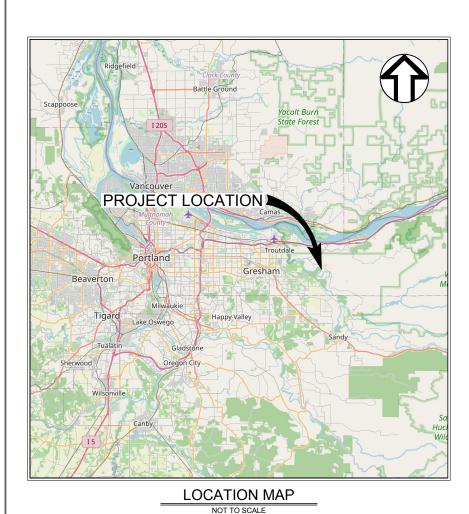
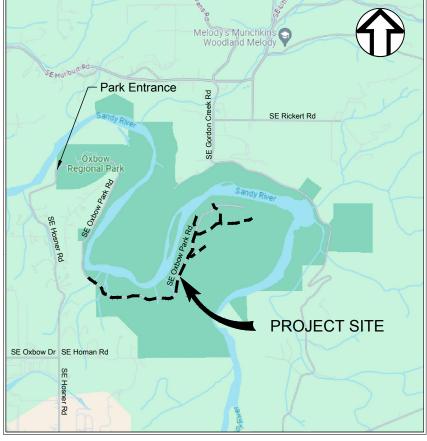
OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

OCTOBER 2024

60% SUBMITTAL





PROJECT SITE MAP NOT TO SCALE



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OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT Metro
 Metro

DRAWING NO:

SHEET INDEX COVER C1 C2 SHEET INDEX & LEGEND СЗ GENERAL NOTES **EROSION CONTROL NOTES & DETAILS** C4 C5 WATER PLAN KEY MAP C6 PLAN & PROFILE BEGIN TO STA 2+00 C7 HDD PLAN & PROFILE STA 2+00 TO STA 12+00 C8 PLAN & PROFILE STA 12+00 TO STA 13+40 C9 HDD PLAN & PROFILE STA 13+40 TO STA 28+20 PLAN & PROFILE STA 28+20 TO STA 32+00 C10 PLAN & PROFILE STA 32+00 TO STA 36+00 C11 PLAN & PROFILE STA 36+00 TO STA 38+40 C12 HDD PLAN & PROFILE STA 38+40 TO STA 45+00 C13 PLAN & PROFILE STA 45+00 TO STA 48+00 C14 C15 PLAN & PROFILE STA 48+00 TO STA 52+00 PLAN & PROFILE STA 52+00 TO STA 56+00 C16 C17 PLAN & PROFILE STA 56+00 TO STA 60+00 C18 PLAN & PROFILE STA 60+00 TO STA 63+20 PLAN & PROFILE STA 63+20 TO STA 67+00 C19 PLAN & PROFILE STA 67+00 TO END C20 HDD PLAN & PROFILE STA 80+00 TO STA 86+40 C21 HDD PLAN & PROFILE STA 90+00 TO STA 95+60 C22 PLAN & PROFILE STA 95+60 TO STA 98+40 C23 C24 HDD PLAN & PROFILE STA 98+40 TO END PLAN & PROFILES STA 110+00 TO STA 112+40 C25 C26 PLAN & PROFILE STA 112+40 TO END PLAN & PROFILE STA 120+00 TO STA 124+60 C27 C28 PLAN & PROFILE STA 124+60 TO END C29 PUMP HOUSE SITE PLAN C30 PUMP HOUSE PLAN & PROFILE

MECHANICAL PLAN

M1

LEGEND EXISTING PROPOSED WATERLINE, SIZE NOTED _____ MAJOR CONTOUR MINOR CONTOUR 8 WATER VALVE FRB ESTIMATED FUTURE RIVER BANK 凸 TEE FLD — 1% ANNUAL CHANCE FLOOD ELEVATION Н BEND BLM BOUNDARY — BLM — AIR RELEASE VALVE —— EDGE OF PAVED ROAD \Diamond STANDPIPE ____ EOG___ EOG___ EDGE OF GRAVEL ROAD \Diamond YARD HYDRANT CENTERLINE OF ROAD. HDD ENTRY/EXIT POINT TOE OF SLOPE ____ - _ TOE - _ - TOE -FENCE — — W4" — WATER LINE, SIZE NOTED WHERE KNOWN IRRIGATION PIPE. SIZE NOTED WHERE KNOWN — SAN — SAN — SAN — SANITARY SEWER, SIZED NOTED WHERE KNOWN --- STM-STORM SEWER, SIZED NOTED WHERE KNOWN OX STORM SEWER CULVERT VEGETATION EXTENTS

OVERHEAD POWER LINE

WATER CONTROL VALVE VAULT

POTABLE WATER MANHOLE

POWER POLE

CONCRETE PAD

WATER VALVE

DOWNSPOUT

STANDPIPE

GATE

SIGN

YARD HYDRANT

TREE - DECIDUOUS

TREE - EVERGREEN

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OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT Metro

DRAWING NO:

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.
- 9. 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.
- 10. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE SET OF CURRENT, APPROVED CONSTRUCTION PLANS ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
- 11. 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
- 12 IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND VERIEY 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.
- 13. 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.
- 14. 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
- 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.
- 3. 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
- 4. 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.
- LIPON 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
- 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
- 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

TREE PROTECTION NOTES

- 1. PROTECT ALL EXISTING TREES, SHRUBS, LANDSCAPING, AND ASSOCIATED ROOT SYSTEMS TO THE GREATEST PRACTICAL EXTENT. SEE SPECIFICATIONS FOR ADDITIONAL ROOT PRUNING REQUIREMENTS.
- COORDINATE WITH METRO'S ARBORIST A MINIMUM OF ONE WEEK IN ADVANCE OF ANY REQUESTED OVERHEAD BRANCH TRIMMING.
- 3. DEVIATIONS FROM ALIGNMENTS AND INSTALLATION DEPTHS SHOWN WHICH MAY INCREASE IMPACTS TO EXISTING TREES SHALL BE PROPOSED IN WRITING BY THE CONTRACTOR AT LEAST TWO WEEKS PRIOR TO IMPLEMENTATION, WITH SUCH DEVIATIONS SUBJECT TO REVIEW AND ACCEPTANCE BY AN ISA CERTIFIED ARBORIST AND THE ENGINEER
- TREE ROOTS LARGER THAN 2 INCHES IN DIAMETER SHALL BE TRIMMED IN THE PRESENCE OF METRO'S ARBORIST. TRIM TREE ROOTS WITH A PRUNING SAW TO ENSURE A CLEAN CUT; DO NOT PULL OR TEAR AT ROOT SYSTEMS WITH EXCAVATOR OR OTHER EQUIPMENT

PAVING NOTES

- THE CONTRACTOR SHALL ADJUST ALL VALVES BOXES AND VAULTS TO FINISHED GRADE
- 2. 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

- 1 THE CONTRACTOR SHALL MAINTAIN A PHYSICAL COPY OF THE CURRENT APPROVED HYDROFRACTURE CONTINGENCY PLAN ON SITE AT ALL TIMES
- 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,
- 5. THE INTERIOR OF ALL BUTT FUSED HDPE PIPE JOINTS SHALL BE COMPLETELY
- ALL DRILLING FLUID MANAGEMENT MEASURES, INCLUDING BUT NOT LIMITED TO SECONDARY CONTAINMENT, SHALL BE IN PLACE AND CONFIRMED AS OPERATIONAL PRIOR TO DRILLING COMMENCEMENT.

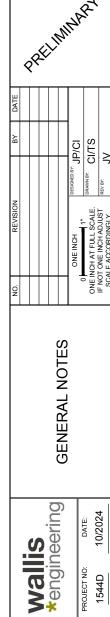
SURVEY NOTES

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

TRIMBLE R10, R12, S5, S7, TSC 3 & TSC 7 ROBOTIC INSTRUMENTS WERE USED TO

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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DRAWING NO

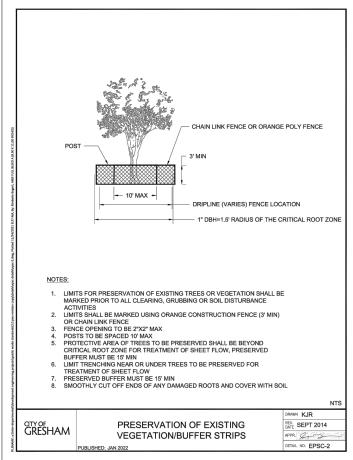
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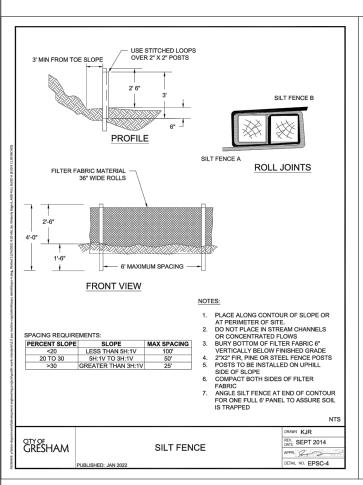
STANDARD EROSION AND SEDIMENTATION **CONTROL NOTES:**

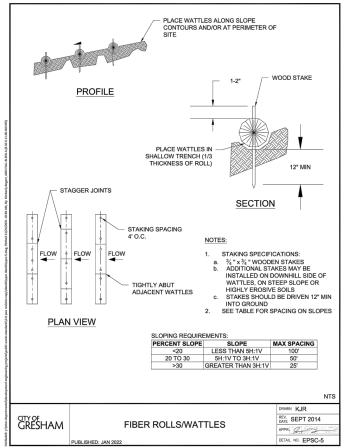
- UNDER NO CONDITION SHALL SEDIMENT BE WASHED INTO DRAINAGE CHANNELS OR CULVERTS, ALL ONSITE STORMWATER ULTIMATELY DRAINS TO THE SANDY RIVER, A NAVIGABLE RIVERWAY UNDER THE REGULATORY JURISDICTION OF THE US ARMY CORPS OF ENGINEERS.
- 2. STORM DRAIN INLETS, CATCHBASINS, AND AREA DRAINS SHALL BE PROTECTED USING THE APPROVED BEST MANAGEMENT PRACTICE (BMP) AT ALL TIMES
- 3. 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.
- 4. 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.
- 5. APPLY TEMPORARY AND PERMANENT SOIL STABILIZATION MEASURES ON ALL DISTURBED AREAS AS WORK PROGRESSES.
- 6 DURING WET WEATHER PERIODS TEMPORARY STABILIZATION OF THE SITE MUST OCCUR AT THE END OF EACH WORK DAY IF RAINFALL IS FORECAST IN
- 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.
- 9. ALL TEMPORARY SEDIMENT CONTROLS MUST REMAIN IN PLACE UNTIL PERMANENT VEGETATION OR OTHER PERMANENT COVERING OF EXPOSED SOIL IS ESTABLISHED
- 10. SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ON ALL DOWN-GRADIENT SIDES OF THE CONSTRUCTION SITE AT ALL TIMES DURING CONSTRUCTION

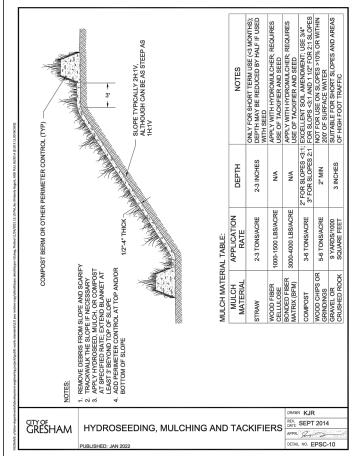
- THE CONSTRUCTION SITE. AN APPROVED EQUIVALENT MEASURE IS TO DRAIN THE SOIL ON-SITE AT A DESIGNATED LOCATION USING APPROPRIATE BMP'S. SOIL MUST BE DRAINED SUFFICIENTLY FOR MINIMAL SPILLAGE
- 12. TEMPORARY STABILIZATION OR COVERING OF SOIL STOCKPILES MUST OCCUR AT THE END OF EACH WORK DAY, OR OTHER BMP'S MUST BE IMPLEMENTED TO PREVENT TURBID DISCHARGES TO SURFACE WATERS.
- 13. DEVELOP AND MAINTAIN ONSITE A WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURE.
- 14 ANY LISE OF TOXIC OR HAZARDOUS MATERIALS MUST INCLUDE PROPER STORAGE, HANDLING, APPLICATION, AND DISPOSAL PROCEDURES
- 15. 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
- 16. 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.
- 17. SEDIMENT MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATER BODIES. DRY SWEEPING MUST BE USED TO CLEAN UP RELEASED SEDIMENTS
- 18 THE APPLICATION RATE OF FERTILIZERS LISED 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
- 19. SEDIMENT MUST BE REMOVED FROM BEHIND SEDIMENT FENCE WHEN VEGETATION HAS REACHED THE HEIGHT OF THE FENCE ABOVE THE GROUND, AND BEFORE FENCE REMOVAL

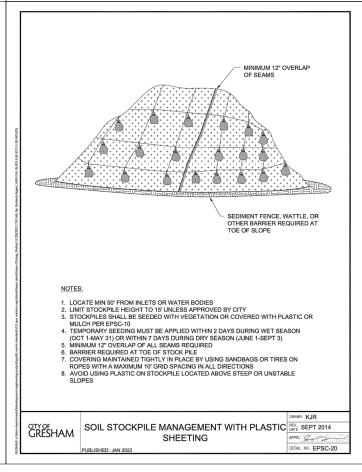
- 11. WATERTIGHT TRUCKS MUST BE USED TO TRANSPORT SATURATED SOILS FROM 20. SEDIMENT MUST BE REMOVED FROM BEHIND BIO BAGS AND OTHER BARRIERS WHEN IT HAS REACHED A HEIGHT OF TWO (2) INCHES AND BEFORE BMP
 - 21. REMOVAL OF TRAPPED SEDIMENT IN A SEDIMENT BASIN OR SEDIMENT TRAP MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY (50) PERCENT, AND AT COMPLETION OF PROJECT.
 - 22. 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
 - 23. 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
 - 24. 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.





