

MEMORANDUM

Date October 13, 2021
To Town of Cumberland Planning Board
From Carla Nixon, Town Planner
Subject **Preliminary and Final Plan Review: 3 Lot Major Conservation
Subdivision –Ross Estates**

This project has been “under construction” for several months with review comments from the Town Engineer and responses from the design engineer going back and forth. The project can now be considered for both preliminary and final plan approval, with conditions.

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To Town of Cumberland Planning Board
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Subject **Preliminary and Final Plan Review: 3 Lot Major Subdivision –Ross Estates**

I. REQUEST/OVERVIEW:

The Applicant is Stonewood Land, LLC, owned by Nate Ross of Falmouth, Maine. The Applicant has requested both preliminary and final review for a proposed 3 lot conservation style subdivision.

This development is classified as a *major* subdivision because it requires the extension of an existing street or private way. The lots will be served by private water and septic. The 12.41 acres parcel is located at off Blanchard Road Extension in the Rural Residential 2 (RR 2) zoning district as shown on Tax Assessor Map R08, Lot 68i. Curtis Neufield, P.E., and Kevin Clark, PLS, of Sitalines Civil Engineers, are the Applicant's representatives. Al Palmer, P.E., reviewed the plans for the Town of Cumberland.

II. PROJECT HISTORY:

Planning Board Workshop: March 16, 2021

Sketch Plan Review: May 18, 2021

III. DESCRIPTION:

Parcel size:	12.41 acres
Net Residential Density:	Allows for 5 lots.
Proposed number of lots:	3
Zoning:	Rural Residential 2
Development Type:	Conservation Subdivision
Min. Lot Size:	Calculated by dividing 50% of the gross area (total area) of the parcel by the number of lots allowed after determining net residential acreage. Actual lot sizes as shown on the plan range from 1.90 acres to 1.96 acres.
Lot frontage:	200'
Setbacks:	Front: 50', Rear: 50', Side: 30' (combined = 75')
Buffer:	75' perimeter buffer
Water:	Private wells
Sewer:	Private septic
Open Space:	6.39 acres (51% of the parcel)
Wetlands:	2,558 sf.

Trails: 2 existing trails will be relocated on the parcel to maintain connectivity to adjacent parcels and Town conservation land.

Utilities: Natural gas, underground electric, telephone, and cable from Blanchard Rd.

Fire Protection: Sprinklers

Street Lighting: None proposed.

Road ROW: 36' Private ROW

Road Width: Two 9' gravel travel lanes with 2' gravel shoulders.

By-ways: None proposed.

Homeowners Association: Draft Declaration of Protective Covenants and Common Easements have not been submitted.

Right, Title and Interest: Quitclaim deed.

Outside Agency Approvals Required:

Agency	Type of Permit	Status
MDEP	Stormwater Permit/General Construction Permit	Application completed
MDEP	NRPA Permit by Rule for stream crossing.	Application completed
Maine Historic Preservation Commission		On file
Maine Natural Areas Program	Rare & Exemplary Botanical Features. None documented.	On file
Maine Inland Fisheries & Wildlife		Pending

V. REVIEW COMMENTS:

DEPARTMENT HEAD REVIEWS:

William Longley, CEO: No comments.

Police Chief Charles Rumsey: No concerns.

Fire Chief Dan Small: After reviewing this site plan application, I have the following comments:

- 1) As denoted in the project application, all dwellings in this subdivision include an automatic fire protection sprinkler system conforming to applicable National Fire Protection Association (NFPA) standards, State of Maine Fire Marshal's Office mandates and approval by the Cumberland Fire Chief.
 - a. Chapter 96 of the Cumberland Code identifies fire protection requirements for residential projects. The number of houses within a subdivision are shown as "minor" for one to four homes and "major" for five or more. Although this project has three homes, due to the distance from the municipal water supply it is supported by this project's proposal as having approved fire protection sprinkler systems per each residence.

- 2) It is recommended, **but not required**, to have a monitored fire alarm system in each residence for the detection of smoke, carbon monoxide and an activation of the sprinkler system.
- 3) It is recommended, **but not required**, to have a fire department approved key box located on each residence to allow access for fire and medical emergencies.

Lands and Conservation Commission Review of Ross Estates

Based on 9/28/21 Sitelines Plans submission, The Lands and Conservation Commission (LCC) has reviewed the September 28, 2021 submission for Ross Estates subdivision. The subdivision contains high-value conservation areas including healthy, native forests, streams, wetlands, wildlife habitat, trails, and a vernal pool.

Trails: As shown in the plans, the property has two existing trails which cross the property. Both existing trails cross proposed lots within the subdivision. In order to maintain trail connectivity, the plans call for these trails to be relocated in the proposed open space for the subdivision. The LCC finds the relocation of the trails to be acceptable.

Open Space: The proposed open space in the plan should help protect the high-value conservation areas and provide an adequate corridor for wildlife movement within the area. In addition, the open space will allow for the possibility of connecting trails with neighboring subdivisions. The LCC finds the proposed open space acceptable.

Ownership of Open Space: The subdivision plans call for the developers to donate the open space to the Town. This would be similar to the Town-owned open space surrounding the nearby West Branch subdivision. The LCC supports this donation. However, if the offer to donate the open space to the Town is not accepted by the Town Council, the LCC strongly recommends that the Town acquire a deeded conservation easement on the open space in order to protect the high-value conservation areas and allow for future trail development.

VI. WAIVER REQUESTS:

- 1) Existing physical features (trees 10" diameter or more)
- 2) Hydro-geologic study
- 3) Well locations
- 4) High intensity soils survey
- 5) Location of temp markers in field
- 6) Street lighting details
- 7) Soil surveys with license number of soil scientist
- 8) Septic plans with license number of site evaluator
- 9) Geological evaluations with registration number of geologist
- 10) Walkways within roads of proposed subdivision

The Town Engineer has stated he has no objections to the granting of these waivers from an engineering perspective based on the scale and nature of the project.

Please note that another response to peer review engineer's comments was submitted Wednesday afternoon after the responses listed below were written. This response letter has been added to the electronic packet.

Based on those responses, the outstanding engineering issues have been addressed for both preliminary and final approval, with conditions as written.

VII. Design Engineer's response to Town Engineer's review

1. Waivers: See above.

2. On page 7 of the package, the Applicant states: There are no significant wildlife habitats or fisheries on the site. What is the basis of this statement as we did not see any correspondence Response to Review Comments Major Conservation Subdivision Plan Application Ross Estates Page 2 of 8 with the Maine Department of Fisheries & Wildlife, Natural Areas Program, or State Historic Preservation Office. Based on initial review of online materials, there was no indication of significant wildlife habitat or fisheries.

Responses to project review requests have been received from the Maine Natural Areas Program (MNAP) and the Maine Historic Preservation Commission (MHPC). No areas of historic areas or species is noted. A response has not been received from the Maine Department of Inland Fisheries and Wildlife (IF&W). A copy of the correspondence is enclosed for your reference and the response from IF&W will be forwarded under separate cover at the time of receipt.

3. No Stormwater Management Plan with supporting calculations and watershed maps, as required by the Preliminary Plan Checklist Item No. 13, were submitted. The Stormwater Management Plan should include the conversion of the land area for the private road as well as the anticipated development on each lot.

A Stormwater Management Plan has been developed for your review. Due to the volume of the Stormwater Management Plan, it will be submitted under separate cover.

4. The Homeowners Association Document to be submitted with the final plan should include the road maintenance requirements for the proposed private way.

Road maintenance requirements are included within the attached Draft Homeowners Association Declaration.

5. Based on our review of other projects in the general area, we are aware that the intersection of Blanchard Road, Blanchard Road Extension and Orchard Road does not meet the MaineDOT definition of a high crash location, although the Critical Rate Factor is 1.93, which is higher than would be expected for similar intersections throughout the State. To satisfy Ordinance Section 250-43. B. (3) we recommend that the Applicant obtain the police report for the crash that occurred at this intersection, conduct a site visit to observe the intersection, and render an opinion as to whether any additional safety improvements are warranted for this location.

The singular crash was anomalous, involving two motorcycles riding together. It is in the Engineer's opinion that the crash is not indicative of necessary safety improvements at the intersection. The proposed three-lot subdivision will not cause the traffic through the intersection to exceed any permitting threshold and additional improvements are not warranted in conjunction with this application. Subdivision Plans

6. The source of the topographic survey (ground, aerial or LIDAR) should be noted on the Plan Set. If it is not ground survey, then a ground survey shall be obtained and shown for the full right of way width as part of the final subdivision plan submission. Plans shall be revised to reflect any necessary changes due to the ground survey.

Topographic data was originally obtained from aerial photography and the Subdivision Plan has been updated to reflect the source of the survey. Additional “on the ground” data was obtained and is reflected on updated roadway plan and profiles.

7. A road name for the existing private right of way (Section C) should be noted on the plans.

The proposed road name for Section C has been approved by the Town of Cumberland Assessor as Moore Farm Road. The existing private right-of-way has been labeled on the revised plans.

8. A road name for the proposed private right of way proposed by this Application should be noted on the plans. ***The proposed road name for the new right-of-way has been approved by the Town of Cumberland Assessor as Estella’s Way. The proposed private right-of-way has been labeled on the revised plans.***

9. As noted in Attachment 1:6 of Chapter 250, “Turnaround on Dead End Street”, the turnaround boundary is not considered part of the right of way, and is specifically noted as an easement. Therefore, the “sides” of the turnaround boundary can not be considered frontage for the purpose of compliance with the space and bulk standards. It appears that Lot B will only have 145’ of frontage based on “right of way”, which is less than the required 200’.

The right-of-way has been revised to account for the turnaround area as an easement and allow for frontage of over 200 feet for each of the three (3) proposed residential lots. The enclosed revised plan set reflects the updated right-of-way.

10. Section 250-37, A.3 notes that the Residential Private Street are permitted only when the average daily traffic is less than 50 (emphasis added). It appears that the existing “Private Right of Way” (Section C of Road Maintenance Agreement) would appear to have an average daily traffic of 50 based on the two existing lots (Ross Bk 36882, Page 305, Yoving Bk 34574, Page 49 and the three proposed Lots (A-C). As the average daily traffic for Section C will not be less than 50, it would appear that the Residential Access Street Standard should apply to this section of the private right of way. While we note that the figures attached to Chapter 50 notes equal to or less than 50 for the Residential Private Street, this contradicts the written ordinance. Per the Town’s concurrence on this determination regarding the discrepancy on the road standards, the standard cross section for Section C Moore Farm Road has been revised.

The revised profile, cross section, and layout is shown on the enclosed revised plan set.

11. Activity within 75 feet of the streams will require an NRPA Permit By Rule for activities adjacent to a protected natural resource. The building envelopes appear to be shown outside of the 75-foot NRPA Statutory Limit, although grading limits outside of the envelopes are not shown. If lot grading would occur within 75’ of the streams, than an NRPA Permit by rule application for lot disturbance within the 75 foot setback would need to be submitted for each lot.

A note has been added to the plan to indicate that any additional grading outside of the building window may require additional NRPA permitting and will be the responsibility of the lot owner.

12. The construction of a portion of the proposed private road and turnaround appears to be within the 75’ NRPA Statutory Limit. Evidence of permitting should be provided with the Final Plan Submission.

A NRPA permit has been submitted, a copy is enclosed for your review.

13. The lot building envelope for Lot C should be trimmed to avoid the wetlands, unless additional wetland disturbance is proposed.

The building envelope for Lot C has been revised to avoid most wetland impacts on the lot and account for some impact to the wetlands.

14. As noted in the Frick Report, This vernal pool contained 8 spotted salamander egg masses which is short of the required 20 egg masses necessary to meet the significance criteria for DEP. However, a formal vernal pool survey must be submitted to the state for concurrence in order for this pool not be regulated by the state. Unless the state determines that the pool is not a significant vernal pool, proposed development or clearing activities within 250 feet of the vernal pool will be subject to DEP review and approval under the Significant Wildlife Habitat Rules, per NRPA. The status of the determination of significance for this vernal pool should be clarified during the Final Plan submission.

Due to the limited sample window during the delineation for this project, we will be assuming that the vernal pool is a Significant Vernal Pool and we will be submitting a Permit by Rule for a disturbance of less than 25% of the 250-foot setback/buffer. If an expanded study is completed during the spring investigation window and the pool is determined to not be significant, the Permit will be modified.

15. The various plans depict a 75' Perimeter Setback versus a 75' Perimeter Buffer. A setback could be interpreted as allowing clearing within the area, while the intent of the buffer is for Response to Review Comments Major Conservation Subdivision Plan Application Ross Estates Page 5 of 8 no disturbance. We would recommend that all references to the Perimeter Setback be modified to a Perimeter Buffer on all drawings.

The buffer is shown on Sheet C4 Site Development Plan and labeled as a No-Cut Buffer. The dimensions that refer to a perimeter setback on Sheet C3 Preliminary Subdivision Plan, Conservation Subdivision have been revised to reflect the buffer as a 75' Perimeter Buffer.

16. The test pit for wastewater disposal for Parcel A is located in the 75' Perimeter Buffer. A test pit should be conducted and information submitted as part of the Final Plan Submission that demonstrates a passing test pit outside of the perimeter buffer.

An additional test pit has been completed has been completed by Chris Coppi of Albert Frick Associates and a copy of the data profile has been enclosed for your review.

17. The dimensions of the proposed turnaround should be noted on the plans. Please note that the dimensions will need to be adjusted for the reduced private right of way (36' vs 50') so that adequate space is provided for emergency vehicles.

The turnaround is designed and dimensioned on the plans in accordance with the sizing required by the Ordinance and exhibits.

18. A note shall be added to the Subdivision Plan noting the requirement for installation of a fire suppression sprinkler system for each residence.

A note has been added noting the requirement for installation of a fire suppression sprinkler system.

19. On Sheet C6, the following comments are provided regarding the proposed private right of way:

a. The proposed private way is not located in the center of the private right of way.

The centerline of proposed private way Estella's Way has been relocated to the center of the private right-of-way.

b. It does not appear that the profile as designed meets the Town Standard of a maximum 3% grade approaching the intersection of 25'.

The profile of proposed private right-of-way Estella's Way has been revised to meet the standard of a 3% maximum grade approaching the intersection.

c. The typical section should be updated to reflect Comment #10 above. Response to Review Comments Major Conservation Subdivision Plan Application Ross Estates Page 6 of 8.

The proposed private right-of-way Estella's Way provides access for three lots and the average daily traffic estimation is 30 vehicles per day, allowing the new private way to remain as a "Residential Access < 50 vpd" cross-section.

d. The typical section should be updated to reflect geotextile fabric as required in Chapter 250, Attachment 2:1.
The typical section has been revised to show the geotextile subbase layer.

e. The 6" underdrain piping and outlet locations shall be shown on the plan view.

In areas of fill, subbase gravels have been daylighted in accordance with conversations with the Town Engineer in lieu of ditch and underdrain.

f. Add a table providing the recommended culvert size by lot.

A table has been included on the plan with the recommended culvert size by lot.

g. A grading easement should be shown on the Plat along any portion of the proposed private way where the toe of slope (cut or fill) is greater than 5' beyond the right of way.

Grading easements have been added to areas outside of 5' beyond the right of way.

h. Sight distance at the intersection should be noted.

The sight distances have been added to the plan.

i. The proposed grading should be revised to reflect the minimum 1' swale as required in Chapter 250, Attachment 1:4.

ii. In areas of fill, the subbase gravels have been daylighted in accordance with conversations with the Town Engineer in lieu of ditch and underdrain.

j. It appears that a culvert is necessary beneath the turnaround / end of road to convey the upstream drainage course.

The grading has been revised at the end of the new private way to maintain the drainage course.

20. The Applicant shall provide a statement that the proposed dead end road length (as measured from the intersection of Blanchard Road Extension and Stonewall Drive to the end of the proposed private right of way) will not exceed 2,000 feet.

A statement has been provided within the cover letter affirming that the dead end does not exceed the Town requirements.

21. On Sheet C5, the following comments are provided for the existing Blanchard Road Extension Improvements (Section A) and the existing Private Right of Way (Section C):

a. The survey should be extended to depict the intersection with Stonewall Drive and the existing edge of pavement. The "End of Pavement" is shown on the Blanchard Road Ext. profile at Station 2+00.

b. The right of way for Blanchard Road Extension should be shown on both sides of the road to demonstrate that the proposed improvements are located within the right of way.

The right-of-way is shown and labeled on the enclosed plans.

c. It does not appear that the profile as designed meets the Town Standard of a maximum 3% grade approaching the intersection of 25' at the intersection of Section A, Section B and Section C.

The profile has been revised and slopes labeled to show how the profile meets the standard. Due to the Town determination that Section C Moore Farm Road be subject to the standards of a “Residential Access > 50 vpd” road, the profile has been designed with a maximum 3% grade within 50 feet of the intersection.

d. The typical section should be updated to reflect Comment #10 above.

The typical section has been revised in accordance with the Town determination that the section be subject to the standards of a “Residential Access > 50 vpd” road.

e. The typical section should be updated to reflect geotextile fabric as required in Chapter 250, Attachment 2:1.

The typical section has been revised to show the geotextile subbase layer.

f. The 6” underdrain piping and outlet locations shall be shown on the plan view.

In areas of fill, subbase gravels have been daylighted in accordance with conversations with the Town Engineer in lieu of ditch and underdrain.

g. Add a table providing the recommended culvert size by lot.

A table has been included on the plan with the recommended culvert size by lot.

h. A grading easement should be shown on the Plat along any portion of the right of way where the toe of slope (cut or fill) extends beyond the right of way.

Grading easements have been added to areas outside of 5’ beyond the right of way.

i. Sight distance at the intersections should be noted.

The sight distances have been added to the plan.

j. The proposed grading should be revised to reflect the minimum 1’ swale as required in Chapter 250, Attachment 1:4.

The grading has been revised to show the swale when the roadway improvements are in an area of cut, and not in areas of fill. In areas of fill, subbase gravels have been daylighted in accordance with conversations with the Town Engineer in lieu of ditch and underdrain.

k. The vertical alignment should be reviewed for conformity to the K Values required for Crest and Sag Vertical Curves for the Residential Access > 50 VPD as shown in Chapter 250, Attachment 1:1.

The profiles have been revised to show the K-values and conformity has been confirmed regarding the required K-Values in accordance with the Town Ordinance.

Town Engineer Comments re: Performance Guarantee

For each road segment as applicable:

1. Provide quantity and cost for seed and mulch.
2. Provide quantity and cost for erosion and sedimentation control.
3. Provide quantity and cost for common borrow.
4. Provide quantity and cost for common excavation.
5. Provide quantity and cost for level lip spreader.
6. Pipe PI as labeled on Sheet C4 references a 36” HDPE Pipe. It appears to have been included in the Performance Guarantee as a 12” Pipe.

VIII. PROPOSED FINDINGS OF FACT - Chapter 250 - Subdivision of Land

The purpose of these standards shall be to assure the comfort, convenience, safety, health and welfare of the people, to protect the environment and to promote the development of an economically sound and stable community. To this end, in approving subdivisions within the Town of Cumberland, Maine, the Board shall consider the following criteria and before granting approval shall determine that the proposed subdivision:

1. Pollution. The proposed subdivision will not result in undue water or air pollution. In making this determination, it shall at least consider:
 - A. The elevation of the land above sea level and its relation to the flood plains;
 - B. The nature of soils and subsoil and their ability to adequately support waste disposal;
 - C. The slope of the land and its effect on effluents;
 - D. The availability of streams for disposal of effluents; and
 - E. The applicable state and local health and water resource rules and regulations;

There are no flood plains on site. A subsurface investigation confirmed that the soils and subsoils are adequate to support waste disposal and passing test pits were confirmed for each lot. The large lot sizes and slope of the land are sufficient for the disposal systems. Streams will not be utilized for disposal of effluents.

Based on the information provided, the Board finds that the standards of this section have been met.

2. Sufficient Water. The proposed subdivision has sufficient water available for the reasonable foreseeable needs of the subdivision;

The lots will be served by private wells. The applicant reviewed the Maine Well Database which shows adequate groundwater available in the surrounding area. Due to the limited (3 lot) development on 12.41 acres will not adversely affect the supply of groundwater to surrounding properties. The Town Engineer has reviewed and approved the findings of the hydrogeologic report.

Based on the information provided, The Board finds that the standards of this section have been met.

3. Municipal Water Supply. The proposed subdivision will not cause an unreasonable burden on an existing water supply, if one is to be used;

The subdivision will not utilize public water.

Based on the information provided, the Board finds the standards of this section have been met.

4. Erosion. The proposed subdivision will not cause unreasonable soil erosion or a reduction in the land's capacity to hold water so that a dangerous or unhealthy condition results;

An erosion and sedimentation control plan (Sheet C 7) was submitted. The plan has been reviewed and approved by the Town Engineer.

Based on the information provided, the Board finds that the standards of this section have been met.

5. Traffic. The proposed subdivision will not cause unreasonable highway or public road congestion or unsafe conditions with respect to the use of the highways or public roads existing or proposed;

The application states that “the anticipated traffic generation for the three (3) proposed single-family lots is estimated at an average of one (1) vehicle trip per hour and ten (10) vehicle trips per day. This is well below any of the traffic permitting thresholds and the existing level of service will not be reduced as a result of this subdivision.

Based on the information provided, the Board finds that the standards of this section have been met.

6. Sewage disposal. The proposed subdivision will provide for adequate sewage waste disposal and will not cause an unreasonable burden on municipal services, if they are utilized;

Each home will have a private septic system. The location of the test pits have been shown on the plan.

Based on the information provided, the Board finds that the standards of this section have been met.

7. Municipal solid waste disposal. The proposed subdivision will not cause an unreasonable burden on the municipality’s ability to dispose of solid waste, if municipal services are to be utilized;

Cumberland provides curbside trash collection and recycling through a contracted waste hauler. The addition of 3 new homes will not cause a burden on the municipality’s ability to dispose of solid waste.

Based on the information provided, the Board finds that the standards of this section have been met.

8. Aesthetic, cultural and natural values. The proposed subdivision will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites, significant wildlife habitat identified by the Department of Inland Fisheries and Wildlife or the municipality, or rare and irreplaceable natural areas or any public rights for physical or visual access to the shoreline;

The plans have been reviewed by town staff and a review letter from the Maine Department of Inland Fisheries and Wildlife is pending and is listed as a proposed condition of approval

With the proposed condition of approval, the Board finds that the standards of this section have been met.

9. Conformity with local ordinances and plans. The proposed subdivision conforms to a duly adopted subdivision regulation or ordinance, comprehensive plan, development plan or land use plan, if any. In making this determination, the municipal reviewing authority may interpret these ordinances and plans;

The plans have been reviewed and approved by the Town Planner, the Town Engineer and Town department heads.

The Board finds that the standards of this section have been met.

10. Financial and technical capacity. The subdivider has adequate financial and technical capacity to meet the standards of this section;

The Applicant has submitted a statement of values that has been reviewed and approved by the Town Engineer. The Applicant states that the proposed improvements will be completed with operating funds

of Stonewood Land, LLC. Evidence of this is listed as a proposed condition of approval and the requirement for a performance guarantee will provide complete evidence of financial capacity.

Technical capacity is evidenced by the use of the following experts: a professional engineer, a licensed land surveyor, an attorney, and a wetland scientist.

With the proposed condition of approval, the Board finds that the standards of this section have been met.

11. Surface waters; outstanding river segments. Whenever situated entirely or partially within the watershed of any pond or lake or within 250 feet of any wetland, great pond or river as defined in Title 38 chapter 3, subchapter I, article 2-B, the proposed subdivision will not adversely affect the quality of that body of water or unreasonably affect the shoreline of the body of water;

Wetlands were delineated by Albert Frick Associates, Inc. in Mya of 2020. The three-lot development has been designed to avoid wetland impact to the maximum extent practicable and will involve the filling of 2,558 s.f. of wetland which is below MDEP permitting thresholds. The proposed development will not adversely affect the quality of the wetlands. The site is not situated in the watershed of a pond or lake.

Based on the information provided, the Board finds that the standards of this section have been met.

12. Ground water. The proposed subdivision will not alone, or in conjunction with, existing activities, adversely affect the quality or quantity of ground water;

The three-lot subdivision, which will utilize private well water, will not adversely affect the quantity or quality of groundwater.

Based on the information provided, the Board finds that the standards of this section have been met.

13. Flood areas. Based on the Federal Emergency Management Agency's Flood Boundary and Floodway Maps and Flood Insurance Rate Maps, and information presented by the applicant whether the subdivision is in a flood-prone area. If the subdivision, or any part of it, is in such an area, the subdivider shall determine the 100-year flood elevation and flood hazard boundaries within the subdivision. The proposed subdivision plan must include a condition of plan approval requiring that principal structures in the subdivision will be constructed with their lowest floor, including the basement, at least one foot above the 100-year flood elevation;

The development is not located within a 100 year flood plain as shown on FEMA Flood Insurance Rate Map Panel 10 of 25 for Cumberland, Maine.

Based on the information provided, the Board finds that the standards of this section have been met.

14. Storm water. The proposed subdivision will provide for adequate storm water management;

The site is currently undeveloped and wooded. The proposed private road will create 7,245 s.f. of impervious area. The runoff from the private gravel road will be directed downstream into existing drainageways. The proposed impervious and disturbed areas are below any permitting threshold for stormwater treatment. Specific provisions for permanent and temporary erosion control features have

been provided in the construction drawings. The Town Engineer has reviewed and approved the stormwater management plan.

Based on the information provided, the Board finds that the standards of this section have been met.

15. Freshwater wetlands. All potential freshwater wetlands, as defined in 30-A M.R.S.A. §4401 (2-A), within the proposed subdivision have been identified on any maps submitted as part of the application, regardless of the size of these wetlands. Any mapping of freshwater wetlands may be done with the help of the local soil and water conservation district.

All wetlands have been mapped and shown on the plan. The development of three proposed single-family residential lots has been designed to avoid wetland impacts to the maximum extent possible and will involve the filling of 2,558 s.f. of wetland which is below MDEP permitting thresholds.

Based on the information provided, the Board finds that the standards of this section have been met.

16. River, stream or brook... Any river, stream, or brook within or abutting the proposed subdivision has been identified on any map submitted as a part of the application. For purposes of this section, "river, stream or brook" has the same meaning as in Title 38, Section 480-B, Subsection 9. [Amended; Effective. 11/27/89]

The streams on the site were delineated by Albert Frick Associates, Inc.

Based on the information provided, the Board finds that the standards of this section have been met.

Article III Conservation Subdivision

§ 250-5 General subdivision standards.

§ 250-6 Conservation subdivision standards.

§ 250-7 Permitted uses of common open space.

§ 250-8 Prohibited uses of common open space.

§ 250-9 Ownership, management, legal protection, and maintenance of common open space in a conservation subdivision.

250-5 GENERAL SUBDIVISION STANDARDS A. General The proposed three (3) lot residential subdivision has been designed as a Conservation Subdivision in accordance with the Planning Board's decision at the preapplication workshop on Tuesday, March 16, 2021. B. Criteria to be considered The proposed three (3) lot

residential subdivision has been designed as a Conservation Subdivision in accordance with the Planning Board's decision. (1) Water The proposed lots will be served by individual private wells. (2) Wastewater The proposed lots will be serviced by individual subsurface wastewater disposal systems. Passing test pits were observed on each of the lots (3) Open Space The site of the proposed subdivision is forested and primarily abuts forested area which includes dedicated open space and residential lots. Existing trails traverse the site and the proposed open space has been sited to permit trail connectivity across the site within the dedicated open space. There are no significant wildlife habitats or fisheries on the site. The existing wetlands, vernal pool, and streams were field located and are shown on the plans. The parcel does not contain or adjoin a Resource Protection District and does abut existing Open Space. Major Conservation Subdivision – Preliminary/Final Plan Application Ross Estates September 28, 2021 Page 8

250-6 CONSERVATION SUBDIVISION STANDARDS

A. Conservation subdivision option: The site is located in the RR2 Zoning District. The proposed three (3) lot residential subdivision has been designed as a Conservation Subdivision in accordance with the Planning Board's determination at the preapplication workshop on Tuesday, March 16, 2021. More than six (6) acres of open space will be preserved with the proposed development.

B. Perimeter buffer. The 75-foot perimeter buffer has been incorporated into the proposed design where existing trees and vegetation will be preserved.

C. Minimum common open space requirement. The proposed development includes three (3) lots, a private right-of-way, and Open Space. In accordance with the Conservation Subdivision open space requirement, the Open Space encompasses a total of 6.52 acres, or 53%, of the 12.41-acre total parcel. The open space includes the vernal pool depression and most of the area of the 100-foot setback despite that the vernal pool is not significant, and much of the wetland and stream area of the site. The open space is also designed to allow for the continuity of the existing trails that cross the site.

D. High-value conservation areas. The site includes two types of high-value conservation areas that have been labeled on the enclosed plans. The entire site is wooded and presumed to be a native, healthy forest. Two (2) existing trails pass through the site that have connectivity to Town and/or conservation lands. The site is not a known habitat for endangered or threatened species or significant wildlife habitat. The site does not include significant natural features or scenic views, historical/archaeological sites, or prime agricultural land. The site is not within the 100-year flood plan nor any resource protection district.

E. Conservation subdivision additional standards. The individual lots of the proposed subdivision will be owned by the individual landowners. The Open Space is proposed to be offered to the Town of Cumberland. As determined using the net residential acreage calculation, the maximum density of this property is five (5) lots. The proposed subdivision includes three (3) single family residential lots. Major Conservation Subdivision – Preliminary/Final Plan Application Ross Estates September 28, 2021 Page 9 F. Conservation subdivision standards (1) Lot density calculation (a) Lot density calculation Gross Acreage: 540,475 s.f. = 12.41 acres Slopes (20%): 0 s.f. = 0.00 acres Wetlands: 38,475 s.f. = 0.88 acres 100yr Flood: 0 s.f. = 0.00 acres Rights-Of-Way: 11,115 s.f. = 0.26 acres Rp District: 0 s.f. = 0.00 acres Net Residential Acreage: 490,885 s.f. = 11.27 acres The minimum lot size allowed in the RR2 zone is 2 acres. Maximum Number of Lots Allowed: 11.27 acres / 2 acres = 5.63 Lots (b) Minimum lot size. Minimum Lot Size: 50% of Gross Acreage / Maximum Number of Lots Allowed 6.20 acres / 5.63 lots = 1.10 acres Each of the proposed lots exceeds the calculated minimum lot size for the RR2 zone. Proposed Lot A consists of 1.92± acres. Proposed Lot B consists of 1.90± acres. Proposed Lot C consists of 1.95± acres. No adjustments are requested or proposed. (c) Lot setbacks The setbacks for each of the proposed lots are shown on the plans (d) Minimum lot frontage: 200 feet Frontage is provided for each of the lots from the proposed private right-of-way. Frontage for each lot exceeds 200 feet. (e) Minimum access easement to common open space Access to the proposed common open space is provided from each of the proposed lots and the existing private right-of-way. Each of the three (3) proposed lots abuts the open space and allows access to the open space. The proposed common open space has frontage on the existing private right-of-way at the far east corner of the site. (f) Sheds and driveways. The three (3) lots will be sold and developed by the future landowners. Major Conservation Subdivision – Preliminary/Final Plan Application Ross Estates September 28, 2021 Page 10

250-28

The proposed subdivision is in compliance with the standards set forth in Chapter 250 – Subdivision of Land.
250-29 REVIEW AND APPROVAL BY OTHER AGENCIES Any necessary approvals will be submitted with the Final Application or upon receipt.

250-30 CONFORMITY WITH OTHER STATE AND LOCAL REGULATIONS The proposed three lot subdivision has been designed in accordance with local and state regulations.

250-31 COMMON OPEN SPACES The open space for the proposed conservation subdivision will be donated to the Town for conservation. The open space has been sited provide connectivity for existing trails that traverse the site and provide connection to adjacent conservation land. The open space allows for the relocation of the existing trails while maintaining connectivity.

250-32 PRESERVATION OF NATURAL FEATURES The proposed subdivision includes the development of three (3) residential lots on 12.41 acres. The development will only disturb approximately 15,000 s.f., preserving many of the natural features of the parcel. The proposed road and lot layout corresponds with the existing topography to the maximum extent practicable. The proposed subdivision incorporates a 75-foot wide buffer along the existing right-of-way and the remaining extents of the outer boundary of the parcel. Much of the wooded buffer is protected by the overlap of the proposed open space.

250-33 UTILITIES The proposed lots will be serviced private well and subsurface wastewater systems on each lot; public water and wastewater systems are not available. Underground electric and communications will be extended from nearby services.

250-34 WATER SUPPLY Public water is not available for this development and individual, and no water mains are proposed. The proposed lots will be served by individual private wells. Each well is tested for quantity and quality when drilled. Well locations are not included in the proposed design as each lot will be sold individually, and the wells will be located by each individual lot owners. A waiver is requested for the well locations. With the generous spacing of the proposed lots and orientation of the passing test pits for the proposed subsurface wastewater systems, each lot has adequate spacing for a proposed well. The enclosed map from the Maine Well Database shows that there appears to be adequate groundwater available in the surrounding area. Major Conservation Subdivision – Preliminary/Final Plan Application Ross Estates
September 28, 2021 Page 11

250-35 SEWAGE DISPOSAL Public sewer is not available for this development and no new sewer system, or sewer system expansion, is proposed. The proposed lots will be served by individual private septic systems and leach fields. Each lot will be sold individually, and the subsurface wastewater systems will be located by each individual lot owner. HHE-200 designs will be provided by individual lot owners at the time of application for building permit. A waiver is requested for the septic plans. Soil test pits indicate adequate soils exist on each lot.

250-36 TREES, ESPLANADES AND PLANTING SCREENS As the existing site is wooded, street trees are not warranted. The proposed wooded buffer along the site perimeter, in conjunction with the internal lot setbacks, will minimize any noise pollution within the site or emanating from the site; however, it is not anticipated that there will be any source of noise pollution from the proposed three-lot residential subdivision.

250-37 GENERAL STREET STANDARDS The average daily trips for the proposed private way Estella's Way is based on the anticipated ten (10) average weekday trips per single-family detached dwelling unit.

250-38 DESIGN AND CONSTRUCTION STANDARDS

250-40 FIRE PROTECTION The subdivision design must comply with Chapter 96, Article II, Fire Protection, of this Code. Article II: Fire Protection The proposed subdivision includes three (3) single-family residential lots and a 300± linear feet private right of way and is a major residential subdivision in accordance with the Town code. The proposed development will be required to meet the Fire protection requirements. As no public water supply exists to serve the development and the development cannot be designed with two entrances, approved automatic sprinkler systems will be required for the new dwelling units. Notes have been added to the subdivision plan requiring all new dwellings to have an approved automatic sprinkler system installed. The three (3) proposed dwelling units will be separated by more than 100 feet as determined by the available building windows. Major Conservation Subdivision – Preliminary/Final Plan Application Ross Estates
September 28, 2021 Page 12

250-41 SOIL EROSION An Erosion & Sediment Control Plan and Erosion Control Notes are included with the plan set. The proposed development will utilize silt fence or sediment barrier to prevent sediment from leaving the site.

250-42 IDENTIFICATION OF FRESHWATER WETLANDS Wetlands were delineated by Albert Frick Associates in May 2020. The wetlands, streams, and vernal pool were field located and are shown on the enclosed plans. The Wetlands and Soil Suitability Report is enclosed with this submission

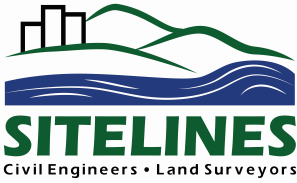
250-43 TRAFFIC CONDITIONS The proposed right-of way (Estella's Way) alignment is in compliance with the Geometric Design Standards and includes a turnaround for the dead-end street. The roadway is designed to safely circulate all traffic within the subdivision. Physical and environmental site conditions prevent any street connections to adjoining parcels. The anticipated traffic generation for the three (3) proposed single-family lots will not cause unreasonable congestion or unsafe conditions on highways or public roads and the traffic associated with the development shall maintain the existing Level of Service on any public road within 200 feet of any existing or proposed curb cut. The developer will be responsible to make improvements within Section A and Section C of Blanchard Road Extension, as described in the enclosed Declaration of Covenants Amending and Replacing Road Maintenance Agreements. The portion of Section A running northwesterly from the end of the existing pavement and the portion of Section C (Moore Farm Road) between the end of Section A and Estella's Way will be designed with a gravel surface and width per the Standard for Residential Access greater than fifty (50) VPD. The new private right-of-way (Estella's Way) will be designed with a gravel surface and width per the Standard for Residential Access equal to or less than fifty (50) VPD.

IX. STANDARD CONDITION OF APPROVAL

This approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted by the applicant. Any variation from the plans, proposals and supporting documents, except de minimus changes as so determined by the Town Planner which do not affect approval standards, is subject to review and approval of the Planning Board prior to implementation.

X. RECOMMENDED CONDITIONS OF PRELIMINARY AND FINAL PLAN APPROVAL:

1. A preconstruction conference shall be held prior to the start of construction.
2. The Applicant will provide a statement showing the amount of operating funds of Stonewood Land, LLC will cover the costs of the estimated cost of construction.
3. A performance guarantee in an amount and form acceptable to the Town Manager will be required prior to the preconstruction conference.
4. All clearing limits shall be flagged and approved by the Peer Review Engineer prior to the preconstruction conference.
5. A blasting permit, if required, shall be obtained from the Code Enforcement Officer.
6. All legal and technical review fees shall be paid to the Town prior to the preconstruction conference.
7. A letter from the Maine Department of Inland Fisheries and Wildlife shall be submitted prior to the preconstruction conference.
8. Any required local, State or Federal permits shall be submitted to the Town Planner prior to releasing the plat for recording.
9. An electronic copy of the as-built plans shall be submitted to the Town Planner prior to the release of any remaining inspection fees.



Revised October 13, 2021

4185-7

Ms. Carla Nixon, Town Planner
Town of Cumberland
290 Tuttle Road
Cumberland, Maine 04021

Re: Major Conservation Subdivision – Final Plan Application
ROSS ESTATES
BLANCHARD ROAD EXTENSION, CUMBERLAND
Tax Map R08, Lot 68I

Dear Carla:

On behalf of Stonewood Land, LLC (Applicant), Sitelines, PA is pleased to submit the enclosed Preliminary and Final Plan Applications for the development of a three (3) lot subdivision on Blanchard Road Extension in Cumberland. This letter is intended to summarize the project in order to facilitate the review process. A check for the \$2,200 fee has been previously submitted.

PROPERTY

The Applicant owns a parcel of land located along a private right-of-way off Blanchard Road Extension. The parcel is identified as Tax Map R08, Lot 68I on the Town of Cumberland Tax Maps. The parcel contains 12.41± acres and has frontage on the private right-of-way. The site has not been previously developed and consists mostly of forested area. Existing features on the site include rock walls, streams, trails, wetlands, and a vernal pool. Wetlands were delineated by Albert Frick Associates in May 2020. The property is located in the Rural Residential 2 (RR2) Zoning District and not is adjacent to any other Town of Cumberland district. It is outside the limits of any Town Overlay Zones. Single-family detached dwellings is a permitted use the RR2 zoning district.

The site includes two types of high-value conservation areas that have been noted in the enclosed plans. The entire site is wooded and presumed to be a native, healthy forest. Two (2) existing trails pass through the site that have connectivity to Town and/or conservation lands. The site is not a known habitat for endangered or threatened species or significant wildlife habitat. The site does not include significant natural features or scenic views, historical/archaeological sites, or prime agricultural land. The site is not within the 100-year flood plan nor any resource protection district.

Gross Acreage:	540,475 s.f.	=	12.41 acres
Slopes (20%):	0 s.f.	=	0.00 acres
Wetlands:	38,475 s.f.	=	0.88 acres
100yr Flood:	0 s.f.	=	0.00 acres
Rights-Of-Way:	0 s.f.	=	0.00 acres
Rp District:	0 s.f.	=	0.00 acres
Net Residential Acreage:	502,000 s.f.	=	11.52 acres

The property is subject to and benefitted by the attached Declaration of Covenants Amending and Replacing Road Maintenance Agreements that was recorded in the Cumberland County Registry of Deeds in Book 23480, Page 223 (Maintenance Agreement). Additional lots created will also be subject to the Maintenance Agreement and will be required to pay an equal share of the costs as defined in the Maintenance Agreement. Any Road improvements necessary within Section A or Section C as defined in the Maintenance Agreement, as well as construction the new private road, will be the responsibility of Stonewood Land, LLC.

SITE DESIGN

The proposed subdivision consists of dividing the existing lot into three (3) residential lots and an area of proposed private right-of-way named Estellas Way. The proposed lots have frontage on the Estellas Way private right-of-way. The proposed wetland impacts of 4,201 s.f. are below any permitting threshold. A Maine Department of Environmental Protection (MDEP) Natural Resources Protection Act (NRPA) Permit by Rule (PBR) has been submitted for the proposed private road and grading within 75' of the stream. Any grading or impacts on any individual building lots within the 75' NRPA setbacks from the streams will necessitate that the individual landowners will need to file NRPA PBRs.

In accordance with Section 250-14 of the Town Ordinance, two options for the proposed subdivision were presented to the Planning Board at the Preapplication Workshop on March 16, 2021. The Planning Board voted that the project shall move forward as a Conservation Subdivision. Enclosed is an updated Conservation Subdivision layout.

The proposed Conservation Subdivision Concept was approved at the Sketch Plan Review level at the May 18, 2021 Planning Board Meeting.

The enclosed Conservation Subdivision Layout has been designed in accordance with *Section 250-6 CONSERVATION SUBDIVISION STANDARDS* of the Town Ordinance. The layout was designed to preserve the natural features of the site and to prioritize conservation of “high value conservation areas” while siting the proposed building windows adjacent to the passing test pits for the future subsurface wastewater disposal systems. The Conservation Option includes three (3) lots, a private right-of-way, and Open Space. In accordance with the Conservation Subdivision open space requirement, the Open Space encompasses a total of 6.39 acres, or



approximately 51%, of the 12.41-acre total parcel. The proposed 36' private right-of-way encompasses 0.24 acres, of which 0.22 acres is outside of the delineated wetlands. The Net Residential Acreage of the site is approximately 11.31 acres when accounting for the existing wetlands and right-of-way. The maximum number of lots allowed is the net residential acreage divided by the 2-acre minimum lot size in the RR2 district, or 5.65 lots. The minimum lot size is calculated at 50% of the gross acreage divided by the maximum number of lots allowed, or 1.10 acres. Proposed Lots A, B, & C encompass 1.92 acres, 1.92 acres, and 1.94 acres, respectively. The layout includes a buffer of 75' around the perimeter of the existing lot and proposed subdivision. The plan shows the locations of the natural features of the site and the locations of the passing test pits for the future subsurface wastewater disposal systems.

Gross Acreage:	540,475 s.f.	=	12.41 acres
Slopes (20%):	0 s.f.	=	0.00 acres
Wetlands:	38,475 s.f.	=	0.88 acres
100yr Flood:	0 s.f.	=	0.00 acres
Rights-Of-Way:	9,472 s.f.	=	0.22 acres
Rp District:	0 s.f.	=	0.00 acres
Net Residential Acreage:	492,528 s.f.	=	11.31 acres

Maximum Number of Lots Allowed: 11.31 acres / 2 acres = 5.65 Lots

Minimum Lot Size: 50% of Gross Acreage / Maximum Number of Lots Allowed
6.20 acres / 5.65 lots = 1.10 acres

The building envelopes have been sited to preserve the natural features of the site and permitting requirements for the wetlands, stream setbacks, and vernal pool habitat necessitate the preservation of these features. Connectivity for the existing trails will be retained.

The road is designed in accordance with the Town Subdivision Road Standards as a "Residential Access < / = 50 vpd" with a gravel surface. The road includes 9' wide gravel travel lanes and 2' side gravel shoulders within a 36' private right-of-way.

REVIEW STANDARDS

To facilitate your review of our proposal, the following issues are summarized in accordance with *CHAPTER 250 - SUBDIVISION OF LAND* of the Cumberland Code:

250-1 PURPOSE

The proposed development is in compliance with the standards set forth in Chapter 250 – Subdivision of Land.



250-4 SUBDIVISION APPROVAL CRITERIA

A. Pollution

The subdivision will not result in undue water or air pollution.

The development has been designed outside of any flood plains.

A subsurface investigation confirmed that the soils and subsoils are adequate to support waste disposal and passing test pits were confirmed for each proposed lot; the soil test pit logs are enclosed. All lots will utilize properly sized underground wastewater disposal systems. The large lot sizes and slope of the land are sufficient for the disposal systems; the disposal systems will have no effect on offsite areas. Streams will not be utilized for disposal of effluents.

B. Sufficient water

Municipal water is not available. The proposed lots will be serviced by private wells. After reviewing the Maine Well Database, there appears to be adequate groundwater available in the surrounding area. As shown on the enclosed map, there are existing wells in the surrounding area that provide flow rates ranging from 2.0 gpm to 50 gpm. As is typical in most areas, well flow rates can vary greatly, and are not typically impacted by surrounding development unless density is increased substantially over a long period of time. The proposed development is meeting the density requirements of the Zoning District and is not anticipated to adversely impact the existing groundwater in the surrounding areas.

C. Municipal water supply

Municipal water is not available. The proposed lots will be serviced by private wells to be located by the future individual lot owners.

D. Erosion

The disturbed areas of the site will be isolated through the use of silt fence and other measures to minimize the transport of sediment from the site. The project has been designed to incorporate Best Management Practices as outlined in the Maine Erosion and Sediment Control BMPs as published by the Maine Department of Environmental Control, current edition. Specific provisions for permanent and temporary erosion control features have been provided in the construction drawings. The contractor will be bound to meet the performance standards of the BMPs including erosion control, stabilization, maintenance, and inspection requirements.

E. Traffic

The anticipated traffic generation for the three (3) proposed single-family lots is estimated at an average of one (1) vehicle trip per hour and ten (10) vehicle trips per

day (VPD) per each lot. This level of additional trips does not trigger any traffic permitting thresholds, including the 100 new peak hour trips threshold for a Maine DOP Traffic Movement Permit. The development will not cause unreasonable congestion or unsafe conditions on highways or public roads and the traffic associated with the development shall maintain the existing Level of Service on any public road within 200 feet of any existing or proposed curb cut.

F. Sewage disposal

The proposed lots will be serviced by individual subsurface wastewater disposal systems. Passing test pits were observed on each of the lots by Albert Frick Associates, Inc. The Wetlands and Soil Suitability Report includes Test Pit Logs and is enclosed with this submission.

G. Municipal solid waste disposal

The three (3) proposed residential lots will create low amounts of solid waste. The proposed development is meeting the density requirements of the Zoning District and is not anticipated to cause an unreasonable burden on the municipality's ability to dispose of solid waste.

H. Aesthetic, cultural and natural values

The proposed subdivision will not have an undue adverse effect on the scenic or natural beauty of the area. An area of 6.39 acres will be preserved in Open Space and much of the natural features of the site including wetlands, vernal pool, and streams will be protected within site and natural resource setbacks.

I. Conformity with local ordinances and plans

The proposed subdivision has been designed in compliance with the standards set forth in the applicable Town ordinances, plans, and standards.

J. Financial and technical capacity

A letter of financial capacity will be submitted to the Planner under separate cover, upon review of the preliminary costs estimate by the Town Engineer.

Technical capacity is evidenced by the design team consisting of: a Professional Engineer, a Professional Land Surveyor, an Attorney, and a wetland and soils scientist.

K. Surface waters; outstanding river segments

Wetlands on the site were delineated by Albert Frick Associates, Inc. in May of 2020. The development of the three (3) proposed single-family residential lots has been designed to avoid wetland impacts to the maximum extent practicable and will involve the filling of 4,201 s.f. of wetland which is below MDEP permitting



thresholds. The proposed development will not adversely affect the quality of the wetlands. The site is not situated in the watershed of a pond or lake.

L. Groundwater

The project will not extract groundwater for operations. The lots will be serviced by a private wells and private subsurface wastewater disposal systems. Providing that the septic systems are installed and maintained as designed, no undue adverse effect on the quality or quantity of groundwater will occur as a result of this project.

M. Flood areas

The development is not in the Shoreland Overlay District. The project area is in Zone C (Areas of Minimal Flooding) of the Flood Insurance Rate Maps (FIRMs) for Town of Cumberland, Maine, Cumberland County. The project area is located on Panel 10 of 25 (Community Panel 230162-0010-B, Effective May 19, 1981). An excerpt of the applicable FIRM is enclosed.

N. Stormwater

In the existing condition, the site is undeveloped and wooded. The site drains generally toward the south; runoff leaves the site in existing drainageways and streams and ultimately enters the Piscataqua River.

The proposed private road will create 0.17 acres of impervious area. The construction and grading of the proposed road will disturb approximately 21,400± s.f. (0.49 acres). The runoff from the private gravel road will be directed downstream into existing drainageways. Please see the accompanying Stormwater Management Plan, submitted under separate cover due to its size.

The disturbed areas of the site will be isolated using silt sock and other measures to minimize the transport of sediment from the site. The project has been designed to incorporate Best Management Practices as outlined in the Maine Erosion and Sediment Control BMPs as published by the Maine Department of Environmental Control, current edition. Specific provisions for permanent and temporary erosion control features have been provided in the construction drawings. The contractor will be bound to meet the performance standards of the BMPs including erosion control, stabilization, maintenance, and inspection requirements.

O. Freshwater wetlands

Wetlands on the site were delineated by Albert Frick Associates, Inc. in May of 2020. The development of the three (3) proposed single-family residential lots has been designed to avoid wetland impacts to the maximum extent practicable and will involve the filling of 4,201 s.f. of wetland which is below MDEP permitting



thresholds. The proposed development will not adversely affect the quality of the wetlands.

P. River, stream or brook

The streams on the site were delineated by Albert Frick Associates, Inc. in May of 2020. The development of the three (3) proposed single-family residential lots has been designed to avoid direct stream impacts but the proposed activity within 75' of a stream will necessitate a Maine Department of Environmental Protection (MDEP) Natural Resources Protection Act (NRPA) Permit by Rule (PBR). Future landowners will be responsible for obtaining any MDEP permits required for stream and wetland impacts from driveway individual lot development.

250-5 GENERAL SUBDIVISION STANDARDS

A. General

The proposed three (3) lot residential subdivision has been designed as a Conservation Subdivision in accordance with the Planning Board's decision at the preapplication workshop on Tuesday, March 16, 2021.

B. Criteria to be considered

The proposed three (3) lot residential subdivision has been designed as a Conservation Subdivision in accordance with the Planning Board's decision.

(1) Water

The proposed lots will be served by individual private wells.

(2) Wastewater

The proposed lots will be serviced by individual subsurface wastewater disposal systems. Passing test pits were observed on each of the lots

(3) Open Space

The site of the proposed subdivision is forested and primarily abuts forested area which includes dedicated open space and residential lots. Existing trails traverse the site and the proposed open space has been sited to permit trail connectivity across the site within the dedicated open space.

There are no significant wildlife habitats or fisheries on the site. The existing wetlands, vernal pool, and streams were field located and are shown on the plans. The parcel does not contain or adjoin a Resource Protection District and does abut existing Open Space.

250-6 CONSERVATION SUBDIVISION STANDARDS

A. *Conservation subdivision option*

The site is located in the RR2 Zoning District. The proposed three (3) lot residential subdivision has been designed as a Conservation Subdivision in accordance with the Planning Board's determination at the preapplication workshop on Tuesday, March 16, 2021. More than six (6) acres of open space will be preserved with the proposed development.

B. *Perimeter buffer*

The 75-foot perimeter buffer has been incorporated into the proposed design where existing trees and vegetation will be preserved.

C. *Minimum common open space requirement*

The proposed development includes three (3) lots, a private right-of-way, and Open Space. In accordance with the Conservation Subdivision open space requirement, the Open Space encompasses a total of 6.52 acres, or 53%, of the 12.41-acre total parcel. The open space includes the vernal pool depression and most of the area of the 100-foot setback despite that the vernal pool is not significant, and much of the wetland and stream area of the site. The open space is also designed to allow for the continuity of the existing trails that cross the site.

D. *High-value conservation areas*

The site includes two types of high-value conservation areas that have been labeled on the enclosed plans. The entire site is wooded and presumed to be a native, healthy forest. Two (2) existing trails pass through the site that have connectivity to Town and/or conservation lands. The site is not a known habitat for endangered or threatened species or significant wildlife habitat. The site does not include significant natural features or scenic views, historical/archaeological sites, or prime agricultural land. The site is not within the 100-year flood plan nor any resource protection district.

E. *Conservation subdivision additional standards*

The individual lots of the proposed subdivision will be owned by the individual landowners. The Open Space is proposed to be offered to the Town of Cumberland. As determined using the net residential acreage calculation, the maximum density of this property is five (5) lots. The proposed subdivision includes three (3) single family residential lots.

F. Conservation subdivision standards

(1) Lot density calculation

(a) Lot density calculation

Gross Acreage:	540,475 s.f.	=	12.41 acres
Slopes (20%):	0 s.f.	=	0.00 acres
Wetlands:	38,475 s.f.	=	0.88 acres
100yr Flood:	0 s.f.	=	0.00 acres
Rights-Of-Way:	11,115 s.f.	=	0.26 acres
Rp District:	0 s.f.	=	0.00 acres
Net Residential Acreage:	490,885 s.f.	=	11.27 acres

The minimum lot size allowed in the RR2 zone is 2 acres.

Maximum Number of Lots Allowed: 11.27 acres / 2 acres = 5.63 Lots

(b) Minimum lot size.

Minimum Lot Size: 50% of Gross Acreage / Maximum Number of Lots Allowed
6.20 acres / 5.63 lots = 1.10 acres

Each of the proposed lots exceeds the calculated minimum lot size for the RR2 zone. Proposed Lot A consists of 1.92± acres. Proposed Lot B consists of 1.90± acres. Proposed Lot C consists of 1.95± acres. No adjustments are requested or proposed.

(c) Lot setbacks

The setbacks for each of the proposed lots are shown on the plans

(d) Minimum lot frontage: 200 feet

Frontage is provided for each of the lots from the proposed private right-of-way. Frontage for each lot exceeds 200 feet.

(e) Minimum access easement to common open space

Access to the proposed common open space is provided from each of the proposed lots and the existing private right-of-way. Each of the three (3) proposed lots abuts the open space and allows access to the open space. The proposed common open space has frontage on the existing private right-of-way at the far east corner of the site.

(f) Sheds and driveways.

The three (3) lots will be sold and developed by the future landowners.



250-28 CONSIDERATIONS FOR APPROVAL

The proposed subdivision is in compliance with the standards set forth in Chapter 250 – Subdivision of Land.

250-29 REVIEW AND APPROVAL BY OTHER AGENCIES

Any necessary approvals will be submitted with the Final Application or upon receipt.

250-30 CONFORMITY WITH OTHER STATE AND LOCAL REGULATIONS

The proposed three lot subdivision has been designed in accordance with local and state regulations.

250-31 COMMON OPEN SPACES

The open space for the proposed conservation subdivision will be donated to the Town for conservation. The open space has been sited provide connectivity for existing trails that traverse the site and provide connection to adjacent conservation land. The open space allows for the relocation of the existing trails while maintaining connectivity.

250-32 PRESERVATION OF NATURAL FEATURES

The proposed subdivision includes the development of three (3) residential lots on 12.41 acres. The development will only disturb approximately 15,000 s.f., preserving many of the natural features of the parcel. The proposed road and lot layout corresponds with the existing topography to the maximum extent practicable.

The proposed subdivision incorporates a 75-foot wide buffer along the existing right-of-way and the remaining extents of the outer boundary of the parcel. Much of the wooded buffer is protected by the overlap of the proposed open space.

250-33 UTILITIES

The proposed lots will be serviced private well and subsurface wastewater systems on each lot; public water and wastewater systems are not available. Underground electric and communications will be extended from nearby services.

250-34 WATER SUPPLY

Public water is not available for this development and individual, and no water mains are proposed. The proposed lots will be served by individual private wells. Each well is tested for quantity and quality when drilled. Well locations are not included in the proposed design as each lot will be sold individually, and the wells will be located by each individual lot owners. A waiver is requested for the well locations. With the generous spacing of the proposed lots and orientation of the passing test pits for the proposed subsurface wastewater systems, each lot has adequate spacing for a proposed well. The enclosed map from the Maine Well Database shows that there appears to be adequate groundwater available in the surrounding area.



250-35 SEWAGE DISPOSAL

Public sewer is not available for this development and no new sewer system, or sewer system expansion, is proposed. The proposed lots will be served by individual private septic systems and leach fields. Each lot will be sold individually, and the subsurface wastewater systems will be located by each individual lot owner. HHE-200 designs will be provided by individual lot owners at the time of application for building permit. A waiver is requested for the septic plans. Soil test pits indicate adequate soils exist on each lot.

250-36 TREES, ESPLANADES AND PLANTING SCREENS

As the existing site is wooded, street trees are not warranted. The proposed wooded buffer along the site perimeter, in conjunction with the internal lot setbacks, will minimize any noise pollution within the site or emanating from the site; however, it is not anticipated that there will be any source of noise pollution from the proposed three-lot residential subdivision.

250-37 GENERAL STREET STANDARDS

The average daily trips for the proposed private way Estella's Way is based on the anticipated ten (10) average weekday trips per single-family detached dwelling unit.

250-38 DESIGN AND CONSTRUCTION STANDARDS

The portion of Section A (Blanchard Road Extension) running northwesterly from the end of the existing pavement (near the intersection with Stonewall Drive) and the portion of Section C (Moore Farm Road) between the end of Section A and Estella's Way will be designed with a gravel surface and width per the Standard for Residential Access greater than fifty (50) VPD. The new private right-of-way (Estella's Way) will be designed with a gravel surface and width per the Standard for Residential Access equal to or less than fifty (50) VPD.

The proposed dead end road length (as measured from the intersection of Blanchard Road Extension and Stonewall Drive to the end of the proposed Estella's Way will not exceed 2,000 feet.

250-39 ROADWAY CONSTRUCTION STANDARDS AND SPECIFICATIONS

All roadway construction standards and specifications shall conform to the Maine Department of Transportation Standard Specifications, 2003, as revised.

250-40 FIRE PROTECTION

The subdivision design must comply with Chapter 96, Article II, Fire Protection, of this Code.

Article II: Fire Protection

The proposed subdivision includes three (3) single-family residential lots and a 300± linear feet private right of way and is a major residential subdivision in



accordance with the Town code. The proposed development will be required to meet the Fire protection requirements. As no public water supply exists to serve the development and the development cannot be designed with two entrances, approved automatic sprinkler systems will be required for the new dwelling units. Notes have been added to the subdivision plan requiring all new dwellings to have an approved automatic sprinkler system installed.

The three (3) proposed dwelling units will be separated by more than 100 feet as determined by the available building windows.

250-41 SOIL EROSION

An Erosion & Sediment Control Plan and Erosion Control Notes are included with the plan set. The proposed development will utilize silt fence or sediment barrier to prevent sediment from leaving the site.

250-42 IDENTIFICATION OF FRESHWATER WETLANDS

Wetlands were delineated by Albert Frick Associates in May 2020. The wetlands, streams, and vernal pool were field located and are shown on the enclosed plans. The Wetlands and Soil Suitability Report is enclosed with this submission

250-43 TRAFFIC CONDITIONS

The proposed right-of way (Estella's Way) alignment is in compliance with the Geometric Design Standards and includes a turnaround for the dead-end street. The roadway is designed to safely circulate all traffic within the subdivision. Physical and environmental site conditions prevent any street connections to adjoining parcels. The anticipated traffic generation for the three (3) proposed single-family lots will not cause unreasonable congestion or unsafe conditions on highways or public roads and the traffic associated with the development shall maintain the existing Level of Service on any public road within 200 feet of any existing or proposed curb cut.

The developer will be responsible to make improvements within Section A and Section C of Blanchard Road Extension, as described in the enclosed *Declaration of Covenants Amending and Replacing Road Maintenance Agreements*. The portion of Section A running northwesterly from the end of the existing pavement and the portion of Section C (Moore Farm Road) between the end of Section A and Estella's Way will be designed with a gravel surface and width per the Standard for Residential Access greater than fifty (50) VPD. The new private right-of-way (Estella's Way) will be designed with a gravel surface and width per the Standard for Residential Access equal to or less than fifty (50) VPD.



WAIVERS

Based on the specifics of the project, the Applicant requests the following waivers. The waivers are reiterated in italics for reference with our justification immediately following:

1. *Existing physical features (trees 10" diameter or more)*

The existing 12.41-acre parcel is entirely wooded and the physical features, including stone walls, have been field located, but field locating each tree would be time consuming and cost prohibitive. The area of development and limits of disturbance have been minimized in the proposed subdivision, and the road and buildings windows have been sited to reduce impact to the natural and existing physical features of the site.

2. *Hydro-geologic study (option for Board)*

A hydro-geologic study is not warranted for the three (3) proposed lots on the existing 12.41-acre lot because of the relative low density of the lots and the evidence of passing test pits on each proposed lot.

3. *Well locations*

The proposed lots will be serviced by private wells to be located by the future individual lot owners. The well locations will be determined at the time of construction.

4. *High intensity soil survey by cert. soil scientist*

A high intensity soil survey is not warranted for the three (3) proposed lots on the existing 12.41-acre lot because of the relative low density of the lots and the evidence of passing test pits on each proposed lot.

5. *Location of temp. markers in field*

The temporary markers have not been located in the field because of the limited size of scope of the project. The project location can be readily located from the extents of Blanchard Road Extension, Section C and the existing trails.

6. *Street lighting details*

Street lighting is not proposed. No new utility poles are proposed, and electric is intended to be provided via underground lines and services.

7. *Soil surveys w/# of soil scientist*

A wetlands and soil suitability report has been provided, but a high intensity soil survey is not warranted for the three (3) proposed lots on the existing 12.41-acre lot because of the relative low density of the lots and the evidence of passing test pits on each proposed lot. The waiver request for the high intensity soil survey is provided above.

8. *Septic plan w/ # of prof. site evaluator*

The proposed lots will be serviced by private septic systems to be located by the future individual lot owners. The test pit locations have been provided. The septic designs and locations will be determined at the time of construction.

9. *Geological evals w reg. geologist number*

A wetlands and soil suitability report has been provided, but a geological evaluation is not warranted for the three (3) proposed lots on the existing 12.41-acre lot because of the relative low density of the lots and the evidence of passing test pits on each proposed lot. A waiver request for the hydro-geologic study is provided above.

10. *§ 250-37G Walkways shall be provided along all roads within a proposed subdivision*

A walkway has not been included along the proposed gravel road because of the additional impervious area that would be created and the increase in wetland impacts. The public and private roadways leading to the proposed subdivision do not include walkways for connectivity.

We look forward to meeting with you and the Planning Board at their September 21, 2021 meeting to review the project and gain their approval. We appreciate your assistance with this project. Should you have any questions, please call or contact me at kclark@sitelinespa.com.

Very truly yours,

Kevin P. Clark

Kevin P. Clark, PLS
President

Enclosures

cc: Nathaniel Ross, Stonewood Land, LLC





October 13, 2021

4185-7

Ms. Carla Nixon, Town Planner
Town of Cumberland
290 Tuttle Road
Cumberland, Maine 04021

RE: Response to Review Comments #2
MAJOR CONSERVATION SUBDIVISION PLAN APPLICATION
ROSS ESTATES
Tax Map R08, Lot 68I

Dear Carla:

We have reviewed the comments by Gorrill Palmer on October 12, 2021 and have prepared the following responses to address the concerns. The comments are reiterated in italics for reference with our response, in bold, immediately following:

Comments from Gorrill Palmer on October 12, 2021

Subdivision Application

1. *As stated in the Application, the following waivers were requested:*
 - a. *Existing physical features (trees 10" diameter or more)*
 - b. *Hydro-geologic study*
 - c. *Well locations*
 - d. *High intensity soils survey*
 - e. *Location of temp markers in field*
 - f. *Street lighting details*
 - g. *Soil surveys with license number of soil scientist*
 - h. *Septic plans with license number of site evaluator*
 - i. *Geological evaluations with registration number of geologist*
 - j. *Walkways within roads of proposed subdivision*

We have no objections to the granting of these waivers from an engineering perspective based on the scale and nature of the project.

No response required.

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119 Purinton Road, Suite A, Brunswick Landing, Brunswick, ME 04011
207-725-1200 • www.sitelinespa.com

2. *Stormwater Management Plan*

- a. *The overall flooding analysis showed an insignificant increase in peak flows at the analysis points.*

No response required.

- b. *The peak flow at the swale at the toe of slope of the turnaround should be computed and the need for soil protection (sod or riprap) addressed if needed.*

Notes to add erosion control blanket in the proposed swales have been added to Sheet C4 Site Development Plan and C6 Plan and Profile, Estella's Way (Proposed).

- c. *The peak flow at the swale at the toe of slope of the southerly edge of Estella's Way should be computed and the need for soil protection (sod or riprap) addressed if needed.*

Notes to add erosion control blanket in the proposed swales have been added to Sheet C4 Site Development Plan and C6 Plan and Profile, Estella's Way (Proposed).

- d. *The peak flow at the ditch along Moore Farm Road should be computed and the need for soil protection (sod or riprap) addressed if needed.*

A note to add erosion control blanket in the proposed swales has been added to Sheet C5 Plan and Profile, Blanchard Road Extension Sections A&C

- e. *A catch basin with a 36" outlet pipe crossing Moore Farm Road is proposed. The capacity of the catch basin inlet should be analyzed to determine if there is adequate capacity for the calculated flow.*

The drainage area upstream and the proposed 36" storm drain culvert were analyzed and modeled. With a peak runoff rate at the proposed 36" storm drain of 7.61 cfs in the 5.8-inch 25-year storm, the catch basin and 36" storm drain pipe are sufficiently sized to convey the peak anticipated flow.

Subdivision Plans

3. *The source of the topographic survey (ground, aerial or LIDAR) should be noted on the Subdivision Plan. The response to comments noted that the source was added, but we couldn't find the reference. The Benchmark should also be noted on the plans.*

A note and Benchmark have been added to sheet C2.

4. *Submit to the Town, a copy of the application for the vernal pool impact.*

The Vernal Pool and Stream Adjacency NRPA Permits-by-Rule are included on a single application in accordance with Maine DEP rules. Enclosed with the pervious



submittal is the NRPA Application for both the Stream Adjacency and the Vernal Pool habitat impacts for the potentially significant Vernal Pool.

5. *Note dimensions of turnaround on the plans.*

The turnaround dimensions have been added to Sheet C6.

6. *Provide driveway culvert sizes on the plans. The response to comments noted that the culverts were added, but we couldn't find the culvert sizes.*

The proposed driveway culverts shall be 36" or greater and the sizing has been added to the Grading and Drainage Notes on C4 Site Development Plan

7. *Provide sizing calculation for level lip spreader.*

The level spreader sizing is based on a peak flow from the upstream drainage area of 5.24 cfs in the 10-year storm event. Based on a sizing of one (1) linear foot per 0.25 cfs in the 10-year storm peak flow, the required level spreader length of 21 linear feet is exceeded with the proposed 25' level spreader.

8. *Provide permanent grading and drainage easements for slopes beyond 5' from ROW and for flow paths around the turnaround and south of the proposed private way up to the stream, to allow for future maintenance.*

An easement has been added and is shown along the base of slope for Estella's Way.

9. *Show the sight distances for the Estella's Way/Moore Farm Road intersection as well as the Moore Farm Road/Blanchard Road intersection on the subdivision plan. The response to comments noted that the sight distance was added, but we couldn't find the distances.*

The site distances have been added to the Site Plans.

10. *The Applicant shall provide a statement that the proposed dead end road length (as measured from the intersection of Blanchard Road Extension and Stonewall Drive to the end of the proposed private right of way) will not exceed 2,000 feet. The response to comments noted that the statement was included in the cover letter, but we couldn't find the statement.*

The cover letter has been revised to incorporate the statement affirming that the dead end does not exceed Town requirements.

11. *Label the profiles on sheet C5 with the roadway names to avoid confusion.*

The road names have been added to the profiles on Sheet C5 for clarity.

12. *It has been noted in the response to comments that the subbase will be daylighted in fill conditions. An underdrain is shown on the typical roadway sections and on the detail sheet. If the underdrain is used, show the location on the plans, as well as the underdrain outlet location. If the underdrain is not used, remove from plan set.*

A portion of Moore Farm Road will include an underdrain and the underdrain has been shown on the plans.

13. *Blanchard Road Extension - Section A – 650' of underdrain is noted in the Performance Guarantee, but not shown on the Plans.*

The grading has been updated to reflect that the rebuilt portion of Blanchard Road Extension Section A is in fill and an underdrain is not warranted. The Performance Guarantee has been updated to reflect no underdrain along Blanchard Road Section A.

14. *Moore Farm Road - Section C – 535' of underdrain is noted in the Performance Guarantee, but not shown on the Plans.*

The underdrain location on Moore Farm Road has been added and is shown on the enclosed revised plans.

15. *Typical Section for Section A – Blanchard Road Extension on Sheet C5 should be revised to depict the proposed underdrain.*

The grading has been updated to reflect that the rebuilt portion of Blanchard Road Extension Section A is in fill and an underdrain is not warranted.

16. *Provide information for cross culvert at approximately Station 15+00 of Blanchard Road Extension (size and inverts) to confirm available cover.*

The size, material, and inverts for the existing culvert at Blanchard Road Extension have been added to Sheet C5 in the plan and profile drawings.

17. *Check the available cover for the "off-road" portion of the proposed storm drain on the left side of Estella's Way.*

The grading has been revised to ensure that the proposed storm drain has sufficient cover.

18. *Please confirm adequacy of 4' Catch Basin to accommodate a 36" HDPE outfall pipe.*

The Drainage Structure Data on Sheet C4 Site Development Plan has been revised to reflect that CB#1 is a 5' I.D. catch basin.

19. *Proposed grading for Blanchard Road Extension needs to be updated to reflect the necessary roadside swale.*

The grading has been updated to reflect that the rebuilt portion of Blanchard Road Extension Section A is in fill and an underdrain is not warranted.

20. *As requested, the Applicant has added the right of way limits for the southerly side of Blanchard Road Extension. As the as-constructed existing roadway is not centered with the right of way, it appears that a permanent grading and maintenance easement will be required from approximately Station 10+00 to Station 18+00. Left. The width of the permanent easement should be at least 5' beyond the grading (after updating based on Comment 19 above).*

A proposed easement has been added along Blanchard Road Extension at the requested location and is shown on the plans.

21. *Provide a rip rap pipe outlet apron detail.*

A detail for riprap outlet protection has been added to Sheet C9 Site Development Details.

Performance Guarantee

For each road segment as applicable:

- 22. *Provide quantity and cost for seed and mulch.*
- 23. *Provide quantity and cost for erosion and sedimentation control.*
- 24. *Provide quantity and cost for common borrow.*
- 25. *Provide quantity and cost for common excavation.*
- 26. *Provide quantity and cost for level lip spreader.*
- 27. *Pipe P1 as labeled on Sheet C4 references a 36" HDPE Pipe. It appears to have been included in the Performance Guarantee as a 12" Pipe.*

A revised estimate addressing the above items is enclosed.

We trust that this information satisfactorily addresses the comments received. Should you have any questions, please call or contact me at kclark@sitelinespa.com. We appreciate your assistance with this project.

Very truly yours,

Kevin P. Clark

Kevin P. Clark, PLS
President

Enclosures



Response to Review Comments #2
Major Conservation Subdivision Plan Application
Ross Estates
Page 6 of 6

cc: Nathaniel Ross, Stonewood Land, LLC



Job Number: 4185
 Project Location:
 Comments: Estimate of Probable Construction Costs
 Date:
 References:
 Calculated By: JJM
 Checked By:

Notes:

1. Opinion of cost does not include Legal Costs.
2. Opinion of cost does not include the remediation or removal of any special or hazardous materials such as Asbestos, PCB's, etc.
3. Opinion of cost does not include costs associated with right of way
4. Opinion of cost does not include costs associated with wetlands

Section 1: Blanchard Road Extension	
Construction Costs Summary	
Construction Costs:	\$ 91,150
Construction Contingency (10%):	\$ 9,115
Total Estimated Construction Costs:	\$ 100,265

Section 2: Moore Farm Road	
Construction Costs Summary	
Construction Costs:	\$ 72,805
Construction Contingency (10%):	\$ 7,281
Total Estimated Construction Costs:	\$ 80,086

Section 3: Estella's Way	
Construction Costs Summary	
Construction Costs:	\$ 70,105
Construction Contingency (10%):	\$ 7,011
Total Estimated Construction Costs:	\$ 77,116

Preliminary Project Cost (Section 1 + Section 2 + Section 3)	\$ 257,466
---	-------------------

References:
Calculated By: JJM
Checked By:

Notes:

1. Opinion of cost does not include Legal Costs.
2. Opinion of cost does not include the remediation or removal of any special or hazardous materials such as Asbestos, PCB's, etc.
3. Opinion of cost does not include costs associated with right of way
4. Opinion of cost does not include costs associated with wetlands

Item	Item Description	Unit	Quantity	Unit Price	Amount
203.24	COMMON BORROW	CY	0	\$ 20.00	\$ -
304.09	AGGR BASE CRS - CRUSHED	CY	210	\$ 40.00	\$ 8,400.00
304.10	AGGR SUBB COURSE - GRAVEL	CY	1520	\$ 35.00	\$ 53,200.00
605.09	6" DIAMATER UNDERDRAIN, TYPE "B"	LF	0	\$ 35.00	\$ -
615.07	LOAM	CY	210	\$ 50.00	\$ 10,500.00
	SEED & MULCH	LS	1	\$ 5,000.00	\$ 5,000.00
	EROSION AND SEDIMENT CONTROL	LS	1	\$ 3,000.00	\$ 3,000.00
	GEOTEXTILE	SF	22100	\$ 0.50	\$ 11,050.00
			SUBTOTAL		\$ 91,150.00

References:
Calculated By: JJM
Checked By:

Notes:

1. Opinion of cost does not include Legal Costs.
2. Opinion of cost does not include the remediation or removal of any special or hazardous materials such as Asbestos, PCB's, etc.
3. Opinion of cost does not include costs associated with right of way
4. Opinion of cost does not include costs associated with wetlands

Item	Item Description	Unit	Quantity	Unit Price	Amount
203.24	COMMON BORROW	CY	0	\$ 20.00	\$ -
304.09	AGGR BASE CRS - CRUSHED	CY	130	\$ 40.00	\$ 5,200.00
304.10	AGGR SUBB COURSE - GRAVEL	CY	960	\$ 35.00	\$ 33,600.00
605.09	6" DIAMATER UNDERDRAIN, TYPE "B"	LF	430	\$ 35.00	\$ 15,050.00
615.07	LOAM	CY	140	\$ 50.00	\$ 7,000.00
	SEED & MULCH	LS	1	\$ 3,500.00	\$ 3,500.00
	EROSION AND SEDIMENT CONTROL	LS	1	\$ 1,500.00	\$ 1,500.00
	GEOTEXTILE	SF	13910	\$ 0.50	\$ 6,955.00
			SUBTOTAL		\$ 72,805.00

Job Number:
 Project Location:
 Comments:
 Date:
 References:
 Calculated By: JJM
 Checked By:

- Notes:
1. Opinion of cost does not include Legal Costs.
 2. Opinion of cost does not include the remediation or removal of any special or hazardous materials such as Asbestos, PCB's, etc.
 3. Opinion of cost does not include costs associated with right of way
 4. Opinion of cost does not include costs associated with wetlands

Item	Item Description	Unit	Quantity	Unit Price	Amount
203.2	COMMON EXCAVATION	CY	2000	\$ 10.00	\$ 20,000.00
203.24	COMMON BORROW	CY	0	\$ 20.00	\$ -
304.09	AGGR BASE CRS - CRUSHED	CY	90	\$ 40.00	\$ 3,600.00
304.10	AGGR SUBB COURSE - GRAVEL	CY	400	\$ 35.00	\$ 14,000.00
603.219	36 INCH DIAMETER HDPE	LF	90	\$ 135.00	\$ 12,150.00
604.13	4 FOOT DIAMETER CATCH BASIN TYPE "E"	EA	1	\$ 3,500.00	\$ 3,500.00
615.07	LOAM	CY	90	\$ 50.00	\$ 4,500.00
	SEED & MULCH	LS	1	\$ 2,000.00	\$ 2,000.00
	EROSION AND SEDIMENT CONTROL	LS	1	\$ 1,000.00	\$ 1,000.00
	GEOTEXTILE	SF	8710	\$ 0.50	\$ 4,355.00
	LEVEL LIP SPREADER	LS	1	\$ 5,000.00	\$ 5,000.00
				SUBTOTAL	\$ 70,105.00

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X:\LAND PROJECTS\186 ROSS BLANCHARD RD CUMBERLAND\DWG\04186-COV-DET.DWG, COVER C1, 10/19/2025 12:08 PM, MELISSA ARCHIBELL

GENERAL NOTES:

1. DRAWINGS ARE BASED ON BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION FROM MULTIPLE SOURCES.
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION HAS NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVES AND IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE (1-800-DIG-SAFE) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IN AREAS OF POTENTIAL CONFLICTS TEST PITS SHALL BE REQUIRED TO VERIFY EXISTING UTILITY LOCATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
3. RIM ELEVATIONS OF PROPOSED SANITARY SEWER MANHOLES AND ASSOCIATED STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADING PLANS. ADJUST ALL OTHER RIM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISH GRADE WITHIN LIMITS OF WORK.
4. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, CABLE AND FIRE ALARM). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH CONSTRUCTION MANAGER AND ARCHITECT.
5. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, SIZE, INVERTS AND TYPES OF EXISTING PIPES AT ALL PROPOSED POINTS OF CONNECTION PRIOR TO ORDERING MATERIALS. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATIONS, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE CONSTRUCTION MANAGER REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT.
6. THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS AND GRADES BEFORE WORK BEGINS. CONTRACTOR SHALL CONFIRM LOCATION AND DEPTH ALL UTILITY LINE CROSSINGS WITH TEST PITS PRIOR TO BEGINNING WORK. CONFLICTS SHALL BE REPORTED IN WRITING TO CONSTRUCTION MANAGER FOR RESOLUTION OF THE CONFLICT.
7. ALL AREAS OUTSIDE THE LIMIT OF WORK THAT ARE DISTURBED SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. ALL AREAS DISTURBED DURING CONSTRUCTION NOT COVERED WITH BUILDINGS, STRUCTURES, OR PAVEMENT SHALL RECEIVE 4 INCHES OF LOAM AND SEED.
8. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS AND SHALL BE RESPONSIBLE FOR PAYING ANY FEES FOR ANY POLE RELOCATION AND FOR THE ALTERATION OR ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, CABLE, FIRE ALARM AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.
9. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY PERMITS, PAY ALL FEES AND POST ALL BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS AND AS SPECIFIED.
10. ALL PROPERTY MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE RESET TO THEIR ORIGINAL LOCATION BY A MAINE REGISTERED LICENSED PROFESSIONAL LAND SURVEYOR (PLS) AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL PREPARE AN AS-BUILT PLAN SURVEY SHOWING LOCATIONS OF ALL SURFACE FEATURES AND SUBSURFACE UTILITY SYSTEMS INCLUDING THE LOCATION TYPE, SIZE AND INVERTS.
11. THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES PRIOR TO EARTHWORK OPERATION AND MAINTAIN ALL EROSION CONTROL MEASURES AND SEEDED EMBANKMENTS DURING CONSTRUCTION. EROSION CONTROL SHALL BE REMOVED ONLY UPON THE ESTABLISHMENT OF ALL LANDSCAPED AREAS. ALL WORK SHALL BE IN COMPLIANCE WITH THE ENVIRONMENTAL QUALITY HANDBOOK FOR EROSION AND SEDIMENT CONTROL, LATEST EDITION, AS ADOPTED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
12. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. ALL CONSTRUCTION ACTIVITY SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
13. ALL MATERIALS AND CONSTRUCTION METHODS USED WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO ALL LOCAL MUNICIPAL STANDARDS AND MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
14. THE CONTRACTOR IS REQUIRED TO CONTROL DUST DURING CONSTRUCTION. EXPOSED SOIL AREAS SHALL BE SPRAYED WITH WATER AS NEEDED TO CONTROL DUST EMISSIONS. COVER EXPOSED SOIL AREAS AS QUICKLY AS PRACTICAL TO PREVENT WINDS FROM GENERATING DUST.
15. ALL MATERIALS SHALL BE NEW AND PROVIDED BY THE CONTRACTOR.

LAYOUT NOTES:

1. ALL DIMENSIONING, UNLESS NOTED OTHERWISE, IS TO THE FACE OF CURB OR FOUNDATION.
2. OFFSETS TO CATCH BASINS AND MANHOLES ARE TO THE CENTER OF THE FRAME.
3. PIPE LENGTH EQUALS THE CENTER TO CENTER DISTANCES BETWEEN CATCH BASINS AND/OR MANHOLES MINUS ONE HALF THE DIAMETER OF EACH CATCH BASIN OR MANHOLE.
4. BOUNDARY INFORMATION ON LAYOUT PLAN IS FOR REFERENCE ONLY, REFER TO CERTIFIED BOUNDARY PLANS FOR BOUNDARY INFORMATION.

GRADING AND DRAINAGE NOTES:

1. UNLESS OTHERWISE NOTED, ALL STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS SECTION 603. PIPE CULVERTS AND STORM DRAINS, LATEST REVISION WITH THE EXCEPTION THAT THE ONLY ACCEPTABLE TYPES OF PIPE ARE AS FOLLOWS:
- POLYVINYL CHLORIDE PIPE (PVC) SDR 35
SMOOTH BORE POLYETHYLENE PIPE - HDPE N-12 ADS OR SDR 35
2. TOPSOIL STRIPPED IN AREAS OF CONSTRUCTION THAT IS SUITABLE FOR REUSE AS LOAM SHALL BE STOCKPILED ON SITE AT A LOCATION TO BE DESIGNATED BY OWNER. UNSUITABLE SOIL SHALL BE SEPARATED, REMOVED AND DISPOSED OF AT AN APPROVED DISPOSAL LOCATION OFF SITE.
3. THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY. NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING.

