



KITTERY TOWN PLANNING BOARD MEETING
Council Chambers – Kittery Town Hall 200 Rogers Road, Kittery, Maine 03904
Phone: 207-475-1323 - Fax: 207-439-6806 - www.kittery.org

AGENDA for Thursday, April 10, 2014
6:00 P.M. to 10:00 P.M.

CALL TO ORDER – ROLL CALL – PLEDGE OF ALLEGIANCE – APPROVAL OF MINUTES – 3/27/2014

PUBLIC COMMENTS - Public comment and opinion are welcome during this open session. However, comments and opinions related to development projects currently being reviewed by the Planning Board will be heard only during a scheduled public hearing when all interested parties have the opportunity to participate. Those providing comment must state clearly their name and address and record it in writing at the podium.

PUBLIC HEARING/OLD BUSINESS

ITEM 1 – (45 min.)– Estes Bulk Propane Storage/U.S. Route 1 –Preliminary Site Plan Review

Action: grant or deny preliminary plan approval. Owner M&T Reality, Applicant Estes Oil & Propane Company, propose a 60,000 gallon bulk propane storage facility at their property south of 506 U.S. Route 1, Tax Map 67, Lot 4, Mixed Use, Residential Rural and Shoreland and Resource Protection Overlay zones. Agent is Edward Brake, ATTAR Engineering.

ITEM 2 – (30 minutes) - Beatrice Way – Right-Of-Way Plan – Preliminary Plan Review

Action: review plan application, approve site walk minutes. Owner Operation Blessing LP, and applicant Richard Sparkowich, propose a new Right-Of-Way to allow the division of remaining land from the previously approved 3-lot subdivision located between Highpoint Circle and Kittree Lane. The site identified as Tax Map 61 Lot 08, ±65 acres, in the Residential - Rural (R-RL) Zone. Agent is Ken Markley, Easterly Survey Inc.

OLD BUSINESS

ITEM 3 – (15 minutes) - Board Member Items / Discussion

- | | |
|--|---|
| A. Action plan review and prioritization discussion | B. Kittery Town Planning & Development Briefing Book discussion |
| C. Committee Updates: Comprehensive Plan Update Status | D. Other |

ITEM 4 – (15 minutes) – Town Planner Items

- | | |
|---|-------------------------------------|
| A. Destination Marketing Program - Route 1BP to Kittery Gateway | B. Quality Improvement Overlay Zone |
| C. Other | |

ITEM 5 – (30 minutes) – Kittery Performing Arts Outdoor Concert Area – 70/76 Dennett Rd - Sketch Plan Review

Action: review plan and grant or deny concept approval. Owner William Cullen and applicant Kittery Performing Arts Center, L3C, is requesting consideration of their plans for an outdoor recreation and concert area to be located at 70/76 Dennett Road, Tax Map 6 Lots 15B and 16A and Map 13 Lot 4, ±24 acres in the Business Park Zone. Agent is Lee Consavage of Seacoast Consulting Engineers, Eliot, Maine.

ADJOURNMENT - (by 10:00 PM unless extended by motion and vote)

*NOTE: ACTION LISTED IN ABOVE AGENDA ITEMS IS FOR REFERENCE ONLY AND THE BOARD MAY DETERMINE A DIFFERENT ACTION.
DISCLAIMER: ALL AGENDAS ARE SUBJECT TO REVISION ONE WEEK PRIOR TO THE SCHEDULED TOWN PLANNING BOARD MEETING.
TO REQUEST A REASONABLE ACCOMMODATION FOR THIS MEETING PLEASE CONTACT STAFF AT (207) 475-1323 OR (207) 475-1307.*

1 TOWN OF KITTERY, MAINE
2 PLANNING BOARD MEETING
3 Council Chambers

UNAPPROVED
March 27, 2014

4
5 Meeting called to order at 6:06 p.m.

6 Board Members Present: Tom Emerson, Karen Kalmar, Bob Melanson, Mark Alesse, Deborah Driscoll
7 Davis, Ann Grinnell

8 Members absent: Susan Tuveson

9 Staff: Gerald R. Mylroie, AICP, Town Planner; Chris DiMatteo, Assistant Town Planner

10
11 Pledge of Allegiance

12
13 Minutes:

14 Ms. Grinnell moved to approve the minutes of February 27, 2014 as amended

15 Ms. Driscoll seconded

16 Motion carried unanimously by all members present

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18 Ms. Grinnell moved to approve the minutes of March 13, 2014 as amended

19 Mr. Alesse seconded

20 Motion carried unanimously by all members present

21
22 Public Comment:

23 Adam Pray, PLS, Eliot (working in Kittery), read a prepared presentation, provided to the Board
24 (Attachment), re: Net Residential Acreage.

25 There was no further public comment.

26 Mr. Emerson noted that Mr. Pray did not reference the Comprehensive Plan implementation, which is part
27 of the Planning Board's responsibility. Item 14 on page 24 of the Comprehensive Plan:

28 *The Town's Land Use regulations should assure that residential development in the areas designated as*
29 *rural retains a rural rather than a suburban landscape. This should include the retention of open space*
30 *and natural features such as large trees and ledges.* What may have been allowed a few years ago was
31 not necessarily following the Comprehensive Plan. What the Town voted on in 1999 was to limit
32 development in rural areas. The Board is now attempting to address this through its land use ordinance.
33 There have been a number of revisions to the Code, though many have been administrative in nature.
34 Language to enable an individual land owner who wishes to pass his land onto his heirs, without creating
35 a subdivision, is what the Board is working on now.

36
37 PUBLIC HEARING

38
39 ITEM 1 – Town Code Amendment – Title 16.7.8 Land Not Suitable for Development. Action: review
40 amendment and make recommendation to Town Council for adoption, An amendment to the Town Code
41 to address the applicability of the Soil Suitability Guide for Land Use Planning in the State of Maine
42 referenced in Title 16.7.8.1 Locations of Sewage, item 5, which pertains to soils related to septic sewage.
43 The proposed amendment also includes changes to the net residential area calculations and associated
44 definitions, Title 16.2.2.

45
46 Mr. Mylroie explained this has been reviewed and developed by the Code Subcommittee and has had a
47 public hearing. Ms. Grinnell noted this should go to a workshop with Council prior to recommendation to
48 Council. Ms. Kalmar suggested the Board continue discussion with professionals regarding the proposed
49 elimination of Article VIII Land Not Suitable for Development, Title 16.7.8.1 Locations and Sewage.
50 Following discussion and minor amendments to the proposed amendment,
51

52 Mr. Melanson moved to approve changes to line 22 of the amendment to Title 16.7.8.1 and forward to
53 Council workshop.

54 Ms. Grinnell seconded

55 Motion carried by all members present

56

57 Mr. Mylroie suggested there be more specificity to easements as included in section E of the amendment
58 and should be fine-tuned in Council workshop. Ms. Grinnell stated whatever goes to Council should be
59 as complete as possible. Discussion to amend this section followed.

60

61 Ms. Driscoll Davis suggested the Board give consideration to Mr. Pray's testimony during Code
62 Subcommittee review. Mr. Emerson concurred as the Council specifically asked how this amendment
63 would impact individual property owners, and the Board needs to be able to address this. Ms. Driscoll
64 noted she believed the ordinance allows an individual with 40,000 sf of property to build one house. Ms.
65 Kalmar asked when the ordinance change impacted non-subdivision divisions.

66

67 Ms. Grinnell moved to send this amendment to the Code Subcommittee to prepare for Council workshop,
68 with the following changes: line 22; line 30-32; exemption from subdivision review; consideration of the
69 letter from Mr. Pray to the Code Subcommittee; and other changes the Code Subcommittee finds
70 pertinent.

71 Mr. Melanson seconded

72

73 Mr. Melanson moved to reconsider his motion to send Title 16.7.8.1 to Council workshop

74 Ms. Grinnell seconded

75 Motion carried by all members present

76

77 Ms. Grinnell's motion carried by all members present

78

79

80 ITEM 2 – Town Code Amendment - Title 16.10.9.1.4. Approved Plan Expiration, Title 16.10.9.1.5
81 Requests for Extension and Title 16.9.3.8 Expiration of Wetlands Alteration Approval. Action: discuss
82 proposed amendment and schedule a public hearing. Proposed amendment reduces the period of time in
83 which extensions can be granted and modifies the process for extension requests.

84 Following discussion and minor changes to the proposed amendment,

85

86 Ms. Grinnell moved to forward to public hearing the March 27, 2014 amendments to Title 16.10.9.1.4,
87 Approved Plan Expirations and Title 16.9.3.8 Expiration of Wetlands Alteration Approval, as discussed.

88 Mr. Melanson seconded

89 Motion carried by all members present

90

91

92 ITEM 3 – Board Member Items / Discussion

93 A. Town Planning and Development Program Briefing Book

94 Mr. Mylroie summarized the intent of preparing the Briefing Book for the Board. Following discussion,
95 Mr. Emerson suggested the Board become familiar with the Briefing Book, and noted it will be shared
96 with the Council and other Boards and Committees.

97

98 Break

99

100 B. Town Council/ Planning Board Workshop results;

101 Mr. Emerson stated the workshops have been productive; quarterly get-togethers will be scheduled to
102 keep all parties informed.

103 C. Action List; Briefing Book Amendments:

- 104 - Following discussion, the Board requested the 2015 code amendment items 3i (i-viii), page 18, be
105 included on the Board's Action List to be addressed.
106 - Historic designation of structures to aid in gaining federal funds.
107 - FEMA FIRMs - A informational workshop has been scheduled on April 7 at 6:15 p.m. with Council
108 for property owners impacted by the new FEMA Federal Insurance Rate Maps.
109

110 D. Review By-Law changes:

111 Numerous administrative and grammatical changes were suggested by the Board. It was suggested that
112 language regarding Board Subcommittees be included in the By-Laws. Mr. Melanson requested inclusion
113 of KPA Rules and Regulations requiring a member of the Planning Board serve on the KPA. Requested
114 changes will be forwarded to Susan Tuveson to be incorporated in the By-Laws for final review.
115

116 E. Other:

- 117 - Title 16.7.3.5.12 ordinance revision was referenced. This was an amendment request by a member of
118 the public. Mr. DiMatteo explained the process to submit to Council. Mr. Alesse offered to simplify
119 the RTC and submit to the Code Subcommittee. Mr. Melanson noted Enactment language is also
120 needed.
121 - BIG project. Mr. Melanson explained the need for a Code amendment allowing for the placement of a
122 new holding tank in the Shoreland zone. This will allow for a pump-out system at the new pier. The
123 DEP is in support of this amendment change for water dependent uses. Mr. DiMatteo explained he
124 believed the CEOs decision was based on the definition of 'septic system', which includes holding
125 tanks, that are not allowed within 100 feet of a water resource. Ms. Kalmar suggested the definition
126 needs to be changed, or allow placement in the Shoreland zone only for commercial/water dependent
127 uses. Mr. Melanson noted this pump-out system will provide \$2,000-\$4,000 in revenue to the Port
128 Authority, which the Council has charged to become more self-sustaining.
129

130 ITEM 4 – Town Planner Items:

131 A. Destination Marketing Program- Kittery Gateway recommendation

132 Mr. Mylroie summarized the group's decision to brand the area as the "Gateway".

133 Ms. Grinnell noted that Phase 2 Destination Marketing includes the Gateway proposal, and the Council
134 has not approved Phase 2 as yet. She noted there was a limited number of businesses represented, and
135 does not support sending the recommendation to Council.

136 Ms. Driscoll- Davis suggested the name of the area needs to be unique. The name 'Gateway' is being
137 considered in Portsmouth, and the I-95 bridge is referenced as the gateway to Maine. It is too confusing.

138 Mr. Emerson stated, in deference to the group that selected the name, he would support moving this
139 forward to Council, without a recommendation one way or the other. No action was taken
140

141 B. Quality Improvement Overlay Zone - No discussion.
142

143 C. Quality Improvement Plans for Kittery Shore and Harbors - No discussion.
144

145 D. Town Council Joint Workshop is scheduled for April 7, 2014, 7:15-8:15 with the Town Planning
146 Board, Economic Development Committee, and Comp Plan Update Committee. This will be followed by
147 the FEMA/FIRM public workshop.
148

149 E. Other town code amendments
150
151

152 NEW BUSINESS

153

154 ITEM 5 – Town Code Amendment – Chapter 2, Definitions, Chapter 3, Article 2, Section 17 Shoreland
155 Overlay Zone and Chapter 7, Article 3 Nonconformance in Title 16 Land Use Development Code.

156 Action: review amendment and schedule a public hearing. An Amendment includes changes to the
157 town’s Shoreland zoning to comply with the Maine Department of Environmental Protection 2000 and
158 2010 conditional approvals.

159 Mr. Mylroie explained the amendments would bring the Code into compliance with state guidelines. Mr.
160 DiMatteo explained these changes were added directly from the 1999 and 2010 DEP conditions of
161 approval.

162

163 Mr. Melanson moved to accept amendments to Title 16.2; Title 16.3.2.17; Title 16.7.3; and Title 16.8.28,
164 as presented on March 27, 2014, and schedule a public hearing.

165 Ms. Kalmar seconded

166 Motion carried by all members present

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169 Mr. Emerson moved to adjourn

170 Ms. Grinnell seconded

171 Motion carried by all members present

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175 The Kittery Planning Board meeting of March 27, 2014 adjourned at 9:52 p.m.

176 Submitted by Jan Fisk, Recorder, April 1, 2014

177

178
179

ATTACHMENT

March 19, 2014

To: Tom Emerson, Chairman, Kittery Planning Board
Kittery Planning Board Members

Cc: Nancy Colbert Puff, Town Manager
Gerry Mylroie, Town Planner
Chris DiMatteo, Asst. Town Planner
Heather Ross, Town Code Enforcement Officer

From: Adam Pray, PLS
PO Box 714
Kittery, ME 03904

Re: Town Code Amendment Title 16.7.8 Net Residential Acreage

Dear Mr. Chairman and members of the Planning Board,

I respectfully request that this letter be considered in connection with the proposed Town Code Amendment to Title 16.7.8 regarding Residential Acreage Calculations. Furthermore, I ask that this letter be read aloud by a member of the Planning Board or Planning Department during the next scheduled workshop and the 3/27/14 Planning Board Meeting so that it may be considered and entered into the public record before a draft is presented to the Town Council.

This letter is in regards to amendments to Title 16.7.8.1 as proposed on pages 3 and 4 of the 3/13/14 review notes as submitted for the 3/13/14 Planning Board Meeting under "ITEM 2 - Town Code Amendment - Title 16.7.8 Land Not Suitable for Development."

I am unable to attend Planning board meetings on Thursdays but often review the video recordings as linked on the Town of Kittery website. What a useful resource! I had a chance to watch the 3/13/14 meeting and was surprised that only one member of the public provided comments to the proposed rule-changes. This is surprising considering what the recent amendments to the development code and current proposed amendments will mean for Kittery land owners and how they will be able to use their land. I think more public comments would be provided if Kittery land owners understood how these recent code amendments and proposed amendments impact their land value and ability to develop or divide their property. Recent amendments have either greatly restricted or prevented a land owner's ability to divide their land or add additional dwelling units. Proposed amendments will further restrict Kittery land owners.

Part 1 below offers a brief discussion and example of how the recent amendment has affected one land owner; Part 2 is a copy of the currently proposed amendment; and Part 3 offers a few conclusions and recommendations about how to improve the amendment.

180

Part 1

As I understand it, prior to recent and proposed code amendments, a land owner in Kittery had the ability to divide their land or add additional dwelling units in at least two ways:

1) through subdivision review requiring Planning Board approval and subject to subdivision review requirements (3 or more lots in a five year period);

or,

2) if exempt from subdivision as defined by statute, by division of land which does not require Planning Board approval and not subject to subdivision review requirements.

In either case, a proposed lot would have to meet the minimum lot size, and in the case of additional dwelling units, the minimum land area per dwelling unit. The following hypothetical scenario illustrates the negative impact the recent amendment has had on one land owner who has carefully planned on dividing his lot:

Joe owned a 3 acre parcel of land in the Rural Residential district (which is what the majority of Kittery is Zoned). Joe bought his parcel in 1986 and planned on dividing a portion of it to acquire some funds to help pay off some bills at retirement. Joe also has a daughter who got married and wanted to build a house. Joe, as a good father, planned to give as a gift a portion of his property so his daughter and her husband could build their home. It would be the ideal spot to have their daughter. She would be close, and, if Joe and his wife ever needed care, they would be right there to help. So in 2009 Joe began implementing his plan.

In 2009 Joe hired a land surveyor to help him with his planning. The surveyor confirmed that their parcel of land was actually 3.5 acres, not 3 acres as shown on the Town GIS. Portions of the lot were wetlands. These were delineated and shown on the survey. It was also discovered during the research process that a utility easement had been reserved across Joe's property for a neighboring parcel. No width was given and the location could not be determined in the field. This was noted on the plan. Also shown was a reserved 30' access easement that was conveyed to the neighbor along the westerly side of the property, which was actually never constructed.

In 2010, the circumstances are right and Joe decides to go ahead with dividing his land.

Proposed boundary lines were drawn and the proposed lots met all of the dimensional requirements and were well above the 40,000 s.f. minimum area. The minimum lot area for the Rural Residential zone in 2010 was 40,000 square feet.

In 2010 Lot area was defined as, "...the area of land enclosed within the boundary lines of a lot, minus: (1) land below the normal high-water line of a water body or upland edge of a coastal wetland; (2) areas beneath Planning Board-approved right-of-way; and (3) land within public street rights-of-way.

Setback distances from the back wetland were easily met for the proposed buildings. In 2011, an attorney drafted the deeds and the lots were conveyed - one to a new resident and the other to his daughter. Later that same year, building permits were given, both lots were built on and taxes levied.

Let's now assume Joe waited a little longer to execute the deeds. Joe was told that the economy was still picking up and that if he waited a little longer he would get a better return on the one lot. Besides, he was taking care of his mother and was living in Florida at the time. His daughter was still a student

at the University of Maine in Orono and would be graduating in 2014.

So, in 2014, after returning from Florida, Joe tries to execute his plan. He submits his proposed plan to the Planning Department and after much review and back and forth with the department, is told that his plan doesn't meet the code and that he can't divide his property. What Joe thought was his 3.5 acre parcel has now effectively been reduced to a little over an acre by the new code and cannot be divided. Utterly disappointed and trying to understand what has happened, Joe sees that the code has been amended on 9/26/11, 1/23/12, 5/30/12, 9/24/12, 3/25/13, 6/10/13 and finally on 1/27/14. Joe looks at the newly revised code (1/27/14) and sees that what used to be shown under the residential zone as "Minimum Land Area per Dwelling Unit - 40,000 sq. ft.", and could easily be calculated, is now replaced with "Minimum Land Area per Dwelling Unit* - 40,000 sq. ft." *As per Chapter 16.2 definition of net residential density except to exempt properties which are unable to meet the square feet required for a single family dwelling unit, provided the lot was conforming prior to the date of this enactment.

Joe looks up the Chapter 16.2 definition of net residential density:

Net Residential Density: means the number of dwelling units per net residential acre.

Joe, frustrated and confused, looks up the definition of Net residential acreage:

Net Residential Acreage: means the gross available acreage less the area required for streets or access and less the areas of any portions of the site which are unsuitable for development as outlined in Article VIII of Chapter 16.7

Joe, still frustrated and confused, looks up Article VIII of Chapter 16.7.

Article VIII. Land Not Suitable for Development.

16.7.8.1 Locations and Sewage

The planning Board may not approve portions of any proposed development that:

- 1. Are situated below sea level;*
- 2. Are located within the one hundred (100) year frequency floodplain as found in the definition;*
- 3. Are located on land which must be filled or drained, or on land created by diverting a watercourse, except The Planning Board may grant approval if central sewage collection and disposal system is provided.*
- 4. Has any part of the development located on filled tidal wetlands.*
- 5. Employs septic sewage disposal and is located on soils rated poor or very poor by the Soil Suitability Guide for Land in the State of Maine.*

At this point Joe is extremely confused. It doesn't make sense to him that, what he could have done just a few years ago, is completely out of reach now. He understands that uncontrolled development isn't good, but his situation was different. He wasn't a large developer - he wasn't even proposing a subdivision, just two lots and that would be exempt from subdivision. He doesn't understand that his neighbor was able to do the same thing only a few years earlier. He had done all of this planning, really for nothing. The code had changed so fast that he really didn't understand how it would affect him so much and really what it meant for his security and his ability to plan for the future.

The only comfort Joe has is that he knows the Planning Board has been working on amending the code.

Part 2

The following is a copy of the proposed amendment as proposed on pages 3 and 4 of the 3/13/14 review notes as submitted for the 3/13/14 Planning Board Meeting under “ITEM 2”.

~~*Proposed Amendment – EDITS THROUGH 2/18/14 PBCS MEETING & 2/27/14 PB MEETING*~~
~~*Article VIII. Land Not Suitable for Development*~~

~~*16.7.8.1 Locations and Sewage*~~

~~*The Planning Board may not approve portions of any proposed development that:*~~

- ~~*1. Are situated below sea level;*~~
- ~~*2. Are located within the one hundred (100) year frequency floodplain as found in the definition;*~~
- ~~*3. Are located on land which must be filled or drained, or on land created by diverting a watercourse, except the Planning Board may grant approval if central sewage collection and disposal system is provided.*~~
- ~~*4. Has any part of the development located on filled tidal wetlands.*~~
- ~~*5. Employs septic sewage disposal and is located on soils rated poor or very poor by the Soil Suitability Guide for Land Use Planning in the State of Maine.*~~

Chapter 16.7 GENERAL DEVELOPMENT REQUIREMENTS 6

Article VIII. Net Residential Acreage

16.7.8.1 Net Residential Acreage Calculations

The Net Residential Acreage determines the maximum number of dwelling units allowed on a parcel. To calculate the Net Residential Acreage the following land area must be subtracted from a parcel's gross area:

- A. All land located below the Highest Annual Tide elevation as published in the Maine DEP Highest Annual Tide (HAT) levels for the most current year.*
- B. All land located within the floodplain as defined in Title 16.2, Flood, One Hundred (100) Year.*
- C. All wetlands as defined in Title 16.2 Wetland, as well as vernal pools, ponds, lakes, streams and other water bodies.*
- D. All land located on filled tidal lands, per Title 16.2 Tidal Land, Filled.*
- E. All land located within existing easements, excluding view easements, and rights-of-way, as well as proposed rights-of-way, parking and associated travel ways, including driveways that service two (2) or more dwelling units.*
- F. All land isolated from the primary portion of the parcel by a road/street, existing land uses, or any physical feature, natural or manmade, such that it creates a barrier to the central development of the site and no means of access is proposed nor likely to be provided in the future. However, to demonstrate that identified isolated land may be considered developable for the purpose of this calculation, the applicant must submit a plan and supporting documentation for the Board's consideration.*
- G. All land zoned commercial.*
- H. All land one (1) acre or more contiguous area with sustained slopes of 20% or greater.*
 - I. All land identified as exposed bedrock, or soils with a drainage class of poorly drained, and/or very poorly drained as defined in Title 16.2 Soils.*
 - J. Fifty (50) percent of all land that is characterized with a drainage class of somewhat poorly drained, unless public sewer is utilized, in which case no land area is subtracted.*
 - K. All land area within a cemetery/burying ground as defined in Title 16.2, including associated setback per MRS Title 13 §1371-A Limitations on construction and excavation near burial sites.*
 - L. All land within a Commercial Fisheries/Maritime Uses Overlay Zone or Resource Protection Overlay Zone not included in 16.7.8.1.A -K.*

16.7.8.2 Documentation

The Net Residential Acreage calculation must be supported by verifiable information and accurate data and shown on the subdivision plan or other plan when applicable.

Title 16.2 Definitions

Tidal Land, Filled: means portions of the submerged and intertidal lands that have been rendered by human activity to be no longer subject to tidal action or below the natural low-water mark after October 1, 1975.

Soils

1. *“Poorly drained soils” means soils where water is removed so slowly that the water table is at or within twelve (12) inches of the ground surface for six to nine months of the year.*
2. *“Very poorly drained soils” means soils in an area where water is removed so slowly that the water table is at or within twelve (12) inches of the ground surface for nine to ten (10) months of the year. A soil’s drainage class must be determined by a Maine Certified Soil Scientist and based on the NRCS Supplemental Key for the Identification of Soil Drainage Class based on the Maine Association of Professional Soil Scientists, Key to Drainage Classes, March 5, 2002 or subsequent revisions.*

Cemetery and Burying Ground: A private or public place set apart for the interment of the dead. In the absence of an apparent boundary, i.e., fence, stone wall, survey markers, survey plan, or information from the Kittery Historical and Naval Society or other reliable historic sources, the perimeter of the interment area is determined by starting with a 10-foot distance from existing tombstones and expanded, where necessary, to form a final rectilinear area.

Net residential acreage means the land area identified for regulatory purposes as developable and is means the gross available acreage less the area required for streets or access and less the areas of any portions of the site which are unsuitable for development land area identified as outlined in Article VIII of Chapter 16.7 Net Residential Acreage. The Net Residential Acreage is used to determine the maximum number of dwelling units allowed on a parcel.

Chapter 16.8 DESIGN AND PERFORMANCE STANDARDS – BUILT ENVIRONMENT

16.8.11.5 Application Procedure.

All development reviewed under this Article is subject to the application procedures in Chapter 16.10, Development Plan Application and Review, and the following:

A. In addition to the requirements of Chapter 16.10, the following are required at submittal of the Sketch Plan:

1. *Calculations and maps to illustrate:*
 - a. *proposed dimensional modifications and the dimensional standards required in the zone in which the development will be located;*
 - b. *non-buildable area (land not suitable for development area as defined in Article VIII of Chapter Title 16.7.8.1);*
 - c. *net residential acreage and net residential density; and*
 - d. *open space as defined in Section 16.8.11.6.D.2 of this Article.*

Part 3

Conclusions and Recommendations

It can be agreed that an amendment to the current Land Use Ordinance is necessary. However, it must be admitted that the proposed amendment muddles an already disorientating and confusing development code.

First, the current code erroneously links Net Residential Area to lot area requirements in divisions that are exempt from subdivision review. (See the example of Joe above). The current definition of "Lot Area" is more appropriate. It is straight forward and understandable:

"Lot Area means the area of land enclosed within the boundary lines of a lot, minus: (1) land below the normal-high-water line of a water body or upland edge of a coastal wetland; (2) areas beneath Planning Board-approved right-of-way; and (3) land within public street rights of way."

Furthermore, the proposed amendment does not address this error. It says, *"The Net Residential Acreage determines the maximum number of dwelling units allowed on a parcel."*

This is not only too broad, but erroneous because it would include one or two lot divisions, which do not meet the statutory definition of a subdivision and which are exempt from subdivision review requirements.

The proposed amendment should clearly limit the Net Residential Acreage and density calculations to subdivisions and cluster developments. It should positively exempt non-subdivisions from the Net Residential Acreage calculation where "Lot Area" is the correct definition.

Second, a more critical and judicious look should be made at the definitions for land areas that must be subtracted from a parcel's gross area to calculate the Net Residential Acreage. While most might agree that most areas defined should be subtracted (i.e. floodplain, wetlands etc..) and is justifiable, a few definitions are clearly arbitrary, ambiguous and redundant and should be either changed or removed.

For example, proposed 16.7.8.1.E says, *"All land located within existing easements, excluding view easements, and rights-of-way, as well as proposed rights-of-way, parking and associated travel ways, including driveways that service two (2) or more dwelling units."*

Rights-of-way are easements. What about blanket easements? or easements in gross? would the entire area be deducted? how about easements that have no defined width? that can't be located on the ground? mineral easements? aerial easements? reciprocal easements? would the appurtenant easement area be counted back toward the gross area? Should all parking areas and associated travel ways really be deducted from the parcel's gross acreage? Couldn't these areas be conceivably used for development?

"Existing easements" is too ambiguous. It should be replaced with a clearer definition. (i.e. "Town Approved Right of Ways")

Another example, proposed 16.7.8.1.I says, *"All land identified as exposed bedrock, or soils with a drainage class of poorly drained, and/or very poorly drained"*

Should all of the area of poorly drained soils and bedrock really be excluded? Adjacent Towns with similar definitions at least allow for a percentage to be counted.

Also, 16.7.8.2 Documentation says, "The Net Residential Acreage calculation must be supported by verifiable information and accurate data and shown on the subdivision plan or other plan when applicable"

Verifiable to whom and by what standard? What is the standard of accuracy?

The development code is changing at break neck speeds. The current code was ordained on 7/26/2010. 7 amendments have been made since then: 9/26/11; 1/23/12; 5/30/12; 9/24/12; 3/25/13; 6/10/13; 1/27/14; and now this proposed amendment. What has precipitated all of the changes? Has the code been that faulty that it requires constant maintenance to address its apparent inadequacies? How can a land owner or small developer navigate these changes? How can they plan if the code and definitions change 3 or 4 times in a year?

Recent code amendments have left Kittery residents reeling, especially relating to cluster provisions that have had unintended consequences. The board has been faced with proposed cluster developments that seemed beyond what the code was trying to allow. These proposals appear to have prompted knee-jerk reactions to implement a quick-fix. The record indicates that the current remedy sought by the Planning Board is to redefine and apply the Net Residential Acreage definition to subtract as much land as possible from a landowner's gross area so that the amount of units or lots they can build is greatly reduced, or eliminated. Simple proposals and subdivisions that are arguably sustainable and responsible will not be possible under the current ordinance and proposed amendment - proposals that would have been entirely viable just a few years ago. At the same time, the Net Residential Area is currently being misapplied to non-subdivision proposals (divisions exempt from subdivision review). The standard Lot Area definition should apply to these proposals.

The Board is right in directing an amendment to the ordinance and has a great opportunity to provide a fair amendment. However, recent and proposed amendments betray a lack of public input and representation. When tested, the current code and proposed amendment fails Kittery land owners. It will negatively impact land owner's rights and will unfairly restrict otherwise responsible development. The proposed amendment is inadequate and demands wider representation and critical review.

Respectfully,



Adam M. Pray, PLS



April 3, 2014

Mr. Chris DiMatteo, Assistant Town Planner
Town of Kittery
P.O. Box 808
Kittery, Maine 03904

**RE: Town of Kittery, Planning Board Services
Estes Propane Storage (Tax Map 67, Lot 4) Review #3
CMA #591.77**

Dear Chris:

CMA Engineers received the following information for Assignment #77, and have prepared this 3rd review of the preliminary site plan application for the Estes Propane Storage (Tax Map 67, Lot 4):

- 1) Letter to Gerry Mylroie Re: Estes Propane Storage Preliminary Site Plan Application from Attar Engineering dated March 19, 2014 and attachments.
- 2) Grading and Utility Plan Estes Propane Storage U.S. Route 1, Kittery, Maine by Attar Engineering dated 11/7/2013 and revised 3/19/14.

As described in our previous review 2, the project includes construction of a 60,000 gallon bulk storage facility comprised of two 30,000 gallon propane tanks on a concrete pad with a security fence and a garage. The site is accessed by a proposed 1,000' long road, construction of which includes a wetland crossing with 14,455 sf of impact. The project includes installation of water, sewer main and a sewer force main (for future use).

We have reviewed the information submitted for conformance with the Kittery Land Use and Development Code Zoning Ordinance and general engineering practices and offer the following comments below that correspond directly to the Town's Ordinances.

The Applicant has provided a "Fire Safety Analysis for Estes Propane Blue Star Memorial Highway U.S. Route 1 Kittery, ME, Two 30,000 gallons tank" dated November 26, 2013 and prepared by Jody Pratt Ameden Energy Consulting LLC. The analysis concludes that the proposed plan is compliant with the State Fire Codes and with NFPA 58.

As outlined below, it appears that the site is being designed to accommodate additional future uses that are not described. The Applicant should describe the purpose of these features, and provide concepts associated with the potential future uses.

Chapter 16.3 Land Use Zone Regulations

16.3.2.13 Mixed Use (MU)

16.3.2.13.D. The Applicant has indicated architectural details will be included with the building permit application. The building permit is granted after the project receives approval from the

Planning Board. Review of the architectural details is part of the Planning Board approval and the Applicant needs to provide them at this time.

