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DRAWINGS FOR:

ST TIMOTHY'S EPISCOPAL CHURCH

3295 LADD AVE NE

SALEM, OR 97301

FOR:

ANGELA FLORES, AIA

CARLSON VEIT JUNGE ARCHITECTS PC

3095 RIVER RD N

SALEM, OR 97303

503.390.0281



Know what's below.
Call before you dig.

ITEM	PROPOSED	EXISTING
SANITARY SEWER	_____	SS _____
STORM DRAIN	_____	SD _____
WATER	_____	W _____
GAS	_____	G _____
TELEPHONE	_____	T _____
POWER	_____	P _____
TELEVISION	_____	TV _____
FENCE	—X—X—	X—X—
RAILROAD	_____	_____
CURB, DRIVEWAY, P.C.C. SIDEWALK	_____	_____
HEDGE OR BRUSH	_____	_____
TREES	_____	_____
STREET OR ALLEY RIGHT OF WAY	_____	R/W _____
PLATTED LOT LINE	_____	_____
PLATTED LOT LINE (ABANDONED)	_____	_____
OWNERSHIP LINE	_____	_____
EASEMENT OR TEMPORARY RIGHT OF WAY	_____	_____
IMPROVEMENT DISTRICT BOUNDARY	_____	_____
PROJECT CENTERLINE AND STATIONING	2 3 4 5+00	_____
CITY LIMITS LINE	_____	_____

BARRICADE	_____	_____
FLOW DIRECTION	←	←
TELEPHONE MANHOLE	③	③
TELEPHONE PEDESTAL	③	③
SANITARY SEWER MANHOLE	③	③
STORM DRAIN MANHOLE	③	③
CATCH BASIN	③	③
JUNCTION BOX	③	③
FIRE HYDRANT AND VALVE	③	③
WATER METER	③	③
WATER VALVE	③	③
POWER POLE	③	③
POWER POLE W/ANCHOR	③	③
POLE W/LUMINARE	③	③
LIGHT POLE	③	③
SIGN POST	③	③
MAILBOX	③	③
TRAFFIC SIGNAL	③	③
X-WALK SIGNAL	③	③

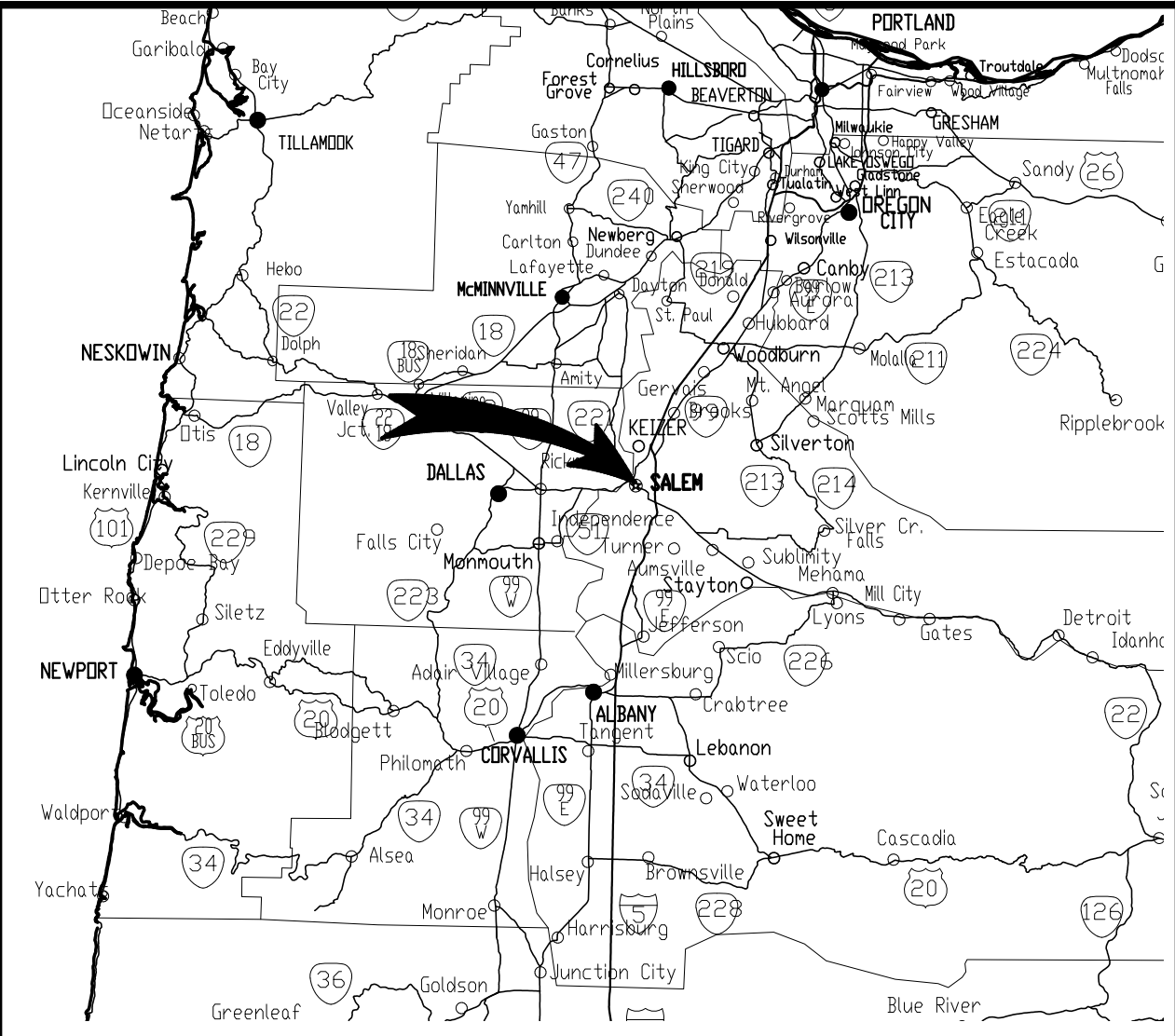
ABBREVIATIONS	
ASPH _____ ASPHALT	IRR _____ IRRIGATION
AD _____ AREA DRAIN	IE _____ INVERT ELEVATION
ASSY _____ ASSEMBLY	JB _____ JUNCTION BOX
BLDG, BLD _____ BUILDING	LP _____ LIGHT POLE
BW _____ BOTTOM OF WALL	M _____ METER, MAIN
CATV _____ CABLE TELEVISION	MB _____ MAILBOX
CB _____ CATCH BASIN	MH _____ MANHOLE
CO _____ CLEAN-OUT	OH _____ OVER-HEAD
CONC _____ CONCRETE	P/L, R _____ PROPERTY LINE
CL, C _____ CENTERLINE	PP _____ POWER POLE
DIP _____ DUCTILE IRON PIPE	PVC _____ POLYVINYL CHLORIDE
EG _____ EDGE OF GRAVEL	PWR _____ POWER
EOP, EP _____ EDGE OF PAVEMENT	R, RAD _____ RADIUS
ELEV _____ ELEVATION	R, RAD _____ RIGHT-OF-WAY
EX, EXIST _____ EXISTING	SS _____ SANITARY SEWER
FDC _____ FIRE DEPT. CONNECTOR	SD _____ STORM DRAIN
FT _____ FEET	SVC _____ SERVICE
FF _____ FINISH FLOOR	SWK, S/W _____ SIDEWALK
FG _____ FINISH GRADE	TC _____ TOP OF CURB
FH _____ FIRE HYDRANT	TEL _____ TELEPHONE
FI _____ FIELD INLET	TR _____ TRANSFORMER
FM _____ FORCE MAIN	TS _____ TRAFFIC SIGNAL
GRAV _____ GRAVEL	TW _____ TOP OF WALL
GM _____ GAS METER	TYP _____ TYPICAL
GP _____ GATE POST	UG, U/G _____ UNDER GROUND
GS _____ GROUND SHOT	UTL _____ UTILITY
GV _____ GAS VALVE	VLT _____ VAULT
HM _____ HANDICAP	W _____ WITH
HDPE _____ HIGH-DENSITY POLYETHYLENE	WM _____ WATER METER
HYD _____ HYDRANT	WLM _____ WETLANDS MARKER
IR _____ IRON ROD	YPC _____ YELLOW PLASTIC CAP
IP _____ IRON PIPE	

SYMBOLS	
AD ① AREA DRAIN	① SIGN POST
① or ① CATCH BASIN	PEO PEDESTAL
COO CLEANOUT	① MAIL BOX
① FIRE HYDRANT	① IRRIGATION VALVE
① GAS VALVE	① LIGHT POLE
① WATER VALVE	① UTILITY/POWER POLES
① GAS/POWER/WATER METER	① TEST PIT
① DOWN SPOUT	① MONUMENT FOUND
① MANHOLE TELEPHONE	
① MANHOLE STORM DRAIN	
① MANHOLE SANITARY SEWER	
① TREES - *TREE NAME* DIAMETER (INCHES)*DRIP RADIUS (FEET)	
NOTE: DIAMETER MEASURED AT BREAST HEIGHT	

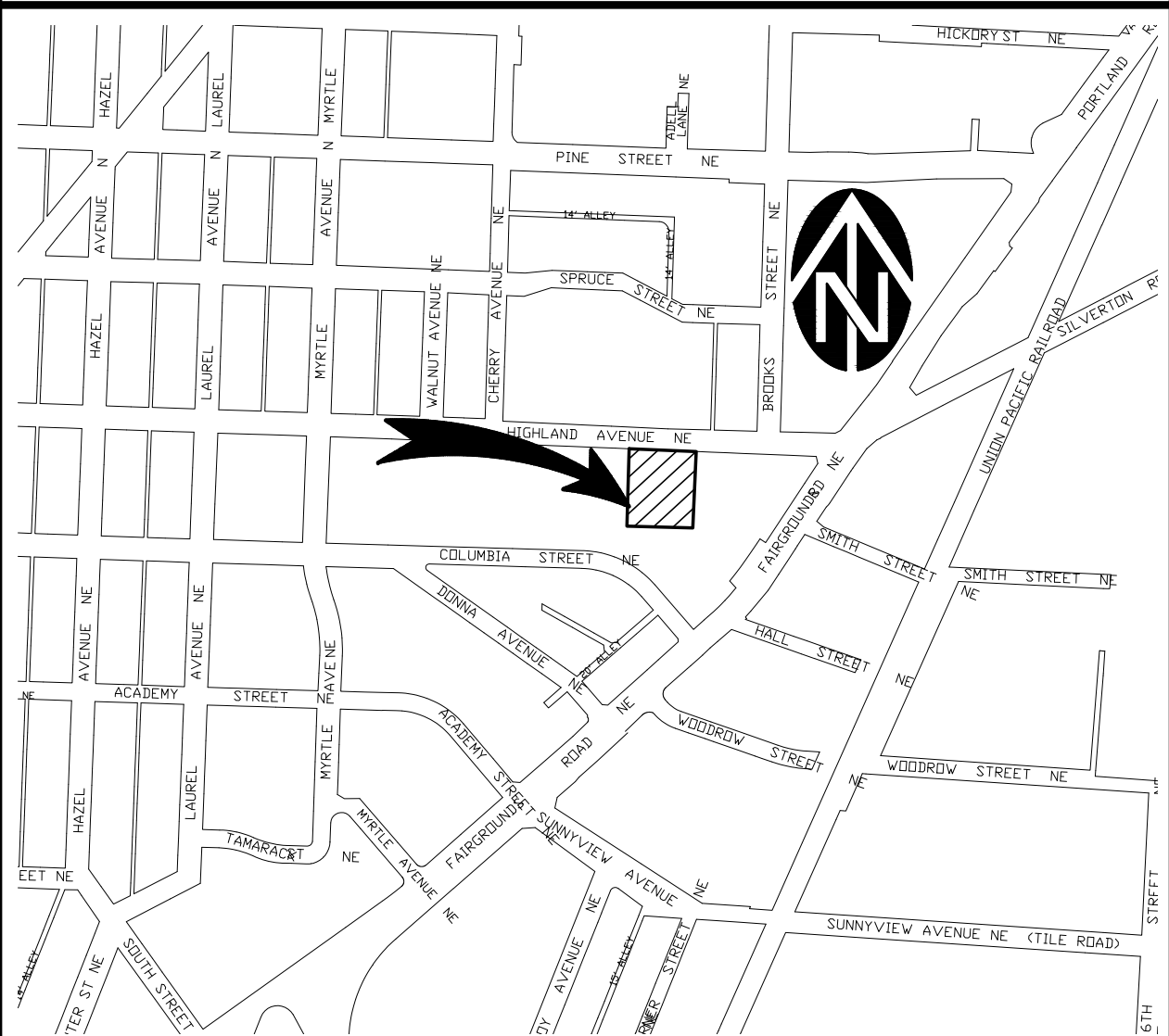
LINE TYPES	
CATV LINE	CATV _____ CATV _____ CATV _____ CATV _____ CATV _____ CATV _____ CATV _____
COMMUNICATION LINE	COM _____ COM _____ COM _____ COM _____ COM _____ COM _____ COM _____
EASEMENT LINE	_____
FENCE LINE	_____
FIBER OPTIC LINE	FOC _____ FOC _____ FOC _____ FOC _____ FOC _____ FOC _____ FOC _____
GAS LINE	GAS _____ GAS _____ GAS _____ GAS _____ GAS _____ GAS _____ GAS _____
EDGE OF GRAVEL LINE	_____
OVERHEAD LINE	OH LINES _____ OH LINES _____ OH LINES _____ OH LINES _____ OH LINES _____
PHONE LINE	PH _____ PH _____ PH _____ PH _____ PH _____ PH _____ PH _____
POWER LINE	ELEC _____ ELEC _____ ELEC _____ ELEC _____ ELEC _____ ELEC _____ ELEC _____
SANITARY SEWER LINE	SS _____ SS _____ SS _____ SS _____ SS _____ SS _____ SS _____
STORM DRAIN LINE	SD _____ SD _____ SD _____ SD _____ SD _____ SD _____ SD _____
WATER LINE	W _____ W _____ W _____ W _____ W _____ W _____ W _____

PROJECT LOCATION

TAX LOT #073W24DA00900
SEC24, T7S, R3W., W.M.