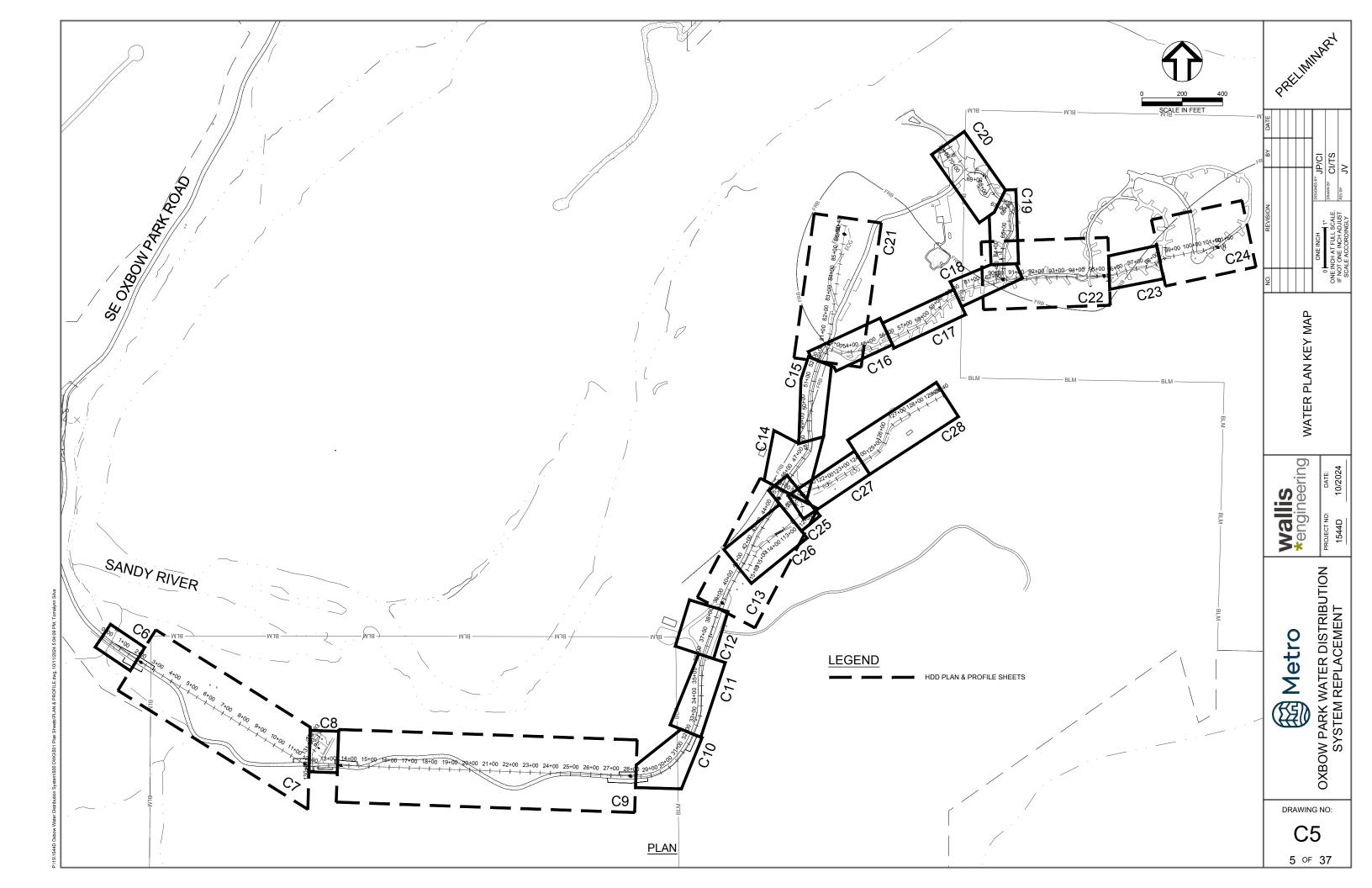


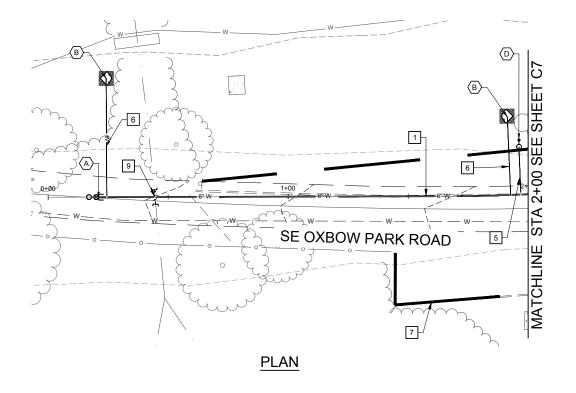


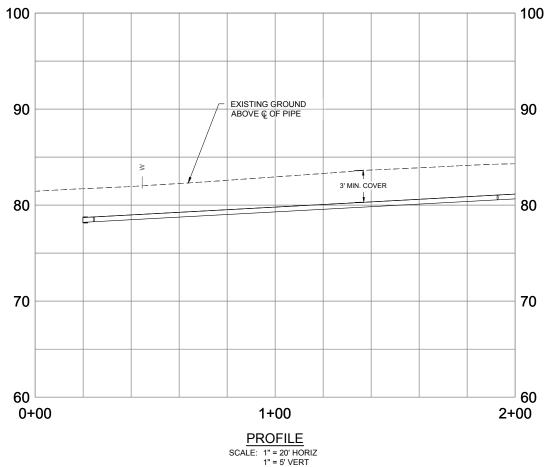


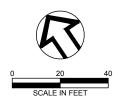


DRAWING NO:









(A) INSTALL: 1 ~ 2" BLOWOFF ASSEMBLY PER DETAIL [FORTHCOMING]

(B) INSTALL:
1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL
[FORTHCOMING]

DINSTALL:
1 ~ 2" CARV ASSEMBLY PER DETAIL
[FORTHCOMING]

WATER CONSTRUCTION NOTES

1 INSTALL 6" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN FRENCH METHODOLOGY PER DETAIL [FORTHCOMING].

5 INSTALL 2" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].

6 INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].

7 WORK AREA LIMITS. NO HEAVY EQUIPMENT PERMITTED OUTSIDE LIMITS SHOWN.

9 REMOVE EXISTING ASBESTOS PIPE AS REQUIRED TO ACCOMMODATE PROPOSED WORK. CAP OPEN ENDS WITH MJ CAP AND DISPOSE OF PIPE REMOVED PER THE SPECIFICATIONS.

		JP/CI	CI/TS	,
		DESIGNED BY: JF	DRAWN BY: C	REV BY: JV
		ONE INCH	ONE INCH AT FULL SCALE.	SCALE ACCORDINGLY
		-	ONE	SC/S

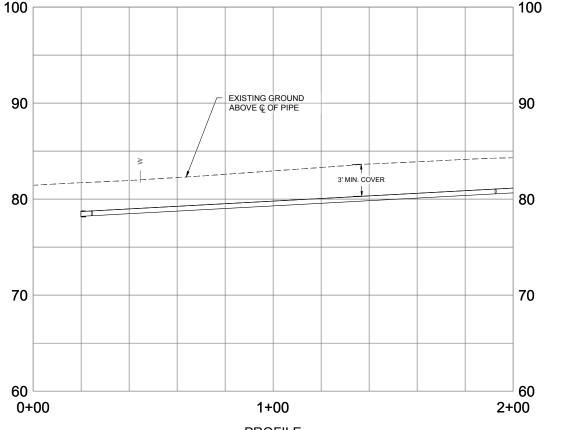
PLAN & PROFILE BEGIN TO STA 2+00

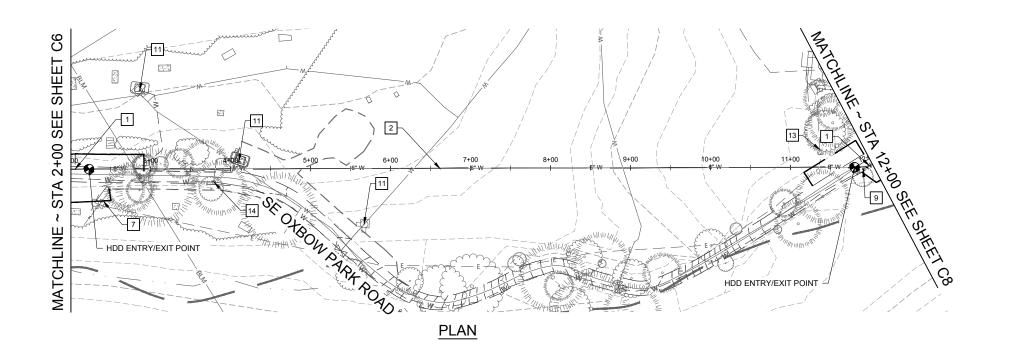
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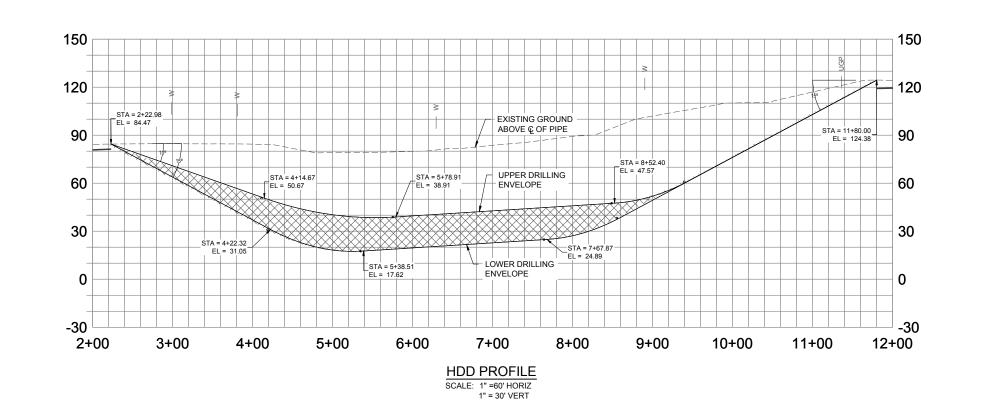
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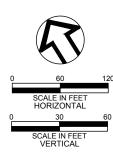
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C6









WATER CONSTRUCTION NOTES

- 1 INSTALL 6" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
- 2 INSTALL FUSED 6" DR9 HDPE PIPE BY HDD PER DETAIL [FORTHCOMING].
- 7 WORK AREA LIMITS. NO HEAVY EQUIPMENT PERMITTED OUTSIDE LIMITS SHOWN.
- 9 REMOVE EXISTING ASBESTOS PIPE AS REQUIRED TO ACCOMMODATE PROPOSED WORK. CAP OPEN ENDS WITH MJ CAP AND DISPOSE OF PIPE REMOVED PER THE SPECIFICATIONS.
- 11 ABANDON EXISTING HYDRANT OR STANDPIPE ABOVE GRADE. REMOVE ALL ASSOCIATED VALVES AND VALVE BOXES AND RESTORE SURFACE IN KIND.
- 13 POTHOLE AHEAD OF INSTALLATION FOR EXISTING UNDERGROUND UTILITIES AND PROTECT EXISTING UTILITY IN PLACE. RESTORE SURFACING IN KIND.
- ABANDON EXISTING VALVE IN PLACE. REMOVE VALVE CAN AND LID AND RESTORE SURFACING.

HDD NOTES

- 1) REFER TO HORIZONTAL DIRECTIONAL DRILLING NOTES, SHEET C3.
- 2 HDD PROFILE SHOWN RESPRESENTS A PRELIMINARY DESIGN ENVELOPE, INCLUSIVE OF POSSIBLE BORE PATHS. HDD CONTRACTOR SHALL ADJUST HDD GEOMETRY, INCLUDING ANGLES, DEPTHS AND ELEVATIONS, RADII, AND SLOPES AS REQUIRED AND
- (3) CONNECTIONS TO PROPOSED WATER LINE AT ENTRY/ EXIT POINTS SHALL BE MADE PER DETAIL, SHEET CXX.

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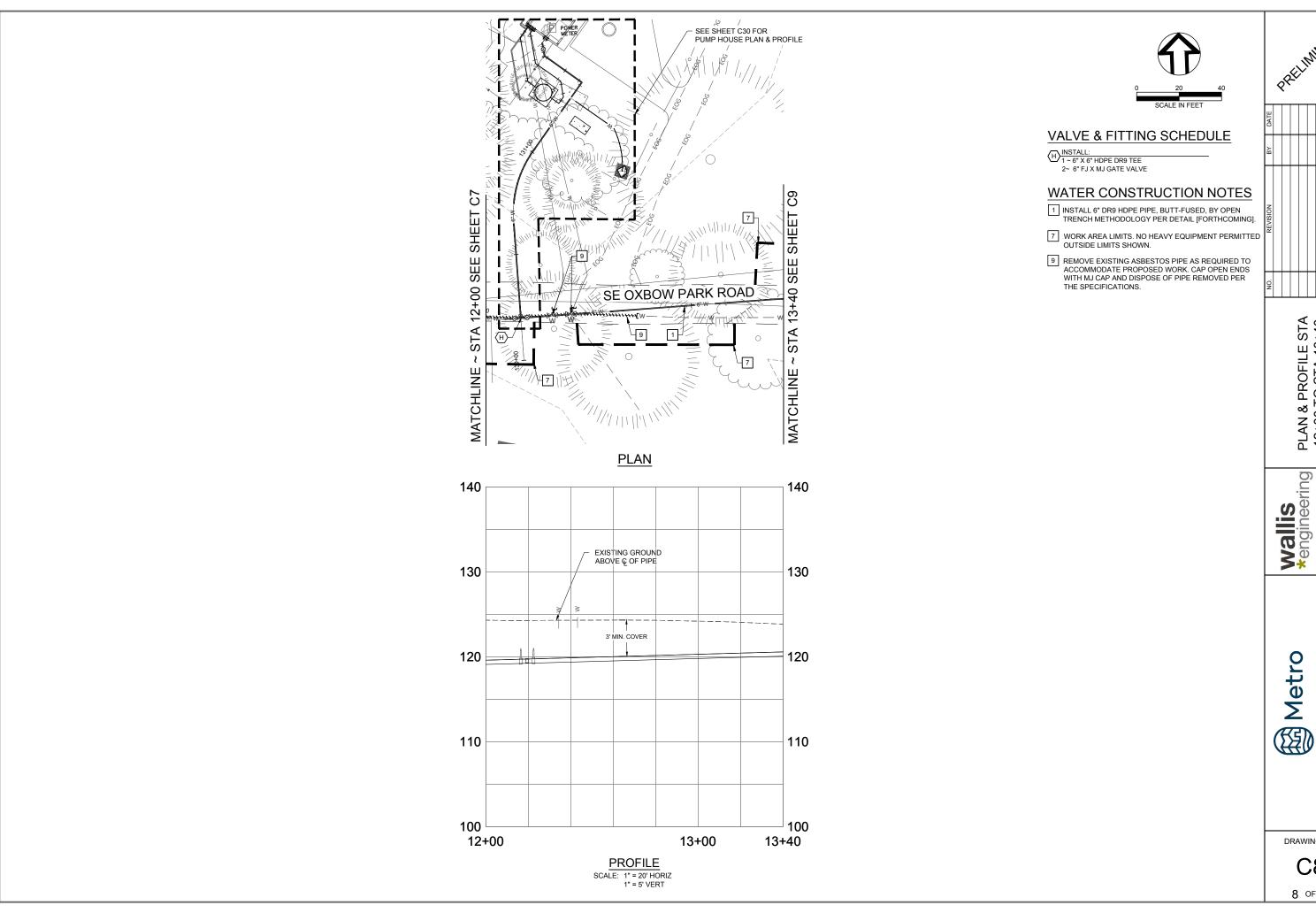
HDD PLAN & PROFILE STA 2+00 TO STA 12+00

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Metro
 Metro

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:



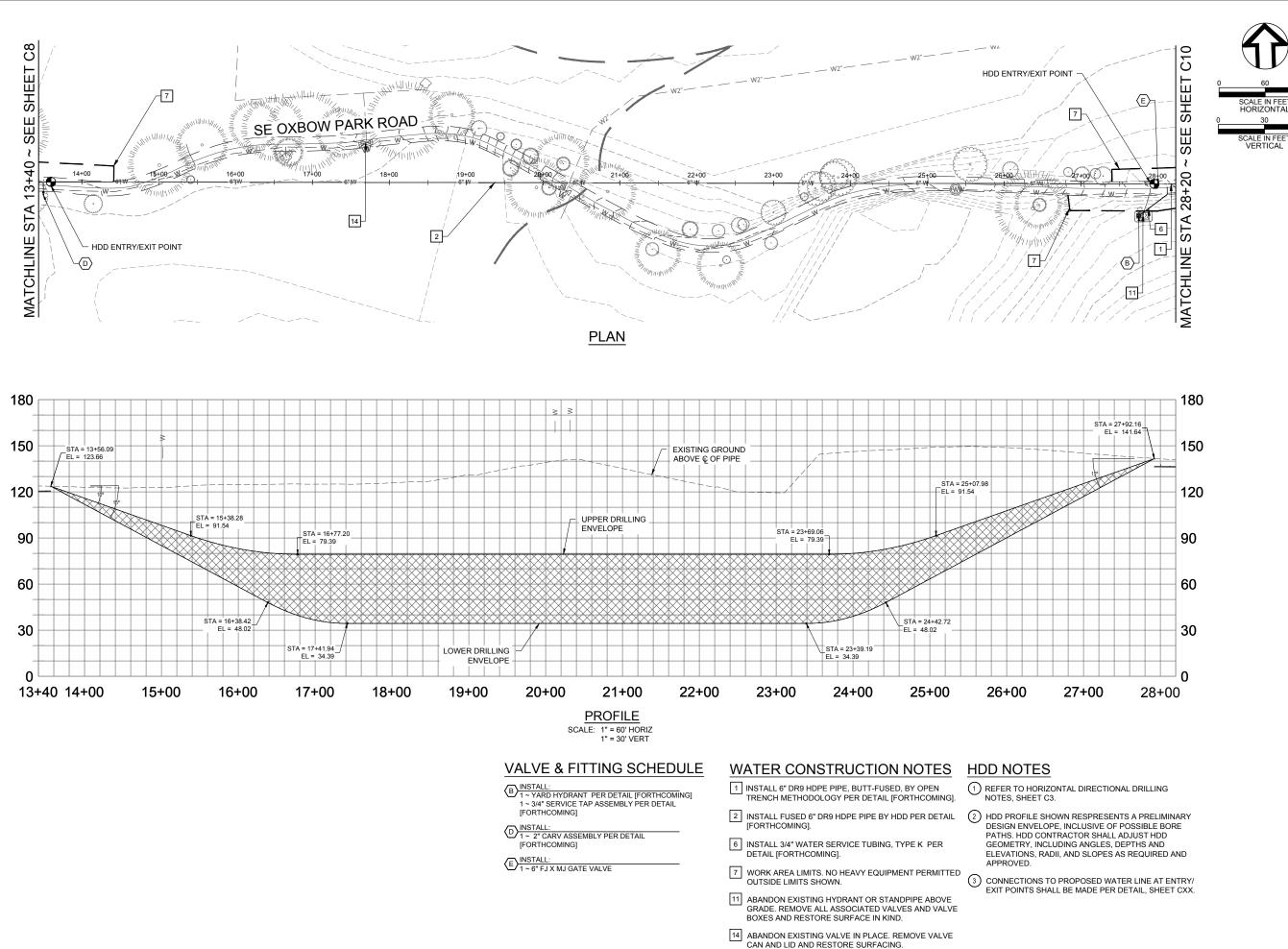


PLAN & PROFILE STA 12+00 TO STA 13+40

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:

C8



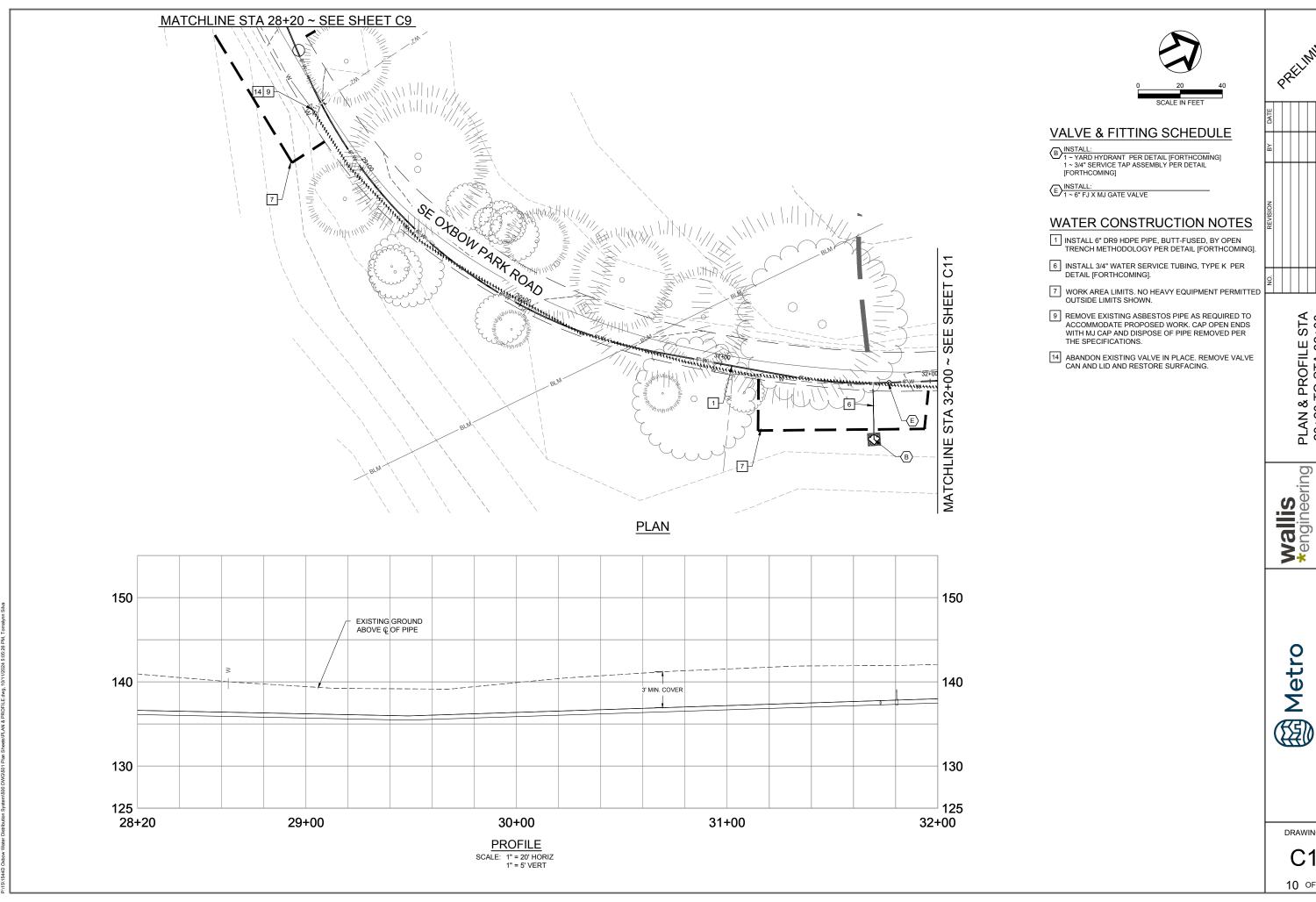
PROFILE STA 28+20 HDD PLAN & F STA 13+40 TO S

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OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

Metro Metro

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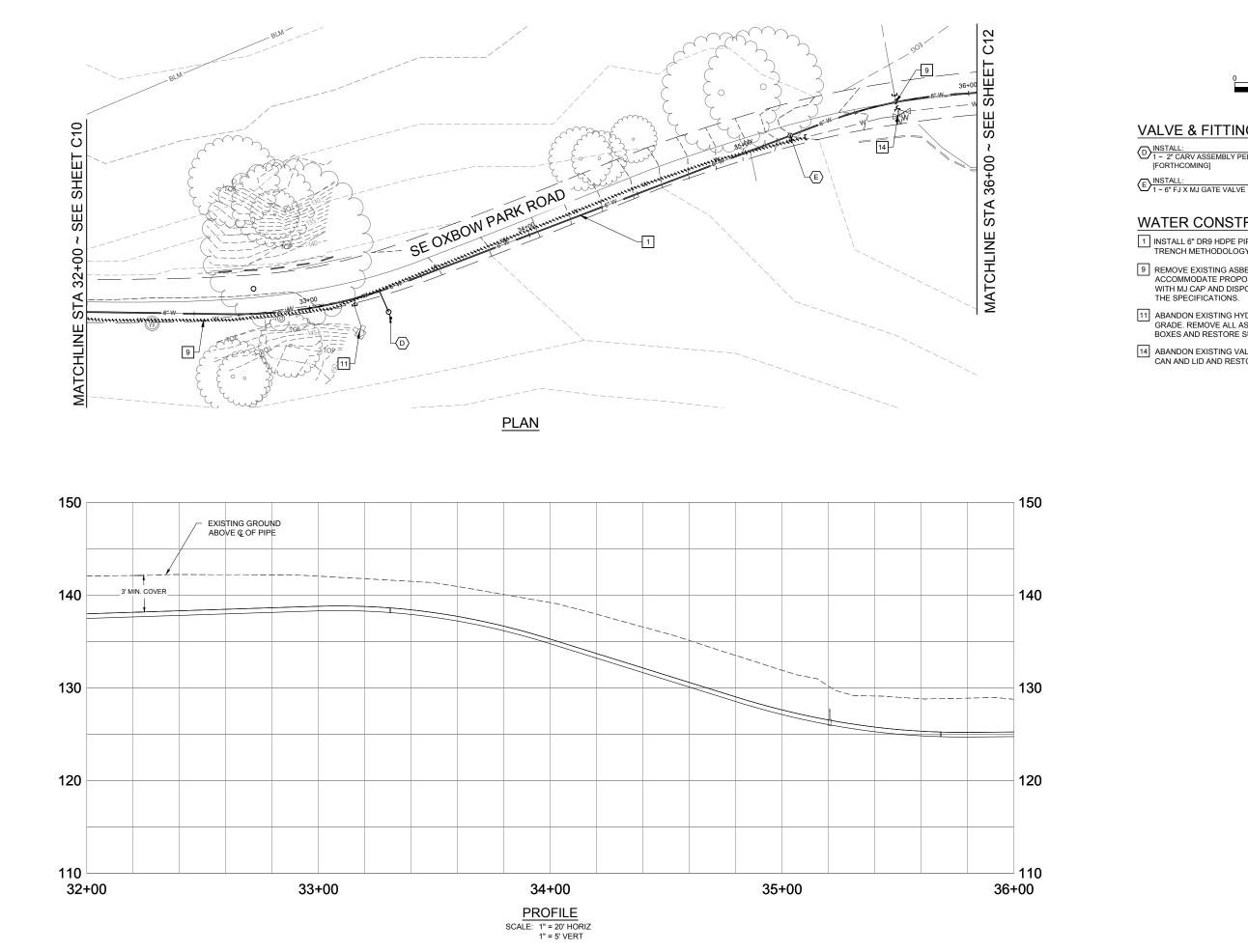


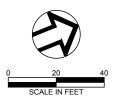
PLAN & PROFILE STA 28+20 TO STA 32+00

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT Metro
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DRAWING NO:

C10





DINSTALL:
1 ~ 2" CARV ASSEMBLY PER DETAIL
[FORTHCOMING]

WATER CONSTRUCTION NOTES

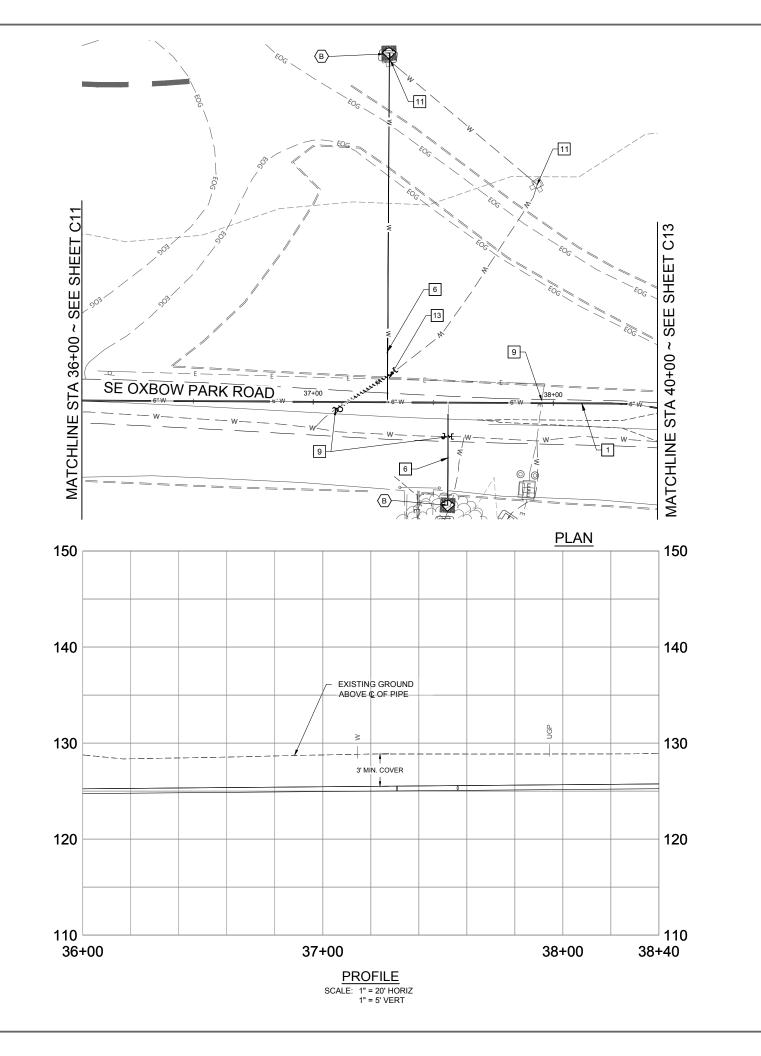
- 1 INSTALL 6" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
- 9 REMOVE EXISTING ASBESTOS PIPE AS REQUIRED TO ACCOMMODATE PROPOSED WORK. CAP OPEN ENDS WITH MJ CAP AND DISPOSE OF PIPE REMOVED PER THE SPECIFICATIONS.
- 111 ABANDON EXISTING HYDRANT OR STANDPIPE ABOVE GRADE. REMOVE ALL ASSOCIATED VALVES AND VALVE BOXES AND RESTORE SURFACE IN KIND.
- ABANDON EXISTING VALVE IN PLACE. REMOVE VALVE CAN AND LID AND RESTORE SURFACING.

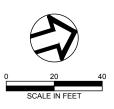
PLAN & PROFILE STA 32+00 TO STA 36+00

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OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT ∰ Metro

DRAWING NO:





(B) INSTALL:
1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL
[FORTHCOMING]

WATER CONSTRUCTION NOTES

- 1 INSTALL 6" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
- 6 INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].
- 7 WORK AREA LIMITS. NO HEAVY EQUIPMENT PERMITTED OUTSIDE LIMITS SHOWN.
- 9 REMOVE EXISTING ASBESTOS PIPE AS REQUIRED TO ACCOMMODATE PROPOSED WORK. CAP OPEN ENDS WITH MJ CAP AND DISPOSE OF PIPE REMOVED PER THE SPECIFICATIONS.
- 111 ABANDON EXISTING HYDRANT OR STANDPIPE ABOVE GRADE. REMOVE ALL ASSOCIATED VALVES AND VALVE BOXES AND RESTORE SURFACE IN KIND.
- 13 POTHOLE AHEAD OF INSTALLATION FOR EXISTING UNDERGROUND UTILITIES AND PROTECT EXISTING UTILITY IN PLACE. RESTORE SURFACING IN KIND.