Chapter 16.8 Design and Performance Standards-Built Environment

Article VII. Sewage Disposal

The Applicant has shown the location of a gravity sewer and a sewer force main on site for future use. The gravity sewer main includes three sewer manholes and seems excessive for sewer use associated with an equipment storage garage. Please clarify.

The applicant further describes that sewer service to the proposed garage will be provided at a future time. The details should be provided now.

Article VIII. Surface Drainage

16.8.8.1 The proposed drainage system uses roadside swales, closed piping and detention ponds with outlet structures. The Applicant has provided a stormwater management plan that shows decreases in peak flows for the 2, 10 and 25-year storm events. The stormwater management plan appears thought out and complete. We have the following minor comments:

1. What is the purpose of the "sealed stub for future 6" perforated pipe" in the catch basins at ponds 21 and 62 (Sheet 5)?
2. The Existing Drainage Diagram in the Stormwater Management Plan erroneously reference reach "2R". We believe this should be "1R".

Article IX. Parking, Loading and Traffic

16.8.9.4.D. There is no parking indicated for the warehouse. Is that intended to be at the "hammer head"? If so, does that parking impede trucks? Please clarify.

Chapter 16.9 Design and Performance Standards-Natural Environment

Article III. Conservation of Wetlands Including Vernal Pools

16.9.3.7 In this latest revision, the wetlands impact has increased from 11,985 sf to 14,455 sf. Alternatives exist for the wetland crossing that would have a much smaller impact, including vertical retaining systems and potentially narrowing the 20' roadway. Has the Applicant explored other alternatives with less impact?

16.9.3.9 The Applicant has moved the 15,000 sf undisturbed upland buffer zone (reserve area because of wetlands impacts) to an area that has only limited use for development due to its location within wetlands setbacks. In that the area is largely protected, should the reserve area be located in an area that could more readily be developed?

Should you have any questions, please do not hesitate to call.

Very truly yours,

CMA ENGINEERS, INC.



Jodie Bray Strickland, P.E.
Project Engineer

cc: Edward Brake, EIT, Attar Engineering

**Town of Kittery
Planning Board Meeting
April 10, 2014**

Estes Bulk Propane Storage – Public Hearing / Preliminary Plan Review.

Owner M&T Realty, and applicant Estes Oil & Propane Company is requesting consideration of their plans for a 60,000 gallon bulk propane storage facility at their property south of 506 U.S. Route One., Tax Map 67, Lot 4, Mixed Use Zone, with a portion in the Residential Rural and Shoreland Overlay zones. Agent is Joe Cheever, ATTAR Engineering,

PROJECT TRACKING

REQ'D	ACTION	COMMENTS	STATUS
	Sketch Plan Review	March 14, 2013; scheduled for 4/11/13; applicant requested a continuance to 5/9/13;	Sketch Plan accepted: 5/9/13
NO	Site Visit	Site walk conducted 4/10/13 as part of Sketch (no minutes taken); 1/7 and 1/22 meetings were cancelled due to inclement weather.	
Yes	Preliminary Plan Review Completeness/Acceptance	Preliminary Plan received 11/7/13 (w/in 6 months of sketch plan acceptance); preliminary plan accepted as substantially complete	12/12/13
Yes	Public Hearing	Scheduled 1/9/14	HELD
Yes	Preliminary Approval	Review started 1/9/14, continued on 2/13/14; 4/10/14;	PENDING
Yes	Final Plan Approval		

Applicant: Prior to the signing of the approved Plan any **Conditions of Approval related to the Findings of Fact along with waivers and variances (by the BOA) must be placed on the Final Plan and, when applicable, recorded at the York County Registry of Deeds. PLACE THE MAP AND LOT NUMBER IN 1/4" HIGH LETTERS AT LOWER RIGHT BORDER OF ALL PLAN SHEETS.** As per Section 16.4.4.13 - Grading/Construction Final Plan Required. - Grading or construction of roads, grading of land or lots, or construction of buildings is prohibited until the original copy of the approved final plan endorsed has been duly recorded in the York County registry of deeds when applicable.

Overview

Applicant is requesting Site Plan approval for the construction of two 30,000 gallon propane tanks for a bulk propane storage facility. The proposed development also includes a 24' x 30' garage, a 1,360-foot long 20-foot wide roadway, and associated drainage structures, pavement and earthwork. Site walks scheduled have been cancelled due to inclement weather. The Applicant has requested to forgo the site walk during the preliminary review phase and hold it during the final plan review phase.

The public hearing was held on 1/9/14 and the Board received a presentation from the Applicant's Fire Safety consultant and comments from Fire Chief David O'Brien who supported the report's conclusion that the proposed development is compliant with NFPA 58 and State Fire Codes. In addition, a letter dated August, 2013 from abutting property (Map 67 Lot 3) owner, Betty Crawford describing her concerns about the project was read into the record.

Staff Review

The Applicant has submitted a revised plan, narrative that addresses some issues and comments, revised approval criteria for Special Exception Use, letter regarding sewer availability from the Town, and a stormwater management report. The revised plan includes a shorter access road and building envelopes have decreased in size due to revised wetland delineation.

The Town's Peer Review Engineer, CMA, has prepared another review of the project and summarized their comments in the attached 4/3/14 report. These comments have **not** been incorporated in the review criteria yet.

Vernal Pools

The applicant has provided a letter from Kenneth Wood, P.E. with ATTAR Engineering who is a certified wetland scientist in the State of New Hampshire. His letter certifies that there was no evidence of vernal

pools on the site. Attached is an email from Ed Brake, E.I.T., ATTAR Engineering, responding to Earledean Wells, KCC, email request for additional vernal pool determination on the neighboring parcel to the north at 506 Route One. Mr. Brake states that the Applicant shouldn't be responsible for off-site vernal pools and that MDEP regulates only "significant" vernal pools and only those that they are located in an area under control by the developer/owner. He also speculates that if there were to be a vernal pool located off site the proposed development is outside of the required 250-foot buffer, which can comprise of a minimum of 75% un-fragmented forest.

The Planning Board can require an additional vernal pools study as allowed under 16.10.5.2. *Additional Requirements*. The Board would need, however, a compelling reason to do so, and it is unclear if there is one at this time.

With regard to the description of the MDEP regulation of Vernal Pools, the applicant should provide a similar synopsis for the Army Corps of Engineers (AOCE), since that agency would have jurisdiction also, due to the wetland fill, if a vernal pool was found off site.

The applicant is correct in that the MDEP does not consider any vernal pools on land not under the control of the developer/owner, per Title 38 §480-BB. Significant wildlife habitat; major substantive rules in the Maine Revised Statutes. The AOCE has a similar policy in that they don't request the applicant to search neighboring properties for vernal pools, however, if vernal pools are known to be off site, then they are considered. Many towns have inventoried the location of vernal pools with owner permission and have created published maps of these resources.

The letter from Mr. Wood, certifies that he found no evidence of vernal pools on the site. Mr. Wood should clarify if in fact the entire site was investigated, because in the letter he states that he only "observed all wetland areas on the parcel for evidence of vernal pools". Vernal Pools are often found isolated within upland woodlands.

The Board needs to direct the applicant with regard to whether another vernal pool assessment for the site is required and if a vernal pool assessment off-site is required.

Wetland Mitigation Upland Buffer Zone

The applicant has addressed the requirement in Title 16.9.3.9.B.2 where undisturbed upland is used to create a deed restricted buffer zone adjacent to a wetland boundary. Previously the 15,000 SF area was proposed within the 100-foot setback that it is somewhat unlikely to be disturbed. The applicant has proposed a different location, however, still within the 100-foot setback. In effect, this area is already protected. The Board needs to direct the applicant if this area is suitable as an "undisturbed buffer zone" as required in 16.9.3.9.B.2. An area on the site that might be more effective in protecting upland area is the knoll located just east of the propane tanks and pond 63.

Current LOMA and Preliminary FIRM

Staff has confirmed that the LOMA previously issued for the property is listed among what FEMA plans to "revalidate" after the preliminary FIRM becomes effective and that the actual map does not reflect the LOMA changes due to scale limitations. Attached is an exhibit that shows the revised flood zone as it pertains to the approved LOMA.

Inland Waterfowl and Wading Bird Habitat/Resource Protection Boundary

That applicant notes in the most recent submittal that the boundary has been "verified in the field", however, the revised plan does not include any supporting information to that effect. In addition, a previous plan note stating the "shoreland zone extends 250' from the upland edge of the wetland" has been removed. The Applicant needs to address for this.

Landscape Standards for the Mixed-Use District

The Applicant makes a point that the requirements under Title 16.3.2.13.D.6.a.iii are not appropriate due to the natural and rural character of the site. If the Board concurs with this perspective, they might consider placing the vegetation in an area where it may be a productive screen, along the northeast boundary of the property, for example, adjacent to the first portion of the proposed roadway. Plant palette can be designed with native plant species to be more appropriate for a natural setting. At a minimum, street trees probably would fit straddling the front property line or inside the U.S. Route One ROW.

Also in the zoning standards, 16.3.2.13.D.6.c Rural Landscape Features requires features such as “stonewalls, berms, and other agricultural structures, tree lines or fields must be retained to the maximum extent possible.” It is not clear if all of these types of features have been considered and/or identified on the plan. Applicant needs to clarify. Title 16.3.2.13.D.8 Open Space Standards appear to have been addressed in the revised plans.

Additional Information

The applicant states that the 8” water line, complete stormwater analysis, and a design for a subsurface wastewater system will all be part of the final plan application. The Board should discuss if this amenable. Typically wastewater systems and associated HHE-200 information is submitted as part of the preliminary plan phase. Lighting, that is typically part of the final plan application, needs to be addressed by the applicant.

Recommendation

There are several significant items that need to be addressed: special exception use; site walk; and vernal pools.

Special Exception Use

The Board, after review of the applicable decision criteria found in Title 16.6.6, and the Applicant’s narrative and responses attached, should give the Applicant an indication of which of the criteria are not sufficiently addressed. If there is information the Board needs in order to complete its review and approve the request for special exception use, it would be prudent to advise the Applicant now, prior to Preliminary approval.

Site Walk

The Board needs to determine if the site walk can be held during final plan review. If not, schedule the site walk for a specific date.

Vernal Pools

The Board needs to address the request by the Conservation Commission regarding vernal pool studies on and off site. The Board needs to direct the applicant with regard to whether another vernal pool assessment for the site is required and if a vernal pool assessment off-site is required. In addition, if the latter is required, will the applicant be required to pay for the assessment? The Applicant has requested the Board vote on these issues.

Review Criteria

<p>Action by the board shall be based upon findings of fact which certify or waive compliance with all the required standards of this title, and which certify that the development satisfies the following requirements:</p>
<p>A. Development Conforms to Local Ordinances.</p> <p>The proposed development conforms to a duly adopted comprehensive plan as per adopted provisions in the Town Code, zoning ordinance, subdivision regulation or ordinance, development plan or land use plan, if any. In making this determination, the municipal reviewing authority may interpret these ordinances and plans.</p>
<ul style="list-style-type: none">• The proposed use is a special exception use within the Mixed-Use Zone. Specific review criteria is required for special exception uses (Title 16.6.6 Basis for Decision). Applicant addressed these conditions and factors in their 11/20/13 submittal. Is the Board satisfied with the applicant's compliance with these approval criteria?• 16.3.2.13.D.5 – Applicant should provide architectural details for the proposed garage to assure compliance with building design standards.• 16.3.2.13.D.6 - Applicant should provide a landscape plan indicating the location of the landscape planter strip with vegetation and streetside trees, or explain that the location of the facility provides adequate natural screening. Applicant notes the tanks and garage 'will be screened by existing vegetation' and the site is 'adequately screened' and 'will have adequate landscaping' (see 11/20/13 letter, Factors for Consideration, 16.6.6.2.J.-M). Applicant also addresses the treatment of the streetside landscape in the 1/22/14 submittal, see staff comments above.
<p>B. Freshwater Wetlands Identified.</p> <p>All freshwater wetlands within the project area have been identified on any maps submitted as part of the application, regardless of the size of these wetlands.</p>
<p>Wetlands have been identified. The Conservation Commission asked that a vernal pool evaluation be conducted on the site. In a May 9, 2013 memorandum, Kenneth Wood noted that, following a site walk on May 9, no vernal pools were evident on the site (see 11/20/13 submittal package). A <i>Functional Assessment of Wetlands</i> prepared by Michael Cuomo (12/3/13) summarized the wetland's Floodflow Alteration and ability to perform Sediment and Toxicant Retention and Nutrient Removal 'will be reduced only slightly, as natural flow will be generally maintained by the installation of three culverts beneath the road fill.' (page 7).</p> <p>(Note: it is not clear if the 12/7/1995 wetland delineation is superseded by the functional assessment or if Cuomo has recertified the 1995 delineation. It is confusing to have vernal pool assessment being done by someone other than the professional delineating the wetlands and preparing a functional assessment. Is it possible for Cuomo to recertify the 1995 wetland delineation and concur that there are no vernal pools on the site? If not, the final plan needs to be revised with the certifying professionals and date for wetland delineation and vernal pool determination.) Applicant states the plan will be updated, 1/22/14.</p>
<p>C. River, Stream or Brook Identified.</p> <p>Any river, stream or brook within or abutting the proposed project area has been identified on any maps submitted as part of the application. For purposes of this section, "river, stream or brook" has the same meaning as in 38 M.R.S. §480-B, Subsection 9</p>
<p>An intermittent stream has been identified within the wetlands on the site plan and is included in the wetland crossing details. This stream was identified as possibly a 'farm ditch that has filled in and taken on more natural shape from lack of maintenance' (Cuomo, 12/3/13). The site does abut the Johnson Brook, whose associated wetlands have been identified by Maine IF&W as important waterfowl and wading bird habitat.</p>
<p>D. Water Supply Sufficient.</p> <p>The proposed development has sufficient water available for the reasonably foreseeable needs of the development.</p>
<p>The proposed development has sufficient water available per a letter dated November 13, 2013 from the Kittery Water District.</p>
<p>E. Municipal Water Supply Available.</p> <p>The proposed development will not cause an unreasonable burden on an existing water supply, if one is to be used.</p>

<p>The proposed development has sufficient water available per a letter dated November 13, 2013 from the Kittery Water District. Plan and profile needs to include proposed water line. The Fire Chief requests the 8" water line be installed the full length of proposed driveway.</p>
<p>F. Sewage Disposal Adequate. The proposed development will provide for adequate sewage waste disposal and will not cause an unreasonable burden on municipal services if they are utilized.</p>
<p>The applicant states the proposed development will utilize municipal sewer at a 'future date'. What is the rationale for deferring installation of the sewer connection? <i>Plans should show the location of the force main on the profile and provide details.</i> CEO informs staff that restroom is required with the construction of a garage associated with the proposed use. Is the garage and the sewer connection part of a future phase?</p>
<p>G. Municipal Solid Waste Disposal Available. The proposed development will not cause an unreasonable burden on the municipality's ability to dispose of solid waste, if municipal services are to be used.</p>
<p>The applicant has not yet addressed this requirement, however there should be very little solid waste generated based on the proposed use.</p>
<p>H. Water Body Quality and Shoreline Protected. Whenever situated entirely or partially within two hundred fifty (250) feet of any wetland, the proposed development will not adversely affect the quality of that body of water or unreasonably affect the shoreline of that body of water. <i>The project includes a wetland impact of 11,985 sf of wetlands crossing for the access roadway. The applicant should provide wetlands alteration and mitigation plans prior to preliminary plan approval.</i></p>
<p>I. Groundwater Protected. The proposed development will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of groundwater. Applicant proposes public sewer will be utilized in the future for the proposed garage. Applicant is now considering a septic system in the interim, location available for final plan review, 1/22/14. The Kittery Sewer Department stated a port-a-potty could be used in the interim, if no basin or toilet is installed in the proposed garage. Does the Board concur? CEO needs to verify the use of port-a-potty in lieu of restroom. CEO informs staff that restroom is required with the construction of a garage associated with the proposed use.</p>
<p>J. Flood Areas Identified and Development Conditioned. All flood-prone areas within the project area have been identified on maps submitted as part of the application based on the Federal Emergency Management Agency's Flood Boundary and Floodway Maps and Flood Insurance Rate Maps, and information presented by the applicant. If the proposed development, or any part of it, is in such an area, the applicant must determine the one hundred (100) year flood elevation and flood hazard boundaries within the project area. The proposed plan must include a condition of plan approval requiring that principal structures in the development will be constructed with their lowest floor, including the basement, at least one foot above the one hundred (100) year flood elevation. Applicant has submitted an amended 100-year flood zone boundary per the September 15, 2003 Letter of Map Amendment Determination. Boundary illustrates the proposed road, road crossing, storage tanks and garage are outside of the 100-year flood zone area (A). (Site Plan, Sheet 1, Reference 2) The applicant should clarify if the 2003 LOMA supersedes the recent preliminary FEMA FIRM maps when they become finally adopted. If this is the case then why is the 2003 LOMA not reflected in the preliminary FIRM maps? Applicant has clarified this and Staff has confirmed.</p>
<p>K. Stormwater Managed. Stormwater Managed. The proposed development will provide for adequate stormwater management <i>The applicant has shown locations of proposed piping and ponds for the stormwater management system. A more complete stormwater analysis, including pre and post development flows is needed prior to final plan approval.</i></p>

L. Erosion Controlled.

The proposed development 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.

This standard will be met. A standard condition of final approval states the applicant's contractor will follow MDEP best management practices for erosion and sediment control (silt fencing, silt sacks, etc.), and CMA engineers will be notified to observe application during construction.

M. Traffic Managed.

The proposed development will:

1. 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; and
2. Provide adequate traffic circulation, both on-site and off-site.

The applicant states in the 11/20/13 submittal in their response to 16.6.6.2 Factors for Consideration that the proposal will (C) have a minimal effect on vehicular traffic on U.S. Route 1; is (G) separated from areas of public parking and recreational facilities; (H) will only be accessed by Estes Oil Company delivery trucks and no off street parking is required and (I) the site is designed to be accessible by fire and emergency apparatus .

Total number of anticipated truck trips is not clear and needs clarification. "two trips per day for oil delivery trucks" How may "oil delivery trucks" are anticipated? **At the public hearing it was stated two delivery trucks per day and one or two tractor trailer for supply per week.**

Other than this and pending review response from the Department of Public Works, the proposed development does not appear to cause congestion or unsafe conditions with respect to the use of public roads, and on and off-site circulation appears to be adequate.

N. Water and Air Pollution Minimized.

The proposed development will not result in undue water or air pollution. In making this determination, the following must be considered:

1. Elevation of the land above sea level and its relation to the floodplains;
Applicant has submitted an amended 100-year flood zone boundary per the September 15, 2003 Letter of Map Amendment Determination. Boundary illustrates the proposed road, road crossing, storage tanks and garage are outside of the 100-year flood zone area (A). The applicant should clarify if the 2003 LOMA supersedes the recent preliminary FEMA FIRM maps when they become finally adopted. If this is the case then why is the 2003 LOMA not reflected in the preliminary FIRM maps?
2. Nature of soils and sub-soils and their ability to adequately support waste disposal;
(Not Applicable)
3. Slope of the land and its effect on effluents;
(Not Applicable)
4. Availability of streams for disposal of effluents;
(Not applicable)
5. Applicable state and local health and water resource rules and regulations; and
6. Safe transportation, disposal and storage of hazardous materials.
*The project needs to be reviewed and approved or permitted through the National Fire Protection Association (NFPA)-58 process for bulk storage of flammable materials. **Though the Fire Chief has reviewed this it still needs to be finalized with the State Fire Marshal.***

O. Aesthetic, Cultural and Natural Values Protected.

The proposed development 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.

- Letter to Maine Historic Preservation Commission dated November 8, 2013. No response received by applicant to date.
- The site plan illustrates location of the proposed development is outside of the identified natural wildlife habitat, waterfowl and wading bird/resource protection area (Site Plan, Sheet 1), however, this delineation is based on GIS data. Given the close proximity of the proposed development to the resource protection overlay zone (OZ-RP), Staff recommends a wetland delineation be performed for the regulated non-forested wetland along Johnson Brook in order to base the 250-foot offset used to determine the OZ-RP, and not GIS data.
- The Wetland Functional Assessment concluded: *The proposed wetland fill will most affect the Wildlife Habitat and Visual Quality/Aesthetics functions of the wetland, as a habitat block will be fragmented ...however, no exceptional habitats have been identified...and the visual quality ...is not exceptional. The wetland has been degraded by past land use, filling, and invasive plants are widespread. [Cuomo, 12/3/13, pg. 7]*

P. Developer Financially and Technically Capable.

Developer is financially and technically capable to meet the standards of this section.

Applicant has pending financial obligations for ASA charges.

Note: See applicant's response to the following *Basis for Decision* in the November 20, 2013 submittal (pages 3-4). Board consideration of these conditions and factors will be included in the final approval for formal action. However, each factor may be considered during review to help direct the applicant.

16.6.6 Basis for Decision.

16.6.6.1 Conditions.

1. Proposed use will not prevent the orderly and reasonable use of adjacent properties or of properties in adjacent use zones;
2. Use will not prevent the orderly and reasonable use of permitted or legally established uses in the zone wherein the proposed use is to be located, or of permitted or legally established uses in adjacent use zones;
3. Safety, the health, and the welfare of the Town will not be adversely affected by the proposed use or its location; and
4. Use will be in harmony with and promote the general purposes and intent of this Code.

16.6.6.2 Factors for Consideration.

- A. The character of the existing and probable development of uses in the zone and the peculiar suitability of such zone for the location of any of such uses;
- B. The conservation of property values and the encouragement of the most appropriate uses of land;
- C. The effect that the location of the proposed use may have upon the congestion or undue increase of vehicular traffic congestion on public streets or highways;
- D. The availability of adequate and proper public or private facilities for the treatment, removal or discharge of sewage, refuse or other effluent (whether liquid, solid, gaseous or otherwise) that may be caused or created by or as a result of the use);
- E. Whether the use, or materials incidental thereto, or produced thereby, may give off obnoxious gases, odors, smoke or soot;
- F. Whether the use will cause disturbing emission of electrical discharges, dust, light, vibration or noise;
- G. Whether the operations in pursuance of the use will cause undue interference with the orderly enjoyment by the public of parking or of recreational facilities, if existing, or if proposed by the Town or by other competent governmental agency;
- H. The necessity for paved off-street parking;
- I. Whether a hazard to life, limb or property because of fire, flood, erosion or panic may be created by reason or as a result of the use, or by the structures to be used, or by the inaccessibility of the property or structures thereon

for the convenient entry and operation of fire and other emergency apparatus, or by the undue concentration or assemblage of person upon such plot;

- J. Whether the use, or the structures to be used, will cause an overcrowding of land or undue concentration of population; or, unsightly storage of equipment, vehicles, or other materials;
- K. Whether the plot area is sufficient, appropriate and adequate for the use and the reasonably anticipated operation and expansion thereof;
- L. Whether the proposed use will be adequately screened and buffered from contiguous properties;
- M. The assurance of adequate landscaping, grading, and provision for natural drainage;
- N. Whether the proposed use will provide for adequate pedestrian circulation;
- O. Whether the proposed use anticipates and eliminates potential nuisances created by its location;
- P. The satisfactory compliance with all applicable performance standard criteria contained in Chapter 16.8 and 16.9.

Date: November 10, 2013

To: Tom Emerson, Chairman
Kittery Planning Board

From: Earldean Wells, Chair
Kittery Conservation Commission

Re: Proposed Estes Bulk Storage/Rte. 1

This memo is to serve as a reminder to the Planning Board of the concerns addressed by KCC during the sitewalk at the above mentioned property on April 10, 2013. I would like to also point out that the December 12, 2013 is the first meeting since that sitewalk eight months ago and that KCC was not given any advanced notice that this proposed development would be on this agenda so that a memo from us could have been included in this packet:

1. During the April sitewalk I called attention to the sound of the peeper frogs singing. This is often an indicator of the presence of a vernal pool nearby. I requested that a vernal pool evaluation be done as there was still several weeks left that would allow such an evaluation to be done. The wetland evaluation done by Soil Scientist, Michael Cuomo, included in the December 12, 2013 packet, is an evaluation of the proposed impacted area of the wetland for a proposed road and does not include the information requested by KCC.
KCC requests that a vernal pool evaluation be done and that the vernal pool be clearly located on the site plan; that it be clearly indicated whether it exists on this property or an abutting property and exactly how far it is from the proposed propane tank and road.
2. The proposed road/wetland crossing will require a huge amount of fill, 11,985 sq. ft. of fill, along with three culverts and guard rails. The impact fee for the wetland fill @ \$4.00 sq. ft. will be \$47,940.00, add to this the cost of the fill itself, the culverts, the guard rails, paving, engineering plans, etc. and KCC feels that these costs alone make a discussion of a bridge to cross this wetland viable. The area before and after the proposed crossing is higher than the wetland itself, which is why such a large amount of fill is needed. The topic of a bridge was brought up during the sitewalk and we had expected that this would be addressed.
3. KCC recently received a letter from U.S. Dept. of Homeland Security FEMA, dated November 5, 2013 which indicated that updated flood hazard risk information would soon be available. Since this the flood zone information on this property is based on 4/22/2003 information, KCC requests that the Planning Board make no decisions on this application until the new flood zone information is discussed and evaluated during the formal community coordination meeting which will be scheduled sometime after December 15, 2013.

4. During the site walk a KCC member noticed the grade of the hill on the far side of the wetland; it appeared to him that the access road would need a major cut to reduce the grade to allow the large delivery trucks to be able to access the storage tank. When he brought this to the attention of the developer he was told that part of the road would have to be 'engineered'. If the road height must be reduced we should have information not only on the amount of the reduction but also the ramifications of such an alteration to the existing wetlands, setbacks, flood plain, etc. in this area.
5. The developer's representative included plans during the Sketch Plan presentation of the expected future development along the proposed road of various businesses. Because this property is located in a very sensitive area, KCC feels that should the Planning Board approve this proposed development that there be a Condition on the plans requiring that any further/future development on this property have a full Planning Board review with a notation that the Planning Board may/or/may not approve further development of this property should the proposal pose a risk to the environmental areas.

Minutes: May 9, 2013

ITEM 7 – Estes Bulk Propane Storage/U.S. Route 1 – Sketch Plan.

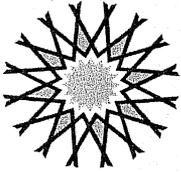
Action: Continue Sketch Plan Review, discuss site walk, approve Sketch Plan concept if in compliance with Town Code and provide direction to Applicant Owner M&T Reality, and applicant Estes Oil & Propane Company is requesting consideration of their plans for a 60,000 gallon bulk propane storage facility at their property south of 506 U.S. Route One., Tax Map 67, Lot 4, Mixed Use Zone, with a portion in the Residential Rural and Shoreland Overlay zones. Agent is Joe Cheever, ATTAR Engineering, Lou Chamberlain, ATTAR Engineering, explained the plan has changed since the March 14 submittal to illustrate the Resource Protection zone and the flood zone area. Mr. Alesse asked about the dangers of two large propane tanks in this area especially if there is hunting and danger of a stray bullet. Mr. Chamberlain stated he cannot answer this question at this time, but could pursue for preliminary review. Ms. Driscoll concurred and asked if an earthen buffer could be designed to provide additional protection. Mike Estes stated studies conducted by Homeland Security have shown that typical bullets hitting mobile propane tanker trucks do not penetrate. The proposed tanks at the site are three-times thicker than those on tanker trucks, and the valves are constructed within safety guidelines. Mr. Emerson asked about potential development along the long road accessing the tanks. Mr. Estes stated he does not intend to go forward with any other kind of development on this property at this time. Ms. Driscoll asked about the road finish and emergency vehicle access. Mr. Estes stated he would pave the first 700-800 feet, with a dirt road the remaining distance. Herb Kingsbury, Conservation Commission, asked if the Board will be addressing the plan review notes regarding wildlife habitat, vernal pools, etc. Mr. Emerson stated these issues will be further reviewed at the preliminary review stage, and the Commission may address these in writing to the applicant. Mr. Melanson moved to accept the sketch plan concept for Estes Bulk Propane storage. Ms. Tuveson seconded. Motion carried unanimously by all members present.

Minutes – March 14, 2013

ITEM 6 – Estes Bulk Propane Storage/U.S. Route 1 – Sketch Plan.

Action: After listening and commenting on introductory presentation, schedule a site walk. Owner M&T Reality and applicant Estes Oil & Propane Company is requesting consideration of their plans for a 60,000 gallon bulk propane storage facility at their property south of 506 U.S. Route One., Tax Map 67, Lot 4, Mixed Use Zone, with a portion in the Residential Rural and Shoreland Overlay zones. Agent is Joe Cheever, ATTAR Engineering. Joe Cheever introduced Mike Estes, owner of the parcel. Mr. Cheever summarized the proposal, noting the parcel is in the shoreland and mixed-use zones. The proposed road is 1,400 feet with a wetland crossing and wetland impact of 12,355s.f. Approximately once per week, bulk propane would be delivered via 12,000 gallon trucks to the two proposed 30,000 gallon storage tanks on site. During heating season, propane delivery trucks would enter the site to fill their trucks and deliver to residential users. Fire protection will be needed, including a water line and hydrant. A standard hammerhead is included on the sketch plan. No trucks will be kept on site; they are not proposing a gate across the road. Mr. Estes noted the area will have to be fenced around the tanks to meet state and federal regulations. Mr. Emerson advised the fence will have to be included on the plan. The propane pad is approximately 45 feet x45 feet. Mr. Melanson asked if the site is accessible for a site walk. Mr. Cheever suggested they could access the site via the Take Flight parcel [Mr. Cheever will obtain permission from the owner of the adjacent parcel prior to the site walk]. Ms. Wells stated this is the third time this property has been before the Board and the wetland crossing needs to be carefully observed. Mr. Emerson reminded the applicant the Fire Chief and DPW will need to review. Mr. Melanson moved to accept the sketch plan and schedule a site walk. Ms. Grinnell seconded. Motion carries unanimously.

A site walk was scheduled for Wednesday, April 10, 2013 at 6:15 p.m. Mr. Cheever will flag the wetland crossing, road and storage tank location.



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Gerry Mylroie, AICP, Town Planner
Town of Kittery
P.O. Box 808
Kittery, Maine 03904

March 19, 2014
Project No.: C082-14

**Re: Estes Propane Storage
Preliminary Site Plan Application**

Dear Mr. Mylroie:

On behalf of Michael Estes, President of Estes Oil & Propane Company, I have enclosed additional information requested by the Planning Board at the February 20, 2014 meeting and in response to items raised in the February 6, 2014 CMA Review and the February 13, 2014 Planning Department Review Notes for the above referenced project. The site is located on Route 1 in the Mixed Use District and is described by the Town of Kittery Assessor's Map 67 as Lot 4.

Please find the following attachments:

- 1) List of plan revisions and response to Planning Board comments at the February 20, 2014 meeting and the CMA Review dated February 6, 2014.
- 2) Special Exception Use Narrative
- 3) Revised Approval Criteria for Special Exception Use (Previously submitted November 20, 2013)
- 4) Revised Plan Set
- 5) Stormwater Management Plan

I respectfully request that the Planning Board vote on the following unresolved issues at the next Planning Board meeting:

- 1) Acceptance of the Special Exception Use of the site as a Warehouse / Storage facility,
- 2) Vote that the letter from Kenneth A. Wood, PE, CWS, certifying that he has done a vernal pool survey and found no vernal pools on the site is sufficient and no further vernal pools studies are necessary, and
- 3) Waive the site walk until the Final Site Plan review or schedule a site walk in April.

I look forward to discussing this project with the Board at the April 10, 2014 meeting. Please contact me for any additional information or clarifications required.

Sincerely,

Edward Brake, E.I.T.