VICINITY MAP



LOCATION MAP

SHEET INDEX	
#	TITLE
C0.0	COVER, INDEX, & VICINITY MAPS
C1.0	EXISTING CONDITIONS, DEMOLITION, & EROSION CONTROL PLAN
C1.1	POST-DEVELOPMENT EROSION CONTROL PLAN
C1.2	EROSION CONTROL NOTES & DETAILS
C1.3	EROSION CONTROL NOTES
C2.0	GRADING & DRAINAGE PLAN
C3.0	UTILITY PLAN
C4.0	SURFACING PLAN
C5.0	CONSTRUCTION NOTES
C5.1	CONSTRUCTION NOTES
C6.0	CONSTRUCTION DETAILS

NOTES

- BASIS OF BEARINGS AND COORDINATE SYSTEM IS BASED ON OREGON STATE PLANE NORTH ZONE 3601, NAD83(2011), EPOCH 2010.00. ALL DISTANCES SHOWN HEREON ARE GROUND DISTANCES.
- ELEVATIONS WERE ESTABLISHED BY GPS RTK OBSERVATIONS TO CITY OF SALEM BENCHMARK "6030". MARK IS AN ALUMINUM DISK IN THE CURB AT THE SOUTHWEST CORNER OF LANCASTER DRIVE AND SUNNYVIEW ROAD NE. ELEVATION = 203.97' (CITY OF SALEM DATUM, NGVD29)
- THE LOCATION OF UTILITIES SHOWN HEREON ARE FROM OBSERVED VISIBLE EVIDENCE OF ABOVE GROUND APPURTENANCES ALONG WITH SURFACE UTILITY MARKINGS BY OTHERS. ALL UNDERGROUND UTILITIES SHOWN WERE MARKED ON THE SURFACE BY AN "OREGON ONE-CALL NOTIFICATION CENTER" REQUEST AS WELL AS "MARK IT OUT, LLC", A PRIVATE LOCATING SERVICE PROVIDER. SURVEYOR MAKES NO GUARANTEE AS TO THE ACCURACY OF SAID MARKINGS, HOWEVER, THEY ARE LOCATED AS ACCURATELY AS THEY ARE MARKED ON THE GROUND.
- PER ORS 209.150, ANY SURVEY MONUMENT REMOVED, DISTURBED OR DESTROYED SHALL BE REPLACED BY A PROFESSIONAL LAND SURVEYOR WITHIN 90 DAYS AT THE EXPENSE OF THE PERSON OR PUBLIC AGENCY RESPONSIBLE FOR SAID REMOVAL, DISTURBANCE OR DESTRUCTION.
- FIELD SURVEYED OCTOBER, 2023.

project:
ST. TIMOTHY'S EPISCOPAL CHURCH
PARISH HALL ADDITION
3295 LADD AVE NE
SALEM, OR 97301

revisions:
1

date: DEC 2023

project: 3476.0000.0

dwg file:

drawn by: AK

checked by: JW

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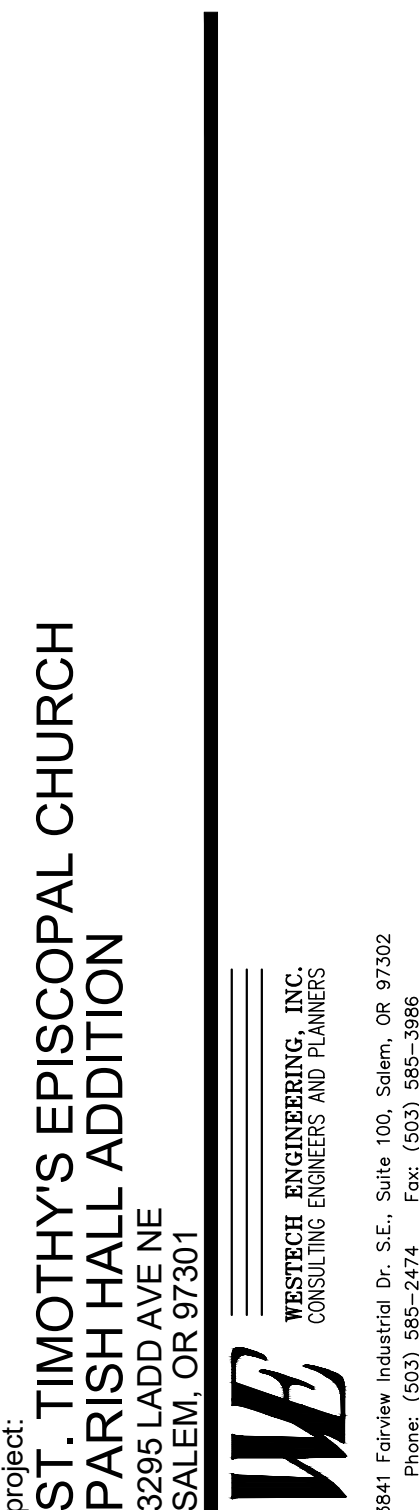
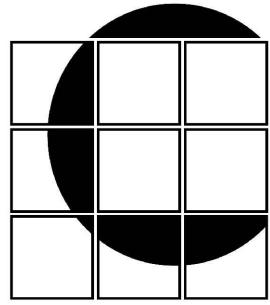
COVER, INDEX, &
VICINITY MAPS

sheet:

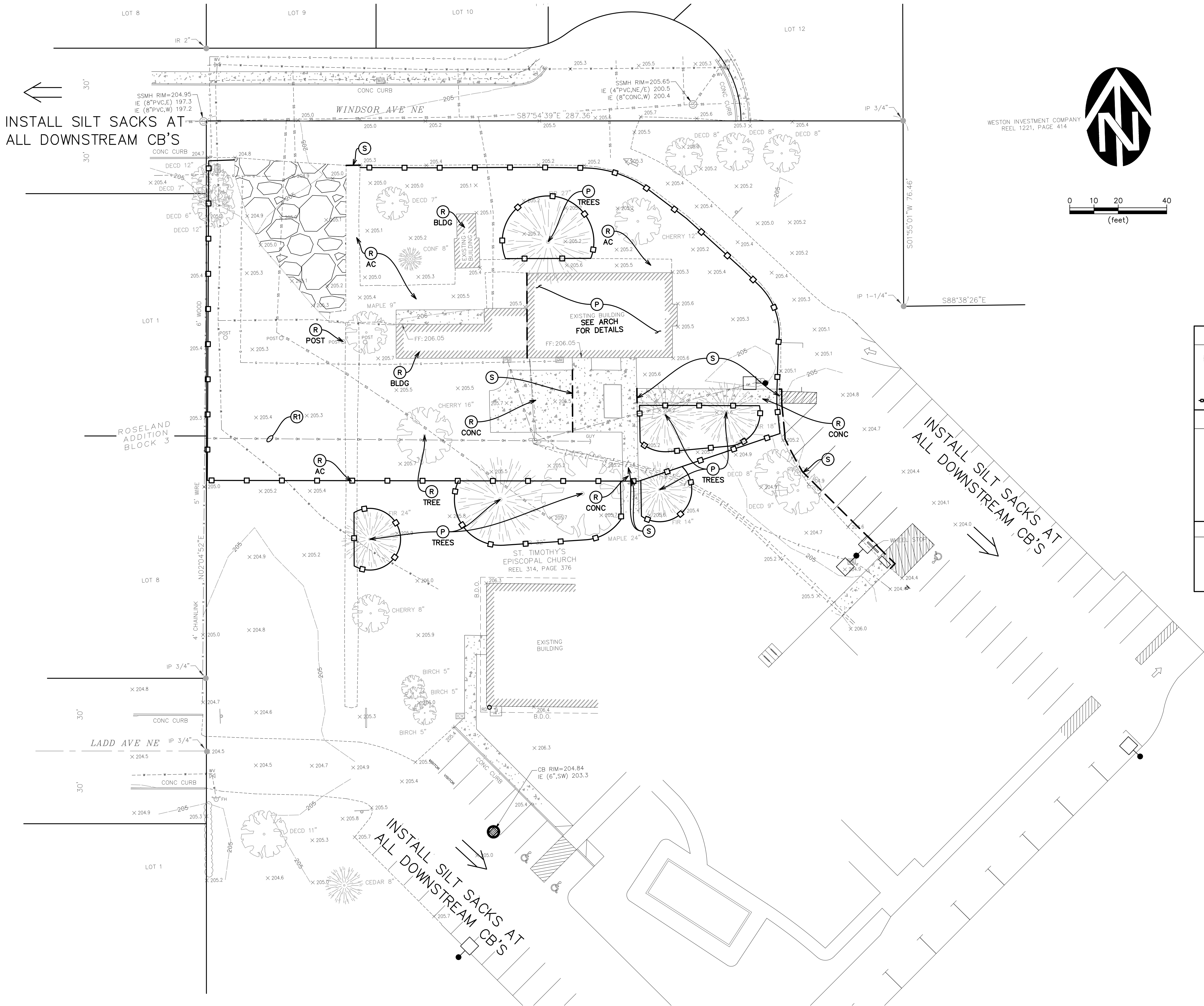
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EROSION CONTROL LEGEND	
	SILT SACK
	BIO-BAG
	SILT FENCE
DEMOLITION LEGEND	
	ABANDON
	REMOVE
	CONTRACTOR TO COORDINATE W/ PGE. RELOCATE AS REQ'D.
	PROTECT
	SAWCUT
NOTES	
1. NO CONCRETE WASHOUTS OR STOCKPILES ALLOWED ON SITE	
2. CONTRACTOR TO WORK OFF OF EXT'G GRAVEL. IF TRACKING BECOMES AN ISSUE, INSTALL GRAVEL CONSTRUCTION ENTRANCE.	

project:
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PARISH HALL ADDITION
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SALEM, OR 97301

revisions:
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2
3
4

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EXISTING CONDITIONS,
DEMOLITION, & EROSION
CONTROL PLAN

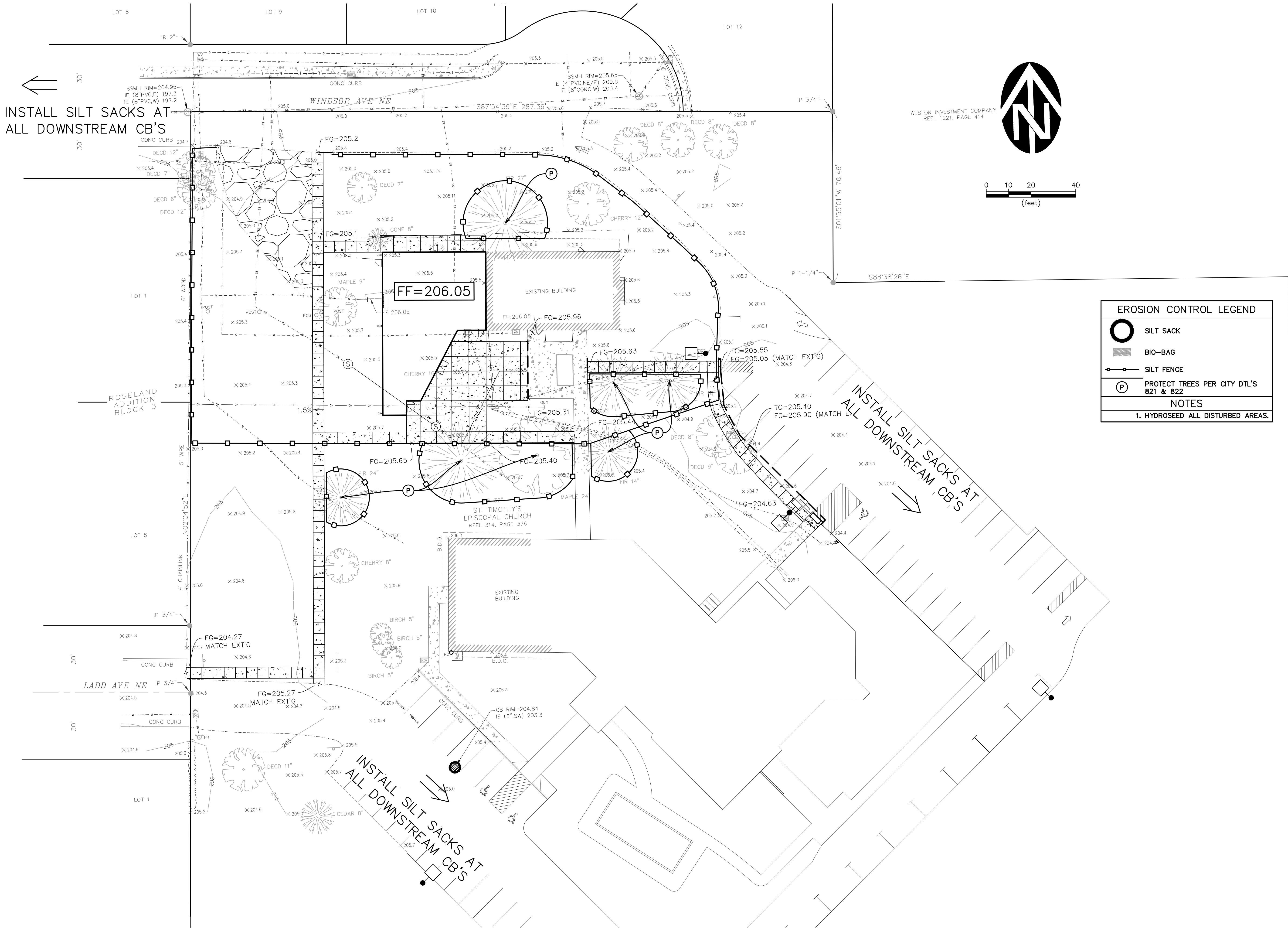
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REGISTERED PROFESSIONAL
ENGINEER
NOV. 12, 2008
WILLIAM J. NELLS
RENEWAL: 6/30/2024
REVIEW

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EROSION CONTROL LEGEND

- SILT SACK
- BIO-BAG
- SILT FENCE
- PROTECT TREES PER CITY DTL'S 821 & 822

NOTES

- HYDROSEED ALL DISTURBED AREAS.

project:
**ST. TIMOTHY'S EPISCOPAL CHURCH
PARISH HALL ADDITION**
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SALEM, OR 97301

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POST-DEVELOPMENT
EROSION CONTROL PLAN

sheet:
C1.1
of:

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WILLIAM J. NELLS
000-12-00000
07/07/2024

