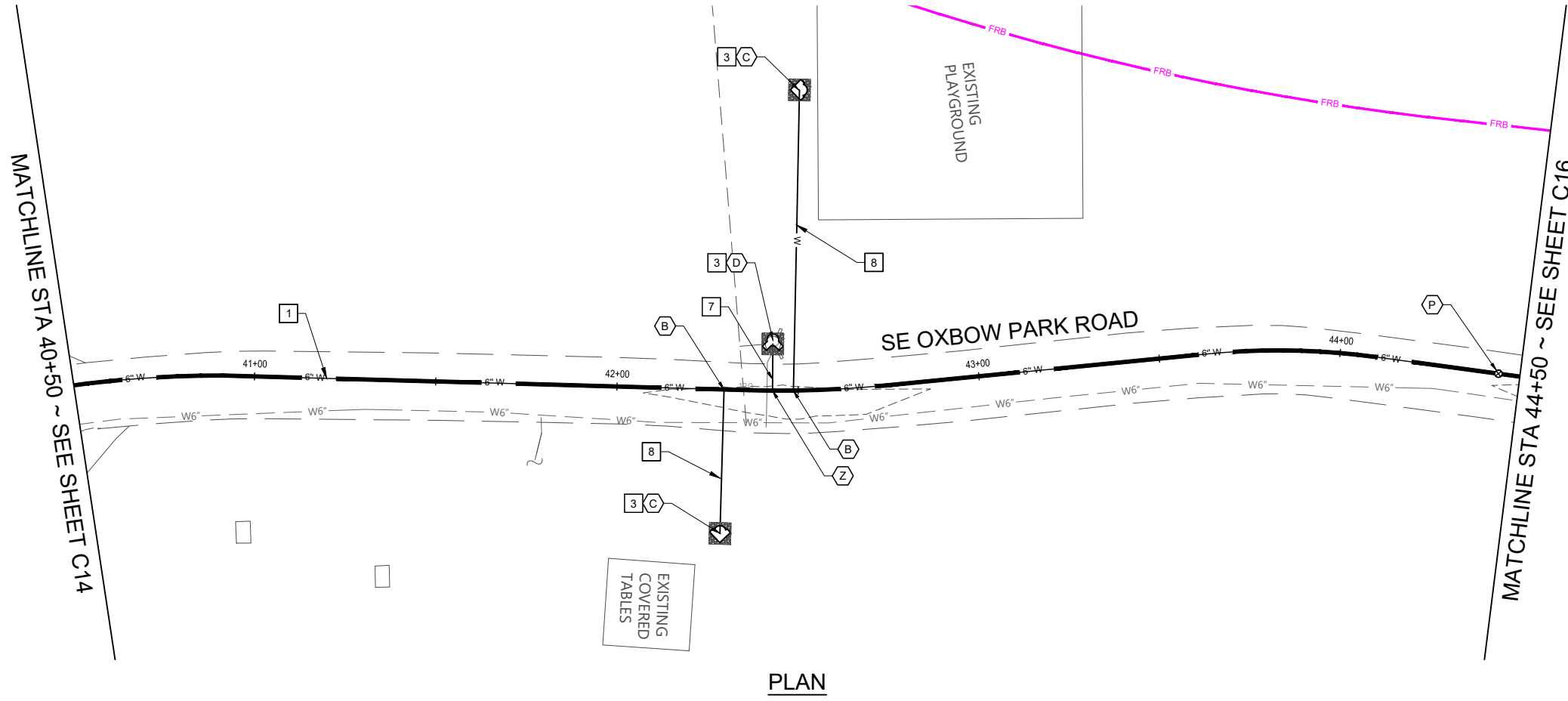
wallis engineering

PROJECT NO: 1544D DATE: 03/2024

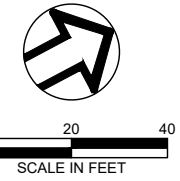
Metro

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:
C14
14 OF 33



PLAN



VALVE & FITTING SCHEDULE

- B** INSTALL: (TYP 2)
1 ~ 3/4" SERVICE TAP ASSEMBLY
- C** INSTALL: (TYP 2)
1 ~ YARD HYDRANT ASSEMBLY
1 ~ 3/4" BACKFLOW PREVENTION VALVE ASSEMBLY
- D** INSTALL:
1 ~ 2" STANDPIPE ASSEMBLY
- P** INSTALL:
1 ~ 6" MJ GATE VALVE ASSEMBLY
- Z** INSTALL:
1 ~ 6" x 2" HDPE DR 11 REDUCING TEE

WATER CONSTRUCTION NOTES

- 1** INSTALL 6" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 3** CONSTRUCT 6' x 6' SPLASH PAD
- 7** INSTALL 2" COPPER TYPE K SERVICE CONNECTION
- 8** INSTALL 3/4" TYPE K COPPER SERVICE CONNECTION

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
DRAWN BY: C/I/T/S
REV BY: JK/JV

0 1" ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

PLAN & PROFILE STA 40+50 TO STA 44+50

wallis engineering

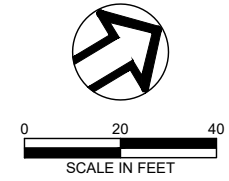
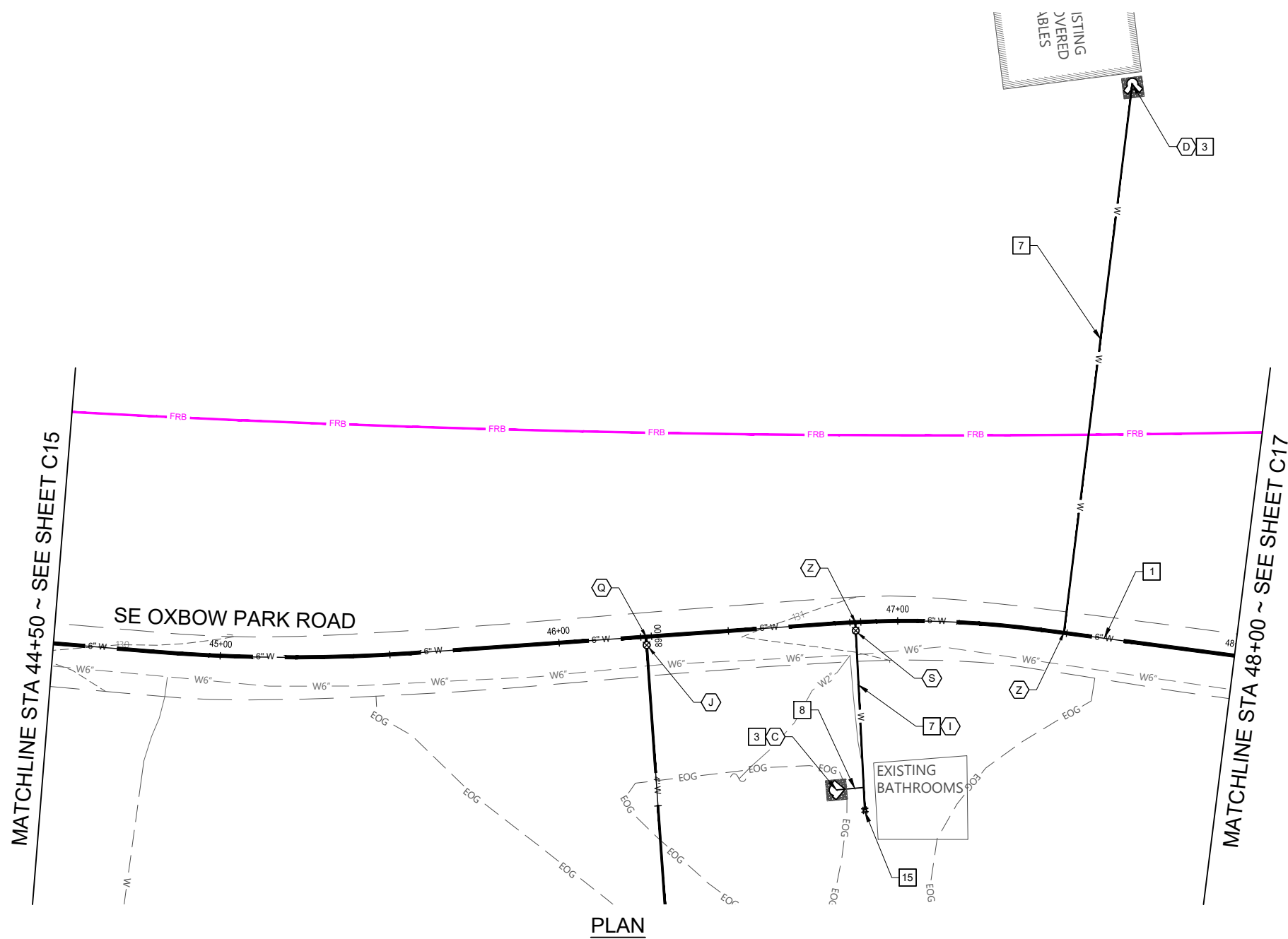
PROJECT NO: 1544D DATE: 03/2024

Metro

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:
C15
15 OF 33

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VALVE & FITTING SCHEDULE

- C** INSTALL:
1 ~ YARD HYDRANT ASSEMBLY
1 ~ 3/4" BACKFLOW PREVENTION VALVE ASSEMBLY
- D** INSTALL:
1 ~ 2" STANDPIPE ASSEMBLY
- I** INSTALL:
1 ~ 2" BACKFLOW PREVENTION VALVE ASSEMBLY
- J** INSTALL: (TYP 2)
1 ~ 4" MJ GATE VALVE ASSEMBLY
- S** INSTALL:
1 ~ 6" x 4" HDPE DR 11 REDUCING TEE
- S** INSTALL: (TYP 2)
1 ~ 2" MJ GATE VALVE ASSEMBLY
- Z** INSTALL: (TYP 3)
1 ~ 6" x 2" HDPE DR 11 REDUCING TEE

WATER CONSTRUCTION NOTES

- 1** INSTALL 6" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 3** CONSTRUCT 6' x 6' SPLASH PAD
- 4** INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 7** INSTALL 2" COPPER TYPE K SERVICE CONNECTION
- 8** INSTALL 3/4" TYPE K COPPER SERVICE CONNECTION
- 15** CONNECT TO EXISTING PIPING PER DETAIL [FORTHCOMING]

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
DRAWN BY: C/ITS
REV BY: JK/JV