✓cc: Michael Estes

C082-14 Kittery Review Response 20140319.doc

General Revisions

The following revisions have been made to the Plan Set:

- 1) The wetlands have been revised on the plan to show new wetlands delineated by Michael Cuomo, CSS, and the setbacks from the wetland adjusted. General Note 11 has been revised.
- 2) The propane storage tanks have been relocated due to the revision to the wetland and in order to move them further from the property lines to address abutter concerns.
- 3) Water and sewer lines have been revised and also added to the Road Plan & Profile (sheet 3).
- 4) Snow storage areas have been added to the Grading Plan (sheet 2).
- 5) The required Open Space has been added to the Site Plan (sheet 1) to meet Section 16.3.2.13.D.8 of the ordinance.
- 6) The Wetland Mitigation Upland Buffer Zone has been moved.
- 7) Treeline and limit of disturbance have been clarified as shown on the Grading Plan (sheet 2).

Planning Board Response

A response to comments from the Planning Board at the February 20, 2014 meeting follows:

- 1) Conservation Commission
 - a) As previously discussed in submittals and at Planning Board Meetings, Kenneth A. Wood, PE, CWS, has done a vernal pool survey and found no vernal pools on the site. A letter certifying that no vernal pools were found has been submitted. A note specifying that no vernal pools were found on the parcel has been added to the Site Plan (sheet 1). Mr. Wood's vernal pool survey is sufficient and an additional vernal pool survey should not be required. Note that the Plan Review Notes for February 13, 2014 Planning Board Meeting state that "The Planning Board can require an additional vernal pools study as allowed under 16.10.5.2 *Additional Requirements*. The board would need, however, a compelling reason to do so, and it is unclear if there is one at this time." The applicant requests that the Planning Board take a vote to resolve this matter.
 - b) Snow storage areas have been added to the Grading Plan (sheet 2).
 - c) While this is the first propane storage facility in the town of Kittery, the Special Exception definition states that Special Exception Use is "controlled as to number, area, location, or relation to the neighborhood" and therefore, does not result in propane storage becoming an approved or typical use in the zone.
- 2) The proposed undisturbed wetland buffer zone, required by Section 16.9.3.9.B.2 of the ordinance, has been relocated so that it is in a buildable area. The proposed buffer zone is located to protect existing trees and screening from any possible future development.
- 3) The wastewater system required for the garage will be designed prior to the submittal of the Final Site Plan Application.
- 4) Special Exception Use Narrative and the Approval Criteria for Special Exception Use are attached. The Special Exception approval criteria was originally submitted on November 20, 2013. The applicant requests that the Planning Board take a vote to determine if this is an acceptable Special Exception Use in this zone.
- 5) As discussed at the February 20, 2014 Planning Board meeting, the Waterfowl and Wading Bird Habitat boundary shown on the plan has been verified in the field.

CMA Review #2

Dated February, 6 2014

- The Fire Safety Analysis for Estes Propane, prepared by Jody Pratt Ameden Energy Consulting, LLC, addresses the requirements of NFPA-58.

Chapter 16.3 Land Use Zone Regulations

16.3.2.13.D.5: The proposed garage will be a typical 1 story garage for the storage of equipment. Architectural Details for garage will be included when an application for a building permit is submitted.

16.3.2.19: With the relocation of the propane storage tanks, Pond 40 is no longer needed and has been removed. There will be no disturbance in the RP zone.

Chapter 16.8 Design and Performance Standards-Built Environment

The water line, sewer line and underground utilities have been updated on the Grading Plan. The water line, sewer lines, and sewer force main have been added to the Plan & Profile (sheet 3). A Stormwater Management Plan has also been prepared and is enclosed.

Chapter 16.9 Design and Performance Standards-Natural Environment

16.9.3.9.B.2: – The proposed undisturbed wetland buffer zone has been relocated so that it is in a buildable area.

Plan Review Notes for February 13, 2014 Planning Board Meeting

Treeline and limit of disturbance clarified on the plan

Additional Notes

The Maine Department of Environmental Protection (MDEP) Natural Resource Protection Act (NRPA) Permit, MDEP Stormwater Permit by Rule, and U.S. Army Corps of Engineers General Permit will be amended based on the revised plan set.

Special Exception Use Narrative

As requested by the Planning Board, the following is offered in response to how the proposed Estes Propane Storage Facility meets the Special Exception Use requirements set fourth in the Land Use and Development Code for Kittery, Maine. A description of how the use of this site as a Warehouse / Storage facility meets the criteria of Section 16.6.6 of the Land Use and Development Code for Kittery, Maine is also attached. Specifically, this narrative describes how the proposed use meets the Special Exception definition in the code that:

Special exception means a use that would not be appropriate generally or without restriction throughout the zoning district, but which, if controlled as to number, area, location, or relation to the neighborhood, would promote the public health, safety, welfare, morals, order, comfort, convenience, appearance, prosperity, or general welfare. Such uses may be permitted in such zoning districts as special exceptions, if specific provision for such special exceptions is made in Chapter 16.3.

The proposed Propane Storage Facility, on lot 67-4, is considered a Warehouse / Storage facility and meets the requirements of the Special Exception definition as described below:

- 1) *“controlled as to number, area, location, or relation to the neighborhood...”*
The proposed propane storage facility is located along a fairly rural section of U.S. Route 1 near the Kittery and York boundary. The parcel is large, 28.8 acres, and propane storage tanks are located as far from the abutting property lines and structures as possible (240 ft from the nearest property line, and 660 ft from the nearest building). This is the first propane storage facility in Kittery, with the only other 30,000 gallon propane tank being located at Parker-Hannifin Watts Fluid facility (Lot 50-1), also in the Mixed-Use Zone.
- 2) *“promote the public health, safety, welfare, morals, order, comfort, convenience, appearance, prosperity, or general welfare.”*
Since the start of this project, effort has been made to ensure the public health, safety, and welfare. Jody Ameden, of Ameden Energy Consulting, prepared a Fire Safety Analysis for the Estes Propane Site. The board received a copy of the Fire Safety Analysis, and Jody has described the fire safety aspect of the project to the board. A copy of the Fire Safety Analysis Executive Summary is attached. Note that the Executive Summary states that “The storage tanks will incorporate automatic and redundant product control measures to minimize the probability of a significant release of propane. There are no nearby population concentrations... The local fire department has a good response time, and the proper training to manage incidents involving Propane tanks.” The Executive Summary concludes that “the proposed plan is compliant with the State Fire Codes and with NFPA 58 [the Liquefied Petroleum Gas Code].” Also note that the propane storage tanks will only be used to fill the propane delivery trucks. No filling of individual propane tanks will be done on the site.

The proposed location of the propane tanks on the site minimizes the clearing of trees, while leaving a majority of the trees to screen the propane tanks. This will maintain the natural appearance of the site from Route 1.

The propane storage facility allows Estes Oil and Propane to expand its business, thus providing additional jobs for Kittery residents. Estes Oil and Propane currently has 20 full-time employees, 4 of whom live in Kittery. They serve 430 customers in Kittery, of whom 115 are propane customers. In total, Estes Oil has 1,625 propane

1,625 propane customers in southern Maine. Their propane sales, measured in gallons sold, grew 22% in 2012, 30% in 2013, and the growth for the first 3 months of 2014 is approximately 30%. The proposed propane storage facility will give Estes Oil better pricing and a more reliable supply, which will be beneficial for all of their customers. In addition to business and job expansion, the development of the lot also increases the tax revenue for the town.

Executive Summary

This Fire Safety Analysis (FSA) was prepared by Jody Pratt Ameden Energy Consulting LLC with critical input by Fire Chief O'Brien. The installation consists of two 30,000 gallon storage tanks. The tanks will be installed on Blue Star Highway in Kittery, ME. The tanks will be used for retail bulk delivery.

The storage capacity of this installation is greater than 4,000 gallons, so National Fire Protection Association (NFPA) recommends that a Fire Safety Analysis be performed. The propane industry has a well-developed protocol for performing Fire Safety Analyses for Propane facilities. That format will be used for the FSA. The installation will be designed using the latest version of NFPA 58.

The storage tank will incorporate automatic and redundant product control measures to minimize the probability of a significant release of Propane. There are no nearby population concentrations such as schools or malls. The local fire department has a good response time, and the proper training to manage incidents involving Propane tanks.

This preliminary Fire Safety Analysis was performed in preparation for two 30,000 gallon propane storage facility. It is concluded that the proposed plan is compliant with the State Fire Codes and with NFPA 58.

A Fire Safety Analysis should be repeated when required by state or local regulations or whenever there is a significant change of the assumptions in this analysis.

Approval Criteria for Special Exception Use

Land Use and Development Code Section 16.6.6

Revised March 19, 2014 – Revisions are in italics

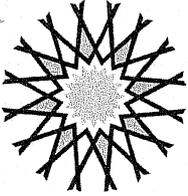
16.6.6.1 Conditions

1. The proposed use will not prevent the orderly and reasonable use of adjacent properties or of properties in adjacent use zones, as the propane storage area meets the setback requirements and has sufficient distance from all of the abutting uses. *Specifically, the propane tanks are located 240 ft from the nearest property line, and 660 ft from the nearest building. The propane storage facility does not prevent the use of adjacent properties more than any other use on the site would. In fact, due to the small size of the area being developed, it has a lower impact on the surrounding area than a different use would have.*
2. The use will not prevent the orderly and reasonable use of permitted or legally established uses in the zone or in adjacent zones, as the propane storage facility will not have an effect on the other uses in the zone.
3. The safety, the health, and the welfare of the Town will not be adversely affected by the proposed use or its location. *See the Special Exception Use Narrative.*
4. The use meets the requirements set forth in the Land Use and Development Code for Kittery, Maine.

16.6.6.2 Factors for Consideration

- A. The proposed Propane Storage Facility is allowed as a Special Exception Use in the Zone. Based on the location and natural features of the site, the character of the existing and probable development in the zone will not be affected by this development.
- B. The conservation of property values adjacent to the site will not be adversely affected by this development. *Again, the propane tanks are located on the site in a manner that creates the largest distance to the abutting parcels, minimizes the impact on abutting lots, and provides the greatest preservation of existing vegetation.*
- C. As noted in the *previously submitted* application, the proposed development will have a minimal effect on vehicular traffic on U.S. Route 1.
- D. Sewer will be installed on the site and will connect to the existing municipal sewer at U.S. Route 1.
- E. The proposed development will be for storage of propane and will not produce obnoxious gases, odors, smoke or soot.
- F. The proposed use will not cause disturbing emission of electrical discharges, dust, light, vibration or noise.
- G. The proposed development is separated from areas of public parking and recreational facilities.
- H. The site will only be accessed by Estes Oil Company oil delivery trucks and no off street parking is required.
- I. The site is designed to be accessible by fire and emergency apparatus and the propane storage area will be designed to meet all state and federal standards.

- J. The proposed use will not cause an overcrowding of land. The proposed propane storage tanks and garage will be screened by existing vegetation and no other storage of equipment, vehicles, or materials is proposed on the site.
- K. The developable, upland area of the site is adequate for the use and potential future expansion.
- L. The proposed use will be adequately screened and buffered by existing vegetation from contiguous properties.
- M. The site will have adequate landscaping, grading, and drainage.
- N. The proposed will not have pedestrian access.
- O. The proposed use will meet all required state and federal requirements for propane storage.
- P. The proposed use will meet all applicable performance standards of the Town of Kittery.



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TRANSMITTAL

George Kathios, Superintendent
Kittery Sewer Department
P.O. Box 808
Kittery, ME 03904

March 14, 2014
Project No.: C082-14

RE: Sewer Availability
Estes Business Park
Kittery, Maine

Dear Mr. Tapley:

I am writing to request a letter of sewer availability for a planning board submittal for the proposed commercial development on U.S. Route 1 in Kittery (Tax Map 67, Lot 4). The proposed development is a 60,000 gallon bulk propane storage facility with two 30,000 gallon propane tanks with a security fence and a garage. The facility will be accessed by a proposed 1,020' long, 20' wide road. By code, the garage is required to have a restroom. The design flow for a warehouse facility is 100 GPD.

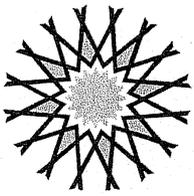
Enclosed is a Site and Grading Plan of the proposed development.

Please contact me for any additional information.

Sincerely,

Edward Brake, E.I.T

C082-13 Sewer.doc



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ESTES PROPANE STORAGE BLUE STAR MEMORIAL HIGHWAY/ U.S. ROUTE ONE KITTERY, MAINE STORMWATER MANAGEMENT STUDY

Project No.: C082-14

March 19, 2013

◆ Scope

This stormwater management plan has been prepared for Estes Propane Storage, a proposed bulk propane storage facility, located on U.S. Route 1, Kittery, Maine. The entire parcel contains 28.8 acres; the development will include two 30,000 gallon propane storage tanks on a concrete pad, and a 720 S.F. garage. The project must receive a Stormwater Permit By Rule (PBR) from the Maine Department of Environmental Protection (MDEP) and meet the Stormwater Management requirements for the Town of Kittery.

◆ Site and Watershed Description

The site is located in the Johnson Brook watershed. Johnson Brook is tributary to Dolly Gordon Brook, York River and ultimately, the Atlantic Ocean. The York River and portions of Dolly Gordon Brook are tidal. A 7½ minute series U.S.G.S. map of the project area is attached. The site is developed with a total of 34,885 S.F. of structures and roads. The remainder of the lot contains woodlands and wetlands.

Johnson Brook is located to the south of the site. On site runoff sheet flows across upland areas and several wooded wetlands prior to discharge towards the brook. The south westerly portion of the site contains a small man made pond that has been washed out. The wetlands on the site contain a small stream that flows into the pond.

The topography of the site is gently rolling with several steeper slopes. The majority of grades on-site are from near level to 8%; some areas contain slopes ranging to 15%.

A small portion of this site is subject to flooding, see the Site Plan for the 100 year flood zone as determined by the Federal Emergency Management Agency (FEMA). A Letter of Map Amendment (LOMA) for the site is attached.

The site development involves the construction of a propane storage facility, garage, and access road, resulting in approximately 0.80 acres of impervious area. The total disturbed area on the site is approximately 2.14 acres.

◆ Soils/Hydrologic Soil Groups

Soil types and their respective Hydrologic Soil Groups (HSG) were determined from a Class B High Intensity Soil Survey (HISS) developed by Michael Cuomo, CSS, SE for this development. On site soil types consist of Biddeford Mucky Silt Loam (Bm), Lamoine Silt Loam (La), Lyman Fine Sandy Loam – Rock Outcrop (LR), Made Land (Md), Ossipee Mucky Peat (Os), Scantic Silt Loam (Sc), Tunbridge-Lyman Fine Sandy Loams Complex (TL) and Westbury (Ws) soils. The Scantic, Biddeford, and Ossipee soils are hydric, or wetland soils. Hydrologic Soil Groups (HSG's) range from "C" to "D" for these soil types. Off-site soil types and their HSG's were determined from the Soil Survey of York County, Maine.

◆ **Methodology**

The stormwater quantity analysis will be conducted using the HydroCAD Stormwater Modeling System by Applied Microcomputer Systems. The analysis determines the "Existing Condition" and "Developed Condition" stormwater flows. Both cases are analyzed for the 2, 10 and 25-year, 24-hour frequency storm events. The Existing Condition analyzes the site as it currently exists and the Developed Condition models the site with the proposed improvements described above.

◆ **Water Quantity Analysis**

Existing Condition

The site was divided into three on-site sub catchments (SC) for the Existing Condition analysis. SC 1 is an offsite drainage area upstream of the subject parcel. Sub catchments 2 and 3 are on-site areas that flow to two Analysis Points (AP's). These AP's were selected to provide points to compare Existing Condition flows to Developed Condition flows.

Developed Condition

The Developed Condition analysis consists of eight subcatchments. Other features such as ponds and reaches were added to account for on-site routing and detention of stormwater. All Developed Condition flows were routed to the Analysis Points described above.

Changes in Stormwater Flows

Changes in stormwater flows at the analysis points, representing the difference from the Existing Condition to the Developed Condition were analyzed. The stormwater flows are shown on the attached table. The proposed ponds provide detention of the stormwater from the development. This detention of stormwater results in no increase in peak flows at the analysis points for the Developed Condition compared to the Existing Condition. No negative effects on downstream properties are anticipated.

◆ **Summary**

The use of ponds to attenuate peak flows will result in no significant increase in peak runoff quantity from the proposed Estes Propane Storage development. No adverse effects are anticipated on any downstream properties or drainage structures.

Sincerely;



Edward Brake, E.I.T.

C082-14 SW Estes Propane



Estes Propane Storage - BMP Calculations

BMPS ESTES_PROPANE.xls

3/19/14

C082-14

STORMWATER FLOWS

EXISTING CONDITIONS

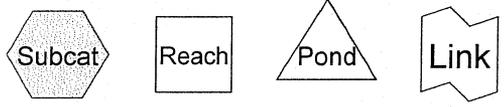
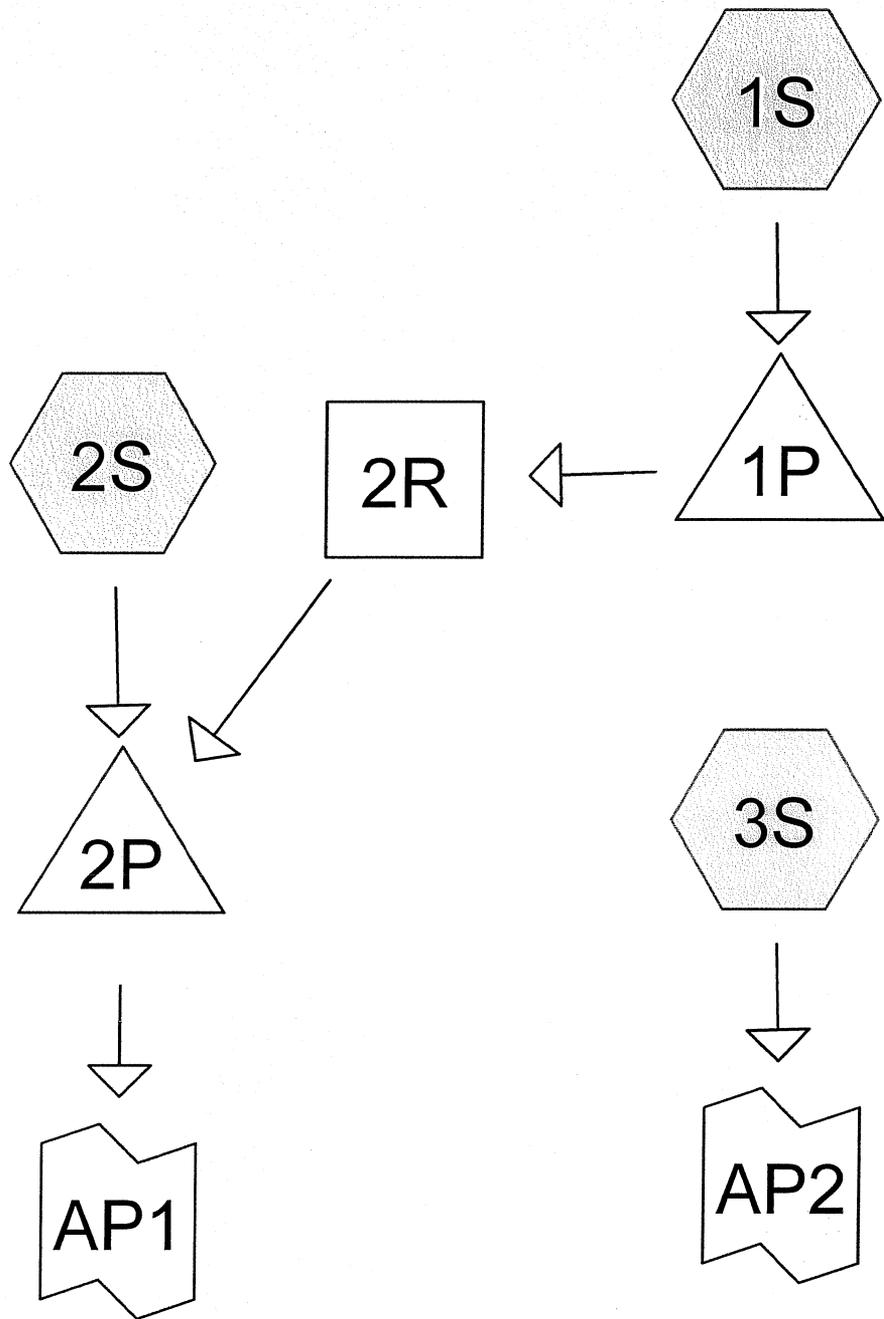
	2-YR	10-YR	25-YR
AP 1	27.19	65.75	85.65
AP 2	6.27	13.93	18.05

DEVELOPED CONDITIONS

	2-YR	10-YR	25-YR
AP 1	23.51	55.63	74.89
AP 2	6.21	13.19	17.32

REDUCTION IN FLOWS

	2-YR	10-YR	25-YR
AP 1	-3.68	-10.12	-10.76
AP 2	-0.06	-0.74	-0.73



Drainage Diagram for ESTES PROPANE EXT
 Prepared by Attar Engineering, Inc., Printed 3/19/2014
 HydroCAD® 9.10 s/n 01988 © 2009 HydroCAD Software Solutions LLC

ESTES PROPANE EXT

Type III 24-hr 2 YEAR STORM Rainfall=3.00"

Prepared by Attar Engineering, Inc.

Printed 3/19/2014

HydroCAD® 9.10 s/n 01988 © 2009 HydroCAD Software Solutions LLC

Page 1

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S:Runoff Area=1,162,216 sf 9.78% Impervious Runoff Depth=1.25"
Flow Length=1,520' Tc=23.2 min CN=80 Runoff=24.21 cfs 2.779 af**Subcatchment 2S:**Runoff Area=837,780 sf 7.64% Impervious Runoff Depth=1.19"
Flow Length=1,220' Tc=15.7 min CN=79 Runoff=19.24 cfs 1.905 af**Subcatchment 3S:**Runoff Area=312,810 sf 0.00% Impervious Runoff Depth=1.07"
Flow Length=625' Tc=16.5 min CN=77 Runoff=6.27 cfs 0.641 af**Reach 2R:**Avg. Flow Depth=1.26' Max Vel=1.64 fps Inflow=24.04 cfs 2.778 af
n=0.080 L=835.0' S=0.0101 '/' Capacity=397.45 cfs Outflow=20.71 cfs 2.778 af**Pond 1P:**Peak Elev=45.00' Storage=14,950 cf Inflow=24.21 cfs 2.779 af
Primary=2.30 cfs 1.602 af Secondary=21.74 cfs 1.176 af Outflow=24.04 cfs 2.778 af**Pond 2P:**Peak Elev=35.62' Storage=44,727 cf Inflow=28.68 cfs 4.683 af
Primary=27.19 cfs 3.721 af Secondary=0.00 cfs 0.000 af Outflow=27.19 cfs 3.721 af**Link AP1:**Inflow=27.19 cfs 3.721 af
Primary=27.19 cfs 3.721 af**Link AP2:**Inflow=6.27 cfs 0.641 af
Primary=6.27 cfs 0.641 af

ESTES PROPANE EXT

Type III 24-hr 10 YEAR STORM Rainfall=4.60"

Prepared by Attar Engineering, Inc.

Printed 3/19/2014

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Page 2

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S:Runoff Area=1,162,216 sf 9.78% Impervious Runoff Depth=2.55"
Flow Length=1,520' Tc=23.2 min CN=80 Runoff=50.37 cfs 5.663 af**Subcatchment 2S:**Runoff Area=837,780 sf 7.64% Impervious Runoff Depth=2.46"
Flow Length=1,220' Tc=15.7 min CN=79 Runoff=41.07 cfs 3.944 af**Subcatchment 3S:**Runoff Area=312,810 sf 0.00% Impervious Runoff Depth=2.29"
Flow Length=625' Tc=16.5 min CN=77 Runoff=13.93 cfs 1.372 af**Reach 2R:**Avg. Flow Depth=1.83' Max Vel=2.09 fps Inflow=48.83 cfs 5.662 af
n=0.080 L=835.0' S=0.0101 '/' Capacity=397.45 cfs Outflow=45.96 cfs 5.662 af**Pond 1P:**Peak Elev=45.13' Storage=20,103 cf Inflow=50.37 cfs 5.663 af
Primary=2.54 cfs 2.209 af Secondary=46.29 cfs 3.453 af Outflow=48.83 cfs 5.662 af**Pond 2P:**Peak Elev=35.92' Storage=51,699 cf Inflow=66.02 cfs 9.605 af
Primary=50.20 cfs 8.107 af Secondary=15.55 cfs 0.536 af Outflow=65.75 cfs 8.644 af**Link AP1:**Inflow=65.75 cfs 8.644 af
Primary=65.75 cfs 8.644 af**Link AP2:**Inflow=13.93 cfs 1.372 af
Primary=13.93 cfs 1.372 af

ESTES PROPANE EXT

Type III 24-hr 25 YEAR STORM Rainfall=5.40"

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Page 3

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Runoff Area=1,162,216 sf 9.78% Impervious Runoff Depth=3.24"
Flow Length=1,520' Tc=23.2 min CN=80 Runoff=64.15 cfs 7.214 af

Subcatchment 2S: Runoff Area=837,780 sf 7.64% Impervious Runoff Depth=3.15"
Flow Length=1,220' Tc=15.7 min CN=79 Runoff=52.60 cfs 5.047 af

Subcatchment 3S: Runoff Area=312,810 sf 0.00% Impervious Runoff Depth=2.96"
Flow Length=625' Tc=16.5 min CN=77 Runoff=18.05 cfs 1.772 af

Reach 2R: Avg. Flow Depth=2.05' Max Vel=2.25 fps Inflow=62.55 cfs 7.213 af
n=0.080 L=835.0' S=0.0101 '/' Capacity=397.45 cfs Outflow=59.28 cfs 7.213 af

Pond 1P: Peak Elev=45.19' Storage=22,535 cf Inflow=64.15 cfs 7.214 af
Primary=2.65 cfs 2.458 af Secondary=59.91 cfs 4.755 af Outflow=62.55 cfs 7.213 af

Pond 2P: Peak Elev=35.99' Storage=53,342 cf Inflow=85.92 cfs 12.260 af
Primary=54.92 cfs 10.004 af Secondary=30.74 cfs 1.294 af Outflow=85.65 cfs 11.298 af

Link AP1: Inflow=85.65 cfs 11.298 af
Primary=85.65 cfs 11.298 af

Link AP2: Inflow=18.05 cfs 1.772 af
Primary=18.05 cfs 1.772 af

ESTES PROPANE EXT

Type III 24-hr 25 YEAR STORM Rainfall=5.40"

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Page 1

Summary for Subcatchment 1S:

Runoff = 64.15 cfs @ 12.32 hrs, Volume= 7.214 af, Depth= 3.24"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR STORM Rainfall=5.40"

Area (sf)	CN	Description
113,692	98	Paved parking & roofs
543,629	78	Meadow, non-grazed, HSG D
504,895	77	Woods, Good, HSG D
1,162,216	80	Weighted Average
1,048,524		90.22% Pervious Area
113,692		9.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.8	50	0.0500	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.00"
10.9	730	0.0500	1.12		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.7	340	0.0680	7.69	76.89	Channel Flow, Area= 10.0 sf Perim= 5.0' r= 2.00' n= 0.080 Earth, long dense weeds
2.8	400	0.0160	2.35	70.49	Channel Flow, Area= 30.0 sf Perim= 30.0' r= 1.00' n= 0.080 Earth, long dense weeds
23.2	1,520	Total			

Summary for Subcatchment 2S:

Runoff = 52.60 cfs @ 12.22 hrs, Volume= 5.047 af, Depth= 3.15"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR STORM Rainfall=5.40"

Area (sf)	CN	Description
64,037	98	Paved parking & roofs
234,016	78	Meadow, non-grazed, HSG D
539,727	77	Woods, Good, HSG D
837,780	79	Weighted Average
773,743		92.36% Pervious Area
64,037		7.64% Impervious Area

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Type III 24-hr 25 YEAR STORM Rainfall=5.40"

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Page 2

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	50	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 3.00"
2.2	300	0.0230	2.27		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
5.8	870	0.0180	2.49	74.76	Channel Flow, Area= 30.0 sf Perim= 30.0' r= 1.00' n= 0.080 Earth, long dense weeds
15.7	1,220	Total			

Summary for Subcatchment 3S:

Runoff = 18.05 cfs @ 12.23 hrs, Volume= 1.772 af, Depth= 2.96"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR STORM Rainfall=5.40"

Area (sf)	CN	Description
312,810	77	Woods, Good, HSG D
312,810		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	50	0.1200	0.13		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.00"
10.3	575	0.0346	0.93		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
16.5	625	Total			

Summary for Reach 2R:Inflow Area = 26.681 ac, 9.78% Impervious, Inflow Depth = 3.24" for 25 YEAR STORM event
Inflow = 62.55 cfs @ 12.37 hrs, Volume= 7.213 af
Outflow = 59.28 cfs @ 12.55 hrs, Volume= 7.213 af, Atten= 5%, Lag= 11.0 minRouting by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.25 fps, Min. Travel Time= 6.2 min
Avg. Velocity = 0.64 fps, Avg. Travel Time= 21.6 minPeak Storage= 21,992 cf @ 12.45 hrs
Average Depth at Peak Storage= 2.05'
Bank-Full Depth= 5.00', Capacity at Bank-Full= 397.45 cfs30.00' x 5.00' deep Parabolic Channel, n= 0.080 Earth, long dense weeds
Length= 835.0' Slope= 0.0101 1'
Inlet Invert= 43.40', Outlet Invert= 35.00'

ESTES PROPANE EXT

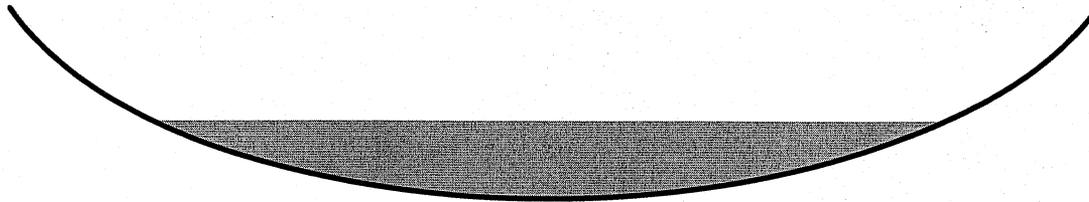
Type III 24-hr 25 YEAR STORM Rainfall=5.40"

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Page 3

**Summary for Pond 1P:**

Inflow Area = 26.681 ac, 9.78% Impervious, Inflow Depth = 3.24" for 25 YEAR STORM event
 Inflow = 64.15 cfs @ 12.32 hrs, Volume= 7.214 af
 Outflow = 62.55 cfs @ 12.37 hrs, Volume= 7.213 af, Atten= 2%, Lag= 3.1 min
 Primary = 2.65 cfs @ 12.37 hrs, Volume= 2.458 af
 Secondary = 59.91 cfs @ 12.37 hrs, Volume= 4.755 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 45.19' @ 12.37 hrs Surf.Area= 30,524 sf Storage= 22,535 cf

Plug-Flow detention time= 33.5 min calculated for 7.213 af (100% of inflow)
 Center-of-Mass det. time= 33.2 min (867.6 - 834.5)

Volume	Invert	Avail.Storage	Storage Description
#1	43.50'	54,387 cf	Custom Stage Data (Prismatic) Listed below
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
43.50	100	0	0
44.00	3,255	839	839
45.00	24,888	14,072	14,910
46.00	54,065	39,477	54,387

Device	Routing	Invert	Outlet Devices
#1	Primary	43.50'	12.0" Round Culvert L= 35.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 43.50' / 43.40' S= 0.0029 ' n= 0.020
#2	Secondary	44.80'	90.0' long x 30.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=2.64 cfs @ 12.37 hrs HW=45.19' (Free Discharge)

↳ **1=Culvert** (Barrel Controls 2.64 cfs @ 3.36 fps)

Secondary OutFlow Max=59.47 cfs @ 12.37 hrs HW=45.19' (Free Discharge)

↳ **2=Broad-Crested Rectangular Weir** (Weir Controls 59.47 cfs @ 1.69 fps)

ESTES PROPANE EXT

Type III 24-hr 25 YEAR STORM Rainfall=5.40"

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Page 4

Summary for Pond 2P:

Inflow Area = 45.914 ac, 8.89% Impervious, Inflow Depth = 3.20" for 25 YEAR STORM event
 Inflow = 85.92 cfs @ 12.48 hrs, Volume= 12.260 af
 Outflow = 85.65 cfs @ 12.50 hrs, Volume= 11.298 af, Atten= 0%, Lag= 1.2 min
 Primary = 54.92 cfs @ 12.50 hrs, Volume= 10.004 af
 Secondary = 30.74 cfs @ 12.50 hrs, Volume= 1.294 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 35.99' @ 12.50 hrs Surf.Area= 28,824 sf Storage= 53,342 cf

Plug-Flow detention time= 63.0 min calculated for 11.282 af (92% of inflow)
 Center-of-Mass det. time= 18.7 min (881.1 - 862.4)

Volume	Invert	Avail.Storage	Storage Description
#1	33.50'	138,922 cf	Custom Stage Data (Prismatic) Listed below
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
33.50	9,998	0	0
34.00	17,734	6,933	6,933
36.00	28,871	46,605	53,538
38.00	56,513	85,384	138,922

Device	Routing	Invert	Outlet Devices
#1	Primary	33.50'	60.0 deg x 5.0' long Sharp-Crested Vee/Trap Weir C= 2.53
#2	Secondary	35.80'	150.0' long x 3.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=54.90 cfs @ 12.50 hrs HW=35.99' TW=35.50' (Fixed TW Elev= 35.50')
 ↑1=Sharp-Crested Vee/Trap Weir (Weir Controls 54.90 cfs @ 3.42 fps)

Secondary OutFlow Max=30.64 cfs @ 12.50 hrs HW=35.99' TW=35.50' (Fixed TW Elev= 35.50')
 ↑2=Broad-Crested Rectangular Weir (Weir Controls 30.64 cfs @ 1.07 fps)

Summary for Link AP1:

Inflow Area = 45.914 ac, 8.89% Impervious, Inflow Depth = 2.95" for 25 YEAR STORM event
 Inflow = 85.65 cfs @ 12.50 hrs, Volume= 11.298 af
 Primary = 85.65 cfs @ 12.50 hrs, Volume= 11.298 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

ESTES PROPANE EXT

Type III 24-hr 25 YEAR STORM Rainfall=5.40"

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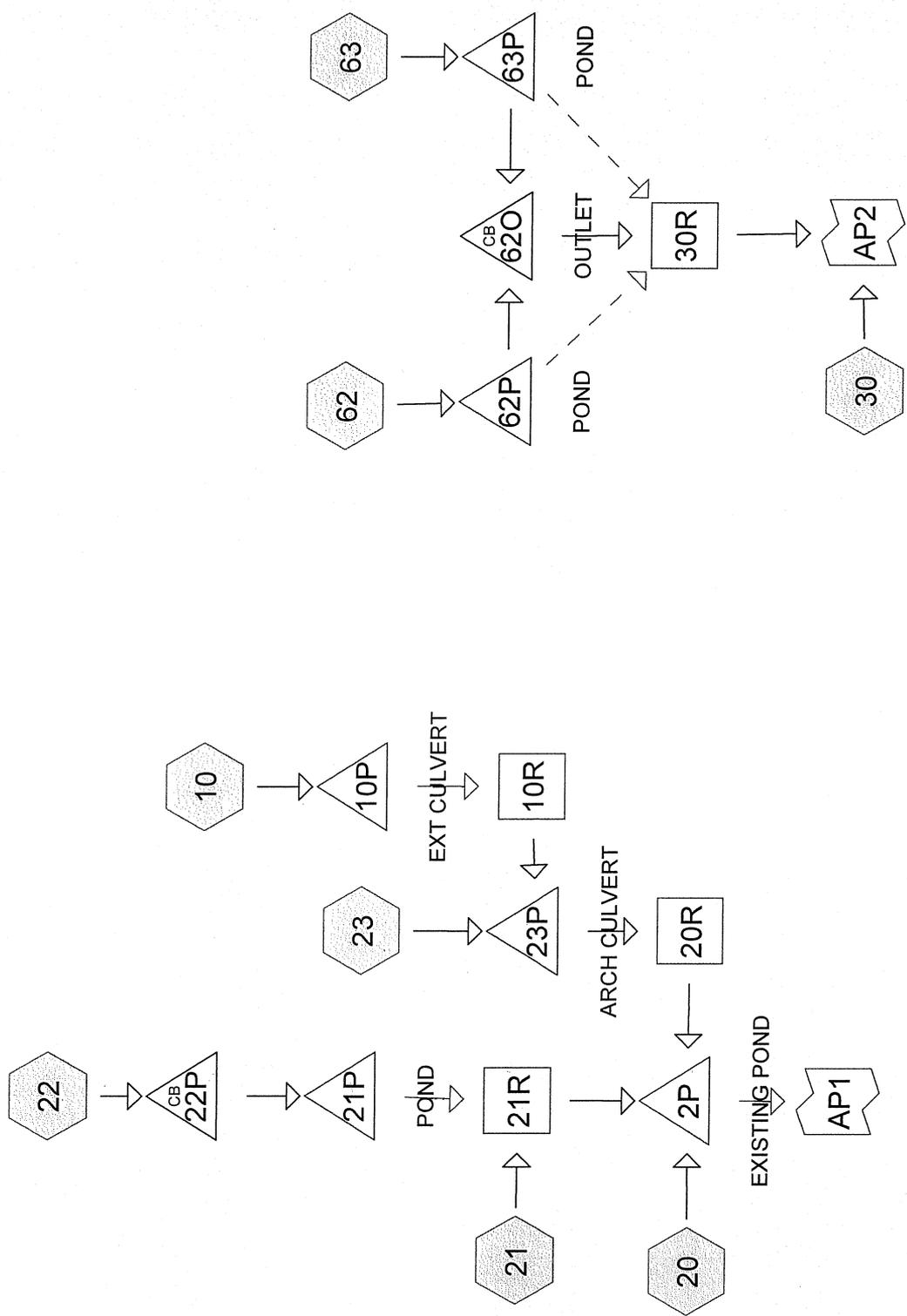
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Page 5

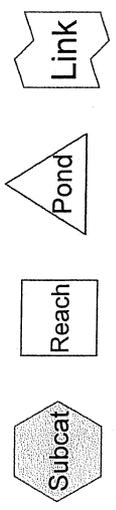
Summary for Link AP2:

Inflow Area = 7.181 ac, 0.00% Impervious, Inflow Depth = 2.96" for 25 YEAR STORM event
Inflow = 18.05 cfs @ 12.23 hrs, Volume= 1.772 af
Primary = 18.05 cfs @ 12.23 hrs, Volume= 1.772 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs



Drainage Diagram for ESTES PROPANE DEV
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ESTES PROPANE DEV

Type III 24-hr 2 YEAR STORM Rainfall=3.00"

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Page 1

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 10: Runoff Area=1,160,660 sf 9.80% Impervious Runoff Depth=1.25"
Flow Length=1,520' Tc=31.9 min CN=80 Runoff=21.06 cfs 2.776 af

Subcatchment 20: Runoff Area=604,625 sf 8.41% Impervious Runoff Depth=1.19"
Flow Length=1,220' Tc=15.7 min CN=79 Runoff=13.89 cfs 1.375 af

Subcatchment 21: Runoff Area=12,060 sf 33.58% Impervious Runoff Depth=1.66"
Flow Length=295' Tc=2.1 min CN=86 Runoff=0.59 cfs 0.038 af

Subcatchment 22: Runoff Area=8,230 sf 52.55% Impervious Runoff Depth=1.90"
Flow Length=310' Tc=2.2 min CN=89 Runoff=0.46 cfs 0.030 af

Subcatchment 23: Runoff Area=210,800 sf 11.25% Impervious Runoff Depth=1.31"
Flow Length=545' Tc=12.6 min CN=81 Runoff=5.87 cfs 0.530 af

Subcatchment 30: Runoff Area=269,180 sf 0.00% Impervious Runoff Depth=1.07"
Flow Length=600' Tc=18.6 min CN=77 Runoff=5.15 cfs 0.552 af

Subcatchment 62: Runoff Area=20,715 sf 55.68% Impervious Runoff Depth=1.98"
Flow Length=170' Tc=1.3 min CN=90 Runoff=1.21 cfs 0.079 af

Subcatchment 63: Runoff Area=26,275 sf 16.97% Impervious Runoff Depth=1.38"
Flow Length=207' Tc=9.7 min CN=82 Runoff=0.84 cfs 0.069 af

Reach 10R: Avg. Flow Depth=0.94' Max Vel=2.42 fps Inflow=20.77 cfs 2.776 af
n=0.050 L=205.0' S=0.0127 '/ Capacity=106.28 cfs Outflow=20.64 cfs 2.776 af

Reach 20R: Avg. Flow Depth=1.05' Max Vel=2.27 fps Inflow=22.40 cfs 3.305 af
n=0.050 L=555.0' S=0.0095 '/ Capacity=619.58 cfs Outflow=21.86 cfs 3.305 af

Reach 21R: Avg. Flow Depth=0.19' Max Vel=0.87 fps Inflow=1.04 cfs 0.068 af
n=0.050 L=668.0' S=0.0135 '/ Capacity=735.93 cfs Outflow=0.63 cfs 0.068 af

Reach 30R: Avg. Flow Depth=0.11' Max Vel=1.25 fps Inflow=1.46 cfs 0.148 af
n=0.035 L=297.0' S=0.0269 '/ Capacity=141.65 cfs Outflow=1.28 cfs 0.148 af

Pond 2P: EXISTING POND Peak Elev=34.71' Storage=21,002 cf Inflow=26.55 cfs 4.748 af
Primary=23.51 cfs 4.748 af Secondary=0.00 cfs 0.000 af Outflow=23.51 cfs 4.748 af

Pond 10P: EXT CULVERT Peak Elev=44.98' Storage=14,427 cf Inflow=21.06 cfs 2.776 af
Primary=2.26 cfs 1.587 af Secondary=18.51 cfs 1.188 af Outflow=20.77 cfs 2.776 af

Pond 21P: POND Peak Elev=48.52' Storage=35 cf Inflow=0.46 cfs 0.030 af
Primary=0.45 cfs 0.030 af Secondary=0.00 cfs 0.000 af Outflow=0.45 cfs 0.030 af

Pond 22P: Peak Elev=49.07' Inflow=0.46 cfs 0.030 af
12.0" Round Culvert n=0.013 L=47.0' S=0.0021 '/ Outflow=0.46 cfs 0.030 af

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Type III 24-hr 2 YEAR STORM Rainfall=3.00"

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Page 2

Pond 23P: ARCH CULVERT

Peak Elev=41.56' Storage=4,412 cf Inflow=22.97 cfs 3.305 af
Outflow=22.40 cfs 3.305 af

Pond 62O: OUTLET

Peak Elev=41.25' Inflow=1.46 cfs 0.148 af
12.0" Round Culvert n=0.013 L=97.0' S=0.0052 '/' Outflow=1.46 cfs 0.148 af

Pond 62P: POND

Peak Elev=44.05' Storage=23 cf Inflow=1.21 cfs 0.079 af
Primary=1.20 cfs 0.079 af Secondary=0.00 cfs 0.000 af Outflow=1.20 cfs 0.079 af

Pond 63P: POND

Peak Elev=43.60' Storage=454 cf Inflow=0.84 cfs 0.069 af
Primary=0.56 cfs 0.069 af Secondary=0.00 cfs 0.000 af Outflow=0.56 cfs 0.069 af

Link AP1:

Inflow=23.51 cfs 4.748 af
Primary=23.51 cfs 4.748 af

Link AP2:

Inflow=6.21 cfs 0.699 af
Primary=6.21 cfs 0.699 af

ESTES PROPANE DEV

Type III 24-hr 10 YEAR STORM Rainfall=4.60"

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Page 3

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 10: Runoff Area=1,160,660 sf 9.80% Impervious Runoff Depth=2.55"
Flow Length=1,520' Tc=31.9 min CN=80 Runoff=43.70 cfs 5.655 af

Subcatchment 20: Runoff Area=604,625 sf 8.41% Impervious Runoff Depth=2.46"
Flow Length=1,220' Tc=15.7 min CN=79 Runoff=29.64 cfs 2.846 af

Subcatchment 21: Runoff Area=12,060 sf 33.58% Impervious Runoff Depth=3.10"
Flow Length=295' Tc=2.1 min CN=86 Runoff=1.09 cfs 0.071 af

Subcatchment 22: Runoff Area=8,230 sf 52.55% Impervious Runoff Depth=3.39"
Flow Length=310' Tc=2.2 min CN=89 Runoff=0.80 cfs 0.053 af

Subcatchment 23: Runoff Area=210,800 sf 11.25% Impervious Runoff Depth=2.63"
Flow Length=545' Tc=12.6 min CN=81 Runoff=11.93 cfs 1.063 af

Subcatchment 30: Runoff Area=269,180 sf 0.00% Impervious Runoff Depth=2.29"
Flow Length=600' Tc=18.6 min CN=77 Runoff=11.46 cfs 1.180 af

Subcatchment 62: Runoff Area=20,715 sf 55.68% Impervious Runoff Depth=3.49"
Flow Length=170' Tc=1.3 min CN=90 Runoff=2.07 cfs 0.138 af

Subcatchment 63: Runoff Area=26,275 sf 16.97% Impervious Runoff Depth=2.72"
Flow Length=207' Tc=9.7 min CN=82 Runoff=1.67 cfs 0.137 af

Reach 10R: Avg. Flow Depth=1.32' Max Vel=3.03 fps Inflow=43.28 cfs 5.655 af
n=0.050 L=205.0' S=0.0127 '/ Capacity=106.28 cfs Outflow=43.09 cfs 5.655 af

Reach 20R: Avg. Flow Depth=1.50' Max Vel=2.86 fps Inflow=47.24 cfs 6.718 af
n=0.050 L=555.0' S=0.0095 '/ Capacity=619.58 cfs Outflow=46.84 cfs 6.718 af

Reach 21R: Avg. Flow Depth=0.26' Max Vel=1.07 fps Inflow=1.88 cfs 0.125 af
n=0.050 L=668.0' S=0.0135 '/ Capacity=735.93 cfs Outflow=1.24 cfs 0.125 af

Reach 30R: Avg. Flow Depth=0.15' Max Vel=1.51 fps Inflow=2.58 cfs 0.275 af
n=0.035 L=297.0' S=0.0269 '/ Capacity=141.65 cfs Outflow=2.36 cfs 0.275 af

Pond 2P: EXISTING POND Peak Elev=35.56' Storage=41,358 cf Inflow=59.48 cfs 9.689 af
Primary=55.63 cfs 9.689 af Secondary=0.00 cfs 0.000 af Outflow=55.63 cfs 9.689 af

Pond 10P: EXT CULVERT Peak Elev=45.10' Storage=17,682 cf Inflow=43.70 cfs 5.655 af
Primary=2.49 cfs 2.206 af Secondary=40.79 cfs 3.449 af Outflow=43.28 cfs 5.655 af

Pond 21P: POND Peak Elev=48.54' Storage=52 cf Inflow=0.80 cfs 0.053 af
Primary=0.80 cfs 0.053 af Secondary=0.00 cfs 0.000 af Outflow=0.80 cfs 0.053 af

Pond 22P: Peak Elev=49.23' Inflow=0.80 cfs 0.053 af
12.0" Round Culvert n=0.013 L=47.0' S=0.0021 '/ Outflow=0.80 cfs 0.053 af

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Type III 24-hr 10 YEAR STORM Rainfall=4.60"

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Page 4

Pond 23P: ARCH CULVERT

Peak Elev=42.03' Storage=9,466 cf Inflow=48.14 cfs 6.718 af
Outflow=47.24 cfs 6.718 af

Pond 62O: OUTLET

Peak Elev=41.63' Inflow=2.58 cfs 0.275 af
12.0" Round Culvert n=0.013 L=97.0' S=0.0052 ' Outflow=2.58 cfs 0.275 af

Pond 62P: POND

Peak Elev=44.07' Storage=35 cf Inflow=2.07 cfs 0.138 af
Primary=2.06 cfs 0.138 af Secondary=0.00 cfs 0.000 af Outflow=2.06 cfs 0.138 af

Pond 63P: POND

Peak Elev=44.18' Storage=1,018 cf Inflow=1.67 cfs 0.137 af
Primary=0.91 cfs 0.137 af Secondary=0.00 cfs 0.000 af Outflow=0.91 cfs 0.137 af

Link AP1:

Inflow=55.63 cfs 9.689 af
Primary=55.63 cfs 9.689 af

Link AP2:

Inflow=13.19 cfs 1.456 af
Primary=13.19 cfs 1.456 af

ESTES PROPANE DEV

Type III 24-hr 25 YEAR STORM Rainfall=5.40"

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Page 5

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 10: Runoff Area=1,160,660 sf 9.80% Impervious Runoff Depth=3.24"
Flow Length=1,520' Tc=31.9 min CN=80 Runoff=55.64 cfs 7.204 af

Subcatchment 20: Runoff Area=604,625 sf 8.41% Impervious Runoff Depth=3.15"
Flow Length=1,220' Tc=15.7 min CN=79 Runoff=37.96 cfs 3.642 af

Subcatchment 21: Runoff Area=12,060 sf 33.58% Impervious Runoff Depth=3.84"
Flow Length=295' Tc=2.1 min CN=86 Runoff=1.34 cfs 0.089 af

Subcatchment 22: Runoff Area=8,230 sf 52.55% Impervious Runoff Depth=4.16"
Flow Length=310' Tc=2.2 min CN=89 Runoff=0.97 cfs 0.065 af

Subcatchment 23: Runoff Area=210,800 sf 11.25% Impervious Runoff Depth=3.34"
Flow Length=545' Tc=12.6 min CN=81 Runoff=15.19 cfs 1.347 af

Subcatchment 30: Runoff Area=269,180 sf 0.00% Impervious Runoff Depth=2.96"
Flow Length=600' Tc=18.6 min CN=77 Runoff=14.86 cfs 1.525 af

Subcatchment 62: Runoff Area=20,715 sf 55.68% Impervious Runoff Depth=4.26"
Flow Length=170' Tc=1.3 min CN=90 Runoff=2.51 cfs 0.169 af

Subcatchment 63: Runoff Area=26,275 sf 16.97% Impervious Runoff Depth=3.44"
Flow Length=207' Tc=9.7 min CN=82 Runoff=2.11 cfs 0.173 af

Reach 10R: Avg. Flow Depth=1.47' Max Vel=3.27 fps Inflow=55.14 cfs 7.204 af
n=0.050 L=205.0' S=0.0127 '/ Capacity=106.28 cfs Outflow=54.92 cfs 7.204 af

Reach 20R: Avg. Flow Depth=1.68' Max Vel=3.08 fps Inflow=60.06 cfs 8.552 af
n=0.050 L=555.0' S=0.0095 '/ Capacity=619.58 cfs Outflow=59.67 cfs 8.552 af

Reach 21R: Avg. Flow Depth=0.29' Max Vel=1.15 fps Inflow=2.29 cfs 0.154 af
n=0.050 L=668.0' S=0.0135 '/ Capacity=735.93 cfs Outflow=1.57 cfs 0.154 af

Reach 30R: Avg. Flow Depth=0.17' Max Vel=1.60 fps Inflow=3.11 cfs 0.342 af
n=0.035 L=297.0' S=0.0269 '/ Capacity=141.65 cfs Outflow=2.88 cfs 0.342 af

Pond 2P: EXISTING POND Peak Elev=35.86' Storage=49,461 cf Inflow=76.14 cfs 12.348 af
Primary=69.67 cfs 12.273 af Secondary=5.22 cfs 0.075 af Outflow=74.89 cfs 12.348 af

Pond 10P: EXT CULVERT Peak Elev=45.16' Storage=19,281 cf Inflow=55.64 cfs 7.204 af
Primary=2.59 cfs 2.457 af Secondary=52.55 cfs 4.747 af Outflow=55.14 cfs 7.204 af

Pond 21P: POND Peak Elev=48.54' Storage=59 cf Inflow=0.97 cfs 0.065 af
Primary=0.96 cfs 0.065 af Secondary=0.00 cfs 0.000 af Outflow=0.96 cfs 0.065 af

Pond 22P: Peak Elev=49.30' Inflow=0.97 cfs 0.065 af
12.0" Round Culvert n=0.013 L=47.0' S=0.0021 '/ Outflow=0.97 cfs 0.065 af

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Page 6

Pond 23P: ARCH CULVERT

Peak Elev=42.24' Storage=12,331 cf Inflow=61.33 cfs 8.552 af
Outflow=60.06 cfs 8.552 af

Pond 62O: OUTLET

Peak Elev=42.11' Inflow=3.11 cfs 0.342 af
12.0" Round Culvert n=0.013 L=97.0' S=0.0052 '/ Outflow=3.11 cfs 0.342 af

Pond 62P: POND

Peak Elev=44.09' Storage=47 cf Inflow=2.51 cfs 0.169 af
Primary=2.48 cfs 0.169 af Secondary=0.00 cfs 0.000 af Outflow=2.48 cfs 0.169 af

Pond 63P: POND

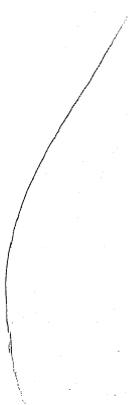
Peak Elev=44.25' Storage=1,097 cf Inflow=2.11 cfs 0.173 af
Primary=1.99 cfs 0.173 af Secondary=0.00 cfs 0.000 af Outflow=1.99 cfs 0.173 af

Link AP1:

Inflow=74.89 cfs 12.348 af
Primary=74.89 cfs 12.348 af

Link AP2:

Inflow=17.32 cfs 1.867 af
Primary=17.32 cfs 1.867 af



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Page 1

Summary for Subcatchment 10:

Runoff = 55.64 cfs @ 12.44 hrs, Volume= 7.204 af, Depth= 3.24"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR STORM Rainfall=5.40"

Area (sf)	CN	Description
113,692	98	Paved parking & roofs
543,629	78	Meadow, non-grazed, HSG D
503,339	77	Woods, Good, HSG D
1,160,660	80	Weighted Average
1,046,968		90.20% Pervious Area
113,692		9.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.8	50	0.0500	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.00"
10.9	730	0.0500	1.12		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.7	340	0.0500	3.35		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
10.5	400	0.0160	0.63		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
31.9	1,520	Total			

Summary for Subcatchment 20:

Runoff = 37.96 cfs @ 12.22 hrs, Volume= 3.642 af, Depth= 3.15"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR STORM Rainfall=5.40"

Area (sf)	CN	Description
45,427	98	Paved parking & roofs
5,410	98	Paved parking & roofs
8,130	80	>75% Grass cover, Good, HSG D
197,320	78	Meadow, non-grazed, HSG D
348,338	77	Woods, Good, HSG D
604,625	79	Weighted Average
553,788		91.59% Pervious Area
50,837		8.41% Impervious Area

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Page 2

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	50	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 3.00"
2.2	300	0.0230	2.27		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
5.8	870	0.0180	2.49	74.76	Channel Flow, Area= 30.0 sf Perim= 30.0' r= 1.00' n= 0.080 Earth, long dense weeds
15.7	1,220	Total			

Summary for Subcatchment 21:

Runoff = 1.34 cfs @ 12.04 hrs, Volume= 0.089 af, Depth= 3.84"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR STORM Rainfall=5.40"

Area (sf)	CN	Description
4,050	98	Paved parking & roofs
8,010	80	>75% Grass cover, Good, HSG D
12,060	86	Weighted Average
8,010		66.42% Pervious Area
4,050		33.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.5	30	0.0170	0.98		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.00"
1.6	265	0.0350	2.81		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
2.1	295	Total			

Summary for Subcatchment 22:

Runoff = 0.97 cfs @ 12.04 hrs, Volume= 0.065 af, Depth= 4.16"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR STORM Rainfall=5.40"

Area (sf)	CN	Description
4,325	98	Paved parking & roofs
3,905	80	>75% Grass cover, Good, HSG D
8,230	89	Weighted Average
3,905		47.45% Pervious Area
4,325		52.55% Impervious Area

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Page 3

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.5	30	0.0170	0.98		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.00"
1.7	280	0.0330	2.72		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
2.2	310	Total			

Summary for Subcatchment 23:

Runoff = 15.19 cfs @ 12.17 hrs, Volume= 1.347 af, Depth= 3.34"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR STORM Rainfall=5.40"

Area (sf)	CN	Description
18,610	98	Paved parking & roofs
5,105	98	Paved parking & roofs
6,940	80	>75% Grass cover, Good, HSG D
29,900	78	Meadow, non-grazed, HSG D
150,245	79	Woods/grass comb., Good, HSG D
210,800	81	Weighted Average
187,085		88.75% Pervious Area
23,715		11.25% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.4	50	0.0400	0.19		Sheet Flow, Grass: Short n= 0.150 P2= 3.00"
3.9	270	0.0520	1.14		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
4.3	225	0.0310	0.88		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.6	545	Total			

Summary for Subcatchment 30:

Runoff = 14.86 cfs @ 12.26 hrs, Volume= 1.525 af, Depth= 2.96"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR STORM Rainfall=5.40"

Area (sf)	CN	Description
9,425	80	>75% Grass cover, Good, HSG D
259,755	77	Woods, Good, HSG D
269,180	77	Weighted Average
269,180		100.00% Pervious Area

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Page 4

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	50	0.0600	0.10		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.00"
10.4	550	0.0310	0.88		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
18.6	600	Total			

Summary for Subcatchment 62:

Runoff = 2.51 cfs @ 12.02 hrs, Volume= 0.169 af, Depth= 4.26"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR STORM Rainfall=5.40"

Area (sf)	CN	Description
11,535	98	Paved parking & roofs
9,180	80	>75% Grass cover, Good, HSG D
20,715	90	Weighted Average
9,180		44.32% Pervious Area
11,535		55.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	15	0.0200	0.91		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.00"
1.0	155	0.0323	2.70		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
1.3	170	Total			

Summary for Subcatchment 63:

Runoff = 2.11 cfs @ 12.14 hrs, Volume= 0.173 af, Depth= 3.44"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 YEAR STORM Rainfall=5.40"

Area (sf)	CN	Description
4,460	98	Paved parking & roofs
11,750	80	>75% Grass cover, Good, HSG D
10,065	77	Woods, Good, HSG D
26,275	82	Weighted Average
21,815		83.03% Pervious Area
4,460		16.97% Impervious Area

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Page 5

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	50	0.0600	0.10		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.00"
0.8	50	0.0400	1.00		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.7	107	0.0280	2.51		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
9.7	207	Total			

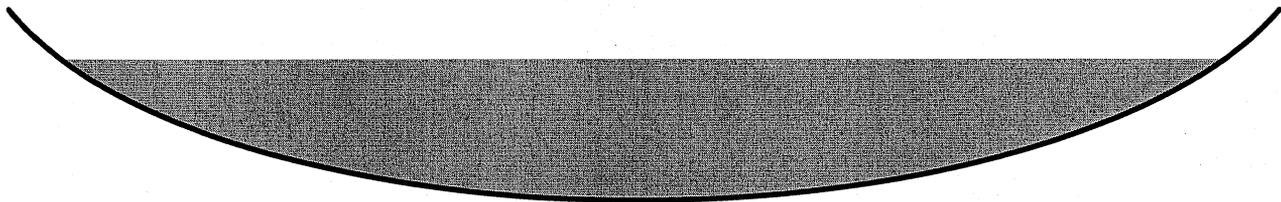
Summary for Reach 10R:

Inflow Area = 26.645 ac, 9.80% Impervious, Inflow Depth = 3.24" for 25 YEAR STORM event
 Inflow = 55.14 cfs @ 12.48 hrs, Volume= 7.204 af
 Outflow = 54.92 cfs @ 12.51 hrs, Volume= 7.204 af, Atten= 0%, Lag= 1.8 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Max. Velocity= 3.27 fps, Min. Travel Time= 1.0 min
 Avg. Velocity = 0.90 fps, Avg. Travel Time= 3.8 min

Peak Storage= 3,458 cf @ 12.49 hrs
 Average Depth at Peak Storage= 1.47'
 Bank-Full Depth= 2.00', Capacity at Bank-Full= 106.28 cfs

20.00' x 2.00' deep Parabolic Channel, n= 0.050 Earth, long dense weeds
 Length= 205.0' Slope= 0.0127 '
 Inlet Invert= 43.40', Outlet Invert= 40.80'

**Summary for Reach 20R:**

Inflow Area = 31.484 ac, 10.02% Impervious, Inflow Depth = 3.26" for 25 YEAR STORM event
 Inflow = 60.06 cfs @ 12.54 hrs, Volume= 8.552 af
 Outflow = 59.67 cfs @ 12.63 hrs, Volume= 8.552 af, Atten= 1%, Lag= 5.1 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Max. Velocity= 3.08 fps, Min. Travel Time= 3.0 min
 Avg. Velocity = 0.91 fps, Avg. Travel Time= 10.2 min

Peak Storage= 10,763 cf @ 12.58 hrs
 Average Depth at Peak Storage= 1.68'
 Bank-Full Depth= 5.00', Capacity at Bank-Full= 619.58 cfs

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Type III 24-hr 25 YEAR STORM Rainfall=5.40"

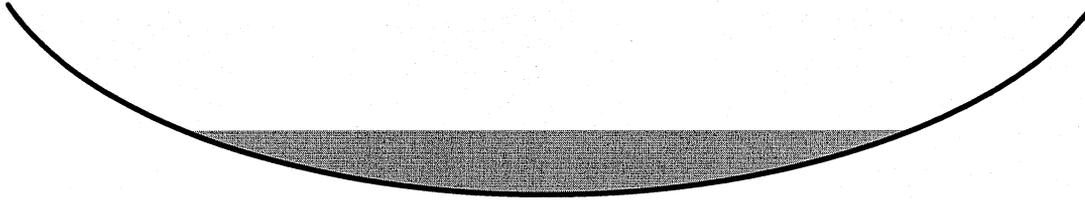
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Page 6

30.00' x 5.00' deep Parabolic Channel, n= 0.050 Earth, cobble bottom, clean sides
Length= 555.0' Slope= 0.0095 '/'
Inlet Invert= 40.30', Outlet Invert= 35.00'



Summary for Reach 21R:

Inflow Area =	0.466 ac, 41.28% Impervious,	Inflow Depth =	3.97"	for 25 YEAR STORM event
Inflow =	2.29 cfs @ 12.04 hrs,	Volume=	0.154 af	
Outflow =	1.57 cfs @ 12.27 hrs,	Volume=	0.154 af,	Atten= 31%, Lag= 13.9 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.15 fps, Min. Travel Time= 9.7 min
Avg. Velocity = 0.43 fps, Avg. Travel Time= 25.9 min

Peak Storage= 929 cf @ 12.11 hrs
Average Depth at Peak Storage= 0.29'
Bank-Full Depth= 5.00', Capacity at Bank-Full= 735.93 cfs

30.00' x 5.00' deep Parabolic Channel, n= 0.050 Earth, cobble bottom, clean sides
Length= 668.0' Slope= 0.0135 '/'
Inlet Invert= 44.00', Outlet Invert= 35.00'



Summary for Reach 30R:

Inflow Area =	1.079 ac, 34.04% Impervious,	Inflow Depth =	3.80"	for 25 YEAR STORM event
Inflow =	3.11 cfs @ 12.04 hrs,	Volume=	0.342 af	
Outflow =	2.88 cfs @ 12.12 hrs,	Volume=	0.342 af,	Atten= 7%, Lag= 5.1 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.60 fps, Min. Travel Time= 3.1 min
Avg. Velocity = 0.47 fps, Avg. Travel Time= 10.5 min

Peak Storage= 535 cf @ 12.07 hrs
Average Depth at Peak Storage= 0.17'
Bank-Full Depth= 1.00', Capacity at Bank-Full= 141.65 cfs

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Type III 24-hr 25 YEAR STORM Rainfall=5.40"

