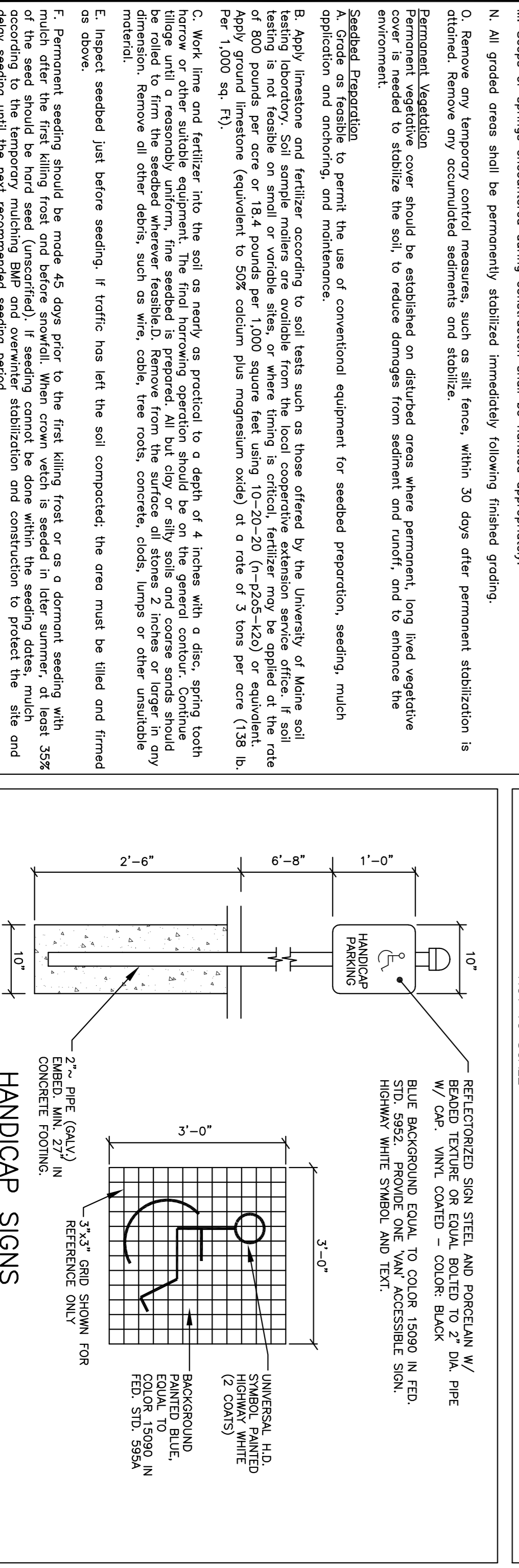


EROSION AND SEDIMENT CONTROL PLAN

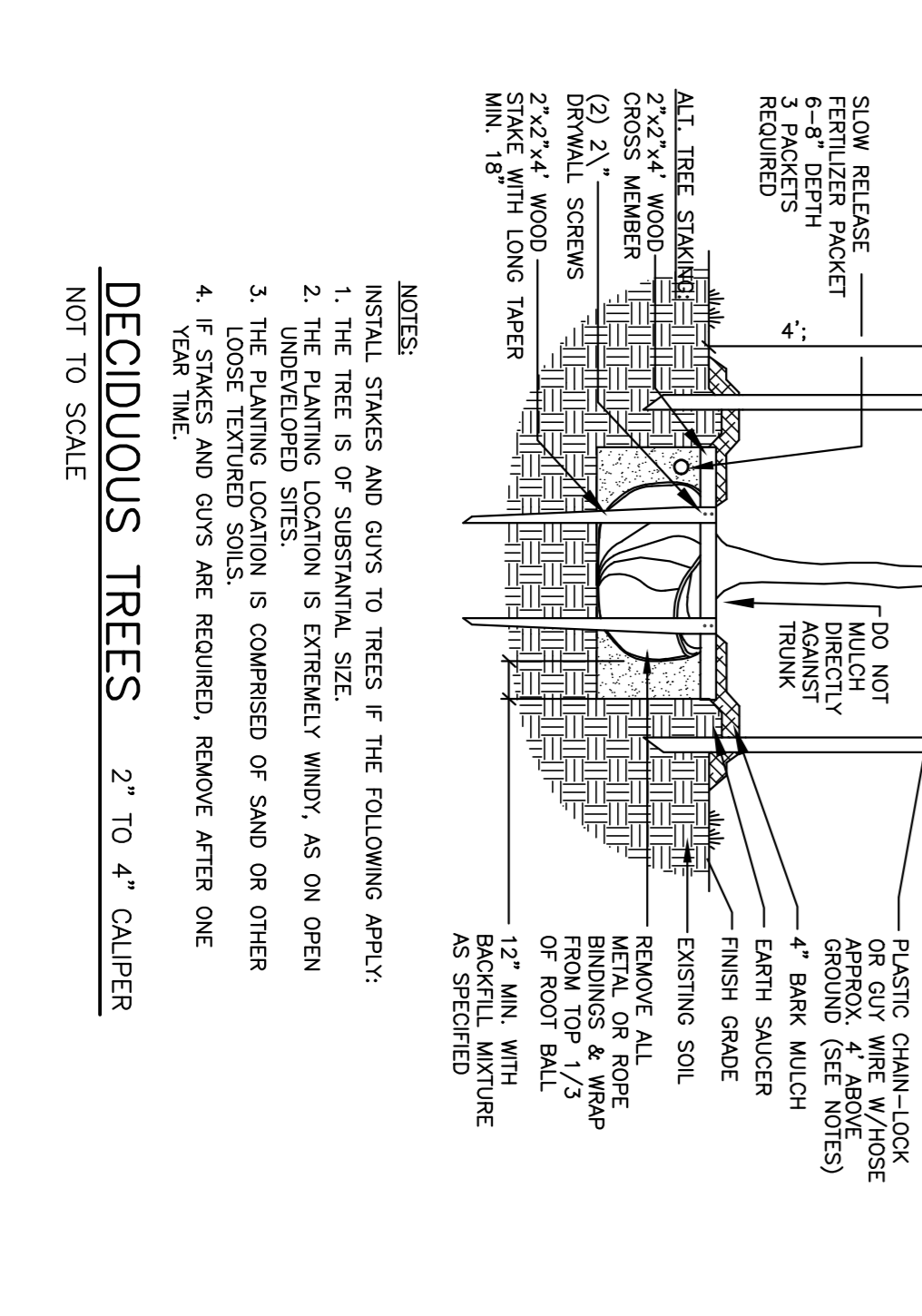
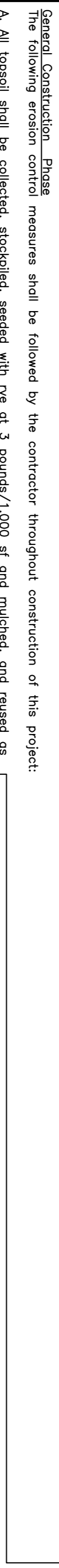
- F. Perennial seeding** shall be made 45 days prior to the first killing frost or on a dormant seeding with much after the first killing frost and before snowfall. When crown weath is seeded in later summer, at least 35% of the seed should be hard seed (unstratified). If seeding cannot be done within the seeding dates, much according to the temporary mulching BMP and overwinter stabilization and construction to protect the site and delay seeding until the next recommended seeding period.
 - G. Following seed bed preparation**, silt areas, fill areas and back slopes shall be seeded at a rate of 3 lbs./1,000 sq. ft. with a mixture of 55% creeping red fescue, 6% red top, 24% Kentucky bluegrass, 10% annual ryegrass, 20% annual ryegrass and 5% white Dutch clover.
 - H. Areas** which have been temporarily or permanently seeded shall be mulched immediately following seeding.
 - I. Areas** which cannot be seeded within the growing season shall be mulched for over-winter protection and winterized.
 - J. Areas** which cannot be seeded within the growing season shall be mulched for over-winter protection and winterized.
 - K. Water Control**
 - Perennial stabilization consists of at least 90% vegetation, pavement/gravel base or riprap.
 - Do not expose slopes or leave slopes exposed over the winter or for any other extended time of work.
 - Apply grass seed at twice the standard rate (150 lbs. Per 1,000 sq. ft). The mulch must be thick enough such that the ground surface will not be visible and must be anchored.
 - Use mulch and much seeding or an erosion control mulch blanket or all slopes greater than 8% or other areas exposed to direct wind.
 - Install an erosion control blanket in all ditches/slopes (bottom and sides) with a slope greater than 3%.
 - See the vegetation measures for more information on seeding dates and types.
 - Winter excavation and earthwork shall be completed so that no more than 1 acre of the site is without vegetation at any one time.
 - An area within 100 feet of a protected natural resource must be protected with a double row of sediment riprap.
 - Temporary mulch must be applied within 7 days of soil exposure or prior to any storm event, but offer permanent coverage as soon as possible.
 - Areas that have been brought to final grade must be permanently mulched that same day.
 - If snowfall is greater than 1 inch (fresh or cumulative), the snow shall be removed from the areas due to be seeded and mulched.
 - Lawn shall be free of frozen clumps before it is applied.
 - L. Loam** shall be free of frozen clumps before it is applied.
 - M. All vegetation** shall be stabilized with November 1, or will be worked during the winter construction period, must be stabilized with an appropriate slope facing backed by an appropriate gravel bed or geotextile unless specifically reversed from this standard by the department.
- Maintenance and Inspection Phase**
- A. Contractor shall inspect** disturbed and temporary areas, and erosion and stormwater control measures, areas on a regular basis throughout the construction period to ensure that all erosion control measures are functioning properly and in accordance with the approved plans. The contractor shall be responsible for providing and installing any supplemental measures as directed by the inspecting engineer. Failure to comply with the engineer's directions will result in discontinuation of construction activities.
 - B. Erosion control** shall be inspected in accordance with the plans over all final seeded areas as specified on the design plans.
 - C. All graded or disturbed areas**, including steep slopes, shall be protected during clearing and construction in accordance with the approved erosion and sediment control plan until they are adequately stabilized.
 - D. Areas** that are not stabilized or stabilized in accordance with the approved erosion and sediment control plan shall be stabilized in accordance with the approved erosion and sediment control plan.
 - E. Areas** to be filled shall be cleared, grubbed and stripped of topsoil to remove trees, vegetation, roots or other objectionable materials.
 - F. Areas** shall be staked to a minimum depth of 3 inches prior to placement of topsoil.
 - G. All fill** shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended for support buildings, structures and conduits, etc., shall be compacted in accordance with best practices for the project.
 - H. All fill** shall be placed and compacted in layers not to exceed 8 inches in thickness.
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 - J. Excavations** for approved landfills or non-structural fills, fill material shall be free of brush, rubbish, rocks, logs, stumps, building debris and other objectionable materials that would interfere with or prevent construction of satisfactory fills.
 - K. Frozen material** or soft, muddy or highly compressible materials shall not be incorporated into fill slopes or structural fills.
 - L. Fill** shall not be placed on a frozen foundation.
 - M. Seeps** or springs encountered during construction shall be handled appropriately.
 - N. All graded areas** shall be permanently stabilized immediately following finished grading.
 - O. Remove** any temporary control measures, such as silt fence, within 30 days after permanent stabilization is attained. Remove any accumulated sediments and stabilize.
 - P. Permanent Stabilization**
 - Permanent vegetative cover should be established on disturbed areas where permanent, long lived vegetation is required to stabilize the soil, to reduce damages from sediment and runoff, and to enhance the environment.
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 - Seeded Preparation**
 - A. Grade as feasible to permit the use of conventional equipment for seeded preparation, seeding, much application and anchoring, and maintenance.
 - B. Apply limonite and fertilizer according to soil tests such as those offered by the University of Maine soil testing laboratory. Soil sample moles are available from the local cooperative extension service office. If soil testing is not feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 800 pounds per acre or 18.4 pounds per 1,000 square feet using 10-20-20 (or P-20-0-20) or equivalent fertilizer at the rate of 200 lbs. per acre (equivalent to 50# calcium plus magnesium oxide) at a rate of 3 tons per acre (139 lb. Per 1,000 sq. ft.).
 - C. Work lime and fertilizer into the soil as nearly as practical to a depth of 4 inches with a disc, spring tooth or similar equipment. If soil testing is not feasible, apply lime and fertilizer at the rate of 10-20-20 at a rate of 3 tons per acre (equivalent to 50# calcium plus magnesium oxide) at a rate of 3 tons per acre (139 lb. Per 1,000 sq. ft.).

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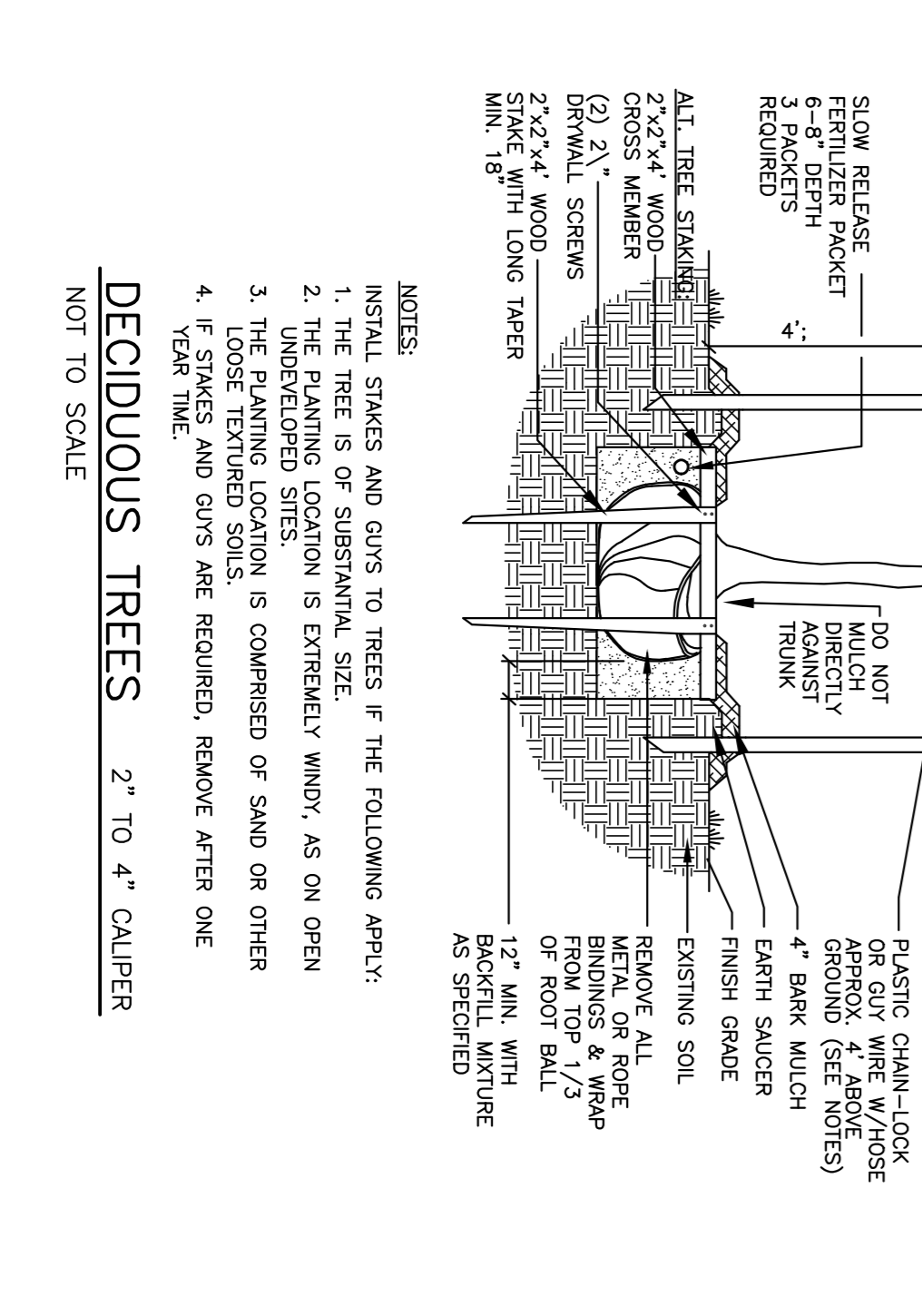
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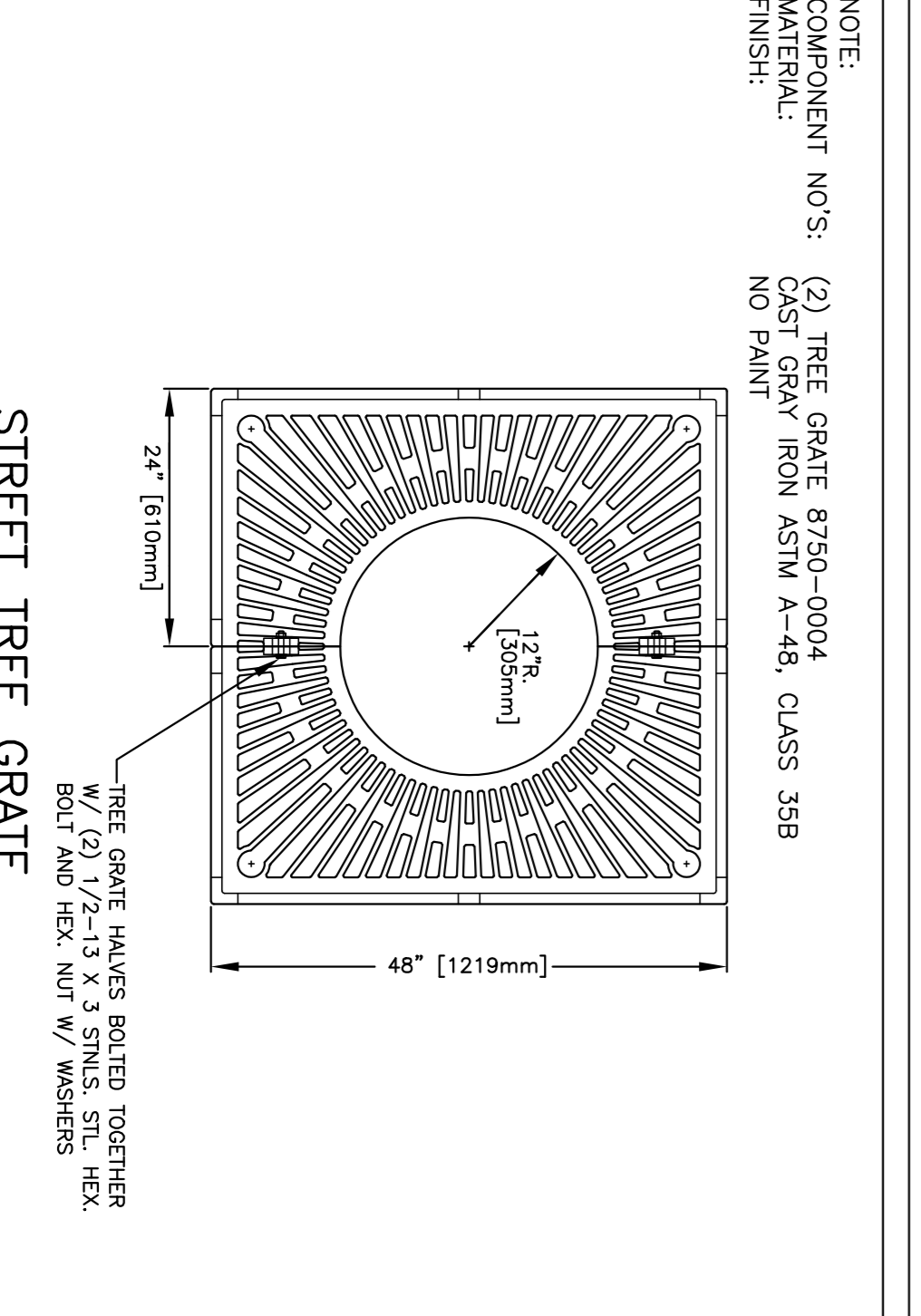
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DECIDUOUS TREES

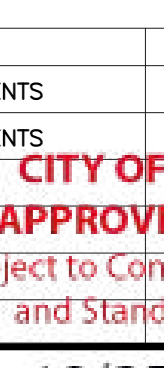
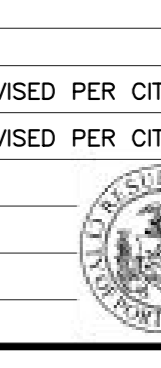
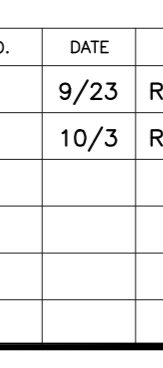
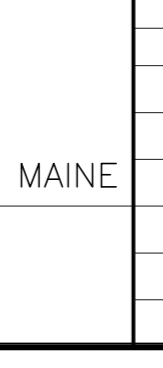
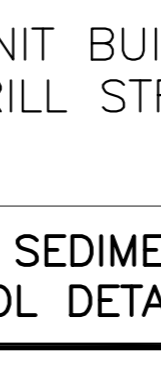
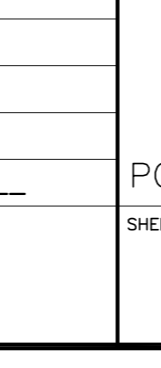
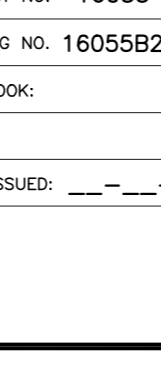
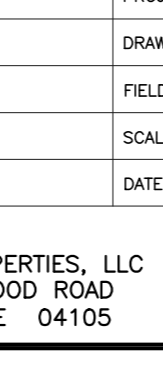
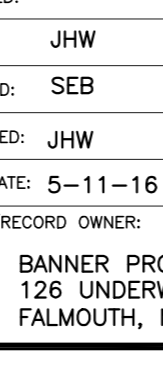
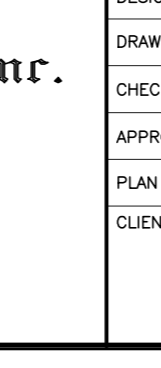
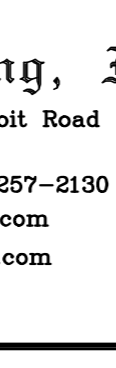
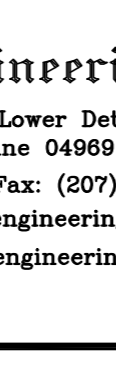
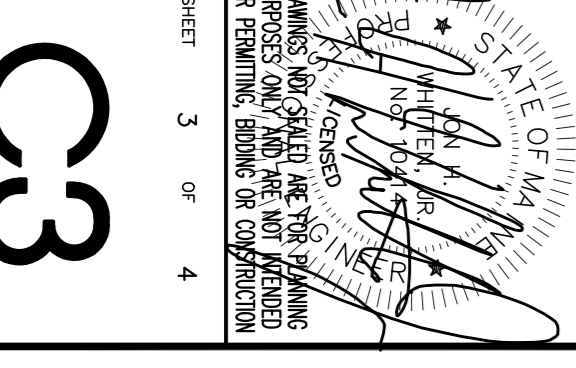


SILT FENCE



CONSTRUCTION NOTES:

- 1. All work shall conform to the applicable codes and ordinances.
- 2. Contractor shall visit the site and familiarize him or herself with all conditions affecting the proposed work.
- 3. Contractor shall verify all dimensions and conditions in the field prior to fabrication and erection of any material. Any unusual conditions shall be reported to the attention of the engineer.
- 4. Contractor shall notify engineer of all products or items noted as "missing" which are not found in the field.
- 5. Contractor shall obtain all required permits prior to construction.
- 6. All erosion and sediment control measures shall be installed in accordance with "Maine Erosion and Sedimentation Control Handbook for Construction" published by the Cumberland County Soil and Water Conservation District and Maine Department of Environmental Protection, March 2004 or all times.
- 7. The contractor shall be responsible for the availability of the contractor to possess a copy of the erosion control plan at all times.
- 8. The contractor is hereby authorized that all site features shown herein are based on field observations by the contractor and are not to be used for final design purposes. The contractor shall be responsible for identifying and locating all utilities.
- 9. Contractor shall be aware that Dig Safe only notifies its "member" utilities about the dig. When notified, Dig Safe will advise contractor of member utilities in the area. Contractor is responsible for identifying and locating all utilities.
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- 12. Contractor shall be responsible for compliance with the requirements of 23 M.R.S.A. 3360-A. It shall be the responsibility of the contractor to coordinate with the appropriate utilities to obtain authorization prior to installation of any existing utilities which conflict with the proposed improvements shown on these plans. If a conflict exists, the contractor shall immediately notify the owner, the municipality and appropriate utility company prior to proceeding with any relocation.
- 13. All permanent markings and directional signage shown on the plan shall conform to the Manual of Uniform Traffic Control Devices (MUTCD) standards.
- 14. All pavement joints shall be sealed prior to paving to provide a durable and uniform joint.
- 15. No new, trenches or structures shall be left open overnight in any excavation accessible to the public or in public rights-of-way.
- 16. All work within the public right-of-way shall require a M.D.O.T. Permit as well as permits from the town as applicable.
- 17. The proposed limits of clearing shown herein are approximate based upon the proposed limits of site grading. The applicant reserves the right to perform normal forest management activities outside of the clearing limit as shown. Tree removal outside of the limits of clearing may be necessary to remove dead or damaged trees or tree limbs. This removal is due to potential safety hazards and to promote proper forest growth.
- 18. Immediately upon completion of cuts/fills, the contractor shall stabilize disturbed areas in accordance with erosion control notes and as specified on plans.
- 19. The contractor shall be fully and solely responsible for the removal, replacement and restoration of all damaged or defective material and workmanship in connection with the contract work. The contractor shall prepare a report as directed by the owner of such damaged or defective materials which appear within a period of one year from the date of substantial completion.
- 20. All work performed by the general contractor and/or trade subcontractor shall conform to the requirements of local, state or federal laws, as well as any other governing requirements, whether or not specified on the drawings.
- 21. Where the terms "approved equal", "other approved", "equal to", "acceptable" or other general qualifying terms are used in these notes, it shall be understood that reference is made to the ruling and judgment of Plymouth Engineering, Inc.
- 22. The general contractor shall provide all necessary protection for the work until turned over to the owner.
- 23. The general contractor shall maintain a current and complete set of construction drawings on site during all phases of construction for use of all trades.
- 24. The contractor shall take full responsibility for any changes and deviation of approved plans not authorized by the architect/engineer and/or client/owner.
- 25. Details are intended to show and result of design. Any modification to suit field dimension and condition shall be submitted to the engineer for review and approval prior to any work.
- 26. Before the final acceptance of the project, the contractor shall remove all equipment and materials, repair or replace private or public property which may have been damaged or destroyed during construction, clean the areas within and adjacent to the project which have been obstructed by his/her operations, and leave the project area neat and presentable.



Plymouth Engineering, Inc.
P.O. Box 46 30 Lower Detroit Road
Plymouth, Maine 04969
Tel: (207) 257-2071 Fax: (207) 257-2130
info@plymouthengineering.com
www.plymouthengineering.com

DESIGNED: JHW PROJECT NO. 16055
DRAWN: JHW DRAWING NO. 16055B2
CHECKED: SEB FIELDBOOK
APPROVED: JHW SCALE:
PLAN DATE: 5-11-16 DATE ISSUED: _____
CLIENT/RECORD OWNER: BANNER PROPERTIES, LLC
121 UNDERWOOD ROAD
FALMOUTH, ME 04105

PROJECT NAME: SEVEN-UNIT BUILDING 30 MERRILL STREET
PORTLAND MAINE
SHEET NAME: EROSION & SEDIMENTATION CONTROL DETAILS

NO.	DATE	DESCRIPTION	DRAWN	APPD.
1	9/23	REVISED PER CITY REVIEW COMMENTS	JHW	JHW
2	10/3	REVISED PER CITY REVIEW COMMENTS	JHW	JHW

CITY OF PORTLAND APPROVED SITE PLAN
Subject to Conditions of Approval and Standard Conditions

DATE OF APPROVAL: 10/25/16
PLANNER: Nell Donaldson
PROJECT NO.: 2016-172