ONE INCH AT FULL SCALE.
IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

PLAN & PROFILE STA 44+50 TO STA 48+00

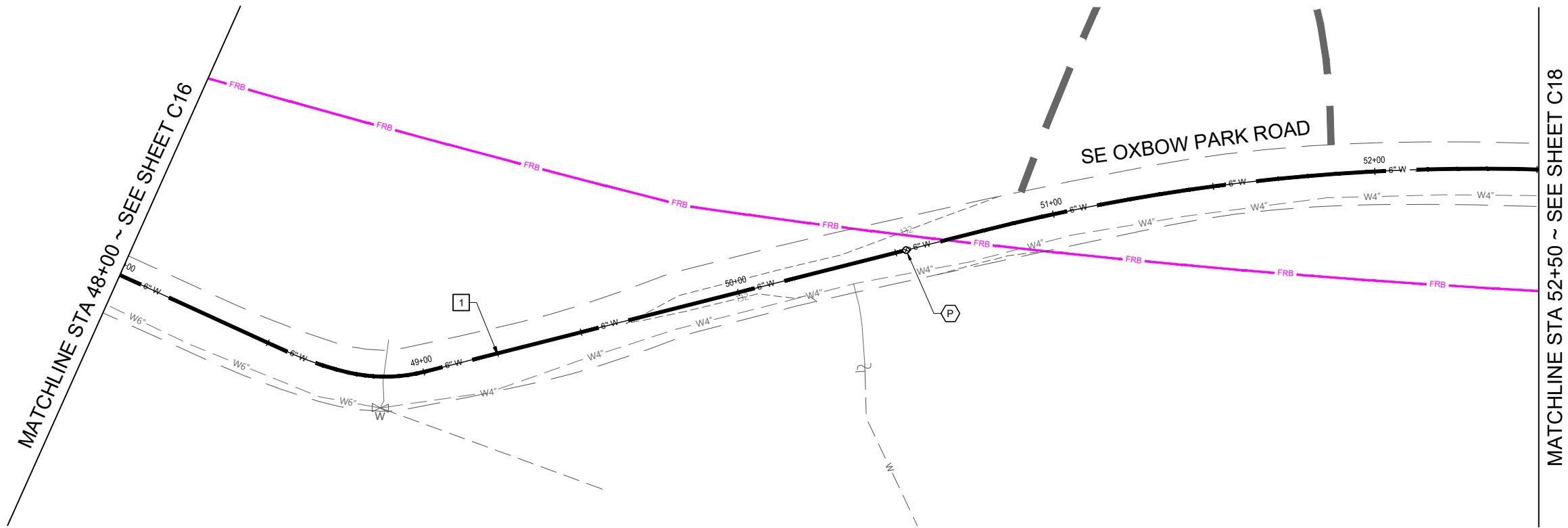
wallis *engineering

PROJECT NO: 1544D
DATE: 03/2024

Metro

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:
C16
16 OF 33



PLAN

MATCHLINE STA 48+00 ~ SEE SHEET C16

MATCHLINE STA 52+00 ~ SEE SHEET C18

VALVE & FITTING SCHEDULE

INSTALL:
1 ~ 6" MJ GATE VALVE ASSEMBLY

WATER CONSTRUCTION NOTES

1 INSTALL 6" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
DRAWN BY: CJ/TS
REV BY: JK/JV

ONE INCH AT FULL SCALE.
IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

PLAN & PROFILE STA
48+00 TO STA 52+50

wallis *engineering

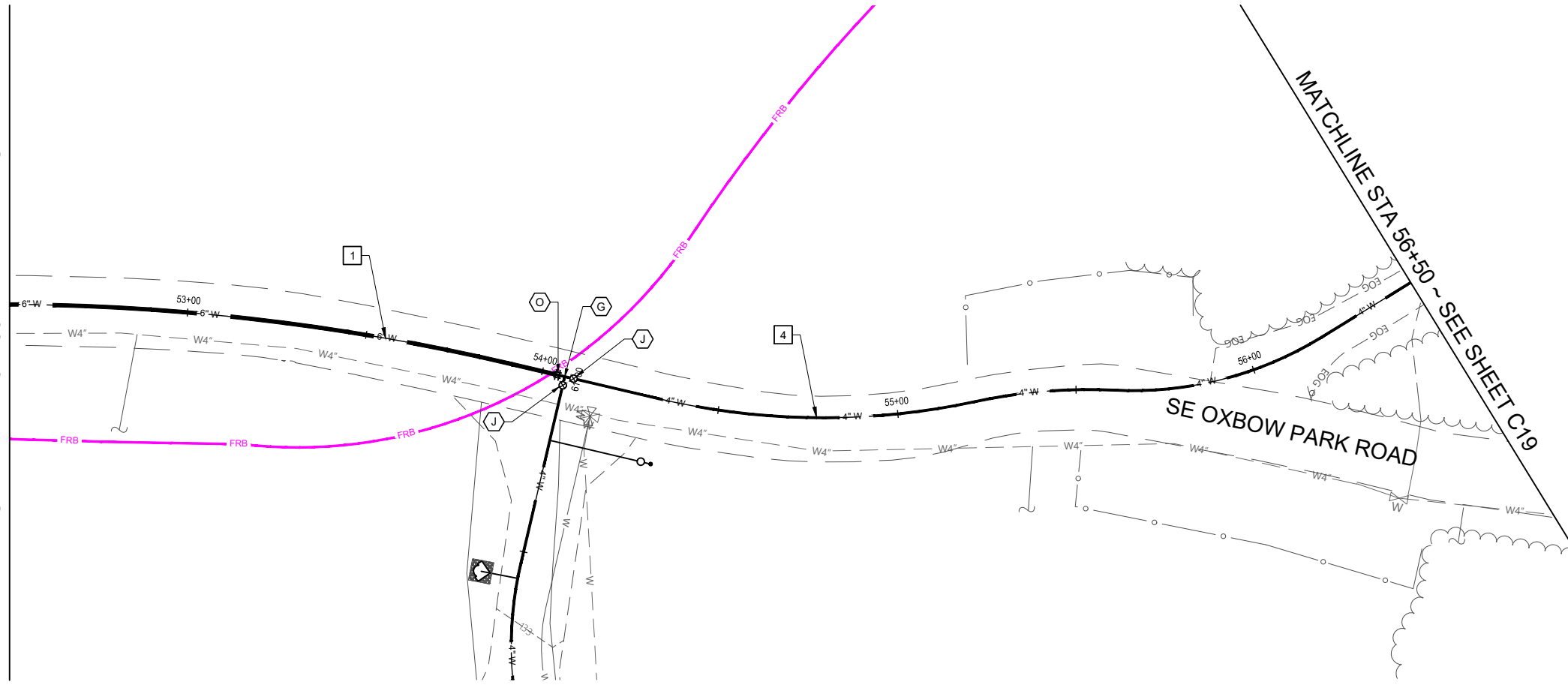
PROJECT NO: 1544D
DATE: 03/2024

Metro

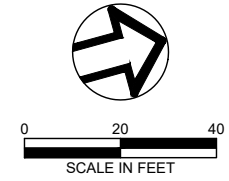
OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:
C17
17 OF 33

MATCHLINE STA 52+50 ~ SEE SHEET C17



PLAN



VALVE & FITTING SCHEDULE

- G INSTALL:
1 - 4" HDPE DR 11 TEE
- J INSTALL: (TYP 2)
1 - 4" MJ GATE VALVE ASSEMBLY
- O INSTALL:
1 - 6" x 4" HDPE DR 11 REDUCER

WATER CONSTRUCTION NOTES

- 1 INSTALL 6" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 4 INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
 DRAWN BY: C/I/T/S
 REV BY: JK/JV

0 1" ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

PLAN & PROFILE STA 52+50 TO STA 56+50

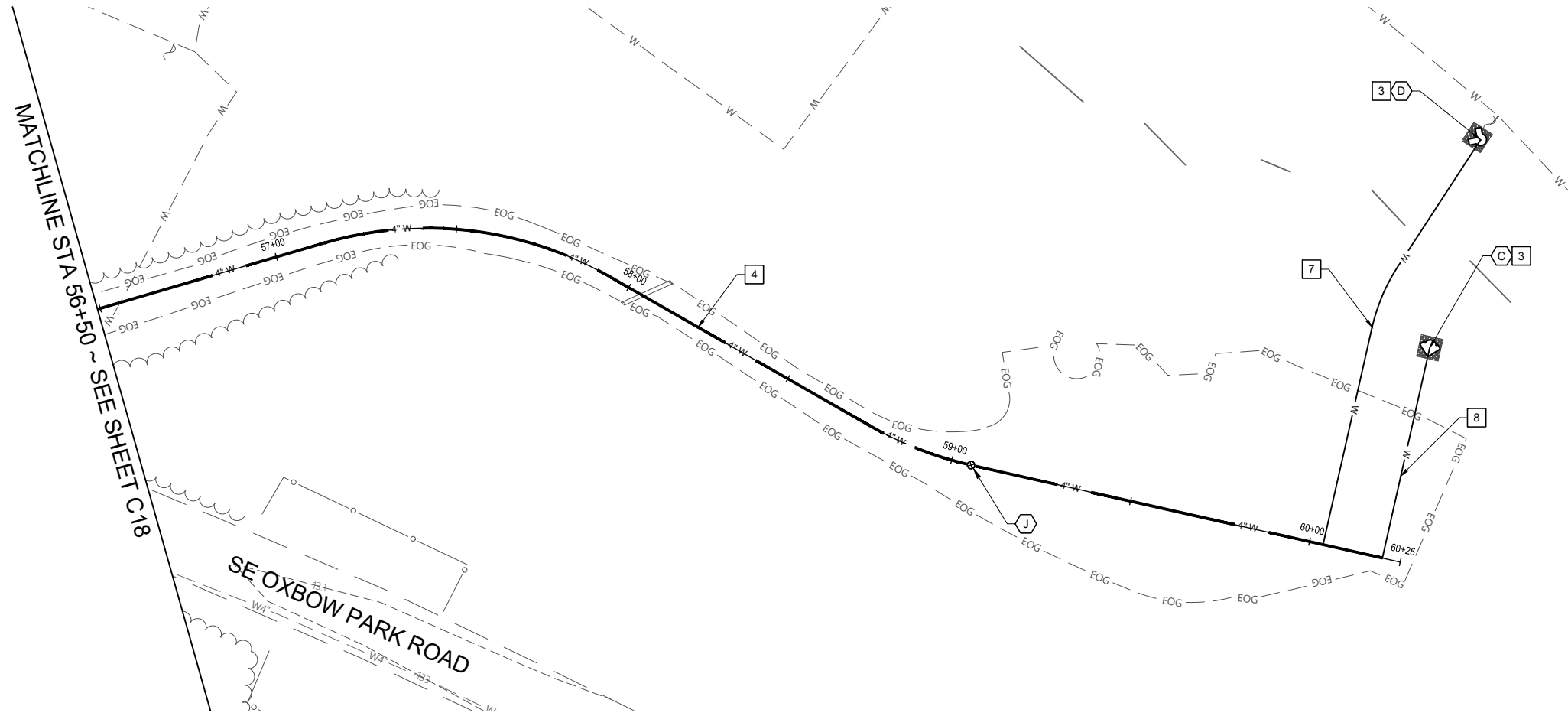
wallis engineering

PROJECT NO: 1544D
 DATE: 03/2024

Metro

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:
C18
 18 OF 33



PLAN



0 20 40
SCALE IN FEET

VALVE & FITTING SCHEDULE

- C** INSTALL:
1 ~ YARD HYDRANT ASSEMBLY
1 ~ 3/4" BACKFLOW PREVENTION VALVE ASSEMBLY
- D** INSTALL:
1 ~ 2" STANDPIPE ASSEMBLY
- J** INSTALL:
1 ~ 4" MJ GATE VALVE ASSEMBLY

WATER CONSTRUCTION NOTES

- 3** CONSTRUCT 6' x 6' SPLASH PAD
- 4** INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 7** INSTALL 2" COPPER TYPE K SERVICE CONNECTION
- 8** INSTALL 3/4" TYPE K COPPER SERVICE CONNECTION

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
DRAWN BY: C/ITS
REV BY: JK/JV

ONE INCH AT FULL SCALE.
IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

PLAN & PROFILE STA
56+50 TO END

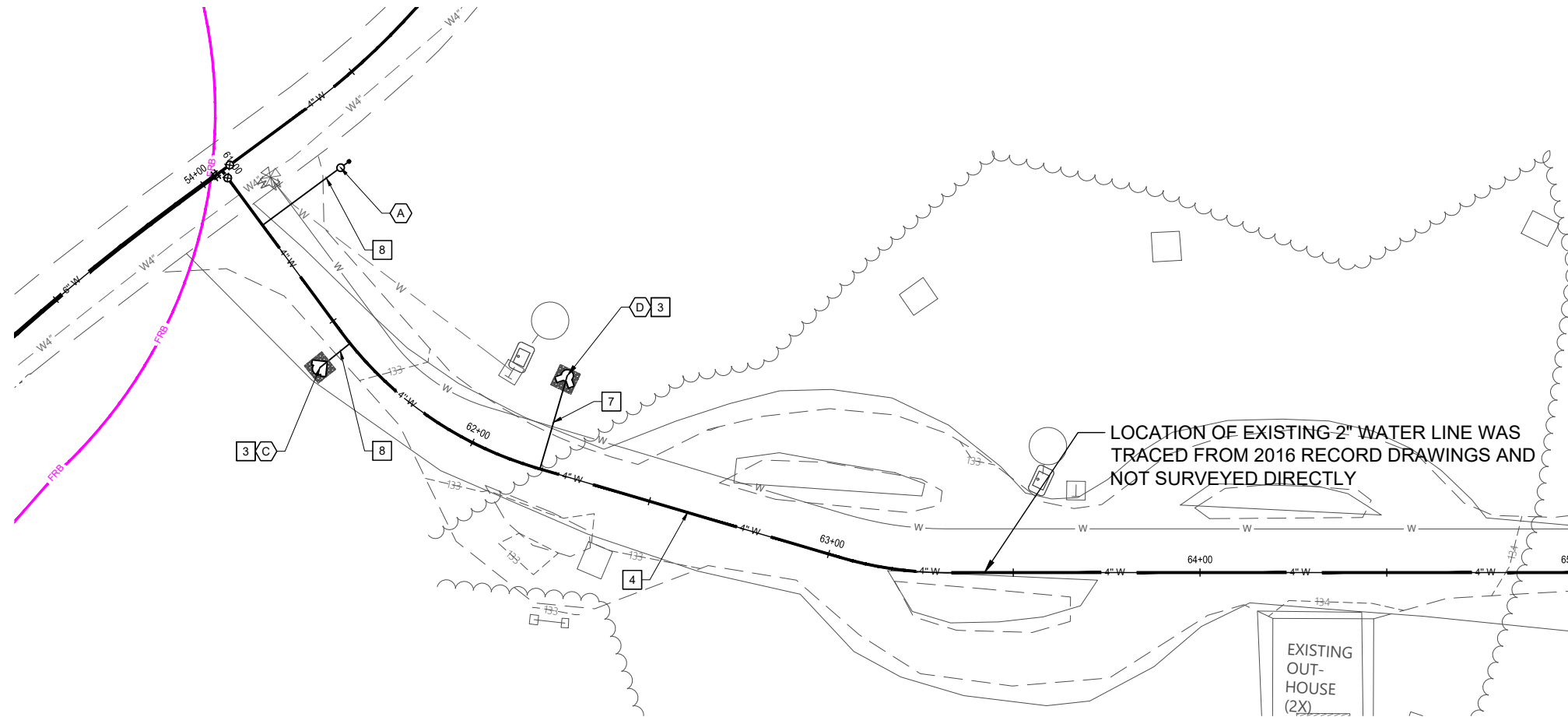
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PROJECT NO: 1544D
DATE: 03/2024