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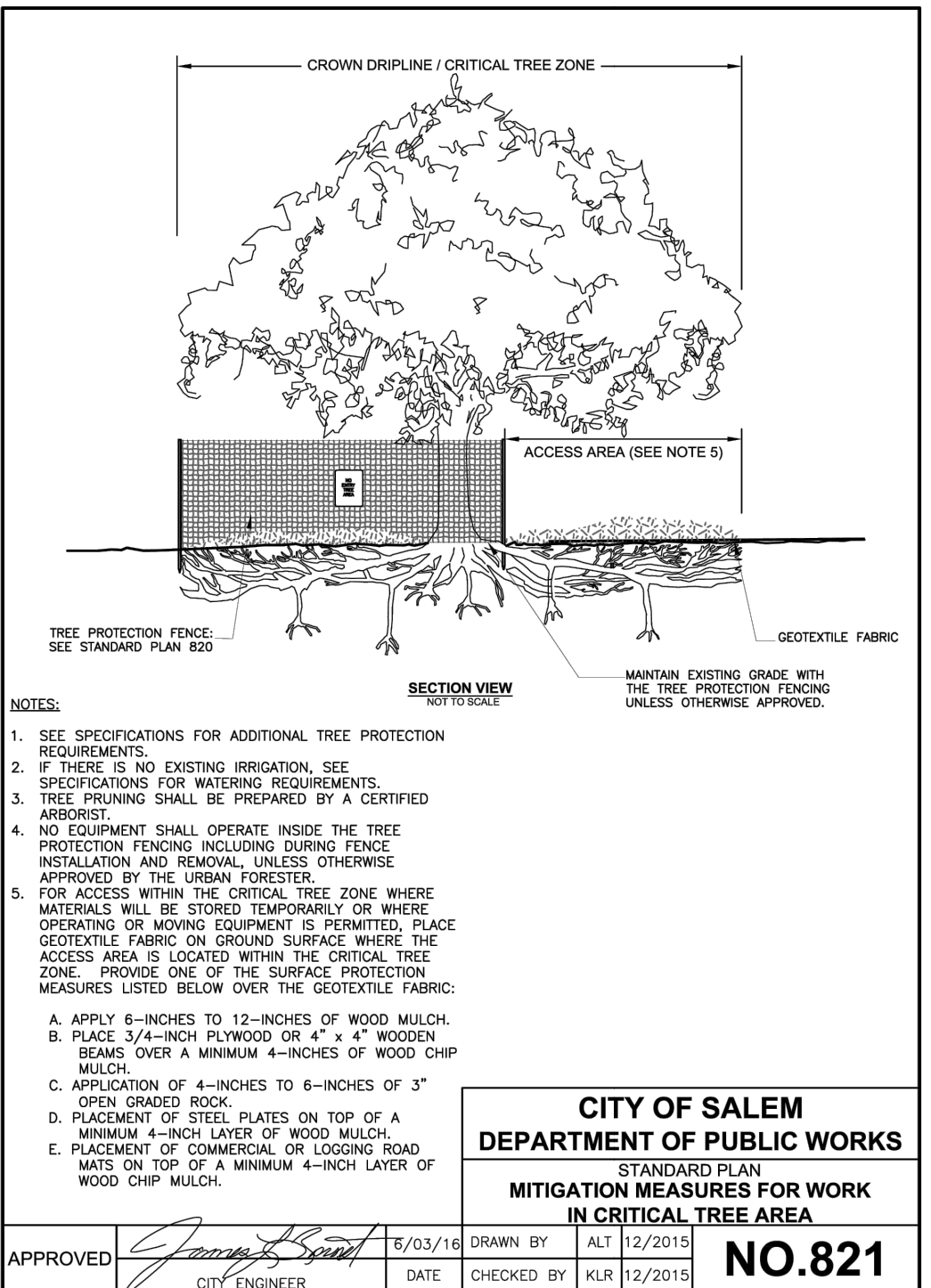
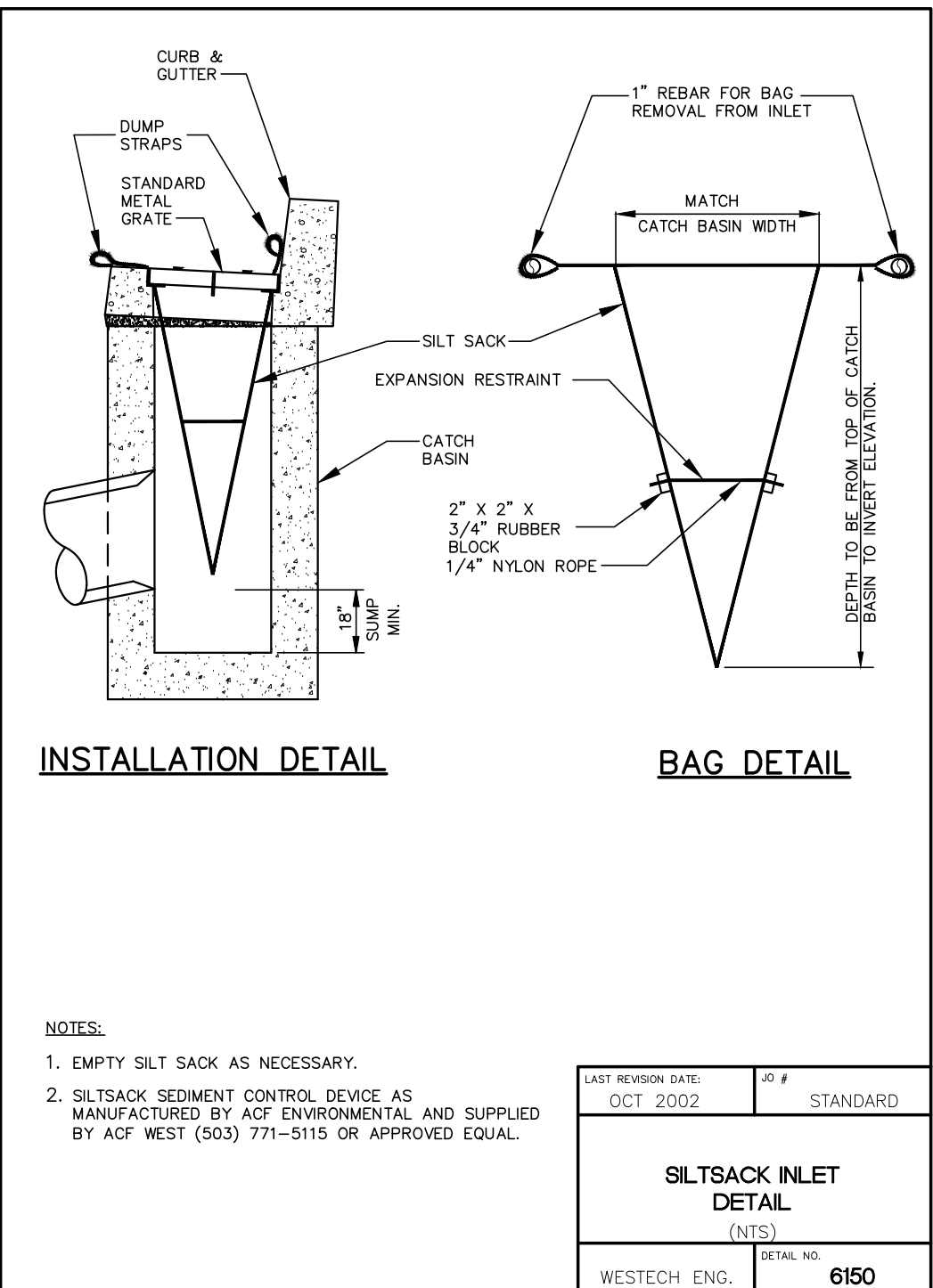
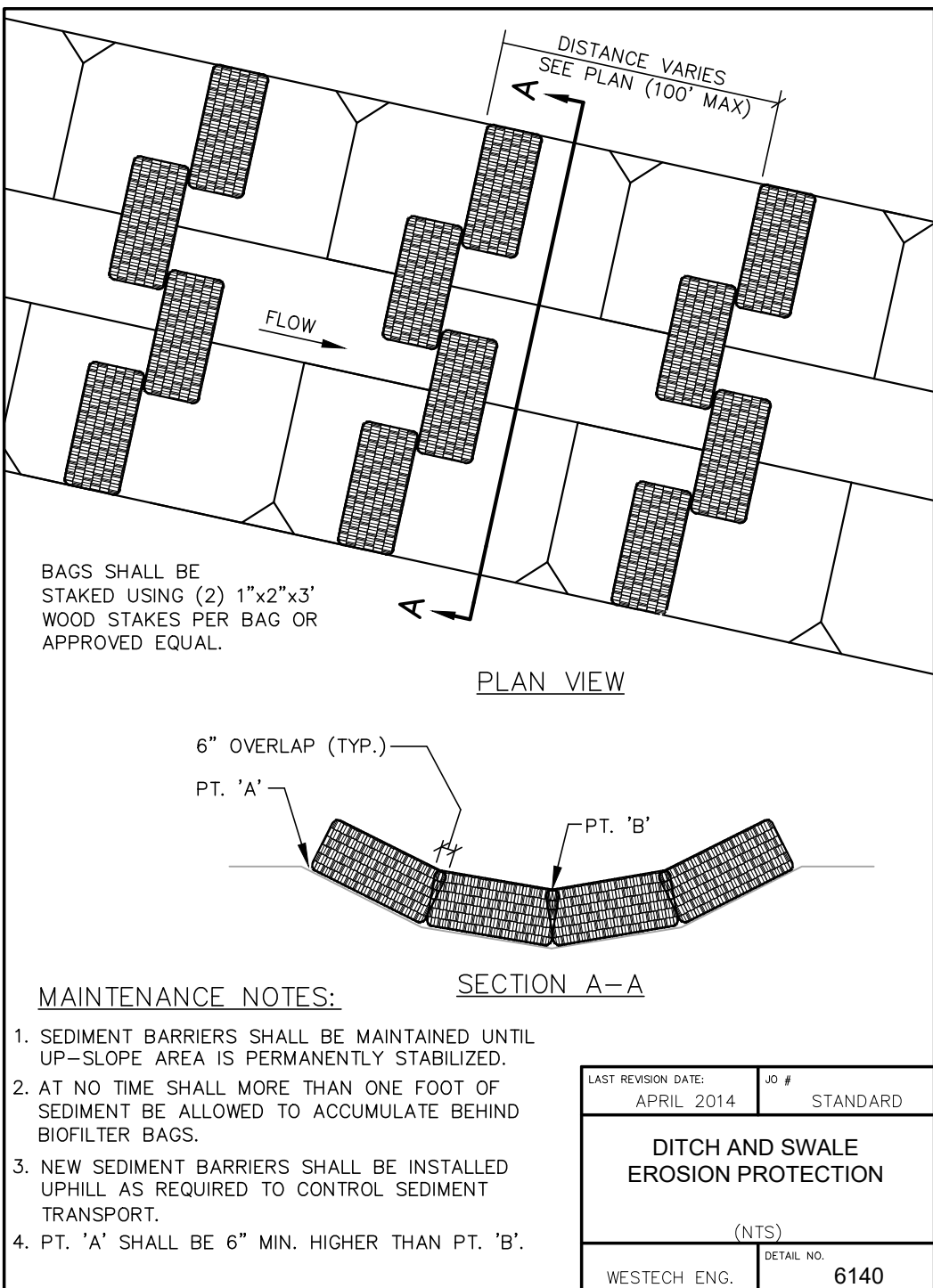
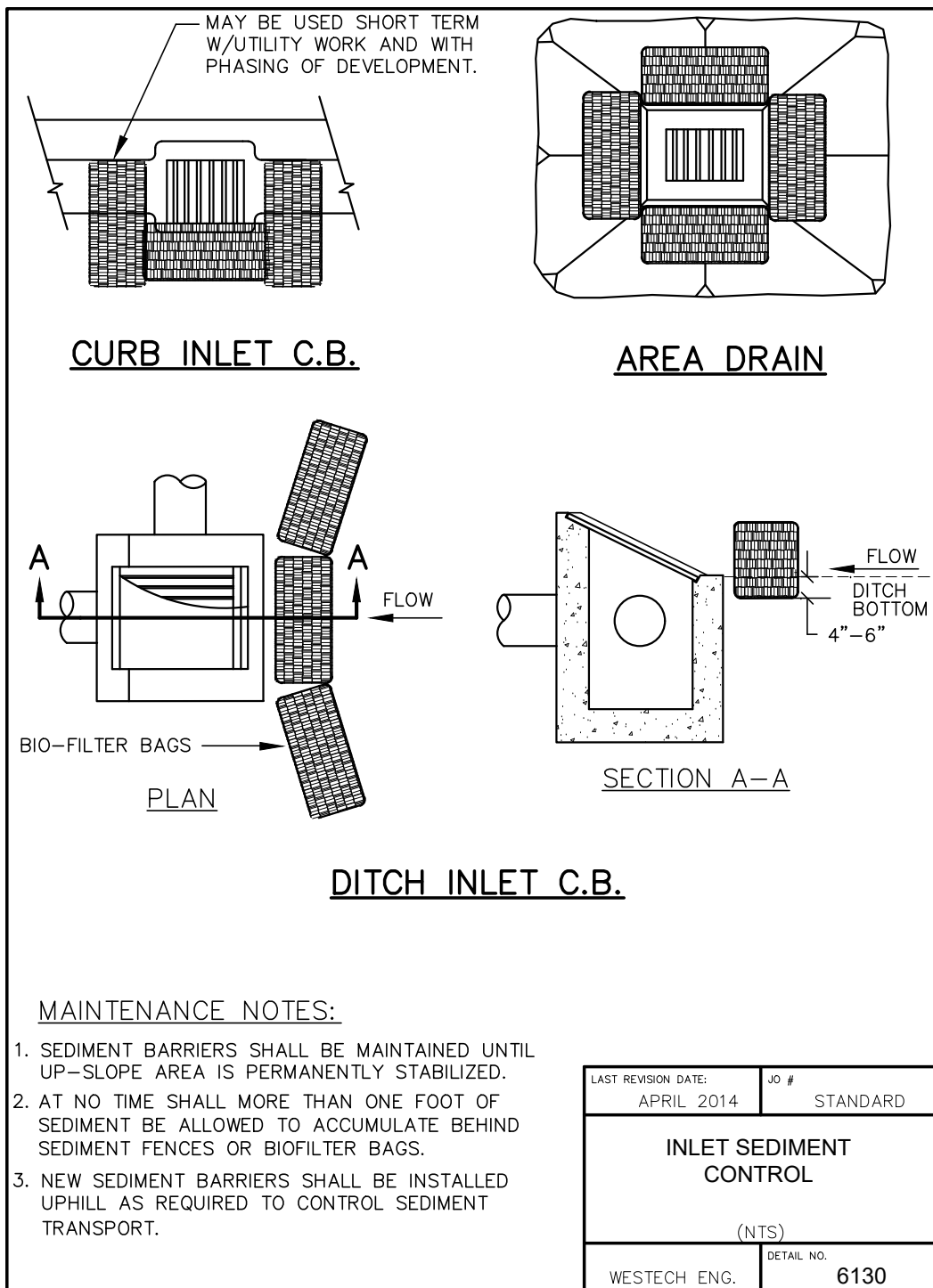
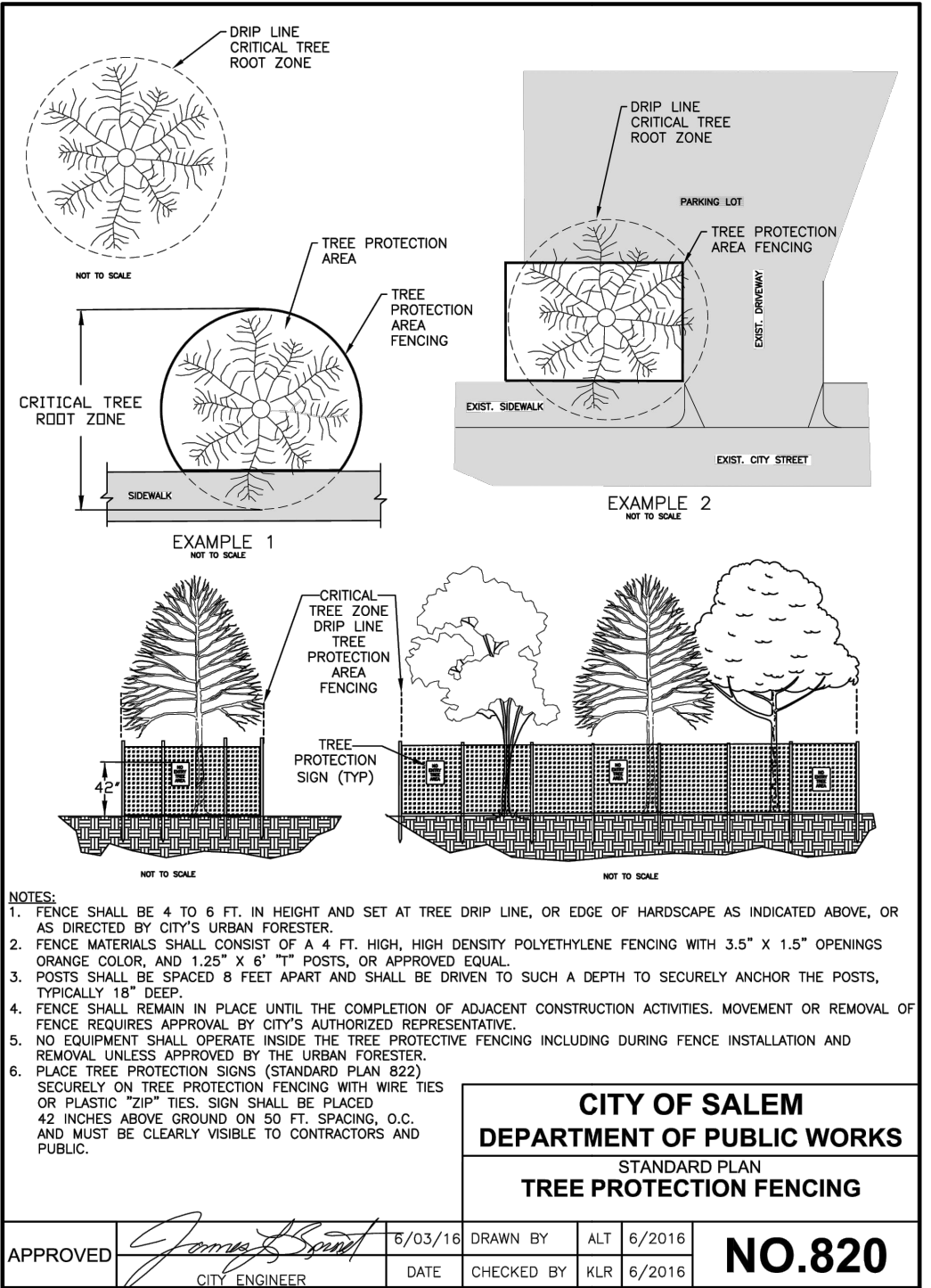
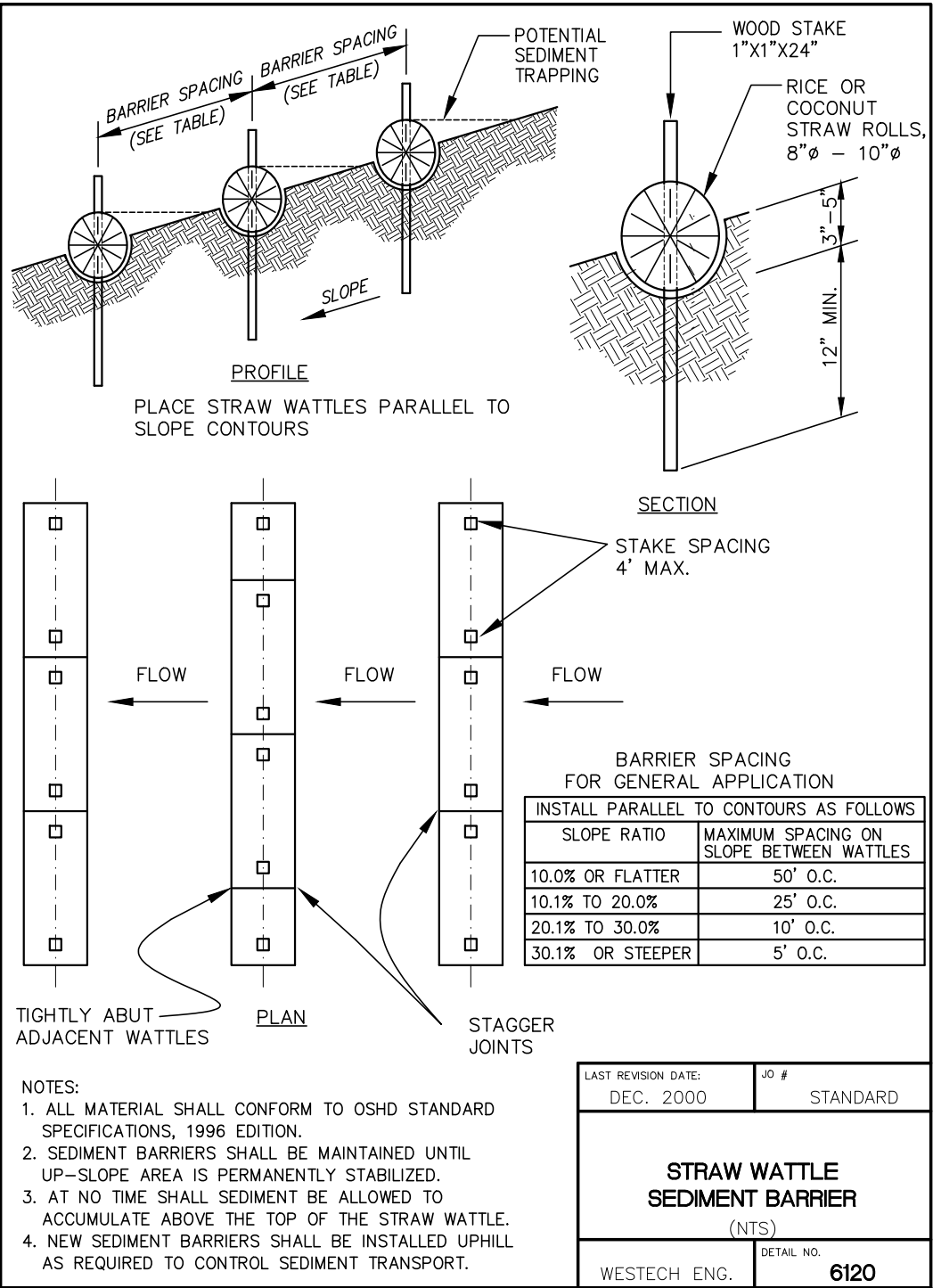
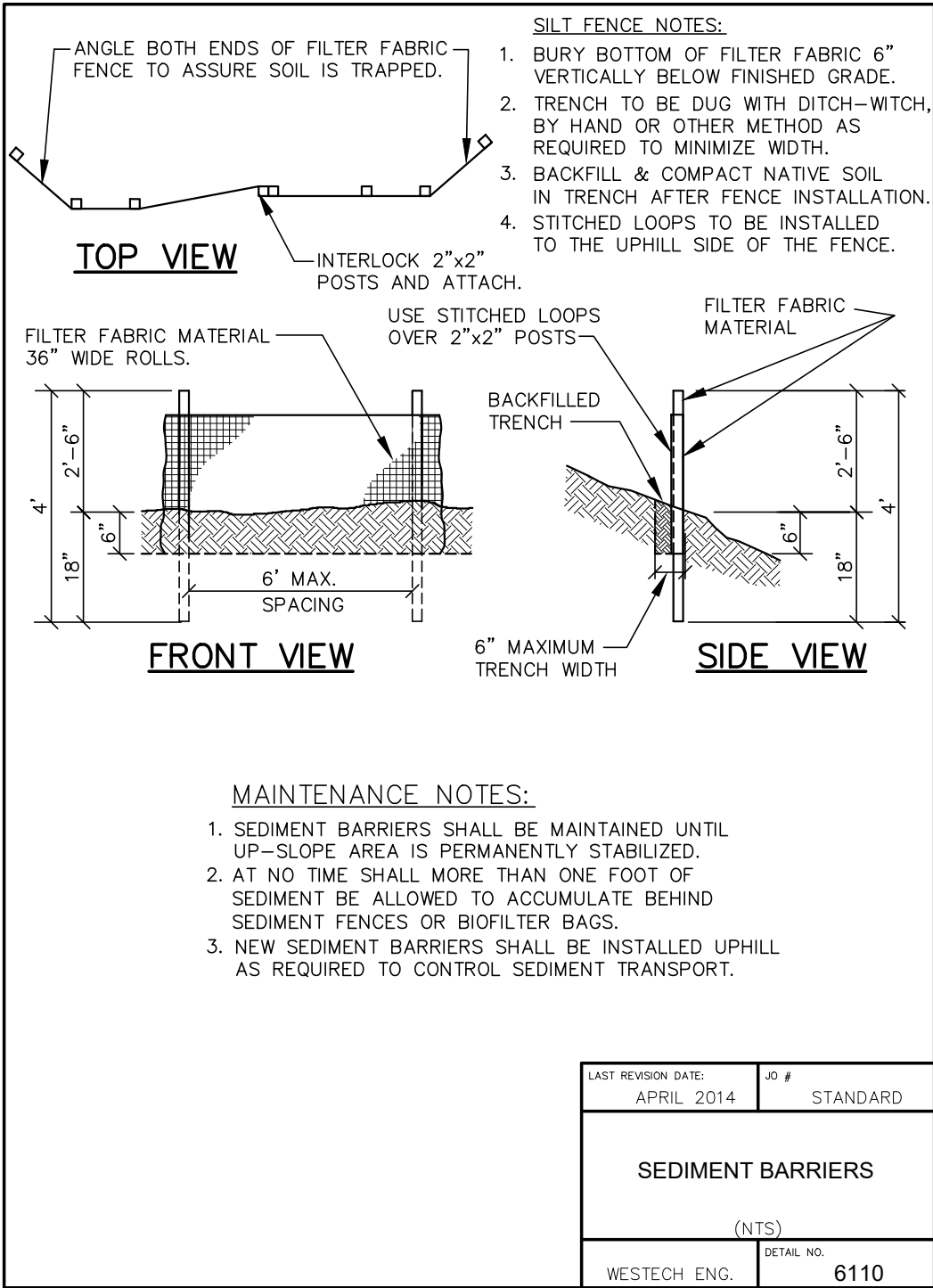
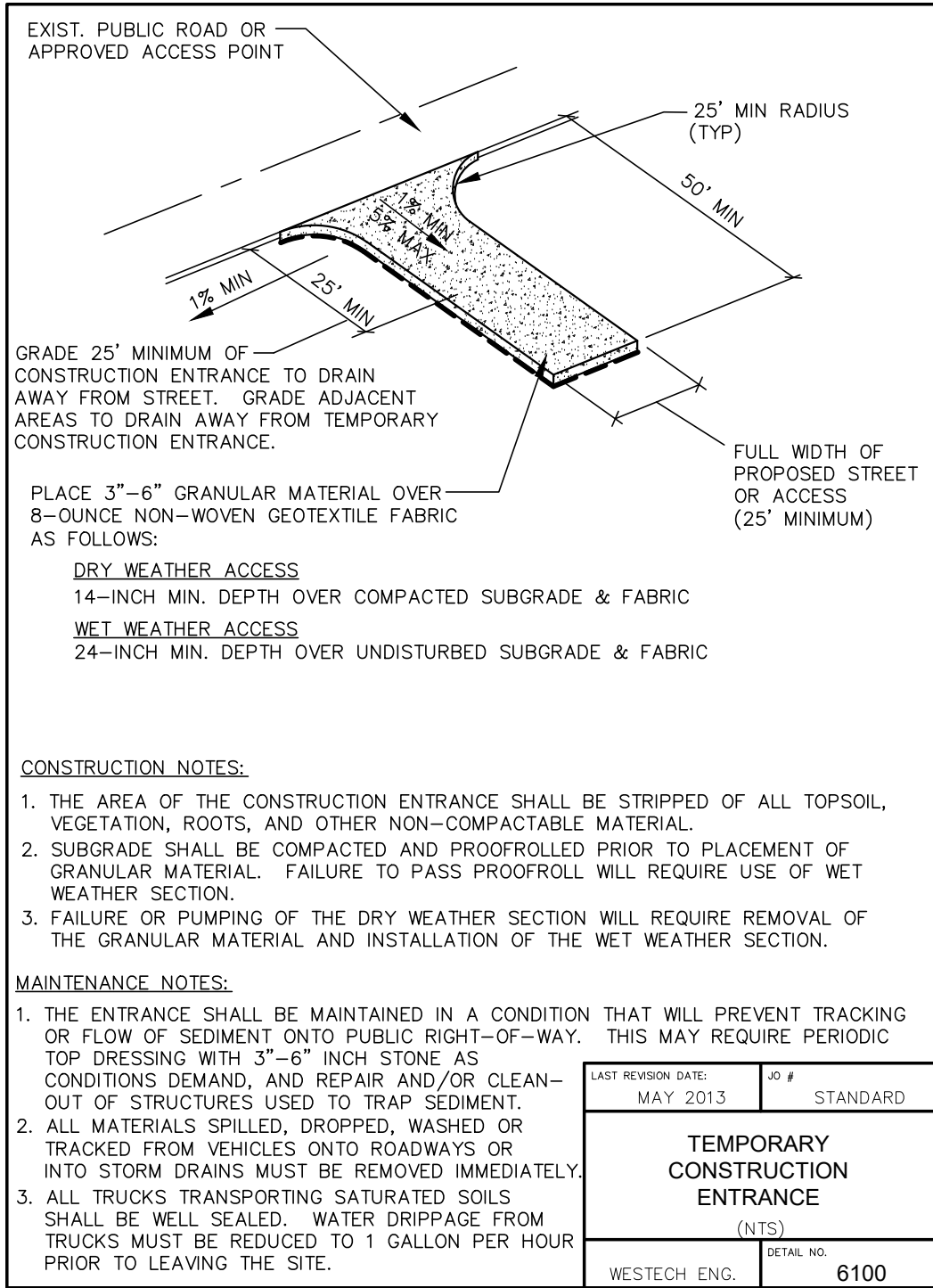
EROSION CONTROL NOTES:

1. Clearing and grading erosion control measures shall be in place prior to site disturbance. All other necessary erosion control measures shall be implemented prior to starting work on the portion/phase of the project to which the measures are related. Erosion control measures shall be maintained in such a manner as to ensure that sediment and sediment-laden water does not enter the drainage system, roadways, or violate applicable water quality standards.
2. The erosion control construction, maintenance, replacement and upgrading of the erosion control facilities is the responsibility of the Contractor until all construction is completed and approved, and permanent erosion control (i.e. vegetation/landscaping) is established on all disturbed areas.
3. All recommended erosion control procedures are dependent on construction methods, staging, site conditions, weather and scheduling. During the construction period, erosion control facilities shall be upgraded as necessary due to unexpected storm events and to ensure that sediment and sediment laden water does not leave the site.
4. The Contractor is responsible for control of sediment transport within project limits. If an installed erosion control system does not adequately contain sediment on site, then the erosion control measures shall be adjusted or supplemented by the Contractor as necessary to ensure that sediment laden water does not leave the site. Additional measures shall be provided as required to ensure that all paved areas are kept clean for the duration of the project. Additional interim measures will include, at a minimum, installation of sediment barriers or silt fences in accordance with the details shown on the drawings. These measures shall be installed along all exposed embankments and cut slopes to prevent sediment transport.

5. All existing and newly constructed storm inlets and drains shall be protected until pavement surfaces are completed and/or vegetation is established.
6. Erosion control facilities and sediment fences on active sites shall be inspected by the Contractor at least daily during any period with measurable precipitation. Any required repairs or maintenance shall be completed immediately. The erosion control facilities on inactive sites shall be inspected and maintained by the Contractor a minimum of once a month or within 24 hours following the start of a storm event.
7. At no time shall sediment accumulation within a trapped catch basin exceed 50% of the sediment capacity. All catch basins and conveyance lines shall be cleaned prior to paving. The cleaning operation shall not flush sediment-laden water into the downstream system. The Contractor shall remove all accumulated sediment from all impacted catch basins and storm pipes prior to acceptance by the Owner.
8. The Contractor is solely responsible for protection of all adjacent property and downstream facilities from erosion and siltation during project construction. Any damage resulting from such erosion and siltation shall be corrected at the sole expense of the Contractor.
9. The Contractor shall provide site watering as necessary to prevent wind erosion of fine-grained soils.
10. Unless otherwise indicated on the drawings, all temporary erosion control facilities, including sediment fences, silt sacks, bio-bags, etc. shall be removed by the Contractor within 30 days after permanent landscaping/vegetation is established.

11. Sediment fences shall be constructed of continuous filter fabric to avoid use of joints. When joints are necessary, filter cloth shall be spliced together only at a support post, with a minimum 6-inch overlap, and both ends securely fastened to a post.
12. Sediment fence shall be installed per drawing details. Sediment fences shall have adequate support to contain all silt and sediment captured.
13. The standard strength filter fabric shall be fastened securely to stitched loops installed on the upslope side of the posts, and 6 inches of the fabric shall be extended into the trench. The fabric shall not extend more than 30 inches above the original ground surface. Filter fabric shall not be stapled to existing trees.
14. Bio-filter bags shall be clean 100 percent wood product waste. Bags shall be 18-inch x 18-inch x 30-inch, weigh approximately 45 lbs., and be contained in a bag made of 1/2-inch plastic mesh.
15. Sediment barriers shall be maintained until the up-slope area has been permanently stabilized. At no time shall more than 10-inches of sediment be allowed to accumulate behind sediment fences. No more than 2 inches of sediment shall be allowed to accumulate behind bio-filter bags. Sediment shall be removed prior to reaching the above stated depths. New sediment barriers shall be installed uphill as required to control sediment transport.
16. Stabilized construction entrances shall be installed at the beginning of construction and maintained for the duration of the project. Additional measures may be required to ensure that all paved areas are kept clean for the duration of the project.

17. The Contractor shall verify that all trucks are well sealed when transporting saturated soils from the site. Water dripnage from trucks transporting saturated soils must be reduced to less than 1 gallon per hour prior to leaving the site.
18. The entrance shall be maintained in a condition that will prevent tracking or flow of mud onto the public right-of-way or approved access point. The entrance may require periodic top dressing as conditions demand, and repair and/or clean out of any structures used to trap sediment.
19. All materials spilled, dropped, washed, or tracked from vehicles onto roadways or into storm drains must be removed immediately, and the Contractor shall provide protection of downstream inlets and catch basins to ensure sediment laden water does not enter the storm drain system.
20. Temporary grass cover measures must be fully established by Oct 15th, or other cover measures (ie. erosion control blankets with anchors, 3-inches minimum of straw mulch, 6 mil HDPE plastic sheet, etc.) shall be in place over all disturbed soil areas until April 30th. To establish an adequate grass stand for controlling erosion by Oct 15th, it is recommended that seeding and mulching occur by September 1st. Straw mulch, if used, shall not leave any bare ground visible through the straw.
21. Minimum wet weather slope protection. For slopes steeper than 3H:1V but less than 2H:1V, use Tensor/North American Green Type S150 erosion control blanket. For slopes 2H:1V or steeper, use Tensor/North American Green Type SC150 erosion control blanket. Use a minimum of 2-inches straw mulch or Tensor/North American Green Type S150 for slopes flatter than 3H:1V. Slope protection shall be placed on all disturbed areas immediately after completion of each section of construction activity, until the erosion control seeding has been established. As an option during temporary or seasonal work stoppages, a 6-mil HDPE plastic sheet may be placed on exposed slopes. The plastic sheet shall be provided with an anchor trench at the top and bottom of the slope, and shall be sandbagged on the slopes as required to prevent damage or displacement by wind.
22. Permanent erosion control vegetation on all embankments and disturbed areas shall be re-established as soon as construction is completed.
23. Soil preparation. Topsoil should be prepared according to landscape plans, if available, or recommendations of grass seed supplier. It is recommended that slopes be textured before seeding by rack walking (ie. driving a crawling tractor up and down the slopes to leave a pattern of cleat imprints parallel to slope contours) or other method to provide stable areas for seeds to rest.
24. When used, hydromulch shall be applied with grass seed at a rate of 2000 lbs. per acre between April 30 and June 10, or between September 1 and October 1. On slopes steeper than 10 percent, hydrosseed and mulch shall be applied with a bonding agent (tackifier). Application rate and methodology to be in accordance with seed supplier recommendations.
25. When used in lieu of hydromulch, dry, loose, weed free straw used as mulch shall be applied at a rate of 4000 lbs. per acre (double the hydromulch application requirement). Anchor straw by working in by hand or with equipment (rollers, cleat trackers, etc.). Mulch shall be spread uniformly immediately following seeding.
26. When conditions are not favorable to germination and establishment of the grass seed, the Contractor shall irrigate the seeded and mulched areas as required to establish the grass cover.
27. Seeding. Recommended erosion control grass seed mix is as follows. Dwarf grass mix (low height, low maintenance) consisting of dwarf perennial ryegrass (80% by weight), creeping red fescue (20% by weight). Application rate shall be 100 lbs. per acre minimum.
28. Grass seed shall be fertilized at a rate of 10 lbs. per 1000 S.F with 16-16-16 slow release type fertilizer. Development areas within 50 feet of water bodies and wetlands must use a non-phosphorous fertilizer.



project: ST. TIMOTHY'S EPISCOPAL CHURCH PARISH HALL ADDITION 3295 LADD AVE NE SALEM, OR 97301

revisions:

NO.	DESCRIPTION
1	

date: DEC 2023

project: 3476.0000.0

dwg file:

drawn by: AK

checked by: JW

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EROSION CONTROL NOTES & DETAILS

sheet: C1.2

of:

CARLSON VEIT JUNGE ARCHITECTS PC

ARCHITECTURE • INTERIOR DESIGN

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REGISTERED PROFESSIONAL ENGINEER

REVIEW

WILLIAM J. WELLS

NOV 12 2024

REVISED: 6/19/2024

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CITY OF SALEM PUBLIC WORKS DESIGN STANDARDS:

Division 007 Appendix A--EPSC Plan Standard Notes

(a) PRE--CONSTRUCTION

(1). Prior to any land disturbing activities, the boundaries of the clearing and grading limits, vegetated buffers, and any sensitive areas shown on this plan shall be clearly delineated in the field. Unless otherwise approved, no disturbance is permitted beyond the clearing limits. The Contractor must maintain the delineation for the duration of the project. Note: vegetated corridors to be delineated with orange construction fence or approved equal.

(2). BMPs that must be installed prior to land disturbing activities are construction entrance, perimeter sediment control, and inlet protection.

(3). Hold a preconstruction conference to review the EPSCP and with the City's Project Manager and Inspector.

(b) CONSTRUCTION

(1). All sediment is required to stay on site. Sediment amounts greater than 1/2--cubic foot which leave the site must be cleaned up within 24 hours and placed back on the site and stabilized or properly disposed. Vacuuming or dry sweeping must be used to clean up released sediment and it must not be swept or washed into storm sewers, drainage ways, or water bodies. The cause of the sediment release must be found and prevented from causing a recurrence of the discharge within thesame 24 hours. Any in--stream clean up of sediment shall be performed according to the DSL required time frame.

(2). Construction, maintenance, replacement, and upgrading of erosion prevention and sediment control facilities is the sole responsibility of the Contractor until all construction is completed, approved, and permanent erosion control (i.e., vegetation/landscaping) is established on all disturbed areas.

(3). All recommended erosion prevention and sediment control procedures are dependent on construction methods, staging, site conditions, weather, and scheduling. During the construction period, erosion control facilities shall be revised, upgraded, replaced, or added, to comply with SRC and State and Federal regulatory requirements.

(4). The Contractor is solely responsible for protection of all adjacent property and downstream facilities from erosion and siltation during project construction. Any damage resulting from such erosion and siltation shall be corrected at the sole expense of the Contractor.

(5). When saturated soil is present, water--tight trucks must be used to transport saturated soils from the construction site. Soil may be drained on site at a designated location, using appropriate BMPs. Soil must be drained sufficiently to drip less than one gallon per hour prior to leaving the site.

(6). All materials spilled, dropped, or washed into storm drains must be removed immediately, and the Contractor shall provide protection of downstream inlets and catch basins to ensure sediment--laden water does not enter the storm drain system.

(7). All discharge of sediment--laden water must be treated with an appropriate BMP to remove sediment from discharge waters and to comply with SRC and State and Federal Regulatory Permits.

(8). In areas subject to wind erosion, appropriate BMPs must be used which may include the application of fine water spraying, plastic sheeting, mulching, or other approved measures.

(9). The EPSC measures and BMPs shown on this plan are the minimum requirements for anticipated site conditions. During the construction period, these measures shall be upgraded as needed to maintain compliance with all regulations.

(10). The contractor shall provide onsite water or other appropriate BMPs to prevent dust and wind erosion of fine grain soils.

(11). Disturbed areas must be stabilized after 14 days of inactivity, or immediately if rain is forecasted. See Subsection 7A.1(d)--Wet Weather Period.

(12). During the wet weather work period or when rain is forecasted, all active and inactive soil stock piles must be covered with appropriate plastic sheeting. Plastic sheeting must cover the entire stock pile and be sufficiently anchored.

(c) POLLUTANTS, SOLID WASTE AND HAZARDOUS MATERIALS MANAGEMENT

(1). Any use of toxic or other hazardous materials must include proper storage, application, and disposal.

(2). The contractor is solely responsible to properly manage pollutants, hazardous wastes, used oils, contaminated soils, concrete waste, sanitary waste, liquid waste, or other toxic substances discovered or generated during construction to prevent leakage, spills or release of pollutants to the environment and surface waters.

(3). Contractor shall develop a project specific written spill prevention and response procedures that includes employee training on spill prevention and proper disposal procedures; regular maintenance schedule for vehicles andmachinery; and material delivery and storage controls, signage, material use, and use of covered storage areas for waste and supplies. The plan shall comply with SRC and Federal and State requirements, and shall be available on site at all times.

(d) WET WEATHER PERIOD (OCTOBER 15 THROUGH APRIL 30)

(1). Construction activities must avoid or minimize the duration of disturbed areas.

(2). Temporary stabilization of the site including covering of bare soils with approved BMPs, must be installed at the end of the shift before a holiday or weekend, or at the end of each workday if rainfall is forecast in the next 24 hours.

(3). Temporary stabilization or covering of soil stockpiles and protection of stockpiles located away from construction activity must occur at the end of each workday.

(e) MAINTENANCE

(1). Erosion control measures shall be maintained in such a manner as to ensure that erosion is prevented and sediment--laden water does not enter a drainage system, roadway, or violate applicable water quality standards.

(2). Sediment shall not be washed or swept into storm sewers, drainage ways, or water bodies.

(3). Sediment must be removed from behind all sediment control measures when it has reached a height of 1/3 the barrier height, and prior to the control measures removal.

(4). Removal of trapped sediment in a sediment basin or sediment trap or catch basins must occur when the sediment retention capacity has been reduced by 50 percent; is not functioning properly and/or at the completion of project.

(5). Cleaning of all structures, inlet protection BMPs, and sump pumps must be completed regularly and as required to ensure structures and inlets function properly and flow freely.

(6). Construction site exits shall be maintained in a condition that will prevent tracking or flow of mud onto the ROW or approved access point. The entrance may require periodic top dressing as conditions demand, and repair and/or cleanup of any structures used to trap sediment. Wheel washing shall be required to prevent sediment and material tracking on road surfaces if passive BMPs are not effective.

(f) INSPECTION

(1). The EPSCP must be kept onsite at all times. All measures shown on the plan must be installed properly to ensure compliance with SRC and State and Regulatory permits, and that sediment does not enter a surface water system, roadway, or other properties.

(2). Written EPSC inspection logs shall be maintained onsite and available to City inspectors upon request.

(3). All BMPs shall be inspected at least every week. When a rainfall event exceeds 1/2--inch in a 24--hour period, daily inspection of the erosion controls, sediment controls, and discharge outfalls must be conducted and documented. Inspections shall be done by a representative of the permit registrant who is knowledgeable and experienced in the principles, practices, installation, and maintenance of erosion and sediment controls.

(g) INACTIVE CONSTRUCTION PERIODS AND POST--CONSTRUCTION

(1). Should work cease in any area for 14 days, the inactive area must be stabilized with appropriate soil stabilization BMPs. If all construction activity ceases the entire site must be temporarily stabilized using vegetation, heavy mulch layer, temporary seeding, or other method.

(2). All temporary erosion prevention and sediment control facilities shall be removed by the contractor within 30 days after permanent landscaping/vegetation is established and the threat of erosion and sediment transport has been mitigated.

(3). Temporary grass cover measures must be fully established by October 15 or other cover measures (i.e., erosion control blankets with anchors, one--inch of straw mulch, six mil HDPE plastic sheet, etc.) shall be in place over all disturbed soil areas until April 30. To establish an adequate grass stand for controlling erosion by October 15, it is recommended that seeding and mulching occur by September 1.

(4). Permanent erosion control vegetation on all embankments and disturbed areas shall be re--established as soon as construction is completed.

(h) SPECIFICATIONS

(1). Soil preparation. Topsoil should be prepared according to the landscape plans, if available, or recommendations of the grass seed supplier. Slopes shall be textured before seeding by rack walking (i.e., driving a crawling tractor up and down the slopes to leave a pattern of cleat imprints parallel to slope contours) or other method to provide stable areas for seeds to rest.

(2). Seeding. Erosion control grass seed mix shall be as follows: Dwarf grass mix (low height, low maintenance) consisting of dwarf perennial ryegrass (80 percent by weight), creeping red fescue (20 percent by weight). Application rate shall be 100 pounds per acre minimum.

(3). Grass seed shall be fertilized at a rate of ten pounds per 1,000 square feet with 16--16--16 slow release type fertilizer. Disturbed areas within 50 feet of water bodies and wetlands must use a non--phosphorous fertilizer.

(4). The application rate of fertilizers used to reestablish vegetation shall follow manufacturer's recommendations. Nutrient releases from fertilizers to surface waters shall be minimized. Time release fertilizers shall be used. Care shall be made in the application of fertilizers within any waterway riparian zone to prevent leaching into the waterway.

(5). When used, hydromulch shall be applied with grass seed at a rate of 2,000 pounds per acre between April 30 and June 10, or between September 1 and October 1. On slopes steeper than ten percent, hydroseed and mulch shall be applied with a bonding agent (tackifier). Application rate and methodology shall be in accordance with seed supplier recommendations.

(6). When used in lieu of hydromulch, dry, loose, weed--free straw used as mulch shall be applied at a rate of 4,000 pounds per acre (double the hydromulch application requirement). Anchor straw by working in by hand or with equipment (rollers, cleat trackers, etc.). Mulch shall be spread uniformly immediately following seeding.

(7). When conditions are not favorable to germination and establishment of the grass seed, the Contractor shall irrigate the seeded and mulched areas as required to establish the grass cover.

(8). Sediment fences shall be constructed of continuous filter fabric to avoid use of joints. When joints are necessary, filter cloth shall be spliced together only at a support post, with a minimum six--inch overlap, and both ends securely fastened to a post.

(9). The standard strength filter fabric shall be fastened securely to stitched loops installed on the upslope side of the posts, and six inches of the fabric shall be extended into the trench. The fabric shall not extend more than 30 inches above the original ground surface. Filter fabric shall not be stapled to existing trees.

(10). Bio--filter bags shall be clean 100 percent wood product waste. Bags shall be 18--inch x 18--inch x 30--inch, weigh approximately 45 pounds, and be contained in a bag made of 1/2--inch plastic mesh.

(11). Minimum wet weather slope protection. For 3H:1V or steeper slopes use Bon Terra Type C2 or North American Green Type C125 erosion control blankets. Use a minimum of two inches straw mulch or North American Green Type S150 for slopes flatter than 3H:1V and greater than 6H:1V. Slopes flatter than 6H:1V use one inch straw mulch, hydroseed with hydromulch and tackifier. Slope protection shall be placed on all disturbed areas immediately after completion of each section of construction activity, until the erosion control seeding has been established. As an option during temporary or seasonal work stoppages, a six--mil HDPE plastic sheet may be placed on exposed slopes. The plastic sheet shall be provided with an anchor trench at the top and bottom of the slope, and shall be sandbagged on the slopes as required to prevent damage or displacement by wind.

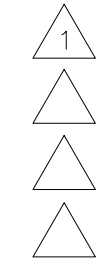
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ST. TIMOTHY'S EPISCOPAL CHURCH
PARISH HALL ADDITION
3295 LADD AVE NE
SALEM, OR 97301



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revisions:



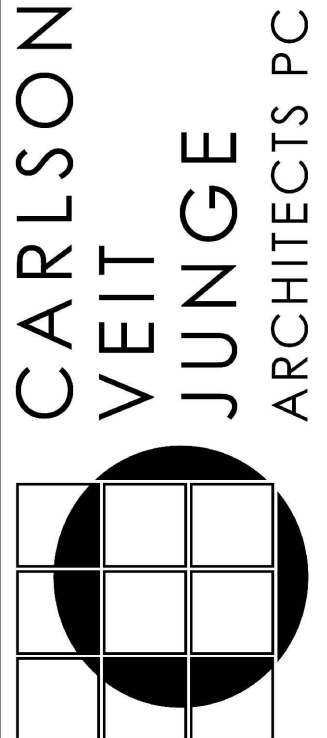
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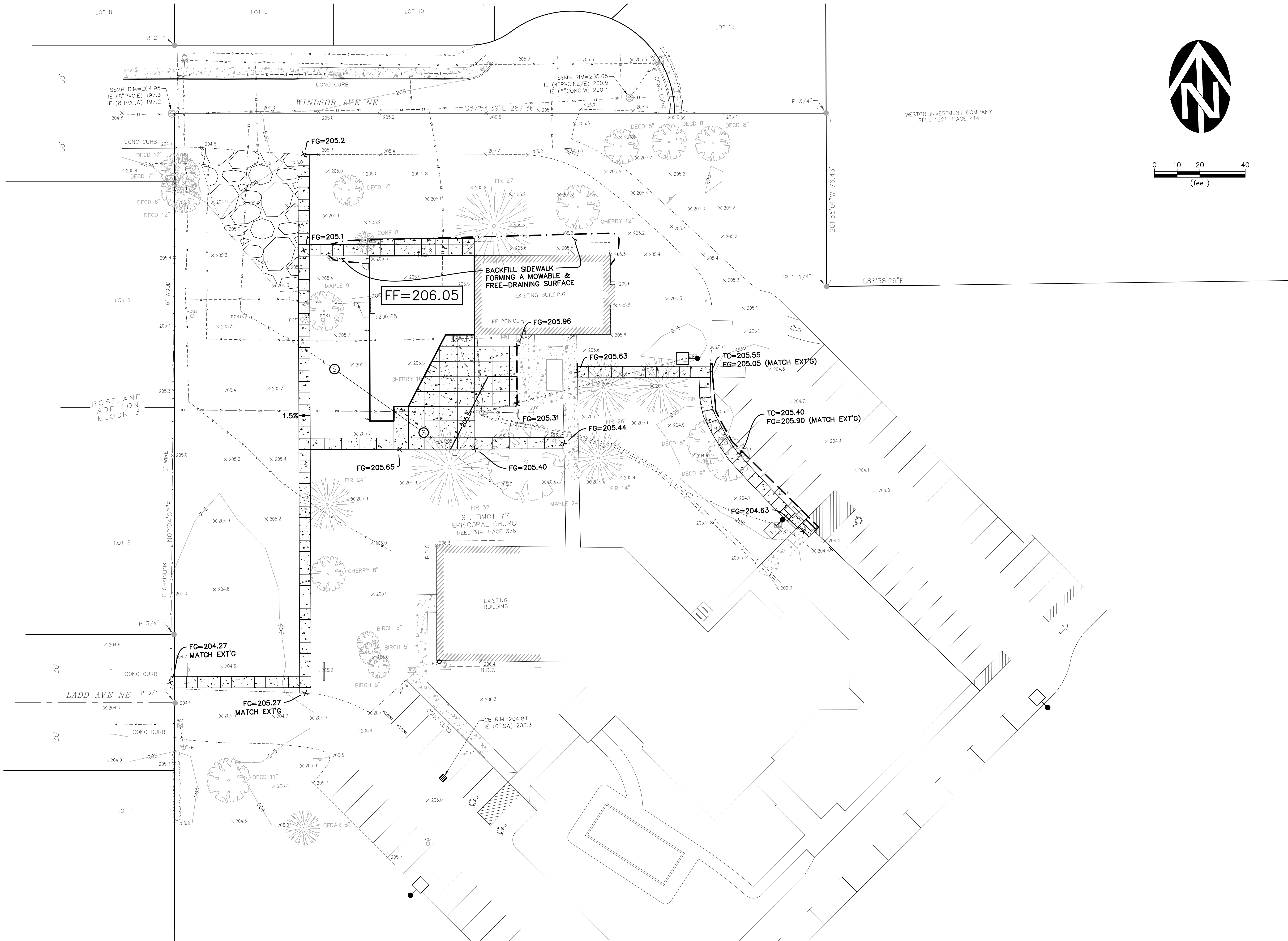
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project:
ST. TIMOTHY'S EPISCOPAL CHURCH
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GRADING &
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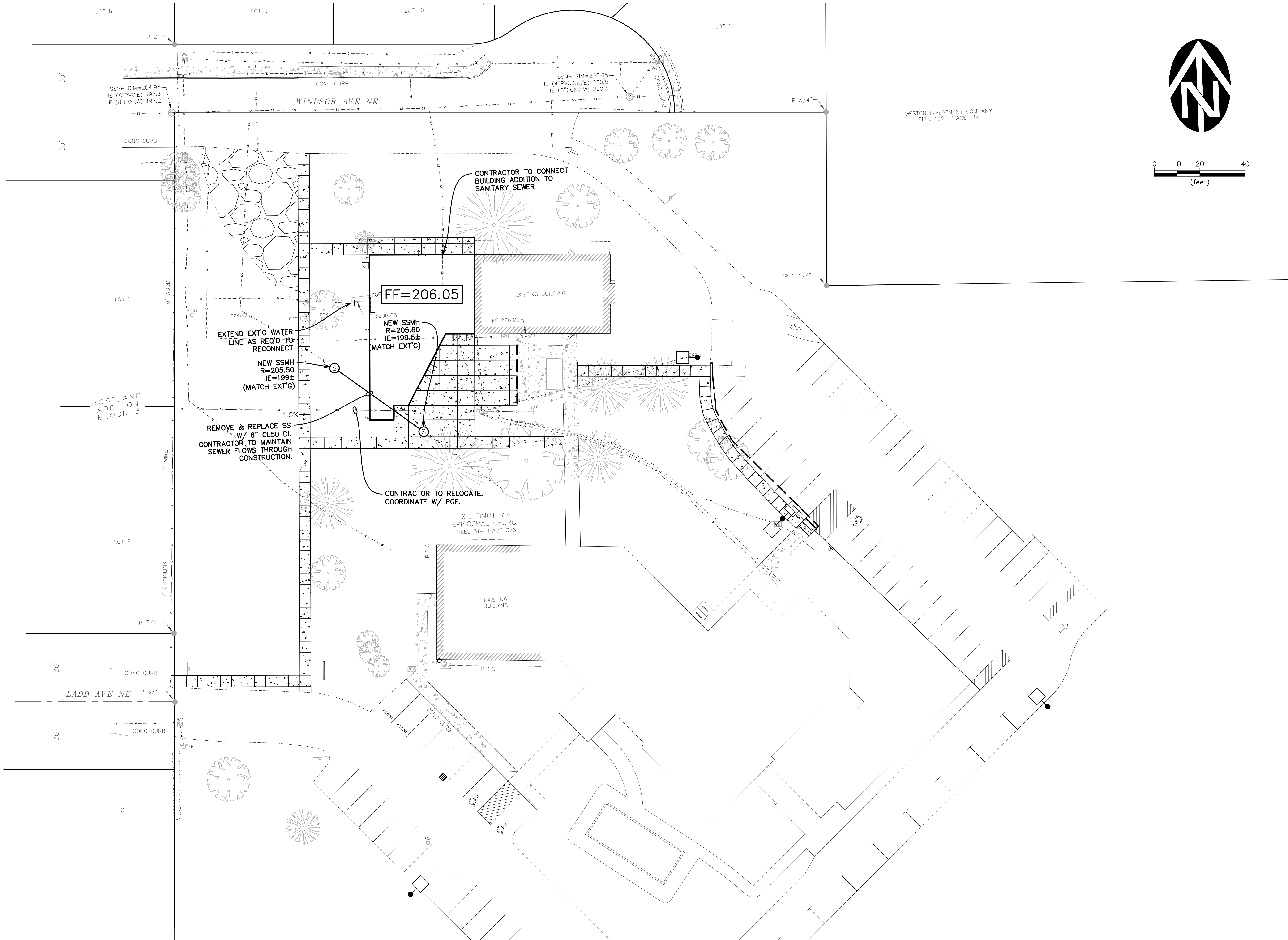
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project:
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UTILITY PLAN

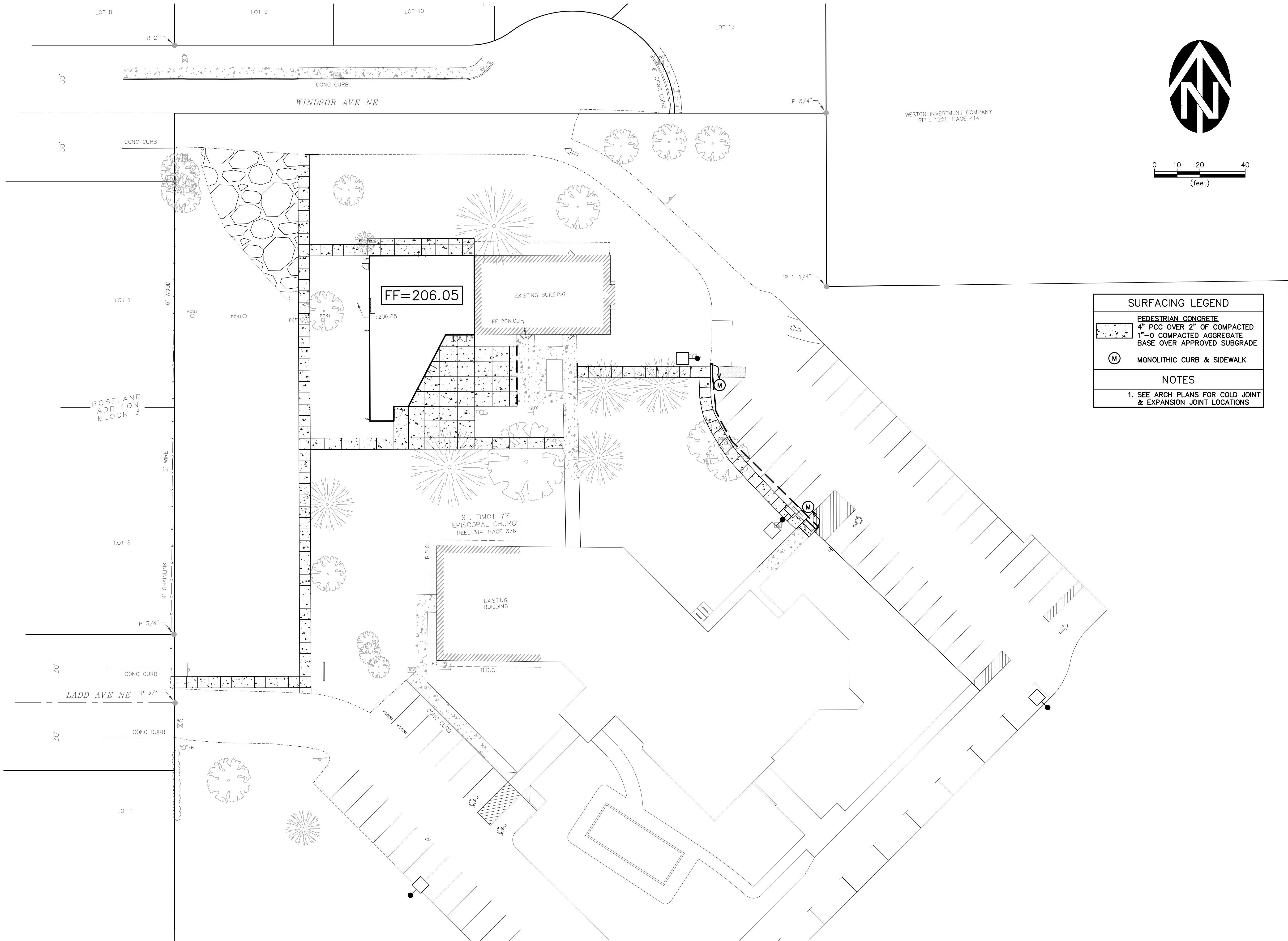
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GENERAL NOTES

1. Contractor shall procure and conform to all construction permits required by the City of Detroit and Marion County.
2. Owner to pay all project permit costs, including but not limited to utility tapping, TV, and chlorination costs. The Contractor shall coordinate with the Approving Agency to determine appropriate fees and provide the Owner with 48 hours notice prior to the required payment of fees or costs.
3. Oregon law requires the Contractor to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. Obtain copies of the rules by calling the center. (Note: the telephone number for the Oregon Utility Notification Center is 503-232-1987).
4. Contractor to notify City, County, ODOT and all utility companies a minimum of 48 business hours (2 business days) prior to start of construction, and comply with all other notification requirements of the Approving Agency with jurisdiction over the work.
5. Contractor shall provide all bonds and insurance required by public and/or private agencies having jurisdiction. Where required by public and/or private agencies having jurisdiction, the Contractor shall submit a suitable maintenance bond prior to final payment.
6. All materials and workmanship for facilities in street right-of-way or easements shall conform to the Approving Agencies' construction specifications wherein each has jurisdiction, including but not limited to the City, County, Oregon Health Division (OHD) and the Oregon Department of Environmental Quality (DEQ).
7. Unless otherwise approved by the Public Works Director, construction of all public facilities shall be done between 7:00 a.m. and 6:00 p.m., Monday through Saturday.
8. The Contractor shall perform all work necessary to complete the project in accordance with the approved construction drawings including such incidentals as may be necessary to meet the Approving Agencies' requirements and provide a completed project.
9. Any inspection by the City, County or other Approving Agency shall not, in any way, relieve the Contractor from any obligation to perform the work in strict compliance with the contract documents, applicable codes, and Approving Agency requirements.
10. Contractor shall maintain one complete set of approved drawings on the construction site at all times whereon he will record all approved deviations in construction from the approved drawings, as well as the station locations and depths of all existing utilities encountered. These field record drawings shall be kept up to date at all times and shall be available for inspection by the Approving Agency or Owner's Representative upon request. Failure to conform to this requirement may result in delay in payment and/or final acceptance of the project.
11. Upon completion of construction of all new facilities, Contractor shall submit a clean set of field record drawings containing all as-built information to the Engineer. All information shown on the Contractor's field record drawings shall be subject to verification. If significant errors or deviations are noted, an as-built survey prepared and stamped by a registered professional Land Surveyor shall be completed at the Contractor's expense.

12. The contractor shall retain and pay for the services of a registered Civil Engineer and/or Land Surveyor licensed in the State of Oregon to establish construction control and perform initial construction surveys to establish the lines and grades of improvements as indicated on the drawings. Staking for buildings, structures, curbs, gravity drainage pipes/structures and other critical improvements shall be completed using equipment accurate to 0.04 feet horizontally and 0.02 feet vertically or better. Use of GPS equipment for final construction staking of these critical improvements is prohibited. The registered professional surveyor shall provide the design engineer with copies of all grade sheets for construction staking performed for the project.

13. See architectural drawings for site lighting, site dimensioning, and continuation of all utilities.

TRAFFIC CONTROL

14. Contractor shall erect and maintain barricades, warning signs, traffic cones (and all other traffic control devices required) per City, County and ODOT requirements in accordance with the current MUTCD (including Oregon amendments). Access to driveways shall be maintained at all times. All traffic control measures shall be approved and in place prior to any construction activity. Prior to any work in the existing public right-of-way, Contractor shall submit final traffic control plan to the Approving Agency for review and issuance of a Lane Closure or Work in Right-of-Way Permit.
15. Prior to any work in the existing right-of-way, Contractor shall submit final traffic control plan to City of Detroit for review and issuance of lane closure permit. Contractor to obtain a lane closure permit before construction starts for any work within the existing public right-of-way, including public street improvements or driveway connections to existing streets.

TESTING AND INSPECTION:

16. For public and private improvements, the Contractor shall be responsible to ensure that all required or necessary inspections are completed by authorized inspectors prior to proceeding with subsequent work which covers or that is dependent on the work to be inspected. Failure to obtain necessary inspection(s) and approval(s) shall result in the Contractor being fully responsible for all problems and/or corrective measures arising from uninspected work.
17. Unless otherwise specified, the attached "Required Testing and Frequency" table outlines the minimum testing schedule for private improvements on the project. This testing schedule is not complete, and does not relieve the Contractor of the responsibility of obtaining all necessary inspections or observations for all work performed, regardless of who is responsible for payment. Cost for retesting shall be borne by the Contractor.

EXISTING UTILITIES & FACILITIES:

18. The location and descriptions of existing utilities shown on the drawings are compiled from available records and/or field surveys. The Engineer or utility companies do not guarantee the accuracy or the completeness of such records. Contractor shall field verify locations and sizes of all existing utilities prior to construction.
19. Contractor shall field verify location and depth of all existing utilities where new facilities cross. All utility crossings marked or shown on the drawings shall be potholed using hand tools or other non-invasive methods prior to excavating or boring. Contractor shall be responsible for exposing potential utility conflicts far enough ahead of construction to make necessary grade or alignment modifications without delaying the work. If grade or alignment modification is necessary, Contractor shall notify the Design Engineer, and the Design Engineer or the Owner's Representative shall obtain approval from the Approving Agency prior to construction.
20. The Contractor shall be responsible for locating and marking all existing survey monuments of record (including but not limited to property and street monuments) prior to construction. If any survey monuments are removed, disturbed or destroyed during construction of the project, the Contractor shall retain and pay for the services of a Registered Professional Surveyor licensed in the State of Oregon to reference and replace all such monuments prior to final payment. The monuments shall be replaced within a maximum of 90 days, and the County Surveyor shall be notified in writing as required by per ORS 209.150. Per ORS 92.044(7), utility infrastructure may not be placed within one foot of a survey monument location noted on a subdivision or partition plat.
21. All facilities shall be maintained in-place by the Contractor unless otherwise shown or directed. Contractor shall take all precautions necessary to support, maintain, or otherwise protect existing utilities and other facilities at all times during construction. Contractor to leave existing facilities in an equal or better-than-original condition and to the satisfaction of the Approving Agency and Owner's Representative.

22. Utilities or interfering portions of utilities that are abandoned in place shall be removed by the Contractor to the extent necessary to accomplish the work. The Contractor shall plug the remaining exposed ends of abandoned utilities after appropriate verification procedures have taken place.
23. Contractor shall remove all existing signs, mailboxes, fences, landscaping, etc., as required to avoid damage during construction and replace them to existing or better condition.
24. The Contractor shall be responsible for managing construction activities to ensure that public streets and right-of-ways are kept clean of mud, dust or debris. Dust abatement shall be maintained by adequate watering of the site by the Contractor.

GRADING, PAVING & DRAINAGE:

25. All materials and workmanship for compaction, fills, grading, rocking and paving within the public right-of-way shall conform to City of Detroit Standard Construction Specifications.
26. Unless otherwise noted, all grading, rocking and paving to conform to Oregon Standard Specifications for Construction (OSSC/ODOT/APWA), 2021 edition.
27. Clear and grub within work limits all surface vegetation, trees, stumps, brush, roots, etc. Do not damage or remove trees except as approved by the Owner's Representative or as shown on the drawings. Protect all roots two inches in diameter or larger.
28. Strip work limits, removing all organic matter, which cannot be compacted into a stable mass. All trees, brush, and debris associated with clearing, stripping or grading shall be removed and disposed of off-site.
29. Immediately following stripping and grading operations, compact subgrade to 92% of the maximum dry density per AASHTO T-180 test method (Modified Proctor). Subgrade must be inspected and approved by the Owner's authorized representative before placing, engineered fills or fine grading for base rock.
30. Engineered fills shall be constructed and compacted in 6" lifts over approved subgrade. All fills shall be engineered and comply with the Oregon Structural Specialty Code, with each lift compacted to 92% of the maximum dry density per AASHTO T-180 test method (Modified Proctor).
31. Granular baserock shall conform to the requirements of OSSC (ODOT/APWA) 02630.10 (Dense Graded Base Aggregate), with no more than 10% passing the #40 sieve and no more than 5% passing the #200 sieve.
32. Compact granular baserock to 92% of the maximum dry density per AASHTO T-180 test method (Modified Proctor). Written baserock compaction test results from an independent testing laboratory must be received by the Owner's authorized representative before placing AC pavement, and a finished rock grade proof-roll (witnessed by the Owners authorized representative) must be performed.
33. A.C. pavement shall conform to OSSC (ODOT/APWA) 00745 (Hot Mixed Asphalt Concrete Pavement) for standard duty mix. Unless otherwise specified or shown on the drawings, base fills shall be 3/4" dense graded mix, while wearing courses shall be 1/2" dense graded mix. Unless otherwise specified or shown on the drawings, A.C. pavement for parking lots and streets shall be Level 2 mix (50 blow Marshall) per OSSC (ODOT/APWA) 00744.13. A.C. Pavement shall be compacted to a minimum of 91% of maximum density as determined by the Rice standard method. Written AC pavement compaction test results from an independent testing laboratory must be received by the Owner's authorized representative before final payment.
34. Pavement surface shall be a smooth, well-sealed, tight mat without depressions or bird baths. Bony or open graded pavement surfaces shall be repaired to the satisfaction of the Owner's authorized representative, prior to final acceptance of the work.
35. HMAc mixtures shall be placed only when the surface is dry and weather conditions are such that proper handling, finishing and compaction can be accomplished. In no case shall bituminous mixtures be placed when the surface temperature is below the minimum established under 2021 OSSC (ODOT/APWA) 00744.40 (AC - Season and Temperature Limitations) or the project specifications, whichever is more stringent.

36. Contractor shall protect new pavement against traffic as required, until it has cooled sufficiently to avoid tracking.
37. Unless otherwise shown on the drawings or details, straight grades shall be run between all finish grade elevations and/or finish contour lines shown (exception: where grade is shown across sidewalks, slopes shall be adjusted to ensure that maximum allowable sidewalk cross slopes are not exceeded).
38. Finish pavement grades at transition to existing pavement shall match existing pavement grades or be feathered past joints with existing pavement as required to provide a smooth, free draining surface.
39. All existing or constructed manholes, cleanouts, monument boxes, gas valves, water valves and similar structures shall be adjusted to match finish grade of the pavement, sidewalk, landscaped area or median strip wherein they lie. Verify that all valve boxes and risers are clean and centered over the operating nut.

40. Unless otherwise shown on the drawings, no cut or fill slopes shall be constructed steeper than 3H:1V.

41. Unless otherwise shown on the landscape plans, all planter areas, shall be backfilled with approved topsoil minimum 8" thick. Stripping materials shall not be used for planter backfill.
42. Contractor shall seed and mulch (uniformly by hand or hydroseed) all exposed slopes and disturbed areas which are not scheduled to be landscaped, including trench restoration areas. If the Contractor fails to apply seed and mulch in a timely manner during periods favorable for germination, or if the seeded areas fail to germinate, the Owner's Representative may (at his discretion) require the Contractor to install sod to cover such disturbed areas.

43. Unless otherwise shown or indicated on the drawings, 6-inches nominal curb exposure used for design of all parking lot and street grades.

44. Where new curbing connects to existing curbing or is installed along existing streets or pavement, the gutter grade shall match the existing street grades so as to allow drainage from the street to the gutter and through any transitions. The Contractor shall notify the Owner's Representative in writing of any grade discrepancies or problems prior to curb placement.

45. Road widening design is based on available survey taken at random intervals. Street pavement widening cross slope shall be a minimum of 2% and a maximum of 5% across width of the road. If grade or alignment modification is required, the maximum (intersection defined from end of curb radius both directions). Prior to placing curbs, Contractor shall field verify pavement widening cross slope and contact Engineer if the design pavement widening cross slope is not within the limits stated above.

46. Contractor shall construct all handicap access ramps in accordance with current ADA requirements.

47. Sidewalks shall be a minimum of 4-inches thick. Commercial use driveways and alley approaches shall be minimum 8-inches thick. All curbs, sidewalks and driveways shall be constructed using 3300-psi concrete, and shall be cured with Type 1 or Type 1D clear curing compound. All sidewalks shall be ADA compliant.

48. Curb & sidewalk concrete shall be placed only during periods when it will not be damaged by rain (protect unhardened concrete from precipitation). Concrete shall not be placed on frozen baserock. Do not begin concrete placement until temperature in the shade is a minimum of 35°F and rising, and stop placement if air temperature falls below 35°F. Protect concrete from freezing for a minimum of 5 days after placement per OSSC (ODOT/APWA) 00440.4.d & 00756.40 or the project specifications, whichever is more stringent.

49. Connection joints shall be installed directly over any pipes that cross under the sidewalk, to control cracking. In general, cracks in new curbs or sidewalks (at locations other than contraction joints) are not acceptable, and cracked panels shall be removed & replaced unless otherwise approved by the Approving Agency and the design engineer.

50. All sidewalks shall be ADA compliant. Direction of sidewalk cross slope shall conform with the slope direction shown on the grading plan. Sidewalk cross slopes shall not exceed 1:67 (1.5%) nor be less than 1%. Longitudinal slope shall not exceed 1:20 (5%).

51. Where trench excavation requires removal of PCC curbs and/or sidewalks, the curbs and/or sidewalks shall be sawcut and removed at a tooled joint unless otherwise authorized in writing by the Approving Agency. The sawcut lines shown on the drawings are schematic and not intended to show the exact alignment of such cuts.

52. Unless otherwise shown on the drawings, areas along curbs and sidewalks shall be backfilled with approved topsoil, as well as being seeded and mulched (or hydroseeded).

PIPED UTILITIES:

53. All tapping of existing sanitary sewer, storm drain mains, and manholes must be done by Contractor forces.

54. The Contractor shall have appropriate equipment on site to produce a firm, smooth, undisturbed subgrade at the trench bottom, true to grade. The bottom of the trench excavation shall be smooth, free of loose materials or tooth grooves for the entire width of the trench prior to placing the granular bedding material.

55. All pipes shall be bedded with minimum 6-inches of 3/4"-0 crushed rock bedding and backfilled with compacted 3/4"-0 crushed rock in the pipe zone (crushed rock shall extend a minimum of 12-inches over the top of the pipe in all cases). Unless CDF or other backfill is shown or noted on the drawings, crushed rock trench backfill shall be used under all improved areas, including pavement, sidewalks, foundation slabs, buildings, etc.

56. Granular trench bedding and backfill shall conform to the requirements of OSSC (ODOT/APWA) 02630.10 (Dense Graded Base Aggregate), 3/4"-0. Unless otherwise shown on the drawings, compact granular backfill to 92% of the maximum dry density per AASHTO T-180 test method (Modified Proctor).

57. Contractor shall arrange to abandon existing sewer and water services not scheduled to remain in service in accordance with approving agency requirements.

58. All piped utilities abandoned in place shall have all openings closed with concrete plugs with a minimum length equal to 2 times the diameter of the abandoned pipe.

59. The end of all utility service lines shall be marked with a 2-x-4 painted white and wired to pipe stub. The pipe depth shall be written on the post in 2" block letters.

60. All non-metallic water, sanitary and storm sewer piping shall have an electrically conductive insulated 12 gauge solid core copper tracer wire the full length of the installed pipe using blue wire for water and green wire for storm and sanitary piping. Tracer wire shall be extended up into all valve boxes, catch basins, manholes and lateral cleanout boxes. Tracer wire penetrations into manholes shall be within 18 inches of the rim elevation and adjacent to manhole steps. The tracer wire shall be tied to the top manhole step or otherwise supported to allow retrieval from the outside of the manhole. All tracer wire splices shall be made with waterproof splices or waterproof/corrosion resistant wire nuts.

61. No trenches in sidewalks, roads, or driveways shall be left in an open condition overnight. All such trenches shall be closed before the end of each workday and normal traffic and pedestrian flows restored.

62. Before mandrel testing, TV inspection or final acceptance of gravity pipelines, all trench compaction shall be completed and all sewers and storm drains flushed & cleaned to remove all mud, debris & foreign material from the pipelines, manholes and/or catch basins.

63. Where future extensions are shown upstream of new manholes (sewer or storm), catch basins or junction boxes, pipe stubs (with gasketed caps) shall be installed at design grades to a point 2' minimum outside of the structure.

WATER SYSTEM:

64. City forces to operate all valves, including fire hydrants, on existing public mains.

65. All water mains shall be Class 52 ductile iron or C-900 PVC (DR 18).

66. All fittings 4-inches through 24-inches in diameter shall be ductile iron fittings in conformance with AWWA C-153 or AWWA C-110. The minimum working pressure for all MJ cast iron or ductile iron fittings 4-inches through 24-inch in diameter shall be 350 psi for MJ fittings and 250 psi for flanged fittings.

67. All water mains to be installed with a minimum 36 inch cover to finish grade unless otherwise noted or directed. Water service lines shall be installed with a minimum 30-inch cover. Deeper depths may be required as shown on the drawings or to avoid obstructions.

68. Unless otherwise shown or approved by the Engineer, all valves shall be flange connected to adjacent tees or crosses.

69. Thrust restraint shall be provided on all bends, tees and other direction changes per Approving Agency requirements and as specified or shown on the drawings.

70. Water service pipe 2-inch and smaller on the public side of the meter shall be Type K soft copper tubing conforming to ASTM B-88. Water service pipe 3-inch and larger shall conform to the construction drawings and approving agency standards.

71. Unless otherwise noted, water service pipe 3-inch and smaller on the private side of the meter shall be Schedule 40 PVC. Unless otherwise specified, private water service piping shall be hydrostatically pressure tested to a minimum of 150% of the maximum static pressure at the site. All materials and workmanship for all private water lines, including water lines located within any building envelope, shall be installed in conformance with Uniform Plumbing Code requirements. All water service pipe on the private side of the meter shall be installed by a licensed plumber in accordance with Uniform Plumbing Code requirements.

72. Domestic and fire backflow prevention devices and vaults shall conform to requirements of public and/or private agencies having jurisdiction. The Contractor shall be responsible for having backflow devices tested and certified prior to final acceptance of the work.

73. Contractor shall provide all necessary equipment and materials (including plugs, blowoffs, valves, service caps, etc.) required to flush, test and disinfect waterlines per the Approving Agency requirements.

74. The work shall be performed in a manner designated to maintain water service to buildings supplied from the existing waterlines. In no case shall service to any main line or building be interrupted for more than four (4) hours in any one-day. Contractor shall notify the Approving Agency and all affected residents and businesses a minimum of 24 business hours (1 business day) before any interruption of service.

75. Where new waterlines cross below or within 18-inches vertical separation above a sewer main or sewer service lateral, center one full length of waterline pipe at point of crossing the sewer line or sewer lateral. In addition (unless otherwise approved in writing by the Approving Agency, existing sewer mains and/or service laterals within this zone shall be replaced with a full length of Class 50 Ductile Iron or C-900 PVC pipe (DR 18) centered at the crossing in accordance with OAR 333-061 and Approving Agency requirements. Connect to existing sewer lines with approved rubber couplings. Example: For an 8-inch waterline with 36-inches cover, 4-inch service lateral inverts within 5.67-feet (68-inches) of finish grade must be DI or C-900 PVC at the crossing.

76. All waterlines, services and appurtenances shall be pressure tested for leakage. All testing shall conform to requirements as outlined in the specifications, Approving Agency standards and/or testing forms. The hydrostatic test shall be performed with all service line corporation stops open and meter stops closed, and with all hydrant line valves open. Prior to the start of each pressure test, the position of all mainline valves, hydrant line valves and service line corporation stops in the test segment shall be verified.

77. After the pressure test and prior to disinfecting, the water lines shall be thoroughly flushed through hydrants, blow offs or by other approved means.

78. Disinfection & Bacteriological Testing. All water mains and service lines shall be chlorinated/disinfected per Approving Agency requirements, AWWA C-651 or OAR 333-061 (25 mg/L minimum chlorine solution, 24 hours contact time), whichever is more stringent. Unless otherwise approved by the Approving Agency, a Representative from the Approving Agency shall witness the application of the chlorine solution and the chlorine testing at the end of the 24 hour contact period. After the 24 hour chlorine contact period, the free chlorine concentration shall be checked, and if it is found to be 10 mg/L or more, the chlorine solution shall be drained (otherwise the line shall be rechlorinated), the waterline flushed with potable water, and a minimum of two consecutive samples taken at least 24 hours apart shall be collected from the waterline for microbiological analysis (ie. one sample immediately after flushing, and another sample 24 hours later). Contractor to pay for laboratory analysis of water samples taken under the supervision of the Approving Agency. If the results of both analyses indicate that the water is free of coliform organisms, the waterline may be placed in service. Should the initial treatment prove ineffective, the chlorination shall be repeated until confirmed tests show acceptable results.

79. Disinfection of Connections. For connections which cannot be disinfected with the waterline mainlines as noted above, all fittings, valves and appurtenances, including tool surfaces which will come in contact with potable water, shall be thoroughly cleaned by washing with potable water and then swabbed or sprayed with a one percent (1%) hypochlorite solution (10,000 mg/L) in accordance with the requirements of AWWA C-651 and OAR 333-061.

STORM DRAIN SYSTEM:

80. Storm sewer pipe materials shall conform to the construction drawings and Approving Agency's requirements. Unless otherwise noted or shown on the drawings, storm sewer pipe materials with watertight joints shall conform to the attached "Storm Pipe Table". Contractor shall use uniform pipe material on each pipe run between structures unless otherwise directed or approved. Jointed HDPE pipe shall not be used for slopes exceeding ten percent (10%). All materials and workmanship for all private storm drains, including storm drains located within any building envelope, shall be installed in conformance with Uniform Plumbing Code requirements.

81. Contractor shall designate the pipe material actually installed on the field record drawings and provide this information for inclusion on the as-built drawings.

82. Catch basins and junction boxes shall be set square with buildings or with the edge of the parking lot or street wherein they lie. Storm drain inlet structures and paving shall be adjusted so water flows into the structure without ponding water.

83. Unless otherwise approved by the Engineer, all storm drain connections shall be by manufactured tees or saddles.

84. Unless otherwise shown on the drawings, all storm pipe inlets & outfalls shall be beveled flush to match the slope wherein they lie.

85. Sweep (deflect) storm sewer pipe into catch basins and manholes as required. Maximum joint deflection shall not exceed 5 degrees or manufacturers recommendations, whichever is less.

86. Unless otherwise shown or directed, install storm sewer pipe in accordance with manufacturer installation guidelines.

87. After manhole channeling and prior to mandrel testing or final acceptance, flush and clean all sewers, and remove all foreign material from the mainlines, manholes and catch basins.

88. Mandrel Testing. Contractor shall conduct deflection test of flexible storm sewer pipes by pulling an approved mandrel through the completed pipeline following trench compaction. The diameter of the mandrel shall be 95% of the initial pipe diameter. Test shall be conducted not more than 30 days after the trench backfilling and compaction has been completed.

89. TV Inspection. Upon completion of all storm sewer construction, testing and repair, the Contractor shall conduct a color TV acceptance inspection of all mainlines in accordance with OSSC (ODOT/APWA) 445.74 to determine compliance with grade requirements of OSSC (ODOT/APWA) 445.40.b. The TV inspection shall be conducted by an approved technical service which is equipped to make audio-visual recordings of the TV inspections on DVD (VHS video tape acceptable only upon prior written approval by Public Works). Unless otherwise required by the agency with jurisdiction, a standard 1-inch diameter ball shall be suspended in front of the camera during the inspection to determine the depth of any standing water. Sufficient water to reveal low areas or reverse grades shall be discharged into the pipe immediately prior to initiation of the TV inspection. The DVD and written report shall be delivered to the Approving Agency.

90. Prior to acceptance, the Owner's Representative may lamp storm lines upstream & downstream of structures to verify that the pipes are clean and there is no grout or concrete in the mainlines and that there are no observable bellies in the line. When necessary, sufficient water to reveal low areas shall be discharged into the pipe by the Contractor prior to any such inspection by the Owner's Representative or the Approving Agency.

FRANCHISE & PRIVATE UTILITIES:

91. Unless otherwise shown on the drawings or approved by jurisdiction having authority, all new franchise and private utilities (power, cable TV, telephone, gas, data, communication, control, alarms, etc.) shall be installed underground. Installation of such utilities or associated conduits in a common trench with public water, sanitary sewer, or storm sewer is prohibited.

92. Contractor shall coordinate with gas, power, telephone, and cable TV Company for location of conduits in common trenches, as well as location or relocation of vaults, pedestals, etc. The Contractor shall be responsible for providing franchise utility companies adequate written notice of availability of the open trench (typically 10 days minimum), and reasonable access to the open trench. Unless otherwise approved in writing by the Approving Agency, all above-grade facilities shall be located in PUEs (where PUEs exist or will be granted by the development), and otherwise shall be placed in a location outside the proposed sidewalk location.

93. Unless otherwise approved by the Approving Agency, installation of private utilities (including either franchise utilities or private water, sewer or storm services) in a common trench with or within 3 feet horizontally of and paralleling public water, sanitary sewer or storm drains is prohibited.

94. Power, telephone and TV trenching and conduits shall be installed per utility company requirements with pull wire. Contractor shall verify with utility company for size, location and type of conduit before construction, and shall ensure that trenches are adequately prepared for installation per utility company requirements. All changes in direction of utility conduit runs shall have long radius steel bends.

95. Contractor shall notify and coordinate with franchise utilities for removal or relocation of power poles, vaults, pedestals, manholes, etc. to avoid conflict with Public utility structures, fire hydrants, meters, sewer or storm laterals, etc.

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REGISTERED PROFESSIONAL
ENGINEER
NO. 12,345
WILLIAM J. KELLS
RENEW: 6/30/2024

REVIEW

project:
ST. TIMOTHY'S EPISCOPAL CHURCH
PARISH HALL ADDITION
3295 LADD AVE NE
SALEM, OR 97301

revisions:
1
2
3
4

date: DEC 2023
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checked by: JW
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CONSTRUCTION
NOTES
sheet:
C5.0
of:

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REQUIRED TESTING AND FREQUENCY TABLE		Party Responsible for payment		
<i>Contractor to notify Owner's Representative prior to all testing, to allow Owner's Representative to be present if desired.</i>		Contractor	Others (see note 1)	
Streets, Fire Lanes, Common Driveways, Parking Lots, Pads, Fills, etc.				
Subgrade	1 Test/4000 S.F./Lift (4 min), locations acceptable to approving agency (typically alternate sides of road or access aisles)	✓	See note 2 & note 3	
Engineered Fills	1 Test/4000 S.F./Lift (4 min), locations acceptable to approving agency	✓	See note 2 & note 5	
Baseroack	1 Test/4000 S.F./Lift (4 min), locations acceptable to approving agency (typically alternate sides of road or access aisles)	✓	See note 2 & note 3	
Asphalt	1 Test/6000 S.F./Lift (4 min), locations acceptable to AA (typ. alternate as above)	✓	See note 2	
Piped Utilities, All				
Trench Backfill	1 Test/200 Foot Trench/Lift (4 min)	✓	See note 2	
Trench AC Restoration	1 Test/300 Foot Trench (4 min)	✓	See note 2	
Water				
Pressure Test	(to be witnessed by Owner's Representative or approving agency)	✓	See note 4	
Bacterial Water Test	Per Oregon Health Division	✓	See note 2	
Chlorine Residual Test	Per City Requirements	✓		
Sanitary Sewer				
Air Test	Per City or APWA Requirements, whichever is more stringent	✓	See note 4	
Mandrel	95% of actual inside diameter	✓	See note 4	
TV Inspection	All. Lines must be cleaned prior to TV work	✓		
Manhole	(1) Vacuum test per manhole, witnessed by Owner's Representative or approving agency	✓	See note 2	
Concrete, Block, etc.				
Slump, Air & Cylinders for structural & reinforced concrete, equipment slabs, curbs, sidewalks & PCC pavements. Unless otherwise specified, one set of cylinders per 100 cubic yards (or portion thereof) of each class of concrete placed per day. Slump & air tests required on same load as cylinders.		✓	See note 2	
<p>Note 1: "Others" refers to Owner's authorized Representative or Approving Agency as applicable. Contractor responsible for scheduling testing. All testing must be completed prior to performing subsequent work.</p> <p>Note 2: Testing must be performed by an approved independent testing laboratory.</p> <p>Note 3: In addition to in-place density testing, the subgrade and base rock shall be proof-rolled with a loaded 10 yard dump truck provided by the Contractor. Baseroack proofroll shall take place immediately prior to (within 24 hours of) paving, and shall be witnessed by the Owner's authorized Representative or approving agency. Location and pattern of testing and proofroll to be as approved or directed by said Owner's authorized Representative or approving agency.</p> <p>Note 4: To be witnessed by the Owner's Representative or approving agency. The Contractor shall perform pretests prior to scheduling witnessed waterline or sanitary sewer pressure tests, or pipeline mandrel test.</p> <p>Note 5: The approved independent laboratory retained by the Contractor shall provide a certification (stamped by an engineer licensed in the State of Oregon) that the subgrade was prepared and all engineered fills were placed in accordance with the provisions of the construction drawings and the contract documents.</p> <p><i>Contractor to notify Owner's Representative prior to all testing, to allow Owner's Representative to be present if desired.</i></p>				

project:

ST. TIMOTHY'S EPISCOPAL CHURCH
PARISH HALL ADDITION
3295 LADD AVE NE
SALEM, OR 97301



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revisions:



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project: 3476.0000.0
dwg file:
drawn by: AK
checked by: JW
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Carlson Veit Architects P.C.

CONSTRUCTION
NOTES

sheet:

C5.1

of:





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NOTES:

1. CONCRETE DEPTH FOR STANDARD SIDEWALKS SHALL BE 4" MIN.
2. CONCRETE SHALL BE 3300 PSI @ 28 DAYS, MAX 5" SLUMP, 4.5% AIR (±1.5%).
3. INSTALL TOOLED CONTRACTION JOINTS AT 5' INTERVALS. SIDEWALKS 10' & WIDER SHALL HAVE A LONGITUDINAL CONTRACTION JOINT AT 5' ON CENTER.
4. INSTALL MIN. 2 WEEP HOLES ON ALL LOTS. ONE WEEP HOLE TO BE AT LOW POINT OF LOT, 5' FROM P/L. A CONTRACTION JOINT SHALL BE PLACED ALONG AND OVER WEEPHOLE & DRAIN PIPE.
5. PUBLIC SIDEWALKS SHALL BE LOCATED ENTIRELY WITHIN RIGHT-OF-WAYS OR SIDEWALK EASEMENTS, INCLUDING SIDEWALKS AT DRIVEWAY APRONS.

LAST REVISION DATE: AUG 2020	JO # STANDARD
<p align="center">MONOLITHIC CURB AND SIDEWALK</p> <p align="center">(NTS)</p>	
WESTECH ENG.	DETAIL NO. 2112

TRENCH FOUNDATION STABILIZATION: IF TRENCHES ARE OVER-EXCAVATED FOR ANY REASON, OVER-EXCAVATION SHALL BE FILLED TO THE DESIGN TRENCH SUBGRADE (I.E. TO THE BOTTOM OF THE TRENCH) WITH A STABLE SUBGRADE OR TRENCH FOUNDATION STABILIZATION AS REQUIRED. THE PIPE OR BACKFILL BEDDING SHALL BE A 100% GRADED GRANULAR ROCK IS PROHIBITED UNLESS IT IS COMPLETELY ENCAPSULATED IN GEOTEXTILE FABRIC & APPROVED BY A.H.U.

UNDERGROUND WARNING TAPE
(COLOR & WORDS AS REQ'D FOR WATER, SEWER, STORM, ETC.)

CLASS 1 BACKFILL:
3/4"-0" GRANULAR BACKFILL
(92% COMPACTION)

CLASS 3 BACKFILL:
CLEAN NATIVE BACKFILL ABOVE PIPE ZONE
(85% COMPACTION)

(% TRENCH COMPACTION PER NOTES ABOVE)

PIPE ZONE
3/4"-0" COMPACTED GRANULAR BACKFILL TO 12" OVER PIPE

PIPE EMBED.
3/4"-0" GRANULAR BACKFILL

PIPE
8" MIN. OR ROAD BASE THICKNESS

95% COMPACTION REQ'D FOR TOP LIFT IN STREET (STREET BASEROCK THICKNESS) PER AASHTO T-180

12" MIN. TO 18" MAX. TO TAPE

12" MIN. ABOVE OUTSIDE OF PIPE BELL (TYPICAL ALL PIPE TYPES)

TRACER WIRE ALONG ALL PIPE & LATERALS (TAPE TO PIPE BELOW CROWN AT 5' MAX INTERVALS, 10:30 OR 2:30 POSITION)

6" MIN BEDDING BELOW PIPE (TYPICAL ALL PIPE TYPES, ALL LOCATIONS)

"A" NOMINAL PIPE DIA.
"B" MIN/MAX

24" MIN. (SEE TABLE)

"A" NOM. PIPE DIAMETER	"B" MIN/MAX CLEARANCE
≤10	10"/18"
12"-16"	12"/18"

1. CLASS 1 REQ'D. UNDER ALL EXIST. OR FUTURE IMPROVED AREAS INCLUDING SIDEWALKS.
2. WHERE NEW PIPING IS IN SAME ALIGNMENT AS EXISTING PIPING, THE PIPE EMBEDMENT SHALL EXTEND TO A MIN. OF 6" BELOW THE NEW PIPING OR 6" BELOW EXISTING PIPING, WHICHEVER IS DEEPER.
3. FOR ALL FLIGHTS OF TRENCH SHORING SHALL BE ABOVE PIPE SPRINGLINE PRIOR TO COMPACTING BACKFILL ABOVE PIPE SPRINGLINE AND UNDER THE PIPE HAUNCHES.
4. MINIMUM CLEARANCES SHOWN ("B") ASSUMES STANDARD 6' WALL TRENCH BOXES SET ON TRENCH BOTTOM, AND REPRESENTS WIDTH REQUIRED TO CONSOLIDATE GRANULAR MATERIAL UNDER PIPE HAUNCHES (TO AVOID LOSS OF SIDE SUPPORT WHEN TRENCH BOX IS MOVED OR PULLED FORWARD). TRENCH WIDTH REDUCTION REQUIRES PRIOR APPROVAL BASED ON ACTUAL TRENCH SHORING PROPOSED.

"A"	"B"
NOM. PIPE DIAMETER	MIN/MAX CLEARANCE
≤10	10"/18"
12"–16"	12"/18"
18"–21"	16"/24"
24"–30"	18"/30"
>30"	24"/36"

(SEE NOTE 4)

LAST REVISION DATE: FEB 2020	STANDARD
<p align="center">TRENCH BACKFILL, BEDDING, AND PIPE ZONE</p> <p align="center">(NTS)</p>	
WESTECH ENG.	DETAIL NO. 3010

STEPS.
VERIFY LOCATION TO AVOID CONFLICTS WITH INSIDE OR OUTSIDE DROPS

MANHOLE FRAME & COVER, SET PER DTL 407

MANPAN MH LID INSERT AS REQ'D (SEE DTL 407)

PAVED SURFACE

UNPAVED

SLOPE SHELVES 1:12 TO DRAIN

BUTYL RESIN MASTIC

KEYLOCK JOINT

MANHOLE BARREL JOINT OPTIONS

9" WIDE EXTERNAL MASTIC W/ g & PICKHOLES (TRELLEBORG & PICKHOLES)

PLAN

SET FRAME IN NON-SHRINK GROUT

ALL INSIDE JOINTS & WALL PENETRATIONS TO BE GROUTED FOLLOWING MH ASSEMBLY (TYP).

GRADE RINGS (VARIABLE) 18" MAX.-TOP OF CONE TO RIM

SLOPE OF PRECAST ECCENTRIC CONE SHALL FACE DOWN GRADE. LOCATE STEPS ON UPSTREAM SIDE OF MANHOLE.

FLAT TOP MH'S SHALL BE USED FOR ALL MH'S LESS THAN 6' RIM TO INVERT, OR WITH TOP OF PIPE CONNECTIONS WITHIN 5 FEET OF RIM ELEVATION.

ALL PIPE PENETRATIONS ON SANITARY SEWER MANHOLES TO HAVE RUBBER BOOTS AS SPECIFIED.

ROUTE TONING WIRE UP OUTSIDE OF MH AS SHOWN (TYP ALL PIPES).

PRECAST BASE, 6" MIN THICKNESS

6" MIN COMPACTED GRANULAR BEDDING

STRAP F

CONC PIPE, TYP

CHANNEL DEPTH= 2/3 PIPE DIA. MIN.

16" MAX

48" INSIDE DIA. MIN

5" MIN. THICK

MASTIC WRAP AS SPEC'D

ALL OPENINGS CORRED DRILLED.

12" TYP

30" MAX

8" MIN

18" MAX

LAST REVISION DATE:

SECTION NUMBER:

CORRECTION NO.

1. PRECAST SECTIONS SHALL MEET OR EXCEED ASTM C-478. ALL CHANNELS & GROUTING TO BE SMOOTH.
2. WATERTIGHT O-RING OR MASTIC JOINTS REQUIRED, W/EXTERNAL SEAL AT BARREL JOINTS & PICKHOLES.
3. STEPS TO BE POLYPROPYLENE PLASTIC WITH GRADE 60 REINFORCING ROD. ADD STEPS TO EXTG CONNECTION MH IF EXTG STEPS ARE ABSENT.

LAST REVISION DATE: AUG 2023	COPYRIGHT 1998 WESTECH ENGINEERS, INC.
<p align="center">STANDARD MANHOLE FOR 21" PIPE AND SMALLER (SEWER & STORM)</p> <p align="center">(NTS)</p>	
WESTECH ENG.	DETAIL NO. 4010