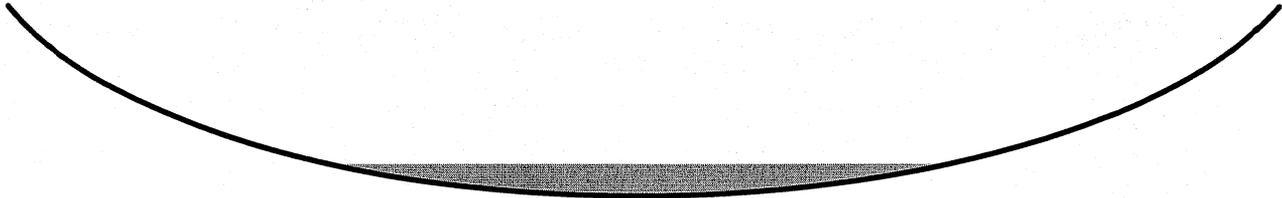
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Page 7

40.00' x 1.00' deep Parabolic Channel, n= 0.035 Earth, dense weeds
 Length= 297.0' Slope= 0.0269 1/
 Inlet Invert= 40.00', Outlet Invert= 32.00'



Summary for Pond 2P: EXISTING POND

Inflow Area = 45.830 ac, 9.85% Impervious, Inflow Depth = 3.23" for 25 YEAR STORM event
 Inflow = 76.14 cfs @ 12.53 hrs, Volume= 12.348 af
 Outflow = 74.89 cfs @ 12.61 hrs, Volume= 12.348 af, Atten= 2%, Lag= 4.8 min
 Primary = 69.67 cfs @ 12.61 hrs, Volume= 12.273 af
 Secondary = 5.22 cfs @ 12.61 hrs, Volume= 0.075 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 35.86' @ 12.61 hrs Surf.Area= 28,074 sf Storage= 49,461 cf

Plug-Flow detention time= 16.1 min calculated for 12.348 af (100% of inflow)
 Center-of-Mass det. time= 16.2 min (878.6 - 862.4)

Volume	Invert	Avail.Storage	Storage Description
#1	33.50'	138,922 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
33.50	9,998	0	0
34.00	17,734	6,933	6,933
36.00	28,871	46,605	53,538
38.00	56,513	85,384	138,922

Device	Routing	Invert	Outlet Devices
#1	Primary	33.50'	60.0 deg x 5.0' long Sharp-Crested Vee/Trap Weir C= 2.53
#2	Secondary	35.80'	150.0' long x 3.0' breadth Broad-Crested Rectangular Weir
Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00			
2.50 3.00 3.50 4.00 4.50			
Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68			
2.72 2.81 2.92 2.97 3.07 3.32			

Primary OutFlow Max=69.59 cfs @ 12.61 hrs HW=35.86' (Free Discharge)
 ↑ **1=Sharp-Crested Vee/Trap Weir** (Weir Controls 69.59 cfs @ 4.65 fps)

Secondary OutFlow Max=4.76 cfs @ 12.61 hrs HW=35.86' (Free Discharge)
 ↑ **2=Broad-Crested Rectangular Weir** (Weir Controls 4.76 cfs @ 0.57 fps)

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Page 8

Summary for Pond 10P: EXT CULVERT

Inflow Area = 26.645 ac, 9.80% Impervious, Inflow Depth = 3.24" for 25 YEAR STORM event
 Inflow = 55.64 cfs @ 12.44 hrs, Volume= 7.204 af
 Outflow = 55.14 cfs @ 12.48 hrs, Volume= 7.204 af, Atten= 1%, Lag= 2.3 min
 Primary = 2.59 cfs @ 12.48 hrs, Volume= 2.457 af
 Secondary = 52.55 cfs @ 12.48 hrs, Volume= 4.747 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 45.16' @ 12.48 hrs Surf.Area= 29,571 sf Storage= 19,281 cf

Plug-Flow detention time= 28.3 min calculated for 7.204 af (100% of inflow)
 Center-of-Mass det. time= 28.0 min (870.5 - 842.5)

Volume	Invert	Avail.Storage	Storage Description
#1	43.50'	54,387 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
43.50	100	0	0
44.00	3,255	839	839
45.00	24,888	14,072	14,910
46.00	54,065	39,477	54,387

Device	Routing	Invert	Outlet Devices
#1	Primary	43.50'	12.0" Round Culvert L= 35.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 43.50' / 43.40' S= 0.0029 ' / Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior
#2	Secondary	44.80'	90.0' long x 30.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=2.59 cfs @ 12.48 hrs HW=45.16' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 2.59 cfs @ 3.30 fps)

Secondary OutFlow Max=52.34 cfs @ 12.48 hrs HW=45.16' (Free Discharge)

↑ **2=Broad-Crested Rectangular Weir** (Weir Controls 52.34 cfs @ 1.62 fps)

Summary for Pond 21P: POND

Inflow Area = 0.189 ac, 52.55% Impervious, Inflow Depth = 4.16" for 25 YEAR STORM event
 Inflow = 0.97 cfs @ 12.04 hrs, Volume= 0.065 af
 Outflow = 0.96 cfs @ 12.05 hrs, Volume= 0.065 af, Atten= 1%, Lag= 0.7 min
 Primary = 0.96 cfs @ 12.05 hrs, Volume= 0.065 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 48.54' @ 12.05 hrs Surf.Area= 1,473 sf Storage= 59 cf
 Flood Elev= 50.00' Surf.Area= 2,424 sf Storage= 2,909 cf

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Page 9

Plug-Flow detention time= 1.5 min calculated for 0.065 af (100% of inflow)
 Center-of-Mass det. time= 1.5 min (789.7 - 788.2)

Volume	Invert	Avail.Storage	Storage Description
#1	48.50'	2,909 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
48.50	1,446	0	0
49.00	1,780	807	807
50.00	2,424	2,102	2,909

Device	Routing	Invert	Outlet Devices
#1	Primary	45.00'	12.0" Round Culvert L= 35.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 45.00' / 44.00' S= 0.0286 ' S= 0.0286 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior
#2	Device 1	48.50'	2.2" x 2.2" Horiz. Orifice/Grate X 7.00 columns X 7 rows C= 0.600 Limited to weir flow at low heads
#3	Secondary	49.00'	16.0' long x 12.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64

Primary OutFlow Max=0.95 cfs @ 12.05 hrs HW=48.54' (Free Discharge)

↑ **1=Culvert** (Passes 0.95 cfs of 5.21 cfs potential flow)

↑ **2=Orifice/Grate** (Weir Controls 0.95 cfs @ 0.66 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=48.50' (Free Discharge)

↑ **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 22P:

Inflow Area = 0.189 ac, 52.55% Impervious, Inflow Depth = 4.16" for 25 YEAR STORM event
 Inflow = 0.97 cfs @ 12.04 hrs, Volume= 0.065 af
 Outflow = 0.97 cfs @ 12.04 hrs, Volume= 0.065 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.97 cfs @ 12.04 hrs, Volume= 0.065 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Peak Elev= 49.30' @ 12.04 hrs

Flood Elev= 50.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	48.60'	12.0" Round Culvert L= 47.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.60' / 48.50' S= 0.0021 ' S= 0.0021 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior

Primary OutFlow Max=0.93 cfs @ 12.04 hrs HW=49.29' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 0.93 cfs @ 2.29 fps)

ESTES PROPANE DEV

Type III 24-hr 25 YEAR STORM Rainfall=5.40"

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Page 10

Summary for Pond 23P: ARCH CULVERT

Inflow Area = 31.484 ac, 10.02% Impervious, Inflow Depth = 3.26" for 25 YEAR STORM event
 Inflow = 61.33 cfs @ 12.48 hrs, Volume= 8.552 af
 Outflow = 60.06 cfs @ 12.54 hrs, Volume= 8.552 af, Atten= 2%, Lag= 3.7 min
 Primary = 60.06 cfs @ 12.54 hrs, Volume= 8.552 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 42.24' @ 12.54 hrs Surf.Area= 14,612 sf Storage= 12,331 cf
 Flood Elev= 44.00' Surf.Area= 31,585 sf Storage= 52,884 cf

Plug-Flow detention time= 3.4 min calculated for 8.540 af (100% of inflow)
 Center-of-Mass det. time= 3.4 min (868.7 - 865.3)

Volume	Invert	Avail.Storage	Storage Description
#1	40.80'	52,884 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
40.80	1,740	0	0
41.00	4,584	632	632
42.00	12,250	8,417	9,049
44.00	31,585	43,835	52,884

Device	Routing	Invert	Outlet Devices
#1	Primary	40.80'	120.0" W x 39.6" H Box Culvert L= 52.0' Box, 30-75° wingwalls, square crown, Ke= 0.400 Inlet / Outlet Invert= 40.80' / 40.30' S= 0.0096 '/ Cc= 0.900 n= 0.050 Mountain streams w/large boulders
#2	Primary	40.70'	42.0" Round Culvert w/ 12.0" fill L= 60.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 39.70' / 38.40' S= 0.0217 '/ Cc= 0.900 n= 0.050 Mountain streams w/large boulders
#3	Primary	40.80'	42.0" Round Culvert w/ 12.0" fill L= 59.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 39.80' / 38.50' S= 0.0220 '/ Cc= 0.900 n= 0.050 Mountain streams w/large boulders

Primary OutFlow Max=59.98 cfs @ 12.54 hrs HW=42.24' (Free Discharge)

- 1=Culvert (Barrel Controls 33.33 cfs @ 3.08 fps)
- 2=Culvert (Barrel Controls 13.91 cfs @ 3.52 fps)
- 3=Culvert (Barrel Controls 12.74 cfs @ 3.44 fps)

Summary for Pond 62O: OUTLET

Inflow Area = 1.079 ac, 34.04% Impervious, Inflow Depth = 3.80" for 25 YEAR STORM event
 Inflow = 3.11 cfs @ 12.04 hrs, Volume= 0.342 af
 Outflow = 3.11 cfs @ 12.04 hrs, Volume= 0.342 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.11 cfs @ 12.04 hrs, Volume= 0.342 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

ESTES PROPANE DEV

Type III 24-hr 25 YEAR STORM Rainfall=5.40"

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Page 11

Peak Elev= 42.11' @ 12.03 hrs
 Flood Elev= 45.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	40.50'	12.0" Round Culvert L= 97.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 40.50' / 40.00' S= 0.0052 ' / ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior

Primary OutFlow Max=3.03 cfs @ 12.04 hrs HW=42.05' (Free Discharge)
 ↑1=Culvert (Barrel Controls 3.03 cfs @ 3.85 fps)

Summary for Pond 62P: POND

Inflow Area = 0.476 ac, 55.68% Impervious, Inflow Depth = 4.26" for 25 YEAR STORM event
 Inflow = 2.51 cfs @ 12.02 hrs, Volume= 0.169 af
 Outflow = 2.48 cfs @ 12.03 hrs, Volume= 0.169 af, Atten= 1%, Lag= 0.6 min
 Primary = 2.48 cfs @ 12.03 hrs, Volume= 0.169 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 44.09' @ 12.03 hrs Surf.Area= 523 sf Storage= 47 cf
 Flood Elev= 45.00' Surf.Area= 1,031 sf Storage= 751 cf

Plug-Flow detention time= 0.5 min calculated for 0.169 af (100% of inflow)
 Center-of-Mass det. time= 0.5 min (784.3 - 783.8)

Volume	Invert	Avail.Storage	Storage Description
#1	44.00'	1,342 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
44.00	470	0	0
45.00	1,031	751	751
45.50	1,336	592	1,342

Device	Routing	Invert	Outlet Devices
#1	Primary	44.00'	2.2" x 2.2" Horiz. Orifice/Grate X 7.00 columns X 7 rows C= 0.600 Limited to weir flow at low heads
#2	Secondary	45.50'	15.0' long x 12.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64

Primary OutFlow Max=2.37 cfs @ 12.03 hrs HW=44.09' (Free Discharge)
 ↑1=Orifice/Grate (Orifice Controls 2.37 cfs @ 1.44 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=44.00' (Free Discharge)
 ↑2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

ESTES PROPANE DEV

Type III 24-hr 25 YEAR STORM Rainfall=5.40"

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Page 12

Summary for Pond 63P: POND

Inflow Area = 0.603 ac, 16.97% Impervious, Inflow Depth = 3.44" for 25 YEAR STORM event
 Inflow = 2.11 cfs @ 12.14 hrs, Volume= 0.173 af
 Outflow = 1.99 cfs @ 12.21 hrs, Volume= 0.173 af, Atten= 5%, Lag= 4.3 min
 Primary = 1.99 cfs @ 12.21 hrs, Volume= 0.173 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 44.25' @ 12.22 hrs Surf.Area= 1,121 sf Storage= 1,097 cf
 Flood Elev= 45.50' Surf.Area= 1,675 sf Storage= 2,841 cf

Plug-Flow detention time= 19.4 min calculated for 0.173 af (100% of inflow)
 Center-of-Mass det. time= 19.7 min (836.3 - 816.6)

Volume	Invert	Avail.Storage	Storage Description
#1	43.00'	2,841 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
43.00	650	0	0
44.00	1,016	833	833
45.00	1,442	1,229	2,062
45.50	1,675	779	2,841

Device	Routing	Invert	Outlet Devices
#1	Primary	41.10'	12.0" Round Culvert L= 99.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 41.10' / 40.60' S= 0.0051 ' / Cc= 0.900 n= 0.013 Corrugated PE, smooth interior
#2	Device 1	43.00'	6.0" Vert. Orifice/Grate C= 0.600
#3	Device 1	44.20'	2.2" x 2.2" Horiz. Orifice/Grate X 7.00 columns X 7 rows C= 0.600 Limited to weir flow at low heads
#4	Secondary	46.20'	30.0' long x 26.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=1.82 cfs @ 12.21 hrs HW=44.24' (Free Discharge)

↑ **1=Culvert** (Passes 1.82 cfs of 4.77 cfs potential flow)
 ↑ **2=Orifice/Grate** (Orifice Controls 0.94 cfs @ 4.79 fps)
 ↑ **3=Orifice/Grate** (Weir Controls 0.88 cfs @ 0.64 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=43.00' (Free Discharge)

↑ **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

ESTES PROPANE DEV

Type III 24-hr 25 YEAR STORM Rainfall=5.40"

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Page 13

Summary for Link AP1:

Inflow Area = 45.830 ac, 9.85% Impervious, Inflow Depth = 3.23" for 25 YEAR STORM event
Inflow = 74.89 cfs @ 12.61 hrs, Volume= 12.348 af
Primary = 74.89 cfs @ 12.61 hrs, Volume= 12.348 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

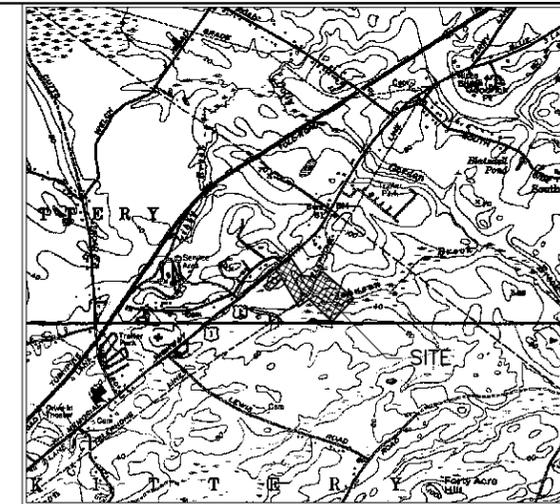
Summary for Link AP2:

Inflow Area = 7.258 ac, 5.06% Impervious, Inflow Depth = 3.09" for 25 YEAR STORM event
Inflow = 17.32 cfs @ 12.27 hrs, Volume= 1.867 af
Primary = 17.32 cfs @ 12.27 hrs, Volume= 1.867 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

ESTES PROPANE STORAGE

U.S. ROUTE 1 KITTERY, MAINE



LOCATION MAP
SCALE: 1"=2000'

GENERAL NOTES

- THIS PLAN PROVIDES DETAILS FOR THE APPROVAL AND CONSTRUCTION OF A BULK PROPANE STORAGE FACILITY IN KITTERY, MAINE. THE SITE IS LOCATED ON U.S. ROUTE 1, BLUE STAR MEMORIAL HIGHWAY. THE PARCEL, IDENTIFIED ON THE TOWN OF KITTERY TAX ASSESSOR'S MAP 67 AS LOT 4, IS 28.8 ACRES IN AREA, AND HAS 407' OF STREET FRONTAGE.
- THE PROPOSED FACILITY INCLUDES TWO 30,000 GALLON PROPANE TANKS WITH ASSOCIATED CONCRETE PAD AND SECURITY FENCING, AND A 720 S.F. GARAGE. THE TANKS WILL BE ACCESSED BY A 1,020' LONG, 20' WIDE ASPHALT ROAD.
- THE PARCEL IS LOCATED IN THE SHORELAND ZONE, MIXED USE (MU) DISTRICT AND RURAL RESIDENTIAL (RR) DISTRICT. REQUIREMENTS ARE AS FOLLOWS (WITH FRONTAGE ON ROUTE 1):
 LOT SIZE: 200,000 S.F. (MIN)
 STREET FRONTAGE: 250' (MIN)
 FRONT YARD: 60' (MIN)
 REAR AND SIDE YARD SETBACK: 30'
 BUILDING HEIGHT: NOT TO EXCEED 40'
 SHORELAND ZONE:
 COVERAGE: MAXIMUM LOT COVERAGE SHALL BE 70% (MU DISTRICT)
 PRINCIPLE & ACCESSORY STRUCTURE WETLAND SETBACK: 100' (MIN)
 40' BUFFERS REQUIRED:
 -TO NEIGHBORING LOT WITH A RESIDENCE WITHIN 100' OF LOT LINE.
 -BETWEEN MIXED USE DISTRICT AND RESIDENTIAL DISTRICT.
- THE TOTAL NEW IMPERVIOUS AREA ON SITE IS 34,885 S.F. (0.80 AC). THE TOTAL DISTURBED AREA ON SITE IS 93,400 S.F. (2.14 AC).
- MAXIMUM LOT COVERAGE ALLOWED IS 70% IN THE SHORELAND ZONE OF THE MIXED USE DISTRICT. THE AREA OF THE PARCEL IN THE SHORELAND ZONE AND THE MIXED USE DISTRICT IS 570,989 S.F. THEREFORE, COVERAGE CALCULATIONS ARE AS FOLLOWS:
 $34,885 \text{ SF} / 570,989 \text{ SF} = 6.1\%$
- OPEN SPACE, AS REQUIRED BY SECTION 16.3.2.13.D.8, IS CALCULATED AS FOLLOWS:
 TOTAL PARCEL SIZE = 1,253,765 S.F. (28.8 AC)
 REQUIRED OPEN SPACE = 35% X 1,253,765 S.F. = 438,818 S.F. (10.1 AC)
 PROVIDED OPEN SPACE: BLOCK 1 = 121,858 S.F. (2.8 AC)*
 BLOCK 2 = 317,040 S.F. (7.3 AC)
 TOTAL OPEN SPACE = 438,898 S.F. (10.1 AC)
 *OPEN SPACE BLOCK 1 (27.8%) IS LOCATED IN THE FRONT 50% OF THE LOT, MEETING THE REQUIREMENT THAT 25% OF THE REQUIRED OPEN SPACE BE IN THE FRONT 50% OF THE LOT AREA CLOSEST TO ROUTE 1.
- WATER SERVICE SHALL BE PROVIDED TO THE SITE BY THE KITTERY WATER DISTRICT. WATER IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH RESPECTIVE DISTRICT REQUIREMENTS.
- ON-SITE SEWER LINES AND MANHOLES SHALL BE INSTALLED FOR FUTURE USE AND CONNECTION TO MUNICIPAL SEWER. SEWER IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE KITTERY SANITARY DISTRICT REQUIREMENTS.
- THE CONTRACTOR MUST CONTACT DIG SAFE AND ALL LOCAL UTILITIES PRIOR TO THE START OF CONSTRUCTION TO VERIFY THE LOCATION OF EXISTING UTILITIES AND CONDITIONS. LOCATING AND PROTECTING ANY UNDERGROUND OR ABOVE GROUND UTILITY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- ANY PROPOSED SIGNS SHALL MEET ALL REQUIREMENTS SET FORTH BY ARTICLE XII FROM THE TOWN CODE OF KITTERY.
- WETLANDS WERE IDENTIFIED IN THE FIELD BY MICHAEL CUOMO, CSS IN DECEMBER 2013. SEE ESTES PROPANE STORAGE FUNCTIONAL ASSESSMENT OF WETLANDS PREPARED BY MICHAEL CUOMO, DATED 3 DECEMBER 2013.
- EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY ANDERSON LIVINGSTON ENGINEERS, INC., SEE REFERENCE 1.
- THE PROPOSED WETLAND AND STREAM CROSSING SHALL MEET ALL OF THE REQUIREMENTS OF THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION (MDEP) CHAPTER 305: PERMIT BY RULE/SECTION 10: STREAM CROSSING.
- A VERNAL POOL SURVEY WAS CONDUCTED BY KENNETH A. WOOD, CWS, ON MAY 9, 2013. NO VERNAL POOLS WERE FOUND ON THE SITE.

REFERENCES

- "STANDARD BOUNDARY SURVEY AND DIVISION OF LAND" FOR FIRST STEP LAND DEVELOPMENT PREPARED BY ANDERSON LIVINGSTON ENGINEERS, INC. DATED MAY 2000 AND RECORDED Y.C.R.D. PLAN BOOK 256 PAGE 11.
- "LETTER OF MAP AMENDMENT DETERMINATION DOCUMENT (REMOVAL)" FEDERAL EMERGENCY MANAGEMENT AGENCY CASE NO. 03-01-1618A DATED SEPTEMBER 15, 2003.

OWNER OF RECORD: M & T REALTY
519 U.S. ROUTE 1
P.O. BOX 125
YORK, MAINE 03909

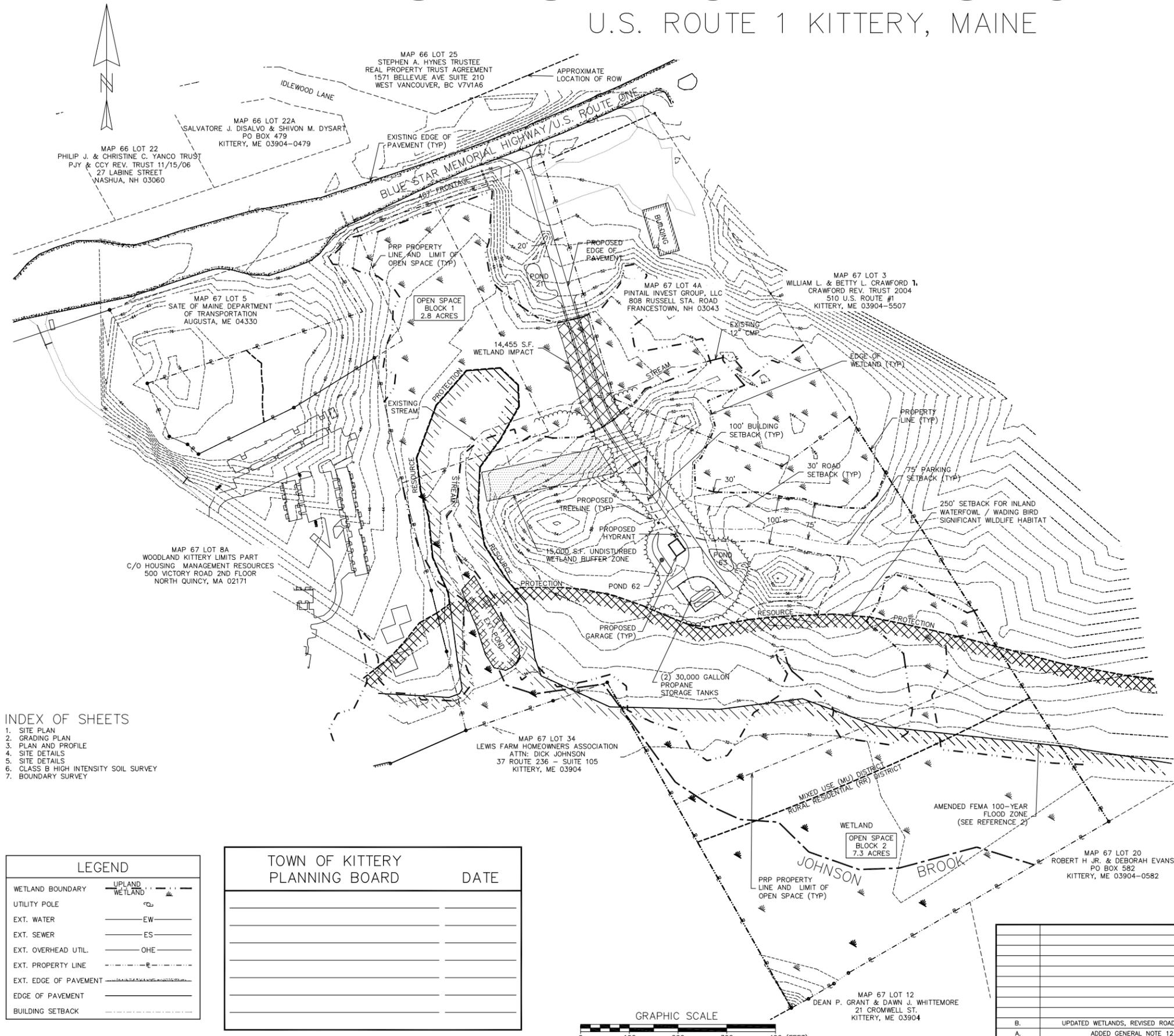
SITE PLAN
ESTES PROPANE STORAGE
BLUE STAR MEMORIAL HIGHWAY
(U.S. ROUTE 1), KITTERY, MAINE

FOR: MICHAEL ESTES
PO BOX 125
YORK, MAINE 03909

ATTAR ENGINEERING, INC.

CIVIL • STRUCTURAL • MARINE
1284 STATE ROAD - ELIOT, MAINE 03903
PHONE: (207)439-6023 FAX: (207)439-2128

SCALE: 1" = 100'	APPROVED BY:	DRAWN BY: EAB
DATE: 11/7/13		REVISION : DATE B : 3/19/14
JOB NO: C082-13	CAD FILE: ESTES PROPANE BASE	SHEET 1



INDEX OF SHEETS

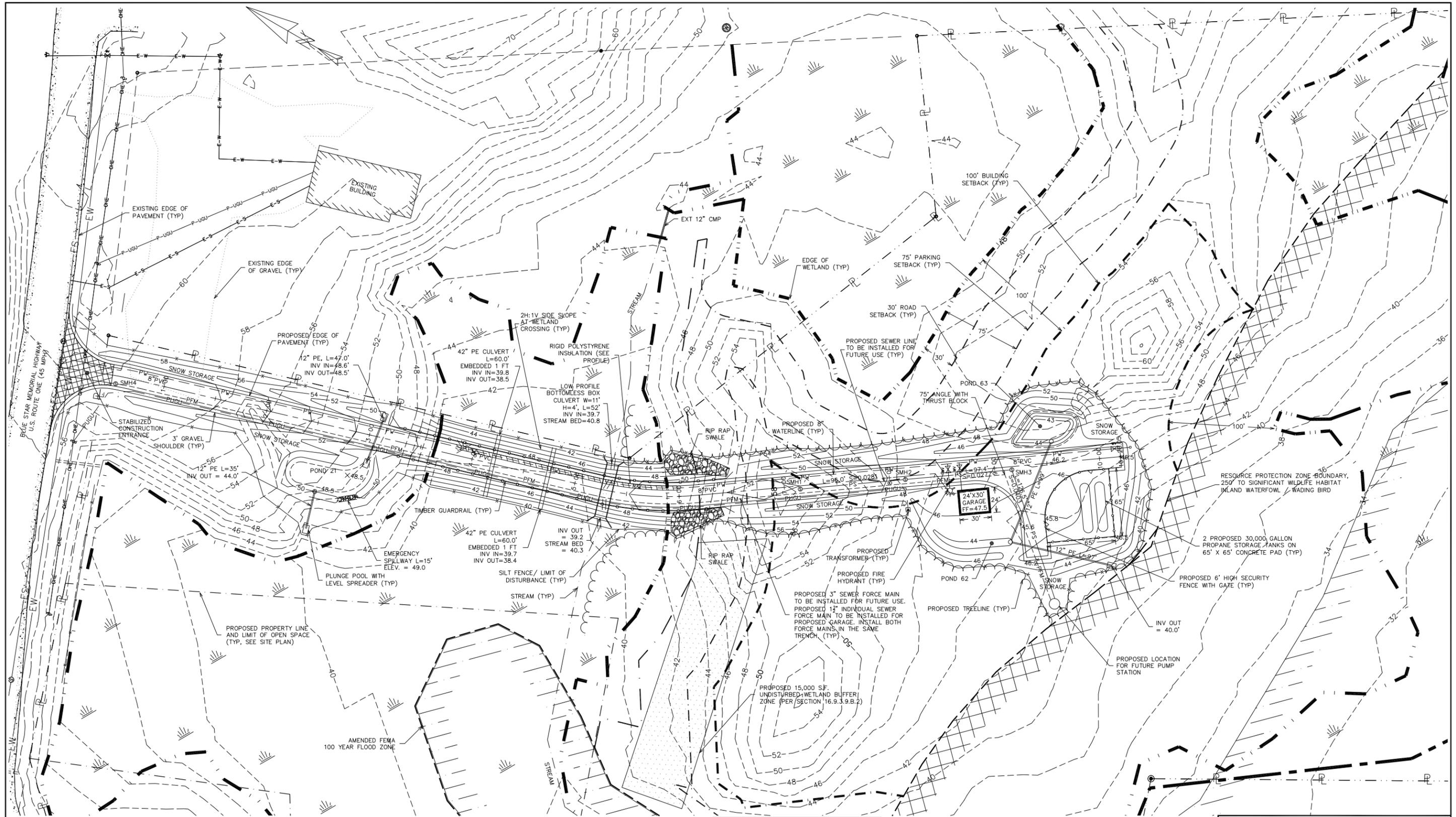
- SITE PLAN
- GRADING PLAN
- PLAN AND PROFILE
- SITE DETAILS
- SITE DETAILS
- CLASS B HIGH INTENSITY SOIL SURVEY
- BOUNDARY SURVEY

LEGEND	
WETLAND BOUNDARY	UPLAND WETLAND
UTILITY POLE	
EXT. WATER	EW
EXT. SEWER	ES
EXT. OVERHEAD UTIL.	OHE
EXT. PROPERTY LINE	
EXT. EDGE OF PAVEMENT	
EDGE OF PAVEMENT	
BUILDING SETBACK	

TOWN OF KITTERY PLANNING BOARD	DATE



NO.	DESCRIPTION	DATE
B.	UPDATED WETLANDS, REVISED ROAD LAYOUT	3/19/14
A.	ADDED GENERAL NOTE 12	11/8/13
NO.	DESCRIPTION	DATE
REVISIONS		



GENERAL NOTES

1. ALL STORM DRAINS TO BE ADS N-12 (PE) OR APPROVED EQUAL.
2. CENTRAL MAINE POWER COMPANY WILL PREPARE THE ELECTRICAL PLAN FOR CONSTRUCTION. ALL ELECTRICAL, TELEPHONE, AND CABLE SERVICES WILL BE UNDERGROUND.
3. SEWER MAINS TO BE 8" SDR 35 PVC. ALL OTHER APPURTENANCES SHALL MEET KITTERY SEWER DISTRICT STANDARDS.
4. ALL PIPES, VALVES, FITTINGS, AND CONNECTIONS SHALL MEET CURRENT KITTERY WATER DISTRICT STANDARDS.
5. A MINIMUM OF 5.0' OF COVER SHALL BE MAINTAINED OVER ALL WATER LINES.
6. NEW WATER AND SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH RESPECTIVE DISTRICT REQUIREMENTS.

LEGEND

EXISTING CONTOUR	---	XXX
PROPOSED CONTOUR	---	XXX
WETLAND BOUNDARY	---	UPLAND WETLAND
UTILITY POLE	⊕	
EXT. WATER	---	EW
EXT. SEWER	---	ES
EXT. OVERHEAD UTIL.	---	OHE
EXT. PROPERTY LINE	---	
EDGE OF PAVEMENT	---	
BUILDING SETBACK	---	



NO.	DESCRIPTION	DATE
C.	UPDATED WETLANDS, REVISED ROAD LAYOUT	3/19/14
B.	ADDED WETLAND BUFFER ZONE	1/22/14
A.	STORMWATER REVISIONS	12/5/13
NO.	DESCRIPTION	DATE

**GRADING AND UTILITY PLAN
ESTES PROPANE STORAGE
U.S. ROUTE 1, KITTERY, MAINE**

FOR: MICHAEL ESTES
PO BOX 125
YORK, MAINE 03909

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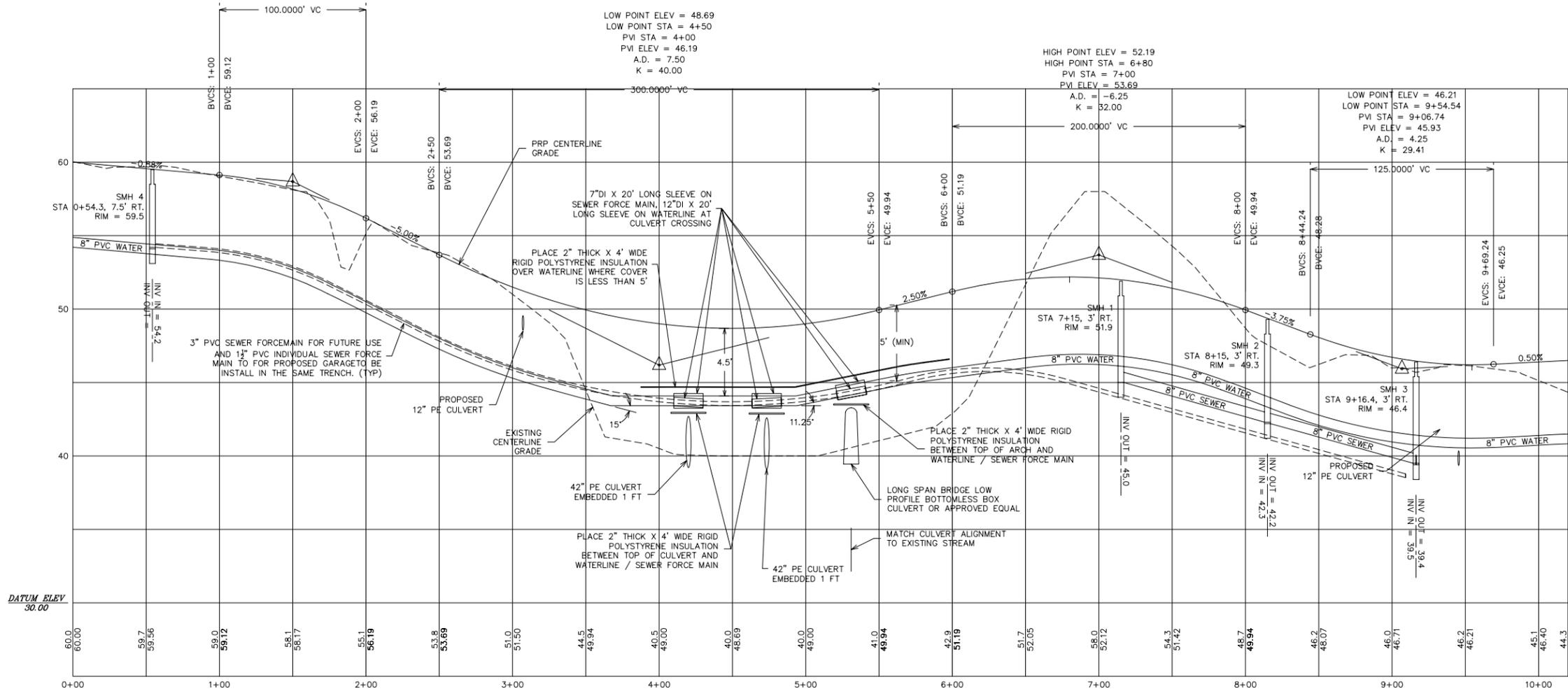
SCALE: 1" = 40'	APPROVED BY:	DRAWN BY: JLC
DATE: 11/7/13		REVISION : DATE C : 3/19/14
JOB NO: C082-13	CAD FILE: ESTES PROPANE BASE	SHEET 2

PVI STA = 1+50
 PVI ELEV = 58.69
 A.D. = -4.12
 K = 24.25

LOW POINT ELEV = 48.69
 LOW POINT STA = 4+50
 PVI STA = 4+00
 PVI ELEV = 46.19
 A.D. = 7.50
 K = 40.00

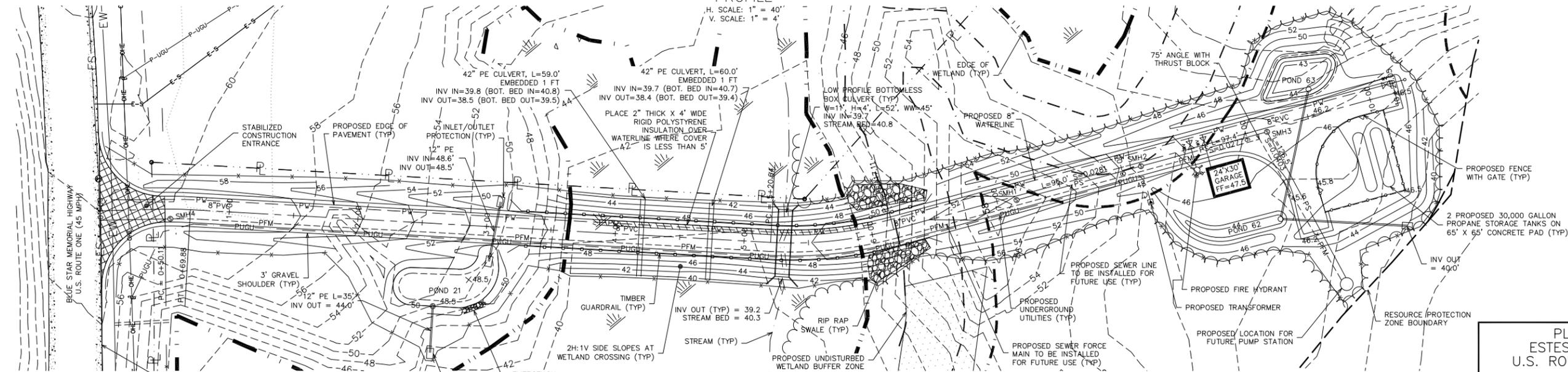
HIGH POINT ELEV = 52.19
 HIGH POINT STA = 6+80
 PVI STA = 7+00
 PVI ELEV = 53.69
 A.D. = -6.25
 K = 32.00

LOW POINT ELEV = 46.21
 LOW POINT STA = 9+54.54
 PVI STA = 9+06.74
 PVI ELEV = 45.93
 A.D. = 4.25
 K = 29.41



PROFILE

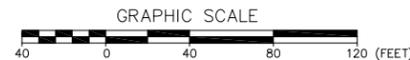
H. SCALE: 1" = 40'
 V. SCALE: 1" = 4'



PLAN VIEW

SCALE: 1" = 40'

PLAN VIEW SCALE 1"=40'



PLAN AND PROFILE
 ESTES PROPANE STORAGE
 U.S. ROUTE 1, KITTELY, MAINE

FOR: MICHAEL ESTES PO BOX 125 YORK, MAINE 03909		
ATTAR ENGINEERING, INC. CIVIL • STRUCTURAL • MARINE 1284 STATE ROAD - ELIOT, MAINE 03903 PHONE: (207)439-6023 FAX: (207)439-2128		
SCALE: 1" = 40'	APPROVED BY:	DRAWN BY: JLC
DATE: 11/7/13		REVISION : DATE B : 3/19/14
JOB NO: COB2-13	CAD FILE: ESTES PROPANE BASE	SHEET 3

NO.	DESCRIPTION	DATE
B.	UPDATED WETLANDS, REVISED ROAD LAYOUT & PROFILE	3/19/14
A.	STORMWATER REVISIONS	12/5/13

EROSION & SEDIMENTATION CONTROL NOTES

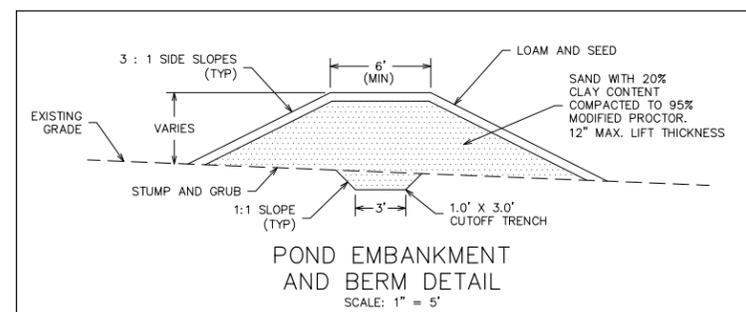
1. SILTATION FENCE OR HAY BALE BARRIERS WILL BE INSTALLED DOWNSLOPE OF ALL STRIPPING OR CONSTRUCTION OPERATIONS. A DOUBLE SILT FENCE BARRIER SHALL BE INSTALLED DOWNSLOPE OF ANY SOIL MATERIAL STOCKPILES. SILT FENCES SHALL BE INSPECTED AFTER EACH RAIN EVENT AND DAILY DURING PROLONGED RAIN. SILT AND SOIL PARTICLES ACCUMULATING BEHIND THE FENCE SHALL BE REMOVED AFTER EACH SIGNIFICANT RAIN EVENT AND IN NO INSTANCE SHOULD ACCUMULATION EXCEED 1/2 THE HEIGHT OF THE FENCE. TORN OR DAMAGED AREAS SHALL BE REPAIRED.
2. TEMPORARY AND PERMANENT VEGETATION AND MULCHING IS AN INTEGRAL COMPONENT OF THE EROSION AND SEDIMENTATION CONTROL PLAN. ALL AREAS SHALL BE INSPECTED AND MAINTAINED UNTIL THE DESIRED VEGETATIVE COVER IS ESTABLISHED. THESE CONTROL MEASURES ARE ESSENTIAL TO EROSION PREVENTION AND ALSO REDUCE COSTLY REWORK OF GRADED AND SHAPED AREAS.
3. SEEDING, FERTILIZER AND LIME RATES AND TIME OF APPLICATION WILL BE DEPENDENT ON SOIL REQUIREMENTS. TEMPORARY VEGETATION SHALL BE MAINTAINED IN THESE AREAS UNTIL PERMANENT SEEDING IS APPLIED. ADDITIONALLY, EROSION AND SEDIMENTATION MEASURES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED.
4. ALL LAWN AREA SHALL BE PERMANENTLY SEEDED WITH THE FOLLOWING MIXTURE: 20 LB/ACRE KENTUCKY BLUEGRASS, 20 LB/ACRE CREEPING RED FESCUE AND 5 LB/ACRE PERENNIAL RYE GRASS FOR A TOTAL OF 45 LB/ACRE. FERTILIZER AND LIME RATES SHALL BE DEPENDENT ON SOIL TESTING. IN THE ABSENCE OF SOIL TESTS, FERTILIZE WITH 10-20-20 (N-P205-K201) AT 800 LB/ACRE AND LIME AT 3 TONS/ACRE. MULCH WITH HAY AT 70-90 LB/1000 S.F. 4" OF LOAM SHALL BE APPLIED PRIOR TO SEEDING.
5. ALL DRAINAGE SWALES, POND EMBANKMENTS AND CROSSING EMBANKMENTS SHALL BE SEEDED WITH A MIXTURE OF CREEPING RED FESCUE, REDTOP AND TALL FESCUE. THE MIXTURE SHALL CONTAIN 20 LB/ACRE CREEPING RED FESCUE, 2 LB/ACRE REDTOP AND 20 LB/ACRE TALL FESCUE. SEE THE ABOVE NOTE FOR FERTILIZER, LIME AND MULCHING RATES.
6. TEMPORARY VEGETATION OF ALL DISTURBED AREAS, MATERIAL STOCKPILES AND OTHER SUCH AREAS SHALL BE ESTABLISHED BY SEEDING WITH EITHER WINTER RYE AT A RATE OF 112 LB/ACRE OR ANNUAL RYEGRASS AT A RATE OF 40 LB/ACRE. WINTER RYE SHALL BE USED FOR FALL SEEDING AND ANNUAL RYEGRASS FOR SHORT DURATION SEEDING. SEEDING SHALL BE ACCOMPLISHED BEFORE OCTOBER 1.
7. TEMPORARY SEEDING OF DISTURBED AREAS SHALL BE ACCOMPLISHED BEFORE OCTOBER 1. PERMANENT SEEDING SHALL BE ACCOMPLISHED BEFORE SEPTEMBER 15.
8. ALL SEEDED AREAS SHALL BE MULCHED WITH HAY AT A RATE OF 2 BALES (70-90 LB) PER 1000 S.F. OF SEEDED AREA.
9. ALL DISTURBED AREAS ON THE SITE SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING OR TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE.
10. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT ALL ACCESSES TO PUBLIC ROADS (SEE PLAN). TEMPORARY CULVERTS SHALL BE PROVIDED AS REQUIRED.
11. SLOPES 2:1 OR STEEPER SHALL BE TREATED WITH POLYJUTE OPEN WEAVE GEOTEXTILE (OR EQUIVALENT) AFTER SEEDING. JUTE MATS SHALL BE ANCHORED PER MANUFACTURER'S SPECIFICATIONS.
12. EXCESSIVE DUST CAUSED BY CONSTRUCTION OPERATIONS SHALL BE CONTROLLED BY APPLICATION OF WATER OR CALCIUM CHLORIDE.
13. THE CONTRACTOR MAY OPT TO USE EROSION CONTROL MIX BERM AS A SEDIMENT BARRIER IN LIEU OF SILTATION FENCE OR HAY BALE BARRIERS WITH APPROVAL FROM THE INSPECTING ENGINEER.

DRIVEWAY CONSTRUCTION NOTES

1. DRIVEWAYS TO BE CONSTRUCTED IN ACCORDANCE WITH THE APPROPRIATE CROSS SECTION DETAIL. GRAVEL FILL TO BE COMPACTED TO 95% MODIFIED PROCTOR IN ACCORDANCE WITH ASTM D 1557. LIFT THICKNESSES TO BE A MAXIMUM OF 6".
2. ALL STUMPS, ORGANIC MATERIAL, ROCKS AND BOULDERS TO BE REMOVED TO A MINIMUM DEPTH OF 24" BELOW SUBBASE.
3. ALL STUMPS, LEDGE AND LARGE BOULDERS TO BE REMOVED FROM THE CONSTRUCTION AREA. THE CONSTRUCTION AREA SHALL BE CLEARED AND ROUGH GRADED.
4. ALL CULVERTS TO BE ADS N-12 (HDPE) OR APPROVED EQUAL. CULVERT INLETS AND OUTLETS TO BE PROTECTED IN ACCORDANCE WITH THE CULVERT INLET/OUTLET PROTECTION DETAIL.
5. THE CONTRACTOR MUST CONTACT DIG SAFE AND ALL LOCAL UTILITIES PRIOR TO THE START OF CONSTRUCTION TO VERIFY THE LOCATION OF EXISTING SUBSURFACE UTILITIES AND CONDITIONS. LOCATING AND PROTECTING ANY UNDERGROUND OR ABOVE GROUND UTILITY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

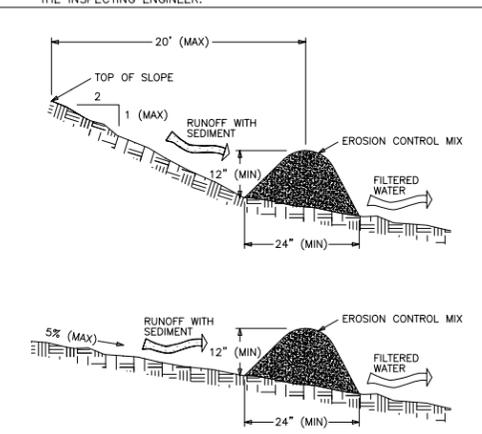
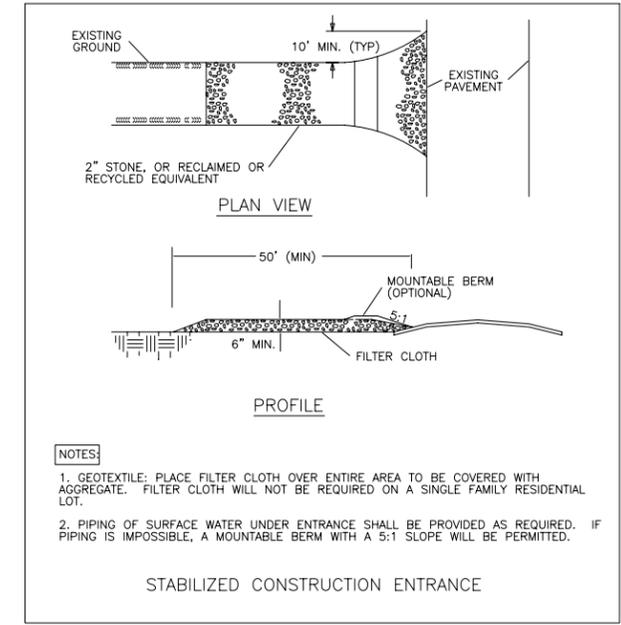
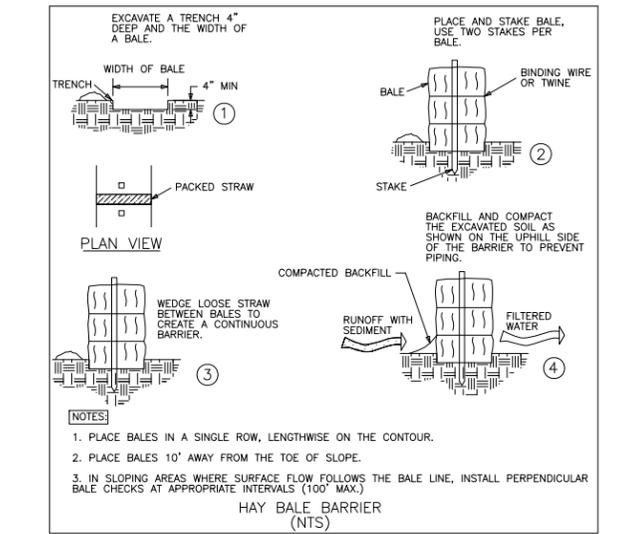
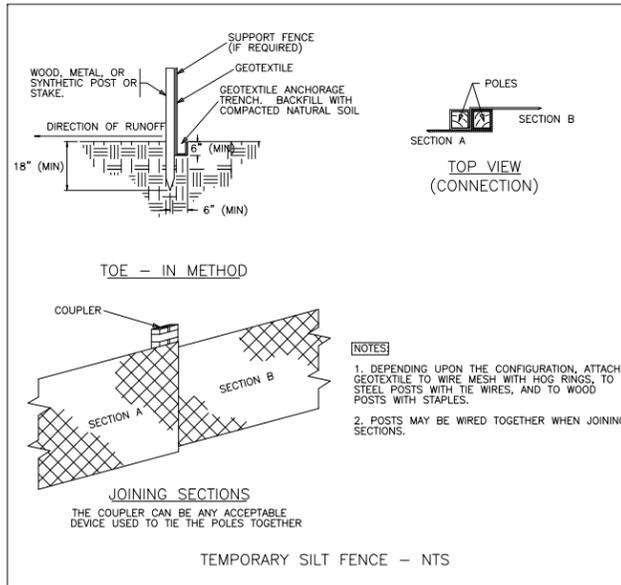
WINTER CONSTRUCTION NOTES

1. EXPOSED AREAS SHOULD BE LIMITED TO AN AREA THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.
2. AN AREA SHALL BE CONSIDERED STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH HAY AT A RATE OF 100 LB/1000 S.F. OR DORMANT SEEDED, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE. IN ALL CASES, MULCH SHALL BE APPLIED SO THAT THE SOIL SURFACE IS NOT VISIBLE THROUGH THE MULCH.
3. FROM OCTOBER 15 TO APRIL 1, LOAM AND SEED WILL NOT BE REQUIRED. DURING PERIODS OF TEMPERATURES ABOVE FREEZING, DISTURBED AREAS SHALL BE FINE GRADED AND PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL PERMANENT SEEDING CAN BE APPLIED. AFTER NOVEMBER 1, DISTURBED AREAS MAY BE LOAMED, FINE GRADED AND DORMANT SEEDED AT A RATE 200-300% HIGHER THAN THE SPECIFIED PERMANENT SEEDING RATE. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, DISTURBED AREAS SHALL BE GRADED BEFORE FREEZING AND TEMPORARILY STABILIZED WITH MULCH. DISTURBED AREAS SHALL NOT BE LEFT OVER THE WINTER OR FOR ANY OTHER EXTENDED PERIOD OF TIME UNLESS STABILIZED WITH MULCH.
4. FROM NOVEMBER 1 TO APRIL 15 ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING, ASPHALT EMULSION CHEMICAL, TRACK OR WOOD CELLULOSE FIBER. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH SLOPES GREATER THAN 3%. SLOPES EXPOSED TO DIRECT WINDS AND FOR SLOPES GREATER THAN 8%. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15%. AFTER OCTOBER 1, THE SAME APPLIES TO ALL SLOPES GREATER THAN 8%.
5. DURING WINTER CONSTRUCTION, DORMANT SEEDING OR MULCH AND ANCHORING SHALL BE APPLIED TO ALL DISTURBED AREAS AT THE END OF EACH WORKING DAY.
6. SNOW SHALL BE REMOVED FROM AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.



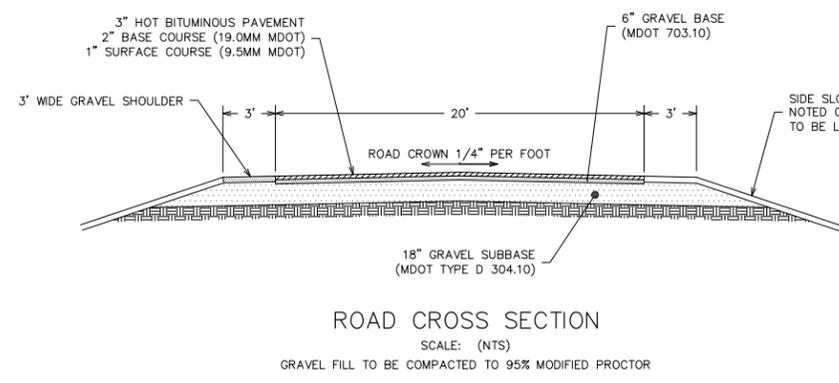
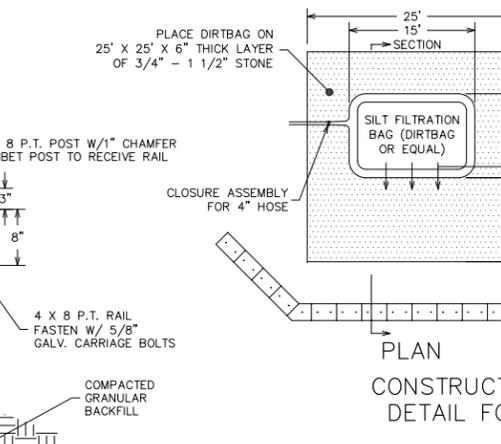
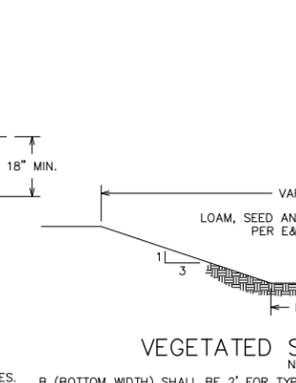
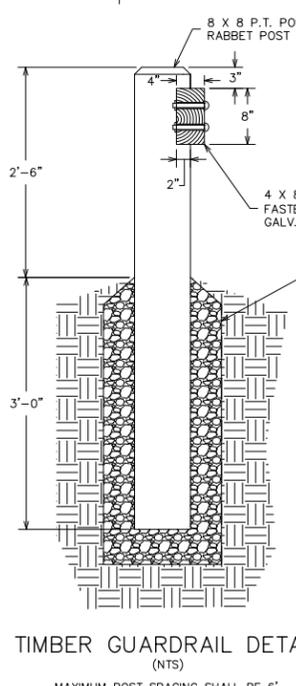
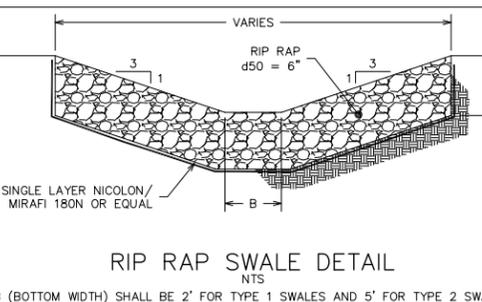
EMBANKMENT CONSTRUCTION NOTES

1. ALL ORGANIC MATERIAL, STUMPS, ROCKS AND BOULDERS SHALL BE REMOVED TO A MINIMUM DEPTH OF 24" BELOW SUBGRADE OF THE BASIN EMBANKMENT. ALL EXCAVATIONS BELOW THE BASIN EMBANKMENT SHALL HAVE A MINIMUM SLOPE OF 1H : 1V.
2. ALL BASIN EMBANKMENT FILL MATERIAL SHALL BE SAND WITH 20% CLAY CONTENT. EMBANKMENT FILL SHALL BE PLACED IN 12" (MAX.) LIFTS AND BE COMPACTED TO 95% MODIFIED PROCTOR. A CUTOFF TRENCH SHALL BE EXCAVATED AS SHOWN PRIOR TO CONSTRUCTION OF EMBANKMENT.
3. DETENTION BASIN AND ALL EXCAVATIONS SHALL BE KEPT FREE OF WATER DURING CONSTRUCTION.
4. EMBANKMENT SIDE SLOPES AND BOTTOM OF DETENTION BASIN SHALL BE LOAMED, SEEDED AND MULCHED IN ACCORDANCE WITH THE EROSION AND SEDIMENTATION CONTROL NOTES.



EROSION CONTROL MIX COMPOSITION STANDARDS:

- THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 80 AND 100%, DRY WEIGHT BASIS.
- PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN AND A MINIMUM OF 70% MAXIMUM OF 85% PASSING A 0.75" SCREEN.
- THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED
- LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX
- SOLUBLE SALTS CONTENT SHALL BE <4.0 mmhos/cm
- THE pH SHOULD FALL BETWEEN 5.0 AND 8.0



NO.	REVISIONS	DATE
A.	REVISED ROAD CROSS SECTION	3/19/14

SITE DETAILS
ESTES PROPANE STORAGE
U.S. ROUTE 1, KITTELY, MAINE

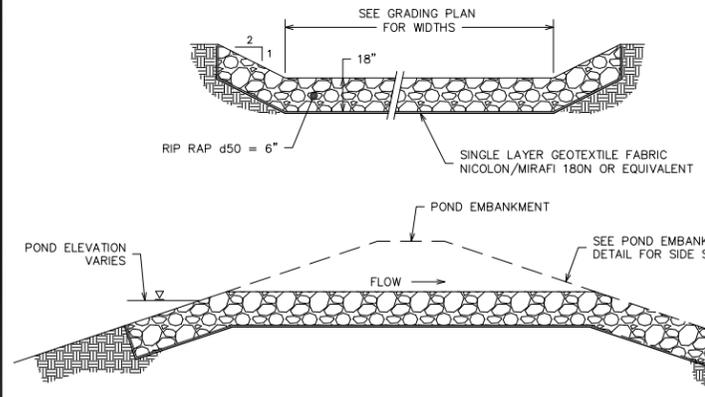
FOR: MICHAEL ESTES
P.O. BOX 125
YORK, MAINE 03909

ATTAR ENGINEERING, INC.
CIVIL • STRUCTURAL • MARINE
1284 STATE ROAD - ELIOT, MAINE 03903
PHONE: (207)439-6023 FAX: (207)439-2128

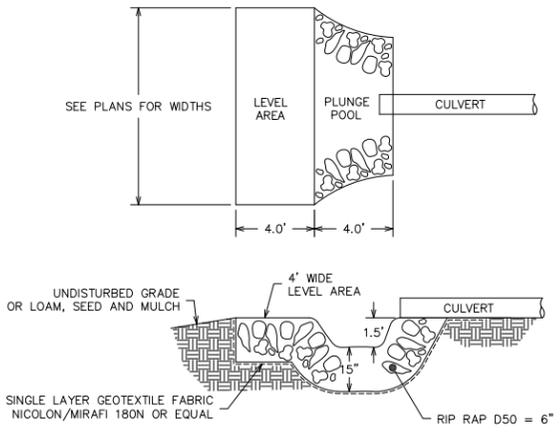
SCALE: AS NOTED
DATE: 11/7/13

APPROVED BY: [Signature]
DRAWN BY: EAB
REVISION: DATE
A: 3/19/14

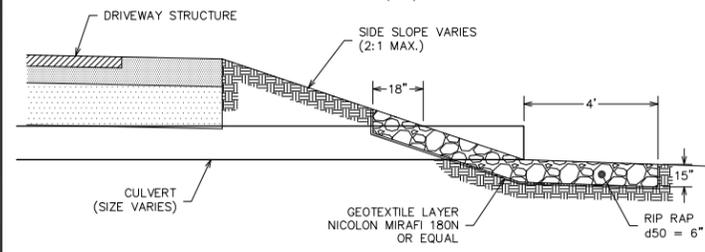
JOB NO: C082-13 CAD FILE: ESTES PROPANE DTL SHEET 4



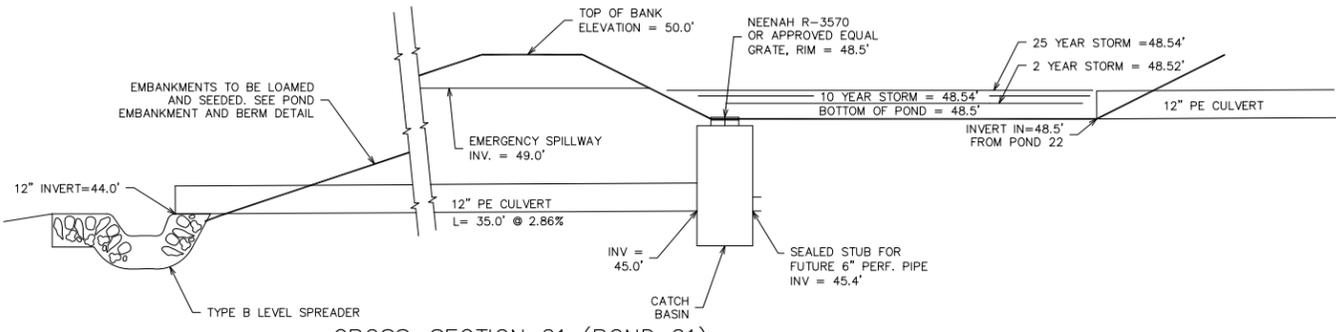
EMERGENCY SPILLWAY DETAIL (NTS)



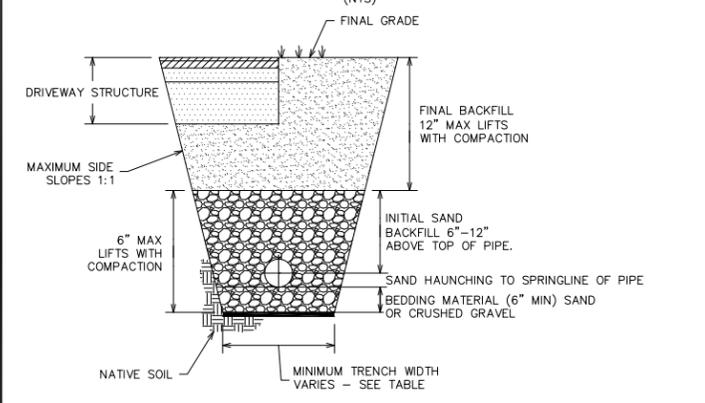
LEVEL SPREADER (NTS)



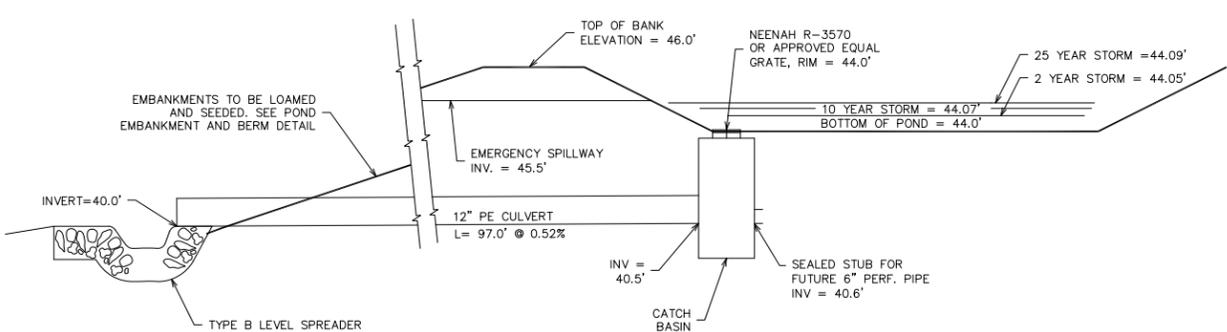
CULVERT INLET/OUTLET PROTECTION DETAIL (NTS)



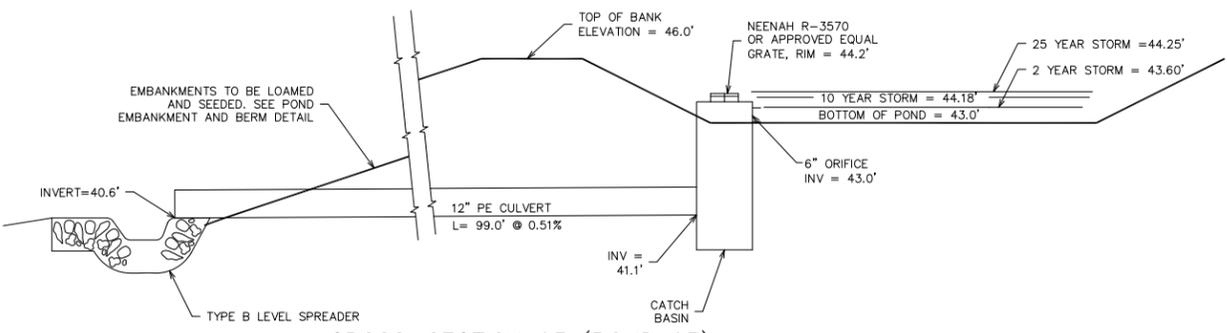
CROSS-SECTION 21 (POND 21) (NTS)



HDPE CULVERT TRENCH DETAIL (NTS)

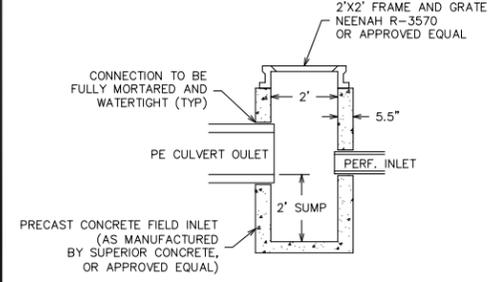


CROSS-SECTION 62 (POND 62) (NTS)



CROSS-SECTION 63 (POND 63) (NTS)

NOMINAL DIAMETER (IN)	MIN. TRENCH WIDTH (IN)
4	21
6	23
8	25
10	28
12	31
15	34
18	39
24	48
30	66
36	78
42	83
48	89
60	102



TYPICAL OUTLET STRUCTURE DETAIL (NTS)

NO.	REVISIONS	DATE
A.	ADDED POND CROSS SECTIONS	3/19/14

SITE DETAILS
ESTES PROPANE STORAGE
U.S. ROUTE 1, KITTERY, MAINE

FOR: MICHAEL ESTES
P.O. BOX 125
YORK, MAINE 03909

ATTAR ENGINEERING, INC.
CIVIL • STRUCTURAL • MARINE
1284 STATE ROAD - ELIOT, MAINE 03903
PHONE: (207)439-6023 FAX: (207)439-2128

SCALE: AS NOTED	APPROVED BY:	DRAWN BY: JLC
DATE: 11/7/13		REVISION : DATE A : 3/19/14
JOB NO: C082-13	CAD FILE: ESTES PROPANE DTL	SHEET 5



NOTE: SEE EXISTING CONDITIONS FOR OFFSITE ANALYSIS

NOTE: SEE EXISTING CONDITIONS FOR OFFSITE ANALYSIS

LEGEND	
EXISTING CONTOUR	---XXX---
PROPOSED CONTOUR	—XXX—
WETLAND BOUNDARY	— · · —
SUBCATCHMENT LINE	— · —
Tc	SF XX' @ X%
UTILITY POLE	⊙
EXT. WATER	—EW—
EXT. SEWER	—ES—
EXT. OVERHEAD UTIL.	—OHE—
EXT. PROPERTY LINE	—P—
EDGE OF PAVEMENT	— · —
SOIL TYPE BOUNDARY	— · · —

CLASS B HIGH INTENSITY SOIL SURVEY LEGEND

- Bm BIDDEFORD MUCKY SILT LOAM* (HSG D)
 - Lo LAMOINE SILT LOAM (HSG D)
 - LR LYMAN FINE SANDY LOAM-ROCK OUTCROP COMPLEX (HSG D)
 - Md MADELAND (HSG C)
 - Os OSSISPEE MUCKY PEAT* (HSG D)
 - Sc SCANTIC SILT LOAM* (HSG D)
 - TL TUNBRIDGE-LYMAN FINE SANDY LOAMS (HSG C/D)
- * THESE ARE WETLAND SOILS

SLOPE LEGEND

- (NONE) 0 TO 3%
- B 3 TO 8%
- C 8 TO 15%
- D 15 TO 25%
- E +25%

- 1 SUBCATCHMENT
 - 1R REACH
 - 1 POND
 - 1 ANALYSIS POINT
- FLOW TYPES
- SF - SHEET FLOW
 - SCF - SHALLOW CONCENTRATED FLOW
 - CF - CHANNELIZED FLOW
 - PIPE - PE PIPE FLOW



DEVELOPED CONDITIONS AND Tc'S
ESTES BUSINESS PARK
ROUTE 1, KITTEERY, MAINE

FOR: MICHAEL ESTES
PO BOX 125
YORK, MAINE 03909

ATTAR ENGINEERING, INC.
CIVIL • STRUCTURAL • MARINE
1284 STATE ROAD - ELIOT, MAINE 03903
PHONE: (207)439-6023 FAX: (207)439-2128

SCALE: 1" = 60'	APPROVED BY:	DRAWN BY: EAB
DATE: 11/7/13		REVISION : DATE A : 3/19/14

NO.	DESCRIPTION	DATE
A.	UPDATED WETLANDS, REVISED ROAD LAYOUT	3/19/14
REVISIONS		

**Town of Kittery
 Planning Board Meeting
 April 10, 2014**

Beatrice Way – Right-Of-Way Plan Review

Owner Operation Blessing LP, and applicant Richard Sparkowich, propose a new Right-Of-Way to allow the division of remaining land from the previously approved 3-lot subdivision located between Highpoint Circle and Kittree Lane. The site identified as Tax Map 61 Lot 08, ±65 acres, in the Residential - Rural (R-RL) Zone. Agent is Ken Markley, Easterly Survey Inc.

PROJECT TRACKING

REQ'D	ACTION	COMMENTS	STATUS
NO	Site Visit	April 1, 2014	HELD
YES	Determination of Completeness/Acceptance	February 27, 2014	GRANTED
	Waiver Request:	16.8 Article IV, Table 1 – Street Design Standards	TBD
YES	Public Hearing	March 13, 2014	PENDING
YES	Preliminary/Final Plan Review and Approval	Begin March 13, 2014	PENDING

Applicant: The purpose of these Plan Review Notes is to assist in Development Plan Review process. Complete compliance, however, is not all inclusive of the Town’s plan review requirements; other local, state and federal approvals may be required. Plan Review Notes reflect comments and recommendations regarding applicability of Town Land Use Development Code, and standard planning and development practices by the Town Planner and the Town’s plan review consultant, CMA Engineers, Inc. While the Planning Board (PB) refers to Plan Review Notes during the plan review process the comments and recommendations are non-binding until approved by the PB. Only the PB makes final decisions on code compliance and approves, approves with conditions or denies final plans. Prior to the signing of the approved Plan any **Conditions of Approval related to the Findings of Fact along with waivers and variances (by the BOA) must be placed on the Final Plan and, when applicable, recorded at the York County Registry of Deeds. PLACE THE MAP AND LOT NUMBER IN 1/4” HIGH LETTERS AT LOWER RIGHT BORDER OF ALL PLAN SHEETS.** As per Section 16.4.4.13 - Grading/Construction Final Plan Required. - Grading or construction of roads, grading of land or lots, or construction of buildings is prohibited until the original copy of the approved final plan endorsed has been duly recorded in the York County registry of deeds when applicable.

BRING PACKET INFO FROM 2/27 MTG & SITE WALK

Staff Comments

Background

Operation Blessing, LP, represented by Richard Sparkowich, received subdivision approval in August 2008 for three lots. The remaining 58 acres (with existing access from Old Farm Road) maintains 78 feet of frontage along a right-of-way that formerly was owned by Goodhouse Construction (Highpoint Circle developer) and currently co-owned by abutters Hanson and Gasbarro. September 13, 2012 the Applicant withdrew their request for an extension to complete the project and finalized the road construction and essentially completing the 2008 approved subdivision in November 2012.

Early in 2013 the applicant submitted an application to amend the 2008 Subdivision with the addition of a new Right-Of-Way that would allow the creation of one additional lot. The Modification of an Approved Plan included splitting the remaining 57-acre land into two lots; one with existing dwellings (total of 5) and the other with a single proposed dwelling. The applicant was not amenable to the requirements under the recently adopted cluster ordinance requiring setting aside open space, regardless of the number of lots being proposed. The Board never acted on the application within the required timeframe and thereby making it null and void.

The applicant has now submitted a Right-Of-Way Plan application. The applicant had submitted the application earlier, stating that they were beyond the 5 year period that would trigger subdivision; and as of 2/27/14, deeds have been submitted confirming this.

Review to date

At the last meeting the Board organized the project in the following manner:

1. Lot division and configuration;

Staff recommends the Row design proposed be modified to allow for a more straightforward application of the Code as it applies to Lots, Lot Width, Front Yard, etc. At a minimum, a cul-de-sac rather than a hammerhead, which is required for Class II and III roads, would provide a clearer application of the standards.

2. Access and road design;

-The applicant has access rights to both Kittree Lane and Highpointe Circle, and is currently proposing that future and existing dwellings use Highpointe Circle via the proposed ROW.

-The applicant is requesting a waiver from the road standards but has not provided any specific details as to which standards. Staff recommends that at a minimum Class II road standards are applied, however, it may be reasonable to consider applying Class III road standards given the existing and future dwelling units including the potential capacity of the parcels. Construction of the roadway may be contingent on a building permit for either parcel.

-Fire Chief and the Assessor support having the existing dwellings use the proposed ROW as their primary access. With regard to the public safety, the Fire Chief stated it was important to assure road maintenance/snow plowing on the private roads.

3. Where does one road/right-of-way start and end?

The Applicant recommends the proposed ROW should be the dividing line when naming the new intersection. To the north would be Kittree Lane and to the southeast would be Highpointe Circle. The latter requires the interested parties petition the Town to accept this section of roadway as a public street, essentially an addition to the currently accepted and public Highpointe Circle.

4. Use of Operation Blessing LC remaining land including its use for logging as permitted by the state.

Board needs to discuss further.

Plan Information

Staff has the following comments:

- 1) Parcel perimeter shown does not coincide with what is shown on the Tax Map. Tax Map 61 Lot 8 shows a parcel that connects to Old Farm Road via a narrow extension of land. The plan submitted does not show the connection/frontage on Old Farm Road? {Applicant has not clarified this to date, though has submitted as part of the site walk documents information regarding a 50-foot wide ROW extending from Old Farm Road drawn on a previous building permit application. The Applicant has no legal information supporting ROW; i.e. recorded deed or easement.}
- 2) Plan information per Title 16.10.5.2.B.7. *Surveyed acreage*.....missing total wetlands for parcel A {shown on revised plan REV 2/27/14}
- 3) Plan information per Title 16.10.5.2.B.8. *Names and addresses*record owner information for parcel across from Gasbarro is missing. {shown on revised plan REV 2/27/14}
- 4) Plan information per Title 16.10.5.2.B.10.h. *setbacks Existing and Proposed*.....not shown on plan
- 5) Title 16.10.5.2.C.2.b. *Essential physical features*.....Forest cover is not shown

Title 16.8.16 Lots

16.10.8.3.4.S.1 requires that a Right-Of-Way Plan “does not create any nonconforming lots or buildings”. To make a positive finding on the above standard the proposed plan needs to conform to provisions under 16.8.16. Staff has the following comments:

- 1) Parcel A looks like a Flag Lot. Provision A under 16.8.16.9 Lot Shape prohibits “flag lots” but does not define them:

A. The ratio of lot length to width shall not be more than three to one. Flag lots and other odd-shaped lots in which narrow strips are joined to other parcels in order to meet minimum lot size requirements are prohibited.

Staff contends that a lot that looks like a “flag” (in that the street frontage is along a narrow portion of land, the pole of the flag) is a “Flag Lot”. The applicant’s agent, Ken Markley, Professional Land Surveyor, contests that the proposed lot is not a flag lot because it is not created “in which narrow strips are joined to other parcels in order to meet minimum lot size requirements...” Staff obtained advice from MMA’s legal department to address this issue. In her second email Attorney Seel clarified her first email and concurred with Staff’s initial assumption. (see 2/27/14 PRN)

- 2) Parcel A does not meet the 3:1 lot length to width ratio **as configured**. As required in 16.8.16.9.A, the lot length cannot be more than three times the width of the lot. This measurement is based on the definition of Lot Width found in 16.2.

Lot width means the horizontal distance between the side lot lines, measured at the setback lines.

Side Lot Lines is essentially defined in 16.8.16.5 and states they “must be substantially at right angles or radial to street lines.” Front Yard is defined in 16.2 and means “an open area unoccupied by any structure...on the same lot with the building between the front line of the building and the front line of the lot and extending the full width of the lot as it abuts along a public or private street.”

Staff does not agree with the agent’s calculations on determining lot width. An email with Mr. Markley’s calculations and Staff’s comments is attached for reference. (see 2/27/14 PRN) When considering the definition of Lot Width and meanings associated with “side lot line” and “front yard”, Parcel A is not in compliance to 16.8.16 Lots.

Driveway

Title 16.2 Definitions, the length of a driveway is 500 feet. The current proposal anticipates a driveway in excess of 500 feet. In addition, the Applicant may want to consider having the wetland impact incurred by the eventual driveway now, since such disturbance needs Planning Board approval. Staff may have more information after Public Safety has an opportunity to comment on the application.

Wildlife Habitat

Potential vernal pool habitat is shown on the plan. The pool identified outside the depicted wetlands should be shown with a 100-foot setback, required by State and Federal regulations. As mentioned in staff comments under *O. Aesthetic, Cultural and Natural Values Protected* (in the draft findings, following), this particular area is uniquely situated between two significant wildlife habitats; Lewis Farm Conservation Subdivision open space and the Town Forest to the north, and Hill Creek and associated wetlands to the south. (see Att.1, 2/27/14 PRN)

The Board can consider requiring a condition of approval that restricts the disturbance (clearing and cutting) in the 100-foot wetland (and proposed vernal pool) setback, with the exception of a driveway to access the future dwelling. This measure would help ensure continuity through the habitat corridor (see Att.1, 2/27/14 PRN).

Waiver Request

The applicant has submitted a request for the Planning Board to waive the requirements in Table 1, Chapter 8, Article IV in Title 16 *Design and Construction Standards for Streets and Pedestrian Ways*. It is Staff's understanding the Applicant claims that since the Average Daily Trips (ADT) are less than what is typically attributed to one household (10 ADT) the current proposal does not apply to the street standards.

If the street standards are not applied, then there shouldn't be a need for a street, which is the only method in this case to split the subject parcel and provide the required frontage. The Board may want to consider modifying or waiving specific components of Table 1, as they may not apply at this point in time. If this is the case, the Plan and conditions need to be clear on what those items are and if any of them are required at a later date, if and when more dwelling units are accessing the new street.

Frontage

The above assumes the Board concurs with the Applicant's plan not to provide access for the existing dwellings to the new street. Inherent in the current proposal, Parcel B is created and provides legal frontage to the existing dwellings where there was none (or sufficient) before. In 2008, the parcel, Map 61 Lot 8, was approved to be subdivided resulting in 3 new lots, and "remaining lot area" as noted on the plan. The latter is important since at the time of the subdivision the "remaining lot area" included four dwelling units that equates to a developed lot. It is questionable if the plan should have been approved with the remaining lot having less than the required 150 feet of frontage.

In summary, the Board should consider the access to the current dwellings and require that it be changed to the new street to conform to Town's definition of "Street Frontage". This would also require that the new street be built to standards identified in Table 1, Title 16.8.4, for Class I, to be upgraded to Class II requirements for subsequent dwellings.

Recommendation

A site walk has been held and the Board, after review, should adopt the minutes attached.

Board should determine which staff comments are relevant and direct the Applicant to make the necessary changes.

KITTERY PLANNING BOARD

DRAFT FINDINGS OF FACT

UNAPPROVED

for

Beatrice Way Right-Of-Way

Right-Of-Way Plan Review

Note: This approval by the Planning Board constitutes an agreement between the Town and the Developer incorporating the Development plan and supporting documentation, the Findings of Fact, and all waivers and/or conditions approved and required by the Planning Board.

WHEREAS: Owner Operation Blessing LP, and applicant Richard Sparkowich, propose a new Right-Of-Way to allow the division of remaining land from the previously approved 3-lot subdivision located between Highpoint Circle and Kittree Lane. The site identified as Tax Map 61 Lot 08, ±65 acres, in the Residential - Rural (R-RL) Zone. Agent is Ken Markley, Easterly Survey Inc.

Hereinafter the “Development”.

Pursuant to the Plan Review meetings conducted by the Planning Board as duly noted; and pursuant to the Project Application and Plan and other documents considered to be a part of the approval by the Planning Board in this finding consist of the following (Hereinafter the “Plan”), prepared by . Easterly Surveying, Inc (or as noted):

1. Right-Of-Way Plant entitled:
Proposed Division of Land & “Beatrice Way” Right-Of-Way Plan... , Kittery, Maine REV Date: 2/27/2014
2. Submitted application, cover letters and associated documentation: Date: 2/06/2014

Hereinafter the “Plan”.

NOW THEREFORE, based on the entire record before the Planning Board as and pursuant to the applicable standards in the Land Use and Development Code, the Planning Board makes the following factual findings as required by Section 16.10.8.3.4. and as recorded below:

FINDINGS OF FACT

Action by the board shall be based upon findings of fact which certify or waive compliance with all the required standards of this title, and which certify that the development satisfies the following requirements:
A. Development Conforms to Local Ordinances. <i>The proposed development conforms to a duly adopted comprehensive plan as per adopted provisions in the Town Code, zoning ordinance, subdivision regulation or ordinance, development plan or land use plan, if any. In making this determination, the municipal reviewing authority may interpret these ordinances and plans.</i>
See Staff comments above.
Vote of __ in favor__ against __ abstaining
B. Freshwater Wetlands Identified. <i>All freshwater wetlands within the project area have been identified on any maps submitted as part of the application, regardless of the size of these wetlands.</i>
Appears to meet the standard. Wetlands are shown on the plan. Plan references 2007 data, wetlands should be re-certified, especially within the likely impacted areas of the parcel.
Vote of __ in favor__ against __ abstaining

C. River, Stream or Brook Identified. <i>Any river, stream or brook within or abutting the proposed project area has been identified on any maps submitted as part of the application. For purposes of this section, "river, stream or brook" has the same meaning as in 38 M.R.S. §480-B, Subsection 9.</i>
<i>It is apparent from the aerial photo/orthoimagery that not all the stream features on the parcel have been shown on the plan. The stream, or portion of, that is likely to be impacted has been shown on the plan.</i>
Vote of __ in favor__ against __ abstaining
D. Water Supply Sufficient. <i>The proposed development has sufficient water available for the reasonably foreseeable needs of the development.</i>
<i>Appears to meet the standard. Private wells are used on abutting properties and service the existing dwellings. A private well is anticipated and there appears to be enough space to meet required setbacks from septic fields.</i>
Vote of __ in favor__ against __ abstaining
E. Municipal Water Supply Available. <i>The proposed development will not cause an unreasonable burden on an existing water supply, if one is to be used.</i>
<i>Not applicable. Municipal water is not available. A private well is anticipated.</i>
Vote of __ in favor__ against __ abstaining
F. Sewage Disposal Adequate. <i>The proposed development will provide for adequate sewage waste disposal and will not cause an unreasonable burden on municipal services if they are utilized.</i>
<i>The standard appears to be met. Individual subsurface wastewater disposal system proposed.</i>
Vote of __ in favor__ against __ abstaining
G. Municipal Solid Waste Disposal Available. <i>The proposed development will not cause an unreasonable burden on the municipality's ability to dispose of solid waste, if municipal services are to be used.</i>
<i>The standard appears to be met. The proposed development does not require any changes to municipal solid waste service.</i>
Vote of __ in favor__ against __ abstaining
H. Water Body Quality and Shoreline Protected. <i>Whenever situated entirely or partially within two hundred fifty (250) feet of any wetland, the proposed development will not adversely affect the quality of that body of water or unreasonably affect the shoreline of that body of water.</i>
<i>The standard appears to be met. Portions of the development are located within 250 feet of wetlands but the development should not adversely affect the quality of the water body.</i>
Vote of __ in favor__ against __ abstaining
I. Groundwater Protected. <i>The proposed development will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of groundwater.</i>
<i>The standard appears to be met. The proposed development should not adversely affect the quality or quantity of groundwater.</i>
Vote of __ in favor__ against __ abstaining
J. Flood Areas Identified and Development Conditioned. <i>All flood-prone areas within the project area have been identified on maps submitted as part of the application based on the Federal Emergency Management Agency's Flood Boundary and Floodway Maps and Flood Insurance Rate Maps,</i>

and information presented by the applicant. If the proposed development, or any part of it, is in such an area, the applicant must determine the one hundred (100) year flood elevation and flood hazard boundaries within the project area. The proposed plan must include a condition of plan approval requiring that principal structures in the development will be constructed with their lowest floor, including the basement, at least one foot above the one hundred (100) year flood elevation.

The property does lie within the floodplain, and it is not clear to what extent. There are some plan notes that indicate flood hazard area, though the delineation does not correspond with the current FIRM.

Vote of __ in favor__ against __ abstaining

K. Stormwater Managed.

Stormwater Managed. The proposed development will provide for adequate stormwater management

There are no indication as to how the proposed road will be graded and how stormwater will be managed.

Vote of __ in favor__ against __ abstaining

L. Erosion Controlled.

The proposed development 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.

There are erosion control notes on the plan.

Vote of __ in favor__ against __ abstaining

M. Traffic Managed.

The proposed development will:

- 1. 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; and*
- 2. Provide adequate traffic circulation, both on-site and off-site.*

The standard appears to be met.

Vote of __ in favor__ against __ abstaining

N. Water and Air Pollution Minimized.

The proposed development will not result in undue water or air pollution. In making this determination, the following must be considered:

- 1. Elevation of the land above sea level and its relation to the floodplains;*
- 2. Nature of soils and sub-soils and their ability to adequately support waste disposal;*
- 3. Slope of the land and its effect on effluents;*
- 4. Availability of streams for disposal of effluents;*
- 5. Applicable state and local health and water resource rules and regulations; and*
- 6. Safe transportation, disposal and storage of hazardous materials.*

The standard appears to be met.

- It does not appear that filling or development is proposed within a 100 year floodplain, however, anticipated driveway access will;
- The Applicant has provided a portion of the 2006 HHE-200 report for the test pit locations shown on the plan. No current letter/report by a soil scientist stating that the site can support subsurface wastewater disposal systems.
- No topographic information in the area of the test pits to evaluate slope.
- Not applicable. It appears the streams on site are not in the vicinity of
- The Applicant needs to address.
- Not applicable. No hazardous materials anticipated.

Vote of __ in favor__ against __ abstaining

O. Aesthetic, Cultural and Natural Values Protected.

The proposed development will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics,

<i>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.</i>
<i>The site does have significant wildlife habitat in the form of potential vernal pools located to the rear/westerly portion of the property. The Board should consider this and the proximity of the Lewis Farm Conservation Subdivision's open space to the north and the large expanse of wetland and wildlife habitat to the south that ultimately extends to Spruce Creek.</i>
Vote of __ in favor__ against __ abstaining
P. Developer Financially and Technically Capable. <i>Developer is financially and technically capable to meet the standards of this section.</i>
Vote of __ in favor__ against __ abstaining
S. For a Right-Of-Way Plan. The Proposed ROW: <i>1. Does not create any nonconforming lots or buildings; and</i> <i>2. Could reasonably permit the right of passage for an automobile.</i>
<i>1. It appears that Parcel B, that includes existing dwelling units, has sufficient frontage, where before, the 57 acre plus parcel had insufficient frontage thereby making it non-conforming. The Board should consider, however, if access to these units should be from the proposed Right-Of-Way, where the legal frontage (see Title 16.2 Street Frontage) is obtained, or from the existing location of Old Farm Road.</i> <i>It appears that Parcel A does not have a front yard, as defined in Title 16.2 Yard, Front. This is relevant in that in order to find that the proposed lot is conforming, the appropriate provisions of the Code have to be applied. These include: Title 16.8.16 Lots and associated terms defined in 16.2. If the applicable provisions cannot be met then the lot and ROW design needs to change.</i>
<i>2. This standard appears to be met.</i>
Vote of __ in favor__ against __ abstaining

NOW THEREFORE the Kittery Planning Board adopts each of the foregoing Findings of Fact and based on these Findings determines the proposed Development will have no significant detrimental impact, and the Kittery Planning Board hereby grants Preliminary and Final Approval for the Development at the above referenced property, including any waivers granted or conditions as noted.

Waivers:

- 1.

Conditions: (All conditions must be included on the final plan prior to signature by the Planning Board Chairman)

1. Final Plan must include notes that reflect adherence to the Maine DEP *Best Management Practices* for all work associated with site and building renovations to ensure adequate erosion control and slope stabilization.
2. Prior to the commencement of grading and/or construction within a building envelope, as shown on the Plan, the owner and/or developer must stake all corners of the envelope. These markers must remain in place until the Code Enforcement Officer (CEO) determines construction is completed and there is no danger of damage to areas that are, per Planning Board approval, to remain undisturbed.
3. No changes, erasures, modifications or revisions may be made to any Planning Board approved final plan. See Title 16.10.9.1.2.

The Planning Board authorizes the Planning Board Chairman to sign the Final Plan and the Findings of Fact upon confirmation of compliance with any conditions of approval.

APPROVED BY THE KITTERY PLANNING BOARD ON _____, 2013

Vote of __ in favor__ against __ abstaining

Thomas Battcock-Emerson, Planning Board Chairman

Instructions/Notice to Applicant:

1. One (1) mylar copy and two (2) paper copies of the recorded Plan and any and all related state/federal permits or legal documents that may be required, must be submitted to the Town Planning Department. The date of Planning Board approval must be included in the signature block on the final plan.
2. Prior to the release of the signed plans, the applicant must pay all outstanding fees associated with the permitting, including, but not limited to, Town Attorney fees, peer review, newspaper advertisements and abutter notification, and wetland mitigation.
3. Performance Guaranty Conditions. Prior to soil disturbance, the Developer must submit to the Planning Department a Performance Guarantee and/or an escrow account to pay for any required field inspections or improvements. See Title 16.10.8.2.2.
4. State law requires all subdivision plans, and any plans receiving waivers or variances, be recorded at the York County Registry of Deeds within 90 days of the final approval.
5. **An aggrieved party with legal standing may appeal a final decision of the Planning Board to the York County Superior Court in accordance with Maine Rules of Civil Procedures Section 80B, within forty-five (45) days from the date the decision by the Planning Board was rendered. See Title 16.6.2.A.**
6. This approval by the Planning Board constitutes an agreement between the Town and the Developer, incorporating as elements the Development Plan and supporting documentation, the Planning Board Findings of Fact, any Conditions of Approval, and any requirements as set forth in Title 16, Land Use and Development Code of Ordinances.

Site Walk minutes

Beatrice Way Right-Of-Way Plan Review

April 1, 2014

Attendees:

All Planning Board members present

Staff; G. Mylroie, C. DiMatteo

Applicant: Rick Sparkowich and Byron Grant, Operation Blessing and Ken Markley, NorthEasterly Surveying

Abutters: J. Gasbarro, 11 Highpointe Circle; D. Hanson, 14 Highpointe Circle; Mary Ellen Ciali, 10 Kittree Lane; Darleen McIntyre, Old Farm Road; D. Sparkowich, Old Farm Road; and M. Morehead, 10 Highpointe Circle.

Handouts: 11x17 reduction of proposed Right-Of-Way plan previously submitted, and a letter with several plan exhibits that summarized the access history among the associated parcels/developments, entitled "Right of Way Chronological History-Operation Blerissing-22/24 Old Farm Road, Kittery Tax Map 61 Lot 8- Job12726"

Meeting called to order at 5:05 PM by Vice-Chair S. Tuveson.

K. Markley presented the information found in the plan exhibits.

Clarification on Right-Of-Way shown on extending from Old Farm Road; K. Markley stated he was not aware of any supporting information other than what is shown sketched on CEO building permit application.

Walk commenced from the terminus of Highpointe Circle, opposite house #9, towards Kittree Lane.

{Mr. Battock-Emerson arrived}

Stopped opposite the driveways of #11 and #14 Highpointe Circle:

- 1) Discussed the existing roadway between the properties and how access by the Applicant along this portion of road originated, through the High point Circle Subdivision. The abutters Gasbarro and Hanson own the land while applicant has a right-of-way over the land. Board expressed to see deed information regarding OB access. (Applicant provided later in the meeting to staff). Currently Gasbarro and Hanson share in the maintenance of the roadway that was installed by the Applicant as part of the Beatrice Way 2008 subdivision. The actual Right-Of-Way was part of the High Point Estates (Highpointe Circle) subdivision approval.

Proceeded to the end of what is referenced as the High point circle "extension" and the beginning of the unnamed section of roadway, refined on the ROW plan Exhibit as #4.

- 2) Granite marker/monument identified by R. Sparkowich as to the end of the land/roadway that Gasbarro and Hanson own and beginning of the stretch of Roadway that was part of the Beatrice Way 2008 approved subdivision and connects to Kittree Lane.

Proceeded to a graveled drive behind the Gasbarro's house at 11 Highpointe Circle known as the "woods road".

2012-2014
PLANNING BOARD ACTION ITEMS

DATE	ITEM	PRIORITY	ACTION TAKEN	DATE
8/9/2012	16.10.9.2 REDEFINE FIELD CHANGES; Major/Minor	1	Ongoing	
10/11/2012	REVIEW 16.10 (WORKSHOP ITEM #1 FROM 10/11/12 WORKSHOP) Plan Application Review	3		
	Post Building Permits on Web Site		Requested; Shelly Bishop; TBD	
	SUGGESTED ORDINANCE CHANGES BE AVAILABLE ONLINE	2		
	ABUTTER'S LIST TO PB EARLY ON, BEFORE PUBLIC HEARING	1	at sketch plan	4/25/2013
10/13/2012	DPW PROJECTS COME BEFORE PB; NEED UPDATED LIST	2	No DPW update submitted since October, 2012	4/25/2013
	BUSINESS OVERLAY ZONES: WHERE AND WHAT CHANGES; 16.3.2.20 Proposed Quality Improvement Overlay; form based code vs. individual ordinances (Bob M.)	2	Workshop; Sustain So ME; set up January 2014 workshop (1/24 AM)	4/25/2013
2/14/2013	DEFINE COMMERCIAL RECREATION	2	In process	
2/14/2013	OUTDOOR SEATING/use of public ROW/Title 5 (See also: VIII.3.i.iv 2015 Code Amendments: Briefing Book)	1	Ongoing (Winter, 2014)	
2/28/2013	UPDATE DESIGN STANDARDS FOR LED LIGHTING:	3		
3/28/2013	Set up Workshop to discuss High Pointe Circle Issues: Road Extension & Gate and use of woods road; review prior approvals and minutes	1	Staff (GM) will attempt to resolve and report to KPB	4/25/2013
3/28/2013	CONTINUE WORKSHOP WITH KCPC, KOSC REGARDING 1 - 3 ACRE RR; discuss LD 220 and LD 1810 and potential impact on property values and future land use regulation; restrict # building permits issued per year (See also: VIII.3.i.i 2015 Code Amendments: Briefing Book)		May 15, 2013 Workshop; December 3, 2013 workshop, w Soil Suitability: what is status of LD 220 and 1810?	Ongoing
4/11/2013	Format of Comp Plan		strike out and underline existing 3/25/2002 CP	Ongoing
4/25/2013	WORKSHOP: Cluster Ordinance needs work USABLE OPEN SPACE RETAIN ROAD FRONTAGE (Buffers) TRAFFIC STUDIES	2	KOSC wants input	
4/25/2013	PB Workshop Update (MMA?): training; education; conflict of interest; attendance/voting;	1	Retreat: January 10, 2014; MMA workshop 3/25/14	Ongoing
4/25/2013	16.11.3 SHOREFRONT PLAN REVIEW	2	To Council for adoption	Ongoing
4/26/2013	ROADS / SIDEWALKS TO NOWHERE (ROW plans)	1	Ongoing	
8/22/2013	No site work while application before Planning Board; site dev pre-meeting; CMA construction inspection;	1	January 2014	
10/24/13 Amendment	DPW Road Cuts; Title 5 amendment; approved by PB 10/24; to Council 11/25		Revise per Council Action (on Hold)	
	Shoreland definition			
	HAT - Highest Annual Tide: no Elevation 6			
	Definition: Substantially complete re: development vs. building permits			

2012-2014
PLANNING BOARD ACTION ITEMS

	Soil Suitability Guide; discontinue; how do other communities handle?	1	Workshop December 3, 2013	Ongoing
11/14/2013	Sidewalks to nowhere; case by case basis; further discussion			
11/14/2013	Waivers; legal issue?		January 2014	
11/14/2013	Fines			
11/14/2013	16.7.3.5.6 Reconstruction periods			
11/14/2013	Structure replacement outside of shoreland zone (missing from code)	1		
11/14/2013	Federal standards, re: road design			
11/14/2013	COUNCILOR DENNETT'S PROPOSED CHANGES TO KPB BY-LAWS	1	Markup provided; discussed 11/14; 12/12; 1/14; 3/14	Ongoing
11/14/2013	Review flood hazard ordinance; 16.5.3.4		Coordinate w CMA; need estimates	
12/12/2013	Structure replacement inside shoreland/excavation	1		
12/12/2013	Pedestrian / Bike paths			
12/12/2013	Minor subdivisions; density; septic			
1/23/2014	Outdoor Seating (extend to other zones)			
1/24/2014	Findings of Fact workshop			
2/27/2014	Extension of subdivisions/building permit periods	1	Reviewed 3/27/14;	Ongoing
2/27/2014	List of Committees/Boards to monitor ?			
2/27/2014	Flag Lots (16.8.-16.9)			
3/13/2014	Septic pretreatment requirement as bonus (See also: VIII.3.i.ii 2015 Code Amendments: Briefing Book)			
3/13/2014	Proof of building materials (ie. sand from Alfred for septic systems)			
	FY 2015 Amendments: Briefing Book			
3/27/2014	iii. Quality Improvement Development Standards update v. Adjacent off-site improvement update vi. Consolidate RR and RC zones vii. Consolidate BL and L-1 zones viii. Sign standards/education/enforcement			
3/27/2014	Kittery Historic Resources; historic designation identification			

**Town of Kittery
 Planning Board Meeting
 April 10, 2014**

Kittery Performing Arts Outdoor Concert Area – 70/76 Dennett Rd - Sketch Plan Review
 Owner William Cullen and applicant Kittery Performing Arts Center, L3C, is requesting consideration of their plans for an outdoor recreation and concert area to be located at 70/76 Dennett Road, Tax Map 6 Lots 15B and 16A and Map 13 Lot 4, ±24 acres in the Business Park Zone. Agent is Lee Consavage of Seacoast Consulting Engineers, Eliot, Maine.

PROJECT TRACKING

REQ'D	ACTION	COMMENTS	STATUS
YES	Sketch Plan Review	Scheduled: 4/10/14	
NO	Site Visit		
Yes	Preliminary Plan Review Completeness/Acceptance		
Yes	Public Hearing		
Yes	Final Plan Review		
<p>Applicant: Prior to the signing of the approved Plan any Conditions of Approval related to the Findings of Fact along with waivers and variances (by the BOA) must be placed on the Final Plan and, when applicable, recorded at the York County Registry of Deeds. PLACE THE MAP AND LOT NUMBER IN 1/4" HIGH LETTERS AT LOWER RIGHT BORDER OF ALL PLAN SHEETS. As per Section 16.4.4.13 - Grading/Construction Final Plan Required. - Grading or construction of roads, grading of land or lots, or construction of buildings is prohibited until the original copy of the approved final plan endorsed has been duly recorded in the York County registry of deeds when applicable.</p>			

Background

A local L3C (Low-Profit Limited Liability) company is proposing to develop an outdoor recreation and concert area. This is one of three primary objectives for Kittery Performing Arts Center, L3C. The other two include: land preservation within the Business Park Zone; and the eventual construction of a 2600-seat performing arts center. All three objectives presumes the purchase of two undeveloped sites within the Business Park Zone, the three parcels considered as part of the sketch plan, approximately 24 acres in size, and another site that is approximately 86 acres in size.

Review

The proposal before the board is an interim plan to begin a campaign to support the organization’s primary objectives stated above and in their application.

Below is an excerpt from the zoning pertinent to the site and proposal.

16.3.2.10 Business – Park B-P

A. Purpose.

To encourage investment that promotes development of a high quality park-like setting for both the business and residential communities. Cluster mixed-use development must be used on larger tracts of land where offices, retail sales, services, lodging, open space, housing and light manufacturing space are blended with residential and moderate entertainment to foster general business growth and a sense of community. The intent of cluster mixed-use development is to provide a more efficient use of land than might be obtained through segregated development procedures.

B. Permitted Uses.

1. The following land uses are permitted for projects that are cluster mixed-use developments:
 - e. Commercial parking lot or parking garage;
 - f. Conference center;
 - n. Place of public assembly, including theater;
 - o. Public open space recreational uses, recreational facilities, and selected commercial recreation;

2. The following land uses are permitted for projects that are not cluster mixed-use developments:

- a. Business and professional offices;
- b. Accessory uses and buildings; and
- c. Business services.

Staff has the following comments/questions:

- 1) The current zoning does not appear to anticipate the proposed use without being part of a larger mixed-use development. This would include a residential component.
- 2) It is not clear from the submitted plans the extent of the disturbance and type of treatment proposed in order to achieve the interim objective of a concert area. Is the 533 stall parking area a grass field or gravel lot? Are the seating areas paved or lawn areas?
- 3) The seating areas designated on the plan appear to be undersized for the stated number of seats. How have these areas been determined? The NFPA Life Safety Code requires 7 to 15 net S.F./person for concentrated and less concentrated assembly use without fixed seating.
- 4) Board needs to consider to what extent and in what manner should the wetland setback be used for seating. Table 16.9 allows for no setbacks for “low intensity recreation” and as close to 25 feet for top soil removal with an erosion and sedimentation plan.
- 5) It is not clear if all of the proposed parking is feasible. Topography, especially on parcel 13-4, may limit the actual amount of parking possible. Providing on subsequent plans the limit of all area required for the parking, i.e. stalls (shown) and aisles (not entirely shown) as well as expected clearing limits, would in this regard. The calculations used to determine the required amount of parking should be provided and ultimately listed on the site plan.
- 6) Topography is required information for sketch plan, per 16.10.4.2.2.B. Maine GIS has available 2-foot contours the applicant can use.
- 7) Is Parcel 6-17A (identified on GIS) included with Parcel 6-16A? Has the applicant secured formal 'right, title and interest' from the property owner (will be required prior to preliminary review).
- 8) The proposal is likely incur a traffic moving permit from MDOT (in access of 100 ADT) and Stormwater permit from MDEP (greater than 1 acre of disturbance). This should be addressed prior to the preliminary plan application.
- 9) A management plan addressing life safety issues should be prepared as the project develops to aid in establishing a common understanding between the owner/applicant and town’s fire and police departments.

Recommendation

Prior to approving the concept and further review (and expense to the Applicant associated with such review) the Board must determine whether the proposal meets the purpose and permitted uses in the Business Park zone, as the proposal does not include, at this time, a cluster mixed-use development component. Is the applicant intending to further develop the parcel(s) to meet the purpose of the Business Park zone?

The action by the Board must include “determination whether the sketch plan proposal complies with the standards...” and when necessary “make specific suggestions in writing to be incorporated by the applicant in subsequent submissions”.

As a sketch plan, the level of information submitted, with the addition of the information raised in the comments above, appears adequate to move forward to preliminary plan review requiring full site development, engineering, traffic impact, lighting and noise impact, and site access/egress analyses, etc., compliance with the Comprehensive Plan, and Peer Review.



TOWN OF KITTERY MAINE
TOWN PLANNING AND DEVELOPMENT DEPARTMENT

200 Rogers Road, Kittery, Maine 03904

Phone: (207) 475-1323

Fax: (207) 439-6806

www.kittery.org

RECEIVED
 MAR 05 2014

BY: _____

**APPLICATION: SITE OR SUBDIVISION-
 SKETCH PLAN REVIEW**

THIS REVIEW PROCESS REQUIRES APPROVAL FROM BOTH THE TOWN PLANNER AND THE CODE ENFORCEMENT OFFICER

FEE FOR REVIEW	<input checked="" type="checkbox"/> \$300.00	Amount Paid: \$300.-
		Date: 3-5-14

PROPERTY DESCRIPTION	Parcel ID	Map	6	Lot	15B 16A 4	Zone(s)- Base: Overlay: MS4	____ BP ____ ____ ____ YES ____ NO	Total Land Area	24 Acres
	Physical Address	76 Dennett Road							

PROPERTY OWNER'S INFORMATION	Name	William Cullen		Mailing Address	113 Old Farm Lane Eliot, ME 03903
	Phone	207-252-1437			
	Fax				
	Email	wmjcullen@gmail.com			

APPLICANT'S AGENT INFORMATION	Name	Lee Consavage		Name of Business	Kittery Performing Arts Center, L3C
	Phone	207-475-7054		Mailing Address	261 Jennie Lane Eliot, ME 03903
	Fax				
	Email	lee@seacoastengineers.com			

PROJECT DESCRIPTION	<i>See reverse side regarding information to be provided.</i>	
	Existing Land Use: Storage of equipment and large containers	
	See attached project description.	
	Proposed Land Use and Development: Performing Arts Center and Outdoor Concert Area	

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PROJECT DESCRIPTION	Please describe any construction constraints (wetlands, shoreland overlay zone, flood plain, non-conformance, etc.)
	The property does contain wetlands as shown on the attached sketch plan. The layout of the buildings and parking on the site includes the 100 foot buffer requirement. Our sketch plan is in compliance with setback and wetland requirements.

I certify, to the best of my knowledge, this application information is true and correct and I will not deviate from the Plan submitted without notifying the Town Planning and Development Department of any changes.

Applicant's Signature:	<u>Lee Company</u>	Owner's Signature:	<u>[Signature]</u>
Date:	<u>3/05/2014</u>	Date:	<u>3/5/2014</u>

MINIMUM PLAN SUBMITTAL REQUIREMENTS

- 15 Copies of this Application, Vicinity Map, and the Sketch Plan - 5 of which must be 24" X 36"

Sketch Plan format and content:

- A) Paper Size; no less than 11" X 17" or greater than 24" X 36"
- B) Plan Scale
 - Under 10 acres: no greater than 1" = 30'
 - 10 + acres: 1" = 50'
- C) Title Block
 - Applicant's name and address
 - Name of preparer of plan with professional information
 - Parcel's Kittery tax map identification (map - lot) in bottom right corner

NOTE TO APPLICANT: PRIOR TO A PLANNING BOARD SITE WALK, TEMPORARY MARKERS MUST BE ADEQUATELY PLACED THAT ENABLE THE PLANNING BOARD TO READILY LOCATE AND EVALUATE THE DEVELOPMENT'S DESIGN.

Vicinity Map – map or aerial photo showing 1,000 feet around the site.

Sketch Plan must include the following existing and proposed information:

Existing:

- Land Use Zone and boundary
- Topographic map (optional)
- Wetlands and flood plains
- Water bodies and water courses
- Parcel area
- Lot dimensions
- Utilities (Sewer/septic, water, electric, phone)
- Streets, driveways and rights-of-way
- Structures

Proposed: (Plan must show the lightened existing topography under the proposed plan for comparison.)

- Recreation areas and open space
- Number of lots and lot areas
- Setback lines and building envelopes
- Lot dimensions
- Utilities (Sewer/septic, water, electric, phone)
- Streets, driveways and rights-of-way
- Structures

Distance to:

- Nearest driveways and intersections
- Nearest fire hydrant
- Nearest significant water body

AN APPLICATION THE TOWN PLANNER DEEMS SUFFICIENTLY LACKING IN CONTENT WILL NOT BE SCHEDULED FOR PLANNING BOARD REVIEW.

Project Description: Kittery Performing Arts Outdoor Concerts

A group of residents in the Kittery, Maine area formed an L3C (Low-Profit Limited Liability) company to buy two undeveloped sites (24-acres and 86-acres) located in the Kittery Business Park for 3 purposes:

1. To protect 80% of the most pristine land from development.
2. To create an outdoor recreation and concert area for community use similar to the Stern Grove Recreation Area located in San Francisco.
3. To eventually build the Kittery Performing Arts Center (2600-seats) on the 24-acre site directly adjacent to highway I-95.

Our first step is to start hosting outdoor concerts on the 24-acre site, which is adjacent to highway I-95, beginning summer 2014. The land owner supports our vision and is generously allowing us to use his property. Our goal is to raise awareness and the funds necessary to purchase the land and build a permanent recreation and outdoor concert area for community use year round, including building a large 30 acre pond for wildlife and ice skating.

The following are permitted uses in the Business Park that are related to the outdoor concert venue: Commercial parking lot or parking garage, Conference center, Place of public assembly, including theater, and Public open space recreational uses, recreational facilities, and selected commercial recreation.

For Summer 2014, our goal is to host several small concerts (up to 500 people) in June & July. And then have 2 large concerts in August (up to 5,000 people). The following is a summary of our intent:

1. The concert area has near direct on/off access to highway I-95.
2. The concerts will most likely be held evenings from 7:00pm to 9:00pm.
3. The concerts will be in compliance the noise ordinance for the Business Park by using sound meters at property line to monitor loudness. The stage and sound will be directed away from homes.
4. The concerts will be in compliance with all local, fire and police ordinances.
5. Lighting will be directed away from adjacent properties.
6. Electricity will be provided by solar electric panels and a back-up generator.
7. Composting toilets & portable toilets will be provided.
8. Portable solar powered hot water hand washing stations will be provided.
9. Food & beverage vending services will be provided by licensed vendors. Potable water will be available through these vendors.
10. Beer will be available through licensed vendors.
11. The Kittery Fire Department & ambulance service will be located on-site during large concerts.
12. Parking will be limited to 700 vehicles on site. 250 of those vehicles will be required to be vans or buses capable of holding 10 or more passengers.
13. Arrangements will be made to shuttle other concert attendees from near-by satellite parking sites. Shuttle service will be provided from the C&J bus terminal located at the Pease Tradeport. Shuttle site locations include the Eliot Commons and possibly Post Office Square in Kittery (if adequate space allows).
14. We will limit ticket sales to parking available on and off-site.
15. Portable buildings will be set-up on site for equipment & performers.
16. We will collaborate with Kittery Public Safety to address all issues relative to Medical, Fire and Police issues.

Project Description: Kittery Performing Arts Outdoor Concerts

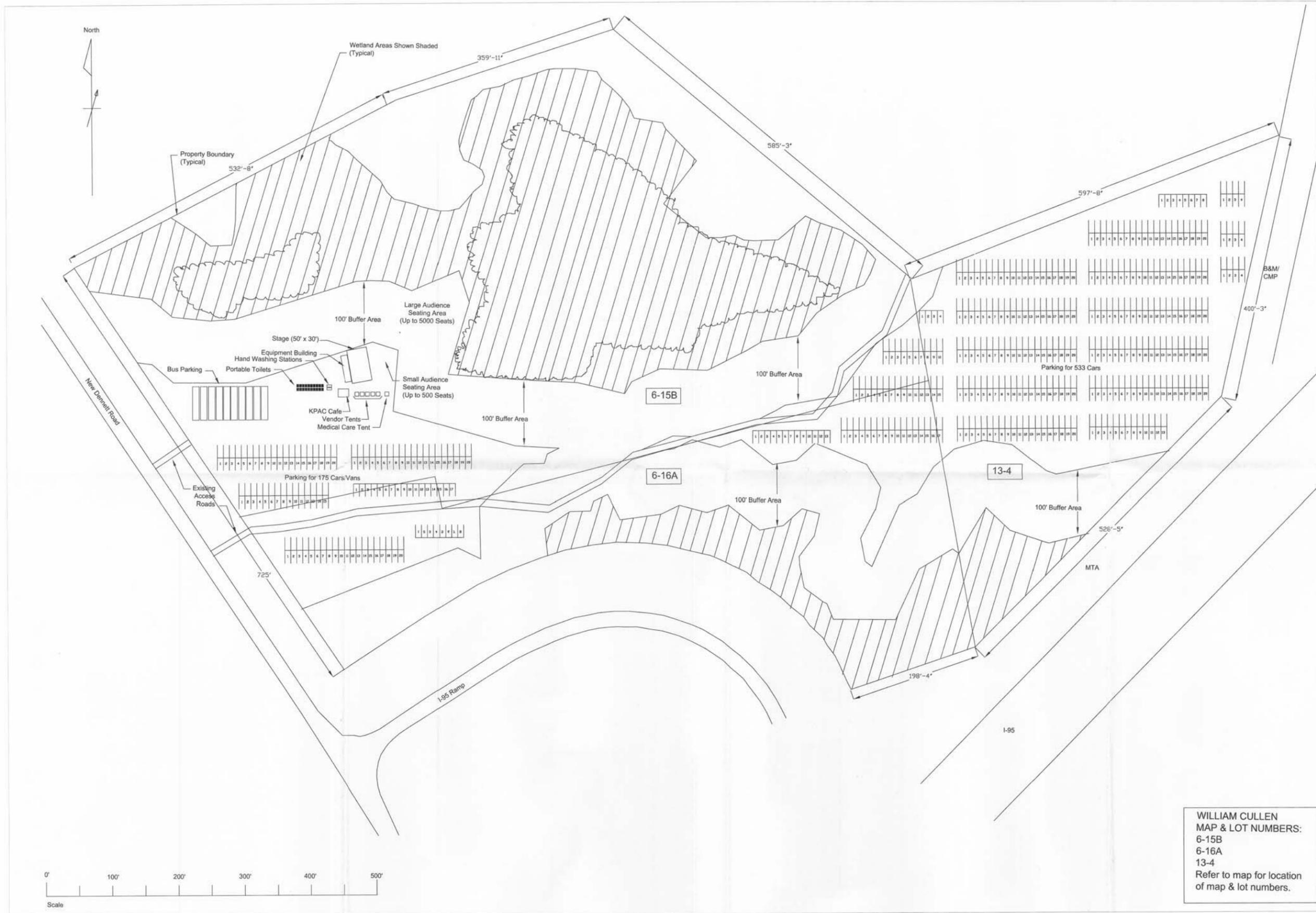
Access to the site will be through the two access roads from the property to Dennett Road.

We anticipate the Kittery Performing Arts Center and Outdoor Concert area will benefit Kittery residents and the Seacoast Arts community as follows:

1. Increased tourism to Kittery benefits local businesses.
2. New job opportunities.
3. Bringing arts to the community. The new outdoor concert venue could host a variety of top performers including ballets and musicals as well as rock, classical, jazz and country/western type concerts.
4. The new outdoor stage could be used by local performers and performing arts organizations to host their own events.
5. Educational opportunities; Due to our unique situation of not having power, water or sewer available to us initially, we will use this opportunity to design systems that allow us to function on the site comfortably with minimum resources. Those minimal resources include renewable energy, green building design, composting toilets, highly efficient appliances and recycling water. We will offer tours and discuss our unique designs to anyone interested in learning green design.
6. Another educational opportunity; Due to our desire to keep as much of the property as possible in its natural state we anticipate having a problem with mosquitoes during some of the concerts. We will use this opportunity to plant mosquito-hating plants to show how natural remedies may help control the problem. The University of New England in Biddeford, Maine recently had success controlling their mosquito problem using a similar technique.

For additional information, please contact Lee Consavage; lee@seacoastengineers.com or 207-475-7054

2014-03-05 KPAC-Outdoor.dwg
1/15/2004



WILLIAM CULLEN
MAP & LOT NUMBERS:
6-15B
6-16A
13-4
Refer to map for location
of map & lot numbers.

C1 SITE PLAN-Outdoor Concerts
1 Scale = 1/64" = 1'-0"

REVIEW SET 03-05-2014

MJS ENGINEERING, PC
3 PARKWAY ST., 4TH FLOOR
DURHAM, NH 03824
PHONE: (603) 859-4476, FAX: (603) 859-4827
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CONSULTING ENGINEERS

ISAAK DESIGN, PLLC
Architecture & Urban Design
35 Oyster River Rd
Durham, NH 03824
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603-969-6711



KITTERY PERFORMING ARTS CENTER
KITTERY, MAINE
Outdoor Concert Site Plan

Seacoast Consulting Engineers, LLC
261 Jennie Lane
Eliot, Maine 03903
207-370-7230
www.SeacoastEngineers.com
Project No. 2009-112
SCALE AS NOTED
DATE 11-10-2010
Designed By: LDC
Drawn By: LDC
Checked By: TDC

C1

KITTERY, MAINE

Route 236

Exit 2 in Maine

Route 103

Interstate I-95

Piscataqua River

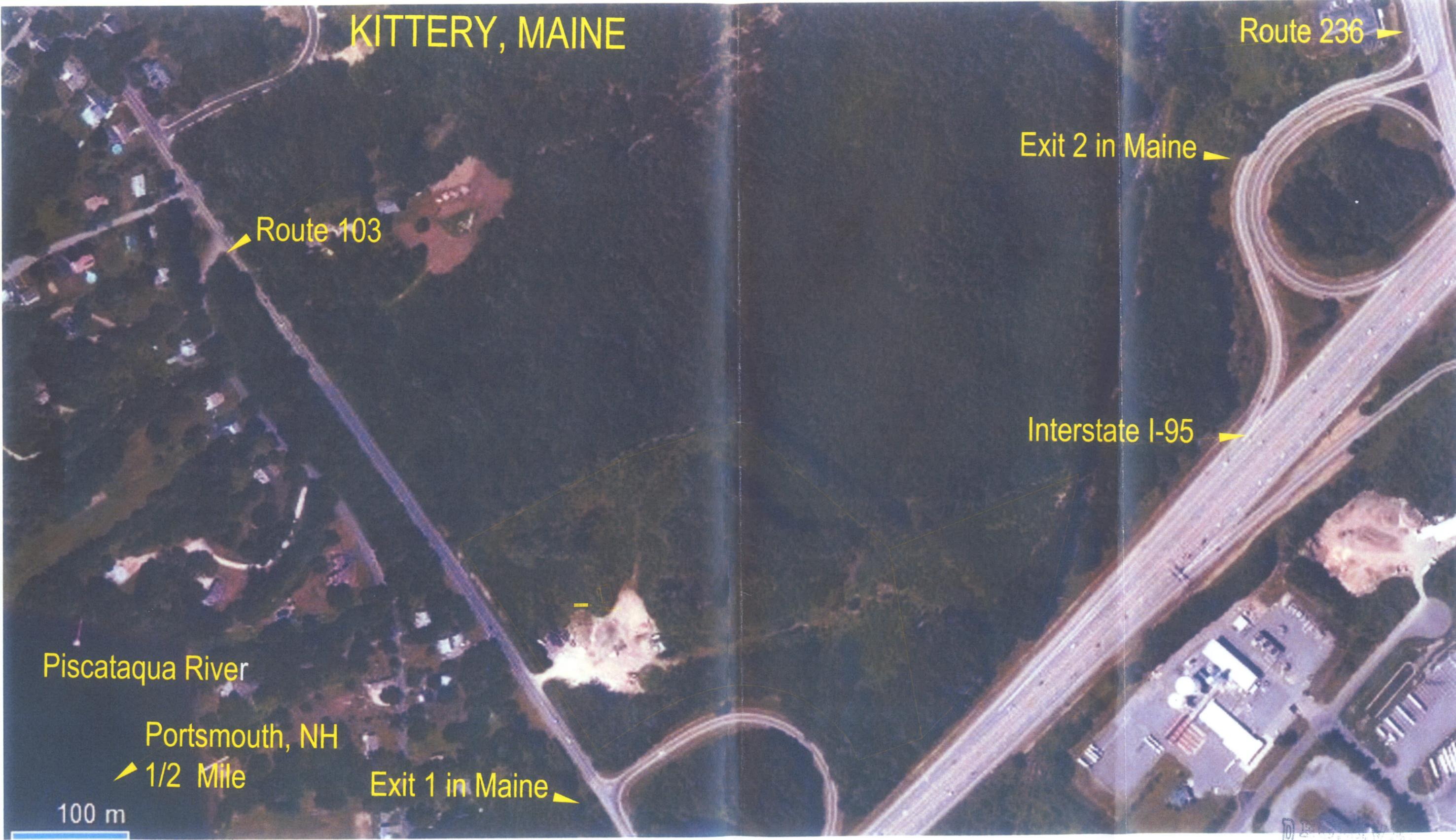
Portsmouth, NH

1/2 Mile

Exit 1 in Maine

100 m

R
MAR 05 2010



MAR 2014 BUILDING PERMIT REPORT

Date Issued	Permit #	Property Owner	Address	Map	Lot	C	R	Work	Description	Value	Fee	Impact Fee
		Number of Building Permits Issued		21								
		Value of Building Permits	\$1,607,104.00									
		Permit Fees Collected	\$20,340.00									
		Impact Fees Paid	\$735.00									
3/5/2014	14-055	SPRUCE CK RETAIL OUTLETS	340 US ROUTE 1 36 CROCKETT NECK	47	25	C		COMMERCIAL REF	LANE BRYANT	\$247,500.00	\$3,820.00	-
3/5/2014	14-056	KENDALL, ANN	ROAD	26	42	R		SOLAR	SOLAR ELEC PANEL ST	\$19,461.00	\$265.00	-
3/6/2014	14-057	PURINTON, STEVE	54 TILTON AVE	16	192	R		MAINTENANCE	REPLACE FURNACE & OIL TANK	\$5,591.00	\$25.00	-
3/6/2014	14-058	ERICKSON, KAREN	20 SEAPoint RD	58	7	R		MAINTENANCE	MAINT & REPAIR & RENOV	\$285,000.00	\$3,325.00	-
3/6/2014	14-059	DUGAS, ROBERT	80 PICOTT RD	49	11	R		SHED	SHED	\$500.00	\$31.00	-
3/11/2014	14-060	DOOLITTLE, JIM	15 STIMSON ST	3	18	R		RENOV	KITCHEN BATH RENOV	\$10,000.00	\$85.00	-
3/11/2014	14-061	DOOLITTLE, JIM	15 STIMSON ST	3	18	R		MAINTENANCE	ELECTRICAL MAINT & NEW	\$6,500.00	\$25.00	-
3/11/2014	14-062	WYMAN, LINDA	14 COOK ST	3	123	R		RENOVATION	BATH	\$5,000.00	\$25.00	-
3/11/2014	14-063	FIRST CONG CHURCH	23 PEPPERELL RD	18	17	C		MAINTENANCE	REGLAZE & PAINT WINDOWS	\$38,400.00	\$676.00	-
3/13/2014	14-064	CHRISTIANSON, JON	5 ELIZABETH LN	56	3-40	R		RENOV	FINISH 3RD FL	\$6,100.00	\$97.00	-
3/13/2014	14-065	SPEERT, DAVID	6 KEENE AVE 143 BRAVE BOAT HAR RD	36	66A	R		RENOV	RENOV	\$275,000.00	\$3,205.00	-
3/19/2014	14-066	WATTS, JOHN	RD	63		R		MAINTENANCE	KITCHEN AND REPAIR INT STAIR	\$16,000.00	\$97.00	-
3/24/2014	14-067	SSG6 LLC	436 US RT 1	50		C		COMMERCIAL REF	SUZANNE BISTRO	\$100,000.00	\$1,600.00	-
3/25/2014	14-068	LANDGARTEN, MICHAEL	578 HALEY RD	26	36	R		RENOV	RENOVATIONS PER PB	\$185,000.00	\$2,125.00	-
3/25/2014	14-069	WALLINGFORD SQ LLC	7 WALLINGFORD SQ	4	106	C		COMMERCIAL REF	MAINE MEAT, LLC	\$15,000.00	\$325.00	-
3/25/2014	14-070	BROCK, MATT	50 GOODWIN RD	58	51M	R		MAINTENANCE	RENOV BATHROOM	\$14,000.00	\$73.00	-
3/26/2014	14-071	NEWMAN, ROBERT	1 WHEELHOUSE WAY 23 BADGERS ISL W	71	1/27/20	R		RENOVATION	RENOV 1/2 GAR TO LIV SPACE	\$5,000.00	\$85.00	-
3/26/2014	14-072	BARTLETT, SUE DAVID	UNITE	1	28B	R		MAINTENANCE & REP	WATER DAMAGE	\$20,000.00	\$145.00	-
3/27/2014	14-073	DONNELL, BRIAN	5 ROSEBERRY LN	12	1/1/20	R		GENERATOR	11KW GENERATOR	\$6,052.00	\$97.00	-
3/27/2014	14-074	ZAMARRIPA, NATHAN	OFF BB HARBOR RD	63	64A	R		SINGLE FAMILY	SINGLE FAMILY HOUSE	\$192,000.00	\$2,329.00	\$460.00
3/27/2014	14-075	HAYES, EDWARD	30 PHIL BRICK ROAD	10	88	R		SINGLE FAMILY	3BR 2.5BA W/ATTACHED GARAGE	\$155,000.00	\$1,885.00	\$275.00

- 3) Some discussion of the issues related to the use of the “woods road”. R. Sparkowich proposed relocating the entire “woods road” away from the Gasbarro’s property towards his barn/garage where it can connect to the proposed Right-Of-Way and still provide access to the back portion of the property with construction and maintenance vehicles.

Proceeded down the “woods road” towards the existing dwellings and garage that are located off Old Farm Road.

- 4) Discussed the existing development and the Applicant’s interest in providing in the future two lots for their children. R. Sparkowich explained the location of these lots would front the proposed Right-Of-Way and would propose to terminate access to Norton Road via Old Farm Road.

Proceeded to the where the Applicant is proposing to relocate of the “woods road”.

- 5) Discussion of what type of access is planned for the relocated drive. R. Sparkowich explained that the drive would include vehicular access for the existing development and future lots along with maintenance vehicles he uses.

Proceeded to the terminus of the proposed Right-Of-Way.

- 6) R. Sparkowich identified the end of the hammerhead turn-a-round proposed as part of the new Right-Of-Way and pointed out the flags on site that represented the center line of the proposed roadway/right-of-way.

Proceeded to down the proposed Right-Of-Way, existing graveled drive in muddy condition, back towards the vicinity of Kittree Lane and Highpointe Circle “extension”.

- 7) Chair Battcock-Emerson asked if there were any further questions.
Hearing none, meeting adjourned at 6:10 PM.

Submitted by Chris DiMatteo, Assistant Planner
April 2, 2014