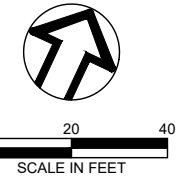
Metro

OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:
C19
19 OF 33



MATCHLINE STA 65+00 ~ SEE SHEET C21



VALVE & FITTING SCHEDULE

- A INSTALL:
1 - 1" COMBINATION AIR RELEASE VALVE ASSEMBLY
- C INSTALL:
1 - YARD HYDRANT ASSEMBLY
1 - 3/4" BACKFLOW PREVENTION VALVE ASSEMBLY
- D INSTALL:
1 - 2" STANDPIPE ASSEMBLY

WATER CONSTRUCTION NOTES

- 3 CONSTRUCT 6' x 6' SPLASH PAD
- 4 INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 7 INSTALL 2" COPPER TYPE K SERVICE CONNECTION
- 8 INSTALL 3/4" TYPE K COPPER SERVICE CONNECTION

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
DRAWN BY: C/I/T/S
REV BY: JK/JV

ONE INCH AT FULL SCALE.
IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

PLAN & PROFILE STA
61+00 TO STA 65+00

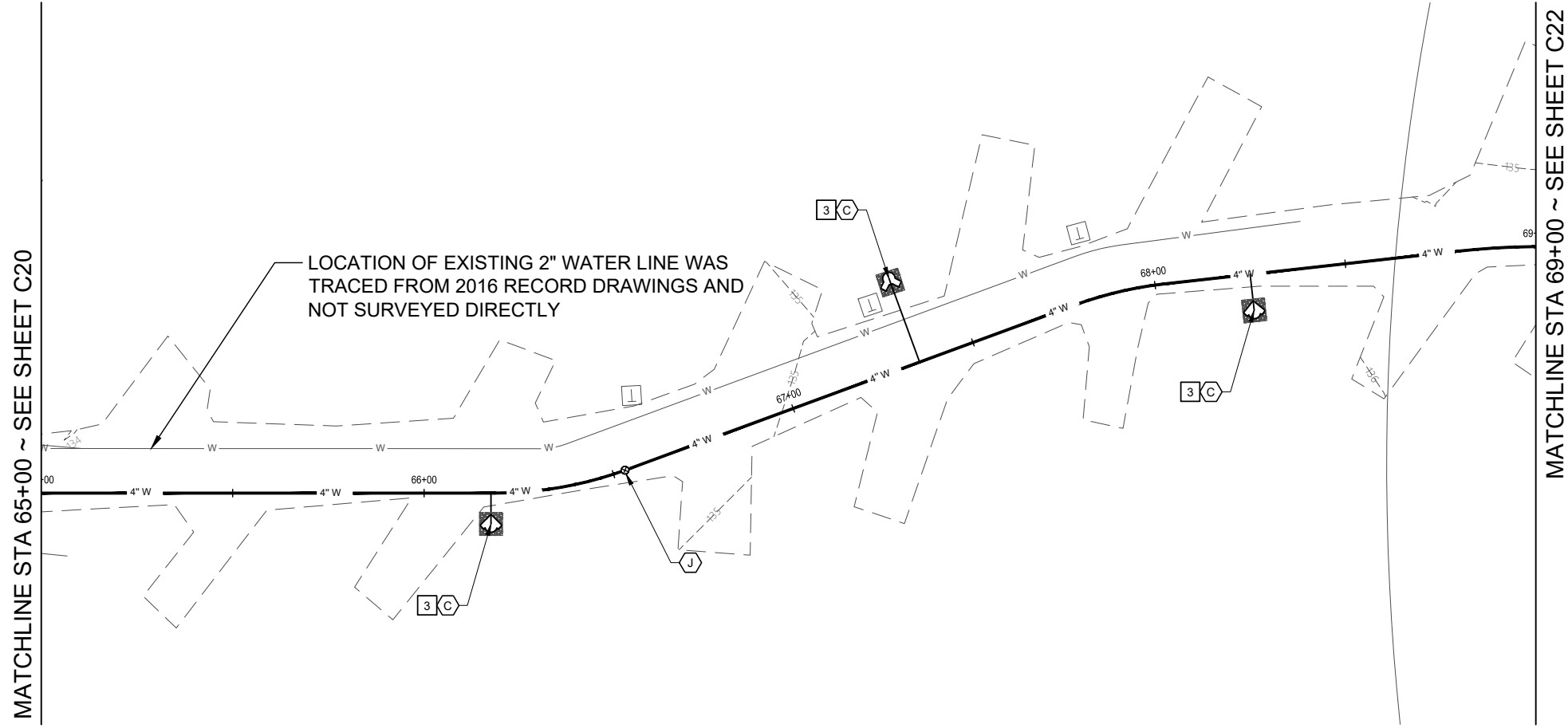
wallis engineering

PROJECT NO: 1544D
DATE: 03/2024

Metro

OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:
C20
20 OF 33

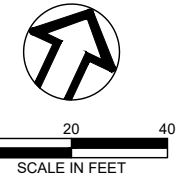


LOCATION OF EXISTING 2" WATER LINE WAS TRACED FROM 2016 RECORD DRAWINGS AND NOT SURVEYED DIRECTLY

PLAN

MATCHLINE STA 65+00 ~ SEE SHEET C20

MATCHLINE STA 69+00 ~ SEE SHEET C22



VALVE & FITTING SCHEDULE

- C** INSTALL: (TYP 3)
1 ~ YARD HYDRANT ASSEMBLY
1 ~ 3/4" BACKFLOW PREVENTION VALVE ASSEMBLY
- D** INSTALL:
1 ~ 2" STANDPIPE ASSEMBLY
- J** INSTALL:
1 ~ 4" MJ GATE VALVE ASSEMBLY

WATER CONSTRUCTION NOTES

- 3** CONSTRUCT 6' x 6' SPLASH PAD

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
DRAWN BY: C/I/T/S
REV BY: JK/JV

ONE INCH AT FULL SCALE.
IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

PLAN & PROFILE STA 65+00 TO STA 69+00

wallis engineering

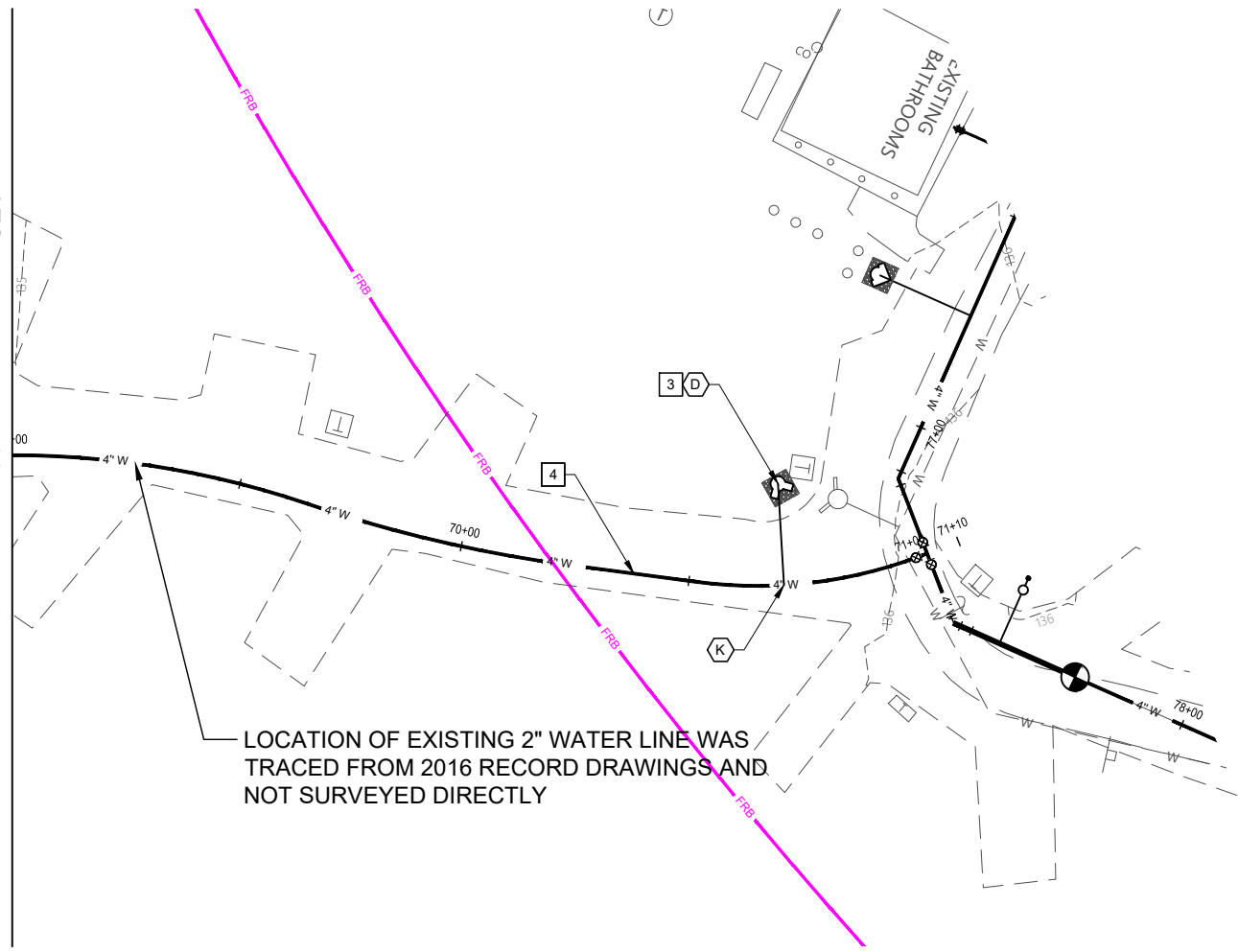
PROJECT NO: 1544D
DATE: 03/2024

Metro

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

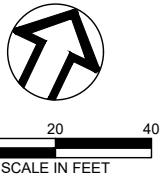
DRAWING NO:
C21
21 OF 33

MATCHLINE STA 69+00 ~ SEE SHEET C21



LOCATION OF EXISTING 2" WATER LINE WAS TRACED FROM 2016 RECORD DRAWINGS AND NOT SURVEYED DIRECTLY

PLAN



VALVE & FITTING SCHEDULE

- A INSTALL:
1 ~ 1" COMBINATION AIR RELEASE VALVE ASSEMBLY
- B INSTALL: (TYP 2)
1 ~ 3/4" SERVICE TAP ASSEMBLY
- C INSTALL:
1 ~ YARD HYDRANT ASSEMBLY
1 ~ 3/4" BACKFLOW PREVENTION VALVE ASSEMBLY
- D INSTALL:
1 ~ 2" STANDPIPE ASSEMBLY
- J INSTALL: (TYP 3)
1 ~ 4" MJ GATE VALVE ASSEMBLY
- N INSTALL: (TYP 2)
1 ~ 4" HDPE DR 11 45° BEND

WATER CONSTRUCTION NOTES

- 3 CONSTRUCT 6' x 6' SPLASH PAD
- 4 INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 5 INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY HORIZONTAL DIRECTIONAL DRILLING
- 7 INSTALL 2" COPPER TYPE K SERVICE CONNECTION
- 8 INSTALL 3/4" TYPE K COPPER SERVICE CONNECTION

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
 DRAWN BY: C/I/T/S
 REV BY: JK/JV