PERMITTING REQUIREMENTS:

AGENCY:	PERMIT:	STATUS:
TOWN OF CUMBERLAND	SUBDIVISION APPROVAL BUILDING	PENDING (BY CONTRACTOR)
MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION	NRPA PBR	PENDING



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OF UNDERGROUND UTILITIES

MAJOR CONSERVATION SUBDIVISION

FINAL PLAN

ROSS ESTATES

BLANCHARD ROAD EXTENSION

CUMBERLAND, MAINE

PREPARED FOR:

STONEWOOD LAND, LLC

8 ROBERTS STREET, FALMOUTH, MAINE 04105

TOWN/UTILITY CONTACTS

CODE ENFORCEMENT

WILLIAM LONGLEY
TOWN OF CUMBERLAND
290 TUTTLE ROAD
CUMBERLAND, MAINE 04021
207-829-2207

ELECTRIC SERVICE

CENTRAL MAINE POWER
280 BATH ROAD
BRUNSWICK, MAINE 04011
207-721-8054

TELEPHONE SERVICE

FAIRPOINT
BATH ROAD (P.O. BOX 360)
BRUNSWICK, MAINE 04011
207-442-8018

CABLE SERVICE

COMCAST CONSTRUCTION OFFICE
336 BATH ROAD
BRUNSWICK, MAINE, 04011
207-729-6660

WATER SERVICE

PORTLAND WATER DISTRICT
225 DOUGLASS STREET
PO BOX 3553
PORTLAND, MAINE 04104

SANITARY SEWER

TOWN OF CUMBERLAND
WILLIAM SHANE, P.E., TOWN MANAGER
290 TUTTLE ROAD
CUMBERLAND, MAINE 04021
207-829-2205

PUBLIC WORKS DEPARTMENT

CHRISTOPHER BOLDUC, PUBLIC SERVICES DIRECTOR
290 TUTLE ROAD
CUMBERLAND, MAINE 04021
207-829-2220

CUMBERLAND FIRE DEPARTMENT

DANIEL SMALL, FIRE CHIEF
366 TUTTLE ROAD
CUMBERLAND, MAINE 04021
207-829-5421

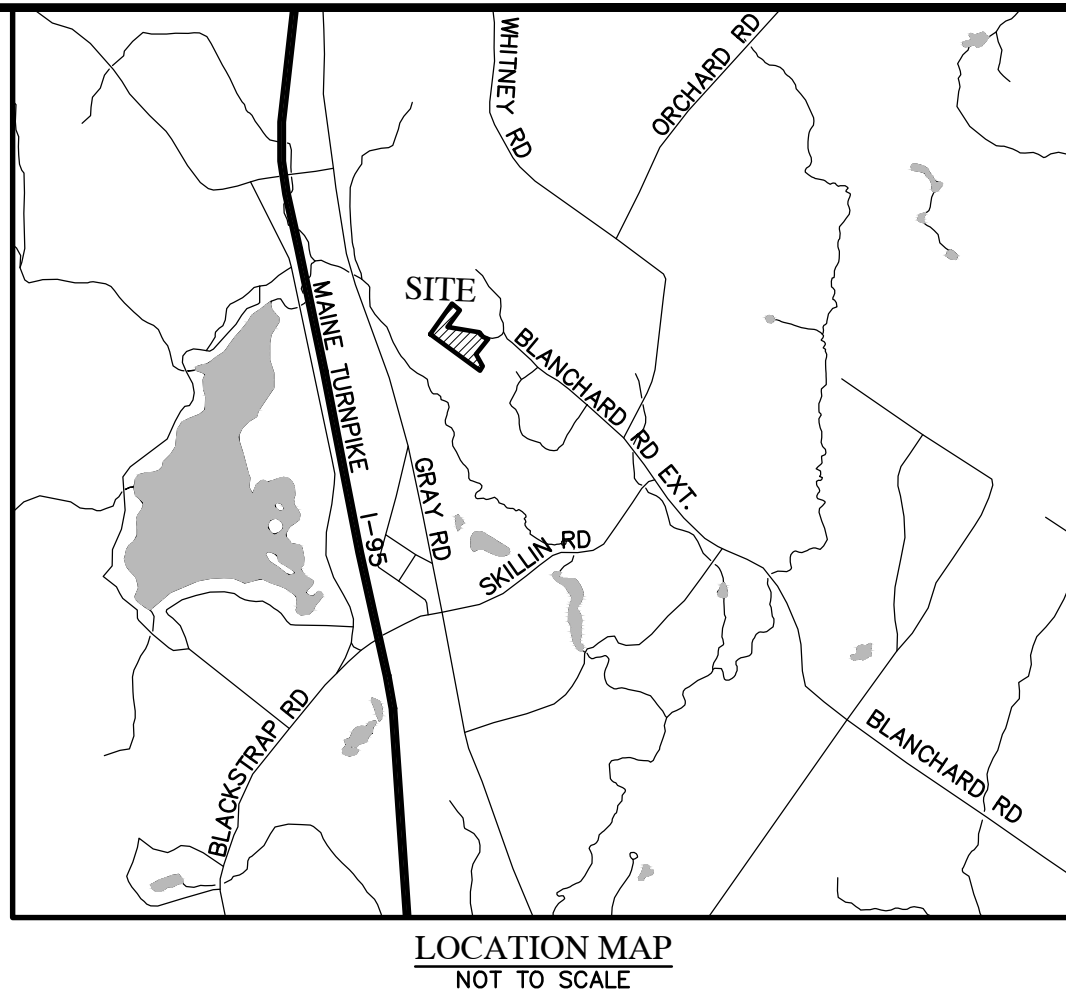
CIVIL ENGINEER

SITELINES P.A.
ATTN: CURTIS Y. NEUFELD, P.E.
119 PURINTON ROAD, SUITE A
BRUNSWICK, MAINE 04011
207-725-1200
WWW.SITELINESPA.COM

PROJECT TEAM

SURVEYOR

SITELINES P.A.
ATTN: KEVIN CLARK, P.L.S.
119 PURINTON ROAD, SUITE A
BRUNSWICK, MAINE 04011
207-725-1200
WWW.SITELINESPA.COM



LEGEND

EXISTING		PROPOSED
	IRON MARKER FOUND	
	5/8" REBAR TOPPED WITH AN ALUMINUM I.D. CAP	
	CATCH BASIN	
	SEWER MANHOLE	
	FIRE HYDRANT	
	WATER GATE VALVE	
	WATER SHUT-OFF	
	BLOW-OFF/CLEAN-OUT	
	UTILITY POLE	
	UTILITY LINE	
	PROPERTY LINE	
	EASEMENTS	
	SETBACK/BUFFER	
	STREAM	
	CURB	
	EDGE OF PAVEMENT	
	BUILDING	
	STORM DRAIN(SEE PLAN FOR SIZE)	
	SEWER LINE(SEE PLAN FOR SIZE)	
	WATER LINE(SEE PLAN FOR SIZE)	
	UNDERDRAIN(SEE PLAN FOR SIZE)	
	SLOPE ARROW	
	CONTOURS	
	TREE LINE	
	SEDIMENT BARRIER	
	RIPRAP	
	PROPOSED PAVEMENT	
	SPOT GRADE	

3. 10-13-21 REVISED PER TOWN COMMENTS MCA
2. 09-28-21 SUBMITTED TO TOWN FOR FINAL SUBDIVISION REVIEW MCA
1. 08-17-21 SUBMITTED TO TOWN FOR PRELIMINARY SUB. REVIEW MCA

TITLE:

COVER SHEET

PROJECT:

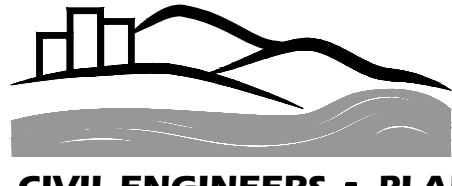
ROSS ESTATES

BLANCHARD ROAD EXTENSION, CUMBERLAND, MAINE

PREPARED FOR:

STONEWOOD LAND, LLC

8 ROBERTS STREET, FALMOUTH, MAINE 04105



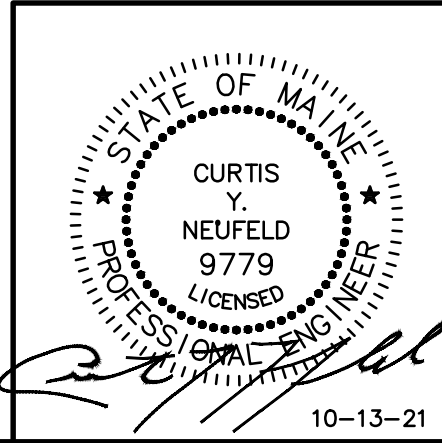
SITELINES

119 PURINTON ROAD, SUITE A
BRUNSWICK, MAINE 04011
207.725.1200

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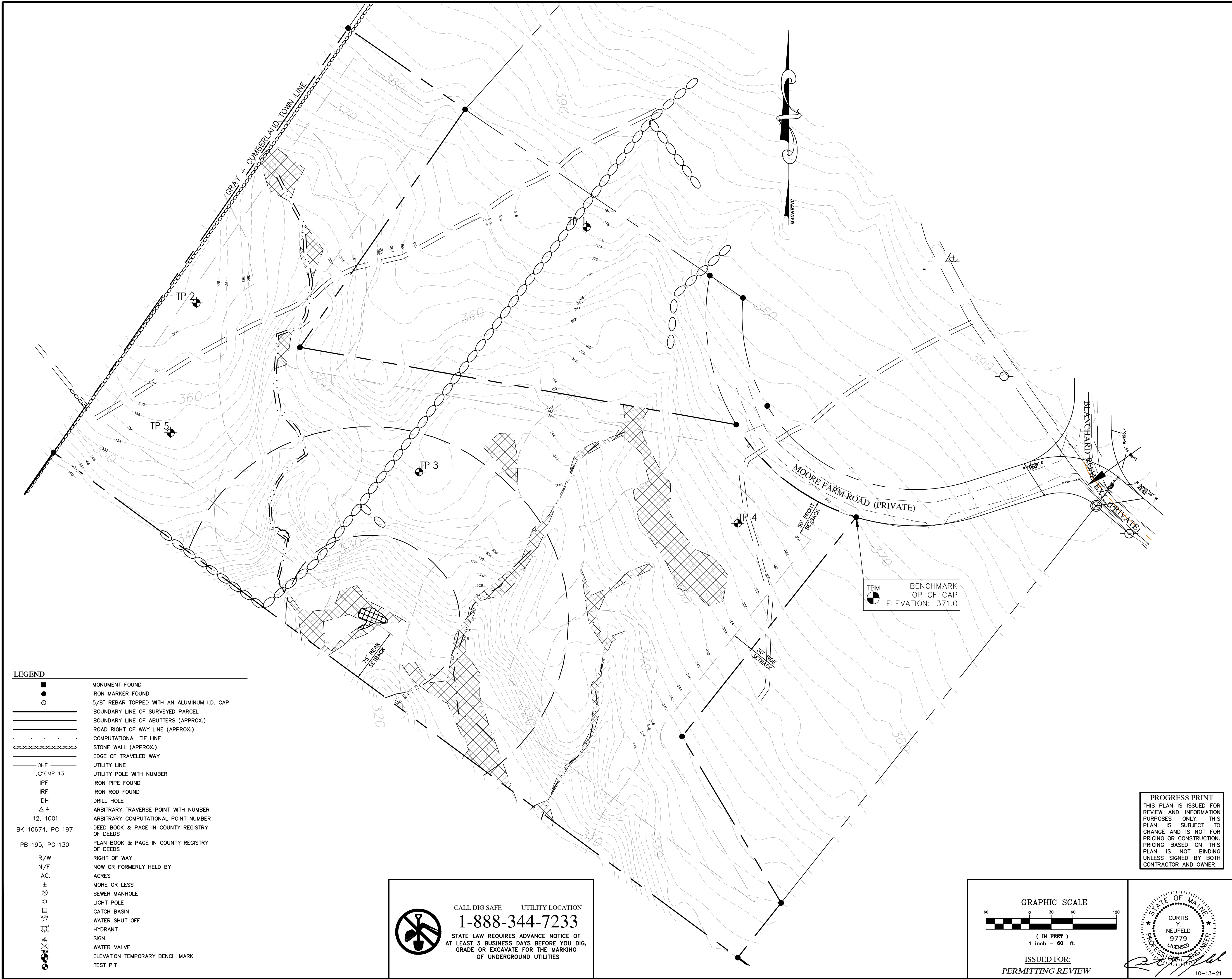
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DRN BY: MCA	JOB #: 4185	
CH'D BY: KPC	MAP/LOT: R08 / 681	
DATE: 11-16-2020	FILE: 4185-COV-DET	

ISSUED FOR:
PERMITTING REVIEW



10-13-21

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LEGEND	
■	MONUMENT FOUND
○	IRON MARKER FOUND
---	5/8" REBAR TOPPED WITH AN ALUMINUM I.D. CAP
---	BOUNDARY LINE OF SURVEYED PARCEL
---	BOUNDARY LINE OF ABUTTERS (APPROX.)
---	ROAD RIGHT OF WAY LINE (APPROX.)
---	COMPUTATIONAL TIE LINE
---	STONE WALL (APPROX.)
---	EDGE OF TRAVELED WAY
---	UTILITY LINE
---	UTILITY POLE WITH NUMBER
---	IRON PIPE FOUND
---	IRON ROD FOUND
---	DRILL HOLE
△ 4	ARBITRARY TRAVERSE POINT WITH NUMBER
12, 1001	ARBITRARY COMPUTATIONAL POINT NUMBER
BK 10674, PG 197	DEED BOOK & PAGE IN COUNTY REGISTRY OF DEEDS
PB 195, PG 130	PLAN BOOK & PAGE IN COUNTY REGISTRY OF DEEDS
R/W	RIGHT OF WAY
N/F	NOW OR FORMERLY HELD BY
AC.	ACRES
±	MORE OR LESS
⊙	SEWER MANHOLE
☆	LIGHT POLE
⊞	CATCH BASIN
⊞	WATER SHUT OFF
⊞	HYDRANT
⊞	SIGN
⊞	WATER VALVE
⊞	ELEVATION TEMPORARY BENCH MARK
⊞	TEST PIT



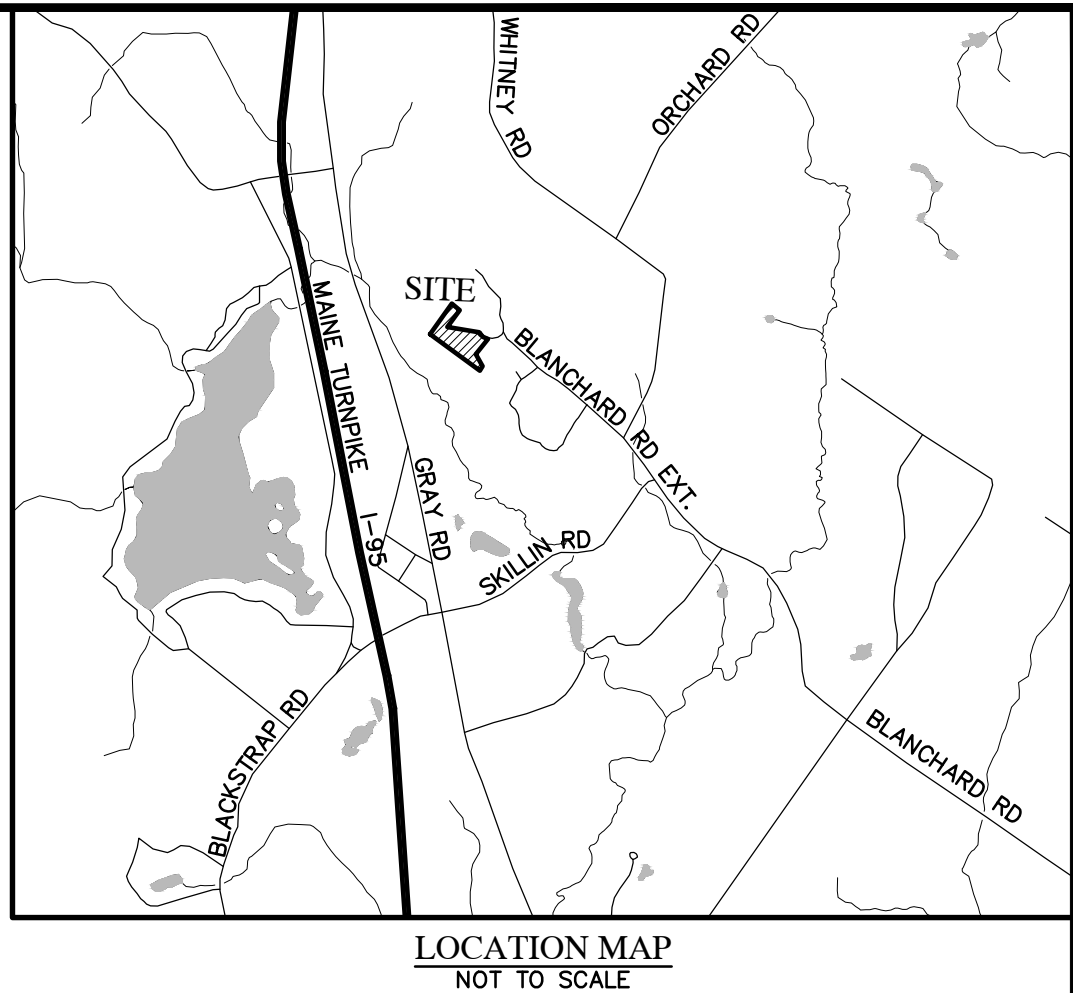
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STATE LAW REQUIRES ADVANCE NOTICE OF
AT LEAST 3 BUSINESS DAYS BEFORE YOU DIG,
GRADE OR EXCAVATE FOR THE MARKING
OF UNDERGROUND UTILITIES

GRAPHIC SCALE
0 30 60 120
(IN FEET)
1 inch = 60 ft.
ISSUED FOR:
PERMITTING REVIEW

PROGRESS PRINT
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REVIEW AND INFORMATION
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PLAN IS SUBJECT TO
CHANGE AND IS NOT FOR
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PRICING BASED ON THIS
PLAN IS NOT BINDING
UNLESS SIGNED BY BOTH
CONTRACTOR AND OWNER.

STATE OF MAINE
CURTIS Y. NEUFELD
9779
LICENSED PROFESSIONAL ENGINEER

10-13-21



- NOTES:
- TITLE REFERENCE FOR SURVEYED PARCEL:
BK 36884, PG 28
 - PLAN REFERENCE(S):
a) PLAN ENTITLED, "PLAN OF LAND AND RIGHTS SOLD TO NATHANIEL ROSS & ROSS ENTITIES BY BRENDA AND ROBERT PIAMPIANO", DATED SEPTEMBER 15, 2020 BY CUMBERLAND BOUNDARY SURVEY, PLLC.
b) PLAN ENTITLED, "WETLAND DELINEATION PLAN PREPARED FOR NATE ROSS (N/F PIAMPIANO), BLANCHARD ROAD EXT, CUMBERLAND, MAINE", DATED MAY 8, 2020 BY ALBERT FRICK ASSOCIATES, INC.
c) PLAN ENTITLED, "STANDARD BOUNDARY SURVEY OF LAND OF ROBERT J. PIAMPIANO, BLANCHARD ROAD, CUMBERLAND, MAINE, PREPARED FOR BRENDA T. PIAMPIANO, 365 BLANCHARD ROAD, CUMBERLAND, MAINE 04021", BY SEBAGO TECHINCS AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS ON MARCH 20, 2001 IN PLAN BOOK 201, PAGE 104.
 - AREA INFORMATION:
540,475 S.F. (12.41 ACRES)
 - TAX MAP REFERENCE:
TAX MAP ROB, LOT 68I.
 - BASIS OF BEARINGS:
BEARINGS ARE MAGNETIC AND ARE BASED ON HAND COMPASS BEARINGS ALONG RANDOM TRAVERSE LINES.
 - WETLANDS:
WETLAND DELINEATION COMPLETED BY ALBERT FRICK ASSOCIATES, INC. ON MAY 13, 2020
 - TEST PITS:
THREE (3) TEST PITS WERE COMPLETED ON THE SITE BY ALBERT FRICK ASSOCIATES, INC. ON JUNE 2, 2020.
 - TOPOGRAPHY:
AERIAL TOPOGRAPHY PROVIDED BY AERIAL SURVEY AND PHOTO, INC. AND WAS AUGMENTED WITH LEADER TOPOGRAPHY FROM MEGIS AND TRADITIONAL ON THE GROUND DATA ALONG EXISTING AND PROPOSED ROADWAYS. DATUM NAVD 1988.

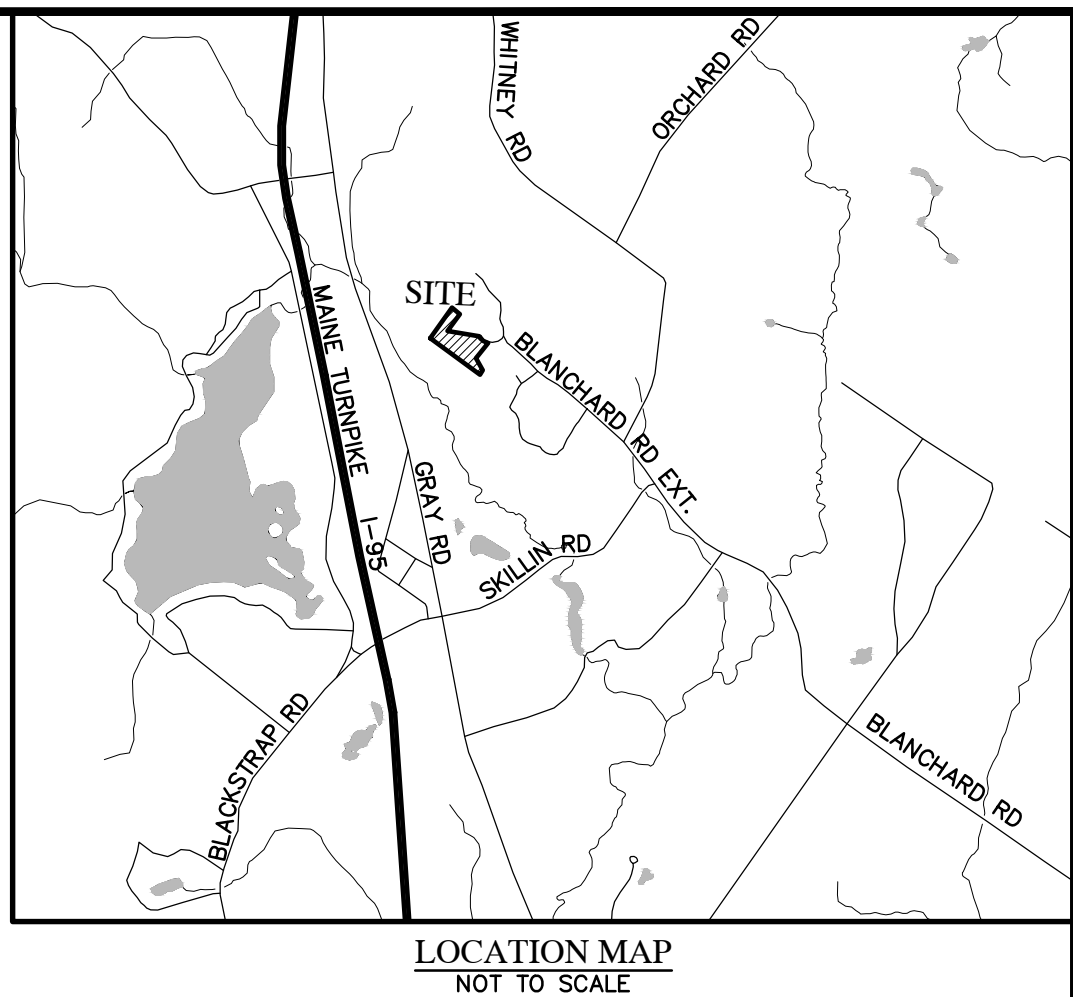
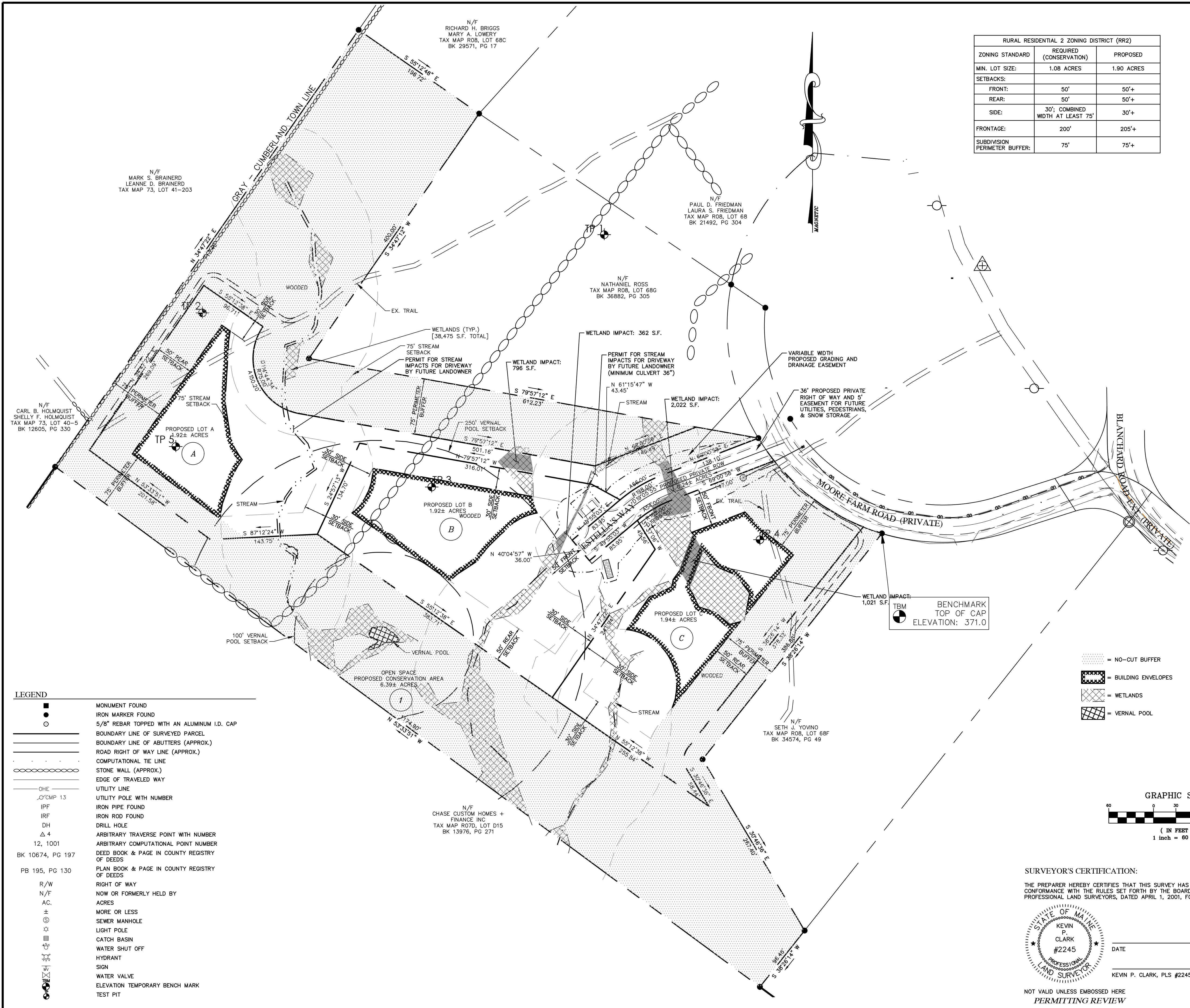
3. 10-13-21 REVISED PER TOWN COMMENTS MCA
2. 09-28-21 SUBMITTED TO TOWN FOR FINAL SUBDIVISION REVIEW MCA
1. 08-17-21 SUBMITTED TO TOWN FOR PRELIMINARY SUB. REVIEW MCA

TITLE:
EXISTING CONDITIONS PLAN
PROJECT:
ROSS ESTATES
BLANCHARD ROAD EXTENSION, CUMBERLAND, MAINE
PREPARED FOR:
STONEWOOD LAND, LLC
8 ROBERTS STREET, FALMOUTH, MAINE 04105



SITELINES
119 PURINTON ROAD, SUITE A
BRUNSWICK, MAINE 04011
207.725.1200
CIVIL ENGINEERS • PLANNERS • LAND SURVEYORS

FIELD WK:	SCALE: 1"=60'	SHEET:
DRN BY: MCA	JOB #: 4185	C2
CH'D BY: KPC	MAP/LOT: R08 / 68I	
DATE: 11-16-2020	FILE: 4185-SITE	



- NOTES:**
- TITLE REFERENCE FOR SURVEYED PARCEL:**
BK 36884, PG 28
 - PLAN REFERENCE(S):**
a) PLAN ENTITLED, "PLAN OF LAND AND RIGHTS SOLD TO NATHANIEL ROSS & ROSS ENTITIES BY BRENDA AND ROBERT PIAMPANO", DATED SEPTEMBER 15, 2020 BY CUMBERLAND BOUNDARY SURVEY, PLLC.
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c) PLAN ENTITLED, "STANDARD BOUNDARY SURVEY OF LAND OF ROBERT J. PIAMPANO, BLANCHARD ROAD, CUMBERLAND, MAINE, PREPARED FOR BRENDA T. PIAMPANO, 365 BLANCHARD ROAD, CUMBERLAND, MAINE 04021", BY SEBAGO TECHNICS AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS ON MARCH 20, 2001 IN PLAN BOOK 201, PAGE 104.
 - AREA INFORMATION:**
540,475 S.F. (12.41 ACRES)
 - TAX MAP REFERENCE:**
TAX MAP R08, LOT 68I.
 - BASIS OF BEARINGS:**
BEARINGS ARE MAGNETIC AND ARE BASED ON HAND COMPASS BEARINGS ALONG RANDOM TRAVERSE LINES.
 - DENSITY CALCULATIONS:**
GROSS ACREAGE: 540,475 S.F. (12.41 AC.)
SLOPES (20%): 0 S.F. (0 AC.)
WETLANDS: 38,475 S.F. (0.88 AC.)
100YR FLOOD: 0 S.F. (0 AC.)
RIGHTS-OF-WAY: 9,472 S.F. (0.22 AC.)
RP DISTRICT: 0 S.F. (0 AC.)
NET RESIDENTIAL ACREAGE: 492,528 S.F. (11.31 AC.)
MAXIMUM NUMBER OF LOTS ALLOWED: 11.31 AC / 2 AC (RR2) = 5.65 LOTS
MINIMUM LOT SIZE: 50% OF GROSS ACREAGE / MAX ALLOWABLE LOTS
6.20 AC / 5.65 LOTS = 1.10 ACRES
 - OPEN SPACE REQUIREMENTS:**
GROSS ACREAGE: 12.41 ACRES
50% OF AREA: 6.20 ACRES MINIMUM OPEN SPACE REQUIREMENT
PROPOSED OPEN SPACE = 6.39± ACRES
 - WETLAND IMPACTS:**
TOTAL WETLAND IMPACTS: 4,201 S.F.
 - FIRE PROTECTION:**
EACH RESIDENTIAL DWELLING UNIT WITHIN THIS SUBDIVISION SHALL BE EQUIPPED WITH AN APPROVED AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM IN ACCORDANCE WITH CHAPTER 96 ARTICLE II OF THE TOWN OF CUMBERLAND CODE.
 - MDPE NRPA PERMITTING:**
IMPACTS WITHIN THE 75' STREAM SETBACK WILL REQUIRE A MAINE DEP NRPA PERMIT BY RULE. INDIVIDUAL LOTS WILL BE REQUIRED TO SUBMIT INDIVIDUAL NRPA PERMITS FOR ANY STREAM IMPACTS ASSOCIATED WITH BUILDING AND DRIVEWAY DEVELOPMENT. INDIVIDUAL LOT GRADING OUTSIDE OF THE BUILDING WINDOW ENVELOPES MAY REQUIRE ADDITIONAL NRPA PERMITTING AND WILL BE THE RESPONSIBILITY OF THE INDIVIDUAL LOT OWNERS.

TITLE: SUBDIVISION PLAN
CONSERVATION SUBDIVISION

PROJECT: ROSS ESTATES
BLANCHARD ROAD EXTENSION, CUMBERLAND, MAINE

PREPARED FOR: STONEWOOD LAND, LLC
8 ROBERTS STREET, FALMOUTH, MAINE 04105

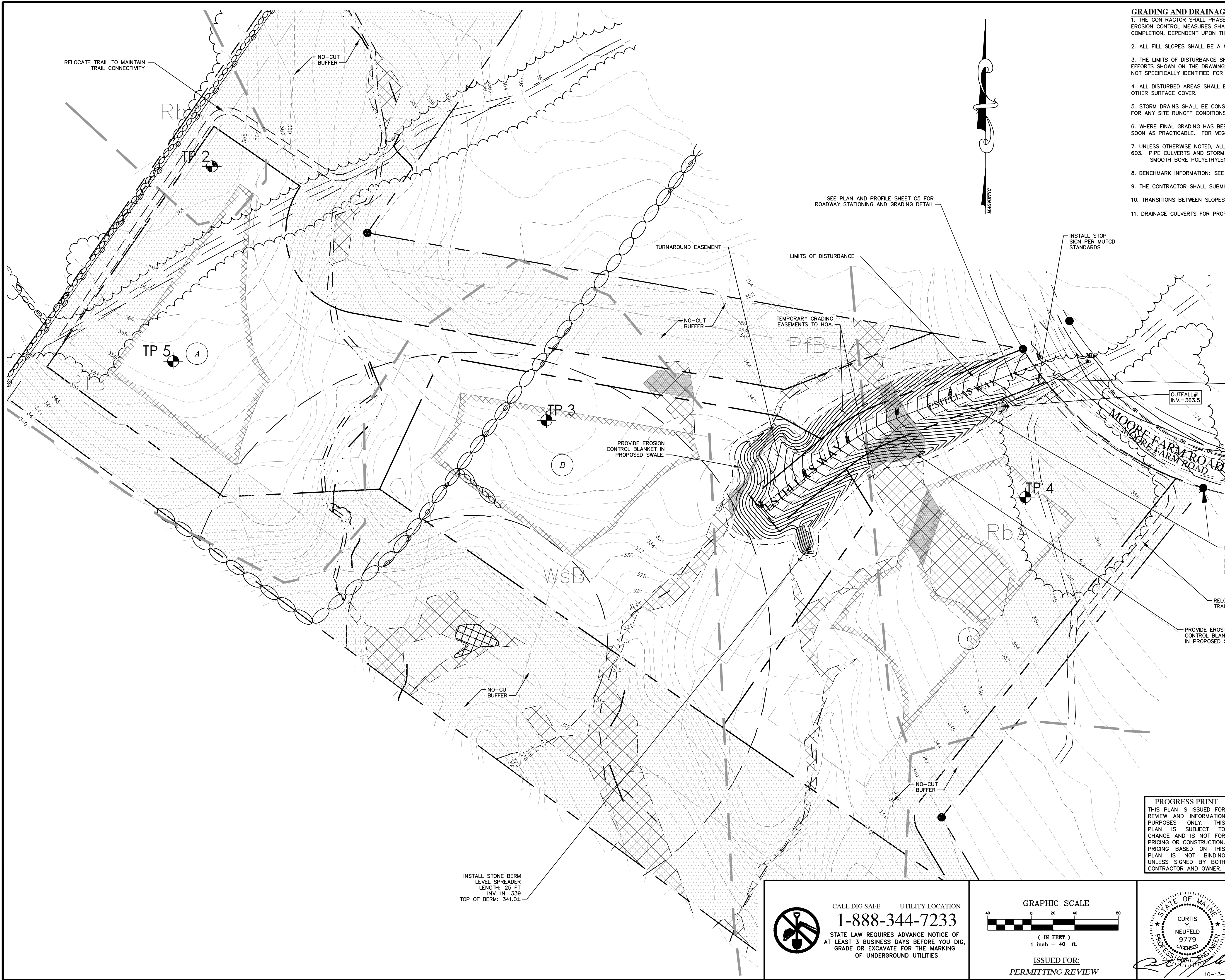
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FIELD WK: SCALE: 1"=60'
DRN BY: JOB #: 4185
CH'D BY: MAP/LOT: R08 / 68I
DATE: 11-16-2020 FILE: 4185-SITE

SITELINES
119 PURINTON ROAD, SUITE A
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C3

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X:\LAND PROJECTS\4185 ROSS BLANCHARD RD CUMBERLAND\DWG\4185-SITE.DWG, CA SITE REV. 10/13/2021 12:08 PM, MELISSA ARCHBELL



- GRADING AND DRAINAGE NOTES:**
1. THE CONTRACTOR SHALL PHASE GRADING EFFORTS SUCH THAT TOTAL SITE DISTURBANCE IS MINIMIZED. TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO GRADING EFFORTS OR WITHOUT DELAY UPON THEIR COMPLETION, DEPENDENT UPON THE SITUATION.
 2. ALL FILL SLOPES SHALL BE A MINIMUM OF 3:1 HORIZONTAL TO VERTICAL UNLESS OTHERWISE NOTED OR DIRECTED.
 3. THE LIMITS OF DISTURBANCE SHALL GENERALLY BE THE MINIMAL EXTENT NECESSARY ONLY TO PERFORM THE GRADING EFFORTS SHOWN ON THE DRAWINGS. SPECIAL CARE SHALL BE TAKEN TO AVOID DISTURBANCE OF OBJECTS AND AREAS NOT SPECIFICALLY IDENTIFIED FOR MODIFICATION OR REMOVAL.
 4. ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDING IN ACCORDANCE WITH THE DRAWINGS, UNLESS INTENDED FOR OTHER SURFACE COVER.
 5. STORM DRAINS SHALL BE CONSTRUCTED CONCURRENTLY WITH GRADING EFFORTS TO PROVIDE ADEQUATE CONVEYANCE FOR ANY SITE RUNOFF CONDITIONS.
 6. WHERE FINAL GRADING HAS BEEN COMPLETED, SURFACE RESTORATION FOR DISTURBED AREAS WILL BE COMPLETED AS SOON AS PRACTICABLE. FOR VEGETATIVE AREAS, VEGETATION WILL BE PROGRESSIVELY ESTABLISHED.
 7. UNLESS OTHERWISE NOTED, ALL STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS SECTION 603. PIPE CULVERTS AND STORM DRAINS, LATEST REVISION WITH ACCEPTABLE TYPES OF PIPE ARE AS FOLLOWS:
SMOOTH BORE POLYETHYLENE PIPE - HDPE N-12 ADS
 8. BENCHMARK INFORMATION: SEE PLAN
 9. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL DRAINAGE STRUCTURES AND PIPING PRIOR TO ORDERING.
 10. TRANSITIONS BETWEEN SLOPES ARE TO BE GENERALLY GRADUAL AND RESULT IN A SMOOTH, ROUNDED APPEARANCE.
 11. DRAINAGE CULVERTS FOR PROPOSED DRIVEWAYS SHALL BE 36"Ø OR GREATER.

DRAINAGE STRUCTURE DATA:

CB#1 (5' I.D.)
RIM: 369.9 EXPANDED STEEL GRATE
INV.OUT: 364.0± (TO OUTFALL#1)

P1: 36" HDPE L=91' S=0.0050

EXTEND UNDERGROUND ELECTRIC ALONG NEW ROADWAY. FINAL LOCATION OF TRANSFORMERS, PULL BOXES AND UNDERGROUND ELECTRIC TO BE COORDIATED WITH CMP.

PRIVATE GRAVEL ROAD WITH 9' TRAVEL LANES AND 2' GRAVEL SHOULDERS, WITHIN A 36' PRIVATE RIGHT-OF-WAY WITH ADDITIONAL 5' EASEMENTS. SEE SHEET C8 FOR ROAD AND RIGHT-OF-WAY CROSS SECTION

RELOCATE TRAIL TO MAINTAIN TRAIL CONNECTIVITY

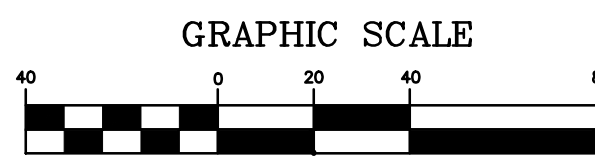
PROVIDE EROSION CONTROL BLANKET IN PROPOSED SWALE

3. 10-13-21 REVISED PER TOWN COMMENTS MCA
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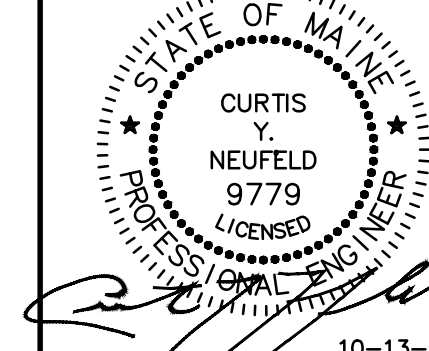
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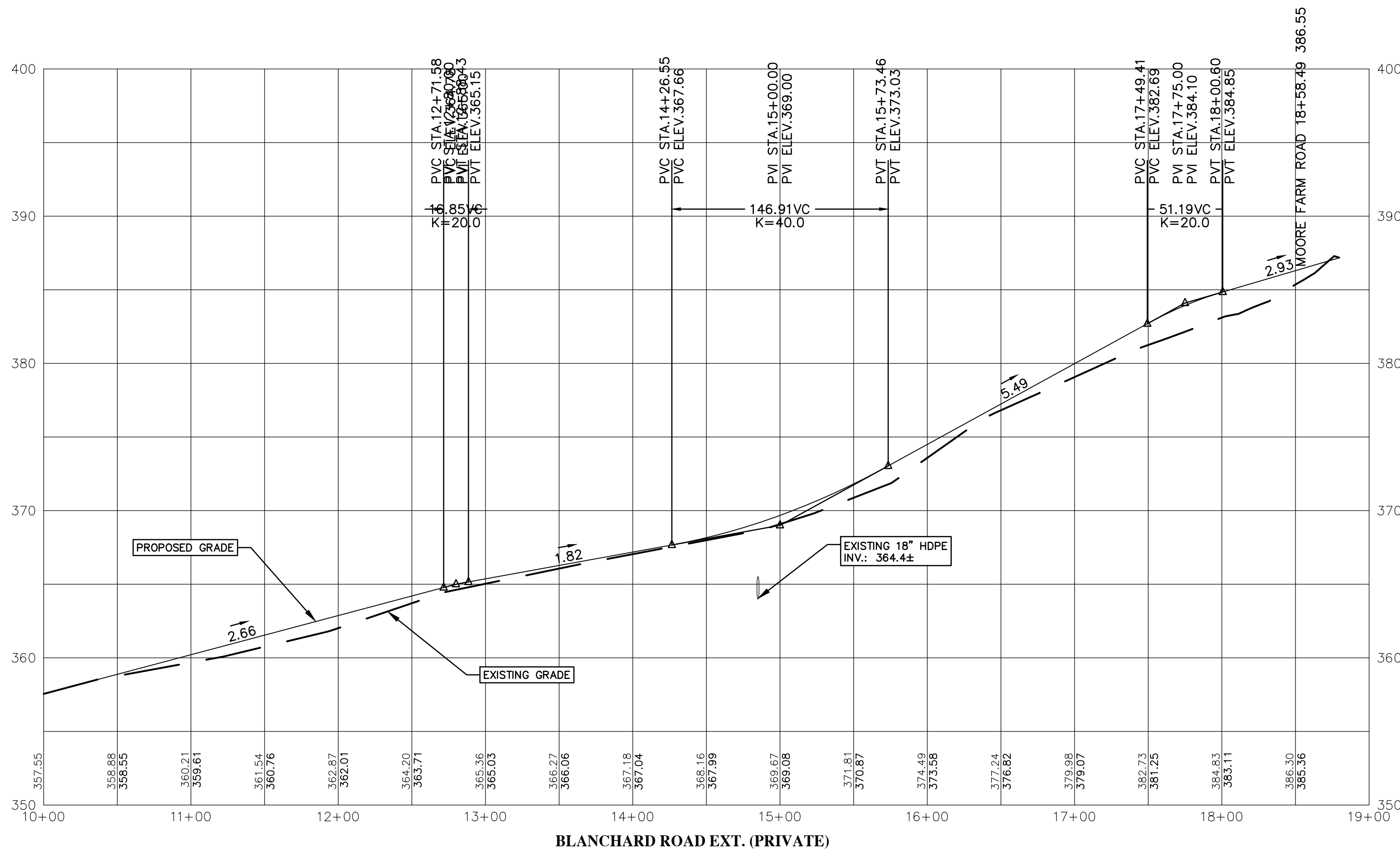
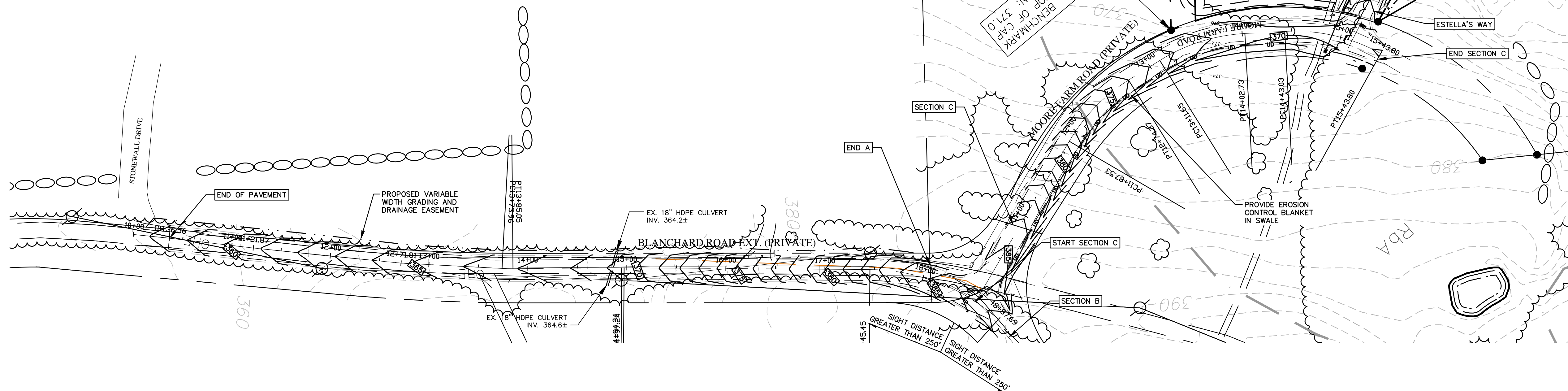
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FIELD WK:	SCALE: 1"=50'
DRN BY: MCA	JOB #: 4185
CH'D BY: KPC	MAP/LOT: R08 / 681
DATE: 11-16-2020	FILE: 4185-SITE

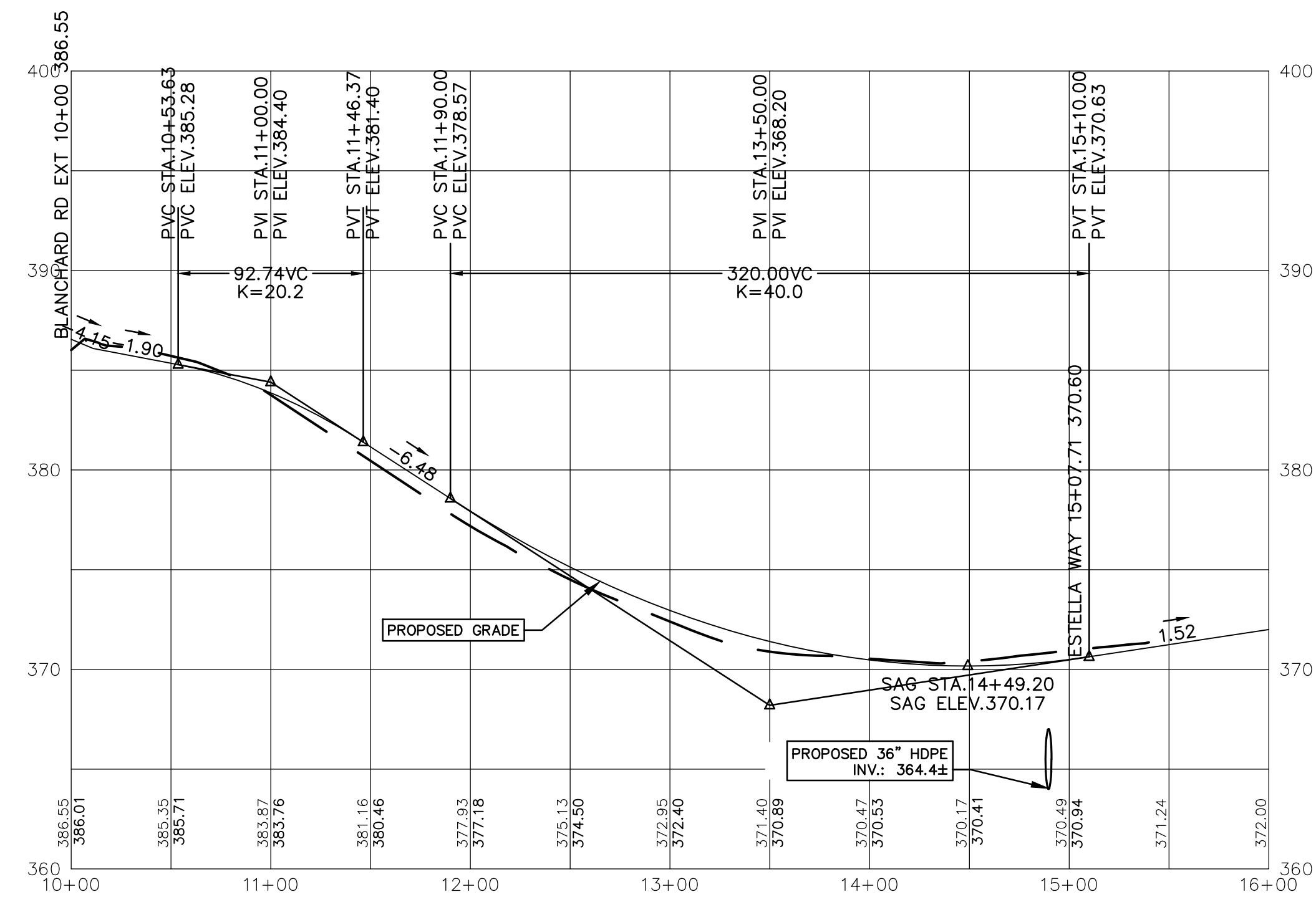
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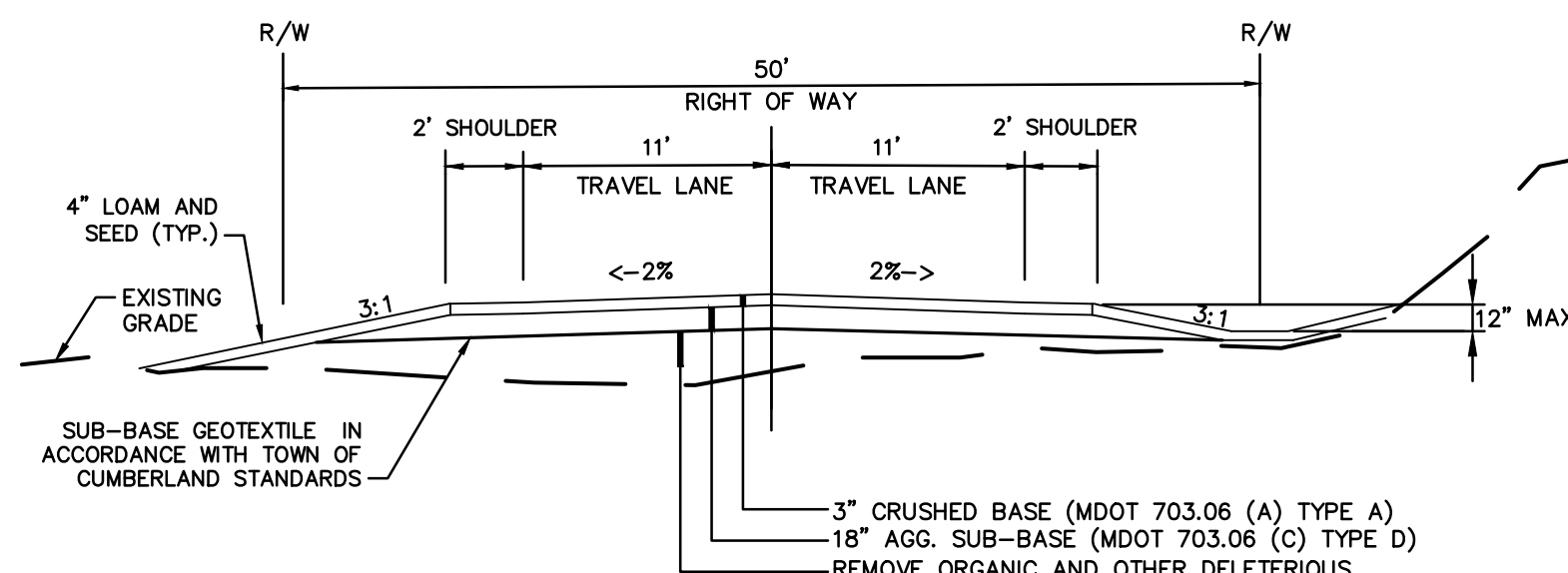
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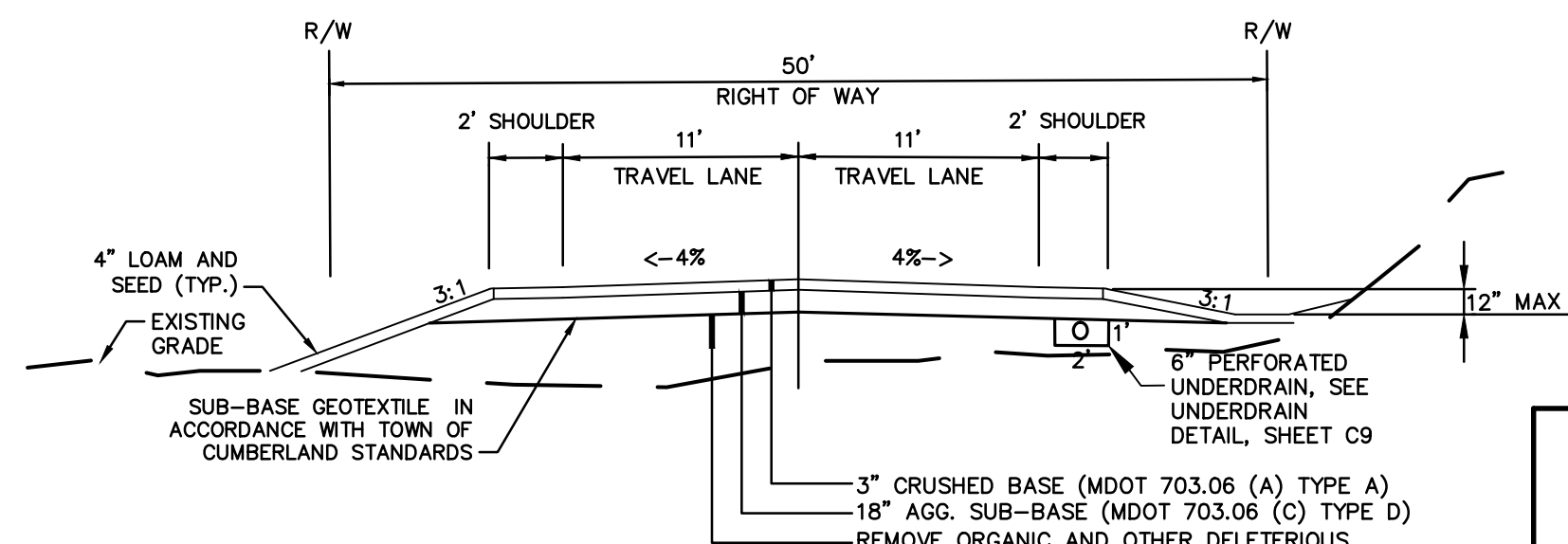
PROFILE VIEW:
SCALE: 1" = 60' HORIZONTAL & 1" = 6' VERTICAL



MOORE FARM ROAD (PRIVATE)
PROFILE VIEW:
SCALE: 1" = 60' HORIZONTAL & 1" = 6' VERTICAL



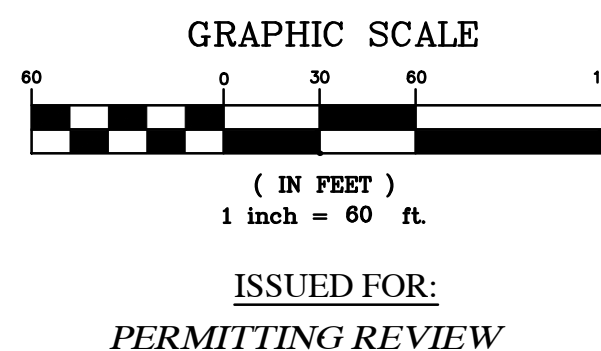
SECTION A (BLANCHARD ROAD EXTENSION)
N.T.S.



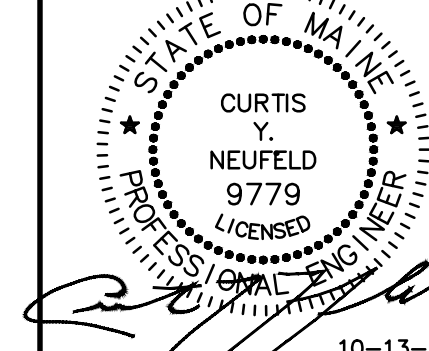
SECTION C (MOORE FARM ROAD)
N.T.S.



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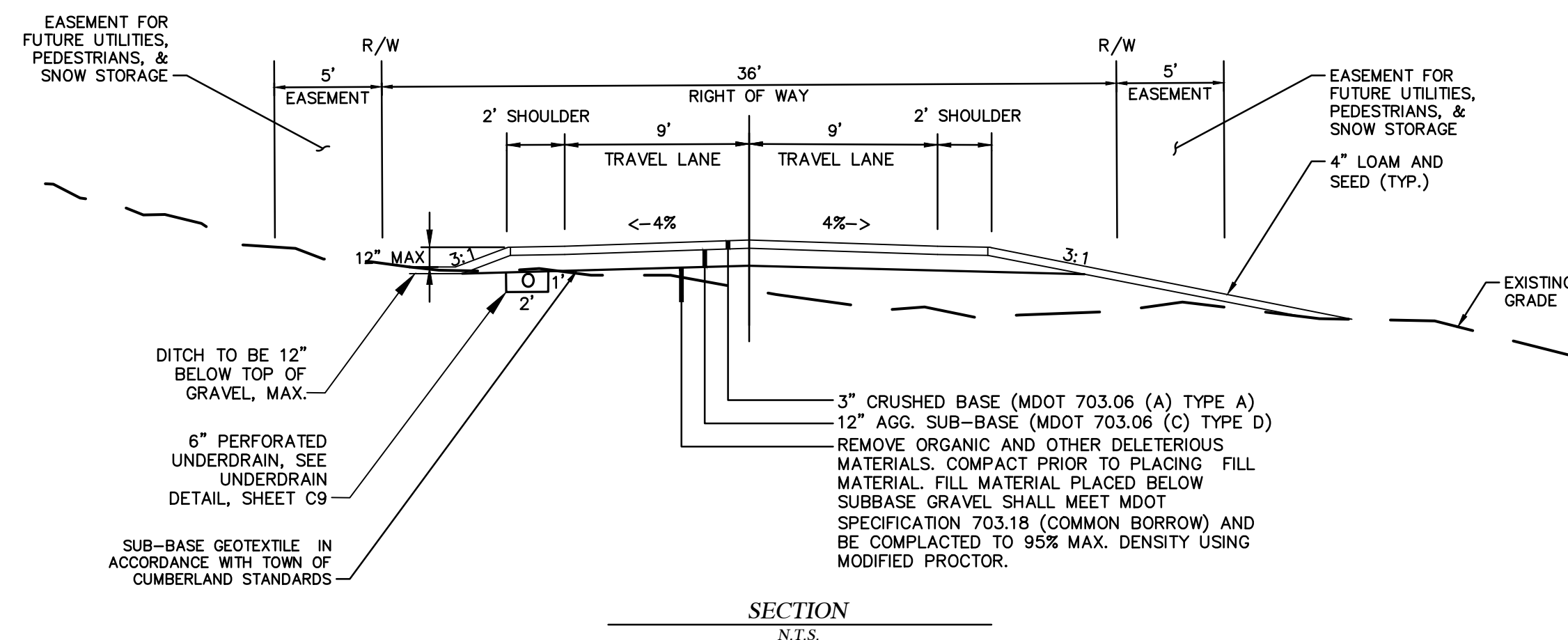
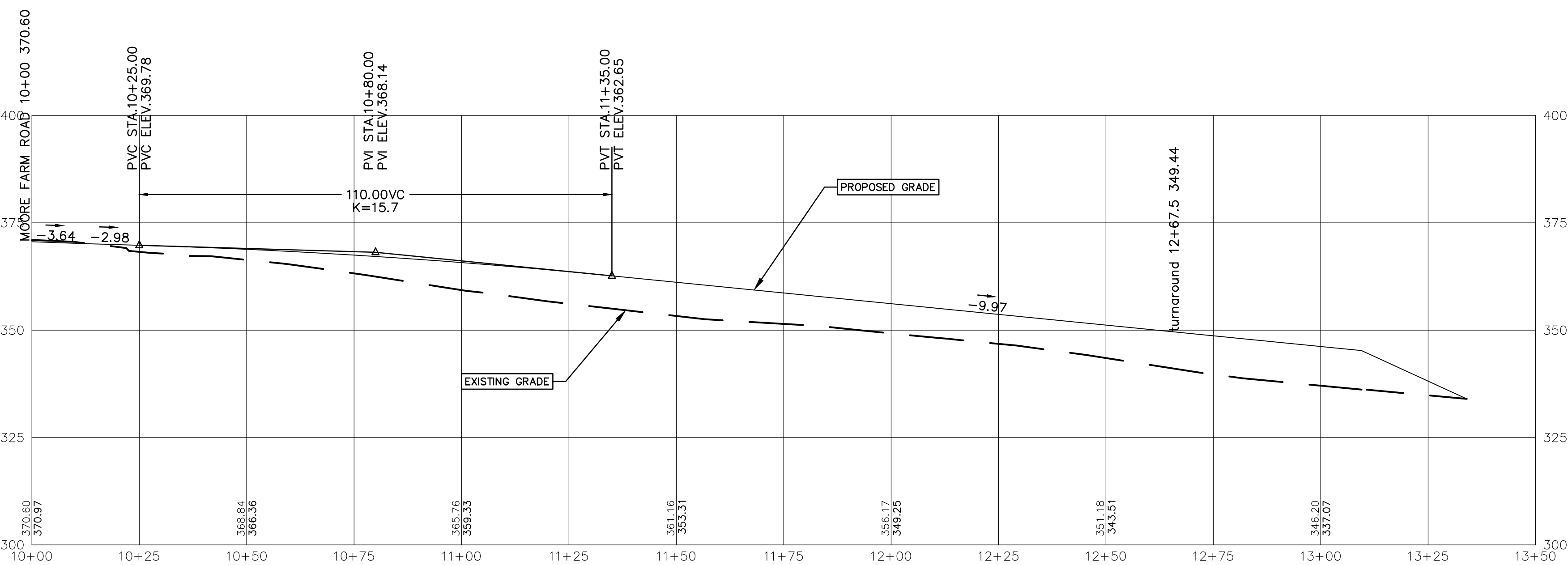


- | | | | |
|----|----------|--|-----|
| 3. | 10-13-21 | REVISED PER TOWN COMMENTS | MCA |
| 2. | 09-28-21 | SUBMITTED TO TOWN FOR FINAL SUBDIVISION REVIEW | MCA |
| 1. | 08-17-21 | SUBMITTED TO TOWN FOR PRELIMINARY SUB. REVIEW | MCA |

TITLE: **PLAN AND PROFILE**
BLANCHARD ROAD EXTENSION SECTIONS A&C
PROJECT: **ROSS ESTATES**
BLANCHARD ROAD EXTENSION, CUMBERLAND, MAINE
PREPARED FOR: **STONEWOOD LAND, LLC**
8 ROBERTS STREET, FALMOUTH, MAINE 04105

 SITELINES 119 PURINTON ROAD, SUITE A BRUNSWICK, MAINE 04011 207.725.1200 CIVIL ENGINEERS • PLANNERS • LAND SURVEYORS	
FIELD WK:	SCALE: 1" = 30'
DRN BY: MCA	JOB #: 4185
CH'D BY: KPC	MAP/LOT: R08 / 681
DATE: 11-16-2020	FILE: 4185-SITE

SHEET:
C5

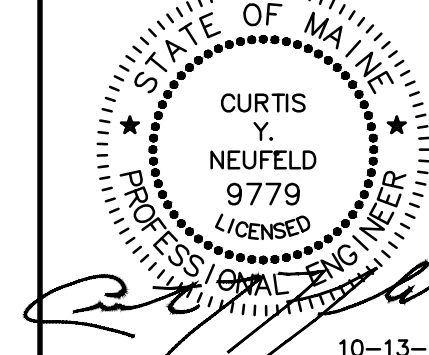
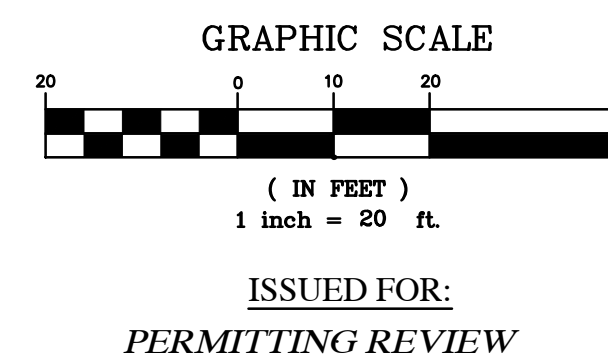


PROFILE VIEW:
SCALE: 1" = 20' HORIZONTAL & 1" = 20' VERTICAL

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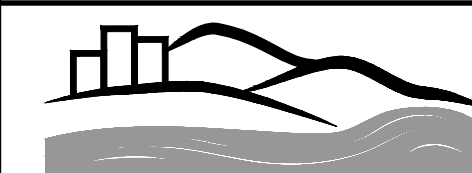


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1.	08-17-21	SUBMITTED TO TOWN FOR PRELIMINARY SUB. REVIEW	MCA

TITLE:	PLAN AND PROFILE ESTELLA'S WAY (PROPOSED)
PROJECT:	ROSS ESTATES BLANCHARD ROAD EXTENSION, CUMBERLAND, MAINE
PREPARED FOR:	STONEWOOD LAND, LLC 8 ROBERTS STREET, FALMOUTH, MAINE 04105

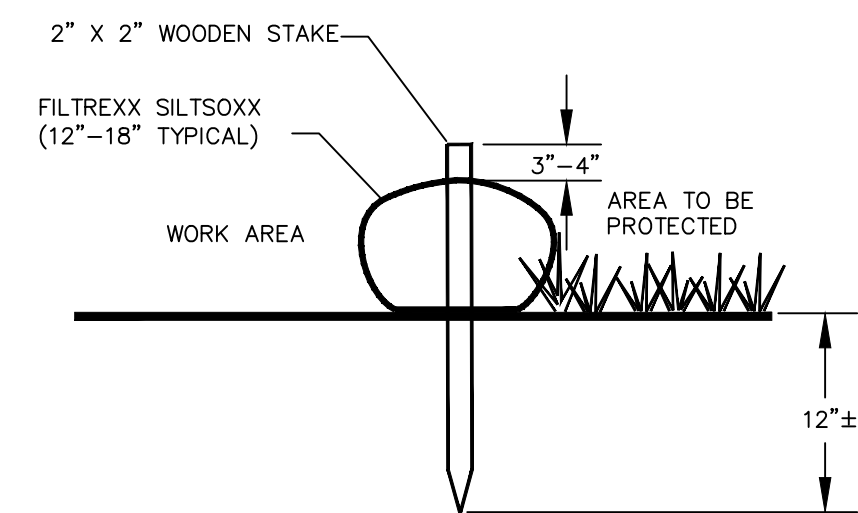


SITELINES
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ANNERS • LAND SURVEYORS

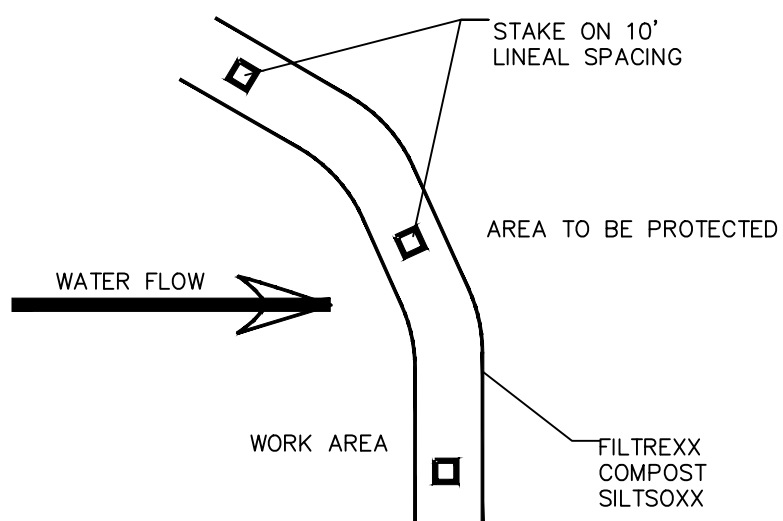
FIELD WK:	SCALE: 1" = 20'	SHEET: C6
DRN BY: MCA	JOB #: 4185	
CHD BY: KPC	MAP/LOT: R08 / 68I	
DATE: 11-16-2020	FILE: 4185-SITE	

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XLAND PROJECTS/1418 ROSS BLANCHARD RD CUMBERLAND/0404165-SITE.DWG, C7 E.S. 10/13/2021, 12:06 PM, MELISSA ARCHIBELL

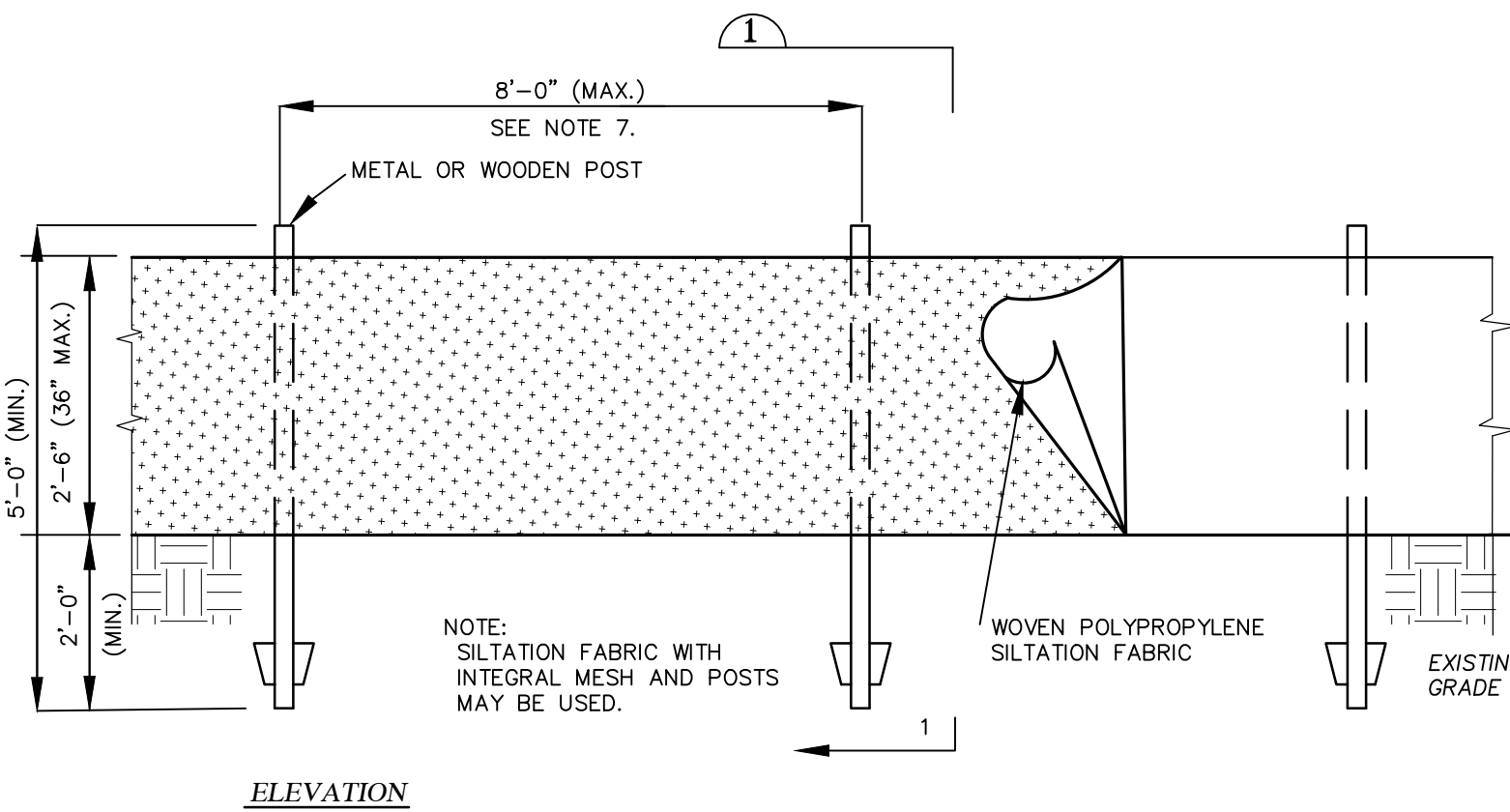


SECTION

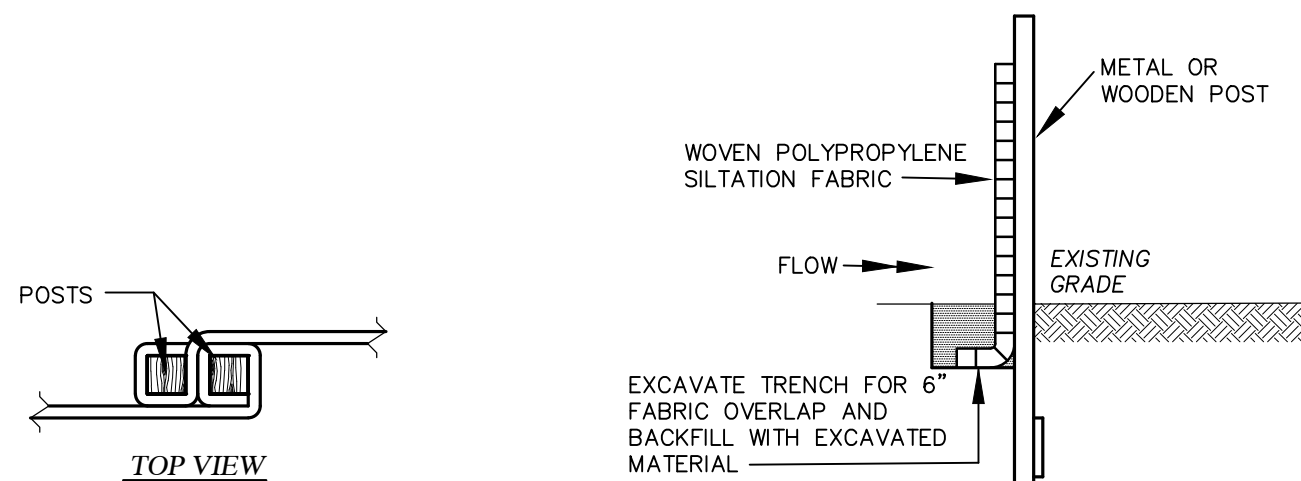


PLAN

- NOTES:
1. ALL MATERIALS TO MEET FILTREXX SPECIFICATIONS
 2. SILTSSOXX COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS
 3. SILTSSOXX DEPICTED IS FOR MINIMUM SLOPES. GREATER SLOPES MAY REQUIRE LARGER SOCKS PER THE ENGINEER.
 4. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.



ELEVATION



TOP VIEW

SECTION

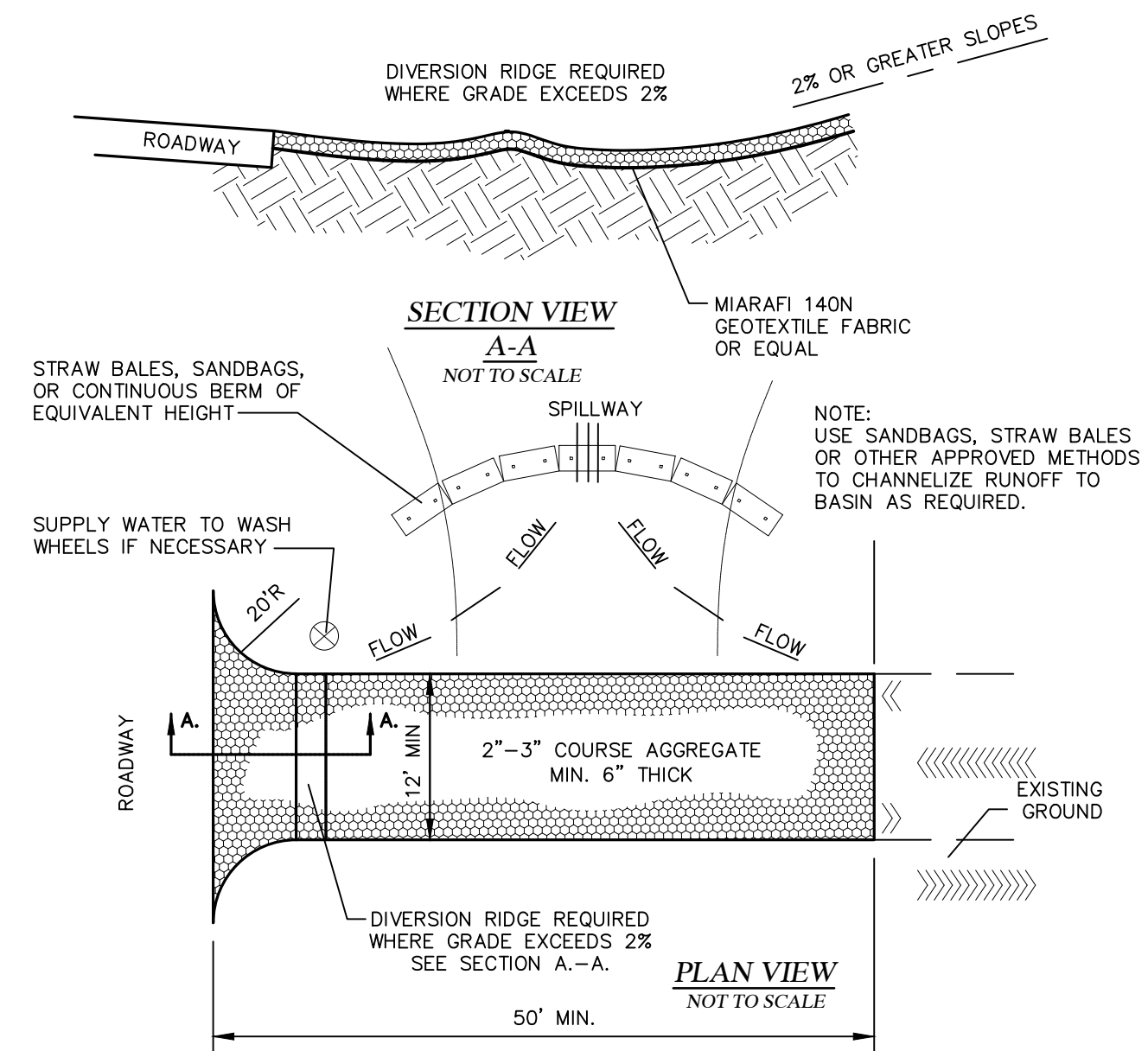
- INSTALLATION:
1. EXCAVATE A 6" X 6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
 2. UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.
 3. DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE TRENCH BOTTOM.
 4. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH. BACK FILL THE TRENCH AND TAMP THE SOIL.
 5. JOIN SECTION AS SHOWN IN TOP VIEW.
 6. BARRIER SHALL BE MIRAFI SILT FENCE (100X) OR APPROVED EQUIVALENT.
 7. A STONE "FILLET" MAY BE USED FOR ANCHORING FABRIC IF IT CANNOT BE KEYED IN.

A FILTREXX SILTSSOXX DETAIL "SEDIMENT BARRIER OPTION"

N.T.S.

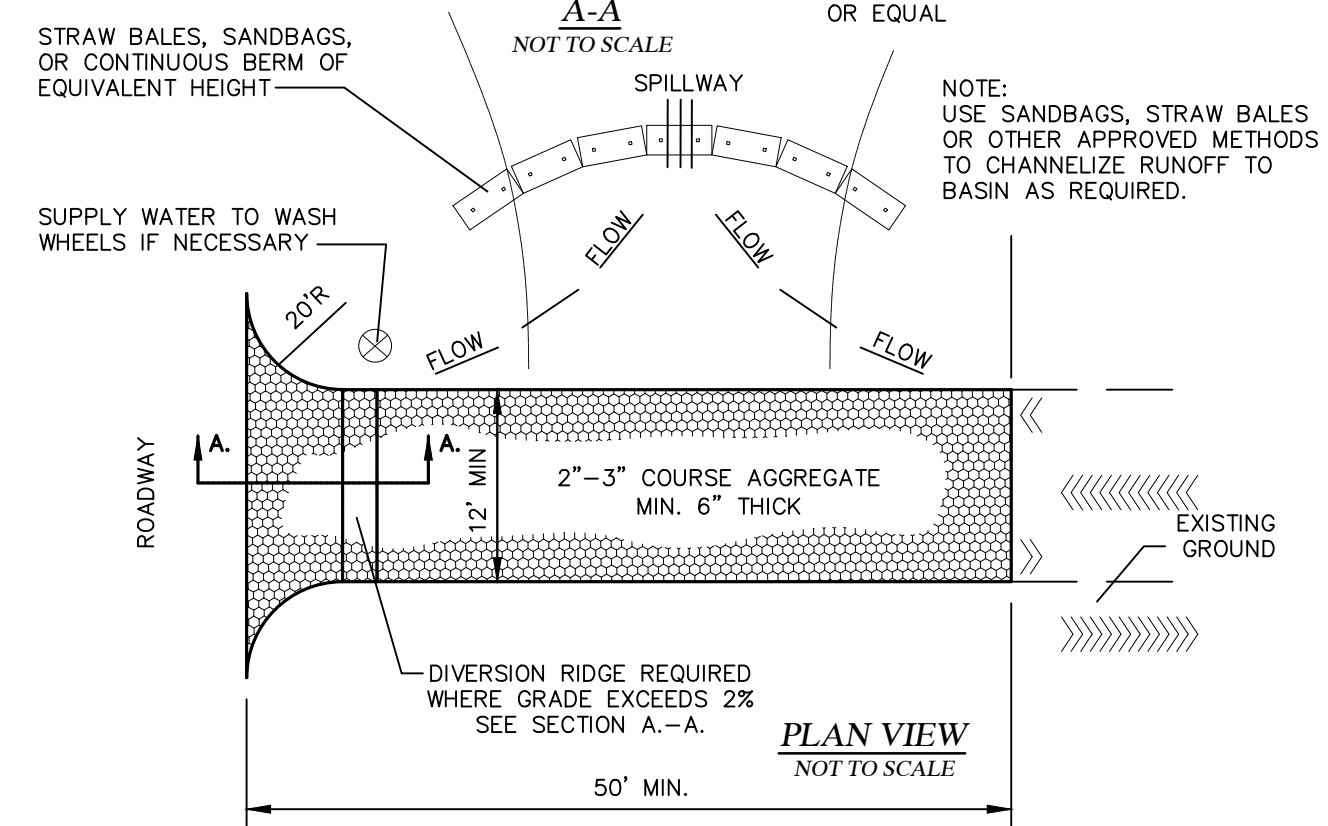
B SILT FENCE DETAIL "SEDIMENT BARRIER OPTION"

N.T.S.



SECTION VIEW A-A

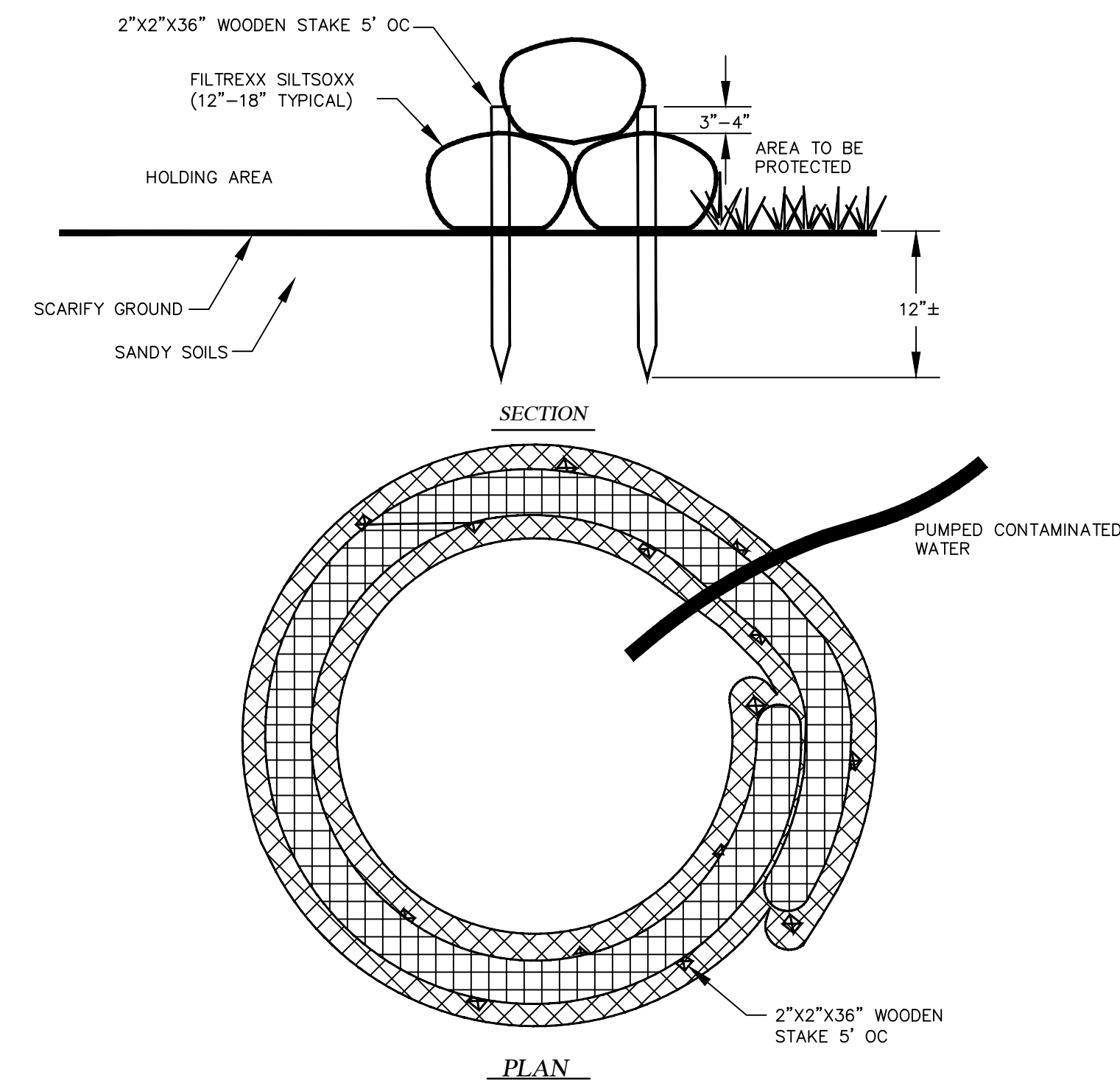
NOT TO SCALE



PLAN VIEW

NOT TO SCALE

- NOTE:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR, AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS.
 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR BASIN.
 4. TRACKED MUD OR SEDIMENT SHALL BE REMOVED PRIOR TO THE NEXT STORM EVENT. "REMOVED" SHALL MEAN VACUUM SWEEPING. MECHANICAL BROOM/SWEEPING SEDIMENT INTO DITCHES OR STRUCTURES IS NOT ACCEPTABLE.



SECTION

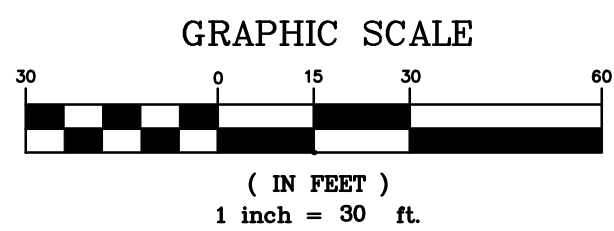
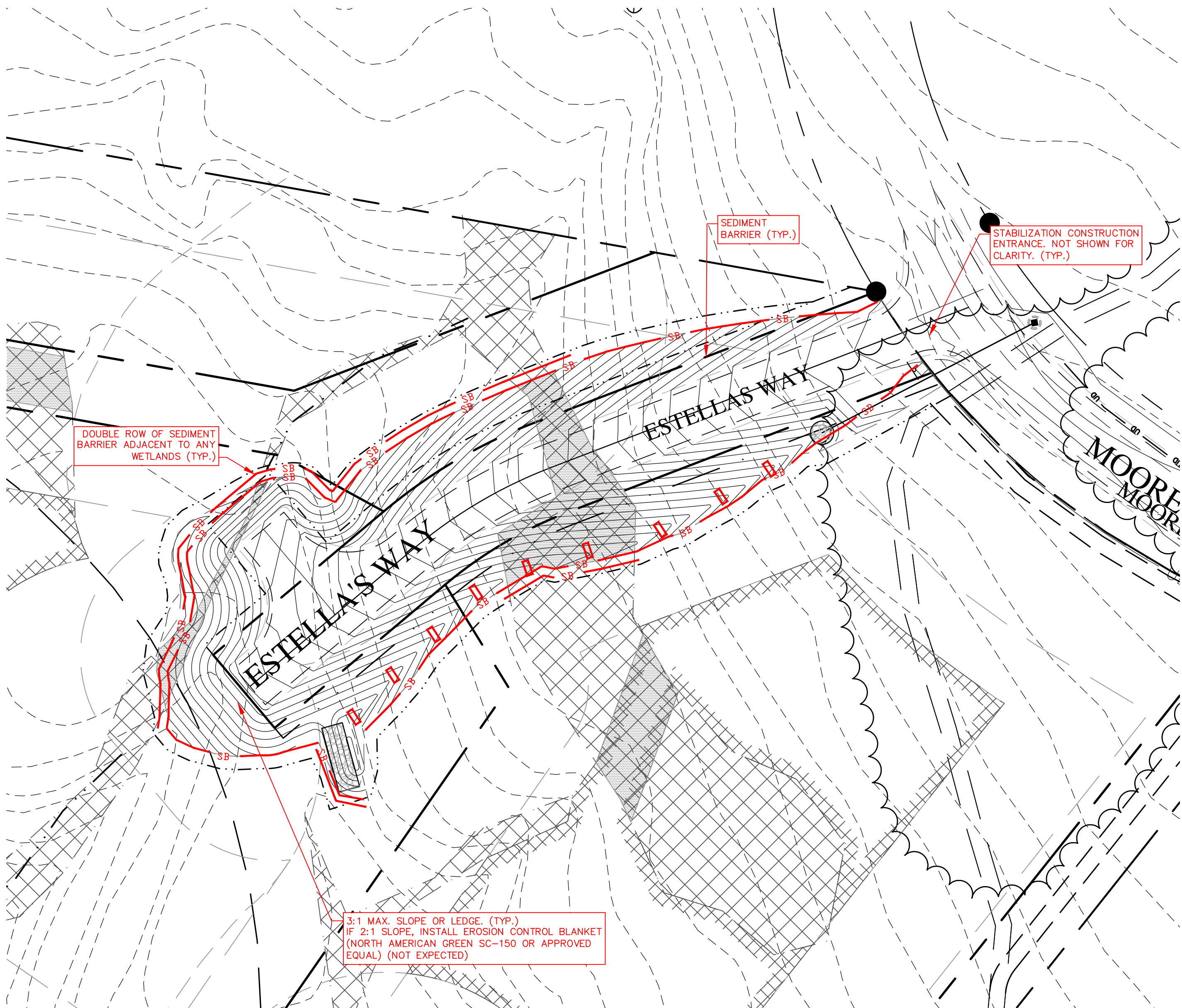
PLAN

C STABILIZED CONSTRUCTION ENTRANCE

N.T.S.

