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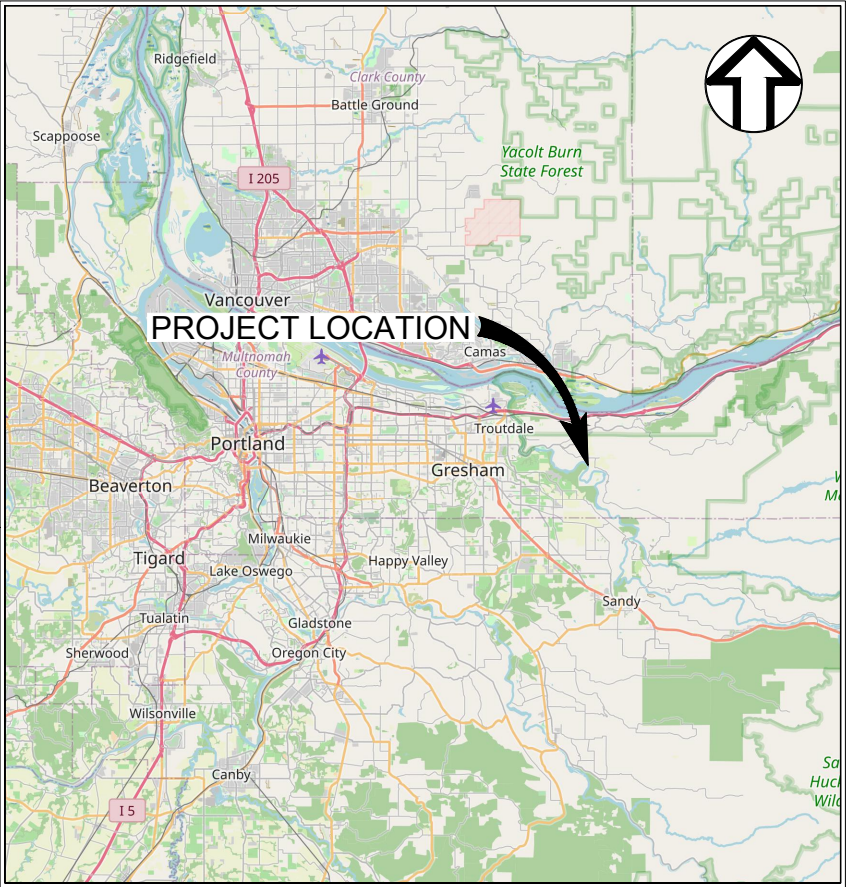
OXBOW PARK WELCOME CENTER WATER SYSTEM

NOVEMBER 2023

PRELIMINARY

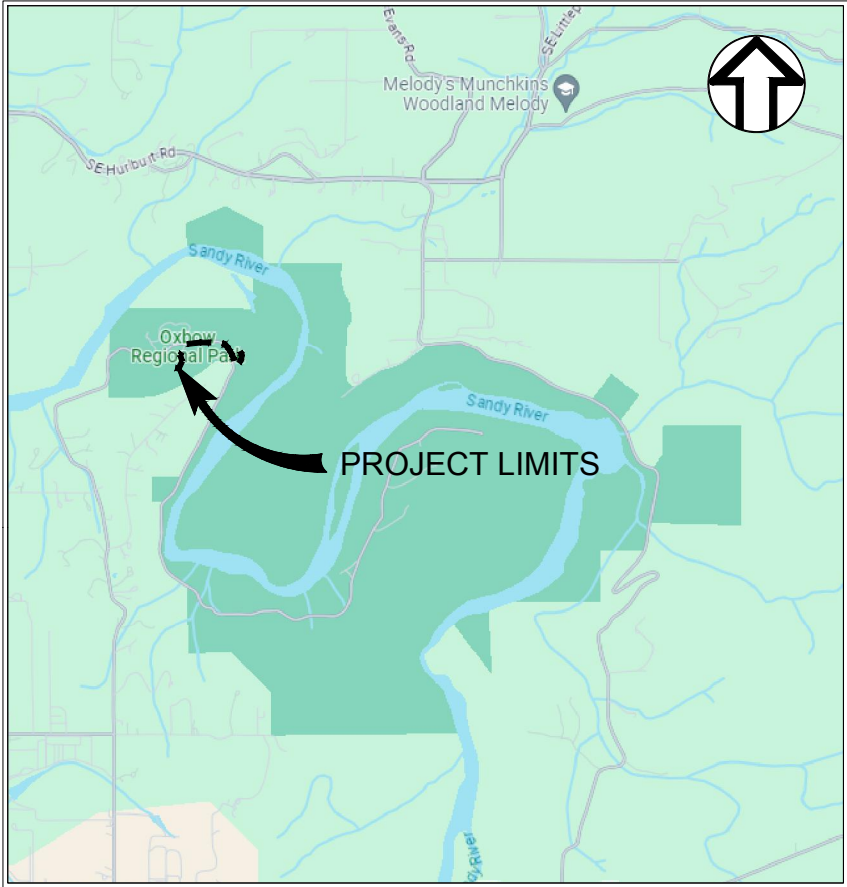
EXHIBIT 3a

Exhibit A.5



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

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COVER

wallis engineering
PROJECT NO: 1544C
DATE: 11/2023

OXBOW PARK
WELCOME CENTER
WATER SYSTEM

Metro

DRAWING NO:
G1

1 OF 12

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| G5 | EROSION CONTROL PLAN |
| C1 | PLAN & PROFILE BEGIN TO STA 3+50 |
| C2 | PLAN & PROFILE STA 3+50 TO 7+00 |
| C3 | PLAN & PROFILE STA 7+00 TO 10+50 |
| C4 | PLAN & PROFILE STA 10+50 TO 14+00 |
| C5 | PLAN & PROFILE STA 14+00 TO END |
| C6 | SITE PLAN |
| M1 | TREATMENT BUILDING FLOOR PLAN |