ONE INCH AT FULL SCALE.
 IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

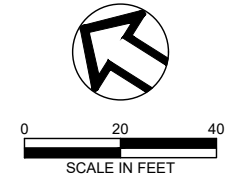
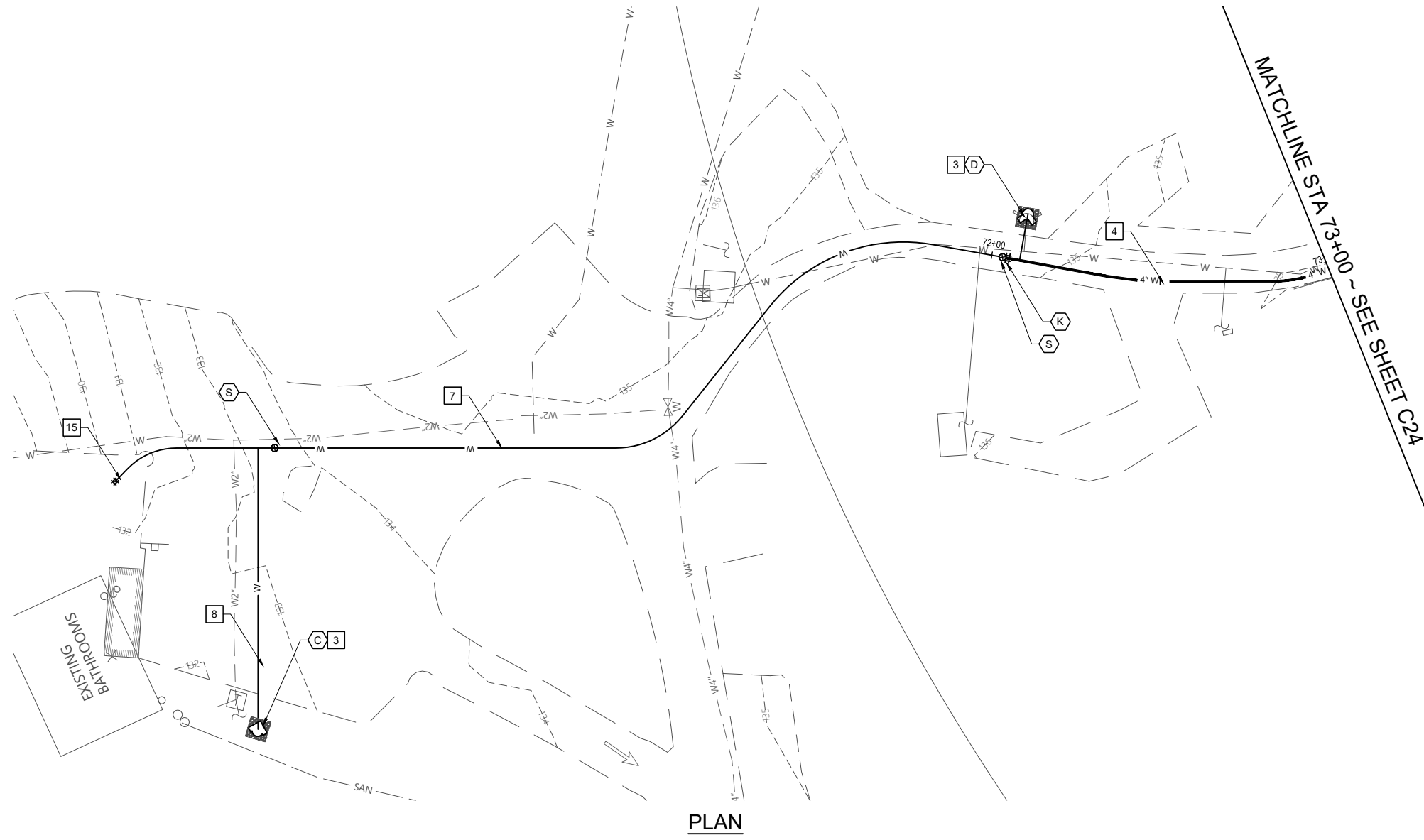
PLAN & PROFILE
 STA 69+00 TO END

wallis engineering

PROJECT NO: 1544D
 DATE: 03/2024

Metro

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT



VALVE & FITTING SCHEDULE

- C** INSTALL: (TYP 3)
1 ~ YARD HYDRANT ASSEMBLY
1 ~ 3/4" BACKFLOW PREVENTION VALVE ASSEMBLY
- D** INSTALL:
1 ~ 2" STANDPIPE ASSEMBLY
- K** INSTALL:
1 ~ 4" x 2" HDPE DR 11 REDUCER
- S** INSTALL:
1 ~ 2" MJ GATE VALVE ASSEMBLY

WATER CONSTRUCTION NOTES

- 3** CONSTRUCT 6' x 6' SPLASH PAD
- 4** INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 7** INSTALL 2" COPPER TYPE K SERVICE CONNECTION
- 8** INSTALL 3/4" TYPE K COPPER SERVICE CONNECTION
- 15** CONNECT TO EXISTING PIPING PER DETAIL [FORTHCOMING]

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP

DRAWN BY: C/I/T/S

REV BY: JK/JV

ONE INCH = 1'

ONE INCH AT FULL SCALE.

IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

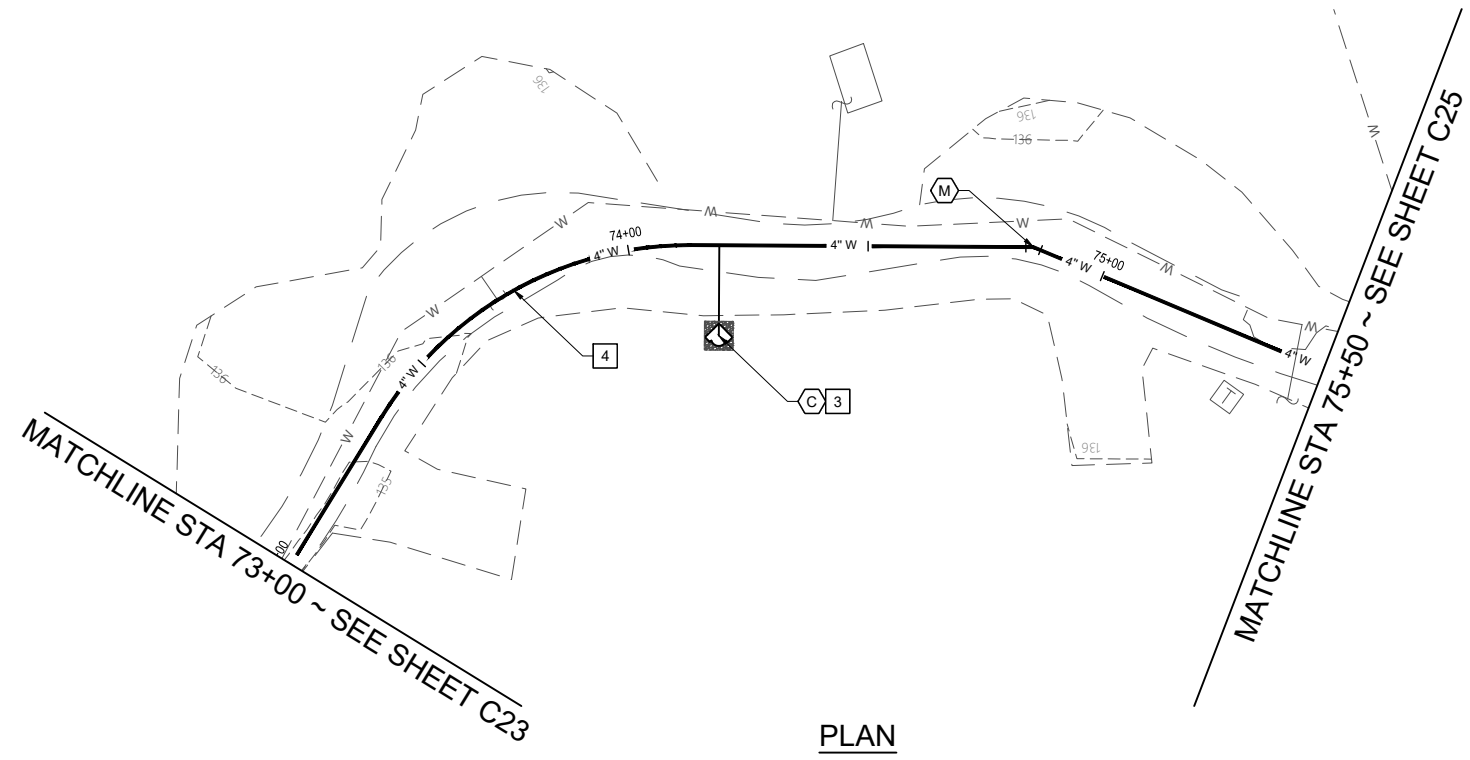
**PLAN & PROFILE STA
72+00 TO STA 73+00**

PROJECT NO: 1544D

DATE: 03/2024

Metro
OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:
C23
23 OF 33



0 20 40
SCALE IN FEET

VALVE & FITTING SCHEDULE

- C** INSTALL:
 - 1 - YARD HYDRANT ASSEMBLY
 - 1 - 3/4" BACKFLOW PREVENTION VALVE ASSEMBLY
- M** INSTALL:
 - 1 - 4" HDPE DR 11 22.5° BEND

WATER CONSTRUCTION NOTES

- 3** CONSTRUCT 6' x 6' SPLASH PAD
- 4** INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
 DRAWN BY: C/I/T/S
 REV BY: JK/JV

0 1" ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

**PLAN & PROFILE STA
73+00 TO STA 75+50**

wallis
*engineering

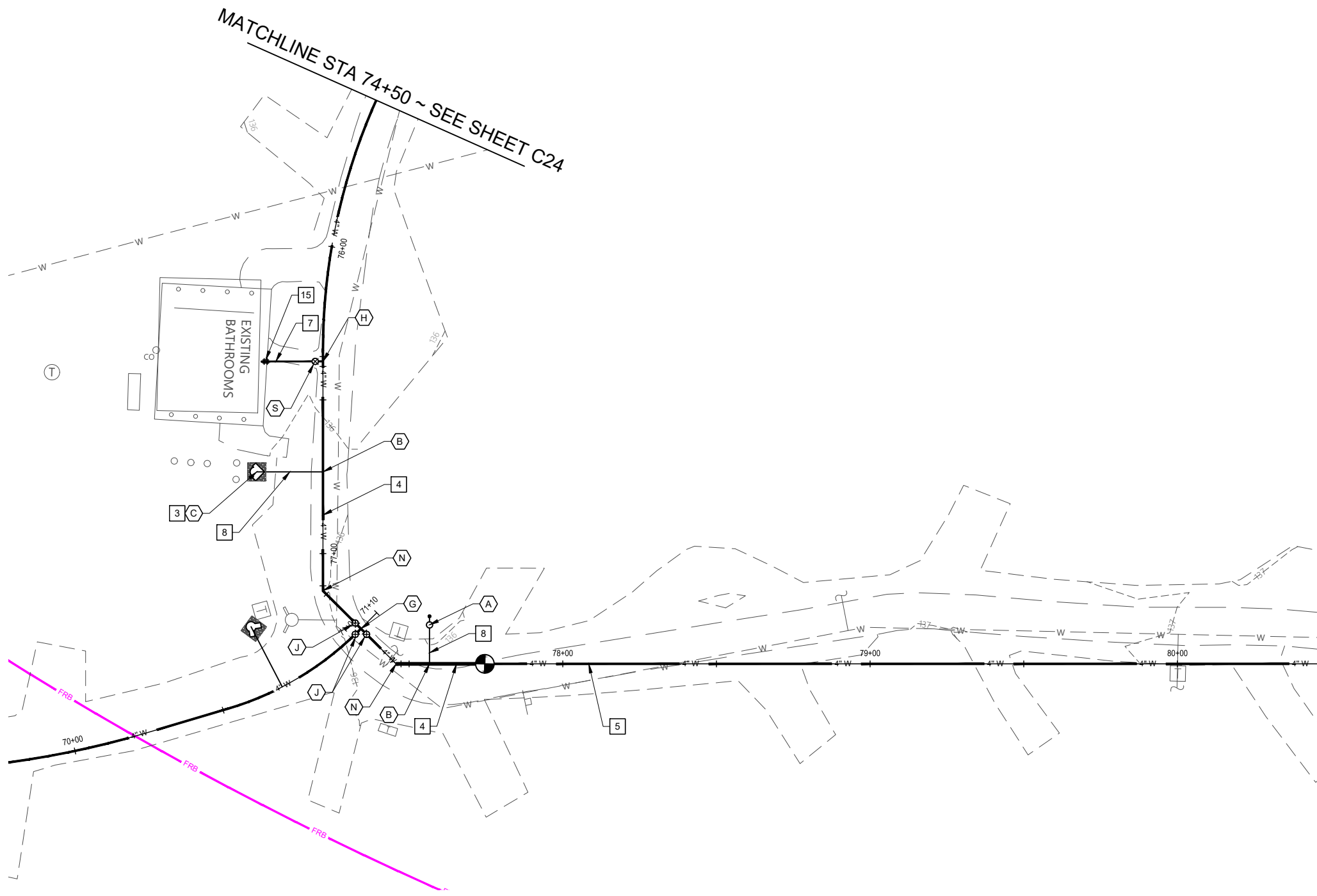
PROJECT NO: 1544D DATE: 03/2024

Metro

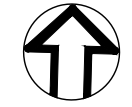
**OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT**