D SEDIMENT TRAP DETAIL

N.T.S.



LEGEND

- SB SEDIMENT BARRIER
CD CHECK DAM

EROSION & SEDIMENT CONTROL (ESC) NOTES:

1. THE CONTRACTOR SHALL UTILIZE THE CONSTRUCTION ENTRANCE FOR ENTERING AND EXITING THE PROPERTY
2. ESC BMPs SHALL BE INSTALLED PRIOR TO START OF WORK.
3. CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO PROTECT DISTURBED AREAS AND REVIEW BMPs PRIOR TO FORECAST PRECIPITATION OF MORE THAN 0.5 INCHES.
4. CONTRACTOR TO SWEEP EXISTING PAVED ACCESS AS NEEDED TO REMOVE TRACKED SOILS.
5. CONTRACTOR SHALL KEEP THE WRITTEN STORMWATER MANAGEMENT INSPECTION AND MAINTENANCE PLAN ON SITE.
6. ALL RUNOFF FROM DISTURBED AREAS SHALL BE DIRECTED TO A FILTERING DEVICE DESIGNATED TO LIMIT DISCHARGE TURBIDITY. THE FILTERING DEVICE MAY BE BUT IS NOT LIMITED TO SAND FILTERS, EROSION CONTROL MIX, STRAW WA TILES, FLOCCULATION CHEMICALS, DIRT GLUE AND SILT FENCE.
7. STOCKPILES TO BE TEMPORARILY SEEDDED AND MULCHED OR COVERED WITH POLY SHEETING AS REQUIRED BY THE PROJECT SPECIFICATIONS.
8. THE CONTRACTOR SHALL TREAT DISTURBED AREAS, BUILDING AREAS, AND CONSTRUCTION HAUL PATHS WITH DUST CONTROL BMPs TO LIMIT ALL FUGITIVE DUST PER THE PROJECT SPECIFICATIONS.
9. THE EROSION AND SEDIMENT CONTROL MEASURES DEPICTED ON THIS PLAN ARE CONSIDERED TO BE THE MINIMUM REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE TO MANAGE, INSPECT AND PROTECT THE SITE USING MEPEP BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL AS REQUIRED BY THE PROJECT SPECIFICATIONS AND THE EROSION AND SEDIMENT CONTROL REPORT. THIS MAY REQUIRE ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES NOT DEPICTED ON THIS PLAN WHICH ARE CONSIDERED INCIDENTAL TO THE CONTRACT AND WILL BE IMPLEMENTED AT NO ADDITIONAL COST TO THE OWNER.
10. ALL CATCH BASIN INLETS WITH TRIBUTARY AREA WITH PAVEMENT COVER SHALL HAVE AN OIL ABSORBENT BOOM INSTALLED PRIOR TO THE PLACEMENT OF ANY BINDER PAVEMENT.
11. SEE ADDITIONAL NOTES ON SHEET C10, EROSION CONTROL NOTES.

PROGRESS PRINT
THIS PLAN IS ISSUED FOR REVIEW AND INFORMATION PURPOSES ONLY. THIS PLAN IS SUBJECT TO CHANGE AND IS NOT FOR PRICING OR CONSTRUCTION. PRICING BASED ON THIS PLAN IS NOT BINDING UNLESS SIGNED BY BOTH CONTRACTOR AND OWNER.

3. 10-13-21 REVISED PER TOWN COMMENTS MCA
2. 09-28-21 SUBMITTED TO TOWN FOR FINAL SUBDIVISION REVIEW MCA
1. 08-17-21 SUBMITTED TO TOWN FOR PRELIMINARY SUB. REVIEW MCA

TITLE: **EROSION CONTROL PLAN**

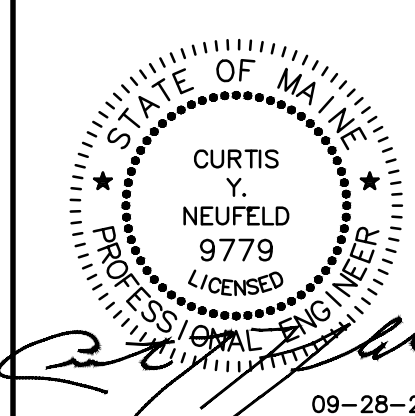
PROJECT: **ROSS ESTATES**
BLANCHARD ROAD EXTENSION, CUMBERLAND, MAINE

PREPARED FOR: **STONEWOOD LAND, LLC**
8 ROBERTS STREET, FALMOUTH, MAINE 04105



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FIELD WK:	SCALE:	SHEET:
DRN BY: MCA	JOB #: 4185	C7
CH'D BY: KPC	MAP/LOT: R08 / 681	
DATE: 11-16-2020	FILE: 4185-SITE	

ALAND PROJECTS 148 ROSS BLANCHARD RD CUMBERLAND MAE 04100 10/13/2021 12:28 PM MELISSA ARCHIBEL
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EROSION AND SEDIMENTATION NOTES:

1. CONTRACTOR SHALL REFER TO THE FOLLOWING REFERENCES FOR THE DESIGN AND INSTALLATION OF TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL PRACTICES:
- 2016 REVISION TO THE 2003 MAINE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES MANUAL FOR DESIGNERS AND ENGINEERS
 - 2014 REVISION TO THE 2003 MAINE EROSION AND SEDIMENT CONTROL FIELD GUIDE FOR CONTRACTORS

GENERAL EROSION AND SEDIMENTATION CONTROL PRACTICES:

EROSION/SEDIMENT CONTROL DEVICES:

THE FOLLOWING EROSION SEDIMENTATION CONTROL DEVICES ARE PROPOSED FOR CONSTRUCTION ON THIS PROJECT. INSTALL THESE DEVICES AS INDICATED ON THE PLANS.

1. SEDIMENT BARRIER: PRIOR TO THE START OF CONSTRUCTION, SILT SOXX OR APPROVED EQUAL WILL BE INSTALLED ALONG THE DOWN GRADING EDGES OF DISTURBED AREAS TO TRAP RUNOFF BORNE SEDIMENTS UNTIL THE SITE IS STABILIZED. THE STABILIZED IS 90% COVERAGE OF SEEDD AREAS. IN AREAS WHERE STORMWATER DISCHARGES THE SEDIMENT BARRIER WILL BE REINFORCED WITH HAY BALES TO HELP MAINTAIN THE INTEGRITY OF THE SEDIMENT BARRIER AND TO PROVIDE ADDITIONAL TREATMENT.
2. HAY BALES: HAY BALES TO BE PLACED IN LOW FLOW DRAINAGE SWALES AND PATHS TO TRAP SEDIMENTS AND REDUCE RUNOFF VELOCITIES. DO NOT PLACE HAY BALES IN FLOWING WATER OR STREAMS.
3. RIPRAP: PROVIDE RIPRAP IN AREAS WHERE CULVERTS DISCHARGE OR AS SHOWN ON THE PLANS.
4. LOAM, SEED, & MULCH: ALL DISTURBED AREAS, WHICH ARE NOT OTHERWISE TREATED, SHALL RECEIVE PERMANENT SEEDING AND MULCH TO STABILIZE THE DISTURBED AREAS. THE DISTURBED AREAS WILL BE REVEGETATED WITHIN 5 DAYS OF FINAL GRADING. SEEDING REQUIREMENTS ARE PROVIDED AT THE END OF THIS SPECIFICATION.
5. STRAW AND HAY MULCH: USED TO COVER DENUDED AREAS UNTIL PERMANENT SEED OR EROSION CONTROL MEASURES ARE IN PLACE. MULCH BY ITSELF CAN BE USED ON SLOPES LESS THAN 15% IN SUMMER AND 8% IN WINTER. JUTE MESH IS TO BE USED OVER MULCH ONLY.
6. IN LIEU OF MULCH, USE EROSION CONTROL BLANKET (EQUAL TO NORTH AMERICAN GREEN SC150) TO STABILIZE AREAS OF CONCENTRATED FLOW AND DRAINAGE WAYS.
7. STABILIZED CONSTRUCTION ENTRANCE: PRIOR TO THE START OF CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE WILL BE INSTALLED AND UTILIZED FOR CONTRACTOR ACCESS. TRACKED MUD OR SEDIMENT SHALL BE REMOVED PRIOR TO THE NEXT STORM EVENT.

TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES:

PROVIDE THE FOLLOWING TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES PRIOR TO THE START OF CONSTRUCTION OF THE DEVELOPMENT:

1. SEDIMENT BARRIER ALONG THE DOWNGRADIENT SIDE OF THE PARKING AREAS AND OF ALL FILL SECTIONS. THE SEDIMENT BARRIER SHALL BE INSTALLED PRIOR TO THE START OF THE CONSTRUCTION AND WILL REMAIN IN PLACE UNTIL THE SITE IS 90% REVEGETATED.
2. HAY BALES PLACED AT KEY LOCATIONS TO SUPPLEMENT THE SEDIMENT BARRIER.
3. PROTECT TEMPORARY STOCKPILES OF STUMPS, GRUBBINGS, OR COMMON EXCAVATION AS FOLLOWS:
 - A. SOIL STOCKPILE SIDE SLOPES SHALL NOT EXCEED 2:1.
 - B. AVOID PLACING TEMPORARY STOCKPILES IN AREAS WITH SLOPES OVER 10 PERCENT, OR NEAR DRAINAGE SWALES.
 - C. STABILIZE STOCKPILES WITHIN 7 DAYS BY TEMPORARILY SEEDING WITH A HYDROSEED METHOD CONTAINING AN EMULSIFIED MULCH TACKIFIER OR BY COVERING THE STOCKPILE WITH MULCH.
 - D. SURROUND STOCKPILE SOIL WITH SEDIMENT BARRIER AT BASE OF PILE.
 - E. STORMWATER SHOULD BE PREVENTED FROM RUNNING ONTO STOCKPILES.
4. ALL DENUDED AREAS WHICH HAVE BEEN ROUGH GRADED AND ARE NOT LOCATED WITHIN THE BUILDING PAD, OR PARKING AND DRIVEWAY SUBBASE AREA SHALL RECEIVE MULCH WITHIN 7 DAYS AFTER CESSATION THE CONSTRUCTION ACTIVITIES. STABILIZE ANY EXPOSED SOIL WITH MULCH, OR OTHER NON-ERODIBLE COVER. IN THE EVENT THE CONTRACTOR COMPLETES FINAL GRADING AND INSTALLATION OF LOAM AND SOD WITHIN THE TIME PERIODS PRESENTED ABOVE, INSTALLATION OF MULCH AND NETTING, WHERE APPLICABLE, IS NOT REQUIRED.
5. IF WORK IS CONDUCTED BETWEEN OCTOBER 15 AND APRIL 15, ALL DENUDED AREAS ARE TO BE COVERED WITH HAY MULCH, APPLIED AT TWICE THE NORMAL APPLICATION RATE, AND ANCHORED WITH FABRIC NETTING. THE PERIOD BETWEEN FINAL GRADING AND MULCHING SHALL BE REDUCED TO A 7 DAY MAXIMUM.
6. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE HAS BEEN STABILIZED OR IN AREAS WHERE PERMANENT EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
7. WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 FEET OF ANY WETLAND. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY WETLAND, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE WETLAND, PERIMETER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.
8. AREAS WITHIN 75 FT OF A WETLAND WILL BE STABILIZED WITHIN 48 HOURS OF INITIAL DISTURBANCE OF THE SOIL OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.
9. ALL AREAS WITHIN 75 FEET OF A WETLAND MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS DURING WINTER CONSTRUCTION (NOVEMBER 1 THROUGH APRIL 15).
10. TEMPORARY SEDIMENT BASINS MAY BE INSTALLED DOWNGRADIENT OF THE DISTURBED AREAS. THESE BASINS MUST BE DESIGNED TO PROVIDE STORAGE FOR EITHER THE CALCULATED RUNOFF FROM A 2-YEAR, 24-HOUR STORM OR PROVIDE FOR 3,600 CUBIC FEET OF CAPACITY PER ACRE DRAINING TO THE BASIN. OUTLET STRUCTURES MUST DISCHARGE WATER FROM THE SURFACE OF THE BASIN WHENEVER POSSIBLE. EROSION CONTROLS AND VELOCITY DISSIPATION DEVICES MUST BE USED IF THE DISCHARGING WATERS ARE LIKELY TO CREATE EROSION. ACCUMULATED SEDIMENT MUST BE REMOVED AS NEEDED FROM THE BASIN TO MAINTAIN AT LEAST ½ OF THE DESIGN CAPACITY OF THE BASIN.
11. EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME. AT ANY TIME, THE DENUDED AREA WILL NOT EXCEED THAT WHICH CAN BE MULCHED IN ONE DAY.

PERMANENT EROSION CONTROL MEASURES:

THE FOLLOWING PERMANENT CONTROL MEASURES ARE REQUIRED BY THIS EROSION/SEDIMENTATION CONTROL PLAN:

1. ALL AREAS DISTURBED DURING CONSTRUCTION, BUT NOT SUBJECT TO OTHER RESTORATION (PAVING, RIPRAP, ETC.), WILL BE LOAMED, LIMED, FERTILIZED AND SEEDD. NATIVE TOPSOIL SHALL BE STOCKPILED AND REUSED FOR FINAL RESTORATION WHEN IT IS OF SUFFICIENT QUALITY.
2. SLOPES GREATER THAN 2:1 WILL RECEIVE RIPRAP. (NONE ANTICIPATED)

POST-CONSTRUCTION REVEGETATION:

THE FOLLOWING GENERAL PRACTICES WILL BE USED TO PREVENT EROSION AS SOON AS AN AREA IS READY TO UNDERGO FINAL GRADING.

1. A MINIMUM OF 6" OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND GRADED TO A UNIFORM DEPTH AND NATURAL APPEARANCE, OR STONE WILL BE PLACED ON SLOPES TO STABILIZE SURFACES.
2. IF FINAL GRADING IS REACHED DURING THE NORMAL GROWING SEASON (4/15 TO 9/15), PERMANENT SEEDING WILL BE DONE AS SPECIFIED BELOW. PRIOR TO SEEDING, LIMESTONE SHALL BE APPLIED AT A RATE OF 138 LBS/1000 SQ. FT. AND 10:20:20 FERTILIZER AT A RATE OF 18.4 LBS/1000 SQ.FT WILL BE APPLIED. BROADCAST SEEDING AT THE FOLLOWING RATES:

LAWNS SHALL BE: ALLEN, STERLING & LATHROP "TUFFTURT", 70% DIAMOND TALL FESCUE, 20% PLEASURE OLUS PERENNIAL YEGRASS, 10% BARON KENTUCKY BLUEGRASS. SEEDING RATE SHALL BE 7-LBS./1,000 SQ. FT.

SWALES SHALL BE: WILDFLOWER MEADOW (SEED) FESTUCA OVINA SHEEP FESCUE; SOW AT A RATE OF 12 OZ. PER 1,000 SQFT. TRIFOLIUM REPENS WHITE CLOVER; SOW AT A RATE OF ½ OZ.PER 1,000 SQFT. (FLOWERS) ACHILLEA MILLEFOLIUM YARROW, AQUILEGA CANADENSIS COLUMBINE, ASOLEPAS TURBOSO BUTTERNUT MILKWED, ASTER NOVAE-ANGLIAE NEW-ENGLAND ASTER, BAPTISIA AUSTRALIS WILD INDIGO, BOLTONIA ASTERODS FALSE ASTER, CHRYSANTHEMUM LEUCANTHEMUM OXEYE DAISY, DIGITALIS PURPUREA FOXGLOVE, ECHINACEA PURPUREA POPPY CONFLOWER, LUPINUS PERENNIS LUPINE, MONARDA FISTULOSA BERGAMOT, PAPAVER ORIENTALE ORIENTAL POPPY, RUDBECKIA HIRTA BLACK-EYED SUSAN, SALVIA OFFICINALIS SAGE; SOW AT A RATE OF 1/3 OZ. EACH PER 1,000 SQFT. OR 4 OZ. PER 1,000 SQFT. IN COMBINATION

3. AN AREA SHALL BE MULCHED IMMEDIATELY AFTER IS HAS BEEN SEEDD. MULCHING SHALL CONSIST OF HAY MULCH, HYDRO-MULCH, JUTE NET OVER MULCH, PRE-MANUFACTURED EROSION MATS OR ANY SUITABLE SUBSTITUTE DEEMED ACCEPTABLE BY THE DESIGNER.
 - A. HAY MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. HAY MULCH SHALL BE SECURED BY EITHER: (NOTE: SOIL SHALL NOT BE VISIBLE)
 - i. BEING DRIVEN OVER BY TRACKED CONSTRUCTION EQUIPMENT ON GRADES OF 5% AND LESS.
 - ii. BLANKETED BY TACKED PHOTODEGRADABLE/BIODEGRADABLE NETTING, OR WITH SPRAY, ON GRADES GREATER THAN 5%.
 - B. HYDRO-MULCH SHALL CONSIST OF A MIXTURE OF EITHER ASPHALT, WOOD FIBER OR PAPER FIBER AND WATER SPRAYED OVER A SEEDD AREA. HYDRO-MULCH SHALL NOT BE USED BETWEEN 9/15 AND 4/15.
4. CONSTRUCTION SHALL BE PLANNED TO ELIMINATE THE NEED FOR SEEDING BETWEEN SEPTEMBER 15 AND APRIL 15. SHOULD SEEDING BE NECESSARY BETWEEN SEPTEMBER 15 AND APRIL 15 THE FOLLOWING PROCEDURE SHALL BE FOLLOWED. ALSO REFER TO NOTE 9 OF WINTER CONSTRUCTION.
 - A. ONLY UNFROZEN LOAM SHALL BE USED.
 - B. LOAMING, SEEDING AND MULCHING WILL NOT BE DONE OVER SNOW OR ICE COVER. IF SNOW EXISTS, IT MUST BE REMOVED PRIOR TO PLACEMENT OF SEED.
 - C. WHERE PERMANENT SEEDING IS NECESSARY, ANNUAL WINTER RYE (1.2 LBS/1000 SQ.FT) SHALL BE ADDED TO THE PREVIOUSLY NOTED AREAS.

- D. WHERE TEMPORARY SEEDING IS REQUIRED, ANNUAL WINTER RYE (2.6 LBS/1000 SQ. FT.) SHALL BE SOWN INSTEAD OF THE PREVIOUSLY NOTED SEEDING RATE.
- E. FERTILIZING, SEEDING AND MULCHING SHALL BE APPLIED TO LOAM THE DAY THE LOAM IS SPREAD BY MACHINERY.
- F. ALTERNATIVE HAY MULCH SHALL BE SECURED WITH PHOTODEGRADABLE/BIODEGRADABLE NETTING. TRACKING BY MACHINERY ALONE WILL NOT SUFFICE.

5. FOLLOWING FINAL SEEDING, THE SITE WILL BE INSPECTED EVERY 30 DAYS UNTIL 85% COVER HAS BEEN ESTABLISHED. RESEEDING WILL BE CARRIED OUT BY THE CONTRACTOR WITHIN 10 DAYS OF NOTIFICATION BY THE ENGINEER THAT THE EXISTING CATCH IS INADEQUATE.

MONITORING SCHEDULE:

THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING, MONITORING, MAINTAINING, REPAIRING, REPLACING AND REMOVING ALL OF THE EROSION AND SEDIMENTATION CONTROLS OR APPOINTING A QUALIFIED SUBCONTRACTOR TO DO SO. MAINTENANCE MEASURES WILL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, A VISUAL INSPECTION WILL BE MADE OF ALL EROSION AND SEDIMENTATION CONTROLS AS FOLLOWS:

1. HAY BALE BARRIERS, SEDIMENT BARRIER, AND STONE CHECK DAMS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK OR IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6" AND REDISTRIBUTED TO AREAS UNDERGOING FINAL GRADING. SHOULD THE HAY BALE BARRIERS PROVE TO BE INEFFECTIVE, THE CONTRACTOR SHALL INSTALL SEDIMENT BARRIER BEHIND THE HAY BALES.
2. VISUALLY INSPECT RIPRAP ONCE A WEEK OR AFTER EACH SIGNIFICANT RAINFALL AND REPAIR AS NEEDED. REMOVE SEDIMENT TRAPPED BEHIND THESE DEVICES ONCE IT ATTAINS A DEPTH EQUAL TO 1/2 THE HEIGHT OF THE DAM OR RISER. DISTRIBUTE REMOVED SEDIMENT OFF-SITE OR TO AN AREA UNDERGOING FINAL GRADING.
3. REVEGETATION OF DISTURBED AREAS WITHIN 25' OF DRAINAGE-COURSE/STREAM WILL BE SEEDD WITH THE "MEADOW AREA MIX" AND INSPECTED ON A WEEKLY BASIS OR AFTER EACH SIGNIFICANT RAINFALL AND RESEEDD AS NEEDED. EXPOSED AREAS WILL BE RESEEDD AS NEEDED UNTIL THE AREA HAS OBTAINED 100% GROWTH RATE. PROVIDE PERMANENT RIPRAP FOR SLOPES IN EXCESS OF 3:1 AND WITHIN 25' OF DRAINAGE COURSE.

HOUSEKEEPING:

FROM THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, CHAPTER 500, APPENDIX C.

1. SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.

NOTE: ANY SPILL OR RELEASE OF TOXIC OR HAZARDOUS SUBSTANCES MUST BE REPORTED TO THE DEPARTMENT. FOR OIL SPILLS, CALL 1-800-482-0777 WHICH IS AVAILABLE 24 HOURS A DAY. FOR SPILLS OF TOXIC OR HAZARDOUS MATERIAL, CALL 1-800-452-4664 WHICH IS AVAILABLE 24 HOURS A DAY. FOR MORE INFORMATION, VISIT THE DEPARTMENT'S WEBSITE AT : [HTTP://WWW.MAINE.GOV/DEP/SPILLS/EMERGSPILLSRESP/](http://www.maine.gov/dep/spills/emergspillsresp/)

2. GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.

NOTE: LACK OF APPROPRIATE POLLUTANT REMOVAL BEST MANAGEMENT PRACTICES (BMPs) MAY RESULT IN VIOLATIONS OF THE GROUNDWATER QUALITY STANDARD ESTABLISHED BY 38 M.R.S.A. §465-C(1).

3. FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHALL BE INSTALLED AT THE END OF THE EXIST PAVED ACCESS TO THE SITE TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEEP IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.

4. DEBRIS AND OTHER MATERIALS. MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

5. EXCAVATION DE-WATERING. EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER SHOULD BE STORED IN A DEDICATED WATER BASIN. THE BASIN SHOULD BE PROTECTED THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

EXCAVATION DEWATERING IS ANTICIPATED FOR THIS PROJECT. SHOULD IT BE NECESSARY, THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A SEDIMENT TRAP (SEE DETAIL THIS SHEET), DIRT BAG, OR SEDIMENTATION BASIN. A DEWATERING DISCHARGE PLAN SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR APPROVAL.

6. AUTHORIZED NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:

- (a) DISCHARGES FROM FIREFIGHTING ACTIVITY;
- (b) FIRE HYDRANT FLUSHINGS
- (c) VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
- (d) DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND CHAPTER 500 APPENDIX C(3);
- (e) ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
- (f) PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAS BEEN REMOVED) IF DETERGENTS ARE NOT USED;
- (g) UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
- (h) UNCONTAMINATED GROUNDWATER OR SPRING WATER;
- (i) FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;
- (j) UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5));
- (k) POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
- (l) LANDSCAPE IRRIGATION.

7. UNAUTHORIZED NON-STORMWATER DISCHARGES. THE DEPARTMENT'S APPROVAL UNDER CHAPTER 500 DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C (6). SPECIFICALLY, THE DEPARTMENTS APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:

- (a) WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
- (b) FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
- (c) SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND
- (d) TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

CONSTRUCTION PHASE:

THE FOLLOWING GENERAL PRACTICES WILL BE USED TO PREVENT EROSION DURING CONSTRUCTION OF THIS PROJECT.

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND MAINTAIN UNTIL SITE IS PAVED.
2. ONLY THOSE AREAS NECESSARY FOR CONSTRUCTION WILL BE DISTURBED.
3. PRIOR TO THE START OF CONSTRUCTION, SEDIMENT BARRIER WILL BE INSTALLED ACROSS THE SLOPE(S), ON THE CONTOUR, AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT TRAVELLED WAY TO PROTECT IT FROM CONSTRUCTION-RELATED EROSION.
4. CLEAR AND GRUB WORK SITE AS NEEDED TO EXECUTE PLANS USING CAUTION NOT TO OVER EXPOSE THE SITE.
5. STORMWATER MANAGEMENT SYSTEM WILL BE INSTALLED PRIOR TO CONSTRUCTION OF SITE ELEMENTS THAT DISCHARGE TO THESE SYSTEMS. NO STORMWATER SHALL BE DIRECTED TO THE BIORETENTION FILTERS UNTIL THE SITE IS COMPLETELY STABILIZED. TEMPORARY INFILTRATION BASINS SHALL BE INSTALLED TO COLLECT ANY INFILTRATE ANY STORMWATER RUNOFF FROM THE SITE DURING CONSTRUCTION AND PRIOR TO STABILIZATION.
6. DISTURBED AREAS WILL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING, OR TEMPORARILY STABILIZED WITHIN 30 DAYS OF THE INITIAL DISTURBANCE. DISTURBED AREAS WILL BE SEEDD AND MULCHED BEFORE STORMS. LOAM WILL BE SAVED FOR LATER USE WHERE POSSIBLE. EXCESS SOIL MATERIALS WILL BE USED AS FILL OR REMOVED FROM SITE TO AN APPROVED LOCATION.
7. AT A MINIMUM, THE EROSION CONTROL MEASURES SHALL BE REVIEWED AND REPAIRED ONCE A WEEK OR IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOWMELT. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6 INCHES AND BE DISCARDED ON THE SITE. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS.

8. LOAM, LIME, FERTILIZE, SEED, AND MULCH LANDSCAPED AND OTHER DISTURBED AREAS.

9. ONCE THE SITE IS STABILIZED AND A 90% CATCH OF VEGETATION HAS BEEN OBTAINED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

10. TOUCH UP LOAM AND SEED.

NOTE: ALL DENUDED AREAS NOT SUBJECT TO FINAL PAVING, RIPRAP OR GRAVEL SHALL BE REVEGETATED.

EROSION CONTROL DURING WINTER CONSTRUCTION:

1. WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.
2. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN ONE (1) ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
3. EXPOSED AREA SHALL BE LIMITED TO THOSE AREAS TO BE MULCHED IN ONE DAY. AT THE END OF EACH WORK WEEK NO AREAS MAY BE LEFT UNSTABILIZED OVER THE WEEKEND.
4. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.
5. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1000 S.F. (WITH OR WITHOUT SEEDING) OR DORMANT SEEDD, MULCHED AND ANCHORED SUCH THAT SOIL SURFACES NOT VISIBLE THROUGH THE MULCH. NOTE: AN AREA IS ALSO CONSIDERED STABLE IF SODDED, COVERED WITH GRAVEL (PARKING LOTS) OR STRUCTURAL SAND.

6. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDD AND MULCH UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1 AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDD AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW, DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF HAY, SEDIMENT BARRIER OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS SHOWN ON THE DESIGN DRAWINGS. NOTE: DORMANT SEEDING SHOULD NOT BE ATTEMPTED UNLESS SOIL TEMPERATURE REMAINS BELOW 50 DEGREES AND DAY TIME TEMPERATURES REMAIN IN THE 30'S.

7. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS. SLOPES GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8% VEGETATED DRAINAGE SWALES SHALL BE LINED WITH STRAW-COCOONUT EROSION CONTROL BLANKET (NORTH AMERICAN GREEN SC150 OR APPROVED EQUAL).

8. BETWEEN THE DATES OF OCTOBER 15 TO NOVEMBER 1, WINTER RYE IS RECOMMENDED FOR STABILIZATION. AFTER NOVEMBER 1, WINTER RYE IS NOT EFFECTIVE. AROUND NOVEMBER 15 OR LATER, ONCE TEMPERATURES OF THE AIR AND SOIL PERMIT, DORMANT SEEDING IS EFFECTIVE.

9. IN THE EVENT OF SNOWFALL (FRESH OR CUMULATIVE) GREATER THAN 1 INCH DURING WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM THE AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.

10. ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS.

SITE INSPECTION AND MAINTENANCE:

1. WEEKLY INSPECTIONS, AS WELL AS ROUTINE INSPECTIONS FOLLOWING EACH RAINFALL, SNOWSTORM, OR THAWING, SHALL BE CONDUCTED BY THE GENERAL CONTRACTOR OF ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES UNTIL FINAL ACCEPTANCE OF THE PROJECT (90% GRASS CATCH). RAINFALL OF 0.5 INCHES OR MORE OF RAIN IN 24 CONSECUTIVE HOURS SHALL TRIGGER AN INSPECTION. SNOWFALL OF 2 INCHES OR MORE SHALL TRIGGER AN INSPECTION. CORRECTIVE ACTION SHALL BE STARTED BY THE END OF THE NEXT WORK DAY AND COMPLETED WITHIN SEVEN (7) DAYS OR BEFORE THE NEXT STORM EVENT AS NOTED ABOVE. INSPECTIONS SHALL BE PERFORMED BY SOMEONE WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT ISSUED FOR THE PROJECT. THE SCOPE OF CONSTRUCTION INSPECTIONS INCLUDES DISTURBED AREAS AND IMPERVIOUS AREAS, MATERIAL STORAGE AREAS, AND VEHICLE ACCESS POINTS IN ADDITION TO ESC MEASURES. NECESSARY REPAIRS SHALL BE MADE TO CORRECT UNDERMINING OR DETERIORATION. FINAL ACCEPTANCE SHALL INCLUDE A SITE INSPECTION TO VERIFY THE STABILITY OF ALL DISTURBED AREAS AND SLOPES. UNTIL FINAL INSPECTION, ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL IMMEDIATELY BE CLEANED, AND REPAIRED BY THE GENERAL CONTRACTOR AS REQUIRED. DISPOSAL OF ALL TEMPORARY EROSION AND CONTROL DEVICES SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. RECORDS OF INSPECTIONS SHALL BE KEPT FOR THREE (3) YEARS.

MAINTENANCE. IF BEST MANAGEMENT PRACTICES (BMPs) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. IF ADDITIONAL BMPs OR SIGNIFICANT REPAIR OF BMPs ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.

DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPs THAT NEED MAINTENANCE, BMPs THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPs ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPs, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN.

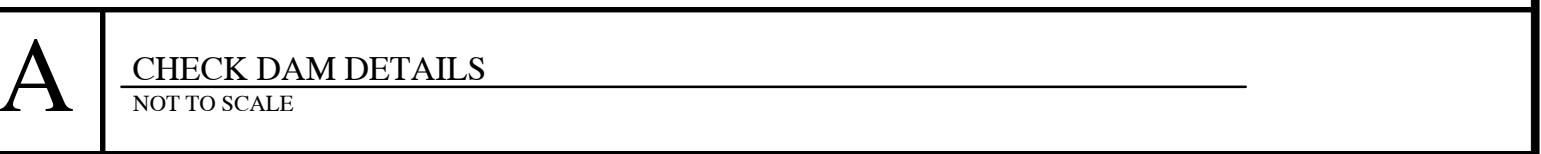
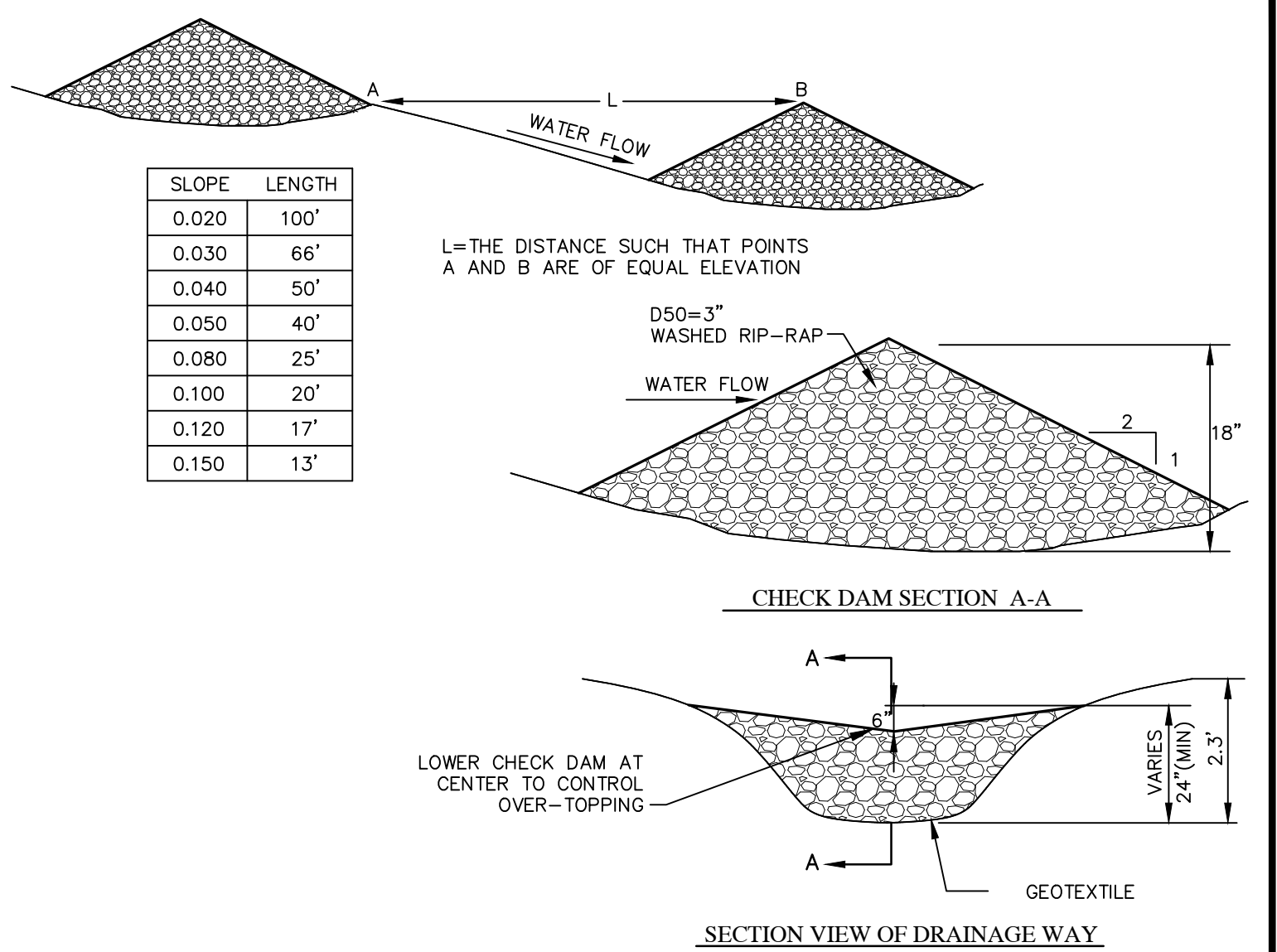
THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

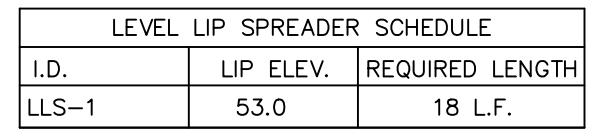
IT IS RECOMMENDED THAT THE OWNER HIRE THE SERVICES OF THE DESIGN ENGINEER TO PROVIDE COMPLIANCE INSPECTIONS (DURING ACTIVE CONSTRUCTION) RELATIVE TO IMPLEMENTATION OF THE STORMWATER AND EROSION CONTROL PLANS. SUCH INSPECTIONS SHOULD BE LIMITED TO ONCE A WEEK OR AS NECESSARY AND BE REPORTABLE TO THE OWNER, TOWN AND DEP.

DURING WINTER CONSTRUCTION, THE EROSION CONTROL MEASURES SHALL BE INSPECTED AFTER EACH RAINFALL, SNOWSTORM, OR THAWING, AND A MINIMUM OF ONCE PER WEEK.

2. SHORT-TERM SEDIMENTATION MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAN OUT ALL SWALES AND STRUCTURES PRIOR TO TURNING PROJECT OVER.

3. LONG-TERM PROVISIONS FOR PERMANENT MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROL DEVICES AFTER ACCEPTANCE OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE OWNER.

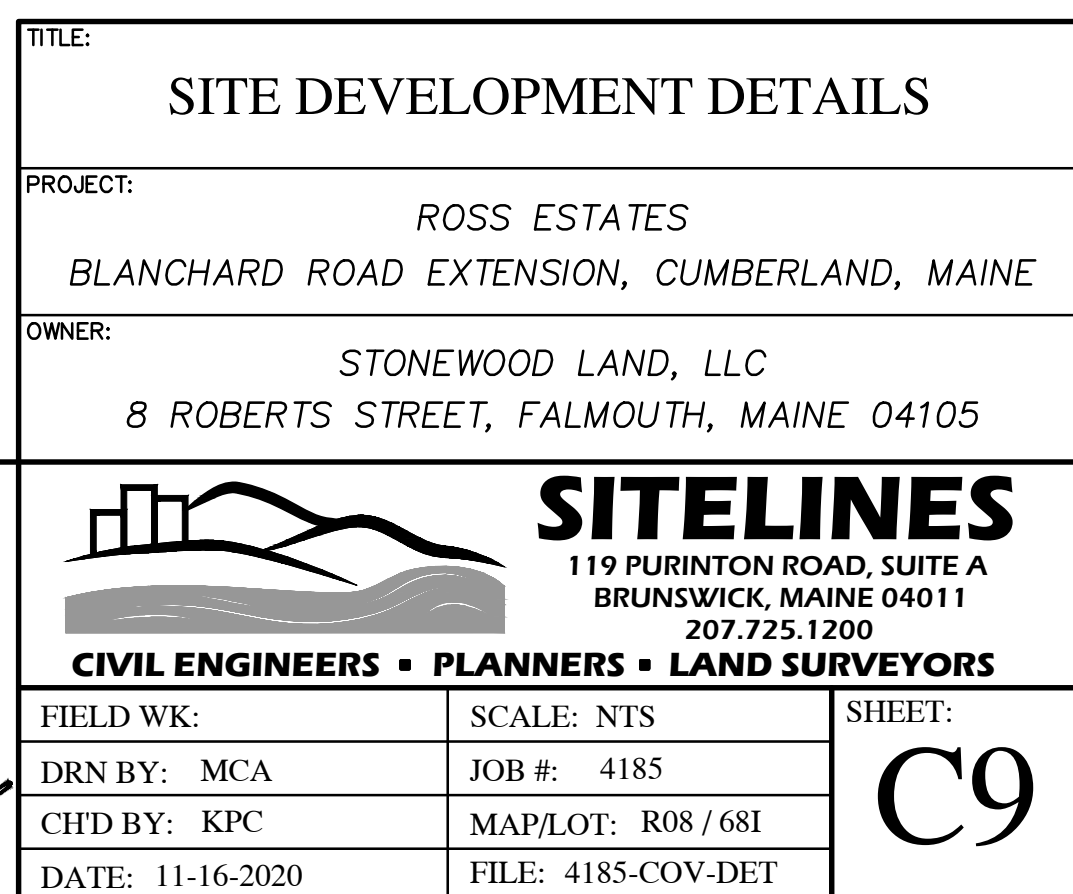




D STONE BERMED LEVEL LIP SPREADER
N.T.S.



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MEMORANDUM

To: Town of Cumberland

From: Alton Palmer, Principal

Date: October 12, 2021

Project: Ross Estates Subdivision

Subject: Peer Review

As requested by the Town, Gorrill Palmer has conducted an Engineering Peer Review for the above referenced project. Information received for this assignment included:

- Final Subdivision Submission and attachments, dated September 28, 2021, prepared by SiteLines on behalf of the Stonewood Land, LLC, consisting of 155 pages.
- Stormwater Management Plan, prepared by SiteLines, consisting of 37 pages.
- Final Subdivision Drawing Set, dated September 28, 2021, prepared by SiteLines consisting of 9 drawings.
- Estimate of Probable Construction Costs, dated September 28, 2021, prepared by SiteLines, consisting of 4 pages.

Based on our review of this information, general engineering principles and the Town of Cumberland Zoning and Subdivision Ordinances, we offer the following comments related to the engineering and design aspects of this project:

Subdivision Application

1. As stated in the Application, the following waivers were requested:
 - a. Existing physical features (trees 10" diameter or more)
 - b. Hydro-geologic study
 - c. Well locations
 - d. High intensity soils survey
 - e. Location of temp markers in field
 - f. Street lighting details
 - g. Soil surveys with license number of soil scientist
 - h. Septic plans with license number of site evaluator
 - i. Geological evaluations with registration number of geologist
 - j. Walkways within roads of proposed subdivision

We have no objections to the granting of these waivers from an engineering perspective based on the scale and nature of the project.

2. Stormwater Management Plan
 - a. The overall flooding analysis showed an insignificant increase in peak flows at the analysis points.
 - b. The peak flow at the swale at the toe of slope of the turnaround should be computed and the need for soil protection (sod or riprap) addressed if needed.



- c. The peak flow at the swale at the toe of slope of the southerly edge of Estella's Way should be computed and the need for soil protection (sod or riprap) addressed if needed.
- d. The peak flow at the ditch along Moore Farm Road should be computed and the need for soil protection (sod or riprap) addressed if needed.
- e. A catch basin with a 36" outlet pipe crossing Moore Farm Road is proposed. The capacity of the catch basin inlet should be analyzed to determine if there is adequate capacity for the calculated flow.

Subdivision Plans

- 3. The source of the topographic survey (ground, aerial or LIDAR) should be noted on the Subdivision Plan. The response to comments noted that the source was added, but we couldn't find the reference. The Benchmark should also be noted on the plans.
- 4. Submit to the Town, a copy of the application for the vernal pool impact.
- 5. Note dimensions of turnaround on the plans.
- 6. Provide driveway culvert sizes on the plans. The response to comments noted that the culverts were added, but we couldn't find the culvert sizes.
- 7. Provide sizing calculation for level lip spreader.
- 8. Provide permanent grading and drainage easements for slopes beyond 5' from ROW and for flow paths around the turnaround and south of the proposed private way up to the stream, to allow for future maintenance.
- 9. Show the sight distances for the Estella's Way/Moore Farm Road intersection as well as the Moore Farm Road/Blanchard Road intersection on the subdivision plan. The response to comments noted that the sight distance was added, but we couldn't find the distances.
- 10. The Applicant shall provide a statement that the proposed dead end road length (as measured from the intersection of Blanchard Road Extension and Stonewall Drive to the end of the proposed private right of way) will not exceed 2,000 feet. The response to comments noted that the statement was included in the cover letter, but we couldn't find the statement.
- 11. Label the profiles on sheet C5 with the roadway names to avoid confusion.
- 12. It has been noted in the response to comments that the subbase will be daylighted in fill conditions. An underdrain is shown on the typical roadway sections and on the detail sheet. If the underdrain is used, show the location on the plans, as well as the underdrain outlet location. If the underdrain is not used, remove from plan set.
- 13. Blanchard Road Extension - Section A – 650' of underdrain is noted in the Performance Guarantee, but not shown on the Plans.
- 14. Moore Farm Road - Section C – 535' of underdrain is noted in the Performance Guarantee, but not shown on the Plans.
- 15. Typical Section for Section A – Blanchard Road Extension on Sheet C5 should be revised to depict the proposed underdrain.
- 16. Provide information for cross culvert at approximately Station 15+00 of Blanchard Road Extension (size and inverts) to confirm available cover.
- 17. Check the available cover for the "off-road" portion of the proposed storm drain on the left side of Estella's Way.
- 18. Please confirm adequacy of 4' Catch Basin to accommodate a 36" HDPE outfall pipe.
- 19. Proposed grading for Blanchard Road Extension needs to be updated to reflect the necessary roadside swale.
- 20. As requested, the Applicant has added the right of way limits for the southerly side of Blanchard Road Extension. As the as-constructed existing roadway is not centered with the right of way, it appears that a permanent grading and maintenance easement will be required from



approximately Station 10+00 to Station 18+00. Left. The width of the permanent easement should be at least 5' beyond the grading (after updating based on Comment 19 above).

21. Provide a rip rap pipe outlet apron detail.

Performance Guarantee

For each road segment as applicable:

22. Provide quantity and cost for seed and mulch.
23. Provide quantity and cost for erosion and sedimentation control.
24. Provide quantity and cost for common borrow.
25. Provide quantity and cost for common excavation.
26. Provide quantity and cost for level lip spreader.
27. Pipe P1 as labeled on Sheet C4 references a 36" HDPE Pipe. It appears to have been included in the Performance Guarantee as a 12" Pipe.

MAJOR CONSERVATION SUBDIVISION FINAL PLAN APPLICATION

ROSS ESTATES TAX MAP R08, LOT 68I

BLANCHARD ROAD EXTENSION
CUMBERLAND, MAINE

September 28, 2021

Prepared For

STONEWOOD LAND, LLC

8 Roberts Street
Falmouth, ME 04105

Prepared By



119 Purinton Road, Suite A, Brunswick Landing, Brunswick, ME 04011
207-725-1200 ▪ www.sitelinespa.com

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Attachment D	Supporting Graphics
Attachment E	Subdivision & Site Plans



September 28, 2021

4185-7

Ms. Carla Nixon, Town Planner
Town of Cumberland
290 Tuttle Road
Cumberland, Maine 04021

Re: Major Conservation Subdivision – Final Plan Application
ROSS ESTATES
BLANCHARD ROAD EXTENSION, CUMBERLAND
Tax Map R08, Lot 68I

Dear Carla:

On behalf of Stonewood Land, LLC (Applicant), Sitelines, PA is pleased to submit the enclosed Preliminary and Final Plan Applications for the development of a three (3) lot subdivision on Blanchard Road Extension in Cumberland. This letter is intended to summarize the project in order to facilitate the review process. A check for the \$2,200 fee has been previously submitted.

PROPERTY

The Applicant owns a parcel of land located along a private right-of-way off Blanchard Road Extension. The parcel is identified as Tax Map R08, Lot 68I on the Town of Cumberland Tax Maps. The parcel contains 12.41± acres and has frontage on the private right-of-way. The site has not been previously developed and consists mostly of forested area. Existing features on the site include rock walls, streams, trails, wetlands, and a vernal pool. Wetlands were delineated by Albert Frick Associates in May 2020. The property is located in the Rural Residential 2 (RR2) Zoning District and not is adjacent to any other Town of Cumberland district. It is outside the limits of any Town Overlay Zones. Single-family detached dwellings is a permitted use the RR2 zoning district.

The site includes two types of high-value conservation areas that have been noted in the enclosed plans. The entire site is wooded and presumed to be a native, healthy forest. Two (2) existing trails pass through the site that have connectivity to Town and/or conservation lands. The site is not a known habitat for endangered or threatened species or significant wildlife habitat. The site does not include significant natural features or scenic views, historical/archaeological sites, or prime agricultural land. The site is not within the 100-year flood plan nor any resource protection district.

SITELINES • CIVIL ENGINEERS • LAND SURVEYORS
119 Purinton Road, Suite A, Brunswick Landing, Brunswick, ME 04011
207-725-1200 • www.sitelinespa.com

Gross Acreage:	540,475 s.f.	=	12.41 acres
Slopes (20%):	0 s.f.	=	0.00 acres
Wetlands:	38,475 s.f.	=	0.88 acres
100yr Flood:	0 s.f.	=	0.00 acres
Rights-Of-Way:	0 s.f.	=	0.00 acres
Rp District:	0 s.f.	=	0.00 acres
Net Residential Acreage:	502,000 s.f.	=	11.52 acres

The property is subject to and benefitted by the attached Declaration of Covenants Amending and Replacing Road Maintenance Agreements that was recorded in the Cumberland County Registry of Deeds in Book 23480, Page 223 (Maintenance Agreement). Additional lots created will also be subject to the Maintenance Agreement and will be required to pay an equal share of the costs as defined in the Maintenance Agreement. Any Road improvements necessary within Section A or Section C as defined in the Maintenance Agreement, as well as construction the new private road, will be the responsibility of Stonewood Land, LLC.

SITE DESIGN

The proposed subdivision consists of dividing the existing lot into three (3) residential lots and an area of proposed private right-of-way named Estellas Way. The proposed lots have frontage on the Estellas Way private right-of-way. The proposed wetland impacts of 4,201 s.f. are below any permitting threshold. A Maine Department of Environmental Protection (MDEP) Natural Resources Protection Act (NRPA) Permit by Rule (PBR) has been submitted for the proposed private road and grading within 75' of the stream. Any grading or impacts on any individual building lots within the 75' NRPA setbacks from the streams will necessitate that the individual landowners will need to file NRPA PBRs.

In accordance with Section 250-14 of the Town Ordinance, two options for the proposed subdivision were presented to the Planning Board at the Preapplication Workshop on March 16, 2021. The Planning Board voted that the project shall move forward as a Conservation Subdivision. Enclosed is an updated Conservation Subdivision layout.

The proposed Conservation Subdivision Concept was approved at the Sketch Plan Review level at the May 18, 2021 Planning Board Meeting.

The enclosed Conservation Subdivision Layout has been designed in accordance with *Section 250-6 CONSERVATION SUBDIVISION STANDARDS* of the Town Ordinance. The layout was designed to preserve the natural features of the site and to prioritize conservation of “high value conservation areas” while siting the proposed building windows adjacent to the passing test pits for the future subsurface wastewater disposal systems. The Conservation Option includes three (3) lots, a private right-of-way, and Open Space. In accordance with the Conservation Subdivision open space requirement, the Open Space encompasses a total of 6.39 acres, or



approximately 51%, of the 12.41-acre total parcel. The proposed 36' private right-of-way encompasses 0.26 acres. The Net Residential Acreage of the site is approximately 11.27 acres when accounting for the existing wetlands and right-of-way. The maximum number of lots allowed is the net residential acreage divided by the 2-acre minimum lot size in the RR2 district, or 5.63 lots. The minimum lot size is calculated at 50% of the gross acreage divided by the maximum number of lots allowed, or 1.10 acres. Proposed Lots A, B, & C encompass 1.92 acres, 1.90 acres, and 1.95 acres, respectively. The layout includes a buffer of 75' around the perimeter of the existing lot and proposed subdivision. The plan shows the locations of the natural features of the site and the locations of the passing test pits for the future subsurface wastewater disposal systems.

Gross Acreage:	540,475 s.f.	=	12.41 acres
Slopes (20%):	0 s.f.	=	0.00 acres
Wetlands:	38,475 s.f.	=	0.88 acres
100yr Flood:	0 s.f.	=	0.00 acres
Rights-Of-Way:	11,115 s.f.	=	0.26 acres
Rp District:	0 s.f.	=	0.00 acres
Net Residential Acreage:	490,885 s.f.	=	11.27 acres

Maximum Number of Lots Allowed: $11.27 \text{ acres} / 2 \text{ acres} = 5.63 \text{ Lots}$

Minimum Lot Size: $50\% \text{ of Gross Acreage} / \text{Maximum Number of Lots Allowed}$
 $6.20 \text{ acres} / 5.63 \text{ lots} = \underline{1.10 \text{ acres}}$

The building envelopes have been sited to preserve the natural features of the site and permitting requirements for the wetlands, stream setbacks, and vernal pool habitat necessitate the preservation of these features. Connectivity for the existing trails will be retained.

The road is designed in accordance with the Town Subdivision Road Standards as a "Residential Access ≤ 50 vpd" with a gravel surface. The road includes 9' wide gravel travel lanes and 2' side gravel shoulders within a 36' private right-of-way.

REVIEW STANDARDS

To facilitate your review of our proposal, the following issues are summarized in accordance with *CHAPTER 250 - SUBDIVISION OF LAND* of the Cumberland Code:

250-1 PURPOSE

The proposed development is in compliance with the standards set forth in Chapter 250 – Subdivision of Land.



250-4 SUBDIVISION APPROVAL CRITERIA

A. Pollution

The subdivision will not result in undue water or air pollution.

The development has been designed outside of any flood plains.

A subsurface investigation confirmed that the soils and subsoils are adequate to support waste disposal and passing test pits were confirmed for each proposed lot; the soil test pit logs are enclosed. All lots will utilize properly sized underground wastewater disposal systems. The large lot sizes and slope of the land are sufficient for the disposal systems; the disposal systems will have no effect on offsite areas. Streams will not be utilized for disposal of effluents.

B. Sufficient water

Municipal water is not available. The proposed lots will be serviced by private wells. After reviewing the Maine Well Database, there appears to be adequate groundwater available in the surrounding area. As shown on the enclosed map, there are existing wells in the surrounding area that provide flow rates ranging from 2.0 gpm to 50 gpm. As is typical in most areas, well flow rates can vary greatly, and are not typically impacted by surrounding development unless density is increased substantially over a long period of time. The proposed development is meeting the density requirements of the Zoning District and is not anticipated to adversely impact the existing groundwater in the surrounding areas.

C. Municipal water supply

Municipal water is not available. The proposed lots will be serviced by private wells to be located by the future individual lot owners.

D. Erosion

The disturbed areas of the site will be isolated through the use of silt fence and other measures to minimize the transport of sediment from the site. The project has been designed to incorporate Best Management Practices as outlined in the Maine Erosion and Sediment Control BMPs as published by the Maine Department of Environmental Control, current edition. Specific provisions for permanent and temporary erosion control features have been provided in the construction drawings. The contractor will be bound to meet the performance standards of the BMPs including erosion control, stabilization, maintenance, and inspection requirements.

E. Traffic

The anticipated traffic generation for the three (3) proposed single-family lots is estimated at an average of one (1) vehicle trip per hour and ten (10) vehicle trips per



day (VPD) per each lot. This level of additional trips does not trigger any traffic permitting thresholds, including the 100 new peak hour trips threshold for a Maine DOP Traffic Movement Permit. The development will not cause unreasonable congestion or unsafe conditions on highways or public roads and the traffic associated with the development shall maintain the existing Level of Service on any public road within 200 feet of any existing or proposed curb cut.

F. Sewage disposal

The proposed lots will be serviced by individual subsurface wastewater disposal systems. Passing test pits were observed on each of the lots by Albert Frick Associates, Inc. The Wetlands and Soil Suitability Report includes Test Pit Logs and is enclosed with this submission.

G. Municipal solid waste disposal

The three (3) proposed residential lots will create low amounts of solid waste. The proposed development is meeting the density requirements of the Zoning District and is not anticipated to cause an unreasonable burden on the municipality's ability to dispose of solid waste.

H. Aesthetic, cultural and natural values

The proposed subdivision will not have an undue adverse effect on the scenic or natural beauty of the area. An area of 6.39 acres will be preserved in Open Space and much of the natural features of the site including wetlands, vernal pool, and streams will be protected within site and natural resource setbacks.

I. Conformity with local ordinances and plans

The proposed subdivision has been designed in compliance with the standards set forth in the applicable Town ordinances, plans, and standards.

J. Financial and technical capacity

A letter of financial capacity will be submitted to the Planner under separate cover, upon review of the preliminary costs estimate by the Town Engineer.

Technical capacity is evidenced by the design team consisting of: a Professional Engineer, a Professional Land Surveyor, an Attorney, and a wetland and soils scientist.

K. Surface waters; outstanding river segments

Wetlands on the site were delineated by Albert Frick Associates, Inc. in May of 2020. The development of the three (3) proposed single-family residential lots has been designed to avoid wetland impacts to the maximum extent practicable and will involve the filling of 4,201 s.f. of wetland which is below MDEP permitting



thresholds. The proposed development will not adversely affect the quality of the wetlands. The site is not situated in the watershed of a pond or lake.

L. Groundwater

The project will not extract groundwater for operations. The lots will be serviced by a private wells and private subsurface wastewater disposal systems. Providing that the septic systems are installed and maintained as designed, no undue adverse effect on the quality or quantity of groundwater will occur as a result of this project.

M. Flood areas

The development is not in the Shoreland Overlay District. The project area is in Zone C (Areas of Minimal Flooding) of the Flood Insurance Rate Maps (FIRMs) for Town of Cumberland, Maine, Cumberland County. The project area is located on Panel 10 of 25 (Community Panel 230162-0010-B, Effective May 19, 1981). An excerpt of the applicable FIRM is enclosed.

N. Stormwater

In the existing condition, the site is undeveloped and wooded. The site drains generally toward the south; runoff leaves the site in existing drainageways and streams and ultimately enters the Piscataqua River.

The proposed private road will create 0.17 acres of impervious area. The construction and grading of the proposed road will disturb approximately 21,400± s.f. (0.49 acres). The runoff from the private gravel road will be directed downstream into existing drainageways. Please see the accompanying Stormwater Management Plan, submitted under separate cover due to its size.

The disturbed areas of the site will be isolated using silt sock and other measures to minimize the transport of sediment from the site. The project has been designed to incorporate Best Management Practices as outlined in the Maine Erosion and Sediment Control BMPs as published by the Maine Department of Environmental Control, current edition. Specific provisions for permanent and temporary erosion control features have been provided in the construction drawings. The contractor will be bound to meet the performance standards of the BMPs including erosion control, stabilization, maintenance, and inspection requirements.

O. Freshwater wetlands

Wetlands on the site were delineated by Albert Frick Associates, Inc. in May of 2020. The development of the three (3) proposed single-family residential lots has been designed to avoid wetland impacts to the maximum extent practicable and will involve the filling of 4,201 s.f. of wetland which is below MDEP permitting



thresholds. The proposed development will not adversely affect the quality of the wetlands.

P. River, stream or brook

The streams on the site were delineated by Albert Frick Associates, Inc. in May of 2020. The development of the three (3) proposed single-family residential lots has been designed to avoid direct stream impacts but the proposed activity within 75' of a stream will necessitate a Maine Department of Environmental Protection (MDEP) Natural Resources Protection Act (NRPA) Permit by Rule (PBR). Future landowners will be responsible for obtaining any MDEP permits required for stream and wetland impacts from driveway individual lot development.

250-5 GENERAL SUBDIVISION STANDARDS

A. General

The proposed three (3) lot residential subdivision has been designed as a Conservation Subdivision in accordance with the Planning Board's decision at the preapplication workshop on Tuesday, March 16, 2021.

B. Criteria to be considered

The proposed three (3) lot residential subdivision has been designed as a Conservation Subdivision in accordance with the Planning Board's decision.

(1) Water

The proposed lots will be served by individual private wells.

(2) Wastewater

The proposed lots will be serviced by individual subsurface wastewater disposal systems. Passing test pits were observed on each of the lots

(3) Open Space

The site of the proposed subdivision is forested and primarily abuts forested area which includes dedicated open space and residential lots. Existing trails traverse the site and the proposed open space has been sited to permit trail connectivity across the site within the dedicated open space.

There are no significant wildlife habitats or fisheries on the site. The existing wetlands, vernal pool, and streams were field located and are shown on the plans. The parcel does not contain or adjoin a Resource Protection District and does abut existing Open Space.

250-6 CONSERVATION SUBDIVISION STANDARDS

A. *Conservation subdivision option*

The site is located in the RR2 Zoning District. The proposed three (3) lot residential subdivision has been designed as a Conservation Subdivision in accordance with the Planning Board's determination at the preapplication workshop on Tuesday, March 16, 2021. More than six (6) acres of open space will be preserved with the proposed development.

B. *Perimeter buffer*

The 75-foot perimeter buffer has been incorporated into the proposed design where existing trees and vegetation will be preserved.

C. *Minimum common open space requirement*

The proposed development includes three (3) lots, a private right-of-way, and Open Space. In accordance with the Conservation Subdivision open space requirement, the Open Space encompasses a total of 6.52 acres, or 53%, of the 12.41-acre total parcel. The open space includes the vernal pool depression and most of the area of the 100-foot setback despite that the vernal pool is not significant, and much of the wetland and stream area of the site. The open space is also designed to allow for the continuity of the existing trails that cross the site.

D. *High-value conservation areas*

The site includes two types of high-value conservation areas that have been labeled on the enclosed plans. The entire site is wooded and presumed to be a native, healthy forest. Two (2) existing trails pass through the site that have connectivity to Town and/or conservation lands. The site is not a known habitat for endangered or threatened species or significant wildlife habitat. The site does not include significant natural features or scenic views, historical/archaeological sites, or prime agricultural land. The site is not within the 100-year flood plan nor any resource protection district.

E. *Conservation subdivision additional standards*

The individual lots of the proposed subdivision will be owned by the individual landowners. The Open Space is proposed to be offered to the Town of Cumberland. As determined using the net residential acreage calculation, the maximum density of this property is five (5) lots. The proposed subdivision includes three (3) single family residential lots.

F. Conservation subdivision standards

(1) Lot density calculation

(a) Lot density calculation

Gross Acreage:	540,475 s.f.	=	12.41	acres
Slopes (20%):	0 s.f.	=	0.00	acres
Wetlands:	38,475 s.f.	=	0.88	acres
100yr Flood:	0 s.f.	=	0.00	acres
Rights-Of-Way:	11,115 s.f.	=	0.26	acres
Rp District:	0 s.f.	=	0.00	acres
Net Residential Acreage:	490,885 s.f.	=	11.27	acres

The minimum lot size allowed in the RR2 zone is 2 acres.

Maximum Number of Lots Allowed: 11.27 acres / 2 acres = 5.63 Lots

(b) Minimum lot size.

Minimum Lot Size: 50% of Gross Acreage / Maximum Number of Lots Allowed
6.20 acres / 5.63 lots = 1.10 acres

Each of the proposed lots exceeds the calculated minimum lot size for the RR2 zone. Proposed Lot A consists of 1.92± acres. Proposed Lot B consists of 1.90± acres. Proposed Lot C consists of 1.95± acres. No adjustments are requested or proposed.

(c) Lot setbacks

The setbacks for each of the proposed lots are shown on the plans

(d) Minimum lot frontage: 200 feet

Frontage is provided for each of the lots from the proposed private right-of-way. Frontage for each lot exceeds 200 feet.

(e) Minimum access easement to common open space

Access to the proposed common open space is provided from each of the proposed lots and the existing private right-of-way. Each of the three (3) proposed lots abuts the open space and allows access to the open space. The proposed common open space has frontage on the existing private right-of-way at the far east corner of the site.

(f) Sheds and driveways.

The three (3) lots will be sold and developed by the future landowners.

250-28 CONSIDERATIONS FOR APPROVAL

The proposed subdivision is in compliance with the standards set forth in Chapter 250 – Subdivision of Land.

250-29 REVIEW AND APPROVAL BY OTHER AGENCIES

Any necessary approvals will be submitted with the Final Application or upon receipt.

250-30 CONFORMITY WITH OTHER STATE AND LOCAL REGULATIONS

The proposed three lot subdivision has been designed in accordance with local and state regulations.

250-31 COMMON OPEN SPACES

The open space for the proposed conservation subdivision will be donated to the Town for conservation. The open space has been sited provide connectivity for existing trails that traverse the site and provide connection to adjacent conservation land. The open space allows for the relocation of the existing trails while maintaining connectivity.

250-32 PRESERVATION OF NATURAL FEATURES

The proposed subdivision includes the development of three (3) residential lots on 12.41 acres. The development will only disturb approximately 15,000 s.f., preserving many of the natural features of the parcel. The proposed road and lot layout corresponds with the existing topography to the maximum extent practicable.

The proposed subdivision incorporates a 75-foot wide buffer along the existing right-of-way and the remaining extents of the outer boundary of the parcel. Much of the wooded buffer is protected by the overlap of the proposed open space.

250-33 UTILITIES

The proposed lots will be serviced private well and subsurface wastewater systems on each lot; public water and wastewater systems are not available. Underground electric and communications will be extended from nearby services.

250-34 WATER SUPPLY

Public water is not available for this development and individual, and no water mains are proposed. The proposed lots will be served by individual private wells. Each well is tested for quantity and quality when drilled. Well locations are not included in the proposed design as each lot will be sold individually, and the wells will be located by each individual lot owners. A waiver is requested for the well locations. With the generous spacing of the proposed lots and orientation of the passing test pits for the proposed subsurface wastewater systems, each lot has adequate spacing for a proposed well. The enclosed map from the Maine Well Database shows that there appears to be adequate groundwater available in the surrounding area.



250-35 SEWAGE DISPOSAL

Public sewer is not available for this development and no new sewer system, or sewer system expansion, is proposed. The proposed lots will be served by individual private septic systems and leach fields. Each lot will be sold individually, and the subsurface wastewater systems will be located by each individual lot owner. HHE-200 designs will be provided by individual lot owners at the time of application for building permit. A waiver is requested for the septic plans. Soil test pits indicate adequate soils exist on each lot.

250-36 TREES, ESPLANADES AND PLANTING SCREENS

As the existing site is wooded, street trees are not warranted. The proposed wooded buffer along the site perimeter, in conjunction with the internal lot setbacks, will minimize any noise pollution within the site or emanating from the site; however, it is not anticipated that there will be any source of noise pollution from the proposed three-lot residential subdivision.

250-37 GENERAL STREET STANDARDS

The average daily trips for the proposed private way Estella's Way is based on the anticipated ten (10) average weekday trips per single-family detached dwelling unit.

250-38 DESIGN AND CONSTRUCTION STANDARDS

SDFLKJSDFLKJ

250-40 FIRE PROTECTION

The subdivision design must comply with Chapter 96, Article II, Fire Protection, of this Code.

Article II: Fire Protection

The proposed subdivision includes three (3) single-family residential lots and a 300± linear feet private right of way and is a major residential subdivision in accordance with the Town code. The proposed development will be required to meet the Fire protection requirements. As no public water supply exists to serve the development and the development cannot be designed with two entrances, approved automatic sprinkler systems will be required for the new dwelling units. Notes have been added to the subdivision plan requiring all new dwellings to have an approved automatic sprinkler system installed.

The three (3) proposed dwelling units will be separated by more than 100 feet as determined by the available building windows.

250-41 SOIL EROSION

An Erosion & Sediment Control Plan and Erosion Control Notes are included with the plan set. The proposed development will utilize silt fence or sediment barrier to prevent sediment from leaving the site.

250-42 IDENTIFICATION OF FRESHWATER WETLANDS

Wetlands were delineated by Albert Frick Associates in May 2020. The wetlands, streams, and vernal pool were field located and are shown on the enclosed plans. The Wetlands and Soil Suitability Report is enclosed with this submission

250-43 TRAFFIC CONDITIONS

The proposed right-of way (Estella's Way) alignment is in compliance with the Geometric Design Standards and includes a turnaround for the dead-end street. The roadway is designed to safely circulate all traffic within the subdivision. Physical and environmental site conditions prevent any street connections to adjoining parcels. The anticipated traffic generation for the three (3) proposed single-family lots will not cause unreasonable congestion or unsafe conditions on highways or public roads and the traffic associated with the development shall maintain the existing Level of Service on any public road within 200 feet of any existing or proposed curb cut.

The developer will be responsible to make improvements within Section A and Section C of Blanchard Road Extension, as described in the enclosed *Declaration of Covenants Amending and Replacing Road Maintenance Agreements*. The portion of Section A running northwesterly from the end of the existing pavement and the portion of Section C (Moore Farm Road) between the end of Section A and Estella's Way will be designed with a gravel surface and width per the Standard for Residential Access greater than fifty (50) VPD. The new private right-of-way (Estella's Way) will be designed with a gravel surface and width per the Standard for Residential Access equal to or less than fifty (50) VPD.

WAIVERS

Based on the specifics of the project, the Applicant requests the following waivers. The waivers are reiterated in italics for reference with our justification immediately following:

1. Existing physical features (trees 10" diameter or more)

The existing 12.41-acre parcel is entirely wooded and the physical features, including stone walls, have been field located, but field locating each tree would be time consuming and cost prohibitive. The area of development and limits of disturbance have been minimized in the proposed subdivision, and the road and buildings windows have been sited to reduce impact to the natural and existing physical features of the site.



2. *Hydro-geologic study (option for Board)*

A hydro-geologic study is not warranted for the three (3) proposed lots on the existing 12.41-acre lot because of the relative low density of the lots and the evidence of passing test pits on each proposed lot.

3. *Well locations*

The proposed lots will be serviced by private wells to be located by the future individual lot owners. The well locations will be determined at the time of construction.

4. *High intensity soil survey by cert. soil scientist*

A high intensity soil survey is not warranted for the three (3) proposed lots on the existing 12.41-acre lot because of the relative low density of the lots and the evidence of passing test pits on each proposed lot.

5. *Location of temp. markers in field*

The temporary markers have not been located in the field because of the limited size of scope of the project. The project location can be readily located from the extents of Blanchard Road Extension, Section C and the existing trails.

6. *Street lighting details*

Street lighting is not proposed. No new utility poles are proposed, and electric is intended to be provided via underground lines and services.

7. *Soil surveys w/# of soil scientist*

A wetlands and soil suitability report has been provided, but a high intensity soil survey is not warranted for the three (3) proposed lots on the existing 12.41-acre lot because of the relative low density of the lots and the evidence of passing test pits on each proposed lot. The waiver request for the high intensity soil survey is provided above.

8. *Septic plan w/ # of prof. site evaluator*

The proposed lots will be serviced by private septic systems to be located by the future individual lot owners. The test pit locations have been provided. The septic designs and locations will be determined at the time of construction.

9. *Geological evals w reg. geologist number*

A wetlands and soil suitability report has been provided, but a geological evaluation is not warranted for the three (3) proposed lots on the existing 12.41-acre lot because of the relative low density of the lots and the evidence of passing test pits on each proposed lot. A waiver request for the hydro-geologic study is provided above.

10. § 250-37G Walkways shall be provided along all roads within a proposed subdivision

A walkway has not been included along the proposed gravel road because of the additional impervious area that would be created and the increase in wetland impacts. The public and private roadways leading to the proposed subdivision do not include walkways for connectivity.

We look forward to meeting with you and the Planning Board at their September 21, 2021 meeting to review the project and gain their approval. We appreciate your assistance with this project. Should you have any questions, please call or contact me at kclark@sitelinespa.com.

Very truly yours,

Kevin P. Clark

Kevin P. Clark, PLS
President

Enclosures

cc: Nathaniel Ross, Stonewood Land, LLC



Attachment A
Application Form & Checklist

A

A completed copy of the Conservation Subdivision Application Form and Checklist, and Response to Review Comments are enclosed.

Application Form & Checklist

SUBDIVISION OF LAND

APPENDIX E

CONSERVATION SUBDIVISION APPLICATION,
SUBMISSION REQUIREMENTS AND CHECKLIST

The information listed below will be required for submissions of preliminary and final applications for Conservation Subdivisions. Please review Section 250 (Subdivision of Land) in the Cumberland Code for complete information on the processes for review.

Prior to submission of plans for Planning Board review, a pre-application meeting with the Town Planner and Code Enforcement Officer is required. The date of this meeting is scheduled for: _____ at _____ a.m./p.m.

A: APPLICATION

Proposed Project Name: Ross Estates

Project Address: Blanchard Road Extension

Accessor's Tax Map and Lot Number(s): Map R08, Lot 68i

Property Owner's Contact Information

Name: Stonewood Land, LLC (Attn: Nate Ross)
Mailing Address: 8 Roberts Street, Falmouth, ME 04105
Email Address: sales@stonewoodmaine.com
Office Phone: _____
Cell Phone: _____

Consultant's Contact Information.

Name: Sitelines, PA (Attn: Kevin Clark, PLS)
Professional Designation (e.g., P.E., LLA) PLS
Mailing Address: 119 Purinton Road, Suite A, Brunswick, ME 04011
Email Address: kclark@sitelinespa.com
Office Phone: 207-725-1200 ext. 14
Cell Phone: _____

Has evidence of right, title or interest in the property been provided?: Yes

Has evidence of acting as owner's agent letter been provided? Yes

Date of Submission: 07-27-21 (Re-submitted 09-28-2021)

Gross Site Acreage: 12.41 acres

Estimated or actual area of wetlands: 0.88 acres

Estimated Net Residential Acreage: 11.27 acres

CUMBERLAND CODE

Proposed number of lots: 3

Proposed Subdivision Name: Ross Estates

Proposed Subdivision Address: Estella's Way

Will the proposed subdivision be served by:

Check the ones that apply:

Public Water ☐

Public Sewer ☐

Private Septic ☒

Private Wells ☒

Submittal Requirements:

Provide all plans and supporting information in electronic format.

Provide 2 full size paper plan sets and supporting information.

Submit review fee as required.

B: BASE INFORMATION/PLAN:

The base information shall be used for the preparation of the plan for the Workshop Meeting with the Planning Board:

The base information must include the following:

- a. Scale: 1" = 10' to 1" = 30'
- b. Vicinity Map
- c. North Arrow
- d. Aerial Photo showing existing vegetation.
- e. Significant natural features (rock formations, ponds, streams, water courses, etc.)
- f. Existing Contours
- g. Approximate location of any existing trails on the subject property and the adjacent properties.

C. SITE CONDITIONS:

Describe in detail the present condition of the subject property, including any water frontage, the general slope and topography of the ground (flat, steep, percent slope, etc., any history of vegetation clearing and timber harvesting activities and whether portions of the site are subject to flooding or ponding, etc.

- 1) Water Frontage:
- 2) Slope and Topography:
- 3) Existing Vegetation:
- 4) Hydrogeologic Features:
- 5) Flood Zone Designation:
- 6) Special Natural Areas:
- 7) Historic Features:

SUBDIVISION OF LAND

D. EXISTING AND PROPOSED ZONING, USES AND STRUCTURES:

Zoning District(s): Rural Residential 2 (RR2)

Current Use: ☒ Undeveloped/forested; _____ Residential; _____ Commercial;
_____ Industrial; _____ Public/Civic. OTHER: _____

Is the parcel in a zoning overlay district? If so, specify which one: N/A

Is a mixed use (residential and commercial) development proposed? If yes, list number of residential units N/A and non-residential units: N/A

E. ACCESS:

Is there a suitable entrance location identified that meets required sight distance or any applicable MDOT regulations? Yes: ☒ NO: _____

F. CONNECTIVITY:

Is there an opportunity to connect this subdivision with an adjacent subdivision? If yes, describe: The proposed Open Space will abut other Open Space and retain trail connectivity

G. AFFORDABILITY:

Will the subdivision include any lots for affordable housing? No

Is there an opportunity for a Low Impact Development (LID)? Yes

H. SCENIC CHARACTER, NATURAL AND HISTORIC FEATURES:

- (i) How will the development be located, designed and landscaped to minimize any visual impacts on the scenic character of the surrounding area:
- (ii) Will structures be visible from the existing roadways or shorelines?

I. PRIMARY CONSERVATION AREAS: (List below and show on plan)

See Plans

PLANNING BOARD WORKSHOP:

The next step will be a Planning Board Workshop. The following items are required to be submitted:

1. Site Analysis (SA) narrative to include a general description of the property, its site constraints and opportunities, open space potential and development potential.

CUMBERLAND CODE

2. A location map that shows the Subject Property and all abutting properties within 500' (including across roads.) Indicate ownership of all abutting properties on the plan. Show the approximate location of any known trails on the properties shown on this map.
 3. Map SA-1: An Existing Resources and Site Inventory and Analysis Plan to include:
 - Vertical aerial photography of site and surroundings.
 4. Map SA-2
 - Topography with 5' contours.
 - Slopes in excess of 20%
 - Drainage Courses and features (e.g., wetlands, PVPs)
 - Soil types
-

PRELIMINARY PLAN

- A. Preliminary plan location map. The preliminary plan shall be accompanied by a location map drawn at a scale of not over 1,000 feet to the inch to show the relation of the proposed subdivision to the adjacent properties and to the general surrounding area. The preliminary plan shall show all the area within 1,000 feet of any property line of the proposed subdivision. Within such area the location map shall show:
 1. All existing subdivisions and approximate tract lines of adjacent parcels together with the names of the record owners of all adjacent parcels of land, those directly abutting or directly across any street adjoining the proposed subdivision.
 2. Locations, widths and names of existing, filed or proposed streets, easements, and building lines pertaining to the proposed subdivision and to the adjacent properties.
 3. The boundaries and designations of zoning districts, parks and other public spaces.
 4. An outline of the proposed subdivision together with its street system and an indication of the future probable street system of the remaining portion of the tract, if the preliminary plan submitted covers only part of the subdivider's entire holding.
1. Preliminary plan maps and information. The preliminary plan shall be submitted in 2 copies of one or more maps or drawings which may be printed or reproduced on paper with all dimensions shown in feet or decimals of a foot, drawn to a scale of one inch equals not more than 100 feet or, for plans describing construction of required improvements, a scale of one inch equals 40 feet; drawings are not to exceed 24 inches by 36 inches. All materials must also be provided in an electronic format. All plans shall be accompanied by the following information:
 1. Proposed subdivision name or identifying title and the name of the municipality.
 2. Name and address of record owner, subdivider and designer of preliminary plan.

SUBDIVISION OF LAND

3. Date of plan submission, true North point and graphic scale.
4. Number of acres within the proposed subdivision, location of property lines, existing easements, buildings, watercourses and other essential existing physical features.
5. The names of all subdivisions immediately adjacent and the names of owners of record of adjacent acreage.
6. The space standard and setback provisions of the Chapter 315, Zoning, applicable to the area to be subdivided and any zoning district boundaries affecting the subdivision.
7. The location and size of any existing or proposed sewers and water mains, culverts, hydrants, and drains on the property to be subdivided. This shall show the connections with existing sewer or water systems. Where public water and/or sewerage is not to be provided, alternative means of water supply and sewage treatment and disposal shall be shown, both horizontally and vertically. If on-site groundwater wells are proposed, the effect of withdrawal of groundwater may be required by the Board as set forth in this chapter.
8. If individual or collective private sewage disposal system(s) is (are) proposed, the location and results of tests to ascertain subsurface soils and groundwater conditions shall be signed and numbered by a licensed site evaluator. If a cluster system or collective private sewage disposal system(s) is (are) proposed, a hydrogeologic investigation shall be submitted meeting the sewage disposal standards as set forth in this chapter. A hydrogeologic investigation may be required by the Board for individual systems as set forth in this chapter.
9. Location, names and present and proposed widths of existing and proposed streets, highways, easements, building lines, alleys, parks and other public open spaces both within and abutting the subdivision. Grades and street profiles of all streets, sidewalks or other public ways proposed by the subdivider shall be shown.
10. Contour lines at intervals of two feet or at such intervals as the Planning Board may require, based on United States Geological Survey datum and referred to mean sea level.
11. A high-intensity soil survey shall be conducted by a certified soil scientist to identify soils within the proposed development in accordance with United States Department of Agriculture Natural Resources Conservation Service National Cooperative Soil Classification. The soil boundaries and names shall be superimposed on a plot plan of the proposed development.

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12. Deed reference and map of survey of tract boundary made and certified by a registered land surveyor, tied into established reference points. Deed restrictions, if any, shall be described.
13. A surface drainage plan or stormwater management plan, with profiles and cross sections drawn by a professional engineer registered in the State of Maine, showing preliminary design of all facilities and conveyances necessary to meet the stormwater management standards as set forth in this chapter.
14. The proposed lot lines with dimensions and suggested locations of buildings.
15. The location of temporary markers adequate to enable the Board to locate readily and appraise the basic layout in the field.
16. All parcels of land proposed to be dedicated to public use and the conditions of such dedication.
17. The location of all natural features or site elements to be preserved.
18. A grading and landscaping plan, including natural features to be preserved.
19. Plans shall bear the seals or numbers of the registered professionals responsible for preparing appropriate sections of the plan. Surveys shall be stamped by registered professional engineers, soil surveys shall bear the numbers of a soil scientist, subsurface sewage disposal plans shall bear the number of the professional site evaluator responsible for those evaluations, geological evaluations shall bear a registered geologist's number and architectural work shall bear the architect's seal.

FINAL PLAN

The final subdivision plan for a major traditional or clustered subdivision shall consist of an electronic submission and two (2) paper copies of all required application materials.

All materials must also be provided in an electronic format.

The final plan shall show:

1. All of the information presented on the preliminary plan and location map and any amendments thereto required by the Board or otherwise added to the plan. Engineering plans submitted shall be final plans on which construction may be based.
2. The name, registration number and seal of the engineer, land surveyor, geologist, soil scientist, architect or planning consultant who prepared the plan.
3. Street names and lines, pedestrian ways, lanes, easements, rights-of-way and areas to be reserved for or dedicated to public use.

SUBDIVISION OF LAND

4. The length of all straight lines, the deflection angles, radii, length of curves and central angles of all curves, tangent distance and tangent bearings for each street.
 5. An actual field survey of the boundary lines of the tract, giving complete descriptive data by bearings and distances, made and certified by a licensed land surveyor. The corners of the tract shall be located on the ground and marked by monuments as herein required and shall be referenced as shown on the plan.
 6. Sufficient data acceptable to the municipal officials to determine readily the location, bearing and length of every lot line and boundary line and to reproduce such lines upon the ground. Where practical these should be tied to reference points previously established.
 7. The survey of the outside boundaries of the tract and the computation of the lot lines shall be performed to an accuracy of one foot in 5,000 feet. If requested by the Planning Board, the surveyor shall furnish copies of computation sheets for outside boundaries showing.
 - a. Sketch of traverse lines.
 - b. Closures;
 - c. Adjustments;
 - d. Coordinates; and
 - e. Computation of outside boundaries.
 8. By proper designation, all public open space for which offers of cession are made by the subdivider and those spaces to which the title is reserved by him.
 9. Lots and blocks within the subdivision numbered in accordance with local practice.
 10. Proposed homeowners' covenants and restrictions.
 11. Required MDEP stormwater maintenance documents.
- D.** There shall be submitted to the Board with final plan:
1. Copies of declarations, agreements or other documents showing the manner in which open space or easements are to be held and maintained.
 2. Where conveyance of public open space or easements to the Town is contemplated, a written offer to make such conveyance to the Town and written evidence that the municipal officers are willing to accept such conveyances and are satisfied with the terms and conditions of the proposed conveyance and with the legal sufficiency of the proposed transfer documents. Such written evidence shall not constitute an acceptance by the municipality of any such public open space.
-

CUMBERLAND CODE

COMPLETION CHECKLIST FOR CONSERVATION SUBDIVISION SUBMISSION REQUIREMENTS

Waivers: Please make a check in the *Waiver Request* column for any requested waivers. Attach a separate sheet citing the Subdivision Ordinance section number, description, and reason for the waiver request.

	Check if provided	Location of information in packet, e.g. plan #, page #	Waiver Request?
General Submissions:			
15 copies of plans and materials. All sheet sized to be 24" x 36"	✓	Plan Set, Application Packet	
1"=100' scale for general plan	✓	Plan Set	
1"=40' scale for construction of required improvements	✓	Plan Set	
Traffic Info?	✓	Cover Letter	
Capacity to Serve letters?		N/A - Private Water & Septic	
Financial and Technical Capacity (Sec.14)	✓	Cover Letter	
Sewer user permits required? Status?		N/A	
Deed restrictions, if any, describe on separate sheet		N/A	
Cover Sheet:			
Proposed subdivision name	✓	Plan Set	
Name & address of record owner, subdivider, and designer of preliminary plan	✓	Plan Set	
Location Map:			
12. Scale 1"=1000'	✓	Attachments	
Shows area 1000' from property lines	✓	Attachments	
All existing subdivisions		N/A	
Approximate tract lines of adjacent parcels	✓	Plan Set	
Approximate tract lines of parcels directly across street	✓	Plan Set	
Location of existing & proposed streets, easements, lot lines & bldg. lines of proposed subdivision & adjacent properties.	✓	Plan Set	
Existing Conditions Plan:			
Existing buildings	✓	Plan Set, Sheet C2	

SUBDIVISION OF LAND

	Check if provided	Location of information in packet, e.g. plan #, page #	Waiver Request?
Watercourses	✓	Plan Set, Sheet C2	
Legend	✓	Plan Set, Sheet C2	
Wetlands	✓	Plan Set, Sheet C2	
Existing physical features (trees 10" diameter or more. Stone walls	✓	Plan Set, Sheet C2(Waiver for trees)	✓
Trail System?	✓	Plan Set, Sheet C2	
Subdivision Plan:			
Date of plan submission, true north & graphic scale	✓	Plan Set, Sheet C3	
Net residential acreage calculations	✓	Plan Set, Sheet C3	
Legend	✓	Plan Set, Sheet C3	
Trail (connecting?)	✓	Plan Set, Sheet C3	
Widths of existing/proposed streets, easements & bldg. lines	✓	Plan Set, Sheet C3	
Names of existing/ proposed streets, easements & bldg. lines	✓	Plan Set, Sheet C3	
Boundaries & designations of zoning districts, parks, public spaces		N/A - RR2 Zone, no parks	
Outline of proposed subdivision w/ street system	✓	Plan Set, Sheet C3	
Future probable street system of remaining portion of tract.		N/A	
Opportunities for Connecting Road(s) (13.2D)		N/A	
Space and Setback of district	✓	Plan Set, Sheet C3	
Classification of road	✓	Cover Letter	
Width of road(s)	✓	Plan Set, Sheet C8	
Drainage type (open, closed, mix)	✓	Cover Letter	
Type of byway provided (8.4D)		N/A	
Names of adjacent subdivisions	✓	Application Packet, Tax Map	
Names of owners of record of adjacent acreage	✓	Plan Set, Sheet C2, Application pkt	
Any zoning district boundaries affecting subdivision		N/A	
Location & size of existing or proposed sewers, water mains, culverts, hydrants and drains on property		N/A	
Connections w/existing sewer or water systems		N/A	
Private water supply shown		N/A	
Private septic shown	✓	Passing test pits located	
Hydro-geologic study		N/A	

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	Check if provided	Location of information in packet, e.g. plan #, page #	Waiver Request?
(option for Board)			
Test pit locations	✓	Plan Set, Sheet C3	
Well locations		N/A	
Signature & lic. # of site evaluator	✓	Application Packet, test pit logs	
Existing streets: location, name(s), widths w/in and abutting	✓	Plan Set, Sheet C2	
Proposed streets: location, name(s), widths w/in and abutting	✓	Plan Set, Sheet C3	
The above for any highways, easements, bldg. lines, alleys, parks, other open spaces w/in and abutting	✓	Plan Set, Sheet C3	
Grades & street profiles of all streets, sidewalks or other public ways proposed	✓	Plan Set, Sheet C4	
2' contour lines	✓	Plan Set, Sheet C4	
High intensity soil survey by cert. soil scientist			✓
Soil boundaries & names superimposed on plot plan	✓	Plan Set, Sheet C4	
Deed reference & map of survey of tract boundary by reg. land surveyor tied to established reference points	✓	Plan Set, Sheet C8	
Surface drainage or stormwater mgmt plan w/ profiles & cross sections by a P.E. showing prelim. design and conveyances	✓	Plan Set, Sheet C4, Cover Letter	
Proposed lot lines w/ dimensions and suggested bldg. locations.	✓	Plan Set, Sheet C3	
Location of temp. markers in field		N/A	
All parcels proposed to be dedicated to public use and conditions of such.	✓	Open Space to Town, Sheet C3	
Location of all natural features or site elements to be preserved	✓	Plan Set, Sheet C2	
Street lighting details		N/a	
Landscaping and grading plan including natural features to be preserved	✓	Plan Set, Sheet C4	
Survey stamped by P.E.	✓	Boundary Survey by Sebago Technics	
Soil surveys w/# of soil scientist	✓	Application Packet	
Septic plan w/ # of prof. site evaluator		N/A	
Geological evals w/ reg. geologists number		N/A	
Architect's seal		N/A	

SUBDIVISION OF LAND

	Check if provided	Location of information in packet, e.g. plan #, page #	Waiver Request?
For Rt. One: 75' undisturbed buffer applicable to all buildings, structures, parking areas, drainage facilities and uses.		N/A	
Open Space	✓	Plan Set	
Any part of parcel in a shoreland zone?		N/A	
Flood Map Number and rating?	✓	Application Packet	
Stormwater Report	✓	Plan Set, Application Packet	
Rivers, ponds, wetlands	✓	Plan Set, Application Packet	
Historic, archeological features	✓	MHPC Response Pending	
Solid waste disposal	✓	Narrative	
Required Notes on Plan:			
Fire Department notes	✓	Plan Set, Sheet C3	
Clearing limits note	✓	Plan Set, Sheet C3	
Re: approval limit of 90 days before recording or null p. 10	✓	Plan Set, Sheet C3	
Actual field survey of boundary lines w/ monumentation shown	✓	Plan Set, Sheet C2	
Assessor's approval of street names and assignment of lot numbers.	✓	Final Plan Submission	
Designation of all open spaces w/ notes on ownership	✓	Final Plan Submission	
Copies of declarations, agreements or other documents showing the manner in which open space or easements are to	✓	Submitted to Planner for Legal Review	
Written offer for any conveyance to the Town of open space or easements along with written evidence that the Council is willing to accept such offer	✓	See Cover Letter; Acceptance is Pending	
Evidence of Outside Agency Approvals	✓	NRPA Permits Pending	

As per Section 7.2 - REVIEW AND APPROVAL BY OTHER AGENCIES:

E. Where review and approval of any subdivisions or site plan by any other governmental agency is required, such approval shall be submitted to the Planning Board in writing prior to the submission of the Final Plan.

Please list below all outside agency approvals that are required for this subdivision.

- **Maine Department of Environmental Protection:** *List type of permit(s) required (e.g., SLODA, NRPA (tier type?), Maine Construction General Permit, etc.)*

CUMBERLAND CODE

- *US Army Corps of Engineers*
- **Maine Department of Transportation:** *List type of permit(s) required.*
- *Maine Department of Inland Fisheries and Wildlife*
- **Cumberland County Soils and Water Conservation Service:** Required by Town.

Other: (Please List): See Cover Letter



September 28, 2021

4185-7

Ms. Carla Nixon, Town Planner
Town of Cumberland
290 Tuttle Road
Cumberland, Maine 04021

RE: Response to Review Comments
MAJOR CONSERVATION SUBDIVISION PLAN APPLICATION
ROSS ESTATES
Tax Map R08, Lot 68I

Dear Carla:

We have reviewed the comments by Gorrill Palmer on September 13, 2021 and have prepared the following responses to address the concerns. The comments are reiterated in italics for reference with our response, in bold, immediately following:

Comments from Gorrill Palmer on September 13, 2021

Subdivision Application

1. *As stated in the Application, the following waivers were requested:*
 - a. *Existing physical features (trees 10" diameter or more)*
 - b. *Hydro-geologic study*
 - c. *Well locations*
 - d. *High intensity soils survey*
 - e. *Location of temp markers in field*
 - f. *Street lighting details*
 - g. *Soil surveys with license number of soil scientist*
 - h. *Septic plans with license number of site evaluator*
 - i. *Geological evaluations with registration number of geologist*
 - j. *Walkways within roads of proposed subdivision*

We have no objections to the granting of these waivers from an engineering perspective based on the scale and nature of the project.

No response required.

2. *On page 7 of the package, the Applicant states: There are no significant wildlife habitats or fisheries on the site. What is the basis of this statement as we did not see any correspondence*

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119 Purinton Road, Suite A, Brunswick Landing, Brunswick, ME 04011
207-725-1200 ▪ www.sitelinespa.com

with the Maine Department of Fisheries & Wildlife, Natural Areas Program, or State Historic Preservation Office.

Based on initial review of online materials, there was no indication of significant wildlife habitat or fisheries. Responses to project review requests have been received from the Maine Natural Areas Program (MNAP) and the Maine Historic Preservation Commission (MHPC). No areas of historic areas or species is noted. A response has not been received from the Maine Department of Inland Fisheries and Wildlife (IF&W). A copy of the correspondence is enclosed for your reference and the response from IF&W will be forwarded under separate cover at the time of receipt.

3. *No Stormwater Management Plan with supporting calculations and watershed maps, as required by the Preliminary Plan Checklist Item No. 13, were submitted. The Stormwater Management Plan should include the conversion of the land area for the private road as well as the anticipated development on each lot.*

A Stormwater Management Plan has been developed for your review. Due to the volume of the Stormwater Management Plan, it will be submitted under separate cover.

4. *The Homeowners Association Document to be submitted with the final plan should include the road maintenance requirements for the proposed private way.*

Road maintenance requirements are included within the attached Draft Homeowners Association Declaration.

5. *Based on our review of other projects in the general area, we are aware that the intersection of Blanchard Road, Blanchard Road Extension and Orchard Road does not meet the MaineDOT definition of a high crash location, although the Critical Rate Factor is 1.93, which is higher than would be expected for similar intersections throughout the State. To satisfy Ordinance Section 250-43. B. (3) we recommend that the Applicant obtain the police report for the crash that occurred at this intersection, conduct a site visit to observe the intersection, and render an opinion as to whether any additional safety improvements are warranted for this location.*

The singular crash was anomalous, involving two motorcycles riding together. It is in the Engineer's opinion that the crash is not indicative of necessary safety improvements at the intersection. The proposed three-lot subdivision will not cause the traffic through the intersection to exceed any permitting threshold and additional improvements are not warranted in conjunction with this application.

Subdivision Plans

6. *The source of the topographic survey (ground, aerial or LIDAR) should be noted on the Plan Set. If it is not ground survey, then a ground survey shall be obtained and shown for the full*



right of way width as part of the Final Subdivision Plan submission. Plans shall be revised to reflect any necessary changes due to the ground survey.

Topographic data was originally obtained from aerial photography and the Subdivision Plan has been updated to reflect the source of the survey. Additional “on the ground” data was obtained and is reflected on updated roadway plan and profiles.

7. *A road name for the existing private right of way (Section C) should be noted on the plans.*

The proposed road name for Section C has been approved by the Town of Cumberland Assessor as Moore Farm Road. The existing private right-of-way has been labeled on the revised plans.

8. *A road name for the proposed private right of way proposed by this Application should be noted on the plans.*

The proposed road name for the new right-of-way has been approved by the Town of Cumberland Assessor as Estella’s Way. The proposed private right-of-way has been labeled on the revised plans.

9. *As noted in Attachment 1:6 of Chapter 250, “Turnaround on Dead End Street”, the turnaround boundary is not considered part of the right of way, and is specifically noted as a easement. Therefore, the “sides” of the turnaround boundary can not be considered frontage for the purpose of compliance with the space and bulk standards. It appears that Lot B will only have 145’ of frontage based on “right of way”, which is less than the required 200’.*

The right-of-way has been revised to account for the turnaround area as an easement and allow for frontage of over 200 feet for each of the three (3) proposed residential lots. The enclosed revised plan set reflects the updated right-of-way.

10. *Section 250-37, A.3 notes that the Residential Private Street are permitted only when the average daily traffic is less than 50 (emphasis added). It appears that the existing “Private Right of Way” (Section C of Road Maintenance Agreement) would appear to have an average daily traffic of 50 based on the two existing lots (Ross Bk 36882, Page 305, Yoving Bk 34574, Page 49 and the three proposed Lots (A-C). As the average daily traffic for Section C will not be less than 50, it would appear that the Residential Access Street Standard should apply to this section of the private right of way. While we note that the figures attached to Chapter 50 notes equal to or less than 50 for the Residential Private Street, this contradicts the written ordinance.*

Per the Town’s concurrence on this determination regarding the discrepancy on the road standards, the standard cross section for Section C Moore Farm Road has been revised

to meet the standards of a “Residential Access > 50 vpd” road. The revised profile, cross section, and layout is shown on the enclosed revised plan set.

11. *Activity within 75 feet of the streams will require an NRPA Permit By Rule for activities adjacent to a protected natural resource. The building envelopes appear to be shown outside of the 75-foot NRPA Statutory Limit, although grading limits outside of the envelopes are not shown. If lot grading would occur within 75' of the streams, than an NRPA Permit by rule application for lot disturbance within the 75 foot setback would need to be submitted for each lot.*

A note has been added to the plan to indicate that any additional grading outside of the building window may require additional NRPA permitting and will be the responsibility of the lot owner.

12. *The construction of a portion of the proposed private road and turnaround appears to be within the 75' NRPA Statutory Limit. Evidence of permitting should be provided with the Final Plan Submission.*

A NRPA has been submitted, a copy is enclosed for your review.

13. *The lot building envelope for Lot C should be trimmed to avoid the wetlands, unless additional wetland disturbance is proposed.*

The building envelope for Lot C has been revised to avoid most wetland impacts on the lot and account for some impact to the wetlands.

14. *As noted in the Frick Report, This vernal pool contained 8 spotted salamander egg masses which is short of the required 20 egg masses necessary to meet the significance criteria for DEP. However, a formal vernal pool survey must be submitted to the state for concurrence in order for this pool not be regulated by the state. Unless the state determines that the pool is not a significant vernal pool, proposed development or clearing activities within 250 feet of the vernal pool will be subject to DEP review and approval under the Significant Wildlife Habitat Rules, per NRPA. The status of the determination of significance for this vernal pool should be clarified during the Final Plan submission.*

Due to the limited sample window during the delineation for this project, we will be assuming that the vernal poll is a Significant Vernal Pool and we will be submitting a Permit by Rule for a disturbance of less than 25% of the 250-foot setback/buffer. If an expanded study is completed during the spring investigation window and the pool is determined to not be significant, the Permit will be modified.

15. *The various plans depict a 75' Perimeter Setback versus a 75' Perimeter Buffer. A setback could be interpreted as allowing clearing within the area, while the intent of the buffer is for*

no disturbance. We would recommend that all references to the Perimeter Setback be modified to a Perimeter Buffer on all drawings.

The buffer is shown on Sheet C4 Site Development Plan and labeled as a No-Cut Buffer. The dimensions that refer to a perimeter setback on Sheet C3 Preliminary Subdivision Plan, Conservation Subdivision have been revised to reflect the buffer as a 75' Perimeter Buffer.

- 16. The test pit for wastewater disposal for Parcel A is located in the 75' Perimeter Buffer. A test pit should be conducted and information submitted as part of the Final Plan Submission that demonstrates a passing test pit outside of the perimeter buffer.*

An additional test pit has been completed has been completed by Chris Coppi of Albert Frick Associates and a copy of the data profile has been enclosed for your review.

- 17. The dimensions of the proposed turnaround should be noted on the plans. Please note that the dimensions will need to be adjusted for the reduced private right of way (36' vs 50') so that adequate space is provided for emergency vehicles.*

The turnaround is designed and dimensioned on the plans in accordance with the sizing required by the Ordinance and exhibits.

- 18. A note shall be added to the Subdivision Plan noting the requirement for installation of a fire suppression sprinkler system for each residence.*

A note has been added noting the requirement for installation of a fire suppression sprinkler system.

- 19. On Sheet C6, the following comments are provided regarding the proposed private right of way:*

- a. The proposed private way is not located in the center of the private right of way.*

The centerline of proposed private way Estella's Way has been relocated to the center of the private right-of-way.

- b. It does not appear that the profile as designed meets the Town Standard of a maximum 3% grade approaching the intersection of 25'.*

The profile of proposed private right-of-way Estella's Way has been revised to meet the standard of a 3% maximum grade approaching the intersection.

- c. The typical section should be updated to reflect Comment #10 above.*



The proposed private right-of-way Estella's Way provides access for three lots and the average daily traffic estimation is 30 vehicles per day, allowing the new private way to remain as a "Residential Access < 50 vpd" cross-section.

- d. *The typical section should be updated to reflect geotextile fabric as required in Chapter 250, Attachment 2:1.*

The typical section has been revised to show the geotextile subbase layer.

- e. *The 6" underdrain piping and outlet locations shall be shown on the plan view.*

In areas of fill, subbase gravels have been daylighted in accordance with conversations with the Town Engineer in lieu of ditch and underdrain.

- f. *Add a table providing the recommended culvert size by lot.*

A table has been included on the plan with the recommended culvert size by lot.

- g. *A grading easement should be shown on the Plat along any portion of the proposed private way where the toe of slope (cut or fill) is greater than 5' beyond the right of way.*

Grading easements have been added to areas outside of 5' beyond the right of way.

- h. *Sight distance at the intersection should be noted.*

The sight distances have been added to the plan.

- i. *The proposed grading should be revised to reflect the minimum 1' swale as required in Chapter 250, Attachment 1:4.*

In areas of fill, the subbase gravels have been daylighted in accordance with conversations with the Town Engineer in lieu of ditch and underdrain.

- j. *It appears that a culvert is necessary beneath the turnaround / end of road to convey the upstream drainage course.*

The grading has been revised at the end of the new private way to maintain the drainage course.

20. *The Applicant shall provide a statement that the proposed dead end road length (as measured from the intersection of Blanchard Road Extension and Stonewall Drive to the end of the proposed private right of way) will not exceed 2,000 feet.*



A statement has been provided within the cover letter affirming that the dead end does not exceed the Town requirements.

21. On Sheet C5, the following comments are provided for the existing Blanchard Road Extension Improvements (Section A) and the existing Private Right of Way (Section C):

- a. The survey should be extended to depict the intersection with Stonewall Drive and the existing edge of pavement.*

The “End of Pavement” is shown on the Blanchard Road Ext. profile at Station 2+00.

- b. The right of way for Blanchard Road Extension should be shown on both sides of the road to demonstrate that the proposed improvements are located within the right of way.*

The right-of-way is shown and labeled on the enclosed plans.

- c. It does not appear that the profile as designed meets the Town Standard of a maximum 3% grade approaching the intersection of 25' at the intersection of Section A, Section B and Section C.*

The profile has been revised and slopes labeled to show how the profile meets the standard. Due to the Town determination that Section C Moore Farm Road be subject to the standards of a “Residential Access > 50 vpd” road, the profile has been designed with a maximum 3% grade within 50 feet of the intersection.

- d. The typical section should be updated to reflect Comment #10 above.*

The typical section has been revised in accordance with the Town determination that the section be subject to the standards of a “Residential Access > 50 vpd” road.

- e. The typical section should be updated to reflect geotextile fabric as required in Chapter 250, Attachment 2:1.*

The typical section has been revised to show the geotextile subbase layer.

- f. The 6” underdrain piping and outlet locations shall be shown on the plan view.*

In areas of fill, subbase gravels have been daylighted in accordance with conversations with the Town Engineer in lieu of ditch and underdrain.

- g. Add a table providing the recommended culvert size by lot.*



A table has been included on the plan with the recommended culvert size by lot.

- h. A grading easement should be shown on the Plat along any portion of the right of way where the toe of slope (cut or fill) extends beyond the right of way.*

Grading easements have been added to areas outside of 5' beyond the right of way.

- i. Sight distance at the intersections should be noted.*

The sight distances have been added to the plan.

- j. The proposed grading should be revised to reflect the minimum 1' swale as required in Chapter 250, Attachment 1:4.*

The grading has been revised to show the swale when the roadway improvements are in an area of cut, and not in areas of fill. In areas of fill, subbase gravels have been daylighted in accordance with conversations with the Town Engineer in lieu of ditch and underdrain.

- k. The vertical alignment should be reviewed for conformity to the K Values required for Crest and Sag Vertical Curves for the Residential Access > 50 VPD as shown in Chapter 250, Attachment 1:1.*

The profiles have been revised to show the K-values and conformity has been confirmed regarding the required K-Values in accordance with the Town Ordinance.

We trust that this information satisfactorily addresses the comments received. Should you have any questions, please call or contact me at kclark@sitelinespa.com. We appreciate your assistance with this project.

Very truly yours,

Kevin P. Clark

Kevin P. Clark, PLS
President

Enclosures

cc: Nathaniel Ross, Stonewood Land, LLC



Attachment B
Right, Title, & Interest

B

A copy of a Letter from the Applicant's Attorney, Applicant's Source Deed and relevant documents are enclosed.

Right, Title, & Interest

August 4, 2021

Ms. Carla Nixon
Town Planner
Town of Cumberland
290 Tuttle Road
Cumberland, Maine 04021

RE: Ross Estates Subdivision Application

Dear Carla,

Kevin Clark of Sitelines asked me to review and address Stonewood Land, LLC's rights with respect to the Blanchard Road Extension. As explained below, in my opinion Stonewood Land has the right to use the Blanchard Road Extension to access its property and, further, to improve the road at its expense to meet the Town of Cumberland's requirements. For your convenience, I have attached copies of the documents referenced in this letter.

Stonewood Land, LLC's Property and Easement Rights

Stonewood Land, LLC's purchased the property subject to the application from Robert and Brenda Paimpiano on June 22, 2020. (EX 1; BK 36884, PG 28). The property is benefited by the following express easement over the Blanchard Road Extension contained in that deed:

Together with a right-of-way easement to and from the lot herein conveyed in common with the Grantors, their heirs and assigns, and others for the purpose of ingress and egress, and the installation, repair and maintenance of utilities, either above ground or underground, in, on, over, and across a 50-foot private right-of-way known as Blanchard Road Extension, to and from the Town owned portion of Blanchard Road Extension. The easement and property herein conveyed are subject to the rights, obligations, terms and conditions of a certain Declaration of Covenants Amending and Replacing Road Maintenance Agreements With Amended Road Maintenance Agreement dated November 18, 2005 and recorded in Book 23480 Pages 223-246 of said Cumberland County Registry which run with, benefit and burden the land and easement herein conveyed, and to By-laws of the Blanchard Road Extension Road Association, Inc. or its successor as the same may now exist or hereafter be amended. Meaning and intending to convey and describe an easement over Section A, over a small portion of Section B, and over Section C so-called of the private portion of Blanchard Road Extension as described in Exhibit A to the above referenced Amended Road Maintenance Agreement, so that the Grantee herein shall have a continuous 50 foot right of way easement leading from the Town owned portion of Blanchard Road Extension to the property herein conveyed.

Stonewood's rights and obligations with respect to the easement Blanchard Road Extension are further set out in the Maintenance Agreement attached to the Declaration of Covenants Amending and Replacing Road Maintenance Agreement. (EX 2; BK 23480, PG 223) In addition to the right to access the Stonewood property, section 16 of the Maintenance Agreement states that it shall not prejudice the rights of the Piampianos, their successors and assigns to improve the road to Town standards at their own cost. As the Piampianos' successor in title, Stonewood holds the right to make those improvements in addition to its right of access.

Fee Ownership Blanchard Road Extension

The Blanchard Road Extension is comprised of three segments. (EX 3; Sketch) Section A extends from the paved road to just before the fork in the road where it splits into Sections B and C. Section C extends to the Stonewood property and is also referred to as the Moore Farm Extension. Prior to 1998, the Piampianos owned the entirety of the Blanchard Road Extension, subject to the rights of way granted to others who owned property abutting the road.

Sections A and B

In 1998, the Piampianos conveyed the fee interest in Section A to Chase Custom Homes & Finance. (EX 4; BK 13976, PG 274) In the deed to Chase, Piampianos reserved a right of way over Section A along with the right to improve the road. In 2013, the Piampianos conveyed Section B to the Blanchard Road Extension Association. (EX 5; BK 30446, PG 70). When they did so, they reserved the right to use the portion of Section B between Sections A and C, including the right to upgrade that portion of the road to Town standards.

In November 2005, the Piampianos and the property owners abutting Sections B and C agreed to the Declaration of Covenants Amending and Replacing Road Maintenance Agreement (EX 2; BK 23480, PG 223). At the same time, Chase granted a public easement over Section A to the Town of Cumberland subject to certain maintenance obligations which the Town accepted (EX 6; BK 23480, PG 247) and the Piampianos granted a public easement over the portion of Section B that forms a "Y" in the road to the Town of Cumberland subject to certain maintenance obligations which the Town accepted. (EX 7; BK 23480, PG 252).

Section C

Simultaneously with the Piampianos' conveyance of the property to Stonewood Land, they conveyed their interest in Section C of the Blanchard Road Extension to Stonewood Builders, Inc., an affiliate of Stonewood Land¹ (EX 18; BK 36884, PG 31). In that deed, the Piampianos expressly conveyed their right to improve Section A and that portion of Section B that lies between Sections A and C. Those rights include, but are not limited to, the rights reserved by the Piampianos in the deeds to Sections A and B.

¹ Nathaniel Ross is the sole shareholder of Stonewood Land, Inc. as well as being the sole member of Stonewood Land, LLC.

Conclusion

For the reasons outlined above, Stonewood Land has sufficient right, title and interest in the Blanchard Road Extension to support its pending subdivision application for Ross Estates.

If you have any questions regarding my analysis, please feel free to contact me.

Thank you.

Sincerely,



David C. Pierson

Enclosed

Cc:

Kevin Clark, PLS *via email*

Nate Ross *via email*

MAINE REAL ESTATE TAX-Paid

WARRANTY DEED
Statutory Short Form
 DLN: 1002040100486

ROBERT J. PIAMPIANO and BRENDA T. PIAMPIANO, husband and wife, with a mailing address of 3 High Street, Brunswick, Maine 04011, hereinafter the "Grantors," for consideration paid, **GRANT to Stonewood Land, LLC** with a mailing address of 8 Roberts Street, Falmouth, Maine 04105, hereinafter the "Grantee", its heirs, successors, and assigns, with **Warranty Covenants**, a certain parcel of land, with no buildings thereon, situated in the Town of Cumberland, County of Cumberland, and State of Maine, together with certain easements, covenants, and restrictions appurtenant thereto, which are more particularly described in Exhibit A, which is attached hereto and made a part hereof.

The Warranty Covenants described above specifically do not include any covenant by the Grantors concerning the status of this parcel, or any combination of this parcel or any portion thereof with another parcel, as a buildable lot under any former, current, or future standards or ordinances of the Town of Cumberland.

The parcel herein conveyed does not create an additional separate lot for subdivision purposes, since there has been no division of this lot within the last 5 years and the entire lot is being conveyed.

IN WITNESS WHEREOF, the said **ROBERT J. PIAMPIANO** and **BRENDA T. PIAMPIANO** have signed this instrument this 22nd day of June, 2012.

Kimberly Doyon
 Witness

Robert J. Piampiano
 Robert J. Piampiano

Kimberly Doyon
 Witness

Brenda T. Piampiano
 Brenda T. Piampiano

STATE OF MAINE
 COUNTY OF CUMBERLAND

June 22, 2020

The foregoing instrument was acknowledged before me this date by Brenda T. Piampiano.

[Signature]
 Notary Public/Attorney-at-Law
 Print Name: TIM KEENE

TIM KEENE
 Notary Public, State of Maine
 My Commission Expires July 26, 2022

Exhibit A- Robert and Brenda Piampiano to Stonewood Land, LLC

A certain lot or parcel of land situated on the southerly side of a 50-foot wide private right-of-way easement leading westerly from the Town owned portion of Blanchard Road Extension in the Town of Cumberland, County of Cumberland and State of Maine, being more particularly bounded and described as follows:

Beginning at a 5/8 inch iron rebar set with cap # 1328 in the Gray-Cumberland town line, said rebar marking the southwest corner of land conveyed by these Grantors to Briggs and Lowery by deed dated May 8, 2012, recorded in Book 29571 Page 17 in the Cumberland County Registry of Deeds, said point of beginning being at the northwesterly corner of the property herein described;

Thence proceeding in a counterclockwise direction S 34°-47'-12" W following the Gray-Cumberland town line a distance of 713.53 feet to a 5/8 inch iron rebar set with cap # 1328;

Thence S 53°-34'-18" E along land now or formerly of Chase Custom Homes and an intermittent stone wall a distance of 1,174.90 feet to a 5/8 inch rebar with the remains of a cap set in a stone wall;

Thence N 38°-26'-14" E along land now or formerly of Jones a distance of 96.49 feet to a 5/8 inch capped iron rebar;

Thence N 30°-46'-36" W along land now or formerly of Yovino a distance of 267.40 feet to a 5/8 inch capped iron rebar;

Thence N 38°-26'-14" E along land of said Yovino a distance of 386.86 feet to a 5/8 inch capped iron rebar located on the southerly side of Section C, so called, of the 50-foot wide private right-of-way easement leading westerly from the Town owned portion of Blanchard Road Extension.

Thence southwesterly and turning northwesterly along a curve to the right with a radius of 290.00 feet and a central angle of 42°-17'-42", by and along the southerly sideline of said Section C, an arc distance of 214.07 feet to a 5/8 inch iron rebar set with cap # 2080 located in the southerly sideline of said Section C of the private right of way easement leading westerly from the Town owned portion of Blanchard Road Extension.

Thence N 79°-57'-12" W along land now or formerly of Brenda T. Piampiano a distance of 612.23 feet to a 5/8 inch iron rebar set with cap # 1328;

Thence N 34°-47'-12" E along land now or formerly of Brenda T. Piampiano a distance of 400 feet to a 5/8 inch iron rebar set with cap # 2080;

Thence N 55°-12'-48" W along land of Briggs and Lowery a distance of 196.72 feet to the 5/8 inch iron rebar set with cap # 1328 at the point of beginning.

This description is based on a "Standard Boundary Survey of Land of Robert Piampiano" by Sebago Technics dated June 11, 1997, recorded in Plan Book 201 page 104 in said Cumberland County Registry. This description has been updated to reflect current land owners and the sale of the above referenced outparcel to Briggs and Lowery by the Grantors herein. All bearings herein are based on Grid North- NAD 83- Maine West Zone. Containing 12.4 acres, more or less.

Meaning and intending to convey and describe a portion of a certain lot or parcel of land conveyed by Robert J. Piampiano to Robert J. Piampiano and Brenda T. Piampiano by deed dated July 3, 2008, recorded in Book 19717 Page 258 in said Cumberland County Registry, less and except a parcel of land of 4 acres more or less conveyed by these Grantors to Briggs and Lowery by deed dated May 8, 2012, recorded in Book 29571 Page 17 in said Cumberland County Registry.

Together with a right-of-way easement to and from the lot herein conveyed in common with the Grantors, their heirs and assigns, and others for the purpose of ingress and egress, and the installation, repair and maintenance of utilities, either above ground or underground, in, on, over, and across a 50-foot private right-of-way known as Blanchard Road Extension, to and from the Town owned portion of Blanchard Road Extension. The easement and property herein conveyed are subject to the rights, obligations, terms and conditions of a certain Declaration of Covenants Amending and Replacing Road Maintenance Agreements With Amended Road Maintenance Agreement dated November 18, 2005 and recorded in Book 23480 Pages 223-246 of said Cumberland County Registry which run with, benefit and burden the land and easement herein conveyed, and to By-laws of the Blanchard Road Extension Road Association, Inc. or its successor as the same may now exist or hereafter be amended. Meaning and intending to convey and describe an easement over Section A, over a small portion of Section B, and over Section C so-called of the private portion of Blanchard Road Extension as described in Exhibit A to the above referenced Amended Road Maintenance Agreement, so that the Grantee herein shall have a continuous 50 foot right of way easement leading from the Town owned portion of Blanchard Road Extension to the property herein conveyed.

Also conveying rights and restrictions, including a view easement, in common with the Grantors, their heirs and assigns and others, with the right to enforce the same, as set forth in a deed to Judith B. Kane dated July 18, 1997 and recorded in Book 13210 page 161 of said Cumberland County Registry, which property is now owned by Friedman.

**DECLARATION OF COVENANTS
AMENDING AND REPLACING ROAD MAINTENANCE AGREEMENTS**

The following Declaration of Covenants Amending and Replacing Road Maintenance Agreements are entered into by and between the parties signatory below:

WHEREAS:

1. Certain Road Maintenance Agreements identified in Paragraph A. below run with the land and affect the interests of Robert J. Piampiano, Brenda T. Piampiano, Bruce S. Wildes and Nancy J. Wildes, Beatrice Kalinich and Jeffrey C. Kalinich, Paul D. Friedman and Laura Friedman, Suzanne L. McCormack, Suzanne L. McCormack, as Trustee of the Suzanne L. McCormack Trust dated February 18, 2004, HW Builders, LLC, and Scott S. Kibler, as owners and successors in right, title and interest to the original parties to said agreements;

2. The parties listed in Paragraph 1 of this Declaration are all the current owners of any property which is subject to any of the Agreements listed in Paragraph A below;

3. Raymond and Nina Geissler are the owners of property described in a deed dated February 25, 1992, recorded in Book 9922 Page 90 of the Cumberland County Registry of Deeds, which property abuts, and is accessed by, a portion of the roads described in the Agreements listed in Paragraph A below, and desire to have their property benefit and be burdened by the Amended Road Maintenance Agreement referenced herein;

4. The parties hereto intend and desire to amend and replace the Road Maintenance Agreements identified in Paragraph A. below, and to have the Amended Road Maintenance Agreement, attached hereto as Exhibit 1, be appurtenant to and run with the land of the respective owners and be binding upon themselves, their heirs, devisees, donees, successors, and assigns;

NOW THEREFORE, in consideration of the mutual benefits and promises set forth herein, the parties COVENANT AND AGREE as follows:

A. Existing Agreements Affected. The following existing Road Maintenance Agreements are affected and amended and replaced by this Declaration:

- (1) Brenda T. and Robert J. Piampiano- Judith D. Kane, dated July 18, 1997, recorded in Book 13610 Page 348 in the Cumberland County Registry of Deeds. (Property now owned by Paul D. Friedman and Laura Friedman.)
- (2) Robert J. Piampiano and Brenda T. Piampiano-Kermit E. McCormack and Suzanne L. McCormack, as Trustees of the McCormack Family Trust as of July 1, 1996, dated December 30, 1999, recorded in Book 15252 Page 205 in said Registry, which agreement also affects parcels of land subsequently transferred to Suzanne L. McCormack as Trustee of the Suzanne L. McCormack Declaration of Trust dated February 18, 2004, and to HW Builders, LLC by deed dated July 12, 2005, recorded in Book 22875, Page 181 of said Registry.
- (3) Brenda T. and Robert J. Piampiano- Coleman Construction, Inc., dated May 29, 1998, recorded in Book 13934 Page 105 of said Registry. (Property now owned by Beatrice Kalinich and Jeffrey C. Kalinich.)
- (4) Brenda T. Piampiano- Mathew and Karen Pieper, pursuant to deed dated June 16, 1998, recorded in Book 14099 Page 065 of said Registry. (Property now owned by Bruce S. Wildes and Nancy J. Wildes.)
- (5) Robert J. Piampiano, by Power of Attorney for Sarah E. Piampiano- Scott S. Kibler, dated October 20, 2003, recorded in Book 20457 Page 155 of said Registry.

B. Amendments. The parties hereto covenant and agree that the Amended Road Maintenance Agreement attached hereto as Exhibit 1 and incorporated herein shall amend and replace the road maintenance agreements specified above, shall hereby be binding upon the parties, their heirs, successors, devisees, donees and assigns, and shall be appurtenant to, and run with, and be a burden upon, and a benefit to,

the respective property of each party, and upon any additions thereto or divisions thereof.

IN WITNESS WHEREOF, the undersigned parties have caused this instrument to be executed this 18 day of November, 2005.

Nathan L. Pignatta
Witness

Robert J. Piampiano
Robert J. Piampiano

Brenda T. Piampiano 10/27/05
Brenda T. Piampiano

Bruce S. Wildes
Bruce S. Wildes

Nancy J. Wildes
Nancy J. Wildes

Beatrice Kalinich 10/23/05
Beatrice Kalinich

Jeffrey C. Kalinich 10/23/05
Jeffrey C. Kalinich

Paul D. Friedman 10/23/05
Paul D. Friedman

Laura Friedman 10.23.05
Laura Friedman

Suzanne L. McCormack 11/9/05
Suzanne L. McCormack,
Individually and In Her
Capacity as Trustee - Suzanne L.
McCormack Trust

HW Builders, LLC

By: [Signature]

Its: Manager
Duly Authorized

Robert J. Piampiano
Witness

Scott S. Kibler
Scott S. Kibler

Robert J. Piampiano
Witness

Nina Geissler
Nina Geissler

Robert J. Piampiano
Witness

Nina Geissler, By Power of Attorney for Raymond Geissler
Nina Geissler, By Power of Attorney for Raymond Geissler

STATE OF MAINE
CUMBERLAND, SS.

Date: 10/25/05

Personally appeared the above-named Robert J. Piampiano and acknowledged the foregoing instrument to be his free act and deed.

MICHELLE L. DONOVAN
Notary Public, Maine
My Commission Expires November 18, 2011

Michelle L. Donovan
Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: 10/27/05

Personally appeared the above-named Brenda T. Piampiano and acknowledged the foregoing instrument to be her free act and deed.

Brenda T. Piampiano 10/27/05
Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: 11/8/05

Personally appeared the above-named Bruce S. Wildes and acknowledged the foregoing instrument to be his free act and deed.

Bruce S. Wildes
Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: 11/8/05

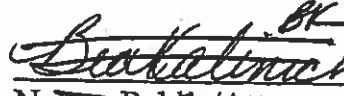
Personally appeared the above-named Nancy J. Wildes and
acknowledged the foregoing instrument to be her free act and deed.


Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: OCT 23, 2005

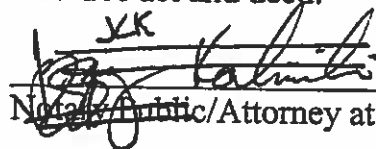
Personally appeared the above-named Beatrice Kalinich and
acknowledged the foregoing instrument to be her free act and deed.


Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: Oct 23, 2005

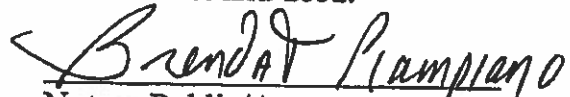
Personally appeared the above-named Jeffrey C. Kalinich and
acknowledged the foregoing instrument to be his free act and deed.


Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: October 23, 2005

Personally appeared the above-named Paul D. Friedman and
acknowledged the foregoing instrument to be his free act and deed.


Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: October 23, 2005

Personally appeared the above-named Laura Friedman and
acknowledged the foregoing instrument to be her free act and deed.

Brenda T. Rianpiano
Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: 11/9/05

Personally appeared the above-named Suzanne L. McCormack
individually, and in her capacity as Trustee of the Suzanne L. McCormack
Trust, and acknowledged the foregoing instrument to be her free act and
deed.

Robert J. Piquet
Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: 10/21/05

Personally appeared DANIEL N. WHITE and acknowledged the
foregoing instrument to be his free act and deed in his said capacity and the
free act and deed of said HW Builders, LLC.

Jill H. Joselyn
Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: 10/25/05

JILL H. JOSSELYN
Notary Public, Maine
My Commission Expires
May 28, 2006

Personally appeared the above-named Scott S. Kibler and
acknowledged the foregoing instrument to be his free act and deed.

Michelle L. Donovan
Notary Public/Attorney at Law

MICHELLE L. DONOVAN
Notary Public, Maine
My Commission Expires November 18, 2011

STATE OF MAINE
CUMBERLAND, SS.

Date: 11/18/05

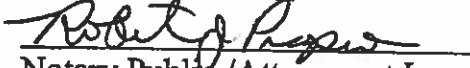
Personally appeared the above-named Nina Geissler and
acknowledged the foregoing instrument to be her free act and deed.


Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: 11/18/05

Personally appeared the above-named ~~Nina~~ ^{Raymond} Geissler and
acknowledged the foregoing instrument as attorney in fact on behalf of
~~Raymond Geissler~~. ^{to be his free act and deed.}


Notary Public./Attorney at Law

RJP;10/16/05

**Exhibit 1 to Declaration
AMENDED ROAD MAINTENANCE AGREEMENT**

THIS AGREEMENT is made on this 18 day of November 2005 by and between Robert J. Piampiano and Brenda T. Piampiano, and Bruce S. Wildes and Nancy J. Wildes, Beatrice Kalinich and Jeffrey C. Kalinich, Paul D. Friedman and Laura Friedman, Suzanne L. McCormack, Suzanne L. McCormack, as Trustee of the Suzanne L. McCormack Trust dated February 18, 2004, HW Builders, LLC, Scott S. Kibler, Raymond Geissler and Nina Geissler;

WHEREAS:

1. Robert J. Piampiano and Brenda T. Piampiano presently own or have rights to use and convey use and access to a certain Fifty (50') foot private Right of Way, consisting of three sections, described in Exhibit A attached. Sections A and B are generally known and described as Blanchard Road Extension. Section C is generally known as Moore Farm Extension.

2. A portion of this Right of Way, Section A as described in Exhibit A, is utilized by all parties to this agreement, and others, for ingress, egress, utilities, and otherwise for access to property owned by each party;

3. A further portion of this Right of Way, Section B as described in Exhibit A, is utilized by Robert J. Piampiano and Brenda T. Piampiano, Bruce S. Wildes and Nancy J. Wildes, Beatrice Kalinich and Jeffrey C. Kalinich, Paul D. Friedman and Laura Friedman, and Suzanne L. McCormack, Suzanne L. McCormack, as Trustee of the Suzanne L. McCormack Trust dated February 18, 2004, HW Builders, LLC, and others, for ingress, egress, utilities, and otherwise for access to property owned by each party;

4. A further portion of this Right of Way, Section C as described in Exhibit A, is utilized by Robert J. Piampiano and Brenda T. Piampiano, and Scott S. Kibler, and others, for ingress, egress,

utilities, and otherwise for access to property owned by each party;

5. It is the desire of all Owners of parcels abutting or using all three sections of said Right of Way to provide for the cost of maintenance, repair, sanding, salting and snowplowing of the common Right of Way, if and to the extent that the Town of Cumberland does not provide such services, and to amend exiting road maintenance agreements regarding the same;

NOW THEREFORE, THE PARTIES, IN CONSIDERATION OF THE MUTUAL PROMISES AND COVENANTS EXCHANGED HEREIN, COVENANT AND AGREE AS FOLLOWS;

SECTION A OBLIGATIONS

6. With respect to Section A of the Right of Way as described herein, each party to this agreement is responsible for an equal share of the costs of maintenance, repair, sanding, salting, and snowplowing, or any other costs reasonably needed in common to maintain access to the lots served by this section, notwithstanding that this section may extend beyond the boundaries of each respective owner's property, it being the specific intent of the parties that the costs for this entire section be shared equally. If an owner transfers all or a portion of his or her property, thereby creating additional parcels served by this Section, then additional shares shall be created which shares shall also pay such costs equally.

SECTION B OBLIGATIONS

7. With respect to Section B of the Right of Way as described herein, each owner of property abutting or accessed by this Section (presently Robert J. Piampiano and Brenda T. Piampiano, Bruce S. Wildes and Nancy J. Wildes, Beatrice Kalinich and Jeffrey C. Kalinich, Paul D. Friedman and Laura Friedman, Suzanne L. McCormack, Suzanne L. McCormack as Trustee of the Suzanne L. McCormack Trust dated February 18, 2004, and HW Builders, LLC,

shall share the costs of maintenance, repair, sanding, salting, and snowplowing, and any other costs reasonably needed in common to maintain access to the lots served by this Section, as follows:

(a) Any owner of property presently owned by Beatrice Kalinich and Jeffrey C. Kalinich and described in a deed dated March 14, 2000 and recorded in Book 16172 Page 143 of the Cumberland County Registry of Deeds, or presently owned by Suzanne L. McCormack, or property owned by Suzanne L. McCormack as Trustee of the Suzanne L. McCormack Trust dated February 18, 2004, shall be responsible for and pay One (1) share;

(b) Any owner of property presently owned by Bruce S. Wildes and Nancy J. Wildes and described in a deed dated December 9, 1998 and recorded in Book 14375 Page 262 of said Registry, or property presently owned by Paul D. Friedman and Laura Friedman described in a deed dated June 30, 2004 and recorded in Book 21492 Page 304 of said Registry shall each be responsible for and pay One and One-Half (1.5) shares.

(c.) Any owner of property presently owned by Robert J. Piampiano, being a portion of property described in a deed dated May 27, 1997, and recorded in Book 13097 Page 257 of said Registry, and any property owned by HW Builders, LLC described in a deed dated July 12, 2005 and recorded in Book 22875 Page 181 of said Registry, shall be responsible for and pay for Two (2) shares.

8. Assessment of shares under paragraph 7 above is subject to adjustment if, after the date of this Agreement, any of the following circumstances occur:

(a) If a portion of property presently owned by any party is transferred, thereby creating additional parcels served by this Section, then additional shares equal to the number of shares assessed to such owner before such transfer shall be created and shall be the responsibility of the new owner, except that if any portion of such additional parcel lies north of the southwest corner of property presently owned by Wildes' referenced

above, then Two (2) additional shares shall be created and be the responsibility of the new owner.

(b) If any party to this Agreement, without sale or transfer of property, locates or constructs any new building to be used as a residence, or for business or commercial purposes, on property located north of the southwest corner of property presently owned by Wildes' referenced above, then the owner of such property shall pay Two (2) shares.

(c) If the owner of any property subject to this Agreement, without sale or transfer of property, uses such property for logging, farming, tree farming, or any other similar activity which is likely to increase such owner's use of Section B during all or any part of any year, then such owner shall pay Two (2) shares for the year in which such activities are conducted.

SECTION C OBLIGATIONS

9. With respect to Section C of the Right of Way as described herein, each owner of property accessed by this section (presently Brenda Piampiano, Robert Piampiano and Scott S. Kibler) is responsible for an equal share of the costs of maintenance, repair, sanding, salting, and snowplowing, or any other costs reasonably needed in common to maintain access to the lots served by this section, notwithstanding that this section may extend beyond the boundaries of each respective owner's property, it being the specific intent of the parties that the costs for this entire section be shared equally. If an owner transfers all or a portion of his or her property, thereby creating additional parcels served by this section, then additional shares shall be created which shares shall also pay such costs equally

GENERAL OBLIGATIONS APPLICABLE TO ALL PARTIES AND ALL SECTIONS

10. For purposes of this agreement, any lot or parcel which is taxed as a separate lot by the Town of Cumberland shall be treated as a separate parcel of land with separate owners for purposes of

assessing shares under this agreement, whether or not such parcel is owned by a party owning other lots subject to this agreement, and whether or not such lots are contiguous.

11. In the event that any damage to any section of the Right of Way occurs as a result of construction or other activity being done on the property of an Owner, such Owner alone shall be responsible for returning the Right of Way to a reasonable, usable condition equal to or better than the condition of the Right of Way prior to the date of such activity. The Owner incurring such costs and expense shall be solely responsible for any such costs and expenses and shall defend, indemnify, and hold the other Owners harmless from any actions arising out of such activities.

12. In the event that any Owner incurs costs or expenses for extension of, or improvements to, the Right of Way beyond routine maintenance, repair, sanding, salting, and snowplowing provided for in this Agreement, without the prior written consent of the other Owners, the party incurring such costs and expenses shall be solely responsible for any such costs and expenses and shall defend, indemnify and hold the other Owners harmless for any actions arising therefrom, including any liens and attachments.

13. Assessments shall be made at least annually, but may be made semi-annually, and may be made in advance. If any amount due and owing under this agreement is not paid within thirty (30) days after such cost is incurred and assessed, the defaulting Owner shall be responsible for interest on the amount in default at the rate of 10% per annum together with all costs of collection, including reasonable attorney's fees.

14. In the event that any party to this Agreement does not pay its obligations under this Agreement within sixty (60) days of when the same are due, the unpaid amounts, together with interests and costs of collection, including reasonable attorney's fees, shall constitute a lien on the property of the delinquent owner, which lien may be perfected by recording a Notice of Lien in the Cumberland County Registry of Deeds without further authorization of the delinquent owner and without court order. The lien provided for herein may be foreclosed in the same manner as a mortgage pursuant

to the provisions of Title 14 M.R.S.A. § 6321 et seq.

15. The parties to this Agreement, together with the other owners whose property is accessed by any section of this Right of Way, shall form a road association whose bylaws shall not be inconsistent with this Agreement or the Declaration, which association shall take responsibility for maintenance, repair, sanding, salting and snowplowing, or other costs reasonably needed in common to maintain access to the lots served by the Right of Way, with the authority to arrange for and procure such services or materials as are necessary for this purpose and to make such assessments as are necessary to pay for the same. Both the Association and any party to this Agreement, their heirs, successors, devisees, donees and assigns, including subsequent owners, shall have the right to enforce the terms of this Agreement.

16. Nothing in this Agreement shall serve to prejudice or extinguish the rights, as allowed by law, if any, of Robert J. Piampiano or Brenda T. Piampiano, their heirs, successors, devisees, donees, and assigns, to (a) extend or improve all or any portion of the Right of Way to town standards (subject to the condition that no owner or party shall be compelled to contribute toward the cost of paving the Right of Way, or toward any increased cost of maintaining or repairing any pavement installed on the right of Way) and to apply for dedication and acceptance of said Right of Way or any portion thereof by the Town of Cumberland, all at their own cost and expense, or; (b) convey any fee, easement, or other interest in the Right of Way described herein to others, subject to the rights of any other party to this agreement which have heretofore been conveyed.

17. Any party to this agreement, their heirs, successors, devisees, donees and assigns, including subsequent owners, reserve such rights, if any, to object to, or otherwise contest, as allowed by law, any action by Robert J. Piampiano or Brenda T. Piampiano, their heirs, successors, devisees, donees, and assigns, or any other party, to extend or improve all or any portion of the right of Way to Town or other standards, and to apply for dedication and acceptance of said right of way or any portion thereof by the Town or Cumberland, or; (b) convey any fee, easement, or other interest in the right of Way described herein, subject to the rights of any other party to this

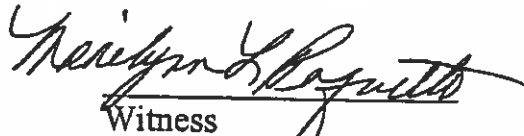
agreement which have heretofore been conveyed.

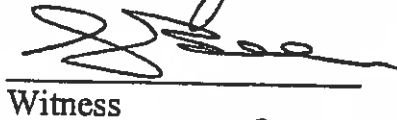
18. Nothing in this agreement shall waive or prejudice the rights or any party or parties to exercise any rights pursuant to Title 23 M.R.S.A. § 3101 et seq. or any other applicable statute, with respect to maintenance and repairs of a Private Way, and no provision of this agreement shall be interpreted in a manner which is inconsistent with, or limits rights or duties under, these statutory provisions.

19. No owner or party shall be compelled to contribute toward the cost of paving all, or any portion of, Section A, B, or C of the Right of Way, or the increased cost of maintaining or repairing any pavement installed on Section A, B, or C of the Right of Way without such owner's or party's consent.

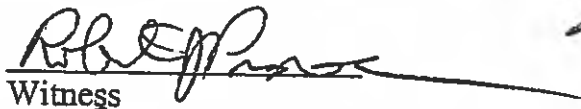
20.. This Agreement shall be binding upon all owners of parcels of land described herein, their heirs, successors, devisees, donees and assigns, including subsequent owners, and shall be appurtenant to and run with the land of each of the parties to this agreement.

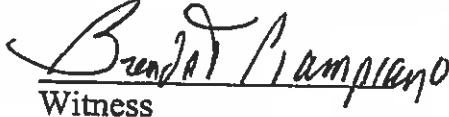
IN WITNESS WHEREOF, the undersigned parties have caused this instrument to be executed this 16 day of November, 2005


Witness


Witness

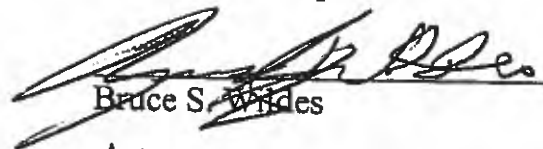

Witness


Witness


Witness


Robert J. Piampiano

 10/27/05
Brenda T. Piampiano


Bruce S. Wildes


Nancy J. Wildes

 10/23/05
Beatrice Kalinich

Brenda T. Piampiano
Witness

Brenda T. Piampiano
Witness

Brenda T. Piampiano
Witness

Robert J. Piampiano
Witness

Robert J. Piampiano
Witness

Robert J. Piampiano
Witness

Robert J. Piampiano
Witness

Robert J. Piampiano
Witness

Jeffrey C. Kalinich 10/23/05
Jeffrey C. Kalinich

Paul D. Friedman 10/23/05
Paul D. Friedman

Laura Friedman 10.23.05
Laura Friedman

Suzanne L. McCormack 11/9/05
Suzanne L. McCormack,
Individually and In Her
Capacity as Trustee

HW Builders, LLC

By: [Signature]

Its: Manager
Duly Authorized

Scott S. Kibler
Scott S. Kibler

Nina Geissler
Nina Geissler

Nina Geissler, By Power of Attorney for Raymond Geissler

STATE OF MAINE
CUMBERLAND, SS.

Date: 10/25/05

Personally appeared the above-named Robert J. Piampiano and
acknowledged the foregoing instrument to be his free act and deed.

Michelle L. Donovan
Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: 10/27/05

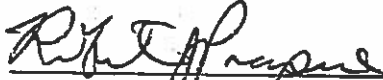
Personally appeared the above-named Brenda T. Piampiano and
acknowledged the foregoing instrument to be her free act and deed.


Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: 11/8/05

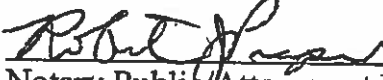
Personally appeared the above-named Bruce S. Wildes and
acknowledged the foregoing instrument to be his free act and deed.


Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: 11/8/05

Personally appeared the above-named Nancy J. Wildes and
acknowledged the foregoing instrument to be her free act and deed.


Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: Oct 23, 2005

Personally appeared the above-named Beatrice Kalinich and
acknowledged the foregoing instrument to be her free act and deed.


Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: *October 23, 2005*

Personally appeared the above-named Jeffrey C. Kalinich and
acknowledged the foregoing instrument to be his free act and deed.

Brenda T. Campiano
Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: *October 23, 2005*

Personally appeared the above-named Paul D. Friedman and
acknowledged the foregoing instrument to be his free act and deed.

Brenda T. Campiano
Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: *October 23, 2005*

Personally appeared the above-named Laura Friedman and
acknowledged the foregoing instrument to be her free act and deed.

Brenda T. Campiano
Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: *11/9/05*

Personally appeared the above-named Suzanne L. McCormack
individually, and in her capacity as Trustee of the Suzanne L. McCormack
Trust, and acknowledged the foregoing instrument to be her free act and
deed.

Robert J. [Signature]
Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: 10/21/05

Personally appeared Daniel H. White and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said HW Builders, LLC.

Julie H. Josselyn
Notary Public/Attorney at Law
My Commission Expires May 28, 2006

STATE OF MAINE
CUMBERLAND, SS.

Date: 10/25/05

Personally appeared the above-named Scott S. Kibler and acknowledged the foregoing instrument to be his free act and deed.

MICHELLE L. DONOVAN
Notary Public, Maine
My Commission Expires November 18, 2011

Michelle L. Donovan
Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: 11/18/05

Personally appeared the above-named Nina Geissler and acknowledged the foregoing instrument to be her free act and deed.

Robert J. Rogers
Notary Public/Attorney at Law

STATE OF MAINE
CUMBERLAND, SS.

Date: 11/16/05

Personally appeared the above-named Raymond ~~Nina~~ Geissler and acknowledged the foregoing instrument as attorney in fact on behalf of Raymond Geissler to be his free act and deed.

Robert J. Rogers
Notary Public/Attorney at Law

RJP;10/16/05

EXHIBIT A TO AMENDED ROAD MAINTENANCE AGREEMENT

DESCRIPTION OF RIGHT OF WAY

The Right of Way which is subject to this Road Maintenance Agreement consists of three sections, Section A, Section B and Section C, which are bounded and described as follows:

Section A

Beginning at the northeast corner of the unaccepted portion of Blanchard Road Extension where this point meets the end of the paved portion of Blanchard Road Extension, said beginning point lying on a course N 44° 47' 29" W a distance of 104.57 feet from a four inch (4") square granite monument set in the ground;

Thence proceeding N 44° 47' 29" W a distance of 272.27 feet to the beginning point of a curve;

Thence proceeding by a curve to the left having a radius of 2050.0 feet and a central angle of 5° 14' 54" an arc distance of 187.78 feet to a point;

Thence proceeding N 50° 02' 23" W a distance of 410.77 feet to a point;

Thence proceeding S 37° 14' 44" W a distance of 50.06 feet to a one and one-quarter (1 ¼) inch iron pipe nine (9) inches high and marking the northeast corner of a lot consisting of 3.11 acres conveyed by deed of even date from Sarah E. Piampiano to Scott S. Kibler;

Thence proceeding S 50° 02' 23" E a distance of 207.11 feet to a point;

Thence proceeding S 50° 02' 23" E a distance of 201.29 feet to a point;

Thence proceeding by a curve to the right having a radius of 2000.00 feet and a central angle of 5° 14' 54" an arc distance of 183.20 feet to a point;

Thence proceeding S 44° 47' 29" E a distance of 167.70 feet to a point marking the southwesterly end of the Town accepted paved portion of Blanchard Road Extension;

Thence proceeding northeasterly across Blanchard Road Extension to the point of beginning, containing .87 acres more or less. The above description is based upon a Plan entitled "Amended Subdivision Plan of Stonegate Estates for John Chase," by Sebago Technics, Inc., dated 11/2/99 to which reference is made for a more particular description.

Bearings herein are based on Grid North – NAD 83 Maine West Zone.

Section B

Beginning on the northeasterly sideline of the Right of Way at a point marking the northeasterly terminus of Section A described above, then proceeding along the sideline of the Right of Way as follows:

Along land of Kalinich, following a curve to the right, having a radius of 125.00 feet, a delta angle of $49^{\circ} 24' 09''$, and an arc length of 107.78 feet to a point;

Thence, N $00^{\circ} 38' 14''$ W, along the easterly side of said right of way, a distance of 112.71 feet to a point;

Thence, continuing along the easterly side of said right of way, following a curve to the left with a radius of 150.00 feet, a delta angle of $29^{\circ} 03' 25''$ and an arc length of 76.07 feet to a point;

Thence, continuing along the easterly side of said right of way, N $29^{\circ} 41' 39''$ W a distance of 100.01 feet to a point;

Thence, continuing along the easterly side of said right of way, following a curve to the right with a radius of 100.00 feet, a delta angle of $44^{\circ} 52' 16''$ and an arc length of 78.31 feet to a point;

Thence, continuing along the easterly side of said right of way, N $15^{\circ} 10' 37''$ E, a distance of 110.38 feet to a point;

Thence, continuing along the easterly side of said right of way and following a curve to the left having a radius of 225.00 feet, a delta angle of $28^{\circ} 44' 30''$ and an arc length of 112.87 feet to a point;

Thence, continuing along the easterly side of said right of way, following a curve to the left, having a radius of 225.00 feet, a delta angle of $35^{\circ} 38' 03''$ and an arc length of 139.94 feet to a point;

Thence, continuing along the easterly side of said right of way, N $49^{\circ} 11' 56''$ W, a distance of 105.64 feet to a point;

Thence, continuing along the easterly side of said right of way, following a curve to the right having a radius of 325.00 feet, a delta angle of $09^{\circ} 40' 50''$ and an arc length of 54.91 feet to a point;

Thence, continuing along the easterly side of said right of way N $39^{\circ} 31' 07''$ W, a distance of 105.67 feet;

Thence, continuing along the easterly side of said right of way, following a curve to the right, having a radius of 175.00 feet, a delta angle of $11^{\circ} 00' 30''$ and an arc length of 33.62 feet to a point;

Thence, continuing along the easterly side of said right of way N $28^{\circ} 30' 37''$ W, a distance of 102.56 feet to a point;

Thence, continuing along the easterly side of said right of way, following a curve to the left with a radius of 525.00 feet, a delta angle of $24^{\circ} 59' 31''$ and an arc length of 229.00 feet to a point;

Thence, N $53^{\circ} 30' 08''$ W, along the easterly side of said right of way a distance of 89.09 feet to a point marking the Gray-Cumberland Town Line and the easterly terminus of Section B.

Thence, S $34^{\circ} 47' 12''$ W, along the Gray-Cumberland Town Line, a distance of 50.02 feet to a point marking the northerly corner of land of Robert J. Piampiano and the westerly terminus of Section B.

Thence, S $53^{\circ} 30' 08''$ E along land of Piampiano and the westerly side of said right of way a distance of 87.59 feet to a point;

Thence, continuing along the westerly side of said right of way following a curve to the left having a radius of 475.00 feet, a delta angle of $24^{\circ} 59' 31''$ and an arc distance of 207.19 feet to a point;

Thence, continuing along the westerly side of said right of way and land now or formerly of Friedman S $28^{\circ} 30' 37''$ E, a distance of 102.56 feet to a point;

Thence, continuing along the westerly side of said right of way, following a curve to the right having a radius of 225.00 feet, a delta angle of $11^{\circ} 00' 30''$, and an arc length of 43.23 feet to a point;

Thence, continuing along the westerly side of said right of way S $39^{\circ} 31' 07''$ E, a distance of 105.67 feet to a point;

Thence, continuing along the westerly side of said right of way, following a curve to the right having a radius of 375.00 feet, a delta angle of $09^{\circ} 40' 50''$ and an arc length of 63.36 feet to a point;

Thence, continuing along the westerly side of said right of way S $49^{\circ} 11' 56''$ E a distance of 105.64 feet to a point;

Thence, continuing along the westerly side of said right of way, following a curve to the left with a radius of 175.00 feet, a delta angle of $64^{\circ} 22' 30''$ and an arc length of 196.62 feet to a point;

Thence, continuing along the westerly side of said right of way S $15^{\circ} 10' 37''$ W a distance of 110.38 feet to a point;

Thence, continuing along the westerly side of said right of way, following a curve to the right with a radius of 150.00 feet, a delta angle of $44^{\circ} 52' 16''$ and an arc length of 117.47 feet to a point;

Thence, continuing along the westerly side of said right of way S $29^{\circ} 41' 39''$ E a distance of 100.01 feet to a point;

Thence, continuing along the westerly side of said right of way, following a curve to the left, having a radius of 100.00 feet, a delta angle of $29^{\circ} 03' 25''$ and an arc length of 50.71 feet to a point;

Thence, continuing along the westerly side of said right of way S $00^{\circ} 38' 14''$ E a distance of 62.18 feet to a point;

Thence, along the northwesterly side of said right of way, following a curve to the left, having a radius of 100.00 feet, a delta angle of $73^{\circ} 03' 20''$ and an arc length of 127.51 feet to a point marking the southerly terminus of Section B.

Bearings herein are based on Grid North NAD 83 Maine West Zone.

The above description is based upon a "Standard Boundary Survey of Land of Robert J. Piampiano" for Brenda Piampiano by Sebago Technics dated 6/25/97 and recorded in Plan Book 201 Page 104 of the Cumberland County Registry of Deeds.

This Section B is a portion of a Right of Way designated as "Private Right of Way" on said survey.

Section C

Beginning at a point on the northeasterly side of the Right of Way and marking the northeasterly terminus of Section A described above;

Thence proceeding N 50° 02' 23" W a distance of 44.62 feet to a point;

Thence proceeding by a curve to the left having a radius of 125.0 feet and a central angle of 57° 32' 30" an arc distance of 125.54 feet to a point;

Thence proceeding S 72° 25' 07" W a distance of 13.44 feet to a point;

Thence proceeding S 72° 25' 07" W a distance of 80.98 feet to a point;

Thence proceeding by a curve to the right having a radius of 240.0 feet a central angle of 76° 22' 43" and an arc distance of 319.93 feet to a point;

Thence proceeding S 58° 47' 50" W a distance of 50.0 feet (said line marking the end of Section B) to a five-eighths (5/8) inch rebar capped, said rebar marking the southeasterly corner of a parcel of land now or formerly of Brenda T. Piampiano;

Thence proceeding by a curve to the left having a radius of 290.0 feet, a central angle of 42° 17' 42", and an arc distance of 214.07 feet to a point marking the southwesterly corner of a lot of land conveyed by deed from Sarah E. Piampiano to Scott S. Kibler;

Thence along the northerly boundary of said Kibler's land by a curve to the left having a radius of 290.0 feet a central angle of 34° 01' 05", and an arc distance of 172.51 feet to a point;

Thence proceeding N 72° 25' 07" E along said Kibler's land a distance of 94.42 feet to a point;

Thence proceeding along said Kibler's land by a curve to the right having a radius of 75.00 feet, a central angle of $57^{\circ} 32' 30''$, and an arc distance of 75.32 feet to a point;

Thence proceeding S $50^{\circ} 02' 23''$ E a distance of 0.90 feet to the point of beginning.

Bearings herein are based on Grid North – NAD 83 Maine West Zone.

The above description is based upon a "Standard Boundary Survey of Land of Robert J. Piampiano" for Brenda T. Piampiano by Sebago Technics, Inc. dated 6/11/97 recorded in Plan Book 201, Page 104 of the Cumberland County Registry of Deeds. This Section C is a portion of a Right of Way designated as "Private Right of Way" on said survey.

Received
Recorded Register of Deeds
Dec 09, 2005 10:46:11A
Cumberland County
John B O'Brien

TOWN OF CUMBERLAND, MAINE
PRIVATE WAY GRANT OF A PUBLIC EASEMENT

EASEMENT DEED made this 21 day of November, 2005 by and between ROBERT J. PIAMPIANO and BRENDA T. PIAMPIANO, with a mailing address of 412 Blanchard Road, Cumberland, Maine 04021 (hereinafter referred to as "Grantors") and the TOWN OF CUMBERLAND, a Maine municipality under the laws of the State of Maine, with a mailing address of 290 Tuttle Road, Cumberland, Maine 04021 (hereinafter referred to as "Cumberland").

WHEREAS, Grantors are the owners and users of a private way known as Blanchard Road Extension, in the Town of Cumberland, County of Cumberland and State of Maine as described in Exhibit A annexed hereto and being a portion of land set forth in the following deed:

1. Deed of Theodore W. Moore, Representative of Estate of Katherine E. Moore, recorded in Book 13097, page 297 in the Cumberland County Registry of Deeds.

WHEREAS, Grantors wish to grant Cumberland the right to maintain the road upon terms and conditions set forth in this Easement Deed; and

WHEREAS, Cumberland is willing to maintain the road upon terms and conditions set forth in this Easement Deed.

NOW THEREFORE, in consideration of the promises as set forth herein, the Grantors hereby grant unto Cumberland a public easement in common with the Grantor and others for use of the road for all purposes, including but not limited to, entering upon said road with persons, vehicles and equipment for the purpose of performing maintenance on said road, including without limitation repairs, snowplowing and sanding, but Cumberland shall be under no obligation to perform the same.

As part consideration of this easement and notwithstanding anything to the contrary in the Easement Deed, Grantors shall be obligated to maintain the road at a minimum standard as may be required by Cumberland in accordance with policies established by Cumberland.

Grantors further hereby agree to indemnify, release and hold harmless the Town of Cumberland, its officers, agents and employees from any and all liability from any and all claims, damages, actions and causes of action, judgments and costs including attorneys' fees, for personal injury and property damage arising

out of or resulting from Cumberland's maintenance of Blanchard Road Extension.

In the event that Cumberland no longer maintains said Blanchard Road Extension, Cumberland agrees to sign a recordable release of this easement.

This easement shall be binding on the heirs, devisees, assigns and successors of the parties herein.

WITNESS our hands and seals this 21st day of November, 2005.

Marilynn L. Paquette
Witness

John M. Gills
Witness

Robert J. Piampiano
Robert J. Piampiano

Brenda T. Piampiano
Brenda T. Piampiano

Nadene Carver
Witness

TOWN OF CUMBERLAND

By: [Signature]
Its: TOWN MANAGER

STATE OF MAINE
CUMBERLAND, SS.
2005

November 21

Then personally appeared the above-named Robert J. Piampiano and acknowledged the foregoing instrument to be his free act and deed.

(Before me,

Marilynn L. Paquette
Attorney at Law/Notary Public
Print Name: MARILYNN L. PAQUETTE
My Commission Expires: 8-15-2012

MARILYNN L. PAQUETTE
NOTARY PUBLIC, MAINE
MY COMMISSION EXPIRES:
AUGUST 15, 2012

STATE OF MAINE
CUMBERLAND, SS.
2005

November 30, 2005

Then personally appeared the above-named
William R. Shane, Town Manager of said TOWN
OF CUMBERLAND and acknowledged the foregoing instrument to be his free
act and deed in his said capacity and the free act and deed of said
municipality.

Before me,

Nancy L. Stroud
Attorney at Law/Notary Public
Print Name: Nancy L. Stroud
My Commission Expires: Sept. 13 2009

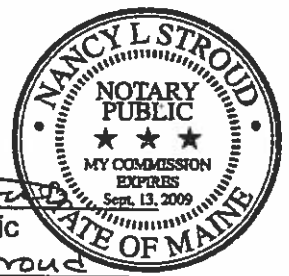


Exhibit A - Piampiano Easement

Beginning on the northeasterly sideline of a private road and Right of Way known as Blanchard Road Extension at a point marking the northeasterly corner of a portion of said Right of Way conveyed to Chase Custom Homes and Finance, Inc. by deed of Robert J. and Brenda T. Piampiano recorded in Book 13976, Page 274 of the Cumberland County Registry, thence proceeding along the northeasterly sideline of the Right of Way as follows:

Along land now or formerly of Kalinich, following a curve to the right, having a radius of 125.00 feet, a delta angle of $49^{\circ} 24' 09''$, and an arc length of 107.78 feet to a point;

Thence, $N 00^{\circ} 38' 14'' W$, along the easterly side of said Right of Way a distance of 112.71 feet to a point;

Thence, proceeding directly across said Right of Way on a line perpendicular to the center line thereof, a distance of 50.00 feet to the westerly side of said Right of Way to a point;

Thence, continuing along the westerly side of said Right of Way $S 00^{\circ} 38' 14'' E$ a distance of 62.18 feet to a point;

Thence, continuing along the northwesterly side of said Right of Way, following a curve to the left, having a radius of 100.00 feet, a delta angle of $73^{\circ} 03' 20''$, and an arc length of 127.51 feet to a point;

Thence, proceeding along the northwesterly side of said Right of Way $S 72^{\circ} 25' 07'' W$ a distance of 80.98 feet to a point;

Thence, proceeding directly across said Right of Way a distance of 50.00 feet on a line perpendicular to the center line thereof to a point;

Thence, proceeding along the southerly side of said Right of Way $N 72^{\circ} 25' 07'' E$ along land now or formerly of Kibler a distance of 94.42 feet to a point;

Thence, proceeding along the southerly side of said Right of Way and Kibler's land following a curve to the right, having a radius of 75.00 feet, a delta angle of $57^{\circ} 32' 30''$, and an arc distance of 75.32 feet to a point;

Thence, proceeding along the westerly side of said Right of Way S 50° 02' 23" E a distance of 0.90 feet to a point;

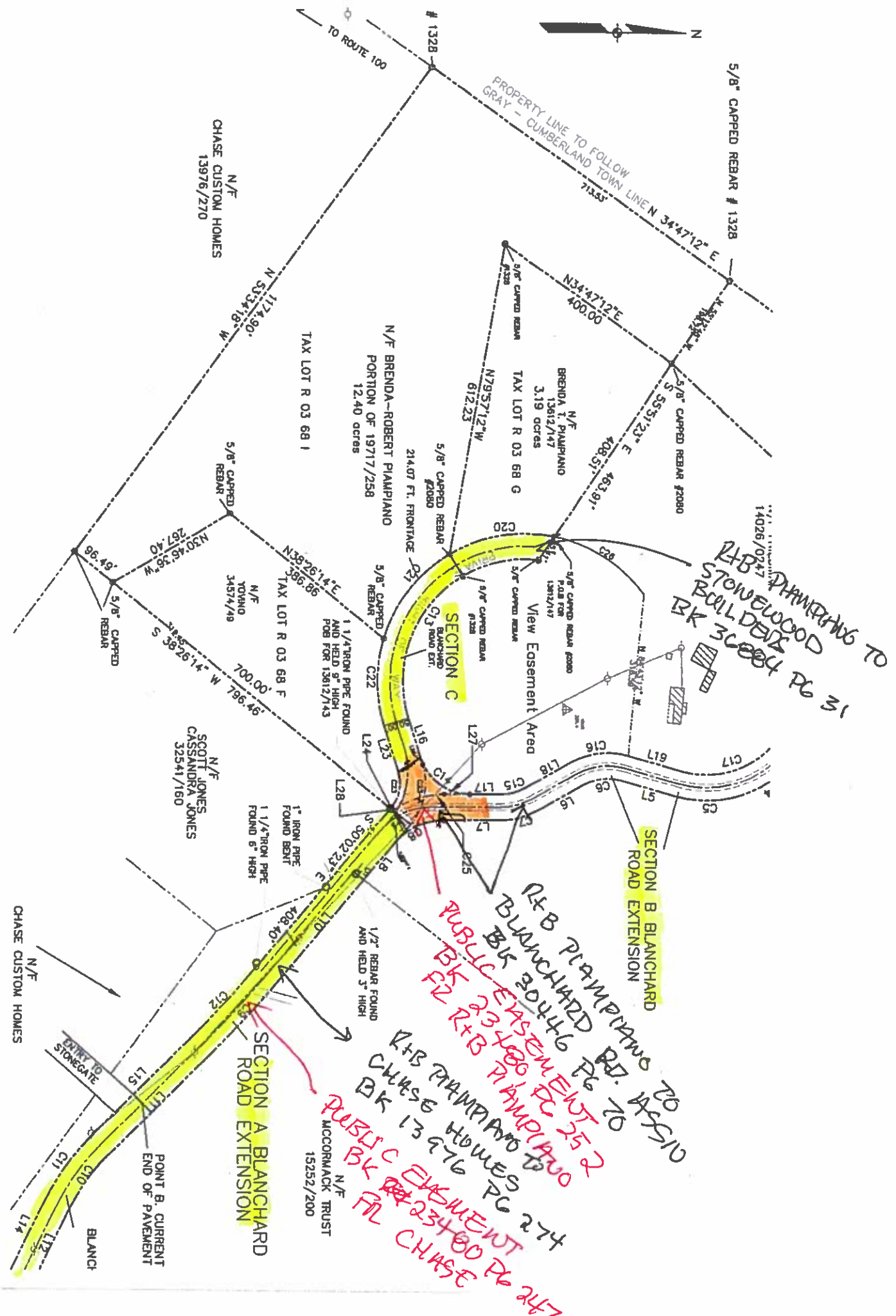
Thence, proceeding directly across said Right of Way, a distance of 50.00 feet, more or less, on a line perpendicular to the center line thereof, to the point of beginning.

Bearings herein are based on Grid North -- NAD 83 Maine West Zone.

The above description is based upon a "Standard Boundary Survey of Land of Robert J. Piampiano" for Brenda T. Piampiano by Sebago Technics Inc., dated June 11, 1997, recorded in Plan Book 201, Page 104 of the Cumberland County Registry of Deeds. The easement described herein is a portion of a Right of Way designated as "Private Right of Way" on said Survey.

Describing a portion of land conveyed by deed of Theodore W. Moore, Representative of the Estate of Katherine E. Moore, recorded in Book 13097, Page 297 of said Registry.

Received
Recorded Register of Deeds
Dec 09, 2005 10:50:09A
Cumberland County
John B O'Brien



045075

WARRANTY DEED

ROBERT J. PIAMPIANO and BRENDA T. PIAMPIANO with a mailing address of 365 Blanchard Road, Cumberland, Maine 04021, for consideration paid, GRANTS to CHASE CUSTOM HOMES & FINANCE, INC., a Maine corporation with a mailing address of 1 Percy Hawkes Road, Windham, Maine, with WARRANTY COVENANTS, that certain lot or parcel of land situated in the Town of CUMBERLAND, County of CUMBERLAND and State of MAINE, and more particularly described on EXHIBIT A attached hereto and made a part hereof.

SUBJECT to the rights, easements and interests as set forth in deeds from Robert J. Piampiano and Brenda T. Piampiano as follows:

MAINE REAL ESTATE TAX PAID

- a. A Deed to Judith Kane, dated July 18, 1997 and recorded in the Cumberland County Registry of Deeds in Book 13210, Page 161;
- b. A Deed to Brenda Piampiano dated February 20, 1998 and recorded in the Cumberland County Registry of Deeds in Book 13612, Page 140;
- c. A Deed to Josephine M. Piampiano, Custodian, dated February 20, 1998 and recorded in the Cumberland County Registry of Deeds in Book 13612, Page 143; and
- d. A Deed to Brenda T. Piampiano dated February 20, 1998 and recorded in the Cumberland County Registry of Deeds in Book 13612, Page 147.
- e. A Deed to John Mark Piampiano, dated February 20, 1998 and recorded in the Cumberland County Registry of Deeds in Book 13612, Page 137.

FURTHER SUBJECT to the rights of the public over and across the premises and any and all rights of the Town of Cumberland to the extent that Blanchard Road Extension is a public road.

RESERVING unto Robert J. Piampiano and Brenda T. Piampiano, their heirs and assigns, a right of way and easement over and across the premises herein referenced for the purpose for ingress and egress to other land of Robert J. Piampiano and Brenda T. Piampiano, and the right to construct, repair, maintain and replace electrical, telephone and other utility poles, lines and wires over and across the premises herein described to other land of Robert J. Piampiano and Brenda T. Piampiano being that property described in a deed to Robert J. Piampiano, et al., recorded in the Cumberland County Registry of Deeds in Book 4967, Page 174, and Cumberland County Registry of Deeds in Book 9939, Page 94 and property described in a deed to Robert J. Piampiano and Brenda T. Piampiano recorded in the Cumberland County Registry of Deeds in Book 13188, Page 69 as corrected, and also the premises described in a deed to Robert J. Piampiano dated May 23, 1997 and recorded in the Cumberland County Registry of Deeds in Book 13097, Page 257.

FURTHER RESERVING, unto Robert J. Piampiano and Brenda T. Piampiano, their heirs and assigns, the right to improve the reserved right of way to Town standards and to apply for dedication and acceptance of the way by the Town of Cumberland.

BK 13976PG275

IN WITNESS WHEREOF, the said ROBERT J. PIAMPIANO and BRENDA T. PIAMPIANO have signed this instrument on the 9 day of July, 1998.


ROBERT J. PIAMPIANO

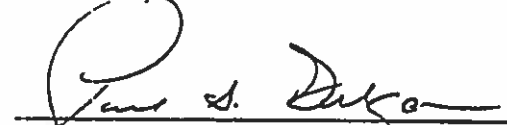

BRENDA T. PIAMPIANO

STATE OF MAINE
COUNTY OF CUMBERLAND

July 9, 1998

Personally appeared the above named ROBERT J. PIAMPIANO and acknowledged the foregoing instrument to be his free act and deed.

Before me,

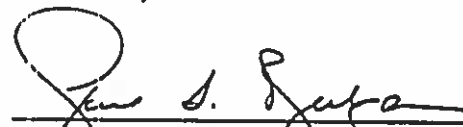

Notary Public/Attorney-at-Law
Print Name: Paul S. Duncan

STATE OF MAINE
COUNTY OF CUMBERLAND

July 9, 1998

Personally appeared the above named BRENDA T. PIAMPIANO and acknowledged the foregoing instrument to be her free act and deed.

Before me,


Notary Public/Attorney-at-Law
Print Name: Paul S. Duncan

119733/PSB/SKLF

EXHIBIT A

A certain lot or parcel of land located at the northwesterly terminus of Blanchard Road, in the Town of Cumberland, County of Cumberland, State of Maine, bounded and described as follows:

Beginning at a point on the southwesterly side of the northwesterly terminus of the apparent Town accepted portion of the Blanchard Road and being the easterly corner of land now or formerly of Robert J. Piampiano and Brenda T. Piampiano as described in Book 9939, Page 96, recorded in the Cumberland County Registry of Deeds;

Thence, N 63°-33'-57" W, along land of said Piampiano, 150.25 feet to a point;

Thence, continuing along land of said Piampiano, following a curve to the right, having a radius of 500.00 feet and an arc length of 163.84 feet to a point;

Thence, N 44°-47'-29" W, continuing along land of said Piampiano, 272.27 feet to a point;

Thence, continuing along land of Piampiano, following a curve to the left, having a radius of 2000.00 feet and an arc length of 183.20 feet to a point;

Thence, N 50°-02'-23" W, continuing along land of said Piampiano, also along land of Raymond Geissler and Nina Geissler as described in Book 9922, Page 90, 408.40 feet to a point;

Thence, N 37°-14'-44" E, approximately 50 feet to the apparent northeasterly sideline of the gravel portion of the extension of said road known as Blanchard Road Extension;

Thence, in a southeasterly direction along the northeasterly sideline of Blanchard Road Extension, so-called, 1000 feet, more or less, to a point at the northwesterly terminus of the apparent town accepted portion of Blanchard Road;

Thence, S 48°-05'-53" W, along the northwesterly terminus of the apparent town accepted portion of Blanchard Road, approximately 50 feet to the point of beginning.

Meaning and intending to describe part of the gravel portion of Blanchard Road extending from Blanchard Road to a point marked by the northeast corner of property of Raymond and Nina Geissler herein referenced.

119902

RECEIVED
RECORDED REGISTRY OF DEEDS

1998 JUL 13 AM 10:29

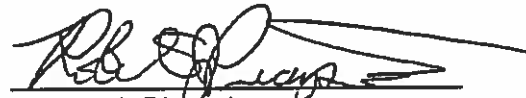
CUMBERLAND COUNTY

RELEASE DEED

ROBERT J. PIAMPIANO, with a mailing address of 3 High Street, Brunswick, Maine 04011, for consideration paid, **RELEASES** to the **BLANCHARD ROAD EXTENSION ROAD ASSOCIATION**, a non-profit corporation organized and existing under the laws of the State of Maine, with a mailing address of 366 Blanchard Road, Cumberland, Maine 04021, that certain lot or parcel of land situated in the Town of Cumberland, County of Cumberland, and State of Maine, as more particularly described on **EXHIBIT A** attached hereto and made a part hereof.

Being a portion of the premises described in a deed to Robert J. Piampiano from the Estate of Katherine E. Moore dated May 23, 1997, recorded in the Cumberland County Registry of Deeds in Book 13097, Page 297.

IN WITNESS WHEREOF, the said Robert J. Piampiano has signed this instrument on the 1st day of March, 2013.

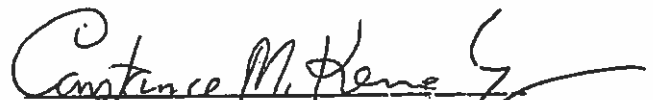

Robert J. Piampiano

STATE OF MAINE
COUNTY OF CUMBERLAND

March 1, 2013

Personally appeared the above named Robert J. Piampiano and acknowledged the foregoing instrument to be his free act and deed.

Before me,


Notary Public/~~Attorney at Law~~
Print Name:

CONSTANCE M. KENNEDY
Notary Public
My Commission Expires:
August 2, 2016

SEAL

Exhibit A to Release Deed

A portion of a certain right of way and private road known as Blanchard Road Extension located in the Town of Cumberland, County of Cumberland, State of Maine bounded and described as follows.

Beginning on the southerly sideline of a 50 foot private right of way known as Blanchard Road Extension at a 1 and ¼ inch iron pipe held 9 inches high, said beginning point marking the southwesterly terminus of that portion of Blanchard Road Extension known and described as Section A in Exhibit A to an Amended Road Maintenance Agreement dated November 18, 2005 and recorded in Book 23480, Page 223 et seq. in the Cumberland County Registry of Deeds, said point of beginning also being shown on a Standard Boundary Survey of Land of Robert J. Piampiano dated 6/25/97, recorded in Plan Book 201 Page 204 of said Registry, thence proceeding in a counterclockwise direction (with all calls regarding direction of curve based on proceeding in a counterclockwise direction) as follows:

N 37°14' 44" E across the right of way a distance of 50.06 feet, more or less, to a point marking the northeasterly terminus of Section A referenced above;

Thence, S 50° 02' 23" E, a distance of 44.62 feet to a point on the easterly sideline of Blanchard Road Extension and land now or formerly of Kalinich;

Thence, along land of Kalinich, following a curve to the right, having a radius of 125.00 feet, a delta angle of 49° 24' 09", and an arc length of 107.78 feet to a point;

Thence, continuing along the easterly side of said right of way, N 00° 38' 14" W, a distance of 112.71 feet to a point;

Thence, continuing along the easterly side of said right of way, following a curve to the left with a radius of 150.00 feet, a delta angle of 29° 03' 25" and an arc length of 76.07 feet to a point;

Thence, continuing along the easterly side of said right of way, N 29° 41' 39" W, a distance of 100.01 feet to a point;

Thence, continuing along the easterly side of said right of way, following a curve to the right with a radius of 100.00 feet, a delta angle of 44° 52' 16" and an arc length of 78.31 feet to a point;

Thence, continuing along the easterly side of said right of way, N 15° 10' 37" E, a distance of 110.38 feet to a point;

Thence, continuing along the easterly side of said right of way and following a curve to the left having a radius of 225.00 feet, a delta angle of 28° 44' 30" and an arc length of 112.87 feet to a point;

Thence, continuing along the easterly side of said right of way, following a curve to the left, having a radius of 225.00 feet, a delta angle of 35° 38' 03" and an arc length of 139.94 feet to a point;

Thence, continuing along the easterly side of said right of way, N 49° 11' 56" W, a distance of 105.64 feet to a point;

Thence, continuing along the easterly side of said right of way, following a curve to the right having a radius of 325.00 feet, a delta angle of 09° 40' 50" and an arc length of 54.91 feet to a point;

Thence, continuing along the easterly side of said right of way, N 39° 31' 07" W, a distance of 105.67 feet;

Thence, continuing along the easterly side of said right of way, following a curve to the right, having a radius of 175.00 feet, a delta angle of 11° 00' 30" and an arc length of 33.62 feet to a point;

Thence, continuing along the easterly side of said right of way, N 28° 30' 37" W, a distance of 102.56 feet to a point;

Thence, continuing along the easterly side of said right of way, following a curve to the left with a radius of 525.00 feet, a delta angle of 24° 59' 31" and an arc length of 229.00 feet to a point;

Thence, continuing along the easterly side of said right of way, N 53° 30' 08" W, a distance of 89.09 feet to a point marking the Gray-Cumberland Town Line and the easterly terminus of Section B as described in Exhibit A to the amended Road Maintenance Agreement above referenced, and the easterly terminus of the property herein conveyed.

Thence, S 34° 47' 12" W, along the Gray-Cumberland Town Line, a distance of 50.02 feet to a point marking the northerly corner of land formerly of Robert J. Piampiano, now of Briggs and Lowery, and the westerly terminus of Section B and the property herein conveyed.

Thence, S 53° 30' 08" E along land formerly of Piampiano, now of Briggs and Lowery, and the westerly side of said right of way a distance of 87.59 feet to a point;

Thence, continuing along the westerly side of said right of way following a curve to the right having a radius of 475.00 feet, a delta angle of 24° 59' 31" and an arc distance of 207.19 feet to a 5/8 inch rebar;

Thence, continuing along the westerly side of said right of way and land now or formerly of Friedman S 28° 30' 37" E, a distance of 102.56 feet to a point;

Thence, continuing along the westerly side of said right of way, following a curve to the left having a radius of 225.00 feet, a delta angle of 11° 00' 30", and an arc length of 43.23 feet to a point;

Thence, continuing along the westerly side of said right of way, S 39° 31' 07" E, a distance of 105.67 feet to a point;

Thence, continuing along the westerly side of said right of way, following a curve to the left having a radius of 375.00 feet, a delta angle of 09° 40' 50" and an arc length of 63.36 feet to a point;

Thence, continuing along the westerly side of said right of way, S 49° 11' 56" E, a distance of 105.64 feet to a point;

Thence, continuing along the westerly side of said right of way, following a curve to the right with a radius of 175.00 feet, a delta angle of 64° 22' 33" (listed as 64° 22' 30" in Exhibit A to the Amended Road Maintenance Agreement referenced above due to a scrivener's error) and an arc length of 196.62 feet to a point;

Thence, continuing along the westerly side of said right of way, S 15° 10' 37" W, a distance of 110.38 feet to a point;

Thence, continuing along the westerly side of said right of way, following a curve to the left with a radius of 150.00 feet, a delta angle of 44° 52' 16" and an arc length of 117.47 feet to a point;

Thence, continuing along the westerly side of said right of way, S 29° 41' 39" E, a distance of 100.01 feet to a point;

Thence, continuing along the westerly side of said right of way, following a curve to the right, having a radius of 100.00 feet, a delta angle of 29° 03' 25" and an arc length of 50.71 feet to a point;

Thence, continuing along the westerly side of said right of way, S 00° 38' 14" E, a distance of 62.18 feet to a point;

Thence, continuing along the northwesterly side of said right of way, following a curve to the left, having a radius of 100.00 feet, a delta angle of 73°

03' 20" and an arc length of 127.51 feet to a point in the northerly sideline of Section C as described in Exhibit A to the Amended Road Maintenance Agreement referenced above;

Thence, S 32° 37' 37" E across a portion of Section C of said right of way a distance of 51.77 feet to a point in the southerly sideline of said section C and land now or formerly of Kibler;

Thence, continuing along the southerly sideline of a portion of Section C of said right of way and along land now or formerly of Kibler following a curve to the right having a radius of 75.00 feet, a delta angle of 57° 32' 30", and an arc distance of 75.32 feet to a point;

Thence, continuing along the southerly sideline of a portion of Section C of said right of way, S 50° 02' 23" E a distance of 0.90 feet to a 1 and ¼ inch iron pipe held 9 inches high at the point of beginning and at the southerly terminus of the property herein conveyed;

Meaning and intending to convey and describe all of Section B, and a small portion of Section C, of Blanchard Road Extension as described in Exhibit A to the above referenced Amended Road Maintenance Agreement.

Bearings herein are based on Grid North NAD 83 Maine West Zone.

The above description is based upon a "Standard Boundary Survey of Land of Robert J. Piampiano" for Brenda Piampiano by Sebago Technics dated 6/25/97 and recorded in Plan Book 201, Page 104 of the Cumberland County Registry of Deeds.

Reserving an easement and right of way over the property herein conveyed to the Grantor, his heirs and assigns, in common with others, whether heretofore or hereafter granted, for purposes of ingress, egress, installation, repair, or maintenance of utilities, whether above ground or below ground, to and from any property of the Grantor or to any addition, division or portion thereof. Grantor, his heirs and assigns, also reserve the right to construct, repair, maintain, or replace electrical, telephone, or other utility poles, lines, and wires or other structures above or below ground, and further reserve the right to improve the reserved right of way to town standards and to apply for dedication and acceptance of the way by the Town of Cumberland.

The property herein conveyed shall be used by the Blanchard Road Extension Road Association and its members solely for purposes of a roadway providing ingress, egress, road maintenance and repair, and utility access to the property of its members, and shall not be used as a building lot nor shall any permanent buildings or structures be placed thereon.

The property herein conveyed is subject to the terms and conditions of the above referenced Declaration of Covenants and Amended Road Maintenance Agreement dated November 18, 2005, recorded in Book 23480, Page 223 et seq. of the Cumberland County Registry of Deeds, which shall run with the land herein conveyed.

The property herein conveyed is also subject to the individual rights of those persons or entities, their heirs, successors and assigns, who are signatory to the above referenced Declaration of Covenants and Amended Road Maintenance Agreement dated November 18, 2005, recorded in Book 23480, Page 223 et seq. of the Cumberland County Registry of Deeds, or who have acquired property of a signatory thereafter, by virtue of easements and rights of way granted to them in their individual deeds, including, as of the current date, Robert and Brenda Piampiano, Bruce and Nancy Wildes, Jeffrey and Beatrice Kalinich, Paul and Laura Friedman, Suzanne and Kermit McCormack, the Suzanne L. McCormack Trust, Scott S. Kibler, Raymond and Nina Geissler, Mark A. Fairbanks and Christa Fairbanks, and Richard Briggs and Mary Lowery.

The property herein conveyed is also subject to the rights of the Town of Cumberland to use certain portions of Sections A, B and C of Blanchard Road Extension pursuant to an Easement Deed from Chase Custom Homes & Finance, Inc. to the Town of Cumberland dated November 21, 2005, recorded in Book 23480, Page 247 of the Cumberland County Registry of Deeds, and pursuant to an Easement Deed from Robert and Brenda Piampiano to the Town of Cumberland dated November 21, 2005 recorded in Book 23480, Page 252 of the Cumberland County Registry of Deeds.

The property herein conveyed does not create a subdivision, since no other division of the parcel from which this property comes has occurred within the last 5 years.

Received
Recorded Register of Deeds
Mar 06:2013 11:13:20A
Cumberland County
Pamela E. Lavley

TOWN OF CUMBERLAND, MAINE
PRIVATE WAY GRANT OF A PUBLIC EASEMENT

EASEMENT DEED made this 21 day of November 2005 by and between CHASE CUSTOM HOMES & FINANCE, INC, with a mailing address of 1 Percy Hawkes Road, Windham, County of Cumberland and State of Maine 04062 (hereinafter referred to as "Grantor") and the TOWN OF CUMBERLAND, a Maine municipality under the laws of the State of Maine, with a mailing address of 290 Tuttle Road, Cumberland, Maine 04021 (hereinafter referred to as "Cumberland").

WHEREAS, Grantor is the owner and user of a private way known as Blanchard Road Extension, in the Town of Cumberland, County of Cumberland and State of Maine as described in Exhibit A annexed hereto and being further set forth in the following deeds:

1. Deed from Robert J. Piampiano and Brenda T. Piampiano to Chase Custom Homes and Finance, Inc. dated July 9, 1998 and recorded at Cumberland County Registry of Deeds in Book 13976, Page 274.

WHEREAS, Grantor wishes to grant Cumberland the right to maintain the road upon terms and conditions set forth in this Easement Deed; and

WHEREAS, Cumberland is willing to maintain the road upon terms and conditions set forth in this Easement Deed.

NOW THEREFORE, in consideration of the promises as set forth herein, the Grantor hereby grants unto Cumberland a public easement in common with the Grantor and others for use of the road for all purposes, including but not limited to, entering upon said road with persons, vehicles and equipment for the purpose of performing maintenance on said road, including without limitation repairs, snowplowing and sanding, but Cumberland shall be under no obligation to perform the same.

As part consideration of this easement and notwithstanding anything to the contrary in the Easement Deed, Grantor shall be obligated to maintain the road at a minimum standard as may be required by Cumberland in accordance with policies established by Cumberland.

Grantors further hereby agree to indemnify, release and hold harmless the Town of Cumberland, its officers, agents and employees from any and all liability from any and

all claims, damages, actions and causes of action, judgments and costs including attorneys' fees, for personal injury and property damage arising out of or resulting from Cumberland's maintenance of Blanchard Road Extension.

In the event that Cumberland no longer maintains said Blanchard Road Extension, Cumberland agrees to sign a recordable release of this easement.

This easement shall be binding on the heirs, devisees, assigns and successors of the parties herein.

WITNESS our hands and seals this 21st day of November, 2005.

Sherwood S. Merrill
Witness

CHASE CUSTOM HOMES AND
FINANCE, INC., Owner

John F. Chase
John F. Chase- President
Duly Authorized

Melody Mc
Witness

TOWN OF CUMBERLAND

By: William R. Shane
Its: Town Manager

STATE OF MAINE
CUMBERLAND, SS.

November 21, 2005

Then personally appeared the above-named John F. Chase, President of Chase Custom Homes and Finance, Inc, and acknowledged the foregoing instrument to be his free act and deed in said capacity and the free act and deed of said corporation.



Before me,

Sherwood S. Merrill
Attorney at Law/Notary Public
Print Name: SHERWOOD S. MERRILL
My Commission Expires: 7/21/2008

STATE OF MAINE
CUMBERLAND, SS.

Nov 30, 2005

Then personally appeared the above-named William R. Shane,
Manager of said TOWN OF CUMBERLAND and acknowledged

the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said municipality.

Before me,

Nancy L. Stroud

Attorney at Law/Notary Public

Print Name: Nancy L. Stroud

My Commission Expires: Sept. 13, 2009

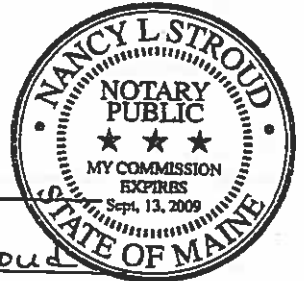


Exhibit A- Chase Easement

Beginning at the northeast corner of the unaccepted portion of Blanchard Road Extension where this point meets the end of the paved portion of Blanchard Road Extension, said beginning point lying on a course N 44° 47' 29" W a distance of 104.57 feet from a four inch (4") square granite monument set in the ground;

Thence proceeding N 44° 47' 29" W a distance of 272.27 feet to the beginning point of a curve;

Thence proceeding by a curve to the left having a radius of 2050.0 feet and a central angle of 5° 14' 54" an arc distance of 187.78 feet to a point;

Thence proceeding N 50° 02' 23" W a distance of 410.77 feet to a point;

Thence proceeding S 37° 14' 44" W a distance of 50.06 feet to a one and one-quarter (1 ¼) inch iron pipe nine (9) inches high and marking the northeast corner of a lot consisting of 3.11 acres conveyed by deed of even date from Sarah E. Piampiano to Scott S. Kibler;

Thence proceeding S 50° 02' 23" E a distance of 207.11 feet to a point;

Thence proceeding S 50° 02' 23" E a distance of 201.29 feet to a point;

Thence proceeding by a curve to the right having a radius of 2000.00 feet and a central angle of 5° 14' 54" an arc distance of 183.20 feet to a point;

Thence proceeding S 44° 47' 29" E a distance of 167.70 feet to a point marking the southwesterly end of the Town accepted paved portion of Blanchard Road Extension;

Thence proceeding northeasterly across Blanchard Road Extension to the point of beginning, containing .87 acres more or less. The above description is based upon a Plan entitled "Amended Subdivision Plan of

Stonegate Estates for John Chase," by Sebago Technics, Inc., dated 11/2/99 to which reference is made for a more particular description.

Bearings herein are based on Grid North – NAD 83 Maine West Zone.

Received
Recorded Register of Deeds
Dec 09, 2005 10:49:18A
Cumberland County
John B O'Brien

QUITCLAIM DEED
DLN: 1002040100562

ROBERT J. PIAMPIANO and BRENDA T. PIAMPIANO, husband and wife, with a mailing address of 3 High Street, Brunswick, Maine 04011, hereinafter the "Grantors," for consideration paid, **GRANT to Stonewood Builders of Maine, Inc.**, with a mailing address of 8 Roberts Street, Falmouth, Maine 04105, hereinafter the "Grantee," its heirs successors and assigns, with Quitclaim Covenant, certain land and other reserved rights situated in the Town of Cumberland, County of Cumberland, and State of Maine, as more particularly described on **EXHIBIT A** attached hereto and made a part hereof.

IN WITNESS WHEREOF, the said Robert J. Piampiano and Brenda T. Piampiano have signed this instrument on the 22nd day of June, 2020.

Kimberly Dayn
Witness

Robert J. Piampiano
Robert J. Piampiano

Kimberly Dayn
Witness

Brenda T. Piampiano
Brenda T. Piampiano

STATE OF MAINE
COUNTY OF CUMBERLAND

June 22, 2020

Personally appeared the above named Robert J. Piampiano and acknowledged the foregoing instrument to be his free act and deed.

Before me,



[Signature]
Notary Public/Attorney-at-Law
Print Name: TIM KEENE

Exhibit A to Quitclaim Deed to Stonewood Builders of Maine, Inc.

1. Fee Interest In Section C Right of Way. Hereby granting to said Grantee, its heirs, successors, and assigns all remaining right, title, and interest of Grantor Robert J. Piampiano in and to Section C, so-called, being a portion of a certain 50 foot right of way and private road known as Blanchard Road Extension located in the Town of Cumberland, County of Cumberland, State of Maine bounded and described as follows, with all lines (L-) and Curves (C-) referenced to the survey by Sebago Technics dated June 11, 1997 referenced below:

Point of Beginning. Beginning at a point on the southerly sideline of a 50 foot private right of way known as Blanchard Road Extension, which beginning point lies on a bearing of S 50°-02'-23" E a distance of 0.90 feet (L-24), then at the end of a curve (C-23) with a radius of 75.00 feet, a central angle of 57°-32'30", and an arc distance of 75.32 feet, from a 1 and ¼ inch iron pipe held 9 inches high, marking the southwesterly terminus of that portion of Blanchard Road Extension known and described as Section A in Exhibit A to an Amended Road Maintenance Agreement dated November 18, 2005 and recorded in Book 23480, Page 223 et seq. in the Cumberland County Registry of Deeds;

Thence proceeding in a clockwise direction (with all calls regarding direction of curve based on proceeding in clockwise direction) S 72°-25'-07" W a distance of 94.42 feet (L-23) along the southerly sideline of said Section C and land now or formerly of Yovino to a point in the southerly sideline of said Section C;

Thence along a curve to the right (C-22) with a radius of 290.00 feet, a central angle of 34°-01'-05" by and along the southerly sideline of said Section C and land of said Yovino an arc distance of 172.51 feet to a 5/8 inch capped iron rebar located in the southerly sideline of said Section C;

Thence along a curve to the right (C-21) with a radius of 290 feet, a central angle of 42°-17'-42" by and along the southerly sideline of said Section C and land now or formerly of Brenda and Robert Piampiano an arc distance of 214.07 feet to a 5/8 inch capped iron rebar set with cap # 2080;

Thence along a curve to the right (C-20) with a radius of 290.00 feet, a central angle of 42°-17'-43" by and along the southerly and westerly sideline of said Section C and land now or formerly of Brenda Piampiano an arc distance of 214.08 feet to a 5/8 inch capped iron rebar set with cap # 2080 marking the end of the southerly and westerly sideline of said Section C;

Thence S 55°-51'-23" E a distance of 55.41 feet to a 5/8 inch capped iron rebar set with cap # 2080 in the line of land now or formerly of Friedman and marking the end of the northerly and easterly sideline of said Section C;

Thence along a curve to the left (C-13) with a radius of 240.00 feet, a central angle of 113°-29'-15" by and along the easterly and northerly sideline of said Section C and land of said Friedman an arc distance of 475.38 feet to a point in the northerly sideline of said Section C;

Thence N 72° 25'-07" E a distance of 80.98 feet (L-16) along the northerly sideline of said Section C and land of said Friedman to a point in the northerly sideline of said Section C and the line of that portion of Blanchard Road Extension owned now or formerly of the Blanchard Road Extension Road Association;

Thence, S 32° - 37' - 37" E across Section C a distance of 51.77 feet along the line of said Blanchard Road Extension Road Association to the point of beginning at land now or formerly of said Yovino;

Being a portion of the premises described in a deed to Robert J. Piampiano from the Estate of Katherine E. Moore dated May 23, 1997, recorded in the Cumberland County Registry of Deeds in Book 13097, Page 257.

Meaning and intending to convey and describe all of Section C of Blanchard Road Extension as described in Exhibit A to the above referenced Amended Road Maintenance Agreement, except a small portion of Section C (which is now a part of Section B) conveyed by Grantor Robert J. Piampiano to the Blanchard Road Extension Road Association by deed dated March 1, 2013, recorded in Book 30446, Page 70 of said Cumberland County Registry.

The above description is based upon a "Standard Boundary Survey of Land of Robert J. Piampiano" for Brenda Piampiano by Sebago Technics dated June 11, 1997 and recorded in Plan Book 201, Page 104 of said Cumberland County Registry. This description has been updated to reflect current land owners and the above referenced conveyance to the Blanchard Road Extension Road Association. Bearings herein are based on Grid North NAD 83 Maine West Zone.

Subject to the rights of Yovino, his heirs and assigns to use that portion of the right of way herein conveyed which borders Yovino's property for purposes of ingress, egress, installation, repair, or maintenance of utilities, whether above ground or below ground, to and from said Yovino's property.

The property herein conveyed is subject to the terms and conditions of a certain Declaration of Covenants and Amended Road Maintenance Agreement dated November 18, 2005, recorded in Book 23480, Page 223 et seq. in said Cumberland County Registry, which shall run with the land herein conveyed.

2. Reserved Rights to Section A. Also granting all rights reserved to the Grantors, their heirs and assigns, in and to that portion of Blanchard Road Extension known and described as Section A, including an easement and right of way for purposes of ingress and egress and utilities to and from lands of the Grantee, to construct, repair, maintain, and replace electrical, telephone, or other utility poles, lines and wires on, over and

across said Section A, and to upgrade and improve to Town of Cumberland standards, and to apply to the Town of Cumberland for dedication and acceptance, all, or any portion of, of said Section A, all as described and reserved in a deed from Robert J. Piampiano and Brenda T. Piampiano to Chase Custom Homes & Finance, Inc. dated July 9, 1998 and recorded in Book 13976 Page 274 of said Cumberland County Registry, subject to the rights of the public, if any, and the rights of members of the Blanchard Road Extension Road Association, or individual lot owners, to use Section A in common with the Grantee, its heirs, successors and assigns, and others to provide access and utilities to and from their respective lots.

2. Reserved Rights to Section B. Also granting all rights reserved to the Grantor Robert J. Piampiano, his heirs and assigns, in and to that portion of Blanchard Road Extension known and described as Section B which may be necessary or convenient to provide a continuous 50 foot right of way from the end of Section A to that portion of Section C conveyed herein, including a right of way and easement for purposes of ingress and egress or utilities to and from lands of the Grantee, the right to construct, repair, maintain, and replace electrical, telephone, or other utility poles, lines and wires on, over and across said portion of Section B, and to upgrade and improve to Town of Cumberland standards, and to apply to the Town of Cumberland for dedication and acceptance, all, or any part of said portion of Section B, as described and reserved in a deed from Robert J. Piampiano to the Blanchard Road Extension Road Association dated March 1, 2013, recorded in Book 30446 Page 70 of said Cumberland County Registry, subject to the rights of the public, if any, and the rights of members of the Blanchard Road Extension Road Association, or individual lot owners, to use Section B, in common with the Grantee, his heirs, successors and assigns, and others to provide access and utilities to and from their respective lots.

Meaning and intending by these grants to convey to the Grantee, its heirs, successors, and assigns, rights of access and utilities to lands of the Grantee, and to upgrade and seek dedication and acceptance by the Town of Cumberland, of a continuous 50 foot right of way and easement from the end of the Town-owned portion of Blanchard Road Extension to lands conveyed to Nathaniel Ross and Stonewood Land, LLC by these Grantors by separate deeds of even date.

Attachment C
Supporting Documents

Copies of relevant correspondence and documents pertaining to the project are enclosed.

C

Supporting Documents



July 26, 2021

4185-2

Mr. Nathaniel Ross
Stonewood Land, LLC
8 Roberts Street
Falmouth, ME 04105
<via email>

**Re: Designation of Agent Authorization
Ross Estates Subdivision
Blanchard Road Extension, Cumberland, Maine
Tax Map R08, Lot 68I**

Dear Nate:

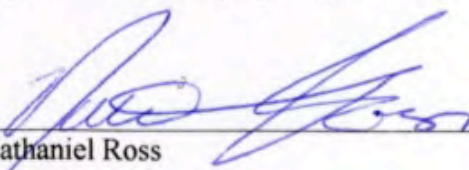
As required by various approval agencies, please indicate by signing below that Sitelines, PA is authorized to act as agent for Stonewood Land, LLC for the specific purpose of preparation and submission of local and state permitting applications on your behalf for the proposed subdivision for the lot identified as Tax Map R08, Lots 68I located off Blanchard Road Extension in Cumberland, Maine.

Very truly yours,

Kevin P. Clark

Kevin P. Clark, PLS
President

The undersigned hereby gives Sitelines, PA the authority to act as agent for Stonewood Land, LLC for the specific purpose of preparation and submission of local and state permitting applications for the project specifically identified above.



Nathaniel Ross

8/1/21

Date

SITELINES • CIVIL ENGINEERS • LAND SURVEYORS
119 Purinton Road, Suite A, Brunswick Landing, Brunswick, ME 04011
207-725-1200 • www.sitelinespa.com

State of Maine



Department of the Secretary of State

I, the Secretary of State of Maine, certify that according to the provisions of the Constitution and Laws of the State of Maine, the Department of the Secretary of State is the legal custodian of the Great Seal of the State of Maine which is hereunto affixed and that the paper to which this is attached is a true copy from the records of this Department.

In testimony whereof, I have caused the Great Seal of the State of Maine to be hereunto affixed. Given under my hand at Augusta, Maine, this sixteenth day of August 2021.



Shenna Bellows

Shenna Bellows

Secretary of State

Additional Addresses

Legal Name	Title	Name	Charter #	Status
STONEWOOD LAND, LLC	Registered Agent		20208280DC	GOOD STANDING
Home Office Address (of foreign entity)		Other Mailing Address		



Albert Frick Associates, Inc

Environmental Consultants

380B Main Street Gorham, Maine 04038
(207) 839-5563 FAX (207) 839-5564
www.albertfrick.com info@albertfrick.com

Brady Frick, President, SE
Albert Frick, CSS, SE
Christopher Coppi CWS, SE
Bryan Jordan, SE
Matthew Logan, SE
Sarah Frick, Office Manager

June 12, 2020

Nate Ross
Stonewood Builders
8 Roberts Street
Falmouth, ME 04105

Re: Wetlands and Soil Suitability Report for 2 Blanchard Road Ext, Cumberland ME.

Dear Mr. Ross:

On May 13th, 2020, Albert Frick Associates, Inc. (AFA) completed a wetland delineation at the above-mentioned property. The property contains narrow freshwater, forested wetlands primarily along DEP-regulated streams that exist within the west and east halves of the property. One vernal pool was observed during the delineation and is located near the southern property boundary. Wetland boundaries were flagged in blue and labeled alphanumerically. Wetland flags were GPS-located using a Trimble Geo 7x hand-held unit. DEP streams were approximated by random GPS locations along the center line of each stream. The attached site plan illustrates the location and extent of wetlands and streams and the location of the vernal pool depression.

DEP Stream Permitting:

Several water courses on the property contained a scoured mineral bottom and at the time of the delineation, exhibited running water containing aquatic insects. As such, these water courses met the DEP stream definition per the Natural Resources Protection Act (NRPA). Streams are a protected resource which requires a 75-foot setback. Permits from the DEP are necessary if a project intrudes into the setback such as clearing of vegetation, filling or the constructions of structures.

Projects maintaining a 25-foot no disturbance from the edge of the stream may qualify for a stream-lined DEP review process referred to as Permit by Rule. Stream crossings for projects that require access, may also qualify for the PBR process. Projects that cannot maintain a 25-foot no disturbance or that don't qualify for a stream crossing PBR, are subject to an Individual review where approval is not a guarantee.

Vernal Pool:

The vernal pool located near the southern property boundary contained eight (8) spotted salamander egg masses. Spotted salamanders are a vernal pool amphibian species that use vernal pools during their life cycle and are considered an important indicator species by DEP and Army Corps. The Army Corps regulates this vernal pool and the area within 750-feet of the depression if wetlands are impacted for a project. After October 2020 the regulation of vernal pools by Army Corps is proposed to change; namely that the 750-foot regulatory buffer will only be applied if the vernal pool depression is impacted (see wetlands permitting section of this report for more information).

The DEP regulates only significant vernal pools. This vernal pool contained 8 spotted salamander egg masses which is short of the required 20 egg masses necessary to meet the significance criteria for DEP. However, a formal vernal pool survey must be submitted to the state for concurrence in order for this pool not be regulated by the state. Unless the state determines that the pool is not a significant vernal pool, proposed development or clearing activities within 250 feet of the vernal pool will be subject to DEP review and approval under the Significant Wildlife Habitat Rules, per NRPA.

Wetlands Permitting:

Based on site observations and available information including NWI Maps, wetland impacts are eligible for the normal DEP Tier review process provided the impact does not occur within 25 feet of any DEP stream or within 250 feet of the vernal pool (unless as noted above that the state determines that the pool is non-significant via a completed survey).

The Army Corps of Engineers requires permits for wetland impacts in addition to the DEP. Provided the wetlands permitting guidelines change in October 2020, projects that occur within 750 feet of the vernal pool will not be subject to clearing restrictions provided there is no direct impact to the vernal pool depression (pink hashed area on site plan).

Site Evaluation:

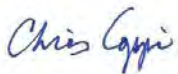
We did a preliminary soil evaluation on the above-referenced property on June 2, 2020. The purpose of the investigation was to determine the suitability of the site for on-site subsurface wastewater disposal. Enclosed is a site plan illustrating the location of random test pits (4), one of which is located on the adjacent lot.

Soils are suitable for wastewater disposal in the vicinity of all Test Pits in accordance with the Subsurface Wastewater Disposal Rules, Chapter 241. Soils on these properties contain somewhat poorly drained to moderately well drained, glacial till parent material and/or bedrock which require a medium-sized disposal system. A completed subsurface wastewater disposal system design (HHE-200) is necessary for a permit to install a system by any passing TP once the building size and location, and site development are conceptualized.

We recommend contacting a licensed surveyor to plot out a conceptual subdivision keeping mind that net residential acreage and other lot requirements may be applied depending upon the number of lots proposed in accordance with the Town of Cumberland Subdivision Rules.

Please contact me if you have any questions or matters for further discussion. I can be reached by phone at 756-3245 or by email at chris@albertfrick.com.

Sincerely,



Chris Coppi CWS, LSE
Certified Wetland Scientist, NH CWS #291
Licensed Site Evaluator

Town, City, Plantation
CUMBERLAND

Street, Road, Subdivision
BLANCHARD RD EXT

Owner's Name
NATE ROSS

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole **TP-1** ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
		BLACK	
SANDY LOAM		YELLOW BROWN	
		OLIVE BROWN	FEW FAINT
REFUSAL IN LARGE ROCK OR BEDROCK			

Soil Classification
2/3 AIII/C
Profile Condition

Slope
%

Limiting Factor
15"

☒ Ground Water
☐ Restrictive Layer
☐ Bedrock
☐ Pit Depth

Soil Series Name:

Drainage Class:

Hydrologic Group:

Observation Hole **TP-2** ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
		GRAY BROWN	
SANDY LOAM	FRIABLE	YELLOW BROWN	NONE EVIDENT
		OLIVE BROWN	
LIMIT OF EXCAVATION			

Soil Classification
3 C
Profile Condition

Slope
%

Limiting Factor
24"

☐ Ground Water
☐ Restrictive Layer
☐ Bedrock
☐ Pit Depth

Soil Series Name:

Drainage Class:

Hydrologic Group:

FOR WASTEWATER DISPOSAL

FOR SOILS MAPPING

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole **TP-3** ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
		GRAY BROWN	
SANDY LOAM	FRIABLE	YELLOW BROWN	
		OLIVE GRAY BROWN	COMMON DISTINCT
REFUSAL IN LARGE ROCK OR BEDROCK			

Soil Classification
2/3 AIII/D
Profile Condition

Slope
%

Limiting Factor
13"

☒ Ground Water
☐ Restrictive Layer
☐ Bedrock
☐ Pit Depth

Soil Series Name:

Drainage Class:

Hydrologic Group:

Observation Hole **TP-4** ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
		DARK BROWN	
SANDY LOAM	FRIABLE	OLIVE GRAY BROWN	COMMON DISTINCT
		OLIVE GRAY	
REFUSAL IN LARGE ROCK OR BEDROCK			

Soil Classification
2/3 AIII/D
Profile Condition

Slope
%

Limiting Factor
1"

☒ Ground Water
☐ Restrictive Layer
☐ Bedrock
☐ Pit Depth

Soil Series Name:

Drainage Class:

Hydrologic Group:

FOR WASTEWATER DISPOSAL

FOR SOILS MAPPING

CHRISTOPHER COPPI

Christopher Coppi

403

JUNE 2, 2020

Site Evaluator / Soil Scientist Signature

SF/CSS *

Date

Town, City, Plantation
CUMBERLAND

Street, Road Subdivision
BLANCHARD ROAD EXTENSION

Owner's Name
ROSS ESTATES

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP 5 ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

0	Texture	Consistency	Color	Mottling
			DARK YELLOW-BROWN	
	SANDY LOAM			
10		FRIABLE		
			YELLOW BROWN	
				NONE EVIDENT
20				
30				
40				
50				

Soil Classification **2 AIII/C**
Profile Condition
Slope **33** %
Limiting Factor **33** "
☐ Ground Water
☒ Restrictive Layer
☐ Bedrock
☐ Pit Depth
Soil Series Name: Drainage Class: Hydrologic Group:

Observation Hole ☐ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

0	Texture	Consistency	Color	Mottling
10				
20				
30				
40				
50				

Soil Classification
Profile Condition
Slope %
Limiting Factor "
☐ Ground Water
☐ Restrictive Layer
☐ Bedrock
☐ Pit Depth
Soil Series Name: Drainage Class: Hydrologic Group:

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole ☐ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

0	Texture	Consistency	Color	Mottling
10				
20				
30				
40				
50				

Soil Classification
Profile Condition
Slope %
Limiting Factor "
☐ Ground Water
☐ Restrictive Layer
☐ Bedrock
☐ Pit Depth
Soil Series Name: Drainage Class: Hydrologic Group:

Observation Hole ☐ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

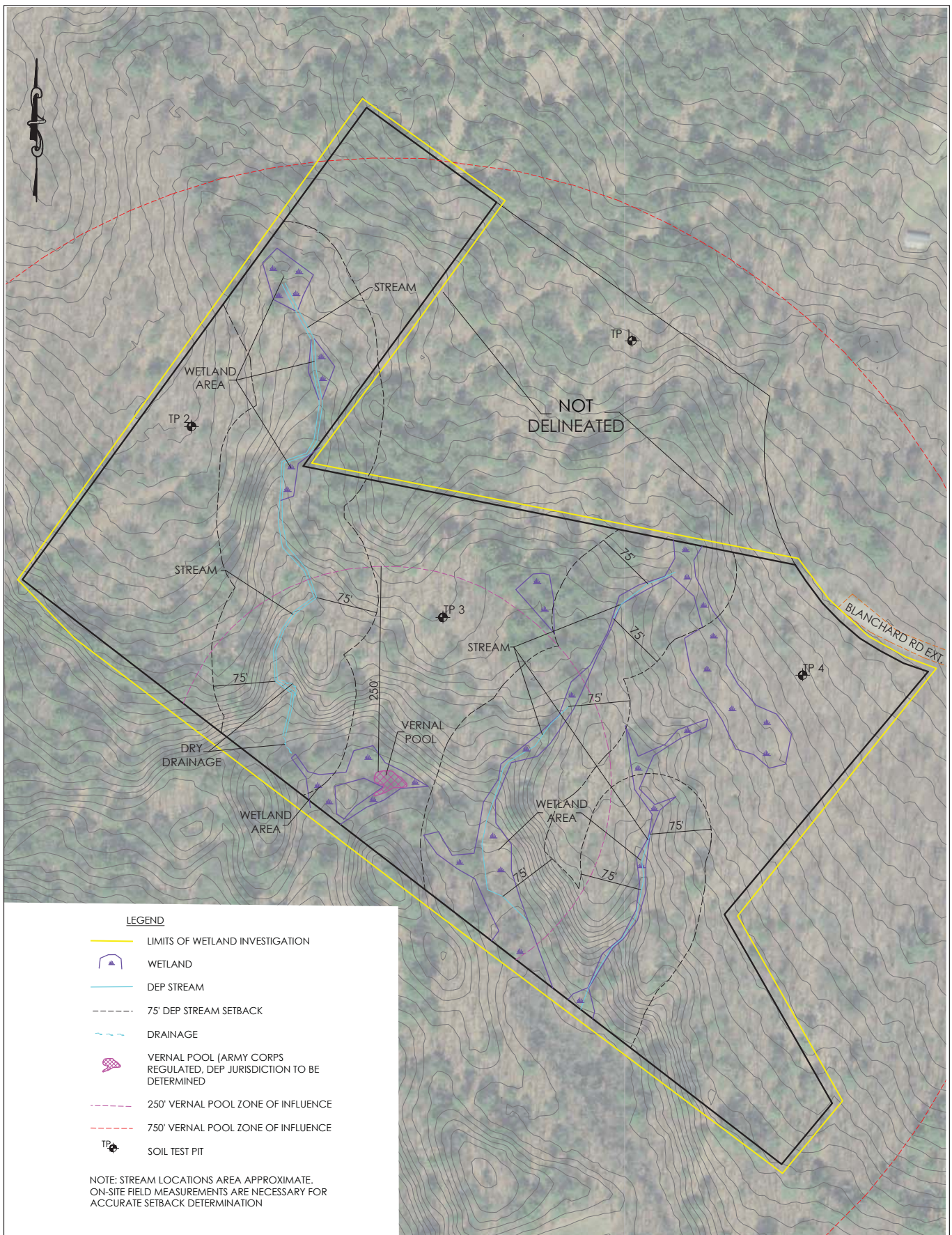
0	Texture	Consistency	Color	Mottling
10				
20				
30				
40				
50				

Soil Classification
Profile Condition
Slope %
Limiting Factor "
☐ Ground Water
☐ Restrictive Layer
☐ Bedrock
☐ Pit Depth
Soil Series Name: Drainage Class: Hydrologic Group:

Christopher V. Gagne
Site Evaluator / Soil Scientist Signature

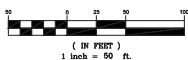
403 / 631
SE/CSS *

9/22/21
Date



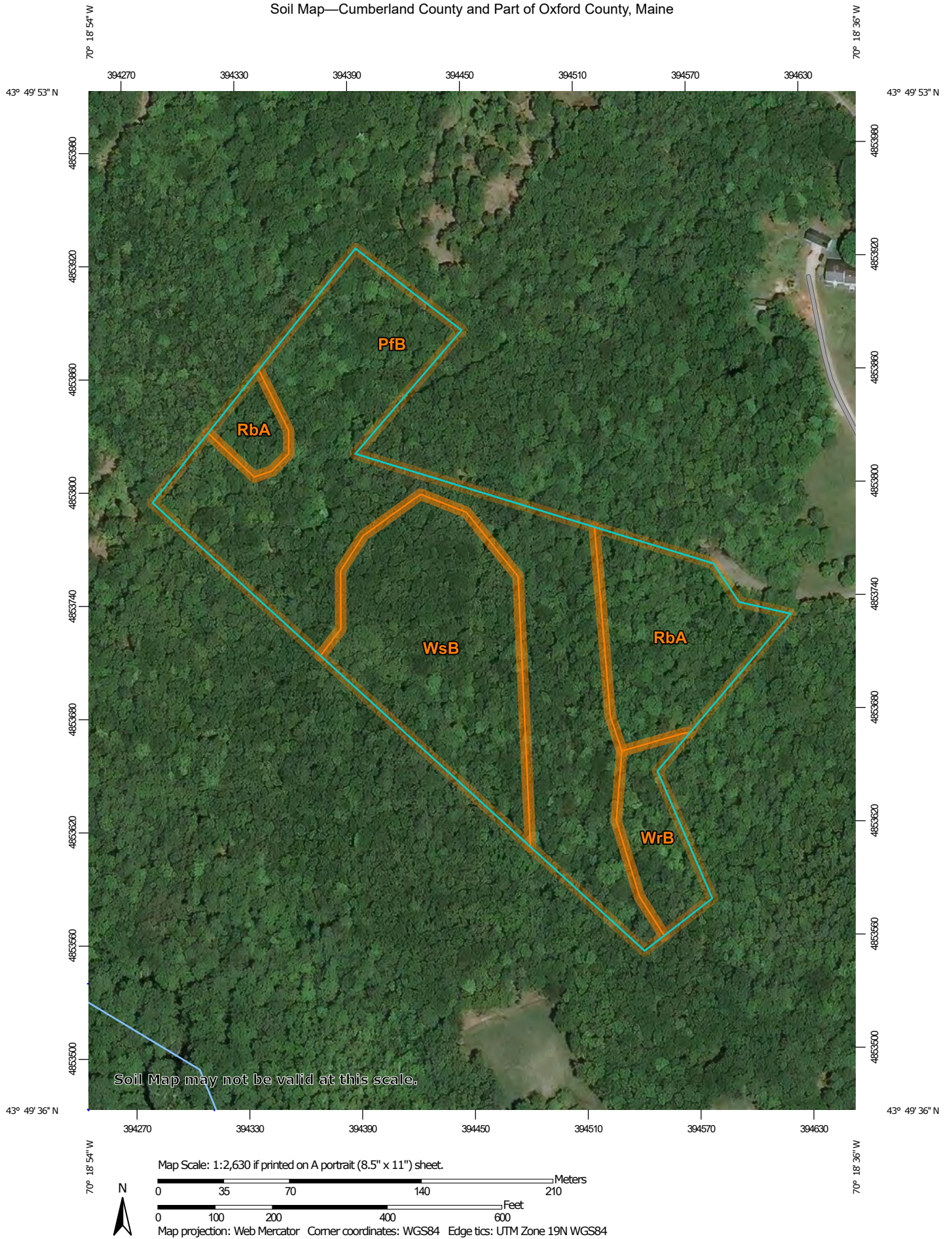
MAP COMPILED FROM:
 *TOWN OF CUMBERLAND TAX MAP
 *PORTION OF SURVEY PLAN PROVIDED BY OWNER
 *AERIAL PHOTOGRAPH FROM THE MAINE OFFICE OF GIS
 *2" TOPOGRAPHIC CONTOURS FROM THE MAINE OFFICE OF GIS
 *ON SITE LOCATIONS UTILIZING TRIMBLE GEO7X HANDHELD UNIT

GRAPHIC SCALE



DATE:	REVISIONS:	WETLAND DELINEATION PLAN PREPARED FOR NATE ROSS (N/F PIAMPIANO) BLANCHARD ROAD EXT CUMBERLAND, MAINE	 Albert Frick Associates, Inc. Environmental Consultants Gorham, Maine
Drawn By: B.J.		Checked By: C.C.	
Date: 5/8/2020		Scale: 1" = 50'	

Soil Map—Cumberland County and Part of Oxford County, Maine



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 17, Jun 5, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 7, 2019—Jul 2, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PfB	Paxton very stony fine sandy loam, 3 to 8 percent slopes	6.3	51.7%
RbA	Ridgebury fine sandy loam, 0 to 3 percent slopes	2.1	17.5%
WrB	Woodbridge fine sandy loam, 0 to 8 percent slopes	0.7	6.1%
WsB	Woodbridge very stony fine sandy loam, 0 to 8 percent slopes	3.0	24.7%
Totals for Area of Interest		12.1	100.0%

Cumberland County and Part of Oxford County, Maine

PfB—Paxton very stony fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: bljj

Elevation: 10 to 2,500 feet

Mean annual precipitation: 34 to 50 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 60 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Paxton and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Paxton

Setting

Landform: Drumlinoid ridges

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Interfluve, crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 2 inches: highly decomposed plant material

H1 - 2 to 8 inches: fine sandy loam

H2 - 8 to 20 inches: fine sandy loam

H3 - 20 to 65 inches: fine sandy loam

Properties and qualities

Slope: 3 to 8 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent

Depth to restrictive feature: 18 to 40 inches to densic material

Drainage class: Well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 30 to 42 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: C

Hydric soil rating: No

Minor Components

Tunbridge

Percent of map unit: 4 percent

Landform: Drumlinoid ridges

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Crest

Down-slope shape: Convex

Across-slope shape: Linear

Hydric soil rating: No

Hollis

Percent of map unit: 4 percent

Landform: Drumlinoid ridges

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Interfluvium, crest

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Colonel

Percent of map unit: 2 percent

Landform: Drumlinoid ridges, till plains

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Linear

Hydric soil rating: No

Woodbridge

Percent of map unit: 2 percent

Landform: Drumlinoid ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Concave

Across-slope shape: Linear

Hydric soil rating: No

Ridgebury

Percent of map unit: 2 percent

Landform: Drumlinoid ridges

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

Paxton, slopes >8%

Percent of map unit: 1 percent

Landform: Drumlinoid ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Nose slope

Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Data Source Information

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 17, Jun 5, 2020

Cumberland County and Part of Oxford County, Maine

RbA—Ridgebury fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: bljs

Elevation: 0 to 2,500 feet

Mean annual precipitation: 28 to 48 inches

Mean annual air temperature: 37 to 52 degrees F

Frost-free period: 80 to 195 days

Farmland classification: Not prime farmland

Map Unit Composition

Ridgebury and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ridgebury

Setting

Landform: Till plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Coarse-loamy lodgment till derived from mica schist

Typical profile

H1 - 0 to 6 inches: fine sandy loam

H2 - 6 to 18 inches: fine sandy loam

H3 - 18 to 65 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 10 to 20 inches to densic material

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: C/D

Hydric soil rating: Yes

Minor Components

Colonel

Percent of map unit: 6 percent
Landform: Drumlinoid ridges, till plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Peru

Percent of map unit: 4 percent
Landform: Till plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Sebago

Percent of map unit: 3 percent
Landform: Bogs
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Whitman

Percent of map unit: 1 percent
Landform: Till plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Rock outcrop

Percent of map unit: 1 percent
Landform: Till plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Data Source Information

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 17, Jun 5, 2020

Cumberland County and Part of Oxford County, Maine

WrB—Woodbridge fine sandy loam, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: blkf

Elevation: 0 to 3,500 feet

Mean annual precipitation: 34 to 50 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 160 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Woodbridge and similar soils: 86 percent

Minor components: 14 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Woodbridge

Setting

Landform: Till plains

Landform position (two-dimensional): Shoulder, backslope

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Coarse-loamy lodgment till derived from mica schist

Typical profile

H1 - 0 to 3 inches: fine sandy loam

H2 - 3 to 20 inches: fine sandy loam

H3 - 20 to 65 inches: fine sandy loam

Properties and qualities

Slope: 0 to 8 percent

Depth to restrictive feature: 16 to 36 inches to densic material

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 18 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Very low (about 2.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C

Hydric soil rating: No

Minor Components

Colonel

Percent of map unit: 6 percent
Landform: Drumlinoid ridges, till plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Paxton

Percent of map unit: 3 percent
Landform: Till plains
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Nose slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Ridgebury

Percent of map unit: 3 percent
Landform: Till plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Berkshire

Percent of map unit: 2 percent
Landform: Till plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Nose slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Data Source Information

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 17, Jun 5, 2020

Cumberland County and Part of Oxford County, Maine

WsB—Woodbridge very stony fine sandy loam, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: blkh

Elevation: 10 to 2,500 feet

Mean annual precipitation: 34 to 49 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Woodbridge and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Woodbridge

Setting

Landform: Till plains

Landform position (two-dimensional): Shoulder, backslope

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 2 inches: highly decomposed plant material

H1 - 2 to 5 inches: fine sandy loam

H2 - 5 to 22 inches: fine sandy loam

H3 - 22 to 65 inches: fine sandy loam

Properties and qualities

Slope: 0 to 8 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent

Depth to restrictive feature: 16 to 36 inches to densic material

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 18 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: C

Hydric soil rating: No

Minor Components

Colonel

Percent of map unit: 8 percent
Landform: Drumlinoid ridges, till plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Ridgebury

Percent of map unit: 3 percent
Landform: Till plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Paxton

Percent of map unit: 3 percent
Landform: Till plains
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Crest, nose slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Woodbridge, slopes >8%

Percent of map unit: 1 percent
Landform: Till plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Data Source Information

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 17, Jun 5, 2020



JANET T. MILLS
GOVERNOR

MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333

KIRK F. MOHNEY
DIRECTOR

September 22, 2021

Ms. Melissa C. Archbell
Sitelines
119 Purinton Road
Suite 4
Brunswick, ME 04011

Project: MHPC #1593-21

Ross Estate, Blanchard Rd. Ext, Map R08, Lot 68I
Proposed 3 Lot Subdivision

Town: Cumberland, ME

Dear Ms. Archbell:

In response to your recent request, I have reviewed the information received September 17, 2021 to initiate consultation on the above referenced project. It is our assumption that this request is being made in conformance with Town of Cumberland municipal requirements, and that it is not a federal undertaking subject to Section 106 of the National Historic Preservation Act of 1966, as amended.

There are no National Register of Historic Places listed or known eligible properties in the project area's area of potential effect. In addition, the house located at 372 Blanchard Road has not been previously evaluated for its National Register eligibility.

The development site is not considered to be sensitive for prehistoric or historic archaeological resources.

If you have any questions regarding this matter, please contact me at 207-287-3811 or kirk.mohney@maine.gov.

Sincerely,

Kirk F. Mohney
State Historic Preservation Officer



STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
177 STATE HOUSE STATION
AUGUSTA, MAINE 04333

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

September 27, 2021

Melissa Archbell
Sitelines
119 Purinton Road, Suite A
Brunswick Landing
Brunswick, ME 04011

Via email: marchbell@sitelinespa.com

Re: Rare and exemplary botanical features in proximity to: #24185-9, Ross Estates Subdivision, Blanchard Road Extension, Cumberland, Maine

Dear Ms. Archbell:

I have searched the Maine Natural Areas Program's Biological and Conservation Data System files in response to your request received September 17, 2021 for information on the presence of rare or unique botanical features documented from the vicinity of the project in Cumberland, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area. This lack of data may indicate minimal survey efforts rather than confirm the absence of rare botanical features. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed.

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as well as recently field-verified information. While historic records have not been documented in several years, they may persist in the area if suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

MOLLY DOCHERTY, DIRECTOR
MAINE NATURAL AREAS PROGRAM
BLOSSOM LANE, DEERING BUILDING



PHONE: (207) 287-804490
WWW.MAINE.GOV/DACF/MNAP

The Maine Natural Areas Program (MNAP) is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. MNAP welcomes coordination with individuals or organizations proposing environmental alteration or conducting environmental assessments. If, however, data provided by MNAP are to be published in any form, the Program should be informed at the outset and credited as the source.

The Maine Natural Areas Program has instituted a fee structure of \$75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for \$150.00 for two hours of our services.

Thank you for using MNAP in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,

Lisa St. Hilaire

Lisa St. Hilaire | Information Manager | Maine Natural Areas Program
207-287-8044 | lisa.st.hilaire@maine.gov

Rare and Exemplary Botanical Features within 4 miles of Project: #4185-9, Ross Estates Subdivision, Blanchard Road Extension, Cumberland, Maine

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
Engelmann's Spikerush						
	PE	SH	G4G5	1916-08-31	2	Open wetland, not coastal nor rivershore (non-forested, wetland)
Fern-leaved False Foxglove						
	SC	S3	G5	1902-09-02	13	Dry barrens (partly forested, upland),Hardwood to mixed forest (forest, upland)
Great Blue Lobelia						
	PE	SX	G5	1905-09	3	Forested wetland,Non-tidal rivershore (non-forested, seasonally wet)
Horned Pondweed						
	SC	S2	G5	1913-09-13	9	Tidal wetland (non-forested, wetland)
Marsh Milkwort						
	PE	SH	G5T4	1903-08-18	1	Dry barrens (partly forested, upland),Open wetland, not coastal nor rivershore (non-forested, wetland)
Oak - Hickory Forest						
	<null>	S1	G4G5	2014-08-21	5	Hardwood to mixed forest (forest, upland)
Pocket Swamp						
	<null>	S2	G5	2017-07-27	24	Forested wetland,Hardwood to mixed forest (forest, upland)
Rattlesnake Hawkweed						
	E	S1	G5T4Q	1909-07	1	Dry barrens (partly forested, upland)
Smooth Winterberry Holly						
	SC	S3	G5	2017-08-23	45	Forested wetland
Spotted Pondweed						
	T	S1	G5	2016-06-22	3	Open water (non-forested, wetland)
Spotted Wintergreen						
	T	S2	G5	2009-07-26	30	Conifer forest (forest, upland),Hardwood to mixed forest (forest, upland)
Upper Floodplain Hardwood Forest						

Rare and Exemplary Botanical Features within 4 miles of

Project: #4185-9, Ross Estates Subdivision, Blanchard Road Extension, Cumberland, Maine

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
<null>		S3	GNR	2017-05-17	18	Forested wetland
Water-plantain Spearwort						
PE		SH	G4	1903-07-29	2	Open water (non-forested, wetland)
Wild Leek						
SC		S3	G5	2017-05-17	47	Hardwood to mixed forest (forest, upland),Forested wetland

Conservation Status Ranks

State and Global Ranks: This ranking system facilitates a quick assessment of a species' or habitat type's rarity and is the primary tool used to develop conservation, protection, and restoration priorities for individual species and natural habitat types. Each species or habitat is assigned both a state (S) and global (G) rank on a scale of 1 to 5. Factors such as range extent, the number of occurrences, intensity of threats, etc., contribute to the assignment of state and global ranks. The definitions for state and global ranks are comparable but applied at different geographic scales; something that is state imperiled may be globally secure.

The information supporting these ranks is developed and maintained by the Maine Natural Areas Program (state ranks) and NatureServe (global ranks).

Rank	Definition
S1 G1	Critically Imperiled – At very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
S2 G2	Imperiled – At high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
S3 G3	Vulnerable – At moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
S4 G4	Apparently Secure – At fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
S5 G5	Secure – At very low risk of extinction or elimination due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.
SX GX	Presumed Extinct – Not located despite intensive searches and virtually no likelihood of rediscovery.
SH GH	Possibly Extinct – Known from only historical occurrences but still some hope of rediscovery.
S#S# G#G#	Range Rank – A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem.
SU GU	Unrankable – Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
GNR SNR	Unranked – Global or subnational conservation status not yet assessed.
SNA GNA	Not Applicable – A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities (e.g., non-native species or ecosystems).
Qualifier	Definition
S#? G#?	Inexact Numeric Rank – Denotes inexact numeric rank.
Q	Questionable taxonomy that may reduce conservation priority – Distinctiveness of this entity as a taxon or ecosystem type at the current level is questionable. The “Q” modifier is only used at a global level.
T#	Intraspecific Taxon (trinomial) – The status of intraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank.

State Status: Endangered and Threatened are legal status designations authorized by statute. Please refer to MRSA Title 12, §544 and §544-B.

Status	Definition
E	Endangered – Any native plant species in danger of extinction throughout all or a significant portion of its range within the State or Federally listed as Endangered.
T	Threatened – Any native plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range in the State or Federally listed as Threatened.
SC	Special Concern – A native plant species that is rare in the State, but not rare enough to be considered Threatened or Endangered.
PE	Potentially Extirpated – A native plant species that has not been documented in the State in over 20 years, or loss of the last known occurrence.

Element Occurrence (EO) Ranks: Quality assessments that designate viability of a population or integrity of habitat. These ranks are based on size, condition, and landscape context. Range ranks (e.g., AB, BC) and uncertainty ranks (e.g., B?) are allowed. The Maine Natural Areas Program tracks all occurrences of rare plants and natural communities/ecosystems (S1-S3) as well as exemplary common natural community types (S4-S5 with EO ranks A/B).

Rank	Definition
A	Excellent – Excellent estimated viability/ecological integrity.
B	Good – Good estimated viability/ecological integrity.
C	Fair – Fair estimated viability/ecological integrity.
D	Poor – Poor estimated viability/ecological integrity.
E	Extant – Verified extant, but viability/ecological integrity not assessed.
H	Historical – Lack of field information within past 20 years verifying continued existence of the occurrence, but not enough to document extirpation.
X	Extirpated – Documented loss of population/destruction of habitat.
U	Unrankable – Occurrence unable to be ranked due to lack of sufficient information (e.g., possible mistaken identification).
NR	Not Ranked – An occurrence rank has not been assigned.

Visit the Maine Natural Areas Program website for more information
<http://www.maine.gov/dacf/mnap>





September 17, 2021

4185-9

John Perry
Environmental Review Coordinator
Maine Department of Inland Fisheries and Wildlife
284 State Street, 41 SHS
Augusta, Maine 04333-0041
<via email>

**Re: Significant Wildlife and Fisheries Resources
Ross Estates, Blanchard Road Extension, Cumberland
Tax Map R08, Lot 68I**

Dear Mr. Perry:

On behalf of Stonewood Land, LLC, Sitelines, PA is preparing a Subdivision Application to the Town of Cumberland for a proposed 3-lot residential subdivision located on Blanchard Road Extension in Cumberland, Maine. The project is located at Tax Map R08, Lot 68I on the Town of Cumberland Tax Maps.

Please review the attached USGS Map and Tax Map and consult your database for suspected significant wildlife or fisheries resources within, or in the vicinity of, the outlined area.

Please contact me with any questions or if you require additional information. Thank you for your assistance with this project.

Very truly yours,

Melissa C. Archbell

Melissa C. Archbell, P.E.
Project Engineer

Enclosures

**DECLARATION OF PROTECTIVE COVENANTS
AND COMMON EASEMENTS FOR
THE ROSS ESTATES SUBDIVISION
TOWN OF CUMBERLAND, COUNTY OF CUMBERLAND, STATE OF MAINE
BY
STONEWOOD LAND, LLC**

THIS DECLARATION dated this ____ day of _____, 2021, by STONEWOOD LAND, LLC, a Maine limited liability company with a mailing address of 8 Roberts Road, Falmouth, Maine 04105(hereinafter referred to as the “Declarant”).

WITNESSETH:

WHEREAS, the Declarant owns certain real property in the Town of Cumberland, County of Cumberland and State of Maine (the “Property”), as described on **Exhibit A** attached hereto and as delineated on a plan entitled “Subdivision Plan, Conservation Subdivision, Ross Estates, Blanchard Road Extension, Cumberland, Maine”, prepared for the Declarant by Sitelines PA and dated September 28, 2021, recorded in the Cumberland County Registry of Deeds in Plan Book ____, Page ____ (the “Plan”), which creates three (3) lots (Lots A through C inclusive shall hereinafter be referred to individually as a “Lot” and collectively as the “Lots”); and

WHEREAS, Declarant desires to develop and improve the Property as a residential community of single family homes in accordance with the Plan; and

WHEREAS, Declarant desires further to subject the Property to protective covenants and common easements as set forth herein in order to assure the quality standards for the orderly development of the Property as a residential community of single family homes and to promote the interest and welfare of each owner of a part of the Property;

NOW, THEREFORE, Declarant hereby declares that the Property is and shall be owned, occupied, improved, transferred, leased and otherwise used and disposed of subject to the protective covenants and common easements set forth herein, all of which are declared to be in furtherance of a uniform scheme of mutual equitable servitudes upon each and every portion thereof, in favor of each and every other portion thereof, and to create reciprocal rights and privity of contract and estate between all persons acquiring or owning an interest in any portion thereof, which protective covenants and common easements shall be determined to run with the land and be a burden and benefit upon and to, and be enforceable by, all persons having any interest in any portion of the Property, their heirs, successors and assigns.

**ARTICLE I
DEFINITIONS.**

1. Adjacent Parcels: “Adjacent Parcels” shall mean and refer to those two (2) parcels of land located on Blanchard Road Extension, Section C, a private right of way, that are identified on the Plan as “Nathaniel Ross” and “Seth J. Yoving”, which are adjacent to the Property.

2. Association: “Association” shall mean and refer to The Ross Estates Homeowners Association, its successors and assigns, a non-profit, non-stock Maine corporation, to be formed by Declarant pursuant to the terms of Article V below.
3. Board: “Board” or “Board of Directors” shall mean the duly elected Board of Directors of the Association.
4. Building: “Building” shall mean and refer to any Dwelling, garage, barn, storage shed, garden shed, pool house, green house or other enclosed structure now or hereafter constructed on a Lot.
5. Common Elements: The Roads, Trails, Open Space, Easement Areas and Remaining Land are sometimes hereinafter collectively referred to as the “Common Elements.”
6. Common Expenses: “Common Expenses” shall mean and refer to expenditures made by or financial liabilities of the Association, together with any allocations to capital or other reserve accounts.
7. Declarant: “Declarant” shall mean and refer to STONEWOOD LAND, LLC, its successors and assigns.
8. Dwelling: “Dwelling” shall mean and refer to any Building designed and intended for use and occupancy as a single family residence, together with any attached garage or attached car port.
9. Easement Areas: “Easement Areas” shall mean and refer to all of the easement areas shown on the Plan that burden any Lot or Lots and that benefit the Association and all of the Lots, including without limitation access and utility easements, sign and landscape easements, sight line easements, drainage easements, and undisturbed treatment easements, and all improvements on, in, across or under such easement areas including signage, landscaping, storm water drainage fixtures and equipment.
10. Improvement: “Improvement” shall mean and refer to anything now or hereafter constructed on a Lot that is not a Building, such as a driveway, sidewalk, patio, pergola, fence, stone wall, lamp post, free-standing solar array, wind turbine, and tree house.
11. Laws: “Laws” shall mean and refer to all laws, ordinances, regulations, codes and directives by any federal, state or local governmental entity, agency or department that are applicable to the Property, the development of the Property, and/or the construction, maintenance, repair and replacement of any Building and/or Improvement thereon (including, without limitation, the zoning laws of the Town of Cumberland and the applicable building codes).
12. Lot: “Lot” shall mean and refer to the Lots numbered A through C inclusive on the Plan.
13. Member: “Member” shall mean and refer to those persons entitled to membership in the Association as determined by the Bylaws of the Association and as set forth herein.
14. Open Space: “Open Space” shall mean and refer to the open space area shown on the Plan.

15. Owners: “Owners” or in the singular, “Owner”, shall mean and refer to the record owner or owners of fee simple title in and to any Lot, and shall include the Declarant so long as it owns any Lot or any other portion of the Property, but shall not include any person or legal entity owning an interest merely as security for an obligation.
16. Remaining Land: “Remaining Land” shall mean and refer to any land that is not the Roads, Trails, Easement Areas, Open Space or a Lot and all improvements thereon, including without limitation the sidewalks, curbing, lighting, and storm water drainage fixtures and equipment, all as shown on the Plan.
17. Roads: “Roads” shall mean and refer to all roads shown on the Plan.
18. Trails: “Trails” shall mean and refer to the recreation trail system shown on the Plan.

ARTICLE II

PROTECTIVE COVENANTS AND RESTRICTIONS.

It is the intention and purpose of this Declaration to preserve, so far as practicable, the natural beauty of the Property, to encourage the erection of attractive Buildings and Improvements on the Lots in appropriate locations, and to ensure that all Buildings and Improvements are of a quality of design, workmanship and materials that is “first-class” and is otherwise compatible and harmonious with the natural setting of the Property and the other Buildings and Improvements within the residential development. Therefore, each conveyance by Declarant, its successors and assigns, of any Lot, and all subsequent conveyances of any Lot, whether directly or by operation of law, shall be subject to the following:

1. No Commercial Uses: Subject to the rights of the Declarant to develop and sell the Lots and such other rights of the Declarant as are set forth in this Declaration, each Lot shall be used only as a private single-family residence, and no commercial enterprise of any nature or description shall be conducted or maintained on any portion of the Property, except that a Dwelling may be used for a home office for telecommuting purposes by the Owners of such Dwelling provided that no customer, client or employee visits are made to the Lot incident to such home office use. For the purposes of this Declaration, leasing all or any portion of a Dwelling for residential use for a term of six (6) months or more shall be considered a residential use; however, leasing all or any portion of a Dwelling for residential use for a term of less than six (6) months (including, but not limited to, Airbnb, VRBO, Homeaway or other similar short term leasing) shall be considered a commercial use in violation of this Declaration.

2. Buildings:

(a) Only one Dwelling shall be constructed or kept on any Lot. The Dwelling shall be the only Buildings on a Lot that can be used for residential purposes. Each Dwelling shall be constructed as follows:

(i) Each Dwelling shall be constructed on a solid concrete foundation.

- (ii) The total livable area above the foundation of the Dwelling shall be not less than 2,400 square feet, excluding any garage, breezeway, exterior porches and any open decks.
- (iii) Each Dwelling must have a garage, which shall have a design and materials similar to the Dwelling and shall have either two (2) or three (3) automobile stalls/bays.
- (iv) The roof of each Dwelling shall be covered with asphalt or fiberglass architectural shingles, white cedar shingles, slate shingles, solar tiles and/or other high-quality roofing material.
- (v) The exterior siding of each Dwelling shall consist of brick, stone, clapboard, cedar shingles and/or other high-quality siding, except that the exterior siding of any breezeway and garage may also use vertical wood that is painted, stained or otherwise professionally treated.
- (vi) All driveways and turnaround areas must be paved with asphalt, concrete, paving tiles or stone dust. Reclaimed asphalt gravel is not permitted. Driveways must have culverts for water drainage through any ditch or swale and culvert ends must be either (a) beveled and surrounded by stone rip rap such that no portion of the exterior of the culvert is readily visible or (b) straight and surrounded by a wall constructed of cobbles or rough stone such that the culvert end is flush with the stone wall and no portion of the exterior of the culvert is readily visible. An Owner shall not build or regrade so as to interfere with the natural drainage of surface water, if any, without installing suitable culverts or other drainage facilities in accordance with the foregoing specifications, adequate to handle seasonal water runoff, and so designed as to discharge surface water from the Lot in the same area and direction as would have naturally occurred before such improvements.
- (vii) Each Dwelling shall be constructed with a fire protection sprinkler system which has been approved by the Town of Cumberland Fire Department or its designee, and the Owner shall maintain said system in good condition and working order, and otherwise in compliance with all applicable Laws, at all times. The Association shall have no liability for any failure of an Owner to comply with this requirement. All Owners shall indemnify the Association against any expense or liability resulting from their failure to so comply.
- (viii) Each Dwelling shall be constructed with a septic system which has been approved by the Code Enforcement Officer of the Town of Cumberland, and the Owner shall maintain said system in good condition and working order, and otherwise in compliance with all applicable Laws, at all times. The Association shall have no liability for any failure of an Owner to comply with this requirement. All Owners shall indemnify the Association against any expense or liability resulting from their failure to so comply.
- (ix) The color of the paint and/or stain used on any Building or other Improvement shall be approved, in writing, by the Declarant or, if applicable, by the Board.

- (x) All Buildings and Improvements erected on any Lot shall be located within the limits of the building envelope as shown on the Plan.
- (xi) The following are additional restrictions on each Lot: (1) an Owner shall not install any television or radio antennae on any Building on his/her Lot or elsewhere on his/her Lot, except that an Owner may install on the outside of any Dwelling or Guest House on his/her Lot one (1) satellite dish antenna under eighteen (18) inches in diameter (e.g., such as that used for DirecTV) provided it is not visible from any Road; (2) an Owner shall not install any mail and/or newspaper receptacles of any kind on his/her Lot; and (3) no trash receptacles and propane tanks shall be visible from any road or other Lot on the Property

(b) Any structure constructed on a Lot must be substantially complete, including two coats of paint, stain or varnish on any exterior wood surface and the site grading, loaming and sodding/seeding of grass, within twelve (12) months of commencement of construction; the completed site must be graded so that no standing water accumulates in any portion of the Lot at any time.

(c) Each Owner shall comply with “The Maine Erosion and Sediment Control Handbook For Construction: Best Practices,” Cumberland County Soil and Water Conservation District, Department of Environmental Protection, March 1991, and as currently revised.

3. Trees: Only the Board shall have the authority to remove, trim, or otherwise cut any trees on the common property of the Association, its roadways and its easements. No Lot may be clear-cut of its trees or used for commercial forestry purposes. To the greatest extent possible, existing trees shall not be cut or removed except for reasons of safety, for the welfare of the remaining stand of trees, to create or improve a dwelling site, or to provide, improve, or preserve a view. Any trees permitted to be cut or removed hereunder shall be cut or removed in strict compliance with the ordinances of the Town of Cumberland.

4. Division of Lots: No Lot may be further divided unless such division is approved by the Town of Cumberland and the Board.

5. Chemicals: To maintain the natural condition of the wetlands and the area surrounding the Property, all lawns, shrubs, trees and gardens shall be fertilized only with organic fertilizer. Salts and chemical ice melt solutions may be used only in the immediate vicinity of the residence on each Lot (e.g., exterior steps). Driveways shall be sanded.

6. Signage: No sign of any nature or description shall be displayed or placed on any Lot, except for signs with a total surface area that does not exceed two (2) square feet indicating the name of the occupants and the street name and number of the Lot and except for a temporary “for sale” sign referring only to such Lot, such “for sale” sign not to exceed four (4) square feet. Notwithstanding the foregoing, signs of a political nature may be temporarily placed on a Lot, provided that such signs are promptly removed after the election or referendum to which they relate.

7. Construction: All Buildings and landscaping shall comply with the following, in addition to the requirements in paragraph 2 above:

- (a) All Lots shall be attractively and appropriately landscaped after completion of construction of the residence or any other Buildings if disturbed as a result of the construction of such other Buildings.
- (b) No residence shall be occupied until substantially complete and only a residence shall be occupied (i.e., no garages or storage sheds shall be occupied, even temporarily).
- (c) Any damage to sidewalks, roads, curbing, utility lines, drainage swales and landscaping caused by any Owner or his/her contractor shall be promptly repaired at the sole cost and expense of such Owner.
- (d) No light which is unreasonably bright or causes unreasonable glare shall be emitted from any Lot; no sound which is unreasonably loud or annoying (including, without limitation, speakers, horns, whistles, bells or other sound devices, except security and fire alarm devices used to protect the Lot) shall be emitted from the Lot; and no odors shall be emitted from any Lot which are noxious or offensive to others.
- (e) Fuel tanks containing fuel for heating purposes only shall be located in the basement of the building or buried on the Lot in strict compliance with all laws and regulations. Propane tanks not located in the basement or buried shall be screened, either naturally or in some other attractive manner, so as not to be visible from roads or other Lots, and the screen shall be approved by the Board.
- (f) All utility lines leading from the road to any structure on any Lot or between structures on a Lot or between structures on adjoining Lots must be located underground to the fullest extent reasonably possible.
- (g) No Owner may erect any fence on any Lot without the prior approval of the Board.

8. Rubbish and Debris: Except during the initial construction of a residence, rubbish and debris shall be stored between pickups in the garage or storage shed (if any) in sanitary receptacles with sealing covers or as required by Town ordinances or regulations and shall be placed curbside for pickup in such receptacles with the covers placed tightly over the receptacles and promptly re-stored in a garage or storage shed after rubbish pickup.

9. Damage of Destruction: Any Building on any Lot that is destroyed or damaged in whole or in part by fire, windstorm or other casualty promptly must be rebuilt or all debris removed and the affected portion of the Lot restored to its natural condition without delay. Notwithstanding the foregoing, in the event that such rebuild or restoration is to be effectuate through the use of insurance proceeds, then such rebuild or restoration shall proceed promptly and without delay upon the Owner's receipt of such insurance proceeds.

10. Compliance with Laws: Each Lot and all Buildings and Improvements thereon shall be constructed, maintained and used, at all times, in accordance with all applicable Laws, including, without limitation, the terms and conditions imposed by the Town of Cumberland Planning Board in connection with the subdivision approval for the Property and reflected on the Plan, and nothing contained in this Declaration shall in any way supersede, alter or amend the obligations of every Owner to comply with such Laws at all times.

11. Animals: No swine, livestock or other animals shall be kept on a Lot or otherwise on the Property, except household pets of the kind and number normally housed in a residence. Poultry (except for roosters and other fowl that create nuisance noises) may be kept on a Lot only with the prior written consent of the Board. There shall be no exterior pet fencing or caging. No boarding of dogs, cats or other household pets shall be conducted on a Lot. Only one (1) dog house shall be permitted on each Lot, to be maintained by each Owner, provided, however, that such dog house shall not be of unreasonable size and must be located on the Lot so as not to be visible from the road on which the Lot has frontage.

12. Prohibited Vehicles: No commercial vehicles, including but not limited to tractor-trailers, box trucks, vans, commercial pickup trucks and other similar vehicles shall be kept, maintained, stored, or serviced on any Lot or the Property, except than an Owner may keep or otherwise maintain a commercial vehicle utilized in that Owner's business on such Owner's Lot. Notwithstanding the foregoing general prohibition, commercial vehicles may be temporarily maintained on Lots or the Property during the following circumstances: (a) development and sale of the Lots by the Declarant; (b) construction of a Dwelling or other Building by an Owner or their agents, representatives, contractors and subcontractors; (c) inspection, maintenance, repair or replacement of any Lot, Building, Dwelling or any part or appurtenance thereto by an Owner or their agents, representatives, contractors and subcontractors. No junk automobiles or other vehicles that do not display a current State of Maine motor vehicle inspection sticker, nor any part or portion of such vehicles, may be kept or maintained on the Property unless parked in a garage or storage shed.

13. Recreational Vehicles: Campers, motor homes, trailers, snowmobiles, all-terrain vehicles and other such vehicles (whether or not operable) and boats (whether powered, sail or otherwise) may be parked, kept or stored on a Lot but only if parked in an enclosed garage or storage shed.

14. Maintenance of Lots, Buildings and Improvements: Each Lot and all Buildings and Improvements constructed thereon shall be maintained by Owner in good condition and repair so as to present a neat and attractive exterior appearance at all times. Supplementing the foregoing, no unsightliness shall be permitted upon any of the Lots.

15. Mobile Homes. Mobile or manufactured homes and other similar items are expressly prohibited.

16. Miscellaneous:

(a) No activity shall be permitted on any Lot, nor shall anything be done thereon, which may be or become an annoyance or nuisance to the neighborhood.

(b) Declarant reserves to itself, its successors and assigns, the exclusive right to erect, place and maintain such facilities in or upon any portion of the Property owned by Declarant as in its sole discretion may be necessary or convenient while selling the Lots or portions thereof, selling or constructing residences and other improvements upon the Property. Such facilities shall include, but are not limited to, sales and construction offices, storage areas, model units, signs, and portable toilet facilities.

ARTICLE III

DURATION.

The protective covenants, common easements and other provisions of this Declaration as set forth herein and as may be amended from time to time, shall run with the land and burden the Property and shall inure to the benefit of and be enforceable by the Declarant, and any other Owner of any portion of the Property, their respective legal representatives, heirs, successors or assigns, for a term of thirty (30) years from the date this Declaration is recorded at the Cumberland County Registry of Deeds, after which time all of said provisions shall be automatically extended for successive periods of five (5) years unless an instrument signed by the Owners of record of two-thirds or more of the Lots has been recorded at the Cumberland County Registry of Deeds, agreeing to terminate this Declaration as of a specific date.

ARTICLE IV **DECLARANT'S RIGHTS.**

The conveyance of the Lots to Owners shall be subject to the following rights reserved by the Declarant until completion of the construction, marketing and sale of all Lots:

1. To change the size, number and location of Lots and other improvements and the size, layout, and location of any Lot (a) owned by the Declarant, (b) for which a Purchase and Sale Agreement has not been executed by the Declarant or (c) with respect to which the Purchaser is in default under a Purchase and Sale Agreement. The foregoing change or changes shall be effective upon the recording by the Declarant of an amendment to this Declaration, no other signatures being necessary on such amendment, and/or the recording by the Declarant of an amended subdivision plan indicating the changes made.

2. To locate on the Property, even though not depicted on the Plan, and grant and reserve easements and rights of way for the installation, maintenance, repair, replacement and inspection of (i) utility lines, pipes, conduits, wires and other facilities for the provision of water, sewer, electric, gas, telephone, cable, data and other communication services, and (ii) stormwater facilities;

3. To connect with and make use of utility lines, pipes, conduits, wires and other facilities located on the Property for construction and sales purposes, provided that the Declarant shall be responsible for the cost of service so used;

4. To use the roads shown on the Plan for ingress and egress to the Property or any portion thereof for all purposes including, but not limited to development and construction of a residential subdivision and use the Property for the storage of materials used in the construction of the residences and improvements on the Lots and infrastructure on the Property and equipment used in the completion of the project;

5. To install and maintain signs and lighting for marketing and sales purposes;

6. To grant to any Adjacent Parcel a non-exclusive and perpetual right and easement on, over and across the Roads for all purposes of a right-of-way to benefit the Adjacent Parcel, which right and easement shall include the right of ingress and egress by foot or by vehicle from Peabody Road to the Adjacent Parcel and the right to construct, install, use, repair, maintain and replace below ground any and all utility lines, pipes, conduits and wires, including, without limitation, those necessary for

the provision of water, sewer, electric, gas, telephone, cable, data and other communication services, including the right to enter the easement area at any time and from time to time with pedestrians, motor vehicles and equipment to exercise the rights reserved pursuant to this easement, and to determine and assess a fair and equitable contribution to the Common Expenses for such easement; and

7. To do all things reasonably necessary to facilitate the development of the Property and the marketing and sale of the Lots.

ARTICLE V **HOMEOWNERS ASSOCIATION.**

On or about the date of execution and recording of this Declaration, there will be formed The Ross Estates Homeowners Association, a non-profit, non-stock corporation organized under the laws of the State of Maine (the "Association"). Each Owner of a Lot, including the Declarant prior to the conveyance of each Lot, shall automatically become and be a member of the Association as long as said Owner continues as record owner of a Lot. Upon termination of the interest of an Owner in a Lot, the Owner's membership and any interest in the Association shall automatically terminate and transfer and inure to the next successive record owner of the Lot. Each Owner shall be bound by the Bylaws of the Association, as the same may be amended from time to time, and each Owner shall comply strictly with such Bylaws. No holder of a mortgage on a Lot (other than the Declarant) shall be considered as an Owner or member of the Association unless and until such holder shall have acquired title to such Lot by foreclosure or deed in lieu of foreclosure.

1. Powers and Duties of the Association: The Association shall have all of the powers that may be exercised in the State of Maine by a nonprofit mutual benefit corporation, including, without limitation, the following specific powers and duties:

- (a) To maintain the Common Elements;
- (b) To improve, maintain, and repair the roads shown on the Plan, including re-surfacing when necessary, snow plowing, snow removal, and sanding;
- (c) To accept an assignment of Declarant's rights and obligations pertaining to the Common Elements or as otherwise provided herein or as otherwise agreed to by Declarant and the Association;
- (d) To adopt and amend budgets for revenues, expenditures and reserves; to assess and collect Association fees and assessments from Owners; to impose charges for late payment of Association fees and assessments;
- (e) To establish reasonable rules and regulations for the use and maintenance of the Property and methods and procedures for ensuring compliance with this Declaration;
- (f) To hire and terminate employees, agents and independent contractors; to make contracts and incur liabilities; to enter into a contract with a trash removal company for servicing the Lots if public trash removal is unavailable, a snow plowing contract, or any other service contracts as are reasonably necessary for the Association to uphold its maintenance obligations of the Common Elements;

- (g) To perform an annual inspection of the stormwater facilities on the Property to ensure that they are performing in accordance with the requirements of the Maine Department of Environmental Protection;
- (h) To obtain insurance including but not limited to liability of directors and officers, casualty, premises liability, motor vehicle and worker's compensation;
- (i) To acquire, own and maintain equipment (including vehicles), tools and materials necessary to carry out the duties set forth above;
- (j) To institute, defend or intervene in litigation or administrative proceeding;
- (k) To impose reasonable charges for the preparation of and recording of amendments to this Declaration, estoppel certificates, or statements of unpaid Lot Owner assessments;
- (l) To provide for the indemnification of its directors and officers and maintain directors' and officers' liability insurance; and
- (m) To exercise any powers conferred by this Declaration or the Bylaws of the Association.

2. Expenditures Limited to Assessment for Current Year: The Association shall not expend more money within one (1) year than the total amount of the assessment for that particular year, plus any surplus that it may have on hand from previous assessments; nor shall the Association enter into any contract for more than one year; and no such contracts shall exceed market rates.

3. Initial Annual Assessment: The initial annual assessment allocated to each Lot shall be \$500.00, which shall be due and paid thirty (30) days after completion of the subdivision infrastructure improvements (i.e., completion of the stormwater systems, roads, paths and other improvements set out in this Declaration) in accordance with the Plan and this Declaration. This initial annual assessment shall be in addition to, and not in lieu of, the capital improvement reserve payment described in Article VI(3) hereof.

4. Maintenance of Common Elements: The Association shall bear all cost and responsibility of operation, upkeep, maintenance repair and replacement of the Common Elements, including without limitation any necessary routine maintenance and repair of the streets, landscaping, sidewalks, curbing, lighting, detention ponds, sewer lines, development signage or other common element improvements. The Association shall also obtain and maintain adequate commercial general liability insurance on the Common Elements. Until and only until conveyance of the Common Elements to the Association, the Declarant shall undertake the maintenance responsibilities of the Association with respect to the Common Elements. The Common Elements shall be conveyed to the Association or, with respect to the Roads and/or Open Space, to the Town of Cumberland (if the Town of Cumberland will accept the same) by Declarant. If not having been conveyed prior thereto, then, upon the sale of the final Lot owned by Declaration, Declarant shall, within thirty (30) days of the closing on the sale of such Lot, convey all of its remaining right, title and interest in and to the Common Elements and Roads to the Association, except that, in Declaration's sole discretion, the Roads and/or may be dedicated to the Town of Cumberland and, upon acceptance, shall be conveyed to the Town of Cumberland. Upon such conveyance, the Declarant shall be relieved of all obligations under this paragraph. To the extent the Declarant elects to install street signs that utilize supports and fixtures different from those customarily installed by the Town of Cumberland

on public streets, such signs, supports and fixtures shall remain part of the Common Elements even if the streets are accepted by the Town of Cumberland as public ways, and the Town of Cumberland shall have no obligation to maintain, repair or replace such signs, supports and fixtures.

ARTICLE VI

ASSESSMENTS FOR COMMON EXPENSES.

1. Upon ratification of the budget for Common Expenses (as defined herein), the Association shall cause to be sent to each Owner a statement showing such Owner's share of the Common Expenses. The Common Expenses shall include, without limitation, the costs necessary to own, operate, manage, maintain, repair and replace the Common Elements and to operate, maintain, repair and replace the roads, streets, sidewalks, lights, landscaping, signage, drainage swales and ponds, drainage rip rap, sewer lines, and all structures and equipment related or connected thereto. Assessments for Common Expenses shall be billed on or about the first day of each quarter. All sums so assessed and billed shall become due no later than thirty (30) days after the date of mailing or delivery of each bill. The Members of the Association may from time to time at special meetings levy additional assessments, in accordance with the terms of the Bylaws.

2. Assessments authorized and billed by the Association shall be a charge on the Lot and, if not paid in full within thirty (30) days after the date when due, then said assessment shall be considered delinquent and shall, together with interest at the rate of eighteen percent (18%) per month or any portion thereof, costs of collection and reasonable attorneys' fees, become a continuing lien on the Lot owned by the delinquent Owner, which lien shall bind the Lot, as well as the delinquent Owner, his heirs, devisees, successors, personal representatives and assigns, without the necessity of filing any document of record. Such lien may be enforced and foreclosed by the Association in the manner provided by applicable law for the foreclosure of real estate mortgages or any other method available at law or equity. All such assessments, in addition to being a lien, shall also constitute the personal liability of the Owner of the Lot so assessed at the time of the assessment. In the collection of any assessment, the defaulting Owner also shall pay all of the Association's costs of collection, including reasonable attorneys' fees.

3. Each purchaser of a Lot from the Declarant shall pay \$500.00 to the Declarant at the closing of the sale of the Lot to fund a capital improvement reserve account to be maintained by the Declarant and used for sewer connection costs and other capital improvements. Such funds shall be nonrefundable to the Lot purchaser, his heirs, successors or assigns, but the balance of the capital improvement reserve account, if any, shall be transferred to the Association when the Declarant transfers the Remaining Land to the Association.

ARTICLE VII

EASEMENTS.

Each Lot and the Common Elements are and shall be conveyed subject to and with the benefit of, as applicable, all easements set forth on the Plan and as further described below, each of which shall run with the land and be binding upon any and all future owners of a Lot, the Common Elements, or any other part or portion of the Property: :

1. “Access and Utility Easement”: An easement to use the Roads for all purposes of a right-of-way to benefit each Lot, which right and easement shall include the right of ingress and egress by foot or by vehicle from Peabody Road to each Lot and the Common Elements and the right to construct, install, use, repair, maintain and replace above and/or below ground any and all utility lines, pipes, conduits, wires, poles, guys, transformer and juncture boxes including without limitation those necessary for the provision of sewer, water, electricity, telephone, cable television, data and other communication services, including the right to enter the easement area at any time and from time to time with pedestrians, motor vehicles and equipment to exercise the rights reserved pursuant to this easement. This easement is subject to the terms of this Declaration, the Bylaws, and the rules and regulations of the Association (including, without limitation, the power of the Association to limit access to or close the Roads at times of emergency or as may be reasonably necessary for repairs and/or maintenance).

2. “Trail Easement”: An easement to use the Trails for low-impact non-motorized recreational purposes such as hiking, walking, running and snowshoeing. This easement is subject to the terms of this Declaration, the Bylaws, and the rules and regulations of the Association (including, without limitation, the power of the Association to limit access to or close the Trails at times of emergency or as may be reasonably necessary for repairs and/or maintenance).

3. “Sign and Landscape Easement”: An easement to construct, install, use, repair, maintain and replace signs identifying the Property, which signs may be constructed of wood, concrete, natural stone or any other suitable material, such signs to be of any design, configuration, shape or dimension as determined in the sole discretion of the Declarant’s or Association, as applicable, including the right to illuminate any such signs; provided, however, that any such signs shall be installed in compliance with all applicable laws, regulations and ordinances; and an easement to cut down, clear, remove, plant, and replant any and all trees, shrubs, bushes, flowers, sod, grass and other vegetation of any type or species and to perform other landscaping work, including without limitation the removal of stumps and roots, the construction decorative walls and columns, and the alteration of the grade of the earth, including the right to maintain and replace all of the foregoing, including the right to enter the easement area at any time and from time to time with pedestrians, motor vehicles and equipment to exercise the rights reserved pursuant to this easement.

4. “Sight Line Easement”: An easement for the removal, trimming, cutting, mowing, pruning, and clearing of trees, shrubbery, brush, grass and all other vegetation at any time and from time to time by the Declarant or the Association, as applicable, for purposes of maintaining a clear sight line of the entrances for the Property from the public roads serving the Property, including the right to enter the easement area at any time and from time to time with pedestrians, motor vehicles and equipment to exercise the rights reserved pursuant to this easement.

4. “Drainage Easement” and “Drainage and Maintenance Easement”: An easement for the detention, flowage or drainage of water and the maintenance of an unobstructed course for the flow of water, including the right of the Declarant or the Association, as applicable, to remove of any vegetation, rubbish, debris or improvements obstructing the free flow of water, and to enter the easement area at any time and from time to time with pedestrians, motor vehicles and equipment to exercise the rights reserved pursuant to this easement.

5. “Undisturbed Treatment Easement”: An easement for the Declarant or Association, as applicable, to maintain, or restore if disturbed, the undisturbed natural grade and vegetation on the land for the purpose of treating storm water runoff; to be maintained in the same condition as “wooded

buffer” or “undisturbed wooded buffer” areas pursuant to Article VIII below, including the right to enter the easement area at any time and from time to time with pedestrians, motor vehicles and equipment to exercise the rights reserved pursuant to this easement.

ARTICLE VII
BUILDING SPECIFICATIONS AND DESIGN APPROVAL.

1. Review and Approval.
 - (a) Prior to the commencement of construction of a new Building or Improvement or the renovation of any existing Building which involves a change in dimensions or footprint of that Building or a change to the exterior of that Building, Owner shall submit to Declarant or, if applicable, to the Association’s Design and Construction Review Committee for its review and recommendations for approval or disapproval to the Board, (i) the construction plans and specifications, including, if applicable, the elevation drawings, in triplicate, which plans, specifications and drawings should detail, among other items, the location on the Lot and the design (including the window, door, trim and window grill design), appearance, type, materials (including the roofing and siding), finishes, exterior color of the Buildings and Improvements and all other items listed in Paragraph 2(a) above, (ii) the landscaping design plan, if applicable, and (iii) such other information as the Declarant and, if applicable, the Committee and/or the Board thereafter reasonably requests.
 - (b) As used herein, “commencement of construction” shall include one or more of the following activities on a Lot: (i) site clearing; (ii) blasting; (iii) earth moving; (iv) roughing in of driveway; (v) building foundations, well digging, installing septic system; (vi) delivery of construction materials to the Lot.
 - (c) Declarant shall have sixty (60) days to approval or disapprove the application by the Owner or to suggest changes. Declarant shall notify Owner of its decision, in writing, including any conditions or stipulations to which its approval is subject or if the application is rejected, then the specific reasons for the denial, within ten (10) business days after the expiration of said sixty (60) day period. Lack of a decision by Declarant within said ten (10) business day period shall constitute approval by Declarant of the application.
 - (d) If the Board has authority, then the provisions of this Paragraph (d) shall apply. The Committee shall have sixty (60) days within which to submit its recommendation for approval or disapproval of the application to the Board after all of the required documentation has been provided to the Committee. The Committee shall have the right, upon written notice to Owner, to an additional thirty (30) days within which to complete its review. The Board shall have an additional period of thirty (30) days within which to accept, reject or modify the recommendation of the Committee. The Board shall notify Owner of the Board’s decision, in writing, including any conditions or stipulations to which its approval is subject or if the application is rejected, then the specific reasons for the denial. Lack of a decision by the Board within sixty (60)

days of the submission of the application to the Committee by the Owner shall constitute approval by the Board of the application.

- (e) The review by Declarant or, if applicable, by the Committee and the Board shall be to determine whether the proposed project complies with the Declaration in all respects and whether the proposed structures and landscaping plan will be compatible and harmonious with the natural setting of the area and other structures within the development.
- (f) Any material deviations to the plans, specifications and drawings approved by Declarant or, if applicable, by the Board shall require the prior written approval of the Declarant or, if applicable, the Board.

ARTICLE IX **AMENDMENTS.**

This Declaration may be amended at any time and from time to time by written instrument duly executed by the Owners of record of two-thirds or more of the Lots; provided, however, that at any time during which the Declarant owns one or more Lots, no amendment shall be effective unless the written consent of the Declarant to such amendment is obtained. No such amendment shall be effective until it is recorded in the Cumberland County Registry of Deeds.

ARTICLE X **GENERAL PROVISIONS.**

1. Votes. With respect to any provision of this Declaration requiring the votes of the Owners of the Lots, including but not limited to Article III and Article IX, each Lot is entitled to cast one (1) vote. If the majority of individuals constituting the Owners of a Lot cannot agree to vote on any matter, then the vote allocated to such Lot may not be cast.

2. Enforcement. By the acceptance of the deed to a Lot subject to this Declaration, each Owner covenants and agrees for himself, his heirs, devisees, successors, personal representatives and assigns, to comply with the covenants and restrictions set forth in this Declaration. Any failure to so comply shall be grounds for an action against the Owner, his heirs, devisees, successors, personal representatives and assigns, to recover damages or for injunctive relief or both. Such action may be maintained by the Association, the Declarant or by any aggrieved Owner. In the event the Association, Declarant or an Owner shall substantially prevail in any such action, they shall be entitled to recover reasonable attorneys' fees and related expenses incurred in enforcing the terms of this Declaration. Nothing herein shall require the Declarant to enforce any of the covenants and restrictions in this Declaration.

3. Effective Provisions of Declaration. Each provision of this Declaration, and any agreement, promise, covenant and undertaking to comply with each provision of this Declaration shall be deemed a covenant running with the land as a burden and upon the title to the Property, the Lots and any portion thereof.

4. Waivers. No delay or omission on part of the Declarant or any Owner in enforcing the covenants set forth herein shall be construed as a waiver of any right to enforce or seek such remedy or acquiescence in such breach.

5. Severability. In the event any one or more of the provisions of this Declaration shall be found for any reason by a court of competent jurisdiction to be unenforceable or null and void, such judgment or decree shall not affect, modify, change, abrogate or nullify any other provision of this Declaration.

6. Pronouns. Wherever used, the singular number shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders.

7. Paragraph Headings. The paragraph headings throughout this Declaration are for convenience and reference only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Declaration.

8. Existing Easements and Encumbrances. Except as otherwise set forth herein, this Declaration shall not affect those existing easements which currently encumber the Property, but only to the extent that said easements exists as of the date hereof. The holders of said easements and encumbrances may enter upon the Property to exercise their respective rights granted to them pursuant to the same.

9. Property Transfer: The Declarant and any subsequent Owner shall include the following notice on all deeds, mortgages, plats or other instruments used to convey any interest in the Property, a Lot, or any part or portion thereof:

NOTICE: This Property is SUBJECT TO a Declaration of Protective Covenants and Common Easements for the Ross Estates Subdivision, Town of Cumberland, County of Cumberland, State of Maine, by Stonewood Land, LLC, dated _____, 2021, and recorded in the Cumberland Country Registry of Deeds in Book _____, Page _____.

Failure to comply with this Section does not impair the validity or enforceability of this Declaration as to the Property or Lot, or any portion thereof so transferred.

10. Reserved Rights. It is expressly understood and agreed that this Declaration does not grant or convey to members of the general public any rights of ownership, entry or use of the Property. This Declaration is created solely for the protection of the Property and Declarant reserves fee simple estate and all rights pertaining thereto, including without limitation the right to exclude others and to use the Property for all purposes consistent with this Declaration.

11. Governing Law. This Declaration shall be governed by and construed in accordance with the laws of the State of Maine.

IN WITNESS WHEREOF, STONEWOOD LAND, LLC, has caused this Declaration to be executed by Nathaniel Ross, its duly authorized Managing Member, as of the day and year first above written.

WITNESS:

STONEWOOD LAND, LLC

By:

Print Name:

Its:

STATE OF MAINE

COUNTY OF CUMBERLAND, ss.

_____, 20____

Personally appeared before me the above-named Nathaniel Ross, Managing Member of STONEWOOD LAND, LLC, as aforesaid, and acknowledged the foregoing to be his free act and deed in said capacity and the free act and deed of said limited liability company.

Print name:

Notary Public/Attorney-at-Law

My Commission Expires:

EXHIBIT A

DEPARTMENT OF ENVIRONMENTAL PROTECTION
PERMIT BY RULE NOTIFICATION FORM

(For use with DEP Regulation, Natural Resources Protection Act - Permit by Rule Standards, Chapter 305)

APPLICANT INFORMATION (Owner)				AGENT INFORMATION (If Applying on Behalf of Owner)			
Name:	Stonewood Land, LLC (Attn. Nate Ross)			Name:	Sitelines, PA (Attn. Kevin Clark)		
Mailing Address:	8 Roberts Street			Mailing Address:	119 Purinton Road		
Mailing Address:				Mailing Address:	Suite A		
Town/State/Zip:	Falmouth, ME 04105			Town/State/Zip:	Brunswick, ME 04011		
Daytime Phone #:	(207) 233-6586	Ext:		Daytime Phone #:	(207) 725-1200	Ext:	14
Email Address:	sales@stonewoodmaine.com			Email Address:	kclark@sitelinespa.com		
PROJECT INFORMATION							
Part of a larger project? (check 1):	☐ Yes ☒ No	After the Fact? (check 1):	☐ Yes ☒ No	Project involves work below mean low water? (check 1):	☐ Yes ☒ No	Name of waterbody:	
Project Town:	Cumberland	Town Email Address:	cnixon@cumberlandmaine.com			Map and Lot Number:	R08 / 68i
Brief Project Description:	See cover letter						
Project Location & Brief Directions to Site:	Blanchard Road Extension, left on Moore Farm Road (Blanchard Road Extension, Section C), and site is on the left.						

PERMIT BY RULE (PBR) SECTIONS (Check at least one): I am filing notice of my intent to carry out work that meets the requirements for Permit-by-Rule (PBR) under DEP Rules, [Chapter 305](#). I and my agent(s), if any, have read and will comply with all of the standards in the Sections checked below.

- | | | |
|--|--|---|
| ☒ Sec. (2) Act. Adj. to Prot. Natural Res. | ☐ Sec. (9) Utility Crossing | ☐ Sec. (16) Coastal Sand Dune Projects |
| ☐ Sec. (3) Intake Pipes | ☐ Sec. (10) Stream Crossing | ☐ Sec. (17) Transfer/Permit Extension |
| ☐ Sec. (4) Replacement of Structures | ☐ Sec. (11) State Transportation Facilities | ☐ Sec. (18) Maintenance Dredging |
| ☐ Sec. (6) Movement of Rocks or Veg. | ☐ Sec. (12) Restoration of Natural Areas | ☒ Sec. (19) Act. Near SVP Habitat |
| ☐ Sec. (7) Outfall Pipes | ☐ Sec. (13) F&W Creat./Water Qual. Improv. | ☐ Sec. (20) Act. Near Waterfowl/Bird Habitat |
| ☐ Sec. (8) Shoreline Stabilization | ☐ Sec. (15) Public Boat Ramps | |

NOTE: Municipal permits also may be required. Contact your local code enforcement office for information. Federal permits may be required for stream crossings and for projects involving wetland fill. Contact the Army Corps of Engineers at the Maine Project Office for information.

NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS AND FEE

- ☒ **Attach** all required submissions for the PBR Section(s) checked above. The required submissions for each PBR Section are outlined in Chapter 305 and may differ depending on the Section you are submitting under.
- ☒ **Attach** a location map that clearly identifies the site (U.S.G.S. topo map, Maine Atlas & Gazetteer, or similar).
- ☒ **Attach** Proof of Legal Name if applicant is a corporation, LLC, or other legal entity. Provide a copy of Secretary of State's registration information (available at <http://icrs.inform.org/nei-sos-icrs/ICRS?MainPage=x>). Individuals and municipalities are not required to provide any proof of identity.

FEE: Pay by credit card at the [Payment Portal](#). The Permit-by-Rule fee may be found here <https://www.maine.gov/dep/feeschedule.pdf> and is currently \$256.

- ☒ **Attach** payment confirmation from the Payment Portal when filing this notification form.

Signature & Certification:

- I authorize staff of the Departments of Environmental Protection, Inland Fisheries & Wildlife, and Marine Resources to access the project site for the purpose of determining compliance with the rules.
- I understand that this PBR becomes effective 14 calendar days after receipt by the Department of this completed form, the required submissions, and fee, *unless the Department approves or denies the PBR prior to that date.*

By signing this Notification Form, I represent that the project meets all applicability requirements and standards in Chapter 305 rule and that the applicant has sufficient title, right, or interest in the property where the activity takes place.

Signature of Agent or Applicant (may be typed):	Kevin Clark (AGENT)	Date:	09/28/2021
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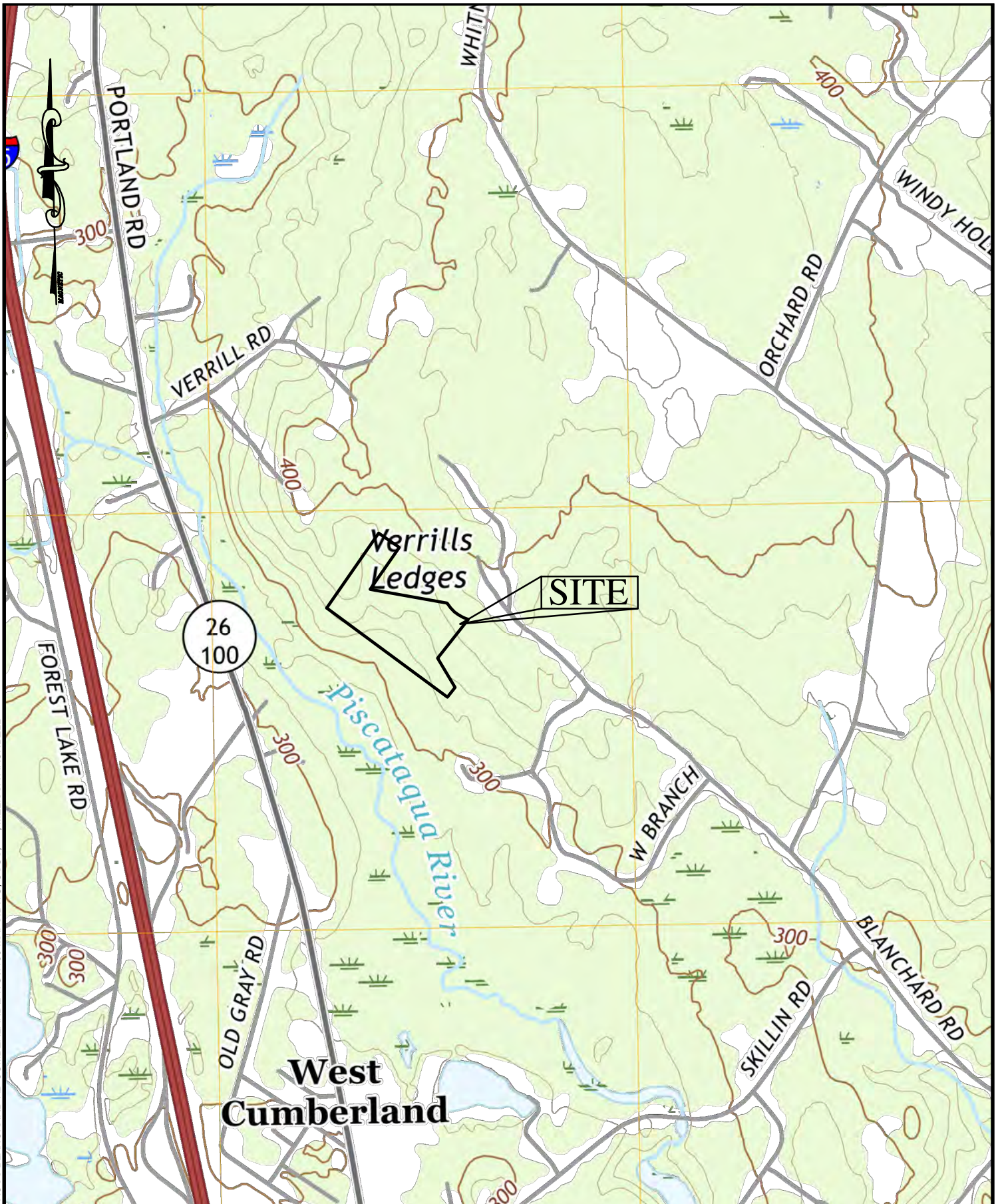
Keep a copy as a record of permit. Email this completed form with attachments to DEP at: DEP.PBRNotification@maine.gov. DEP will send a copy to the Town Office as evidence of DEP's receipt of notification. No further authorization will be issued by DEP after receipt of notice. A PBR is valid for two years, except Section 4, "Replacement of Structures," are valid for three years. **Work carried out in violation of the Natural Resources Protection Act or any provision in Chapter 305 is subject to enforcement.**

Attachment D **Supporting Graphics**

This attachment includes supporting materials and graphics for the application. An excerpt of the applicable USGS 7.5 minute quadrangle map is provided for reference, as well as reduced size copies of the tax map and zoning map. Also included is an excerpt of the FEMA flood rate insurance map (FIRM).

D

Supporting Graphics



X:\LAND PROJECTS\4185 ROSS BLANCHARD RD CUMBERLAND\DWG\4185 MAPS.DWG, USGS, ----, MELISSA ARCHBELL

SHEET: 1 OF 1

SITELINES

119 PURINTON ROAD, SUITE A
BRUNSWICK, ME 04011
207.725.1200



CIVIL ENGINEERS • LAND SURVEYORS

USGS LOCATION MAP

ROSS ESTATES

STONEWOOD LAND, LLC

BLANCHARD ROAD EXT., CUMBERLAND, ME

DATE: 07-27-21

SCALE: 1" = 1000'

JOB: 4185

FILE: 4185 MAPS

Cumberland Center Quadrangle, Maine

Compiled by
Craig D. Neil
Preliminary aquifer boundaries mapped by:
Daniel B. Locke

Digital cartography by:
Michael E. Foley

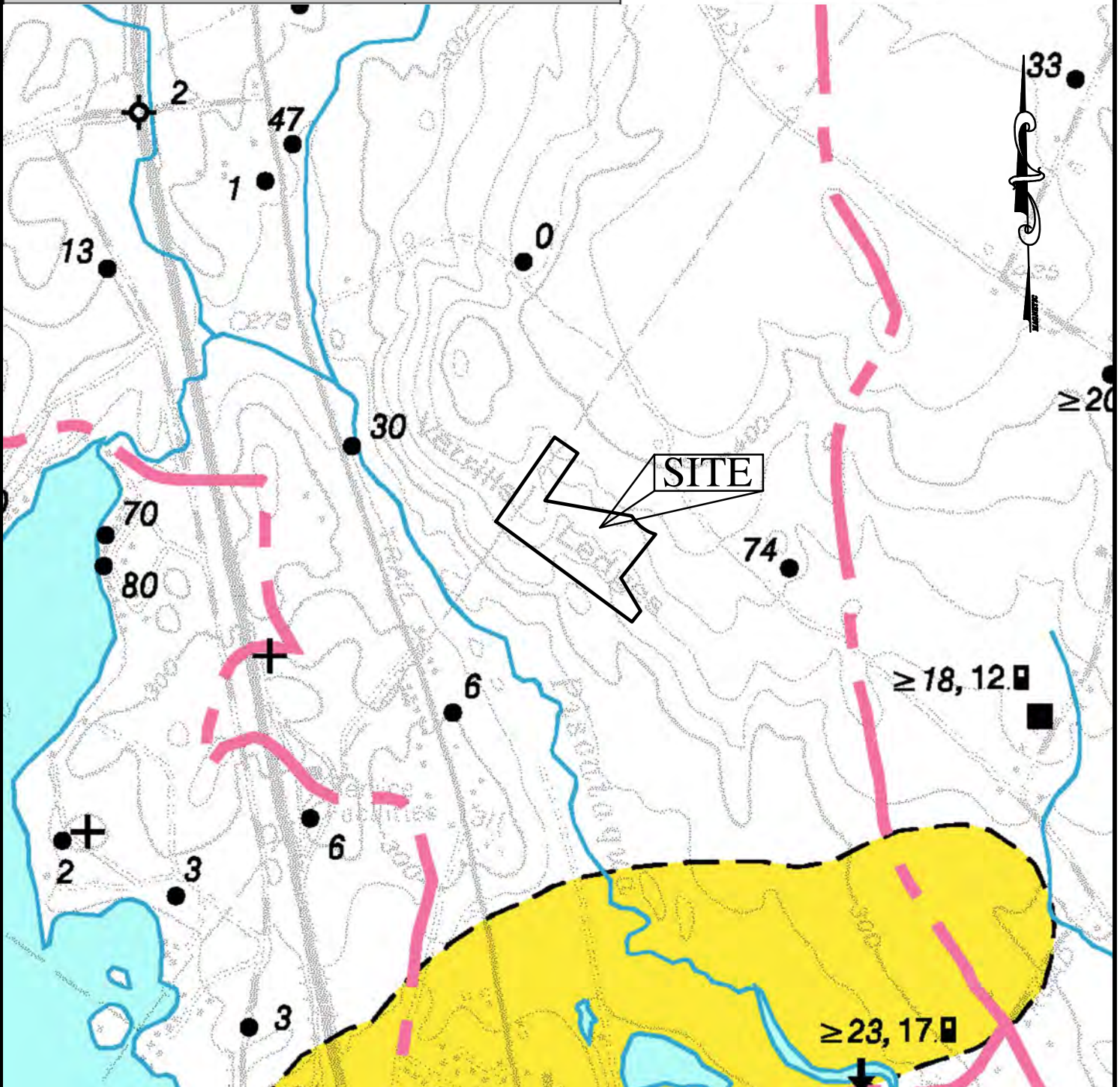
Robert G. Marvinney
State Geologist

Cartographic design and editing by:
Robert D. Tucker
Bennett J. Wilson, Jr.

Funding for the preparation of this map was provided in part by the
Maine Department of Environmental Protection.

SIGNIFICANT SAND AND GRAVEL AQUIFERS (yields greater than 10 gallons per minute)

- Approximate boundary of surficial deposits with significant saturated thickness where potential ground-water yield is moderate to excellent.
-  Surficial deposits with good to excellent potential ground-water yield; yields generally greater than 50 gallons per minute to a properly constructed well. Deposits consist primarily of glacial sand and gravel, but can include areas of sandy till and alluvium; yield zones are based on subsurface data where available, and may vary from mapped extent in areas where data are unavailable.
-  Surficial deposits with moderate to good potential ground-water yield; yields generally greater than 10 gallons per minute to a properly constructed well. Deposits consist primarily of glacial sand and gravel, but can include areas of sandy till and alluvium; yields may exceed 50 gallons per minute in deposits hydraulically connected with surface-water bodies, or in extensive deposits where subsurface data are available.



SITELINES

119 PURINTON ROAD, SUITE A
BRUNSWICK, ME 04011
207.725.1200



CIVIL ENGINEERS ■ LAND SURVEYORS

SIGNIFICANT SAND & GRAVEL AQUIFER MAP

ROSS ESTATES

STONEWOOD LAND, LLC

BLANCHARD ROAD EXT., CUMBERLAND, ME

DATE: 07-27-21

SCALE: 1" = 1000'

JOB: 4185

FILE: 4185 MAPS

Cumberland Center Quadrangle, Maine

Surficial geologic mapping by
Michael J. Retelle

Digital cartography by:
Robert A. Johnston

Robert G. Marvinney
State Geologist

Cartographic design and editing by:
Robert D. Tucker

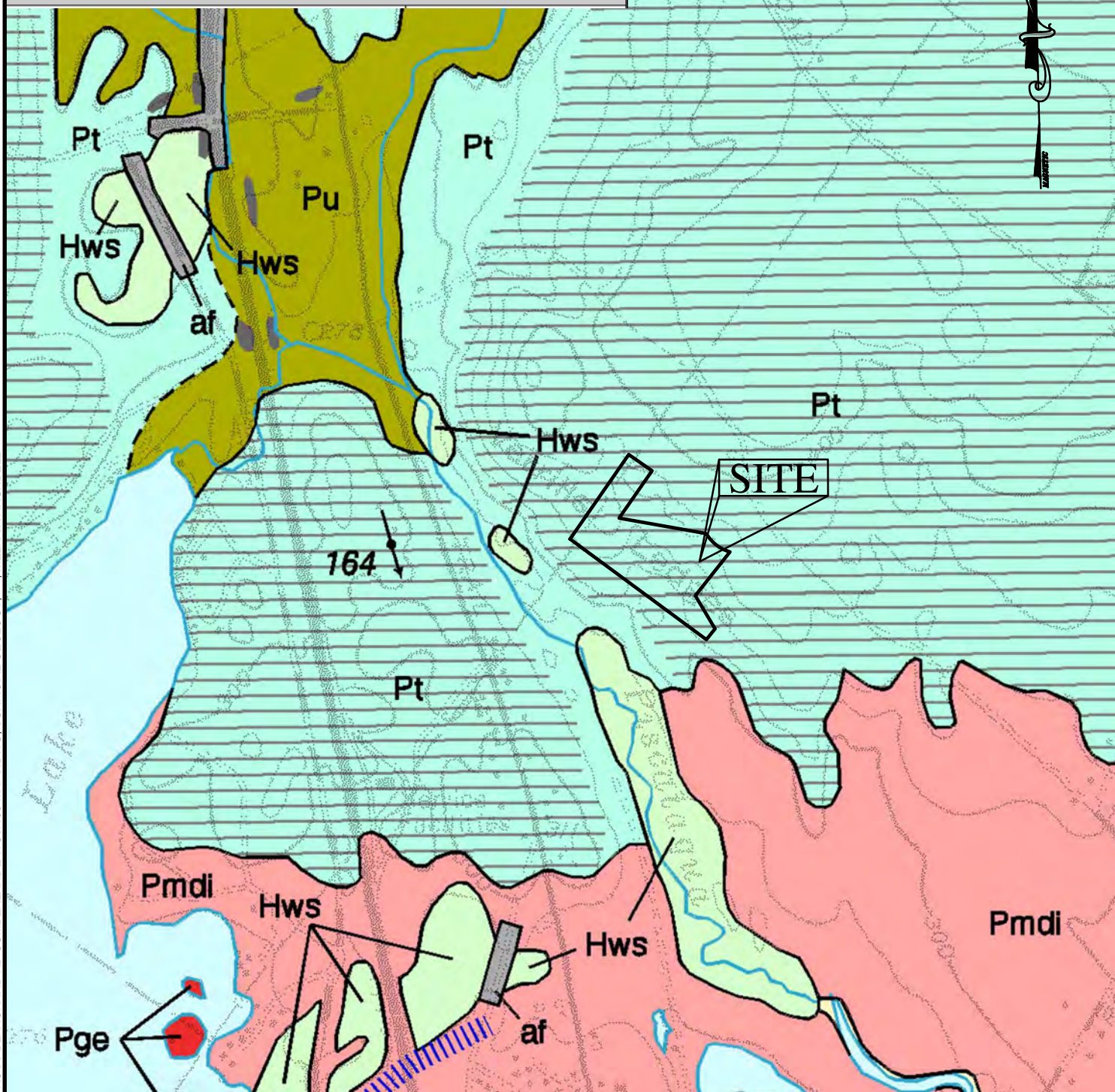
Funding for the preparation of this map was provided in part by the U.S. Geological Survey Cooperative Geological Mapping (COGEMAP) Program, Cooperative Agreement No. 14-08-0001-A0520.

Pt

Till - Poorly sorted mixture of gravel, sand, silt, and clay deposited directly by the action of glacier ice.



Bedrock - Gray dots indicate individual outcrops of ledge exposed at the surface. Horizontal ruled pattern indicates areas where bedrock is covered by a thin veneer of surficial sediments.



X:\LAND PROJECTS\4185 ROSS BLANCHARD RD CUMBERLAND\DWG\4185 MAPS.DWG, SURFICIAL GEOLOGY, ---, MELISSA ARCHBELL

SHEET: 1 OF 1

SITELINES

119 PURINTON ROAD, SUITE A
BRUNSWICK, ME 04011
207.725.1200



CIVIL ENGINEERS ■ LAND SURVEYORS

SURFICIAL GEOLOGY MAP

ROSS ESTATES

STONEWOOD LAND, LLC

BLANCHARD ROAD EXT., CUMBERLAND, ME

DATE: 07-27-21

SCALE: 1" = 1000'

JOB: 4185

FILE: 4185 MAPS

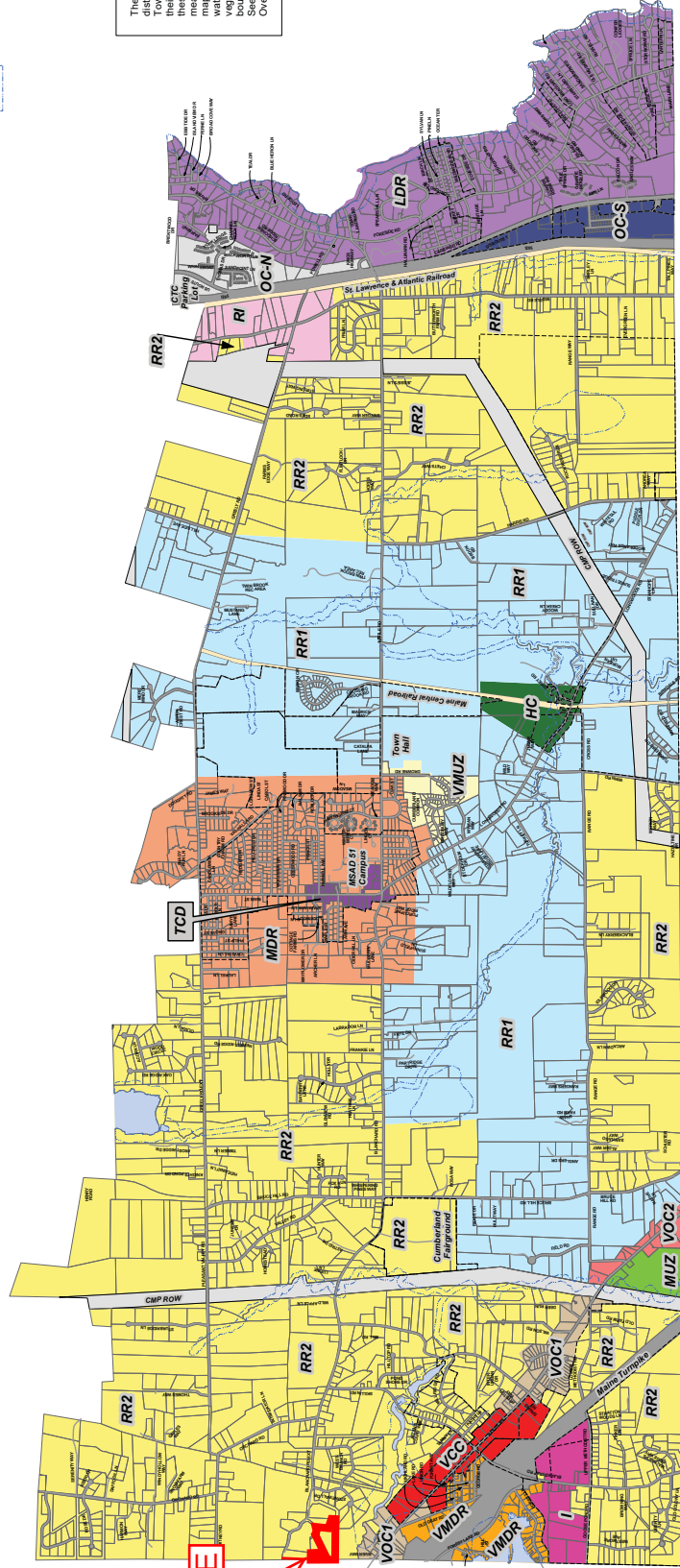
I certify this to be a true copy of the
Official Zoning Map as amended by
vote of the Town Council.

Adopted:	01/25/1999
Amended:	04/30/2008
Amended:	02/23/2009
Amended:	04/11/2011
Amended:	10/10/2011
Amended:	10/08/2012
Amended:	02/25/2013
Amended:	07/23/2013
Amended:	01/25/1999
Amended:	04/30/2008
Amended:	02/23/2009
Amended:	04/11/2011
Amended:	10/10/2011
Amended:	10/08/2012
Amended:	02/25/2013
Amended:	07/23/2013

Adopted: 01/25/1998	Amended: 04/28/2014
Amended: 04/30/2009	Amended: 09/17/2015
Amended: 02/23/2009	Amended: 12/12/2016
Amended: 04/11/2011	Amended: 05/08/2017
Amended: 10/10/2011	Amended: 12/10/2018
Amended: 10/08/2012	Amended: 01/14/2019
Amended: 02/25/2013	
Amended: 07/23/2013	



-
- Rural Residential 2
 Medium Density Residential
 Village Medium Density Residential
 Low Density Residential
 Island Residential
 Overlay Zones
 Shoreland Zoning

Basket
Ireland

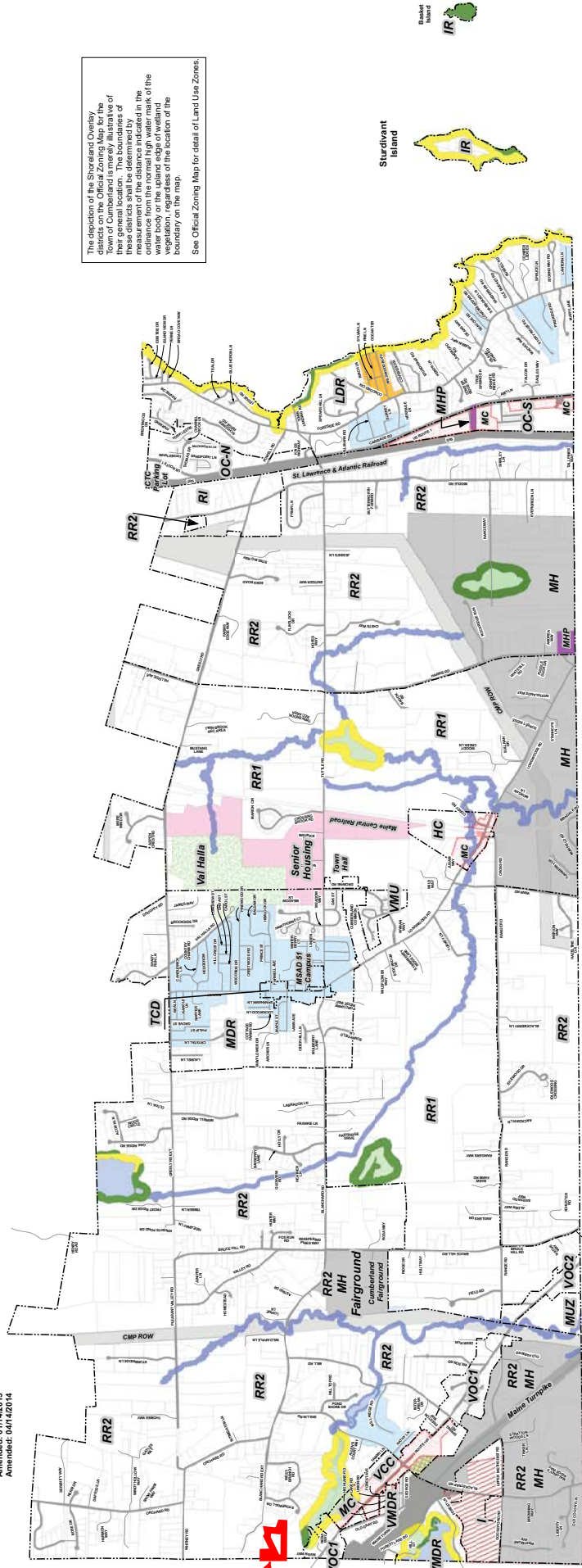
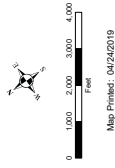
Official Overlay Zoning Map Cumberland, Maine

I certify this to be a true copy of the
Official Zoning Map as amended by
vote of the Town Council.

Town Clerk

Adopted: 01/25/1999
Amended: 08/15/2015
Amended: 05/22/2009
Amended: 07/24/2017
Amended: 04/11/2011
Amended: 12/10/2018
Amended: 10/10/2011
Amended: 05/14/2019
Amended: 06/17/2013
Amended: 01/14/2013
Amended: 04/14/2014

- | | | | |
|--|---|---|---|
|  West Cumberland Field Rec Facility Overlay |  Senior Housing |  General Development |  Shoreland Overlay Zones |
|  Setback Overlay 1 |  West Cumberland Housing |  Limited Residential |  Medical Caregiver (MC) |
|  Setback Overlay 2 |  Medical Caregiver (MC) |  Resource Protection |  Fairgrounds Overlay |
|  Manufactured Housing (MH) |  Stream Protection |  Stream Protection |  Val Halla Golf & Rec Center Overlay |
|  Mobile Home Park (MHP) |  Wetlands |  Wetlands |  Land Use Zones |



The depiction of the Shoreland Overlay districts on the Official Zoning Map for the Town of Cumberland, Maine, shall be determined by their general location. The boundaries of these districts shall be determined by the distance from the normal high water mark of the water body or the upland edge of wetland vegetation, regardless of the location of the boundary on the map.
See Official Zoning Map for detail of Land Use Zones.



ogram at (800) 638-6620, or (800) 424-8872.

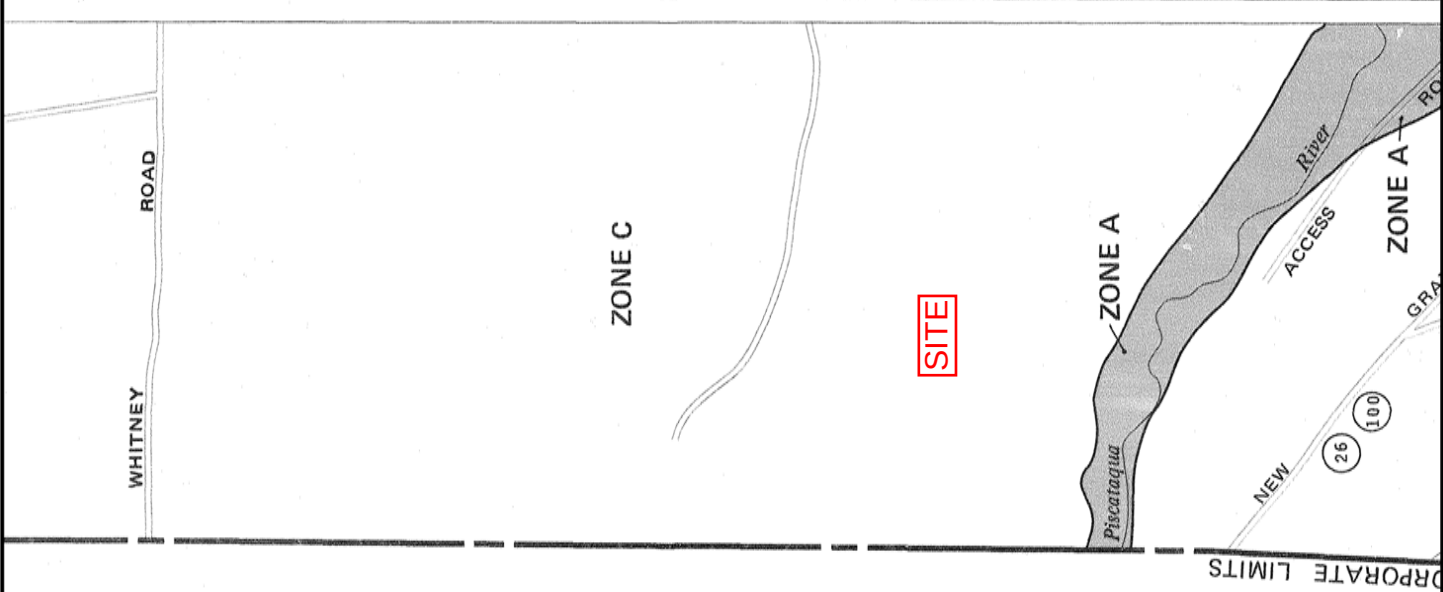
V1-V30
not determined.
Areas of 100-year c
action); base flood el
determined.

NOTES

Certain areas not in the special fl
may be protected by flood contro
This map is for flood insurance
sarily show all areas subject to
all planimetric features outside sp
For adjoining map panels, see se
Panels.

INITIAL IDEN
AUGUST
FLOOD HAZARD BOUN

FLOOD INSURANCE R
MAY 19
FLOOD INSURANCE R



APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
CUMBERLAND, MAINE
CUMBERLAND COUNTY

PANEL 10 OF 25
(SEE MAP INDEX FOR PANELS NOT PRINTED)

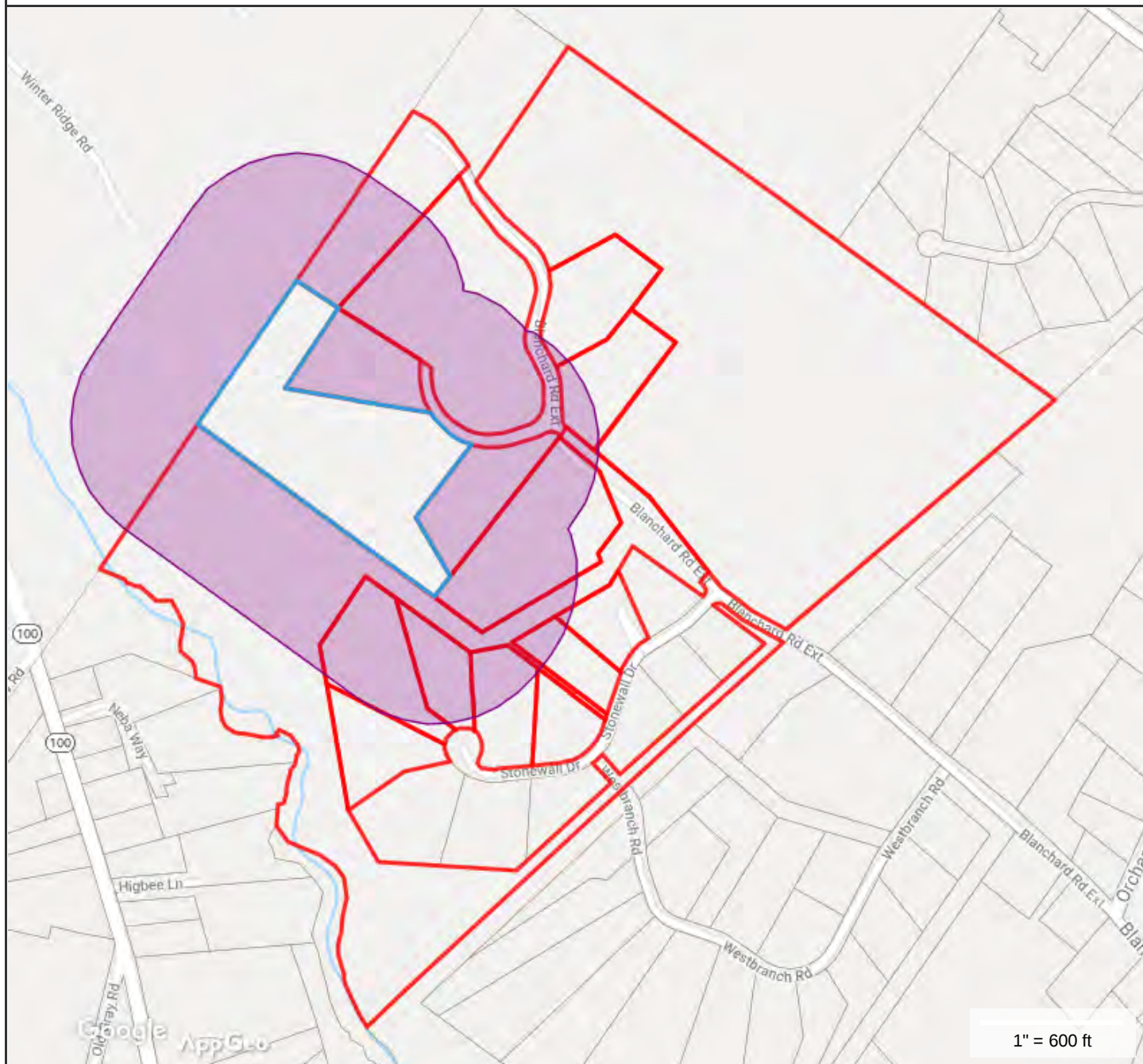
COMMUNITY-PANEL NUMBER
230162 0010 B
EFFECTIVE DATE:
MAY 19, 1981



federal emergency management agency
federal insurance administration

This is an official FIRMette showing a portion of the above-referenced flood map created from the MSC FIRMette Web tool. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For additional information about how to make sure the map is current, please see the Flood Hazard Mapping Updates Overview Fact Sheet available on the FEMA Flood Map Service Center home page at <https://msc.fema.gov>.

Refer to the FLOOD INSURANCE RATE MAP for the date shown on this map to determine the effective date of the flood insurance rate.

**Property Information**

Property ID 0R08 006810000
Location BLANCHARD RD EXT
Owner PIAMPIANO ROBERT J

**MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT**

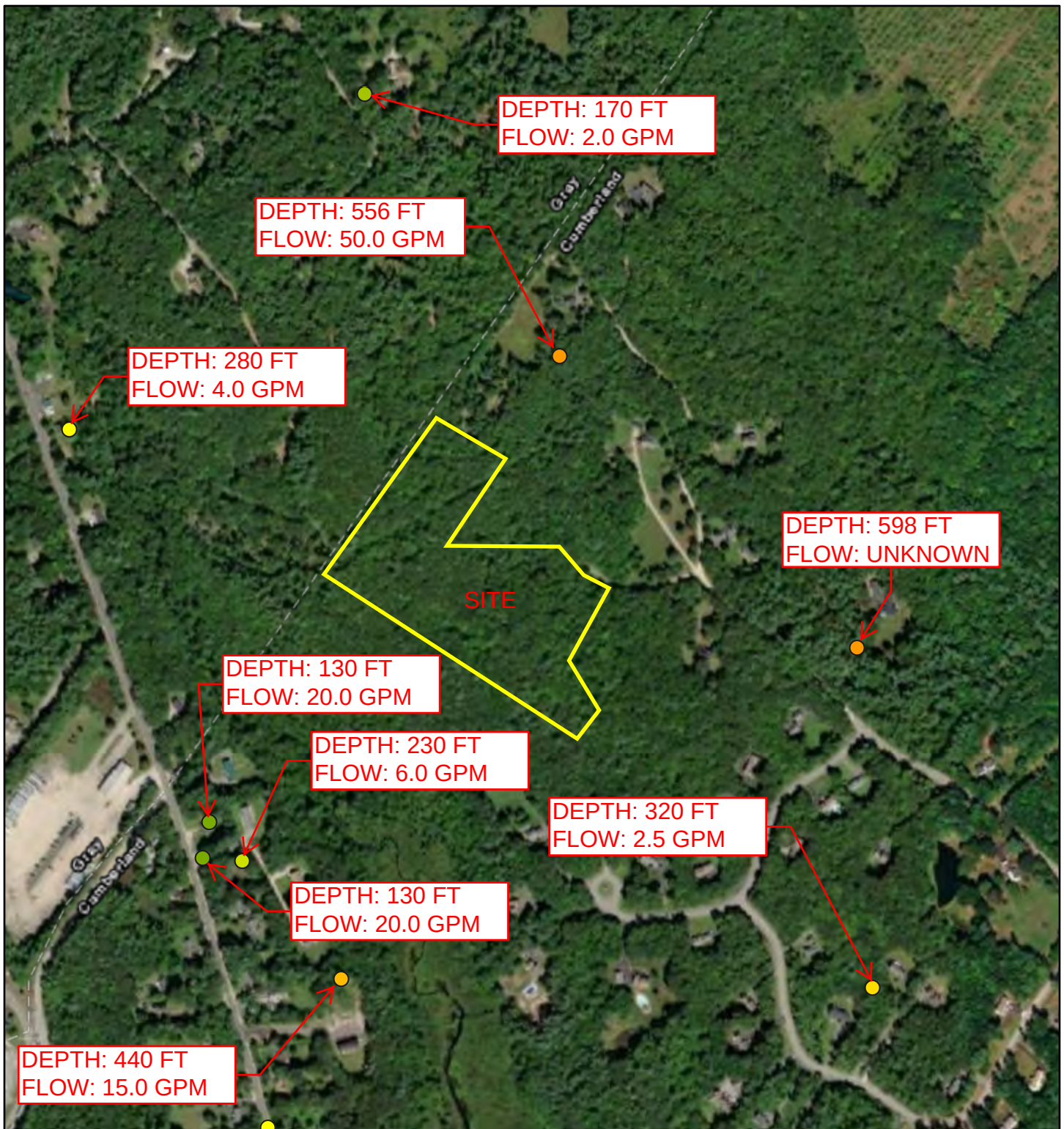
Town of Cumberland, ME makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 6/10/2020
Data updated monthly (see property record card)

500-ft Abutters
Proposed Subdivision
Ross Estates, Blanchard Road Extension, Cumberland

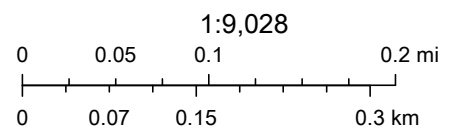
ID	Site Address	Owner Name	Co-Owner Name	Owner Address	Owner City	Owner State	Owner Zip
	372 BLANCHARD ROAD	FRIEDMAN PAUL D	FRIEDMAN LAURA S	372 BLANCHARD ROAD	CUMBERLAND	ME	04021
	365 BLANCHARD RD	MCCORMACK SUZANNE L - TRUSTEE*		365 BLANCHARD ROAD	CUMBERLAND CTR	ME	04021
	366 BLANCHARD ROAD	JONES CASSANDRA M	JONES SCOTT A	366 BLANCHARD ROAD EXT	CUMBERLAND	ME	04021-3211
	412 BLANCHARD RD EXT	BRIGGS RICHARD H	LOWERY MARY A	412 BLANCHARD ROAD EXT	CUMBERLAND	ME	04021
	371 BLANCHARD ROAD	KALINICH BEATRICE	KALINICH JEFFREY	371 BLANCHARD ROAD	CUMBERLAND	ME	04021
	379 BLANCHARD ROAD	WILDES BRUCE S	WILDES NANCY J S	P O BOX 54	CUMBERLAND	ME	04021
	BLANCHARD RD	YOVINO, SETH J		16 HATHORN POINT RD	TENANTS HARBOR	ME	04860
	BLANCHARD RD	PIAPIANO BRENDA T		3 HIGH STREET	BRUNSWICK	ME	04011-1909
	58 STONEWALL DRIVE	BARTO L CASEY	BARTO D ALISON	58 STONEWALL DR	CUMBERLAND	ME	04021
	60 STONEWALL DRIVE	BECHEN, JAMES L	BECHEN, LAUREN L	60 STONEWALL DRIVE	CUMBERLAND	ME	04021
	57 STONEWALL DRIVE	CLARK BRADLEY C	CLARK ELIZABETH M	57 STONEWALL DRIVE	CUMBERLAND	ME	04021
	45 STONEWALL DRIVE	ZAMBERNARDI AILEEN M		45 STONEWALL DRIVE	CUMBERLAND	ME	04021
	BLANCHARD RD EXT	CHASE CUSTOM HOMES + FINANCE INC		290 BRIDGTON ROAD SUITE 2	WESTBROOK	ME	04092
	33 STONEWALL DRIVE	AUFIERO LARRY J	AUFIERO CHRISTINE	33 STONEWALL DRIVE	CUMBERLAND CTR	ME	04021
	21 STONEWALL DRIVE	MARCIULIONIS, VYTAUTAS	LANCARICOVA, LENKA	21 STONEWALL DR	CUMBERLAND CTR	ME	04021
	15 STONEWALL DRIVE	PETZAL DAVID E	PETZAL ARLENE A	15 STONEWALL DRIVE	CUMBERLAND	ME	04021

Maine Well Database - Ross Estates



5/11/2021, 10:17:12 AM

Well Depth (ft)			
●	100.1 - 150	●	200.1 - 250
●	150.1 - 200	●	250.1 - 300
		●	300.1 - 400
		●	400.1 - 500
		●	500.1 - 600



Esri, HERE, Garmin, IPC, Maxar

Conserved Land & Undeveloped Habitat - BWH

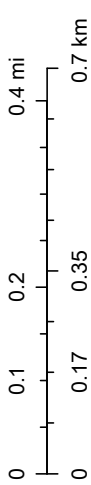


February 10, 2021

- conserved3
- undeveloped
- Municipal

Undeveloped Land

1:18,056



BWH, USDA FSA, GeoEye, Maxar

Beginning With Habitat



Plant & Animal Habitats

February 10, 2021

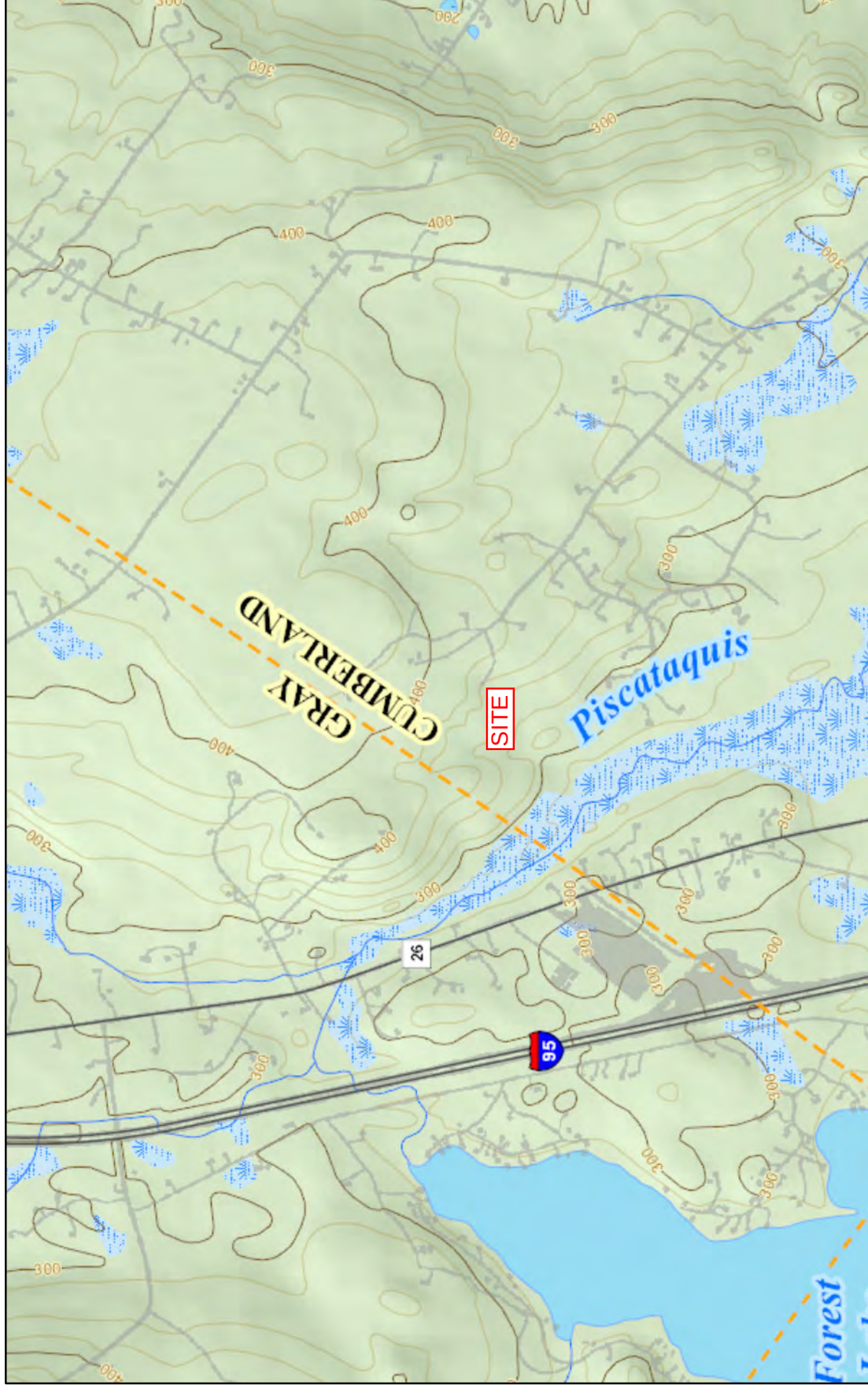
1:18,056

Significant Vernal Pools

trout

Deer Wintering Areas

Beginning With Habitat



February 10, 2021

Riparian Habitats

Attachment E
Subdivision & Site Plans

The project plan set is included for review and copies have been provided as separate plan sets of full-size documents as required.

E

Subdivision & Site Plans

STORMWATER MANAGEMENT PLAN
ROSS ESTATES
BLANCHARD ROAD EXTENSION

Introduction

Stonewood Land, LLC (herein referred to as Applicant) is proposing the development of a 12.41-acre parcel with three (3) residential lots and a portion of private right-of-way off Blanchard Road Extension in Cumberland, Maine.

Runoff is conveyed in existing drainageways and streams on the site and runoff leaves the site to the south and ultimately is discharged to the Piscataqua River.

The proposed stormwater management plan has been designed to mitigate any stormwater runoff impacts from the project and direct the stormwater runoff to existing drainage water courses and avoid impacts to abutting properties.

Study Methodology

Topographical data was obtained from on the ground survey supplemented with LIDAR data. Hydrologic boundaries were generated using the topographic mapping and the drainage patterns were verified by a site reconnaissance visit.

Surficial soils located in the vicinity of the site were obtained from the United States Department of Agriculture Natural Resources Conservation Service Soil Survey Geographic (SSURGO) Database (see Attachments). The Applicant's parcel includes the soil classifications listed below.

SOILS TYPES IN LOCAL STUDY AREA

Soils Series	Symbol(s)	Hydrologic Group (HSG) *
Paxton very stony fine sandy loam	PfB	C
Ridgebury fine sandy loam	RbA	C/D
Woodbridge fine sandy loam	WrB	C
Woodbridge very stony fine sandy loam	WsB	C

*Hydrologic Soils Group taken from SCS TR-55 Manual

Flooding

The proposed improvements are located in Zone C (Areas of Minimal Flooding) of the Flood Insurance Rate Maps (FIRMs) for Cumberland County, Maine. The project area is located on Panel 10 of 25 (Community Panel 230162-0010-B, Effective May 19, 1981). An excerpt of the applicable FIRM is included with the application.

Off-Site Watersheds

The project area is downstream of a large off-site watershed encompassing approximately 26.5 acres, as delineated using LIDAR and USGS mapping. The offsite area is located primarily north of the subject parcel and drains south towards the subject parcel. Runoff from the upstream offsite area is conveyed across the parcel within the site's existing streams and drainageways. The area is included in the HydroCAD modeling as Subcatchments 10S and 11S.

Stormwater Analysis Subcatchments

Pre-Development Conditions

In the pre-development condition, the site is undeveloped and wooded. The parcel drains generally to the south. The runoff leaving the site converges offsite where it was analyzed as Analysis Point 1 (AP-1). A summary of the subcatchments is provided below:

- | | |
|------------------|--|
| Subcatchment 1S | represents approximately 6.73 acres of primarily wooded area. Stormwater runoff drains overland to an existing drainageway and stream that leaves the site to the south at AP-1. |
| Subcatchment 2S | represents approximately 4.72 acres comprised of primarily wooded area. Stormwater runoff drains overland to the existing drainageway and stream. Runoff leaves the site to the south at AP-1. |
| Subcatchment 3S | represents approximately 0.95 acres comprised of primarily wooded area. Stormwater runoff drains overland toward the south at AP-1. |
| Subcatchment 10S | represents approximately 14.88 acres of off-site area comprised of wooded areas and existing residential lots. The runoff from this offsite area is enters the site via overland flow or within one of the existing drainageways/streams. Runoff leaves the site to the south at AP-1. |
| Subcatchment 11S | represents approximately 11.62 acres of off-site area comprised of wooded areas and existing residential lots. The runoff from this offsite area is enters the site via overland flow or within one of the existing drainageways/streams. Runoff leaves the site to the south at AP-1. |

Post-Development Conditions

Under post-development conditions, the proposed private right-of-way will result in an increase of approximately 0.17 acres of impervious area. The individual lots will be developed by the individual landowners, but in accordance with Town requirements, the stormwater analysis includes an estimate of a proposed development on each lot, including 2,600 s.f. of roof and sidewalks per lot. Runoff from the proposed development will be directed off-site in the existing drainageways and streams; one stone bermed level lip spreader is proposed to help distribute concentrated runoff from offsite areas and the proposed private way. A summary of the subcatchments is provided below:

- | | |
|-----------------|--|
| Subcatchment 1S | represents approximately 6.73 acres, comprised of wooded area and the proposed gravel private way, in addition to the development on Lot A, half the development on Lot B, and approximately 300 linear feet of gravel driveway for Lot C. Stormwater runoff drains overland, or through the stone bermed level lip spreader, to an existing drainageway and stream that leaves the site to the south at AP-1. |
| Subcatchment 2S | represents approximately 4.72 acres comprised of wooded area and half of the development on Lot B, half the development on Lot C, including approximately 250 linear feet of gravel driveway. Stormwater runoff drains overland to the existing drainageway and stream. Runoff leaves the site to the south at AP-1. |

Subcatchment 3S represents approximately 0.95 acres comprised of wooded area and half of the development of Lot C. Stormwater runoff drains overland toward the south at AP-1.

Subcatchments 10S and 11S represent approximately 26.5 acres of off-site area comprised of wooded areas and existing residential lots; the subcatchments are unchanged from the pre-development to post-development condition.

Results

The following table summarizes the peak runoff rates at the Analysis Point (AP1) under pre-development and post-development conditions for the 2, 10, 25-year, and 50-year 24-hour storm events.

Analysis Point	Peak Runoff Rate (cfs)			
Design Storm	Pre	Post	Difference	
2-year	21.09	21.51	+0.42	2%
10-year	51.54	52.12	+0.58	1%
25-year	79.37	80.19	+0.82	1%

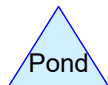
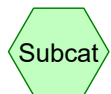
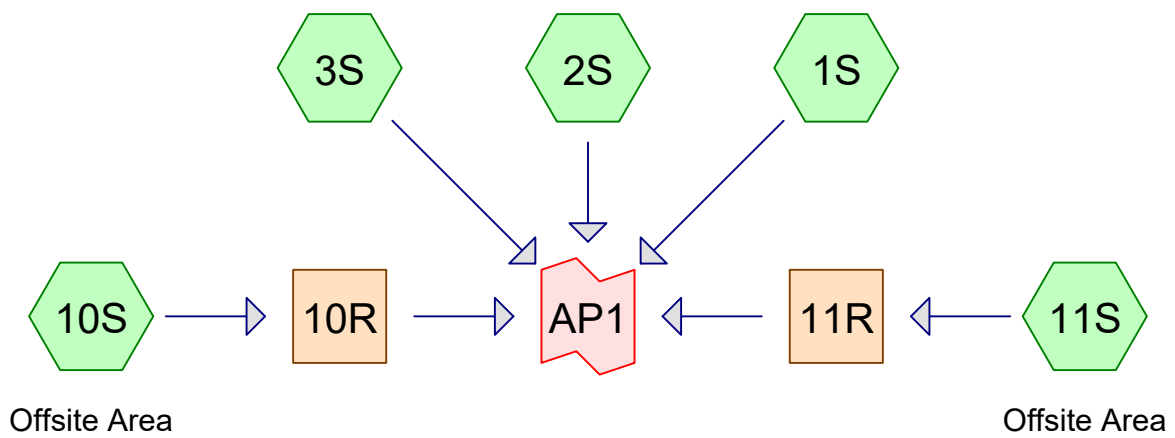
As shown in the table above, the peak runoff rate in the post-development condition is slightly increased in each of the storm events, but the increases are 1% or less than 0.5 cfs, which is not statistically significant and within the margin of error of the modeling calculations. The difference in the peak flows in the post-development condition are not discernably changed from those of the pre-development condition. The proposed development of three (3) single-family lots on the 12.41-acre parcel will not have an adverse effect on the downstream and receiving waters within this 38.9-acre watershed. A stone berm level lip spreader will help distribute the concentrated flows from upstream offsite and those caused by the new private gravel way to the benefit of the receiving waters.

Conclusion

Through the implementation of erosion and sedimentation control measures and best management practices, the project complies with the requirements of the Town of Cumberland Ordinance.

By providing the level lip spreader detaining stormwater runoff from the project such that the peak flows of stormwater from the project site did not increase from pre-development peak flows, the project complies with the requirements of the Town of Cumberland Ordinance.

Attachment A – Pre- and Post-Development Conditions HydroCAD Reports
Attachment B – Pre- and Post-Development Conditions Watershed Maps



4185 PRE

Prepared by Sitelines

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Type III 24-hr 2-YR Rainfall=3.10"

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Page 2

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Runoff Area=6.730 ac 0.00% Impervious Runoff Depth=0.77"
Flow Length=635' Tc=18.1 min CN=70 Runoff=3.74 cfs 0.432 af

Subcatchment2S: Runoff Area=4.720 ac 0.00% Impervious Runoff Depth=0.77"
Flow Length=865' Tc=14.4 min CN=70 Runoff=2.86 cfs 0.303 af

Subcatchment3S: Runoff Area=0.950 ac 0.00% Impervious Runoff Depth=0.77"
Flow Length=253' Tc=16.0 min CN=70 Runoff=0.55 cfs 0.061 af

Subcatchment10S: Offsite Area Runoff Area=14.880 ac 1.61% Impervious Runoff Depth=0.82"
Flow Length=600' Slope=0.0600 '/' Tc=20.9 min CN=71 Runoff=8.46 cfs 1.015 af

Subcatchment11S: Offsite Area Runoff Area=11.620 ac 4.13% Impervious Runoff Depth=0.87"
Flow Length=600' Slope=0.0600 '/' Tc=20.9 min CN=72 Runoff=7.12 cfs 0.841 af

Reach 10R: Avg. Flow Depth=0.36' Max Vel=3.14 fps Inflow=8.46 cfs 1.015 af
n=0.050 L=630.0' S=0.0730 '/' Capacity=389.60 cfs Outflow=8.27 cfs 1.015 af

Reach 11R: Avg. Flow Depth=0.52' Max Vel=3.49 fps Inflow=7.12 cfs 0.841 af
n=0.050 L=650.0' S=0.0708 '/' Capacity=194.79 cfs Outflow=6.98 cfs 0.841 af

Link AP1: Inflow=21.09 cfs 2.652 af
Primary=21.09 cfs 2.652 af

Total Runoff Area = 38.900 ac Runoff Volume = 2.652 af Average Runoff Depth = 0.82"
98.15% Pervious = 38.180 ac 1.85% Impervious = 0.720 ac

Summary for Subcatchment 1S:

Runoff = 3.74 cfs @ 12.29 hrs, Volume= 0.432 af, Depth= 0.77"
 Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 2-YR Rainfall=3.10"

Area (ac)	CN	Description
6.730	70	Woods, Good, HSG C
6.730		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
3.1	309	0.1100	1.66		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
0.9	226	0.0990	4.04	7.63	Trap/Vee/Rect Channel Flow, C-D Bot.W=1.00' D=0.50' Z= 5.2 & 5.9 ' Top.W=6.55' n= 0.050
18.1	635	Total			

Summary for Subcatchment 2S:

Runoff = 2.86 cfs @ 12.22 hrs, Volume= 0.303 af, Depth= 0.77"
 Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 2-YR Rainfall=3.10"

Area (ac)	CN	Description
4.720	70	Woods, Good, HSG C
4.720		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	100	0.1700	0.18		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
2.5	187	0.0642	1.27		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
2.6	578	0.0690	3.68	16.04	Trap/Vee/Rect Channel Flow, C-D Bot.W=4.00' D=0.50' Z= 9.5 & 9.4 ' Top.W=13.45' n= 0.050
14.4	865	Total			

Summary for Subcatchment 3S:

Runoff = 0.55 cfs @ 12.25 hrs, Volume= 0.061 af, Depth= 0.77"
 Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 2-YR Rainfall=3.10"

Area (ac)	CN	Description
0.950	70	Woods, Good, HSG C
0.950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.6	100	0.0550	0.11		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
1.4	153	0.1310	1.81		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
16.0	253	Total			

Summary for Subcatchment 10S: Offsite Area

Runoff = 8.46 cfs @ 12.33 hrs, Volume= 1.015 af, Depth= 0.82"
 Routed to Reach 10R :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 2-YR Rainfall=3.10"

Area (ac)	CN	Description
2.000	77	2 acre lots, 12% imp, HSG C
12.880	70	Woods, Good, HSG C
14.880	71	Weighted Average
14.640		98.39% Pervious Area
0.240		1.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
6.8	500	0.0600	1.22		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
20.9	600	Total			

Summary for Subcatchment 11S: Offsite Area

Runoff = 7.12 cfs @ 12.33 hrs, Volume= 0.841 af, Depth= 0.87"
 Routed to Reach 11R :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 2-YR Rainfall=3.10"

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Type III 24-hr 2-YR Rainfall=3.10"

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Area (ac)	CN	Description
4.000	77	2 acre lots, 12% imp, HSG C
7.620	70	Woods, Good, HSG C
11.620	72	Weighted Average
11.140		95.87% Pervious Area
0.480		4.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
6.8	500	0.0600	1.22		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
20.9	600	Total			

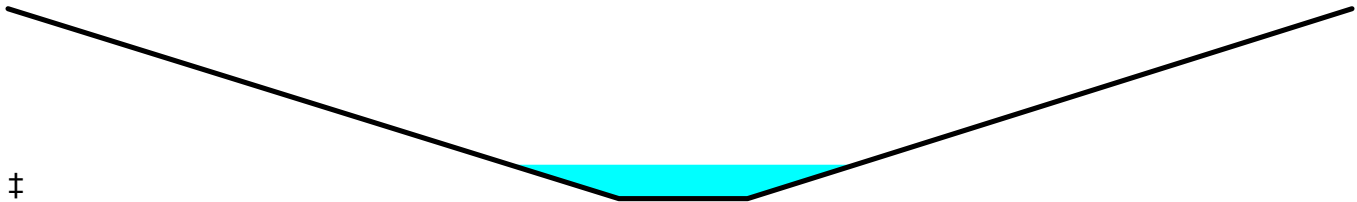
Summary for Reach 10R:

Inflow Area = 14.880 ac, 1.61% Impervious, Inflow Depth = 0.82" for 2-YR event
 Inflow = 8.46 cfs @ 12.33 hrs, Volume= 1.015 af
 Outflow = 8.27 cfs @ 12.43 hrs, Volume= 1.015 af, Atten= 2%, Lag= 6.0 min
 Routed to Link AP1 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Max. Velocity= 3.14 fps, Min. Travel Time= 3.3 min
 Avg. Velocity = 1.31 fps, Avg. Travel Time= 8.0 min

Peak Storage= 1,660 cf @ 12.37 hrs
 Average Depth at Peak Storage= 0.36' , Surface Width= 10.75'
 Bank-Full Depth= 2.00' Flow Area= 45.8 sf, Capacity= 389.60 cfs

4.00' x 2.00' deep channel, n= 0.050
 Side Slope Z-value= 9.5 9.4 ' / ' Top Width= 41.80'
 Length= 630.0' Slope= 0.0730 ' / '
 Inlet Invert= 360.00', Outlet Invert= 314.00'

**Summary for Reach 11R:**

Inflow Area = 11.620 ac, 4.13% Impervious, Inflow Depth = 0.87" for 2-YR event
 Inflow = 7.12 cfs @ 12.33 hrs, Volume= 0.841 af
 Outflow = 6.98 cfs @ 12.42 hrs, Volume= 0.841 af, Atten= 2%, Lag= 5.4 min
 Routed to Link AP1 :

4185 PRE

Prepared by Sitalines

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Type III 24-hr 2-YR Rainfall=3.10"

Printed 9/27/2021

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Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Max. Velocity= 3.49 fps, Min. Travel Time= 3.1 min

Avg. Velocity = 1.57 fps, Avg. Travel Time= 6.9 min

Peak Storage= 1,301 cf @ 12.37 hrs

Average Depth at Peak Storage= 0.52' , Surface Width= 6.74'

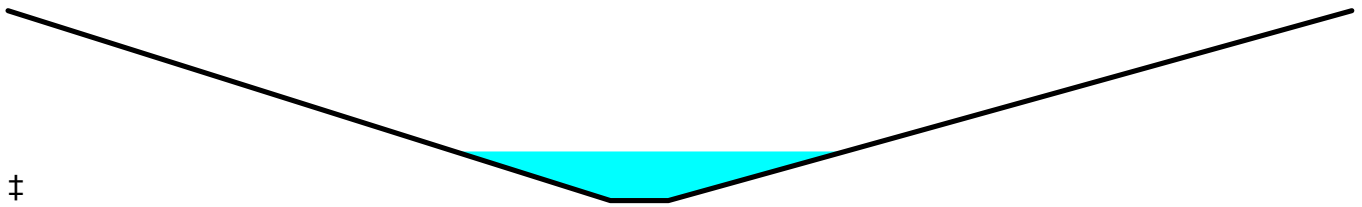
Bank-Full Depth= 2.00' Flow Area= 24.2 sf, Capacity= 194.79 cfs

1.00' x 2.00' deep channel, n= 0.050

Side Slope Z-value= 5.2 5.9 ' ' Top Width= 23.20'

Length= 650.0' Slope= 0.0708 ' '

Inlet Invert= 354.00', Outlet Invert= 308.00'

**Summary for Link AP1:**

Inflow Area = 38.900 ac, 1.85% Impervious, Inflow Depth = 0.82" for 2-YR event

Inflow = 21.09 cfs @ 12.40 hrs, Volume= 2.652 af

Primary = 21.09 cfs @ 12.40 hrs, Volume= 2.652 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

4185 PRE

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Type III 24-hr 10-YR Rainfall=4.60"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Runoff Area=6.730 ac 0.00% Impervious Runoff Depth=1.74"
Flow Length=635' Tc=18.1 min CN=70 Runoff=9.35 cfs 0.979 af

Subcatchment2S: Runoff Area=4.720 ac 0.00% Impervious Runoff Depth=1.74"
Flow Length=865' Tc=14.4 min CN=70 Runoff=7.19 cfs 0.686 af

Subcatchment3S: Runoff Area=0.950 ac 0.00% Impervious Runoff Depth=1.74"
Flow Length=253' Tc=16.0 min CN=70 Runoff=1.39 cfs 0.138 af

Subcatchment10S: Offsite Area Runoff Area=14.880 ac 1.61% Impervious Runoff Depth=1.82"
Flow Length=600' Slope=0.0600 '/' Tc=20.9 min CN=71 Runoff=20.44 cfs 2.256 af

Subcatchment11S: Offsite Area Runoff Area=11.620 ac 4.13% Impervious Runoff Depth=1.89"
Flow Length=600' Slope=0.0600 '/' Tc=20.9 min CN=72 Runoff=16.72 cfs 1.835 af

Reach 10R: Avg. Flow Depth=0.55' Max Vel=3.99 fps Inflow=20.44 cfs 2.256 af
n=0.050 L=630.0' S=0.0730 '/' Capacity=389.60 cfs Outflow=20.16 cfs 2.256 af

Reach 11R: Avg. Flow Depth=0.74' Max Vel=4.33 fps Inflow=16.72 cfs 1.835 af
n=0.050 L=650.0' S=0.0708 '/' Capacity=194.79 cfs Outflow=16.50 cfs 1.835 af

Link AP1: Inflow=51.45 cfs 5.893 af
Primary=51.45 cfs 5.893 af

Total Runoff Area = 38.900 ac Runoff Volume = 5.893 af Average Runoff Depth = 1.82"
98.15% Pervious = 38.180 ac 1.85% Impervious = 0.720 ac

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Type III 24-hr 10-YR Rainfall=4.60"

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Summary for Subcatchment 1S:

Runoff = 9.35 cfs @ 12.26 hrs, Volume= 0.979 af, Depth= 1.74"
 Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 10-YR Rainfall=4.60"

Area (ac)	CN	Description
6.730	70	Woods, Good, HSG C
6.730		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
3.1	309	0.1100	1.66		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
0.9	226	0.0990	4.04	7.63	Trap/Vee/Rect Channel Flow, C-D Bot.W=1.00' D=0.50' Z= 5.2 & 5.9 ' Top.W=6.55' n= 0.050
18.1	635	Total			

Summary for Subcatchment 2S:

Runoff = 7.19 cfs @ 12.21 hrs, Volume= 0.686 af, Depth= 1.74"
 Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 10-YR Rainfall=4.60"

Area (ac)	CN	Description
4.720	70	Woods, Good, HSG C
4.720		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	100	0.1700	0.18		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
2.5	187	0.0642	1.27		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
2.6	578	0.0690	3.68	16.04	Trap/Vee/Rect Channel Flow, C-D Bot.W=4.00' D=0.50' Z= 9.5 & 9.4 ' Top.W=13.45' n= 0.050
14.4	865	Total			

Summary for Subcatchment 3S:

Runoff = 1.39 cfs @ 12.23 hrs, Volume= 0.138 af, Depth= 1.74"
 Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 10-YR Rainfall=4.60"

Area (ac)	CN	Description			
0.950	70	Woods, Good, HSG C			
0.950		100.00% Pervious Area			
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.6	100	0.0550	0.11		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
1.4	153	0.1310	1.81		
					Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
16.0	253	Total			

Summary for Subcatchment 10S: Offsite Area

Runoff = 20.44 cfs @ 12.30 hrs, Volume= 2.256 af, Depth= 1.82"
 Routed to Reach 10R :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 10-YR Rainfall=4.60"

Area (ac)	CN	Description
2.000	77	2 acre lots, 12% imp, HSG C
12.880	70	Woods, Good, HSG C
14.880	71	Weighted Average
14.640		98.39% Pervious Area
0.240		1.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
6.8	500	0.0600	1.22		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
20.9	600	Total			

Summary for Subcatchment 11S: Offsite Area

Runoff = 16.72 cfs @ 12.29 hrs, Volume= 1.835 af, Depth= 1.89"
 Routed to Reach 11R :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 10-YR Rainfall=4.60"

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Type III 24-hr 10-YR Rainfall=4.60"

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Area (ac)	CN	Description
4.000	77	2 acre lots, 12% imp, HSG C
7.620	70	Woods, Good, HSG C
11.620	72	Weighted Average
11.140		95.87% Pervious Area
0.480		4.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
6.8	500	0.0600	1.22		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
20.9	600	Total			

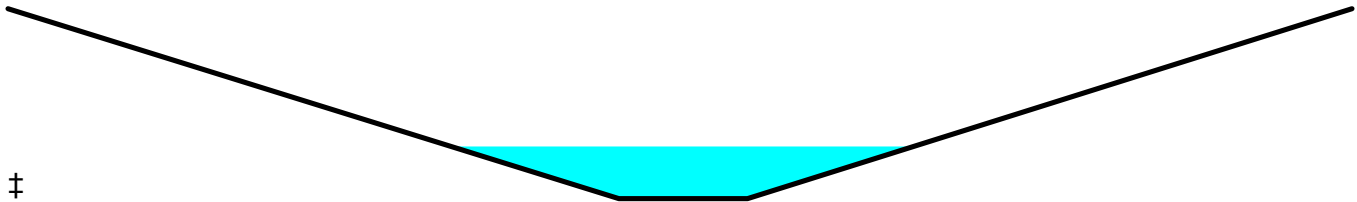
Summary for Reach 10R:

Inflow Area = 14.880 ac, 1.61% Impervious, Inflow Depth = 1.82" for 10-YR event
 Inflow = 20.44 cfs @ 12.30 hrs, Volume= 2.256 af
 Outflow = 20.16 cfs @ 12.38 hrs, Volume= 2.256 af, Atten= 1%, Lag= 5.0 min
 Routed to Link AP1 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Max. Velocity= 3.99 fps, Min. Travel Time= 2.6 min
 Avg. Velocity = 1.58 fps, Avg. Travel Time= 6.7 min

Peak Storage= 3,186 cf @ 12.34 hrs
 Average Depth at Peak Storage= 0.55', Surface Width= 14.39'
 Bank-Full Depth= 2.00' Flow Area= 45.8 sf, Capacity= 389.60 cfs

4.00' x 2.00' deep channel, n= 0.050
 Side Slope Z-value= 9.5 9.4 '/' Top Width= 41.80'
 Length= 630.0' Slope= 0.0730 '/'
 Inlet Invert= 360.00', Outlet Invert= 314.00'

**Summary for Reach 11R:**

Inflow Area = 11.620 ac, 4.13% Impervious, Inflow Depth = 1.89" for 10-YR event
 Inflow = 16.72 cfs @ 12.29 hrs, Volume= 1.835 af
 Outflow = 16.50 cfs @ 12.38 hrs, Volume= 1.835 af, Atten= 1%, Lag= 4.9 min
 Routed to Link AP1 :

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Type III 24-hr 10-YR Rainfall=4.60"

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Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Max. Velocity= 4.33 fps, Min. Travel Time= 2.5 min

Avg. Velocity = 1.84 fps, Avg. Travel Time= 5.9 min

Peak Storage= 2,475 cf @ 12.34 hrs

Average Depth at Peak Storage= 0.74' , Surface Width= 9.25'

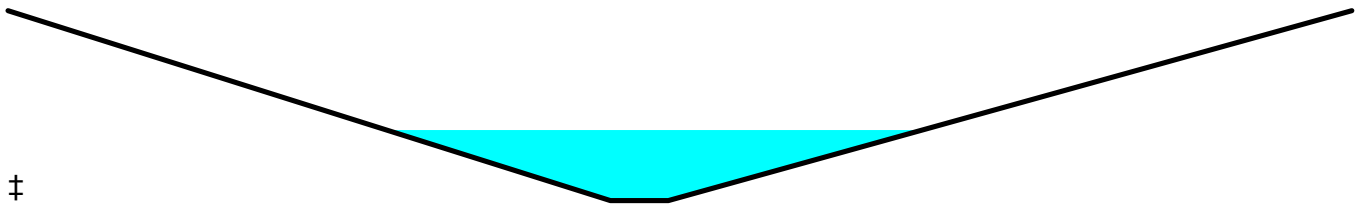
Bank-Full Depth= 2.00' Flow Area= 24.2 sf, Capacity= 194.79 cfs

1.00' x 2.00' deep channel, n= 0.050

Side Slope Z-value= 5.2 5.9 ' / ' Top Width= 23.20'

Length= 650.0' Slope= 0.0708 ' / '

Inlet Invert= 354.00', Outlet Invert= 308.00'

**Summary for Link AP1:**

Inflow Area = 38.900 ac, 1.85% Impervious, Inflow Depth = 1.82" for 10-YR event

Inflow = 51.45 cfs @ 12.35 hrs, Volume= 5.893 af

Primary = 51.45 cfs @ 12.35 hrs, Volume= 5.893 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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Type III 24-hr 25-YR Rainfall=5.80"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Runoff Area=6.730 ac 0.00% Impervious Runoff Depth=2.65"
Flow Length=635' Tc=18.1 min CN=70 Runoff=14.53 cfs 1.485 af

Subcatchment 2S: Runoff Area=4.720 ac 0.00% Impervious Runoff Depth=2.65"
Flow Length=865' Tc=14.4 min CN=70 Runoff=11.15 cfs 1.041 af

Subcatchment 3S: Runoff Area=0.950 ac 0.00% Impervious Runoff Depth=2.65"
Flow Length=253' Tc=16.0 min CN=70 Runoff=2.15 cfs 0.210 af

Subcatchment 10S: Offsite Area Runoff Area=14.880 ac 1.61% Impervious Runoff Depth=2.74"
Flow Length=600' Slope=0.0600 '/' Tc=20.9 min CN=71 Runoff=31.40 cfs 3.396 af

Subcatchment 11S: Offsite Area Runoff Area=11.620 ac 4.13% Impervious Runoff Depth=2.83"
Flow Length=600' Slope=0.0600 '/' Tc=20.9 min CN=72 Runoff=25.40 cfs 2.741 af

Reach 10R: Avg. Flow Depth=0.67' Max Vel=4.46 fps Inflow=31.40 cfs 3.396 af
n=0.050 L=630.0' S=0.0730 '/' Capacity=389.60 cfs Outflow=31.02 cfs 3.396 af

Reach 11R: Avg. Flow Depth=0.88' Max Vel=4.82 fps Inflow=25.40 cfs 2.741 af
n=0.050 L=650.0' S=0.0708 '/' Capacity=194.79 cfs Outflow=25.11 cfs 2.741 af

Link AP1: Inflow=79.37 cfs 8.872 af
Primary=79.37 cfs 8.872 af

Total Runoff Area = 38.900 ac Runoff Volume = 8.872 af Average Runoff Depth = 2.74"
98.15% Pervious = 38.180 ac 1.85% Impervious = 0.720 ac

Summary for Subcatchment 1S:

Runoff = 14.53 cfs @ 12.25 hrs, Volume= 1.485 af, Depth= 2.65"
 Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 25-YR Rainfall=5.80"

Area (ac)	CN	Description			
6.730	70	Woods, Good, HSG C			
6.730		100.00% Pervious Area			
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
3.1	309	0.1100	1.66		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
0.9	226	0.0990	4.04	7.63	Trap/Vee/Rect Channel Flow, C-D Bot.W=1.00' D=0.50' Z= 5.2 & 5.9 ' Top.W=6.55' n= 0.050
18.1	635	Total			

Summary for Subcatchment 2S:

Runoff = 11.15 cfs @ 12.21 hrs, Volume= 1.041 af, Depth= 2.65"
 Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 25-YR Rainfall=5.80"

Area (ac)	CN	Description			
4.720	70	Woods, Good, HSG C			
4.720		100.00% Pervious Area			
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	100	0.1700	0.18		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
2.5	187	0.0642	1.27		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
2.6	578	0.0690	3.68	16.04	Trap/Vee/Rect Channel Flow, C-D Bot.W=4.00' D=0.50' Z= 9.5 & 9.4 '/' Top.W=13.45' n= 0.050
14.4	865	Total			

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Type III 24-hr 25-YR Rainfall=5.80"

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Summary for Subcatchment 3S:

Runoff = 2.15 cfs @ 12.22 hrs, Volume= 0.210 af, Depth= 2.65"
 Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 25-YR Rainfall=5.80"

Area (ac)	CN	Description
0.950	70	Woods, Good, HSG C
0.950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.6	100	0.0550	0.11		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
1.4	153	0.1310	1.81		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
16.0	253	Total			

Summary for Subcatchment 10S: Offsite Area

Runoff = 31.40 cfs @ 12.29 hrs, Volume= 3.396 af, Depth= 2.74"
 Routed to Reach 10R :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 25-YR Rainfall=5.80"

Area (ac)	CN	Description
2.000	77	2 acre lots, 12% imp, HSG C
12.880	70	Woods, Good, HSG C
14.880	71	Weighted Average
14.640		98.39% Pervious Area
0.240		1.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
6.8	500	0.0600	1.22		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
20.9	600	Total			

Summary for Subcatchment 11S: Offsite Area

Runoff = 25.40 cfs @ 12.29 hrs, Volume= 2.741 af, Depth= 2.83"
 Routed to Reach 11R :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 25-YR Rainfall=5.80"

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Type III 24-hr 25-YR Rainfall=5.80"

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Area (ac)	CN	Description
4.000	77	2 acre lots, 12% imp, HSG C
7.620	70	Woods, Good, HSG C
11.620	72	Weighted Average
11.140		95.87% Pervious Area
0.480		4.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
6.8	500	0.0600	1.22		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
20.9	600	Total			

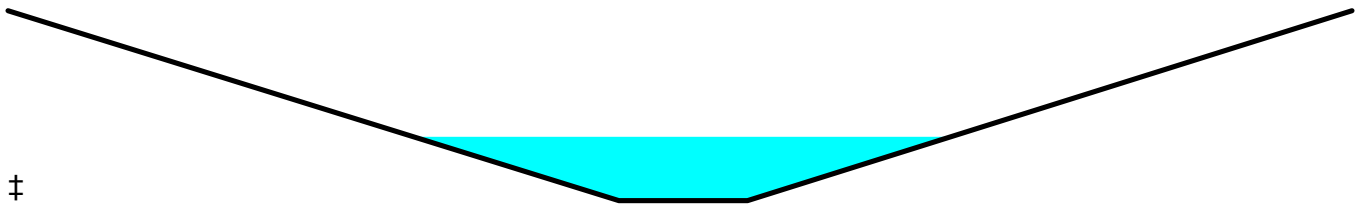
Summary for Reach 10R:

Inflow Area = 14.880 ac, 1.61% Impervious, Inflow Depth = 2.74" for 25-YR event
 Inflow = 31.40 cfs @ 12.29 hrs, Volume= 3.396 af
 Outflow = 31.02 cfs @ 12.37 hrs, Volume= 3.396 af, Atten= 1%, Lag= 4.5 min
 Routed to Link AP1 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Max. Velocity= 4.46 fps, Min. Travel Time= 2.4 min
 Avg. Velocity = 1.73 fps, Avg. Travel Time= 6.1 min

Peak Storage= 4,377 cf @ 12.33 hrs
 Average Depth at Peak Storage= 0.67' , Surface Width= 16.69'
 Bank-Full Depth= 2.00' Flow Area= 45.8 sf, Capacity= 389.60 cfs

4.00' x 2.00' deep channel, n= 0.050
 Side Slope Z-value= 9.5 9.4 ' / ' Top Width= 41.80'
 Length= 630.0' Slope= 0.0730 ' / '
 Inlet Invert= 360.00', Outlet Invert= 314.00'

**Summary for Reach 11R:**

Inflow Area = 11.620 ac, 4.13% Impervious, Inflow Depth = 2.83" for 25-YR event
 Inflow = 25.40 cfs @ 12.29 hrs, Volume= 2.741 af
 Outflow = 25.11 cfs @ 12.36 hrs, Volume= 2.741 af, Atten= 1%, Lag= 4.3 min
 Routed to Link AP1 :

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Type III 24-hr 25-YR Rainfall=5.80"

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Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Max. Velocity= 4.82 fps, Min. Travel Time= 2.2 min

Avg. Velocity = 2.00 fps, Avg. Travel Time= 5.4 min

Peak Storage= 3,389 cf @ 12.32 hrs

Average Depth at Peak Storage= 0.88' , Surface Width= 10.80'

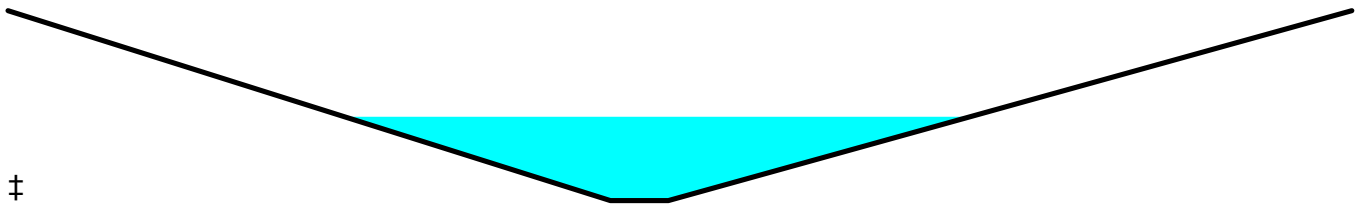
Bank-Full Depth= 2.00' Flow Area= 24.2 sf, Capacity= 194.79 cfs

1.00' x 2.00' deep channel, n= 0.050

Side Slope Z-value= 5.2 5.9 ' ' Top Width= 23.20'

Length= 650.0' Slope= 0.0708 ' '

Inlet Invert= 354.00', Outlet Invert= 308.00'

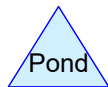
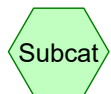
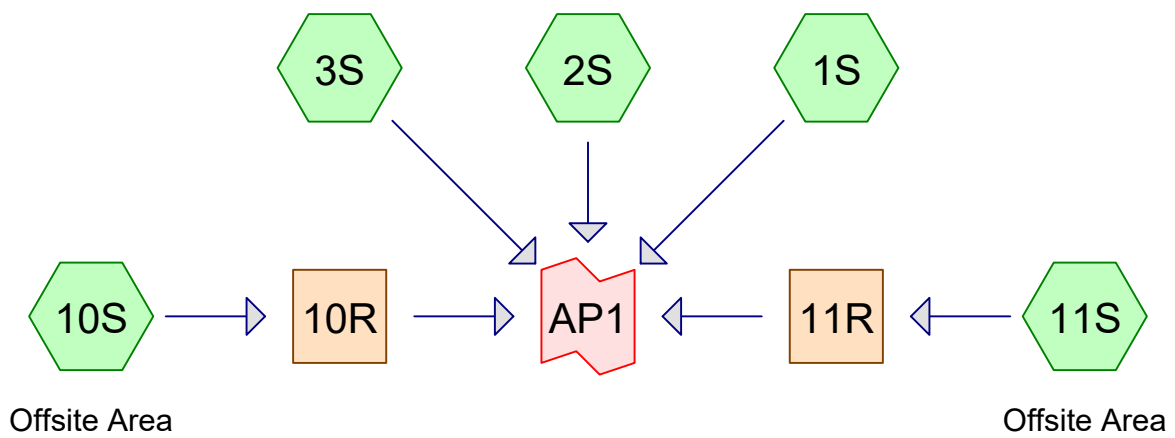
**Summary for Link AP1:**

Inflow Area = 38.900 ac, 1.85% Impervious, Inflow Depth = 2.74" for 25-YR event

Inflow = 79.37 cfs @ 12.33 hrs, Volume= 8.872 af

Primary = 79.37 cfs @ 12.33 hrs, Volume= 8.872 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs



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Type III 24-hr 2-YR Rainfall=3.10"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Runoff Area=6.730 ac 1.34% Impervious Runoff Depth=0.82"
Flow Length=635' Tc=18.1 min CN=71 Runoff=4.04 cfs 0.459 af

Subcatchment2S: Runoff Area=4.720 ac 1.27% Impervious Runoff Depth=0.82"
Flow Length=865' Tc=14.4 min CN=71 Runoff=3.10 cfs 0.322 af

Subcatchment3S: Runoff Area=0.950 ac 3.16% Impervious Runoff Depth=0.82"
Flow Length=253' Tc=16.0 min CN=71 Runoff=0.60 cfs 0.065 af

Subcatchment10S: Offsite Area Runoff Area=14.880 ac 1.61% Impervious Runoff Depth=0.82"
Flow Length=600' Slope=0.0600 '/' Tc=20.9 min CN=71 Runoff=8.46 cfs 1.015 af

Subcatchment11S: Offsite Area Runoff Area=11.620 ac 4.13% Impervious Runoff Depth=0.87"
Flow Length=600' Slope=0.0600 '/' Tc=20.9 min CN=72 Runoff=7.12 cfs 0.841 af

Reach 10R: Avg. Flow Depth=0.36' Max Vel=3.14 fps Inflow=8.46 cfs 1.015 af
n=0.050 L=630.0' S=0.0730 '/' Capacity=389.60 cfs Outflow=8.27 cfs 1.015 af

Reach 11R: Avg. Flow Depth=0.52' Max Vel=3.49 fps Inflow=7.12 cfs 0.841 af
n=0.050 L=650.0' S=0.0708 '/' Capacity=194.79 cfs Outflow=6.98 cfs 0.841 af

Link AP1: Inflow=21.51 cfs 2.702 af
Primary=21.51 cfs 2.702 af

Total Runoff Area = 38.900 ac Runoff Volume = 2.702 af Average Runoff Depth = 0.83"
97.69% Pervious = 38.000 ac 2.31% Impervious = 0.900 ac

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Type III 24-hr 2-YR Rainfall=3.10"

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Summary for Subcatchment 1S:

Runoff = 4.04 cfs @ 12.28 hrs, Volume= 0.459 af, Depth= 0.82"
 Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 2-YR Rainfall=3.10"

Area (ac)	CN	Description
6.240	70	Woods, Good, HSG C
0.170	89	Gravel roads, HSG C
0.090	98	Roofs, HSG C
* 0.140	89	Gravel driveways, HSG C
0.090	74	>75% Grass cover, Good, HSG C
6.730	71	Weighted Average
6.640		98.66% Pervious Area
0.090		1.34% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
3.1	309	0.1100	1.66		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
0.9	226	0.0990	4.04	7.63	Trap/Vee/Rect Channel Flow, C-D Bot.W=1.00' D=0.50' Z= 5.2 & 5.9 ' Top.W=6.55' n= 0.050
18.1	635	Total			

Summary for Subcatchment 2S:

Runoff = 3.10 cfs @ 12.22 hrs, Volume= 0.322 af, Depth= 0.82"
 Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 2-YR Rainfall=3.10"

Area (ac)	CN	Description
4.540	70	Woods, Good, HSG C
* 0.000	89	Gravel roads, HSG C
* 0.060	98	Roofs, HSG C
* 0.060	89	Gravel driveways, HSG C
0.060	74	>75% Grass cover, Good, HSG C
4.720	71	Weighted Average
4.660		98.73% Pervious Area
0.060		1.27% Impervious Area

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Type III 24-hr 2-YR Rainfall=3.10"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	100	0.1700	0.18		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
2.5	187	0.0642	1.27		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
2.6	578	0.0690	3.68	16.04	Trap/Vee/Rect Channel Flow, C-D Bot.W=4.00' D=0.50' Z= 9.5 & 9.4 ' Top.W=13.45' n= 0.050
14.4	865	Total			

Summary for Subcatchment 3S:

Runoff = 0.60 cfs @ 12.25 hrs, Volume= 0.065 af, Depth= 0.82"
 Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 2-YR Rainfall=3.10"

Area (ac)	CN	Description
0.890	70	Woods, Good, HSG C
* 0.000	89	Gravel roads, HSG C
* 0.030	98	Roofs, HSG C
* 0.000	89	Gravel driveways, HSG C
0.030	74	>75% Grass cover, Good, HSG C
0.950	71	Weighted Average
0.920		96.84% Pervious Area
0.030		3.16% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.6	100	0.0550	0.11		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
1.4	153	0.1310	1.81		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
16.0	253	Total			

Summary for Subcatchment 10S: Offsite Area

Runoff = 8.46 cfs @ 12.33 hrs, Volume= 1.015 af, Depth= 0.82"
 Routed to Reach 10R :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 2-YR Rainfall=3.10"

Area (ac)	CN	Description
2.000	77	2 acre lots, 12% imp, HSG C
12.880	70	Woods, Good, HSG C
14.880	71	Weighted Average
14.640		98.39% Pervious Area
0.240		1.61% Impervious Area

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Type III 24-hr 2-YR Rainfall=3.10"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
6.8	500	0.0600	1.22		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
20.9	600	Total			

Summary for Subcatchment 11S: Offsite Area

Runoff = 7.12 cfs @ 12.33 hrs, Volume= 0.841 af, Depth= 0.87"
 Routed to Reach 11R :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 2-YR Rainfall=3.10"

Area (ac)	CN	Description
4.000	77	2 acre lots, 12% imp, HSG C
7.620	70	Woods, Good, HSG C
11.620	72	Weighted Average
11.140		95.87% Pervious Area
0.480		4.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
6.8	500	0.0600	1.22		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
20.9	600	Total			

Summary for Reach 10R:

Inflow Area = 14.880 ac, 1.61% Impervious, Inflow Depth = 0.82" for 2-YR event
 Inflow = 8.46 cfs @ 12.33 hrs, Volume= 1.015 af
 Outflow = 8.27 cfs @ 12.43 hrs, Volume= 1.015 af, Atten= 2%, Lag= 6.0 min
 Routed to Link AP1 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Max. Velocity= 3.14 fps, Min. Travel Time= 3.3 min
 Avg. Velocity = 1.31 fps, Avg. Travel Time= 8.0 min

Peak Storage= 1,660 cf @ 12.37 hrs
 Average Depth at Peak Storage= 0.36' , Surface Width= 10.75'
 Bank-Full Depth= 2.00' Flow Area= 45.8 sf, Capacity= 389.60 cfs

4.00' x 2.00' deep channel, n= 0.050
 Side Slope Z-value= 9.5 9.4 ' ' Top Width= 41.80'
 Length= 630.0' Slope= 0.0730 ' '
 Inlet Invert= 360.00', Outlet Invert= 314.00'

4185 POST

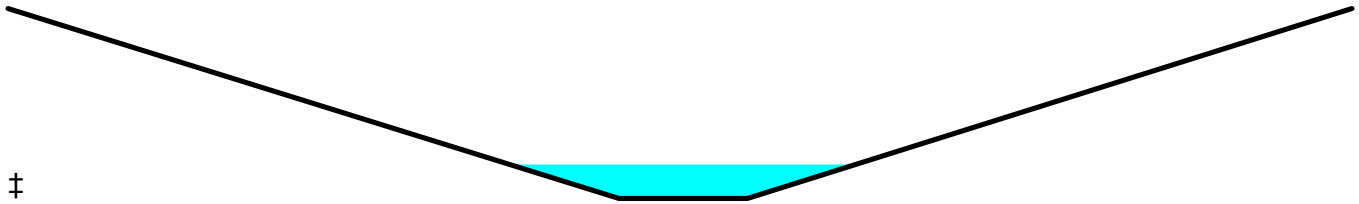
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Type III 24-hr 2-YR Rainfall=3.10"

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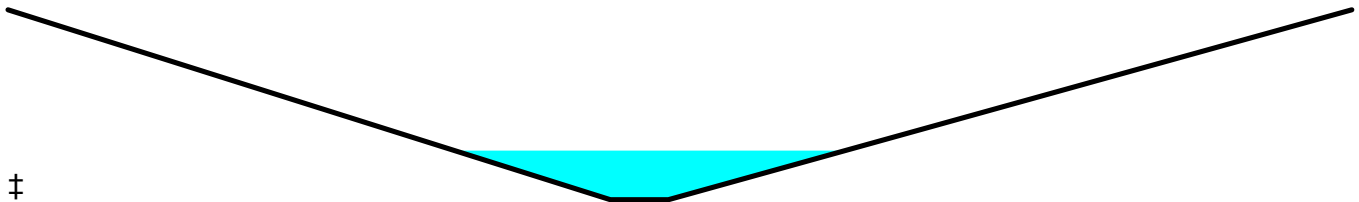
Summary for Reach 11R:

Inflow Area = 11.620 ac, 4.13% Impervious, Inflow Depth = 0.87" for 2-YR event
Inflow = 7.12 cfs @ 12.33 hrs, Volume= 0.841 af
Outflow = 6.98 cfs @ 12.42 hrs, Volume= 0.841 af, Atten= 2%, Lag= 5.4 min
Routed to Link AP1 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.49 fps, Min. Travel Time= 3.1 min
Avg. Velocity= 1.57 fps, Avg. Travel Time= 6.9 min

Peak Storage= 1,301 cf @ 12.37 hrs
Average Depth at Peak Storage= 0.52' , Surface Width= 6.74'
Bank-Full Depth= 2.00' Flow Area= 24.2 sf, Capacity= 194.79 cfs

1.00' x 2.00' deep channel, n= 0.050
Side Slope Z-value= 5.2 5.9 ' / ' Top Width= 23.20'
Length= 650.0' Slope= 0.0708 ' / '
Inlet Invert= 354.00', Outlet Invert= 308.00'



Summary for Link AP1:

Inflow Area = 38.900 ac, 2.31% Impervious, Inflow Depth = 0.83" for 2-YR event
Inflow = 21.51 cfs @ 12.39 hrs, Volume= 2.702 af
Primary = 21.51 cfs @ 12.39 hrs, Volume= 2.702 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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Type III 24-hr 10-YR Rainfall=4.60"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Runoff Area=6.730 ac 1.34% Impervious Runoff Depth=1.82"
Flow Length=635' Tc=18.1 min CN=71 Runoff=9.82 cfs 1.020 af

Subcatchment2S: Runoff Area=4.720 ac 1.27% Impervious Runoff Depth=1.82"
Flow Length=865' Tc=14.4 min CN=71 Runoff=7.54 cfs 0.716 af

Subcatchment3S: Runoff Area=0.950 ac 3.16% Impervious Runoff Depth=1.82"
Flow Length=253' Tc=16.0 min CN=71 Runoff=1.45 cfs 0.144 af

Subcatchment10S: Offsite Area Runoff Area=14.880 ac 1.61% Impervious Runoff Depth=1.82"
Flow Length=600' Slope=0.0600 '/' Tc=20.9 min CN=71 Runoff=20.44 cfs 2.256 af

Subcatchment11S: Offsite Area Runoff Area=11.620 ac 4.13% Impervious Runoff Depth=1.89"
Flow Length=600' Slope=0.0600 '/' Tc=20.9 min CN=72 Runoff=16.72 cfs 1.835 af

Reach 10R: Avg. Flow Depth=0.55' Max Vel=3.99 fps Inflow=20.44 cfs 2.256 af
n=0.050 L=630.0' S=0.0730 '/' Capacity=389.60 cfs Outflow=20.16 cfs 2.256 af

Reach 11R: Avg. Flow Depth=0.74' Max Vel=4.33 fps Inflow=16.72 cfs 1.835 af
n=0.050 L=650.0' S=0.0708 '/' Capacity=194.79 cfs Outflow=16.50 cfs 1.835 af

Link AP1: Inflow=52.12 cfs 5.970 af
Primary=52.12 cfs 5.970 af

Total Runoff Area = 38.900 ac Runoff Volume = 5.970 af Average Runoff Depth = 1.84"
97.69% Pervious = 38.000 ac 2.31% Impervious = 0.900 ac

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Type III 24-hr 10-YR Rainfall=4.60"

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Summary for Subcatchment 1S:

Runoff = 9.82 cfs @ 12.25 hrs, Volume= 1.020 af, Depth= 1.82"
 Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 10-YR Rainfall=4.60"

Area (ac)	CN	Description
6.240	70	Woods, Good, HSG C
0.170	89	Gravel roads, HSG C
0.090	98	Roofs, HSG C
* 0.140	89	Gravel driveways, HSG C
0.090	74	>75% Grass cover, Good, HSG C
6.730	71	Weighted Average
6.640		98.66% Pervious Area
0.090		1.34% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
3.1	309	0.1100	1.66		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
0.9	226	0.0990	4.04	7.63	Trap/Vee/Rect Channel Flow, C-D Bot.W=1.00' D=0.50' Z= 5.2 & 5.9 ' Top.W=6.55' n= 0.050
18.1	635	Total			

Summary for Subcatchment 2S:

Runoff = 7.54 cfs @ 12.21 hrs, Volume= 0.716 af, Depth= 1.82"
 Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 10-YR Rainfall=4.60"

Area (ac)	CN	Description
4.540	70	Woods, Good, HSG C
* 0.000	89	Gravel roads, HSG C
* 0.060	98	Roofs, HSG C
* 0.060	89	Gravel driveways, HSG C
0.060	74	>75% Grass cover, Good, HSG C
4.720	71	Weighted Average
4.660		98.73% Pervious Area
0.060		1.27% Impervious Area

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Type III 24-hr 10-YR Rainfall=4.60"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	100	0.1700	0.18		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
2.5	187	0.0642	1.27		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
2.6	578	0.0690	3.68	16.04	Trap/Vee/Rect Channel Flow, C-D Bot.W=4.00' D=0.50' Z= 9.5 & 9.4 ' Top.W=13.45' n= 0.050
14.4	865	Total			

Summary for Subcatchment 3S:

Runoff = 1.45 cfs @ 12.23 hrs, Volume= 0.144 af, Depth= 1.82"
Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Rainfall=4.60"

Area (ac)	CN	Description
0.890	70	Woods, Good, HSG C
* 0.000	89	Gravel roads, HSG C
* 0.030	98	Roofs, HSG C
* 0.000	89	Gravel driveways, HSG C
0.030	74	>75% Grass cover, Good, HSG C
0.950	71	Weighted Average
0.920		96.84% Pervious Area
0.030		3.16% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.6	100	0.0550	0.11		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
1.4	153	0.1310	1.81		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
16.0	253	Total			

Summary for Subcatchment 10S: Offsite Area

Runoff = 20.44 cfs @ 12.30 hrs, Volume= 2.256 af, Depth= 1.82"
Routed to Reach 10R :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Rainfall=4.60"

Area (ac)	CN	Description
2.000	77	2 acre lots, 12% imp, HSG C
12.880	70	Woods, Good, HSG C
14.880	71	Weighted Average
14.640		98.39% Pervious Area
0.240		1.61% Impervious Area

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Type III 24-hr 10-YR Rainfall=4.60"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
6.8	500	0.0600	1.22		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
20.9	600	Total			

Summary for Subcatchment 11S: Offsite Area

Runoff = 16.72 cfs @ 12.29 hrs, Volume= 1.835 af, Depth= 1.89"
 Routed to Reach 11R :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 10-YR Rainfall=4.60"

Area (ac)	CN	Description
4.000	77	2 acre lots, 12% imp, HSG C
7.620	70	Woods, Good, HSG C
11.620	72	Weighted Average
11.140		95.87% Pervious Area
0.480		4.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
6.8	500	0.0600	1.22		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
20.9	600	Total			

Summary for Reach 10R:

Inflow Area = 14.880 ac, 1.61% Impervious, Inflow Depth = 1.82" for 10-YR event
 Inflow = 20.44 cfs @ 12.30 hrs, Volume= 2.256 af
 Outflow = 20.16 cfs @ 12.38 hrs, Volume= 2.256 af, Atten= 1%, Lag= 5.0 min
 Routed to Link AP1 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Max. Velocity= 3.99 fps, Min. Travel Time= 2.6 min
 Avg. Velocity = 1.58 fps, Avg. Travel Time= 6.7 min

Peak Storage= 3,186 cf @ 12.34 hrs
 Average Depth at Peak Storage= 0.55' , Surface Width= 14.39'
 Bank-Full Depth= 2.00' Flow Area= 45.8 sf, Capacity= 389.60 cfs

4.00' x 2.00' deep channel, n= 0.050
 Side Slope Z-value= 9.5 9.4 ' ' Top Width= 41.80'
 Length= 630.0' Slope= 0.0730 ' '
 Inlet Invert= 360.00', Outlet Invert= 314.00'

4185 POST

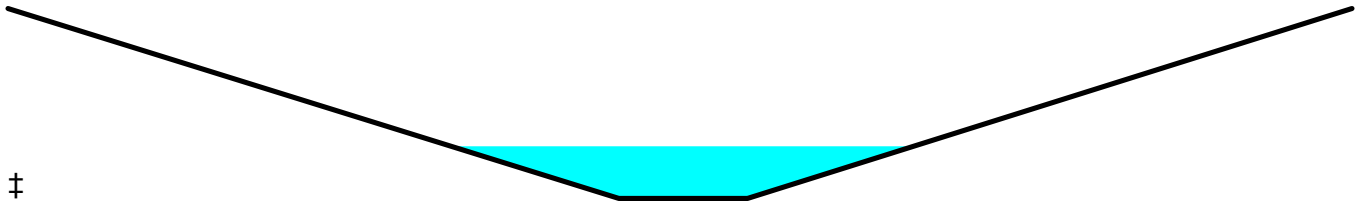
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Type III 24-hr 10-YR Rainfall=4.60"

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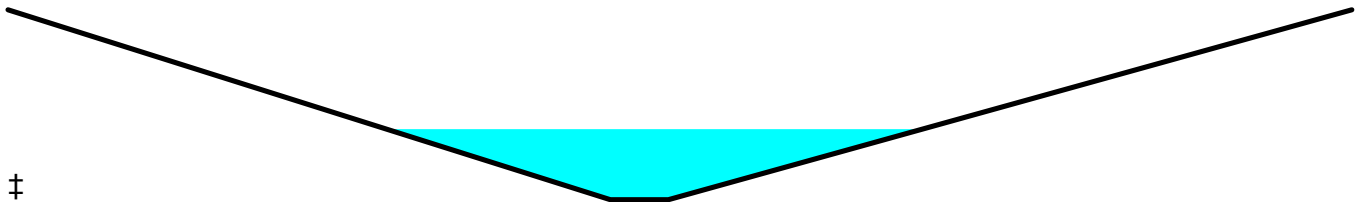
Summary for Reach 11R:

Inflow Area = 11.620 ac, 4.13% Impervious, Inflow Depth = 1.89" for 10-YR event
Inflow = 16.72 cfs @ 12.29 hrs, Volume= 1.835 af
Outflow = 16.50 cfs @ 12.38 hrs, Volume= 1.835 af, Atten= 1%, Lag= 4.9 min
Routed to Link AP1 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.33 fps, Min. Travel Time= 2.5 min
Avg. Velocity= 1.84 fps, Avg. Travel Time= 5.9 min

Peak Storage= 2,475 cf @ 12.34 hrs
Average Depth at Peak Storage= 0.74' , Surface Width= 9.25'
Bank-Full Depth= 2.00' Flow Area= 24.2 sf, Capacity= 194.79 cfs

1.00' x 2.00' deep channel, n= 0.050
Side Slope Z-value= 5.2 5.9 ' / ' Top Width= 23.20'
Length= 650.0' Slope= 0.0708 ' / '
Inlet Invert= 354.00', Outlet Invert= 308.00'



Summary for Link AP1:

Inflow Area = 38.900 ac, 2.31% Impervious, Inflow Depth = 1.84" for 10-YR event
Inflow = 52.12 cfs @ 12.34 hrs, Volume= 5.970 af
Primary = 52.12 cfs @ 12.34 hrs, Volume= 5.970 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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Type III 24-hr 25-YR Rainfall=5.80"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Runoff Area=6.730 ac 1.34% Impervious Runoff Depth=2.74"
Flow Length=635' Tc=18.1 min CN=71 Runoff=15.08 cfs 1.536 af

Subcatchment2S: Runoff Area=4.720 ac 1.27% Impervious Runoff Depth=2.74"
Flow Length=865' Tc=14.4 min CN=71 Runoff=11.56 cfs 1.077 af

Subcatchment3S: Runoff Area=0.950 ac 3.16% Impervious Runoff Depth=2.74"
Flow Length=253' Tc=16.0 min CN=71 Runoff=2.23 cfs 0.217 af

Subcatchment10S: Offsite Area Runoff Area=14.880 ac 1.61% Impervious Runoff Depth=2.74"
Flow Length=600' Slope=0.0600 '/' Tc=20.9 min CN=71 Runoff=31.40 cfs 3.396 af

Subcatchment11S: Offsite Area Runoff Area=11.620 ac 4.13% Impervious Runoff Depth=2.83"
Flow Length=600' Slope=0.0600 '/' Tc=20.9 min CN=72 Runoff=25.40 cfs 2.741 af

Reach 10R: Avg. Flow Depth=0.67' Max Vel=4.46 fps Inflow=31.40 cfs 3.396 af
n=0.050 L=630.0' S=0.0730 '/' Capacity=389.60 cfs Outflow=31.02 cfs 3.396 af

Reach 11R: Avg. Flow Depth=0.88' Max Vel=4.82 fps Inflow=25.40 cfs 2.741 af
n=0.050 L=650.0' S=0.0708 '/' Capacity=194.79 cfs Outflow=25.11 cfs 2.741 af

Link AP1: Inflow=80.19 cfs 8.966 af
Primary=80.19 cfs 8.966 af

Total Runoff Area = 38.900 ac Runoff Volume = 8.966 af Average Runoff Depth = 2.77"
97.69% Pervious = 38.000 ac 2.31% Impervious = 0.900 ac

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Type III 24-hr 25-YR Rainfall=5.80"

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Summary for Subcatchment 1S:

Runoff = 15.08 cfs @ 12.25 hrs, Volume= 1.536 af, Depth= 2.74"
 Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 25-YR Rainfall=5.80"

Area (ac)	CN	Description
6.240	70	Woods, Good, HSG C
0.170	89	Gravel roads, HSG C
0.090	98	Roofs, HSG C
* 0.140	89	Gravel driveways, HSG C
0.090	74	>75% Grass cover, Good, HSG C
6.730	71	Weighted Average
6.640		98.66% Pervious Area
0.090		1.34% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
3.1	309	0.1100	1.66		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
0.9	226	0.0990	4.04	7.63	Trap/Vee/Rect Channel Flow, C-D Bot.W=1.00' D=0.50' Z= 5.2 & 5.9 ' Top.W=6.55' n= 0.050
18.1	635	Total			

Summary for Subcatchment 2S:

Runoff = 11.56 cfs @ 12.20 hrs, Volume= 1.077 af, Depth= 2.74"
 Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 25-YR Rainfall=5.80"

Area (ac)	CN	Description
4.540	70	Woods, Good, HSG C
* 0.000	89	Gravel roads, HSG C
* 0.060	98	Roofs, HSG C
* 0.060	89	Gravel driveways, HSG C
0.060	74	>75% Grass cover, Good, HSG C
4.720	71	Weighted Average
4.660		98.73% Pervious Area
0.060		1.27% Impervious Area

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Type III 24-hr 25-YR Rainfall=5.80"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	100	0.1700	0.18		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
2.5	187	0.0642	1.27		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
2.6	578	0.0690	3.68	16.04	Trap/Vee/Rect Channel Flow, C-D Bot.W=4.00' D=0.50' Z= 9.5 & 9.4 ' Top.W=13.45' n= 0.050
14.4	865	Total			

Summary for Subcatchment 3S:

Runoff = 2.23 cfs @ 12.22 hrs, Volume= 0.217 af, Depth= 2.74"
 Routed to Link AP1 :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 25-YR Rainfall=5.80"

Area (ac)	CN	Description
0.890	70	Woods, Good, HSG C
* 0.000	89	Gravel roads, HSG C
* 0.030	98	Roofs, HSG C
* 0.000	89	Gravel driveways, HSG C
0.030	74	>75% Grass cover, Good, HSG C
0.950	71	Weighted Average
0.920		96.84% Pervious Area
0.030		3.16% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.6	100	0.0550	0.11		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.10"
1.4	153	0.1310	1.81		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
16.0	253	Total			

Summary for Subcatchment 10S: Offsite Area

Runoff = 31.40 cfs @ 12.29 hrs, Volume= 3.396 af, Depth= 2.74"
 Routed to Reach 10R :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 25-YR Rainfall=5.80"

Area (ac)	CN	Description
2.000	77	2 acre lots, 12% imp, HSG C
12.880	70	Woods, Good, HSG C
14.880	71	Weighted Average
14.640		98.39% Pervious Area
0.240		1.61% Impervious Area

4185 POST

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Type III 24-hr 25-YR Rainfall=5.80"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
6.8	500	0.0600	1.22		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
20.9	600	Total			

Summary for Subcatchment 11S: Offsite Area

Runoff = 25.40 cfs @ 12.29 hrs, Volume= 2.741 af, Depth= 2.83"
 Routed to Reach 11R :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Type III 24-hr 25-YR Rainfall=5.80"

Area (ac)	CN	Description
4.000	77	2 acre lots, 12% imp, HSG C
7.620	70	Woods, Good, HSG C
11.620	72	Weighted Average
11.140		95.87% Pervious Area
0.480		4.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.1	100	0.0600	0.12		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
6.8	500	0.0600	1.22		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
20.9	600	Total			

Summary for Reach 10R:

Inflow Area = 14.880 ac, 1.61% Impervious, Inflow Depth = 2.74" for 25-YR event
 Inflow = 31.40 cfs @ 12.29 hrs, Volume= 3.396 af
 Outflow = 31.02 cfs @ 12.37 hrs, Volume= 3.396 af, Atten= 1%, Lag= 4.5 min
 Routed to Link AP1 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Max. Velocity= 4.46 fps, Min. Travel Time= 2.4 min
 Avg. Velocity = 1.73 fps, Avg. Travel Time= 6.1 min

Peak Storage= 4,377 cf @ 12.33 hrs
 Average Depth at Peak Storage= 0.67' , Surface Width= 16.69'
 Bank-Full Depth= 2.00' Flow Area= 45.8 sf, Capacity= 389.60 cfs

4.00' x 2.00' deep channel, n= 0.050
 Side Slope Z-value= 9.5 9.4 ' ' Top Width= 41.80'
 Length= 630.0' Slope= 0.0730 ' '
 Inlet Invert= 360.00', Outlet Invert= 314.00'

4185 POST

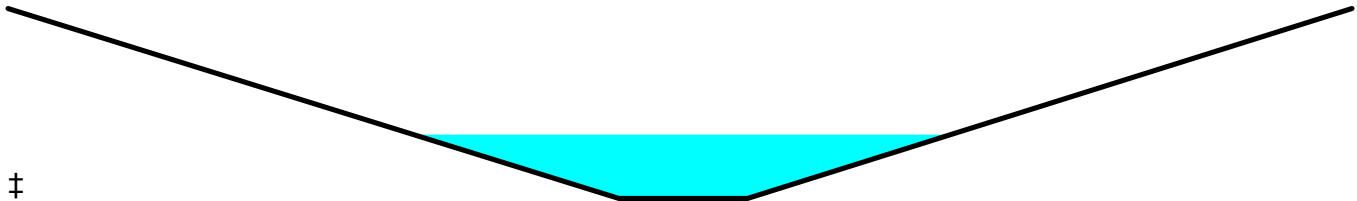
Prepared by Sitelines

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Type III 24-hr 25-YR Rainfall=5.80"

Printed 9/27/2021

Page 16



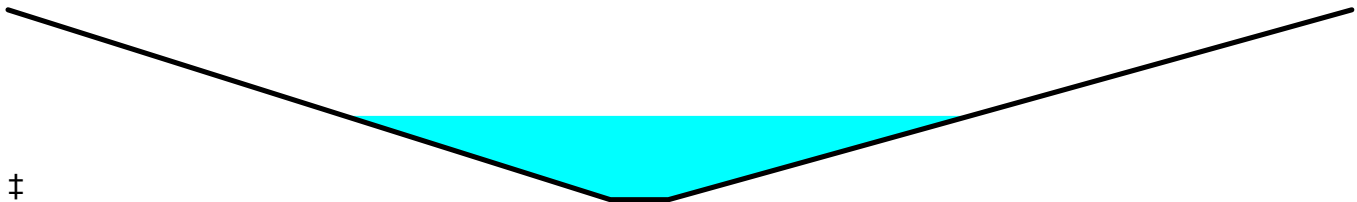
Summary for Reach 11R:

Inflow Area = 11.620 ac, 4.13% Impervious, Inflow Depth = 2.83" for 25-YR event
Inflow = 25.40 cfs @ 12.29 hrs, Volume= 2.741 af
Outflow = 25.11 cfs @ 12.36 hrs, Volume= 2.741 af, Atten= 1%, Lag= 4.3 min
Routed to Link AP1 :

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.82 fps, Min. Travel Time= 2.2 min
Avg. Velocity= 2.00 fps, Avg. Travel Time= 5.4 min

Peak Storage= 3,389 cf @ 12.32 hrs
Average Depth at Peak Storage= 0.88' , Surface Width= 10.80'
Bank-Full Depth= 2.00' Flow Area= 24.2 sf, Capacity= 194.79 cfs

1.00' x 2.00' deep channel, n= 0.050
Side Slope Z-value= 5.2 5.9 ' / ' Top Width= 23.20'
Length= 650.0' Slope= 0.0708 ' / '
Inlet Invert= 354.00', Outlet Invert= 308.00'



Summary for Link AP1:

Inflow Area = 38.900 ac, 2.31% Impervious, Inflow Depth = 2.77" for 25-YR event
Inflow = 80.19 cfs @ 12.33 hrs, Volume= 8.966 af
Primary = 80.19 cfs @ 12.33 hrs, Volume= 8.966 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

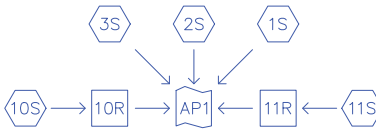
2. LAND PROJECTS WITH ROSS & ANCHORAGE CUMBERLAND AND CUMBERLAND SITE DATE: 09/20/21 1:45 PM, MELISSA A. RICHWELL
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LEGEND:

- SUBAREA OUTLINE
- TIME OF CONCENTRATION
- SUBCATCHMENT ID
- POND
- REACH
- ANALYSIS POINT

ROUTING DIAGRAM:



2. 09-28-21 SUBMITTED TO TOWN FOR FINAL SUBDIVISION REVIEW MCA
1. 08-17-21 SUBMITTED TO TOWN FOR PRELIMINARY SUB. REVIEW MCA

TITLE: **PRE-DEVELOPMENT CONDITIONS WATERSHED MAP**

PROJECT: **ROSS ESTATES
BLANCHARD ROAD EXTENSION, CUMBERLAND, MAINE**

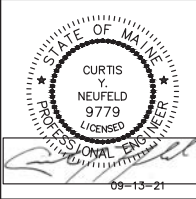
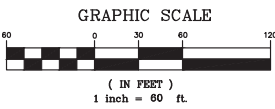
OWNER: **STONEWOOD LAND, LLC
8 ROBERTS STREET, FALMOUTH, MAINE 04105**

SITELINES
119 PURINTON ROAD, SUITE A
BRUNSWICK, MAINE 04011
207.725.1200
CIVIL ENGINEERS • PLANNERS • LAND SURVEYORS

FIELD WK:	SCALE: 1" = 50'	SHEET: DR1
DRN BY: MCA	JOB #: 4185	
CH'D BY: KPC	MAP/LOT: R09 / 680G	
DATE: 11-16-2020	FILE: 4885-SITE	



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09-13-21

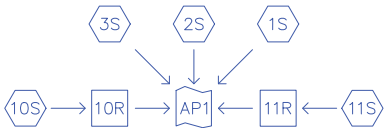
2. LAND PROJECTS: SEE ROSS & BLANCHARD RD. CUMBERLAND AND DUNHAM SITE DAVIS DR. POST. 10/20/2021. 1:40 PM. MESA AND BELL. 05/21. THIS DRAWING IS THE PROPERTY AND INSTRUMENT OF SITELINES P.A. NO MODIFICATIONS OR CHANGES MAY BE MADE TO THIS DRAWING WITHOUT THE EXPRESS WRITTEN PERMISSION OF SITELINES P.A. ANY MODIFICATION, CHANGE OR USE OF THIS DRAWING WITHOUT THE EXPRESS WRITTEN PERMISSION OF SITELINES P.A. IS UNLAWFUL AND IS AT THE USER'S RISK.



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- SUBAREA OUTLINE
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ROUTING DIAGRAM:



2. 09-28-21 SUBMITTED TO TOWN FOR FINAL SUBDIVISION REVIEW MCA
1. 08-17-21 SUBMITTED TO TOWN FOR PRELIMINARY SUB. REVIEW MCA

TITLE: **POST-DEVELOPMENT CONDITIONS
WATERSHED MAP**

PROJECT: **ROSS ESTATES
BLANCHARD ROAD EXTENSION, CUMBERLAND, MAINE**

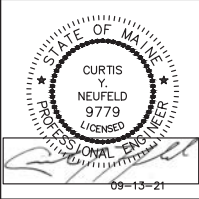
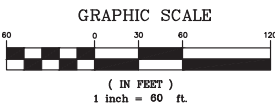
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DRN BY: MCA	JOB #: 4185	
CH'D BY: KPC	MAP/LOT: R09 / 680G	
DATE: 11-16-2020	FILE: 4885-SITE	



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X:\LAND PROJECTS\186 ROSS BLANCHARD RD CUMBERLAND\DWG\186-COV-DET.DWG, COVER C1, 1/28/2021 2:08 PM, MELISSA ARCHIBELL

GENERAL NOTES:

1. DRAWINGS ARE BASED ON BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION FROM MULTIPLE SOURCES.
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION HAS NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVES AND IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE (1-800-DIG-SAFE) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IN AREAS OF POTENTIAL CONFLICTS TEST PITS SHALL BE REQUIRED TO VERIFY EXISTING UTILITY LOCATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
3. RIM ELEVATIONS OF PROPOSED SANITARY SEWER MANHOLES AND ASSOCIATED STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADING PLANS. ADJUST ALL OTHER RIM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISH GRADE WITHIN LIMITS OF WORK.
4. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, CABLE AND FIRE ALARM). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH CONSTRUCTION MANAGER AND ARCHITECT.
5. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, SIZE, INVERTS AND TYPES OF EXISTING PIPES AT ALL PROPOSED POINTS OF CONNECTION PRIOR TO ORDERING MATERIALS. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATIONS, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE CONSTRUCTION MANAGER REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT.
6. THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS AND GRADES BEFORE WORK BEGINS. CONTRACTOR SHALL CONFIRM LOCATION AND DEPTH ALL UTILITY LINE CROSSINGS WITH TEST PITS PRIOR TO BEGINNING WORK. CONFLICTS SHALL BE REPORTED IN WRITING TO CONSTRUCTION MANAGER FOR RESOLUTION OF THE CONFLICT.
7. ALL AREAS OUTSIDE THE LIMIT OF WORK THAT ARE DISTURBED SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. ALL AREAS DISTURBED DURING CONSTRUCTION NOT COVERED WITH BUILDINGS, STRUCTURES, OR PAVEMENT SHALL RECEIVE 4 INCHES OF LOAM AND SEED.
8. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS AND SHALL BE RESPONSIBLE FOR PAYING ANY FEES FOR ANY POLE RELOCATION AND FOR THE ALTERATION OR ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, CABLE, FIRE ALARM AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.
9. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY PERMITS, PAY ALL FEES AND POST ALL BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS AND AS SPECIFIED.
10. ALL PROPERTY MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE RESET TO THEIR ORIGINAL LOCATION BY A MAINE REGISTERED LICENSED PROFESSIONAL LAND SURVEYOR (PLS) AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL PREPARE AN AS-BUILT PLAN SURVEY SHOWING LOCATIONS OF ALL SURFACE FEATURES AND SUBSURFACE UTILITY SYSTEMS INCLUDING THE LOCATION TYPE, SIZE AND INVERTS.
11. THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES PRIOR TO EARTHWORK OPERATION AND MAINTAIN ALL EROSION CONTROL MEASURES AND SEEDED EMBANKMENTS DURING CONSTRUCTION. EROSION CONTROL SHALL BE REMOVED ONLY UPON THE ESTABLISHMENT OF ALL LANDSCAPED AREAS. ALL WORK SHALL BE IN COMPLIANCE WITH THE ENVIRONMENTAL QUALITY HANDBOOK FOR EROSION AND SEDIMENT CONTROL, LATEST EDITION, AS ADOPTED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
12. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. ALL CONSTRUCTION ACTIVITY SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
13. ALL MATERIALS AND CONSTRUCTION METHODS USED WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO ALL LOCAL MUNICIPAL STANDARDS AND MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
14. THE CONTRACTOR IS REQUIRED TO CONTROL DUST DURING CONSTRUCTION. EXPOSED SOIL AREAS SHALL BE SPRAYED WITH WATER AS NEEDED TO CONTROL DUST EMISSIONS. COVER EXPOSED SOIL AREAS AS QUICKLY AS PRACTICAL TO PREVENT WINDS FROM GENERATING DUST.
15. ALL MATERIALS SHALL BE NEW AND PROVIDED BY THE CONTRACTOR.

LAYOUT NOTES:

1. ALL DIMENSIONING, UNLESS NOTED OTHERWISE, IS TO THE FACE OF CURB OR FOUNDATION.
2. OFFSETS TO CATCH BASINS AND MANHOLES ARE TO THE CENTER OF THE FRAME.
3. PIPE LENGTH EQUALS THE CENTER TO CENTER DISTANCES BETWEEN CATCH BASINS AND/OR MANHOLES MINUS ONE HALF THE DIAMETER OF EACH CATCH BASIN OR MANHOLE.
4. BOUNDARY INFORMATION ON LAYOUT PLAN IS FOR REFERENCE ONLY, REFER TO CERTIFIED BOUNDARY PLANS FOR BOUNDARY INFORMATION.

GRADING AND DRAINAGE NOTES:

1. UNLESS OTHERWISE NOTED, ALL STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS SECTION 603. PIPE CULVERTS AND STORM DRAINS, LATEST REVISION WITH THE EXCEPTION THAT THE ONLY ACCEPTABLE TYPES OF PIPE ARE AS FOLLOWS:
- POLYVINYL CHLORIDE PIPE (PVC) SDR 35
SMOOTH BORE POLYETHYLENE PIPE - HDPE N-12 ADS OR SDR 35
2. TOPSOIL STRIPPED IN AREAS OF CONSTRUCTION THAT IS SUITABLE FOR REUSE AS LOAM SHALL BE STOCKPILED ON SITE AT A LOCATION TO BE DESIGNATED BY OWNER. UNSUITABLE SOIL SHALL BE SEPARATED, REMOVED AND DISPOSED OF AT AN APPROVED DISPOSAL LOCATION OFF SITE.
3. THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY. NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING.

PERMITTING REQUIREMENTS:

AGENCY:	PERMIT:	STATUS:
TOWN OF CUMBERLAND	SUBDIVISION APPROVAL BUILDING	PENDING (BY CONTRACTOR)
MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION	NRPA PBR	PENDING



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MAJOR CONSERVATION SUBDIVISION

FINAL PLAN

ROSS ESTATES

BLANCHARD ROAD EXTENSION

CUMBERLAND, MAINE

PREPARED FOR:
STONEWOOD LAND, LLC
8 ROBERTS STREET, FALMOUTH, MAINE 04105

TOWN/UTILITY CONTACTS

CODE ENFORCEMENT

WILLIAM LONGLEY
TOWN OF CUMBERLAND
290 TUTTLE ROAD
CUMBERLAND, MAINE 04021
207-829-2207

ELECTRIC SERVICE

CENTRAL MAINE POWER
280 BATH ROAD
BRUNSWICK, MAINE 04011
207-721-8054

TELEPHONE SERVICE

FAIRPOINT
BATH ROAD (P.O. BOX 360)
BRUNSWICK, MAINE 04011
207-442-8018

CABLE SERVICE

COMCAST CONSTRUCTION OFFICE
336 BATH ROAD
BRUNSWICK, MAINE, 04011
207-729-6660

WATER SERVICE

PORTLAND WATER DISTRICT
225 DOUGLASS STREET
PO BOX 3553
PORTLAND, MAINE 04104

SANITARY SEWER

TOWN OF CUMBERLAND
WILLIAM SHANE, P.E., TOWN MANAGER
290 TUTTLE ROAD
CUMBERLAND, MAINE 04021
207-829-2205

PUBLIC WORKS DEPARTMENT

CHRISTOPHER BOLDUC, PUBLIC SERVICES DIRECTOR
290 TUTLE ROAD
CUMBERLAND, MAINE 04021
207-829-2220

CUMBERLAND FIRE DEPARTMENT

DANIEL SMALL, FIRE CHIEF
366 TUTTLE ROAD
CUMBERLAND, MAINE 04021
207-829-5421

CIVIL ENGINEER

SITELINES P.A.
ATTN: CURTIS Y. NEUFELD, P.E.
119 PURINTON ROAD, SUITE A
BRUNSWICK, MAINE 04011
207-725-1200
WWW.SITELINESPA.COM

PROJECT TEAM

SURVEYOR

SITELINES P.A.
ATTN: KEVIN CLARK, P.L.S.
119 PURINTON ROAD, SUITE A
BRUNSWICK, MAINE 04011
207-725-1200
WWW.SITELINESPA.COM



LOCATION MAP
NOT TO SCALE

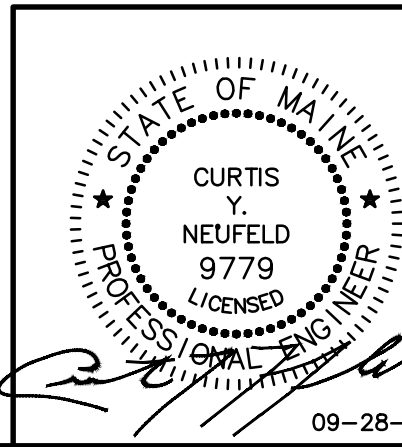
LEGEND

EXISTING	PROPOSED
	IRON MARKER FOUND
	5/8" REBAR TOPPED WITH AN ALUMINUM I.D. CAP
	CATCH BASIN
	SEWER MANHOLE
	FIRE HYDRANT
	WATER GATE VALVE
	WATER SHUT-OFF
	BLOW-OFF/CLEAN-OUT
	UTILITY POLE
	UTILITY LINE
	PROPERTY LINE
	EASEMENTS
	SETBACK/BUFFER
	STREAM
	CURB
	EDGE OF PAVEMENT
	BUILDING
	STORM DRAIN(SEE PLAN FOR SIZE)
	SEWER LINE(SEE PLAN FOR SIZE)
	WATER LINE(SEE PLAN FOR SIZE)
	UNDERDRAIN(SEE PLAN FOR SIZE)
	SLOPE ARROW
	CONTOURS
	TREE LINE
	SEDIMENT BARRIER
	RIPRAP
	PROPOSED PAVEMENT
	SPOT GRADE

2. 09-28-21 SUBMITTED TO TOWN FOR FINAL SUBDIVISION REVIEW MCA
1. 08-17-21 SUBMITTED TO TOWN FOR PRELIMINARY SUB. REVIEW MCA

TITLE:	COVER SHEET	
PROJECT:	ROSS ESTATES BLANCHARD ROAD EXTENSION, CUMBERLAND, MAINE	
PREPARED FOR:	STONEWOOD LAND, LLC 8 ROBERTS STREET, FALMOUTH, MAINE 04105	
	 119 PURINTON ROAD, SUITE A BRUNSWICK, MAINE 04011 207.725.1200 CIVIL ENGINEERS • PLANNERS • LAND SURVEYORS	
FIELD WK:	SCALE: NTS	SHEET: C1
DRN BY: MCA	JOB #: 4185	
CH'D BY: KPC	MAP/LOT: R08 / 681	
DATE: 11-16-2020	FILE: 4185-COV-DET	

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CHANGE AND IS NOT FOR
PRICING OR CONSTRUCTION.
PRICING BASED ON THIS
PLAN IS NOT BINDING
UNLESS SIGNED BY BOTH
CONTRACTOR AND OWNER.

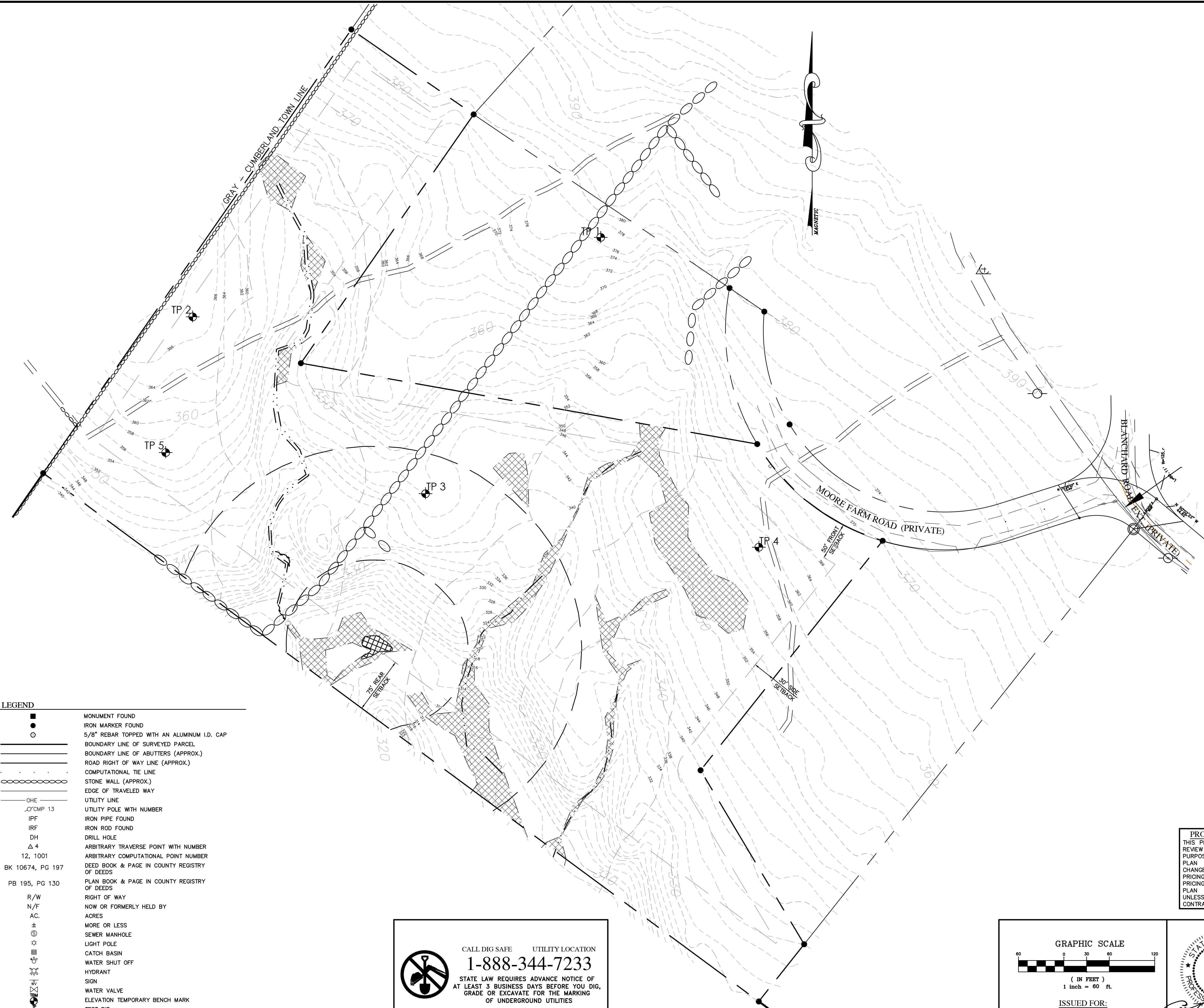


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PERMITTING REVIEW

09-28-21

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XLAND PROJECTS\4185 ROSS BLANCHARD RD CUMBERLAND\DWG\4185-SITE.DWG, 02/20/2021 2:08 PM, MELISSA ARCHIBELL



LOCATION MAP
NOT TO SCALE

NOTES:

1. TITLE REFERENCE FOR SURVEYED PARCEL:
BK 36884, PG 28
2. PLAN REFERENCE(S):
 - a) PLAN ENTITLED, "PLAN OF LAND AND RIGHTS SOLD TO NATHANIEL ROSS & ROSS ENTITIES BY BRENDA AND ROBERT PIAMPIANO", DATED SEPTEMBER 15, 2020 BY CUMBERLAND BOUNDARY SURVEY, PLLC.
 - b) PLAN ENTITLED, "WETLAND DELINEATION PLAN PREPARED FOR NATE ROSS (N/F PIAMPIANO), BLANCHARD ROAD EXT, CUMBERLAND, MAINE", DATED MAY 8, 2020 BY ALBERT FRICK ASSOCIATES, INC.
 - c) PLAN ENTITLED, "STANDARD BOUNDARY SURVEY OF LAND OF ROBERT J. PIAMPIANO, BLANCHARD ROAD, CUMBERLAND, MAINE, PREPARED FOR BRENDA T. PIAMPIANO, 365 BLANCHARD ROAD, CUMBERLAND, MAINE 04021", BY SEBAGO TECHINCS AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS ON MARCH 20, 2001 IN PLAN BOOK 201, PAGE 104.
3. AREA INFORMATION:
540,475 S.F. (12.41 ACRES)
4. TAX MAP REFERENCE:
TAX MAP R08, LOT 68I.
5. BASIS OF BEARINGS:
BEARINGS ARE MAGNETIC AND ARE BASED ON HAND COMPASS BEARINGS ALONG RANDOM TRAVERSE LINES.
6. WETLANDS:
WETLAND DELINEATION COMPLETED BY ALBERT FRICK ASSOCIATES, INC. ON MAY 13, 2020
7. TEST PITS:
THREE (3) TEST PITS WERE COMPLETED ON THE SITE BY ALBERT FRICK ASSOCIATES, INC. ON JUNE 2, 2020.

LEGEND	
■	MONUMENT FOUND
○	IRON MARKER FOUND
=====	BOUNDARY LINE OF SURVEYED PARCEL
-----	BOUNDARY LINE OF ABUTTERS (APPROX.)
-----	ROAD RIGHT OF WAY LINE (APPROX.)
-----	COMPUTATIONAL TIE LINE
=====	STONE WALL (APPROX.)
-----	EDGE OF TRAVELED WAY
-----	UTILITY LINE
○CMP 13	UTILITY POLE WITH NUMBER
IPF	IRON PIPE FOUND
IRF	IRON ROD FOUND
DH	DRILL HOLE
Δ 4	ARBITRARY TRAVERSE POINT WITH NUMBER
12, 1001	ARBITRARY COMPUTATIONAL POINT NUMBER
BK 10674, PG 197	DEED BOOK & PAGE IN COUNTY REGISTRY OF DEEDS
PB 195, PG 130	PLAN BOOK & PAGE IN COUNTY REGISTRY OF DEEDS
R/W	RIGHT OF WAY
N/F	NOW OR FORMERLY HELD BY
AC.	ACRES
±	MORE OR LESS
⊙	SEWER MANHOLE
☆	LIGHT POLE
⊞	CATCH BASIN
⊞	WATER SHUT OFF
⊞	HYDRANT
⊞	SIGN
⊞	WATER VALVE
⊞	ELEVATION TEMPORARY BENCH MARK
⊞	TEST PIT

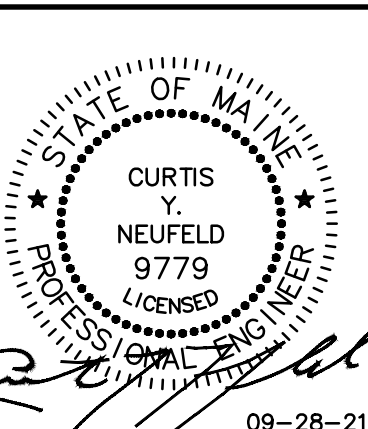
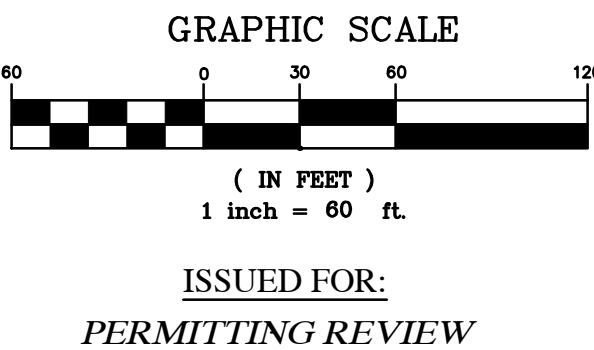


CALL DIG SAFE UTILITY LOCATION

1-888-344-7233

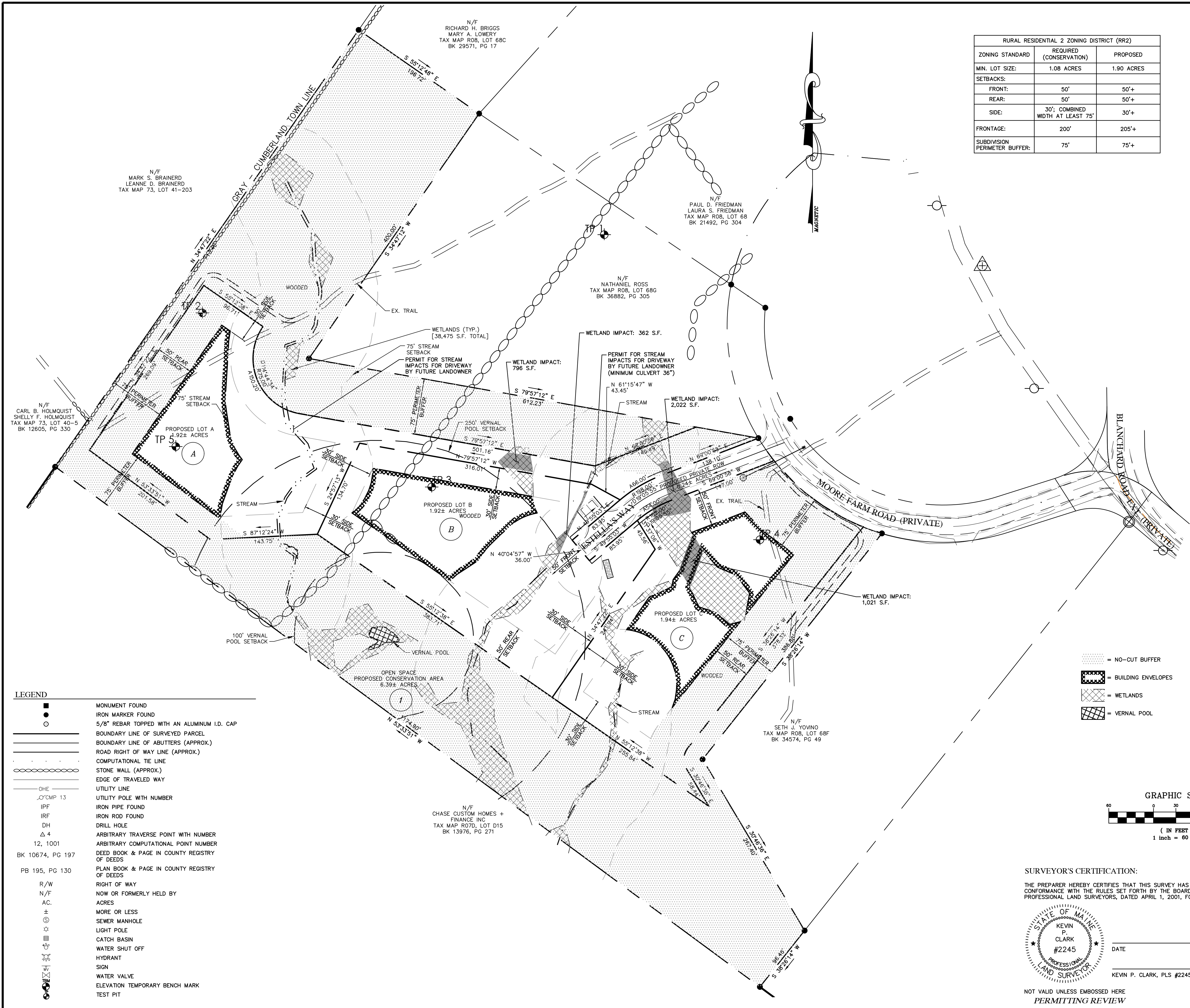
STATE LAW REQUIRES ADVANCE NOTICE OF
AT LEAST 3 BUSINESS DAYS BEFORE YOU DIG,
GRADE OR EXCAVATE FOR THE MARKING
OF UNDERGROUND UTILITIES

PROGRESS PRINT
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CONTRACTOR AND OWNER.



2. 09-28-21 SUBMITTED TO TOWN FOR FINAL SUBDIVISION REVIEW MCA
1. 08-17-21 SUBMITTED TO TOWN FOR PRELIMINARY SUB. REVIEW MCA

TITLE: EXISTING CONDITIONS PLAN	
PROJECT: ROSS ESTATES BLANCHARD ROAD EXTENSION, CUMBERLAND, MAINE	
PREPARED FOR: STONEWOOD LAND, LLC 8 ROBERTS STREET, FALMOUTH, MAINE 04105	
 SITELINES 119 PURINTON ROAD, SUITE A BRUNSWICK, MAINE 04011 207.725.1200 CIVIL ENGINEERS • PLANNERS • LAND SURVEYORS	
FIELD WK:	SCALE: 1"=60'
DRN BY: MCA	JOB #: 4185
CH'D BY: KPC	MAP/LOT: R08 / 68I
DATE: 11-16-2020	FILE: 4185-SITE
SHEET: C2	



RURAL RESIDENTIAL 2 ZONING DISTRICT (RR2)		
ZONING STANDARD	REQUIRED (CONSERVATION)	PROPOSED
MIN. LOT SIZE:	1.08 ACRES	1.90 ACRES
SETBACKS:		
FRONT:	50'	50'+
REAR:	50'	50'+
SIDE:	30'; COMBINED WIDTH AT LEAST 75'	30'+
FRONTAGE:	200'	205'+
SUBDIVISION PERIMETER BUFFER:	75'	75'+



LOCATION MAP
NOT TO SCALE

NOTES:

1. TITLE REFERENCE FOR SURVEYED PARCEL:

BK 36884, PG 28

2. PLAN REFERENCE(S):

a) PLAN ENTITLED, "PLAN OF LAND AND RIGHTS SOLD TO NATHANIEL ROSS & ROSS ENTITIES BY BRENDA AND ROBERT PIAMPANO", DATED SEPTEMBER 15, 2020 BY CUMBERLAND BOUNDARY SURVEY, PLLC.

b) PLAN ENTITLED, "WETLAND DELINEATION PLAN PREPARED FOR NATE ROSS (N/F PIAMPANO), BLANCHARD ROAD EXT, CUMBERLAND, MAINE", DATED MAY 8, 2020 BY ALBERT FRICK ASSOCIATES, INC.

c) PLAN ENTITLED, "STANDARD BOUNDARY SURVEY OF LAND OF ROBERT J. PIAMPANO, BLANCHARD ROAD, CUMBERLAND, MAINE, PREPARED FOR BRENDA T. PIAMPANO, 365 BLANCHARD ROAD, CUMBERLAND, MAINE 04021", BY SEBAGO TECHNICS AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS ON MARCH 20, 2001 IN PLAN BOOK 201, PAGE 104.

3. AREA INFORMATION:

540,475 S.F. (12.41 ACRES)

4. TAX MAP REFERENCE:

TAX MAP R08, LOT 68I.

5. BASIS OF BEARINGS:

BEARINGS ARE MAGNETIC AND ARE BASED ON HAND COMPASS BEARINGS ALONG RANDOM TRAVERSE LINES.

6. DENSITY CALCULATIONS:

GROSS ACREAGE: 540,475 S.F. (12.41 AC.)

SLOPES (20%): 0 S.F. (0 AC.)

WETLANDS: 38,475 S.F. (0.88 AC.)

100YR FLOOD: 0 S.F. (0 AC.)

RIGHTS-OF-WAY: 11,115 S.F. (0.26 AC.)

RP DISTRICT: 0 S.F. (0 AC.)

NET RESIDENTIAL ACREAGE: 490,885 S.F. (11.27 AC.)

MAXIMUM NUMBER OF LOTS ALLOWED: 11.27 AC / 2 AC (RR2) = 5.63 LOTS

MINIMUM LOT SIZE: 50% OF GROSS ACREAGE / MAX ALLOWABLE LOTS

6.20 AC / 5.63 LOTS = 1.10 ACRES

7. OPEN SPACE REQUIREMENTS:

GROSS ACREAGE: 12.41 ACRES

50% OF AREA: 6.20 ACRES MINIMUM OPEN SPACE REQUIREMENT

PROPOSED OPEN SPACE = 6.39± ACRES

8. WETLAND IMPACTS:

TOTAL WETLAND IMPACTS: 4,201 S.F.

9. FIRE PROTECTION:

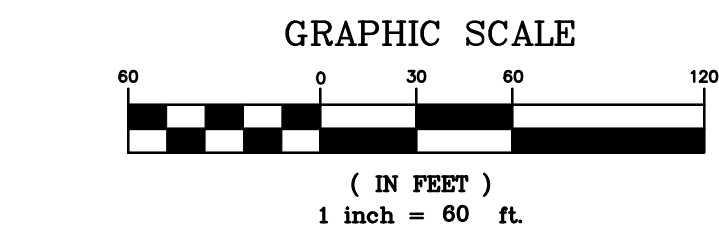
EACH RESIDENTIAL DWELLING UNIT WITHIN THIS SUBDIVISION SHALL BE EQUIPPED WITH AN APPROVED AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM IN ACCORDANCE WITH CHAPTER 96 ARTICLE II OF THE TOWN OF CUMBERLAND CODE.

10. MDEP NRPA PERMITTING:

IMPACTS WITHIN THE 75' STREAM SETBACK WILL REQUIRE A MAINE DEP NRPA PERMIT BY RULE. INDIVIDUAL LOTS WILL BE REQUIRED TO SUBMIT INDIVIDUAL NRPA PERMITS FOR ANY STREAM IMPACTS ASSOCIATED WITH BUILDING AND DRIVEWAY DEVELOPMENT.

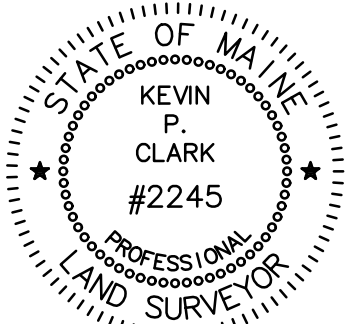
LEGEND

- MONUMENT FOUND
- IRON MARKER FOUND
- 5/8" REBAR TOPPED WITH AN ALUMINUM I.D. CAP
- BOUNDARY LINE OF SURVEYED PARCEL
- BOUNDARY LINE OF ABUTTERS (APPROX.)
- ROAD RIGHT OF WAY LINE (APPROX.)
- COMPUTATIONAL TIE LINE
- STONE WALL (APPROX.)
- EDGE OF TRAVELED WAY
- UTILITY LINE
- UTILITY POLE WITH NUMBER
- IRON PIPE FOUND
- IRON ROD FOUND
- DRILL HOLE
- ARBITRARY TRAVERSE POINT WITH NUMBER
- ARBITRARY COMPUTATIONAL POINT NUMBER
- DEED BOOK & PAGE IN COUNTY REGISTRY OF DEEDS
- PLAN BOOK & PAGE IN COUNTY REGISTRY OF DEEDS
- RIGHT OF WAY
- NOW OR FORMERLY HELD BY
- ACRES
- MORE OR LESS
- SEWER MANHOLE
- LIGHT POLE
- CATCH BASIN
- WATER SHUT OFF
- HYDRANT
- SIGN
- WATER VALVE
- ELEVATION TEMPORARY BENCH MARK
- TEST PIT



SURVEYOR'S CERTIFICATION:

THE PREPARER HEREBY CERTIFIES THAT THIS SURVEY HAS BEEN UNDERTAKEN IN CONFORMANCE WITH THE RULES SET FORTH BY THE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS, DATED APRIL 1, 2001, FOR A BOUNDARY SURVEY.

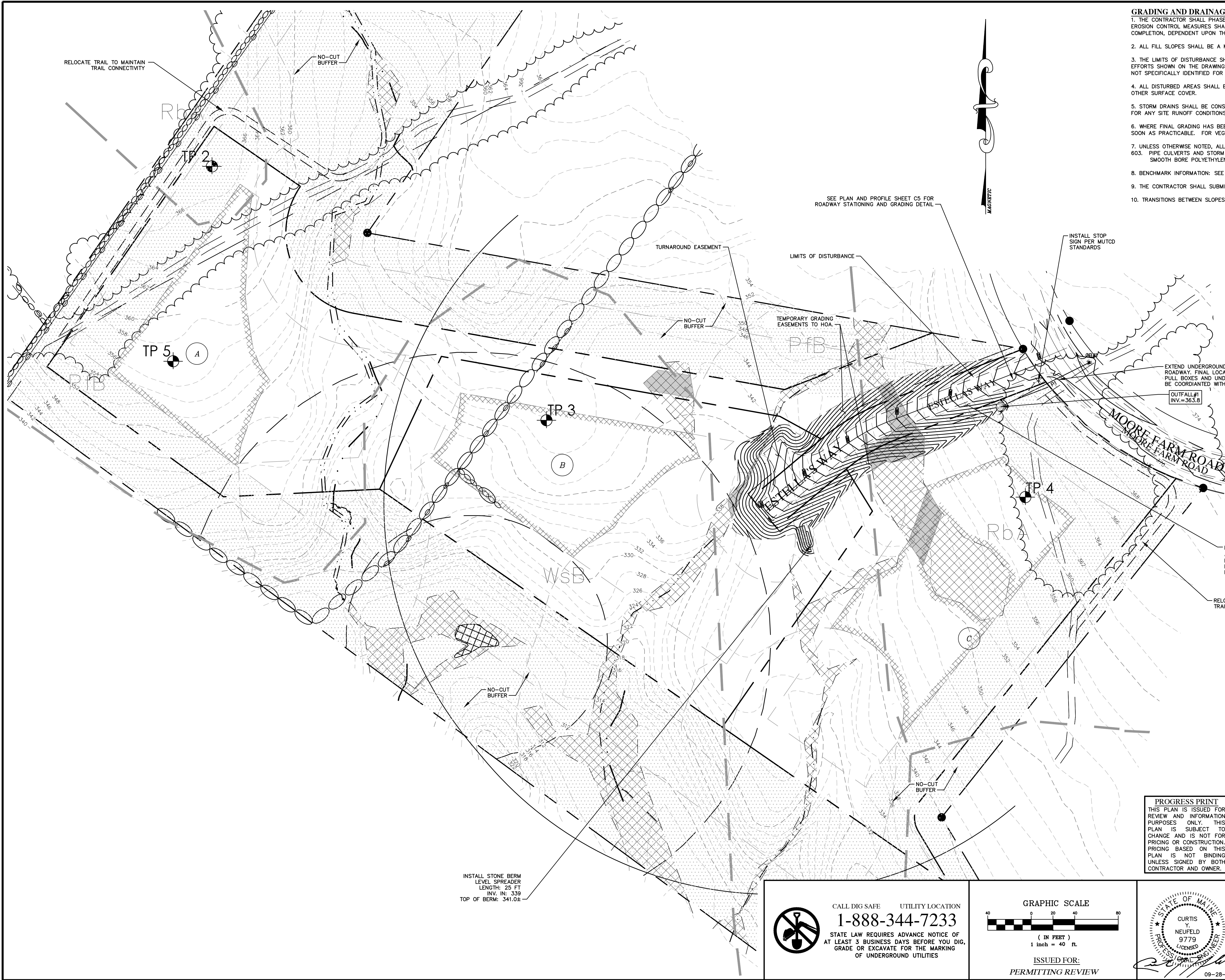


NOT VALID UNLESS EMBOSSED HERE
PERMITTING REVIEW

TITLE: SUBDIVISION PLAN CONSERVATION SUBDIVISION	
PROJECT: ROSS ESTATES BLANCHARD ROAD EXTENSION, CUMBERLAND, MAINE	
PREPARED FOR: STONEWOOD LAND, LLC 8 ROBERTS STREET, FALMOUTH, MAINE 04105	
 SITELINES 119 PURINTON ROAD, SUITE A BRUNSWICK, MAINE 04011 207.725.1200 CIVIL ENGINEERS • PLANNERS • LAND SURVEYORS	
FIELD WK:	SCALE: 1"=60'
DRN BY:	JOB #: 4185
CH'D BY:	MAP/LOT: R08 / 68I
DATE: 11-16-2020	FILE: 4185-SITE

C3

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X:\LAND PROJECTS\4185 ROSS BLANCHARD RD CUMBERLAND\DWG\4185-SITE.DWG, 02 SITE DEV, 9/20/2021 2:08 PM, MELISSA ARCHIBELL



- GRADING AND DRAINAGE NOTES:**
1. THE CONTRACTOR SHALL PHASE GRADING EFFORTS SUCH THAT TOTAL SITE DISTURBANCE IS MINIMIZED. TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO GRADING EFFORTS OR WITHOUT DELAY UPON THEIR COMPLETION, DEPENDENT UPON THE SITUATION.
 2. ALL FILL SLOPES SHALL BE A MINIMUM OF 3:1 HORIZONTAL TO VERTICAL UNLESS OTHERWISE NOTED OR DIRECTED.
 3. THE LIMITS OF DISTURBANCE SHALL GENERALLY BE THE MINIMAL EXTENT NECESSARY ONLY TO PERFORM THE GRADING EFFORTS SHOWN ON THE DRAWINGS. SPECIAL CARE SHALL BE TAKEN TO AVOID DISTURBANCE OF OBJECTS AND AREAS NOT SPECIFICALLY IDENTIFIED FOR MODIFICATION OR REMOVAL.
 4. ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED IN ACCORDANCE WITH THE DRAWINGS, UNLESS INTENDED FOR OTHER SURFACE COVER.
 5. STORM DRAINS SHALL BE CONSTRUCTED CONCURRENTLY WITH GRADING EFFORTS TO PROVIDE ADEQUATE CONVEYANCE FOR ANY SITE RUNOFF CONDITIONS.
 6. WHERE FINAL GRADING HAS BEEN COMPLETED, SURFACE RESTORATION FOR DISTURBED AREAS WILL BE COMPLETED AS SOON AS PRACTICABLE. FOR VEGETATIVE AREAS, VEGETATION WILL BE PROGRESSIVELY ESTABLISHED.
 7. UNLESS OTHERWISE NOTED, ALL STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS SECTION 603. PIPE CULVERTS AND STORM DRAINS, LATEST REVISION WITH ACCEPTABLE TYPES OF PIPE ARE AS FOLLOWS:
SMOOTH BORE POLYETHYLENE PIPE - HDPE N-12 ADS
 8. BENCHMARK INFORMATION: SEE PLAN
 9. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL DRAINAGE STRUCTURES AND PIPING PRIOR TO ORDERING.
 10. TRANSITIONS BETWEEN SLOPES ARE TO BE GENERALLY GRADUAL AND RESULT IN A SMOOTH, ROUNDED APPEARANCE.

DRAINAGE STRUCTURE DATA:

CB#1
RIM: 370.0
INV. OUT: 364.0± (TO OUTFALL#1)

P1: 36" HDPE L=91' S=0.0050

EXTEND UNDERGROUND ELECTRIC ALONG NEW ROADWAY. FINAL LOCATION OF TRANSFORMERS, PULL BOXES AND UNDERGROUND ELECTRIC TO BE COORDINATED WITH CMP.

OUTFALL#1
INV.=363.8

PRIVATE GRAVEL ROAD WITH 9' TRAVEL LANES AND 2' GRAVEL SHOULDERS, WITHIN A 36' PRIVATE RIGHT-OF-WAY WITH ADDITIONAL 5' EASEMENTS. SEE SHEET C8 FOR ROAD AND RIGHT-OF-WAY CROSS SECTION

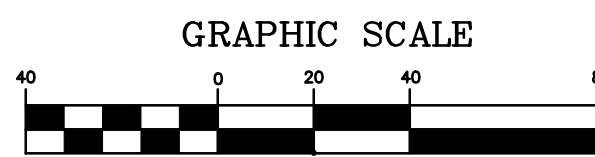
RELOCATE TRAIL TO MAINTAIN TRAIL CONNECTIVITY

INSTALL STONE BERM
LEVEL SPREADER
LENGTH: 25 FT
INV. IN: 339
TOP OF BERM: 341.0±

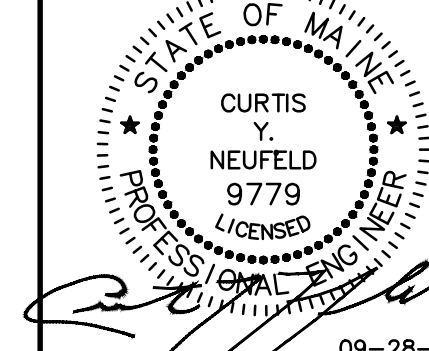
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ISSUED FOR:
PERMITTING REVIEW



2. 09-28-21 SUBMITTED TO TOWN FOR FINAL SUBDIVISION REVIEW MCA
1. 08-17-21 SUBMITTED TO TOWN FOR PRELIMINARY SUB. REVIEW MCA

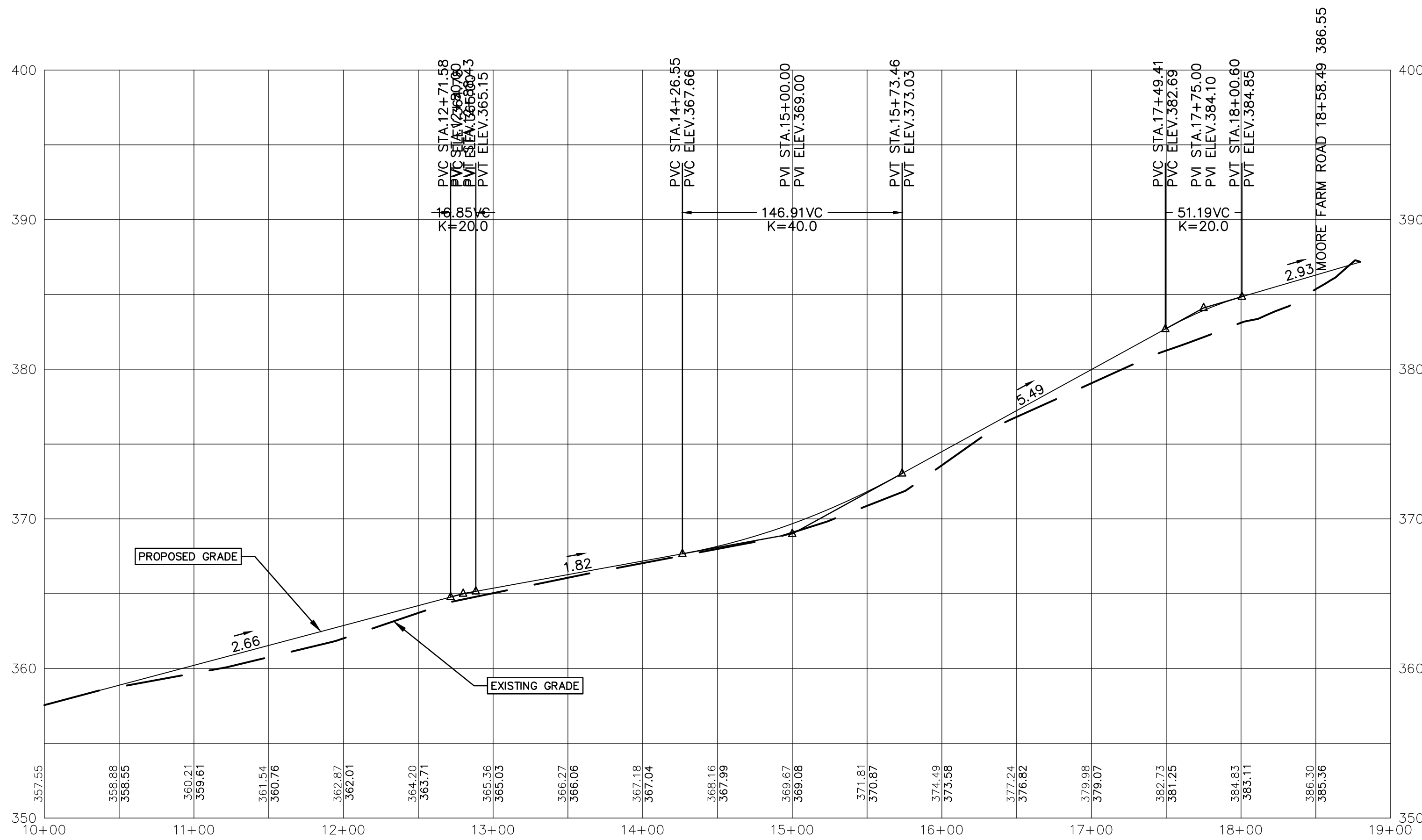
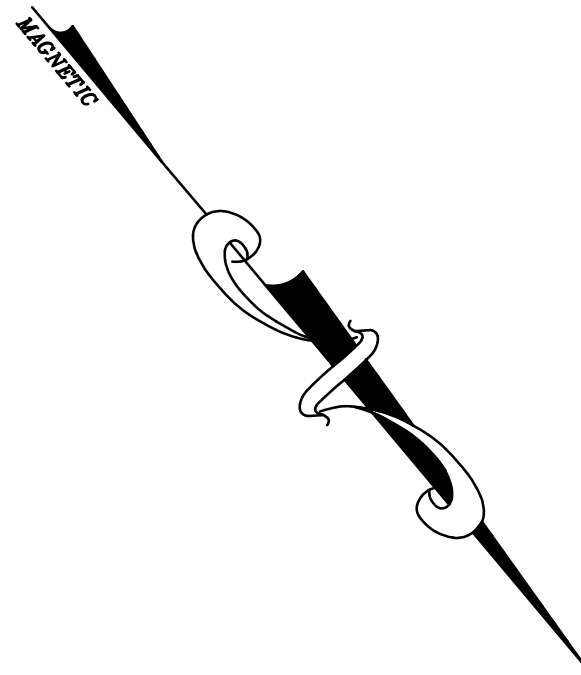
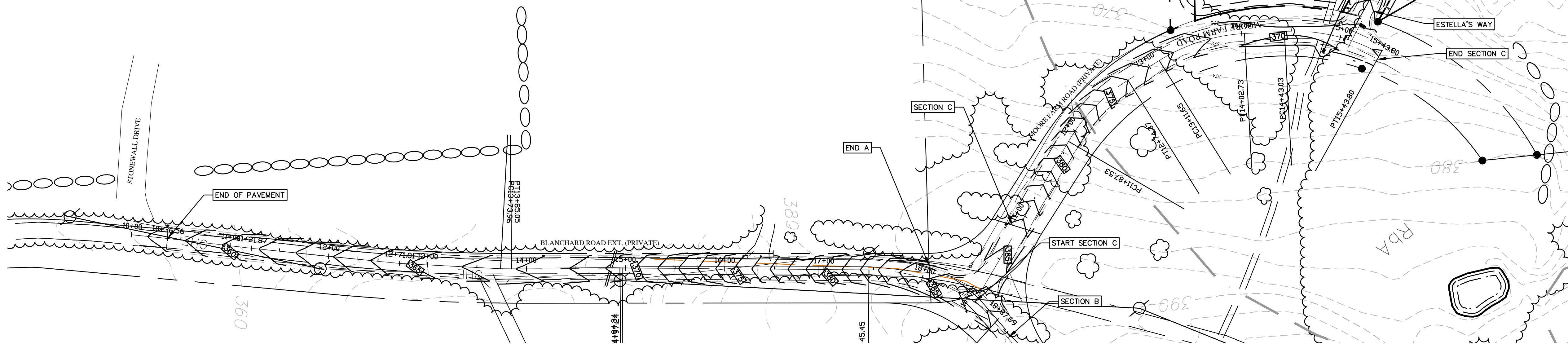
TITLE:
SITE DEVELOPMENT PLAN
PROJECT:
ROSS ESTATES
BLANCHARD ROAD EXTENSION, CUMBERLAND, MAINE
PREPARED FOR:
STONEWOOD LAND, LLC
8 ROBERTS STREET, FALMOUTH, MAINE 04105

SITELINES
119 PURINTON ROAD, SUITE A
BRUNSWICK, MAINE 04011
207.725.1200
CIVIL ENGINEERS • PLANNERS • LAND SURVEYORS

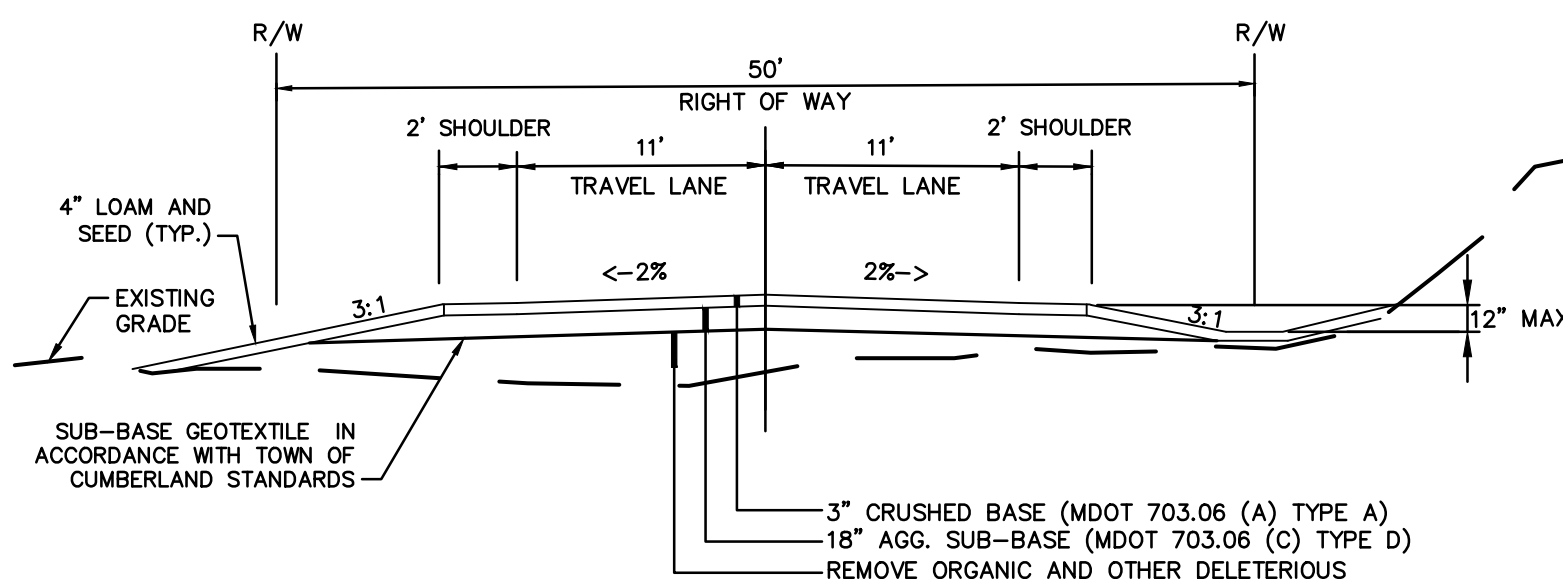
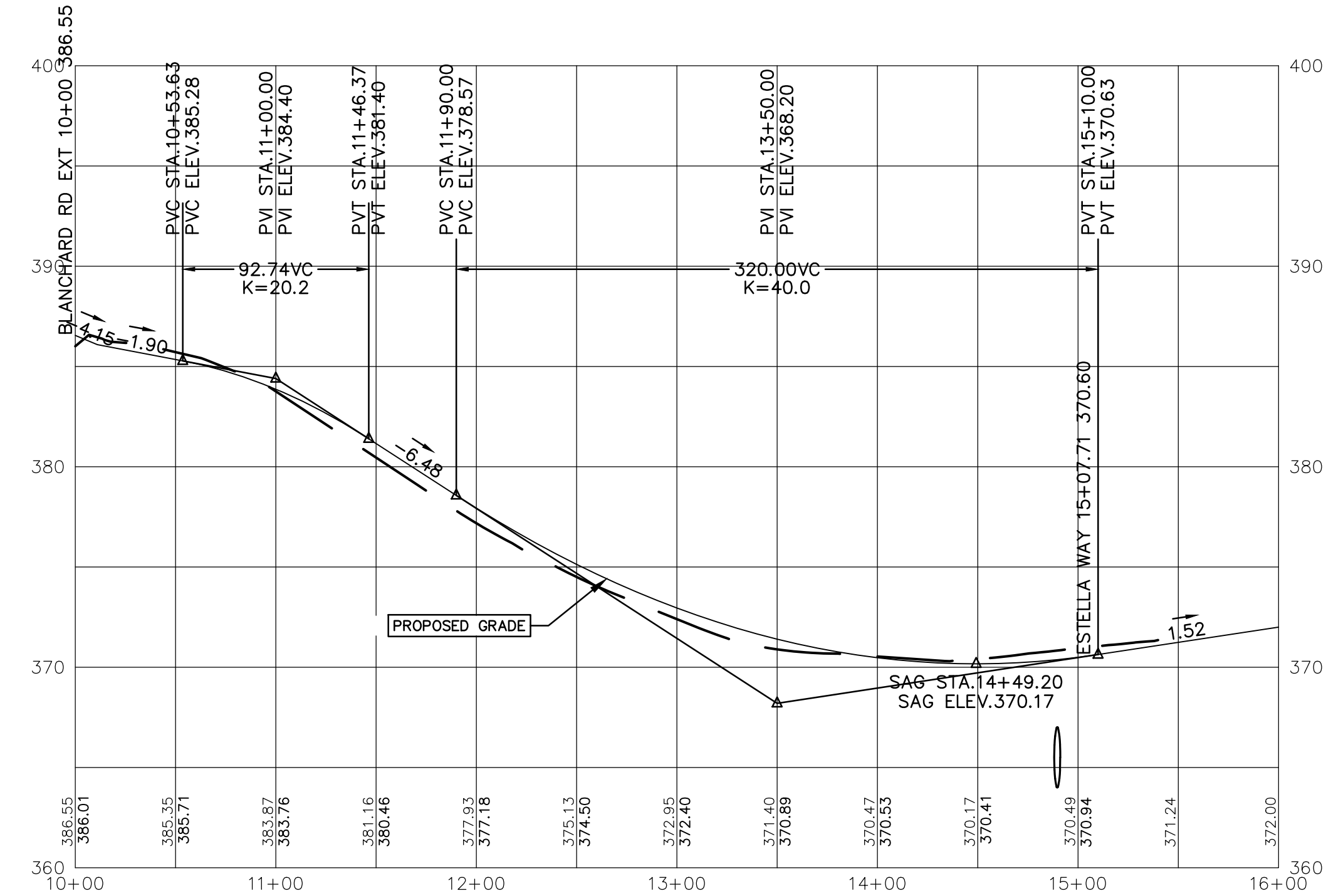
FIELD WK:	SCALE: 1"=50'	SHEET:
DRN BY: MCA	JOB #: 4185	C4
CH'D BY: KPC	MAP/LOT: R08 / 681	
DATE: 11-16-2020	FILE: 4185-SITE	

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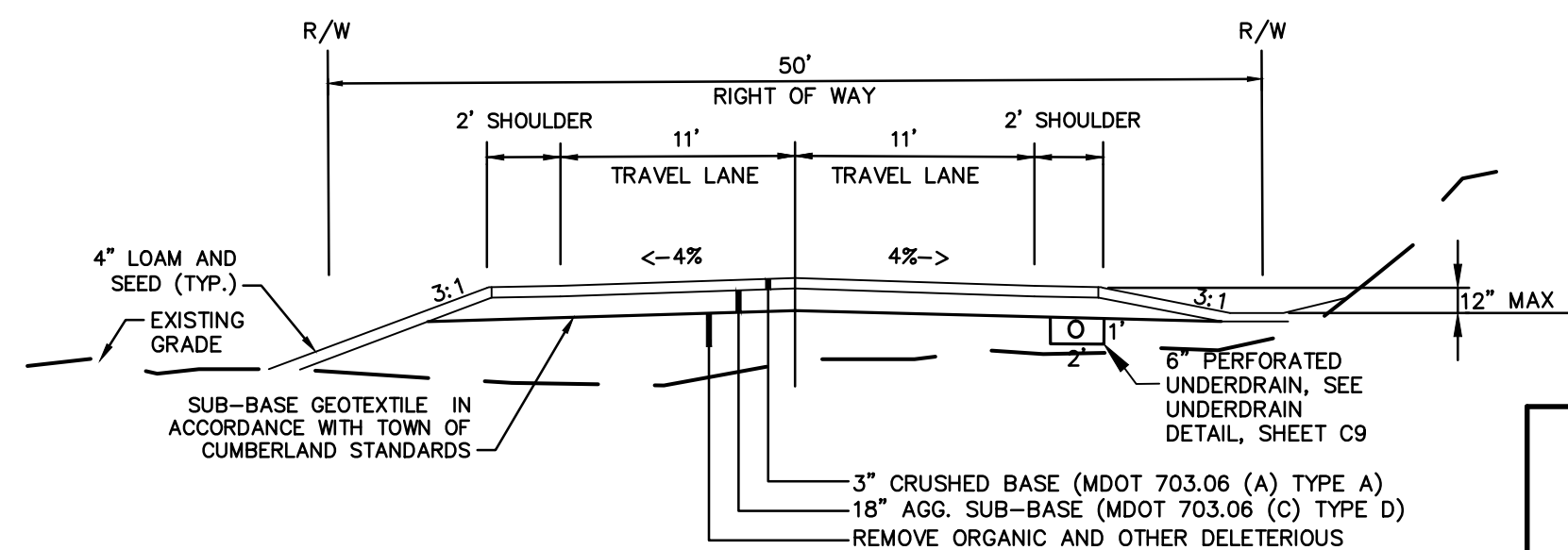
ALLAND PROJECTS/1418 ROSS BLANCHARD RD CUMBERLAND/04185-SITE.DWG. CS:PLAN & PROFILE. 02/28/2021 2:08 PM. MELISSA ARCHIBELL



PROFILE VIEW:
SCALE: 1" = 60' HORIZONTAL & 1" = 6' VERTICAL



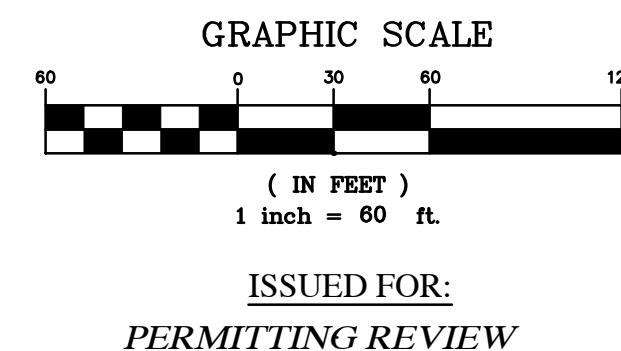
SECTION A (BLANCHARD ROAD EXTENSION)
N.T.S.



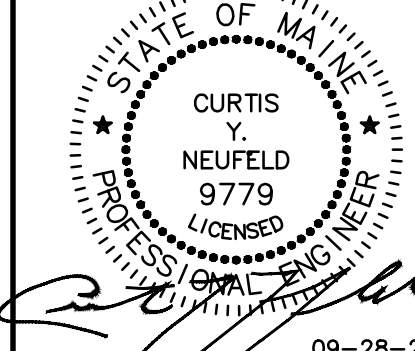
SECTION C (MOORE FARM ROAD)
N.T.S.



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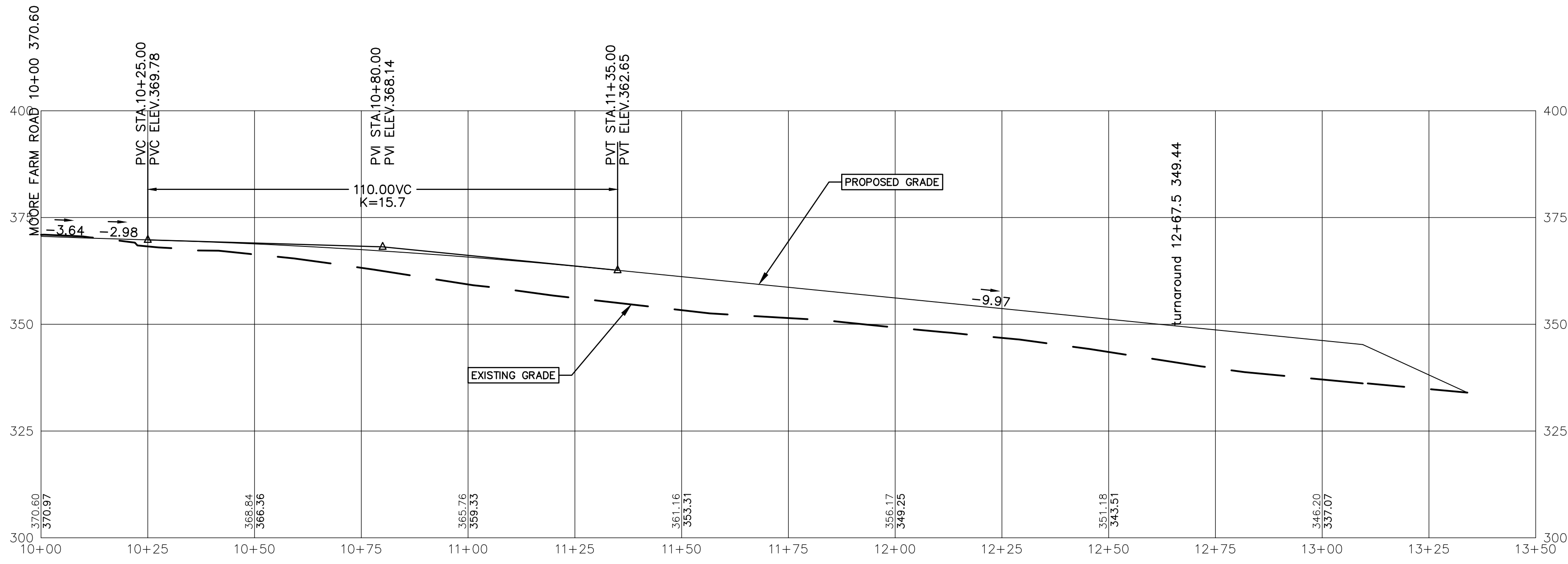
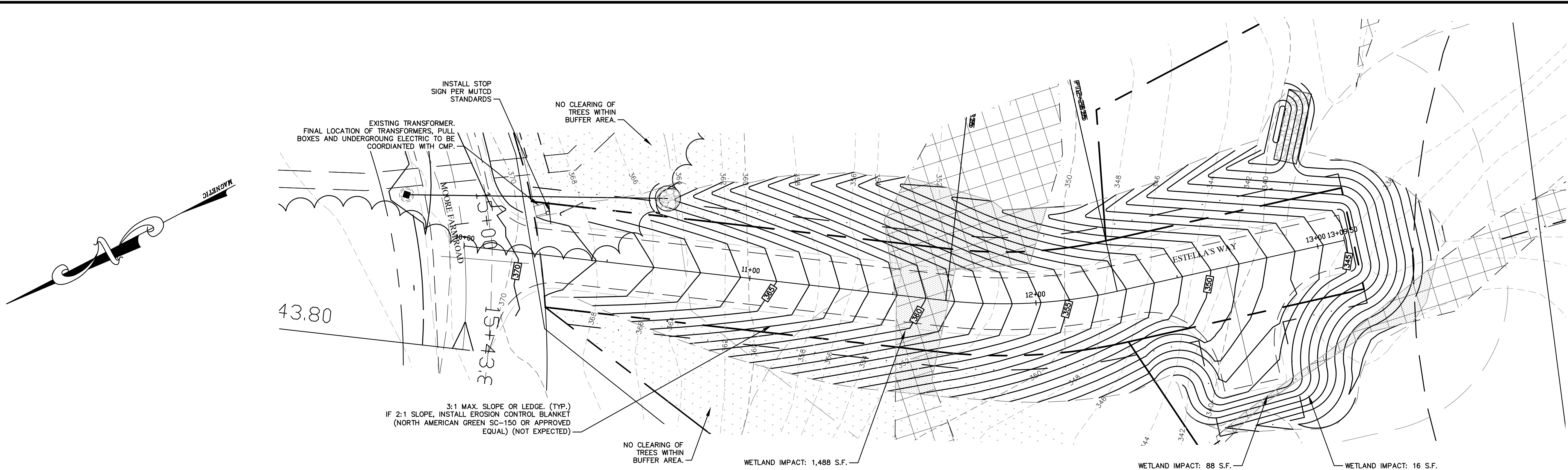


2. 08-28-21 SUBMITTED TO TOWN FOR FINAL SUBDIVISION REVIEW MCA
1. 08-17-21 SUBMITTED TO TOWN FOR PRELIMINARY SUB. REVIEW MCA

TITLE: **PLAN AND PROFILE**
BLANCHARD ROAD EXTENSION SECTIONS A&C
PROJECT: **ROSS ESTATES**
BLANCHARD ROAD EXTENSION, CUMBERLAND, MAINE
PREPARED FOR: **STONEWOOD LAND, LLC**
8 ROBERTS STREET, FALMOUTH, MAINE 04105

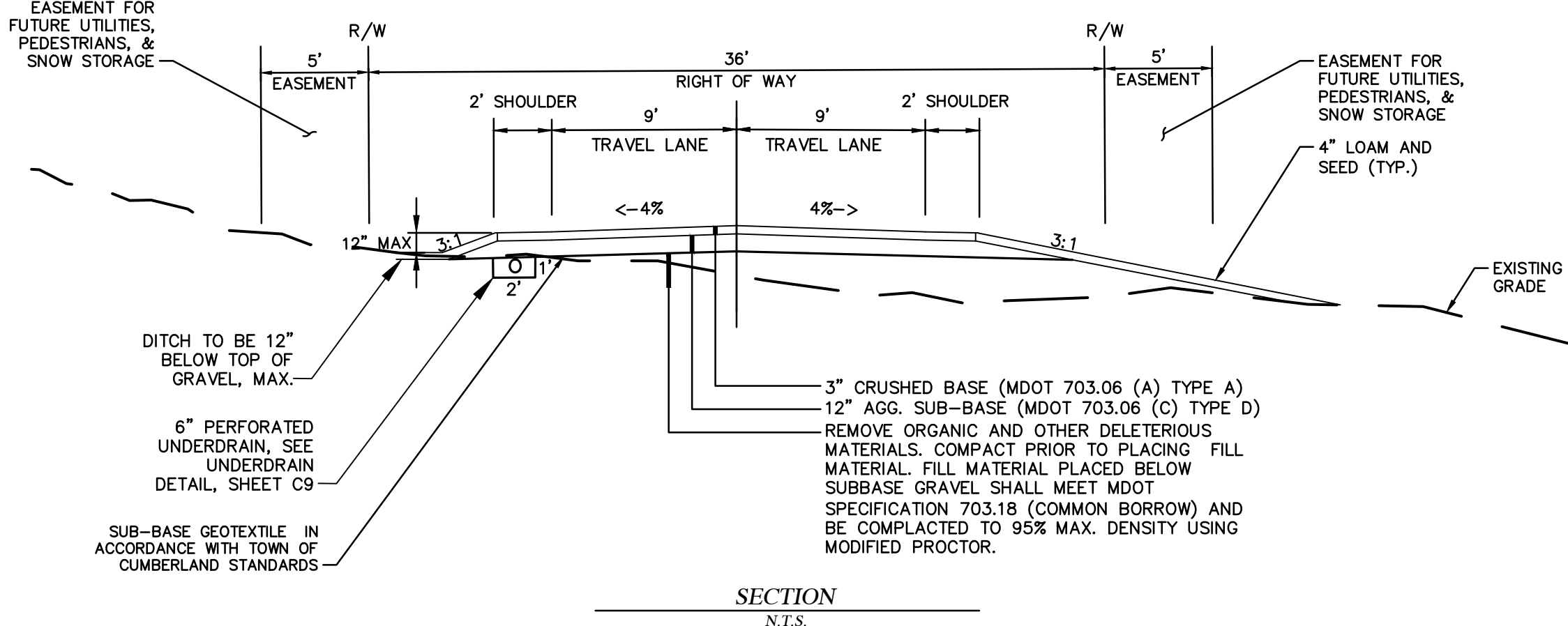
		C5
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FIELD WK:	SCALE: 1" = 30'	
DRN BY: MCA	JOB #: 4185	
CH'D BY: KPC	MAP/LOT: R08 / 681	
DATE: 11-16-2020	FILE: 4185-SITE	

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PROFILE VIEW:

SCALE: 1" = 20' HORIZONTAL & 1" = 20' VERTICAL



SECTION
N.T.S.

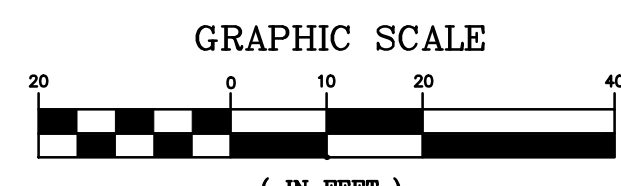
2. 09-28-21 SUBMITTED TO TOWN FOR FINAL SUBDIVISION REVIEW MCA
1. 08-17-21 SUBMITTED TO TOWN FOR PRELIMINARY SUB. REVIEW MCA

TITLE: PLAN AND PROFILE ESTELLA'S WAY (PROPOSED)	
PROJECT: ROSS ESTATES BLANCHARD ROAD EXTENSION, CUMBERLAND, MAINE	
PREPARED FOR: STONEWOOD LAND, LLC 8 ROBERTS STREET, FALMOUTH, MAINE 04105	

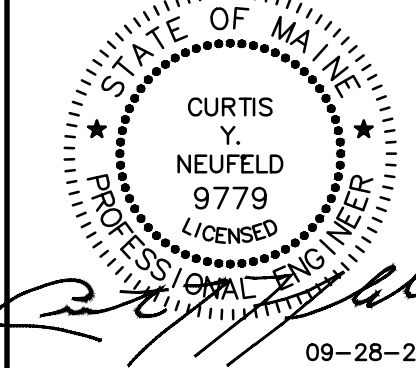
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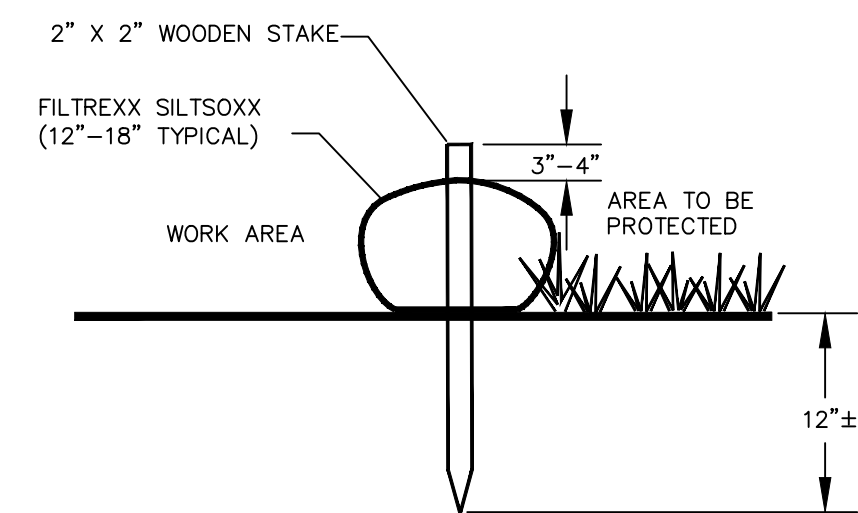


SITELINES 119 PURINTON ROAD, SUITE A BRUNSWICK, MAINE 04011 207.725.1200 CIVIL ENGINEERS • PLANNERS • LAND SURVEYORS	
FIELD WK:	SCALE: 1" = 20'
DRN BY: MCA	JOB #: 4185
CH'D BY: KPC	MAP/LOT: R08 / 681
DATE: 11-16-2020	FILE: 4185-SITE

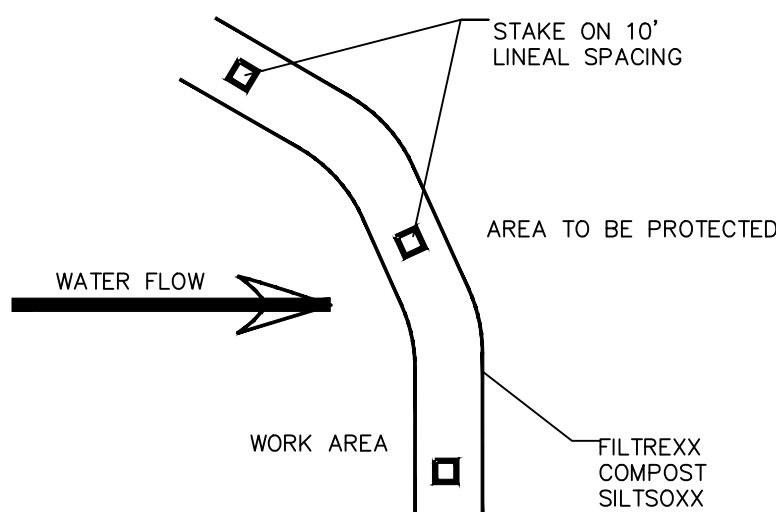
SHEET:
C6

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XLAND PROJECTS/1418 ROSS BLANCHARD RD CUMBERLAND/0404165-SITE.DWG. C7 E.S. 02/28/2021 2:08 PM MELISSA ARCHIBELL

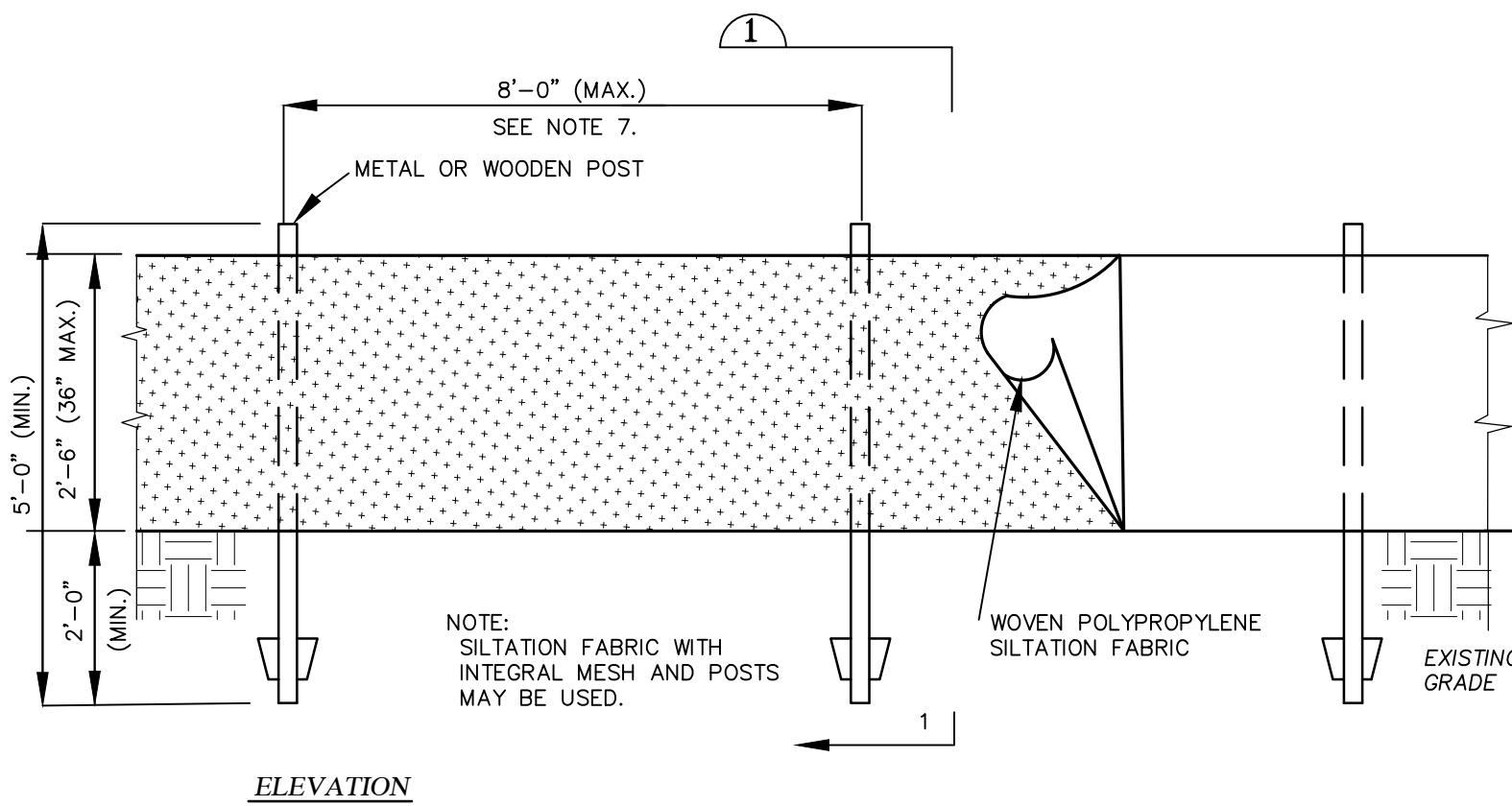


SECTION

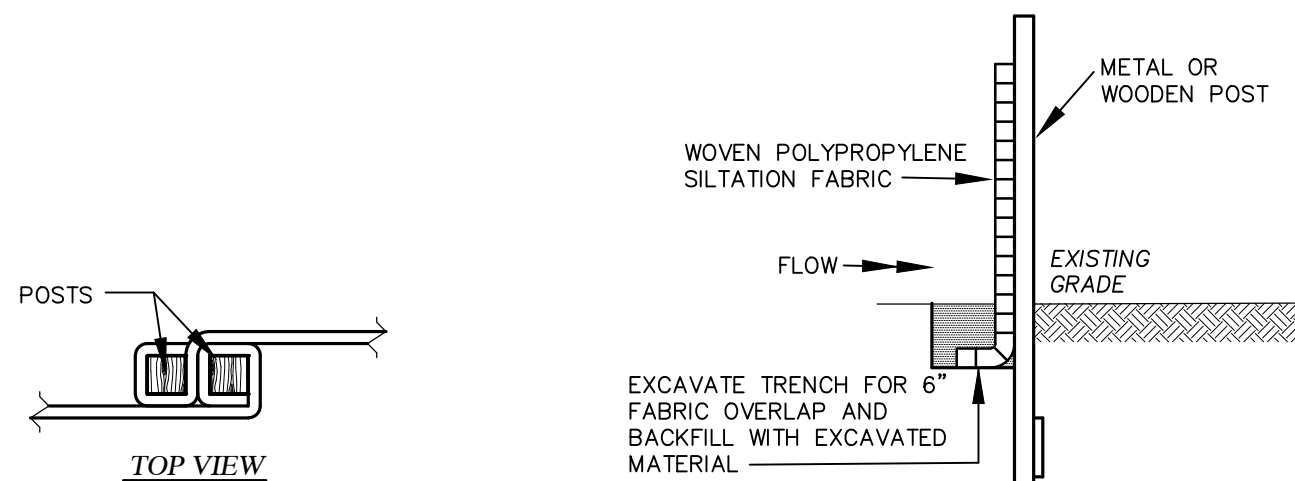


PLAN

- NOTES:
1. ALL MATERIALS TO MEET FILTREXX SPECIFICATIONS
 2. SILTISOXX COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS
 3. SILTISOXX DEPICTED IS FOR MINIMUM SLOPES. GREATER SLOPES MAY REQUIRE LARGER SOCKS PER THE ENGINEER.
 4. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.



ELEVATION



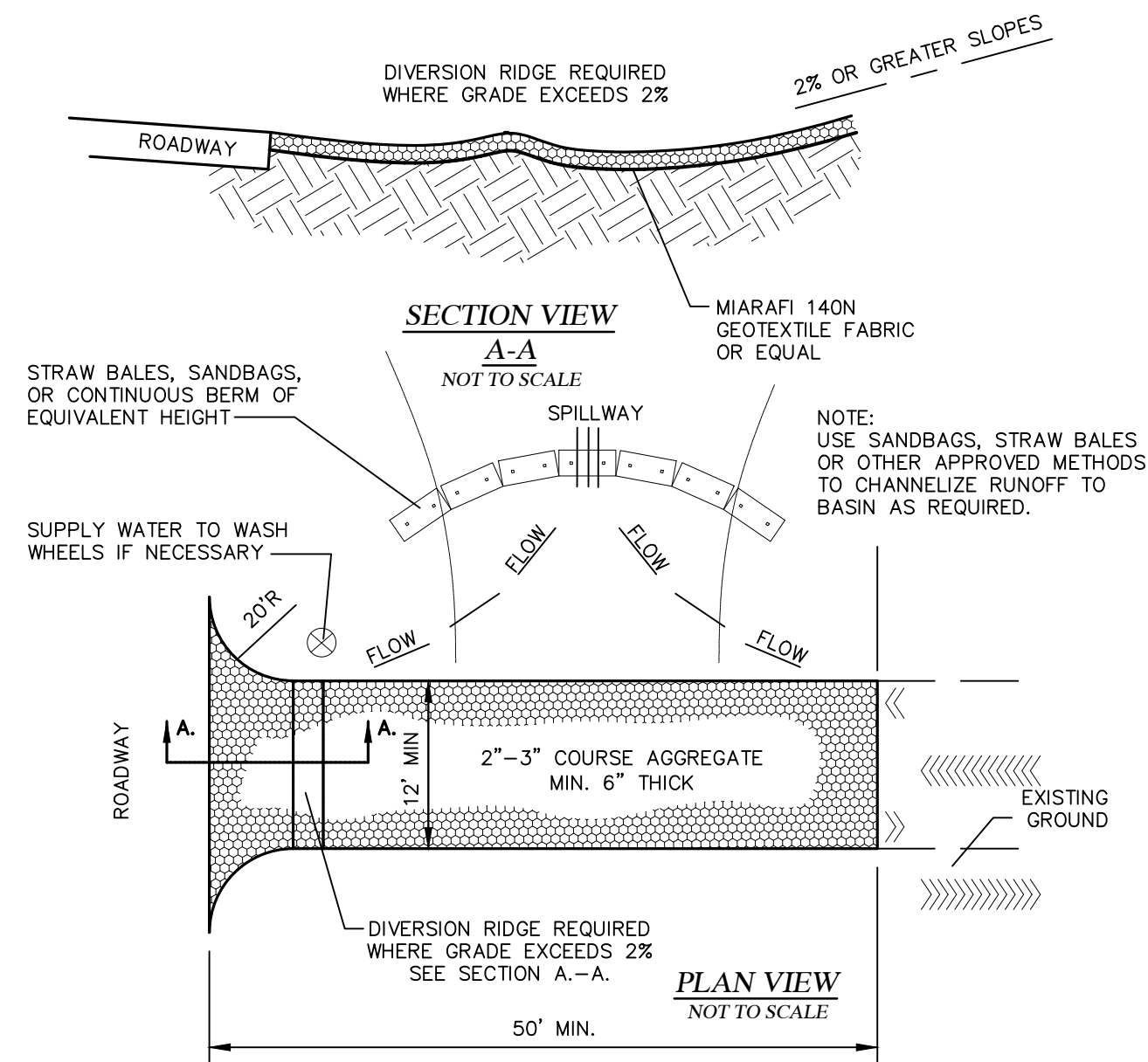
TOP VIEW

SECTION

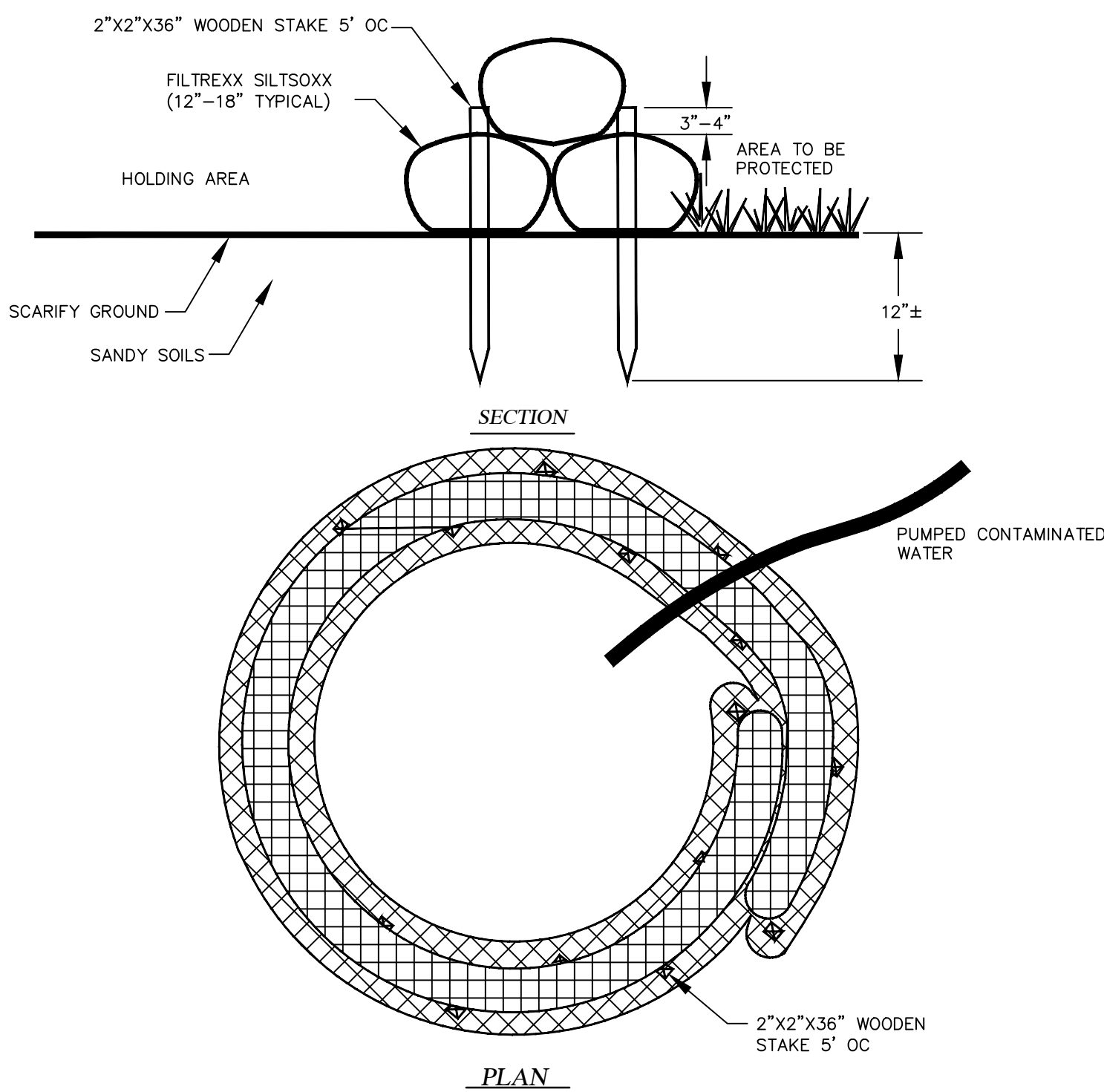
- INSTALLATION:
1. EXCAVATE A 6" X 6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
 2. UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.
 3. DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE TRENCH BOTTOM.
 4. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH. BACK FILL THE TRENCH AND TAMP THE SOIL.
 5. JOIN SECTION AS SHOWN IN TOP VIEW.
 6. BARRIER SHALL BE MIRAFI SILT FENCE (100X) OR APPROVED EQUIVALENT.
 7. A STONE "FILLET" MAY BE USED FOR ANCHORING FABRIC IF IT CANNOT BE KEYED IN.

A FILTREXX SILTISOXX DETAIL "SEDIMENT BARRIER OPTION"
N.T.S.

B SILT FENCE DETAIL "SEDIMENT BARRIER OPTION"
N.T.S.



- NOTE:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR, AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS.
 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR BASIN.
 4. TRACKED MUD OR SEDIMENT SHALL BE REMOVED PRIOR TO THE NEXT STORM EVENT. "REMOVED" SHALL MEAN VACUUM SWEEPING. MECHANICAL BROOM/SWEEPING SEDIMENT INTO DITCHES OR STRUCTURES IS NOT ACCEPTABLE.

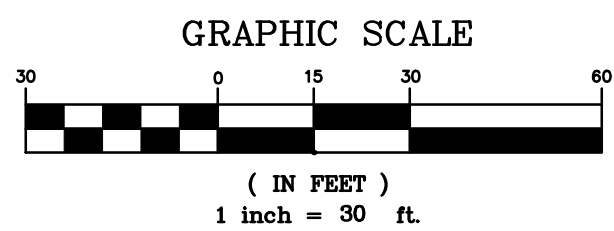
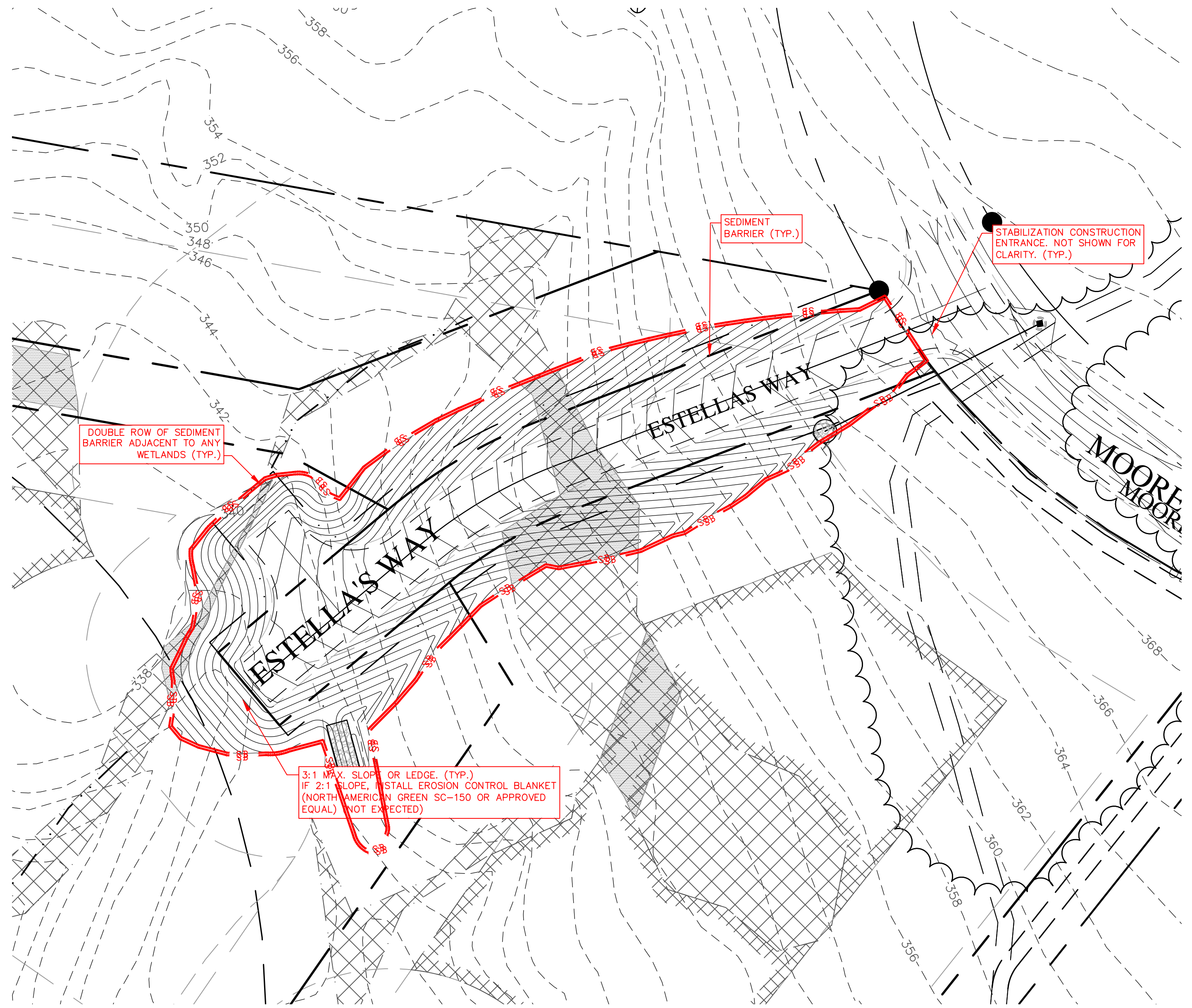


SECTION

PLAN

C STABILIZED CONSTRUCTION ENTRANCE
N.T.S.

D SEDIMENT TRAP DETAIL
N.T.S.



LEGEND

SB SEDIMENT BARRIER

- EROSION & SEDIMENT CONTROL (ESC) NOTES:**
1. THE CONTRACTOR SHALL UTILIZE THE CONSTRUCTION ENTRANCE FOR ENTERING AND EXITING THE PROPERTY
 2. ESC BMPs SHALL BE INSTALLED PRIOR TO START OF WORK.
 3. CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO PROTECT DISTURBED AREAS AND REVIEW BMPs PRIOR TO FORECAST PRECIPITATION OF MORE THAN 0.5 INCHES.
 4. CONTRACTOR TO SWEEP EXISTING PAVED ACCESS AS NEEDED TO REMOVE TRACKED SOILS.
 5. CONTRACTOR SHALL KEEP THE WRITTEN STORMWATER MANAGEMENT INSPECTION AND MAINTENANCE PLAN ON SITE.
 6. ALL RUNOFF FROM DISTURBED AREAS SHALL BE DIRECTED TO A FILTERING DEVICE DESIGNATED TO LIMIT DISCHARGE TURBIDITY. THE FILTERING DEVICE MAY BE BUT IS NOT LIMITED TO SAND FILTERS, EROSION CONTROL MIX, STRAW WA TILES, FLOCCULATION CHEMICALS, DIRT GLUE AND SILT FENCE.
 7. STOCKPILES TO BE TEMPORARILY SEEDED AND MULCHED OR COVERED WITH POLY SHEETING AS REQUIRED BY THE PROJECT SPECIFICATIONS.
 8. THE CONTRACTOR SHALL TREAT DISTURBED AREAS, BUILDING AREAS, AND CONSTRUCTION HAUL PATHS WITH DUST CONTROL BMPs TO LIMIT ALL FUGITIVE DUST PER THE PROJECT SPECIFICATIONS.
 9. THE EROSION AND SEDIMENT CONTROL MEASURES DEPICTED ON THIS PLAN ARE CONSIDERED TO BE THE MINIMUM REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE TO MANAGE, INSPECT AND PROTECT THE SITE USING MEPEP BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL AS REQUIRED BY THE PROJECT SPECIFICATIONS AND THE EROSION AND SEDIMENT CONTROL REPORT. THIS MAY REQUIRE ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES NOT DEPICTED ON THIS PLAN WHICH ARE CONSIDERED INCIDENTAL TO THE CONTRACT AND WILL BE IMPLEMENTED AT NO ADDITIONAL COST TO THE OWNER.
 10. ALL CATCH BASIN INLETS WITH TRIBUTARY AREA WITH PAVEMENT COVER SHALL HAVE AN OIL ABSORBENT BOOM INSTALLED PRIOR TO THE PLACEMENT OF ANY BINDER PAVEMENT.
 11. SEE ADDITIONAL NOTES ON SHEET C10, EROSION CONTROL NOTES.

PROGRESS PRINT
THIS PLAN IS ISSUED FOR REVIEW AND INFORMATION PURPOSES ONLY. THIS PLAN IS SUBJECT TO CHANGE AND IS NOT FOR PRICING OR CONSTRUCTION. PRICING BASED ON THIS PLAN IS NOT BINDING UNLESS SIGNED BY BOTH CONTRACTOR AND OWNER.

2. 09-28-21 SUBMITTED TO TOWN FOR FINAL SUBDIVISION REVIEW MCA
1. 08-17-21 SUBMITTED TO TOWN FOR PRELIMINARY SUB. REVIEW MCA

TITLE: EROSION CONTROL PLAN

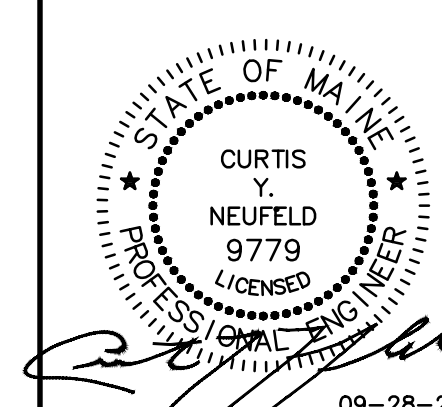
PROJECT: ROSS ESTATES
BLANCHARD ROAD EXTENSION, CUMBERLAND, MAINE

PREPARED FOR: STONEWOOD LAND, LLC
8 ROBERTS STREET, FALMOUTH, MAINE 04105



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DRN BY: MCA	JOB #: 4185	
CH'D BY: KPC	MAP/LOT: R08 / 681	
DATE: 11-16-2020	FILE: 4185-SITE	

SHEET:

ALAND PROJECTS/1418 ROSS BLANCHARD RD CUMBERLAND/MAINE 04105/2002 2:00 PM MELISSA ARCHIBELL

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EROSION AND SEDIMENTATION NOTES:

1. CONTRACTOR SHALL REFER TO THE FOLLOWING REFERENCES FOR THE DESIGN AND INSTALLATION OF TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL PRACTICES:
- 2016 REVISION TO THE 2003 MAINE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES MANUAL FOR DESIGNERS AND ENGINEERS
 - 2014 REVISION TO THE 2003 MAINE EROSION AND SEDIMENT CONTROL FIELD GUIDE FOR CONTRACTORS

GENERAL EROSION AND SEDIMENTATION CONTROL PRACTICES:

EROSION/SEDIMENT CONTROL DEVICES:

THE FOLLOWING EROSION SEDIMENTATION CONTROL DEVICES ARE PROPOSED FOR CONSTRUCTION ON THIS PROJECT. INSTALL THESE DEVICES AS INDICATED ON THE PLANS.

1. SEDIMENT BARRIER: PRIOR TO THE START OF CONSTRUCTION, SILT SOXX OR APPROVED EQUAL WILL BE INSTALLED ALONG THE DOWN GRADING EDGES OF DISTURBED AREAS TO TRAP RUNOFF BORNE SEDIMENTS UNTIL THE SITE IS STABILIZED. THE STANDARD FOR STABILIZED IS 90% COVERAGE OF SEEDED AREAS. IN AREAS WHERE STORMWATER DISCHARGES THE SEDIMENT BARRIER WILL BE REINFORCED WITH HAY BALES TO HELP MAINTAIN THE INTEGRITY OF THE SEDIMENT BARRIER AND TO PROVIDE ADDITIONAL TREATMENT.
2. HAY BALES: HAY BALES TO BE PLACED IN LOW FLOW DRAINAGE SWALES AND PATHS TO TRAP SEDIMENTS AND REDUCE RUNOFF VELOCITIES. DO NOT PLACE HAY BALES IN FLOWING WATER OR STREAMS.
3. RIPRAP: PROVIDE RIPRAP IN AREAS WHERE CULVERTS DISCHARGE OR AS SHOWN ON THE PLANS.
4. LOAM, SEED, & MULCH: ALL DISTURBED AREAS, WHICH ARE NOT OTHERWISE TREATED, SHALL RECEIVE PERMANENT SEEDING AND MULCH TO STABILIZE THE DISTURBED AREAS. THE DISTURBED AREAS WILL BE REVEGETATED WITHIN 5 DAYS OF FINAL GRADING. SEEDING REQUIREMENTS ARE PROVIDED AT THE END OF THIS SPECIFICATION.
5. STRAW AND HAY MULCH: USED TO COVER DENUDED AREAS UNTIL PERMANENT SEED OR EROSION CONTROL MEASURES ARE IN PLACE. MULCH BY ITSELF CAN BE USED ON SLOPES LESS THAN 15% IN SUMMER AND 8% IN WINTER. JUTE MESH IS TO BE USED OVER MULCH ONLY.
6. IN LIEU OF MULCH, USE EROSION CONTROL BLANKET (EQUAL TO NORTH AMERICAN GREEN SC150) TO STABILIZE AREAS OF CONCENTRATED FLOW AND DRAINAGE WAYS.
7. STABILIZED CONSTRUCTION ENTRANCE: PRIOR TO THE START OF CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE WILL BE INSTALLED AND UTILIZED FOR CONTRACTOR ACCESS. TRACKED MUD OR SEDIMENT SHALL BE REMOVED PRIOR TO THE NEXT STORM EVENT.

TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES:

PROVIDE THE FOLLOWING TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES PRIOR TO THE START OF CONSTRUCTION OF THE DEVELOPMENT:

1. SEDIMENT BARRIER ALONG THE DOWNGRADIENT SIDE OF THE PARKING AREAS AND OF ALL FILL SECTIONS. THE SEDIMENT BARRIER SHALL BE INSTALLED PRIOR TO THE START OF THE CONSTRUCTION AND WILL REMAIN IN PLACE UNTIL THE SITE IS 90% REVEGETATED.
2. HAY BALES PLACED AT KEY LOCATIONS TO SUPPLEMENT THE SEDIMENT BARRIER.
3. PROTECT TEMPORARY STOCKPILES OF STUMPS, GRUBBINGS, OR COMMON EXCAVATION AS FOLLOWS:
 - A. SOIL STOCKPILE SIDE SLOPES SHALL NOT EXCEED 2:1.
 - B. AVOID PLACING TEMPORARY STOCKPILES IN AREAS WITH SLOPES OVER 10 PERCENT, OR NEAR DRAINAGE SWALES.
 - C. STABILIZE STOCKPILES WITHIN 7 DAYS BY TEMPORARILY SEEDING WITH A HYDROSEED METHOD CONTAINING AN EMULSIFIED MULCH TACKIFIER OR BY COVERING THE STOCKPILE WITH MULCH.
 - D. SURROUND STOCKPILE SOIL WITH SEDIMENT BARRIER AT BASE OF PILE.
 - E. STORMWATER SHOULD BE PREVENTED FROM RUNNING ONTO STOCKPILES.
4. ALL DENUDED AREAS WHICH HAVE BEEN ROUGH GRADED AND ARE NOT LOCATED WITHIN THE BUILDING PAD, OR PARKING AND DRIVEWAY SUBBASE AREA SHALL RECEIVE MULCH WITHIN 7 DAYS AFTER CESSATION THE CONSTRUCTION ACTIVITIES. STABILIZE ANY EXPOSED SOIL WITH MULCH, OR OTHER NON-ERODIBLE COVER. IN THE EVENT THE CONTRACTOR COMPLETES FINAL GRADING AND INSTALLATION OF LOAM AND SOD WITHIN THE TIME PERIODS PRESENTED ABOVE, INSTALLATION OF MULCH AND NETTING, WHERE APPLICABLE, IS NOT REQUIRED.
5. IF WORK IS CONDUCTED BETWEEN OCTOBER 15 AND APRIL 15, ALL DENUDED AREAS ARE TO BE COVERED WITH HAY MULCH, APPLIED AT TWICE THE NORMAL APPLICATION RATE, AND ANCHORED WITH FABRIC NETTING. THE PERIOD BETWEEN FINAL GRADING AND MULCHING SHALL BE REDUCED TO A 7 DAY MAXIMUM.
6. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE HAS BEEN STABILIZED OR IN AREAS WHERE PERMANENT EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
7. WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 FEET OF ANY WETLAND. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY WETLAND, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE WETLAND, PERIMETER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.
8. AREAS WITHIN 75 FT OF A WETLAND WILL BE STABILIZED WITHIN 48 HOURS OF INITIAL DISTURBANCE OF THE SOIL OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.
9. ALL AREAS WITHIN 75 FEET OF A WETLAND MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS DURING WINTER CONSTRUCTION (NOVEMBER 1 THROUGH APRIL 15).
10. TEMPORARY SEDIMENT BASINS MAY BE INSTALLED DOWNGRADIENT OF THE DISTURBED AREAS. THESE BASINS MUST BE DESIGNED TO PROVIDE STORAGE FOR EITHER THE CALCULATED RUNOFF FROM A 2-YEAR, 24-HOUR STORM OR PROVIDE FOR 3,600 CUBIC FEET OF CAPACITY PER ACRE DRAINING TO THE BASIN. OUTLET STRUCTURES MUST DISCHARGE WATER FROM THE SURFACE OF THE BASIN WHENEVER POSSIBLE. EROSION CONTROLS AND VELOCITY DISSIPATION DEVICES MUST BE USED IF THE DISCHARGING WATERS ARE LIKELY TO CREATE EROSION. ACCUMULATED SEDIMENT MUST BE REMOVED AS NEEDED FROM THE BASIN TO MAINTAIN AT LEAST ½ OF THE DESIGN CAPACITY OF THE BASIN.
11. EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME. AT ANY TIME, THE DENUDED AREA WILL NOT EXCEED THAT WHICH CAN BE MULCHED IN ONE DAY.

PERMANENT EROSION CONTROL MEASURES:

THE FOLLOWING PERMANENT CONTROL MEASURES ARE REQUIRED BY THIS EROSION/SEDIMENTATION CONTROL PLAN:

1. ALL AREAS DISTURBED DURING CONSTRUCTION, BUT NOT SUBJECT TO OTHER RESTORATION (PAVING, RIPRAP, ETC.), WILL BE LOAMED, LIMED, FERTILIZED AND SEEDED. NATIVE TOPSOIL SHALL BE STOCKPILED AND REUSED FOR FINAL RESTORATION WHEN IT IS OF SUFFICIENT QUALITY.

2. SLOPES GREATER THAN 2:1 WILL RECEIVE RIPRAP. (NONE ANTICIPATED)

POST-CONSTRUCTION REVEGETATION:

THE FOLLOWING GENERAL PRACTICES WILL BE USED TO PREVENT EROSION AS SOON AS AN AREA IS READY TO UNDERGO FINAL GRADING.

1. A MINIMUM OF 6" OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND GRADED TO A UNIFORM DEPTH AND NATURAL APPEARANCE, OR STONE WILL BE PLACED ON SLOPES TO STABILIZE SURFACES.
2. IF FINAL GRADING IS REACHED DURING THE NORMAL GROWING SEASON (4/15 TO 9/15), PERMANENT SEEDING WILL BE DONE AS SPECIFIED BELOW. PRIOR TO SEEDING, LIMESTONE SHALL BE APPLIED AT A RATE OF 138 LBS/1000 SQ. FT. AND 10:20:20 FERTILIZER AT A RATE OF 18.4 LBS/1000 SQ.FT WILL BE APPLIED. BROADCAST SEEDING AT THE FOLLOWING RATES:

LAWNS SHALL BE: ALLEN, STERLING & LATHROP "TUFTTURT", 70% DIAMOND TALL FESCUE, 20% PLEASURE OLUS PERENNIAL RYEGRASS, 10% BARON KENTUCKY BLUEGRASS. SEEDING RATE SHALL BE 7-LBS./1,000 SQ. FT.

SWALES SHALL BE: WILDFLOWER MEADOW (SEED) FESTUCA OVINA SHEEP FESCUE; SOW AT A RATE OF 12 OZ. PER 1,000 SQFT. TRIFOLIUM REPENS WHITE CLOVER; SOW AT A RATE OF ½ OZ.PER 1,000 SQFT. (FLOWERS) ACHILLEA MILLEFOLIUM YARROW, AQUILEGA CANADENSIS COLUMBINE, ASOLEPAS TURBOSO BUTTERNUT MILKWED, ASTER NOVAE-ANGLIAE NEW-ENGLAND ASTER, BAPTISIA AUSTRALIS WILD INDIGO, BOLTONIA ASTEROIDS FALSE ASTER, CHRYSANTHEMUM LEUCANTHEMUM OXEYE DAISY, DIGITALIS PURPUREA FOXGLOVE, ECHINACEA PURPUREA PURPLE CONEFLOWER, LUPINUS PERENNIS LUPINE, MONARDA FISTULOSA BERGAMOT, PAPAVER ORIENTALE ORIENTAL POPPY, RUDBECKIA HIRTA BLACK-EYED SUSAN, SALVIA OFFICINALIS SAGE; SOW AT A RATE OF 1/3 OZ. EACH PER 1,000 SQFT. OR 4 OZ. PER 1,000 SQFT. IN COMBINATION

3. AN AREA SHALL BE MULCHED IMMEDIATELY AFTER IS HAS BEEN SEEDED. MULCHING SHALL CONSIST OF HAY MULCH, HYDRO-MULCH, JUTE NET OVER MULCH, PRE-MANUFACTURED EROSION MATS OR ANY SUITABLE SUBSTITUTE DEEMED ACCEPTABLE BY THE DESIGNER.
 - A. HAY MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. HAY MULCH SHALL BE SECURED BY EITHER: (NOTE: SOIL SHALL NOT BE VISIBLE)
 - i. BEING DRIVEN OVER BY TRACKED CONSTRUCTION EQUIPMENT ON GRADES OF 5% AND LESS.
 - ii. BLANKETED BY TACKED PHOTODEGRADABLE/BIODEGRADABLE NETTING, OR WITH SPRAY, ON GRADES GREATER THAN 5%.
 - SEE NOTE 6, GENERAL NOTES, AND NOTE 8, WINTER CONSTRUCTION.
 - B. HYDRO-MULCH SHALL CONSIST OF A MIXTURE OF EITHER ASPHALT, WOOD FIBER OR PAPER FIBER AND WATER SPRAYED OVER A SEEDED AREA. HYDRO-MULCH SHALL NOT BE USED BETWEEN 9/15 AND 4/15.
4. CONSTRUCTION SHALL BE PLANNED TO ELIMINATE THE NEED FOR SEEDING BETWEEN SEPTEMBER 15 AND APRIL 15. SHOULD SEEDING BE NECESSARY BETWEEN SEPTEMBER 15 AND APRIL 15 THE FOLLOWING PROCEDURE SHALL BE FOLLOWED. ALSO REFER TO NOTE 9 OF WINTER CONSTRUCTION.
 - A. ONLY UNFROZEN LOAM SHALL BE USED.
 - B. LOAMING SEEDING AND MULCHING WILL NOT BE DONE OVER SNOW OR ICE COVER. IF SNOW EXISTS, IT MUST BE REMOVED PRIOR TO PLACEMENT OF SEED.
 - C. WHERE PERMANENT SEEDING IS NECESSARY, ANNUAL WINTER RYE (1.2 LBS/1000 SQ.FT) SHALL BE ADDED TO THE PREVIOUSLY NOTED AREAS.

- D. WHERE TEMPORARY SEEDING IS REQUIRED, ANNUAL WINTER RYE (2.6 LBS/1000 SQ. FT.) SHALL BE SOWN INSTEAD OF THE PREVIOUSLY NOTED SEEDING RATE.
- E. FERTILIZING, SEEDING AND MULCHING SHALL BE APPLIED TO LOAM THE DAY THE LOAM IS SPREAD BY MACHINERY.
- F. ALTERNATIVE HAY MULCH SHALL BE SECURED WITH PHOTODEGRADABLE/BIODEGRADABLE NETTING. TRACKING BY MACHINERY ALONE WILL NOT SUFFICE.

5. FOLLOWING FINAL SEEDING, THE SITE WILL BE INSPECTED EVERY 30 DAYS UNTIL 85% COVER HAS BEEN ESTABLISHED. RESEEDING WILL BE CARRIED OUT BY THE CONTRACTOR WITHIN 10 DAYS OF NOTIFICATION BY THE ENGINEER THAT THE EXISTING CATCH IS INADEQUATE.

MONITORING SCHEDULE:

THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING, MONITORING, MAINTAINING, REPAIRING, REPLACING AND REMOVING ALL OF THE EROSION AND SEDIMENTATION CONTROLS OR APPOINTING A QUALIFIED SUBCONTRACTOR TO DO SO. MAINTENANCE MEASURES WILL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, A VISUAL INSPECTION WILL BE MADE OF ALL EROSION AND SEDIMENTATION CONTROLS AS FOLLOWS:

1. HAY BALE BARRIERS, SEDIMENT BARRIER, AND STONE CHECK DAMS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK OR IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6" AND REDISTRIBUTED TO AREAS UNDERGOING FINAL GRADING. SHOULD THE HAY BALE BARRIERS PROVE TO BE INEFFECTIVE, THE CONTRACTOR SHALL INSTALL SEDIMENT BARRIER BEHIND THE HAY BALES.
2. VISUALLY INSPECT RIPRAP ONCE A WEEK OR AFTER EACH SIGNIFICANT RAINFALL AND REPAIR AS NEEDED. REMOVE SEDIMENT TRAPPED BEHIND THESE DEVICES ONCE IT ATTAINS A DEPTH EQUAL TO 1/2 THE HEIGHT OF THE DAM OR RISER. DISTRIBUTE REMOVED SEDIMENT OFF-SITE OR TO AN AREA UNDERGOING FINAL GRADING.
3. REVEGETATION OF DISTURBED AREAS WITHIN 25' OF DRAINAGE-COURSE/STREAM WILL BE SEEDED WITH THE "MEADOW AREA MIX" AND INSPECTED ON A WEEKLY BASIS OR AFTER EACH SIGNIFICANT RAINFALL AND RESEEDED AS NEEDED. EXPOSED AREAS WILL BE RESEDED AS NEEDED UNTIL THE AREA HAS OBTAINED 100% GROWTH RATE. PROVIDE PERMANENT RIPRAP FOR SLOPES IN EXCESS OF 3:1 AND WITHIN 25' OF DRAINAGE COURSE.

HOUSEKEEPING:

FROM THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, CHAPTER 500, APPENDIX C.

1. SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.

NOTE: ANY SPILL OR RELEASE OF TOXIC OR HAZARDOUS SUBSTANCES MUST BE REPORTED TO THE DEPARTMENT. FOR OIL SPILLS, CALL 1-800-482-0777 WHICH IS AVAILABLE 24 HOURS A DAY. FOR SPILLS OF TOXIC OR HAZARDOUS MATERIAL, CALL 1-800-452-4664 WHICH IS AVAILABLE 24 HOURS A DAY. FOR MORE INFORMATION, VISIT THE DEPARTMENT'S WEBSITE AT : HTTP://WWW.MAINE.GOV/DEP/SPILLS/EMERGSPIRLRESP/

2. GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.

NOTE: LACK OF APPROPRIATE POLLUTANT REMOVAL BEST MANAGEMENT PRACTICES (BMPs) MAY RESULT IN VIOLATIONS OF THE GROUNDWATER QUALITY STANDARD ESTABLISHED BY 38 M.R.S.A. §465-C(1).

3. FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHALL BE INSTALLED AT THE END OF THE EXIST PAVED ACCESS TO THE SITE TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.

4. DEBRIS AND OTHER MATERIALS. MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

5. EXCAVATION DE-WATERING. EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER SHOULD BE REMOVED FROM THE SITE AND DISCHARGED TO A BODY OF WATER THAT MUST BE PROTECTED BY NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

EXCAVATION DEWATERING IS ANTICIPATED FOR THIS PROJECT. SHOULD IT BE NECESSARY, THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A SEDIMENT TRAP (SEE DETAIL THIS SHEET), DIRT BAG, OR SEDIMENTATION BASIN. A DEWATERING DISCHARGE PLAN SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR APPROVAL.

6. AUTHORIZED NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:

- (a) DISCHARGES FROM FIREFIGHTING ACTIVITY;
- (b) FIRE HYDRANT FLUSHINGS
- (c) VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
- (d) DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND CHAPTER 500 APPENDIX C(3);
- (e) ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
- (f) PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) DETERGENTS ARE NOT USED;
- (g) UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
- (h) UNCONTAMINATED GROUNDWATER OR SPRING WATER;
- (i) FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;
- (j) UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5));
- (k) POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
- (l) LANDSCAPE IRRIGATION.

7. UNAUTHORIZED NON-STORMWATER DISCHARGES. THE DEPARTMENT'S APPROVAL UNDER CHAPTER 500 DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C (6). SPECIFICALLY, THE DEPARTMENTS APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:

- (a) WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
- (b) FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
- (c) SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND
- (d) TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

CONSTRUCTION PHASE:

THE FOLLOWING GENERAL PRACTICES WILL BE USED TO PREVENT EROSION DURING CONSTRUCTION OF THIS PROJECT.

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND MAINTAIN UNTIL SITE IS PAVED.
2. ONLY THOSE AREAS NECESSARY FOR CONSTRUCTION WILL BE DISTURBED.

3. PRIOR TO THE START OF CONSTRUCTION, SEDIMENT BARRIER WILL BE INSTALLED ACROSS THE SLOPE(S), ON THE CONTOUR, AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT TRAVELLED WAY TO PROTECT IT FROM CONSTRUCTION-RELATED EROSION.

4. CLEAR AND GRUB WORK SITE AS NEEDED TO EXECUTE PLANS USING CAUTION NOT TO OVER EXPOSE THE SITE.

5. STORMWATER MANAGEMENT SYSTEM WILL BE INSTALLED PRIOR TO CONSTRUCTION OF SITE ELEMENTS THAT DISCHARGE TO THESE SYSTEMS. NO STORMWATER SHALL BE DIRECTED TO THE BIORETENTION FILTERS UNTIL THE SITE IS COMPLETELY STABILIZED. TEMPORARILY STABILIZED AREAS SHALL BE INSTALLED TO COLLECT ANY INFILTRATE ANY STORMWATER RUNOFF FROM THE SITE DURING CONSTRUCTION AND PRIOR TO STABILIZATION.

6. DISTURBED AREAS WILL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING, OR TEMPORARILY STABILIZED WITHIN 30 DAYS OF THE INITIAL DISTURBANCE. DISTURBED AREAS WILL BE STABILIZED BEFORE STORMS. LOAM WILL BE SAVED FOR LATER USE WHERE POSSIBLE. EXCESS SOIL MATERIALS WILL BE USED AS FILL OR REMOVED FROM SITE TO AN APPROVED LOCATION.

7. AT A MINIMUM, THE EROSION CONTROL MEASURES SHALL BE REVIEWED AND REPAIRED ONCE A WEEK OR IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOWMELT. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6 INCHES AND BE DISCARDED ON THE SITE. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS.

8. LOAM, LIME, FERTILIZE, SEED, AND MULCH LANDSCAPED AND OTHER DISTURBED AREAS.

9. ONCE THE SITE IS STABILIZED AND A 90% CATCH OF VEGETATION HAS BEEN OBTAINED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

10. TOUCH UP LOAM AND SEED.

NOTE: ALL DENUDED AREAS NOT SUBJECT TO FINAL PAVING, RIPRAP OR GRAVEL SHALL BE REVEGETATED.

EROSION CONTROL DURING WINTER CONSTRUCTION:

1. WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.
2. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN ONE (1) ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
3. EXPOSED AREA SHALL BE LIMITED TO THOSE AREAS TO BE MULCHED IN ONE DAY. AT THE END OF EACH WORK WEEK NO AREAS MAY BE LEFT UNSTABILIZED OVER THE WEEKEND.
4. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.
5. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1000 S.F. (WITH OR WITHOUT SEEDING) OR DORMANT SEEDED, MULCHED AND ANCHORED SUCH THAT SOIL SURFACES NOT VISIBLE THROUGH THE MULCH. NOTE: AN AREA IS ALSO CONSIDERED STABLE IF SODDED, COVERED WITH GRAVEL (PARKING LOTS) OR STRUCTURAL SAND.

6. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1 AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW, DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF HAY, SEDIMENT BARRIER OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS SHOWN ON THE DESIGN DRAWINGS. NOTE: DORMANT SEEDING SHOULD NOT BE ATTEMPTED UNLESS SOIL TEMPERATURE REMAINS BELOW 50 DEGREES AND DAY TIME TEMPERATURES REMAIN IN THE 30'S.

7. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS, SLOPES GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8% VEGETATED DRAINAGE WALES SHALL BE LINED WITH STRAW-COCOONUT EROSION CONTROL BLANKET (NORTH AMERICAN GREEN SC150 OR APPROVED EQUAL).

8. BETWEEN THE DATES OF OCTOBER 15 TO NOVEMBER 1, WINTER RYE IS RECOMMENDED FOR STABILIZATION. AFTER NOVEMBER 1, WINTER RYE IS NOT EFFECTIVE. AROUND NOVEMBER 15 OR LATER, ONCE TEMPERATURES OF THE AIR AND SOIL PERMIT, DORMANT SEEDING IS EFFECTIVE.

9. IN THE EVENT OF SNOWFALL (FRESH OR CUMULATIVE) GREATER THAN 1 INCH DURING WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM THE AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.

10. ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS.

SITE INSPECTION AND MAINTENANCE:

1. WEEKLY INSPECTIONS, AS WELL AS ROUTINE INSPECTIONS FOLLOWING EACH RAINFALL, SNOWSTORM, OR THAWING, SHALL BE CONDUCTED BY THE GENERAL CONTRACTOR OF ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES UNTIL FINAL ACCEPTANCE OF THE PROJECT (90% GRASS CATCH). RAINFALL OF 0.5 INCHES OR MORE OF RAIN IN 24 CONSECUTIVE HOURS SHALL TRIGGER AN INSPECTION. SNOWFALL OF 2 INCHES OR MORE SHALL TRIGGER AN INSPECTION. CORRECTIVE ACTION SHALL BE STARTED BY THE END OF THE NEXT WORK DAY AND COMPLETED WITHIN SEVEN (7) DAYS OR BEFORE THE NEXT STORM EVENT AS NOTED ABOVE. INSPECTIONS SHALL BE PERFORMED BY SOMEONE WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT ISSUED FOR THE PROJECT. THE SCOPE OF CONSTRUCTION INSPECTIONS INCLUDES DISTURBED AREAS AND IMPERVIOUS AREAS, MATERIAL STORAGE AREAS, AND VEHICLE ACCESS POINTS IN ADDITION TO ESC MEASURES. NECESSARY REPAIRS SHALL BE MADE TO CORRECT UNDERMINING OR DETERIORATION. FINAL ACCEPTANCE SHALL INCLUDE A SITE INSPECTION TO VERIFY THE STABILITY OF ALL DISTURBED AREAS AND SLOPES. UNTIL FINAL INSPECTION, ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL IMMEDIATELY BE CLEANED, AND REPAIRED BY THE GENERAL CONTRACTOR AS REQUIRED. DISPOSAL OF ALL TEMPORARY EROSION AND CONTROL DEVICES SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. RECORDS OF INSPECTIONS SHALL BE KEPT FOR THREE (3) YEARS.

MAINTENANCE. IF BEST MANAGEMENT PRACTICES (BMPs) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. IF ADDITIONAL BMPs OR SIGNIFICANT REPAIR OF BMPs ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.

DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPs THAT NEED MAINTENANCE, BMPs THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPs ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPs, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN.

THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

IT IS RECOMMENDED THAT THE OWNER HIRE THE SERVICES OF THE DESIGN ENGINEER TO PROVIDE COMPLIANCE INSPECTIONS (DURING ACTIVE CONSTRUCTION) RELATIVE TO IMPLEMENTATION OF THE STORMWATER AND EROSION CONTROL PLANS. SUCH INSPECTIONS SHOULD BE LIMITED TO ONCE A WEEK OR AS NECESSARY AND BE REPORTABLE TO THE OWNER, TOWN AND DEP.

DURING WINTER CONSTRUCTION, THE EROSION CONTROL MEASURES SHALL BE INSPECTED AFTER EACH RAINFALL, SNOWSTORM, OR THAWING, AND A MINIMUM OF ONCE PER WEEK.

2. SHORT-TERM SEDIMENTATION MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAN OUT ALL SWALES AND STRUCTURES PRIOR TO TURNING PROJECT OVER.

3. LONG-TERM PROVISIONS FOR PERMANENT MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROL DEVICES AFTER ACCEPTANCE OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE OWNER.

PROGRESS PRINT

THIS PLAN IS ISSUED FOR REVIEW AND INFORMATION PURPOSES ONLY. THIS PLAN IS SUBJECT TO CHANGE AND IS NOT FOR PRICING OR CONSTRUCTION. PRICING BASED ON THIS PLAN IS NOT BINDING UNLESS SIGNED BY BOTH CONTRACTOR AND OWNER.

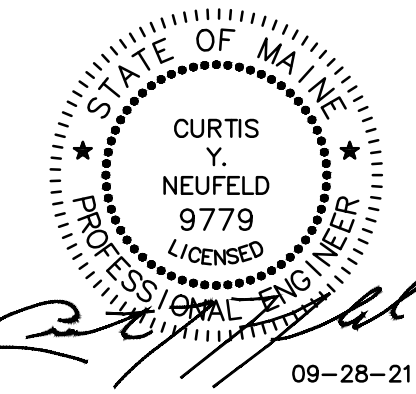
ISSUED FOR:

PERMITTING

2. 09-28-21 SUBMITTED TO TOWN FOR FINAL SUBDIVISION REVIEW MCA
1. 08-17-21 SUBMITTED TO TOWN FOR PRELIMINARY SUB. REVIEW MCA

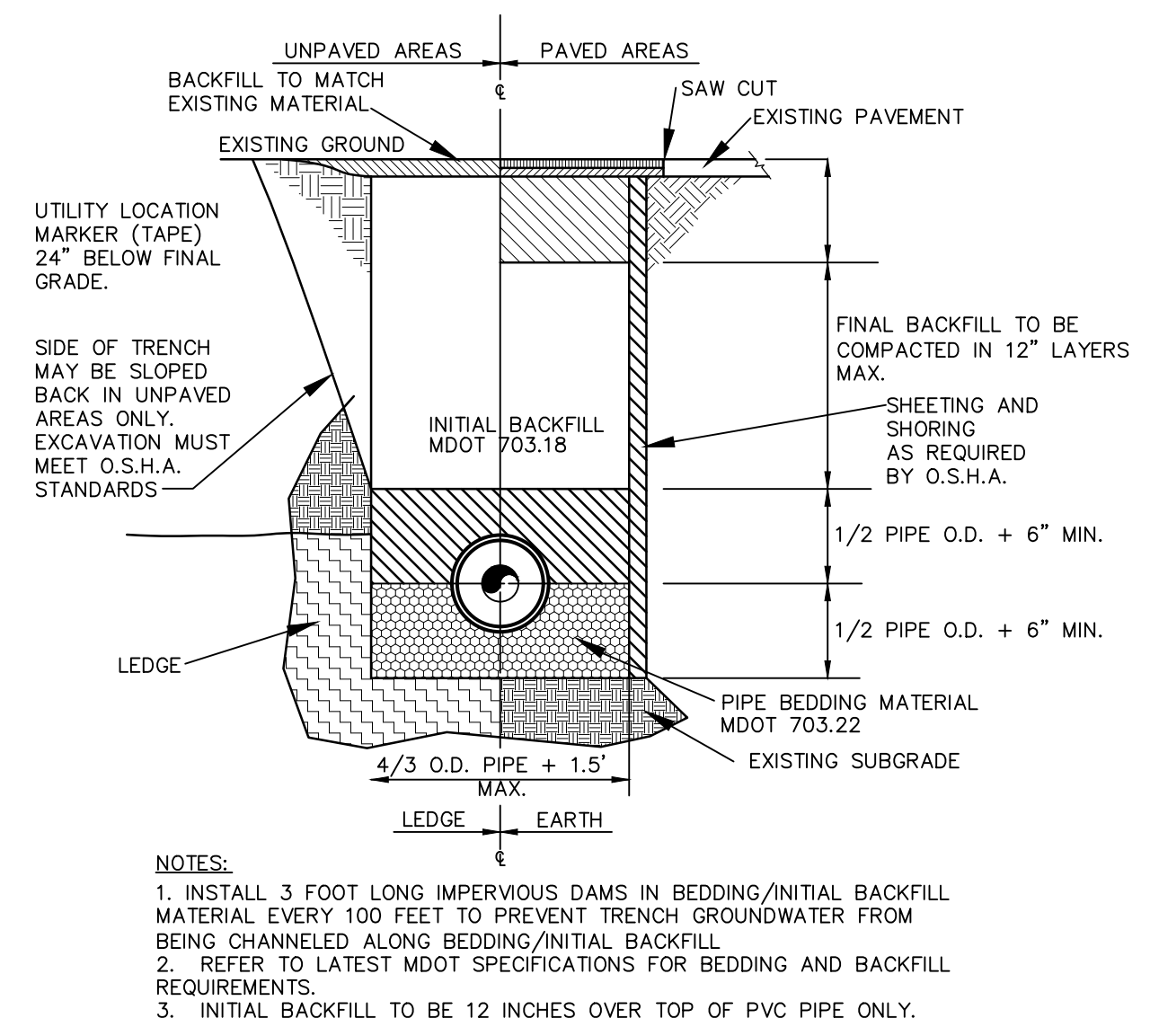
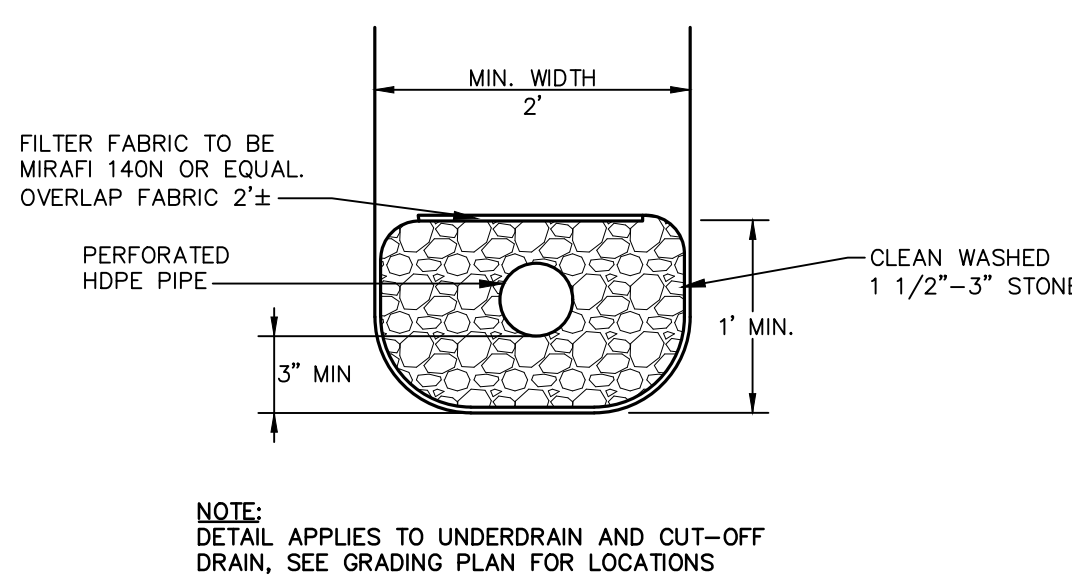
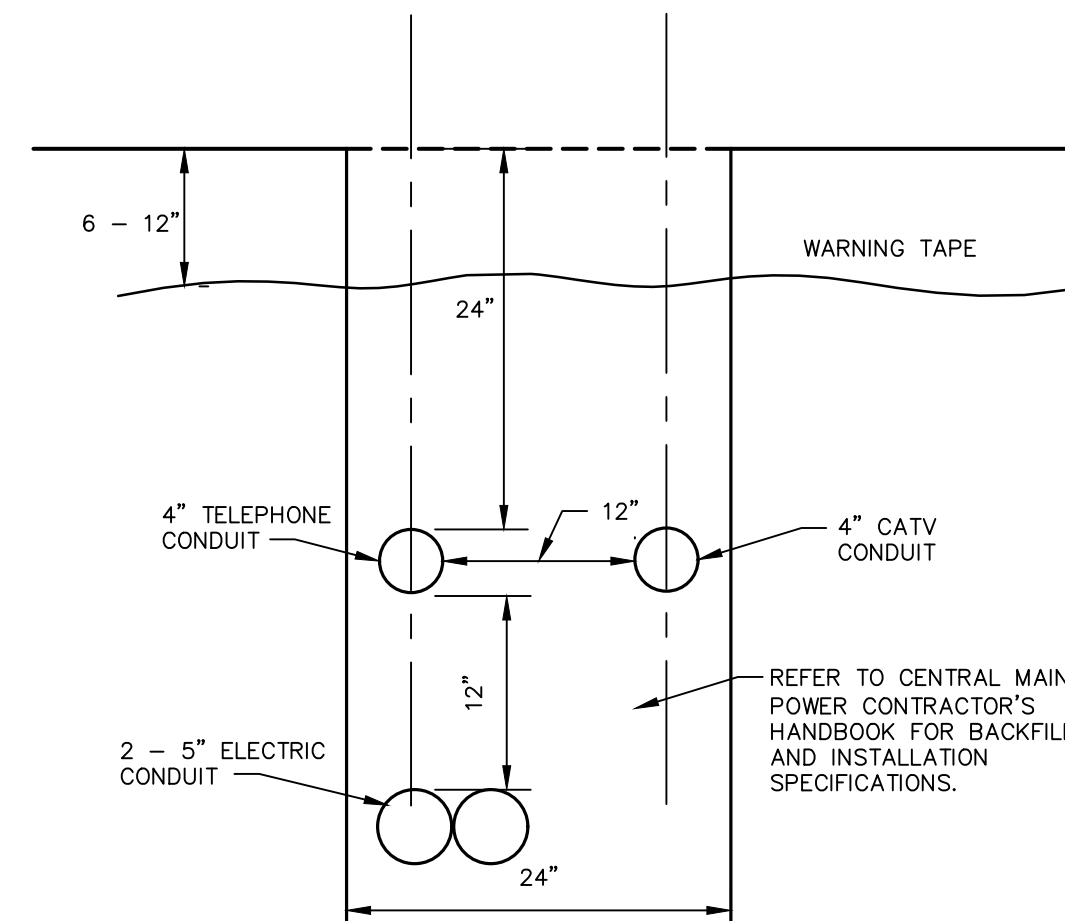
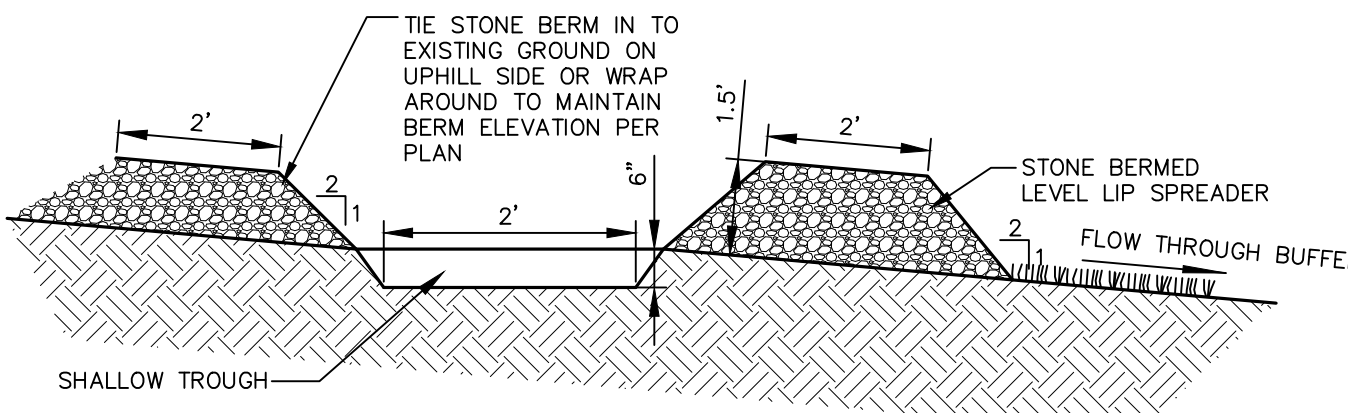
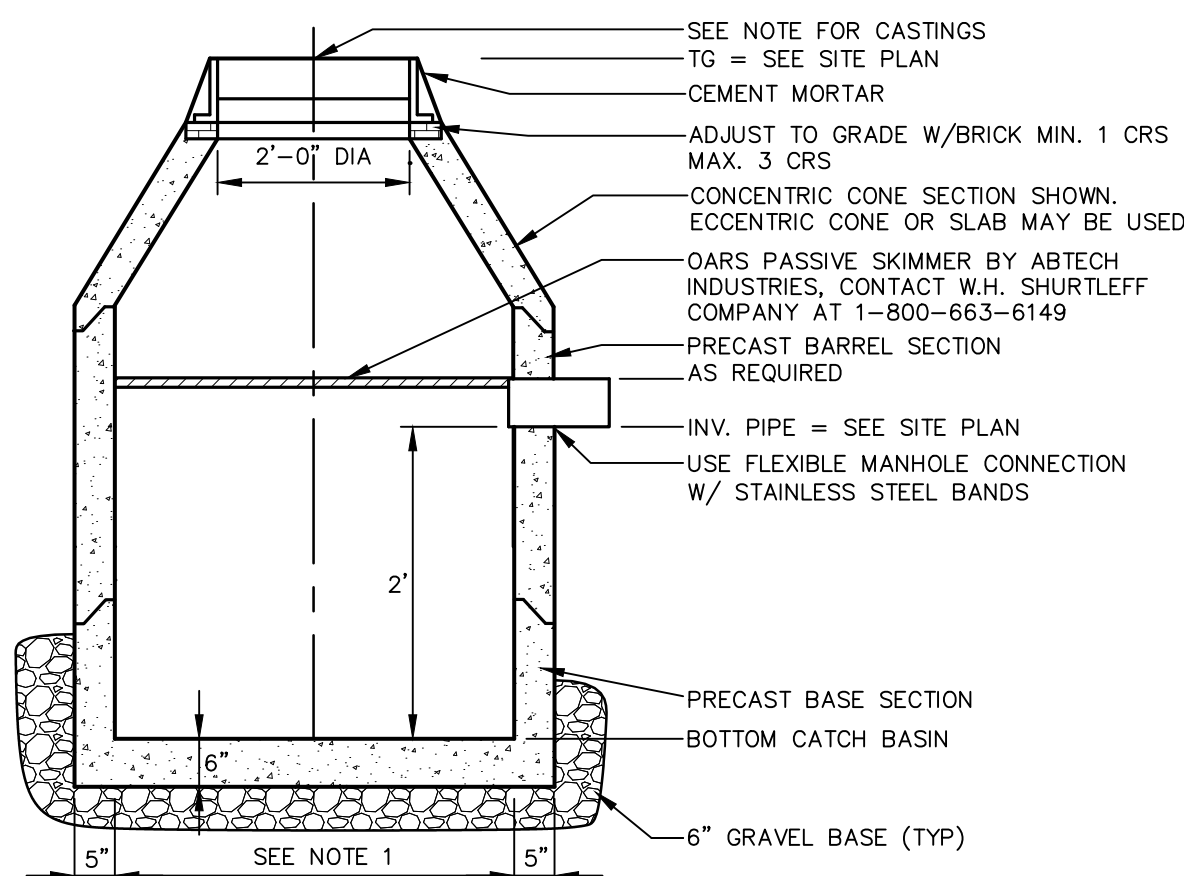
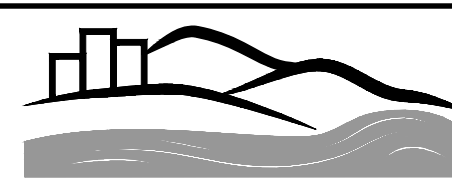
TITLE: EROSION CONTROL NOTES	
PROJECT:	ROSS ESTATES BLANCHARD ROAD EXTENSION, CUMBERLAND, MAINE
OWNER:	STONWOOD LAND, LLC 8 ROBERTS STREET, FALMOUTH, MAINE 04105

 SITELINES 119 PURINTON ROAD, SUITE A BRUNSWICK, MAINE 04011 207.725.1200 CIVIL ENGINEERS • PLANNERS • LAND SURVEYORS		
FIELD WK:	SCALE: NTS	SHEET: C8
DRN BY: MCA	JOB #: 4185	
CHD BY: KPC	MAP/PLOT: R08 / 681	
DATE: 11-16-2020	FILE: 4185-COV-DET	



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X:\LAND PROJECTS\14185-ROSS BLANCHARD RD CUMBERLAND\DWG\14185-COV-DET.DWG, 09/28/2021, 2:08 PM, MELISSA ARCHIBELL

 UNPAVED AREAS PAVED AREAS EXISTING GROUND SAW CUT EXISTING PAVEMENT UTILITY LOCATION MARKER (TAPE) 24" BELOW FINAL GRADE. SIDE OF TRENCH MAY BE SLOPED BACK IN UNPAVED AREAS ONLY. EXCAVATION MUST MEET O.S.H.A. STANDARDS. LEDGE INITIAL BACKFILL MDOT 703.18 SHEETING AND SHORING AS REQUIRED BY O.S.H.A. 1/2 PIPE O.D. + 6" MIN. 1/2 PIPE O.D. + 6" MIN. PIPE BEDDING MATERIAL MDOT 703.22 EXISTING SUBGRADE 4/3 O.D. PIPE + 1.5" MAX. LEDGE EARTH NOTES: 1. INSTALL 3 FOOT LONG IMPERVIOUS DAMS IN BEDDING/INITIAL BACKFILL MATERIAL EVERY 100 FEET TO PREVENT TRENCH GROUNDWATER FROM BEING CHanneled ALONG BEDDING/INITIAL BACKFILL 2. REFER TO LATEST MDOT SPECIFICATIONS FOR BEDDING AND BACKFILL REQUIREMENTS. 3. INITIAL BACKFILL TO BE 12 INCHES OVER TOP OF PVC PIPE ONLY.		 MIN. WIDTH 2' 3" MIN. 1' MIN. CLEAN WASHED 1 1/2"-3" STONE NOTE: DETAIL APPLIES TO UNDERDRAIN AND CUT-OFF DRAIN. SEE GRADING PLAN FOR LOCATIONS		 6 - 12" 24" 12" 12" 24" 4" TELEPHONE CONDUIT 4" CATV CONDUIT 2 - 5" ELECTRIC CONDUIT WARNING TAPE REFER TO CENTRAL MAINE POWER CONTRACTOR'S HANDBOOK FOR BACKFILL AND INSTALLATION SPECIFICATIONS.		 TIE STONE BERM IN TO EXISTING GROUND ON UPHILL SIDE OR WRAP AROUND TO MAINTAIN BERM ELEVATION PER PLAN STONE BERMED LEVEL LIP SPREADER FLOW THROUGH BUFFER SHALLOW TROUGH <table><caption>BERM STONE SIZE</caption><tr><th>SEIVE DESIGNATION (US CUSTOMARY)</th><th>PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES</th></tr><tr><td>12 IN</td><td>100</td></tr><tr><td>6 IN</td><td>84 - 100</td></tr><tr><td>3 IN</td><td>69 - 83</td></tr><tr><td>1 IN</td><td>42 - 55</td></tr><tr><td>NO. 4</td><td>8 - 12</td></tr></table> <table><caption>LEVEL LIP SPREADER SCHEDULE</caption><tr><th>I.D.</th><th>LIP ELEV.</th><th>REQUIRED LENGTH</th></tr><tr><td>LLS-1</td><td>53.0</td><td>18 L.F.</td></tr></table>	SEIVE DESIGNATION (US CUSTOMARY)	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES	12 IN	100	6 IN	84 - 100	3 IN	69 - 83	1 IN	42 - 55	NO. 4	8 - 12	I.D.	LIP ELEV.	REQUIRED LENGTH	LLS-1	53.0	18 L.F.
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A	TYPICAL PIPE TRENCH DETAIL N.T.S.	B	UNDERDRAIN DETAIL N.T.S.	C	UTILITY TRENCH N.T.S.	D	STONE BERMED LEVEL LIP SPREADER N.T.S.																	
 SEE NOTE FOR CASTINGS TG = SEE SITE PLAN CEMENT MORTAR ADJUST TO GRADE W/BRICK MIN. 1 CRS MAX. 3 CRS CONCENTRIC CONE SECTION SHOWN. ECCENTRIC CONE OR SLAB MAY BE USED OARS PASSIVE SKIMMER BY ABTECH INDUSTRIES, CONTACT W.H. SHURTLEFF COMPANY AT 1-800-663-6149 PRECAST BARREL SECTION AS REQUIRED INV. PIPE = SEE SITE PLAN USE FLEXIBLE MANHOLE CONNECTION W/ STAINLESS STEEL BANDS PRECAST BASE SECTION BOTTOM CATCH BASIN 6" GRAVEL BASE (TYP) NOTES: 1. 4'-0" I.D. TYPICAL. SOME STRUCTURES MAY REQUIRE LARGER I.D. PROVIDE SHOP DRAWINGS. 2. DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING. 3. PIPE SIZES AND INVERTS AS NOTED ON PLANS. 4. CATCH BASIN FRAME AND GRATE TO BE LABARON FOUNDRY MODEL LF-244-S GRATE OR APPROVED EQUAL.																								
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