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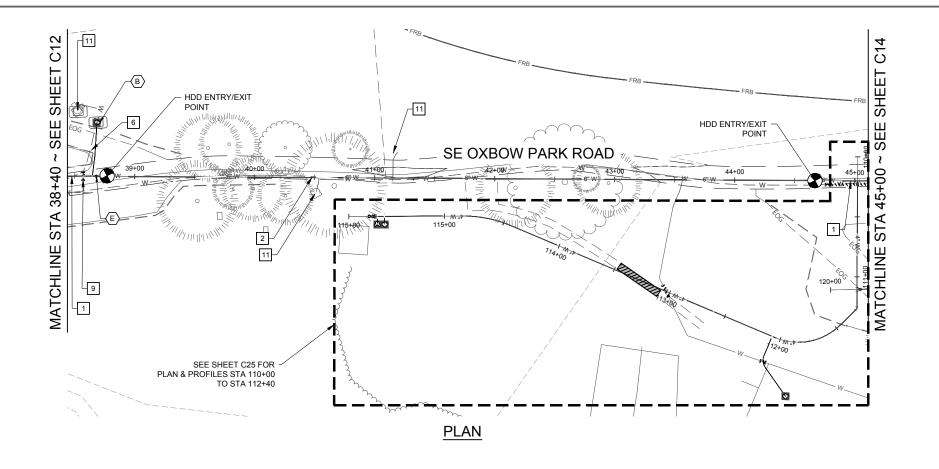
PLAN & PROFILE STA 36+00 TO STA 38+40

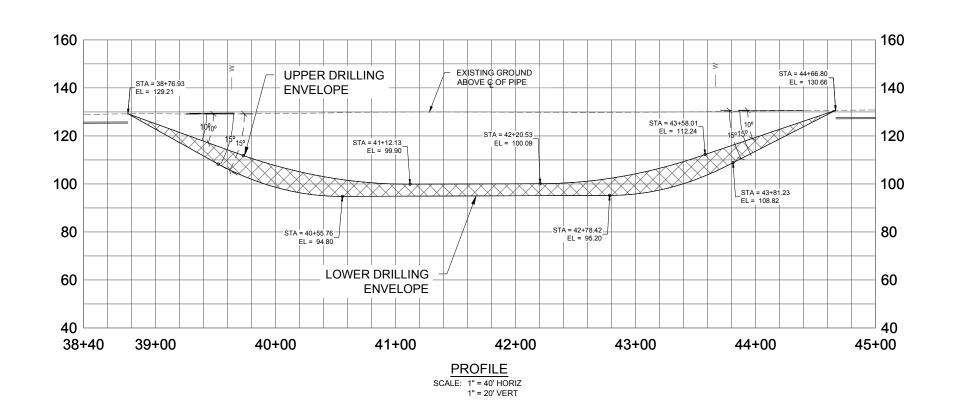
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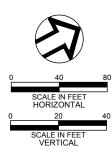
Metro
OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:

C12







(B) INSTALL:
1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL
[FORTHCOMING]

ENSTALL:
1 ~ 6" FJ X MJ GATE VALVE

WATER CONSTRUCTION NOTES

1 INSTALL 6" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].

2 INSTALL FUSED 6" DR9 HDPE PIPE BY HDD PER DETAIL [FORTHCOMING].

6 INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].

9 REMOVE EXISTING ASBESTOS PIPE AS REQUIRED TO ACCOMMODATE PROPOSED WORK. CAP OPEN ENDS WITH MJ CAP AND DISPOSE OF PIPE REMOVED PER THE SPECIFICATIONS.

111 ABANDON EXISTING HYDRANT OR STANDPIPE ABOVE GRADE. REMOVE ALL ASSOCIATED VALVES AND VALVE BOXES AND RESTORE SURFACE IN KIND.

HDD NOTES

(1) REFER TO HORIZONTAL DIRECTIONAL DRILLING NOTES, SHEET C3.

(2) HDD PROFILE SHOWN RESPRESENTS A PRELIMINARY DESIGN ENVELOPE, INCLUSIVE OF POSSIBLE BORE PATHS. HDD CONTRACTOR SHALL ADJUST HDD GEOMETRY, INCLUDING ANGLES, DEPTHS AND ELEVATIONS, RADII, AND SLOPES AS REQUIRED AND APPROVED.

(3) CONNECTIONS TO PROPOSED WATER LINE AT ENTRY/ EXIT POINTS SHALL BE MADE PER DETAIL, SHEET CXX. ONE INCH
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HDD PLAN & PROFILE STA 38+40 TO STA 45+00

*engineering
PROJECT NO. DATE: 1544D 10/2024

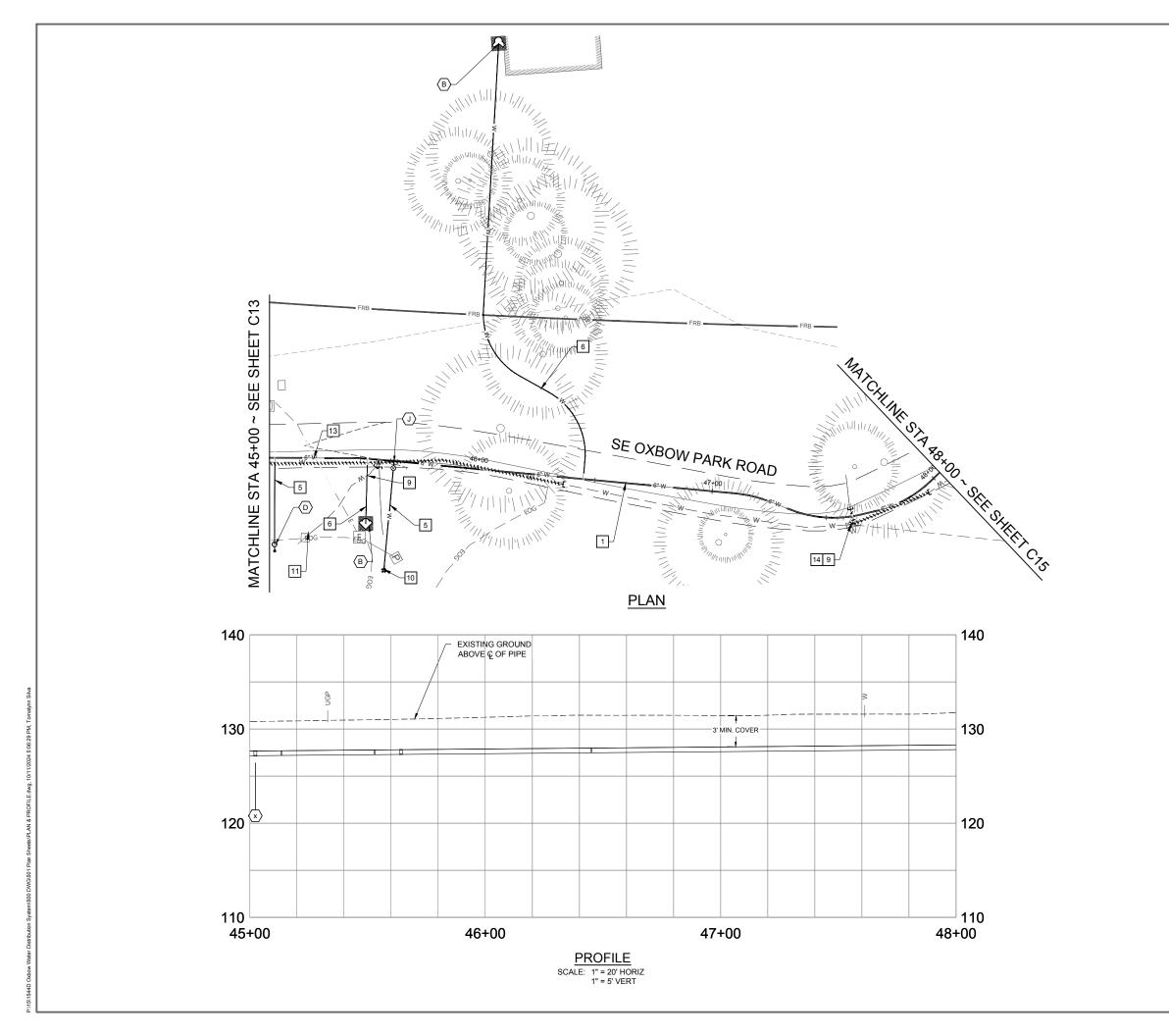
Metro
OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

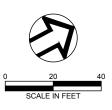
DRAWING NO:

C13

13 OF 37

P:\15\1544D Oxbow Water Distribution System\500 DWG\501 Plan Sheets\PLAN & PROF





BINSTALL:
1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL

INSTALL:
1 ~ 2" CARV ASSEMBLY PER DETAIL
[FORTHCOMING]

JNSTALL:
1 ~ 6" X 2" HDPE DR9 REDUCING TEE
1 ~ 2" FJ X MJ GATE VALVE

WATER CONSTRUCTION NOTES

- 1 INSTALL 6" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
- 5 INSTALL 2" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].
- 6 INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].
- 9 REMOVE EXISTING ASBESTOS PIPE AS REQUIRED TO ACCOMMODATE PROPOSED WORK. CAP OPEN ENDS WITH MJ CAP AND DISPOSE OF PIPE REMOVED PER THE SPECIFICATIONS.
- 10 CONNECT NEW MAIN TO EXISTING SYSTEM WITH APPROVED FITTINGS.
- 111 ABANDON EXISTING HYDRANT OR STANDPIPE ABOVE GRADE. REMOVE ALL ASSOCIATED VALVES AND VALVE BOXES AND RESTORE SURFACE IN KIND.
- [13] POTHOLE AHEAD OF INSTALLATION FOR EXISTING UNDERGROUND UTILITIES AND PROTECT EXISTING UTILITY IN PLACE. RESTORE SURFACING IN KIND.
- 14 ABANDON EXISTING VALVE IN PLACE. REMOVE VALVE CAN AND LID AND RESTORE SURFACING.

RELIMITARY

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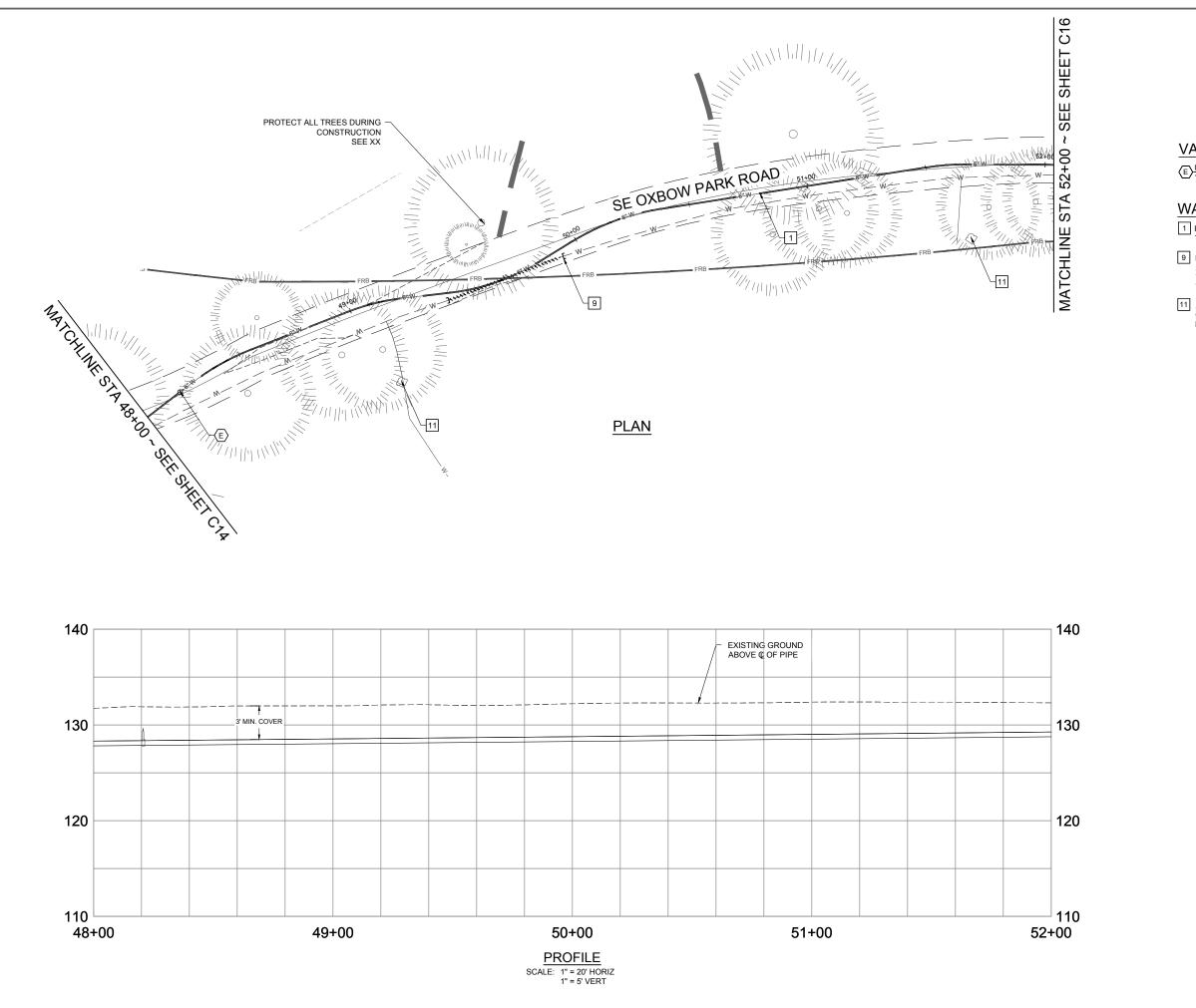
PLAN & PROFILE STA 45+00 TO STA 48+00

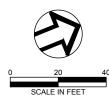
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*engineering
PROJECT NO. DATE:

Metro
OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:

C14



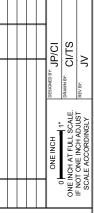


E INSTALL:
1 ~ 6" FJ X MJ GATE VALVE

WATER CONSTRUCTION NOTES

- 1 INSTALL 6" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
- 9 REMOVE EXISTING ASBESTOS PIPE AS REQUIRED TO ACCOMMODATE PROPOSED WORK. CAP OPEN ENDS WITH MJ CAP AND DISPOSE OF PIPE REMOVED PER THE SPECIFICATIONS.
- 111 ABANDON EXISTING HYDRANT OR STANDPIPE ABOVE GRADE. REMOVE ALL ASSOCIATED VALVES AND VALVE BOXES AND RESTORE SURFACE IN KIND.

PREIMMARY



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

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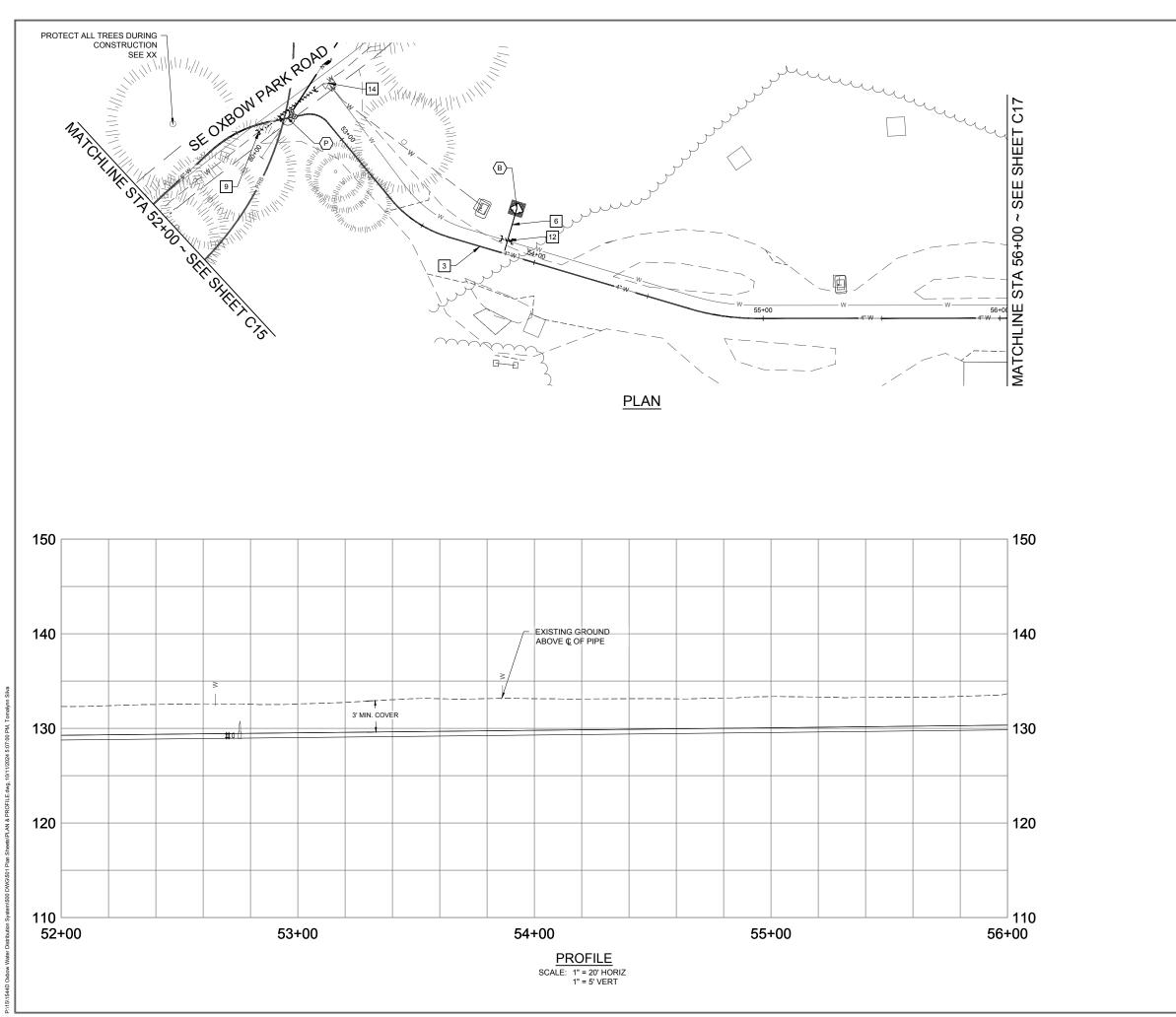
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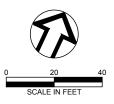
OXBOW PARK WATER DISTRIBUTION

SYSTEM REPLACEMENT

DRAWING NO:

C15
15 OF 37





BINSTALL:
1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL

[FORTHCOMING]

P INSTALL:
1 ~ 4" HDPE DR9 WYE

2 ~ 4" FJ X MJ GATE VALVE 1 ~ 6" X 4" REDUCER

WATER CONSTRUCTION NOTES

INSTALL 4" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].

6 INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].

9 REMOVE EXISTING ASBESTOS PIPE AS REQUIRED TO ACCOMMODATE PROPOSED WORK. CAP OPEN ENDS WITH MJ CAP AND DISPOSE OF PIPE REMOVED PER THE SPECIFICATIONS.

12 CUT EXISTING MAIN WHERE SHOWN AND CAP DEAD END WITH MJ CAP PER DETAIL [FORTHCOMING].

14 ABANDON EXISTING VALVE IN PLACE. REMOVE VALVE CAN AND LID AND RESTORE SURFACING.

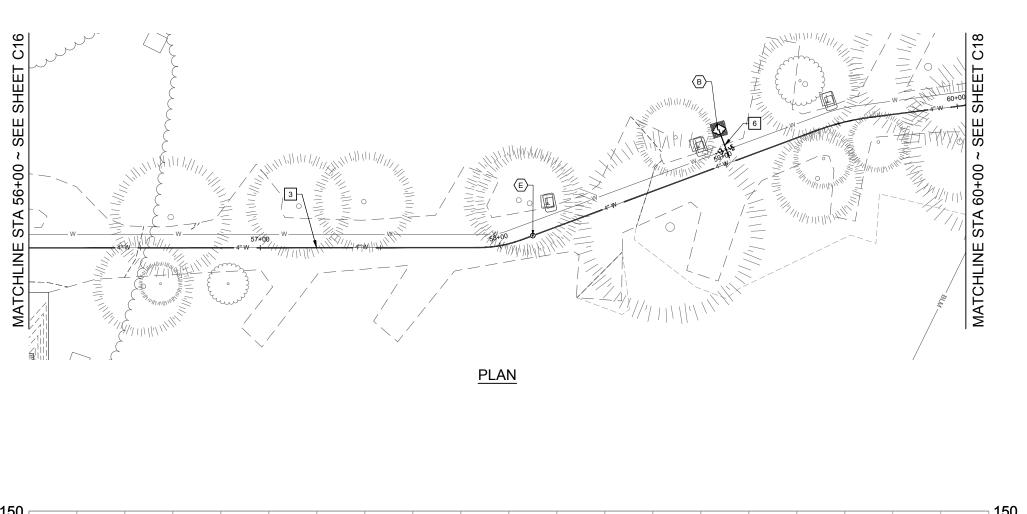
PLAN & PROFILE STA 52+00 TO STA 56+00

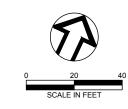
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OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT Metro
 Metro

DRAWING NO:

C16





(B) INSTALL: 1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING] 1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL

ENSTALL:
1 ~ 6" FJ X MJ GATE VALVE

WATER CONSTRUCTION NOTES

INSTALL 4" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].

6 INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].

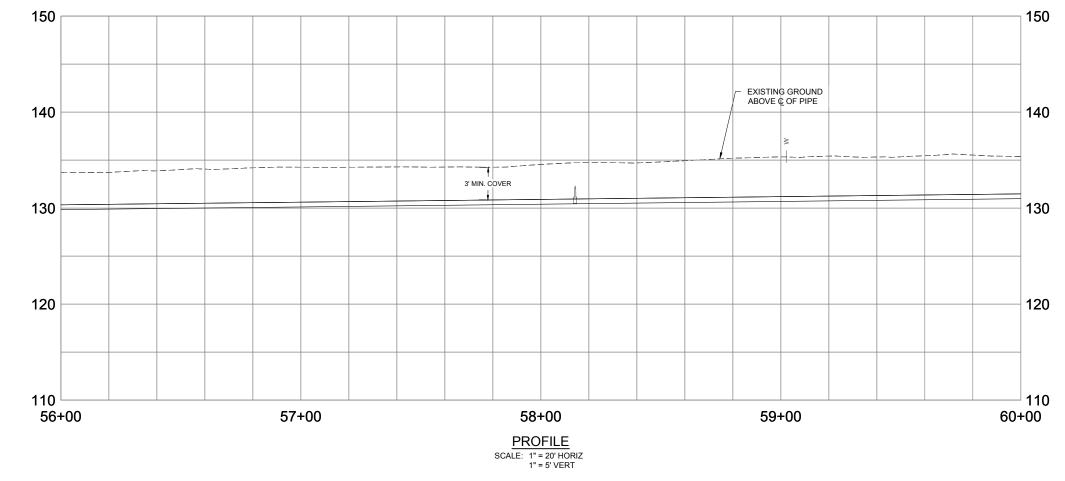


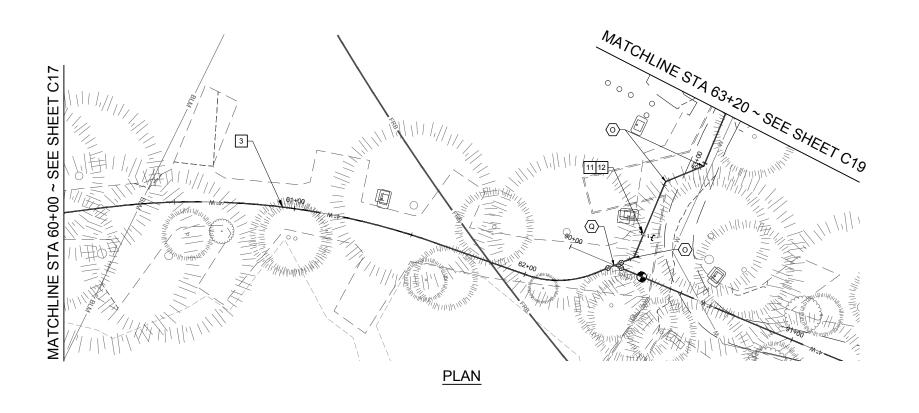
PLAN & PROFILE STA 56+00 TO STA 60+00

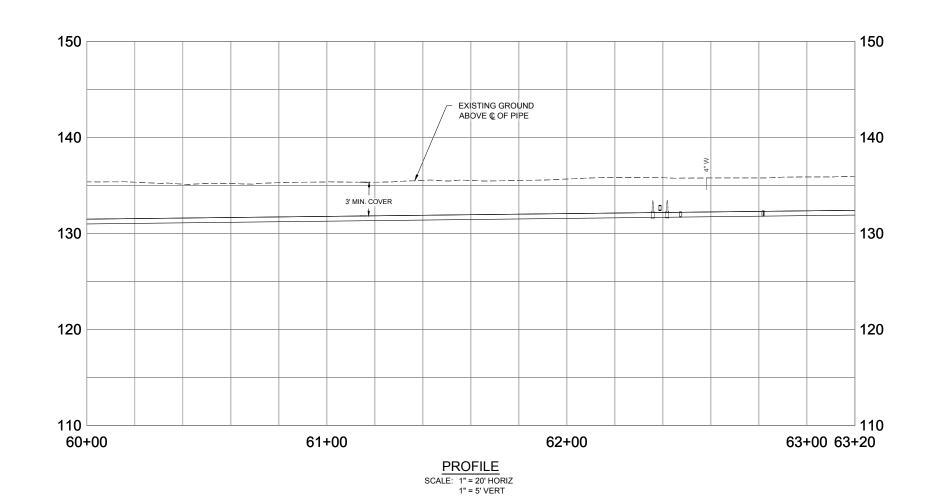
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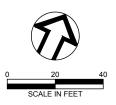
OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT Metro
 Metro

DRAWING NO:









O INSTALL:

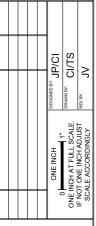
1 ~ 6" HDPE DR9 45° BEND

Q INSTALL: 1 ~ 4" HDPE DR9 WYE 3 ~ 4" FJ X MJ GATE VALVE

WATER CONSTRUCTION NOTES

- 3 INSTALL 4" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
- ABANDON EXISTING HYDRANT OR STANDPIPE ABOVE GRADE. REMOVE ALL ASSOCIATED VALVES AND VALVE BOXES AND RESTORE SURFACE IN KIND.
- CUT EXISTING MAIN WHERE SHOWN AND CAP DEAD END WITH MJ CAP PER DETAIL [FORTHCOMING].

PRELIMITARY



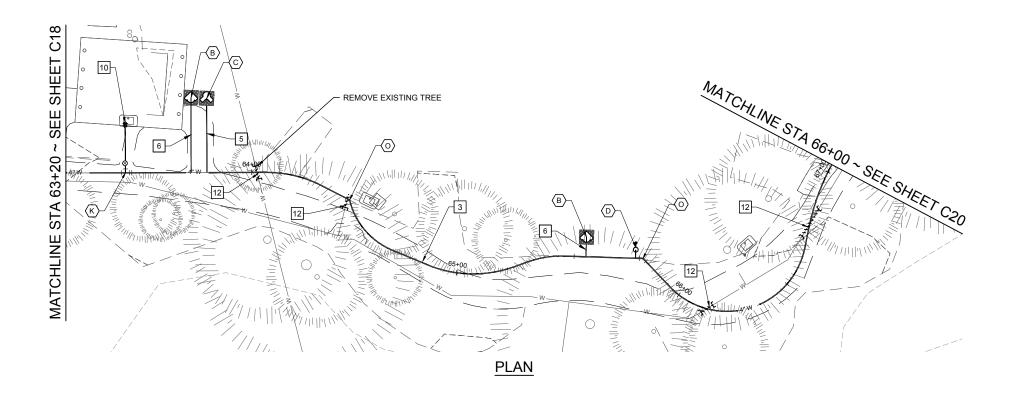
PLAN & PROFILE STA 60+00 TO STA 63+20

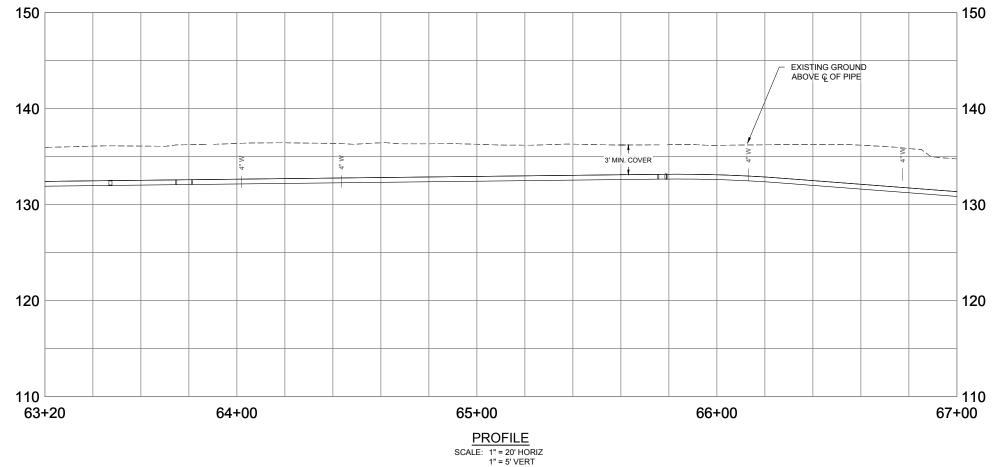
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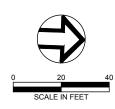
Metro
OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:

C18







BINSTALL:
1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL [FORTHCOMING]

O INSTALL:

1 ~ STANDPIPE PER DETAIL [FORTHCOMING]

1 ~ BACKFLOW PREVENTION ASSEMBLY PER DETAIL [FORTHCOMING]

1 ~ 2" SERVICE TAP ASSEMBLY PER DETAIL
[FORTHCOMING]

DINSTALL:
1 ~ 2" CARV ASSEMBLY PER DETAIL [FORTHCOMING]

(K) INSTALL: 2 ~ 4" X 2" HDPE DR9 REDUCING TEE 1 ~ 2" FJ X MJ GATE VALVE

ONSTALL:
1 ~ 6" HDPE DR9 45° BEND

WATER CONSTRUCTION NOTES

3 INSTALL 4" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].

5 INSTALL 2" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].

6 INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].

CONNECT NEW MAIN TO EXISTING SYSTEM WITH APPROVED FITTINGS.

PLAN & PROFILE STA 63+20 TO STA 67+00

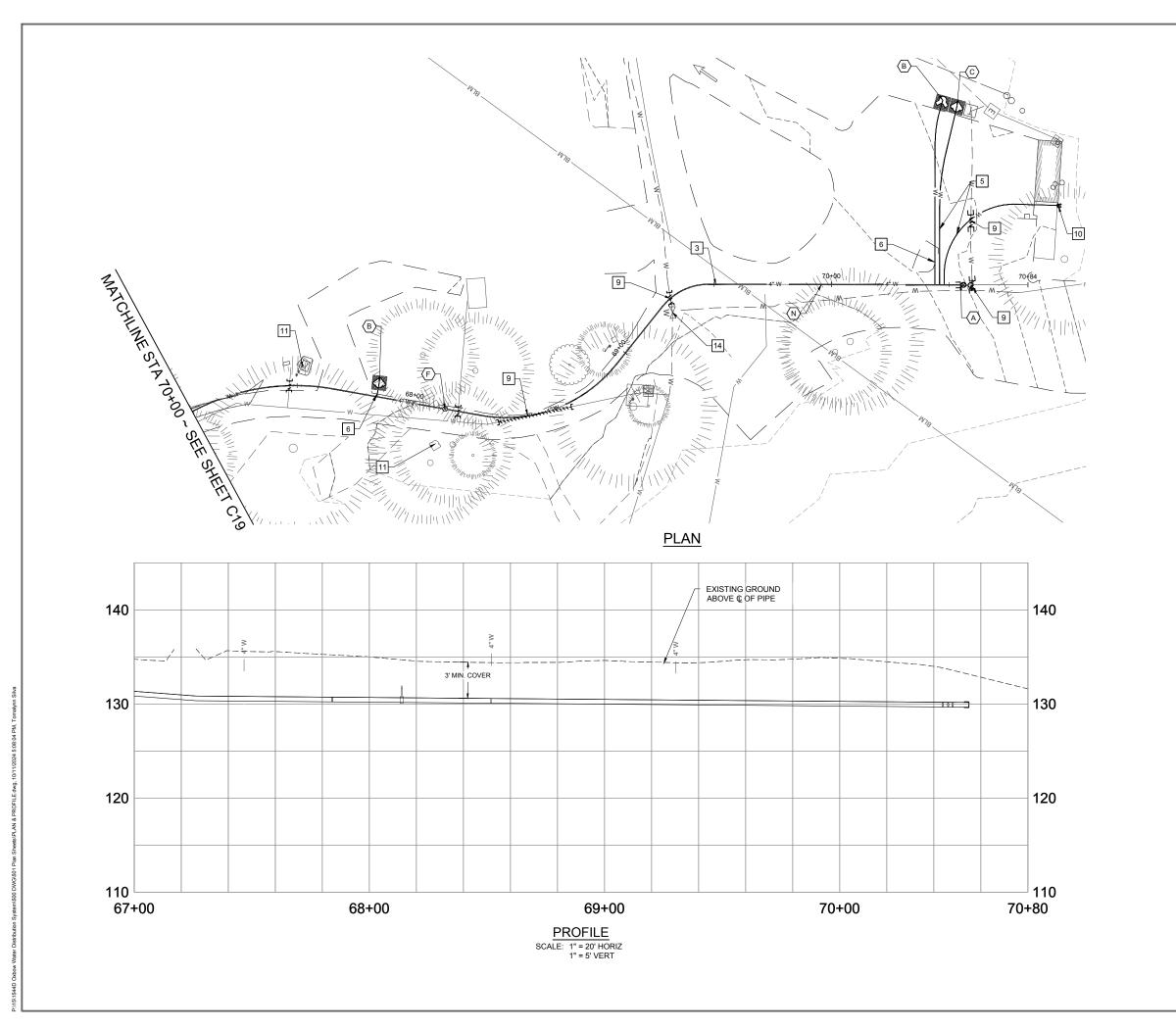
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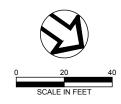
OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:

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Metro
 Metro





(B) INSTALL:
1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL
[FORTHCOMING]

(C) INSTALL:

1 ~ STANDPIPE PER DETAIL [FORTHCOMING]

1 ~ BACKFLOW PREVENTION ASSEMBLY PER
DETAIL [FORTHCOMING]

1 ~ 2" SERVICE TAP ASSEMBLY PER DETAIL
[FORTHCOMING]

F INSTALL:

1 ~ 4" FJ X MJ GATE VALVE

WATER CONSTRUCTION NOTES

3 INSTALL 4" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN

6 INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].

9 REMOVE EXISTING ASBESTOS PIPE AS REQUIRED TO ACCOMMODATE PROPOSED WORK. CAP OPEN ENDS WITH MJ CAP AND DISPOSE OF PIPE REMOVED PER THE SPECIFICATIONS.

CONNECT NEW MAIN TO EXISTING SYSTEM WITH APPROVED FITTINGS.

111 ABANDON EXISTING HYDRANT OR STANDPIPE ABOVE GRADE. REMOVE ALL ASSOCIATED VALVES AND VALVE BOXES AND RESTORE SURFACE IN KIND.

ABANDON EXISTING VALVE IN PLACE. REMOVE VALVE CAN AND LID AND RESTORE SURFACING.

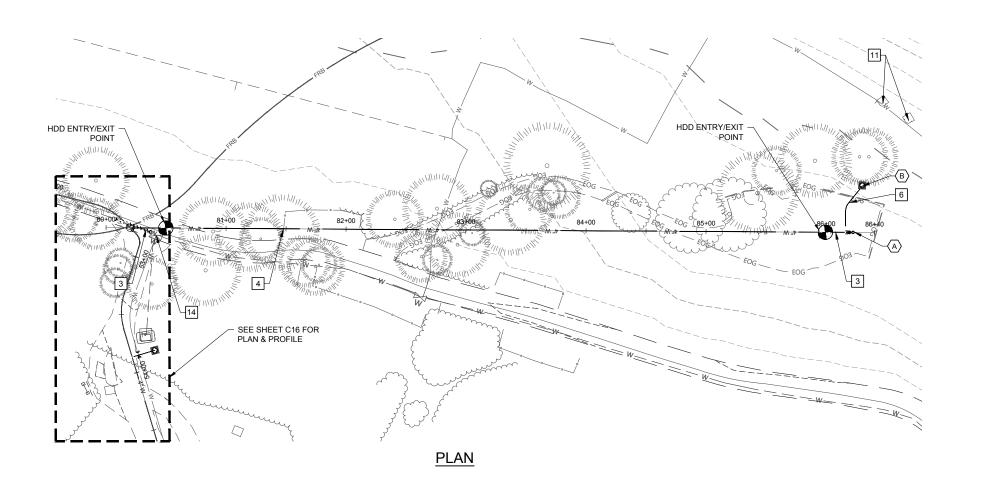
PLAN & PROFILE STA 67+00 TO END

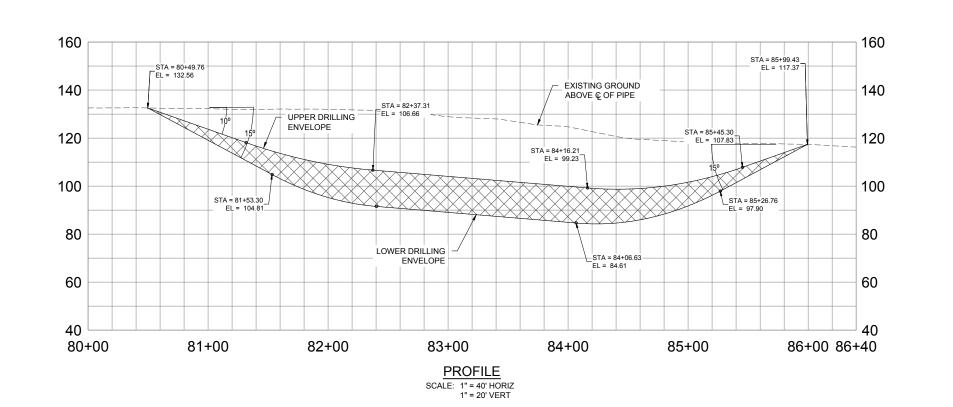
wallis *engineering

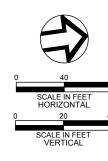
OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT Metro
 Metro

DRAWING NO:

C20







(A) INSTALL: 1 ~ 2" BLOWOFF ASSEMBLY PER DETAIL [FORTHCOMING]

(B) INSTALL:
1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL
[FORTHCOMING]

WATER CONSTRUCTION NOTES

- 3 INSTALL 4" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
- 4 INSTALL FUSED 4" DR9 HDPE PIPE BY HDD PER DETAIL [FORTHCOMING].
- 6 INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].
- 7 WORK AREA LIMITS. NO HEAVY EQUIPMENT PERMITTED OUTSIDE LIMITS SHOWN.
- 11 ABANDON EXISTING HYDRANT OR STANDPIPE ABOVE GRADE. REMOVE ALL ASSOCIATED VALVES AND VALVE BOXES AND RESTORE SURFACE IN KIND.
- 14 ABANDON EXISTING VALVE IN PLACE. REMOVE VALVE CAN AND LID AND RESTORE SURFACING.

HDD NOTES

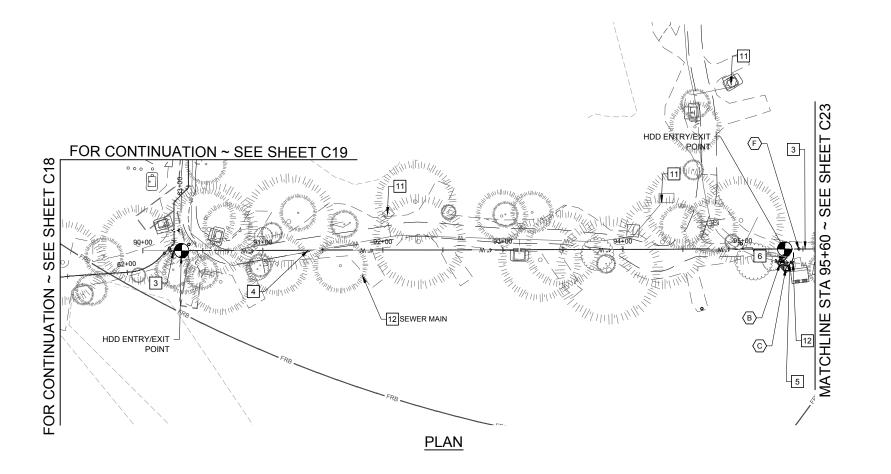
- REFER TO HORIZONTAL DIRECTIONAL DRILLING NOTES, SHEET C3.
- (2) HDD PROFILE SHOWN RESPRESENTS A PRELIMINARY DESIGN ENVELOPE, INCLUSIVE OF POSSIBLE BORE PATHS. HDD CONTRACTOR SHALL ADJUST HDD GEOMETRY, INCLUDING ANGLES, DEPTHS AND ELEVATIONS, RADII, AND SLOPES AS REQUIRED AND
- 3 CONNECTIONS TO PROPOSED WATER LINE AT ENTRY/ EXIT POINTS SHALL BE MADE PER DETAIL, SHEET CXX.

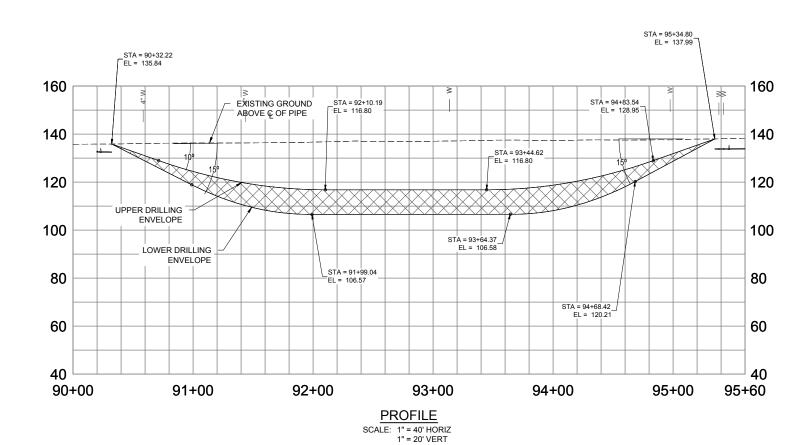
PROFILE STA 86+40 HDD PLAN & F STA 80+00 TO S

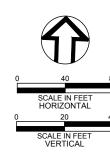
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OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT Metro

DRAWING NO:







BINSTALL:
1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL

INSTALL:
1 ~ STANDPIPE PER DETAIL [FORTHCOMING]
1 ~ BACKFLOW PREVENTION ASSEMBLY PER
DETAIL [FORTHCOMING] 1 ~ 2" SERVICE TAP ASSEMBLY PER DETAIL [FORTHCOMING]

F) INSTALL:

1 ~ 4" FJ X MJ GATE VALVE

WATER CONSTRUCTION NOTES

- INSTALL 4" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
- 4 INSTALL FUSED 4" DR9 HDPE PIPE BY HDD PER DETAIL [FORTHCOMING].
- 5 INSTALL 2" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].
- 6 INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].
- 111 ABANDON EXISTING HYDRANT OR STANDPIPE ABOVE GRADE. REMOVE ALL ASSOCIATED VALVES AND VALVE BOXES AND RESTORE SURFACE IN KIND.
- 12 CUT EXISTING MAIN WHERE SHOWN AND CAP DEAD END WITH MJ CAP PER DETAIL [FORTHCOMING].

HDD NOTES

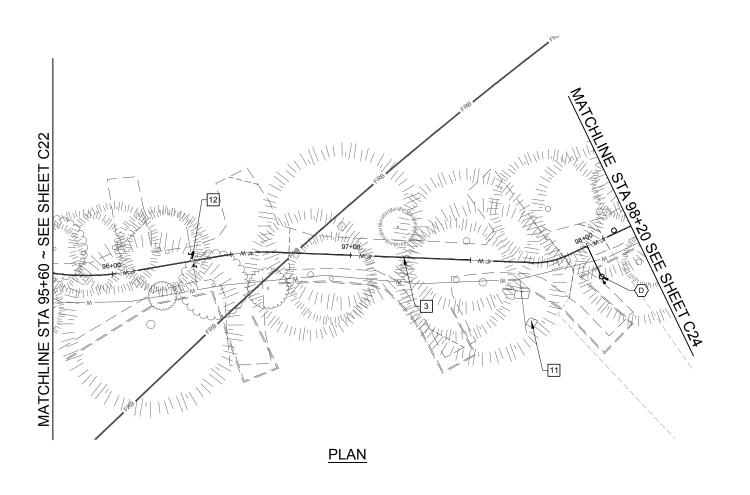
- 1 REFER TO HORIZONTAL DIRECTIONAL DRILLING
- 2 HDD PROFILE SHOWN RESPRESENTS A PRELIMINARY DESIGN ENVELOPE, INCLUSIVE OF POSSIBLE BORE PATHS. HDD CONTRACTOR SHALL ADJUST HDD GEOMETRY, INCLUDING ANGLES, DEPTHS AND ELEVATIONS, RADII, AND SLOPES AS REQUIRED AND APPROVED.
- (3) CONNECTIONS TO PROPOSED WATER LINE AT ENTRY/ EXIT POINTS SHALL BE MADE PER DETAIL, SHEET CXX.

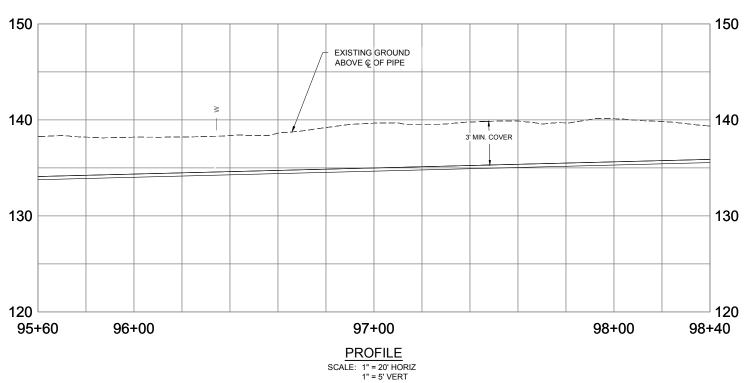
PROFILE STA 95+60 HDD PLAN & F STA 90+00 TO S

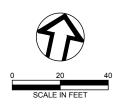
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OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT Metro

DRAWING NO:







D INSTALL:
1 ~ 2" CARV ASSEMBLY PER DETAIL
[FORTHCOMING]

WATER CONSTRUCTION NOTES

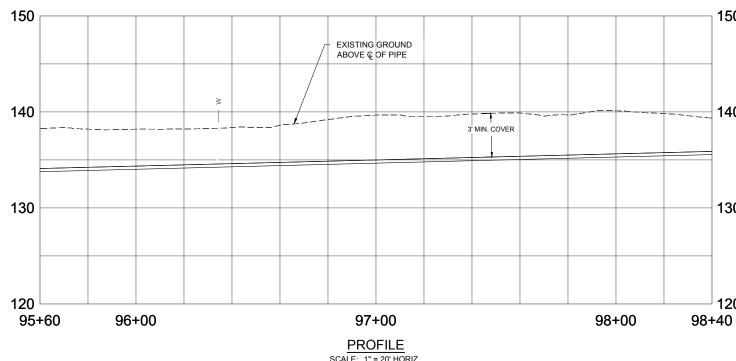
- 3 INSTALL 4" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
- 111 ABANDON EXISTING HYDRANT OR STANDPIPE ABOVE GRADE. REMOVE ALL ASSOCIATED VALVES AND VALVE BOXES AND RESTORE SURFACE IN KIND.
- CUT EXISTING MAIN WHERE SHOWN AND CAP DEAD END WITH MJ CAP PER DETAIL [FORTHCOMING].

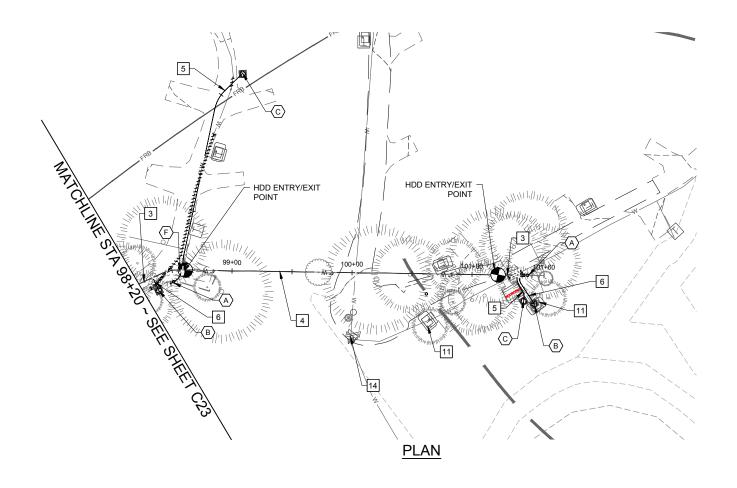
PLAN & PROFILE PLAN & PROFILE STA 95+60 TO STA 98+20

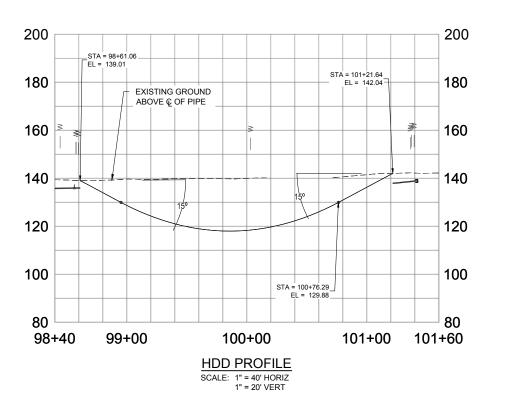
wallis *engineering

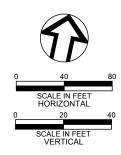
OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT Metro
 Metro

DRAWING NO:









(A) INSTALL: 1 ~ 2" BLOWOFF ASSEMBLY PER DETAIL [FORTHCOMING]

(B) INSTALL:
1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL
[FORTHCOMING]

(C) INSTALL:

1 ~ STANDPIPE PER DETAIL [FORTHCOMING]

1 ~ BACKFLOW PREVENTION ASSEMBLY PER
DETAIL [FORTHCOMING]

1 ~ 2" SERVICE TAP ASSEMBLY PER DETAIL
[FORTHCOMING]

D INSTALL:

1 ~ 2" CARV ASSEMBLY PER DETAIL

[FORTHCOMING]

WATER CONSTRUCTION NOTES

3 INSTALL 4" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].

[4] INSTALL FUSED 4" DR9 HDPE PIPE BY HDD PER DETAIL [FORTHCOMING].

6 INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].

111 ABANDON EXISTING HYDRANT OR STANDPIPE ABOVE GRADE. REMOVE ALL ASSOCIATED VALVES AND VALVE BOXES AND RESTORE SURFACE IN KIND.

14 ABANDON EXISTING VALVE IN PLACE. REMOVE VALVE CAN AND LID AND RESTORE SURFACING.

HDD NOTES

(1) REFER TO HORIZONTAL DIRECTIONAL DRILLING NOTES, SHEET C3.

2 HDD PROFILE SHOWN RESPRESENTS A PRELIMINARY DESIGN ENVELOPE, INCLUSIVE OF POSSIBLE BORE PATHS. HDD CONTRACTOR SHALL ADJUST HDD GEOMETRY, INCLUDING ANGLES, DEPTHS AND ELEVATIONS, RADII, AND SLOPES AS REQUIRED AND APPROV

(3) CONNECTIONS TO PROPOSED WATER LINE AT ENTRY/EXIT POINTS SHALL BE MADE PER DETAIL, SHEET CXX.

ONE INCH

ONE INCH

ONE INCH ADJUST

FROTO ONE INCH ADJUST

SCALE ACCORDINGLY

NEW PR.

JV

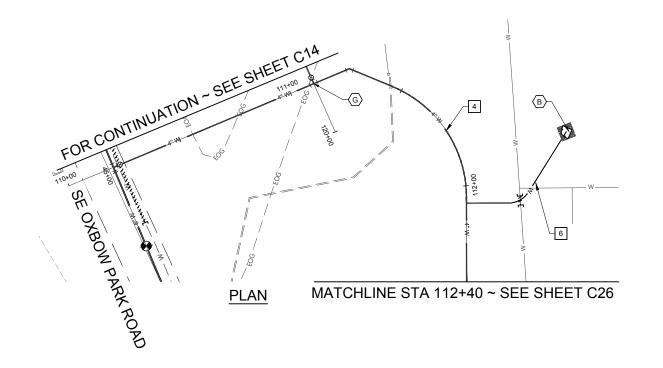
PLAN & PROFILE HDD PLAN & PROFILE STA 98+20 TO END

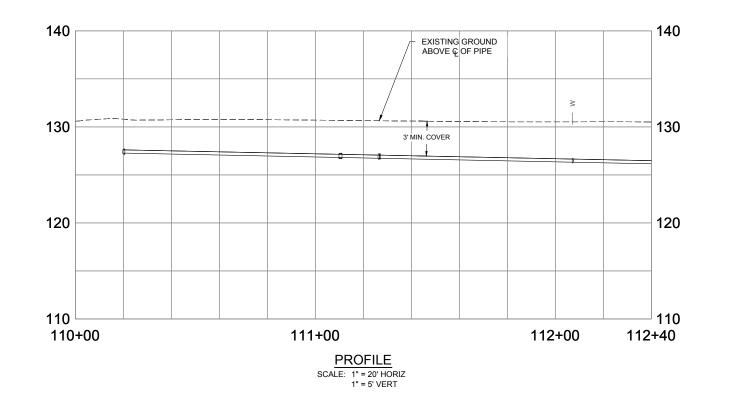
wallis ★engineering PROJECT NO. DATE:

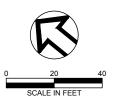
Metro
OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:

C24







(B) INSTALL: 1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING] 1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL

[FORTHCOMING]

(G) INSTALL:
1 ~ 4" X 4" HDPE DR9 TEE

1 ~ 4" FJ X MJ GATE VALVE

WATER CONSTRUCTION NOTES

INSTALL FUSED 4" DR9 HDPE PIPE BY HDD PER DETAIL [FORTHCOMING].

6 INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].

PREIMINARY

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IF NOT ONE INCH ADJUST
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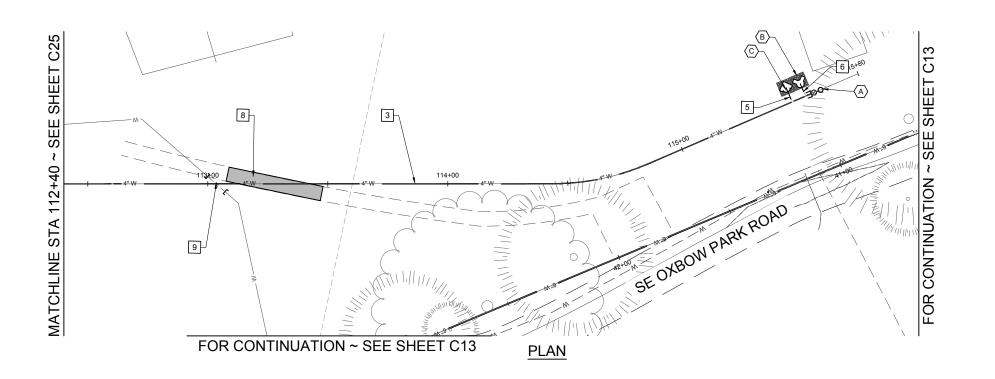
PLAN & PROFILES STA 110+00 TO STA 112+40

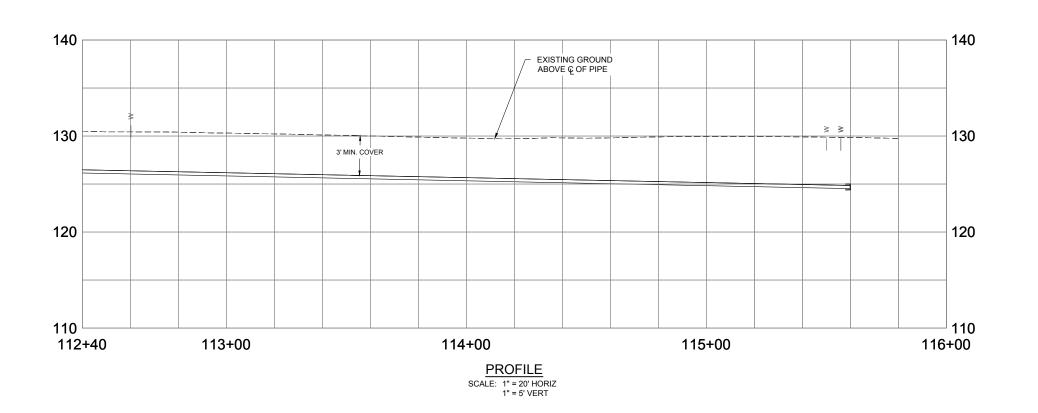
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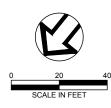
Metro
OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:

C25







- (A) INSTALL: 1 ~ 2" BLOWOFF ASSEMBLY PER DETAIL [FORTHCOMING]
- (B) INSTALL:
 1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
 1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL
 [FORTHCOMING]
- (C) INSTALL:

 1 ~ STANDPIPE PER DETAIL [FORTHCOMING]

 1 ~ BACKFLOW PREVENTION ASSEMBLY PER DETAIL [FORTHCOMING]

 1 ~ 2" SERVICE TAP ASSEMBLY PER DETAIL [FORTHCOMING]

WATER CONSTRUCTION NOTES

- 3 INSTALL 4" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN
- 5 INSTALL 2" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].
- 6 INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING]. 8 REMOVE EXISTING SIDEWALK OVER TRENCH AT NEAREST JOINTS AND RECONSTRUCT PER DETAIL [FORTHCOMING].
- 9 REMOVE EXISTING ASBESTOS PIPE AS REQUIRED TO ACCOMMODATE PROPOSED WORK. CAP OPEN ENDS WITH MJ CAP AND DISPOSE OF PIPE REMOVED PER THE SPECIFICATIONS.

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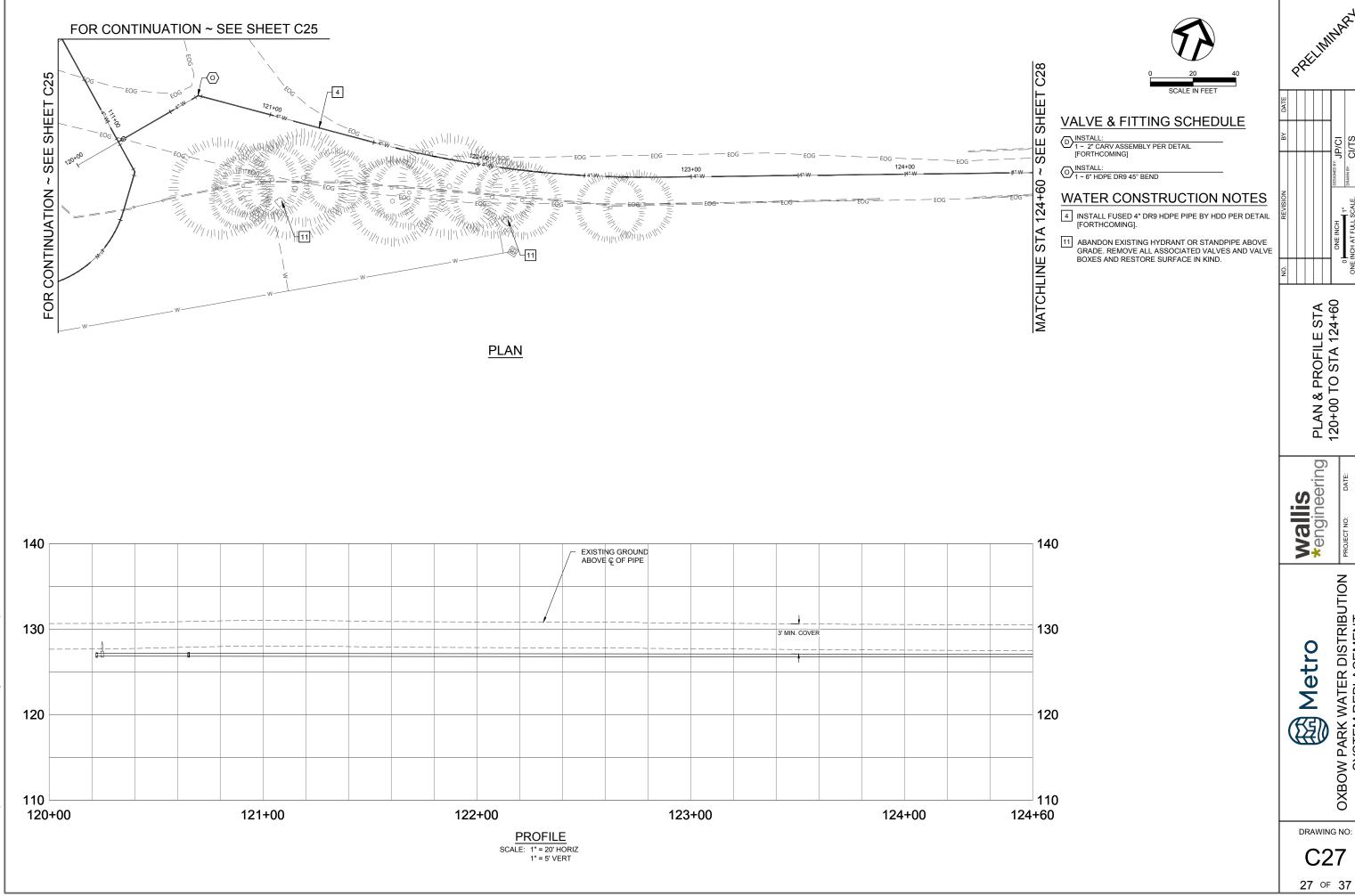
PLAN & PROFILE STA 112+40 TO END

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OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT Metro
 Metro

DRAWING NO:

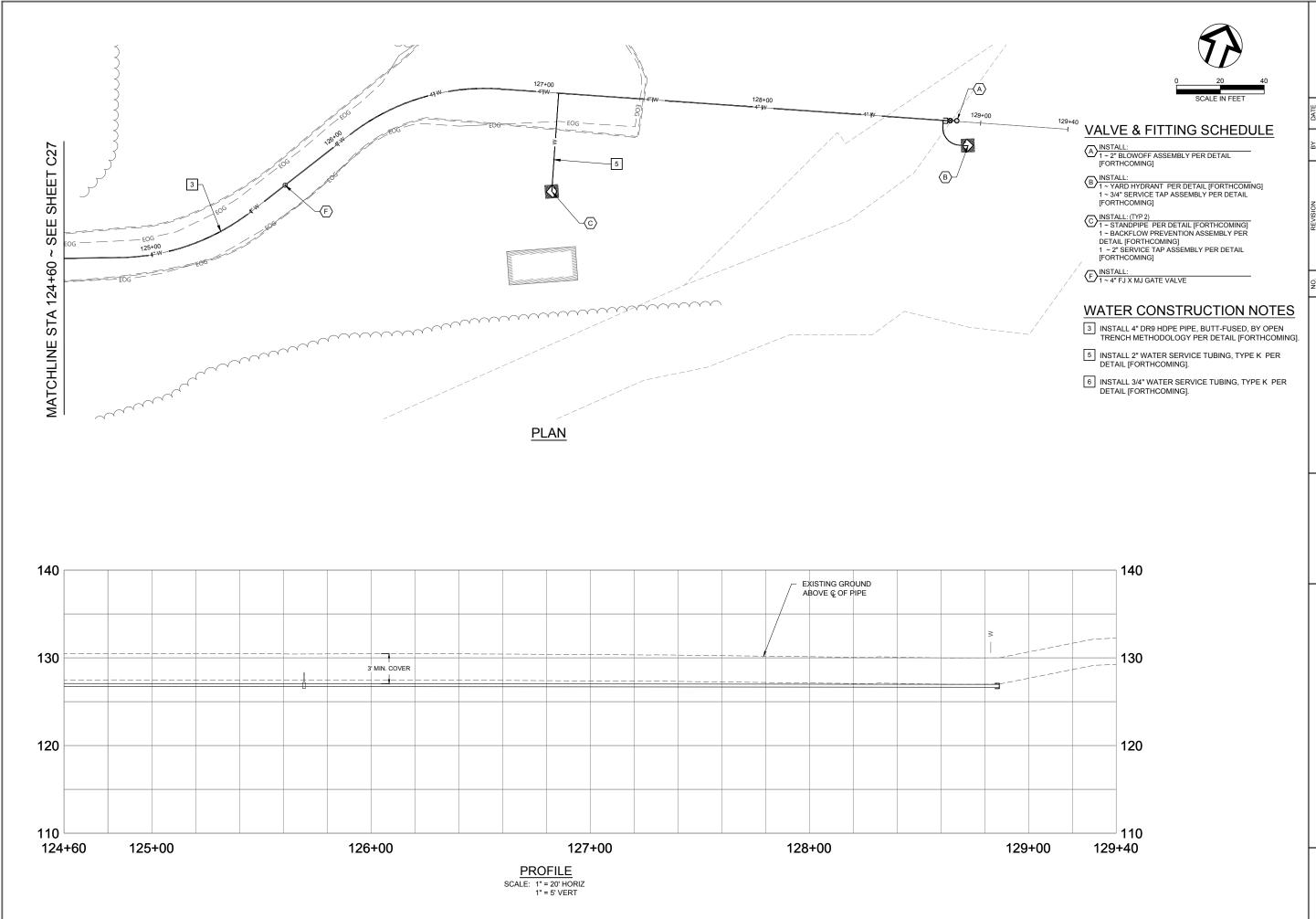
C26



PLAN & PROFILE STA 120+00 TO STA 124+60

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:



PREIMMARY

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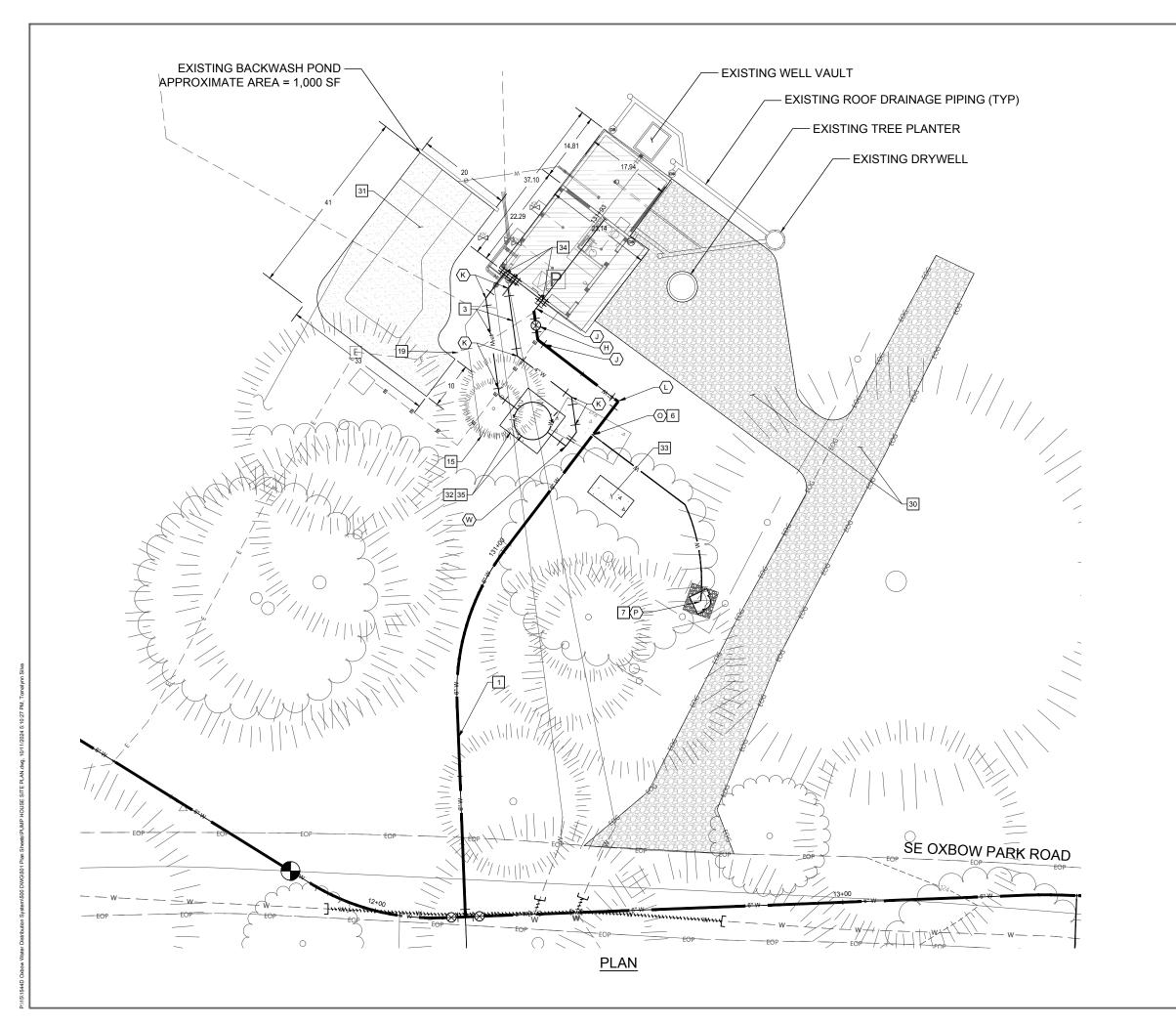
PLAN & PROFILE STA 124+60 TO END

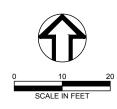
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OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:

C28





H INSTALL: 1 ~ 6" FJ X MJ GATE VALVE

J INSTALL: 1 ~ 6" HDPE DR9 45° BEND

K) INSTALL:
1 ~ 4" HDPE DR9 45° BEND

INSTALL:

1 ~ 6" HDPE DR9 90° BEND

NSTALL:
1 ~ 3/4" SERVICE TAP ASSEMBLY SEE DETAIL ON SHEET XX

P INSTALL: (TYP 3)
1 ~ SPIGOT ASSEMBLY SEE DETAIL ON SHEET XX

W INSTALL:

1 ~ 4" HDPE DR9 90° BEND

WATER CONSTRUCTION NOTES

- 1 INSTALL 6" DR9 HDPE PIPE, BUTT-FUSED, INSTALLED BY OPEN TRENCH SEE SHEET XX
- 3 INSTALL 4" DR9 HDPE PIPE, BUTT-FUSED, INSTALLED BY OPEN TRENCH SEE SHEET XX
- 6 INSTALL 3/4" COPPER SERVICE TUBING, TYPE K SEE SHEET XX
- 7 INSTALL 6"X6" SPLASH PAD SEE SHEET XX
- CONNECT NEW MAIN TO EXISTING SYSTEM WHERE SHOWN SEE DETAIL
- CUT EXISTING 4" ASBESTOS MAIN PER XX AND CAP DEAD END WITH 4" MJ CAP AS ENCOUNTERED
- 19 POTHOLE AHEAD OF INSTALLATION FOR EXISTING UNDERGROUND UTILITIES AND PROTECT EXISTING UTILITY IN PLACE. RESTORE SURFACING IN KIND

SITE CONSTRUCTION NOTES

- 30 RESTORE EXISTING GRAVEL SURFACING PER SECTION [FORTHCOMING]
- [31] RESTORE EXISTING BACKWASH POND PER DETAIL [FORTHCOMING]
- 32 CONSTRUCT 10' x 10' CONCRETE PAD PER DETAILS [FORTHCOMING]
- 33 CONSTRUCT 4.5' x 9' CONCRETE PAD AND INSTALL STANDBY GENERATOR PER DETAILS [FORTHCOMING]
- CONNECT TO PUMP HOUSE PIPING PER DETAILS [FORTHCOMING]
- CONSTRUCT 8' DIAMETER, 6' TALL WATER STORAGE TANK PER DETAILS [FORTHCOMING]



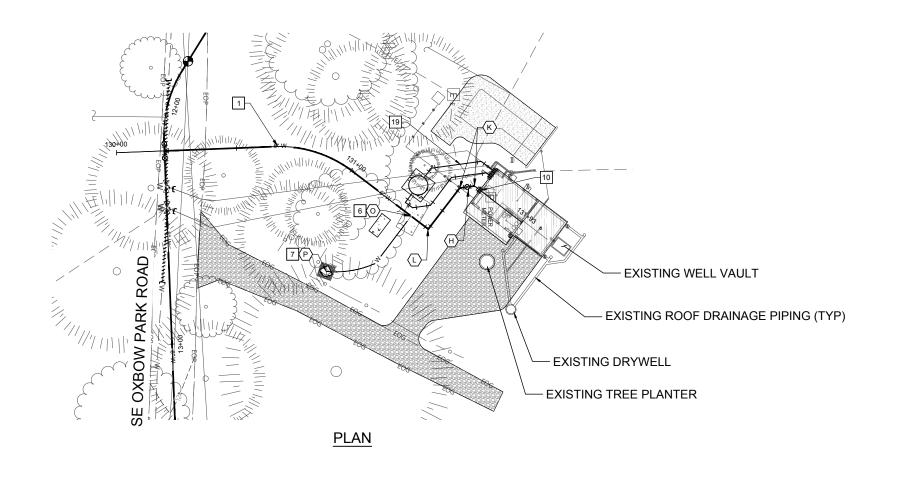
PLAN SITE PUMP HOUSE

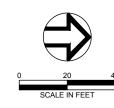
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OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT Metro

DRAWING NO:

C29





H) INSTALL: 1 ~ 6" FJ X MJ GATE VALVE

 $\bigcirc \hspace{-0.1cm} \overbrace{1 \sim 3/4" \text{ SERVICE TAP ASSEMBLY SEE DETAIL ON}}^{\hspace{-0.1cm} \text{INSTALL:}}$

PINSTALL:
1 ~ SPIGOT ASSEMBLY SEE DETAIL ON SHEET XX

WATER CONSTRUCTION NOTES

- 1 INSTALL 6" DR9 HDPE PIPE, BUTT-FUSED, INSTALLED BY OPEN TRENCH SEE SHEET XX
- 6 INSTALL 3/4" COPPER SERVICE TUBING, TYPE K SEE SHEET XX
- 7 INSTALL 6"X6" SPLASH PAD SEE SHEET XX
- CONNECT NEW MAIN TO EXISTING SYSTEM WHERE SHOWN SEE DETAIL
- 19 POTHOLE AHEAD OF INSTALLATION FOR EXISTING UNDERGROUND UTILITIES AND PROTECT EXISTING UTILITY IN PLACE. RESTORE SURFACING IN KIND

SITE CONSTRUCTION NOTES

CONNECT TO PUMP HOUSE PIPING PER DETAILS [FORTHCOMING]

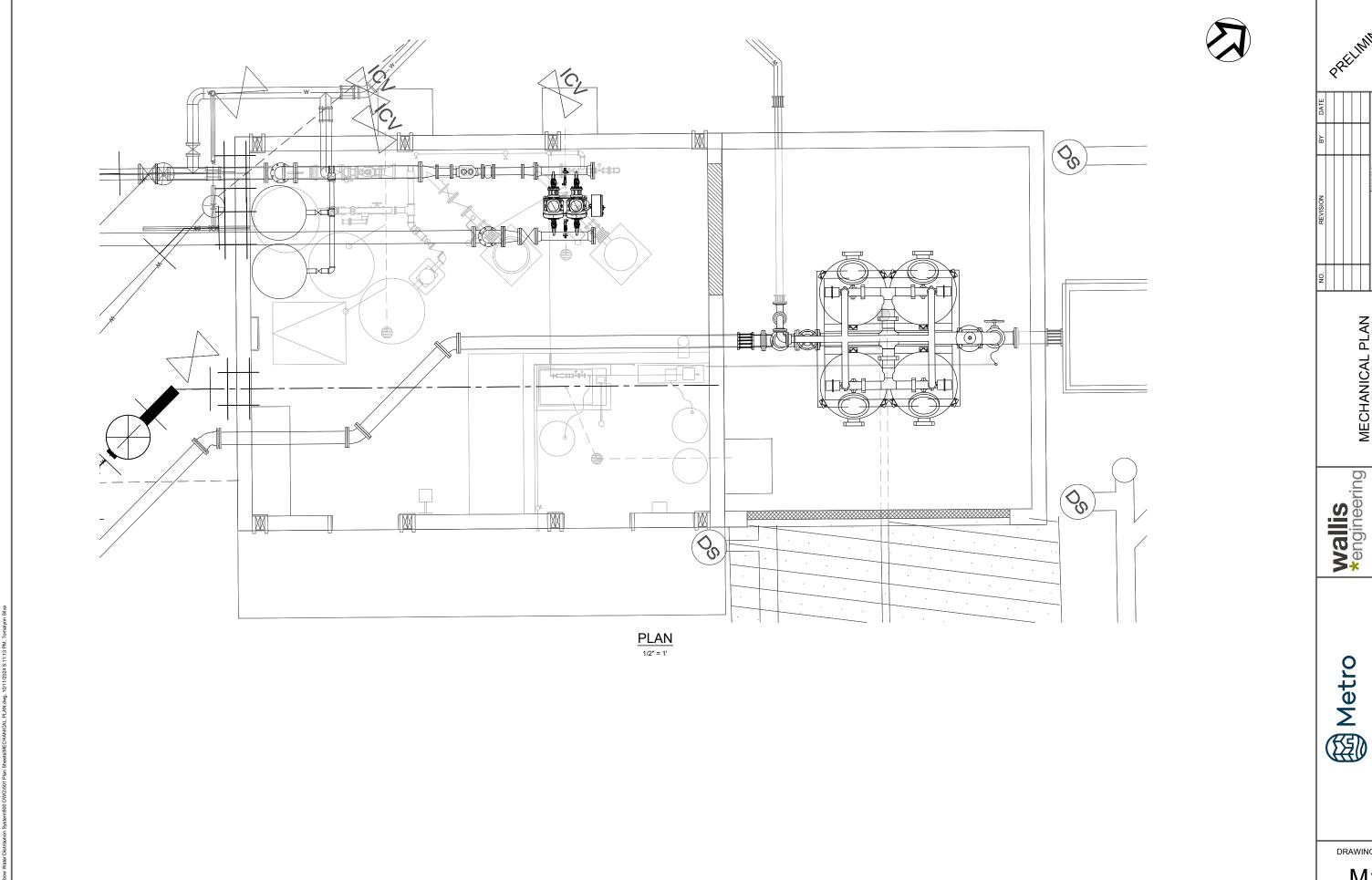
∞ర HOUSE PLAN 8 PROFILE PUMP I

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OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT Metro

DRAWING NO:

C30



MECHANICAL PLAN

OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:

M1