DRAWING NO:
C24
24 OF 33

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PLAN



0 20 40
SCALE IN FEET

VALVE & FITTING SCHEDULE

- A** INSTALL:
1 ~ 1" COMBINATION AIR RELEASE VALVE ASSEMBLY
- B** INSTALL: (TYP 2)
1 ~ 3/4" SERVICE TAP ASSEMBLY
- C** INSTALL:
1 ~ YARD HYDRANT ASSEMBLY
1 ~ 3/4" BACKFLOW PREVENTION VALVE ASSEMBLY
- G** INSTALL:
1 ~ 4" HDPE DR 11 TEE
- H** INSTALL:
1 ~ 4" x 2" HDPE DR 11 REDUCING TEE
- J** INSTALL: (TYP 3)
1 ~ 4" MJ GATE VALVE ASSEMBLY
- N** INSTALL:
1 ~ 4" HDPE DR 11 45° BEND
- S** INSTALL: (TYP 3)
1 ~ 2" MJ GATE VALVE ASSEMBLY

WATER CONSTRUCTION NOTES

- 3** CONSTRUCT 6' x 6' SPLASH PAD
- 4** INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 5** INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY HORIZONTAL DIRECTIONAL DRILLING
- 7** INSTALL 2" COPPER TYPE K SERVICE CONNECTION
- 8** INSTALL 3/4" TYPE K COPPER SERVICE CONNECTION
- 15** CONNECT TO EXISTING PIPING PER DETAIL [FORTHCOMING]

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
DRAWN BY: C/ITS
REV BY: JK/JV

0 1" ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

PLAN & PROFILE STA 75+50 TO STA 80+50

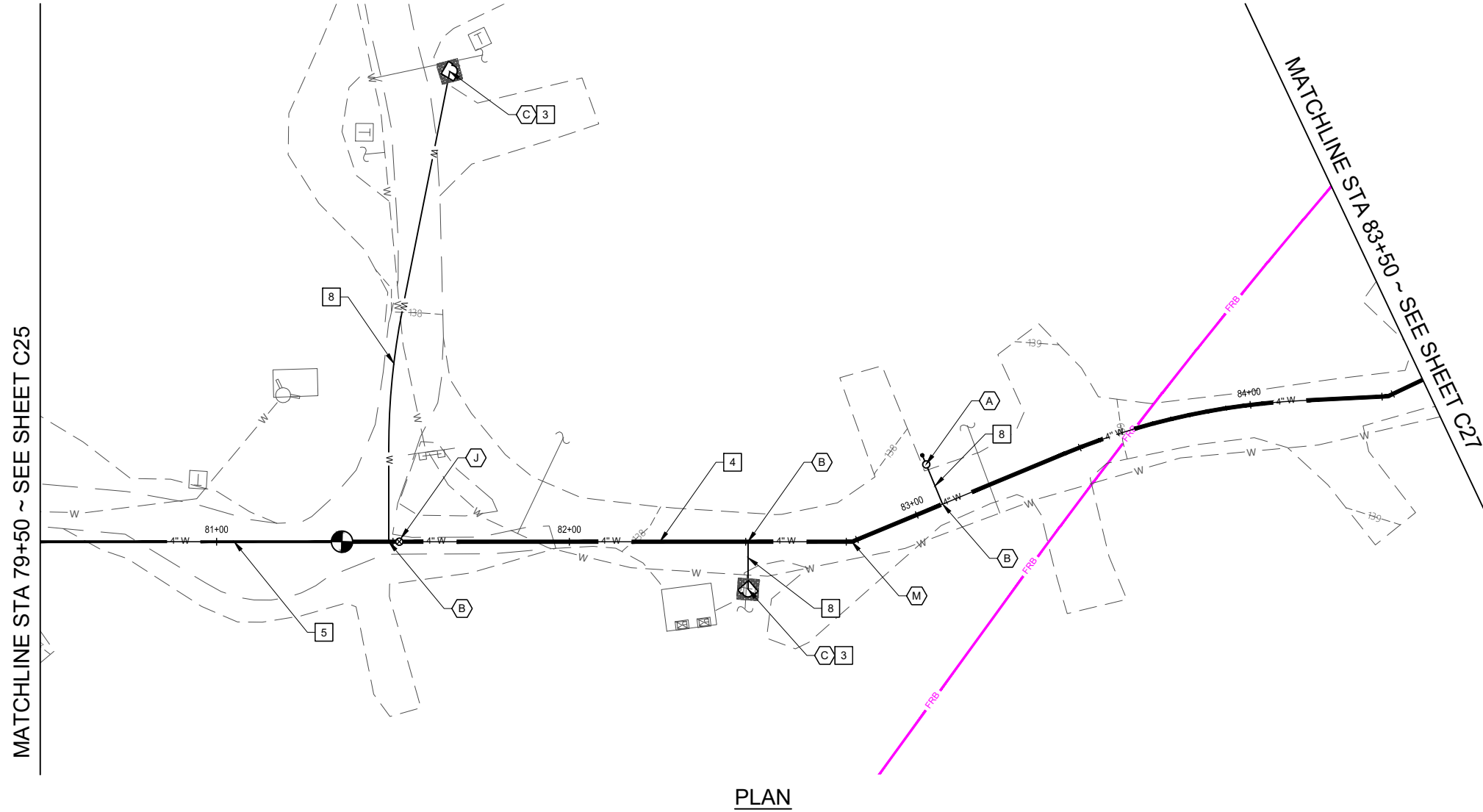
wallis engineering

PROJECT NO: 1544D
DATE: 03/2024

Metro

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

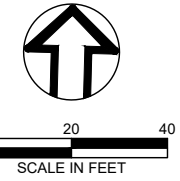
DRAWING NO:
C25
25 OF 33



PLAN

MATCHLINE STA 79+50 ~ SEE SHEET C25

MATCHLINE STA 83+50 ~ SEE SHEET C27



VALVE & FITTING SCHEDULE

- A** INSTALL:
1 ~ 1" COMBINATION AIR RELEASE VALVE ASSEMBLY
- B** INSTALL:
1 ~ 3/4" SERVICE TAP ASSEMBLY
- C** INSTALL: (TYP 2)
1 ~ YARD HYDRANT ASSEMBLY
1 ~ 3/4" BACKFLOW PREVENTION VALVE ASSEMBLY
- J** INSTALL:
1 ~ 4" MJ GATE VALVE ASSEMBLY
- M** INSTALL: (TYP 3)
1 ~ 4" HDPE DR 11 22.5° BEND

WATER CONSTRUCTION NOTES

- 3** CONSTRUCT 6' x 6' SPLASH PAD
- 4** INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 5** INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY HORIZONTAL DIRECTIONAL DRILLING
- 7** INSTALL 2" COPPER TYPE K SERVICE CONNECTION
- 8** INSTALL 3/4" TYPE K COPPER SERVICE CONNECTION

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
 DRAWN BY: C/I/T/S
 REV BY: JK/JV

0 1" ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

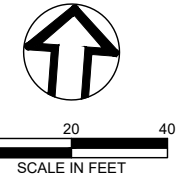
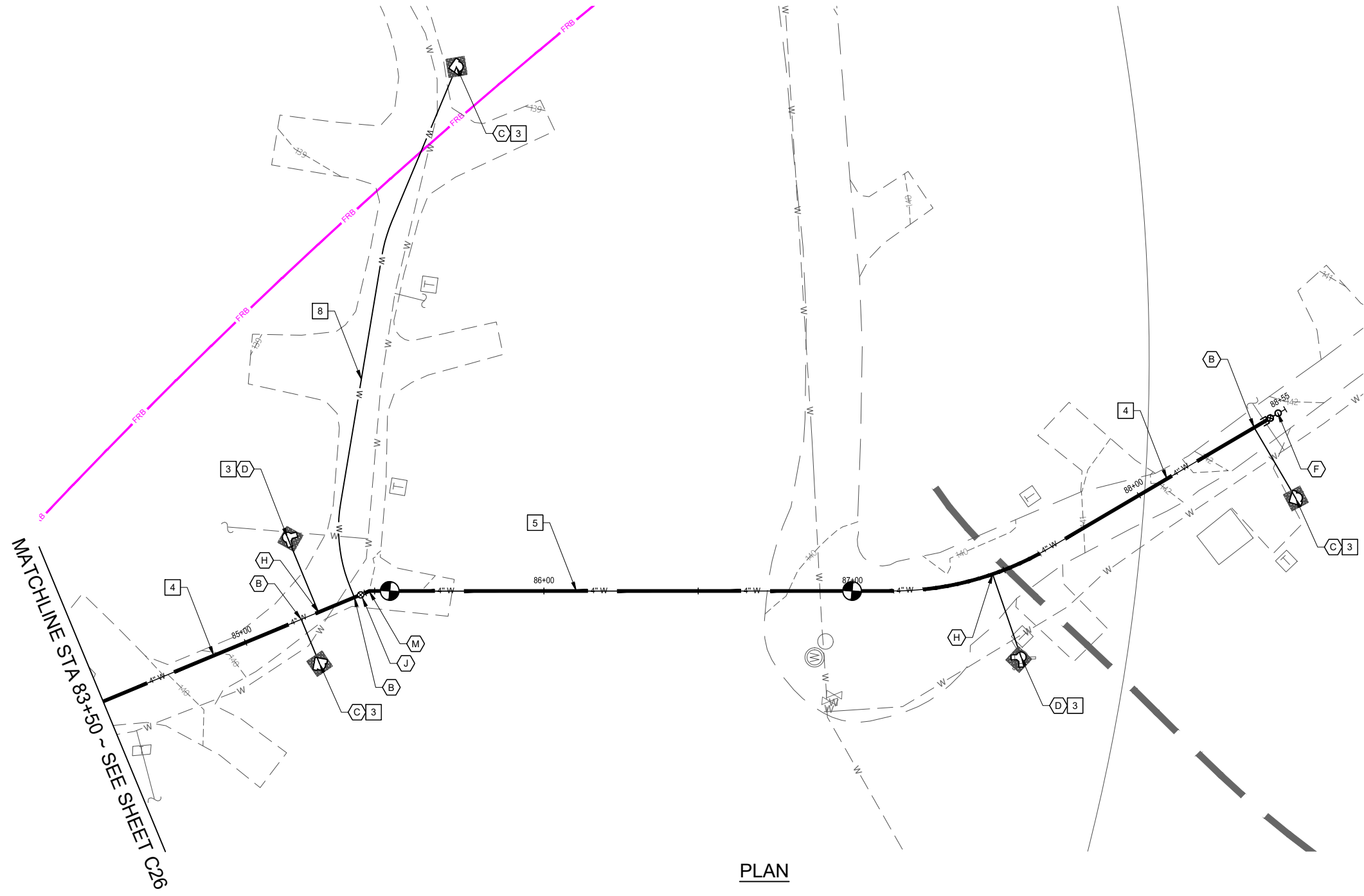
PLAN & PROFILE STA 80+50 TO STA 84+50

wallis engineering

PROJECT NO: 1544D
 DATE: 03/2024

Metro

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT



VALVE & FITTING SCHEDULE

- B** INSTALL: (TYP 3)
1 ~ 3/4" SERVICE TAP ASSEMBLY
- C** INSTALL: (TYP 3)
1 ~ YARD HYDRANT ASSEMBLY
1 ~ 3/4" BACKFLOW PREVENTION VALVE ASSEMBLY
- D** INSTALL: (TYP 2)
1 ~ 2" STANDPIPE ASSEMBLY
- F** INSTALL:
1 ~ 2" BLOWOFF ASSEMBLY
- H** INSTALL: (TYP 2)
1 ~ 4" x 2" HDPE DR 11 REDUCING TEE
- J** INSTALL:
1 ~ 4" MJ GATE VALVE ASSEMBLY
- M** INSTALL:
1 ~ 4" HDPE DR 11 22.5° BEND

WATER CONSTRUCTION NOTES

- 3** CONSTRUCT 6' x 6' SPLASH PAD
- 4** INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 5** INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY HORIZONTAL DIRECTIONAL DRILLING
- 7** INSTALL 2" COPPER TYPE K SERVICE CONNECTION
- 8** INSTALL 3/4" TYPE K COPPER SERVICE CONNECTION

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP

DRAWN BY: C/I/T/S

REV BY: JK/JV

ONE INCH = 1'

ONE INCH AT FULL SCALE.

