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.

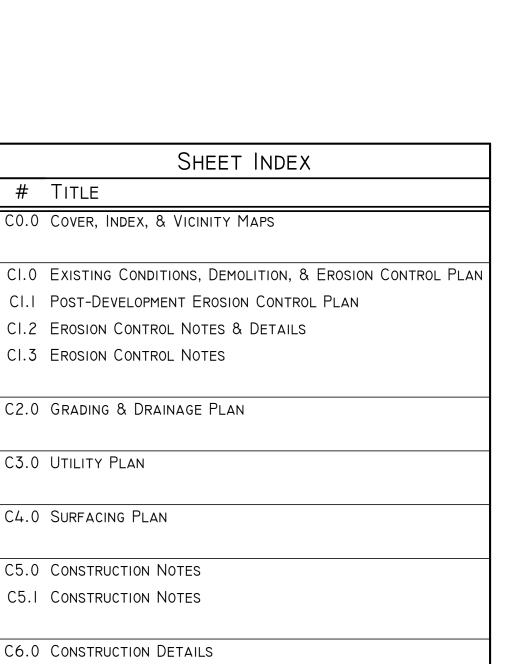
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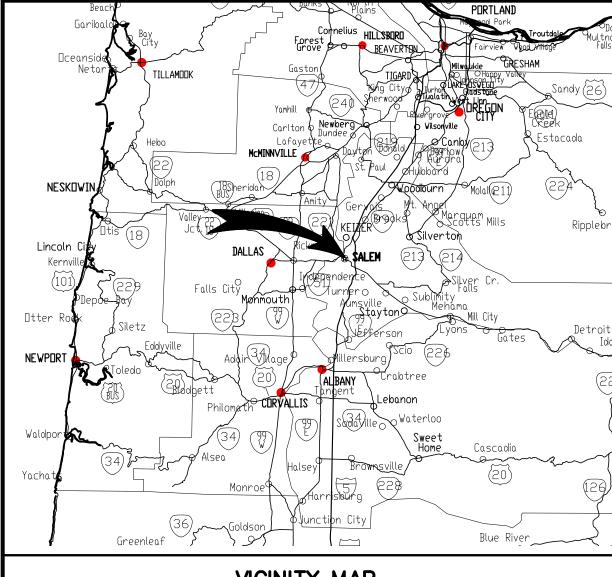
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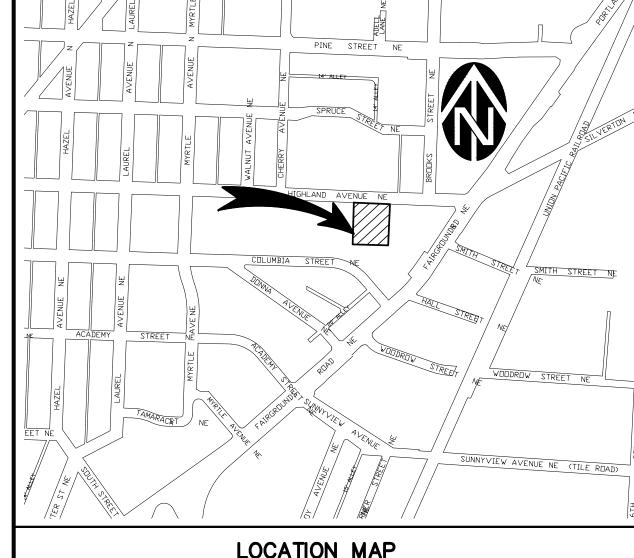
INVERT ELEVATION



PROJECT LOCATION

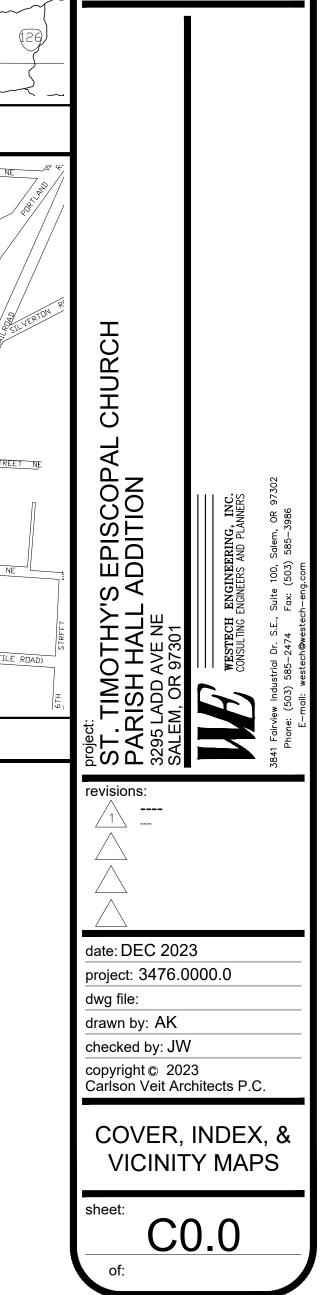
TAX LOT #073W24DA00900 SEC24, T7S, R3W., W.M.

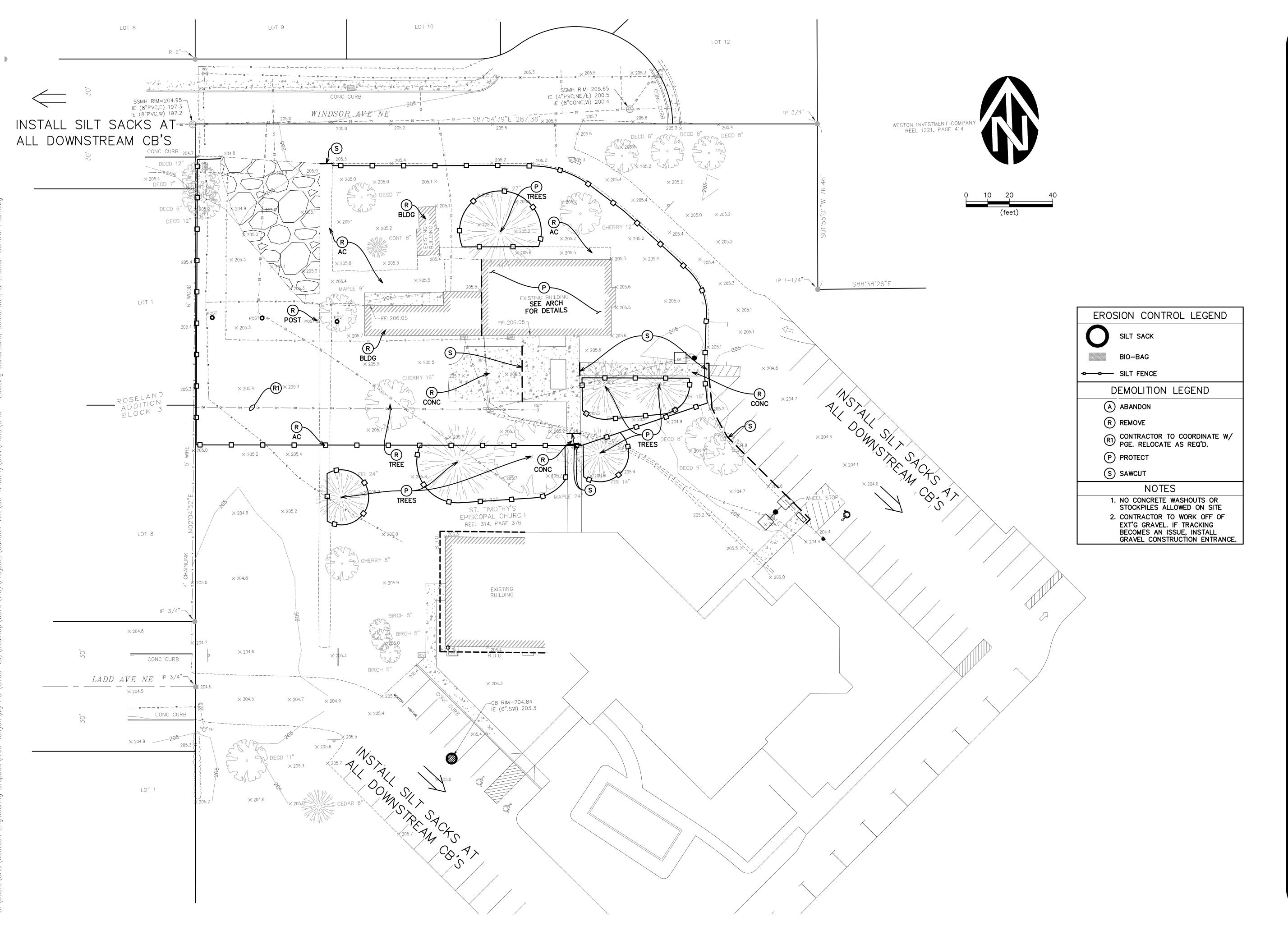


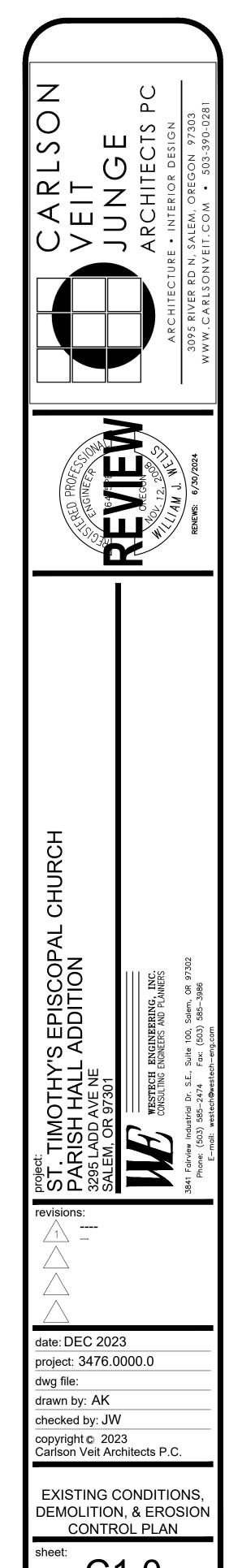


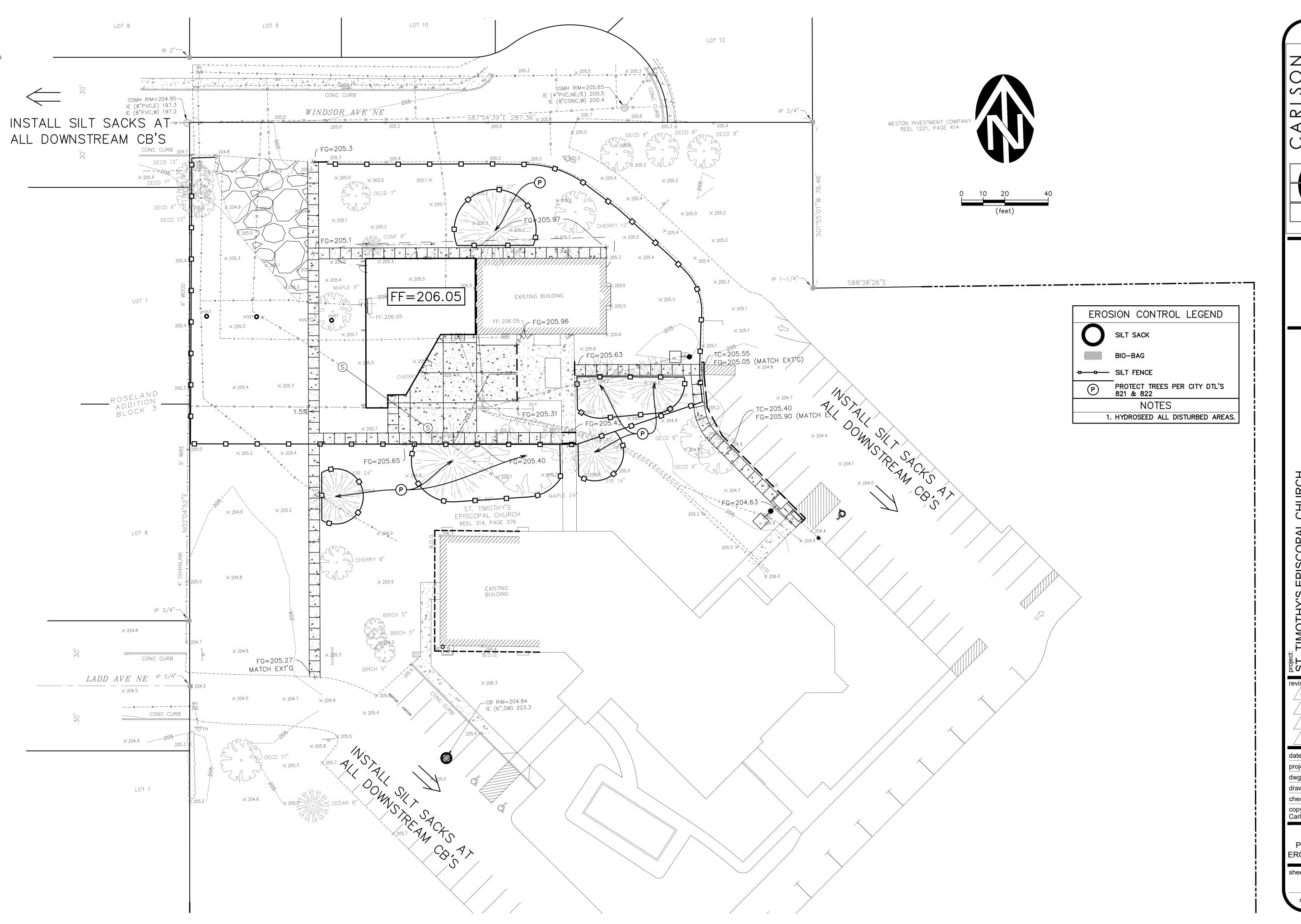
NOTES

- 1. 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.
- 2. 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)
- 3. 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.
- 4. 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.
- 5. FIELD SURVEYED OCTOBER, 2023.









"S EPISCOPAI L ADDITION revisions: date: DEC 2023 project: 3476.0000.0 drawn by: AK checked by: JW copyright © 2023 Carlson Veit Architects P.C. POST-DEVELOPMENT **EROSION CONTROL PLAN**

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.

-ANGLE BOTH ENDS OF FILTER FABRIC -

FENCE TO ASSURE SOIL IS TRAPPED.

6' MAX

FRONT VIEW

SPACING

TOP VIEW

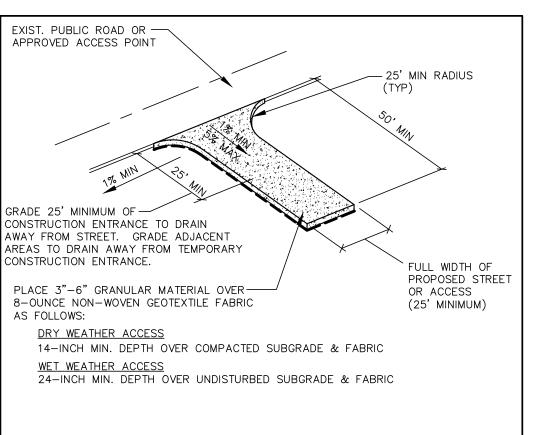
FILTER FABRIC MATERIAL -

36" WIDE ROLLS.

- 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 drippage from trucks transporting saturated soils must be reduced to less than 1 gallon per hour prior to
- 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 Tensar/North American Green Type S150 erosion control blanket. For slopes 2H:1V or steeper, use Tensar/North American Green Type SC150 erosion control blanket. Use a minimum of 2—inches straw mulch or Tensar/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, in 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
- 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, hydroseed 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.



CONSTRUCTION NOTES:

- THE AREA OF THE CONSTRUCTION ENTRANCE SHALL BE STRIPPED OF ALL TOPSOIL, VEGETATION, ROOTS, AND OTHER NON-COMPACTABLE MATERIAL. . SUBGRADE SHALL BE COMPACTED AND PROOFROLLED PRIOR TO PLACEMENT OF GRANULAR MATERIAL. FAILURE TO PASS PROOFROLL WILL REQUIRE USE OF WET
- . FAILURE OR PUMPING OF THE DRY WEATHER SECTION WILL REQUIRE REMOVAL OF THE GRANULAR MATERIAL AND INSTALLATION OF THE WET WEATHER SECTION.

MAINTENANCE NOTES:

PRIOR TO LEAVING THE SITE.

SEDIMENT FENCES OR BIOFILTER BAGS.

TRANSPORT.

NEW SEDIMENT BARRIERS SHALL BE INSTALLED

UPHILL AS REQUIRED TO CONTROL SEDIMENT

. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOW OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC

- TOP DRESSING WITH 3"-6" INCH STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN-OUT OF STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED OR
- TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATE . ALL TRUCKS TRANSPORTING SATURATED SOILS SHALL BE WELL SEALED. WATER DRIPPAGE FROM

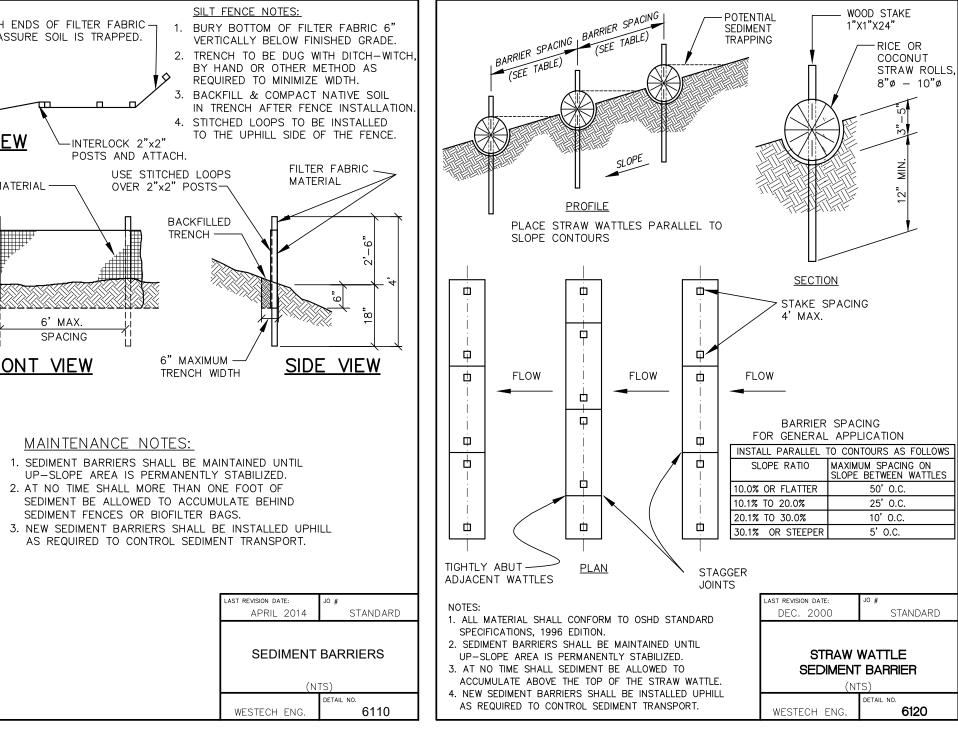
TRUCKS MUST BE REDUCED TO 1 GALLON PER HOUR

TEMPORARY CONSTRUCTION **ENTRANCE** 6100

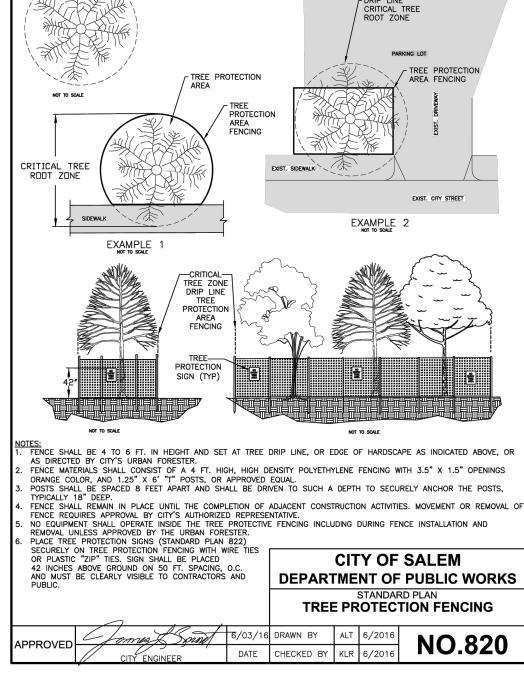
CONTROL

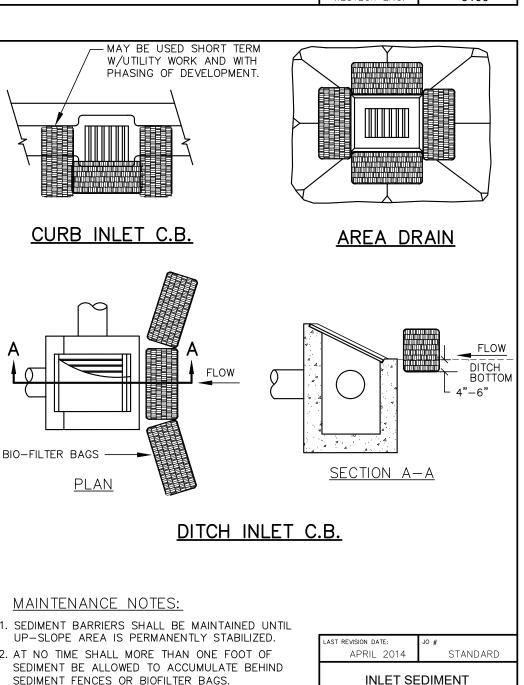
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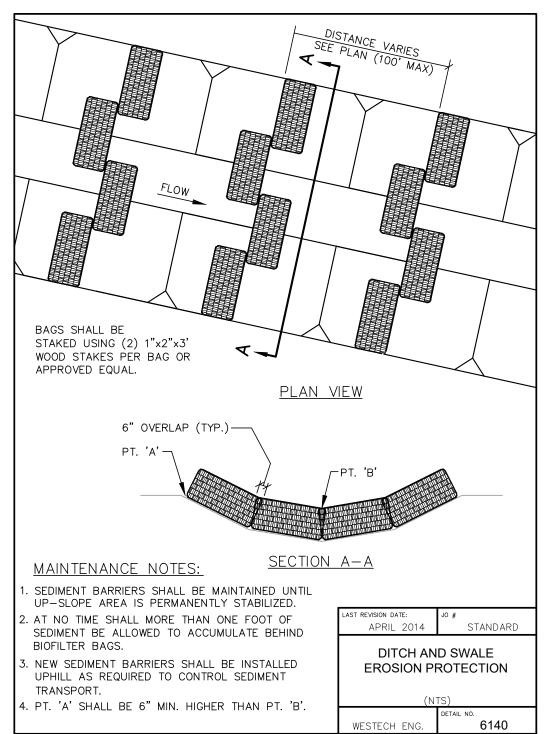
MAY 2013

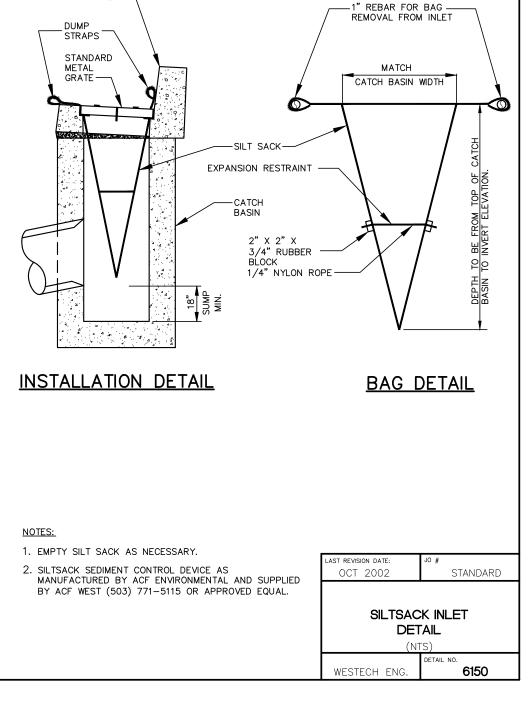


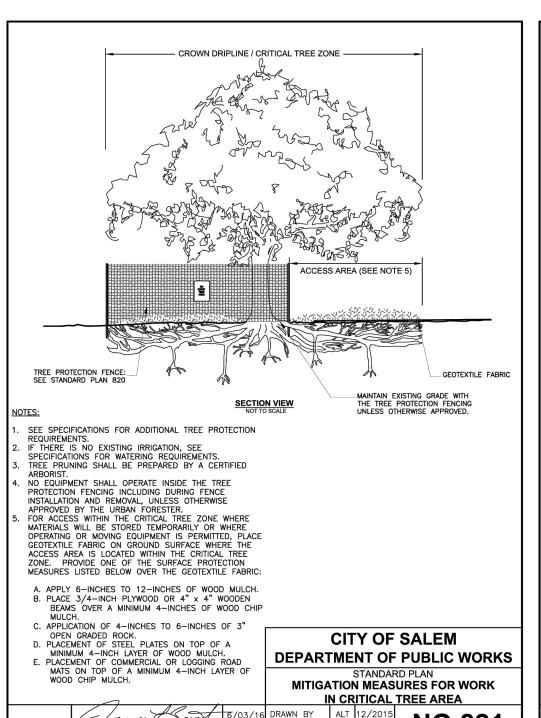
CURB & GUTTER -

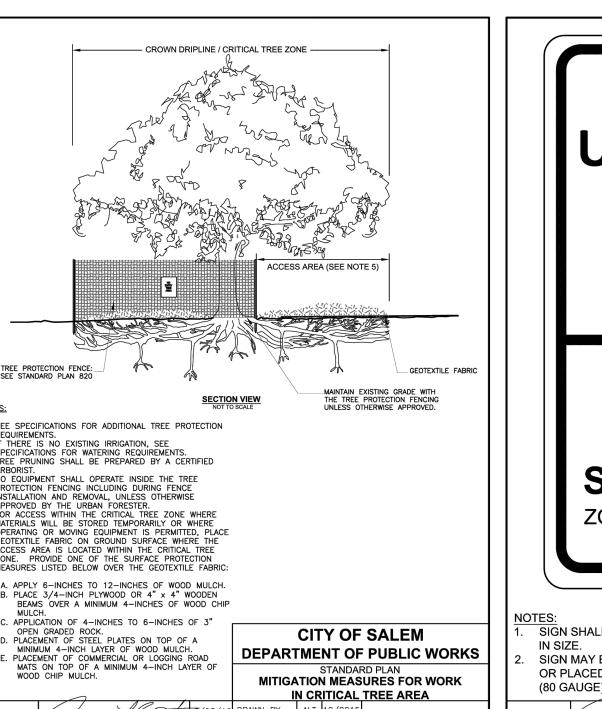






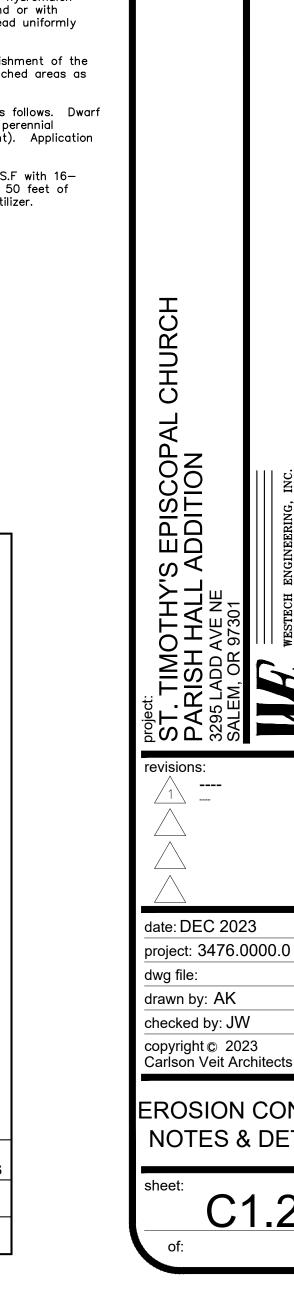






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Division 007 Appendix A-EPSC Plan Standard Notes

(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
- (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 cleanout 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.

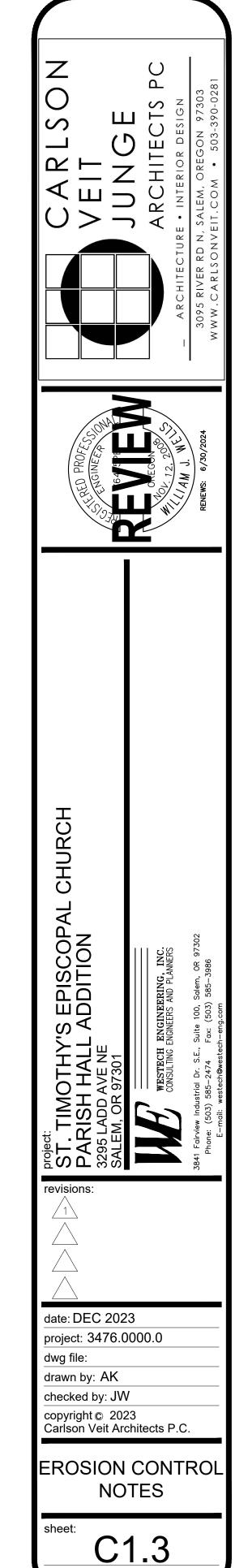
(q) INACTIVE CONSTRUCTION PERIODS AND POST-CONSTRUCTION

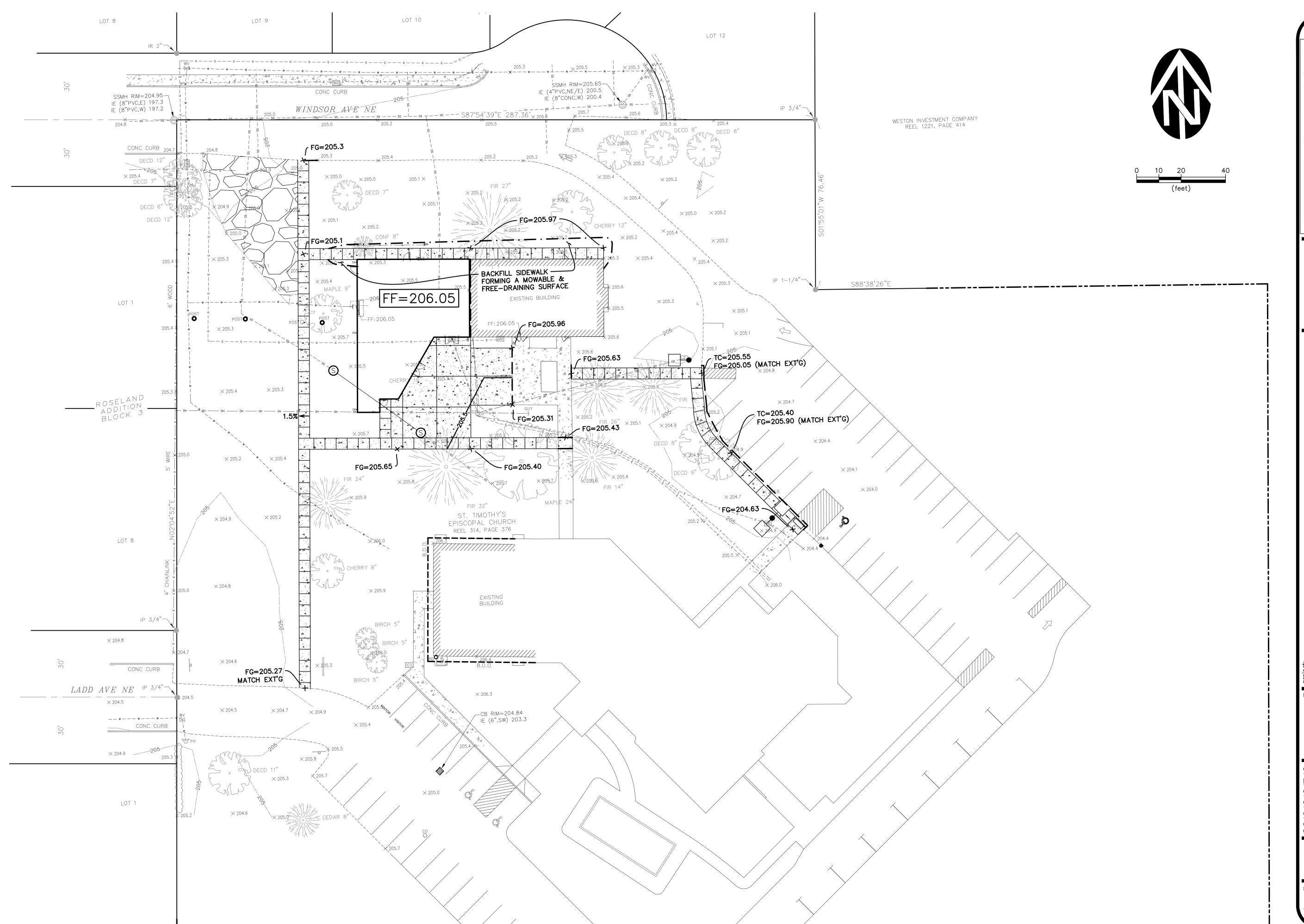
- (1). Should work cease in any area for 14 days, the inactive area must be stabilized with appropriate soil stabilization BMPs. If all construction activity ceases the entire site must be temporarily stabilized using vegetation, heavy mulch layer, temporary seeding, or other method.
- (2). All temporary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

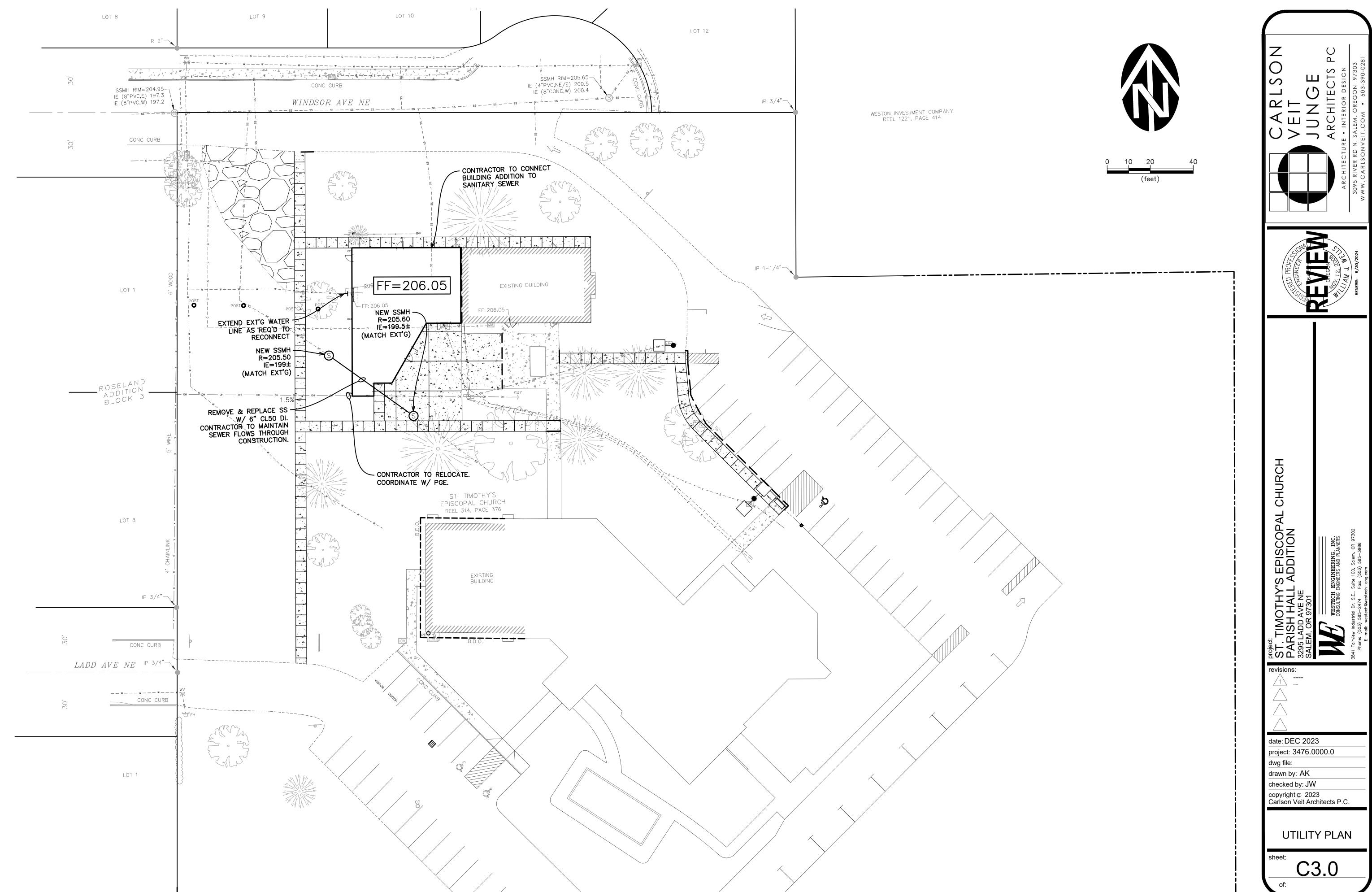
- (1). Soil preparation. Topsoil should be prepared according to the landscape plans, if available, or recommendations of the grass seed supplier. Slopes shall be textured before seeding by rack walking (i.e., driving a crawling tractor up and down the slopes to leave a pattern of cleat imprints parallel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

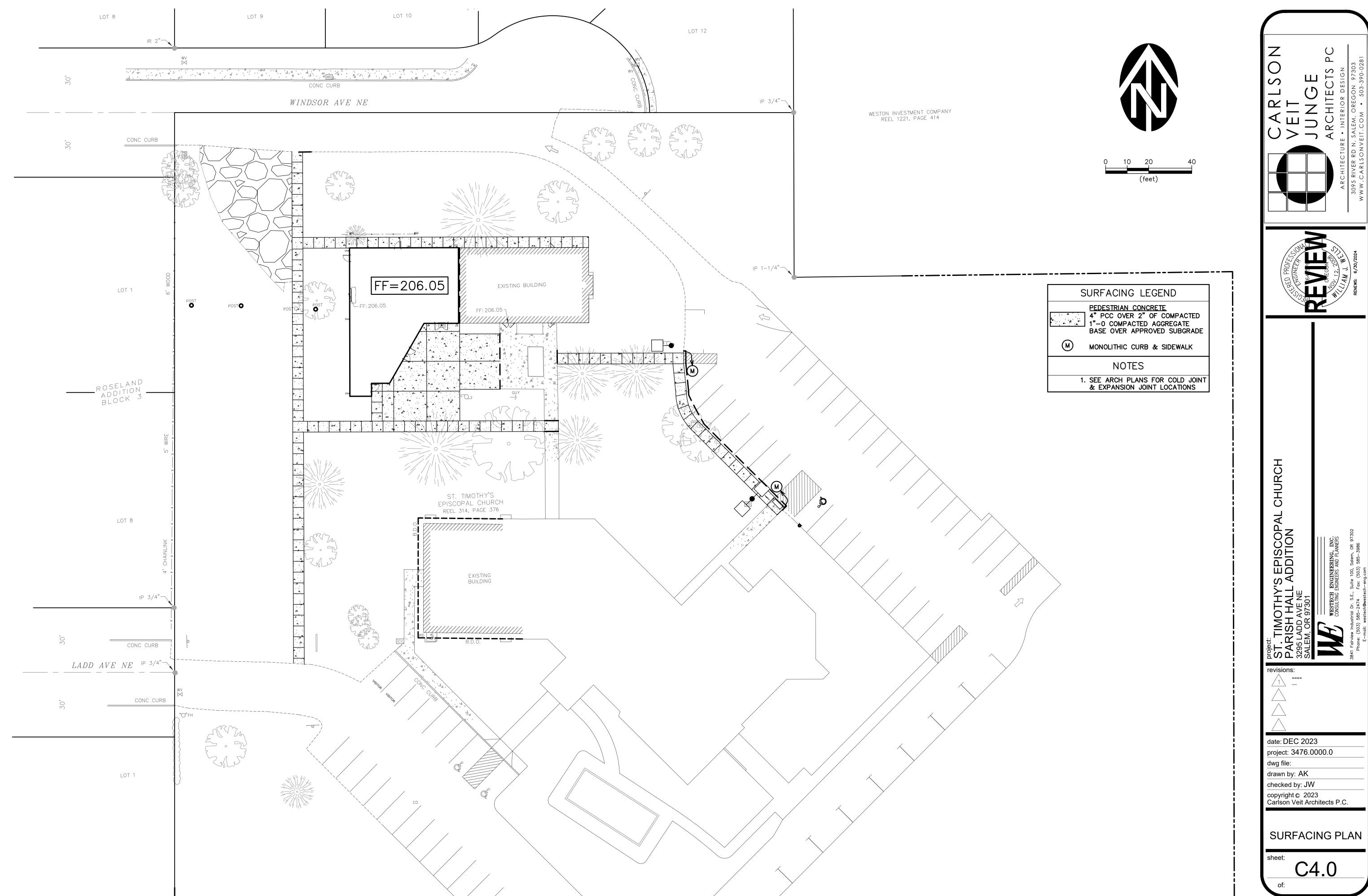
- (4). The application rate of fertilizers used to reestablish vegetation shall follow manufacturer's recommendations. Nutrient releases from fertilizers to surface waters shall be minimized. Time release fertilizers shall be used. Care shall be made in the application of fertilizers within any waterway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





CHURCH IMOTHY'S EPISCOPA SH HALL ADDITION revisions: date: DEC 2023 project: 3476.0000.0 drawn by: AK checked by: JW copyright © 2023 Carlson Veit Architects P.C. **GRADING &** DRAINAGE PLAN





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 notice prior to the required payment of fees or costs.
- 3. Oregon law requires the Contractor to follow rules adopted by the Oregon Utility 24. The Contractor shall be responsible for managing construction activities to ensure 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 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 26. Unless otherwise noted, all grading, rocking and paving to conform to Oregon 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 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
- 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 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.

- 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 oublic right-of-way, Contractor shall submit final traffic con 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 39. All existing or constructed manholes, cleanouts, monument boxes, gas valves, water 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 40. Unless otherwise shown on the drawings, no cut or fill slopes shall be constructed 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) 41. Unless otherwise shown on the landscape plans, all planter areas, shall be 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. 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 45. Road widening design is based on available survey taken at random intervals. 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.

- 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., Approving Agency to determine appropriate fees and provide the Owner with 48 hours as required to avoid damage during construction and replace them to existing or 50. All sidewalks shall be ADA compliant. Direction of sidewalk cross slope shall better condition.
 - that public streets and right-of-ways are kept clean of mud, dust or debris. Dust

GRADING, PAVING & DRAINAGE:

- business hours (2 business days) prior to start of construction, and comply with 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.
 - 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 57. Contractor shall arrange to abandon existing sewer and water services not (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 lifts 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
 - 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 64. City forces to operate all valves, including fire hydrants, on existing public between all finish grade elevations and/or finish contour lines shown (exception: where grades are 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.
 - 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.
 - steeper than 3H:1V.
 - 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 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.
- Contractor shall field verify locations and sizes of all existing utilities prior 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 72. Domestic and fire backflow prevention devices and vaults shall conform to Contractor shall notify the Owner's Representative in writing of any grade discrepancies or problems prior to curb placement.
 - Street pavement widening cross slope shall be a minimum of 2% and a maximum of 5% 73. Contractor shall provide all necessary equipment and materials (including plugs, except at intersections, where the street cross slopes shall not exceed 2% 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) 00440.40.d & 00756.40 or the project specifications, whichever is more stringent.

- 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.
- 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 77. After the pressure test and prior to disinfecting, the water lines shall be
- abatement shall be maintained by adequate watering of the site by the Contractor. 51. Where trench excavation requires removal of PCC curbs and/or sidewalks, the curbs 78. Disinfection & Bacteriological Testing. All water mains and service lines shall 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 79. Disinfection of Connections. For connections which cannot be disinfected with the 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 80. Storm sewer pipe materials shall conform to the construction drawings and per AASHTO T-180 test method (Modified Proctor).
- 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
- 60. All non-metallic water, sanitary and storm sewer piping shall have an electrically 82. Catch basins and junction boxes shall be set square with buildings or with the 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 85. Sweep (deflect) storm sewer pipe into catch basins and manholes as required. normal traffic and pedestrian flows restored.
- staking of these critical improvements is prohibited. The registered professional 35. HMAC mixtures shall be placed only when the surface is dry and weather conditions 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 & 86. Unless otherwise shown or directed, install storm sewer pipe in accordance with 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.

- 65. All water mains shall be Class 52 ductile iron or C-900 PVC (DR 18).
- 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.
- backfilled with approved topsoil minimum 8" thick. Stripping materials shall not 69. Thrust restraint shall be provided on all bends, tees and other direction changes 90. Prior to acceptance, the Owner's Representative may lamp storm lines upstream & 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.
- fail to germinate, the Owner's Representative may (at his discretion) require the 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 FRANCHISE & PRIVATE UTILITIES: 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.
 - 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.
 - blowoffs, valves, service taps, etc.) required to flush, test and disinfect waterlines per the Approving Agency requirements.
 - 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
 - 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.

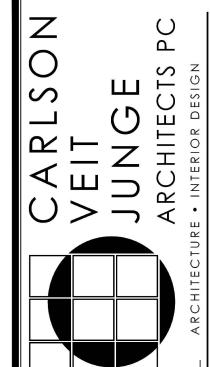
- 22. Utilities or interfering portions of utilities that are abandoned in place shall 49. Contraction joints shall be installed directly over any pipes that cross under the 76. All waterlines, services and appurtenances shall be pressure tested for leakage. All testing shall conform to requirements 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.
 - thoroughly flushed through hydrants, blow offs or by other approved means.
 - be chlorine 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.
 - 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:

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.
- 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
- 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.
- Maximum joint deflection shall not exceed 5 degrees or manufacturers recommendations, whichever is less.
- 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.
- 66. All fittings 4-inches through 24-inches in diameter shall be ductile iron fittings 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.
 - 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.

- 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.
- 74. The work shall be performed in a manner designated to maintain water service to 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,



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revisions:

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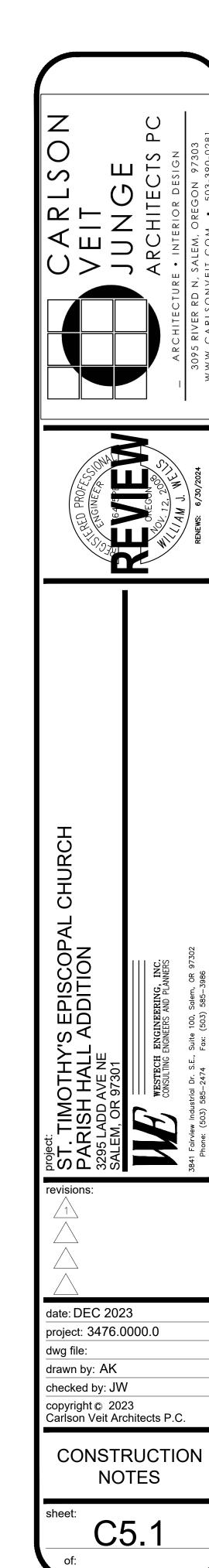
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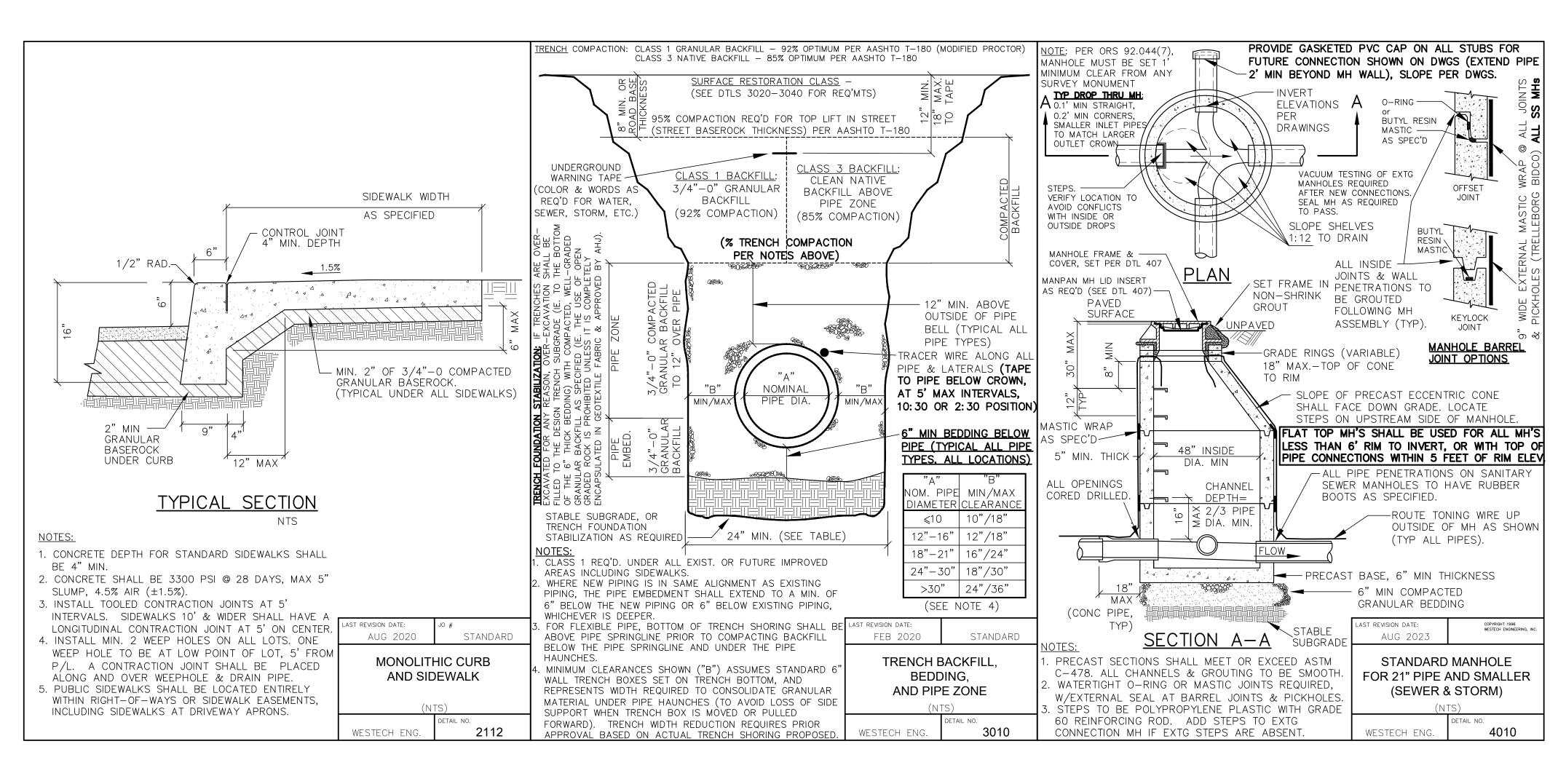
CONSTRUCTION

Carlson Veit Architects P.C.

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| Contractor to | TESTING AND FREQUENCY TABLE | Party | / Responsible f | or payment |
|--|---|--|--|--|
| | notify Owner's Representative prior to all testing, r's Representative to be present if desired. | (| Contractor | Others (see note 1 |
| Streets, Fire La | nes, Common Driveways, Parking Lots, Pads | , Fills | s, etc. | |
| Subgrade | 1 Test/4000 S.F./Lift (4 min), locations acceptable to approving agency (typically alternate sides of road or access aisles) | 1 | See note 2 & note 3 | |
| Engineered Fills | Test/4000 S.F./Lift (4 min), locations acceptable to approving agency | 1 | See note 2 & note 5 | |
| Baserock | 1 Test/4000 S.F./Lift (4 min), locations acceptable to approving agency (typically alternate sides of road or access aisles) | 1 | 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 Res | toration 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 Residu | al Test Per City Requirements | √ | | |
| Sanitary Sewer | | | | |
| Air Test | Per City or APWA Requirements, | | Can make 4 | |
| All Test | 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 | √ | | |
| | | 1 | | |
| Manhole | (1) Vacuum test per manhole, witnessed by Owner's Representative or approving agency | √ | See note 2 | |
| Manhole Concrete, Block | Ówner's Representative or approving agency | ✓ | See note 2 | |
| Concrete, Block Slump, Air & C equipment slabs otherwise speci- (or portion the | Ówner's Representative or approving agency | √ | See note 2 | |
| Concrete, Block Slump, Air & C equipment slabs otherwise speci- (or portion ther Slump & air te | Owner's Representative or approving agency , etc. ylinders for structural & reinforced concrete, s, curbs, sidewalks & PCC pavements. Unless fied, one set of cylinders per 100 cubic yards reof) of each class of concrete placed per day | Appro | See note 2 | |
| Concrete, Block Slump, Air & C equipment slabs otherwise speci- (or portion ther Slump & air te Note 1: "Others" r applicable. completed | Owner's Representative or approving agency , etc. ylinders for structural & reinforced concrete, s, curbs, sidewalks & PCC pavements. Unless fied, one set of cylinders per 100 cubic yards reof) of each class of concrete placed per day sts required on same load as cylinders. efers to Owner's authorized Representative or Contractor responsible for scheduling testing. | Appro | See note 2 ving Agency (sesting must | |
| Concrete, Block Slump, Air & C equipment slabs otherwise speci- (or portion ther Slump & air te Note 1: "Others" r applicable. completed Note 2: Testing mu Note 3: In addition rolled with proofroll shall be Location | Owner's Representative or approving agency , etc. ylinders for structural & reinforced concrete, s, curbs, sidewalks & PCC pavements. Unless fied, one set of cylinders per 100 cubic yards reof) of each class of concrete placed per day sts required on same load as cylinders. efers to Owner's authorized Representative or Contractor responsible for scheduling testing. prior to performing subsequent work. | Appro All 1 g labo d base Con 4 hou | See note 2 ving Agency of testing must ratory. see rock shall tractor. Base ars of) paving or approving | be proof— rock g, and agency. |
| Concrete, Block Slump, Air & C equipment slabs otherwise speci- (or portion ther Slump & air te Note 1: "Others" r applicable. completed Note 2: Testing mu Note 3: In addition rolled with proofroll shall be Location Owner's a Note 4: To be wi shall per | Owner's Representative or approving agency , etc. ylinders for structural & reinforced concrete, s, curbs, sidewalks & PCC pavements. Unless fied, one set of cylinders per 100 cubic yards reof) of each class of concrete placed per day sts required on same load as cylinders. efers to Owner's authorized Representative or Contractor responsible for scheduling testing, prior to performing subsequent work. Ist be performed by an approved independent testing on a loaded 10 yard dump truck provided by the shall take place immediately prior to (within 2 witnessed by the Owner's authorized Representant pattern of testing and proofroll to be as contractors. | Appro Appro All the g labo d base e Con 24 hou cative approv | See note 2 ving Agency of the section of the secti | be proof— rock g, and agency. ed by said Contractor |





ш date: DEC 2023

project: 3476.0000.0

drawn by: AK checked by: JW copyright © 2023 Carlson Veit Architects P.C.

CONSTRUCTION **DETAILS**