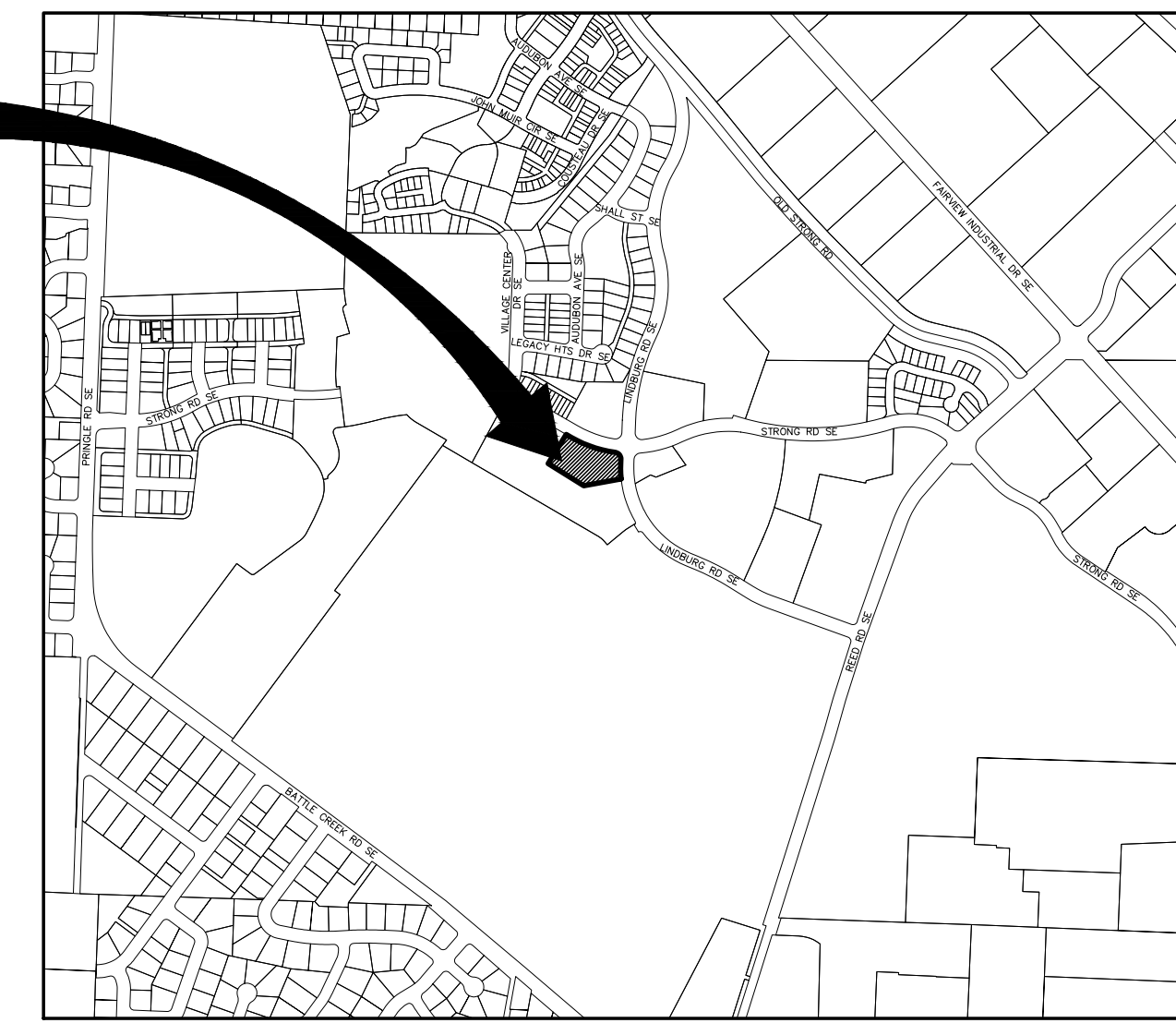


DRAWINGS FOR: FAIRVIEW RETAIL BUILDING SITE IMPROVEMENTS SE CORNER OF STRONG RD SE & LINDBURG RD SE SALEM, OR 97302

FOR:
STUDIO 3 ARCHITECTURE
275 COUR ST NE
SALEM, OR 97301
503.390.6500

PROJECT LOCATION.



VICINITY MAP



Know what's below.
Call before you dig.

SHEET INDEX	
#	TITLE
C0.0	COVER SHEET, INDEX, & VICINITY MAP
C1.0	EROSION CONTROL PLAN - DEMOLITION & CLEARING
C1.1	EROSION CONTROL PLAN - STREETS & UTILITIES
C1.2	EROSION CONTROL PLAN - VERTICAL CONSTRUCTION
C1.3	EROSION CONTROL PLAN - FINAL LANDSCAPING & STABILIZATION
C1.4	EROSION CONTROL NOTES
C1.5	EROSION CONTROL NOTES
C1.6	EROSION CONTROL DETAILS
C2.0	GRADING & DRAINAGE PLAN
C3.0	UTILITY PLAN
C4.0	SURFACING PLAN
C5.0	CONSTRUCTION NOTES
C6.0	CONSTRUCTION DETAILS

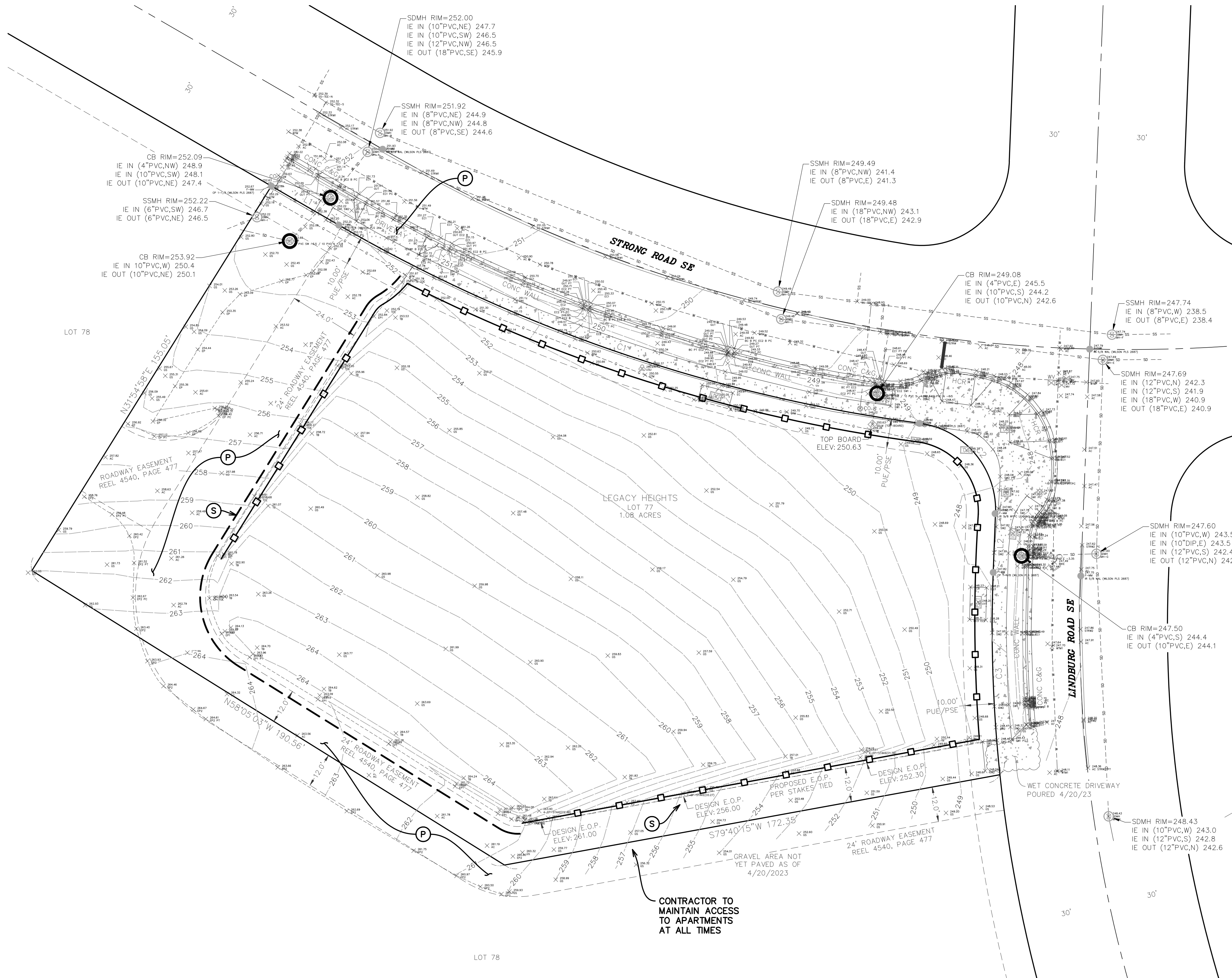
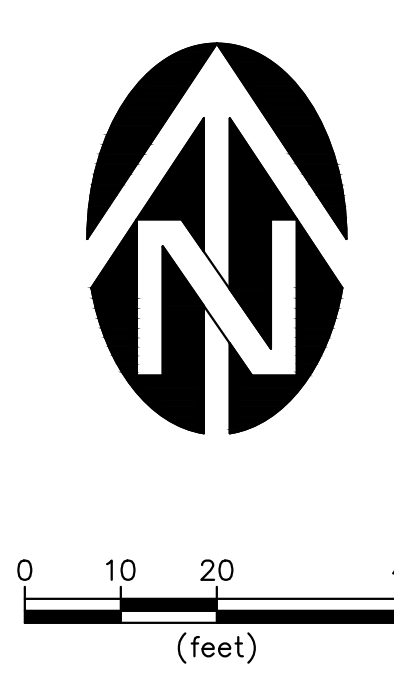
ITEM	PROPOSED	EXISTING	ITEM	PROPOSED	EXISTING
SANITARY SEWER	SS	SS	BARRICADE	[Symbol]	[Symbol]
STORM DRAIN	SD	SD	FLOW DIRECTION	[Symbol]	[Symbol]
WATER	W	W	TELEPHONE MANHOLE	[Symbol]	[Symbol]
GAS	G	G	TELEPHONE PEDESTAL	[Symbol]	[Symbol]
TELEPHONE	T	T	SANITARY SEWER MANHOLE	[Symbol]	[Symbol]
POWER	P	P	STORM DRAIN MANHOLE	[Symbol]	[Symbol]
TELEVISION	Tv	Tv	CATCH BASIN	[Symbol]	[Symbol]
FENCE	X	X	JUNCTION BOX	[Symbol]	[Symbol]
RAILROAD	[Symbol]	[Symbol]	FIRE HYDRANT AND VALVE	[Symbol]	[Symbol]
CURB, DRIVEWAY, P.C.C. SIDEWALK	[Symbol]	[Symbol]	WATER METER	[Symbol]	[Symbol]
HEDGE OR BRUSH	[Symbol]	[Symbol]	WATER VALVE	[Symbol]	[Symbol]
TREES	[Symbol]	[Symbol]	POWER POLE	[Symbol]	[Symbol]
STREET OR ALLEY RIGHT OF WAY	[Symbol]	[Symbol]	POWER POLE W/ANCHOR	[Symbol]	[Symbol]
PLATTED LOT LINE	[Symbol]	[Symbol]	POLE W/LUMINAIRE	[Symbol]	[Symbol]
PLATTED LOT LINE (ABANDONED)	[Symbol]	[Symbol]	LIGHT POLE	[Symbol]	[Symbol]
OWNERSHIP LINE	[Symbol]	[Symbol]	SIGN POST	[Symbol]	[Symbol]
EASEMENT OR TEMPORARY RIGHT OF WAY	[Symbol]	[Symbol]	MAILBOX	[Symbol]	[Symbol]
IMPROVEMENT DISTRICT BOUNDARY	[Symbol]	[Symbol]	TRAFFIC SIGNAL	[Symbol]	[Symbol]
PROJECT CENTERLINE AND STATIONING	2 3 4 5+00		X-WALK SIGNAL	[Symbol]	[Symbol]
CITY LIMITS LINE	[Symbol]	[Symbol]			

LEGEND

[Symbol]	FOUND MONUMENT
[Symbol]	STORM DRAIN MANHOLE
[Symbol]	CATCH BASIN ROUND
[Symbol]	SANITARY SEWER MANHOLE
[Symbol]	CLEANOUT
[Symbol]	WATER VALVE
[Symbol]	IRRIGATION VALVE
[Symbol]	ELECTRICAL BOX
[Symbol]	LIGHT POLE
[Symbol]	UTILITY STUB UP
[Symbol]	UTILITY VAULT
[Symbol]	COMMUNICATION BOX
[Symbol]	GAS RISER
[Symbol]	SIGN
[Symbol]	STORM DRAIN LINE MARKER
[Symbol]	CONCRETE
[Symbol]	GRAVEL
[Symbol]	ASPHALT
[Symbol]	SEWER LINE UNDERGROUND
[Symbol]	STORM LINE UNDERGROUND
[Symbol]	WATERLINE UNDERGROUND
[Symbol]	GAS LINE UNDERGROUND
[Symbol]	CONC
[Symbol]	EDGE OF PAVEMENT
[Symbol]	HCR
[Symbol]	C&G
[Symbol]	PUE
[Symbol]	PSE

NOTES

1. BASIS OF BEARINGS AND COORDINATE SYSTEM IS BASED ON OREGON STATE PLANE NORTH ZONE, 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 "2098". MARK IS A 2" ALUMINUM DISK IN THE CURB ON THE EAST SIDE OF BATTLE CREEK ROAD SE IN BETWEEN KUEBLER BOULEVARD SE AND BOONE ROAD SE. ELEVATION = 369.46' (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. 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 APRIL, 2023.



EROSION CONTROL LEGEND	
	SILT SACK
	SILT FENCE
DEMOLITION LEGEND	
	PROTECT
	SAWCUT
	REMOVE
NOTES	
1. NO CONCRETE WASHOUT ALLOWED ON SITE	
2. NO STOCKPILING ALLOWED ON SITE	

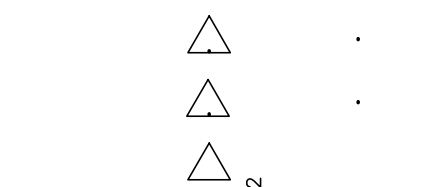
CONTRACTOR TO MAINTAIN ACCESS TO APARTMENTS AT ALL TIMES



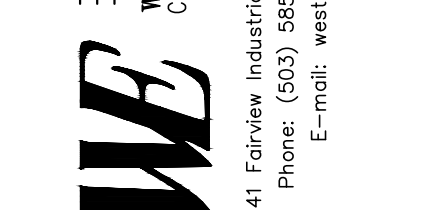
RENEWS: 6/30/2024
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PROJECT #3492.0000.0
DATE: 01/24
DRAWN BY: AK
CHECKED BY: JW

REVISIONS: A

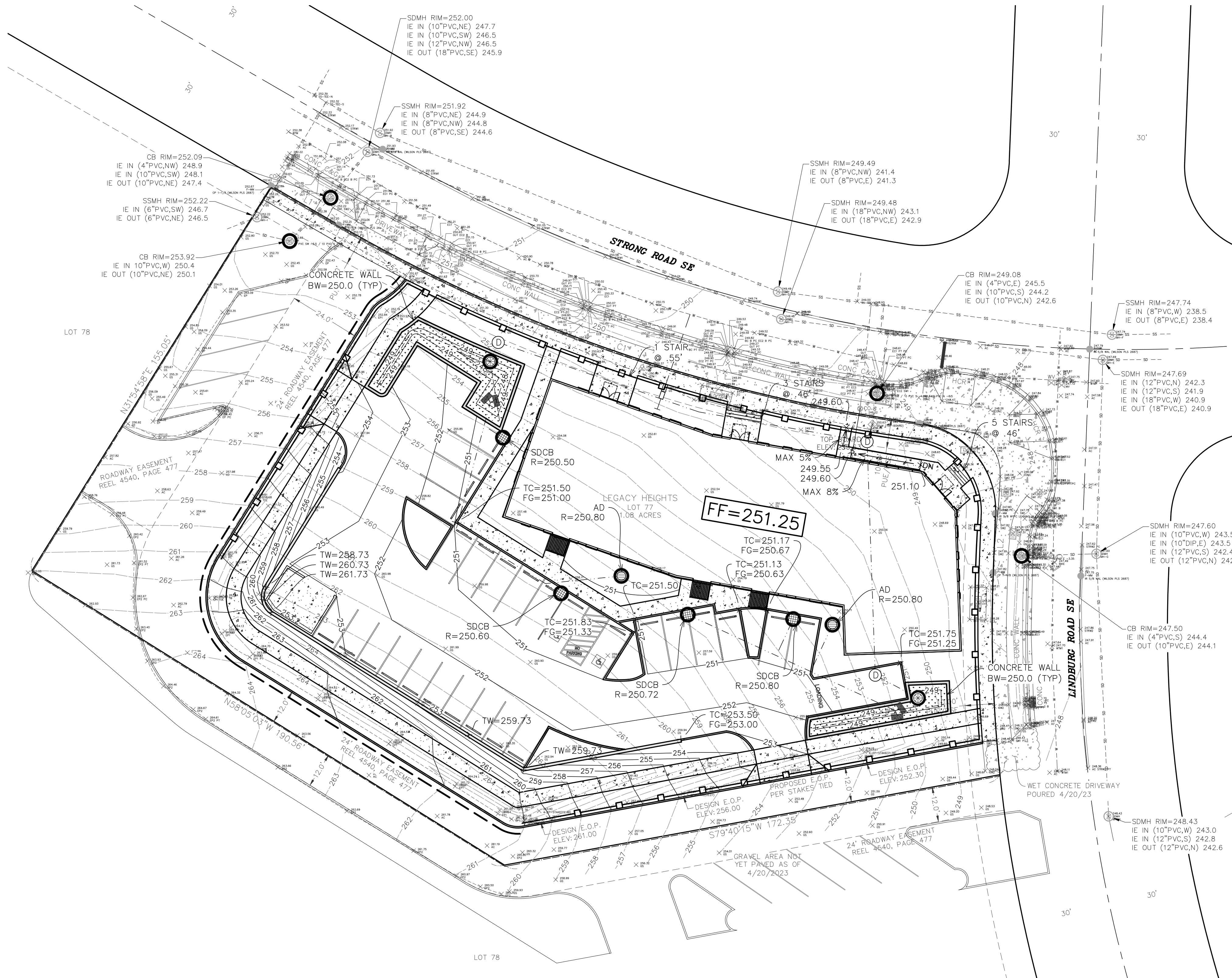
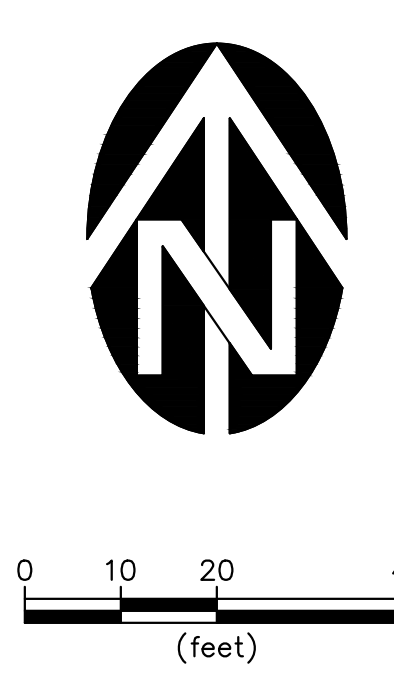


WESTTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS
3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302
Phone: (503) 585-2474 Fax: (503) 585-3986
E-mail: westtech@westtech-eng.com



NEW RETAIL BUILDING:
STRONG RD SE
SALEM, OR
STRONG RD SE & LINDBURG RD SE

SHEET:
C1.1
EROSION CONTROL
PLAN - STREETS &
UTILITIES

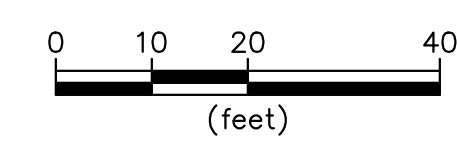


EROSION CONTROL LEGEND

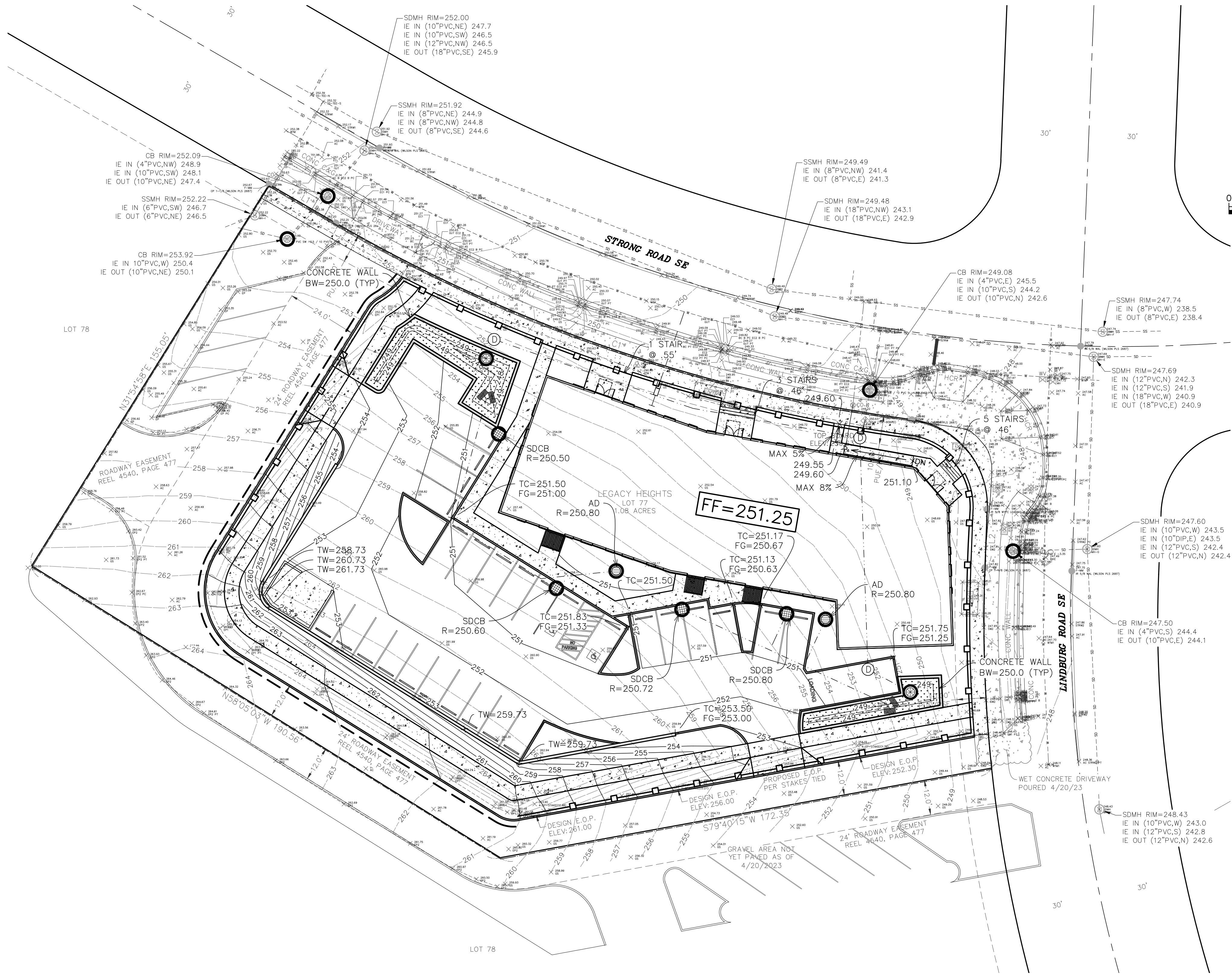
- SILT SACK
- BIOBAG
- SILT FENCE

NOTES

- NO CONCRETE WASHOUT ALLOWED ON SITE
- NO STOCKPILING ALLOWED ON SITE



EROSION CONTROL LEGEND	
	SILT SACK
	BIOBAG
	SILT FENCE
NOTES	
1. NO CONCRETE WASHOUT ALLOWED ON SITE	
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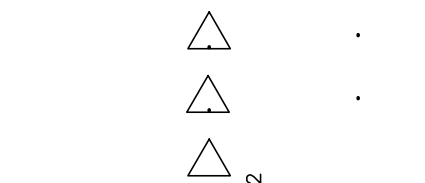




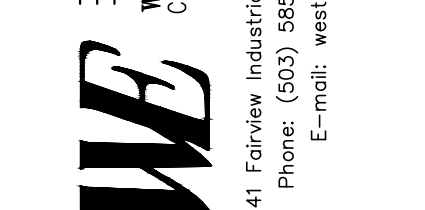
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PROJECT # 3492.0000.0
DATE: 01/24
DRAWN BY: AK
CHECKED BY: JW

REVISIONS:



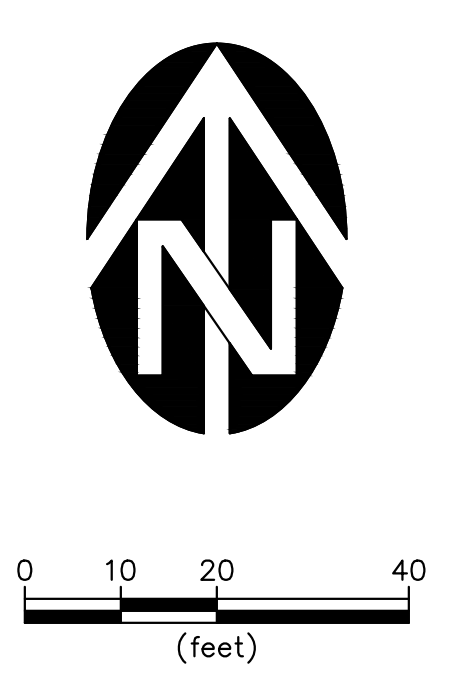
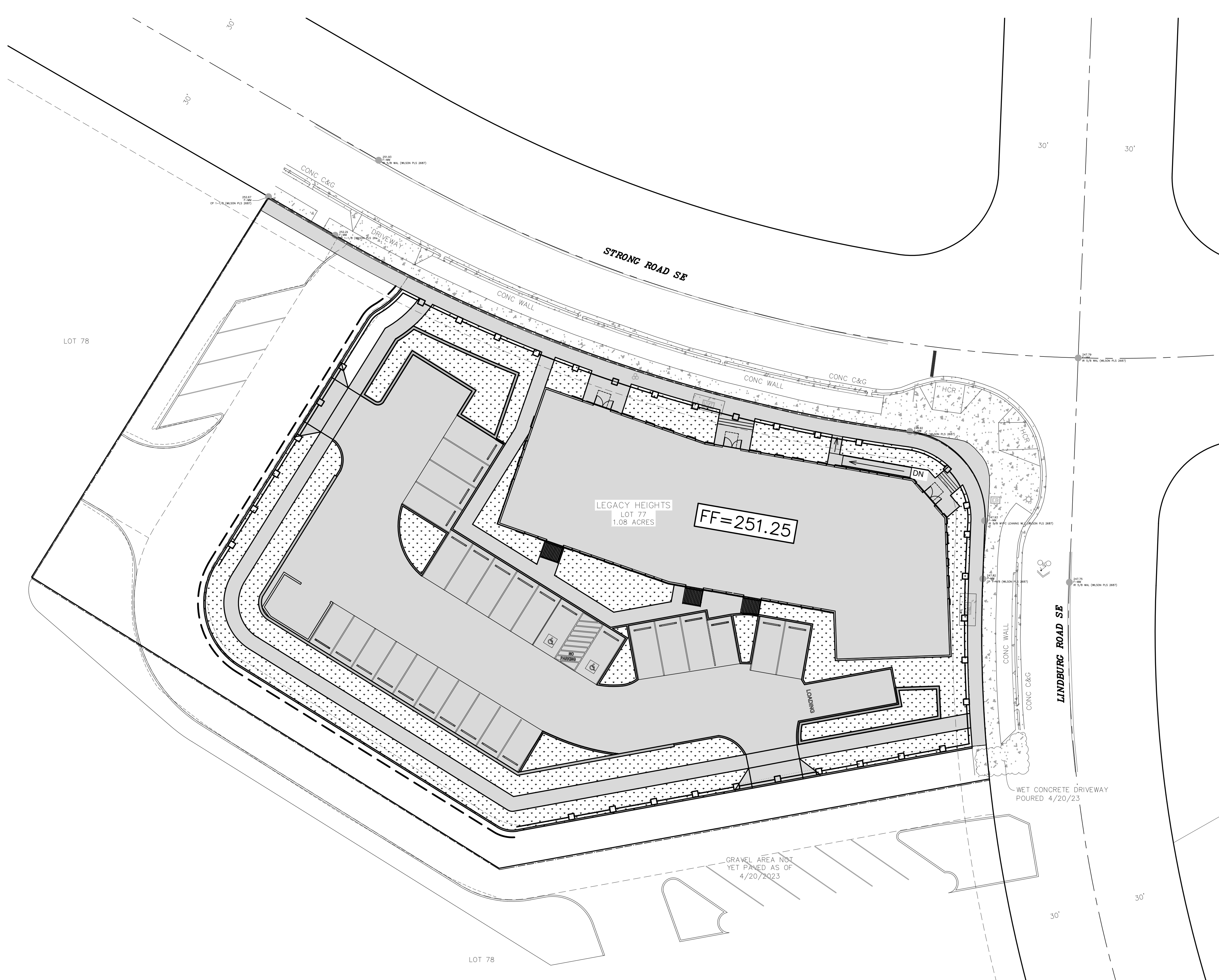
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NEW RETAIL BUILDING:
STRONG RD SE
SALEM, OR
STRONG RD SE & LINDBURG RD SE

SHEET:
C1.3
EROSION CONTROL PLAN
- FINAL LANDSCAPING &
STABILIZATION

SURFACING LEGEND	
	NW IMPERVIOUS AREA
	IF NOT SHOWN TO BE LANDSCAPED, CONTRACTOR TO HYDROSEED.





ARCHITECTURE INCORPORATED

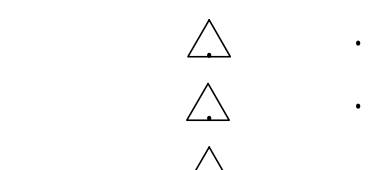
222 COMMERCIAL ST. NE SALEM, OR 97301-3410 P: 503.390.6500 F: 503.390.6501 www.studio3architecture.com



RENEWS: 6/30/2024 IN THE EVENT CONFLICTS ARE DISCOVERED BETWEEN THE ORIGINAL SIGNED AND SEALED DOCUMENTS PREPARED BY THE ARCHITECTS AND/OR THEIR CONSULTANTS, AND ANY COPY OF THE DOCUMENTS TRANSMITTED BY MAIL, FAX, ELECTRONICALLY OR OTHERWISE, THE ORIGINAL SIGNED AND SEALED DOCUMENTS SHALL GOVERN.

PROJECT #3492.0000.0 DATE: 01/24 DRAWN BY: AK CHECKED BY: JW

REVISIONS: 1



WESTTECH ENGINEERING, INC. CONSULTING ENGINEERS AND PLANNERS 3841 Fairview Industrial Dr. S.E. Suite 100, Salem, OR 97302 Phone: (503) 585-2474 Fax: (503) 585-3986 E-mail: westtech@westtech-eng.com



NEW RETAIL BUILDING: STRONG RD SE SALEM, OR STRONG RD SE & LINDBURG RD SE

SHEET: C1.4 EROSION CONTROL NOTES

DEQ EROSION CONTROL STANDARD NOTES:

- 1. Include a list of all personnel (by name and position) that are responsible for the design, installation and maintenance of stormwater control measures (e.g. ESCP developer, BMP installer (see Section 4.10), as well as their individual responsibilities. (Section 4.4.c.ii)
2. Visual monitoring inspection reports must be made in accordance with DEQ 1200-C permit requirements. (Section 6.5)
3. Inspection logs must be kept in accordance with DEQ's 1200-C permit requirements. (Section 6.5.q)
4. Retain a copy of the ESCP and all revisions on site and make it available on request to DEQ, Agent, or the local municipality. (Section 4.7)
5. The permit registrant must implement the ESCP. Failure to implement any of the control measures or practices described in the ESCP is a violation of the permit. (Sections 4 and 4.11)
6. The ESCP must be accurate and reflect site conditions. (Section 4.8)
7. Submission of all ESCP revisions is not required. Submittal of the ESCP revisions is only under specific conditions. Submit all necessary revision to DEQ or Agent within 10 days. (Section 4.9)
8. Sequence clearing and grading to the maximum extent practical to prevent exposed inactive areas from becoming a source of erosion. (Section 2.2.2)
9. Create smooth surfaces between soil surface and erosion and sediment controls to prevent stormwater from bypassing controls and ponding. (section 2.2.3)
10. Identify, mark, and protect (by construction fencing or other means) critical riparian areas and vegetation including important trees and associated rooting zones, and vegetation areas to be preserved. Identify vegetative buffer zones between the site and sensitive areas (e.g., wetlands), and other areas to be preserved, especially in perimeter areas. (Section 2.2.1)
11. Preserve existing vegetation when practical and re-vegetate open areas. Re-vegetate open areas when practicable before and after grading or construction. Identify the type of vegetative seed mix used. (Section 2.2.5)
12. Maintain and delineate any existing natural buffer within the 50-foot of waters of the state. (Section 2.2.4)
13. Install perimeter sediment control, including storm drain inlet protection as well as all sediment basins, traps, and barriers prior to land disturbance. (Sections 2.1.3)
14. Control both peak flow rates and total stormwater volume, to minimize erosion at outlets and downstream channels and streambanks. (Sections 2.1.1. and 2.2.16)
15. Control sediment as needed along the site perimeter and at all operational internal storm drain inlets at all times during construction, both internally and at the site boundary. (Sections 2.2.6 and 2.2.13)
16. Establish concrete truck and other concrete equipment washout areas before beginning concrete work. (Section 2.2.14)
17. Apply temporary and/or permanent soil stabilization measures immediately on all disturbed areas as grading progresses. Temporary or permanent stabilizations measures are not required for areas that are intended to be left unvegetated, such as dirt access roads or utility pole pads. (Sections 2.2.20 and 2.2.21)
18. Establish material and waste storage areas, and other non-stormwater controls. (Section 2.3.7)
19. Keep waste container lids closed when not in use and close lids at the end of the business day for those containers that are actively used throughout the day. For waste containers that do not have lids, provide either (1) cover (e.g., a tarp, plastic sheeting, temporary roof) to prevent exposure of wastes to precipitation, or (2) a similarly effective means designed to prevent the discharge of pollutants (e.g., secondary containment). (Section 2.3.7)
20. Prevent tracking of sediment onto public or private roads using BMPs such as: construction entrance, graveled (or paved) exits and parking areas, gravel all unpaved roads located onsite, or use an exit tire wash. These BMPs must be in place prior to land-disturbing activities. (Section 2.2.7)
21. When trucking saturated soils from the site, either use water-tight trucks or drain loads on site. (Section 2.2.7.f)
22. Control prohibited discharges from leaving the construction site, i.e., concrete wash-out, wastewater from cleanout of stucco, paint and curing compounds. (Sections 1.5 and 2.3.9)
23. Ensure that steep slope areas where construction activities are not occurring are not disturbed. (Section 2.2.10)
24. Prevent soil compaction in areas where post-construction infiltration facilities are to be installed. (Section 2.2.12)
25. Use BMPs to prevent or minimize stormwater exposure to pollutants from spills; vehicle and equipment fueling, maintenance, and storage; other cleaning and maintenance activities; and waste handling activities. These pollutants include fuel, hydraulic fluid, and other oils from vehicles and machinery, as well as debris, fertilizer, pesticides and herbicides, paints, solvents, curing compounds and adhesives from construction operations.(Sections 2.2.15 and 2.3)
26. Provide plans for sedimentation basins that have been designed per Section 2.2.17 and stamped by an Oregon Professional Engineer. (See Section 2.2.17.a)
27. If engineered soils are used on site, a sedimentation basin/impoundment must be installed. (See Sections 2.2.17 and 2.2.18)
28. Provide a dewatering plan for accumulated water from precipitation and uncontaminated groundwater seepage due to shallow excavation activities. (See Section 2.4)
29. Implement the following BMPs when applicable: written spill prevention and response procedures, employee training on spill prevention and proper disposal procedures, spill kits in all vehicles, regular maintenance schedule for vehicles and machinery, material delivery and storage controls, training and signage, and covered storage areas for waste and supplies. (Section 2.3)
30. Use water, soil-binding agent or other dust control technique as needed to avoid wind-blown soil. (Section 2.2.9)
31. The application rate of fertilizers used to reestablish vegetation must follow manufacturer's recommendations to minimize nutrient releases to surface waters. Exercise caution when using time-release fertilizers within any waterway riparian zone. (Section 2.3.5)
32. If an active treatment system (for example, electro-coagulation, flocculation, filtration, etc.) for sediment or other pollutant removal is employed, submit an operation and maintenance plan (including system schematic, location of system, location of inlet, location of discharge, discharge dispersion device design, and a sampling plan and frequency) before operating the treatment system. Obtain Environmental Management Plan approval from DEQ before operating the treatment system. Operate and maintain the treatment system according to manufacturer's specifications. (Section 1.2.9)
33. Temporarily stabilize soils at the end of the shift before holidays and weekends, if needed. The registrant is responsible for ensuring that soils are stable during rain events at all times of the year. (Section 2.2)
34. As needed based on weather conditions, at the end of each workday soil stockpiles must be stabilized or covered, or other BMPs must be implemented to prevent discharges to surface waters or conveyance systems leading to surface waters. (Section 2.2.8)
35. Sediment fence: remove trapped sediment before it reaches one third of the above ground fence height and before fence removal. (Section 2.1.5.b)
36. Other sediment barriers (such as biobags): remove sediment before it reaches two inches depth above ground height and before BMP removal. (Section 2.1.5.c)
37. Catch basins: clean before retention capacity has been reduced by fifty percent. Sediment basins and sediment traps: remove trapped sediments before design capacity has been reduced by fifty percent and at completion of project. (Section 2.1.5.d)
38. Within 24 hours, significant sediment that has left the construction site, must be remediated. Investigate the cause of the sediment release and implement steps to prevent a recurrence of the discharge within the same 24 hours. Any in-stream clean-up of sediment shall be performed according to the Oregon Department of State Lands required timeframe. (Section 2.2.19.a)
39. The intentional washing of sediment into storm sewers or drainage ways must not occur. Vacuuming or dry sweeping and material pickup must be used to cleanup released sediments. (Section 2.2.19)
40. Document any portion(s) of the site where land disturbing activities have permanently ceased or will be temporarily inactive for 14 or more calendar days. (Section 6.5.f.)
41. Provide temporary stabilization for that portion of the site where construction activities cease for 14 days or more with a covering of blown straw and a tackifier, loose straw, or an adequate covering of compost mulch until work resumes on that portion of the site. (Section 2.2.20)
42. Do not remove temporary sediment control practices until permanent vegetation or other cover of exposed areas is established. Once construction is complete and the site is stabilized, all temporary erosion controls and retained soils must be removed and disposed of properly, unless needed for long term use following termination of permit coverage. (Section 2.2.21)

Rev. 12/15/20 By: Blair Edwards

Table with columns for YEAR/MONTH and months '24 05 through '25 04. Rows include CLEARING, EXCAVATION, GRADING, CONSTRUCTION, and various SEDIMENT CONTROLS like Silt Fencing, Sediment Traps, etc.

Table with columns for CONTROL MEASURE and PHASE 1 through PHASE 5. Rows include Silt Fencing, Construction Entrance, Sediment Traps, Storm Inlet Protection, etc.

BMP Rationale: A comprehensive list of available Best Management Practices (BMP) options based on DEQ's 1200-C Permit Application and ESCP Guidance Document has been reviewed to complete this Erosion and Sediment Control Plan.

SOIL TYPE(S): PER MARION CO. SOIL SURVEY THE SITE SOILS INCLUDE "SANTIAM SILT LOAM, 3-6% SLOPES," & "SILVERTON SILT LOAM, 2-12% SLOPES."
EROSION HAZARD: PER MARION CO. SOIL SURVEY EROSION HAZARD IS "SLIGHT."
SITE AREA: 1.08 Ac
DISTURBANCE AREA: 0.83 Ac
LOCAL RAIN GAGE: MCNARY FIELD AIRPORT, LAT/LONG 44.905', -123.0011'

INSPECTION FREQUENCY FOR BMP table with columns Site Condition and Minimum Frequency. Rows include Active period, Inactive periods greater than fourteen (14) consecutive calendar days, etc.

Spill Prevention Procedures and Response

- Spill prevention is an important factor in the successful operation of a storm water injection management system. All contractor employees will be trained on this plan so that they are certain of the location of materials, who to notify in case of a spill, and how to initially contain the spill of hazardous materials.
This data will be posted in an accessible area at the site.

What to do in case of a spill

- 1. Spill kit to be located near the job trailer or another conspicuous location and clearly marked.
2. Get the spill kit.
a. If possible, determine visually what types of fluids have been spilled.
b. Put on gloves and glasses or any other necessary Personal Protective Equipment (PPE).
c. Get the absorbent material provided in the kit and the drain block cover.
d. Place the absorbent materials in the path of the spill.
e. Remove any debris from the vicinity of the inlet where the spill is draining.
f. Unroll the drain block cover and place it snugly over the inlet.
g. Verify that the cover has full contact with the rim of the inlet.
h. Use snakes, pillow or pigs to completely contain the area.
3. Notify the following personnel immediately:
a. Owner's Representative: Troy Craft, Phone: 503-375-7168.
b. When a spill includes any of the below, notify the Oregon Emergency Response System as soon as the Owner's Representative has knowledge of the release. Oregon Emergency Response System Phone: 1-800-452-0311
i. Any amount of oil to waters of the state;
ii. Oil spills on land in excess of 42 gallons;
iii. Hazardous materials that are equal to, or greater than, the quantity listed in the Code of Federal Regulations, 40 CFR Part 302 (List of Hazardous Substances and Reportable Quantities), and amendments adopted before July 1, 2002

NOTE: Only dry cleanup methods will be employed to clean up spills (i.e., no use of water to wash spilled materials from pavement will be conducted). All spill cleanups shall be conducted in accordance with applicable regulations.

Responsible Personnel

In case of spill contact the General Contractor and Owner's Representative immediately. The General Contractor will be responsible for either managing the spill clean up for minor spills or contacting/retaining a company for the cleanup of major spills.

Waste Management Procedures

Activities performed onsite shall implement the following to eliminate the discharge of waste:

- 1. Locate activities that include waste products away from waters of the state and stormwater inlets or conveyances so that stormwater coming into contact with these activities cannot reach waters of the state;
2. Ensure adequate supplies are available at all times to handle spills, leaks, and disposal of liquids, and provide secondary containment (e.g. spill berms, decks, spill containment pallets);
3. Have a spill kit available on site and ensure personnel are available to respond expeditiously in the event of a leak or spill;
4. Clean up spills or contaminated surfaces immediately using dry clean up measures (do not clean contaminated surfaces by hosing the area down), and eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge; and
5. Store materials in a covered area (e.g., plastic sheeting, temporary roofs), or in secondary containment to prevent the exposure of these containers to precipitation or stormwater runoff, or a similarly effective means designed to prevent the discharge of pollutants from these areas.
6. Building Materials & Building Products: Minimize material exposure in cases where the exposure to precipitation or to stormwater will result in a discharge of pollutants (e.g. elevate materials from soil to prevent leaching of pollutants).

Fertilizers, pesticides, herbicides, & insecticides

Comply with all application and disposal requirements included on the registered pesticide, herbicide, insecticide, and fertilizer label. When applying fertilizers, registrants must:

- 1. Apply at a rate and in amounts consistent with manufacturer's specifications;
2. Apply at the appropriate time of year for the location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth;
3. Avoid applying before heavy rains that could cause excess nutrients to be discharged;
4. Never apply to frozen ground;
5. Never apply to stormwater conveyance channels; and
6. Follow all other federal, state, and local requirements regarding fertilizer application.

Authorized non-stormwater discharges anticipated for the proposed project:

- 1. Landscape irrigation
2. Dust control water
3. Water line flushing (potable)

Potential pollutant-generating activities anticipated for the proposed project including an inventory of pollutants for each activity:

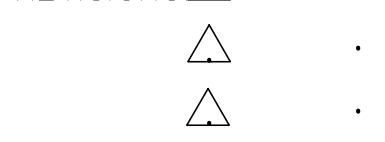
- 1. Mass Grading, Street & Utility Construction
a.Sediment
b.Vehicle and machinery related pollutants (Fuels, hydraulic fluid, oils)
2. Vertical Construction
a.Paints, caulks, sealants, solvents
b.Fluorescent light ballasts
c.Sediment
d.Vehicle and machinery related pollutants (Fuels, hydraulic fluid, oils)
2. Landscaping & Irrigation
a.Fertilizers
b.Pesticides, Herbicides, Insecticides



REVISIONS: 6/30/2024
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NEW RETAIL BUILDING:
STRONG RD SE
SALEM, OR
STRONG RD SE & LINDBURG RD SE

SHEET:
C1.5
EROSION CONTROL
NOTES

SUPPLEMENTAL WESTTECH NOTES:

- 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.
- 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.
- 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.
- 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 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.
- All existing and newly constructed storm inlets and drains shall be protected until pavement surfaces are completed and/or vegetation is established.
- 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.
- 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.
- 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.
- The Contractor shall provide site watering as necessary to prevent wind erosion of fine-grained soils.
- 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.
- 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.
- Sediment fence shall be installed per drawing details. Sediment fences shall have adequate support to contain all silt and sediment captured.
- 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.
- 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.
- 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.
- 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.
- The Contractor shall verify that all trucks are well sealed when transporting saturated soils from the site. Water dripage from trucks transporting saturated soils must be reduced to less than 1 gallon per hour prior to leaving the site.
- 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 cleanout of any structures used to trap sediment.
- 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.
- Temporary grass cover measures must be fully established by October 15th, or other cover measures (i.e. 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 October 15th, it is recommended that seeding and mulching occur by September 1st. Grass mulch, if used, shall not leave any bare ground visible through the straw.
- 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.
- Permanent erosion control vegetation on all embankments and disturbed areas shall be re-established as soon as construction is completed.
- 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 (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.
- 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.
- 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.
- 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.
- 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.
- 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.
- Prior to starting construction contractor shall acquire the services of a DEQ Certified Erosion and Sediment Control Inspector and shall submit an "Action Plan" to DEQ identifying their names, contact information, training and experience as required in Schedule A.6.b.i-ii of the 1200-C Permit
- Contractor shall submit "Notice of Termination" to DEQ to end the 1200-C permit coverage once all soil disturbance activities have been completed and final stabilization of exposed soils has occurred.

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 these 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 and machinery; 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.

(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.

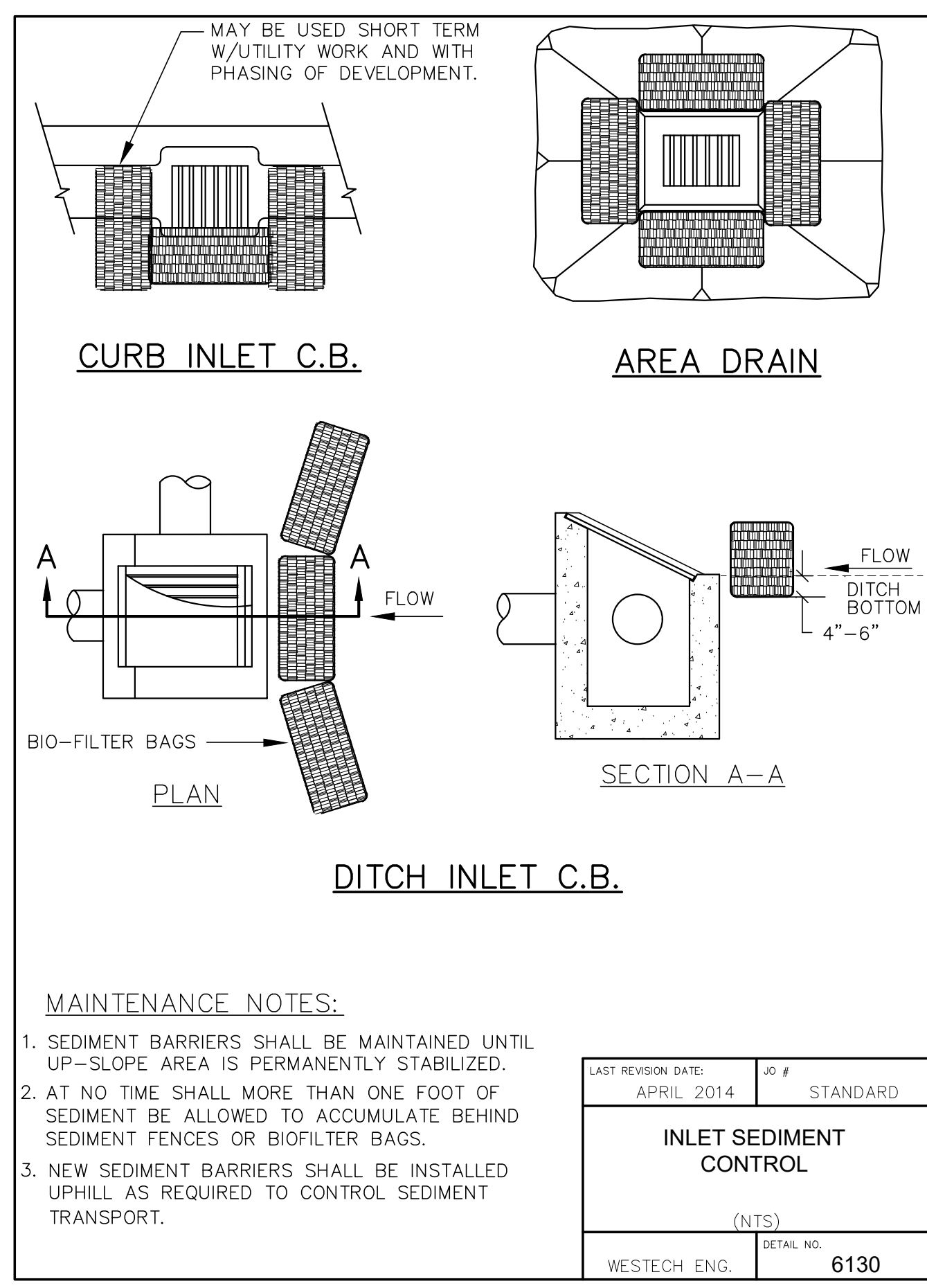
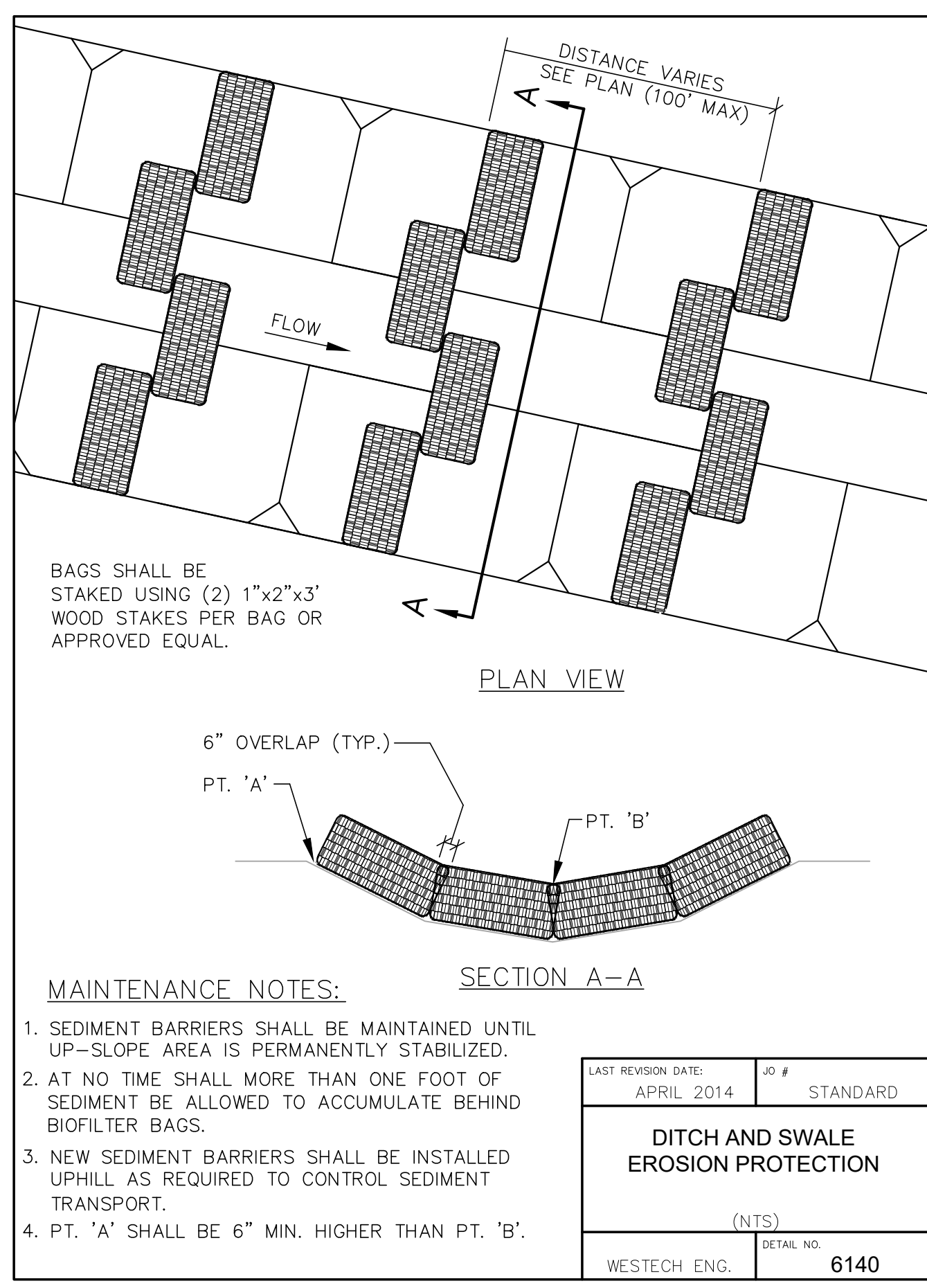
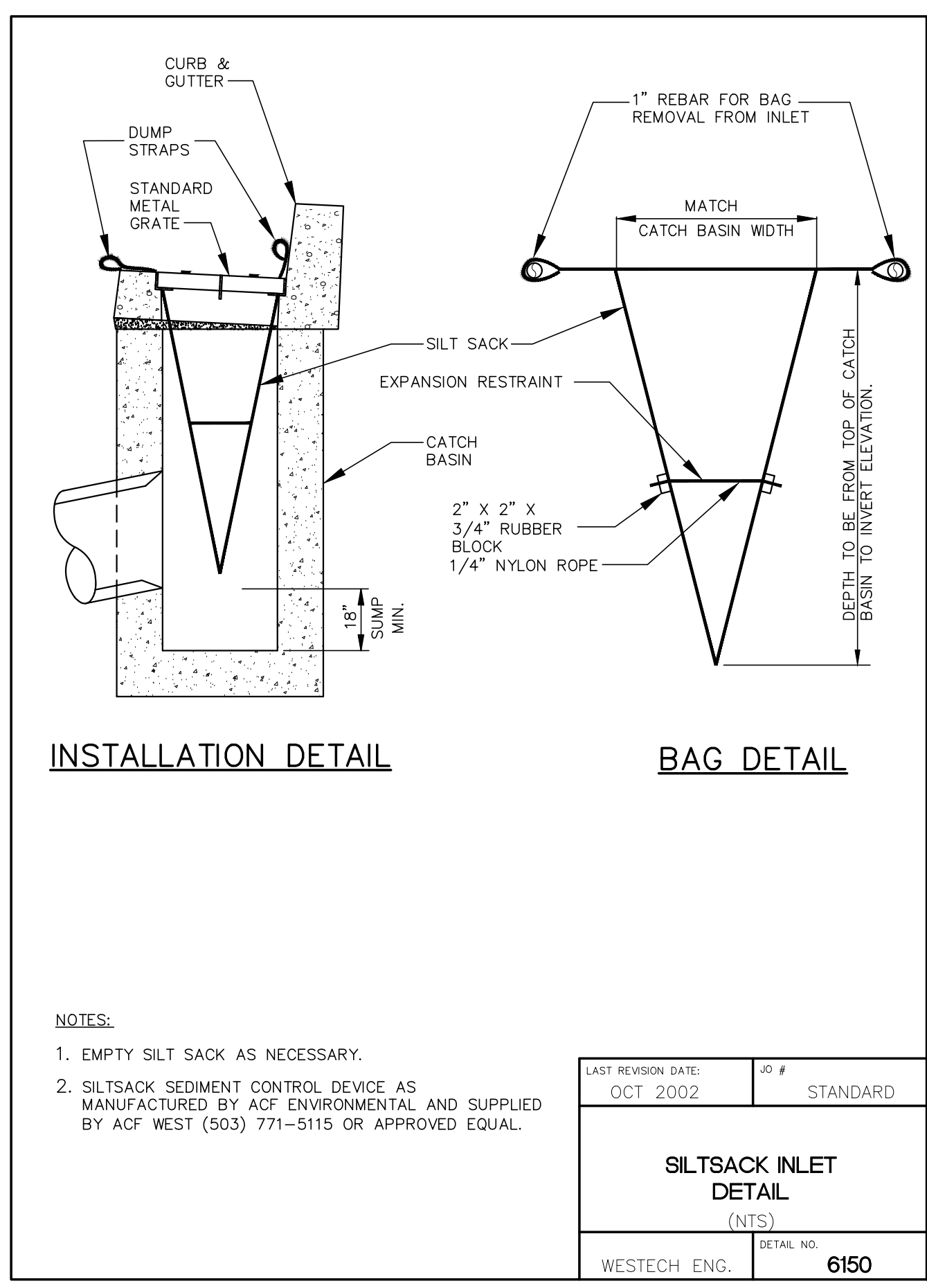
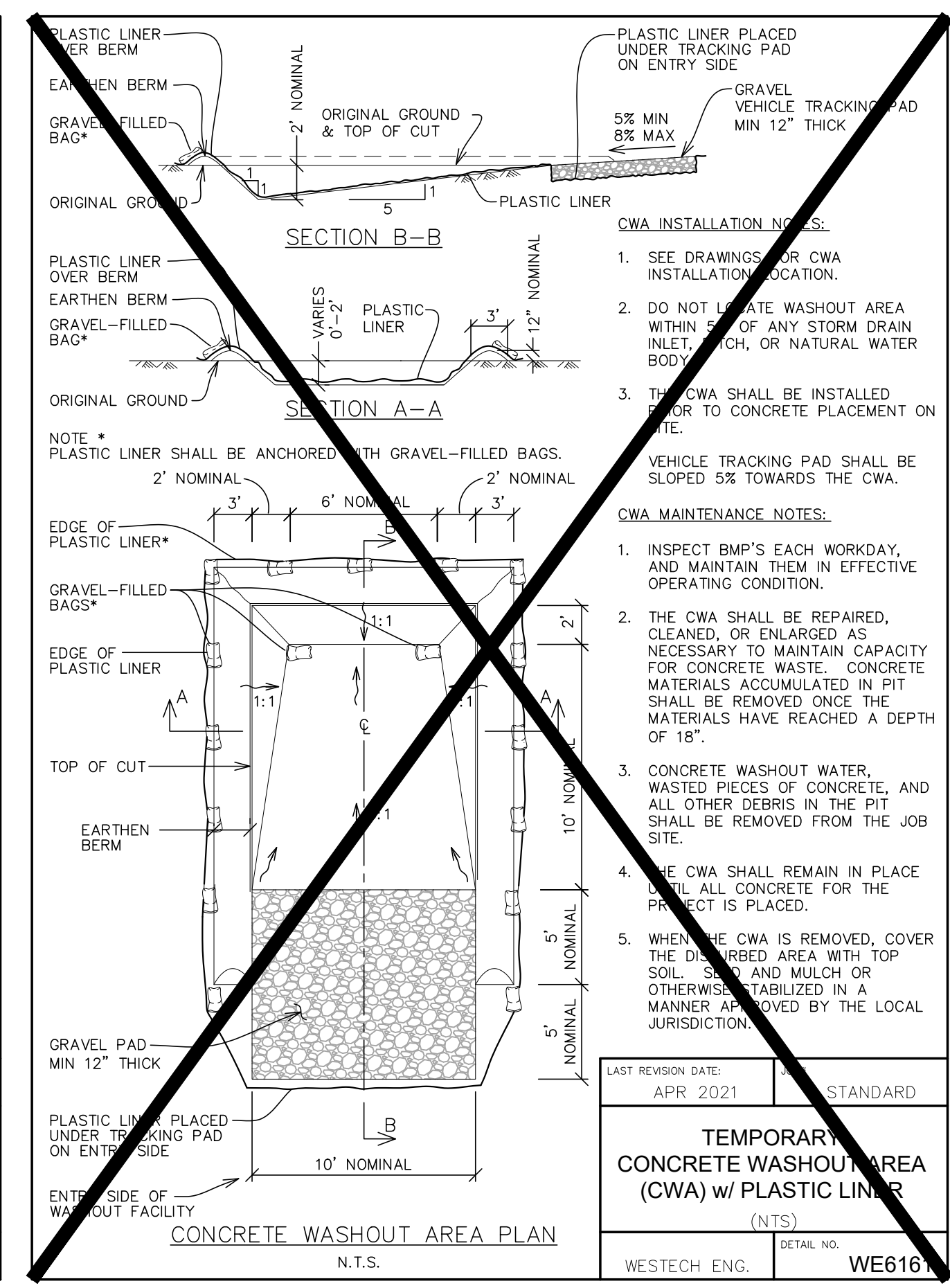
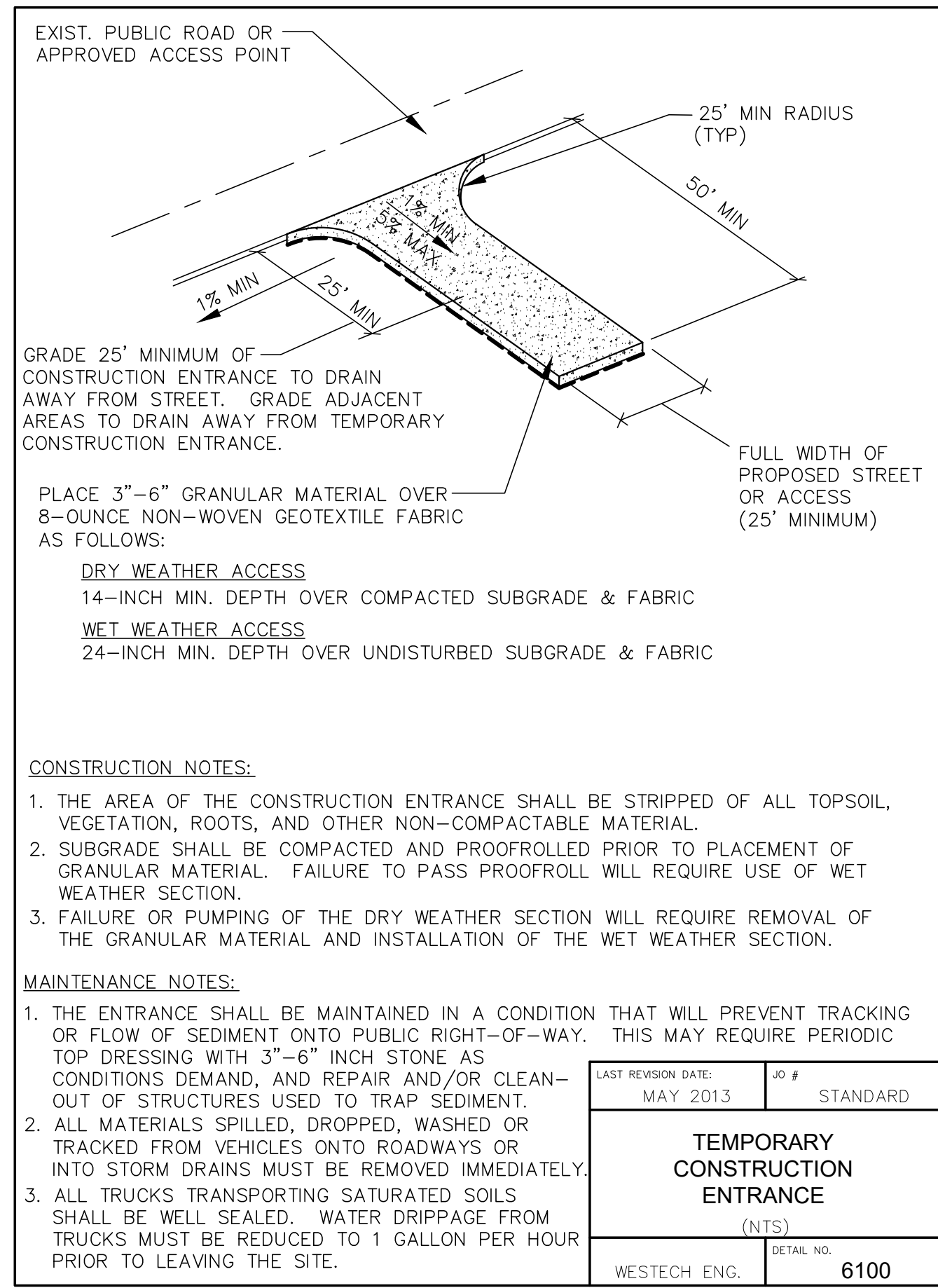
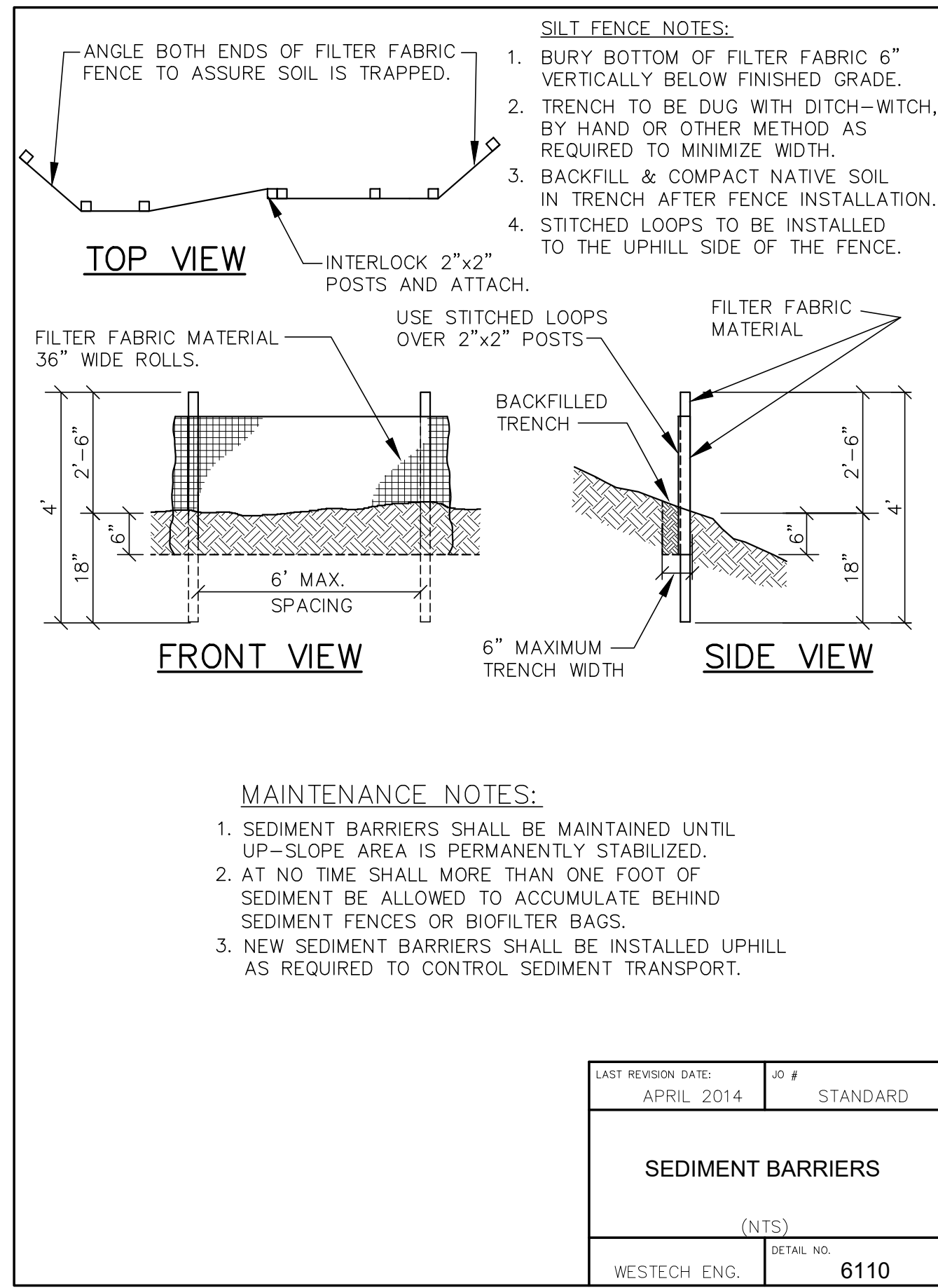
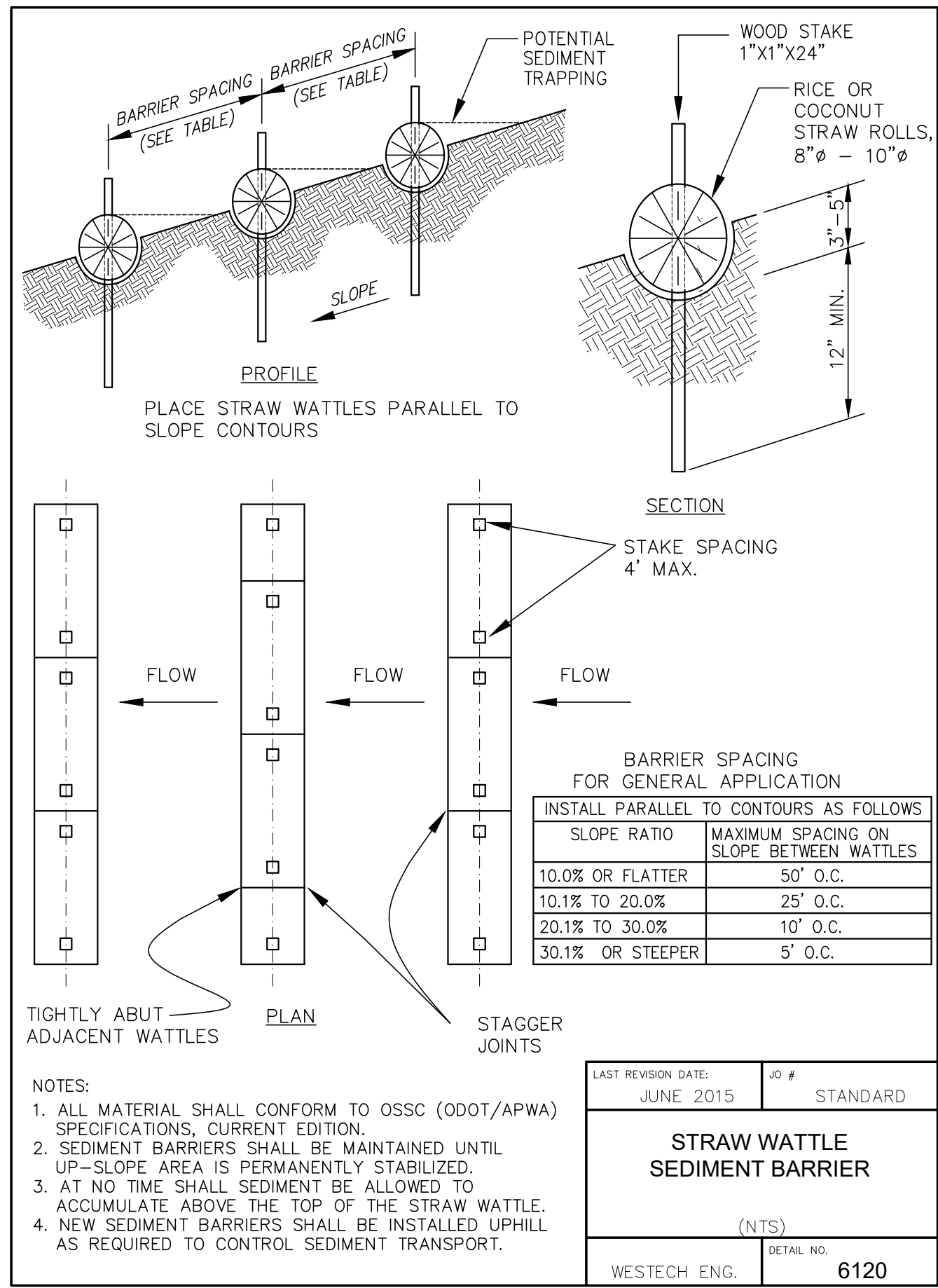
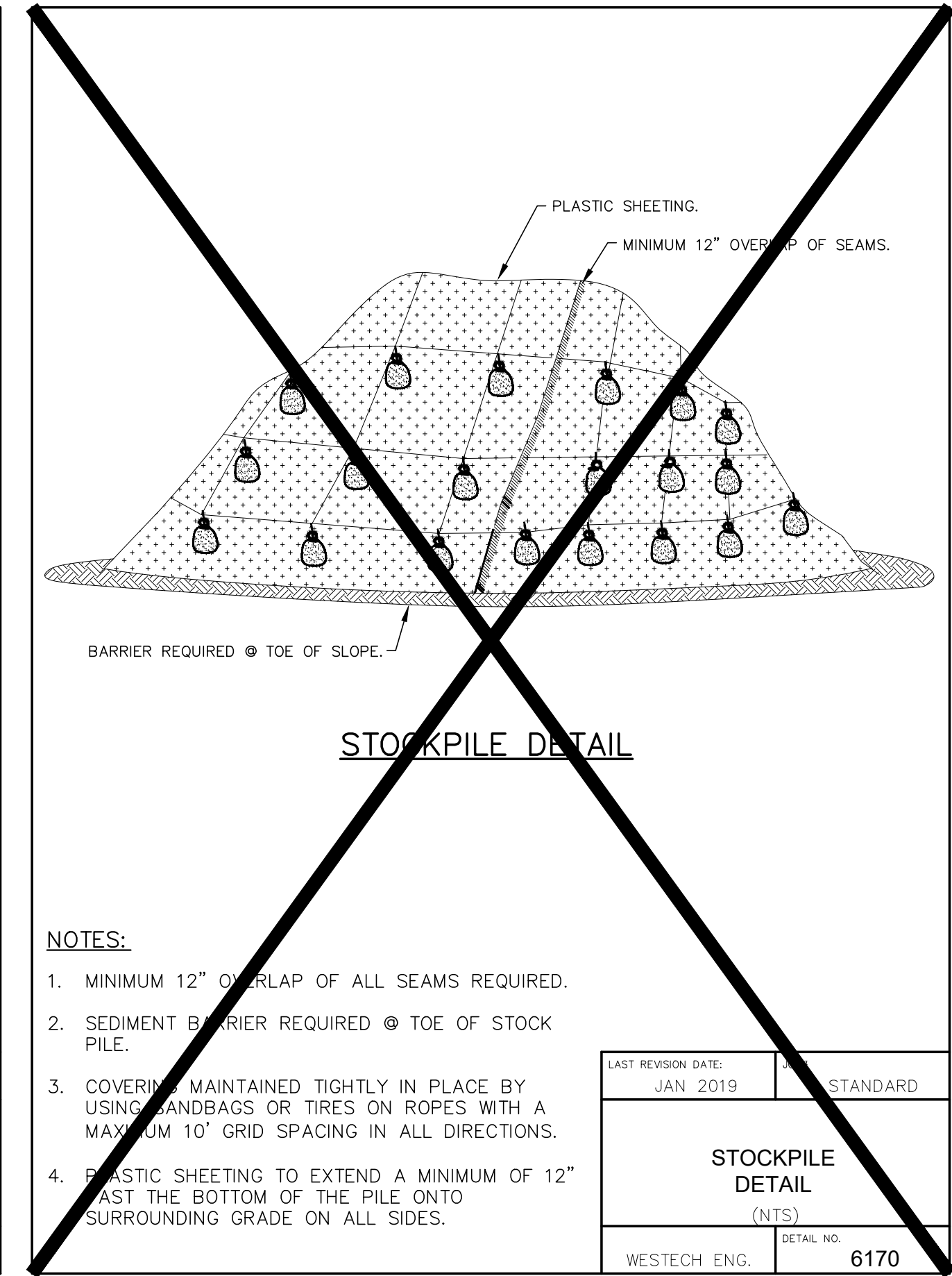
(4). Permanent erosion control vegetation on all embankments and disturbed areas shall be re-established as soon as construction is completed.

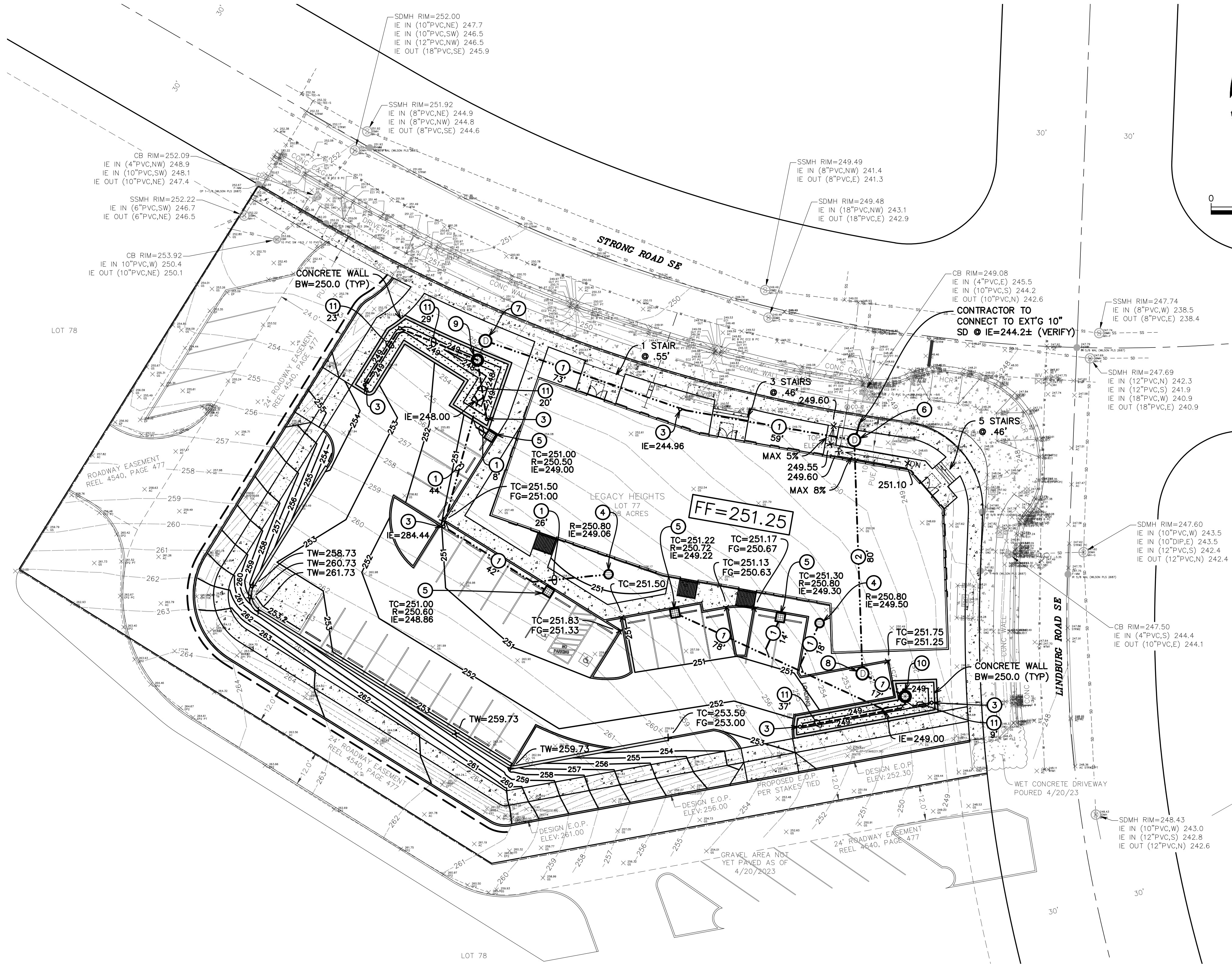
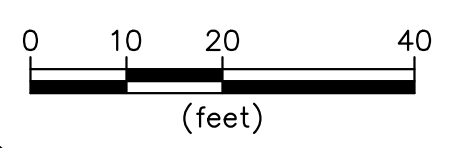
(h) SPECIFICATIONS

(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.





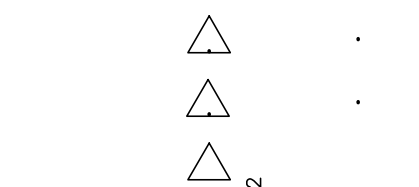
DRAINAGE KEY CALLOUTS	
①	6"SD, L=SEE PLAN, S=1% MIN
②	8"SD, L=SEE PLAN, S=0.5% MIN
③	SDCO, IE=SEE PLAN
④	AREA DRAIN, SEE PLAN FOR INFO
⑤	SDCB, SEE PLAN FOR INFO
⑥	SDMH R=249.20 8" IE IN (S)=244.37 6" IE IN (W)=244.37 10" IE OUT (N)=244.27
⑦	SDMH R=251.30 6" IE IN (SW)=245.79 6" IE OUT (SE)=245.69
⑧	SDMH R=251.50 6" IE IN (SE)=244.60 8" IE OUT (N)=244.58
⑨	BEEHIVE FLOW CONTROL #1 SEE C6.0 R=250.90 6" IE OUT (N)=244.40
⑩	BEEHIVE FLOW CONTROL #2 SEE C6.0 R=250.90 6" IE OUT (SE)=244.65
⑪	6" PERF PIPE, L=SEE PLAN



RENEWALS: 6/30/2024 IN THE EVENT CONFLICTS ARE DISCOVERED BETWEEN THE ORIGINAL SIGNED AND SEALED DOCUMENTS PREPARED BY THE ARCHITECTS AND/OR THEIR CONSULTANTS, AND ANY COPY OF THE DOCUMENTS TRANSMITTED BY MAIL, FAX, ELECTRONICALLY OR OTHERWISE, THE ORIGINAL SIGNED AND SEALED DOCUMENTS SHALL GOVERN.

PROJECT #3492.0000.0 DATE: 01/24 DRAWN BY: AK CHECKED BY: JW

REVISIONS: 1

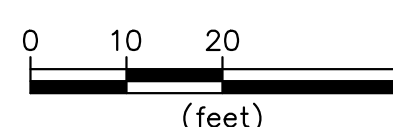
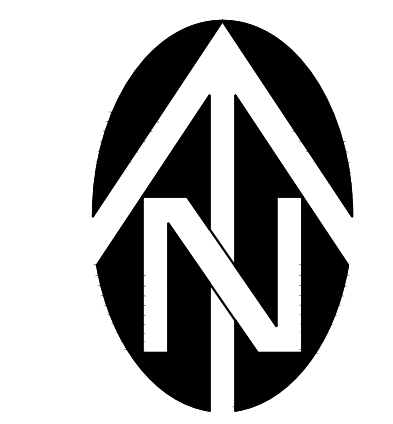
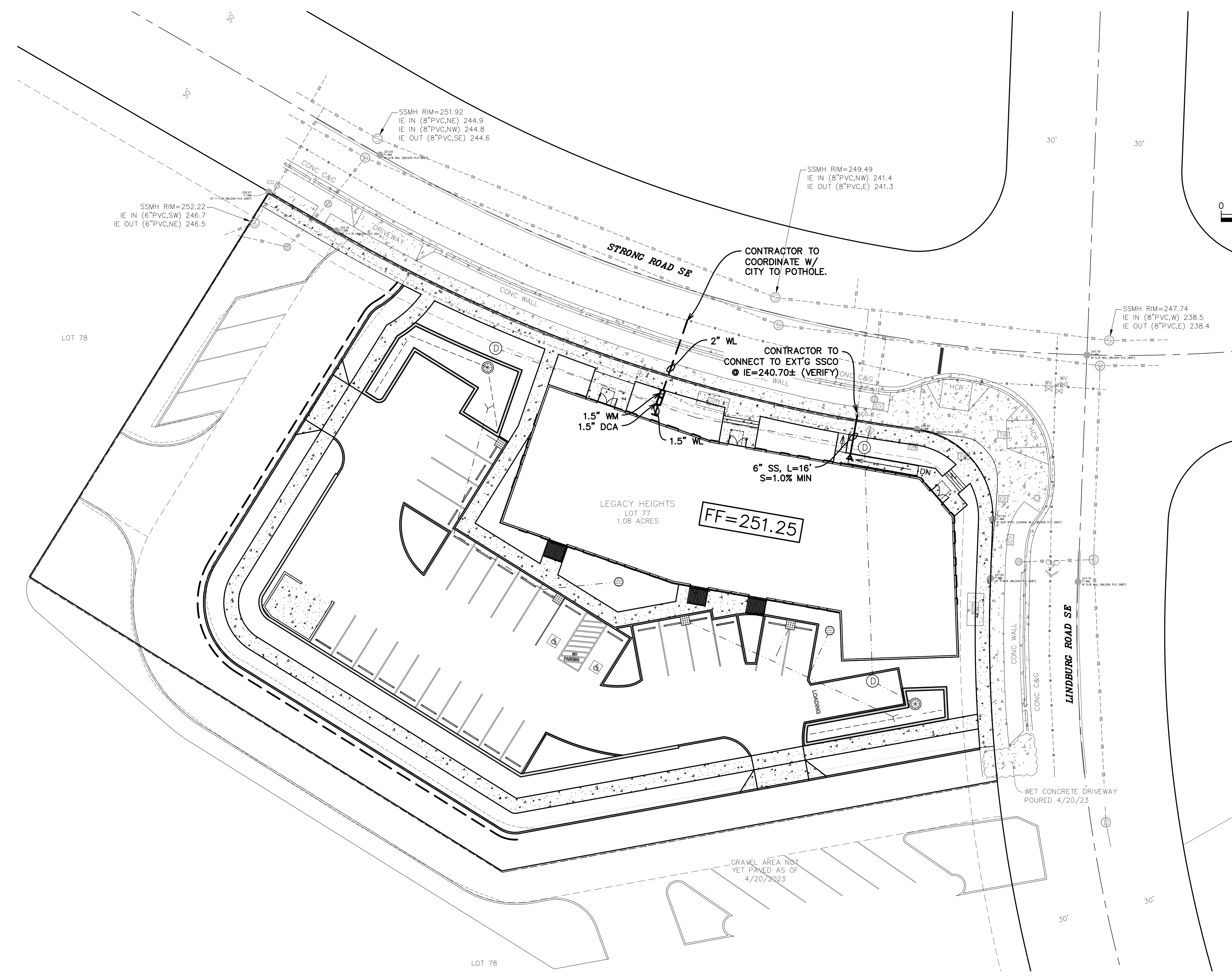


WESTTECH ENGINEERING, INC. CONSULTING ENGINEERS AND PLANNERS 3841 Fairview Industrial Dr. S.E. Suite 100, Salem, OR 97302 Phone: (503) 585-2474 Fax: (503) 585-3986 E-mail: westtech@westtech-eng.com



NEW RETAIL BUILDING: STRONG RD SE SALEM, OR STRONG RD SE & LINDBURG RD SE

SHEET: C3.0 UTILITY PLAN





RENEWS: 6/30/2024
IN THE EVENT CONFLICTS ARE
DISCOVERED BETWEEN THE ORIGINAL
SIGNED AND SEALED DOCUMENTS
PREPARED BY THE ARCHITECTS AND/OR
THEIR CONSULTANTS, AND ANY COPY OF
THE DOCUMENTS TRANSMITTED BY MAIL,
FAX, ELECTRONICALLY OR OTHERWISE,
THE ORIGINAL SIGNED AND SEALED
DOCUMENTS SHALL GOVERN.

PROJECT #3492.0000.0
DATE: 01/24
DRAWN BY: AK
CHECKED BY: JW

REVISIONS: 1

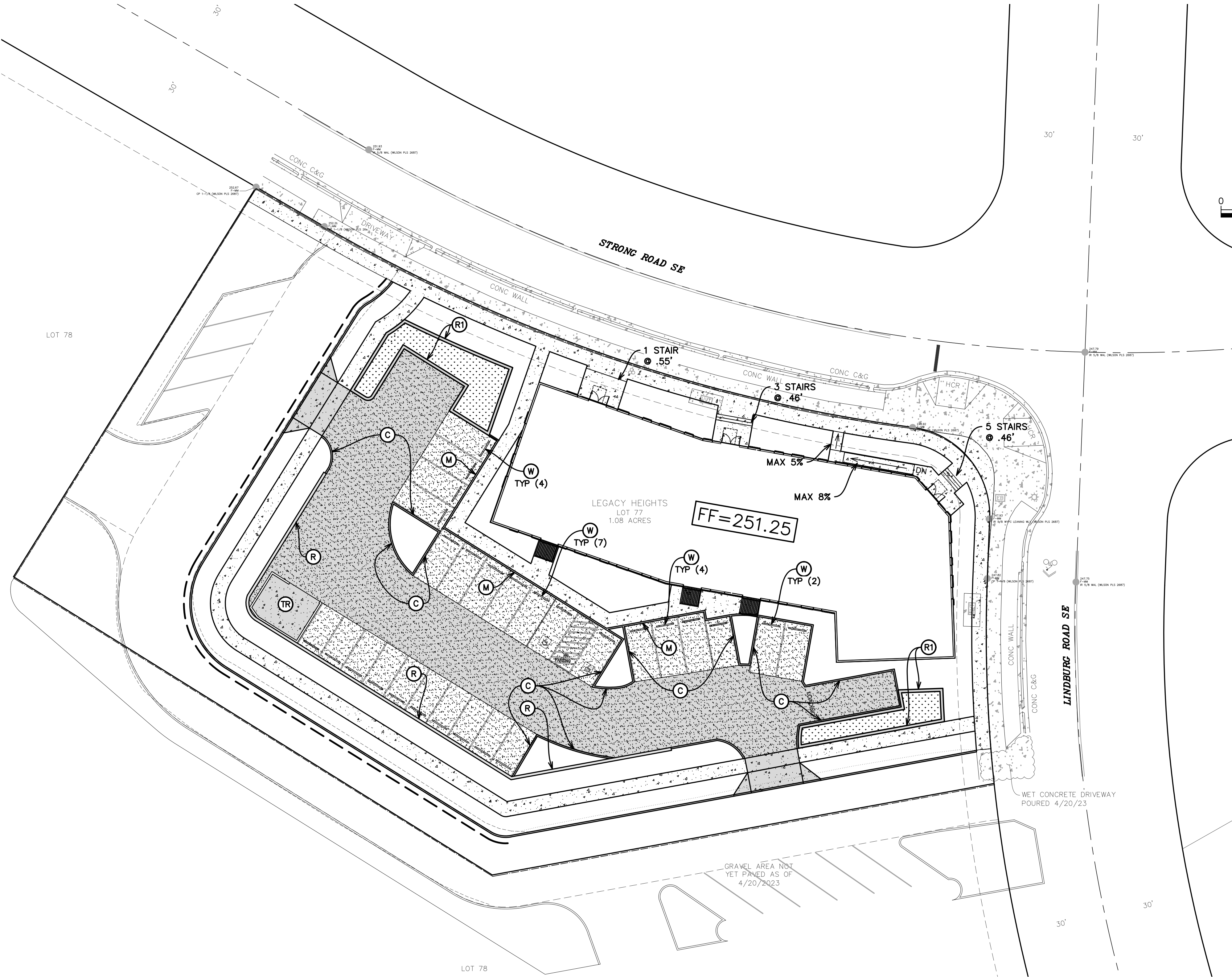
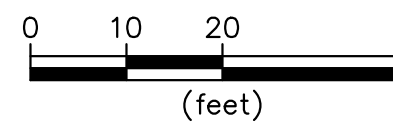
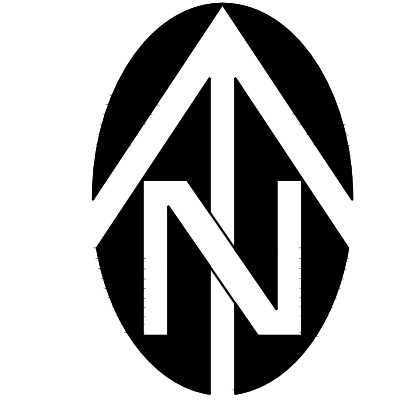


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NEW RETAIL BUILDING:
STRONG RD SE
SALEM, OR
STRONG RD SE & LINDBURG RD SE

SHEET:
C4.0
SURFACING PLAN



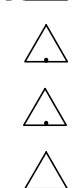
SURFACING LEGEND	
	LIGHT DUTY ASPHALT 3" OF DENSE LEVEL II HMAC OVER 9" OF COMPACTED 1"-0 OVER APPROVED SUBGRADE
	HEAVY DUTY ASPHALT 4" OF DENSE LEVEL II HMAC OVER 12" OF COMPACTED 1"-0 OVER APPROVED SUBGRADE
	PEDESTRIAN CONCRETE 4" OF PCC OVER 2" OF COMPACTED 1"-0 OVER APPROVED SUBGRADE
	HEAVY DUTY CONCRETE 8" OF PCC OVER 4" OF COMPACTED 1"-0 OVER APPROVED SUBGRADE
(C)	TYPE 'C' CURB
(M)	MONOLITHIC CURB & SIDEWALK
(R)	RETAINING WALL, SEE STRUCTURAL PLANS
(R1)	CAST IN PLACE CONCRETE RETAINING WALL SEE STRUCTURAL PLANS
(T)	TRUNCATED DOMES
(TR)	TRASH AREA, SEE ARCH FOR DETAILS
(W)	WHEELSTOPS



RENEW: 6/30/2024
IN THE EVENT CONFLICTS ARE DISCOVERED BETWEEN THE ORIGINAL SIGNED AND SEALED DOCUMENTS PREPARED BY THE ARCHITECTS AND/OR THEIR CONSULTANTS, AND ANY COPY OF THE DOCUMENTS TRANSMITTED BY MAIL, FAX, ELECTRONICALLY OR OTHERWISE, THE ORIGINAL SIGNED AND SEALED DOCUMENTS SHALL GOVERN.

PROJECT # 3492.0000.0
DATE: 01/24
DRAWN BY: AK
CHECKED BY: JW

REVISIONS:



WESTTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS
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Phone: (503) 585-3474 Fax: (503) 585-3986
E-mail: westtech@westtech-eng.com

NEW RETAIL BUILDING:
STRONG RD SE
SALEM, OR
STRONG RD SE & LINDBURG RD SE

SHEET:
C6.0
CONSTRUCTION
DETAILS

REFERENCE COS STD PLAN 246 FOR BEEHIVE GRATE, FRAME, WIRE ROPE, AND U-BOLT REQUIREMENTS

RIM ELEVATION = E

DESIGN STORM PEAK WSE = D

WQ PEAK WSE = C

INV EL = F

ORIFICE DIA = G

TOP OF GSI MEDIA

OPTIONAL EXTERIOR ORIFICE TURN-DOWN TO BE GALVANIZED STEEL OR SIMILAR APPROVED MATERIAL. TURN DOWN TO BE GROUDED IN PLACE WITH NON-SHRINK GROUT INTO CORED HOLE. TURN-DOWN TO HAVE PIPE JOINT ON EXTERIOR OF STRUCTURE.

3" MIN

LOW FLOW ORIFICE DIA = B

OUTLET PIPE

INV EL = H

INLET PIPE

INV EL = A

24" MIN SUMP

PVC PERF PIPE UNDERDRAIN (SEE NOTE 1)

REFERENCE COS STD. PLAN 205 FOR STRUCTURE REQUIREMENTS

SUMP EL = I

TYPICAL SECTION
NTS

DATA TO BE COMPUTED BY DESIGN ENGINEER	
A=	248.00
B=	6"
C=	249.22
D=	249.80
E=	250.00
F=	246.16
G=	0.9"
H=	244.40
I=	242.40

#1

GENERAL NOTES

1. A CAPPED, SOLID WALL, PVC CLEANOUT SHALL BE PLACED AT THE END OF THE UNDERDRAIN. OVERFLOWS SHALL NOT DRAIN VIA THE UNDERDRAIN.
2. REFERENCE ORIFICE MEASUREMENT TABLE ON COS STANDARD PLAN 251E FOR ORIFICE SIZE REQUIREMENTS.

CITY OF SALEM
DEPARTMENT OF PUBLIC WORKS

STANDARD PLAN
BEEHIVE INLET CONTROL

APPROVED	<i>[Signature]</i>	6/8/2021	DRAWN BY	KLA	4/2021	NO.251D
	CITY ENGINEER	DATE	CHECKED BY	JDL	4/2021	

REFERENCE COS STD PLAN 246 FOR BEEHIVE GRATE, FRAME, WIRE ROPE, AND U-BOLT REQUIREMENTS

RIM ELEVATION = E

DESIGN STORM PEAK WSE = D

WQ PEAK WSE = C

INV EL = F

ORIFICE DIA = G

TOP OF GSI MEDIA

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3" MIN

LOW FLOW ORIFICE DIA = B

OUTLET PIPE

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INV EL = A

24" MIN SUMP

PVC PERF PIPE UNDERDRAIN (SEE NOTE 1)

REFERENCE COS STD. PLAN 205 FOR STRUCTURE REQUIREMENTS

SUMP EL = I

TYPICAL SECTION
NTS

DATA TO BE COMPUTED BY DESIGN ENGINEER	
A=	249.00
B=	6"
C=	251.65
D=	249.87
E=	249.89
F=	245.58
G=	0.6"
H=	244.65
I=	242.40

#2

GENERAL NOTES

1. A CAPPED, SOLID WALL, PVC CLEANOUT SHALL BE PLACED AT THE END OF THE UNDERDRAIN. OVERFLOWS SHALL NOT DRAIN VIA THE UNDERDRAIN.
2. REFERENCE ORIFICE MEASUREMENT TABLE ON COS STANDARD PLAN 251E FOR ORIFICE SIZE REQUIREMENTS.

CITY OF SALEM
DEPARTMENT OF PUBLIC WORKS

STANDARD PLAN
BEEHIVE INLET CONTROL

APPROVED	<i>[Signature]</i>	6/8/2021	DRAWN BY	KLA	4/2021	NO.251D
	CITY ENGINEER	DATE	CHECKED BY	JDL	4/2021	