IF NOT ONE INCH ADJUST

SCALE ACCORDINGLY

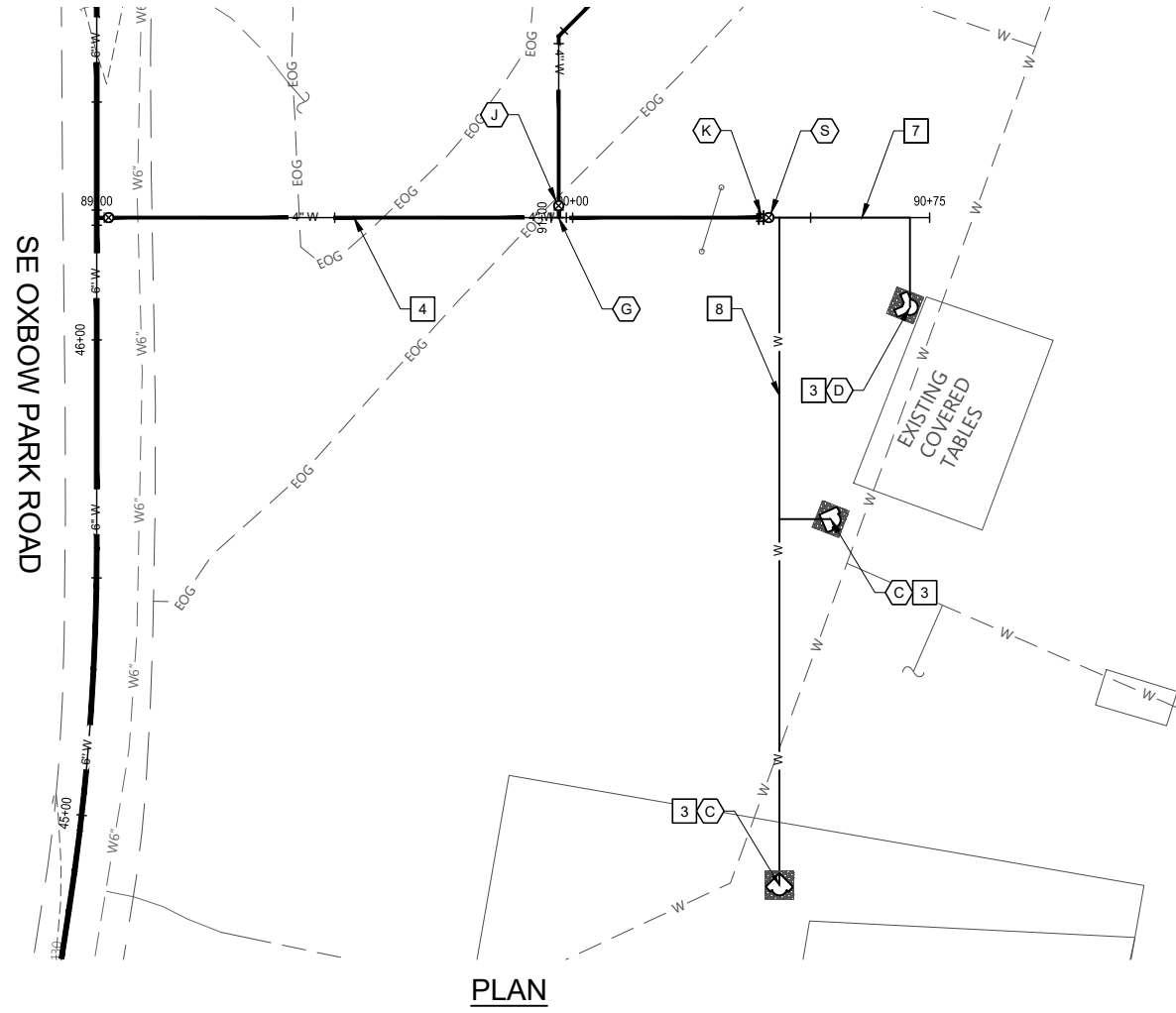
PLAN & PROFILE
STA 84+50 TO END

PROJECT NO: 1544D

DATE: 03/2024

Metro
OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:
C27
27 OF 33



PLAN



0 20 40
SCALE IN FEET

VALVE & FITTING SCHEDULE

- C** INSTALL: (TYP 2)
1 ~ YARD HYDRANT ASSEMBLY
1 ~ 3/4" BACKFLOW PREVENTION VALVE ASSEMBLY
- D** INSTALL:
1 ~ 2" STANDPIPE ASSEMBLY
- G** INSTALL:
1 ~ 4" HDPE DR 11 TEE
- J** INSTALL: (TYP 2)
1 ~ 4" MJ GATE VALVE ASSEMBLY
- K** INSTALL:
1 ~ 4" x 2" HDPE DR 11 REDUCER
- S** INSTALL:
1 ~ 2" MJ GATE VALVE ASSEMBLY

WATER CONSTRUCTION NOTES

- 3** CONSTRUCT 6' x 6' SPLASH PAD
- 4** INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 7** INSTALL 2" COPPER TYPE K SERVICE CONNECTION
- 8** INSTALL 3/4" TYPE K COPPER SERVICE CONNECTION

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
DRAWN BY: C/ITS
REV BY: JK/JV

ONE INCH AT FULL SCALE.
IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

PLAN & PROFILE
STA 89+00 TO END

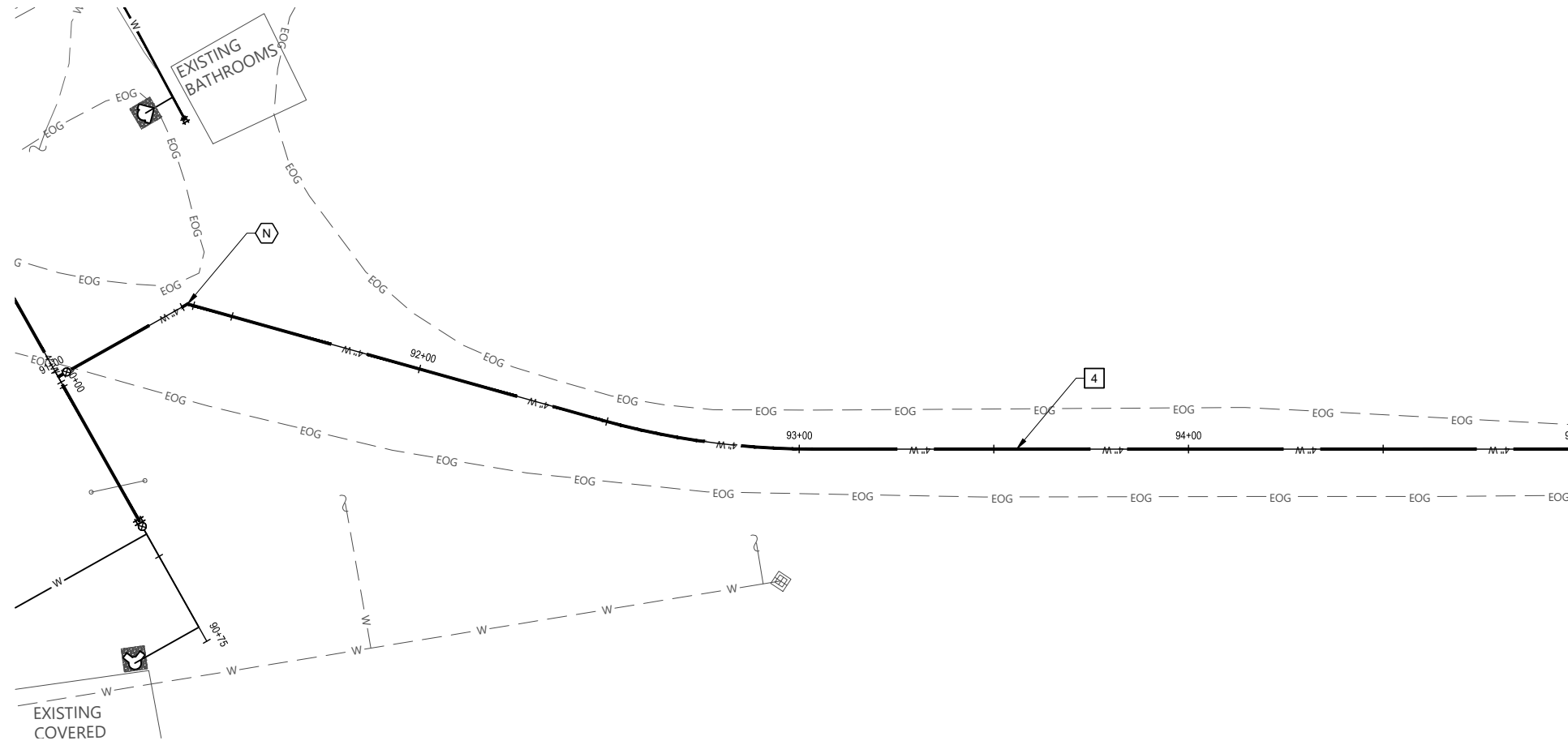
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PROJECT NO: 1544D
DATE: 03/2024

Metro

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:
C28
28 OF 33



PLAN



0 20 40
SCALE IN FEET

VALVE & FITTING SCHEDULE

INSTALL:
1 - 4" HDPE DR 11 45° BEND

WATER CONSTRUCTION NOTES

4 INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
DRAWN BY: C/I/T/S
REV BY: JK/JV

ONE INCH AT FULL SCALE.
IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

PLAN & PROFILE STA 91+00 TO STA 95+00

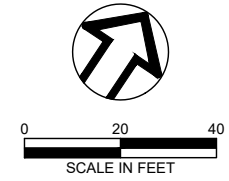
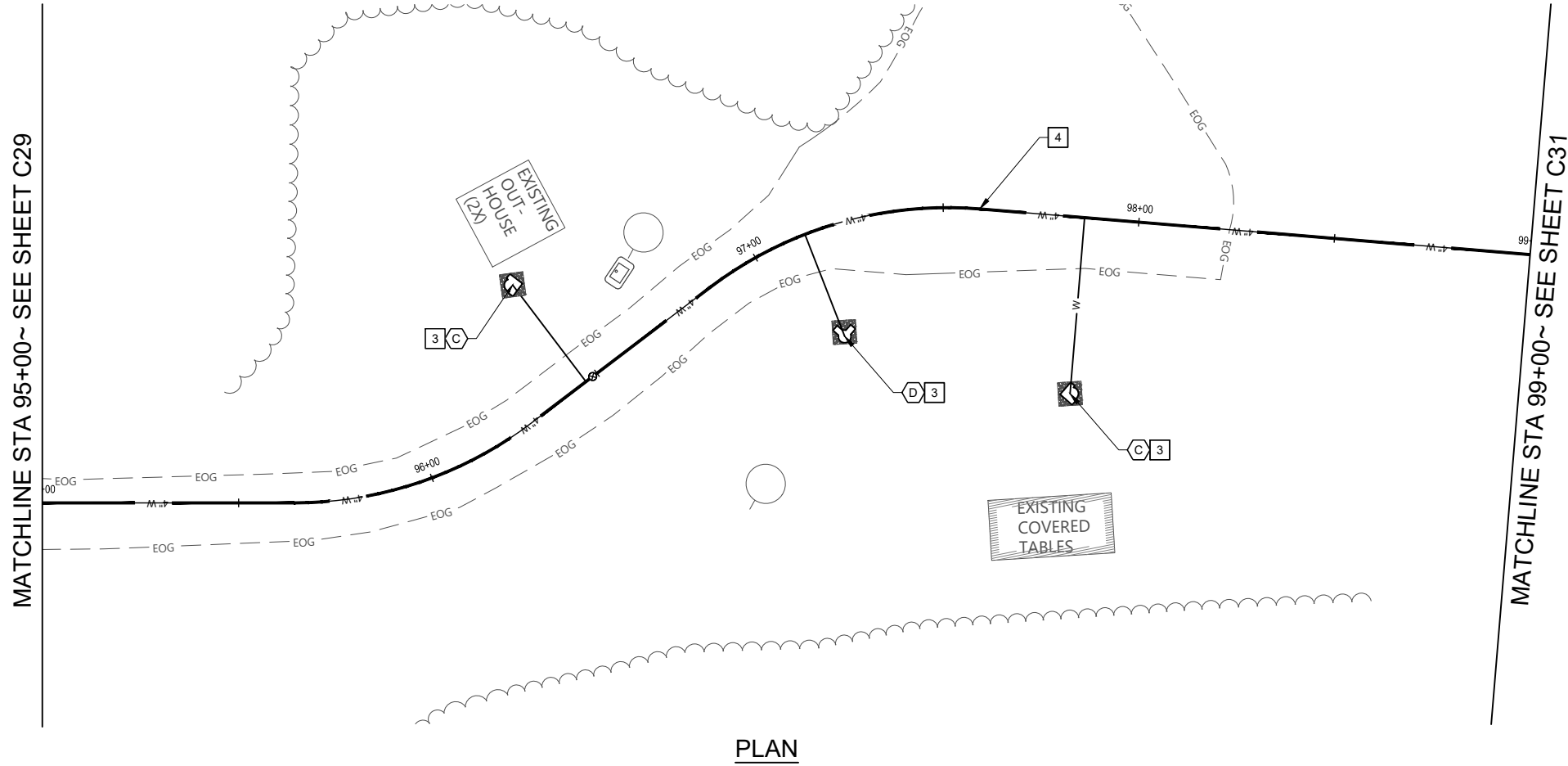
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PROJECT NO: 1544D
DATE: 03/2024