PRELIMINARY

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GENERAL NOTES



PROJECT NO: 1544C DATE: 11/2023

OXBOW PARK
WELCOME CENTER
WATER SYSTEM



DRAWING NO:

G2

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| LEGEND | | | |
|----------|-------------------------------------|-----------------------------|------------------|
| EXISTING | | | |
| | RIGHT OF WAY | | BENCH MARK |
| | PROPERTY LINE | | STUMP |
| | EASEMENT | | TREES |
| | ASPHALT | | HEDGE/BRUSH LINE |
| | CURB | | |
| | CONCRETE SIDEWALK | | |
| | GRAVEL | | |
| | BRICK | | |
| | FENCE | | |
| | STRIPING | | |
| | MAJOR CONTOUR | | |
| | MINOR CONTOUR | | |
| | BUILDING | | |
| | SANITARY SEWER, SIZE NOTED IF KNOWN | | |
| | STORM SEWER, SIZE NOTED IF KNOWN | | |
| | DITCH | | |
| | WATER, SIZE NOTED IF KNOWN | | |
| | OVERHEAD POWER | | |
| | UNDERGROUND POWER | | |
| | UNDERGROUND COMMUNICATIONS | | |
| | CATCH BASIN | | |
| | DOWNSPOUT | | |
| | SANITARY SEWER MANHOLE | | |
| | CLEANOUT | | |
| | WATER MANHOLE | | |
| | WATER VAULT | | |
| | WATER METER | | |
| | WATER VALVE | | |
| | IRRIGATION VALVE | | |
| | WATER SPIGOT | | |
| | WATER FOUNTAIN | | |
| | WATER PLAY STRUCTURE | | |
| | SINK | | |
| | ELECTRIC METER | | |
| | ELECTRICAL SWITCH | | |
| | TELEPHONE RISER | | |
| | COMMUNICATION JUNCTION BOX | | |
| | UTILITY VENT | | |
| | FUEL PUMP | | |
| | MANHOLE | | |
| | POLE MOUNTED LUMINAIRE | | |
| | LUMINAIRE | | |
| | GUY ANCHOR | | |
| | UTILITY POLE | | |
| | BOLLARD | | |
| | SIGN | | |
| | PILLAR | | |
| | PICNIC TABLES | | |
| | BBQ | | |
| | WHEEL STOP | | |
| | TRASH BIN | | |
| | FLAG POLE | | |
| | CHARCOAL BIN | | |
| | WETLAND | | |
| PROPOSED | | | |
| | 6" W | WATERLINE, SIZE NOTED | |
| | 4" IR | IRRIGATION LINE, SIZE NOTED | |
| | | WATER METER | |
| | | WATER VALVE | |
| | | FIRE HYDRANT | |
| | | REDUCER | |
| | | STRADDLE BLOCK | |
| | | THRUST BLOCK | |
| | | TEE | |
| | | BEND | |
| | | CAP | |
| | | AIR RELEASE VALVE | |
| | | WATER FOUNTAIN | |
| | | BOLLARD | |
| | | SAWCUT LIMITS | |
| | | ASPHALT RESTORATION | |
| | | SEEDING RESTORATION | |
| | | GRAVEL RESTORATION | |
| | | AC PATH RESTORATION | |

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LEGEND

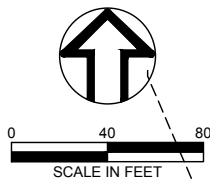
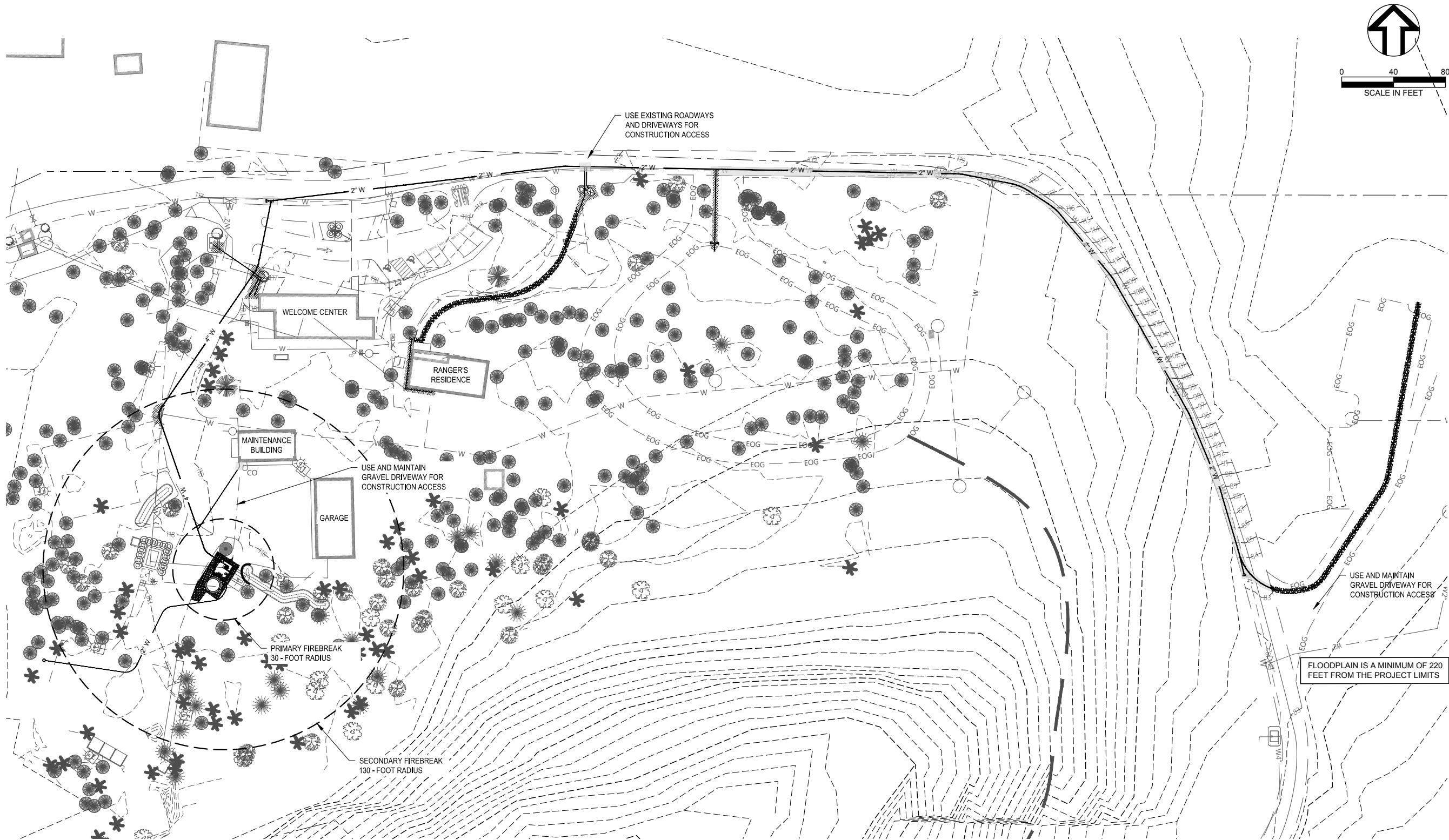
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PROJECT NO: 1544C
DATE: 11/2023

OXBOW PARK
WELCOME CENTER
WATER SYSTEM

DRAWING NO:
G3
3 OF 12

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EROSION CONTROL LEGEND

- LIMITS OF DISTURBED GRAVEL SURFACE
- LIMITS OF DISTURBED VEGETATED SURFACE
- LIMITS OF DISTURBED IMPERVIOUS SURFACE
- INSTALL STRAW WATTLE OR SILT FENCE

PLAN

DISTURBED SURFACE AREAS

- 3,050 S.F. DISTURBED GRAVEL SURFACE
- 1,200 S.F. DISTURBED VEGETATED SURFACE
- 3,250 S.F. DISTURBED IMPERVIOUS SURFACE (TO BE REPLACED)
- 7,500 S.F. TOTAL DISTURBED SURFACE AREA WITHIN PROJECT LIMITS

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PROJECT NO: 1544C
DATE: 11/2023

OXBOW PARK
WELCOME CENTER
WATER SYSTEM

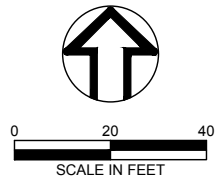
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1. UNDER NO CONDITION SHALL SEDIMENT BE WASHED INTO STORM OR DRAINAGE FACILITIES.
2. STORM AND DRAINAGE FACILITIES SHALL BE PROTECTED USING THE APPROVED BEST MANAGEMENT PRACTICE (BMP) AT ALL TIMES DURING CONSTRUCTION.
3. EFFECTIVE EROSION CONTROL, DUST CONTROL, AND DRAINAGE CONTROL IS REQUIRED AT ALL TIMES. THE COUNTY MAY ORDER STOPPAGE OF WORK TO EFFECT CORRECTIVE ACTION AT ANY TIME.
4. APPLY TEMPORARY AND PERMANENT SOIL STABILIZATION MEASURES ON ALL DISTURBED AREAS AS GRADING PROGRESSES.
5. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND FROM OCTOBER 1 THROUGH MAY 31.
6. 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.
7. ALL EROSION AND SEDIMENT CONTROLS NOT IN THE DIRECT PATH OF WORK MUST BE INSTALLED PRIOR TO ANY LAND DISTURBANCE.
8. PRESERVE EXISTING VEGETATION AND RE-VEGETATE OPEN AREAS WHEN PRACTICAL 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.
11. WATERTIGHT TRUCKS MUST BE USED TO TRANSPORT SATURATED SOILS FROM THE CONSTRUCTION SITE. AN APPROVED EQUIVALENT 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 USE OF TOXIC OR OTHER HAZARDOUS MATERIALS MUST INCLUDE PROPER STORAGE, APPLICATION, AND DISPOSAL.
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 DURING CONSTRUCTION.
16. SIGNIFICANT AMOUNTS OF SEDIMENT WHICH LEAVE THE SITE MUST BE CLEANED UP WITHIN 24 HOURS AND PLACED BACK ON THE SITE AND STABILIZED OR PROPERLY DISPOSED. 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 TIME FRAME.
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 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.
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.
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 REMOVAL.
21. CLEANING OF TRAPPED CATCH BASINS MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY (50) PERCENT, AND AT COMPLETION OF PROJECT.
22. 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.
23. 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.
24. SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR THIRTY (30) DAYS OR MORE, THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD.
25. 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 WITH STRAW, COMPOST, OR OTHER COVERING THAT WILL PREVENT SOIL OR WIND EROSION UNTIL WORK RESUMES ON THAT PORTION OF THE SITE.



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EROSION CONTROL PLAN



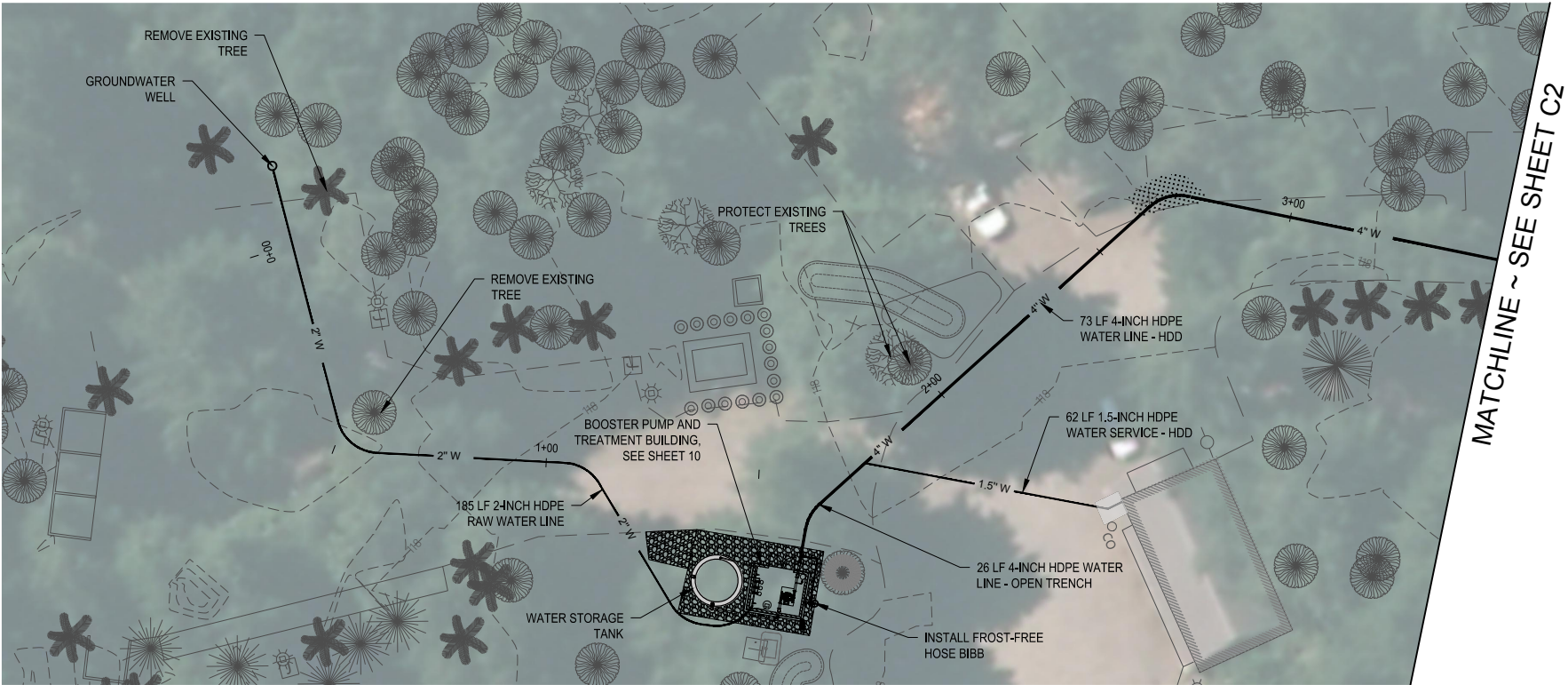
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OXBOW PARK
WELCOME CENTER
WATER SYSTEM

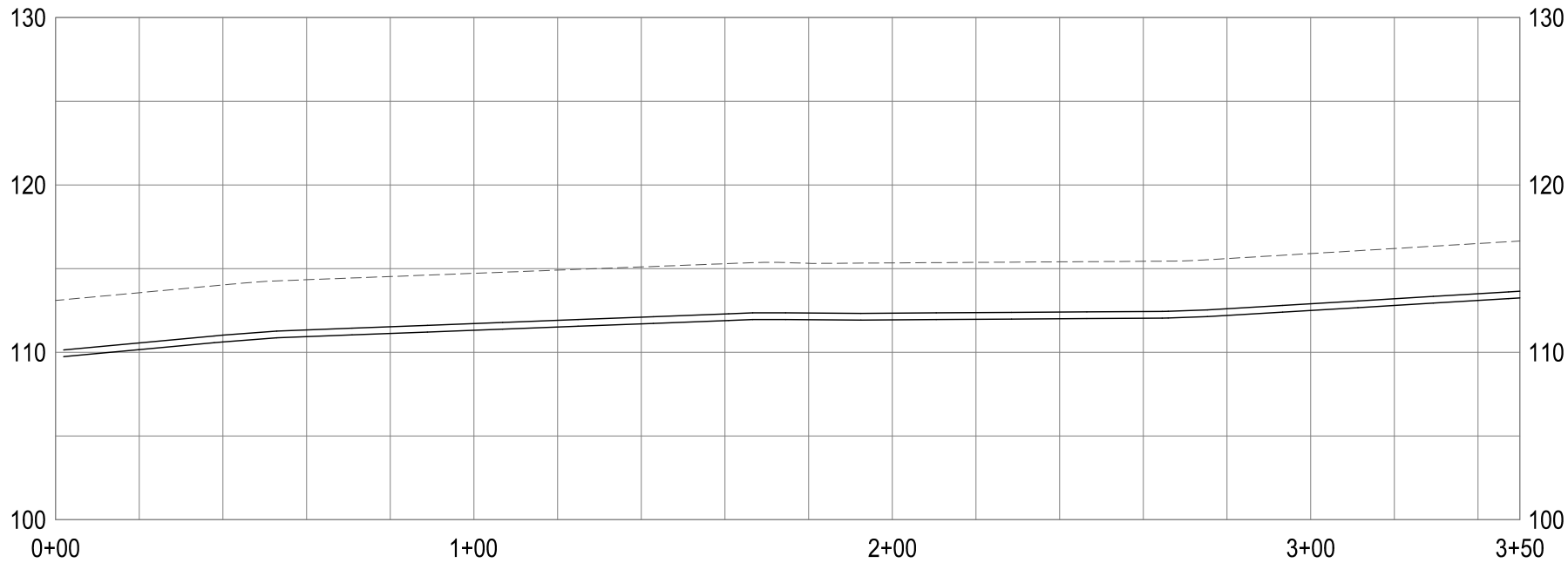


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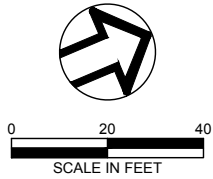
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PLAN



PROFILE
SCALE: 1" = 20' HORIZ
1" = 5' VERT



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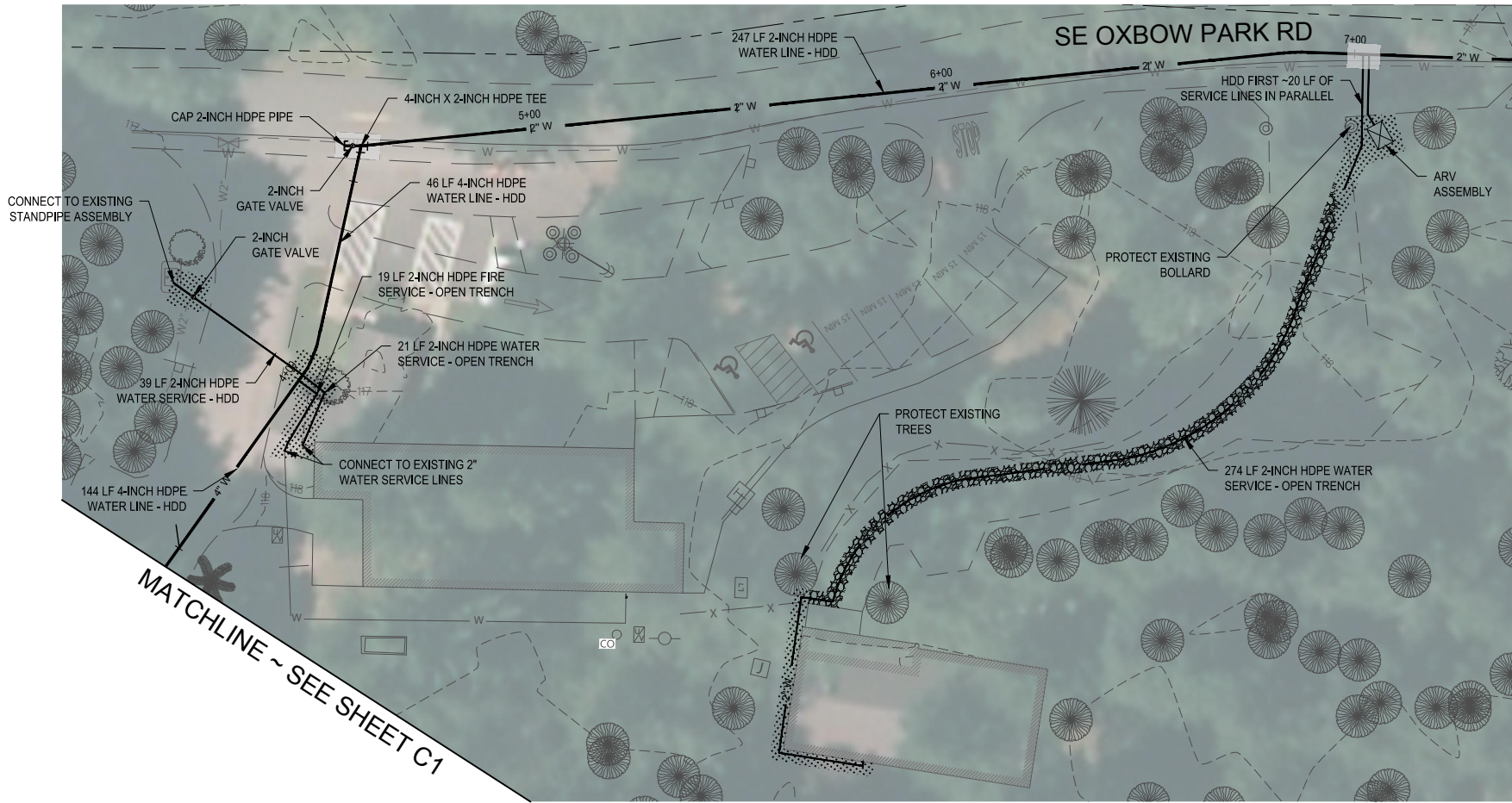
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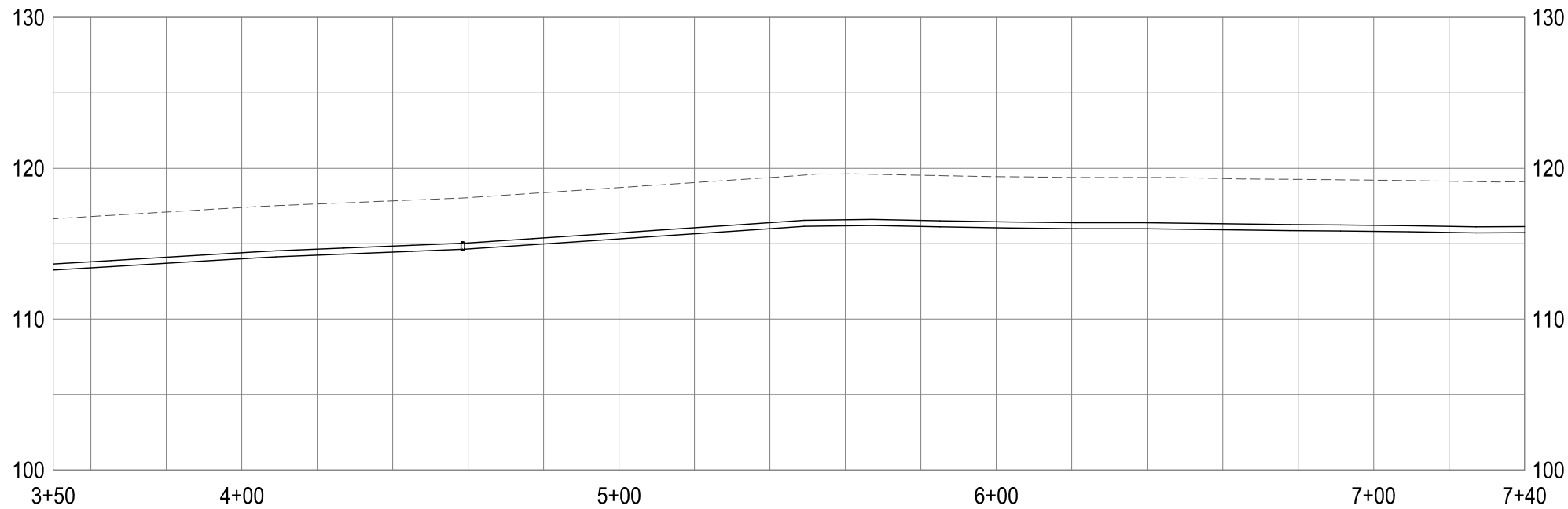
OXBOW PARK
WELCOME CENTER
WATER SYSTEM

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6 OF 12

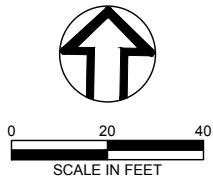
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PLAN



PROFILE
SCALE: 1" = 20' HORIZ
1" = 5' VERT



MATCHLINE ~ SEE SHEET C3

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PROJECT NO: 1544C
DATE: 11/2023

OXBOW PARK
WELCOME CENTER
WATER SYSTEM

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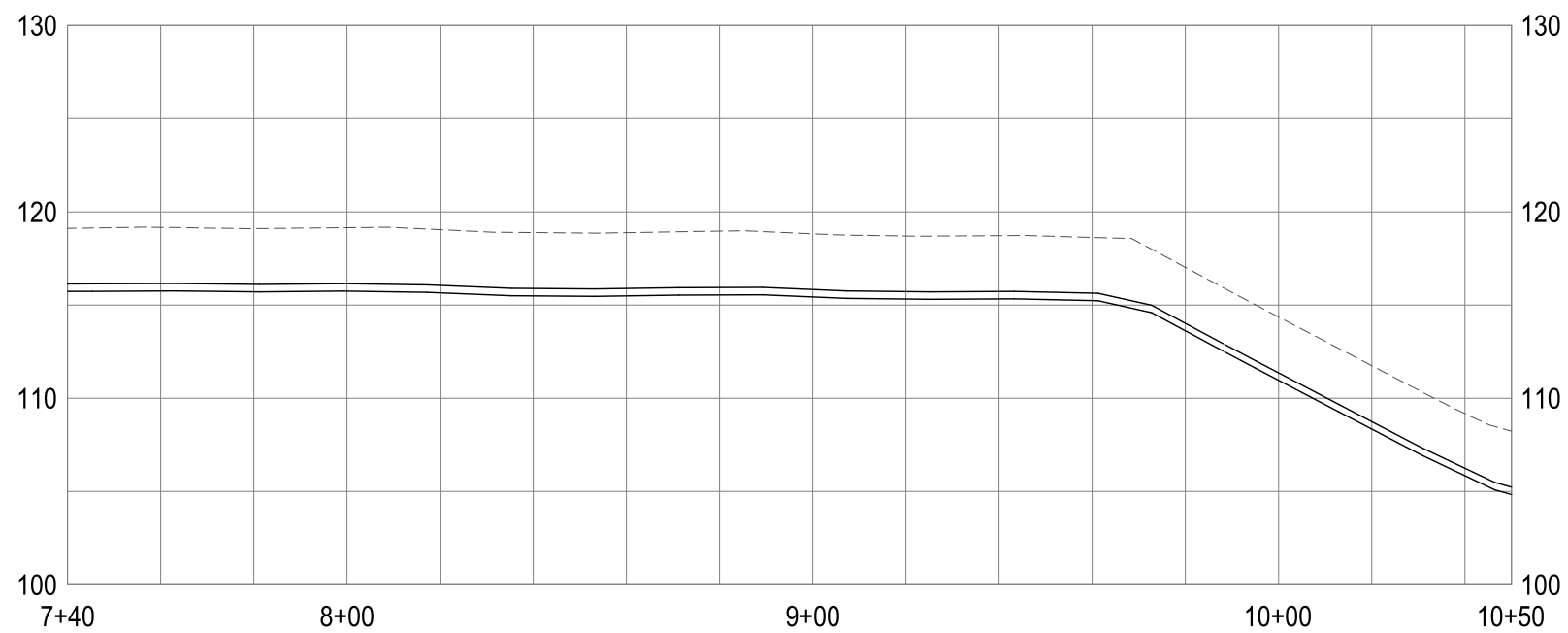
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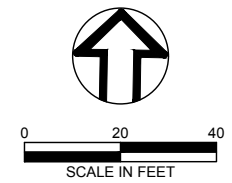
7 OF 12



PLAN



PROFILE
SCALE: 1" = 20' HORIZ
1" = 5' VERT



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7+00 TO 10+50



PROJECT NO: 1544C DATE: 11/2023

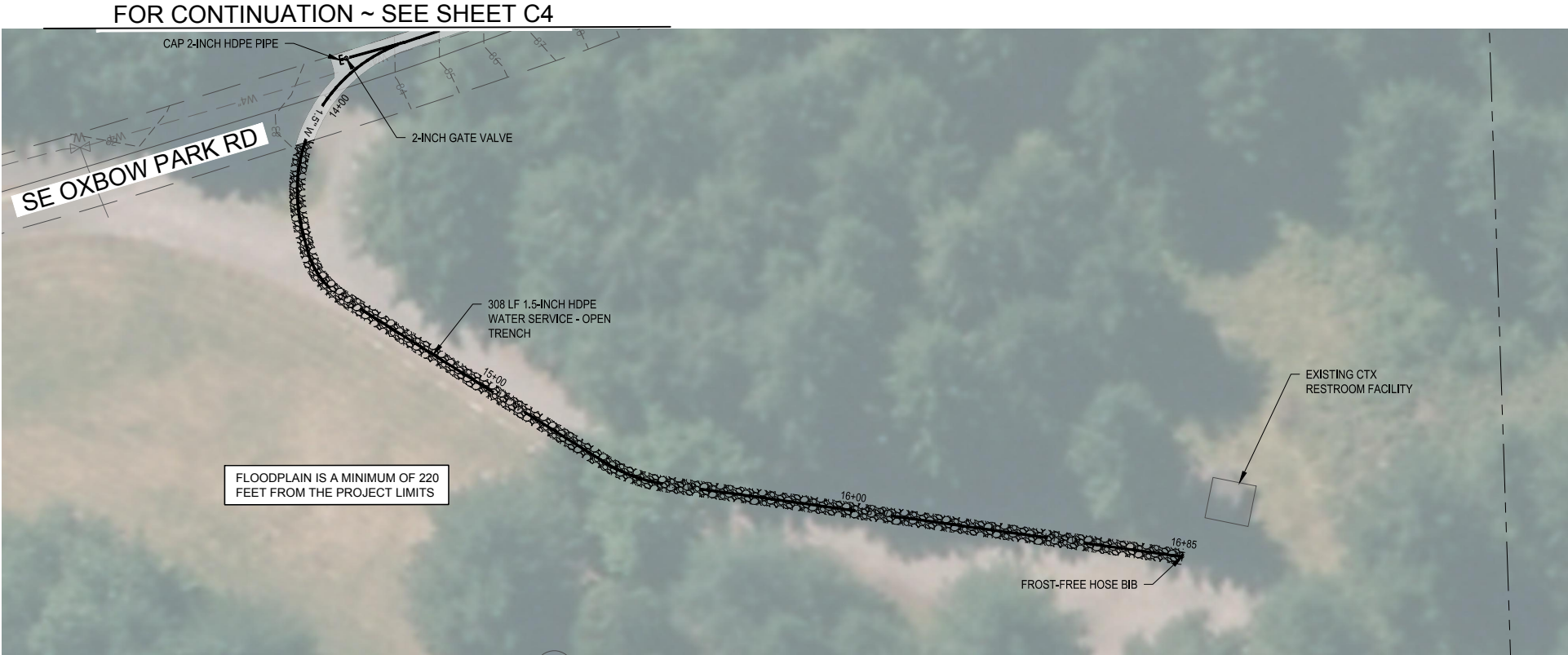
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WELCOME CENTER
WATER SYSTEM



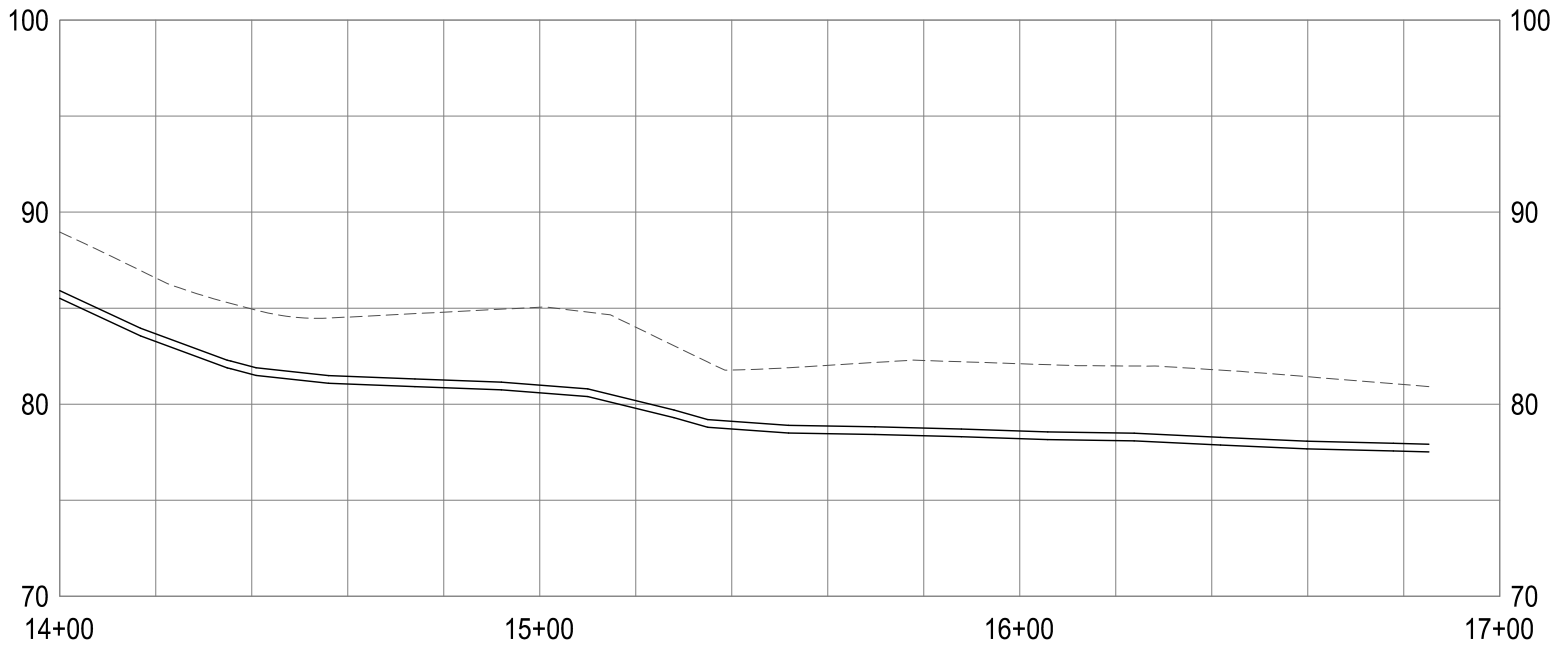
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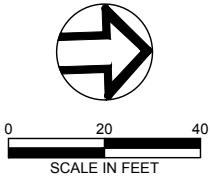


PLAN



PROFILE

SCALE: 1" = 20' HORIZ
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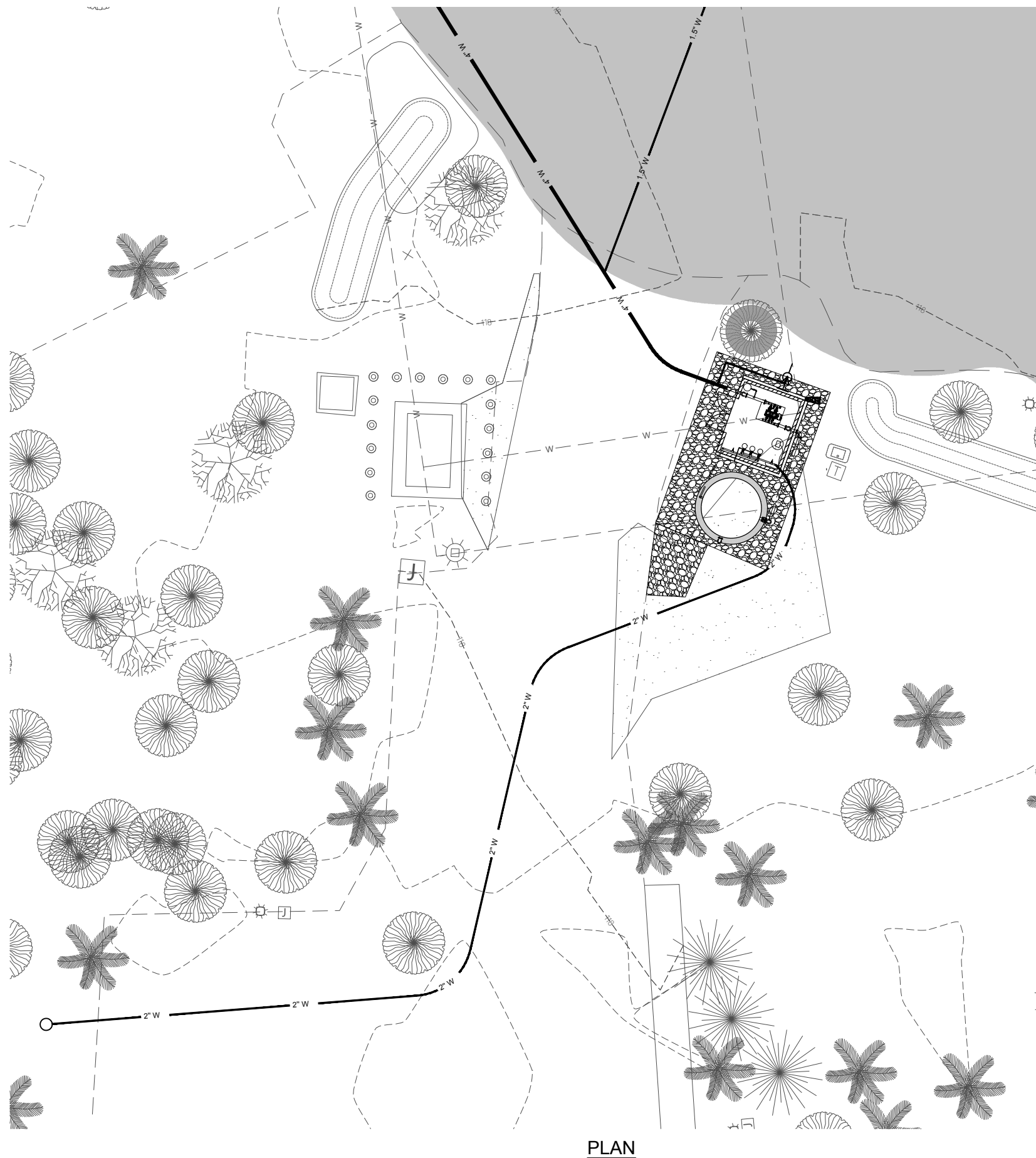
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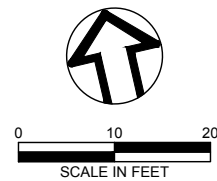
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10 OF 12



PLAN

THE FLOODPLAIN IS A MINIMUM OF
2,849 FEET FROM THE PROJECT LIMITS



OXBOW PARK
WELCOME CENTER
WATER SYSTEM



DRAWING NO:

C6

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PROJECT NO: 1544C DATE: 11/2023

SITE PLAN

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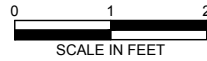
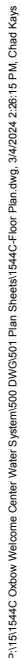
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TREATMENT BUILDING
FLOOR PLAN



PROJECT NO: 1544C DATE: 11/2023

OXBOW PARK
WELCOME CENTER
WATER SYSTEM



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