Metro

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:
C29
29 OF 33



VALVE & FITTING SCHEDULE

- INSTALL: (TYP 2)
 - C 1 - YARD HYDRANT ASSEMBLY
 - 1 - 3/4" BACKFLOW PREVENTION VALVE ASSEMBLY
- INSTALL:
 - D 1 - 2" STANDPIPE ASSEMBLY

WATER CONSTRUCTION NOTES

- 3 CONSTRUCT 6' x 6' SPLASH PAD
- 4 INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
 DRAWN BY: C/I/T/S
 REV BY: JK/JV

0" ONE INCH AT FULL SCALE.
 1" ONE INCH AT FULL SCALE.
 IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

PLAN & PROFILE STA 95+00 TO STA 99+00

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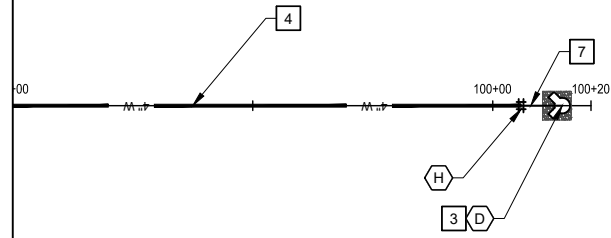
PROJECT NO: 1544D
 DATE: 03/2024

Metro

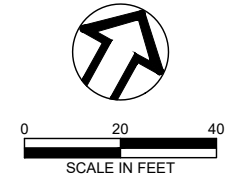
OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:
C30
 30 OF 33

MATCHLINE STA 99+00~ SEE SHEET C30



PLAN



VALVE & FITTING SCHEDULE

D INSTALL:
1 - 2" STANDPIPE ASSEMBLY

WATER CONSTRUCTION NOTES

- 3 CONSTRUCT 6' x 6' SPLASH PAD
- 4 INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 7 INSTALL 2" COPPER TYPE K SERVICE CONNECTION

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP	
DRAWN BY: C/TS	
REV BY: JK/JV	

PLAN & PROFILE
STA 99+00 TO END

PROJECT NO: 1544D
DATE: 03/2024

Metro
OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:
C31
31 OF 33

EXISTING BACKWASH POND
APPROXIMATE AREA = 1,000 SF

EXISTING WELL VAULT

EXISTING ROOF DRAINAGE PIPING (TYP)

EXISTING TREE PLANTER

EXISTING DRYWELL



0 10 20
SCALE IN FEET

VALVE & FITTING SCHEDULE

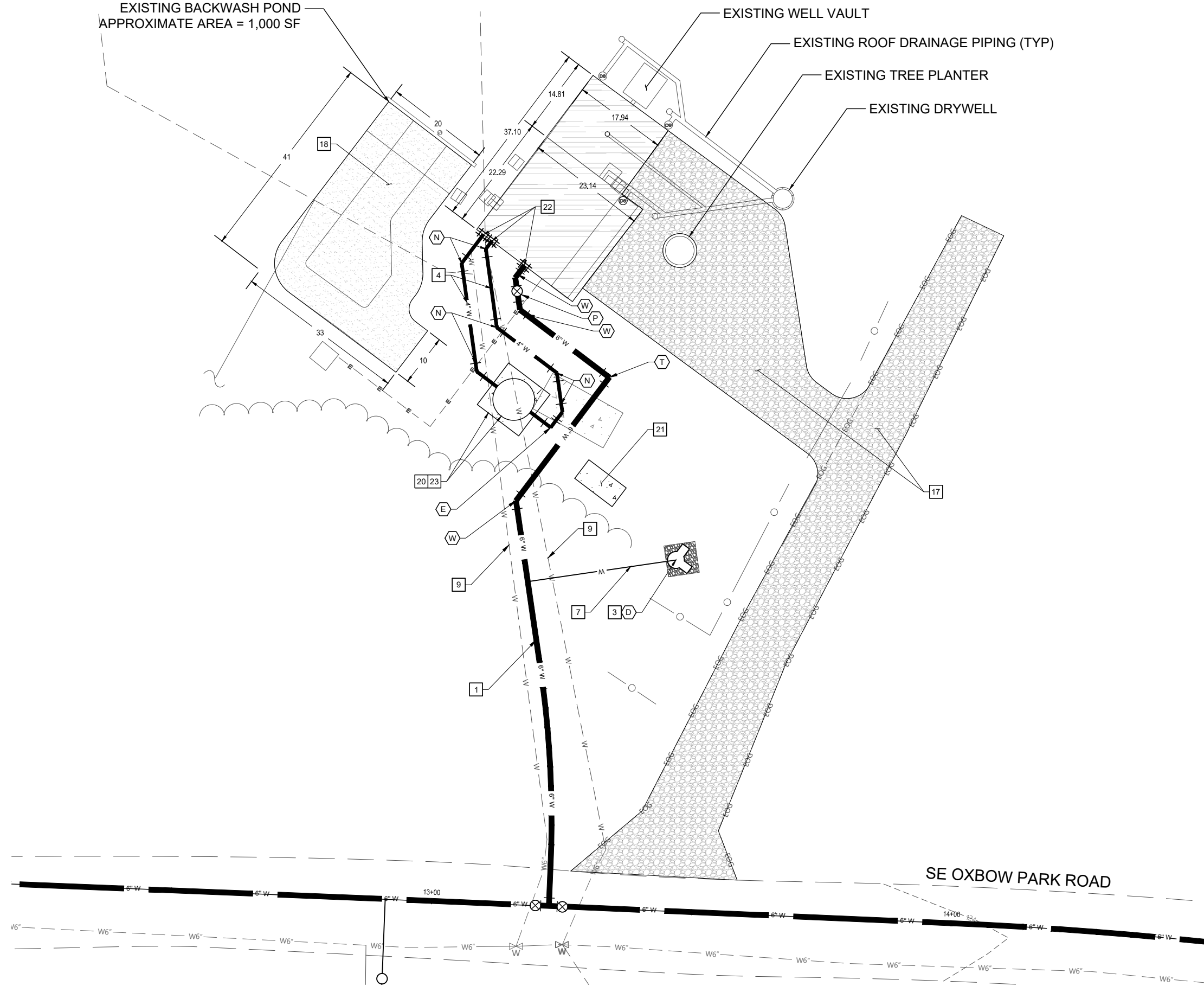
- D INSTALL:
1 - 2" STANDPIPE ASSEMBLY
- N INSTALL: (TYP 6)
1 - 4" HDPE DR 11 45° BEND
- P INSTALL: (TYP 3)
1 - 6" MJ GATE VALVE ASSEMBLY
- T INSTALL:
1 - 6" HDPE DR 11 90° BEND
- W INSTALL: (TYP 3)
1 - 6" HDPE DR 11 45° BEND

WATER CONSTRUCTION NOTES

- 1 INSTALL 6" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 3 CONSTRUCT 6' x 6' SPLASH PAD
- 4 INSTALL 4" HDPE DR 11 FUSED WATER MAIN BY OPEN TRENCH
- 7 INSTALL 2" COPPER TYPE K SERVICE CONNECTION
- 9 REMOVE AND DISPOSED OF EXISTING ACP WATER PIPE AS ENCOUNTERED

SITE CONSTRUCTION NOTES

- 17 RESTORE EXISTING GRAVEL SURFACING PER SECTION [FORTHCOMING]
- 18 RESTORE EXISTING BACKWASH POND PER DETAIL [FORTHCOMING]
- 20 CONSTRUCT 10' x 10' CONCRETE PAD PER DETAILS [FORTHCOMING]
- 21 CONSTRUCT 4.5' x 9' CONCRETE PAD AND INSTALL STANDBY GENERATOR PER DETAILS [FORTHCOMING]
- 22 CONNECT TO PUMP HOUSE PIPING PER DETAILS [FORTHCOMING]
- 23 CONSTRUCT 8' DIAMETER, 6' TALL WATER STORAGE TANK PER DETAILS [FORTHCOMING]



PLAN

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
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REV BY: JK/JV

ONE INCH AT FULL SCALE.
IF NOT ONE INCH ADJUST
SCALE ACCORDINGLY

PUMP HOUSE SITE PLAN

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PROJECT NO: 1544D
DATE: 03/2024

Metro
OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:

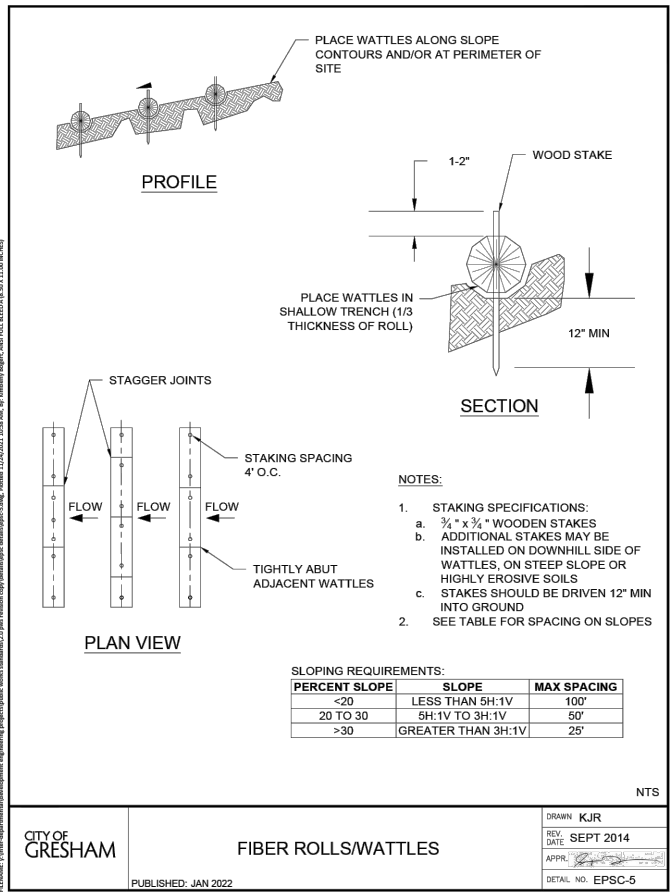
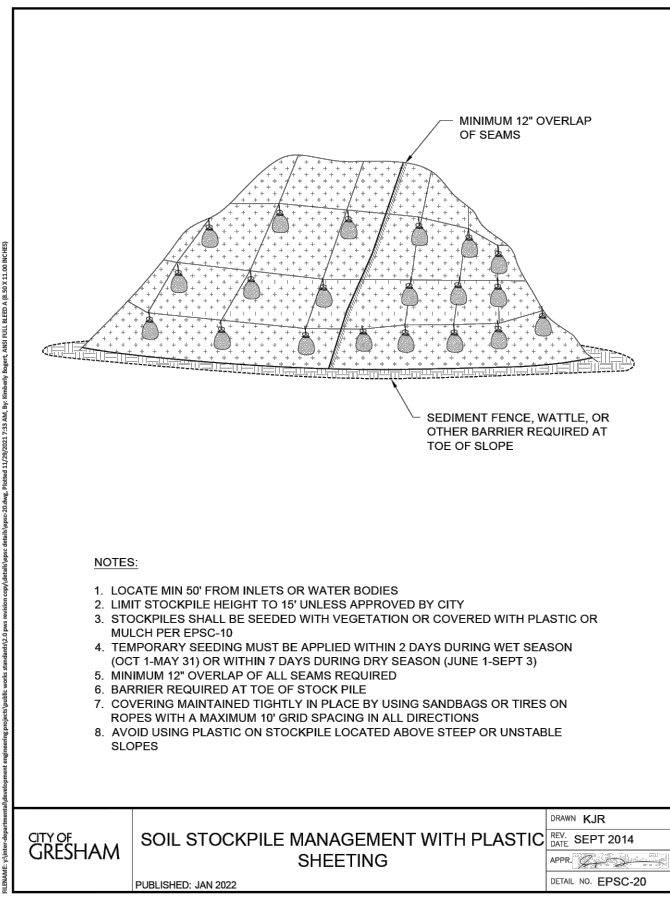
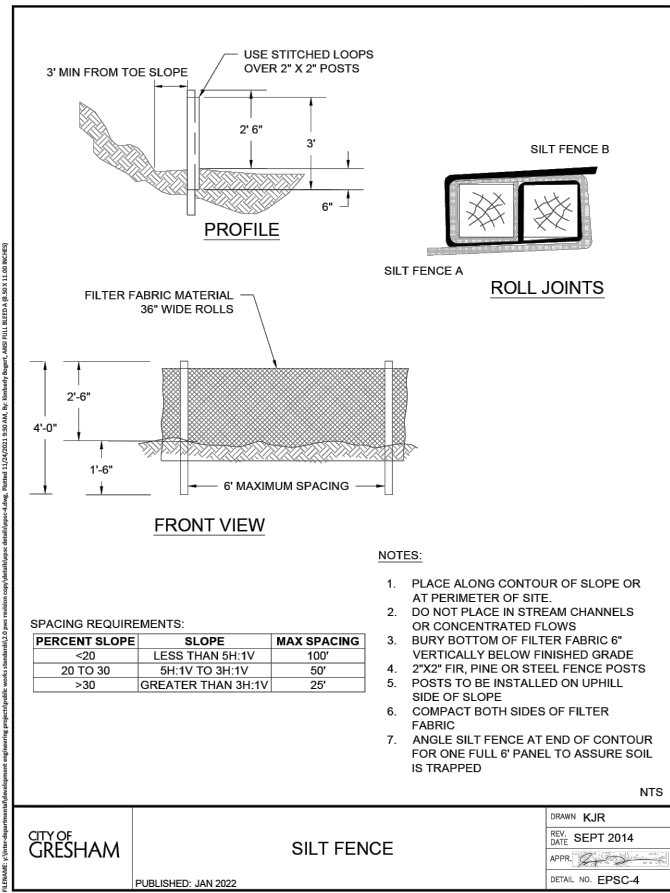
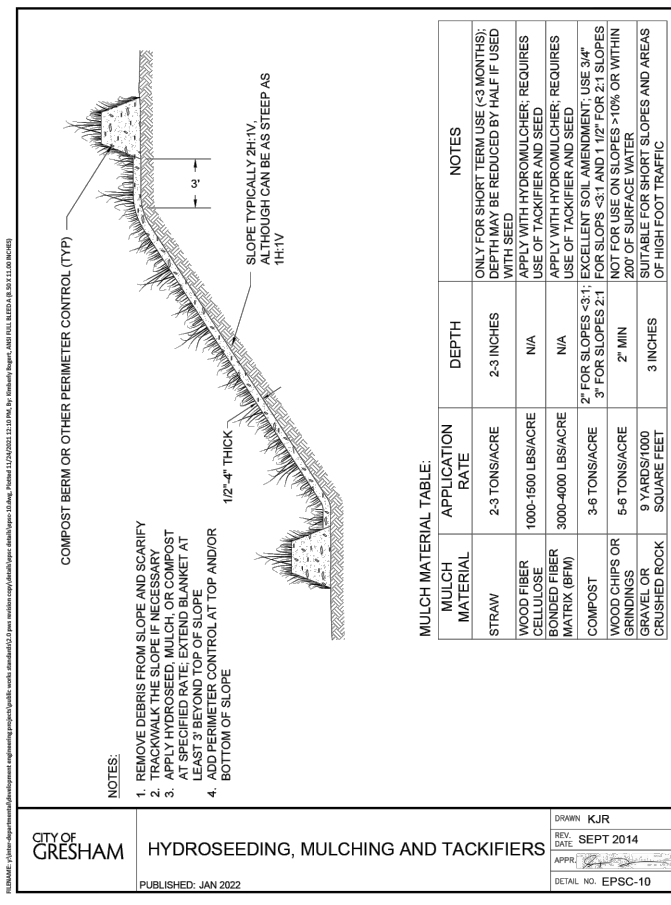
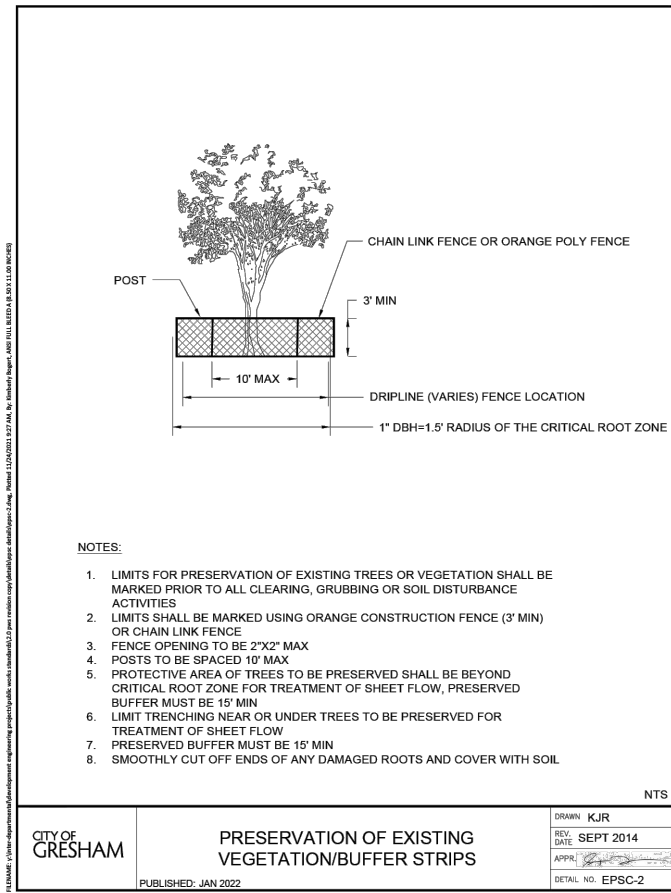
C32

32 OF 33

P:\151544D Oxbow Water Distribution System\500 DWG\501 Plan Sheets\PUMP HOUSE SITE PLAN.dwg, 3/5/2024 12:07:44 PM, James Parker

STANDARD EROSION AND SEDIMENTATION CONTROL NOTES:

- UNDER NO CONDITION SHALL SEDIMENT BE WASHED INTO DRAINAGE CHANNELS OR CULVERTS. ALL ONSITE STORMWATER ULTIMATELY DRAINS TO THE SANDY RIVER, A NAVIGABLE RIVERWAY UNDER THE REGULATORY JURISDICTION OF THE US ARMY CORPS OF ENGINEERS.
- STORM DRAIN INLETS, CATCHBASINS, AND AREA DRAINS SHALL BE PROTECTED USING THE APPROVED BEST MANAGEMENT PRACTICE (BMP) AT ALL TIMES DURING CONSTRUCTION.
- EFFECTIVE EROSION CONTROL, DUST CONTROL, AND DRAINAGE CONTROL IS REQUIRED AT ALL TIMES. JURISDICTIONAL ENTITIES MAY ORDER STOPPAGE OF WORK TO AFFECT CORRECTIVE ACTION AT ANY TIME.
- THE CONTRACTOR SHALL SWEEP ALL PAVED SURFACES TRAVELED ON BY CONSTRUCTION EQUIPMENT AND VEHICLES OR WITHIN THE WORK AREA WEEKLY AT MINIMUM. IF CONSTRUCTION SEDIMENTS ARE OBSERVED AS BEING TRACKED OVER THE SITE, SWEEPING WILL BE REQUIRED DAILY AT MINIMUM.
- APPLY TEMPORARY AND PERMANENT SOIL STABILIZATION MEASURES ON ALL DISTURBED AREAS AS WORK PROGRESSES.
- DURING WET WEATHER PERIODS, TEMPORARY STABILIZATION OF THE SITE MUST OCCUR AT THE END OF EACH WORK DAY IF RAINFALL IS FORECAST IN THE NEXT 24 HOURS.
- ALL EROSION AND SEDIMENT CONTROLS NOT IN THE DIRECT PATH OF WORK MUST BE INSTALLED PRIOR TO ANY LAND DISTURBANCE.
- PRESERVE EXISTING VEGETATION AND RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION.
- ALL TEMPORARY SEDIMENT CONTROLS MUST REMAIN IN PLACE UNTIL PERMANENT VEGETATION OR OTHER PERMANENT COVERING OF EXPOSED SOIL IS ESTABLISHED.
- SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ON ALL DOWN-GRADIENT SIDES OF THE CONSTRUCTION SITE AT ALL TIMES DURING CONSTRUCTION.
- WATERTIGHT TRUCKS MUST BE USED TO TRANSPORT SATURATED SOILS FROM THE CONSTRUCTION SITE. AN APPROVED EQUIVALENT MEASURE IS TO DRAIN THE SOIL ON-SITE AT A DESIGNATED LOCATION USING APPROPRIATE BMP'S. SOIL MUST BE DRAINED SUFFICIENTLY FOR MINIMAL SPILLAGE.
- TEMPORARY STABILIZATION OR COVERING OF SOIL STOCKPILES MUST OCCUR AT THE END OF EACH WORK DAY, OR OTHER BMP'S MUST BE IMPLEMENTED TO PREVENT TURBID DISCHARGES TO SURFACE WATERS.
- DEVELOP AND MAINTAIN ONSITE A WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURE.
- ANY USE OF TOXIC OR HAZARDOUS MATERIALS MUST INCLUDE PROPER STORAGE, HANDLING, APPLICATION, AND DISPOSAL PROCEDURES.
- THE PERMITEE MUST PROPERLY PREVENT AND MANAGE HAZARDOUS WASTE, USED OILS, CONTAMINATED SOILS, CONCRETE WASTE, SANITARY WASTE, LIQUID WASTE, OR OTHER TOXIC SUBSTANCES DISCOVERED OR GENERATED DURING CONSTRUCTION.
- SIGNIFICANT AMOUNTS OF SEDIMENT WHICH LEAVE THE SITE MUST BE CLEANED UP WITHIN 24 HOURS, PLACED BACK ON THE SITE, AND STABILIZED OR PROPERLY DISPOSED OF. THE CAUSE OF THE SEDIMENT RELEASE MUST BE FOUND AND PREVENTED FROM CAUSING A REOCCURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIMEFRAME.
- SEDIMENT MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATER BODIES. DRY SWEEPING MUST BE USED TO CLEAN UP RELEASED SEDIMENTS.
- THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW THE MANUFACTURER'S RECOMMENDATIONS. NUTRIENT RELEASES FROM FERTILIZERS TO SURFACE WATERS MUST BE MINIMIZED. TIME RELEASE FERTILIZERS SHOULD BE USED AND CARE SHOULD BE TAKEN IN THE APPLICATION OF FERTILIZERS WITHIN ANY WATER WAY RIPARIAN ZONE.
- SEDIMENT MUST BE REMOVED FROM BEHIND SEDIMENT FENCE WHEN VEGETATION HAS REACHED THE HEIGHT OF THE FENCE ABOVE THE GROUND, AND BEFORE FENCE REMOVAL.
- SEDIMENT MUST BE REMOVED FROM BEHIND BIO BAGS AND OTHER BARRIERS WHEN IT HAS REACHED A HEIGHT OF TWO (2) INCHES AND BEFORE BMP REMOVAL.
- REMOVAL OF TRAPPED SEDIMENT IN A SEDIMENT BASIN OR SEDIMENT TRAP MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY (50) PERCENT, AND AT COMPLETION OF PROJECT.
- DEQ MUST APPROVE OF ANY TREATMENT SYSTEM AND OPERATIONAL PLAN THAT MAY BE NECESSARY TO TREAT CONTAMINATED CONSTRUCTION DEWATERING OR SEDIMENT AND TURBIDITY IN STORMWATER RUNOFF.
- SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR THIRTY (30) DAYS OR MORE, THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION, A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD.
- SHOULD CONSTRUCTION ACTIVITIES CEASE FOR FIFTEEN (15) DAYS OR MORE ON ANY SIGNIFICANT PORTION OF A CONSTRUCTION SITE, TEMPORARY STABILIZATION IS REQUIRED FOR THAT PORTION OF THE SITE USING STRAW, COMPOST, OR OTHER APPROVED COVERING TO PREVENT SOIL OR WIND EROSION UNTIL WORK RESUMES ON THAT PORTION OF THE SITE.



PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP
DRAWN BY: CJ/TS
REV BY: JK/JV

ONE INCH AT FULL SCALE.
IF NOT ONE INCH ADJUST SCALE ACCORDINGLY

EROSION CONTROL NOTES & DETAILS

wallis engineering

PROJECT NO: 1544D | DATE: 03/2024

Metro

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT