CITY OF DOVER

# DOVER PLANNING BOARD – AGENDA

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| Meeting Type: | Regular Meeting |
| Meeting Location: | McConnell Center, Room 306, 61 Locust Street, Dover, NH |
| Meeting Date: | **Tuesday, August 25, 2015** |
| Meeting Time: | **7:00 pm** |

1. **CITIZENS' FORUM**
2. **APPROVAL OF THE PRIOR MINUTES**
   - July 28, 2015 Regular Meeting Minutes
3. **OLD BUSINESS**
   A. Consideration and possible vote of an Open Space Subdivision for MCL Builders and Developers, LLC (Owner: Mace Family Revocable Trust), Assessor's Map I, Lot 6-C, zoned R-12, located at 46 Back River Road. (Subdivide existing lot into 8 lots. The applicant is requesting three waivers). *(P15-05)
4. **NEW BUSINESS**
   A. Impact Fee Waiver Request for Riparia – One Hundred First Street, LLC, Assessor's Map 6, Lot 3, located at 100 First Street. (Waiver of Public Safety – Police Impact Fee in return for First Street lighting as per 170.23-F-1-c).

   B. Consideration and acceptance of a Minor Lot Line Adjustment for George Maglaras (Owner: City of Dover), Assessor's Map 24, Lots 105 & 105A, zoned CWD, located at 20 & 22 Cocheco Street. *(P15-45)

   C. Consideration and acceptance of a Minor Lot Line Adjustment for George Maglaras, Assessor's Map 24, Lots 138 & 139, zoned CWD, located at 31 & 33 Cocheco Street. *(P15-46)

   D. Consideration and acceptance of a Conditional Use Permit, per Chapter 170-20-B(2), for Jason White (Owner: Big Holdings, LLC), Assessor's Map 23, Lot 24, zoned CBD-General, located at 245-249 Central Avenue. (Proposed 2nd residential building with 4 dwelling units & ground floor garage stalls as opposed to commercial).* (P15-44)

   E. Consideration and acceptance of a Site Plan Review for Johnson Creek Village (Owner: Real McKoy Properties, LLC), Assessor's Map H, Lot 1, zoned B-4, located at 301 Durham Road. (Proposed 9,880 sq. ft. elderly assisted care home attached to existing structure to contain 2 accessory staff apartments). *(P15-38)

   F. Consideration and acceptance of a Site Plan Review for Geoff Aleva, PE (Owner: Bob McGuire), Assessor's Map G, Lot 31-1, zoned I-2, located at 50 Crosby Road. (Proposed 12,000 sq. ft. building with 21 parking spaces). *(P15-43)
5. **STAFF COMMENTS**
6. **MEMBER COMMENTS**
7. **ADJOURNMENT**

*Indicates that if the application is accepted for discussion, the public hearing will be held the same evening, at which time any interested party may offer comment to the Planning Board. Persons with questions or wishing to see the plans are invited to visit the Planning Office, Monday through Thursday from 8:30 am to 5:30 pm and Friday 8:30 am to 4:00 pm.

You may also view materials at www.dover.nh.gov, a map showing project locations can be found at http://www.dover.nh.gov/government/city-operations/planning/index. Follow us on Twitter @DoverNHPlanning and find us on Facebook at https://www.facebook.com/DoverNHPlanning.

CITY OF DOVER

# DOVER PLANNING BOARD – MINUTES

| | |
|---|---|
| Meeting Type: | Regular Meeting |
| Meeting Location: | McConnell Center, Room 306<br>61 Locust Street, Dover, NH 03820 |
| Meeting Date: | **Tuesday, July 28, 2015** |
| Meeting Time: | **7:00 pm** |

**Members Present:** Dennis Ciotti (Chair), Frank Torr, Lee Skinner, Tom Clark, Dave White, Catherine Plante, Gina Cruikshank (Alternate), Maggie Fogarty (Alternate)

**Members Not Present**: Kirt Schuman (Vice Chair), William Garrison (Councilor), Christopher Lawrence

**Staff Present:** Steve Bird, City Planner, Donna Pohli, Assistant City Planner, Tracy Smith (Recording Secretary)

The Chair called the meeting to order at 7:01 p.m.

## 1. CITIZENS' FORUM

*Citizens Forum Open. Nobody Spoke. Citizens Forum Closed*

## 2. APPROVAL OF THE PRIOR MINUTES

- June 23, 2015 & July 14, 2015 Regular Meeting Minutes.

**Motion:** F.Torr made a motion to approve the June 23, 2015 Regular Meeting Minutes. Seconded by D.White. Vote U/A

**Motion:** F.Torr made a motion to approve the July 14, 2015 Regular Meeting Minutes. Seconded by D.White. Vote U/A

D.Ciotti introduced the new Assistant City Planner, Donna Pohli, adding she would be observing the meeting.

## 3. OLD BUSINESS

A. Consideration and possible vote on a Site Plan Review for Dubois Family 2003 Revocable Trust, Assessor's Map 22, Lot 3, zoned RM-U, located at 80 Henry Law Avenue. (Proposed 10 multi-family units within five buildings with associated parking). *(P15-17)

**Motion:** D.White made a motion to remove item 3.A from the table. Seconded by C.Plante. Vote U/A

S.Bird stated a memo was distributed to the Board members with additional comments from the City Engineer, D.White, regarding the updated plans received since the site walk, as well as a document from McEneaney Survey Associates asking for relief from the outdoor lighting regulations.

Kevin McEneaney, McEneaney Survey Associates, represented the applicant and stated Diane Hemingway, one of the Dubois Trustees was also present. He further stated the revised plan consists of eight new units in four buildings with two existing units, and clarified the parking for the units. He addressed condition #3 requesting a waiver to the lighting plan to use residential lights, not commercial lights, and described the proposed lighting in comparison to the requirements. He addressed condition #5 regarding the dumpster location not shown on plan and stated the applicant would like to provide a private trash removal contractor, adding they are not in favor of the dumpster due to odors and people using it who are not authorized to do so. He requested the conditions for #3 and #5 be waived.

T.Clark addressed the road name with K.McEneaney and suggested the applicant use Clay Hill Drive as the name, which would be added to the conditions.

Discussion ensued regarding removing condition #3 and adding the stipulations associated with the memo from D.White to the conditions, as well as adding the trash removal stipulation to the conditions as private trash pickup.

**Motion:** F.Torr made a motion to reopen the public hearing. Seconded by D.White. Vote U/A

*Public Hearing Opened. Nobody Spoke. Public Hearing Closed.*

**STAFF RECOMMENDATION:**
The Planning Department recommends the Planning Board approve the application with the following conditions:

**Conditions to Be Met Prior to Signing of Plans:**

1. The owner's signature shall be added to the final plan set submitted for signature.
2. The applicant shall provide the Planning Department with a digital version of the final plan.
3. The applicant shall revise the plan to add Clay Hill Drive as the road name.
4. The applicant shall revise the title of sheet #2 to be "Existing Conditions and Demolition Plan".
5. The applicant shall revise the plan to add that rubbish will be removed private contractors.
6. The applicant shall revise the plan to label snow storage areas.
7. The applicant shall revise the plan to add common site plan note #17 regarding providing sprinkler systems.
8. The applicant shall have the Stormwater Management Maintenance and Inspection Plan approved by the Community Services Department.
9. The applicant shall revise the plan to provide a minimum of six feet of separation between the gas and sewer mains.
10. The applicant shall revise the plan to remove the conflict between the water main and the utility pole.
11. The applicant shall have the drainage analysis reviewed and approved by the City Engineer.
12. The approval includes the granting of the waiver requested. The Board finds that the criteria of Chapter 149-19.A have been met.

**Conditions to Be Met Prior to Any Construction Activity:**

13. Construction hours shall be limited to Monday-Friday 7 AM-6 PM, Saturday 8 AM-5 PM, with no Sunday hours. Hours of construction shall be documented on a site construction sign along with the contact information for the general contractor. Said signage shall be located and approved by the City Engineer or Director of Planning and Community Development.

**Conditions to Be Met Prior to Issuance of a Building Permit:**

14. Any new dwelling units shall pay the current impact fees in place at the time of building permit application.
15. Any new dwelling unit shall be assessed the current water/sewer investment fees in place at the time of application for water/sewer service.

**Conditions to Be Met Prior to Issuance of a Certificate of Occupancy:**

16. The applicant shall provide a letter of credit or other form of security acceptable to the City for any unfinished work.

**Motion:** D.White made a motion to approve subject to staff recommendations. Seconded by L.Skinner. Vote U/A

B. Consideration and possible vote on a Waiver for First Rate Real Estate Group, LLC, Assessor's Map 2, Lot 76, zoned CBD, located at 11 Court Street (proposal is to waive the pavement setback requirement of 5 ft. on side and rear property lines and 10 ft. on front property lines per Site Review Regulations 149-15C). *(P15-34)

**Motion:** F.Torr made a motion to remove item 3.B from the table. Seconded by G.Cruikshank. Vote U/A

S.Bird gave an overview of the application, adding the applicant submitted revised plans on July 23, 2015.

Kevin McEneaney, McEneaney Survey Associates, represented the applicant and stated the home on Court Street had been removed, and the waiver request is to modify the setback requirements to construct a parking lot with 11 spaces for the tenants at 2 Silver Street which is below the threshold. He stated adjustments made to the plan to transfer parking from the east side to the west side so the spaces and headlights are farther away from buildings. He addressed issues regarding fence and wall construction, snow storage, and lighting, adding they did not propose lighting due to the street lighting provided. He read and distributed a letter from Janice and Devin Karkos and Richard Martuscello to the Board requesting no lighting or fencing and how it would affect their property.

Discussion ensued regarding clarification of the fence design and the parking associated with 2 Silver Street. K.McEneaney stated they are looking at additional parking at the library, adding the lot is separately owned and a separate entity not to be combined with this application. S.Bird confirmed the applicant would have to apply to combine the two.

**Motion:** D.White made a motion to reopen the public hearing. Seconded by C.Plante. Vote U/A

*Public Hearing Opened. Nobody Spoke. Public Hearing Closed.*

**STAFF RECOMMENDATION:**
The Planning Department recommends that the Planning Board approve the waiver with the following conditions:

1. The applicant shall revise the plan to add a street wall at least 24 inches in height as a base for the proposed 4 ft. fence.
2. The applicant shall install all required fencing prior to parking any vehicles in the parking lot.

**Motion:** L.Skinner made a motion to approve subject to staff recommendations. Seconded by G.Cruikshank. Vote U/A

**4. NEW BUSINESS**

A. Consideration and acceptance of a Minor Lot Line Adjustment for William R. & Sheila S. Dube Trustees, Assessor's Map L, Lots 96-A & 96-L, zoned R-20, located at 250 Dover Point Road. *(P15-39)

Joel Runnals, Norway Plains Associates, represented the applicant and stated the application is to transfer 1.81 acres from lot 96-A to 96-L. He further stated lot 96-L, the Dube house, will increase to 4.14 acres and adding frontage on Dover Point Road, and lot 96-A, the rental property, will decrease to 23,800 sq. ft. with access to sewer and water at Dover Point Road. He added the Dube house will have access to the sewer easement.

D.White confirmed with J.Runnals that the rental property will have access to city water and sewer and the Dube house has the sewer easement.

**Motion:** F.Torr made a motion to accept the application. Seconded by C.Plante. Vote U/A

*Public Hearing Opened. Nobody Spoke. Public Hearing Closed.*

**STAFF RECOMMENDATION:**
The Planning Department recommends that the Planning Board accept the application, hold the public hearing, and approve the lot line adjustment plat with the following conditions:

**Conditions to Be Met Prior to Signing of Plans:**

1. The owners' signatures shall be added to the final plat submitted for signature.
2. The applicant shall provide the Planning Department with a digital version of the final plat.
3. The applicant shall revise the plat to add the Planning File number P15-39 to the title block.
4. The applicant shall add the surveyor's stamp and signature to the final plat.
5. The applicant shall revise the plat to correct the rear setback in note #3 to be 30 feet.
6. The applicant shall revise the plat to show that iron pipes will be installed at all the new lot corners.

**Motion:** D.White made a motion to approve subject to staff recommendations. Seconded by G.Cruikshank. Vote U/A

B. Consideration and acceptance of a Change of Use for Seacoast Charter School (Owner: Measured Progress, Inc.), Assessor's Map E, Lot 33, zoned ETP, located at 171 Watson Road. (Proposal is to use existing structure as an Educational Institution, K-12). *(P15-41)

F.X. Bruton, Bruton & Berube, represented the applicant and addressed issues as stated in the application for the Change of Use to change the existing structure from an office space and child care facility to a charter school. He stated the variance application was approved by the Zoning Board of Adjustment on July 16, 2015 with the condition to limit the enrollment to 300 students. He addressed the Planning Department condition regarding the traffic study and provided a handout for the Planning Board to compare the traffic and parking with the school in comparison to Measured Progress, Inc., adding there were no traffic issues for them. He asked the Planning Board to reconsider the traffic study due to the fact that it was not required of Measured Progress, Inc. when they received their approval and due to the high cost of the study. Brianna Moynahan from Seacoast Charter School and John Woodman from Measured Progress, Inc. were also present.

Discussion ensued to confirm the building code requirements were met and any State requirements for an outdoor recreation area. B.Moynahan confirmed there were no requirements with set green space, and the school is not required to have fields.

**Motion:** F.Torr made a motion to accept the application. Seconded by D.White. Vote U/A

*Public Hearing Opened. Nobody Spoke. Public Hearing Closed.*

**STAFF RECOMMENDATION:**



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The Planning Department recommends approval of the change of use, with the following conditions:

1. The applicant shall prepare a standard traffic impact analysis study for review by the Planning Department.
2. The applicant shall have a meeting with the Building Official to conduct a thorough review of the building for compliance with code issues.
3. If the school decides to expand to include high school students, the applicant shall return to the Planning Board for a public hearing to review traffic and any other impacts.
4. The applicant shall pay the current impacts fees in place at the time of building permit application, prior to obtaining a certificate of occupancy.

Discussion ensued regarding condition #1 and the concern with waiving the traffic study if residents later complain about the traffic. S.Bird clarified the information provided in the standard traffic study and the need to obtain this information due to the amount of traffic schools typically generate.

**Motion:** L.Skinner made a motion to approve subject to staff recommendations. Seconded by T.Clark. Vote U/A

C. Consideration and acceptance of an Open Space Subdivision for MCL Builders and Developers, LLC (Owner: Mace Family Revocable Trust), Assessor's Map I, Lot 6-C, zoned R-12, located at 46 Back River Road. (Subdivide existing lot into 8 lots. The applicant is requesting three waivers). *(P15-05)

Bob Stowell, Tritech Engineering, represented the applicant and stated the updates to the plans in response to the Planning Technical Review Committee (TRC) meeting comments. Mike Lefevre, the applicant, and Peggy Mace, the land owner, were also present.

**Motion:** F.Torr made a motion to accept the application. Seconded by G.Cruikshank. Vote U/A

*Public Hearing Opened.*

Frank Crossman, 50 Back River Road, stated his concerns regarding safety issues associated with the road shrinking and too many roads going in on the one area and the heavy traffic associated with this, and how this has affected his daycare business.

*Public Hearing Closed.*

B.Stowell addressed the road width as 20 ft. wide stating this is appropriate for residential use. He stated the issue expressed by the abutter was not related, adding the issue with Back River Road is sight distance. Doug LaRosa, TriTech Engineering, distributed a document to the Planning Board regarding the sight distance to show an adequate and safe volume of traffic.

S.Bird gave the update from the TRC meeting and stated the recommendation for a site walk prior to approval and the issues to address at the site walk.

Discussion ensued regarding the number of bedrooms in the houses proposed and the factors associated with the schools and the tax cost per student.

Discussion ensued regarding Picnic Rock and the potential for future connection.

**STAFF RECOMMENDATION:**
The Planning Department recommends the Planning Board accept the application, open the public hearing and then table the application so that a site walk can be scheduled.

**Motion:** F.Torr made a motion to table item 4.C to schedule a site walk. Seconded by D.White. Vote U/A

D.Ciotti scheduled the Site walk for Tuesday, August 4th at 5:30 p.m.

D. Consideration and acceptance of a Site Plan Review for Summit Land Development (Owners: H53 Mast Road, LLC), Assessor's Map H Lot 53-1, zoned I-4, located at Stonewall Drive. (Proposed 129,600 sq. ft. Industrial Manufacturing Building w/Office Space & Warehousing to include 68 parking spaces). *(P15-35)

E. Consideration and acceptance of a Conditional Use Permit for Summit Land Development (Owners: H53 Mast Road, LLC), Assessor's Map H Lot 53-1, zoned I-4, located at Stonewall Drive. (CUP for proposed use in Secondary Groundwater Protection Zone and for impervious coverage of 43.6%). *(P15-36)

D.Ciotti stated items 4.D and 4.E would be heard together.

L.Skinner recused himself for items 4.D and 4.E.

S.Bird gave an overview of the applications.

Chad Kageleiry, Summit Land Development, property owner and applicant stated the applications are to build a 129,600 sq. ft. manufacturing building owned by Rand Whitney Corporation. He addressed the TRC comments and stated the awareness of the sensitivity and location regarding the well, adding the Planning Staff has been involved with reviewing plans associated with the well. He displayed aerial photos to show the construction, roadways, and locations of perspectives of the buildings. He expressed the economic benefits to the community associated with the project. He stated Rand Whitney considered other locations and expressed the importance of timing to complete the building. Eric Weinraub from Altus Engineering, Inc. and Matt Worth from Pro Con Construction were also present.

E.Weinraub explained the process of drainage on the Rand Whitney site and the connection to Stonewall Kitchen and clarified the easements between the properties and the run off for the combined projects. He displayed aerial photos to show the proposed landscaping, and clarified there would be Sumac and light vegetation for the area on Mast Road. He confirmed the completion of the proposed project to be in May 2016. S.Bird clarified that Stonewall site has to be completed before Rand Whitney site water could be treated.

**Motion:** F.Torr made a motion to accept the applications for items 4.D and 4.E. Seconded by G.Cruikshank. Vote U/A

*Public Hearing Opened.*

Dan Barufaldi, Dover Business and Industrial Development Authority, 240 Backwater Road, gave background information regarding the Rand Whitney Corporation, and stated the need to build due to the existing lease expiring at the current location for the corporation. He further stated the economic benefits to the Dover community.

Stephen Sherman, 75 Bellamy Road, stated his concern regarding industrial traffic and asked if the trucks would be using Route 108 or Bellamy Road. He further stated his concern regarding the impact to the water.

David Dupont, 24 Lisa Beth Circle, stated his concern regarding water garden #2.

Lara Scammon, 356 Washington Street, represented her parents who live on Lisa Beth Circle, stated her concern about the water table and the effect on the homes. She further stated her concern with the possibility of contaminants affecting the water, Bellamy River and Great Bay Estuary. She also expressed her concern with industrial traffic.

Bonnie Sanders, 23 Lisa Beth Circle, stated her concern with tree removal, her view, and fewer wildlife. She requested the location of the buffer, adding her concern with the effects of the blasting. She further stated her concern regarding the value of the homes, and the water level rising and polluting homes. She suggested a site walk for the neighbors for assurance of the safety issues. Larry Sanders was also present.

*Public Hearing Closed.*

C.Kageleiry stated the abutter concerns are regarding Stonewall Kitchen, adding Rand Whitney is a separate issue and application. He addressed the contamination concerns and stated it is more possible for the homes to contaminate the Bellamy River before the extensive water system developed by the companies. He explained the water collection process, adding they have no control regarding the water table. He addressed the site walk request and stated he tried to show the progress with the aerial photos. He displayed plans and clarified what areas will be conservation and the location of the rain garden, as well as the conservation land that was fixed. He explained the landscaping and where berms will be built. He explained the water system and the continual monitoring associated and that no salt would be used and the protective measures to develop the property near the groundwater well.

Discussion ensued regarding the guarantees available for the water garden and water system. E.Weinraub explained the water treatment system.

Discussion ensued regarding Route 108 or Route 4 for truck traffic, and Bellamy Road has signs requesting no trucks.

C.Kageleiry clarified the manufacturing use proposed at Rand Whitney Corporation and described the products and process and stated no hazardous products will be used other than lubricant oil for the machinery.

**STAFF RECOMMENDATION: (P15-35)**
The Planning Department recommends that the Planning Board accept the application, hold the public hearing, and approve the site plan with the following conditions:

**Conditions to Be Met Prior to Signing of Plans:**

1. The owner's signatures shall be added to the final plan submitted for signature.
2. The applicant shall provide the Planning Department with a digital version of the final plan.
3. The applicant shall provide the Planning Department with a copy of the NH Department of Environmental Services Alteration of Terrain Permit and add the permit number to the plan.

4. The applicant shall have the Stormwater Management Maintenance and Inspection Plan approved by the Community Services Department.
5. The approval includes the granting of the waiver requested for the reasons stated by the applicant. The Board finds that the criteria of Chapter 149-19.A have been met.
6. The approval includes the granting of the Transfer of Development Rights waiver.
7. The applicant shall revise the TDR plan to label the TDR sending area.
8. The applicant shall prepare a developer's agreement that addresses, at a minimum, the prohibition of the use of salt for roadway and pavement maintenance, TDR architectural covenants, the requirement for a blasting plan, groundwater monitoring plan, and amendment of the Emery & Garrett contract.
9. The applicant shall have the drainage analysis reviewed and approved by the City Engineer.
10. The applicant shall prepare drainage easements for review by the Planning Department.

**Conditions to Be Met Prior to Any Construction Activity:**

11. Construction hours shall be limited to Monday-Friday 7 AM-6 PM, Saturday 8 AM-5 PM, with no Sunday hours. Hours of construction shall be documented on a site construction sign along with the contact information for the general contractor. Said signage shall be located and approved by the City Engineer or Director of Planning and Community Development.

**Conditions to Be Met Prior to Issuance of a Building Permit:**

12. Any new building shall pay the current impact fees in place at the time of building permit application.
13. Any new building shall be assessed the current water/sewer investment fees in place at the time of application for water/sewer service.

**Conditions to Be Met Prior to Issuance of a Certificate of Occupancy:**

14. The applicant shall prepare a perpetual easement or restrictive covenant for the TDR sending area that preserves the open space within the sending area. These documents shall be reviewed by the Planning Department, with consultation by the City Attorney on compliance with conditions.
15. The applicant shall provide a letter of credit or other form of security acceptable to the City for any unfinished work.
16. The storm water system on Stonewall property shall be installed and operational before RW gets certificate of occupancy.

**Motion:** D.White made a motion to approve subject to staff recommendations. Seconded by F.Torr. Vote U/A

**STAFF RECOMMENDATION: (P15-36)**

The Planning Department recommends that the Planning Board accept the application, hold the public hearing, and approve the Conditional Use Permit with the following conditions:

**Conditions to Be Met Prior to the Issuance of the Conditional Use Permit:**

1. The erosion and sediment control features shall be installed prior to any earth disturbance.

**Conditions to Be Met Prior to Issuance of a Building Permit:**

1. The applicant shall prepare the Development Review Model required by Chapter 170-28.3-G and submit it to the City Engineer for review and approval.

**Motion:** D.White made a motion to approve subject to staff recommendations. Seconded by F.Torr. Vote U/A

**5. STAFF COMMENTS**



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S.Bird stated the City Council will be having a Workshop on August 5, 2015 to review the Zoning amendments.

S.Bird stated C.Parker has provided a list of names for the Planning Board to review for the Transportation Master Plan Steering Committee, adding he will schedule the first meeting for the Steering Committee when he returns from vacation. D.Ciotti read the list to the Planning Board. There was a show of hands for approval of the list.

S.Bird introduced Donna Pohli, Assistant City Planner, and explained the work she will be doing in the Planning Department.

## 6. MEMBER COMMENTS

None.

## 7. ADJOURNMENT

**Motion:** C.Plante made a motion to adjourn at 9:39 p.m. Seconded by G.Cruikshank. Vote: U/A

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CITY OF DOVER

# PLANNING BOARD - STAFF MEMO FILE #P15-05

| | |
|---|---|
| Application Type: | Open Space Subdivision |
| Applicant: | MCL Builders and Developers, LLC |
| Owner: | Mace Family Revocable Trust |
| Location | 46 Back River Road (Tax Map I, Lot 6C) |

**INTENT:** Subdivision Plan Review to create an open space subdivision containing seven (7) lots (including a lot for the existing home) plus an open space lot.

**UNITS PROPOSED:** Six (6) new single family dwelling units, plus one (1) existing duplex

**AGENDA ITEM #:** 3-A

**ACRES:** 3.72 acres

**ZONING DISTRICT:** Medium-Density Residential District – R-12

**EXISTING LAND USE:** Two Family Residential

**SURROUNDING LAND USE:** Single and multi-family residential; child day care

**PROPOSED LAND USE:** 6 new single family house lots and two family on the existing lot

**ZBA ACTION:** Variance granted on March 19, 2015 for creating lot that can't meet front lot line build to requirement

**ATTACHMENTS:** Subdivision plan, application and impact statement

**APPLICATION IS COMPLETE:** Yes

**NOTICES SENT:** Abutter notices were sent by certified mail to all abutters for the July 28, 2015 meeting.

**PERMITS REQUIRED:** None

**WAIVERS REQUESTED:**

- To Chapter 155-33-A to allow a road width of 20 feet instead of 24 feet
- To Chapter 155-22-F to allow existing house to stay in 100' buffer
- To Chapter 155-22-F to reduce 30 foot buffer to 15 feet, along north boundary
- To Chapter 155-22-F to allow roadway within 30 foot buffer

**Summary of Request and Background**

The applicant has submitted a plan to do an Open Space Subdivision on an existing lot to create 7 house lots. The units would be serviced by municipal water and sewer and be accessed by a private road.

The applicant appeared before the Technical Review Committee on July 16, 2015 (see TRC minutes).

The Board accepted the application and held a public hearing at their meeting on July 28, 2015. The Board tabled the application and held a Site Walk on August 6, 2015.

**Consistency with Land Use Regulations**

Chapter 155-15 of the Land Subdivision Regulations of the City Code provides for subdivisions of existing lots.

Chapter 155-22 allows an open space subdivision in the R-12 District if the lot is a minimum of five acres. Projects that do not meet the acreage requirements are allowed if an impact statement is submitted and a preliminary public hearing is held so the Planning Board can determine if an open space subdivision is more warranted than a conventional subdivision. The applicant received Planning Board approval for proceeding with the open space subdivision on April 14, 2015.

**Waiver Requests:**

The applicant is requesting a waiver from Chapter 155-33-A to allow a road width of 20 feet instead of 24 feet. The applicant is also requesting a waiver of Chapter 155-22-F to allow the existing house to stay in the 100 foot buffer. A third waiver of Chapter 155-22-F is reduce the 30 foot buffer to 15 feet along the north boundary is being requested by the applicant. Lastly, a waiver request has been submitted for Chapter 155-22-F to allow roadway within the 30 foot buffer.

The applicant has submitted a letter that includes the justification for the requests. The Planning Department supports three out of the four waiver requests for the reasons stated by the applicant. However, the Planning Department does not support the waiver to reduce the 30 foot buffer to 15 feet because staff does not feel there is appropriate justification.

**STAFF RECOMMENDATION:**

The Planning Department recommends that the Planning Board approve the Open Space Subdivision with the following conditions:

CITY OF DOVER

# PLANNING BOARD - STAFF MEMO FILE #P15-05

| | |
|---|---|
| Application Type: | Open Space Subdivision |
| Applicant: | MCL Builders and Developers, LLC |
| Owner: | Mace Family Revocable Trust |
| Location | 46 Back River Road (Tax Map I, Lot 6C) |

**Conditions to Be Met Prior to Signing of Plans:**

1. The owner's signatures shall be added to the final plat submitted for signature.
2. The applicant shall provide the Planning Department with a digital version of the final plat.
3. The applicant shall revise the plat to add the Planning File number P15-05 to the cover sheet and title block on all sheets.
4. The approval includes the granting of 3 of the waivers requested for the reasons stated by the applicant. The Board finds that the criteria of Chapter 155-51.A have been met for these 3.
5. The applicant shall revise the plat to include a 30 foot no cut/no disturb buffer per Chapter 155-36.F on the north and relocate the gas and sewer lines and eliminate the 20 foot sewer easement.
6. The applicant shall add the required public transit section to the standard traffic impact study to be approved by the Planning Department.
7. Applicant shall revise the plan to change "he tide" to "the tide" in note #17 on Sheet EX-1.
8. The applicant shall revise the plan to address any forthcoming comments from the City Engineer to the satisfaction of the Engineer.
9. Applicant shall revise plan on Sheet S-2 to:
    a. show house outlines;
    b. label the sight distance for the proposed road or add a detail and reference on plan sheet;
    c. include a fire truck turning radius to the satisfaction of the Fire Department or add detail and reference on plan sheet;
    d. label gravel in the connector road.
10. Applicant shall revise plan Sheet La-1 to state that trees in perimeter buffer must be 8 feet tall and include evergreen trees per 155-36-F and add the 4 "PS" trees shown on plan to the legend.
11. Applicant to fix gas line on the legend to match what is shown on the plan (fixing single line to double line).
12. Applicant shall revise the plan to turn the hydrant symbol as it is difficult to read on plans currently.
13. The applicant shall have the Stormwater Management Maintenance and Inspection Plan approved by the Community Services Department.
14. The applicant shall submit proposed Homeowner's Association Documents, addressing maintenance of the drainage infrastructure and utilities, the private road, open space ownership, access to the open space lot, and preservation of perimeter landscaping. These documents shall be reviewed by the Planning Department, with consultation by the City Attorney on compliance with conditions.

**Conditions to Be Met Prior to Any Construction Activity:**

15. Construction hours shall be limited to Monday-Friday 7 AM-6 PM, with no Saturday or Sunday hours. Hours of construction shall be documented on a site construction sign along with the contact information for the general contractor. Said signage shall be located and approved by the City Engineer or Director of Planning and Community Development.

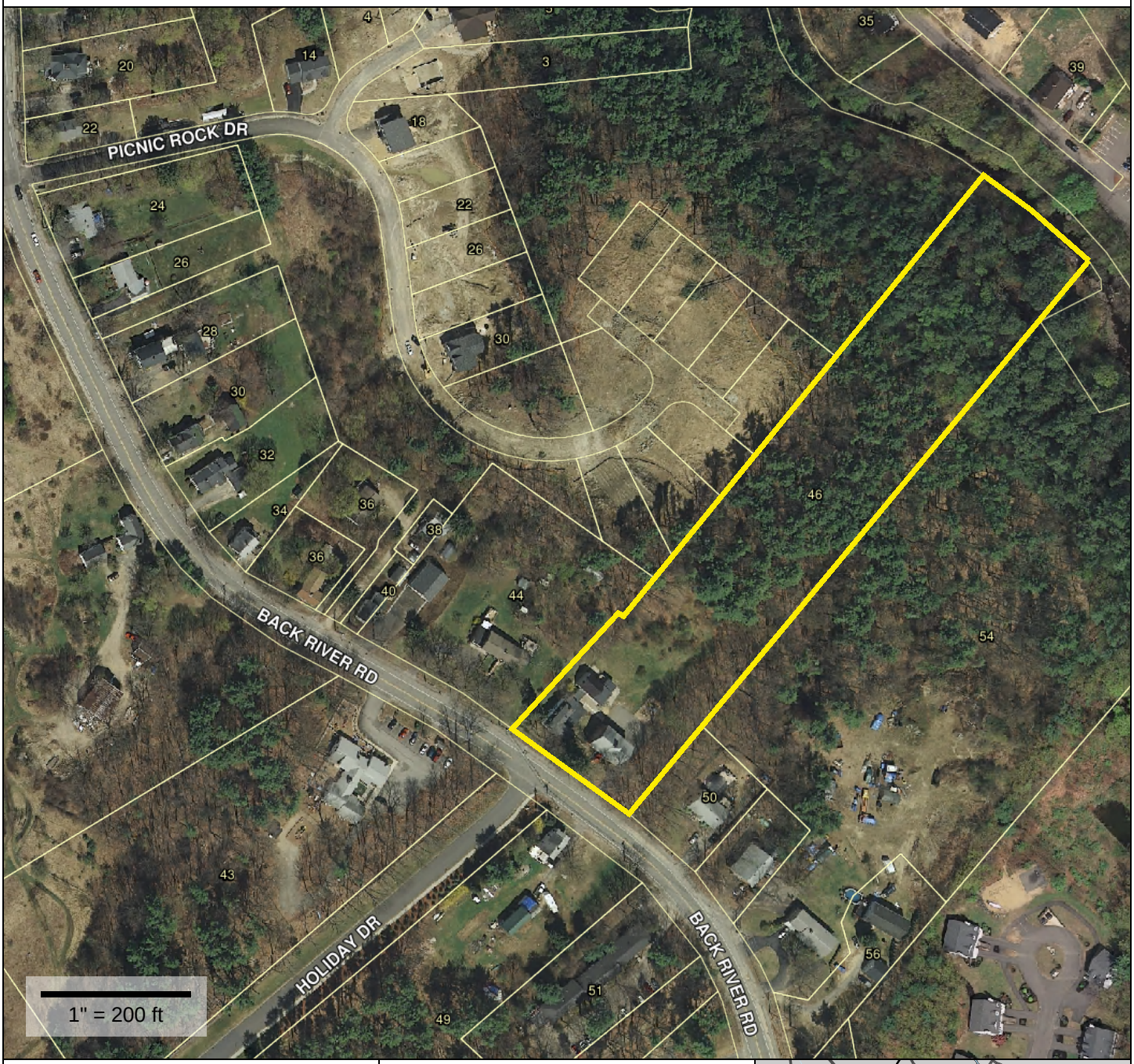
**Conditions to Be Met Prior to Issuance of a Building Permit:**

16. Any new building shall pay the current impact fees in place at the time of building permit application.
17. Any new building shall be assessed the current water/sewer investment fees in place at the time of application for water/sewer service.

**Conditions to Be Met Prior to Issuance of a Certificate of Occupancy:**

18. The applicant shall provide a letter of credit or other form of security acceptable to the City for any unfinished work.
19. The applicant shall submit documentation that a Homeowner's Association has been formed.

# 46 Back River Road



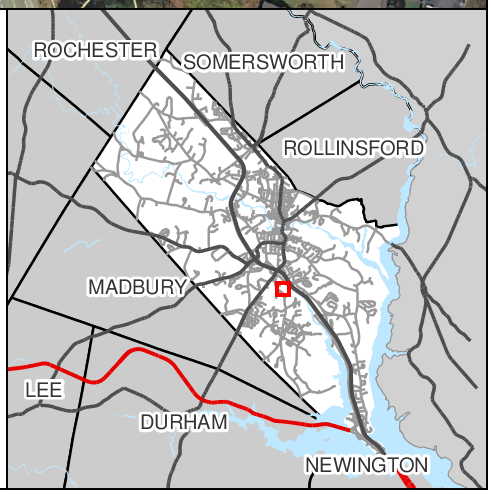

**Property Information**

| | |
|---|---|
| **Property ID** | I0006-C00000 |
| **Location** | 46 BACK RIVER RD |
| **Owner** | MACE JOSEPH E & PEGGY J T<br>MACE FAMILY REVOCABLE TRU |

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

The City makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated January 1, 2015



**TRITECH**
**ENGINEERING CORPORATION**

755 Central Avenue
Dover, New Hampshire 03820

Telephone 603.742.8107
Facsimile 603.742.3830

August 19, 2015

Christopher G. Parker, AICP
Director of Planning and Community Development
City of Dover, Planning Department
288 Central Avenue
Dover, New Hampshire 03820

RECEIVED
Planning Office
AUG 20 2015
Dover, New Hampshire

**Subject:** ***Open Space Subdivision – P15-05***
**Bellamy Ridge**
Tax Map I, Lot 6C
Back River Road
Dover, New Hampshire
Job No. 14103

Dear Christopher:

Enclosed please find the following:

- One (1) full-size and Fourteen (14) half size sets of Plans.
- Traffic Impact Assessment & Analysis.
- Tidal Determination Letter.

**Planning Department Comments:**

*1. Need traffic impact study*
- Attached please find Traffic Impact Assessment and Analysis; including SD-1 (Site Distance) & FT-1 (Fire Truck Turning) Exhibits.

*2. Impact fees will be assessed*
- Applicant acknowledges this requirement.

*3. Water and sewer investment fees will be assessed*
- Applicant acknowledges this requirement.

**T-2**

*1. Fix neighborhood plan title*
- The Neighborhood Plan Title have been revised.

**EX- 1**

*1. Label owner unknown lot*
- The lot is labeled "Owner Unknown".

*2. Add date of wetland delineation in note #12*
- The date of the wetland delineation has been added.

3. *Show proof of claim made in note #17*
   - See attached letter from Schauer Environmental. Schauer Environmental performed a review of the vegetation on the bank of the Bellamy River. A clear change from the salt tolerant vegetation to salt intolerant vegetation occurs at the old removed dam site. This location was flagged by Schauer Environmental and located by Tritech Engineering.

**S-1**

1. *30 foot external buffer is required per 155-22-F-4 and 155-23-B and road is within that buffer.*
   - A waiver has been requested from this buffer.
2. *Show requested buffer line- don't see justification for reduction in buffer waiver.*
   - The requested buffer line is depicted on the plan.

**S-2**

1. *What are the house sizes?*
   - The house size varies from 1700 sq. ft. to 2200 sq. ft.
2. *What is the sight distance for proposed road?*
   - The sight distance is 671+/- to the North and 397+/- to the South, (See attached Traffic Analysis).
3. *Firetruck turning radius?*
   - Please find Exhibit FT-1 in the attached Traffic Analysis showing the Fire Truck Turning Radius.
4. *Gravel in connector road*
   - No connection between Picnic Rock Drive and Red Barn Drive are proposed

**La-1**

1. *Trees in perimeter buffer have to be 8 feet tall and include evergreen trees per 155-36-F*
   - Trees abutting the Northerly Boundary Line with Picnic Rock are 8 feet tall and are coniferous. Plantings along the Southerly Boundary Line are street trees mixed with Low Growing Juniper slope Treatment.
2. *Move trees behind lots 3 and 4 to the south*
   - We have moved the sewer 5 feet to the south to eliminate the conflict.

***Planning Board Comments:***

1. *Clarify owner unknown lot*
   - Current owner is unknown.
2. *Eliminate driveway to barn*
   - We have revised the driveway as discussed at the site walk.
3. *Concerned about turnaround*
   - Please see Exhibit FT-1 in the Traffic Analysis attached noting hammer head is more than adequate to turn the aerial ladder truck around.

**Police Department Comments:**

1. *None*

**Fire/Inspections Comments:**

1. *Please provide template of fire apparatus turning radius at hammerhead*
   - FT-1 was provided to the Fire Department at the Technical Review Committee meeting and is attached in the Traffic Analysis.
2. *Wanted to confirm the drive is 20 feet wide*
   - The drive is 20 feet wide.

*3. Please turn hydrant symbol very difficult to read it on plans*
- Hydrant Symbol has been revised.

*4. Confirming the open space will not be built upon*
- The open space shall be protected by the Home Owners Association documents.

*5. Maintain all weather access to site*
- See Note C-29 on Sheet C-2 stating "All weather access shall be provided to the site".

**Engineering Comments**

*1. Can the sewer main be placed in the highway?*
- The sewer main has been placed to maximize gravity sewer.

*2. Show the sewer force mains and pumping apparatus.*
- The sewer force mains have been shown for Lots 5 & 6 on Sheet C-1.

*3. Will there be gas main in this project?*
- The gas main has been shown on Sheet C-1.

*4. Create a utility easement over to picnic rock and to map/lot 1/6*
- We have added Note 27 on Sheet S-1 stating the City of Dover shall have a waterline easement over Red Barn Drive.

*5. There will be no buffer vegetation along the north side due to the installation of the sewer and none on the south side due to grading. How will you compensate for this?*
- We have proposed 8' tall conifer trees as shown on Sheet LA-1.

*6. Should the sidewalk connect to picnic rock for looping?*
- At the site walk, it was our understanding that the sidewalk to Picnic Rock should not loop.

*7. There should be a street light at the end of the road at hammerhead.*
- A street light has been shown.

*8. Change the end of the water main configuration so the hydrant is at the end of the main.*
- The water main configuration has been revised as requested.

*9. Is an 8 inch main oversized for this subdivision?*
- The regulations require an 8 inch main.

*10. Why does the note C-23 say to replace the paved drive with gravel when the driveway entrance is being discontinued?*
- As discussed at the site walk, the driveway entrance will be reconstructed to match the existing roadway.

*11. I believe the curve on back river is VGC not sloped. Please change note C-14.*
- The plans have been revised to reflect existing conditions.

*12. How will people access the open space area?*
- The open space will be accessed from the end of the Right-of-Way. The underdrain outlet has been moved and the rip rap has been removed.

*13. On C-3-fix the details 1, 2 and 9 on asphalt thickness for the roadway.*
- The asphalt thickness has been revised as requested.

*14. I see on C-3 detail 1 that you call for no fabric or underdrain. I would recommend putting a note that these may be required as field conditions warrant by the engineer.*
- A note has been added to detail #1 on Sheet C-3 Stating "City Engineer may requested underdrain and/or fabric as warranted by on-site conditions".

*15. On C-8 correct the coupling type on the sewer service detail outside the fountain.*
- The sewer service detail has been revised with the correct coupling type.

*16. Some of your proposed tree locations seem to conflict with guardrail and sewer main.*
- We have revised the sewer main location. Smaller ground junipers appear close to the guardrail in plan view, but are not conflicting with it.

*17. Show where notes C16 and C19 apply on the plans.*

- C-16 and C-19 occurs at the intersection of Back River Road and the proposed Red Barn Drive, and Note # and arrows have been added to the sheet C-1.

**Drainage Review**

*1. Please clarify the plan vs profile on the two infiltration practice details on sheet C-5*

- We have clarified plan, profile and cross section by labeling Detail 7 – Section, Detail 8 – Profile and Detail 10 – Plan.

*2. What size are the nyloplast cleanouts with cb grates that are shown on the roof drain detail.*

- We have revised the Nyloplast Cleanouts to 8 Inch in diameter.

*3. Is the intent to have four roof drain down spouts, with four catchbasin cleanouts and two infiltration practices per lot? Please show the chatchbasins on the drainage plan to ensure they are incorporated into the building construction.*

- The intent is to show four potential down spout locations. The number of down spouts and actual locations will be based on the home/roof constructed on each lot.

*4. Will the infiltration practices be constructed as part of the overall site work or part of the individual lot development? Please revise the construction sequence in the drainage report and plans set to be consistent, and identify the construction timing of the infiltration basins.*

- Infiltration Practices will be constructed as part of the individual lot development. The construction sequence in the report and plans have been revised to reflect this. The infiltration basins will be constructed prior to occupancy at final landscaping slope.

*5. The surface area of the pond in the hydroCAD model is 295 sf, the plans call for two, 20' x 5' basins. How was the surface area determined?*

- The infiltration area has been revised to a 2 foot x 7.5 foot stone trench or 300 square feet each.

*6. Please add the bioretention mixture requirements to the plan set, as often the contractor does not have the drainage report.*

- The bioretention mixture requirements have been added to Sheet La-1.

*7. Please remove the rip-rap details from the plans as they are not needed. This will also help address a previous comment about the access to the open spaces.*

- The rip rap detail has been removed as requested.

*8. I would recommend incorporating the stormwater inspection report directly in to the homeowners association documents in some form, and noting the infiltration basin maintenance responsibility in each deed.*

- The Stormwater Inspection report will be incorporated into the homeowners association documents. The infiltration beds maintenance will be incorporated in the deeds.

We look forward to meeting with the Planning Board on August 25, 2015.

Please advise should you have any questions.

Very truly yours,
**TRITECH ENGINEERING CORP.**

Robert J. Stowell, P.E., L.L.S.
President

RJS/rms
Enclosures
cc: Engineering Dept.
\\14103_TRC_SubmissionLtr3.doc

# SEC

## *SCHAUER ENVIRONMENTAL CONSULTANTS, L.L.C.*

December 14, 2014

Ref: SEC JN 6561

RECEIVED
Planning Office
AUG 2 0 2015
Dover, New Hampshire

Mr. Douglas LaRosa
Tritech Engineering Corporation
755 Central Avenue
Dover, NH 03820

Re: Environmental Services (Tidal Wetlands Jurisdictional Limits Determination)
Bellamy River, Dover, New Hampshire (Tax Map 17, Lot 4)

Dear Mr. LaRosa:

Schauer Environmental Consultants, L.L.C. (SEC) has completed the site investigation that you requested at the above-referenced location in Dover, New Hampshire. This investigation was completed on December 12, 2014 by Tom Sokoloski, NH Certified Wetland Scientist #127 with SEC. The purpose of this investigation was to determine the limits of tidal wetland resources along the Bellamy River in the vicinity of Mill Street, in order to then determine the extent of the 100-foot Tidal Buffer Zone as defined at Env-Wt 101.99 ("Tidal buffer zone" means the area extending landward 100 feet from the highest observable tide line. This area can contain wetlands, transitional areas, and natural and developed upland areas.).

The highest observable tide line is defined at Env-Wt 101.48 "a line defining the farthest landward limit of tidal flow, not including storm events, that can be recognized by indicators such as the presence of a strand line of flotsam and debris, the landward margin of salt tolerant vegetation, or a physical barrier that blocks farther flow of the tide."

On December 12, 2014, Mr. Sokoloski observed the "landward" or upstream limit of salt tolerant vegetation (*Spartina alterniflora*, or salt marsh cordgrass) at a segment of the Bellamy River where a sharp drop (3 vertical feet within approximately 15 horizontal feet) in the bed of the River, or rapids, appears to form a physical barrier to the upstream flow of the tide. This location is approximately 15-20 feet upstream from the western side of the apartment building at 50 Mill Street. This position was marked with a pink and black striped surveyors flag with the notation "HOTL 1; SEC; 12/12/2014."

This tidal wetlands limit finding was supported by the presence of salt-intolerant vegetation at the edge of flow along the bank above that location, including red maple (*Acer rubrum*), paper birch (*Betula papyrifera*) and eastern hemlock (*Tsuga canadensis*). Also, snow that had fallen the preceding night extended down to the edge of water above the rapids, indicating that high tide had not reached that far upstream, whereas below the rapids, snow was two to three feet higher than the water level consistently along the bank, indicating that a high tide had melted

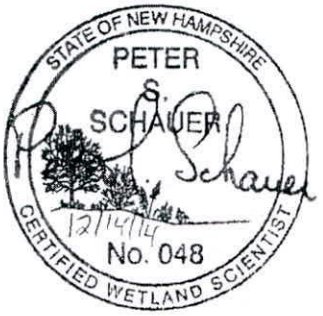
snow above the then-current water level. On-line tide charts for the Dover area (Dover Point and the Cocheco River) indicate that there was a high tide around 4:18 – 4:30 AM on December 12, 2014, and that there was a low tide around 10:10 – 10:22 AM later that morning, which coincided with the field inspection performed by Mr. Sokoloski.

If we can be of any further assistance in this process, please let me know.

Very truly yours,

Peter S. Schauer

Peter S. Schauer
Certified Soil Scientist #039
Certified Wetland Scientist #048



TRITECH
ENGINEERING CORPORATION

755 Central Avenue
Dover, New Hampshire 03820

Telephone 603.742.8107
Facsimile 603.742.3830

**TRAFFIC IMPACT ASSESSMENT & ANALYSIS**
**FOR**

***Bellamy Ridge***
***Open Space Subdivision***

**46 Back River Road**
**Tax Map I, Lot 6C**
**Dover, New Hampshire**

RECEIVED
Planning Office
AUG 20 2015
Dover, New Hampshire

***July 28, 2015***

## *Introduction*

Tritech Engineering Corp. has conducted a traffic impact assessment and analysis of the proposed Residential Open Space Subdivision in the City of Dover, New Hampshire. Back River Road runs generally from north to south. The site is on the east side of Back River Road between Holiday Drive and Wingate Lane. The site presently includes a (2) two-family dwelling. The proposed subdivision will include reusing the existing driveway location.

## *Site Description*

The existing site includes a (2) two-family dwelling and barn with two access points off of Back River Road.

To the north of the site is Picnic Rock Drive that accesses directly from Back River Road. To the South are single-family residences on Back River Road until Wingate Lane a duplex home development. To the east is the Bellamy River. Across Back River Road to the west is Holiday Drive, a retirement community along with a daycare and residential homes.

## *Road Description*

Back River Road, near the site, is sloping from north to south. The street includes two travel lanes. Utility poles, and a bituminous concrete sidewalk, are on the east side of the street along the site frontage on Back River Road. The pavement is in serviceable condition. The speed limit is posted at 30 mph.

Several unsignalized intersections are located along Dover Point Road near the site:

- Picnic Rock Drive
- Holiday Drive
- Westgate Lane

## *Sight Distances*

Sight distances for site driveway is over 671 feet +/- to the north and 397 feet +/- to the south.

Site lines shall be maintained to prevent inappropriate roadside obstructions/vegetation.

See attached Sight Distance Exhibit SD-1 dated July 28, 2015.

## Trip Generation

The Institute of Transportation Engineers (ITE) compiles trip generation information; based on empirical data for a variety of land uses, in the authorative reference *Trip Generation*.[1] This reference includes information for single-family homes, based on each dwelling unit. The estimated trip generation for the 7 residential lot subdivision is:

- weekday: 76 (total of in and out)
- weekday PM street peak hour: 8 (5 in and 3 out)

The Institute of Transportation Engineers (ITE) suggests that land developments generating at least 100 peak-hour vehicle trips, in the busier direction, are candidates for consideration of traffic impact analysis.[2] The estimated peak hour trip generation of the proposed development falls below this level. Moreover, the existing site uses generate trips are existing on site, and the above estimates do not account for decrease of existing trips.

The change in traffic volume due to the change in use is negligible.

The ITE trip generation for the existing two-family homes (210) per dwelling unit is:

- weekday: 19 (total of in and out)
- weekday PM street peak hour: 2 (1 in and 1 out)

The increase in traffic due to the proposed development is:

- week day: 57 (total of in and out)
- week day PM street peak hour: 6 (4 in and 2 out)

## Trip Distribution/Assignment

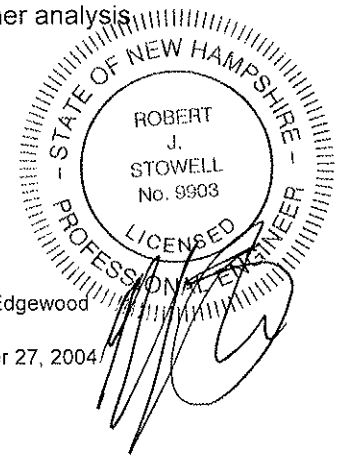
The estimated number of vehicle trips will not result in a material traffic impact on the area, regardless of trip distribution/assignment. Trips to/from the site may be 50% to/from the north and 50% to/from the south[3].

## Hammer Head Roadway Design

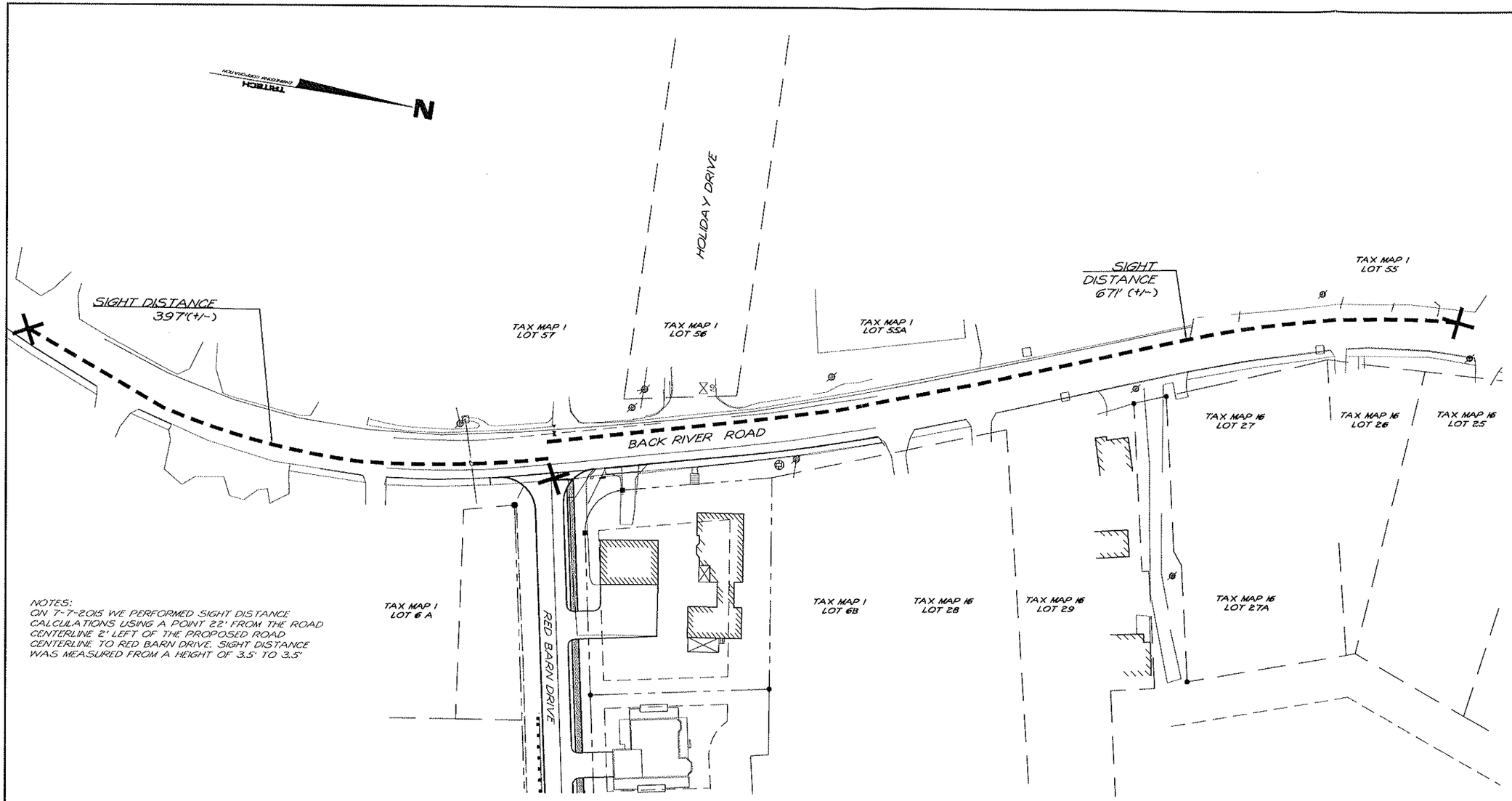
A turning movement analysis was performed on the proposed hammer head road design. See attached FT-1 dated June 18, 2015 indicating an Aerial Fire Truck can adequately maneuver the proposed hammer head configuration.

## Conclusion

The proposed development will not have a material traffic impact on the area and further analysis is not required.




[1] Institute of Transportation Engineers, *Trip Generation*, ninth edition (Washington, DC, 2012).
[2] Institute of Transportation Engineers (ITE), *Manual of Transportation Engineering Studies* (Prentice Hall: Edgewood Cliffs, New Jersey, 2000), page 144.
[3] Traffic Assessment Ref: 841, by TEPP LLC for Proposed Martineau and Kopka Developments, September 27, 2004.




NOTES:
ON 7-7-2015 WE PERFORMED SIGHT DISTANCE CALCULATIONS USING A POINT 22' FROM THE ROAD CENTERLINE 2' LEFT OF THE PROPOSED ROAD CENTERLINE, TO RED BARN DRIVE. SIGHT DISTANCE WAS MEASURED FROM A HEIGHT OF 3.5' TO 3.5'

SIGHT DISTANCE EXHIBIT

40 0 20 40 80 160

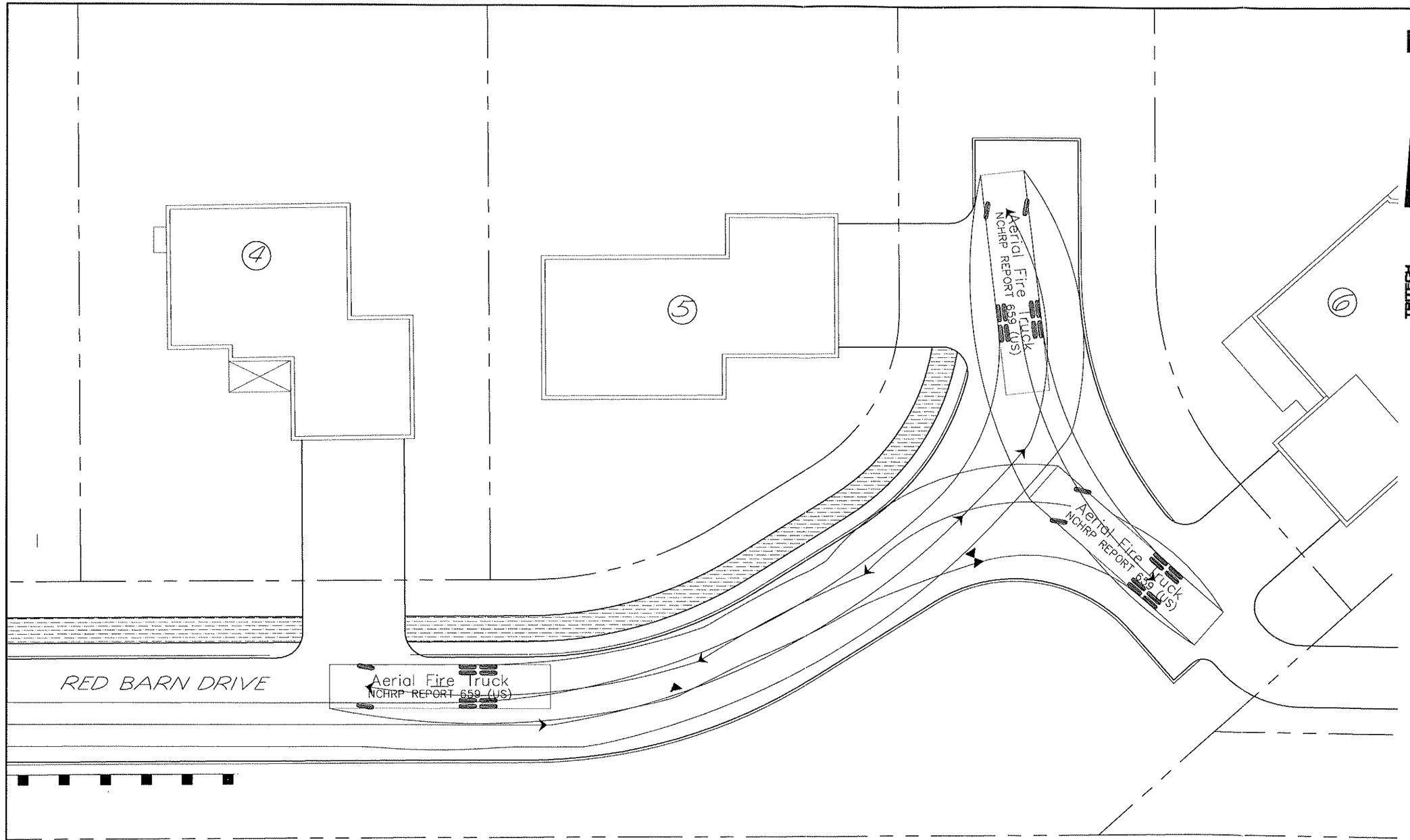
1"=40' HORIZONTAL

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8117
FAX 603 742 8930

REVISIONS
DATE: DESCRIPTION:

SIGHT DISTANCE EXHIBIT
**BELLAMY RIDGE**
46 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
JULY 28, 2015 JOB No. 1403
SCALE: 1" = 40'

SHEET NO.
**SD-1**




PLAN VIEW–RED BARN DRIVE: AERIAL LADDER FIRE TRUCK EXHIBIT

20 0 10 20 40 80

1"=20' HORIZONTAL

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 9117
FAX 603 742 3630

REVISIONS
DATE: DESCRIPTION:

FIRETRUCK TURNING EXHIBIT
**BELLAMY RIDGE**
46 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
JUNE 18, 2015
JOB No. 1403
SCALE: 1" = 20'

SHEET NO.
**FT-1**

# SUBDIVISION & CONSTRUCTION PLANS

# BELLAMY RIDGE

## 46 BACK RIVER ROAD
## DOVER, NEW HAMPSHIRE

RECEIVED
Planning Office
AUG 20 2015
Dover, New Hampshire

PREPARED FOR

*MCL BUILDERS & DEVELOPERS, LLC*
*3 SANDPIPER LANE*
*SEABROOK, NEW HAMPSHIRE*

LIST OF PLANS

T-1 - TITLE SHEET
T-2 - NEIGHBORHOOD PLAN
EX-1 - EXISTING CONDITIONS PLAN
Y-1 - YIELD PLAN
S-1 - OPEN SPACE SUBDIVISION PLAN
S-2 - TOPOGRAPHIC PLAN
C-1 - PLAN & PROFILE - RED BARN DRIVE
C-2 - NOTES, LEGEND & SCHEDULES
C-3 - CONSTRUCTION DETAILS
C-4 - CONSTRUCTION DETAILS
C-5 - CONSTRUCTION DETAILS
C-6 - CONSTRUCTION DETAILS
C-7 - STANDARD SEWER DETAILS
C-8 - STANDARD SEWER DETAILS
LA-1 - LANDSCAPING PLAN

PREPARED BY

TRITECH
ENGINEERING CORPORATION

TRITECH
AUG 20 2015
ISSUED

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 9477
FAX 603 742 3330

REVISIONS

| DATE: | DESCRIPTION: |
|---|---|
| 6-18-15 | REVISED PER REVIEW COMMENTS |
| 8-18-15 | REVISED PER REVIEW COMMENTS |

TITLE SHEET
BELLAMY RIDGE
46 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
DECEMBER 24, 2014
JOB No. 1410 3

SHEET No. T-1

(P15-05)




| SHEET No. | NEIGHBORHOOD PLAN<br>BELLAMY RIDGE<br>46 BACK RIVER ROAD<br>DOVER, NEW HAMPSHIRE<br>DECEMBER 24, 2014 JOB No. 14103<br>SCALE: 1" = 200' | REVISIONS | | TRITECH<br>ENGINEERING CORPORATION<br>795 CENTRAL AVENUE<br>DOVER, NEW HAMPSHIRE 03820<br>TELEPHONE 603 742 8107<br>FAX 603 742 3630 |
|---|---|---|---|---|
| T-2 | | DATE: | DESCRIPTION: | |
| | | 6-16-15 | REVISED PER REVIEW COMMENTS | |
| | | 8-18-15 | REVISED PER REVIEW COMMENTS | |

(SD-SIS-03)

## NOTES

1.) INTENT: TO SHOW THE EXISTING CONDITIONS OF DOVER TAX MAP I LOT 6C.

2.) CURRENT OWNER: MACE FAMILY REVOCABLE TRUST
46 BACK RIVER ROAD
DOVER, N.H. 03820

3.) TOTAL LOT AREA: 161,869 SQ.FT. – 3.716 ACRES

4.) TAX MAP I LOT 6C

5.) PROJECT DEED REFERENCE: BOOK 3553 PAGE 277

6.) PROJECT PLAN REFERENCE: AMENDED
OPEN SPACE SUBDIVISION PLAN
PIONIC ROCK FARM
BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
TRITECH ENGINEERING CORPORATION
JUNE 8, 2009 SCRD 25-65

PLAN OF LAND OF
BRUCE G. & OLIVE E. STAPLES
BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
K.E. MOORE & B.G. STAPLES
JAN. 1985 SCRD 25-65

BOUNDARY LINE ADJUSTMENT FOR
LOUISE SWEATT
DOVER, NEW HAMPSHIRE
EMERY ENGINEERING
SEPTEMBER 26, 1991 SCRD 39-79

7.) ZONING: R-12

| | | OPEN SPACE REQUIREMENTS |
|---|---|---|
| MIN. LOT SIZE: | 12,000 SQ. FT. | MIN. LOT SIZE: 8,000 SQ.FT. |
| MIN. FRONTAGE: | 100 FT | MIN. FRONTAGE: 20 FT |
| MIN. SETBACKS: | | MIN. SETBACKS: |
| FRONT: | 27.5 FT (BUILD TO LINE) | FRONT: 10 FT |
| SIDE: | 15 FT | SIDE: 10 FT |
| REAR: | 30 FT | REAR: 10 FT |
| MAX BUILDING HEIGHT: | 35 FT | EXTERIOR BOUNDARY: 30 FT |
| LOT COVERAGE: | 30 % | EXISTING STRUCTURES: 50 FT |
| | | FRONTAGE BUFFER: 100 FT |

IN ADDITION TO R-12, THIS PROPERTY FALLS WITHIN THE CONSERVATION OVERLAY DISTRICT

8.) THE RAW UNADJUSTED CLOSURE OF OUR RANDOM POINT TRAVERSE WAS 1 PART IN 41,000, AND WAS ACCOMPLISHED USING A LEICA TC 703 TOTAL STATION, DURING THE MONTH OF SEPTEMBER, 2014.

9.) PROPERTY CORNER COORDINATE – BASED ON THE CITY OF DOVER GIS SYSTEM. CITY OF DOVER GIS POINTS WERE OCCUPIED TO DETERMINE POSITION, DIRECTION AND VERTICAL DATUM.

10.) THIS PROPERTY FALLS WITHIN THE CONSERVATION DISTRICT, ZONING ORDINANCE 170-27. AREAS SUCH AS THOSE WITHIN 50 FEET OF STREAMS, BROOKS OR OTHER FRESHWATER BODIES AND SLOPES IN EXCESS OF 20% ARE PART OF THE CONSERVATION DISTRICT AND THE REGULATIONS OF 170-27 APPLY.

11.) A PORTION OF THE NEW MAP I LOT 6C IS LOCATED IN A FEDERALLY DESIGNATED FLOOD HAZARD (ZONE "A"). LOCATION IS SCALED FROM FIRM PANEL No. 33017C 0340D, EFFECTIVE DATE MAY 17, 2005. (AS SHOWN)

12.) WETLAND DELINEATION SERVICES WERE PERFORMED BY MICHAEL MARIANO, NEW HAMPSHIRE CERTIFIED WETLAND SCIENTIST, IN SEPTEMBER OF 2014, IN ACCORDANCE WITH THE "REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION (VERSION 2.0). THERE WERE NO WETLANDS IDENTIFIED ON THE SUBJECT PARCEL.

13.) ALL ON-SITE UTILITIES SHALL BE INSTALLED UNDERGROUND.

14.) THE FINAL SUBDIVISION PLAN SHALL BE SUBMITTED IN A DIGITAL DXF FORMAT ON A TRANSFERABLE DISK TO THE CITY OF DOVER ENGINEER'S OFFICE.

15.) PROPERTY LINE DETERMINED TO BE THE MEAN LOW WATER OF THE BELLAMY RIVER AS OBSERVED IN AUGUST OF 2014.

16.) MAP I LOT 6C MAY BE SUBJECT TO FLOWAGE RIGHTS AND MILL PRIVILEGE RIGHTS.

17.) ON DECEMBER 12, 2014, TOM SOKOLOSKI, WETLAND SCIENTIST #127 DETERMINED THE LIMIT OF TIDAL ACTION BY DETERMINING THE LIMIT OF SALT TOLERANT VEGETATION AND PHYSICAL BARRIER THAT BLOCKS FARTHER FLOW OF HE TIDE. THE PORTION OF THE BELLAMY RIVER ADJACENT TO THE SUBJECT PROPERTY IS NOT SUBJECT TO TIDAL ACTION. THE RIVERFRONT OVERLAY DISTRICT DOES NOT APPLY TO THE SUBJECT PARCEL.

18.) ON APRIL 14, 2015, THE PLANNING BOARD HELD A HEARING AS REQUIRED BY SECTION 155-22. C.1.A. OF THE CITY OF DOVER SUBDIVISION REGULATIONS AND DETERMINED THAT THE OPEN SPACE SUBDIVISION AS SHOWN WAS ACCEPTABLE FOR TAX MAP F LOT 6C.

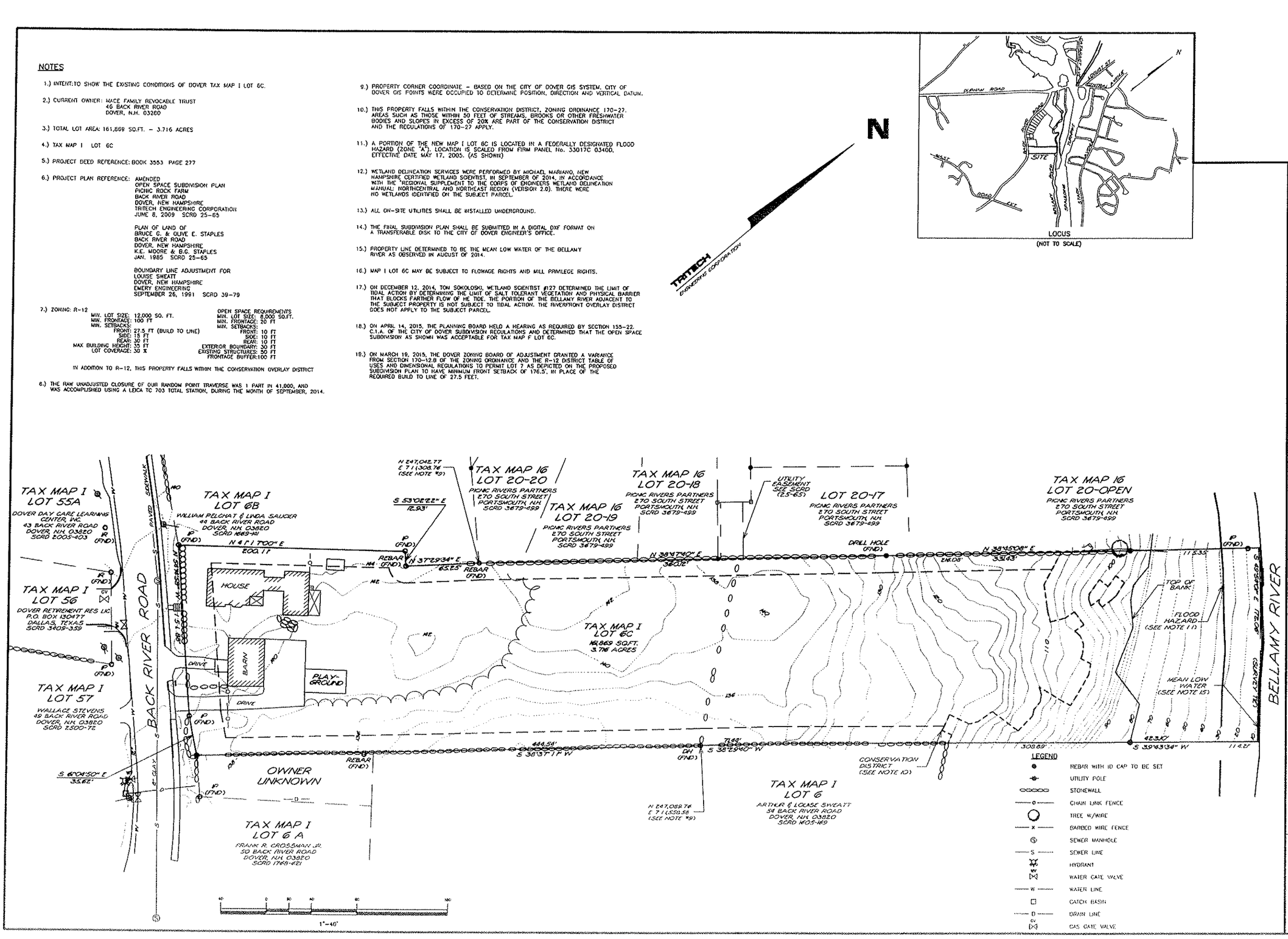
19.) ON MARCH 19, 2015, THE DOVER ZONING BOARD OF ADJUSTMENT GRANTED A VARIANCE FROM SECTION 170-12.8 OF THE ZONING ORDINANCE AND THE R-12 DISTRICT TABLE OF USES AND DIMENSIONAL REGULATIONS TO PERMIT LOT 7 AS DEPICTED ON THE PROPOSED SUBDIVISION PLAN TO HAVE MINIMUM FRONT SETBACK OF 176.5', IN PLACE OF THE REQUIRED BUILD TO LINE OF 27.5 FEET.

N

TRITECH
ENGINEERING CORPORATION



LOCUS
(NOT TO SCALE)




| REVISIONS | |
|---|---|
| DATE: | DESCRIPTION: |
| 6-18-15 | REVISED PER REVIEW COMMENTS |
| 8-18-15 | REVISED PER REVIEW COMMENTS |

**TRITECH**
ENGINEERING CORPORATION
795 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 6477
FAX 603 742 3660

EXISTING CONDITIONS PLAN
BELLAMY RIDGE
46 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
DECEMBER 24, 2014 JOB No. 14103
SCALE: 1" = 40'

SHEET No. EX-1

(P15-05)

NOTES

1.) INTENT:TO SHOW THE CONVENTONAL SUBDIVISION OF DOVER TAX MAP I LOT 6C.

2.) CURRENT OWNER: MACE FAMILY REVOCABLE TRUST
46 BACK RIVER ROAD
DOVER, N.H. 03280

3.) TOTAL LOT AREA: 161,869 SQ.FT. – 3.716 ACRES

4.) TAX MAP I LOT 6C

5.) PROJECT DEED REFERENCE: BOOK 3553 PAGE 277

6.) PROJECT PLAN REFERENCE: AMENDED
OPEN SPACE SUBDIVISION PLAN
PIONIC ROCK FARM
BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
TRITECH ENGINEERING CORPORATION
JUNE 8, 2009 SCRD 25-65

PLAN OF LAND OF
BRUCE G. & OLIVE E. STAPLES
BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
K.E. MOORE & B.G. STAPLES
JAN. 1985 SCRD 25-65

BOUNDARY LINE ADJUSTMENT FOR
LOUISE SWEATT
DOVER, NEW HAMPSHIRE
EMERY ENGINEERING
SEPTEMBER 26, 1991 SCRD 39-79

7.) ZONING: R-12

| | | OPEN SPACE REQUIREMENTS | |
|---|---|---|---|
| MIN. LOT SIZE: | 12,000 SQ. FT. | MIN. LOT SIZE: | 6,000 SQ.FT. |
| MIN. FRONTAGE: | 100 FT | MIN. FRONTAGE: | 20 FT |
| MIN. SETBACKS: | | MIN. SETBACKS: | |
| FRONT: | 27.5 FT (BUILD TO LINE) | FRONT: | 10 FT |
| SIDE: | 15 FT | SIDE: | 10 FT |
| REAR: | 30 FT | REAR: | 10 FT |
| MAX BUILDING HEIGHT: | 35 FT | EXTERIOR BOUNDARY: | 30 FT |
| LOT COVERAGE: | 30 % | EXISTING STRUCTURES: | 50 FT |
| | | FRONTAGE BUFFER: | 100 FT |

IN ADDITION TO R-12, THIS PROPERTY FALLS WITHIN THE CONSERVATION OVERLAY DISTRICT

8.) THE RAW UNADJUSTED CLOSURE OF OUR RANDOM POINT TRAVERSE WAS 1 PART IN 41,000, AND WAS ACCOMPLISHED USING A LEICA TC 703 TOTAL STATION, DURING THE MONTH OF SEPTEMBER, 2014.

9.) PROPERTY CORNER COORDINATE – BASED ON THE CITY OF DOVER GIS SYSTEM. CITY OF DOVER GIS POINTS WERE OCCUPIED TO DETERMINE POSITION, DIRECTION AND VERTICAL DATUM.

10.) THIS PROPERTY FALLS WITHIN THE CONSERVATION DISTRICT, ZONING ORDINANCE 170-27. AREAS SUCH AS THOSE WITHIN 50 FEET OF STREAMS, BROOKS OR OTHER FRESHWATER BODIES AND SLOPES IN EXCESS OF 20% ARE PART OF THE CONSERVATION DISTRICT AND THE REGULATIONS OF 170-27 APPLY.

11.) A PORTION OF THE NEW MAP I LOT 6C IS LOCATED IN A FEDERALLY DESIGNATED FLOOD HAZARD (ZONE "A"). LOCATION IS SCALED FROM FIRM PANEL No. 33017C 0340D, EFFECTIVE DATE MAY 17, 2005. (AS SHOWN)

12.) WETLAND DELINEATION SERVICES WERE PERFORMED BY MICHAEL MARIANO, NEW HAMPSHIRE CERTIFIED WETLAND SCIENTIST, IN SEPTEMBER OF 2014, IN ACCORDANCE WITH THE "REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRIAL AND NORTHEAST REGION (VERSION 2.0). THERE WERE NO WETLANDS IDENTIFIED ON THE SUBJECT PARCEL.

13.) STREET ADDRESSES FOR EACH LOT SHALL BE ASSIGNED BY THE BUILDING INSPECTOR AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.

14.) PLANS T-1, T-2, EX-1, S-1, S-2, C-1 THRU C-7 AND LA-1 ARE PART OF THIS APPROVAL.

15.) ALL ON-SITE UTILITIES SHALL BE INSTALLED UNDERGROUND.

16.) THE FINAL SUBDIVISION PLAN SHALL BE SUBMITTED IN A DIGITAL DXF FORMAT ON A TRANSFERABLE DISK TO THE CITY OF DOVER ENGINEER'S OFFICE.

17.) PROPERTY LINE DETERMINED TO BE THE MEAN LOW WATER OF THE BELLAMY RIVER AS OBSERVED IN AUGUST OF 2014.

18.) MAP I LOT 6C MAY BE SUBJECT TO FLOWAGE RIGHTS AND MILL PRIVILEGE RIGHTS.

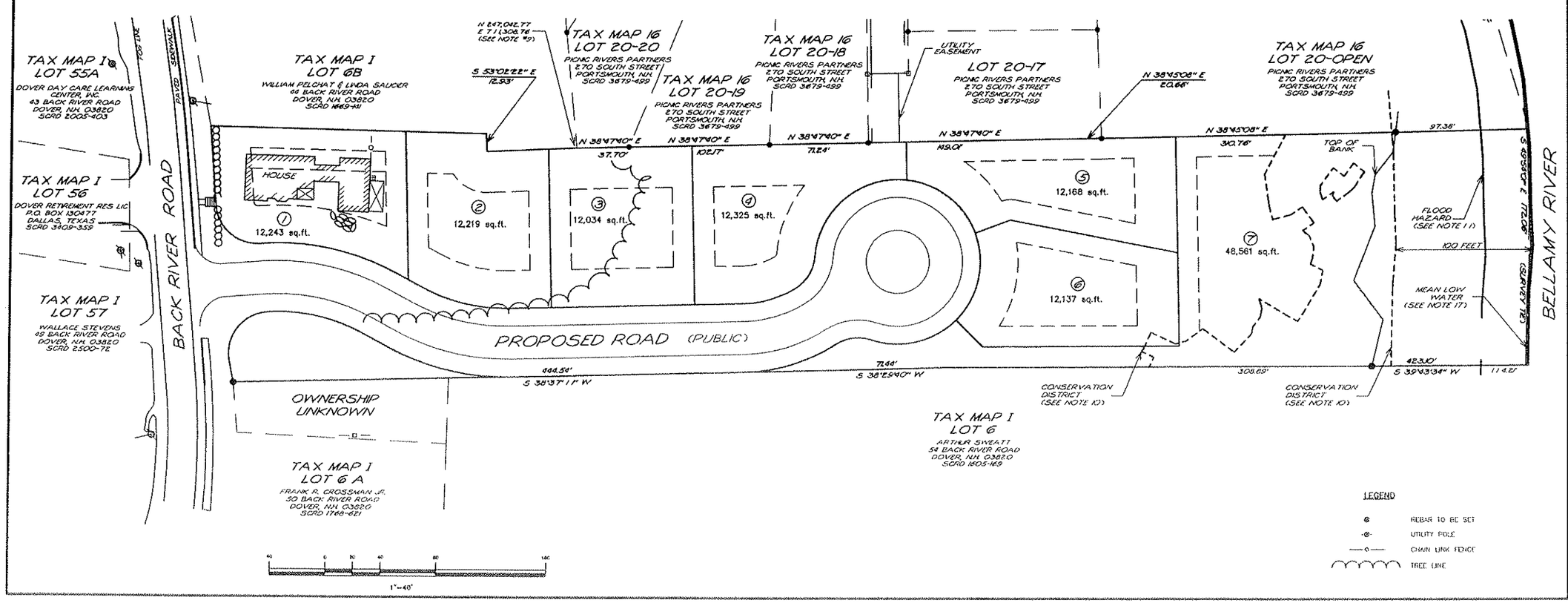
19.) LOTS TO BE SERVICED BY CITY WATER AND SEWER. ALL NEW DWELLING UNITS SHALL BE ASSESSED THE CURRENT WATER AND SEWER INVESTMENT FEES IN PLACE AT THE TIME OF THE BUILDING PERMIT APPLICATION.

20.) ON MARCH 19, 2015, THE DOVER ZONING BOARD OF ADJUSTMENT GRANTED A VARIANCE FROM SECTION 170-12.B OF THE ZONING ORDINANCE AND THE R-12 DISTRICT TABLE OF USES AND DIMENSIONAL REGULATIONS TO PERMIT LOT 7 AS DEPICTED ON THE PROPOSED SUBDIVISION PLAN TO HAVE MINIMUM FRONT SETBACK OF 176.5', IN PLACE OF THE REQUIRED BUILD TO LINE OF 27.5 FEET.

21.) THE PORTION OF THE BELLAMY RIVER ADJACENT TO THE SUBJECT PROPERTY IS NOT SUBJECT TO TIDAL ACTION. THE RIVER FRONT OVERLAY DISTRICT DOES NOT APPLY TO THE SUBJECT PARCEL.

N

TRITECH
DIVISION OF COMPANY





TRITECH
ENGINEERING CORPORATION
700 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 749 9107
FAX 603 742 9630


REVISIONS

| DATE: | DESCRIPTION: |
|---|---|
| 4-2-15 | REVISED OPEN SPACE |
| 4-15-15 | REVISED PER PLANNING COMMENTS |

YIELD PLAN

# BELLAMY RIDGE

46 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE

DECEMBER 24, 2014 JOB No. 14103

SCALE: 1" = 40'

SHEET No. Y-1

(P15-05)

## NOTES

1.) INTENT: TO SHOW THE OPEN SPACE SUBDIVISION OF DOVER TAX MAP 1 LOT 6C. AS AN OPEN SPACE SUBDIVISION WHICH WILL CREATE 7 LOTS, PLUS THE THE EXISTING HOUSE LOT AT 46 BACK RIVER ROAD. THE OTHER 7 LOTS ARE 6 PROPOSED BUILDING LOTS, AND 1 OPEN SPACE LOT.

2.) CURRENT OWNER: MACE FAMILY REVOCABLE TRUST
46 BACK RIVER ROAD
DOVER, N.H. 03820

OWNER'S SIGNATURE

APPLICANT: MCL BUILDERS & DEVELOPERS, LLC
3 SANDPIPER LANE
SEABROOK, NEW HAMPSHIRE

3.) TOTAL LOT AREA: 161,869 SQ.FT. - 3.716 ACRES

4.) TAX MAP 1 LOT 6C

5.) PROJECT DEED REFERENCE: BOOK 3553 PAGE 277

6.) PROJECT PLAN REFERENCE: AMENDED
OPEN SPACE SUBDIVISION PLAN
PICNIC ROCK FARM
BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
TRITECH ENGINEERING CORPORATION
JUNE 8, 2009 SCRD 25-65

PLAN OF LAND OF
BRUCE G. & OLIVE E. STAPLES
BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
K.E. MOORE & B.G. STAPLES
JAN. 1985 SCRD 25-65

BOUNDARY LINE ADJUSTMENT FOR
LOUISE SWEATT
DOVER, NEW HAMPSHIRE
EMERY ENGINEERING
SEPTEMBER 26, 1991 SCRD 39-79

7.) ZONING: R-12

| | | OPEN SPACE REQUIREMENTS | |
|---|---|---|---|
| MIN. LOT SIZE: | 12,000 SQ. FT. | MIN. LOT SIZE: | 8,000 SQ.FT. |
| MIN. FRONTAGE: | 100 FT | MIN. FRONTAGE: | 20 FT |
| MIN. SETBACKS: | | MIN. SETBACKS: | |
| FRONT: | 27.5 FT (BUILD TO LINE) | FRONT: | 10 FT |
| SIDE: | 15 FT | SIDE: | 10 FT |
| REAR: | 30 FT | REAR: | 10 FT |
| MAX BUILDING HEIGHT: | 35 FT | EXTERIOR BOUNDARY: | 30 FT |
| LOT COVERAGE: | 30 % | EXISTING STRUCTURES: | 50 FT |
| | | FRONTAGE BUFFER: | 100 FT |

IN ADDITION TO R-12, THIS PROPERTY FALLS WITHIN THE CONSERVATION OVERLAY DISTRICT

8.) THE RAW UNADJUSTED CLOSURE OF OUR RAYDON POINT TRAVERSE WAS 1 PART IN 41,000, AND WAS ACCOMPLISHED USING A LEICA TC 703 TOTAL STATION, DURING THE MONTH OF SEPTEMBER, 2014.

9.) PROPERTY CORNER COORDINATE - BASED ON THE CITY OF DOVER GIS SYSTEM. CITY OF DOVER GIS POINTS WERE OCCUPIED TO DETERMINE POSITION, DIRECTION AND VERTICAL DATUM.

10.) THIS PROPERTY FALLS WITHIN THE CONSERVATION DISTRICT, ZONING ORDINANCE 170-27. AREAS SUCH AS THOSE WITHIN 50 FEET OF STREAMS, BROOKS OR OTHER FRESHWATER BODIES AND SLOPES IN EXCESS OF 20% ARE PART OF THE CONSERVATION DISTRICT AND THE REGULATIONS OF 170-27 APPLY.

11.) A PORTION OF THE NEW MAP 1 LOT 6C IS LOCATED IN A FEDERALLY DESIGNATED FLOOD HAZARD (ZONE "A"). LOCATION IS SCALED FROM FIRM PANEL No. 33017C 0340D, EFFECTIVE DATE MAY 17, 2005. (AS SHOWN)

12.) WETLAND DELINEATION SERVICES WERE PERFORMED BY MICHAEL MARIANO, NEW HAMPSHIRE CERTIFIED WETLAND SCIENTIST, IN SEPTEMBER OF 2014, IN ACCORDANCE WITH THE "REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION (VERSION 2.0). THERE WERE NO WETLANDS IDENTIFIED ON THE SUBJECT PARCEL.

13.) STREET ADDRESSES FOR EACH LOT SHALL BE ASSIGNED BY THE BUILDING INSPECTOR AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.

14.) PLANS T-1, T-2, EX-1, Y-1, S-2, C-1 THRU C-7 AND LA-1 ARE PART OF THIS APPROVAL.

15.) ALL ON-SITE UTILITIES SHALL BE INSTALLED UNDERGROUND.

16.) THE FINAL SUBDIVISION PLAN SHALL BE SUBMITTED IN A DIGITAL DXF FORMAT ON A TRANSFERABLE DISK TO THE CITY OF DOVER ENGINEER'S OFFICE.

17.) PROPERTY LINE DETERMINED TO BE THE MEAN LOW WATER OF THE BELLAMY RIVER AS OBSERVED IN AUGUST OF 2014.

18.) MAP 1 LOT 6C MAY BE SUBJECT TO FLOWAGE RIGHTS AND MILL PRIVILEGE RIGHTS.

19.) LOTS TO BE SERVICED BY CITY WATER AND SEWER. ALL NEW DWELLING UNITS SHALL BE ASSESSED THE CURRENT WATER AND SEWER INVESTMENT FEES IN PLACE AT THE TIME OF THE BUILDING PERMIT APPLICATION.

20.) * OPEN SPACE REQUIRED: 7 LOTS x 4,000 SQ.FT. = 28,000 SQ.FT.
* TOTAL OPEN SPACE PROVIDED: 49,834 SQ.FT.
* TOTAL AREA OF USEABLE OPEN SPACE REQUIRED: 28,000 SQ.FT. x .05 = 14,000 SQ.FT.
* TOTAL AREA OF USEABLE OPEN SPACE PROVIDED: 17,800 SQ.FT. (CONTIGUOUS NON-CONSERVATION DISTRICT)

21.) A SIGN WILL BE POSTED ON-SITE THAT IDENTIFIES DEVELOPER AND CONTRACTOR CONTACT INFORMATION.

22.) THERE WILL BE NO FURTHER SUBDIVISION OR INCREASE OF DENSITY OF THE PROPOSED LOTS.

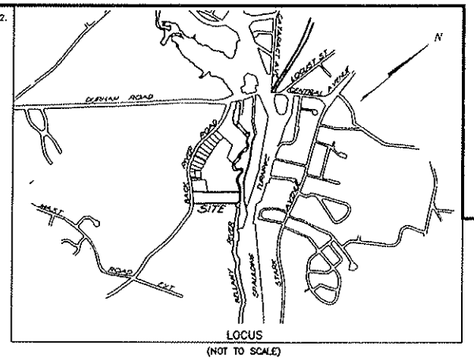
23.) 30' WIDE PUBLIC ACCESS EASEMENT.

24.) ON DECEMBER 12, 2014, TOM SOKOLOSKI, WETLAND SCIENTIST #127 DETERMINED THE LIMIT OF TIDAL ACTION BY DETERMINING THE LIMIT OF SALT TOLERANT VEGETATION AND PHYSICAL BARRIER THAT BLOCKS FARTHER FLOW OF HE TIDE. THE PORTION OF THE BELLAMY RIVER ADJACENT TO THE SUBJECT PROPERTY IS NOT SUBJECT TO TIDAL ACTION. THE RIVERFRONT OVERLAY DISTRICT DOES NOT APPLY TO THE SUBJECT PARCEL.

25.) ON APRIL 14, 2015, THE PLANNING BOARD HELD A HEARING AS REQUIRED BY SECTION 155-22. C.1.A. OF THE CITY OF DOVER SUBDIVISION REGULATIONS AND DETERMINED THAT THE OPEN SPACE SUBDIVISION AS SHOWN WAS ACCEPTABLE FOR TAX MAP F LOT 6C.

26.) ON MARCH 19, 2015, THE DOVER ZONING BOARD OF ADJUSTMENT GRANTED A VARIANCE FROM SECTION 170-12.B OF THE ZONING ORDINANCE AND THE R-12 DISTRICT TABLE OF USES AND DIMENSIONAL REGULATIONS TO PERMIT LOT 7 AS DEPICTED ON THE PROPOSED SUBDIVISION PLAN TO HAVE MINIMUM FRONT SETBACK OF 176.5', IN PLACE OF THE REQUIRED BUILD TO LINE OF 27.5 FEET.

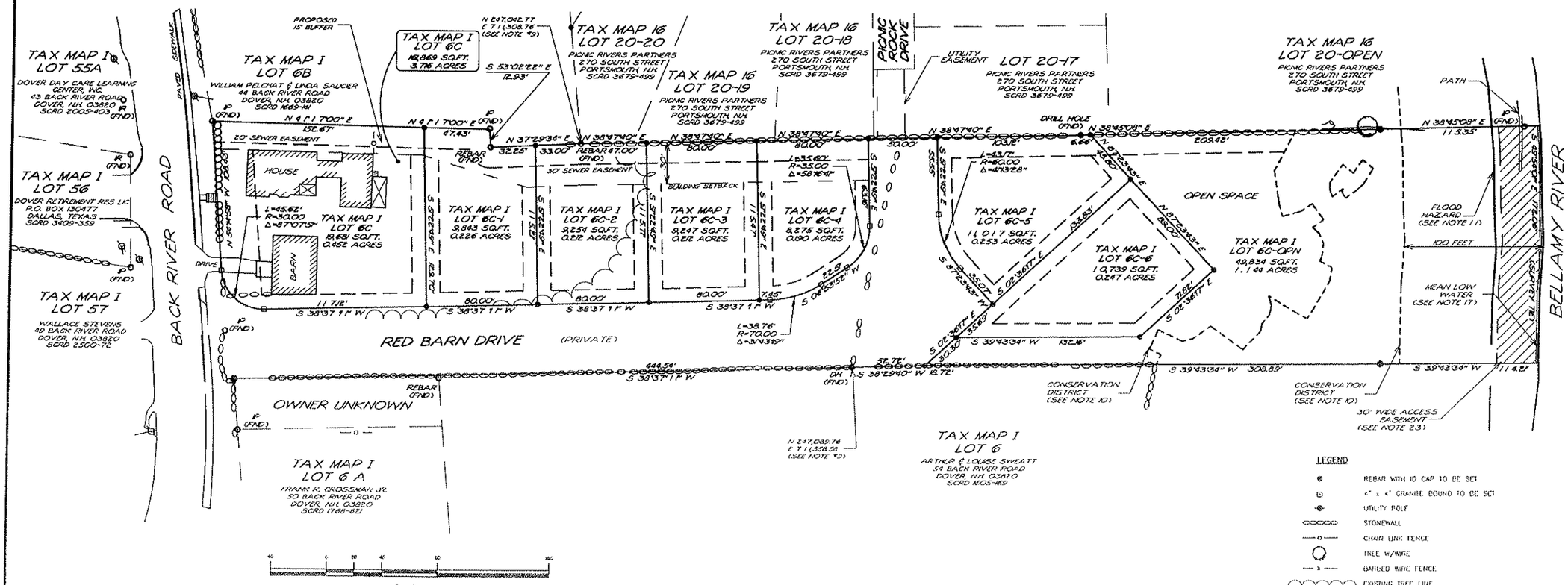
27.) THE RED BARN DRIVE RIGHT-OF-WAY SHALL HAVE A WATER LINE EASEMENT IN FAVOR OF THE CITY OF DOVER.



LOCUS
(NOT TO SCALE)

N

TRITECH
ENGINEERING CORPORATION




LEGEND

- REBAR WITH ID CAP TO BE SET
- 6" x 6" GRANITE BOUND TO BE SET
- UTILITY POLE
- STONEWALL
- CHAIN LINK FENCE
- TREE W/WIRE
- BARBED WIRE FENCE
- EXISTING TREE LINE

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8407
FAX 603 742 3630

| REVISIONS | DESCRIPTION: |
|---|---|
| DATE: | |
| 4-2-15 | REVISED OPEN SPACE |
| 4-17-15 | REVISED PLANNING BOARD COMMENTS |
| 8-18-15 | REVISED PER REVIEW COMMENTS |
| 8-18-15 | REVISED PER REVIEW COMMENTS |

OPEN SPACE SUBDIVISION PLAN
BELLAMY RIDGE
46 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
DECEMBER 24, 2014 JOB No. 14103
SCALE: 1" = 40'

SHEET No. S-1

(P15-05)

## NOTES

1.) INTENT: TO SHOW THE OPEN SPACE SUBDIVISION OF DOVER TAX MAP 1 LOT 6C. AS AN OPEN SPACE SUBDIVISION WHICH WILL CREATE 7 LOTS, PLUS THE THE EXISTING HOUSE LOT AT 46 BACK RIVER ROAD. THE OTHER 7 LOTS ARE 6 PROPOSED BUILDING LOTS, AND 1 OPEN SPACE LOT.

2.) CURRENT OWNER: MACE FAMILY REVOCABLE TRUST
46 BACK RIVER ROAD
DOVER, N.H. 03280

OWNERS SIGNATURE

APPLICANT: MCL BUILDERS & DEVELOPERS, LLC
3 SANDPIPER LANE
SEABROOK, NEW HAMPSHIRE

3.) TOTAL LOT AREA: 161,869 SQ.FT. – 3.716 ACRES

4.) TAX MAP 1 LOT 6C

5.) PROJECT DEED REFERENCE: BOOK 3553 PAGE 277

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TRITECH ENGINEERING CORPORATION
JUNE 8, 2009 SCRD 25-65

PLAN OF LAND OF
BRUCE G. & OLIVE E. STAPLES
BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
K.E. MOORE & B.G. STAPLES
JAN. 1985 SCRD 25-65

BOUNDARY LINE ADJUSTMENT FOR
LOUISE SWEATT
DOVER, NEW HAMPSHIRE
EMERY ENGINEERING
SEPTEMBER 26, 1991 SCRD 30-79

7.) ZONING: R-12

| | | OPEN SPACE REQUIREMENTS | |
|---|---|---|---|
| MIN. LOT SIZE: | 12,000 SQ. FT. | MIN. LOT SIZE: | 8,000 SQ.FT. |
| MIN. FRONTAGE: | 100 FT | MIN. FRONTAGE: | 20 FT |
| MIN. SETBACKS: | | MIN. SETBACKS: | |
| FRONT: | 27.5 FT (BUILD TO LINE) | FRONT: | 10 FT |
| SIDE: | 15 FT | SIDE: | 10 FT |
| REAR: | 30 FT | REAR: | 10 FT |
| MAX BUILDING HEIGHT: | 35 FT | EXTERIOR BOUNDARY: | 30 FT |
| LOT COVERAGE: | 30 % | EXISTING STRUCTURES: | 50 FT |
| | | FRONTAGE BUFFER: | 100 FT |

IN ADDITION TO R-12, THIS PROPERTY FALLS WITHIN THE CONSERVATION OVERLAY DISTRICT

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10.) THIS PROPERTY FALLS WITHIN THE CONSERVATION DISTRICT, ZONING ORDINANCE 170-27. AREAS SUCH AS THOSE WITHIN 50 FEET OF STREAMS, BROOKS OR OTHER FRESHWATER BODIES AND SLOPES IN EXCESS OF 20% ARE PART OF THE CONSERVATION DISTRICT AND THE REGULATIONS OF 170-27 APPLY.

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13.) STREET ADDRESSES FOR EACH LOT SHALL BE ASSIGNED BY THE BUILDING INSPECTOR AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.

14.) PLANS T-1, T-2, EX-1, Y-1, S-2, C-1 THRU C-7 AND LA-1 ARE PART OF THIS APPROVAL.

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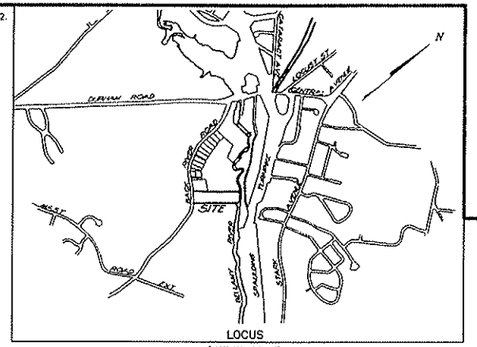
23.) 30' WIDE PUBLIC ACCESS EASEMENT.

24.) ON DECEMBER 12, 2014, TOM SOKOLOSKI, WETLAND SCIENTIST #122 DETERMINED THE LIMIT OF TIDAL ACTION BY DETERMINING THE LIMIT OF SALT TOLERANT VEGETATION AND PHYSICAL BARRIER THAT BLOCKS FARTHER FLOW OF HE TIDE. THE PORTION OF THE BELLANY RIVER ADJACENT TO THE SUBJECT PROPERTY IS NOT SUBJECT TO TIDAL ACTION. THE RIVERFRONT OVERLAY DISTRICT DOES NOT APPLY TO THE SUBJECT PARCEL.

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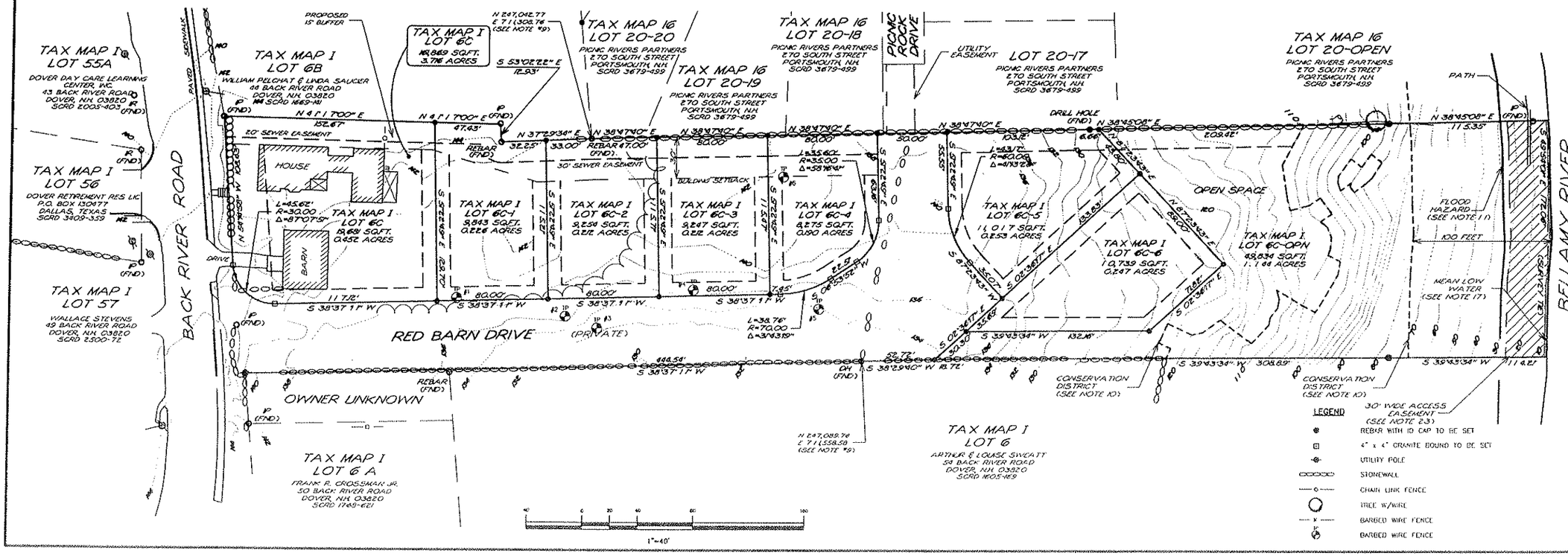
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LOCUS
(NOT TO SCALE)

N

TRITECH ENGINEERING CORPORATION



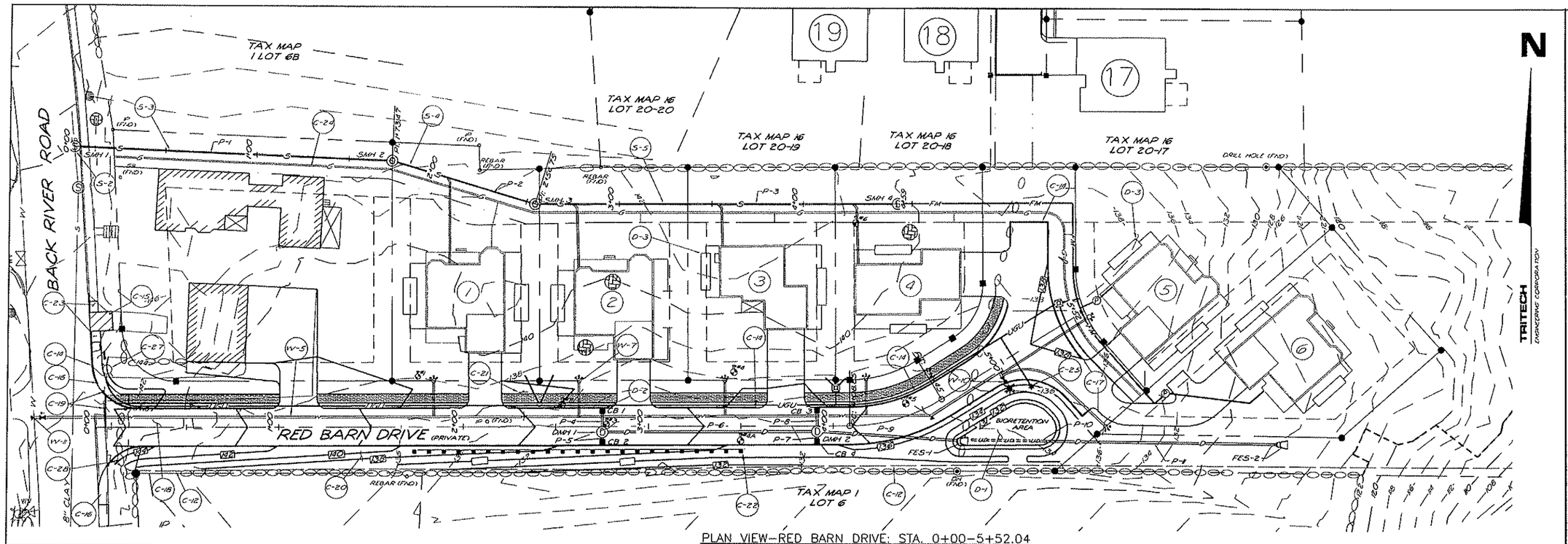

TRITECH
ENGINEERING CORPORATION
795 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8177
FAX 603 742 3820

REVISIONS
DATE: DESCRIPTION:
4-15-15 REVISED PLANNING BOARD COMMENTS
6-18-15 REVISED PER REVIEW COMMENTS
8-18-15 REVISED PER REVIEW COMMENTS

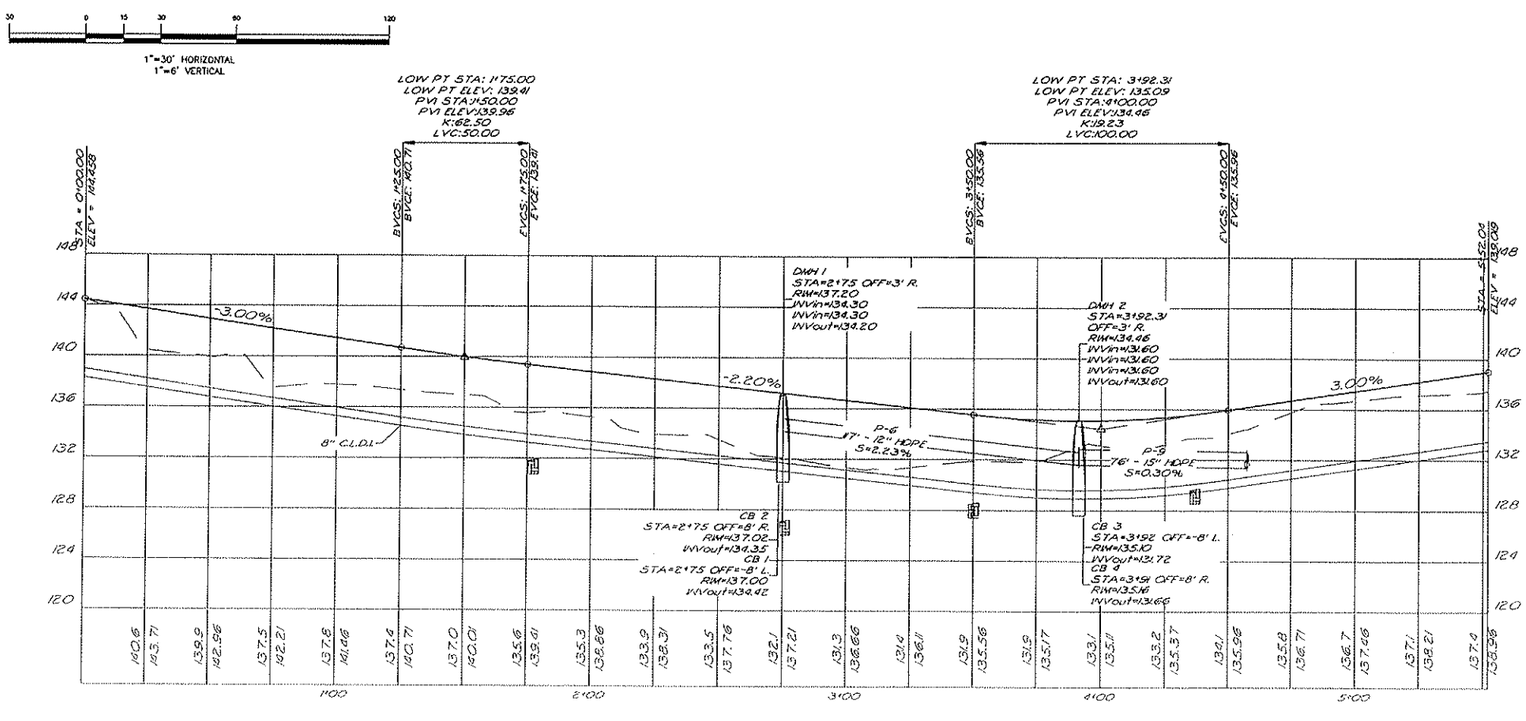
TOPOGRAPHIC PLAN
BELLAMY RIDGE
46 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
DECEMBER 24, 2014 JOB No. 14103
SCALE: 1" = 40'

SHEET NO. S-2

(P15-05)




PLAN VIEW–RED BARN DRIVE: STA. 0+00–5+52.04




PROFILE VIEW–RED BARN DRIVE: STA. 0+00–5+52.04

*LEGEND*

- EXISTING 2 FOOT CONTOUR
- EXISTING 10 FT CONTOUR
- PROPOSED CONTOUR
- PROPOSED LOT LINE
- PROPOSED EASEMENT
- IRON PIN TO BE SET
- GRANITE MONUMENT TO BE SET
- UTILITY POLE
- EXISTING WATER LINE
- EXISTING WATER GATE VALVE
- EXISTING WATER SHUTOFF
- EXISTING FIRE HYDRANT
- PROPOSED WATER LINE
- PROPOSED WATER SHUTOFF
- EXISTING DRAIN LINE
- EXISTING CATCH BASIN
- EXISTING DRAIN MANHOLE
- PROPOSED DRAIN LINE
- PROPOSED CATCH BASIN
- PROPOSED DRAIN MANHOLE
- EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- PROPOSED SEWER LINE
- PROPOSED SEWER MANHOLE
- PROPOSED GAS LINE
- PROP. ASPHALT CONCRETE SIDEWALK
- PROP. UNDERDRAIN
- PROPOSED UNDERGROUND ELECTRIC TELEPHONE & CABLE
- PROPOSED TRANSFORMER
- PROPOSED HANDHOLE
- LEDGE OUTCROP/BOULDER

TRITECH
ENGINEERING CORPORATION
795 CENTRAL AVENUE
DOVER NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3630

REVISIONS

| DATE: | DESCRIPTION: |
|---|---|
| 06-18-15 | REVISED PER P.B. COMMENTS |
| 08-18-15 | REVISED PER REVIEW COMMENTS |

ROAD PLAN AND PROFILE

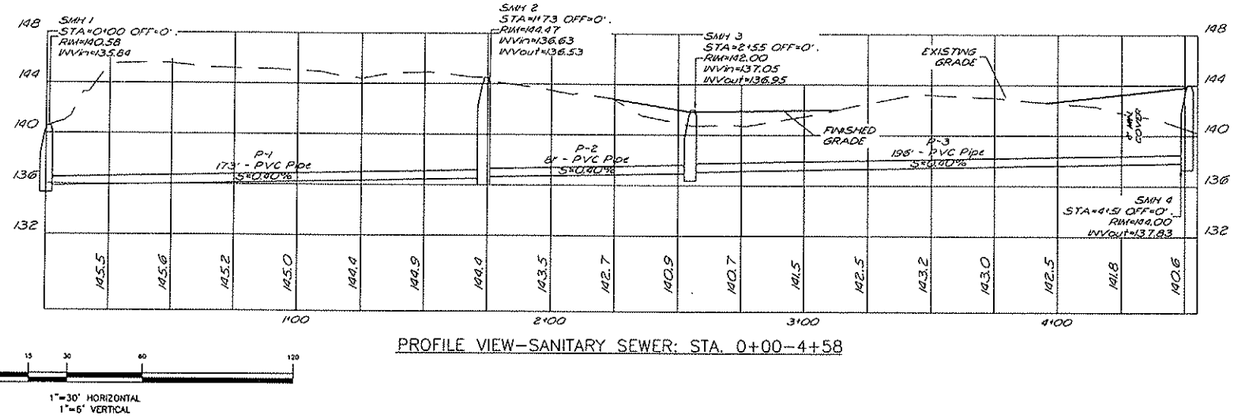
**BELLAMY RIDGE**

46 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE

DECEMBER 24, 2014 JOB NO. 1403

SCALE: 1" = 30'

SHEET NO. **C-1**




PROFILE VIEW–SANITARY SEWER: STA. 0+00–4+58

30 0 15 30 60 120

1"=30' HORIZONTAL
1"=6' VERTICAL

## S–1 SEWER NOTES:

1. ALL EXISTING INVERTS AND ELEVATIONS TO BE VERIFIED BY CONTRACTOR.
2. INSTALL SEWER MANHOLE PER DETAILS ON SHEET C–7 & C–8.
3. INSTALL 173' – 8" SDR 35 PVC FROM SMH 2 TO SMH 1
   INVout = 136.53, INVin = 135.84. S = 0.004 FT/FT.
4. INSTALL, 81' – 8" SDR 35 PVC FROM SMH 3 TO SMH 2.
   INVout = 136.63, INVin = 136.95. S = 0.004 FT/FT.
5. INSTALL, 196' – 8" SDR 35 PVC FROM SMH 4 TO SMH 3
   INVout = 137.83, INVin = 137.08. S = 0.004 FT/FT

SEWER PIPE TABLE

| PIPE # | SIZE | LENGTH | SLOPE |
|---|---|---|---|
| P-1 | 8" SDR 35 Pipe | 173' | 0.40% |
| P-2 | 8" SDR 35 Pipe | 81' | 0.40% |
| P-3 | 8" SDR 35 Pipe | 196' | 0.40% |

SEWER STRUCTURE TABLE

| STRUCTURE | RIM ELEV. | INVERT IN | INVERT OUT |
|---|---|---|---|
| SMH 1 | 140.58 | 135.84 | EXISITNG |
| SMH 2 | 144.47 | 136.63 | 136.53 |
| SMH 3 | 142.00 | 137.05 | 136.95 |
| SMH 4 | 144.00 | | 137.83 |

## C–1 CONSTRUCTION NOTES:

1. THE CONTRACTOR IS REQUIRED UNDER NEW HAMPSHIRE LAW TO CONTACT "DIG SAFE" AT 811, 72 HOURS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN THE "DIG SAFE" LOCATIONS THROUGH OUT THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL BEAR THE COST TO REPAIR ANY UTILITIES DAMAGED DURING THE COURSE OF THE WORK.
2. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH THE APPLICABLE CITY AND STATE CODES.
3. EXISTING UTILITIES – ALL INFORMATION ON, AND LOCATION OF, EXISTING UTILITIES ARE APPROXIMATE AND BASED ON FIELD INFORMATION AND AVAILABLE PLANS. EXACT LOCATIONS AND DEPTHS TO BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
4. AS–BUILT PLANS OF THE SITE SHALL BE SUBMITTED IN A DIGITAL DXF FORMAT TO THE CITY OF DOVER ENGINEER'S OFFICE UPON COMPLETION OF THE PROJECT. AS–BUILTS SHALL BE PREPARED AND CERTIFIED CORRECT BY A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER.
5. ALL CONSTRUCTION SHALL CONFORM WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION"; HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS" AND ALSO WITH THE "CITY OF DOVER SPECIFICATIONS".
6. AS REQUIRED BY THE CITY OF DOVER PLANNING DEPARTMENT, A PRE CONSTRUCTION CONFERENCE WITH THE DEVELOPER, THE EARTHWORK CONTRACTOR, TRITECH ENGINEERING CORPORATION, AND THE CITY ENGINEER SHALL OCCUR PRIOR TO THE START OF ANY EARTHWORK.
7. ALL BACKFILL IN TRENCHES AND FILL FOR ROADBEDS SHALL BE THOROUGHLY COMPACTED TO 95% OF OPTIMUM DENSITY.
8. LAND CLEARING SHALL BE LIMITED TO MINIMAL AMOUNTS DURING ROAD CONSTRUCTION.
9. ALL ON–SITE UTILITIES SHALL BE INSTALLED UNDERGROUND.
10. THE LIMITS OF CONSTRUCTION DISTURBANCE THAT ARE LOCATED WITHIN THE CONSERVATION DISTRICT SHALL BE FLAGGED AND CLEARLY IDENTIFIED PRIOR TO THE START OF SITE WORK.
11. A LETTER OF CREDIT FOR THE COST OF REVEGETATING ALL DISTURBED AREAS ON THE SITE SHALL BE SUBMITTED PRIOR TO THE START OF ANY EARTHWORK.
12. INSTALL SILT FENCE PER DETAIL 1, SHEET C–4.
13. MATCH EXISTING PAVEMENT.
14. INSTALL SLOPED GRANITE CURB PER DETAIL 2, SHEET C–3.
15. EXISTING DRIVE TO BE RECONSTRUCTED AS NECESSARY. LOAM AND SEED DISTURBED AREAS
16. INSTALL HANDICAP ACCESSIBLE REINFORCED CONCRETE RAMP (MAXIMUM SLOPE = 1" IN 12") FROM PAVEMENT GRADE TO SIDEWALK GRADE IN COMPLIANCE WITH ALL A.D.A. STANDARDS, PER DETAIL 3, SHEET C–3.
17. END SLOPED GRANITE CURB.
18. INSTALL STABILIZED CONSTRUCTION ENTRANCE PER DETAIL 7, SHEET C–4.
19. INSTALL STOP BAR & STOP SIGN.
20. 4" LOAM AND SEED
21. INSTALL SIGN "NO PARKING" ON EACH SIDE OF ROADWAY
22. INSTALL GUARDRAIL FROM STATION 1+75 TO STATION 3+50 PER DETAIL 6 SHEET C–3.
23. INSTALL CAPE COD BERM, SIDEWALK AND TIP DOWN RAMP
24. INSTALL GAS MAIN.
25. INSTALL EVERSOURCE STOCK TOWN AND COUNTRY STREET LIGHT
26. INSTALL PUMP STATION PER DETAIL 12 SHEET C–2.
27. PROPOSED RISER UTILITY POLE
28. INSTALL ROAD SIGN "RED BARN DRIVE– PRIVATE"
29. ALL WEATHER ACCESS SHALL BE PROVIDED TO THE SITE DURING CONSTRUCTION

## DRAINAGE STRUCTURE TABLE

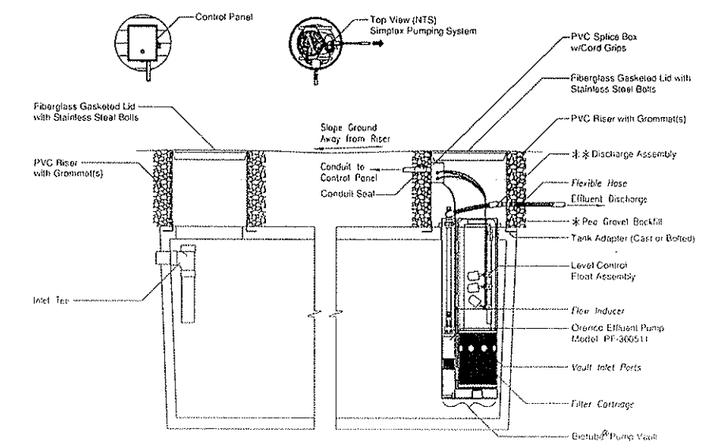
| STRUCTURE | RIM ELEV. | INVin | INVout | SUMP |
|---|---|---|---|---|
| CB 1 | 137.00 | - | 134.42 | 130.42 |
| CB 2 | 137.02 | - | 134.35 | 130.35 |
| CB 3 | 135.10 | - | 131.72 | 127.72 |
| CB 4 | 135.16 | - | 131.66 | 127.66 |
| DMH 1 | 137.20 | 134.30<br>134.30 | 134.20 | |
| DMH 2 | 134.96 | 131.60<br>131.60<br>131.60 | 131.60 | |

## W–1 WATER NOTES:

1. WATERLINE AND APPENDITURES, INSTALLATION, AND MATERIALS SHALL CONFORM WITH THE CITY OF DOVER, NH AND AMERICAN WATER WORKS STANDARDS. ALL VALVES SHALL REQUIRE RESTRAINED MECHANICAL JOINTS USING EITHER MEGA–LUG, GRIP RINGS, OR OTHER METHODS OF RESTRAIN ACCEPTABLE TO THE CITY OF DOVER WATER DEPARTMENT, IN ADDITION TO USE OF CONCRETE THRUST BLOCKS
2. PRESSURE AND LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST STANDARDS OF AAWA. CHLORINATING AND FLUSHING SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST STANDARDS OF AAWA, STATE AND LOCAL REGULATIONS.
3. WATER LINES MUST BE FLUSHED AND WITNESSED BY FIRE PREVENTION DEPARTMENT PRIOR TO CONNECTION TO THE SPRINKLER SYSTEM
4. BACKFLOW PREVENTORS SHALL BE PROVIDED FOR DOMESTIC WATER LINES.
5. INSTALL S35'd – 8" CONCRETE LINED DUCTILE IRON CLASS 52 (C.L.D.I.) WATER MAIN WITH POLYWRAP MINIMUM DEPTH OF COVER OVER PIPE = 5.5'.
6. LINE FROM WATER MAIN TO CURB STOP SHALL BE 1" TYPE K COPPER PIPE. MINIMUM DEPTH OF COVER OVER PIPE SHALL BE 5.5'
7. LINE FROM CURB STOP TO HOUSE SHALL BE 1" TYPE K COPPER OR 1" HDPE DOMESTIC WATER PIPE. MINIMUM DEPTH OF COVER OVER PIPE SHALL BE 5.5'.
8. INSTALL CORPORATION AND CURB STOP (HAYES, FORD, OR MCDONALD.)
9. INSTALL CONCRETE THRUST BLOCKS WHERE SHOWN.
10. INSTALL FIRE HYDRANT ASSEMBLY WITH GATE VALVE
11. INSTALL 8" STAINLESS STEEL TAPPING SLEEVE, THRUST BLOCK AND GRATE BY KENNEDY OR AFL
12. CONNECT TO 8" CLDI WATER MAIN AT PICNIC ROCK DRIVE.

## D–1 DRAINAGE NOTES:

1. INSTALL BIORETENTION BASIN PER DETAIL 4, SHEET C–5. BIORETENTION BASIN SHALL BE CONSTRUCTED AND STABILIZED PRIOR TO DIRECTING STORMWATER FLOW TOWARDS IT. SEE SHEET LA–1 FOR PLANTINGS.
2. INSTALL HIGH FLOW SILT SACK IN ALL CATCH BASINS PER DETAIL 3, SHEET C–4.
3. INSTALL INFILTRATION PRACTICE PER DETAIL 7, 8, & 10 SHEET C–5 AT TIME OF RESIDENTIAL HOME CONSTRUCTION.
4. INSTALL 11' – 12" HDPE FROM CB 1 TO DMH 1 INVin = 134.42, INVout = 134.30. S = 0.01 FT/FT.
5. INSTALL 5' – 12" HDPE FROM CB 2 TO DMH 1 INVin = 134.35, INVout = 134.30. S = 0.01 FT/FT.
6. INSTALL 117' – 12" HDPE FROM DMH 1 TO DMH 2 INVin = 134.20, INVout = 131.60 S = 0.0223 FT/FT.
7. INSTALL 5' – 12" HDPE FROM CB 4 TO DMH 2 INVin = 131.66, INVout = 131.60. S = 0.01 FT/FT.
8. INSTALL 11' – 12" HDPE FROM CB 3 TO DMH 2 INVin = 131.72, INVout = 131.60. S = 0.01 FT/FT.
9. INSTALL 76' – 15" HDPE FROM DMH 2 TO FES 1 INVin = 131.60, INVout = 131.37 S = 0.003 FT/FT.
10. INSTALL 50' OF 6"ø PERFORATED HDPE PIPE FROM UNDERDRAIN FILTER MEDIA IN BIORETENTION BASIN INVin = 128.50, INVout = 128.30, S = 0.005 FT/FT.
11. INSTALL 125' OF 6"ø HDPE PIPE FROM END OF 6"ø PERFORATED HDPE PIPE TO OUTFALL INVout = 127.68 S = 0.005 FT/FT.




✻ Pea Gravel Backfill Recommended to Help Prevent Frost Heave
✻✻ Discharge Line and Distribution System Must be Configured to Allow Complete Drainage. (distribution system not shown)

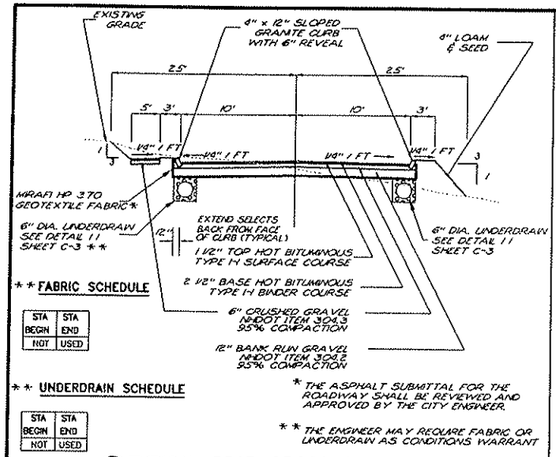
C–12 Effluent Pumping System for Cold Weather Applications (db style)
Scale: 1" = 2'


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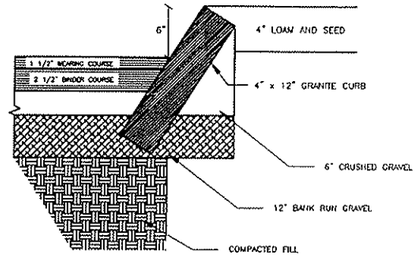

REVISIONS
DATE: DESCRIPTION:
06/18/15 REVISED PER P.B. COMMENTS
08/18/15 REVISED PER RE/WW COMMENTS

SHEET NO. C-2

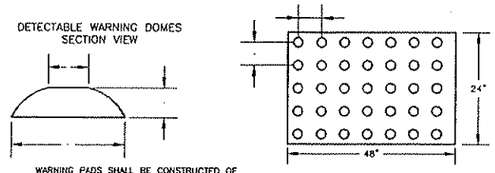
CONSTRUCTION NOTES & DETAILS
BELLAMY RIDGE
46 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
DECEMBER 24, 2014 JOB No. 1403
SCALE: 1" = 20'

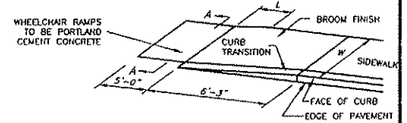



1 TYPICAL ROAD CROSS SECTION
NOT TO SCALE

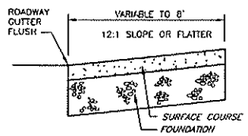



2 SLOPED GRANITE CURB SECTION
NOT TO SCALE



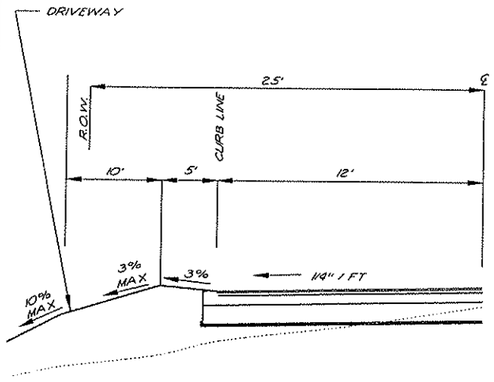

NOTES:
1. THE DIMENSIONS SHOWN AT ROADWAY EDGE ARE FIXED DISTANCES.
2. RAMP CROSS SECTION TO BE SAME AS ADJACENT SIDEWALK; I.E., DEPTH OF SURFACE AND FOUNDATION.
3. PORTLAND CEMENT CONCRETE RAMPS ARE TO BE TEXTURED BY BROOMING IN A DIRECTION PARALLEL TO THE LENGTH OF THE RAMP.
4. SIDEWALKS THAT CROSS DRIVEWAYS SHALL BE RAMPED TO MEET THE GRADE OF DRIVEWAY.
5. THESE DIMENSIONS ARE SUBJECT TO CHANGE IN THE FIELD IF EXISTING APPURTENANCES OR CONDITIONS WILL MAKE THE RAMP LOCATIONS IMPRACTICAL OR UNSAFE.
6. DETECTABLE WARNINGS TO BE INSTALLED 6" FROM EDGE OF RAMP
7. DETECTABLE WARNINGS PADS SHALL BE CONSTRUCTED OF CAST IRON OR SIMILAR DURABLE MATERIAL APPROVED BY THE CITY OF ROCHESTER.




SECTION A–A

| W | L | S.Y. |
|---|---|---|
| 5'–0" | 2'–9"± | 8.3 |
| 6'–0" | 2'–0"± | 7.2 |
| 7'–0" | 1'–3"± | 8.0 |
| 8'–0" | 0'–0" | 8.1 |

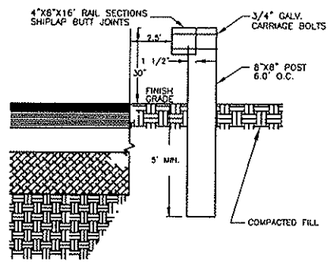
3 WHEEL CHAIR RAMP
NOT TO SCALE




5 DRIVEWAY PAVEMENT MATCH DETAIL
NOT TO SCALE

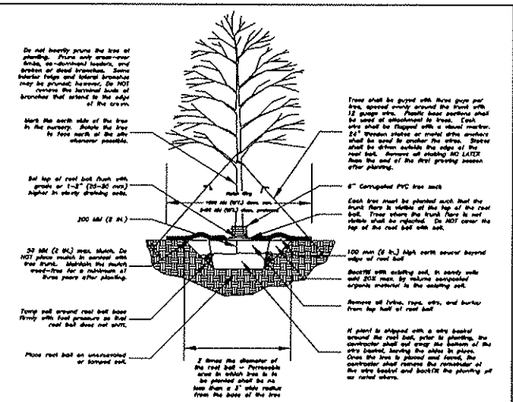
GUARDRAIL LOCATION

| STA BEGIN | STA END | DIST RT. |
|---|---|---|
| 1+75 | 3+50 | 13' |

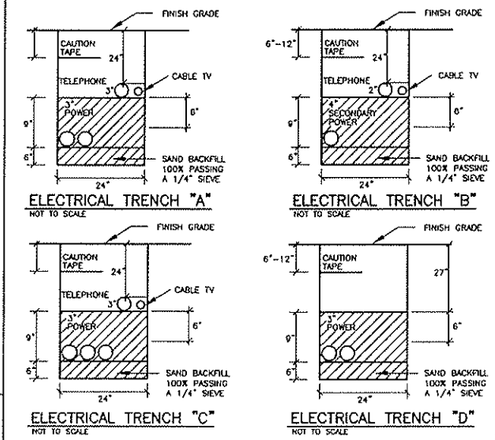



1. GUARD RAIL TIMBERS TO BE PRESSURE TREATED SOUTHERN YELLOW PINE #2 OR BETTER, TREATED TO AWPB LP-22 (GROUND CONTACT TREATMENT).
2. CARE SHALL BE TAKEN TO ENSURE GUARD RAIL POSTS DO NOT INTERFERE WITH UNDERGROUND UTILITIES.

6 GUARD RAIL
NOT TO SCALE




7 PLANTING DETAIL
NOT TO SCALE




ELECTRICAL TRENCH "A"
NOT TO SCALE




ELECTRICAL TRENCH "B"
NOT TO SCALE




ELECTRICAL TRENCH "C"
NOT TO SCALE




ELECTRICAL TRENCH "D"
NOT TO SCALE

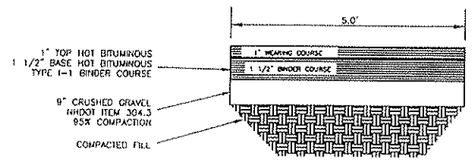
1.) TELEPHONE CONDUIT SHALL BE 3" SCHEDULE 40 PVC, WITH STEEL SWEEPS AT RISER POLE, 90° BENDS AND AT BUILDING.

2.) LEAVE PULL ROPE IN ALL CONDUITS FOR CABLE INSTALLATION.

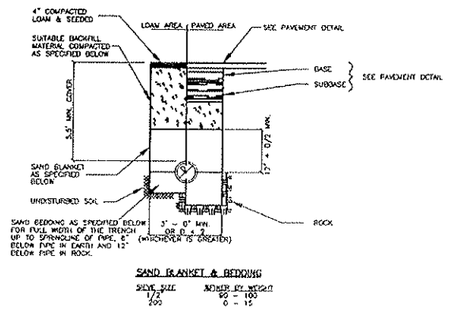
3.) FOR COMPLETE SPECIFICATION SEE "PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE CONSTRUCTION SPECIFICATIONS FOR UNDERGROUND CONDUIT SYSTEMS".

4.) CONTRACTOR SHOULD VERIFY THE NUMBER & SIZE OF CONDUIT WITH THE APPROPRIATE UTILITIES.

12 TYPICAL TRENCH DETAIL
NOT TO SCALE




9 BITUMINOUS CONCRETE WALK DETAILS
NOT TO SCALE

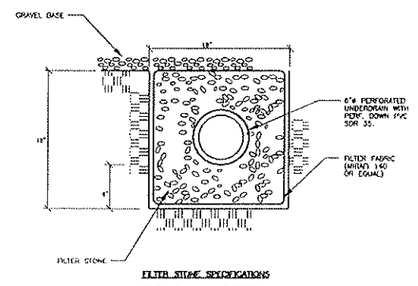



SAND BLANKET & BEDDING

| SIEVE SIZE | % PASSING BY WEIGHT |
|---|---|
| 1/2" | 90 - 100 |
| #200 | 0 - 15 |

BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.

10 WATER LINE TRENCH
NOT TO SCALE




FILTER STONE SPECIFICATIONS

| SIEVE SIZE | % PASSING |
|---|---|
| 1" | 100 |
| .75" | 70-85 |
| .375" | 10-40 |
| #4 | 0-20 |
| #200 | 0-10 |

11 UNDERDRAIN DETAIL
NOT TO SCALE

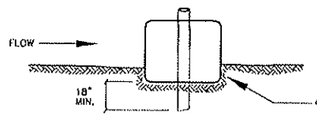
TRITECH
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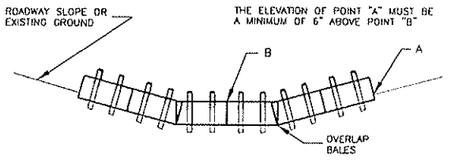
CONSTRUCTION DETAILS
BELLAMY RIDGE
46 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
DECEMBER 24, 2014
JOB NO. 14103

SHEET NO.
C-3

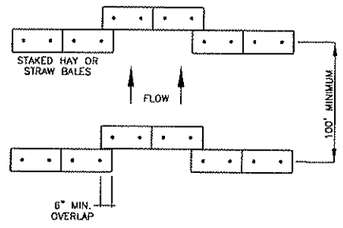
(P15-05)




EMBEDDING DETAIL




ELEVATION

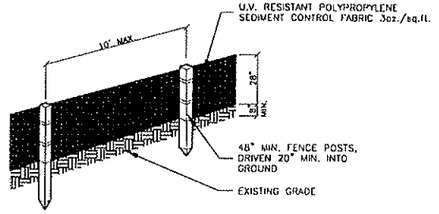



PLAN

## CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR REBARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED (AFTER EACH RAIN).
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
6. REMOVE AND PROPERLY DISPOSE OF ALL SEDIMENT PRIOR TO REMOVING HAYBALES.

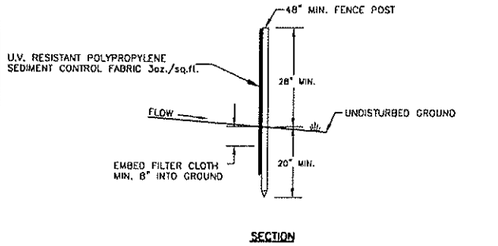
(1) HAYBALE BARRIER – TREATMENT SWALE
NOT TO SCALE




PERSPECTIVE VIEW

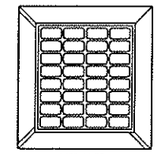
## NOTES

1. THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR BEST MANAGEMENT PRACTICE FOR SILT FENCES, OF THE "STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE" PREPARED BY ROCKINGHAM COUNTY CONSERVATION DISTRICT, DATED AUGUST 1992.
2. THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 8 INCHES INTO THE GROUND AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
4. FENCE POSTS SHALL BE A MINIMUM OF 36 INCHES LONG AND DRIVEN A MINIMUM OF 20 INCHES INTO THE GROUND. WOOD POSTS SHALL BE OF SOUND QUALITY HARDWOOD AND SHALL HAVE A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQ.IN..
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED TO PREVENT BULGES IN THE SILT FENCE DUE TO DEPOSITION OF SEDIMENT.
6. REMOVE BY HAND AND PROPERLY DISPOSE OF ALL SEDIMENT PRIOR TO REMOVING FENCE.




SECTION

(2) SILT FENCE
NOT TO SCALE



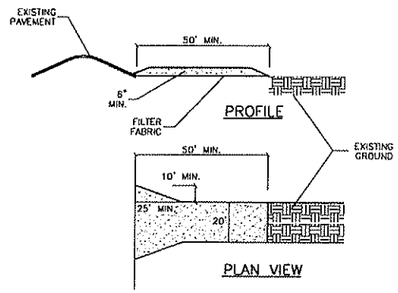
INSTALLED

ROUTINE INSPECTION OF A SILTSACK'S COLLECTED SEDIMENT LEVEL IS IMPORTANT TO PREVENT "PONDING" AROUND STORM DRAINS. WE RECOMMEND THE FOLLOWING MAINTENANCE SCHEDULE:

- EACH SILTSACK SHOULD BE INSPECTED AFTER EVERY MAJOR RAIN EVENT.
- IF THERE HAVE BEEN NO MAJOR EVENTS, SILTSACK SHOULD BE INSPECTED EVERY 2-3 WEEKS.
- THE YELLOW RESTRAINT CORD SHOULD BE VISIBLE AT ALL TIMES. IF THE CORD IS COVERED WITH SEDIMENT, THE SILTSACK SHOULD BE EMPTIED.

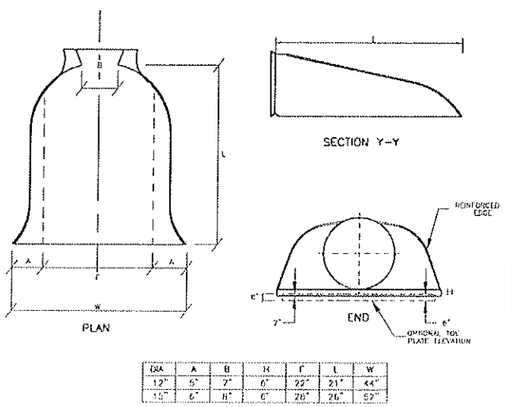
(3) HIGH-FLOW SILTSACK
NOT TO SCALE

1. GRADE AND COMPACT ACCESS ROAD ENTRANCE AS NECESSARY. PLACE FILTER FABRIC (MIRAFI OR EQUAL) AND PLACE 6" OF 1" - 2" STONE TO MATCH SLOPE OF EXISTING ROAD
2. PROVIDE NECESSARY SWALES OR DIVERSIONS TO MINIMIZE DIRECT FLOW OF WATER ONTO STONE AREA.
3. CONSTRUCTION ENTRANCE SHALL BE MAINTAINED AS NECESSARY TO REMOVE SILT FROM TIRES PRIOR TO ENTERING PUBLIC ROADS. A SMALL SWALE SHALL BE CONSTRUCTED ON THE DOWN GRADIENT SIDE TO TRAP ANY SILT WASHED FROM THE STONE.
4. HAYBALES OR SILT FENCE SHALL BE PLACED ON THE DOWN GRADIENT SIDE AS SHOWN ON THE EROSION CONTROL PLAN.




(7) STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

(9) NOT USED
NOT TO SCALE




| DIA | A | B | H | r | L | W |
|---|---|---|---|---|---|---|
| 12" | 5" | 7" | 6" | 22° | 21" | 44" |
| 15" | 6" | 8" | 6" | 20° | 26" | 52" |

(10) CMP FLARED END SECTION
NOT TO SCALE

### LOT DEVELOPMENT CONSTRUCTION SEQUENCE

1. Do not begin construction until all local, state and federal permits have been applied for and received.
2. Install silt fences and hay bale barriers necessary to control erosion and prevent sediment contamination of wetlands prior to any earth moving activities.
3. Cut and remove trees, shrubs, saplings, brush, vines and other debris and rubbish as required for drainage construction.
4. Care shall be taken to preserve the infiltration capacity of the infiltrating soil. See the New Hampshire Stormwater Manual for additional information.
5. Cut and remove trees, shrubs, saplings, brush, vines and other debris and rubbish as required for remaining site.
6. Construct the home and gutter system. Construct stormwater infiltration beds and overflow grates.
7. Loam and seed disturbed areas in accordance with vegetative practice and general construction notes. Cut and fill slopes shall be seeded immediately after their construction.
8. All soils that are finish graded must be stabilized within 72 hours of disturbance.
9. Maintain disturbed areas as necessary.

(12) CONTINUED
NOT TO SCALE

1. THE PROJECT SHALL BE MANAGED TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
2. FUGITIVE DUST SHALL BE CONTROLLED IN ACCORDANCE WITH ENV-A 1000.

### CRITICAL AREAS

Anywhere on the site that existing vegetation is to be removed will require immediate erosion control treatment. Special care should be taken where runoff enters wetlands.

### EROSION AND SEDIMENT CONTROL PRACTICES

Erosion and sediment control practices will include the use of rip-rap, and silt fence check dams. All erosion and sediment control practices will be constructed and maintained according to the minimum standards and specifications contained in the "New Hampshire Stormwater Manual, Volume 2".

### A. Erosion and Sediment Control Measures

1. The erosion control procedures shall conform to Section 645 of the "Standard Specifications for Road and Bridge Construction" of the NH DOT, and the "New Hampshire Stormwater Manual."
2. During Construction and thereafter, erosion control measures are to be implemented as noted. The smallest practical area of land should be exposed at any one time during development. The amount of exposed areas which are temporarily stabilized without permanent stabilization shall be limited to 5 acres.
3. During grading operations, install stone check dams at 50 foot intervals in drainage swales and at drain inlets where shown. Barriers are to be maintained and cleaned until disturbed areas are stabilized.
4. Any disturbed areas which are to be left temporarily, and which will be regraded later during construction shall be mechine hay mulched and seeded with rye grass to prevent erosion.
5. Silt fences and other erosion control measures shall be inspected weekly and after every 0.25" rainfall event during the life of the project. All damaged silt fences shall be repaired. Sediment deposits shall periodically be removed.
6. Avoid the use of future open spaces (loam and seed areas) wherever possible during the construction. Construction traffic shall use the roadbeds of future roads and parking areas.
7. Topsoil required for the establishment of vegetation shall be stock piled in amounts necessary to complete finished grading of all exposed areas.
8. Areas to be filled shall be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots or other objectionable material. Stumps shall be disposed by grinding or fill in an approved facility.
9. All fills shall be placed and compacted to reduce erosion, slippage settlement, subsidence or other related problems.
10. All fill shall be placed and compacted in layers not to exceed 8 inches in thickness.
11. Frozen material or soft, mucky or highly compressible material shall not be incorporated into fills.
12. Fill material shall not be placed on a frozen foundation subgrade.
13. Disturbed areas shall be seeded immediately following finished grading.
14. Limit of exposed area that is temporarily stabilized without permanent stabilization is 5 acres or less.
15. All areas not stabilized by Nov. 1st must be protected by Erosion Control Blankets or equivalent and mulched/seeded with winter rye or oats.
16. All disturbed areas must be seed and mulched within 3 days of final grading, permanently stabilized within 15 days of final grading or temporarily stabilized within 45 days of initial disturbance.
17. All ditches and swales are to be stabilized prior to directing runoff to these features.
18. All cut and fill slopes shall be seeded immediately.
19. An area shall be considered stable if one of the following has occurred:
    a.) Base course gravels are installed in areas to be paved
    b.) A minimum of 85% vegetated growth has been established
    c.) A minimum of 3" of non-erosive material such as stone or riprap has been installed
    d.) Erosion control blankets have been properly installed.

### B. Vegetative Practice

All ground areas opened up for construction will be regraded, loamed, seeded and mulched in the shortest practical time. All Temporary and Permanent Seeding must be applied prior to October 1st. Employ temporary erosion and sedimentation control devices as detailed in this plan as necessary until adequate stabilization has been assured.

### A. Temporary Seeding & Hay Mulching

1. At no time shall any disturbed area remain unstabilized for longer than 30 days. All areas where construction is not completed within 30 days of the initial disturbance shall receive temporary seeding measures.
2. Fertilizer shall be spread on the top layer of loam and worked into the surface. Fertilizer application rate shall be 300 pounds per acre of 10-10-10 fertilizer.
3. Seed shall be Winter Rye, 112 LBS. per acre.
4. Remove stones and trash that will interfere with seeding the area. Where feasible, till the soil to a depth of about 3 inches to prepare a seedbed and mix fertilizer into the soil. The seedbed should be left in a firm and smooth condition. The last tillage operation should be performed across the slope whenever practical.
5. If seeding between May 15th and August 15th, hay mulch shall be applied immediately after seeding at a rate of 1.5 to 2 tons per acre and shall be held in place using appropriate techniques from the Erosion and Sediment Control Handbook.
6. The surface shall be watered and kept moist with a fine spray as required without washing away the soil, until the grass is well established. Any areas which are not satisfactorily covered with grass shall be reseeded, and all noxious weeds are removed.

### B. Permanent Seeding & Hay Mulching

1. All disturbed areas shall be loamed (4") and limed. Lime shall be thoroughly incorporated into the loam layer at a rate of 2 tons per acre.
2. Fertilizer shall be spread on the top layer of loam and worked into then surface. Fertilizer application rate shall be 500 pounds per acre of 10-20-20 fertilizer.
3. Seed shall be 48 lbs. per acre, SCS mixture "C" (20 lbs tall fescue, 20 lbs. creeping red fescue and 8 lbs. birds foot trefoil = 48 lbs total.) The soil shall be lightly raked immediately before seeding. One half the seed shall be sown in one direction and the other half at right angles to the original direction. It shall be lightly raked in to the soil to a depth not over 1/4 inch and rolled with hand roller weighing not over 100 pounds per linear foot to width.
4. Hay mulch shall be applied immediately after seeding at a rate of 1.5 to 2 tons per acre and shall be held in place using appropriate techniques from the Erosion and Sediment Control Handbook. The surface shall be watered and kept moist with a fine spray as required, without washing away the soil, until the grass is well established. Any areas which are not satisfactorily covered with grass shall be reseeded, and all noxious weeds are removed.

### CONSTRUCTION SEQUENCE

1. Do not begin construction until all local, state and federal permits have been applied for and received.
2. Install silt fences and hay bale barriers necessary to control erosion and prevent sediment contamination of wetlands prior to any earth moving activities.
3. Cut and remove trees, shrubs, saplings, brush, vines and other debris and rubbish as required for drainage construction.
4. Care shall be taken to preserve the infiltration capacity of the infiltrating soil. See the New Hampshire Stormwater Manual for additional information.
5. Construct stormwater bioretention area and landscape.
6. Cut and remove trees, shrubs, saplings, brush, vines and other debris and rubbish as required for remaining site.
7. Construct roadway and utilities.
8. Loam and seed disturbed areas in accordance with vegetative practice and general construction notes. Cut and fill slopes shall be seeded immediately after their construction.
9. All areas receiving runoff, including but not limited to the stormwater infiltration area, shall be stabilized prior to directing runoff to them.
10. All soils that are finish graded must be stabilized within 72 hours of disturbance.
11. Maintain disturbed areas as necessary.

### MAINTENANCE

During the period of construction and/or until long term vegetation is established:

1. Seeded areas will be fertilized and reseeded as necessary to insure vegetative establishment.
2. The side slopes will be checked after each significant rainfall.
3. The side slopes will be checked weekly and repaired when necessary until adequate vegetation is established.
4. The silt fence barriers will be checked regularly. Necessary repairs will be made to correct undermining or deterioration of the structures.

### WINTER CONSTRUCTION NOTES

1. All proposed vegetated areas which do not exhibit a minimum of 85% vegetation growth by October 15th, or which are disturbed after October 15th, shall be stabilized by seeding and installing erosion control blankets on slopes greater than 3:1, and seeding and placing 3 to 4 tons of mulch per acre, secured with anchored netting, elsewhere. The installation of erosion control blankets or mulch and netting shall not occur over accumulated snow or on frozen ground and shall be completed in advance of thaw or spring melts.
2. All ditches or swales which do not exhibit a minimum of 85% vegetation growth by October 15th, or which are disturbed after October 15th, shall be stabilized temporarily with stone or erosion control blankets appropriate for the design flow conditions.
3. After November 15th, incomplete road or parking surfaces, where work has stopped for the winter season, shall be protected with a minimum of 3 inches of crushed gravel per NHDOT Item 304.3.

(12) EROSION AND SEDIMENT CONTROL NOTES

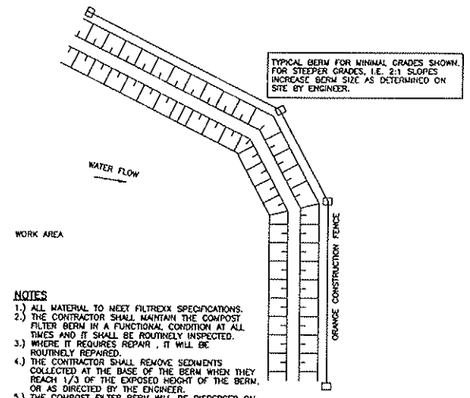
TRITECH
ENGINEERING CORPORATION
795 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 2630

REVISIONS
DATE: DESCRIPTION:
6-18-15 REVISED PER REVIEW COMMENTS
8-18-15 REVISED PER REVIEW COMMENTS

CONSTRUCTION DETAILS
BELLAMY RIDGE
46 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
DECEMBER 24, 2014
JOB NO. 1410-3

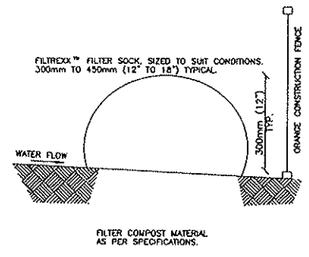
SHEET NO.
C-4

(215-05)

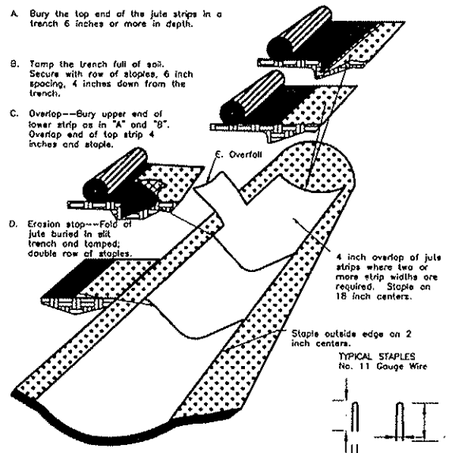



NOTES

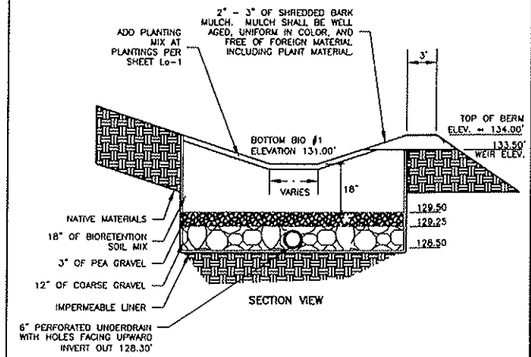
1.) ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2.) THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTER BERM IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED.
3.) WHERE IT REQUIRES REPAIR , IT WILL BE ROUTINELY REPAIRED.
4.) THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE BERM WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE BERM, OR AS DIRECTED BY THE ENGINEER.
5.) THE COMPOST FILTER BERM WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.




## ① FILTREXX SOCK – SILT FENCE

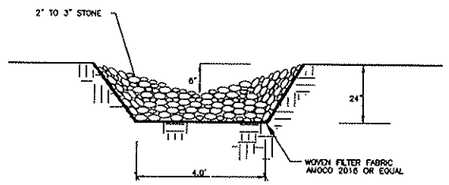


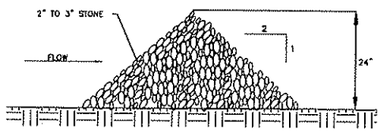

## ③ EROSION CONTROL BLANKET
NOT TO SCALE



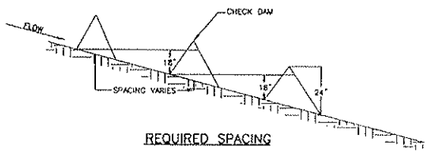

SECTION VIEW

## ④ BIORETENTION BASIN #1
NOT TO SCALE




ELEVATION




REQUIRED SPACING

CONSTRUCTION SPECIFICATIONS

1. CHECK DAMS TO BE SPACED SO THAT THE BOTTOM OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE DOWNSTREAM OVERFLOW.

## ⑤ STONE CHECK DAM
NOT TO SCALE

| ITEM | COMPOSITION BY VOLUME |
|---|---|
| MODERATELY FINE SHREDDED BARK OF WOOD FIBER MULCH (NO GREATER THAN 5 % FINES PASSING NO. 200 SIEVE) | 20 – 30% |
| LOAMY COURSE SAND (SEE SPECIFICATION) | 70 – 80% |

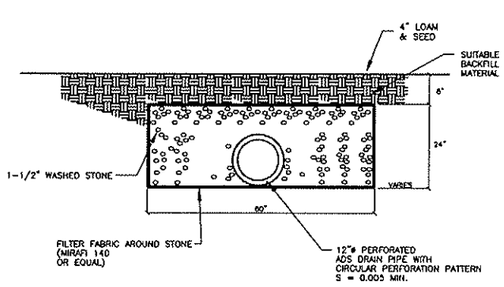
LOAMY COURSE SAND

| SIEVE | COMPOSITION BY WEIGHT |
|---|---|
| #10 | 85 – 100% |
| #20 | 70 – 100% |
| #60 | 15 – 40% |
| #200 | 8 – 15% |

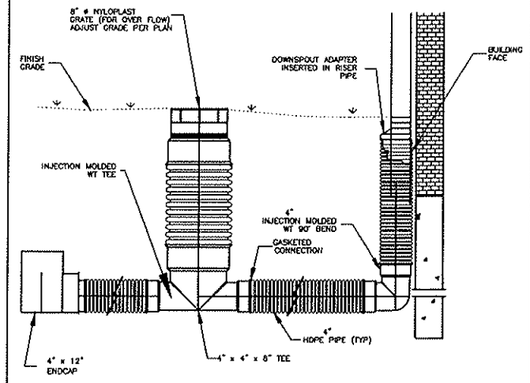
PLANTING SOIL COMPOSITION

| ITEM | COMPOSITION BY WEIGHT | TEST METHOD |
|---|---|---|
| SAND | 50 – 85% | AASHTO T88 |
| SILT | 0 – 50% | AASHTO T88 |
| CLAY | 10 – 20% | AASHTO T88 |
| ORGANIC MATTER | 1.5 – 10% | AASHTO T194 |

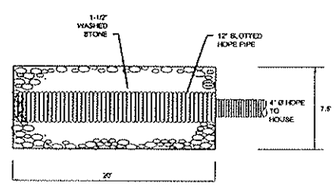
## ⑥ BIORETENTION SOIL MIX
NOT TO SCALE




## ⑦ INFILTRATION PRACTICE (CROSS-SECTION) (IP-1)
NOT TO SCALE




## ⑧ ROOF DRAIN W-TEE CLEANOUT (PROFILE)
NOT TO SCALE




## ⑩ INFILTRATION PRACTICE DETAIL (IP-1) – (PLAN)
NOT TO SCALE

## ⑪ NOT USED
NOT TO SCALE

## ⑫ NOT USED
NOT TO SCALE

TRITECH
ENGINEERING CORPORATION
795 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8627
FAX 603 742 8630

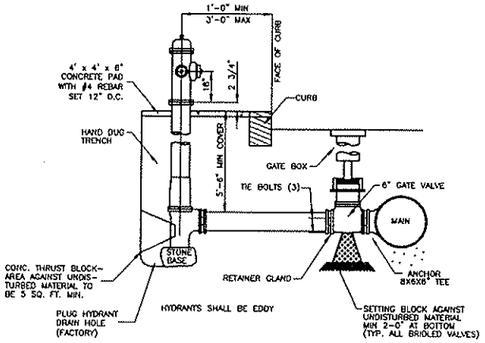
REVISIONS

| DATE: | DESCRIPTION: |
|---|---|
| 6-18-15 | REVISED PER REVIEW COMMENTS |
| 8-18-15 | REVISED PER REVIEW COMMENTS |

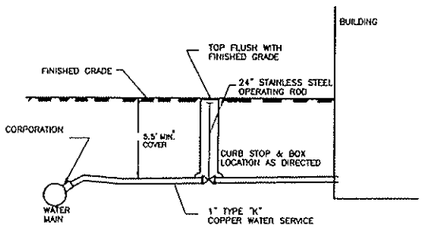
CONSTRUCTION DETAILS
BELLAMY RIDGE
46 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
DECEMBER 24, 2014
JOB No. 1403

SHEET No. C-5

(P15-05)



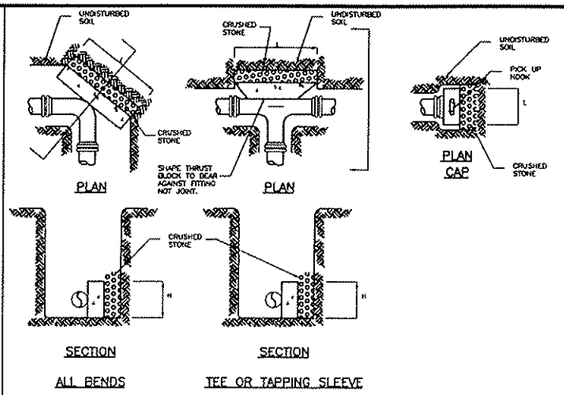

1 HYDRANT & VALVE DETAIL
NOT TO SCALE




*USE 2" x 2' RIGID BOARD INSULATION OVER PIPE WHEN COVER REQUIREMENT CANNOT BE SATISFIED.

NOTES:
1.) SERVICE TO BE TYPE "K" COPPER OR EQUAL, APPROVED BY LOCAL AND STATE SPECIFICATIONS.
2.) BALL VALVE CURB STOP COMPRESSION (NO DRAIN)

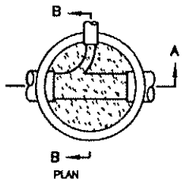
2 BUILDING WATER SERVICE
NOT TO SCALE

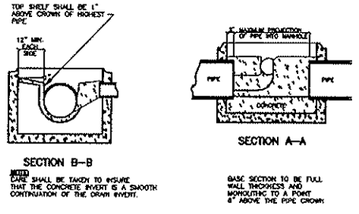


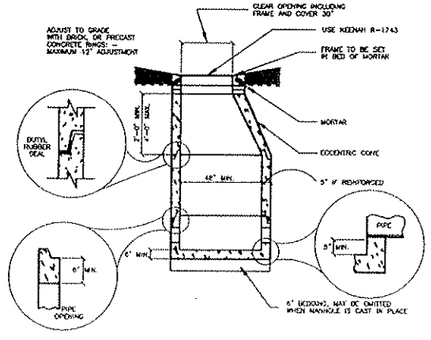

| NOMINAL DIA. (IN) | PIPE SIZE 4 | 6 | 8 | 10 | 12 | 16 |
|---|---|---|---|---|---|---|
| TEE, CAPS, PLUGS & TAPPING SLEEVES | 1.05 | 2.32 | 4.15 | 6.37 | 9.15 | 16.23 |
| 90° BENDS | 1.48 | 3.28 | 5.86 | 9.01 | 12.93 | 22.96 |
| 45° BENDS | 0.80 | 1.78 | 3.17 | 4.86 | 7.00 | 12.42 |
| 22 1/2° BENDS | 0.41 | 0.91 | 1.62 | 2.49 | 3.57 | 6.33 |
| 11 1/4° BENDS | 0.21 | 0.46 | 0.81 | 1.25 | 1.79 | 3.18 |
| SYSTEM PRESSURE: 100 PSI<br>SAFETY FACTOR: 1.5<br>SOIL BEARING CAPACITY: 2,000 PSF | | | | | | |

NOTES:
1. ALL THRUST BLOCKS SHALL BE PRE-CAST CONCRETE AND A MINIMUM SIZE OF 2' x 2' x 3'.
2. THE MINIMUM BEARING AREAS SHOWN IN THE THRUST BLOCK SCHEDULE ARE BASED ON A SYSTEM PRESSURE OF 100 PSI. IF THE SYSTEM PRESSURE IS ABOVE 100 PSI, INCREASE THE NOTED AREAS PROPORTIONAL TO THE ACTUAL SYSTEM PRESSURE. FOR EXAMPLE, IF THE ACTUAL SYSTEM PRESSURE IS 160 PSI, MULTIPLY THE ABOVE VALUES BY 160%
3. SELECT THRUST BLOCKS SUCH THAT THE LENGTH (L) OF THE BLOCK IS APPROX. TWICE AS LONG AS THE DEPTH (H).
4. PLACE CRUSHED STONE BEHIND THRUST BLOCKS AGAINST UNDISTURBED SOIL.
5. PLACE THRUST BLOCKS ALONG THE FULL LENGTH OF THE FITTING TO MAXIMIZE BEARING AREA.
6. PLACE 2 LAYERS OF POLYETHYLENE OR ROOFING PAPER AROUND FITTINGS AS PROTECTION AGAINST DAMAGE FROM CONCRETE BLOCK.
7. PLACE A 12" LONG STEEL HORSESHOE-SHAPED PICKUP HOOK IN ALL PLUG AND CAP THRUST BLOCKS. DIAMETER OF HOOK SHALL BE A MINIMUM OF 5/8".
8. COAT ALL THREADED RODS, NUTS, AND BOLTS WITH BITUMINOUS PAINT.
9. CONCRETE COMPRESSIVE STRENGTH: 2,000 PSI MINIMUM.
10. USE OF THRUST BLOCKS DOES NOT ELIMINATE THE REQUIREMENT OF OTHER RESTRAINTS. ALL VALVES AND FITTINGS SHALL BE RESTRAINED MJ.

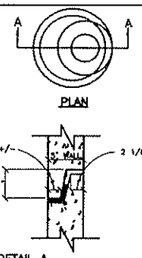
3 PRECAST CONCRETE THRUST BLOCKS AND ANCHORS
NOT TO SCALE



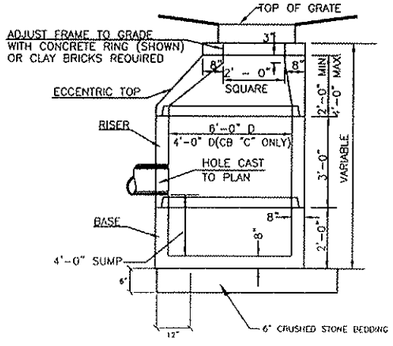




5 DRAIN MANHOLE DETAILS
NOT TO SCALE



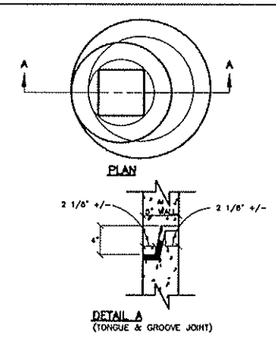

DETAIL A
(TONGUE & GROOVE JOINT)

NOTES
1. ALL SECTIONS SHALL BE CONCRETE CLASS AA(4000 psi).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE OR GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FOOT.
4. RISERS OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH.
5. THE STRUCTURES SHALL BE DESIGNED FOR H-20 LOADING.
6. FOR SHALLOW INVERTS, A FLAT TOP SLAB WITH TONGUE AND GROOVE JOINTS (DETAIL A), MEETING H-20 LOADING MAY BE USED.



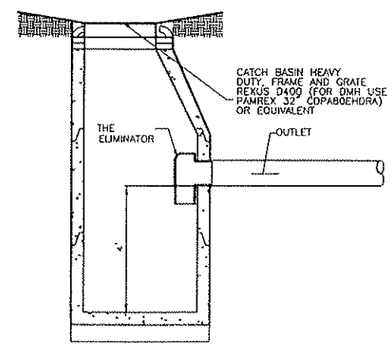

SECTION A-A

6 CATCH BASIN
NOT TO SCALE

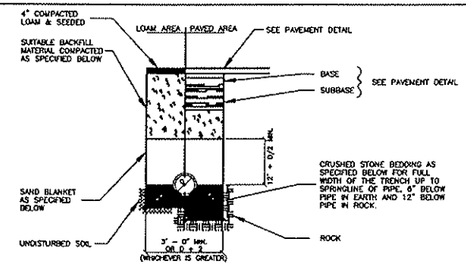



DETAIL A
(TONGUE & GROOVE JOINT)

NOTES
1. ALL SECTIONS SHALL BE CONCRETE CLASS AA(4000 psi).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE OR GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FOOT.
4. RISERS OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH.
5. THE STRUCTURES SHALL BE DESIGNED FOR H-20 LOADING.
6. FOR SHALLOW INVERTS, A FLAT TOP SLAB WITH TONGUE AND GROOVE JOINTS (DETAIL A), MEETING H-20 LOADING MAY BE USED.




7 DEEP SUMP HOODED CATCH BASIN
NOT TO SCALE

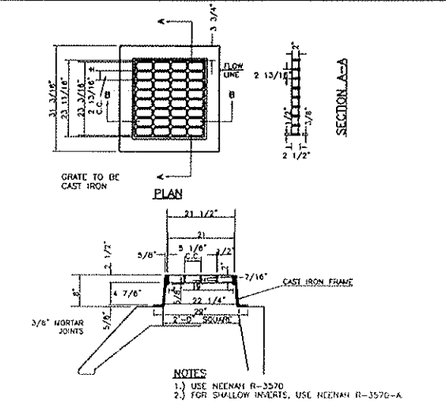



| SAND BLANKET SIEVE SIZE | SAND BLANKET JOINER BY WEIGHT | CRUSHED STONE BEDDING SIEVE SIZE | CRUSHED STONE BEDDING JOINER BY WEIGHT |
|---|---|---|---|
| 1/2 | 90 - 100 | 1" | 100 |
| 200 | 0 - 10 | 3/4" | 90 - 100 |
| | | 3/8" | 20 - 55 |
| | | #4 | 0 - 10 |
| | | #8 | 0 - 5 |

*EQUIVALENT TO STANDARD STONE SIZE #67 - SECTION 703 OF NHDOT STANDARD SPECIFICATIONS

BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.

8 STORM DRAINAGE & SEWER PIPE TRENCH
NOT TO SCALE




NOTES
1.) USE NEENAH R-3570
2.) FOR SHALLOW INVERTS, USE NEENAH R-3570-A

12 CATCH BASIN FRAME & GRATE
NOT TO SCALE

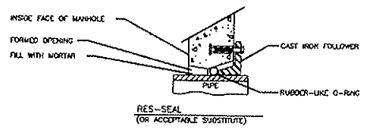
TRITECH
ENGINEERING CORPORATION
735 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8927
FAX 603 742 3630

REVISIONS
DATE: DESCRIPTION:
8-18-15 REVISED PER REVIEW COMMENTS
8-18-15 REVISED PER REVIEW COMMENTS

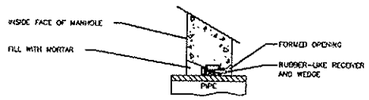
CONSTRUCTION DETAILS
BELLAMY RIDGE
46 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
DECEMBER 24, 2014
JOB No. 1903

SHEET No.
C-6

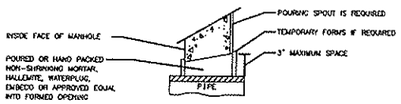
(P15-05)



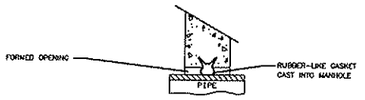

RES-SEAL
(OR ACCEPTABLE SUBSTITUTE)



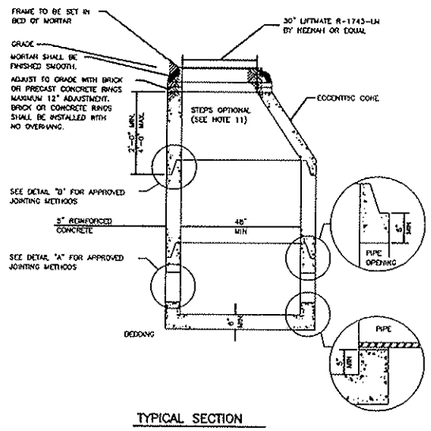

PRESS-WEDGE II
(OR ACCEPTABLE SUBSTITUTE)



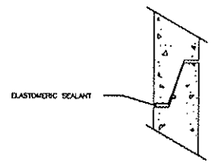

NON-SHRINKING MORTAR
(OR ACCEPTABLE SUBSTITUTE)




A-LOK
(OR ACCEPTABLE SUBSTITUTE)



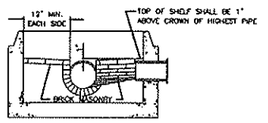

TYPICAL SECTION

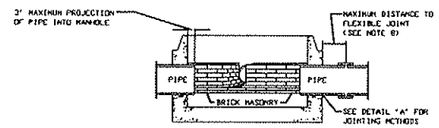



ELASTOMERIC SEALANT

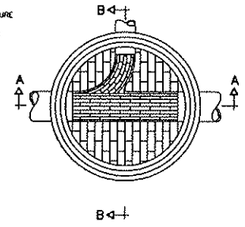
NOTE:
ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS

DETAIL "B" – HORIZONTAL JOINTS




NOTES:
A) INVERT AND SHELF TO BE PLACED AFTER LEAKAGE TEST
B) CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT. INVERT BRICKS SHALL BE LAID ON EDGE.
C) BASE SECTION TO BE FULL WALL THICKNESS AND MONOLITHIC TO A POINT 6" ABOVE THE PIPE CROWN




## GENERAL NOTES

1) IT IS THE INTENTION THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAK PROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING. MANHOLES SHALL BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS(H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE, CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE. A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.

2) BARRELS AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE, OR POURED IN PLACE REINFORCED CONCRETE.

3) PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478.

4) LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS.

5) INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF THE PIPE AND FLOW. AT CHANGES IN DIRECTIONS, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY.

6) FRAMES AND COVERS: MANHOLES FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. A 3-INCH (MINIMUM HEIGHT) WORD "SEWER" FOR SEWERS AND "DRAIN" FOR DRAINS SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER UFTMATE R-1743-LW BY NEENAH OR EQUAL.

7) BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33, SIZE NUMBER 67.
100% PASSING 1 INCH SCREEN 0-10% PASSING #4 SIEVE
90-100% PASSING INCH SCREEN 0-5% PASSING #8 SIEVE
20-55% PASSING INCH SCREEN
WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, SCREENED GRAVEL OR CRUSHED STONE INCH TO 1 INCH SHALL BE USED.

8) FLEXIBLE JOINT: A FLEXIBLE JOINT SHALL BE PROVIDE WITHIN THE FOLLOWING DISTANCES: RCP & CI PIPE - ALL SIZES - 48"

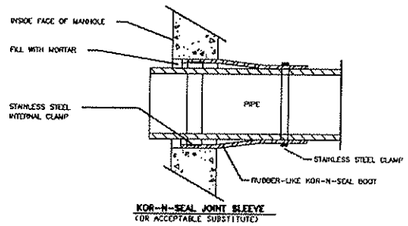
9) SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H-20 LOADS.

10) MANHOLE STEPS MAY BE PERMITTED UPON REQUEST BY THE OWNER AS SECONDARY ADDITIONAL SAFETY FEATURE SUPPLEMENTARY TO THE PRIMARY PORTABLE LADDER ENTRY AND WHEN INSTALLED UNDER THE FOLLOWING CONDITIONS:

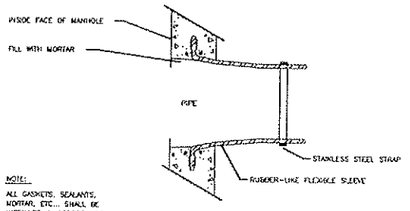
1. THE STEPS SHALL BE MANUFACTURED OF PLASTIC COVERED STEEL. THEY SHALL BE SHAPED SO THEY CANNOT BE PULLED OUT OF THE CONCRETE WALL IN WHICH THEY ARE EMBEDDED.
2. THE STEPS SHALL BE EMBEDDED IN THE CONCRETE BY THE MANUFACTURER DURING MANUFACTURE OR IMMEDIATELY FOLLOWING REMOVAL OF FORMS. SECURING THE STEPS WITH MORTAR IN DRILLED OR CAST HOLES, WILL NOT BE ACCEPTABLE.
3. THE STEPS SHALL BE OF THE DROP TYPE WITH A DEPRESSED SECTION FOR HANDHOLD. APPROXIMATELY 14"X10" IN DIMENSION.

11) HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF A TYPE APPROVED BY THE ENGINEER, WHICH TYPE SHALL, IN GENERAL, DEPEND FOR WATERTIGHTNESS UPON AN ELASTOMERIC OR MASTIC-LIKE GASKET. APPROVED ELASTOMERIC SEALANTS ARE: RAM-NEK
KENT SEAL NO.2
EZ

12) PIPE TO MANHOLE JOINTS SHALL BE ONLY AS APPROVED BY THE ENGINEER AND IN GENERAL, WILL DEPEND FOR WATERTIGHTNESS UPON EITHER AN APPROVED NON-SHRINKING MORTAR OR ELASTOMERIC SEALANT.




KOR-N-SEAL JOINT SLEEVE
(OR ACCEPTABLE SUBSTITUTE)




NOTE:
ALL GASKETS, SEALANTS, MORTAR, ETC., SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS

DETAIL "A" – PIPE TO MANHOLE JOINTS

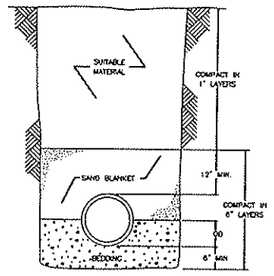
TRITECH
ENGINEERING CORPORATION
785 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 749 9007
FAX 603 742 3630

REVISIONS:
DATE: DESCRIPTION:
8-18-15 REVISED PER REVIEW COMMENTS

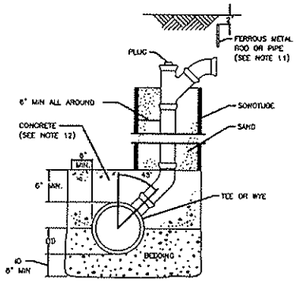
STANDARD SEWER DETAILS
BELLAMY RIDGE
46 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
DECEMBER 24, 2014
JOB No. 1410.3

SHEET No.
C-7

(P15-05)

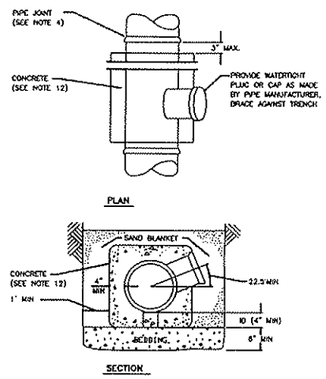



TRENCH CROSS-SECTION
NOT TO SCALE

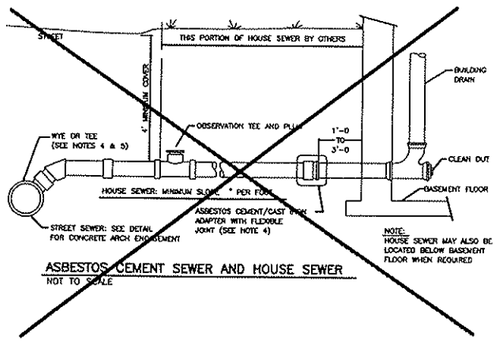



NO BACKFILLING BEFORE CONCRETE HAS TAKEN INITIAL SET (7 HRS. MIN.), BACKFILLING TO BE BROUGHT UP EVENLY ON ALL SIDES.

CHIMNEY (SEE NOTE 13)
NOT TO SCALE

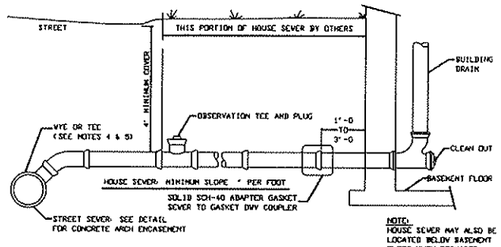



CONCRETE FULL ENCASEMENT
NOT TO SCALE




ASBESTOS CEMENT SEWER AND HOUSE SEWER
NOT TO SCALE

NOT USED




SEWER AND HOUSE SEWER
NOT TO SCALE

## GENERAL NOTES

1) MINIMUM SIZE PIPE FOR HOUSE SERVICE SHALL BE FOUR INCHES.

2) PIPE AND JOINT MATERIALS:

A. PLASTIC SEWER PIPE

1. PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

| ASTM STANDARDS | GENERIC PIPE MATERIAL | SIZES APPROVED |
|---|---|---|
| D3034 | *PVC (SOLID WALL) | 8" THROUGH 15" (SDR 35) |
| F679 | PVC (SOLID WALL) | 18" THROUGH 27" (T-1 & T-2) |
| F789 | PVC (SOLID WALL) | 4" THROUGH 18" (T-1 TO T-3) |
| F794 | PVC (RIBBED WALL) | 8" THROUGH 36" |
| D2680 | *ABS (COMPOSITES WALL) | 8" THROUGH 15" |

*PVC: POLY VINYL CHLORIDE
*ABS: ACRYLONITRILE-BUTADIENE-STYRENE

2. JOINTS SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D-3212 AND SHALL BE PUSH-ON, BELL AND SPIGOT TYPE.

ABS TRUSS PIPE AND FITTINGS SHALL CONFORM TO ASTM D-2680, POLYMER COMPOUNDING SHALL BE TO ASTM D-1788 (CLASS 322).

JOINTS FOR ABS TRUSS PIPE SHALL BE CHEMICAL WELDED COUPLINGS TYPE SC IN ACCORDANCE WITH ASTM D-2680, FORMING A CHEMICAL WELDED JOINT.

B. DUCTILE-IRON PIPE, FITTINGS AND JOINTS.

1. DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE UNITED STATES OF AMERICA STANDARDS INSTITUTE:
A21.50 THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTN A-536 DUCTILE IRON CASTINGS.
A21.51 DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS FOR WATER OR OTHER LIQUIDS.

2. JOINTS SHALL BE OF THE MECHANICAL OR PUSH-ON TYPE. JOINTS AND GASKETS SHALL CONFORM TO:
A21.11 RUBBER GASKETS JOINTS FOR CAST IRON PRESSURE PIPE & FITTINGS

3) DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.

4) JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATER-TIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE FOUNDATION WALL, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.

5) TEES AND WYES: WHERE A TEE OR WYE IS NOT AVAILABLE IN THE EXISTING STREET SEWER, AN APPROPRIATE CONNECTION SHALL BE MADE, FOLLOWING MANUFACTURERS' INSTRUCTIONS USING A BOLTED, CLAMPED OR EPOXY-CEMENTED SADDLE TAPPED INTO A SMOOTHLY DRILLED OR SAWN OPENING IN THE SEWER. THE PRACTICE OF BREAKING AN OPENING WITH A SLEDGE HAMMER, STUFFING CLOTH OR OTHER SUCH MATERIAL AROUND THE JOINT, OR APPLYING MORTAR TO HOLD THE CONNECTION, AND ANY OTHER SIMILAR CRUDE PRACTICES OR INEPT OR HASTY IMPROVISATIONS WILL NOT BE PERMITTED. THE CONNECTION SHALL BE CONCRETE ENCASED AS SHOWN IN THE DETAIL UP TO AND INCLUDING 15" DIAMETER.

6) HOUSE SEWER INSTALLATION: THE PIPE SHALL BE HANDLED, PLACED AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER. IT SHALL BE CAREFULLY BEDDED ON A 4 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL AS SPECIFIED IN NOTE 10. BEDDING AND RE-FILL FOR DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH APPROPRIATE MECHANICAL DEVICES.

THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE FOUNDATION AT A GRADE OF NOT LESS THAN " INCH PER FOOT. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DEWATER THE TRENCH.

7) TESTING: THE COMPLETED HOUSE SEWER SHALL BE SUBJECTED TO A LEAKAGE TEST IN ANY OF THE FOLLOWING MANNERS: (PRIOR TO BACKFILLING)

A. AN OBSERVATION TEE SHALL BE INSTALLED AS SHOWN AND WHEN READY FOR TESTING, AN INFLATABLE BLADDER OR PLUG SHALL BE INSERTED JUST UPSTREAM FROM THE OPENING IN THE TEE. AFTER INFLATION, WATER SHALL BE INTRODUCED INTO THE SYSTEM ABOVE THE PLUG TO A HEIGHT OF 5 FEET ABOVE THE LEVEL OF THE PLUG.

B. THE PIPE SHALL BE LEFT EXPOSED AND LIBERALLY HOSED WITH WATER, TO SIMULATE, AS NEARLY AS POSSIBLE, WET TRENCH CONDITIONS OR, IF TRENCH IS WET, THE GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. INSPECTIONS FOR LEAKS SHALL BE MADE THROUGH THE CLEANOUT WITH A FLASHLIGHT.

C. DRY FLUORESCENT DYE SHALL BE SPRINKLED INTO THE TRENCH OVER THE PIPE. IF THE TRENCH IS DRY, THE PIPE SHALL BE LIBERALLY HOSED WITH WATER, OR IF THE TRENCH IS WET, GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. OBSERVATION FOR LEAKS SHALL BE MADE IN THE FIRST DOWN-STREAM MANHOLE.

LEAKAGE OBSERVED IN ANY ONE OF THE ABOVE ALTERNATE TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE DUG-UP IF NECESSARY AND RE-LAID SO AS TO ASSURE WATER TIGHTNESS.

8) ILLEGAL CONNECTIONS: NOTHING BUT SANITARY WASTE FLOW FROM HOUSE TOILETS, SINKS, LAUNDRY ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS, SUMP PUMPS OR OTHER SIMILAR CONNECTIONS CARRYING RAIN WATER, DRAINAGE OR GROUND WATER SHALL NOT BE PERMITTED.

9) HOUSE WATER SERVICE SHALL NOT BE LAID IN SAME TRENCH AS SEWER SERVICE.

10) BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATERIAL AND MEETING ASTM C33-67.

| | |
|---|---|
| 100% PASSING | 1 INCH SCREEN |
| 90%-100% PASSING | 3/4 INCH SCREEN |
| 20%- 55% PASSING | 3/8 INCH SCREEN |
| 0%- 10% PASSING | #4 SIEVE |
| 0%- 5% PASSING | #8 SIEVE |

WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, SCREENED GRAVEL OR CRUSHED STONE 1/2 INCH TO 1 1/2 INCH SHALL BE USED.

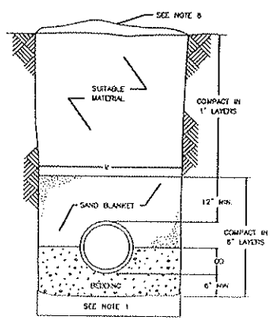
11) LOCATION: THE LOCATION OF THE TEE OR WYE SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS METAL ROD OR PIPE SHALL BE PLACED OVER THE TEE OR WYE AS DESCRIBED IN THE TYPICAL "CHIMNEY" DETAIL, TO AID IN LOCATING THE BURIED PIPE WITH A DIP NEEDLE OR PIPEFINDER.

12) CONCRETE: CONCRETE SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (3000 PSI) CONCRETE OF THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARDS SPECIFICATIONS AS FOLLOWS:

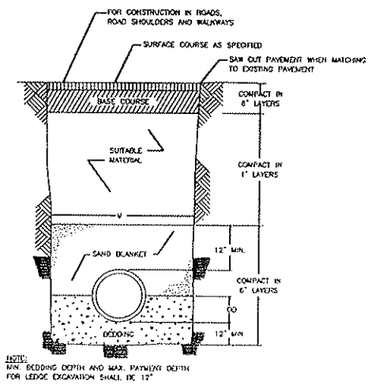
CEMENT: 6.0 BAGS PER CUBIC YARD
WATER: 5.75 GALLONS PER BAG CEMENT
MAXIMUM SIZE OF AGGREGATE: 1 INCH

13) CHIMNEYS: IF VERTICAL DROP INTO SEWER IS GREATER THAN 4 FEET, A CHIMNEY SHALL BE CONSTRUCTED FOR THE HOUSE CONNECTION. CHIMNEY INSTALLATION AS RECOMMENDED BY THE PIPE MANUFACTURER MAY BE USED IF APPROVED BY THE ENGINEER.

14) MAINTAIN A 10' HORIZONTAL SEPARATION BETWEEN SEWER LINES AND WATER LINES, AND AN 18" VERTICAL SEPARATION AT SEWER AND WATER CROSSINGS, WITH WATER OVER SEWER.

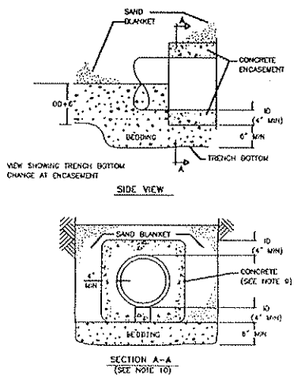



TYPICAL SECTION
NOT TO SCALE




NOTE:
MIN. BEDDING DEPTH AND MAX. PATHWAY DEPTH FOR LEDGE EXCAVATION SHALL BE 12"

LEDGE CONSTRUCTION
NOT TO SCALE




CONCRETE FULL ENCASEMENT
NOT TO SCALE

## GENERAL NOTES

1) ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE. REFILL WITH BEDDING MATERIAL. FOR TRENCH WIDTH SEE NOTE 7.

2) BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33 STONE SIZE NO. 67.

| | |
|---|---|
| 100% PASSING | 1 INCH SCREEN |
| 90%-100% PASSING | 3/4 INCH SCREEN |
| 20%- 55% PASSING | 3/8 INCH SCREEN |
| 0%- 10% PASSING | #4 SIEVE |
| 0%- 5% PASSING | #8 SIEVE |

WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, GRADED SCREENED GRAVEL OR CRUSHED STONE 1/2 INCH TO 1 1/2 INCH SHALL BE USED.

3) SAND BLANKET: CLEAN SAND FREE FROM ORGANIC MATTER SO GRADED THAT 90%-100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAT 15% WILL PASS A #200 SIEVE. BLANKET MAY BE OMITTED FOR DUCTILE IRON AND REINFORCED CONCRETE PIPE PROVIDED THAT NO STONE LARGER THAN 2 INCHES IS IN CONTACT WITH THE PIPE.

4) SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALK-WAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION.

IN CROSS-COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK OR PEAT, IF HE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE AND POSSIBLY RECONSTRUCTION, WHEN NECESSARY WILL BE PRESERVED.

5) BASE COURSE, IF ORDERED BY THE ENGINEER, SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE LATEST EDITION OF THE:
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
OF THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION.

6) WOOD SHEETING, IF REQUIRED, WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER, IT SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE. WHERE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISHED GRADE, BUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.

7) W= MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES, FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.

8) FOR CROSS COUNTRY CONSTRUCTION, BACKFILL OR FILL SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

9) CONCRETE FOR ENCASEMENT SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (3000 LB) CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AS FOLLOWS: CEMENT: 6.0 BAGS PER CUBIC YARD
WATER: 5.75 GALLONS PER BAG CEMENT
MAXIMUM SIZE OF AGGREGATE: 1 INCH

10) IF FULL ENCASEMENT IS UTILIZED, DEPTH OF CONCRETE BELOW PIPE SHALL BE 1/4 I.D. (4" MIN.) BLOCK SUPPORT SHALL BE SOLID CONCRETE BLOCKS.

TRITECH
ENGINEERING CORPORATION
750 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8127
FAX 603 742 3630

REVISIONS
DATE: DESCRIPTION:
8-18-15 REVISED PER REVIEW COMMENTS
8-19-15 REVISED PER REVIEW COMMENTS

STANDARD SEWER DETAILS
BELLAMY RIDGE
46 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
DECEMBER 24, 2014
JOB No. 1403

SHEET No. C-8

(P15-05)

PLANT LIST
GENERAL PLANTS

| KEY | BOTANICAL NAME | COMMON NAME | QTY. | SIZE |
|---|---|---|---|---|
| AF | ABES FRASERI | FRAZIER FIR | 21 | 8' HT |
| TC | TSUGA CANADENSIS | EASTERN HEMLOCK | 5 | 8' HT |
| AR | ACER RUBRUM | RED MAPLE | 10 | 2½" - 3" CAL |
| JH | JUNIPERUS HORIZONTALIS | TRAILING JUNIPER | 16 | 3 GALLON |
| | | | | |

PLANT LIST
BIORETENTION AREA

| KEY | BOTANICAL NAME | COMMON NAME | QTY. | SIZE | NOTE |
|---|---|---|---|---|---|
| COR | CORNUS ALBA 'IVORY HALO' | IVORY HALO DOGWOOD | 5 | 7 GALLON | ONE MALE PLANT PER 6 FEMALE |
| VPT | VIBURNUM PLICATUM TOMENTOSUM 'MARIESII' | MARIE'S DOUBLEFILE VIBURNUM | 3 | 3-4' HT. | |
| RUD | RUDBECKIA FULGIDA 'GOLDSTRUM' | BLACK EYED SUSAN | 100 | 1 GALLON | |
| ECH | ECHINACEA 'KIM'S KNEE HIGH' | KIM'S KNEE HIGH | 100 | 1 GALLON | |
| EF | EUTROCHIUM FISTULOSUM | JOE PYE WEED | 3 | 2 GALLON | |
| OS | ONOCLEA SENSIBILIS | SENSITIVE FERN | 800 | 1 GALLON | |

BIORETENTION SOIL MIX

| ITEM | COMPOSITION BY VOLUME |
|---|---|
| MODERATELY FINE SHREDDED BARK OF WOOD FIBER MULCH (NO GREATER THAN 5 % FINES PASSING NO. 200 SIEVE) | 20 - 30% |
| LOAMY COURSE SAND (SEE SPECIFICATION) | 70 - 80% |

LOAMY COURSE SAND

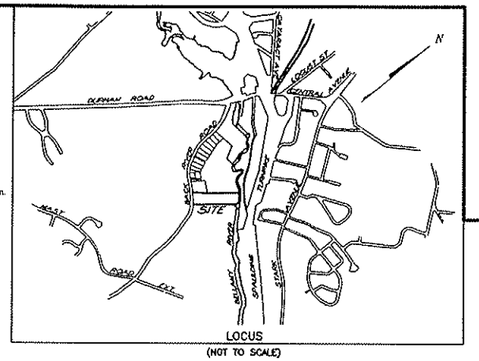
| SIEVE | COMPOSITION BY WEIGHT |
|---|---|
| #10 | 85 - 100% |
| #20 | 70 - 100% |
| #60 | 15 - 40% |
| #200 | 8 - 15% |

PLANTING SOIL COMPOSITION

| ITEM | COMPOSITION BY WEIGHT | TEST METHOD |
|---|---|---|
| SAND | 50 - 85% | AASHTO T86 |
| SILT | 0 - 50% | AASHTO T88 |
| CLAY | 10 - 20% | AASHTO T88 |
| ORGANIC MATTER | 1.5 - 10% | AASHTO T194 |

## LANDSCAPE NOTES

1. Design is based on drawings and information from Tritech Engineering received 02/09/2015 and may require adjustment due to actual field conditions.
2. The contractor shall follow best management practices during construction and shall take all means necessary to stabilize and protect the site from erosion.
3. Erosion Control shall be in place prior to construction.
4. Erosion Control to consist of Hay Bales and Erosion Control Fabric and shall be staked in place between the work and Water bodies, Wetlands and/or drainage ways prior to any construction.
5. The Contractor shall verify layout and grades and inform the Landscape Architect or Client's Representative of any discrepancies or changes in layout and/or grade relationships prior to construction.
6. Plantings to remain within the construction zone shall be protected from damage for the duration of the project by snow fence or other suitable means of protection to be approved by Landscape Architect or Client's Representative. Do not fill or mulch on the trunk flare. Do not disturb roots. Snow fence shall be located at the drip line or at least 4' from shrubs and 10' from trees in all directions, whichever is greater, and shall include any and all surface roots. In order to protect the integrity of the roots, branches, trunk and bark of the tree(s) no vehicles or construction equipment shall drive or park in or on the area within the drip line(s) of the tree(s).
7. Location, support, protection, and restoration of all existing utilities and appurtenances shall be the responsibility of the Contractor.
8. The Contractor shall verify exact location and elevation of all utilities with the respective utility owners prior to construction. Call DIGSAFE at 1-888-344-7233.
9. The Contractor shall procure any required permits prior to construction.
10. The Contractor shall furnish and plant all plants shown on the drawings and listed thereon. All plants shall be nursery-grown under climatic conditions similar to those in the locality of the project. Plants shall conform to the botanical names and standards of size, culture, and quality for the highest grades and standards as adopted by the American Association of Nurserymen, Inc. in the American Standard of Nursery Stock, American Standards Institute, Inc. 230 Southern Building, Washington, D.C. 20005.
11. All plants shall be legibly tagged with proper botanical name.
12. The Contractor shall guarantee all plants for not less than one year from time of acceptance.
13. Owner or Owner's Representative will inspect plants upon delivery for conformity to Specification requirements. Such approval shall not affect the right of inspection and rejection during the progress of the work. The Owner reserves the right to inspect and/or select all trees at the place of growth and reserves the right to approve a representative sample of each type of shrub, herbaceous perennial, annual, and ground cover at the place of growth. Such sample will serve as a minimum standard for all plants of the same species used in this work.
14. No substitutions of plants may be made without prior approval of the Owner or the Owner's Representative for any reason.
15. All disturbed areas will be dressed with 4" of loam and planted as noted on the plans or seeded except plant beds. Plant beds shall be prepared to a depth of 12" with 75 % loam and 25% compost.
16. Trees, ground cover, and shrub beds shall be mulched to a depth of 2" with one-year-old, well-composted, shredded native bark not longer than 4" in length and 1/4" in width, free of woodchips and sawdust. Mulch for ferns and herbaceous perennials shall be no longer than 1" in length. Trees in lawn areas shall be mulched in a 5' diameter min. saucer.
17. Owner is solely responsible for maintaining vehicular and pedestrian vision lines pertaining to vegetation growth.



LOCUS
(NOT TO SCALE)

N

TRITECH
ENGINEERING CORPORATION




TRITECH
ENGINEERING CORPORATION
795 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8977
FAX 603 742 2830


REVISIONS:
DATE: DESCRIPTION:
8-18-15 REVISED PER REVIEW COMMENTS

LANDSCAPE PLAN
BELLAMY RIDGE
46 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
JUNE 18, 2015
JOB No. 14103
SCALE: 1" = 30'

SHEET No. La-1

(P15-05)

CITY OF DOVER

# PLANNING BOARD - STAFF MEMO

| | |
|---|---|
| Application Type: | Impact Fee Waiver Request |
| Applicant: | Riparia – One Hundred First Street, LLC. |
| Owner: | Riparia – One Hundred First Street, LLC. |
| Location | 100 First Street (Assessor's Map 6, Lot 3) |

**INTENT:** To obtain a waiver from the Public Safety-Police impact fees assessed for 100 First Street in exchange for lighting on First Street as per 170.23-F-1-c.

**LOTS/UNITS PROPOSED:** N/A

**AGENDA ITEM #:** 4-A

**ACREAGE:** 0.75 acres

**ZONING DISTRICT:**
Central Business District (CBD) - General

**EXISTING LAND USE:**
Parking lot

**PROPOSED LAND USE:** Restaurant and 32 multi-family units

**SURROUNDING LAND USE:**
Future police station/parking garage, offices, restaurants, commercial, retail and residential uses

**ZBA ACTION:** N/A

**ATTACHMENTS:**
Impact Fee Waiver Request Form, letter, previously approved lighting plan and decision letter, Development Agreement, and lighting invoice.

**PERMITS REQUIRED:**
None

**WAIVERS REQUESTED:** Impact Fee

**Summary of Request and Background**
The applicant is asking for a waiver to the Impact Fee Ordinance – Chapter 170-23-F-1-c. The building will eventually consist of restaurant use but currently has building 32 apartment units that require a certificate of occupancy.

The impact fees for 32 apartment units equals $86,656 ($820 for recreation, $407 for police, $377 for Fire and $1,054 for schools multiplied times 32 units). $73,632 has already been paid to the City.

They are not looking for a commercial certificate of occupancy at this time so the calculation is strictly based on the apartments. If the Board were to grant the waiver of the police fee, there would be a credit of $13,024.

The applicant is requesting a waiver under Chapter 170-23-F-1-c, which reads in part:

> *"The Planning Board may agree to waive all or part of an impact fee assessment and accept in lieu of a cash payment, a proposed contribution of real property or facility improvements of equivalent value and utility to the public..."*

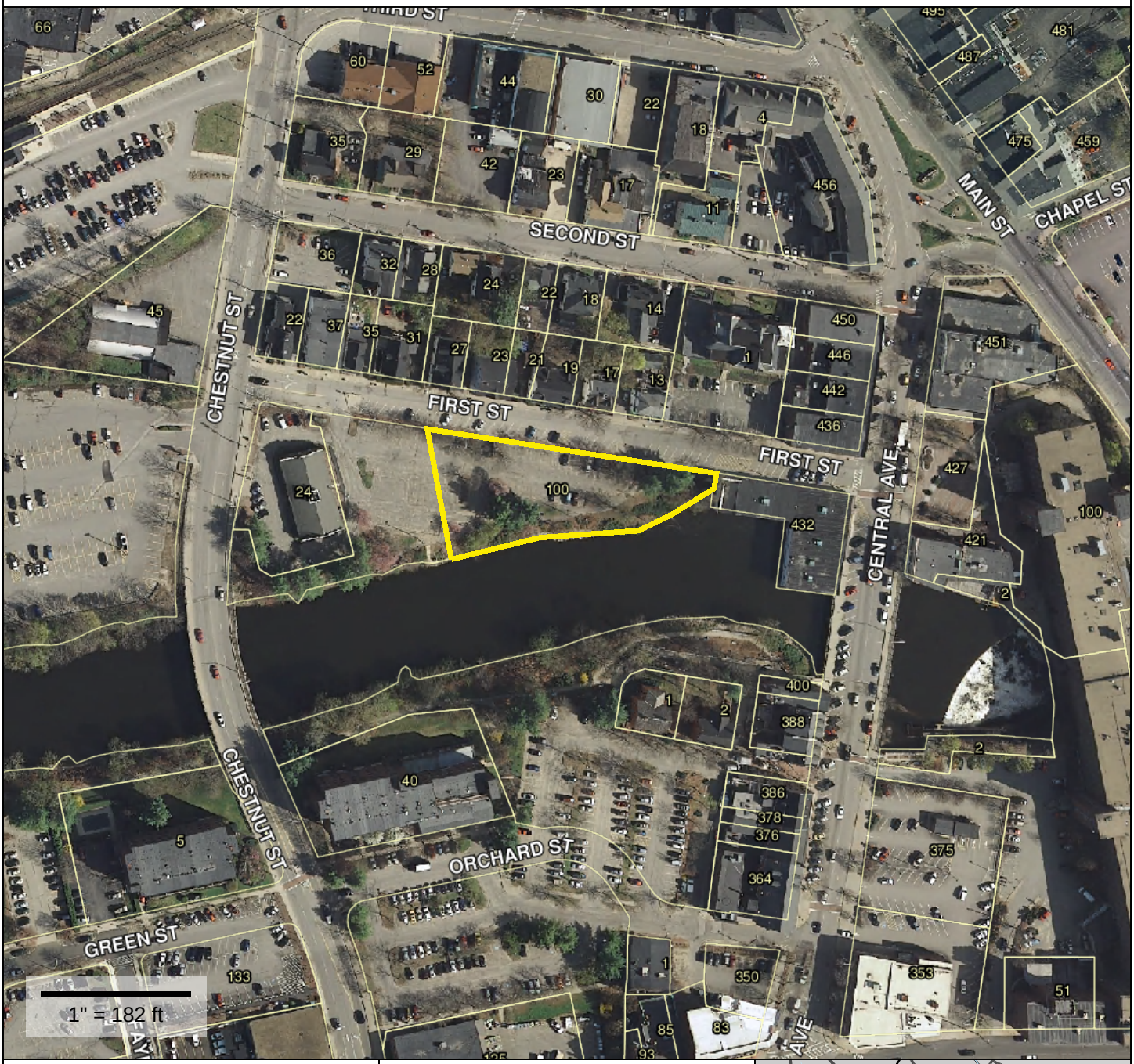
The applicant is requesting waivers from the Public Safety-Police impact fees, not the School, Recreation and Fire impact fees. The waiver for the Police impact fee is equal to the entire assessment of $13,024. Attached is the previously conditionally approved lighting plan and decision letter dated June 1, 2015 from the previous approval at the Planning Board meeting held on May 26, 2015. The Planning Department received a revised lighting plan on July 20, 2015 that complies with the listed conditions.

**Consistency with Development Agreement**
Chapter 170-23-F-1-c, requires that prior to acting on a request for a waiver that involves a contribution of real property or the construction of capital facilities, the Planning Board shall submit the request to the City Council for its review and consent. On January 22, 2014 the City Council approved the revised Development agreement which states that the Planning Board has the sole discretion to grant any waiver of impact fee, in keeping with Article 170-23(F) of the City of Dover Impact Fee Ordinance. Since this particular waiver requires City Council approval, the applicable provisions of this Development Agreement pertaining to the waiver of impact fees shall be binding upon the City Council.

**Consistency with Land Use Regulations**
The ordinance provides for the Planning Board to grant full or partial waivers of impact fees if one of three criteria is met. In this case the applicant is requesting to offset the impact fees by providing lighting along the northern section of First Street. The cost of the lighting is over double the fee requested.

**STAFF RECOMMENDATION:**
The Planning Department recommends that after duly considering the merits of the waiver, the Planning Board should grant the waiver.

# 100 First Street



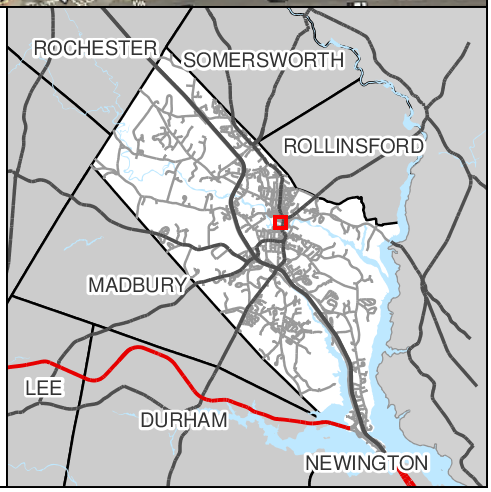

**Property Information**

| | |
|---|---|
| **Property ID** | 06003-000000 |
| **Location** | 100 FIRST ST |
| **Owner** | RIPARIA - ONE HUNDRED FIR |

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

The City makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated January 1, 2015



RECEIVED
JUL 20 2015
BY:

# City of Dover, New Hampshire
# Impact Fee Waiver Request Form

[Revision Date: November 18, 2014]

| *Office Use Only* | Date Received: 7/20/15 | Date of Planning Board Meeting: 8/25/15 |
|---|---|---|
| | Waiver Request #: 4-7 | |

**PROPERTY OWNER AND PARCEL INFORMATION**

Name of Property Owner: Riparia - One Hundred First Street, LLC Telephone # 603.740.0000

Address of Property Owner: 466 Central Avenue, Suite 12, Dover, NH 03820

Address of Property Being Assessed Impact Fee: 100 First Street

Assessor's Map # 6 Lot(s) # 3

Type of Building Proposed (check one):

***RESIDENTIAL***

_____ Single Family Detached

_____ Single Family Attached (townhouse)

_____ Duplex or 3-Unit Structure

XX Multi-family Structure (4+ Units)

_____ Manufactured Home

***NON-RESIDENTIAL***

XX Retail, Restaurant, or Club building

_____ Office or Commercial Services building

_____ Industrial, Transportation, Warehouse or Communication Building

_____ Nursing Home or Assisted Living Building

_____ Other Institutional Use Building

Amount of impact fee invoiced by City: $ 13,024.00

Use the space provided to explain why you feel that the impact fee assessed for your property should be waived by the Planning Board, per Chapter 170-23 F. (attach additional sheet if necessary):

Per agreement with the City of Dover Police as to lighting North side of First Street

Owner's Signature

7/15/15
Date

ALFRED THOMAS CATALFO, Notary Public
My Commission Expires November 17, 2015

David K. Bamford - Co-Manager duly authorized

S:\Department\Planning\Planning_Share\Forms\Impact Fee Waiver Form 2011.docx

State of New Hampshire, County of Strafford

The foregoing instrument was acknowledged, subscribed and sworn to before me this 15 day of July, 2015 by David K. Bamford, the duly authorized Co-Manager of Riparia - One Hundred First Street, LLC, an LLC organized under the law of the State of New Hampshire on behalf of said LLC.

Signed: _____, Notary Public

**From:** Michelle <michtroch@aol.com>
**To:** Michelle Trochalakis <michtroch@aol.com>
**Subject:** Fwd: First Street Impact Fees.
**Date:** Fri, Jul 10, 2015 9:44 pm

---

Michelle Trochalakis

Begin forwarded message:

**From:** Kev425@aol.com
**Date:** July 8, 2015 at 12:14:17 PM EDT
**To:** C.Parker@dover.nh.gov
**Cc:** dkbamford2@aol.com
**Subject: First Street Impact Fees.**

Chris
I want to confirm the Impact Fee numbers that are due for CO.
This is for the 32 residential units only as we are not seeking a CO for the Commercial space.

| | | |
|---|---|---|
| Recreation | $ 870/unit X 32 = | $ 27,840 |
| Police | $ 407/unit X 32 = | $ 13,024 |
| Fire | $ 377/unit X 32 = | $ 12,064 |
| Schools | $ 1054/unit X 32 = | $ 33728 |

| | | |
|---|---|---|
| Total Impact Fees | | $ 86,656 |
| | | $ 86,656 |
| | - | $ 13,024 ( credit for Police portion of improvements completed) |
| Amount due for CO | | $ 73,632 |

Do you agree with this ?

CHRISTOPHER G. PARKER, AICP
Assistant City Manager
Planning & Strategic Initiatives
c.parker@dover.nh.gov

288 Central Avenue
Dover, New Hampshire 03820-4169
(603) 516-6008
Fax: (603) 516-6049
www.dover.nh.gov

# *City of Dover, New Hampshire*

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

**NOTICE OF DECISION**

June 1, 2015

Riparia-One Hundred First Street
100 First Street
Dover, NH 03820

Re: Compliance Hearing for two conditions of approval for a Site Review for Riparia – One Hundred First Street, LLC, Assessor's Map 6, Lot 3, zoned CBD-G, located at 100 First Street. Planning Board needs to approve landscape and lighting plan, per approval granted on February 25, 2014. *(14-03A)

Dear Riparia-One Hundred First Street:

Please be advised that on Tuesday, May 26, 2015 the Dover Planning Board voted to conditionally approve the above referenced plan.

**Conditions to Be Met Prior to the Issuance of the Certificate of Occupancy:**

- ☐ 1. The applicant shall have the landscape architect add a stamp and signature to the landscape plan.
- ☐ 2. The applicant shall provide a statement from the design engineer stating the drainage will work with the islands as proposed. If changes need to be made to the islands, the developer will bear the cost of the changes.
- ☐ 3. The applicant shall remove the proposed light in front of 24 Chestnut Street (on First Street), and relocate it on First Street, if appropriate.
- ☐ 4. The applicant shall add lighting on the river side of the building which will be comparable to other lighting as proposed on the plan.

If you have any questions, please do not hesitate to contact my office.

Sincerely,

Christopher G. Parker, AICP
Assistant City Manager, Planning & Strategic Initiatives

CC: Building Inspection Office
Engineering Office
McEneaney Survey Associates, Inc.

# DeStefano & Associates, Inc.

PLANNING - DESIGN - CONSTRUCTION

## Invoice

| BILL TO |
|---|
| First Street at Garrison, LLC<br>466 Central Ave<br>Suite 12<br>Dover, NH 03820 |

| DATE | INVOICE # |
|---|---|
| 7/6/2015 | 35942 |

| P.O. NO. | TERMS | PROJECT NO. |
|---|---|---|
| VRBL | Net 15 | Riparia |

| SERVICED | DESCRIPTION | QTY | RATE | AMOUNT |
|---|---|---|---|---|
| 6/30/2015 | Public Safety Costs -Per attached cost detail, dated 7/6/15 | 1 | 30,032.44 | 30,032.44 |

*Thank you for your business.*

**Total** $30,032.44

2456 Lafayette Road – Portsmouth, NH 03801-5624
603.430.0339 – 603.430.0346 fax
www.destefano-associates.com – email: johnd@destefano-associates.com

Health Care · Retail · Multi-Family · Restaurants · Food Processing Plants · Supermarkets · Banks · Industrial
Schools · Libraries · Theaters · Hotels · Office Buildings · Sports · Religious · Historical Restoration · LEED

| North Side Lights | | Total | |
|---|---|---|---|
| Trenching | $ | 4,598.80 | |
| Sawcut | | Incl | |
| Pavement Removal | | Incl | |
| E&B | | Incl | |
| Conduit | | Incl | |
| Concrete | $ | 2,234.50 | |
| Grinding | $ | 2,920.00 | |
| Base Pavement | $ | 1,000.00 | E |
| Pole Base | $ | 1,434.00 | |
| Pole Base Install | | Incl | |
| Light Pole & Fixture | $ | 7,585.92 | |
| Wiring | $ | 2,000.00 | |
| Light Install | $ | 3,084.00 | |
| Meter Pedestal | $ | 355.00 | |
| Hitching Post | $ | 500.00 | E |
| City Inspection Fee | $ | 187.50 | |
| Material Testing | $ | 180.00 | |
| Traffic Control | $ | 1,222.50 | |
| TOTAL | $ | 27,302.22 | |
| | | | |
| **Offset Total** | | | |
| North Side Lights | $ | 27,302.22 | |
| | | | |
| Total | $ | 27,302.22 | |
| CM Fee | $ | 2,730.22 | |
| | $ | 30,032.44 | |

NEED INVOICE (NOT BILLED) ON OUR LTR TO

discretion of the Planning Board, and in keeping with Article 170-23(F) of the City of Dover Impact Fee Ordinance. In the event this waiver requires City Council approval, the applicable provisions of this Development Agreement pertaining to the waiver of impact fees shall be binding upon the City Council.

Landscaping and walkway materials installed by the Developer may be brick or cobblestone to reflect the surrounding historic character of the area. Bituminous Asphalt may only be used by the Developer for walkways with the prior approval of the City.

The Developer shall pay to construct the traffic peninsulas necessary to route traffic along First Street at such locations and in the general design specified in Exhibit A. In addition thereto, the Developer shall bear the cost of striping the new parking areas along the Northerly sideline of First Street, relocating the two existing parking meters where the Proposed Easement exists together with related infrastructure. Furthermore, the Developer shall bear the cost of excavating, paving and striping the Proposed Easement area. The cost of these improvements shall not count toward the Minimum Public Improvement Expenditure.

**Section 6.06 Completion of Public Improvements; Sureties.**

In the event that Ninety Thousand Dollars ($90,000.00) worth of the public improvements referenced in Section 6.05 are not completed during Phase 1-Dev, but the Developer desires certificates of occupancy for Phase 1-Dev, then the Developer must post a letter of credit or other financial surety in a form and upon such conditions which are acceptable to the City, in its reasonable discretion, in an amount equal to 115% of the cost of the development of the improvements to reach the Ninety Thousand Dollar ($90,000.00) agreed level. The Developer shall not obtain any certificate of occupancy for Phase 1-Dev until such time as the provisions of this paragraph are satisfied. For instance, should the Developer have expended only Seventy Thousand Dollars ($70,000.00) in public improvements during Phase 1-Dev, then the Developer must provide to the City a letter of credit or other financial surety in the amount of Twenty Three Thousand Dollars ($23,000.00). All public improvements required to be completed pursuant to the Developer's Minimum Public Improvement Expenditure obligation shall be completed by the time that certificates of occupancy for Phase 2-Dev are sought.

**Section 6.07 Maintenance of Public Improvements and Off-Site Improvements on Public Property.**

Except for the maintenance, repair and replacement, including snow plowing and snow removal, of the sidewalks that the public will be granted the right to use on the Project Site, following acceptance of such sidewalks by the City, the Developer shall be required to light, maintain, repair and replace, at its sole cost and expense, any and all public improvements required for the Project, including any and all off-site improvements on public property, related to the Project, and including but not limited to those in the Proposed Easement, as well as any lighting, landscaping, water art, or the canoe/kayak launch. The City shall grant the Developer appropriate easements or licenses for the lighting, maintenance, repair and replacement of such improvements. In the event that the Developer fails to light, maintain, repair and replace such improvements in the same or better state of repair as other similarly-situated improvements in the

cooperate with the Developer to reduce the amount of the surety from time to time, but no more often than once per month, as portions of the improvements in each phase are satisfactorily completed.

**Section 6.05 Development of Public Improvements – Phase 1-Dev**

The Developer shall be required to expend a minimum of One Hundred Twenty Thousand Dollars ($120,000.00) for public improvements (the "Minimum Public Improvement Expenditure") during Phases 1-Dev and 2-Dev; at least Ninety Thousand Dollars ($90,000.00) shall be expended during Phase 1-Dev and the remainder shall be expended during Phase 2-Dev; The Developer is not obligated to spend more than the Minimum Public Improvement Expenditure toward public improvements. These costs shall be defined actual costs paid by the Developer. The Developer may use the Minimum Public Improvement Expenditure toward any of the improvements listed in this paragraph. The Developer may provide, at its expense, other public improvements aside from those covered by the Minimum Public Improvement Expenditure. Any public improvement that the Developer decides to complete at its expense in Phases 1-Dev and 2-Dev, separate from those covered by the aforesaid Minimum Public Improvement Expenditure, must be approved by the Planning Board in order to gain offset of impact fees.

The public improvements may include, but are not limited to (i) lighted walkways in, about, through and adjacent to the Project Site for use by the public, lighting and under-lighting along the Central Avenue Bridge, the Chestnut Street Bridge, and the Community Trail Trestle Bridge (ii) vegetative landscaping along the Cochecho River, (iii) "water art", as that term is described in the Developer's RFP Response, (iv) a public canoe/kayak launch on the Cochecho River, (v) a public fountain to be placed within the Cochecho River, (vi) a public fountain to be placed in the courtyard in building to be constructed during Phase 2-Dev, (vii) a public water bubbler drinking and refilling station, (viii) interactive stations, historical marking and mapping of the site and surrounding locale, (ix) piping and water for irrigation together with loam and vegetation to traffic peninsulas (but not the construction of the peninsula and certain related improvements, as described in the paragraph below.) and (x) a horse troth for watering the horses of the City's mounted horse patrol.

In addition to those public improvements described above, the Developer may complete other public improvements at its expense. Any public improvements to be completed as part of the development of either phase shall be determined by the Developer in concert with and upon the approval of the Planning Board. The Developer is not obligated to undertake any public improvements, the cost of which would be in excess of the Minimum Public Improvement Expenditure. Upon request from time to time by the City, the Developer shall provide written cost estimates or certifications for the aforementioned and any other public improvements developed or to be developed as part of the Project.

In the event that the Developer and the Planning Board agree on public improvements the costs of which are in excess of the Minimum Public Improvement Expenditure, such costs may be considered upon petition by the Developer to the Planning Board as a basis for a waiver of impact fees for one or both phases. The decision to grant any waiver of impact fees is at the sole

CITY OF DOVER

# PLANNING BOARD - STAFF MEMO FILE #P15-45

| | |
|---|---|
| Application Type: | Lot Line Adjustment |
| Applicant(s): | George Maglaras |
| Owner(s): | George Maglaras and City of Dover |
| Location: | 20 & 22 Cocheco Street (Assessor's Map 24, Lots 105 & 105-A) |

**INTENT:** To adjust the lot lines between two existing lots at 20 and 22 Cocheco Street. 1,140 square feet would be transferred from lot 105-A to lot 105. 49 square feet would be transferred from lot 105 to lot 105-A.

**LOTS/UNITS PROPOSED:** None

**AGENDA ITEM #:** 4-B

**ACREAGE:** 1.05 Acres

**ZONING DISTRICT:** Cochecho Waterfront District (CWD)

**EXISTING LAND USE:** Municipal sewer pump station and marina office with boat storage

**PROPOSED LAND USE:** Same

**SURROUNDING LAND USE:** Multi-family residential, two family units, single family, marina, restaurants, and offices

**ZBA ACTION:** None

**ATTACHMENT:** Lot Line Adjustment plan

**APPLICATION IS COMPLETE:** Yes

**NOTICES SENT:** Abutter notices were sent by certified mail to all abutters

**PERMITS REQUIRED:**

- None

**WAIVERS REQUESTED:**

- None

**Summary of Request and Background**

The applicant wants to reconfigure the lot lines between two existing lots to transfer 1,140 square feet from lot 105-A to lot 105 and 49 square feet from lot 105 to lot 105-A. There is no change in the number of lots.

**Consistency with Land Use Regulations**

Chapter 155-18 of the Land Subdivision Regulations of the City Code provides for the adjustment of existing lot lines between two or more lots. Once all conditions have been met, this plan will be consistent with those regulations.

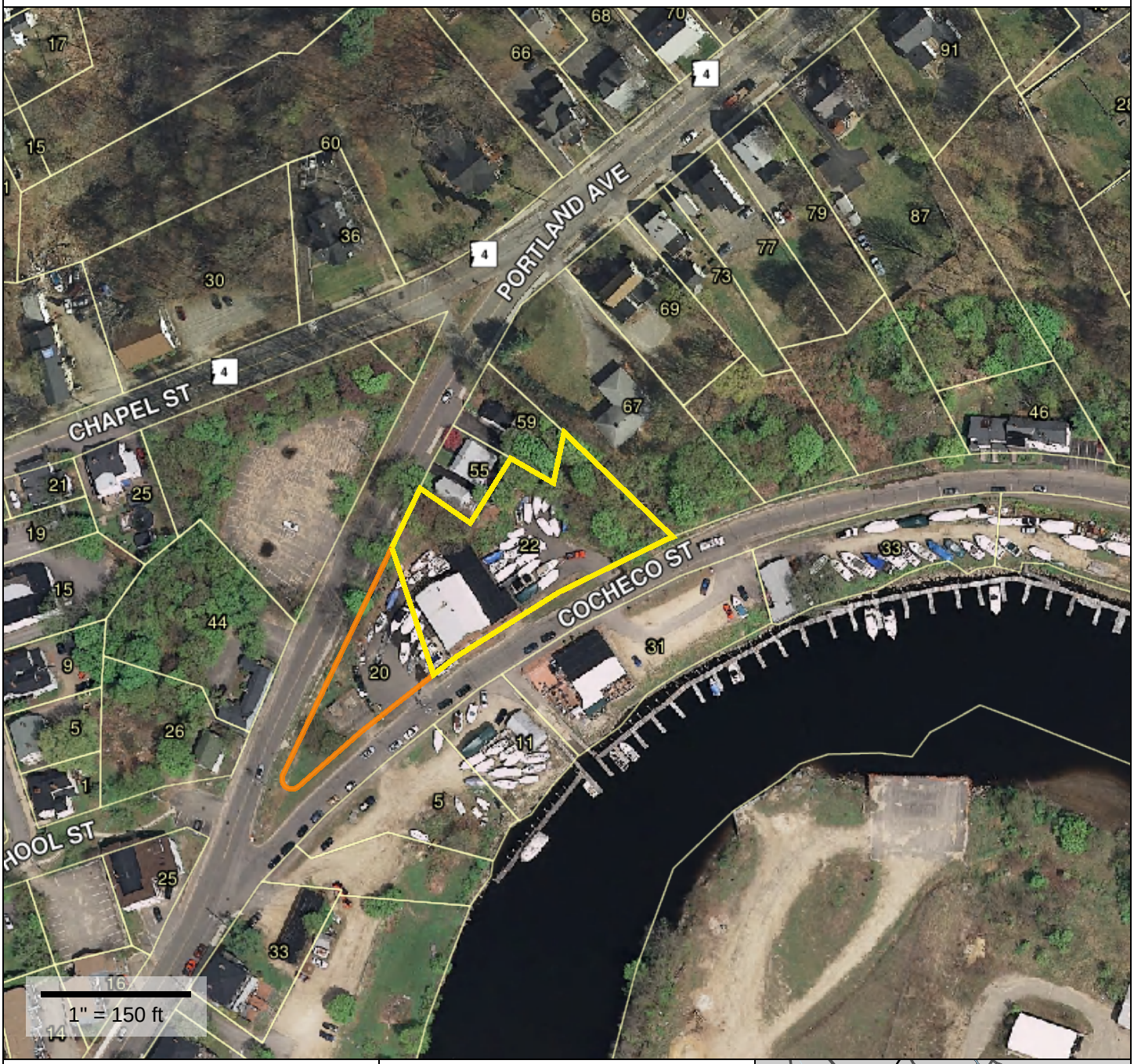
**STAFF RECOMMENDATION:**

The Planning Department recommends the Planning Board accept the application, hold the public hearing, and approve the application with the following conditions:

**Conditions to Be Met Prior to Signing of Plans:**

1. The owner's signature shall be added to the final plan set submitted for signature.
2. The applicant shall provide the Planning Department with a digital version of the final plan.
3. The applicant shall label the lot lines to be eliminated and show the lot line between lot 105 and Portion 24-105 to be eliminated.
4. The applicant shall revise the plat to add the zoning district boundary that runs along Portland Ave.
5. The applicant shall revise the plat to add the Planning File number P15-45 to the title block.
6. The applicant shall correct spelling to "Cochecho" in note 4 and when referencing the river.
7. The applicant shall revise the plan to correct note #8 to say Strafford County Registry of Deeds rather than Stratham Registry of Deeds.

# 20 & 22 Cocheco Street



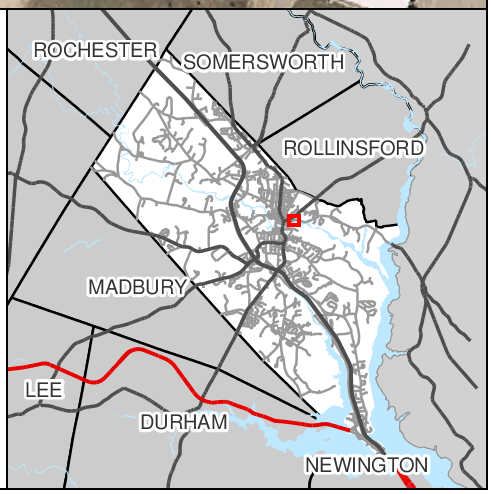

**Property Information**

| | |
|---|---|
| **Property ID** | 24105-000000 |
| **Location** | 22 COCHECO ST |
| **Owner** | MAGLARAS GEORGE |

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

The City makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated January 1, 2015



# City of Dover, New Hampshire
# MINOR LOT LINE ADJUSTMENT APPLICATION

[Revision Date: February 12, 2013]

| *Office Use Only* | Project #: P15-45 | Date Received: AUG 03 2015 |
|---|---|---|
| | Amount Paid: $910.00 CK# 1427617 | Time Received: |

Planning Office
Dover, New Hampshire

## APPLICANT INFORMATION

Name of Applicant: George Maglaras Telephone #(603) 781-3713

Address of Applicant: 33 Cocheco Street, Dover, NH 03820

## FIRST PROPERTY OWNER AND PARCEL INFORMATION

of 1st Property Owner (*if different from applicant*): _____ Telephone #_____

s of 1st Property Owner: _____

Address of Property: 22 Cocheco Streert

Assessor's Map # 24 Lot(s) # 105

Property Deed: Book 3125 Page: 781

Zoning District(s) Cocheco Waterfront District Overlay District(s) _____

Size of Existing Parcel (sq. ft.): 30,595 Size of Proposed Parcel (sq. ft.): 32,832

## SECOND PROPERTY OWNER AND PARCEL INFORMATION

Name of 2nd Property Owner (*if different from applicant*): City of Dover Telephone #(603) 516-6000

Address of 2nd Property Owner: 288 Central Avenue, Dover, NH 03820

Address of Property: 20 Cocheco Street

Assessor's Map # 24 Lot(s) # 105A

Property Deed: Book 951 Page: 203

Zoning District(s) Cocheco Waterfront District Overlay District(s) _____

Size of Existing Parcel (sq. ft.): 8,004 Size of Proposed Parcel (sq. ft.): 6,913

***[Use additional application form if more than two lots are being adjusted]***

## SURVEYOR INFORMATION

Name of Surveyor and Company (Licensed in N.H.) Hans Mertsch, Jr. T.F. Moran, Inc.

Address 48 Constitution Drive, Bedford, NH 03110 Telephone #: (603) 472-4488

Professional License #: 787 E-mail address: hmertsch@tfmoran.com

**SIGNATURES**

I/We hereby submit this application to the City of Dover Planning Board and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant or as agent, I attest that I am duly authorized to act in this capacity.

Signature of First Property Owner: _____ Date: 7-24-15

Signature of Second Property Owner: _____ Date: 8/5/15

Signature of Applicant (*if different from owner*): _____ Date: _____

Signature of Agent: _____ Date: _____

**AUTHORIZATION TO ENTER SUBJECT PROPERTY**

I hereby authorize members of the Dover Planning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: _____ Date: 7.24.15

# City of Dover, New Hampshire
# MINOR LOT LINE ADJUSTMENT APPLICATION

[Revision Date: February 12, 2013]

| Office Use Only | Project #: P15-45 | Date Received: AUG 03 2015 |
|---|---|---|
| | Amount Paid: | Time Received: Dover, New Hampshire |

## APPLICANT INFORMATION

Name of Applicant: George Maglaras Telephone #: (603) 781-3713

Address of Applicant: 33 Cocheco Street, Dover, NH 03820

## FIRST PROPERTY OWNER AND PARCEL INFORMATION

Name of 1st Property Owner (*if different from applicant*): _____ Telephone #: _____

Address of 1st Property Owner: _____

Address of Property: 22 Cocheco Streert

Assessor's Map # 24 Lot(s) # 105

Property Deed: Book 3125 Page: 781

Zoning District(s) Cocheco Waterfront District Overlay District(s) _____

Size of Existing Parcel (sq. ft.): 30,595 Size of Proposed Parcel (sq. ft.): 32,832

## ~~SECOND~~ THIRD PROPERTY OWNER AND PARCEL INFORMATION

Name of ~~2nd~~ 3rd Property Owner (*if different from applicant*): _____ Telephone #: _____

Address of ~~2nd~~ 3rd Property Owner: _____

Address of Property: 22 Cocheco Street

Assessor's Map # 24 Lot(s) # Portion 105

Property Deed: Book 4012 Page: 623

Zoning District(s) Cocheco Waterfront District Overlay District(s) _____

Size of Existing Parcel (sq. ft.): 7,330 Size of Proposed Parcel (sq. ft.): 6,184

***[Use additional application form if more than two lots are being adjusted]***

## SURVEYOR INFORMATION

Name of Surveyor and Company (Licensed in N.H.) Hans Mertsch, Jr. T.F. Moran, Inc.

Address 48 Constitution Drive, Bedford, NH 03110 Telephone #: (603) 472-4488

Professional License #: 787 E-mail address: hmertsch@tfmoran.com

**SIGNATURES**

I/We hereby submit this application to the City of Dover Planning Board and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant or as agent, I attest that I am duly authorized to act in this capacity.

Signature of First Property Owner: _____ Date: 7-24-15

Signature of ~~Second~~ Third Property Owner: _____ Date: 7-24-15

Signature of Applicant (*if different from owner*): _____ Date: _____

Signature of Agent: _____ Date: _____

**AUTHORIZATION TO ENTER SUBJECT PROPERTY**

I hereby authorize members of the Dover Planning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: _____ Date: 7-24-15

# *City of Dover Minor Lot Line Adjustment*

## *List of Abutters*

**Owner/Applicant:**

| Tax Map | Lot # | Property Owner | Owner Name2 | Owner Address | Owner City | Owner State | Owner Zip |
|---|---|---|---|---|---|---|---|
| 24 | 139-000000 | MAGLARAS GEORGE | | 33 COCHECO ST | DOVER | NH | 03820 |

**Surveyor and/or Engineer:**

| Name | Company | | | Address | City | State | Zip |
|---|---|---|---|---|---|---|---|
| Hans Mertsch | T.F. Moran, Inc. | | | 48 Constitution Drive | Bedford | NH | 03110 |

**Conservation Easement Holder:**

| Tax Map | Lot # | Property Owner | Owner Name2 | Owner Address | Owner City | Owner State | Owner Zip |
|---|---|---|---|---|---|---|---|
| | | N/A | | | | | |

**Abutters:**

| Lot # | Owner Name | Owner Name2 | Owner Address | Owner City | Owner State | Owner Zip |
|---|---|---|---|---|---|---|
| *03009-000000* | *FOURNIER DEAN A TRUSTEE* | *FOURNIER DEAN A REVOCABLE LIVING TRUST* | *819 CENTRAL AVE* | *DOVER* | *NH* | *03820* |
| 03009-000001 | ULLRICH BRADLEY W | | 10 LANCASTER RD | WINDHAM | NH | 03087 |
| 03009-000002 | MITRUSHI HEIDI HANSON | | 122 MOUNT VERNON ST | DOVER | NH | 03820-2728 |
| 03009-000003 | JOHNSON JAKE R & | JOHNSON KATHRYN | 8 OLD PINE HILL RD S | BERWICK | ME | 03901-2718 |
| 03009-000004 | KELLEY JOHN T | | PO BOX 277 | PORTSMOUTH | NH | 03802-0277 |
| 03009-000005 | LYNCH DANIEL LAUZIERE | | 25 SCHOOL ST UNIT 5 | DOVER | NH | 03820 |
| 03009-000006 | WHICHER ROBERT E & | WHICHER DENISE H | 55 BOCA CHICA RD LOT 62 | KEY WEST | FL | 33040-5616 |
| 03009-000007 | RCJ & COMPANY | | 35 GARFIELD RD | PORTSMOUTH | NH | 03801 |
| 03009-000008 | EDWARDS KENNETH G & | EDWARDS CLAUDETTE R | 46 HORACE GREELEY RD | AMHERST | NH | 03031 |
| 03009-000009 | LANSFORD KEVIN | | 25 9 SCHOOL ST | DOVER | NH | 038201 |
| *03010-000000* | *FOURNIER DEAN A TRUSTEE* | *FOURNIER DEAN A REVOCABLE LIVING TRUST* | *819 CENTRAL AVE* | *DOVER* | *NH* | *03820* |
| *22001-000000* | *CITY OF DOVER* | | *288 CENTRAL AVE* | *DOVER* | *NH* | *03820* |
| *23001-000000* | *MAIRS ROBERT S* | *OBRIEN ED* | *17 PORTLAND AVENUE* | *DOVER* | *NH* | *03820* |
| *23002-000000* | *MAIRS ROBERT S* | | *17 PORTLAND AVENUE* | *DOVER* | *NH* | *03820* |
| 24060-000000 | LABOURDETTE PETER J & | PAOLETTI BELINDA C | 38 CHAPEL ST | DOVER | NH | 03820 |
| 24094-000000 | HOLGATE LIMITED PARTNERSHIP | | 130 CENTRAL AVE | DOVER | NH | 03820 |
| *24095-000000* | *CITY OF DOVER* | | *288 CENTRAL AVE* | *DOVER* | *NH* | *03820* |
| 24096-000000 | LADERBUSH GEORGE R & | LADERBUSH BONNIE J | 25 CHAPEL STREET | DOVER | NH | 03820 |
| 24102-000000 | BARROWS JEREMY | | 5 MECHANIC ST | DOVER | NH | 03820-3507 |
| 24103-000000 | BARRETT JAMES M | | 17 COOMBS RD | SOMERSWOTH | NH | 03878 |
| *24104-000000* | *44 PORTLAND AVE LLC* | | *42 J DOVER POINT RD* | *DOVER* | *NH* | *03820* |
| *24104-A00000* | *44 PORTLAND AVE LLC* | | *42 J DOVER POINT RD* | *DOVER* | *NH* | *03820* |
| *24105-A00000* | *CITY OF DOVER* | | *288 CENTRAL AVE* | *DOVER* | *NH* | *03820* |
| 24106-000000 | BOUCHER CAROL & | MAGLARAS GEORGE | 55 PORTLAND AV | DOVER | NH | 03820-3535 |
| 24107-000000 | MINOT FRANCINE M | MINOT JAMES L | 59 PORTLAND AVENUE | DOVER | NH | 03820 |
| 24108-000000 | SHAINES GLADYS V TRUSTEE | SHAINES GLADYS V REV TRUST | PO BOX 432 | HAMPTON FALLS | NH | 03844 |
| 24109-000000 | BROCKETT ELIZABETH B | | 71 PORTLAND AVE | DOVER | NH | 03820 |
| 24109-A00000 | AVON HOLDINGS LLC | C/O BRADY PATRICK | 36 THREE RIVERS FARM RD | DOVER | NH | 03820 |
| 24110-000000 | MCKENNEY SALLIE J | MCKENNEY DONALD D | 7 BARNARD LN | ELIOT | ME | 03903-1511 |
| 24111-000000 | SPROWL TIMOTHY A & GAIL L TRUSTEES | SPROWL FAMILY REVOCABLE TRUST | 77 PORTLAND AVE 1 | DOVER | NH | 03820-3525 |
| 24111-A00000 | DISAVERIO GABE A | | 85 SPINNAKER WAY | PORTSMOUTH | NH | 03801 |
| *24112-000000* | *PRINTY RITA C IRREV TRUST* | *PRINTY JAMES W TRUSTEE* | *461 LOCUST ST* | *ROLLINSFORD* | *NH* | *03869* |
| *24113-000000* | *PRINTY RITA C IRREV TRUST* | *PRINTY JAMES W TRUSTEE* | *461 LOCUST ST* | *ROLLINSFORD* | *NH* | *03869* |
| 24114-000000 | SPINELLI MICHAEL & ESTHER | SPINELLI IRENE V FAMILY REVOCABLE TRUST | 87 PORTLAND AV | DOVER | NH | 03820-3525 |
| 24115-B00000 | DEAN STREET HOLDINGS INC | | 130 CENTRAL AVE | DOVER | NH | 03820 |
| *24136-000000* | *MAGLARAS GEORGE* | | *33 COCHECO STREET* | *DOVER* | *NH* | *03820* |
| *24137-000000* | *MAGLARAS GEORGE* | | *33 COCHECO STREET* | *DOVER* | *NH* | *03820* |
| *24138-000000* | *MAGLARAS GEORGE* | | *33 COCHECO STREET* | *DOVER* | *NH* | *03820* |
| *24139-000000* | *MAGLARAS GEORGE* | | *33 COCHECO STREET* | *DOVER* | *NH* | *03820* |
| *24140-000000* | *MAGLARAS GEORGE &* | *LAMPREY PROPERTIES INC* | *33 COCHECO ST* | *DOVER* | *NH* | *03820* |
| *24141-000000* | *MAIRS ROBERT S* | | *17 PORTLAND AVENUE* | *DOVER* | *NH* | *03820* |
| *24142-000000* | *MAIRS ROBERT S* | | *17 PORTLAND AVENUE* | *DOVER* | *NH* | *03820* |

LEGEND

- IRON ROD (FOUND)
- DRILLHOLE (FOUND)
- IRON ROD (TO BE SET)
- CATCH BASIN
- DRAIN MANHOLE
- MANHOLE
- SEWER MANHOLE
- WATER SHUTOFF
- HYDRANT
- LIGHT POLE
- UTILITY POLE
- BUILDING
- CONCRETE
- BRICK
- BITUMINOUS CURB
- SLOPED GRANITE CURB
- VERTICAL GRANITE CURB
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- FENCE
- RETAINING WALL
- OVERHEAD WIRE
- DRAIN LINE

TABLE OF LOT AREAS

| LOT | EXISTING AREA | ADD | SUBTRACT | PROPOSED AREA |
|---|---|---|---|---|
| 105A | 8,004 S.F. | 49 S.F. (PARCEL A) | 1,140 S.F. (PARCEL B) | 6,913 S.F. |
| 105 | 38,595 S.F. | 1,140 S.F. (PARCEL B)<br>1,146 S.F. (PARCEL C) | 49 S.F. (PARCEL A) | 32,632 S.F. |
| PORTION 105 | 7,330 S.F. | | 1,146 S.F. (PARCEL C) | 6,184 S.F. |

24-96
GEORGE R & BONNIE J. LABROUSSI
25 CHAPEL STREET
DOVER, NH 03820

24-94
IRONDALE LIMITED PARTNERSHIP
110 CENTRAL AVENUE
DOVER, NH 03820

24-93
CITY OF DOVER
288 CENTRAL AVENUE
DOVER, NH 03820

24-106
CAROL BOUCHER AND GEORGE MAGLARAS
55 PORTLAND AVENUE
DOVER, NH 03820

24-107
FRANCINE AND JAMES MINOT
59 PORTLAND AVENUE
DOVER, NH 03820

24-109
ELIZABETH B BROCKETT
71 PORTLAND AVE
DOVER, NH 03820

24-104
ROBERT S. MAIRS
14 ROBERTS ROAD
DOVER, NH 03820

PARCEL B
1,140 SF.±

N/F NORTHERN UTILITIES, INC.
BK. 657 PG. 238

REFERENCE PLAN #1

IRON ROD TO BE SET (TYP.)

24-103
JAMES M BARRETT
17 COOMBS RD
SOMERSWORTH, NH 03878

24-104A
BELLAMY ENNAGEMENT CORP
17 PORTLAND STREET
DOVER, NH 03820

PORTLAND AVENUE
(VARIABLE WIDTH - PUBLIC)

SCHOOL STREET

24-105A
SEE TABLE FOR AREAS

24-105
SEE TABLE FOR AREAS

PORTION 24-105
SEE TABLE FOR AREAS

PARCEL A
49 SF.±
SEE DETAIL

PARCEL C
1,146 SF.±

N 255267.8074
E 712260.6293

N 255425.8470
E 712493.8738

24-108
GLADYS SHAINES REVOCABLE TRUST
GLADYS SHAINES, TRUSTEE
P.O. BOX 452
HAMPTON FALLS, NH 03844

24-108A
AVON HOLDINGS LLC
C/O BRADY PATRICK
36 THREE RIVERS FARM RD
DOVER, NH 03820

S-9
DEAN FOURNIER REVOCABLE LIVING TRUST
DEAN FOURNIER, TRUSTEE
819 CENTRAL AVENUE
DOVER, NH 03820

COCHECO STREET
(13 ROD WIDE - 49.5' - PUBLIC)

24-140
GEORGE MAGLARAS AND LAMPREY PROPERTIES, INC.
33 COCHECO STREET
DOVER, NH 03820

24-139
GEORGE MAGLARAS
55 COCHECO STREET
DOVER, NH 03820

24-138
GEORGE MAGLARAS
33 COCHECO STREET
DOVER, NH 03820

24-141
ROBERT S. MAIRS
17 PORTLAND AVENUE
DOVER, NH 03820

24-142
ROBERT S. MAIRS
17 PORTLAND AVENUE
DOVER, NH 03820

23-2
ROBERT S. MAIRS
17 PORTLAND AVENUE
DOVER, NH 03820

23-1
ROBERT S. MAIRS
ED O'BRIEN
17 PORTLAND AVENUE
DOVER, NH 03820

COCHECO RIVER

DETAIL
NOT TO SCALE

VICINITY PLAN
FOR REGISTRY USE
SCALE: 1"=1000'

## REFERENCE PLANS

1. COCHECO STREET LAYOUT FOR THE CITY OF DOVER IN DOVER, N.H. SCALE 1"=50' AUGUST 1, 1990 REVISED MAY 22, 1990 BY BRUCE L. POHOPEK STRAFFORD COUNTY REGISTRY OF DEEDS PLAN 40-82. FIELD NOTES ALSO PROVIDED.
2. ACTIVITY AND USE RESTRICTION PLAN TAX MAP 24 LOTS 105, 139, 140 & 141 PORTLAND AVENUE AND COCHECO STREET DOVER, NEW HAMPSHIRE SCALE 1"=40' OCT. 2006 BY CLD CONSULTING ENGINEERS. NOT RECORDED.
3. PLAN OF LAND PREPARED FOR GEORGE MAGLARAS TAX MAP 24 LOT NO.S 105, 135A, 136, 137, 138, 139, 140 COCHECO STREET CITY OF DOVER COUNTY OF STRAFFORD STATE OF NEW HAMPSHIRE SCALE 1"=40' JUNE 2007 BY MCENANEY SURVEY ASSOCIATES, INC. NOT RECORDED.
4. CITY OF DOVER, NEW HAMPSHIRE ENGINEERING DEPARTMENT LAND OF NORTHERN UTILITIES ALLIED GAS DIVISION TO BE PURCHASED BY THE CITY OF DOVER SCALE 1"=20' DATE: 5/22/74. SCRD PLAN #52 POCKET 9 FOLDER 1.
5. SUBDIVISION PLAN OF LAND OF KERRY FORBES AND DOUG DODD PORTLAND STREET AND COCHECO STREET DOVER, NEW HAMPSHIRE SCALE 1" = 20' DATE 12/23/81 BY CWL CONSULTANTS. SCRD PLAN # 22A-131.
6. LOCATION OF PROPERTY ON COCHECO STREET IN DOVER DATE 3/21/74 BY PUBLIC SERVICE CO. OF NEW HAMPSHIRE. NOT RECORDED. FIELD NOTES ALSO PROVIDED BY PSNH.
7. LAND AT DOVER STONEHOUSE THE EAST STATE GAS & ELEC. CO. DOVER DIV. SCALE 1"=50' DATE 12-31-35. NOT RECORDED PROVIDED BY PSNH.
8. SUBDIVISION OF JOHN & MARJORIE MAGLARAS DOVER, NEW HAMPSHIRE BY G.L. DAVIS & ASSOCIATES. SCRD BOOK 913 PAGE 382. AND DATED SEPT. 1972 REVISED 6/11/74 NOT RECORDED ON FILE AT TFM.
9. PLAN OF LAND ESTATE OF JOHN R. WATHES DOVER NEW HAMPSHIRE SCALE 1"=20' SEPT. 1961 BY G.L. DAVIS & ASSOCIATES. NOT RECORDED ON FILE AT TFM.
10. FOSS PROPERTY DOVER, N.H., OCT., 23, 1922. SCALE 1"=40' SURVEY OF WALTER S. WHEELER, CIVIL ENGINEER.
11. NORTHERN UTILITIES INC. ALLIED GAS DIVISION 2/23/78 COCHECO ST. DOVER, N.H. LAYOUT OF DOVER REGULATION STATION & PROPOSED EASEMENT.

## NOTES

1. OWNER OF RECORD OF MAP 24 LOT 105 & MAP 24 LOT 105 PORTION: GEORGE MAGLARAS, 33 COCHECO STREET, DOVER, NH 03820.
   DEED REFERENCE TO PARCELS IS BK. 3125 PG. 781 AND BK. 4012 PG. 623 S.C.R.D.
   OWNER OF RECORD OF MAP 24 LOT 105A: CITY OF DOVER, 288 CENTRAL AVENUE, DOVER, NH 03820.
   DEED REFERENCE TO PARCEL IS BK. 951 PG. 203 S.C.R.D.
   SEE TABLE FOR AREAS OF PARCELS.
2. 24-105 INDICATES TAX MAP AND LOT NUMBER.
3. THE PURPOSE OF THIS PLAN IS TO ADJUST THE LOT LINES BETWEEN LOT 105 & PORTION LOT 105 AND LOT 105 & 105A.
4. CURRENT ZONING IS CWD (COCHECO WATERFRONT DISTRICT)
   MIN. LOT SIZE: N/A
   MIN. LOT FRONTAGE: N/A
   MIN. BUILDING SETBACKS ARE N/A
5. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) WOULD REVEAL.
6. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. TEMERAN INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-888-344-7233.
7. GOVER COORDINATE SYSTEM PER REFERENCE PLAN #1.
8. SHEETS 1 & 2 TO BE RECORDED AT STRAFFORD COUNTY REGISTRY OF DEEDS.

OWNERS SIGNATURE
CITY OF DOVER ____ DATE

OWNERS SIGNATURE
GEORGE MAGLARAS ____ DATE

I HEREBY CERTIFY, TO MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THIS PLAN SHOWS THE RESULTS OF AN ON THE GROUND "STANDARD PROPERTY SURVEY" AND THAT SAID SURVEY MEETS THE MINIMUM PRECISION AND/OR ACCURACY MEASUREMENTS FOR SURVEY CLASSIFICATION "U" (URBAN) AS SET FORTH IN TABLE 500.1 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS ADOPTED 8/23/01, EFFECTIVE 8/24/01.

I FURTHER CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS A MAXIMUM ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND ON ALL PROPERTY LINES WITHIN AND BORDERING THE SUBJECT PROPERTY.

STATE OF NEW HAMPSHIRE — LICENSED LAND SURVEYOR — No. 787 — HANS-GEORG A. MERTSCH, JR. — 5/22/15

| REV | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|
| 6. | 5/22/15 | MINOR REVISIONS PER CLIENT | JMO | HGM |
| 5. | 12/10/14 | MINOR REVISIONS PER CLIENT | JMO | HGM |
| 4. | 5/17/14 | REASE LOT LINE BETWEEN 24-105 & 24-105A | JAT | HGM |
| 3. | 4/23/13 | REVISE PORTLAND AVE. R.O.W. & LLA | JAT | HGM |
| 2. | 3/11/13 | REVISE ABUTTER IDENTIFICATION | PCL | HGM |
| 1. | 3/8/13 | MINOR REVISIONS PER CLIENT REVIEW | PCL | HGM |

Graphic Scale 50 25 0 50

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This plan is not effective unless signed by a duly authorized officer of Thomas F. Moran, Inc.

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UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM
CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION

TAX MAP 24 LOTS 105, PORTION 105 & 105A

**LOT LINE ADJUSTMENT PLAN**

# PORTLAND AVE. AND COCHECO STREET

**DOVER, NEW HAMPSHIRE**

OWNED BY

**GEORGE MAGLARAS AND CITY OF DOVER**

PREPARED FOR

**NORTHEAST UTILITIES**

**SCALE: 1"=30'** **FEBRUARY 22, 2013**

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

| FILE | DS | FB | CADFILE | |
|---|---|---|---|---|
| 47066.00 | JAT | --- | 47066 Site | SHEET 1 OF 2 |
| | CK HGM | | | |

CITY OF DOVER

# PLANNING BOARD - STAFF MEMO FILE #P15-46

Application Type: Lot Line Adjustment
Applicant(s): George Maglaras
Owner(s): George Maglaras
Location: 31 & 33 Cocheco Street (Assessor's Map 24, Lots 138 & 139)

**INTENT:** To adjust the lot lines between two existing lots at 31 and 33 Cocheco Street. 579 square feet would be transferred from lot 139 to lot 138.
**LOTS/UNITS PROPOSED:** None

**AGENDA ITEM #:** 4-C

**ACREAGE:** 0.83 acres

**ZONING DISTRICT:** Cochecho Waterfront District (CWD)

**EXISTING LAND USE:** Restaurant, office, marina with boat storage

**PROPOSED LAND USE:** Same

**SURROUNDING LAND USE:** Multi-family residential, two family units, single family, marina, restaurants, and offices

**ZBA ACTION:** None

**ATTACHMENT:** Lot Line Adjustment Plan

**APPLICATION IS COMPLETE:** Yes

**NOTICES SENT:** Abutter notices were sent by certified mail to all abutters

**PERMITS REQUIRED:**
- None

**WAIVERS REQUESTED:**
- Waiver to Chapter 155-18-B-5, that requires the entire lot be shown

**Summary of Request and Background**
The applicant wants to reconfigure the lot lines between two existing lots to transfer 579 square feet from lot 139 to lot 138. There is no change in the number of lots.

**Consistency with Land Use Regulations**
Chapter 155-18 of the Land Subdivision Regulations of the City Code provides for the adjustment of existing lot lines between two or more lots. Once all conditions have been met and the waiver granted, this plan will be consistent with those regulations.

**Waiver Requests**
The applicant is requesting a waiver from Chapter 155-18-B-5 to waive the requirement that "lot lines with accurate dimensions and bearing of a sufficient scale to determine readily the location bearing and length of all lines". The applicant has submitted a letter that includes the justification for the request including a 2007 survey of the entire lot prepared by McEneaney Survey. The Planning Department supports the waiver for the reasons stated by the applicant.

**STAFF RECOMMENDATION:**

The Planning Department recommends the Planning Board accept the application, hold the public hearing, and approve the application with the following conditions:

**Conditions to Be Met Prior to Signing of Plans:**
1. The owner's signature shall be added to the final plan set submitted for signature.
2. The applicant shall provide the Planning Department with a digital version of the final plan.
3. The applicant shall revise the plat to add the zoning district boundary that runs along Portland Ave.
4. The applicant shall provide a second sheet to show the names and addresses of all abutters.
5. The applicant shall revise the plat to add the Planning File number P15-46 to the title block.
6. The applicant shall correct spelling to "Cochecho" in note 4 and when referencing the river.
7. The applicant shall remove the lot line between lot 105 and Portion 24-105.
8. The approval includes the granting of the waivers requested for the reasons stated by the applicant. The Board finds that the criteria of Chapter 155-51-A have been met.

# 31 & 33Cocheco Street



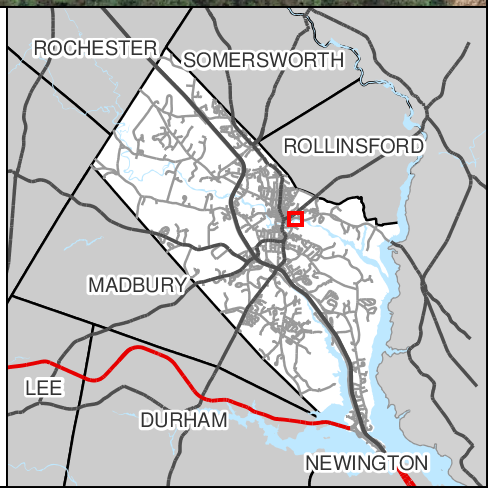

**Property Information**

| | |
|---|---|
| **Property ID** | 24138-000000 |
| **Location** | 33 COCHECO ST |
| **Owner** | MAGLARAS GEORGE |

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

The City makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated January 1, 2015



# City of Dover, New Hampshire
# MINOR LOT LINE ADJUSTMENT APPLICATION

[Revised Date: February 12, 2013]

| *Office Use Only* | Project #: P15-40 | Date Received: AUG 03 2015 |
|---|---|---|
| | Amount Paid: | Time Received: |

Planning Office
Dover, New Hampshire

**APPLICANT INFORMATION**

Name of Applicant: George Maglaras Telephone #: (603) 781-3713

Address of Applicant: 33 Cocheco Street, Dover, NH 03820

**FIRST PROPERTY OWNER AND PARCEL INFORMATION**

Name of 1st Property Owner (*if different from applicant*): _____ Telephone #: _____

Address of 1st Property Owner: _____

Address of Property: Cocheco Streert

Assessor's Map # 24 Lot(s) # 139

Property Deed: Book 1049 Page: 122

Zoning District(s) Cocheco Waterfront District Overlay District(s) _____

Size of Existing Parcel (sq. ft.): 21,590 Size of Proposed Parcel (sq. ft.): 21,011

**SECOND PROPERTY OWNER AND PARCEL INFORMATION**

Name of 2nd Property Owner (*if different from applicant*): _____ Telephone #: _____

Address of 2nd Property Owner: _____

Address of Property: Cocheco Street

Assessor's Map # 24 Lot(s) # 138

Property Deed: Book 1208 Page: 46

Zoning District(s) Cocheco Waterfront District Overlay District(s) _____

Size of Existing Parcel (sq. ft.): 14,587 Size of Proposed Parcel (sq. ft.): 15,166

***[Use additional application form if more than two lots are being adjusted]***

**SURVEYOR INFORMATION**

Name of Surveyor and Company (Licensed in N.H.) Hans Mertsch, Jr. T.F. Moran, Inc.

Address 48 Constitution Drive, Bedford, NH 03110 Telephone #: (603) 472-4488

Professional License #: 787 E-mail address: hmertsch@tfmoran.com

**SIGNATURES**

I/We hereby submit this application to the City of Dover Planning Board and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant or as agent, I attest that I am duly authorized to act in this capacity.

Signature of First Property Owner: _____ Date: 7-24-15

Signature of Second Property Owner: _____ Date: 7-24-15

Signature of Applicant (*if different from owner*): _____ Date: _____

Signature of Agent: _____ Date: _____

**AUTHORIZATION TO ENTER SUBJECT PROPERTY**

I hereby authorize members of the Dover Planning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: _____ Date: 7-24-15

# *City of Dover Minor Lot Line Adjustment*
## *List of Abutters*

Owner/Applicant:

| Tax Map | Lot # | Property Owner | Owner Name2 | Owner Address | Owner City | Owner State | Owner Zip |
|---|---|---|---|---|---|---|---|
| 24 | 139-000000 | MAGLARAS GEORGE | | 33 COCHECO ST | DOVER | NH | 03820 |

Surveyor and/or Engineer:

| Name | Company | | | Address | City | State | Zip |
|---|---|---|---|---|---|---|---|
| Hans Mertsch | T.F. Moran, Inc. | | | 48 Constitution Drive | Bedford | NH | 03110 |

Conservation Easement Holder:

| Tax Map | Lot # | Property Owner | Owner Name2 | Owner Address | Owner City | Owner State | Owner Zip |
|---|---|---|---|---|---|---|---|
| | | N/A | | | | | |

Abutters:

| Lot # | Owner Name | Owner Name2 | Owner Address | Owner City | Owner State | Owner Zip |
|---|---|---|---|---|---|---|
| ***03009-000000*** | ***FOURNIER DEAN A TRUSTEE*** | ***FOURNIER DEAN A REVOCABLE LIVING TRUST*** | ***819 CENTRAL AVE*** | ***DOVER*** | ***NH*** | ***03820*** |
| 03009-000001 | ULLRICH BRADLEY W | | 10 LANCASTER RD | WINDHAM | NH | 03087 |
| 03009-000002 | MITRUSHI HEIDI HANSON | | 122 MOUNT VERNON ST | DOVER | NH | 03820-2728 |
| 03009-000003 | JOHNSON JAKE R & | JOHNSON KATHRYN | 8 OLD PINE HILL RD S | BERWICK | ME | 03901-2718 |
| 03009-000004 | KELLEY JOHN T | | PO BOX 277 | PORTSMOUTH | NH | 03802-0277 |
| 03009-000005 | LYNCH DANIEL LAUZIERE | | 25 SCHOOL ST UNIT 5 | DOVER | NH | 03820 |
| 03009-000006 | WHICHER ROBERT E & | WHICHER DENISE H | 55 BOCA CHICA RD LOT 62 | KEY WEST | FL | 33040-5616 |
| 03009-000007 | RCJ & COMPANY | | 35 GARFIELD RD | PORTSMOUTH | NH | 03801 |
| 03009-000008 | EDWARDS KENNETH G & | EDWARDS CLAUDETTE R | 46 HORACE GREELEY RD | AMHERST | NH | 03031 |
| 03009-000009 | LANSFORD KEVIN | | 25 9 SCHOOL ST | DOVER | NH | 038201 |
| ***03010-000000*** | ***FOURNIER DEAN A TRUSTEE*** | ***FOURNIER DEAN A REVOCABLE LIVING TRUST*** | ***819 CENTRAL AVE*** | ***DOVER*** | ***NH*** | ***03820*** |
| ***22001-000000*** | ***CITY OF DOVER*** | | ***288 CENTRAL AVE*** | ***DOVER*** | ***NH*** | ***03820*** |
| ***23001-000000*** | ***MAIRS ROBERT S*** | ***OBRIEN ED*** | ***17 PORTLAND AVENUE*** | ***DOVER*** | ***NH*** | ***03820*** |
| ***23002-000000*** | ***MAIRS ROBERT S*** | | ***17 PORTLAND AVENUE*** | ***DOVER*** | ***NH*** | ***03820*** |
| 24060-000000 | LABOURDETTE PETER J & | PAOLETTI BELINDA C | 38 CHAPEL ST | DOVER | NH | 03820 |
| 24094-000000 | HOLGATE LIMITED PARTNERSHIP | | 130 CENTRAL AVE | DOVER | NH | 03820 |
| ***24095-000000*** | ***CITY OF DOVER*** | | ***288 CENTRAL AVE*** | ***DOVER*** | ***NH*** | ***03820*** |
| 24096-000000 | LADERBUSH GEORGE R & | LADERBUSH BONNIE J | 25 CHAPEL STREET | DOVER | NH | 03820 |
| 24102-000000 | BARROWS JEREMY | | 5 MECHANIC ST | DOVER | NH | 03820-3507 |
| 24103-000000 | BARRETT JAMES M | | 17 COOMBS RD | SOMERSWOTH | NH | 03878 |
| ***24104-000000*** | ***44 PORTLAND AVE LLC*** | | ***42 J DOVER POINT RD*** | ***DOVER*** | ***NH*** | ***03820*** |
| ***24104-A00000*** | ***44 PORTLAND AVE LLC*** | | ***42 J DOVER POINT RD*** | ***DOVER*** | ***NH*** | ***03820*** |
| ***24105-A00000*** | ***CITY OF DOVER*** | | ***288 CENTRAL AVE*** | ***DOVER*** | ***NH*** | ***03820*** |
| 24106-000000 | BOUCHER CAROL & | MAGLARAS GEORGE | 55 PORTLAND AV | DOVER | NH | 03820-3535 |
| 24107-000000 | MINOT FRANCINE M | MINOT JAMES L | 59 PORTLAND AVENUE | DOVER | NH | 03820 |
| 24108-000000 | SHAINES GLADYS V TRUSTEE | SHAINES GLADYS V REV TRUST | PO BOX 432 | HAMPTON FALLS | NH | 03844 |
| 24109-000000 | BROCKETT ELIZABETH B | | 71 PORTLAND AVE | DOVER | NH | 03820 |
| 24109-A00000 | AVON HOLDINGS LLC | C/O BRADY PATRICK | 36 THREE RIVERS FARM RD | DOVER | NH | 03820 |
| 24110-000000 | MCKENNEY SALLIE J | MCKENNEY DONALD D | 7 BARNARD LN | ELIOT | ME | 03903-1511 |
| 24111-000000 | SPROWL TIMOTHY A & GAIL L TRUSTEES | SPROWL FAMILY REVOCABLE TRUST | 77 PORTLAND AVE 1 | DOVER | NH | 03820-3525 |
| 24111-A00000 | DISAVERIO GABE A | | 85 SPINNAKER WAY | PORTSMOUTH | NH | 03801 |
| ***24112-000000*** | ***PRINTY RITA C IRREV TRUST*** | ***PRINTY JAMES W TRUSTEE*** | ***461 LOCUST ST*** | ***ROLLINSFORD*** | ***NH*** | ***03869*** |
| ***24113-000000*** | ***PRINTY RITA C IRREV TRUST*** | ***PRINTY JAMES W TRUSTEE*** | ***461 LOCUST ST*** | ***ROLLINSFORD*** | ***NH*** | ***03869*** |
| 24114-000000 | SPINELLI MICHAEL & ESTHER | SPINELLI IRENE V FAMILY REVOCABLE TRUST | 87 PORTLAND AV | DOVER | NH | 03820-3525 |
| 24115-B00000 | DEAN STREET HOLDINGS INC | | 130 CENTRAL AVE | DOVER | NH | 03820 |
| ***24136-000000*** | ***MAGLARAS GEORGE*** | | ***33 COCHECO STREET*** | ***DOVER*** | ***NH*** | ***03820*** |
| ***24137-000000*** | ***MAGLARAS GEORGE*** | | ***33 COCHECO STREET*** | ***DOVER*** | ***NH*** | ***03820*** |
| ***24138-000000*** | ***MAGLARAS GEORGE*** | | ***33 COCHECO STREET*** | ***DOVER*** | ***NH*** | ***03820*** |
| ***24139-000000*** | ***MAGLARAS GEORGE*** | | ***33 COCHECO STREET*** | ***DOVER*** | ***NH*** | ***03820*** |
| ***24140-000000*** | ***MAGLARAS GEORGE &*** | ***LAMPREY PROPERTIES INC*** | ***33 COCHECO ST*** | ***DOVER*** | ***NH*** | ***03820*** |
| ***24141-000000*** | ***MAIRS ROBERT S*** | | ***17 PORTLAND AVENUE*** | ***DOVER*** | ***NH*** | ***03820*** |
| ***24142-000000*** | ***MAIRS ROBERT S*** | | ***17 PORTLAND AVENUE*** | ***DOVER*** | ***NH*** | ***03820*** |

TO: Planning Board
City of Dover
Dover, New Hampshire 03820

FROM: George Maglaras
33 Cocheco Street
Dover, New Hampshire 03820

RE: Minor Lot Line Adjustment Application
Waiver Request
Lot 24-139
Cocheco Street

A waiver is being requested regarding the attached application for a minor lot line adjustment on Cocheco Street between Lots 24-139 and 24-138. The waiver being requested is from the requirement that the plot plan show the entire expanse of all subject lots on one map sheet.

Specifically, the enclosed plate "Tax Map 24 Lots 138 & 139 Lot Line Adjustment Plan" prepared by TF Moran shows the existing and now being proposed eastern property boundary of Lot 24-139 (i.e. the western boundary of Lot 24-138). However, the full extent of Lot 24-138 is not included on this plan (but is shown on the attached second map sheet prepared by McEneaney Survey Associates and titled "Plan of Land prepared for George Maglaras Tax Map 24 Lot No.s 105, 135A, 136, 137 138, 139, 140"). As the enclosed minor lot line adjustment application regards the modification of the property boundary of Lot 24-139, and no other boundaries beyond this lot, the map prepared by TF Moran (in combination with the McEneaney survey) is proposed as being sufficient in accurately presenting and describing the proposed minor lot line adjustment for this lot.

Respectfully submitted,

George Maglaras

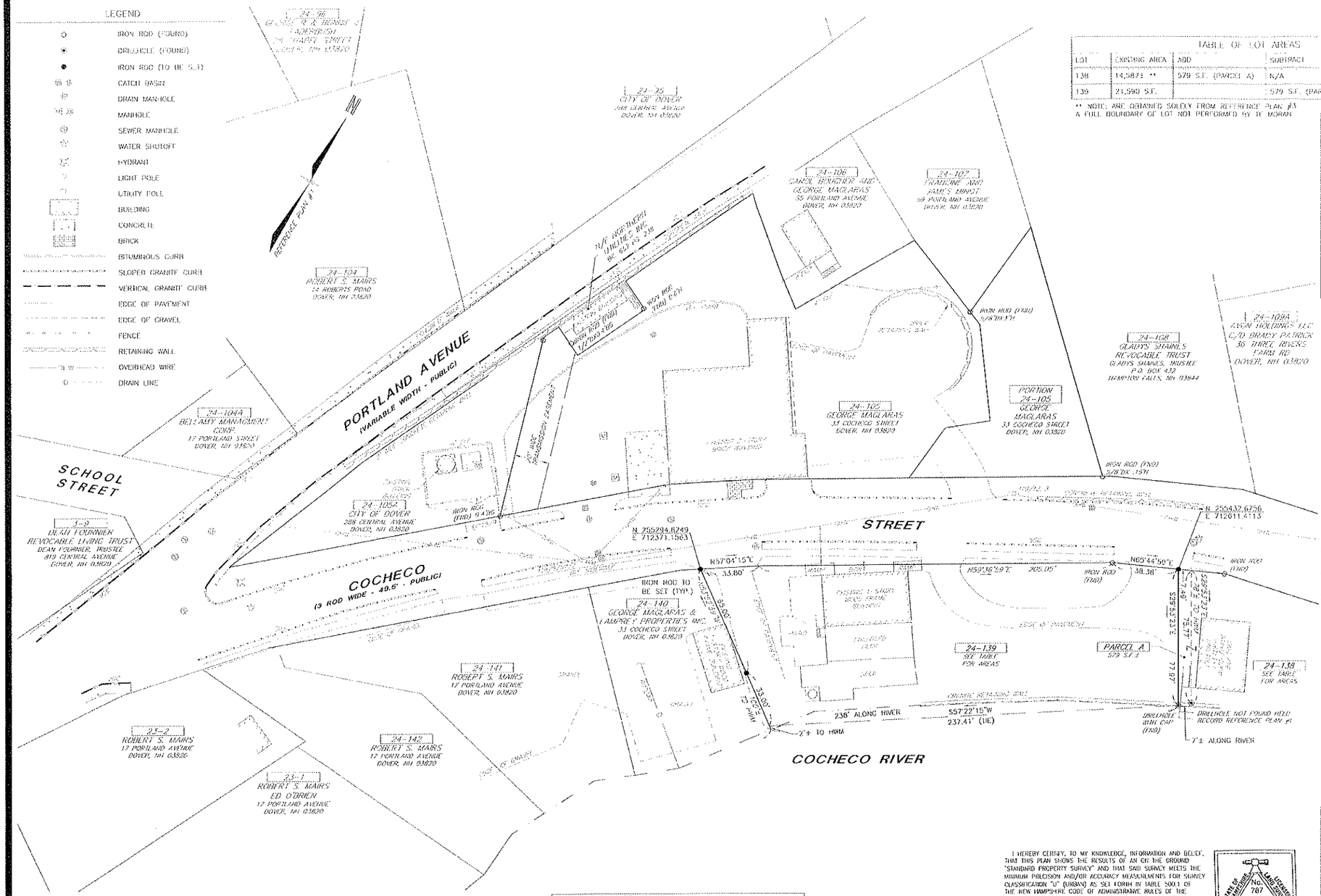
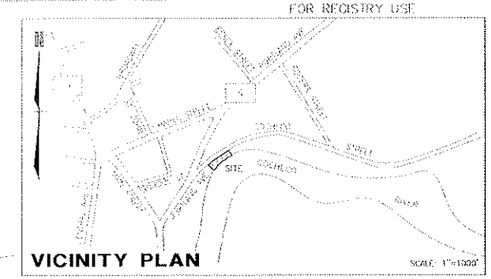



TABLE OF LOT AREAS

| LOT | EXISTING AREA | ADD | SUBTRACT | PROPOSED AREA |
|---|---|---|---|---|
| 138 | 14,587± ** | 579 S.F. (PARCEL A) | N/A | 15166± ** |
| 139 | 21,590 S.F. | | 579 S.F. (PARCEL A) | 21,011 S.F. |

** NOTE: ARE OBTAINED SOLELY FROM REFERENCE PLAN #3
A FULL BOUNDARY OF LOT NOT PERFORMED BY TF MORAN

FOR REGISTRY USE




VICINITY PLAN

## REFERENCE PLANS

1. COCHECO STREET LAYOUT FOR THE CITY OF DOVER IN DOVER, N.H. SCALE 1"=50' AUGUST 1, 1990 REVISED AUG. 22, 1990 BY BRUCE C. PORSPIK STRAFFORD COUNTY REGISTRY OF DEEDS PLAN# 40-87. FIELD NOTES ALSO PROVIDED.
2. ACTIVITY AND USE RESTRICTION PLAN TAX MAP 24 LOTS 105, 139, 140 & 141 PORTLAND AVENUE AND COCHECO STREET DOVER, NEW HAMPSHIRE SCALE 1"=40' OCT. 2006 BY CLD CONSULTING ENGINEERS. NOT RECORDED.
3. PLAN OF LAND PREPARED FOR GEORGE MAGLARAS TAX MAP 24 LOT NOS 105, 135A, 136, 137, 138, 139, 140 COCHECO STREET CITY OF DOVER COUNTY OF STRAFFORD STATE OF NEW HAMPSHIRE SCALE 1"=40' JUNE 2007 BY MCENTARFFY SURVEY ASSOCIATES, INC. NOT RECORDED.
4. CITY OF DOVER, NEW HAMPSHIRE ENGINEERING DEPARTMENT LAND OF NORTHERN UTILITIES ALLIED GAS DIVISION TO BE PURCHASED BY THE CITY OF DOVER SCALE 1"=20'DATE: 5/22/74. SCRD PLAN #52 POCKET 9 FOLDER 1.
5. SUBDIVISION PLAN OF LAND OF KERRY FORBES AND DOUG DODD PORTLAND STREET AND COCHECO STREET DOVER, NEW HAMPSHIRE SCALE 1"= 20'DATE 12/23/81 BY CIVIL CONSULTANTS. SCRD PLAN # 29A-131.
6. LOCATION OF PROPERTY ON COCHECO STREET IN DOVER DATE 2/21/74 BY PUBLIC SERVICE CO. OF NEW HAMPSHIRE. NOT RECORDED. FIELD NOTES ALSO PROVIDED BY PSNH.
7. LAND AT DOVER STOREHOUSE THE TWN STATE GAS & ELEC. CO. DOVER DIV. SCALE 1"=50' DATE 12-31-35. NOT RECORDED PROVIDED BY PSNH.
8. SUBDIVISION OF JOHN & MARJORIE MAGLARAS DOVER, NEW HAMPSHIRE BY G.L. DAWS & ASSOCIATES. SCRD BOOK 913 PAGE 382. AND DATED SEPT. 1972 REVISED 6/11/74 NOT RECORDED OR FILE AT TFM.
9. PLAN OF LAND ESTATE OF JOHN R. MAHEN DOVER NEW HAMPSHIRE. SCALE 1"=20' SEPT. 1961 BY G.L. DAWS & ASSOCIATES. NOT RECORDED OR FILE AT TFM.
10. FOSS PROPERTY DOVER, N.H. OCT., 23, 1922. SCALE 1"=40' SURVEY OF WALTER S. WHEELER, CIVIL ENGINEER.
11. NORTHERN UTILITIES INC. ALLIED GAS DIVISION 2/23/78 COCHECO ST. DOVER, N.H. LAYOUT OF DOVER REGULATION STATION & PROPOSED EASEMENT.

## NOTES

1. OWNER OF RECORD OF MAP 24 LOTS 138 & 139: GEORGE MAGLARAS, 33 COCHECO STREET, DOVER, NH 03820
   DEED REFERENCE TO PARCELS IS BK. 1208 PG. 46 AND BK. 1049 PG. 122 S.C.R.D.
   SEE TABLE FOR AREAS OF PARCELS.
2. [24-139] INDICATES TAX MAP AND LOT NUMBER.
3. THE PURPOSE OF THIS PLAN IS TO ADJUST THE LOT LINES BETWEEN LOTS 139 & 138.
4. CURRENT ZONING IS CMD (COCHECO WATERFRONT DISTRICT)
   MIN. LOT SIZE: N/A
   MIN. LOT FRONTAGE: N/A
   MIN. BUILDING SETBACKS ARE: N/A
5. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) WOULD DETERMINE.
6. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. HOWEVER INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-888-344-7233.
7. DOVER COORDINATE SYSTEM PER REFERENCE PLAN #1.

OWNERS SIGNATURE

GEORGE MAGLARAS DATE

I HEREBY CERTIFY, TO MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THIS PLAN SHOWS THE RESULTS OF AN ON THE GROUND "STANDARD PROPERTY SURVEY" AND THAT SAID SURVEY MEETS THE MINIMUM PRECISION AND/OR ACCURACY MEASUREMENTS FOR SURVEY CLASSIFICATION "U" (URBAN) AS SET FORTH IN TABLE 500.1 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS ADOPTED 8/23/01, EFFECTIVE 8/24/01.

I FURTHER CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS A MAXIMUM ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND ON ALL PROPERTY LINES WITHIN AND BORDERING THE SUBJECT PROPERTY.

STATE OF NEW HAMPSHIRE — No. 707 — HANS-GEORG A. MENTSCH, JR. — LICENSED LAND SURVEYOR

5/22/13

TAX MAP 24 LOTS 138 & 139

**LOT LINE ADJUSTMENT PLAN**

COCHECO STREET

**DOVER, NEW HAMPSHIRE**

OWNED BY

**GEORGE MAGLARAS**

PREPARED FOR

**NORTHEAST UTILITIES**

**SCALE: 1"=30'** **APRIL 23, 2013**

| REV | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|
| 2 | 5/22/13 | MINOR REVISIONS PER CLIENT | JMD | HGM |
| 1 | 10/31/13 | REMOVE LOT 140 | JAT | HGM |

Graphic Scale 30 15 0 30

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

| JOB | 47066.00 | DR | JAT | FB | – | SHEET 1 OF 1 |
|---|---|---|---|---|---|---|
| | | CK | HGM | CADFILE | 47066 Site | |

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CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION

For Registry of Deeds Use

## REFERENCE PLANS:

1.) ACTIVITY AND USE RESTRICTION PLAN, TAX MAP 24 LOTS 105, 139, 140 & 141, PORTLAND AVENUE AND COCHECO STREET, DOVER, NEW HAMPSHIRE; SCALE: 1" = 40'; DATED: OCTOBER 2006; BY CLD CONSULTING ENGINEERS; NOT RECORDED.

2.) COCHECO STREET LAYOUT FOR THE CITY OF DOVER - IN DOVER, N.H.; SCALE: 1" = 50'; DATED: AUGUST 1, 1990; BY BRUCE L. POMPEEK, LAND SURVEYOR; RECORDED S.C.R.D. PLAN 40-82.

3.) PLAN OF LAND OF JOHN PRINTY, COCHECO STREET, DOVER, NEW HAMPSHIRE; SCALE: 1" = 30'; DATED: APRIL 6, 1988; BY CIVIL CONSULTANTS, INC.; RECORDED S.C.R.D. PLAN 33A-86.

4.) SUBDIVISION OF LAND OF KERRY FORBES AND DOUG DODD, PORTLAND STREET AND COCHECO STREET, DOVER, NEW HAMPSHIRE; SCALE: 1" = 20'; DATED: DECEMBER 23, 1981; BY CIVIL CONSULTANTS, INC.; RECORDED S.C.R.D. PLAN 22A-131.

5.) SUBDIVISION OF LAND - DOVER, N.H. - FOR TIMOTHY G. PEARSON; SCALE: 1" = 50'; DATED: SEPTEMBER 10, 1979; RECORDED S.C.R.D. PLAN 209-29.

6.) LAND OF NORTHERN UTILITIES ALLIED GAS DIVISION TO BE PURCHASED BY THE CITY OF DOVER; SCALE: 1" = 20'; DATED: MAY 22, 1974; BY THE CITY OF DOVER, NEW HAMPSHIRE ENGINEERING DEPARTMENT; RECORDED S.C.R.D. PLAN 52, POCKET 9, FOLDER 1.

7.) SUBDIVISION - JOHN & MARJORIE MAGLARAS, DOVER, NEW HAMPSHIRE; SCALE: 1" = 40'; BY G.L. DAVIS & ASSOCIATES; RECORDED S.C.R.D. BOOK 913, PAGE 382.

8.) FOSS PROPERTY, DOVER, N.H.; SCALE: 1" = 40'; DATED: OCTOBER 23, 1922; BY WALTER S. WHEELER, CIVIL ENGINEER; RECORDED S.C.R.D. PLAN 11, POCKET 1, FOLDER 7.

9.) PART OF DOVER GAS LIGHT CO. PROPERTY; SCALE: 1" = 20', RECORDED: MAY 19, 1884; RECORDED S.C.R.D. PLAN 9, POCKET 4, FOLDER 2.

10.) TRACED FROM BENJAMIN COLLINS' OLD PLAN AND RETURN MADE BY Wm. I. OGDEN, CIVIL ENGINEER; SCALE: 1" = 30'; DATED: AUGUST 11, 1878

## LEGEND

- I.R.(fnd) - IRON ROD (FOUND)
- I.P.(fnd) - IRON PIPE (FOUND)
- S.S.(fnd) - STEEL STAKE (FOUND)
- I.R.(set - IRON ROD WITH ID CAP #661 (SET)
- UTILITY POLE
- FIRE HYDRANT
- CHAINLINK FENCE
- STONE WALL
- CONC. - CONCRETE
- TYP - TYPICAL
- RR TIES - RAILROAD LANDSCAPE TIES
- S.C.R.D. - STRAFFORD COUNTY REGISTRY OF DEEDS

LOCUS

LOCATION PLAN
( NO SCALE )

CHAPEL STREET

PORTLAND STREET (PUBLIC - 4 RODS WIDE)

COCHECO STREET (PUBLIC - 49.5' WIDE)

COCHECO RIVER
FLOOD (TIDAL) EBB

CITY OF DOVER GAS LIGHT CO.

24 / 104 — ROBERT MAIRS, 4 ROBERTS ROAD, DOVER, NH 03820, 3233 / 685

24 / 104A — CITY OF DOVER, 288 CENTRAL AVENUE, DOVER, NH 03820

24 / 105 — CAROL BOUCHER, GEORGE MAGLARAS, 55 PORTLAND STREET, DOVER, NH 03820, 3125 / 778; 36,938 S.F., 0.85 Ac.

24 / 105A — CITY OF DOVER, 288 CENTRAL AVENUE, DOVER, NH 03820

24 / 106 — CITY OF DOVER, 288 CENTRAL AVENUE, DOVER, NH 03820, 589 / 108

24 / 107 — FRANCINE MINOT, JAMES MINOT, 59 PORTLAND AVENUE, DOVER, NH 03820, 1076 / 352

24 / 108 — GLADYS V. SHAINES REVOCABLE TRUST, GLADYS V. SHAINES, TRUSTEE, P.O. BOX 432, HAMPTON FALLS, NH 2074 / 806

24 / 109A — AVON HOLDINGS LLC, 161 PORTLAND AVENUE, DOVER, NH 03820, 3177 / 12

24 / 112 — RITA C. PRINTY REVOCABLE TRUST, JAMES PRINTY, TRUSTEE, 461 LOCUST STREET, ROLLINSFORD, NH, 3154 / 944

24 / 113 — RITA C. PRINTY REVOCABLE TRUST, JAMES PRINTY, TRUSTEE, 461 LOCUST STREET, ROLLINSFORD, NH, 3154 / 944

24 / 115 — MATTHEW & KAREN RANDALL REVOCABLE TRUST, 131 CLEMENT ROAD, ROLLINSFORD, NH, 3333 / 968

24 / 121 — BARBARA A. CURRAN, C/O BARBARA ZIELFELDER, 10 ROGERS STREET, DOVER, NH 03820, 1165 / 194

24 / 135 — ROBERT & BARBARA DUSTIN, 76 SALMON FALLS ROAD, SOMERSWORTH, NH 03878, 3143 / 182

24 / 135A — 16,036 S.F., 0.37 Ac.

24 / 136 — 7,532 S.F., 0.17 Ac.

24 / 137 — 10,201 S.F., 0.23 Ac.

24 / 138 — 14,587 S.F., 0.33 Ac.

24 / 139 — 22,462 S.F., 0.52 Ac.

24 / 140 — 8,054 S.F., 0.19 Ac.

24 / 141 — ROBERT MAIRS, 17 PORTLAND AVENUE, DOVER, NH 03820, 1861 / 500

BRICK WALL; ASPHALT; BRICK BUILDING; GRAVEL AREA; OFFICE; GRAVEL PARKING; ASPHALT DRIVE; GRAVEL PARKING; RR TIES; RESTAURANT; CANOPY; PATIO; CONC. BOAT LAUNCH; GRANITE RETAINING WALL; HOUSE; SCHOOL STREET; ASPHALT SIDEWALK; CONC. PAD; STONE BLOCK RETAINING WALL; INVERT 60" HDPE PIPE

c/l NORTHERN UTILITIES 657'28.7

TRANSMISSION GAS LINES AND

SURVEY TIE N84°06'20"E 947.14

## NOTES:

1.) OWNERS OF RECORD:

- 24 / 105 — GEORGE MAGLARAS, 33 COCHECO STREET, DOVER, NEW HAMPSHIRE 03820, S.C.R.D. VOLUME 3125, PAGE 781
- 24 / 130 — GEORGE MAGLARAS, 33 COCHECO STREET, DOVER, NEW HAMPSHIRE 03820, S.C.R.D. VOLUME 1102, PAGE 80
- 24 / 137 — GEORGE MAGLARAS, 33 COCHECO STREET, DOVER, NEW HAMPSHIRE 03820, S.C.R.D. VOLUME 1207, PAGE 803
- 24 / 138 — GEORGE MAGLARAS, 33 COCHECO STREET, DOVER, NEW HAMPSHIRE 03820, S.C.R.D. VOLUME 1208, PAGE 46
- 24 / 139 — GEORGE MAGLARAS, 33 COCHECO STREET, DOVER, NEW HAMPSHIRE 03820, S.C.R.D. VOLUME 1049, PAGE 122
- 24 / 140 — LAMPREY PROPERTIES, INC., GEORGE MAGLARAS, 33 COCHECO STREET, DOVER, NEW HAMPSHIRE 03820, S.C.R.D. VOLUME 1834, PAGE 622

2.) 24 / 105 - DENOTES TAX MAP AND PARCEL NUMBER.

3.) BASIS OF BEARING IS THE CITY OF DOVER G.I.S. GRID SYSTEM.

4.) FOR COCHECO STREET LAYOUT SEE CITY OF DOVER ROAD BOOK 1, PAGE 41 & BOOK 2, PAGE 263, AND REFERENCE PLAN #2.

| NO. | DATE | DESCRIPTION | BY | CHK |
|---|---|---|---|---|
| | | REVISIONS | | |

| | | |
|---|---|---|
| 07-1737 | BOUNDARY | |
| PROJECT NO | TYPE | FIELDBOOK & PAGES |

For Registry of Deeds Use

### LINE TABLE

| LINE | LENGTH | BEARING |
|---|---|---|
| L1 | 22.72 | N25°04'25"E |
| L2 | 9.22 | S64°55'35"E |
| L3 | 46.67 | N25°04'25"E |
| L4 | 9.22 | N64°55'35"W |
| L5 | 22.54 | S73°12'44"E |
| L6 | 7.69 | S75°43'58"E |
| L7 | 14.09 | S89°11'30"E |
| L8 | 11.52 | N65°48'30"E |
| L9 | 12.93 | N57°03'02"E |
| L10 | 33.30 | N57°03'02"E |

"I HEREBY CERTIFY THAT THIS PLAT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE WHICH HAS A MAXIMUM ERROR OF CLOSURE OF 1 PART IN 15,000."

"I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN." ( RSA 676:18 )

4/6/07
DATE: / KEVIN M. McENEANEY LLS # 661

# PLAN OF LAND
PREPARED FOR
GEORGE MAGLARAS
TAX MAP 24, LOT No.s 105, 135A, 136, 137, 138, 139, 140
COCHECO STREET
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

| | |
|---|---|
| DRAWN BY: KJP | FILE: C:> P\1737\07-1737 |
| SCALE: 1" = 40' | DATE: JUNE 2007 |

40 20 0 20 40 80 120 160

STATE OF NEW HAMPSHIRE — No. 661 — KEVIN M McENEANEY — LICENSED LAND SURVEYOR


McEneaney Survey Associates, inc.
P.O. Box 681 - 24 CHESTNUT STREET
DOVER, NH 03820 (603) 742-0911
SURVEYING - PLANNING - CONSULTING

CITY OF DOVER

# PLANNING BOARD - STAFF MEMO FILE #P15-44

| | |
|---|---|
| Application Type: | Conditional Use Permit |
| Applicant(s): | Jason White |
| Owner(s): | Big Holdings, LLC. |
| Location: | 245-249 Central Ave (Assessor's Map 23, Lot 24) |

**INTENT:** To obtain a Conditional Use Permit to seek relief, per Chapter 170-20-B(2), to the Central Business District requirement that the ground floor not contain residential uses. The applicant proposes to construct a new 4 unit residential building with parking spaces on the ground floor.

**LOTS/UNITS PROPOSED:** 4

**AGENDA ITEM #:** 4-D

**ACREAGE:** 0.35 acres

**ZONING DISTRICT:** Central Business District (CBD) - General

**EXISTING LAND USE:** Six unit residential building

**PROPOSED LAND USE:** Six unit residential building and a four unit residential building with parking

**SURROUNDING LAND USE:** Office, retail, vehicle refueling/recharging station, and multi-family residential

**ZBA ACTION:** None

**ATTACHMENT:** Conditional Use Permit Plan and Applicant Letter

**APPLICATION IS COMPLETE:** Yes

**NOTICES SENT:** Abutter notices were sent by certified mail to all abutters

**PERMITS REQUIRED:** None

**WAIVERS REQUESTED:** None

**Summary of Request and Background**
The applicant is required to obtain a Conditional Use Permit to seek relief of the requirement of Chapter 170-20-B(2) that the ground floor not contain residential uses. The applicant proposes to construct a new 4 unit residential building with parking spaces on the ground floor.

**Consistency with Land Use Regulations**
Chapter 170-20-D(3) requires that within general, mixed use, and TOD sub-districts, new retail and commercial activities are located on the ground floor and that residential activity is not. Therefore, parking associated with residential use above requires a Conditional Use Permit.

Chapter 170-20-B(2) of the City Code states that conditional use approval for relief from the use standards may be granted by the Planning Board provided that the proposed project complies with the following standards:

a.) The requested use shall be compatible with abutting uses and the surrounding neighborhood.
b.) The requested use will not create undue traffic congestion, or unduly impair pedestrian safety.
c.) The requested use will not result in objectionable noise or odor which would constitute a nuisance.

Considering the justification provided in the applicant's letter dated August 11, 2015, the Conditional Use Permit request meets these requirements.

**STAFF RECOMMENDATION:**

The Planning Department recommends that the Planning Board accept the application, hold the public hearing, and approve the Conditional Use Permit with the following conditions:

**Conditions to Be Met Prior to Signing of Plans:**

1. The owner's signature shall be added to the final plan set submitted for signature.
2. The applicant shall provide the Planning Department with a digital version of the final plan.
3. The applicant shall revise the plan to remove parking spaces #8 and #9 so that the 5 foot pavement setback is retained.
4. Revise plan to include erosion and sediment control features which shall be installed prior to any earth disturbance.
5. The applicant shall be subject to a formal agreement between the Planning Board and the applicant. Said agreement shall be recorded at the Strafford County Registry of Deeds per Chapter 170-20-B(3).

# 245 249 Central Avenue



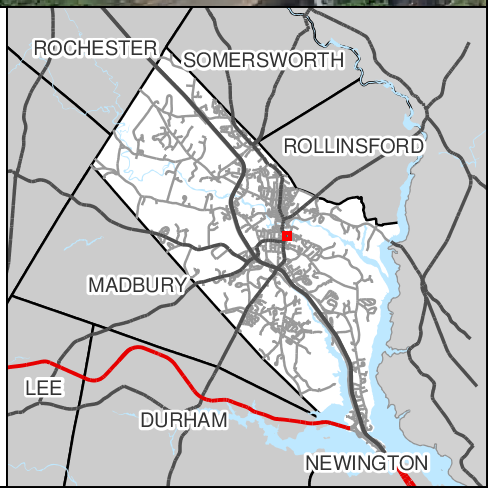

**Property Information**

| | |
|---|---|
| **Property ID** | 23024-000000 |
| **Location** | 245 249 CENTRAL AV |
| **Owner** | CRONIN CHRISTOPHER B TRUS |
| | 245-249 CENTRAL AVENUE RE |

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

The City makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated January 1, 2015



# City of Dover, New Hampshire
# CONDITIONAL USE PERMIT APPLICATION

RECEIVED
Planning Office
Dover, New Hampshire

[Revision Date: May 16, 2013]

| Office Use Only | Project #: | P15-44 | Date Received: | JUL 27 2015 |
|---|---|---|---|---|
| | Amount Paid: | $470.00 CK#1003 | Time Received: | |

## APPLICANT AND OWNER INFORMATION

Name of Applicant: Jason White Telephone # 603-770-5630

Address of Applicant: 79 Exeter Road, North Hampton, NH 03862

E-Mail Address: jwhite912@comcast.net

Name of Property Owner (*if different from applicant*): Bigs Holdings, LLC Telephone # 603-770-5630

Address of Property Owner: P.O. Box 1102, Stratham, NH 03885

## PROPERTY INFORMATION

Assessor's Map # 23 Lot(s) # 24

Address of Property: 245-249 Central Avenue

Zoning District(s) Central Business District Overlay District(s) General

Existing Use of Property: Residential - 6 unit

## CONDITIONAL USE PERMIT INFORMATION

**Type of Conditional Use Permit (Check All That Apply):**

☐ Conservation District
☐ Groundwater Protection
☐ Wetland Protection District
☐ RCM Use Overlay District
☐ Off-Street Parking and Loading
☐ Wetland Protection
☐ I-1 District Uses
X Central Business District

Describe Proposed Use or Activity That Requires Conditional Use Permit and Describe Any Impacts:

Ground floor - residential/parking proposal is to construct a second residential building with 4 additional dwelling units. Ground floor to have garage stalls as opposed to commercial.

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: N/A

Name of Professional That Prepared Plans: Christian Smith, PE

Address 70 Portsmouth Ave, Stratham, NH 03885 Telephone #: 603-583-4860

Professional License #: 09900 E-mail address: csmith@bealsassociates.com

**SIGNATURES**

I/We hereby submit this application to the City of Dover Planning Board and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant or as agent, I attest that I am duly authorized to act in this capacity.

Signature of Property Owner: _____ Date: 7-23-15

Signature of Applicant (*if different from owner*): _____ Date: 7-23-15

Signature of Agent: _____ Date: 7-22-15

**AUTHORIZATION TO ENTER SUBJECT PROPERTY**

I, and my successors, hereby authorize members of the Dover Planning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: _____ Date: 7-23-15

**BEALS · ASSOCIATES** *PLLC*

**70 Portsmouth Avenue**
**Stratham**
**N. H. 03885**
**Phone: 603-583-4860**
**Fax: 603-583-4863**

RECEIVED
Planning Office
AUG 13 2015
Dover, New Hampshire

August 11, 2015

City of Dover Planning Board
288 Central Avenue
Dover, NH 03820

Re: Dover Tax Map 23, Lot 24 - Conditional Use Permit application

Mr. Chairman and members of the Board:
This is Written to demonstrate compliance with Dover Zoning Code section 170-20 B.(2) specific to the use standard of first floor commercial as required in the Central Business (General) District. For clarity we will address each required standard noted consistent with the cited subsection of the ordinance.

(a) The requested use (residential) is consistent with the existing 6-unit building currently on the property, residential uses across Central Ave. and north of the parcel, and abutting residential parcels to the rear of the parcel. The Prime car wash (abutting parcel to the south) will be screened by existing vegetation from the proposed building.
(b) The requested use will not create undue traffic congestion or pedestrian safety issues. The proposed building will be behind the existing residential building that fronts on Central Avenue, and the residents will utilize the existing driveway for vehicle access. The proposed additional units would result in roughly 40+/- vehicle trip ends each day (20-in and 20-out) which should create undue traffic congestion on Central Ave. There are sidewalks on both sides of Central Ave. in this area and pedestrian crosswalks in either direction that provide safe pedestrian travel.
(c) The requested use will not result in objectionable noise or odor which would constitute a nuisance as the proposal is simply to create 4-additional residential units that will have single car garages on the first floor.

I will add that it would be an oddity to propose a commercial use on the first floor of a residential building that will be screened from the street by an existing residential structure. Thank you for your time and consideration of this proposed development.

Very Truly Yours,

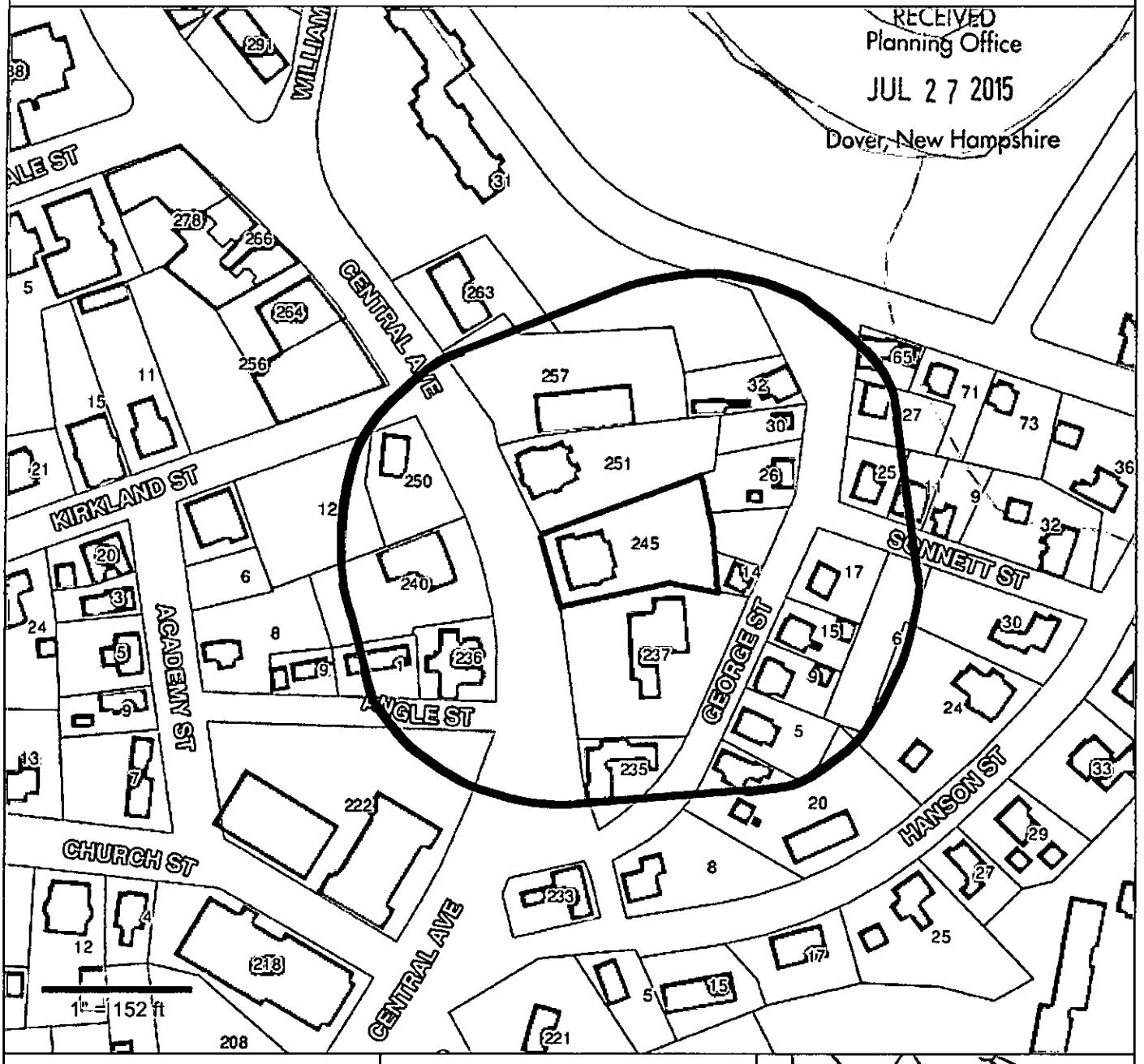
BEALS ASSOCIATES, PLLC

*Christian O. Smith*

Christian O. Smith, PE
Principal

# 245 CENTRAL AVENUE

RECEIVED
Planning Office
JUL 27 2015
Dover, New Hampshire



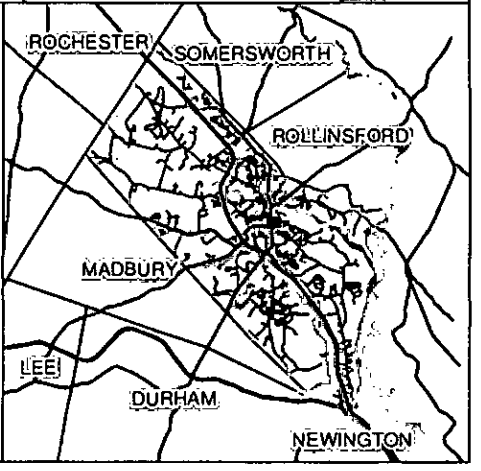

**Property Information**

| | |
|---|---|
| **Property ID** | 23024-000000 |
| **Location** | 245 249 CENTRAL AV |
| **Owner** | CRONIN CHRISTOPHER B TRUS |
| | 245-249 CENTRAL AVENUE RE |

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Parcels updated January 1, 2015



MAILING INCLUDING ABUTTERS WITHIN 200'

NH-879 Dover

RECEIVED
Planning Office
JUL 27 2015
Dover, New Hampshire

Owner:

ID 23024-000000

BIGS HOLDINGS, LLC

PO BOX 1102

STRATHAM, NH 03885

RE: 245 249 CENTRAL AV

Applicant:

Jason White

79 Exeter Road

North Hampton, NH 03862

Engineer:

Beals Associates, LLC

70 Portsmouth Avenue

Stratham, NH 03885

Surveyor:

Thomas Brouillette

39 Park Street

Exeter, NH 03833

ID 23023-000000

KOSTIS ENTERPRISES LLC

Address 263 CENTRAL AVENUE

DOVER, NH 03820

RE: 251 CENTRAL AV

ID 23029-000000

MILLER COLIN G & MILLER JOSEPH G

27 HIDDEN COVE DR

CHURCHVILLE, PA 18966

RE: 26 GEDRGE ST

ID 23027-000000

BARDN JASON L & BARON KATELYN A

14 GEORGE ST

DOVER, NH 03820-4102

RE: 14 16 GEORGE ST

ID 23025-000000

A L PRIME ENERGY CONSULTANT INC

Address 18 LARK AVE

SAUGUS , MA 01906-4261

RE: 237 CENTRAL AV

ID 09102-000000

LESNIAK JOSEPH V TRUSTEE LESNIAK REVOCABLE TRUST

236 CENTRAL AV

DOVER, NH 03820

RE: 236 CENTRAL AV

ID 09103-000000

FDRBES PAULA P & PAOLINI DAVID

242 CENTRAL AVE

DOVER, NH 03820-4130

RE: 240 CENTRAL AV

ID 09104-000000

GALLUP CAROL J TRUSTEE GALLUP CAROL J REV TRUST

7 TWIN POND CIR

EXETER, NH 03833-4731

RE: 250 CENTRAL AV

ID 23022-000000

MCQUADE WILLIAM P

PO BOX 1409

DOVER , NH 03821

RE: 257 CENTRAL AV

ID 23021-000000

KOSTIS ENTERPRISES LLC

263 CENTRAL AVENUE

DOVER, NH 03820

RE: 263 CENTRAL AV

ID 23016-000000

DOVER HOUSING AUTHORITY

62 WHITTIER STREET

DOVER, NH 03820

RE: 31 37 HENRY LAW AV

ID 23031-000000

DENNIS RUTH DENNIS RAYMOND C

32 GEORGE STREET

DOVER, NH 03820

RE: 32 GEORGE ST

ID 23030-000000

DUBOIS WILLIAM G

30 GEORGE ST

DOVER, NH 03820-4102

RE: 30 GEORGE ST

ID 20026-000000

SHAW ROBERT B F JR

26 ROGERS ST

DOVER, NH 03820

RE: 65 HENRY LAW AV

ID 20027-000000

SQUIER DAVID D

27 GEORGE ST

DOVER, NH 03820

RE: 27 29 GEORGE ST

ID 20028-000000

FRITZ MICHAEL

25 GEORGE ST

DOVER, NH 03820

RE: 25 GEORGE ST

ID 20030-000000

FRITZ MICHAEL

35 MYRICA AVE

RYE, NH 03870

RE: 11 13 SONNETT ST

MAILING INCLUDING ABUTTERS WITHIN 200' NH-879 Dover

ID 20033-000000
MOSS ODILE B
PO BOX 1061
DOVER, NH 03821-1061
RE: 17 GEORGE ST

ID 20040-000000
DUFFY VINCENT A
PO BOX 301
DOVER, NH 03821-0301
RE: 6 SONNETT ST

ID 20034-000000
MOSS ODILE B
PO BOX 1061
DOVER, NH 03820
RE: 15 GEORGE ST

ID 20035-000001
RHODES JOSEPH T & RHODES JENNIFER
9 GEORGE ST
DOVER, NH 03820-4135
RE: 9 GEORGE ST

ID 20035-000002
SUMMERS PAUL & SUMMERS REBECCA
3331 US ROUTE 3
THORNTON, NH 03285-6185
RE: 11 GEORGE STREET

ID 20036-000000
DUFFY VINCENT A
PO BOX 301
DOVER, NH 03821-0301
RE: 5 GEORGE ST

ID 20037-000000
STF DEVELOPMENT CORP
242 CENTRAL AVE
DOVER, NH 03820
RE: 20 HANSON ST

ID 23026-000000
MARTUSCELLO LORRAINE TRUSTEE
MARTUSCELLO LORRAINE REV TRUST
12 WEST CONCORD STREET
DOVER, NH 03820
RE: 235 CENTRAL AV

ID 09101-000000
DUNHAM SUZANNE F
45 LAFAYETTE RD STE 6
NORTH HAMPTON, NH 03862-2451
RE: 1 3 ANGLE ST

MAILING INCLUDING ABUTTERS WITHIN 200' NH-879 Dover

ID 09105-000000

FOSTER FAMILY GRANDCHILDREN TR

FOSTER P AND R AND HAYWARD C

194 DOVER POINT RD

DOVER, NH 03820-4632

RE: 12 KIRKLAND ST

Bigs Holdings, LLC
P.O. Box 1102
Stratham, NH 03885

Doc # 0006324 May 29, 2015 12:41 PM
Book 4296 Page 0208 Page 1 of 2
Register of Deeds, Strafford County

C/H
L-CHIP
STA089421

STATE OF NEW HAMPSHIRE
DEPARTMENT OF REVENUE ADMINISTRATION
REAL ESTATE TRANSFER TAX
****9 Thousand 4 Hundred 50 Dollars
DATE 05/29/2015 ST833258 AMOUNT $ ****9450.00
VOID IF ALTERED

# WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, that 245-249 Central Avenue Realty Trust, Christopher B. Cronin, Trustee of 76 State Street, Newburyport, Essex County, Massachusetts, for consideration paid, grants to Bigs Holdings, LLC a New Hampshire Limited Liability Company of P.O. Box 1102, Stratham, County of Rockingham, State of New Hampshire, WITH WARRANTY COVENANTS the following described real estate:

A certain parcel of land with the buildings thereon situate on the Easterly side of Central Avenue in Dover, County of Strafford and State of New Hampshire, shown as Lot #24 on Sheet #23 of the City of Dover Assessors Plans, and bounded and described as follows: Westerly by Central Avenue, eighty (80) feet, more or less; Northerly by land now or formerly of K. McCann and J. E. Grimes, one hundred eighty (180) feet, more or less; Easterly by land now or formerly of Breen, one hundred fifty (150) feet, more or less, and; Southerly by land now or formerly of Tidewater Oil Company.

A survey was accomplished as to the above described premises and recorded in the Strafford County Registry of Deeds as Plan 36-86. The title of such plan is "Boundary Plan – Gerard Curran – 247 Central Avenue – Dover, New Hampshire". Said plan was dated December 20, 1988 and prepared by Terra Scan Engineers. Surveyors and stamped by Norman LeClerc Licensed Land Surveyor. The above conveyance is made subject to matters shown on said plan.

Meaning and intending to describe and convey the same premises conveyed to the Grantor herein by Deed from Siegel Limited Partnership dated May 19, 2014 recorded in the Strafford County Registry of Deeds at Book 4214, Page 0279 and Corrective Warranty Deed from Siegel Limited Partnership dated March 3, 2015 and recorded in the Strafford County Registry of Deeds at Book 4277, Page 0277.

Witness my hand and seal this 27 day of May, 2015

, Trustee
245-249 Central Avenue Realty Trust
Christopher B. Cronin, Trustee

## Commonwealth of Massachusetts

Essex ss.

On this 27 day of May 2015, before me, the undersigned notary public, personally appeared Christopher B. Cronin, Trustee of 245-249 Central Avenue Realty Trust, proved to me through satisfactory evidence of identification, which was personally known, to be the person(s) whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

Corina Paule
Notary Public
My Commission expires 5 22 20

CORINA PAULE
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
May 22, 2020

CORINA PAULE NOTARY PUBLIC MY COMMISSION EXPIRES MAY 22, 2020

City of Dover June 30, 2015

# 245 Central Avenue



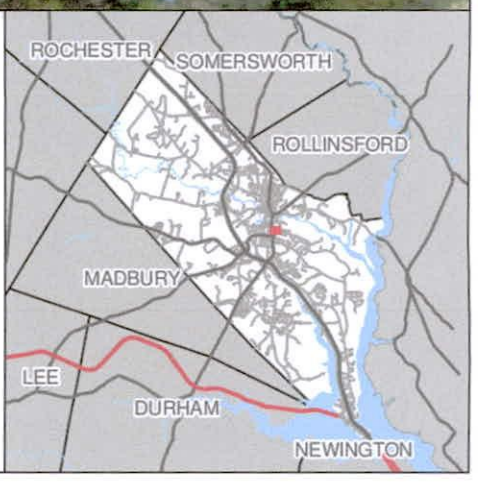

**Property Information**

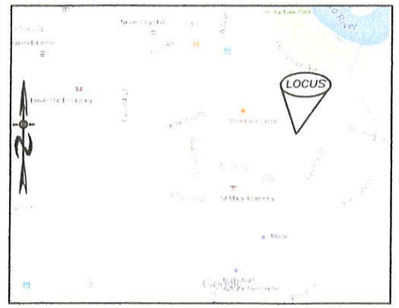
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The City makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated January 1, 2015

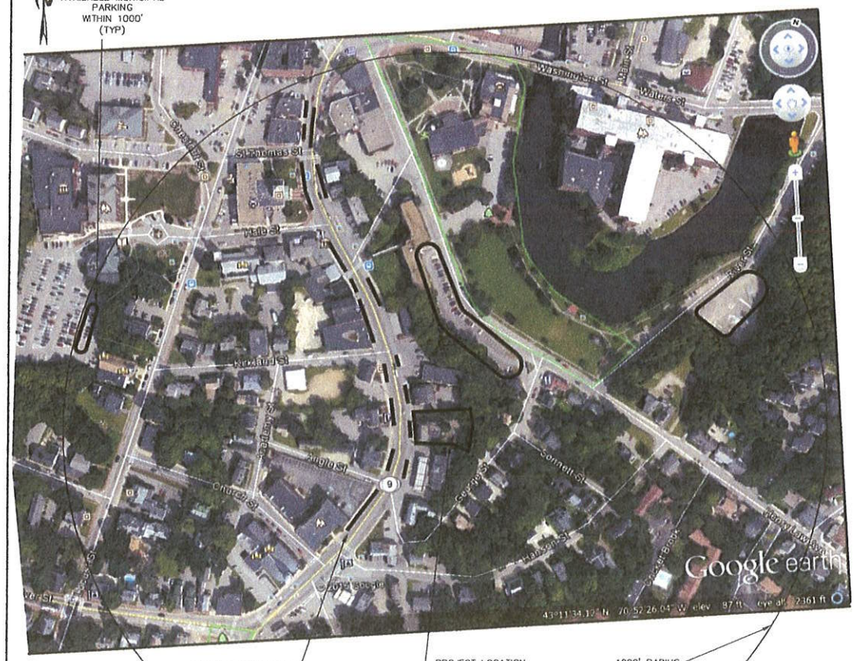





LOCATION MAP
1"=500'

LEGEND

- UTILITY POLE
- TEST PIT W/ NO.
- STONE WALL
- TREE LINE
- EXISTING CONTOUR – 10'
- EXISTING CONTOUR – 2'
- WETLAND BOUNDARY
- SOILS BOUNDARY LINE
- EXISTING PROPERTY LINE




AREA PLAN
NOT TO SCALE

KIRKLAND STREET

CENTRAL AVENUE

ANGLE STREET

257 CENTRAL AVE

251 CENTRAL AVE
TAX MAP 23 LOT 23

32 GEORGE STREET

30 GEORGE STREET

26 GEORGE STREET
TAX MAP 23 LOT 29

TAX MAP 23 LOT 28

14 GEORGE STREET
TAX MAP 23 LOT 27

237 CENTRAL AVE
TAX MAP 23 LOT 25

GEORGE STREET

SONNETT STREET

ON-STREET PARKING (TYP)

PROPOSED 5x5 DUMPSTER (SHALL BE SCREENED)

10' +/- STRUCTURAL RETAINING WALL

10' REAR SETBACK

80'

EXISTING 6 UNIT BUILDING

PROPOSED 4 UNIT BLDG. (4 SPACES FIRST FLOOR)

EXISTING EP (TYP.)

16 15 14 13 12 11 10 9 5 6 7 8

PROPOSED SNOW STORAGE

PROPOSED EDGE OF PAVEMENT

100'

90'

SITE PLAN
1"=20'

GRAPHIC SCALE
20 0 10 20 40 80
( IN FEET )
1 inch = 20 ft.

NOTES
1. BOUNDARY BASED ON PLAN BY TOM BROUILLETTE LLS
2. 2 FOOT CONTOURS BASED ON ASSUMED ELEVATION
3. ZONING DISTRICTS BASED ON MUNICIPAL ZONING MAP.
4. REMAINING FEATURES SHOWN BASED ON MUNICIPAL G.I.S.

CITY NOTES

THE APPLICANT HAS SUBMITTED THIS PERMIT FOR RELIEF FROM THE REQUIREMENT THAT GROUND FLOOR BE USED FOR BUSINESS PURPOSES.

ALL SNOW SHALL BE STORED IN THE AREA(S) DEPICTED ON THIS PLAN AS SNOW STORAGE AREAS. IN THE EVENT THAT THE AREA(S) APPROVED FOR SNOW STORAGE BECOME FULL, THE OWNER SHALL REASONABLY REMOVE EXCESS SNOW FROM THE SITE, AND SHALL NOT ALLOW SNOW TO BE STORED WITHIN TRAVEL AISLES.

ZONING REQUIREMENTS:
ZONING DISTRICT – CENTRAL BUSINESS DISTRICT (GENRAL)
MINIMUM LOT SIZE –NA.
MINIMUM LOT COVERAGE – 75%
FRONTAGE BUILD OUT – 70% MIN

BUILDING SETBACKS
FRONT= 0FT.
SIDE= 0 FT.
REAR= 10 FT.

PARKING CALCULATIONS:
TOTAL NUMBER OF UNITS = 10
ARTICLE XI OFF-STREET PARKING AND LOADING 170-44 TO BE MET
**TOTAL SPACES REQUIRED=20+/-**
**TOTAL SPACES PROVIDED=16**
IT IS INTENDED THAT ADDITIONAL PARKING SPACES REQUIRED SHALL UTILIZE EXISTING ON-STREET PARKING AND MUNICIPLE PARKING PER CENTRAL BUSINESS DISTRICT GENERAL SUB-DISTRICT REGULATIONS

PROPOSED LOT COVERAGE:

LOT SIZE = 15,376 s.f.
LOT COVERAGE = 10,297 s.f.
LOT COVERAGE = 67% < 75%

RECEIVED
Planning Office
JUL 27 2015
Dover, New Hampshire

OWNER OF RECORD
BIGS HOLDINGS, LLC
PO BOX 1102
STRATHAM, NH 03885
S.C.R.D. BOOK 4296 PAGE 0208

PREPARED FOR:
JASON WHITE
79 EXETER ROAD
NORTH HAMPTON, NH 03862

BEALS · ASSOCIATES PLLC
70 PORTSMOUTH AVE, STRATHAM, N.H. 03885
PHONE: 603-583-4860, FAX. 603-583-4863

| REVISIONS: | DATE: |
|---|---|
| | |

# CONDITIONAL USE PLAN

PLAN FOR:
RESIDENTIAL DEVELOPMENT
245 CENTRAL AVENUE
DOVER, NH
TAX MAP 23 LOT 24

| DATE: JULY 2015 | SCALE: 1"=20' |
|---|---|
| PROJ. NO: NH-879 | SHEET NO. 1 OF 1 |

CITY OF DOVER

# PLANNING BOARD - STAFF MEMO FILE #P15-38

Application Type: Site Plan Review
Applicant(s): Johnson Creek Village aka Cocheco Village, Inc.
Owner(s): Real McKoy Properties, LLC.
Location: 301 Durham Road. (Assessor's Map H, Lot 1)

**INTENT:** To construct a 9,880 sq. ft. elderly assisted care home and attach to an existing structure that will contain 2 accessory staff apartments

**LOTS/UNITS PROPOSED:** 12 elderly assisted care units and 2 accessory apartments for staff

**AGENDA ITEM** #: 4-E

**ACRES:** 2.95

**ZONING DISTRICT:** Hotel/Retail (B-4)

**EXISTING LAND USE:** Single Family Residential with a six chair beauty salon in the basement

**PROPOSED LAND USE:** Elderly assisted care home with 2 accessory apartments for staff

**SURROUNDING LAND USE:** Single family residential, fence company, Elks Club, and city border with Madbury

**ZBA ACTION:** Approved case Z13-18 on 10/17/2013 and case Z13-18A on 7/16/2015

**ATTACHMENT:** Site Plan application and plans; TRC minutes, traffic impact analysis

**APPLICATION IS COMPLETE:** Yes

**NOTICES SENT:** Abutter notices were sent by certified mail for this meeting

**PERMITS REQUIRED:**

- NHDES Septic system design

**WAIVERS REQUESTED:**

- Waiver to the requirement that sidewalks be porous
- Waiver to the requirement that a bike rack is onsite

**Summary of Request and Background**
The applicant is requesting site plan approval to construct a 9,880 sq. ft. elderly assisted care home and attach to an existing structure that will contain 2 accessory staff apartments.

The applicant appeared before the Technical Review Committee on August 6, 2015 (see TRC minutes).

**Consistency with Land Use Regulations**
Chapter 149-4 of the Site Review Regulations of the City Code provides for site review by the Planning Board of new construction of various types. The site is located in the Hotel/Retail District (B-4), which encourages efficient and attractive commercial development on a larger scale along major highways. This plan is consistent with those regulations.

**Waiver Requests**
The applicant is requesting a waiver from Chapter 149-14.C.(1) to waive the requirement of internal walkways to be constructed of a pervious material. The applicant is also requesting a waiver from Chapter 149-14.D(2) to waive the requirement of number of spaces for bicycles shall be equal to five percent of the number of parking spaces. The applicant has submitted a letter that includes the justification for the request. The Planning Department supports the waiver of the pervious pavement for the reasons stated by the applicant but does not support the bike rack waiver since the Planning Department does not feel there is appropriate justification.

**STAFF RECOMMENDATION:**

The Planning Department recommends that the Planning Board accept the application, hold the public hearing, and approve the site plan with the following conditions:

**Conditions to Be Met Prior to Signing of Plans:**

1. The owner's signatures shall be added to the final plan submitted for signature.
2. The applicant shall provide the Planning Department with a digital version of the final plan.
3. The applicant shall provide the NHDES septic system design permit and note the number on the final plan.
4. The applicant shall have the NHDOT verify in writing that an amended driveway permit is not needed based on the use
5. The applicant shall revise traffic analysis to include trip distribution, public transit, and Professional Engineer's stamp and signature.
6. The Professional Engineer, Licensed Land Surveyor, and Soil Scientist shall stamp and sign the final plan set.

7. The applicant shall revise sheet 3 to add the fencing near the dumpster to legend.
8. The applicant shall revise note #7 on sheet 3 to correct "car" to "care"
9. Provide Fire Department turning radius template with a 40' scale so that the Fire Department can also see the driveway entrance
10. The approval includes the granting of the waivers requested for the reasons stated by the applicant. The Board finds that the criteria of Chapter 149-19.A have been met.
11. The applicant shall have the Stormwater Management Maintenance and Inspection Plan approved by the Community Services Department.
12. The applicant shall revise the plan to address any forthcoming comments from the City Engineers to the satisfaction of the Engineer.

**Conditions to Be Met Prior to Any Construction Activity:**

13. Construction hours shall be limited to Monday-Friday 7 AM-6 PM, Saturday 8 AM-5 PM, with no Sunday hours. Hours of construction shall be documented on a site construction sign along with the contact information for the general contractor. Said signage shall be located and approved by the City Engineer or Director of Planning and Community Development.

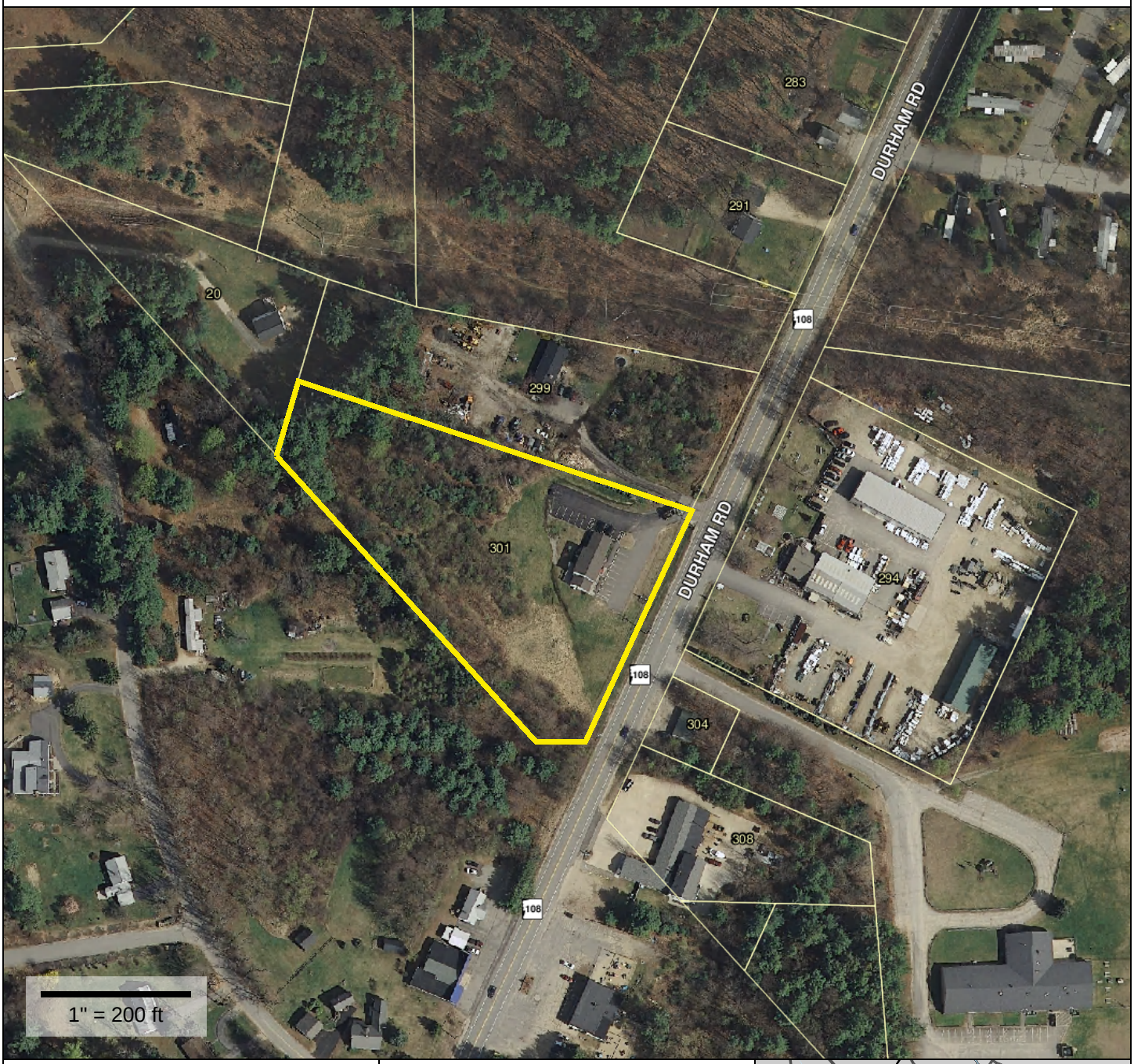
**Conditions to Be Met Prior to Issuance of a Building Permit:**

14. Any new building shall pay the current impact fees in place at the time of building permit application.

**Conditions to Be Met Prior to Issuance of a Certificate of Occupancy:**

15. The applicant shall provide a letter of credit or other form of security acceptable to the City for any unfinished work.

# 301 Durham Road



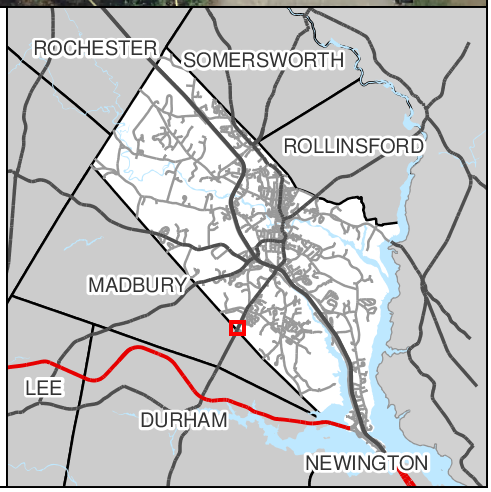

**Property Information**

| | |
|---|---|
| **Property ID** | H0001-000000 |
| **Location** | 301 DURHAM RD |
| **Owner** | REAL MCKOY PROPERTIES LLC |

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

The City makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated January 1, 2015



**CIVILWORKS, INC.**
Civil Engineers
Land Surveyors

P.O. Box 1166
Dover, NH 03821-1166

603-749-0443
(Facsimile) 603-749-7348

RECEIVED
Planning Office
AUG 13 2015
Dover, New Hampshire

August 12, 2015

City of Dover
Planning and Economic Development
City Hall
288 Central Avenue
Dover, NH 03820

Attn: Christopher G. Parker, Director

Subject: Johnson Creek Village Care Home (formerly Cocheco Village)
301 Durham Road
Tax Map H, Lot 1
Our Reference No. 14102

Dear Mr. Parker,

On behalf of our client, Johnson Creek Village, we are pleased to submit the following revised materials for Planning Board consideration:

1) Four (4) full size sets of Site Plans (sheets 1 – 19 plus a streetscape rendering);
2) Eleven (11) half-size (11" x 17") sets of Site Plans;
3) Fifteen (15) copies each of a "Revised Narrative Accompanying Site Plan Review Application";
4) Fifteen (15) copies of a Standard Traffic Impact Analysis;
5) Fifteen (15) copies of Waiver Requests relative to Sections 149-14.C(1), porous sidewalk materials, and Section 149-14.D(2), bike racks.

In response to comments received at the August 6th Technical Review Committee meeting with regard to our July 9th submission, we offer the following:

**Planning Comments:**

- A 3-page narrative was submitted with the original application on July 9th. This narrative has been revised to track appropriate language in the ZBA variance granted July 22nd, reflect a reduction in parking space count and impervious pavement, and formalization of a description of the facility operation.

- A NHDES septic system design was submitted to Engineering on July 29th for review prior to submission to NHDES. We anticipate electronic submission to NHDES before August 14th, pursuant to comments received August 10th from the City.

- Pursuant to conversations with NHDOT, District Six office, our submission for an amended Driveway Permit should be reviewed and a permit issued within two (2) weeks.

- The project name has been changed to "Johnson Creek Village".

- No response required.

- Plan notes now tracks the aforementioned variance language.

- A floor plan prepared by AG Architects is included in the plan set.

- A modified "Exterior Perspective" by AG Architects is included in the plan set.

- File number is included on all engineering plans.

- Stamps will be added to final plans prior to sign-off by the Board.

- All sheets have numbers.

- There is a north arrow on the Landscape Plan.

- The existing sign treatment has been removed from the plan set.

*Cover Sheet:*

- The variances granted for the project has been noted on the cover sheet.

*Sheet 1:*

- The Warranty Deed, Book 3563, Page 238, for the subject property is referenced on the plans and application and included with our original submission. The deed references the Registry Plan No. 41A-51 for description of the driveway easement. Said plan is also referenced on the Existing Conditions Plan by McEneaney Survey Associates, Inc.

*Sheet 2:*

- The requested plan revision has been made.

*Sheet 3:*

- Note 1 on this sheet describes the plan intent and has been revised to track variance language.
- The fencing near the dumpster has been revised to coincide with the Landscape Plan and added to the legend.
- The parking requirements and provisions have been revised to reflect the recently adopted regulations.
- A waiver from bike rack requirements is being requested.
- A waiver from porous sidewalks is being requested.
- The building footprint area has been shown on the plan (see also plan intent).
- Note 5 has been revised to reflect the minimum open space for the B-4 district.
- See Landscape Plan for notation regarding the row of pines to the north.

*Sheet 7:*

- A PD line has been added to the legend.

*Sheet 8:*

- General Notes 3 and 4 on the Cover Sheet address this comment.

*Detail Sheets:*

- Each detail has been numbered – if this is going to become a requirement, it should be stipulated in the Site Review Regulations.

**Planning Board Comments:**

- The applicant is requesting a waiver from Section 149-14.C(1) regarding use of porous pavement in an area other than sidewalks to avoid hazards for mobility impaired elderly.

- Note 1 on Sheet 3 has been reworked to track the ZBA decision and to emphasize that apartments are for staff only.

**Engineering Comments:**

- The subsurface detention area does not provide infiltration due to low permeability of soils in this portion of the parcel and a high seasonal water table.

- NHDOT has issued a Driveway Permit for the shared use of this parcel as well as Lot 1B to the north. Cross-easements are stipulated in the deeds and reference the subdivision plan approved by the City in 1995 and on file in the Registry as Plan No. 41A-51.

- The flows from this site, as measured at the Route 108 culvert outlet, are reduced from the pre-development by 0.1 cfs in the 2-yr. and 100-yr. storm events to 0.2 cfs in the 10-yr. and 25-yr. storm events.

- A headwall has been added to the HDPE outlet.

- A grass paver septic tank maintenance lane has been added as requested.

- The fernco coupling has been deleted on the CB detail outlet.

- A four (4) ft. sump has been added to the CB detail.

- "No Parking – Fire Lane" signs have been added in the turnout areas.

- Lighting and Landscaping Plans are now part of the plan set.

- Infiltration, via porous pavement has been incorporated in a portion of the pavement surface to provide mitigation.

- The cape cod berm (bituminous curbing) detail has been modified to provide a lower profile which will convey stormwater while still providing a "plowable" edging that will not break apart.

- Drip edges are shown on the Landscape Plan, sheet 17.

- A detail of the dumpster pad has been added to the plan set.

**Police Department Comments:**

- The facility has been renamed "Johnson Creek Village".

- Doors and the courtyard gates will be secured to the extent allowed by code, the residents will be fitted with tracking bracelets.

**Fire/Inspections Comments:**

- A note has been added to the Utility Plan regarding flushing of underground sprinkler system piping.

- A turning-radius template is attached to this resubmission as part of the revised narrative.

- "No Parking – Fire Lane" signs have been added as discussed at TRC.

- A stortz connection location which is agreeable to the Fire Department has been added to the plans.

- The facility has been renamed "Johnson Creek Village".

- The accessibility path in compliance with ADA standards is highlighted on sheet 3.

- In addition to an interior grease trap, NHDES requires a 1000 gal (minimum) grease trap which we have located outside the building for servicing.

- Our standard blasting note is shown on sheet 8.

**Economic Development Comment:**

- The narrative has been revised to describe memory care and general levels of care.

We trust you will find the preceding responsive to the comments received to date. We look forward to appearing before the Planning Board on August 25th.

Best Regards,
CIVILWORKS, INC.

Dana C. Lynch, P.E.

DCL/lrd

Enclosures

cc: Aramis Black, Cocheco Village, Inc.
Art Guadano, AG Architects

# City of Dover, New Hampshire
# SITE REVIEW APPLICATION

RECEIVED
Planning Office
AUG 13 2015
Dover, New Hampshire

[Revision Date: April 23, 2013]

| Office Use Only | Project #: | P15-38 | Date Received: | AUG 13 2015 |
|---|---|---|---|---|
| | Amount Paid: | #2165.76 | Time Received: | Dover, New Hampshire |

## APPLICANT AND OWNER INFORMATION

Name of Applicant: Cocheco Village, Inc. Telephone # (603) 591-1256

Address of Applicant: P.O. Box 1727, Dover, NH 03821

E-Mail Address: amblack99@gmail.com

Name of Property Owner (*if different from applicant*): Real McKoy Properties, LLC Telephone # (603) 591-1256

Address of Property Owner: P.O. Box 1727, Dover, NH 03821

## PROPERTY INFORMATION

Address of Property: 301 Durham Road

Assessor's Map # H Lot(s) # 1

Zoning District(s) B-4 Overlay District(s) _____

Size of Parcel: 128,641 sq. ft. 2.95 ac. Property Deed: Book 3563 Page: 238

Existing Use of Property: Hair salon, residence

## SITE PLAN INFORMATION

Describe Proposed Use: Elderly assisted care home with 2 accessory apartments

Area of Parcel to be Developed: 76,000 sq. ft.

If Multi-family Residential, Specify Number of Units & Buildings Proposed: _____

Number of Parking Spaces: Existing 17 Proposed 20

Highway Access (check where applicable): ____ City Street __X__ State Highway

Number of Employees Total: 9 In Maximum Shift: 6

Disposition of Parcel:

Building Footprint 9,880 sq. ft.

Total Building Area 9,880 sq. ft.

Building Setbacks:

Front Yard 81 +/- (unchanged) ft.

Rear Yard 302 ft.

Paved Area 18,145 sq. ft. Side Yard: Right 75 ft. Left 79 ft.

City Water? ___Yes _X_ No How far is city water from the property? Hannaford Entr. @ Durham Rd.

City Sewer? ___Yes _X_ No How far is city sewer from the property? Mast Rd./Durham Rd. intx.

**BUILDING INFORMATION**

Type of Building to be Built: Wood-frame on slab, single story

Height of Building: 31 ft. (existing) Finished Floor Elevation: 93.8

Number of Seats (where applicable) N/A

**WAIVER REQUESTS**

Site Review Regulations section(s) to be waived: See attachment

Justification for waiver request(s) (*attach additional sheets as needed*):

**SURVEYOR INFORMATION**

Name of Surveyor and Company (Licensed in N.H.) Kevin M. McEneaney, McEneaney Survey Associates, Inc.

Address P.O. Box 681, 24 Chestnut Street, Dover, NH Telephone #: (603) 742-0911

Professional License #: 661 E-mail address: msa@surveynh.com

**ENGINEER INFORMATION**

Name of Engineer and Company (Licensed in N.H.) Dana C. Lynch, P.E., Civilworks, Inc.

Address P.O. Box 1166, 181 Watson Road, Dover, NH Telephone #: (603) 749-0443

Professional License #: 5745 E-mail address: dlynch@civilworksinc.com

**SIGNATURES**

I/We hereby submit this application to the City of Dover Planning Board and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant or as agent, I attest that I am duly authorized to act in this capacity.

Signature of Property Owner: Evanie Black (Member) Date: 7-7-15

Signature of Applicant (*if different from owner*): Evanie Black (President) Date: 7-7-15

Signature of Agent: Dana C. Lynch, P.E. Date: 7/9/15

**AUTHORIZATION TO ENTER SUBJECT PROPERTY**

I, and my successors, hereby authorize members of the Dover Planning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: Annie Blatt (Member) Date: 7/8/15

**AUTHORIZATION TO COMPLETE THE PROJECT ON SUBJECT PROPERTY**

I, and my successors, hereby the City of Dover or its assigns to enter my property for the purpose of completing the site work as required by the approved plan should the letter or credit or other surety be called. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: Annie Blatt (Member) Date: 7/8/15

Signature of Applicant (*if different from owner*): Annie Blatt (President) Date: 7/8/15

**CERTIFICATION OF FEES**

I, and my successors, hereby certify that I understand that the City of Dover collects impact fees, utility investment fees and inspection fees for projects developed in Dover. Said fees must be paid before a Certificate of Occupancy can be obtained for a structure, unless a different payment schedule is agreed to by the applicant and the City prior to approvals being issued by the Dover Planning Board. Additionally, should the property be in "Current Use" it will be subject to the Land Use Change Tax.

Signature of Property Owner: Annie Blatt (Member) Date: 7/8/15

Signature of Applicant (*if different from owner*): Annie Blatt (President) Date: 7/8/15

## REAL MCKOY PROPERTIES, LLC

| TAX MAP | LOT NO. | OWNER NAME AND ADDRESS |
|---|---|---|
| **Dover:** | | |
| H (subject) | 1 | Real McKoy Properties, LLC<br>P.O. Box 1727, Dover, NH 03821 |
| H | 1A | Riza Pahleri & Atik Gantini<br>20 Freshet Road, Dover, NH 03820 |
| H | 1B | David S. Geanoulis<br>299 Durham Road, Dover, NH 03820 |
| H | 2 | City of Dover<br>288 Central Avenue, Dover, NH 03820 |
| H | 2A, 2A2 | Joanne Johnson<br>18 Freshet Road, Dover, NH 03820 |
| I | 22D | Gordon D. Clark<br>294 Durham Road, Dover, NH 03820 |
| I | 122 | Order of Elks<br>282 Durham Road, Dover, NH 03820 |
| I | 123 | Kevin Vincent Donahue<br>50 Mill Pond Road, Durham, NH 03824 |
| I | 129 | Leo Croisetiere<br>308 Durham Road, Dover, NH 03820 |
| **Madbury:** | | |
| 9 | 23 | Thomas & Cheryl Daigle<br>24 Freshet Road, Madbury, NH 03823 |
| 9 | 24 | Rinta Family Trust of 1995<br>34 Freshet Road, Madbury, NH 03823 |
| 9 | 69 | Allan Brown & Susan Burdett Brown<br>22 Freshet Road, Madbury, NH 03823 |

## REAL MCKOY PROPERTIES, LLC

| TAX MAP | LOT NO. | OWNER NAME AND ADDRESS |
|---|---|---|
| Applicant: | | Cocheco Village, Inc.<br>P.O. Box 1727, Dover, NH 03821 |
| Engineer: | | Civilworks, Inc.<br>P.O. Box 1166, Dover, NH 03821 |
| Surveyor: | | McEneaney Survey Associates, Inc.<br>P.O .Box 681, Dover, NH 03821 |
| Soil Scientist: | | Joseph W. Noel<br>P.O. Box 174, South Berwick, ME 03908 |

Christopher G. Parker, AICP
Director
c.parker@dover.nh.gov

288 Central Avenue
Dover, New Hampshire 03820-4169
(603) 516-6008
Fax: (603) 516-6097
www.dover.nh.gov

# *City of Dover, New Hampshire*

Department of Planning & Community Development

**Zoning Board of Adjustment**
**NOTICE OF DECISION**

July 22, 2015

*Via E-Mail (amblack99@gmail.com)*
Aramis Black
Real McKoy Properties, Inc.
P.O. Box 1727
Dover, NH 03820

**Re: Z 13-18A 301 Durham Road (Tax Map H, Lot 1)**

Dear Mr. Black:

Please be advised that the Zoning Board of Adjustment at a public hearing held on July 16, 2015, voted **5-0** to **GRANT** your request for a variance from **Section 170-12.A** of the Zoning Ordinance and the B-4 District Table of Use and Dimensional Regulations to permit the construction of an elderly assisted care home for 8-10 residents with 2 accessory staff apartments, where elderly assisted care homes are not a permitted use in the B-4 District. The amendment requests a total of 12 residents with 2 accessory staff apartments be allowed in the home.

Please note that per Section 170-52.C.4.d of the City of Dover Zoning Ordinance, if the variance is not acted upon within four (4) years of the date of approval, it shall be considered null and void.

If you have any questions, please do not hesitate to contact me by phone at (603) 516-6008 or by email at c.parker@dover.nh.gov.

Sincerely,

Christopher G. Parker, AICP
Assistant City Manager

cc: AG Architects, PC
Thomas L. Clark, Building Official (via e-mail)
Wil Corcoran, City Assessor (via e-mail)

**REVISED**
**NARRATIVE ACCOMPANYING**
**SITE REVIEW APPLICATION**
**for**
**Johnson Creek Village**
**Tax Map H, Lot 1**
**301 Durham Road**

PROJECT DESCRIPTION

The subject project is proposed on Lot 1, as shown on City of Dover Tax Map H and is located on Durham Road, across from GC/AAA Fence (n/f Clark) and bordering the City of Dover/Town of Madbury town line to the south. Currently, the 128,641 s.f. parcel is occupied by a single-family dwelling unit with a six (6) chair beauty salon in the basement.

The proposed project will involve remodeling of the existing structure to contain two (2) accessory staff apartments for an elderly assisted care home. The elderly assisted care home will have a footprint of approximately 9,880 s.f. and will be attached to the existing structure. The home will accommodate 12 residents with a central dining facility. The proposed use has been allowed by Variance (ref. Case Z13-18A dated July 22, 2015).

Johnson Creek Village has been designed to meet the needs of elderly residents who need assistance in their daily lives. The facility is being designed in accordance with State of New Hampshire requirements for HeP-805 licensing as an Assisted Living Residence, Supported Residential Health Care. This requires compliance with the NH State Building Code as an I2 Institutional Use Group (Nursing Home) and NFPA 101 Life Safety Code Health Care Facility, Limited Care Facility. Residents may have memory impairment, dementia, or alzheimers, may not be capable of self-preservation, and will require 24-hour care. The facility is not designed for the higher level of skilled nursing care with bed ridden patients or residents on life support, nor is it designed as residential board and care facility for residents who don't need care and are capable of self evacuation. The City's terminology for uses does not align well with the State and Building /Life Safety Code definitions, so the City's term "Elderly Assisted Care Facility" is used to describe the facility. Parking needs are based on the more appropriate need of a nursing home where residents do not drive themselves. Parking is also provided as required for the two staff accessory apartments.

UTILITIES

- Sewer – The project is located approximately 2,600 feet south of the closest sewer at the intersection of Durham Road and Mast Road. Accordingly, the project will be served by a septic system. The septic tanks, grease trap (for kitchen waste flow), and leach field have been sized and located pursuant to NHDES design requirements and will require a Construction Approval.

- Water – The project is located approximately 2,100 feet south of the nearest public water supply main at the entrance to the Hannaford Supermarket. Project water supply will be provided via an on-site well. The well is located in accordance with NHDES requirements. Because the well will constitute a private water supply, serving less than 25 persons, building, pavement, and utilities not related to the septic system are permitted within the protective radius.

- Electric – The site and existing structure is currently serviced by underground electric lines to the structure from a utility pole along Durham Road. These conduits may require upgrade or supplementation as recommended by Eversource. An emergency power generation system will be installed on the westerly side of the building as a back-up power source during power outages.

- Cable/Data/Telephone – These utilities will be expanded and installed as necessary to serve the facility. All connections between the overhead services in Durham Road and the facility will be underground.

- The facility, existing structure, and emergency generator will be served by natural gas. The main is located in Route 108 and a service currently runs to the existing structure.

PARKING & TRAFFIC

- Parking – In accordance with Chapter 149-14.D.1), Parking Regulation Table, the proposed use will require the following parking:

| | |
|---|---|
| Nursing Home – 12 units @ 0.5 spaces/unit | = 6 |
| Employees – 8 (max. shift) @ 1 space/empl. | = 8 |
| Apartment – 2 apartments @ 1.9 spaces/unit | = 3.8 |
| Total Required | = 17.18, Use 18 |

The proposal calls for a total of 18 spaces including 2 accessible spaces. The proposal also calls for removal of 7 existing spaces and a 24 ft. wide access aisle presently located between the structure and Durham Road. All new parking and access will be located on the northerly side of the site and will continue to be screened from the abutter with a row of pines.

The site is proposed to have a turnaround off the northwesterly corner of the new facility. Each leg of the turnaround is 60 ft. long and will facilitate movements of occasional truck deliveries, service vehicles, and emergency fire apparatus. The westerly leg will be comprised of a porous pavement surface covering 1,250 s.f. A template of the fire apparatus turning movement is attached.

- Traffic – Employees, visitors, and delivery vehicles constitute most of the trips to elderly care facilities. Accordingly, trip generation for the facility is low. Per the ITE Trip Generation handbook, the estimated trip generation for the proposed use is as follows:

| | **Assisted Living** (Land Use Code 254) | **Apartment** (Land Use Code 220) | **Total** |
|---|---|---|---|
| Total Weekday | 32 | 14 | 46 |
| A.M. Peak Hour of Adj. Street | 2 | 1 | 3 |
| P.M. Peak Hour of Adj. Street | 3 | 2 | 5 |

These numbers are significantly less than the currently permitted use of the site as a single-family home with a six (6) chair beauty salon.

Sight distance is more than adequate in each direction and no changes in driveway geometry or location are proposed.

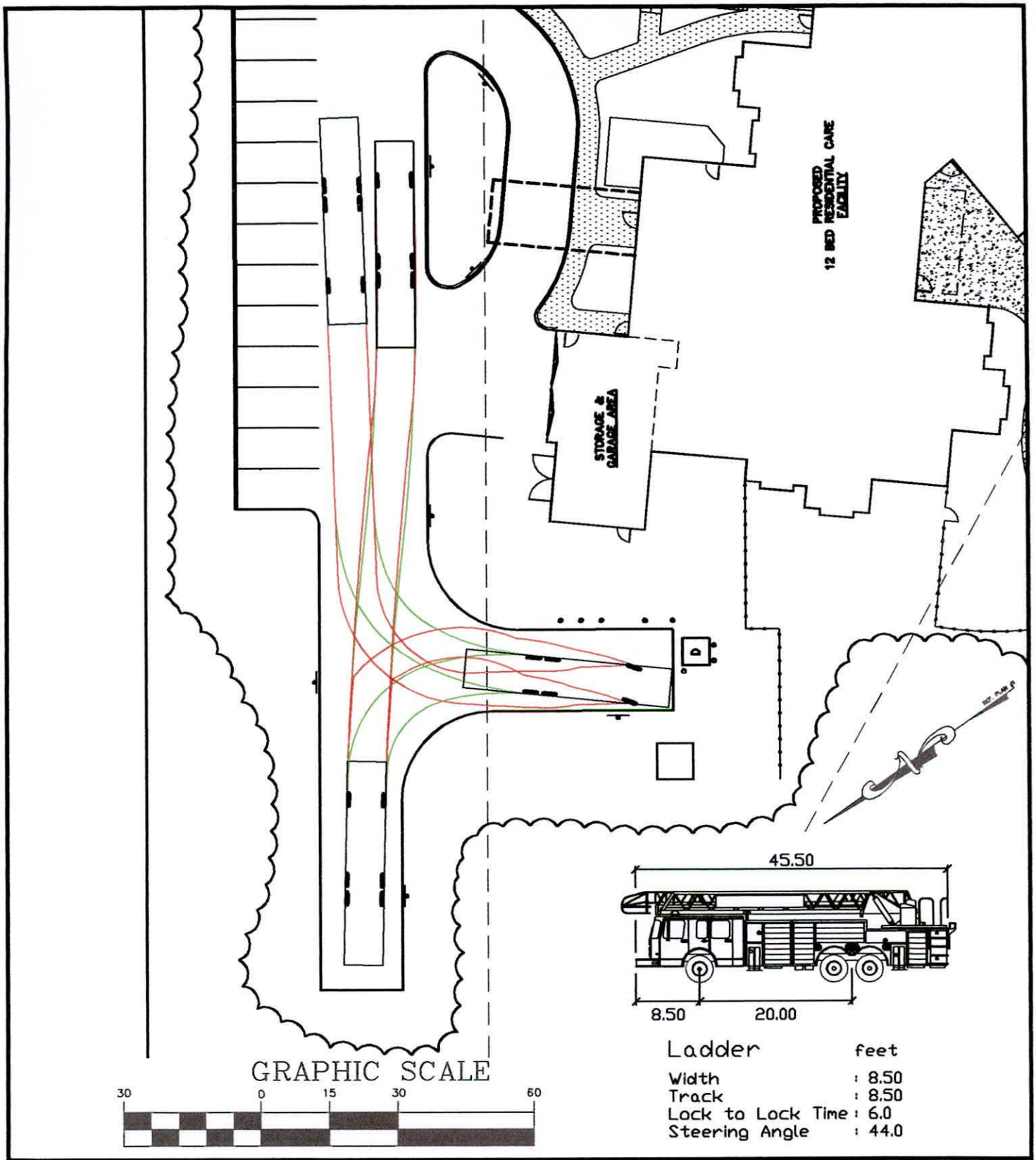
A Standard Traffic Impact Analysis is attached herewith.

DRAINAGE

The site's current use as a single-family home and beauty salon presents approximately 13,750 s.f, of impervious area, most of which drains to an existing 8-inch culvert or to the 15-inch drive culvert along Route 155.

Under the proposed development, the total impervious area will be approximately 28,550 s.f. Measures are proposed to collect roof, pavement, and yard drainage from the proposed elderly assisted care facility, to the greatest extent possible, and detain the anticipated increase in runoff in a subsurface detention controlled outlet structure before discharging into the existing driveway culvert at Route 108.

The design calculations indicate a decrease in all stormwater discharges for each watershed analyzed for the 2-yr., 10-yr., 25-yr., and 100-yr. events.




| Ladder | feet |
|---|---|
| Width | : 8.50 |
| Track | : 8.50 |
| Lock to Lock Time | : 6.0 |
| Steering Angle | : 44.0 |

**FIRE TRUCK LADDER TURNING CLARIFICATION SKETCH**
SCALE: 1"=30'

**JOHNSON CREEK VILLAGE CARE HOME**
**TAX MAP H, LOT 1**
**DOVER, NEW HAMPSHIRE**

civilworks
engineers · surveyors
P.O. Box 1166
Dover, NH 603-749-0443

DATE: 8-13-2015

PROJECT No.: 14102
FILE: 1430-SITE.DWG

**SK-081315-14102-01**

# JOHNSON CREEK VILLAGE
# WAIVER REQUESTS

The following waiver requests are made in accordance with Article VI, Section 149-19, Waivers:

- Section 149-14.C(1) – "Internal walkways shall be constructed of a pervious material, such as pervious asphalt or concrete, open or pervious paving blocks, or similar technologies"

  The applicant seeks a waiver from strict conformance with this provision primarily for safety reasons. The proposed use is tailored to use by elderly and as such, the walkways surrounding the facility are subject to use primarily by older persons with mobility issues. Walkers, wheelchairs, and canes are anticipated to be commonly used by residents.

  Open or pervious paving blocks, by the nature of their installation requirements, have sizeable gaps between the paving units which are filled with coarse aggregate. While this type of installation allows for infiltration, irregularities inherent in the surface dramatically increases opportunities for trip hazards, frost heaves and settlement issues. Generally, what are considered as minor irregularities for a majority of pedestrians can, over time, increase opportunities for trip hazards by those who are mobility impaired.

  Porous asphalt or concrete options are comprised primarily of open-graded aggregate. These options create rough surfaces which are difficult for walkers, etc. A sizeable portion, 90 ft. more or less of the sidewalk at the front of the building is designated as an accessible route between handicap accessible parking and the main entrance. The courtyard sidewalks at the southerly side of the building are for independent resident use and should be as smooth as is reasonable to minimize tripping hazards.

  In an effort to fulfill the spirit and intent of the regulation, the applicant proposes to pave a 1,250 s.f. portion of the truck/fire apparatus turnaround area with porous pavement. This area is roughly equivalent to the area of sidewalk at the northerly and easterly sides of the building which we would prefer to make standard concrete surfaces.

- Section 149-14.D(2) – "The (required) number of spaces for bicycles shall be equal to five percent (5%) of the number of parking spaces."

The applicant seeks a waiver of this requirement for the following reasons:

a) The calculated parking requirement for the project is 18 spaces;
b) By the subject regulation, the required bike rack will have one (1) space;
c) The facility has a storage garage for such use;
d) The likelihood of staff or resident using bicycles on Route 108 is remote at best.

Accordingly, provision of a bike rack for this specific use is inappropriate and granting of the requested waiver will not be contrary to the intent of the regulation.

Stormwater Management System
Inspection & Maintenance Plan

# Johnson Creek Village

**301 Durham Road**
**Dover, New Hampshire**

---

*prepared for:*
Real McKoy Realty, LLC
301 Durham Road
Dover, NH 03820

*prepared by:*
Civilworks, Inc.
P.O. Box 1166
Dover, NH 03821

July 2, 2015
Revised August 12, 2015

## Introduction

Civilworks, Inc. has prepared the following Stormwater Management System Inspection & Maintenance Plan for the Johnson Creek Village (JCV) assisted living facility expansion located at 301 Durham Road, Tax Map H, Lot 1 in Dover, NH. The intent of this plan is to provide JCV with a list of procedures that document the inspection and maintenance requirements of the Stormwater System for this site.

The following inspection and maintenance program is necessary in order to keep the Stormwater Management System functioning properly. By following the enclosed procedures, JCV will be able to maintain the functional design of the Stormwater Management System and maximize its ability to remove sediment and other contaminants from site generated stormwater runoff.

## Stormwater Management System Components

The Stormwater Management System is designed to mitigate both the quantity and quality of site-generated stormwater runoff. As a result, its design includes the following elements:

### Non-Structural BMP's

Non-structural best management practices (BMP's) are designed to minimize and/or remove contaminants before they enter the stormwater collection system. Several of these BMP's have been incorporated into the Stormwater Management System including pavement sweeping and litter/trash removal. These types of BMP's are a highly effective initial treatment measure for reducing stormwater pollutant loading from pavement surfaces.

### Structural BMP's

Structural BMP's are designed to minimize contaminants and reduce velocities associated with the offsite discharge of site generated stormwater runoff. BMP's incorporated into this Stormwater Management System include a rain garden and riprap. These types of BMP's are an effective measure for reducing pollutant loading and/or preventing velocity induced downstream erosion.

### Closed Drainage Collection and Piping System

The closed drainage system is designed to collect and convey stormwater runoff from paved and grassed areas to the subsurface detention system. Stormwater is collected by catch basins located in the parking area to the site and in a portion of the grassed lawn. These catch basins are designed with deep sumps to provide storage areas for sediment and floatable pollutants.

**Subsurface Detention System**

The subsurface detention system is designed to mitigate the quantity of site-generated stormwater runoff. Stormwater is transported to the detention system utilizing the closed drainage collection and piping system. The detention system is designed to provide storage for storm volumes, thereby mitigating increase to peak flow rates associated with the development.

**Porous Pavement Area**

Porous pavement section is limited to the westerly leg of the turnaround and is designed to accept surface runoff from this area and direct all runoff into the detention system.

## Inspection and Maintenance Plan

By implementing the following procedures, JCV will be able to maintain the functional design of the Stormwater Management System and maximize the system's ability to remove sediment and other contaminants from site-generated stormwater runoff, mitigate the increased peak flow rate, and prevent velocity induced erosion.

**Pavement Sweeping and Vacuuming**

- Sweep all traditional pavement areas a minimum of three (3) times per year, or more as necessary.
- Vacuum all porous pavement areas a minimum of three (3) times per year, or more as necessary.
- Do not store bark mulch or sand on porous pavement.

**Litter/Trash Removal**

- Routinely inspect dumpster location for spillage and clean as necessary.
- Routinely patrol site for litter pick up.

**Rip Rap**

- Inspect rip rap yearly.
- Replace and chink displaced stones as necessary.
- Remove all vegetation from rip rap as necessary.

**Closed Drainage Collection and Piping System**

- Inspect catch basins two (2) times per year, and remove accumulated sand, sediment, and floatable products.
- Inspect drainage pipes once every two (2) years and remove accumulated sediment.
- Care should be taken to not flush sediments into the subsurface detention pond.
- Any repairs needed should be undertaken as soon as practical.

**Subsurface Detention System**

- Inspect detention system outlet structure and system/inlet interfaces (utilizing access manholes) two (2) times per year, and remove accumulated sediments, and floatable produts..
- Inspect storage pipes once every two (2) years and remove accumulated sediment .
- Care should be taken not to flush sediments into the downstream drainage road side system.
- Any repairs needed should be undertaken as soon as practical.

**Annual Report**

- Submit an annual Inspection & Maintenance Report to the Dover City Engineering Department by December 15 of each year. The report should include a summary of the system's maintenance requirements and repairs, and copies of the Inspection & Maintenance Log Sheets for the previous 12 months.

## Inspection & Maintenance Checklist/Log

The following pages contain an Inspection & Maintenance Checklist and a blank copy of the Stormwater Management System's Inspection & Maintenance Log. These forms are provided to assist with the inspection and maintenance of the JCV Stormwater Management System.

# TRAFFIC IMPACT ASSESSMENT AND STANDARD ANALYSIS
## JOHNSON CREEK VILLAGE
## 301 DURHAM ROAD, N.H. ROUTE 108
## LOT 1, TAX MAP H
## DOVER, NH 03820

as prepared for:
**Cocheco Village, Inc.**
**P.O. Box 1727**
**Dover, NH 03821-1727**

as prepared by:
Dana C. Lynch, P.E.
Civilworks, Inc.
P.O. Box 1166
Dover, NH 0321-1166

Our Reference No. 14102

In accord with the requirements of Chapter 149-13-A(20) of the City's Site Plan Review Regulations, the following "Standard Traffic Impact Assessment and Analysis" has been prepared in support of the subject project. This development proposal consists of constructing an elderly assisted care home for 12 residents with two (2) accessory staff apartments. Access is along Durham Road via a shared driveway with 199 Durham Road pursuant to deeded easements shown on SCRD Plan No. 41A-51.

**DESCRIPTION OF SITE**

The subject site is known as Lot 1 on Tax Map H and is also known as 301 Durham Road. Said parcel contains 2.95 acres of land. The site is bounded to the south by the Madbury Town line and two (2) residential parcels, to the west by residential land now or formerly of Pahlevi/Gantini, and to the north by land now or formerly of Geanoulis, a commercial enterprise known as Tri-State Paving. The property is currently used as a single-family dwelling with a 6-chair beauty salon.

The parcel gently slopes downhill from west to east. Nearly three quarters of the site will remain green space following construction of the proposed use. Land use on the opposite side of Route 108 consists of a commercial enterprise (GC/AAA Fence) and an Elks Lodge.

**DESCRIPTION OF ROADWAYS**

In the vicinity of the existing driveway (NHDOT Drive Permit 06-125-355), Durham Road (a.k.a. NH Route 108) consists of a long straight section of roadway climbing uphill, from north to south, at approximately a 3 percent slope. The lanes are 12 ft. wide in each direction and shoulders are variable width of 5 ft. to 8 ft. This segment of Route 108 is posted at 40 miles per hour and is striped as a "No Passing Zone" (double yellow centerline).

**SIGHT DISTANCE**

All-season safe sight distance is well in excess of 400' in both directions along Durham Road. This sight distance availability meets and exceeds the requirements of Chapter 92-6.(A.) of the Dover Code and NH RSA 236 (NHDOT Driveway Permit).

**TRIP GENERAITON DISTRIBUTION**

The Institute of Transportation Engineers (ITE) Trip Generation manual, 7th Edition (©2003), sets fourth trip generation data for both Assisted Living (Land Use Code: 254) and Apartment (Land Use Code: 220).

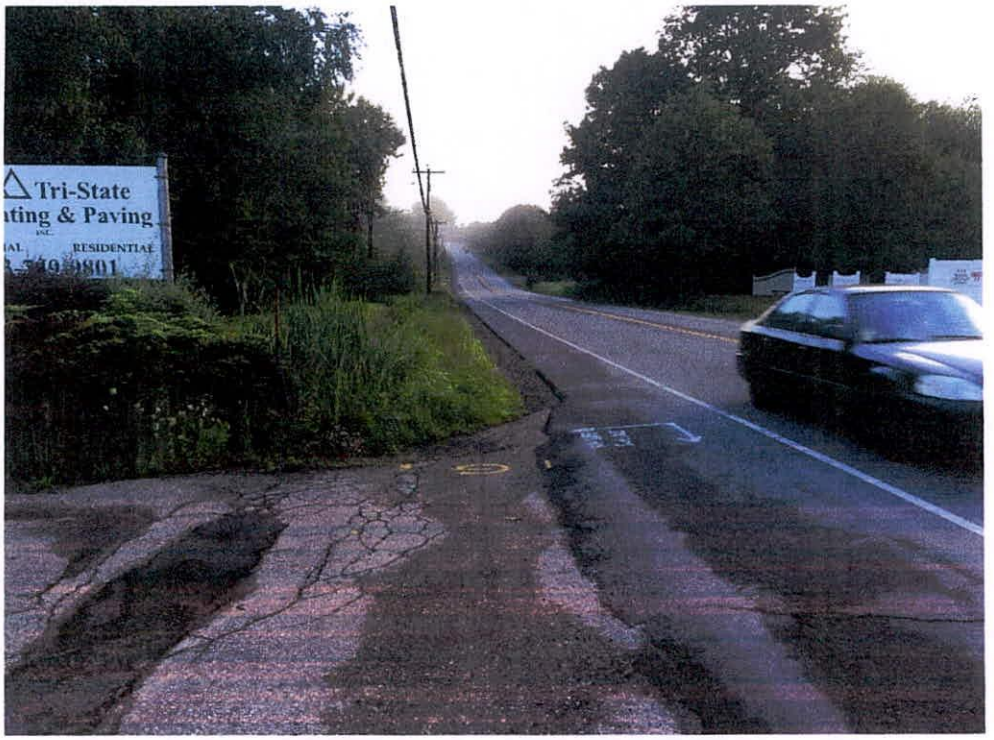
The ITE Land Use: 230 data indicates that the following trip generation rates can be expected from the proposed project:

| | Assisted Living (Land Use Code 254) | Apartment (Land Use Code 220) | Total |
|---|---|---|---|
| Total Weekday | 32 | 14 | 46 |
| A.M. Peak Hour of Adj. Street | 2 | 1 | 3 |
| P.M. Peak Hour of Adj. Street | 3 | 2 | 5 |

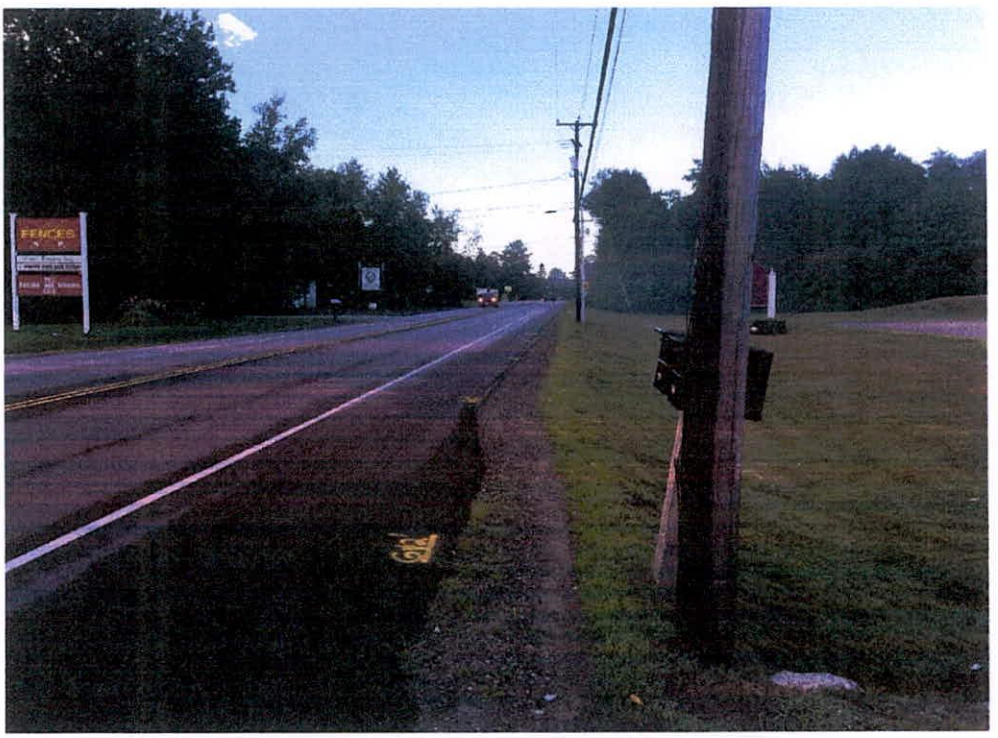
Copies of the ITE Land Use Code: 220 and 254 data sheets are attached herewith, for reference.

**TRAFFIC ENGINEERING CERTIFICATIONS**

The curriculum vitae of Dana C. Lynch, P.E. is attached herewith. His qualifications and experience are outlined therein.




Travelling north on Route 108




Travelling south on Route 108

# DANA C. LYNCH, P.E.

36 Cardinal Drive, Dover, NH 03820 (603) 742-6440 (H)
181 Watson Road, P.O. Box 1166, Dover, NH 03821 (603) 749-0443 (W)

## EDUCATION

University of Rhode Island, B.S. Civil and Environmental Engineering, 1977
Certificate of Training, National Highway Institute, Safety Design and Operations Practices for Streets and Highways, 1981
Northwestern University Traffic Institute Workshops

- Intersection Design and Channelization, 1992
- Traffic Signal Timing, 1994

USDOT, Federal Highway Administration Road Safety Audit Workshop, 2006
Certificate of Training, National Highway Institute, Design and Operation of Work Zone Traffic Control, 2012

## LICENSES AND REGISTRATIONS

| | |
|---|---|
| Registered Professional Engineer: | New Hampshire #5745 |
| | Maine #6137 |
| Licensed Designer of Subsurface Disposal Systems: | New Hampshire #719 |

## PROFESSIONAL ORGANIZATIONS

| | |
|---|---|
| American Society of Civil Engineers | Member |
| Institute of Transportation Engineers | Fellow |
| Transportation and Development Institute, ASCE | Charter Member |

## CIVIC ACTIVITIES

| | |
|---|---|
| Cochecho Waterfront Advisory Committee | Chair, 2003-2006 |
| Greater Dover Chamber of Commerce | Board of Directors (1988-1991,1995-2000) |
| Greater Dover Chamber of Commerce | President, 1998 |
| Cochecho Waterfront Task Force | Chair, 1990 |
| Cochecho Riverwalk Committee | Chair, 1994-1998 |
| Downtown Parking Task Force | 1988 |
| Rail Station Task Force | Chair, 1993 |
| Woodman Park School Playground Project | 1990 |
| Guest Lecturer, University of New Hampshire | |
| • "Planning & Engineering in Real Estate Development " | 1988, 1989 |
| • "Transportation Aspects of Community Planning" | 1994 |
| COAST Route 3, Dover Transportation Committee | 1997 |
| City of Dover Masterplan - Transportation Committee | |
| Dover Main Street Application Team | 1999 |

**CIVIC ACTIVITIES (Continued)**

| | |
|---|---|
| Dover Clean-Up Day Organizer | 2000-2003 |
| Dover Economic Development Commission | 2004-2006 |
| Strafford Economic Development Corporation | Board of Directors |
| Woodman Park School, Mentor | 2004 |

**AWARDS AND ACKNOWLEDGEMENT**

| | |
|---|---|
| Chamber of Commerce President's Award | 1994 |
| Paul Harris Fellow – Dover Rotary Club | |
| Greater Dover Chamber of Commerce, Volunteer of the Year | 1999 |
| Award of Merit, State of New Hampshire, Office of Statewide Planning | 1996 |

**VOCATIONAL EXPERIENCE:**

*Civilworks, Inc.*
*P.O. Box 1166*
*Dover, NH*

October, 1985 – March 1993, and
July 1995 - Present
Co-owner, President, Project Director

Founded the firm in 1985 and developed a professional /technical staff of 11 people including four registered professional engineers and one licensed land surveyor. Responsibilities include management and direction of engineering and business aspects of the firm including client acquisition and retention, proposal preparation and fee negotiation, public presentations, permit acquisition and coordination of budgetary policy. Projects include a wide variety of private and public, commercial and residential developments from concept through construction, as well as technical advisory services relative to litigation associated with highway design and temporary traffic control.

*Appledore Engineering, Inc.*
*600 State Street*
*Portsmouth, NH*

April 1993 – August 1995
Senior Project Manager

Responsible for preparation of plans, specifications, and cost estimates for roadway and site development projects. Projects included site design and permitting for corporate headquarters, schools, several supermarkets and retail developments, conceptual planning for a warehouse/truck maintenance facility, and arterial bypass roadway, as well as engineering review services for local municipalities.

*Costello, Lomasney & deNapoli, Inc.*
*540 Commercial Street*
*Manchester, NH*

August 1982 – October 1985
Project Manager

Responsibilities included a variety of commercial, residential and industrial projects from conceptual design stage through engineering design, permitting, and bid documents. Projects completed include 1600 and 600 unit housing projects, 115,000 and 240,000 square foot commercial space/office complexes, a 57,000 square foot storage facility as well as conceptual design reports for parking facilities in Dover, NH and reports and specifications for dredging of the Cochecho River.

*R.A. Cataldo and Associates, Inc.*
*83 Power Road*
*Pawtucket, RI*

September 1980 – August 1982
Design Engineer

Responsible for preparation of plans, specifications, and cost estimates for highway and site improvement projects. Work included preparation of conceptual design reports, supervision of field and support staff, and coordination with clients.

*Wilbur Smith and Associates*
*Peace Dale, RI, New Haven, Ct,*
*and Providence, RI*

February 1976 – August 1980
Junior Engineer/Design Engineer

Assisted in preparation of the 40-mile I-985 corridor location/EIS, completed roadway and drainage design assignments for highway reconstruction and signalization projects as well as landside terminal access improvements at JFK International Airport, NY.

*Joseph W. Frisella, Civil Engineering*
*Wakefield, RI*

June 1971 – December 1975
Survey Crew Chief/Senior Draftsman

Supervised and coordinated land surveying projects.

# TRIP GENERATION
# DATA SHEETS

**Land Use Code: 220 - Apartment**
**Land Use Code: 254 – Assisted Living**

**Source: ITE Trip Generation, 7th Ed.**

# Apartment
(220)

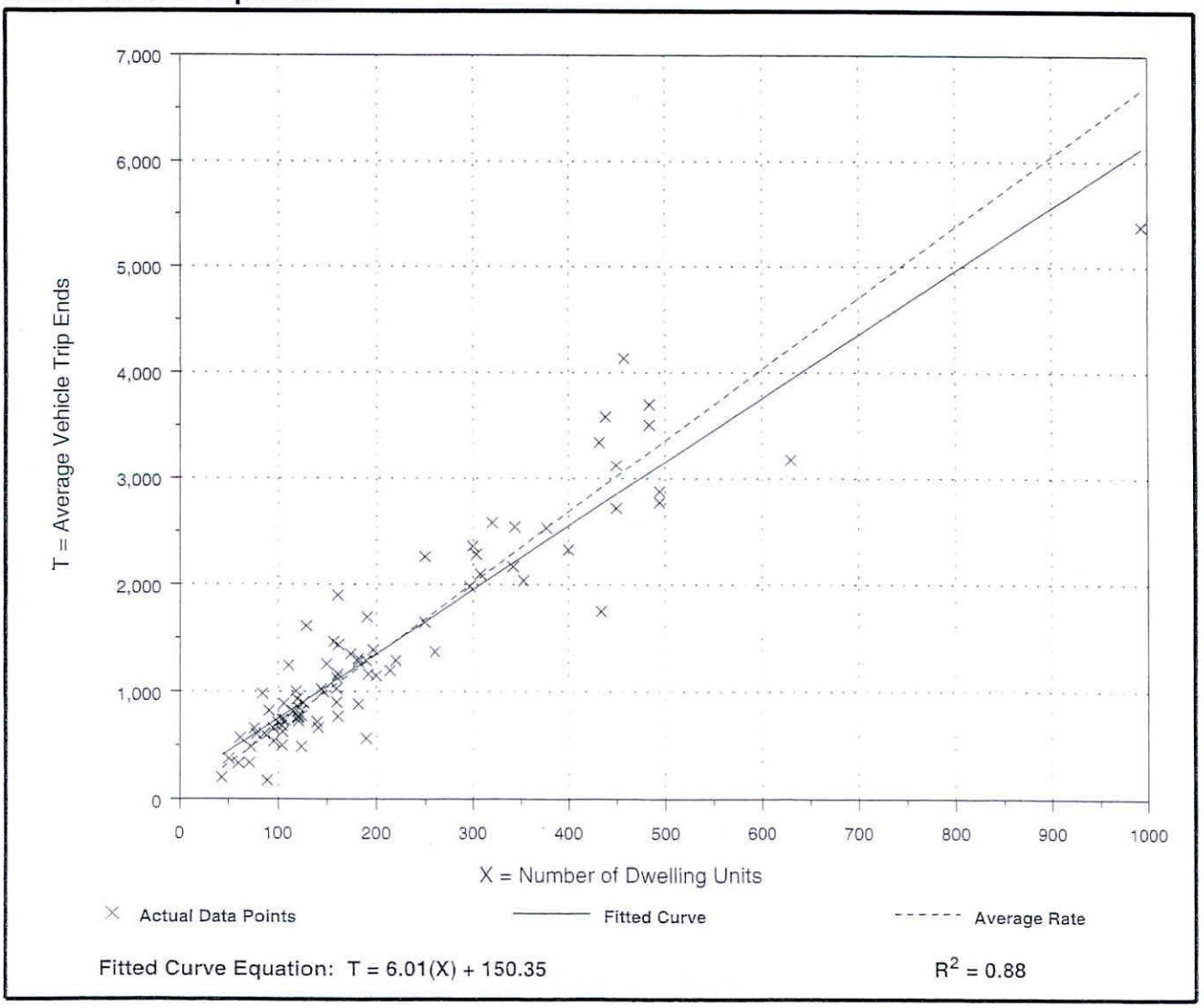
**Average Vehicle Trip Ends vs: Dwelling Units**
**On a: Weekday**

Number of Studies: 86
Avg. Number of Dwelling Units: 212
Directional Distribution: 50% entering, 50% exiting

## Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 6.72 | 2.00 - 12.50 | 3.02 |

## Data Plot and Equation




Fitted Curve Equation: $T = 6.01(X) + 150.35$

$R^2 = 0.88$

# Apartment
(220)

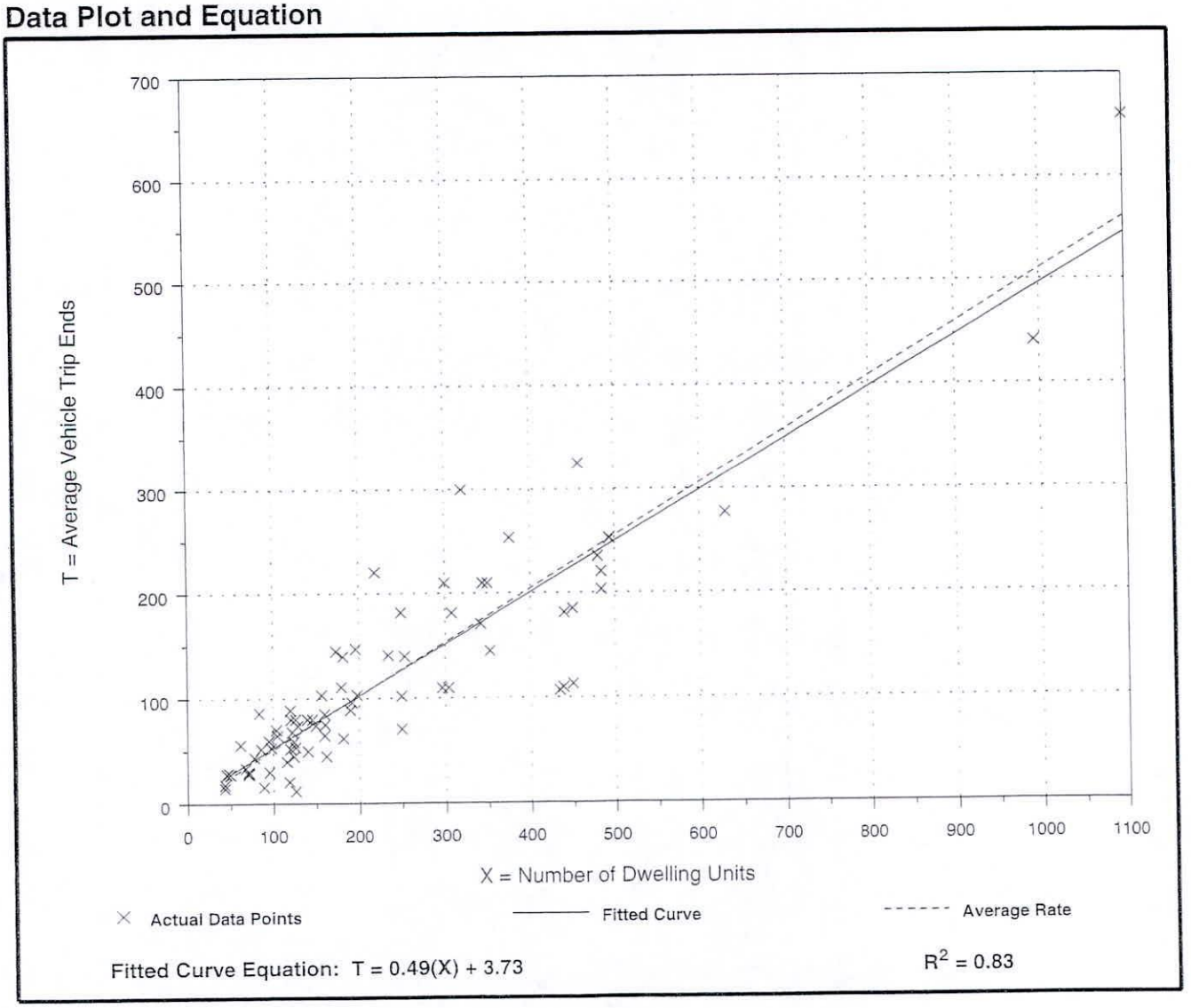
**Average Vehicle Trip Ends vs:** **Dwelling Units**
**On a:** **Weekday,**
**Peak Hour of Adjacent Street Traffic,**
**One Hour Between 7 and 9 a.m.**

Number of Studies: 78
Avg. Number of Dwelling Units: 235
Directional Distribution: 20% entering, 80% exiting

## Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 0.51 | 0.10 - 1.02 | 0.73 |

## Data Plot and Equation




Fitted Curve Equation: T = 0.49(X) + 3.73

$R^2$ = 0.83

# Apartment
(220)

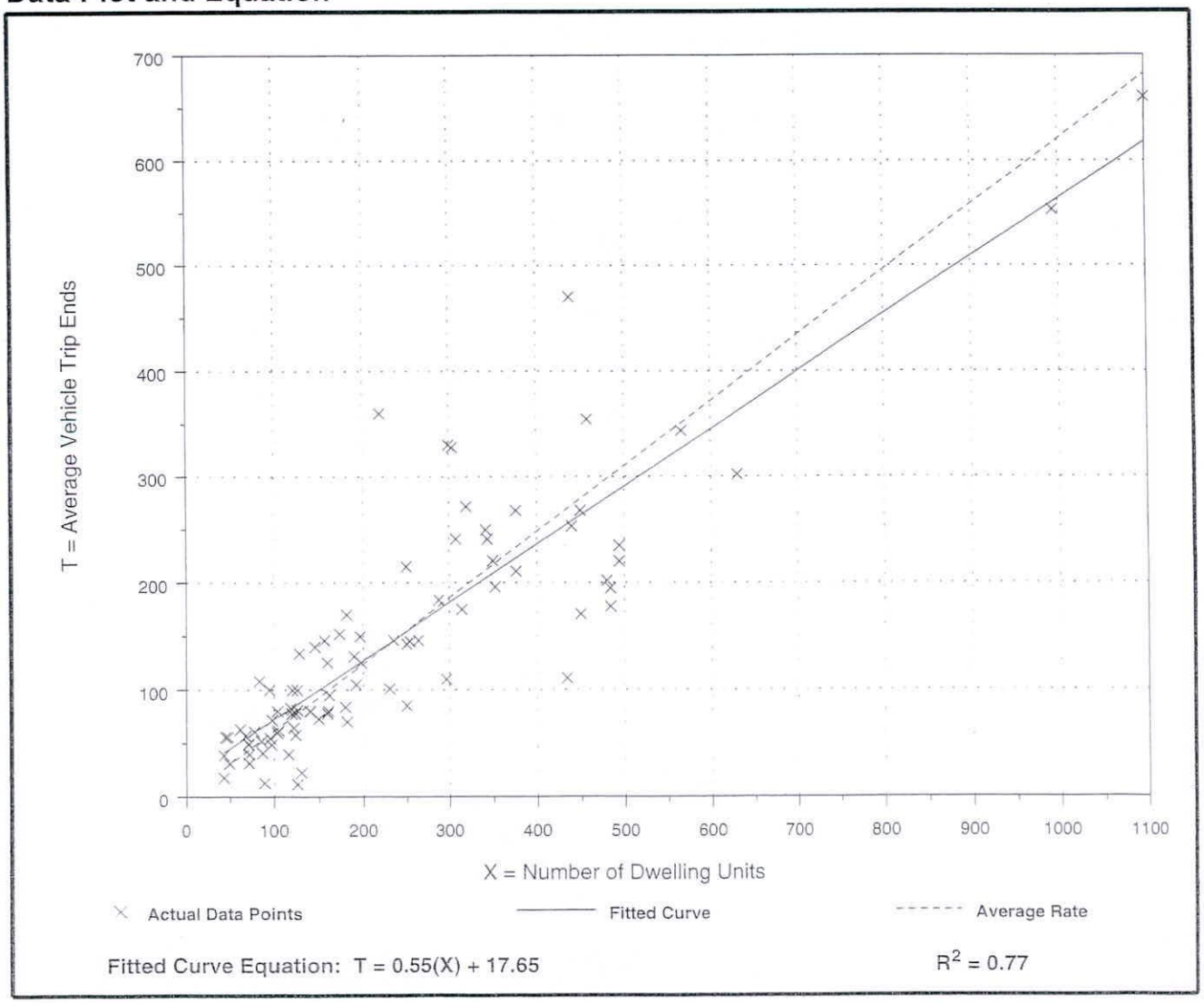
**Average Vehicle Trip Ends vs:** Dwelling Units
**On a:** Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 90
Avg. Number of Dwelling Units: 233
Directional Distribution: 65% entering, 35% exiting

## Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 0.62 | 0.10 - 1.64 | 0.82 |

## Data Plot and Equation




Fitted Curve Equation: T = 0.55(X) + 17.65

$R^2$ = 0.77

# Assisted Living
(254)

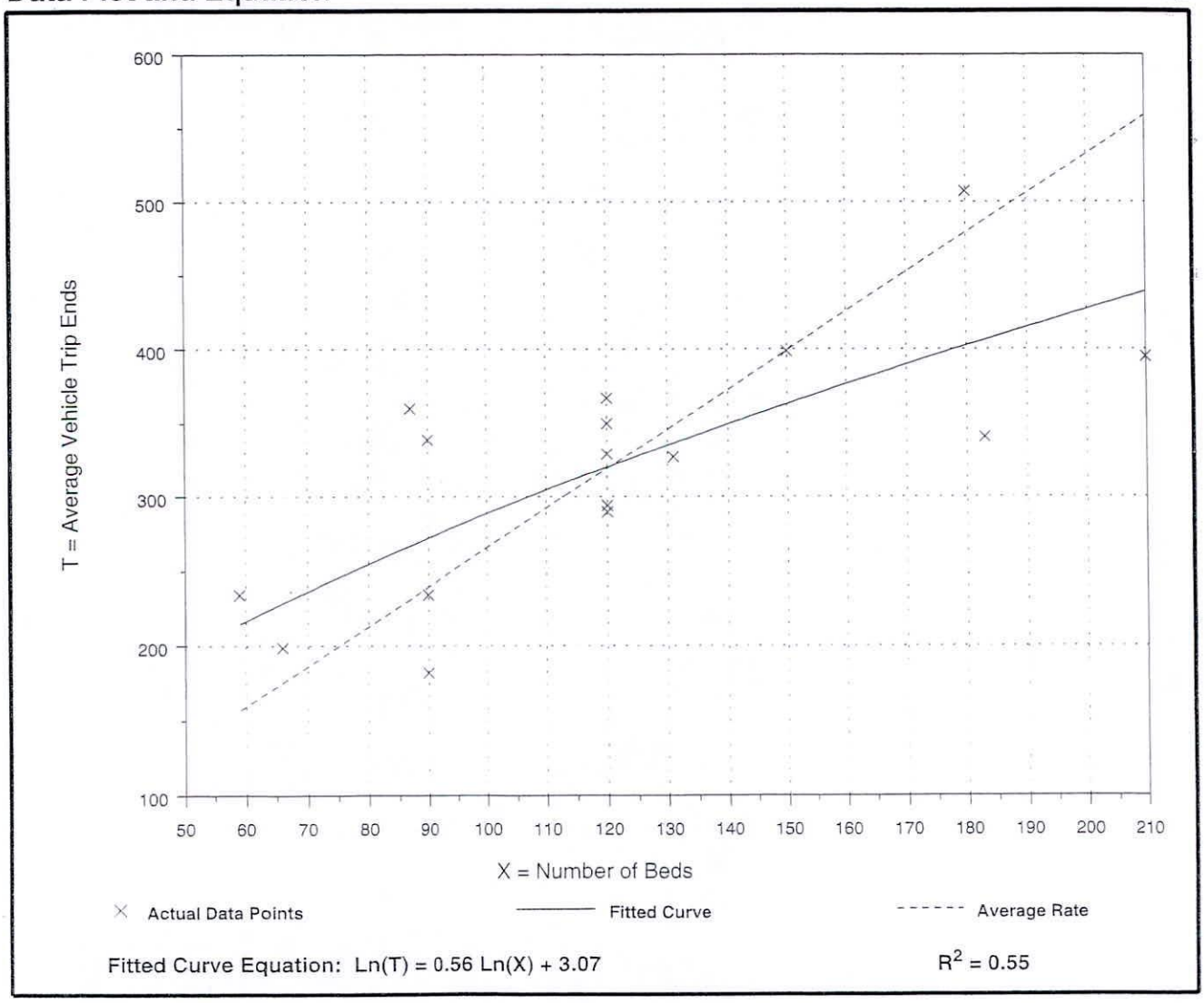
**Average Vehicle Trip Ends vs: Beds**
**On a: Weekday**

Number of Studies: 16
Average Number of Beds: 121
Directional Distribution: 50% entering, 50% exiting

## Trip Generation per Bed

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 2.66 | 1.86 - 4.14 | 1.74 |

## Data Plot and Equation




Fitted Curve Equation: Ln(T) = 0.56 Ln(X) + 3.07

$R^2$ = 0.55

# Assisted Living
(254)

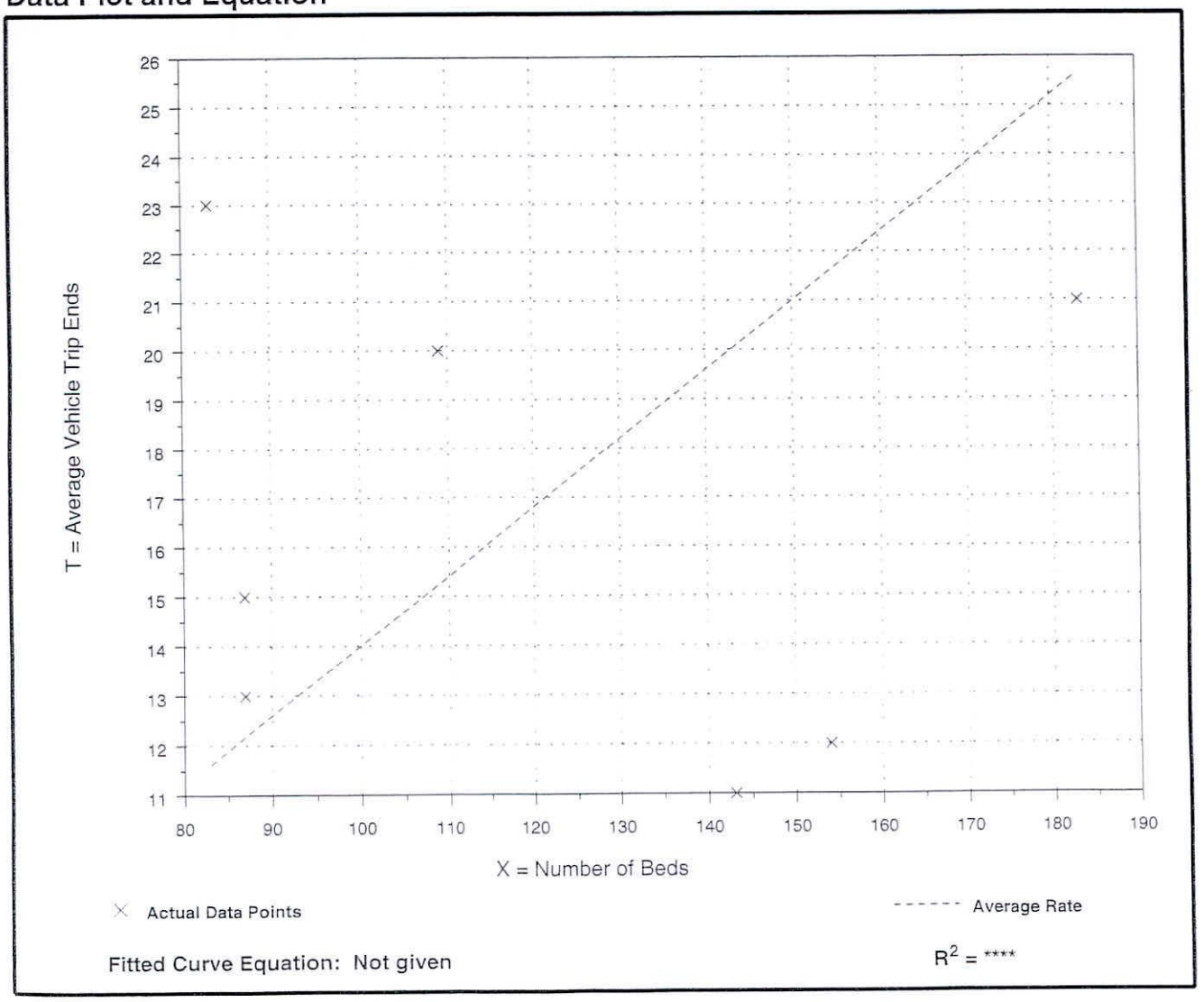
**Average Vehicle Trip Ends vs:** **Beds**
**On a:** **Weekday,**
**Peak Hour of Adjacent Street Traffic,**
**One Hour Between 7 and 9 a.m.**

Number of Studies: 7
Average Number of Beds: 121
Directional Distribution: 65% entering, 35% exiting

## Trip Generation per Bed

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 0.14 | 0.08 - 0.28 | 0.37 |

## Data Plot and Equation




Fitted Curve Equation: Not given

$R^2$ = ****

# Assisted Living
(254)

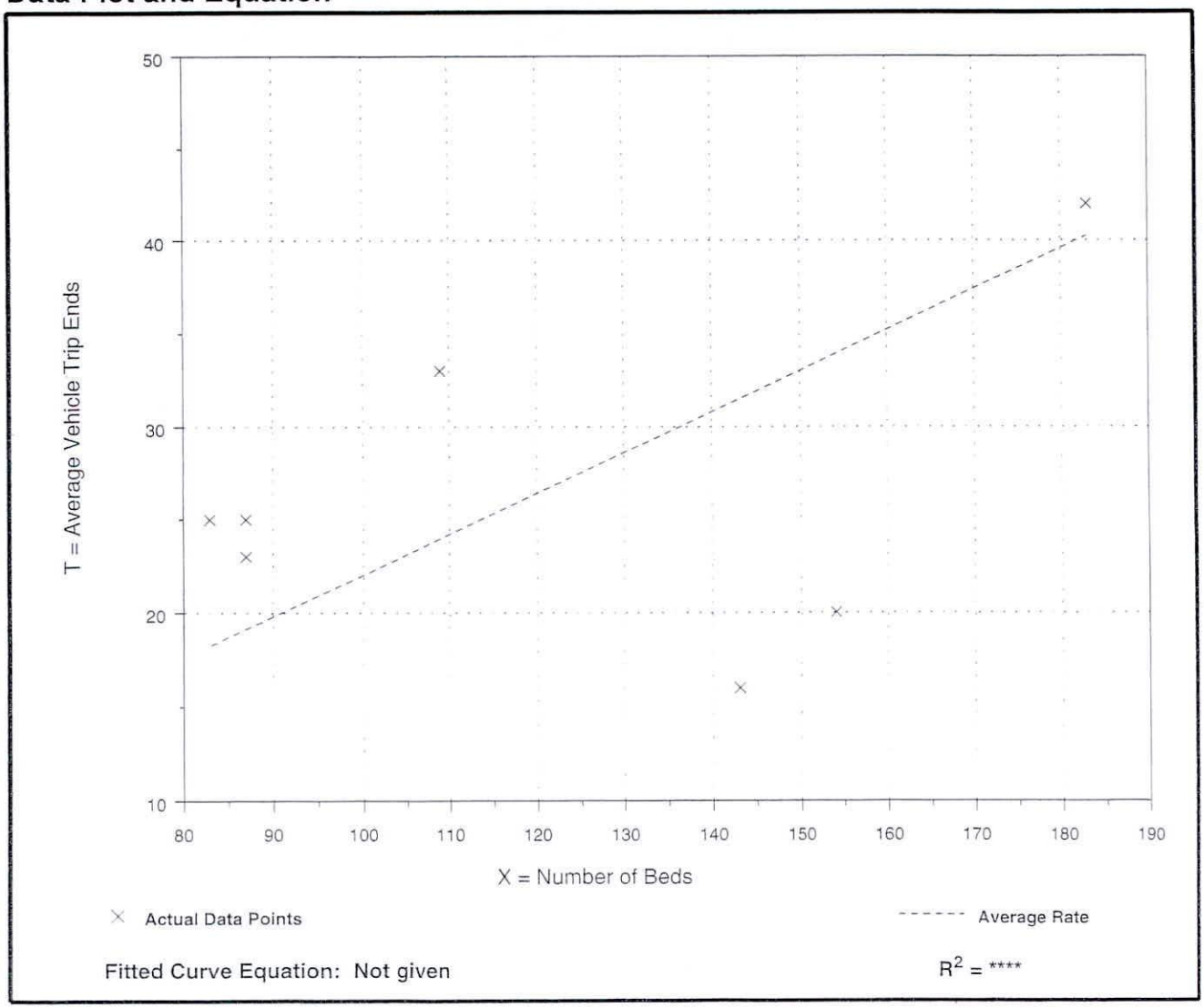
**Average Vehicle Trip Ends vs:** **Beds**
**On a:** **Weekday,**
**Peak Hour of Adjacent Street Traffic,**
**One Hour Between 4 and 6 p.m.**

Number of Studies: 7
Average Number of Beds: 121
Directional Distribution: 44% entering, 56% exiting

## Trip Generation per Bed

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 0.22 | 0.11 - 0.30 | 0.47 |

## Data Plot and Equation



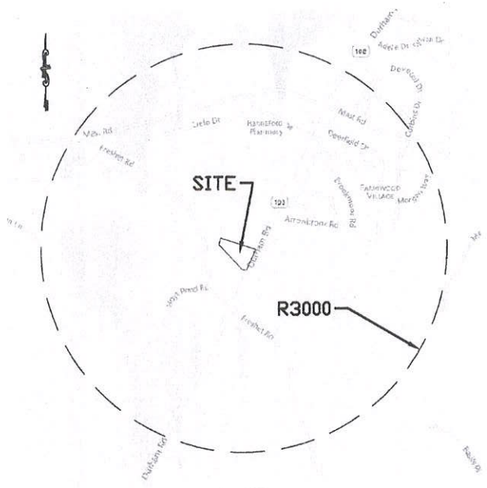

Fitted Curve Equation: Not given

$R^2$ = ****

# SITE PLAN
# JOHNSON CREEK VILLAGE CARE HOME

## TAX MAP H, LOT 1
## 301 DURHAM ROAD
## DOVER, NH
## JULY 9, 2015
## REVISED: AUGUST 13, 2015

RECEIVED
Planning Office
AUG 13 2015
Dover, New Hampshire




LOCUS MAP
SCALE: 1"=1000'

| | |
|---|---|
| OWNER | REAL MCKOY PROPERTIES, LLC<br>P.O. BOX 1727<br>DOVER, NH 03820 |
| APPLICANT | COCHECO VILLAGE INC.<br>P.O. BOX 1727<br>DOVER, NH 03820 |
| SITE CIVIL ENGINEER | CIVILWORKS INC.<br>181 WATSON ROAD<br>DOVER, NH 03820 |
| LAND SURVEYOR | MCENEANEY SURVEY ASSOCIATES, INC.<br>P.O. BOX 681<br>24 CHESTNUT STREET<br>DOVER, NH 03820 |
| SOIL SCIENTIST | JOSEPH W. NOEL<br>P.O. BOX 174<br>SOUTH BERWICK, MAINE 03908 |
| LANDSCAPE ARCHITECT | WOODBURN & COMPANY<br>LANDSCAPING ARCHITECTURE, LLC<br>130 KENT PLACE<br>NEWMARKET, NH 03857 |

**GENERAL NOTES:**

1. THE FOLLOWING FEDERAL AND STATE PERMITS HAVE BEEN ISSUED FOR THE SUBJECT PROPERTY:
   NHDES SUBSURFACE DISPOSAL SYSTEM: PENDING
   NHDOT AMENDED DRIVEWAY PERMIT: PENDING
2. PURSUANT TO CITY OF COVER ORDINANCE AND APPROVALS ASSOCIATED WITH THIS WORK, CONSTRUCTION HOURS SHALL BE LIMITED TO MONDAY – FRIDAY 7AM – 6PM, SATURDAY 8AM – 5PM, WITH NO SUNDAY HOURS. HOURS OF CONSTRUCTION SHALL BE DOCUMENTED ON A SITE CONSTRUCTION SIGN ALONG WITH THE CONTACT INFORMATION FOR GENERAL CONTRACTOR. SAID SIGNAGE SHALL BE LOCATED AND APPROVED BY THE CITY ENGINEER OR DIRECTOR OF PLANNING AND COMMUNITY DEVELOPMENT.
3. A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED FRO THIS PROJECT. THE SWPPP MUST INCLUDE THE APPROPRIATE BEST MANAGEMENT PRACTICES (BMP'S) TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM THE SITE. PARTIES RESPONSIBLE FOR DEVELOPING THE SWPPP SHOULD REFER TO THE EPA NPDES CONSTRUCTION GENERAL PERMITS NOTICE OF INTENT FOR A COMPLETE OUTLINE OR REQUIRED ELEMENTS. THESE PLANS AND THE STORMWATER MANAGEMENT SYSTEM INSPECTION & MAINTENANCE PLAN PREPARED FOR THIS PROJECT MAY BE UTILIZED IN FULFILLING THE REQUIREMENTS.
4. UPON COMPLETION OF CONSTRUCTION, THE OWNER SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE STORMWATER MANAGEMENT SYSTEM INSPECTION & MAINTENANCE PLAN AND THE REPORTING REQUIREMENTS CONTAINED THEREIN.

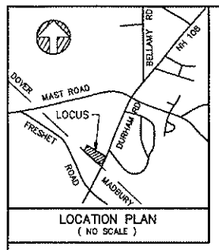
**VARIANCES GRANTED:**

- Z13-18A, JULY 15, 2015:
  VARIANCE FROM SECTION 170-12.A TO PERMIT THE CONSTRUCTION OF AN ELDERLY ASSISTED CARE HOME FOR 12 RESIDENTS WITH 2 ACCESSORY STAFF APARTMENTS (AMENDMENT OF Z13-18)
- Z13-18, OCTOBER 17, 2013:
  VARIANCE FROM SECTION 170-12.A TO PERMIT THE CONSTRUCTION OF AN ELDERLY ASSISTED CARE HOME FOR 8-10 RESIDENTS WITH 2 ACCESSORY STAFF APARTMENTS.
- Z06-13, JUNE 15, 2006:
  VARIANCE FROM SECTION 17-12, TABLE I, PARTS A AND C-1 TO ESTABLISH A BEAUTY SALON AND SINGLE-FAMILY DWELLING.

| SHEET INDEX | SHEET |
|---|---|
| EXISTING CONDITIONS /SOILS PLAN | EX-1 |
| NOTE SHEET | 2 |
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| LIGHTING DETAILS (1 OF 1)(SWANEY LIGHTING ASSOCIATES, INC) | 16 |
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PLANNING FILE NO.: P15-38

1430-SITE.DWG




LOCATION PLAN
( NO SCALE )

## REFERENCE PLANS:

1.) "MINOR SUBDIVISION , GEORGE DEMOSTHENES, DOVER, NH"; SCALE: 1"=60'; DATED: NOVEMBER, 1994; APPROVED BY CITY OF DOVER PLANNING BOARD JAN. 13, 1995; SCRD PLAN FILE #41A-51; PREPARED BY: RANDY R. ORVIS

2.) "SEPTIC SYSTEM DESIGN, MAP H, LOT 1, DOVER, NH"; PREPARED FOR WILLIAM H. SHAHEEN, 73 PERKINS ROAD, MADBURY, NH; PREPARED BY GROOVER SEPTIC DESIGN; DATED SEPTEMBER, 2002

3.) "AS-BUILT PLAN, TAX MAP H, LOT 1, DOVER, NH"; PREPARED FOR COASTLINE MODULAR HOMES, INC.; PREPARED BY LITTLE RIVER SURVEY COMPANY; DATED: MAY, 2003; SCALE: 1"=30'

4.) SITE IMPROVEMENT AND SUBSURFACE DISPOSAL SYSTEM PLAN, LOT NO., LOT 1, TAX MAP H, STREET ADDRESS:, 301 DURHAM ROAD, CITY / TOWN:, DOVER, NEW HAMPSHIRE, OWNER OF RECORD/APPLICANT:, JANNETH A. BLACK, 272 PANIO STREET, HONOLULU, HAWAII; SCALE: 1"= 20'; DATED: 10-01-06, REVISED THROUGH 1/2/07; BY: CIVILWORKS, INC.

## NOTES:

1.) OWNER OF RECORD:
REAL MCKOY PROPERTIES LLC
P.O. BOX 1727
DOVER, NEW HAMPSHIRE 03821
S.C.R.D. VOLUME 3563, PAGE 238

2.) H / 1 – DENOTES TAX MAP AND PARCEL NUMBER.

3.) THE INTENT OF THIS PLAN IS TO DEPICT THE EXISTING CONDITIONS FOR THE SUBJECT PARCEL AT THE TIME OF THIS SURVEY.

4.) TOTAL PARCEL AREA IS 128,641 S.F., 2.95 AC.

4.) ZONING DISTRICT: B-4.
ZONING REQUIREMENTS AND PROVISIONS:

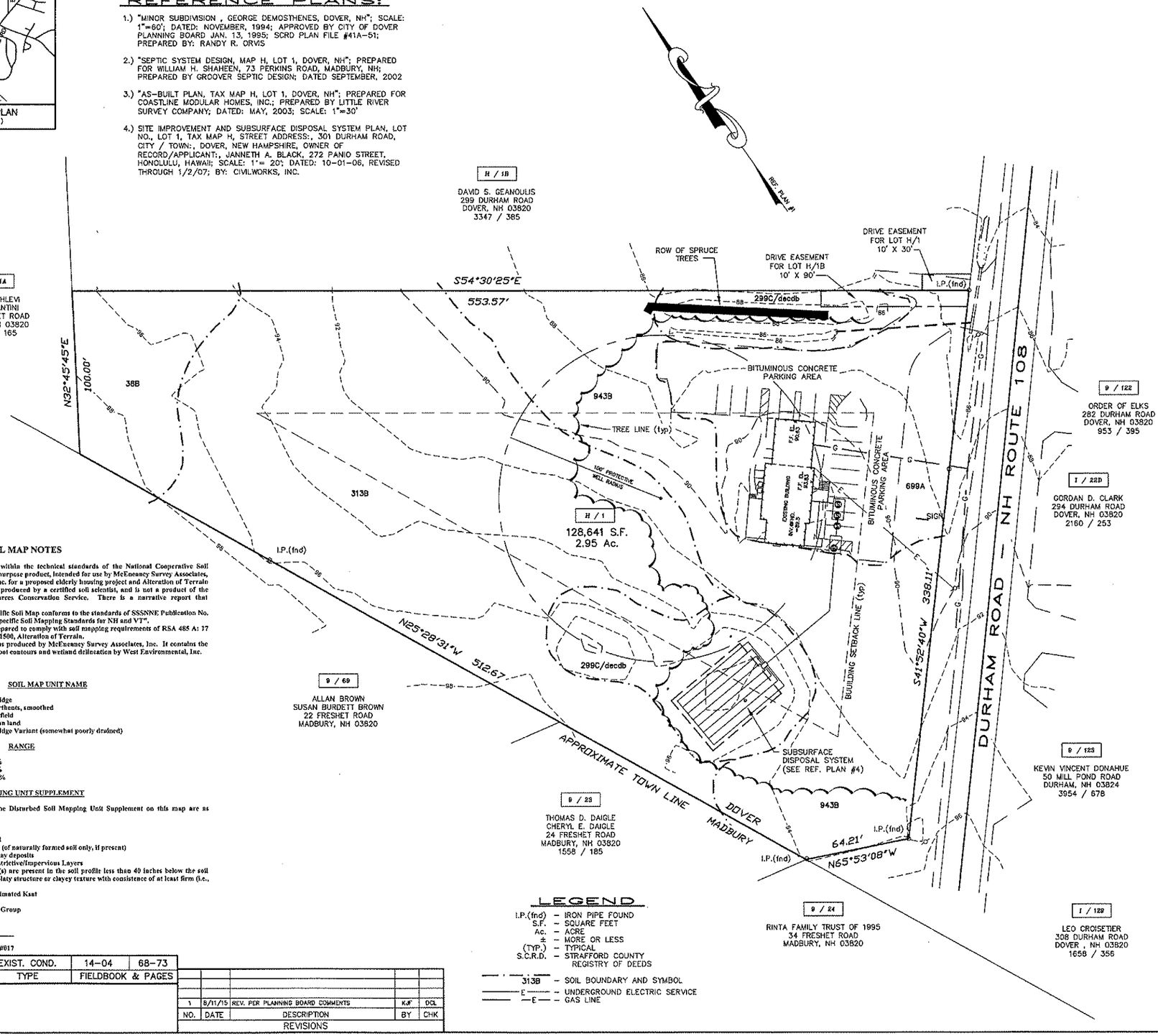
| | |
|---|---|
| MINIMUM LOT SIZE | = 5 ACRES |
| MINIMUM FRONTAGE | = 400 FEET |
| MAXIMUM LOT COVERAGE | = 33 PERCENT |
| MAXIMUM BUILDING HEIGHT | = 55 FEET |
| BUILDING SETBACK REQUIREMENTS: | |
| FRONT | = 50 FEET |
| SIDE (ABUT A STREET) | = 75 FEET |
| SIDE (ABUT A LOT) | = 75 FEET |
| REAR | = 75 FEET |

5.) THE SUBJECT PARCEL IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FLOOD INSURANCE RATE MAP COMMUNITY NUMBER 330145; PANEL 0320; SUFFIX D; MAP NUMBER 33017C0320D; EFFECTIVE DATE MAY 17, 2005.

6.) SITE-SPECIFIC SOIL MAP BY JOSEPH NOEL, NH CERTIFIED SOIL SCIENTIST #017.

7.) HORIZONTAL DATUM SHOWN IN BASED UPON REFERENCE PLAN #1. VERTICAL DATUM IS BASED UPON REFERENCE PLAN #2.

8.) THIS PLAN SHOWS ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT AT THE TIME THE TOPOGRAPHIC SURVEY WAS PERFORMED. THE ABSENCE OF SUBSURFACE STRUCTURES, UTILITIES, ETC. FROM THIS PLAN, BUT IN EXISTENCE, IS NOT INTENDED OR IMPLIED.




### SITE-SPECIFIC SOIL MAP NOTES

1) This map product is within the technical standards of the National Cooperative Soil Survey. It is a special purpose product, intended for use by McEneaney Survey Associates, Inc. and Civilworks, Inc. for a proposed elderly housing project and Alteration of Terrain requirements. It was produced by a certified soil scientist, and is not a product of the USDA Natural Resources Conservation Service. There is a narrative report that accompanies this map.
2) This detailed Site-Specific Soil Map conforms to the standards of SSSNNE Publication No. 3, as amended, "Site-Specific Soil Mapping Standards for NH and VT".
3) This map has been prepared to comply with soil mapping requirements of RSA 485 A: 17 and NH DES Env-Wq 1500, Alteration of Terrain.
4) The base map used was produced by McEneaney Survey Associates, Inc. It contains the existing conditions, 2-foot contours and wetland delineation by West Environmental, Inc.

### SOIL LEGEND

| NUMERICAL SYMBOL | SOIL MAP UNIT NAME |
|---|---|
| 38 | Eldridge |
| 299 | Udorthents, smoothed |
| 313 | Deerfield |
| 699 | Urban land |
| 943 | Eldridge Variant (somewhat poorly drained) |

| ALPHA SLOPE SYMBOL | RANGE |
|---|---|
| A | 0-3% |
| B | 3-8% |
| C | 8-15% |

DISTURBED SOIL MAPPING UNIT SUPPLEMENT

The five components of the Disturbed Soil Mapping Unit Supplement on this map are as follows:

Symbol 1: Drainage Class
d-Moderately Well Drained
Symbol 2: Parent Material (of naturally formed soil only, if present)
e-Loamy/sandy over Silt/Clay deposits
Symbol 3: Restrictive/Impervious Layers
c-Mineral restrictive layer(s) are present in the soil profile less than 40 inches below the soil surface such as hard pan, platy structure or clayey texture with consistence of at least firm (i.e., more than 20 newtons).
Symbol 4: Estimated Ksat
d-Not determined
Symbol 5: Hydrologic Soil Group
b-Group B

Joseph W. Noel
NH Certified Soil Scientist #017

### LEGEND

I.P.(fnd) – IRON PIPE FOUND
S.F. – SQUARE FEET
Ac. – ACRE
± – MORE OR LESS
(TYP.) – TYPICAL
S.C.R.D. – STRAFFORD COUNTY REGISTRY OF DEEDS
313B – SOIL BOUNDARY AND SYMBOL
—E— – UNDERGROUND ELECTRIC SERVICE
—E— – GAS LINE

| NO. | DATE | DESCRIPTION | BY | CHK |
|---|---|---|---|---|
| | | REVISIONS | | |
| 1 | 8/11/15 | REV. PER PLANNING BOARD COMMENTS | KJF | DCL |

| | | | |
|---|---|---|---|
| 14-1717 | EXIST. COND. | 14-04 | 68-73 |
| PROJECT NO | TYPE | FIELDBOOK & PAGES | |

SHEET EX-1

# EXISTING CONDITIONS PLAN
PREPARED FOR
REAL MCKOY PROPERTIES LLC
TAX MAP H, LOT No. 1
301 DURHAM ROAD
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

| | |
|---|---|
| DRAWN BY: KJF | FILE: CPK\1717\14-1717.DWG |
| SCALE: 1" = 30' | DATE: APRIL 2015 |

30 15 0 15 30 60 90 120




McEneaney Survey Associates, inc.
P.O. Box 681 – 24 CHESTNUT STREET
DOVER, NH 03820 (603) 742-0911

SURVEYING – PLANNING – CONSULTING

## DEMOLITION NOTES:

1. COORDINATE REMOVAL, RELOCATION, DISPOSAL OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
2. ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR SHALL NOTIFY "DIG SAFE" PRIOR TO ANY DEMOLITION/ CONSTRUCTION ACTIVITIES. (811).
4. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, UTILITIES AND PAVEMENT ON THE SITE TO THE LIMITS SHOWN UNLESS SPECIFICALLY IDENTIFIED TO REMAIN. ITEMS TO BE REMOVED INCLUDE BUT ARE NOT LIMITED TO: SEPTIC COMPONENTS, CONCRETE, PAVEMENT, POLES, BUILDINGS, FENCES AND TREES.
5. IT IS THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS.
6. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS NOT ALREADY OBTAINED BY THE OWNER AND ARRANGE AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK, EXCEPT FOR WORK NOTED TO BE COMPLETED BY OTHERS.
8. THE LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATION IS NOT GUARANTEED BY THE OWNER OR THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK.
9. ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES, AND CODES.

## SITE NOTES:

1. PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A PLAN REFERENCED 1 PERFORMED BY MCENEANEY SURVEY ASSOCIATES INC. (SEE EXISTING CONDITIONS SURVEY PLAN THIS PLAN SET)
2. AS-BUILT PLANS OF THE SITE SHALL BE SUBMITTED ON A REPRODUCIBLE MYLAR MEDIUM AND IN A DIGITAL DXF FORMAT ON DISK TO THE CITY OF DOVER ENGINEER'S OFFICE UPON COMPLETION OF PROJECT. AS-BUILT PLANS SHALL BE PREPARED AND CERTIFIED CORRECT BY A L.L.S. OR P.E.
3. EXTERIOR LIGHTING SHALL BE CUT-OFF TYPE FIXTURES PER CHAPTER 149-14-E AND SHALL PROVIDE LIGHTING DIRECTED ON-SITE ONLY.
4. THE PROPOSED STRUCTURE SHALL BE SERVED BY A SPRINKLER SYSTEM AS REQUIRED UNDER CHAPTER 109-30 OF THE CODE OF THE CITY OF DOVER AND THE 2009 STATE BUILDING CODES
5. SPRINKLER CONNECTIONS MUST BE FLUSHED IN ACCORDANCE WITH NFPA 24 AND A CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM MUST BE COMPLETED.
6. FIRE DEPARTMENT CONNECTIONS SHALL BE LOCATED ON THE STREET SIDE OF THE BUILDING PER NFPA 13.
7. A SECURITY SYSTEM SHALL BE INSTALLED AS REQUIRED BY CHAPTER 58, ARTICLE I, SECTION 58-2 OF THE CODE OF THE CITY OF DOVER.
8. ALL ON-SITE UTILITIES SHALL BE INSTALLED UNDERGROUND.
9. THE SUBJECT PARCEL IS SERVED BY ON-SITE WELL AND SEPTIC SYSTEM.
10. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO APPLICABLE CITY AND STATE CODES.
11. BACKFLOW PREVENTORS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER LINES.
12. A LETTER OF CREDIT FOR THE COST OF REVEGETATING ALL DISTURBED AREAS ON THE SITE SHALL BE SUBMITTED PRIOR TO ANY EARTH DISTURBING ACTIVITY OCCURS.
13. A PRE-CONSTRUCTION CONFERENCE WITH THE DEVELOPER, THE DESIGN ENGINEER, THE EARTHWORK CONTRACTOR AND THE CITY ENGINEER SHALL OCCUR PRIOR TO ANY EARTH DISTURBING ACTIVITY.
14. BUILDING ADDRESSES SHALL BE ASSIGNED BY THE BUILDING INSPECTOR AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.
15. STRIPE PARKING AREAS AS SHOWN INCLUDING HANDICAP SYMBOLS AND PAINTED ISLANDS. ALL MARKINGS SHALL BE CONSTRUCTED USING WHITE TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M-248-TYPE N.
16. ALL PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS, AND THE AMERICAN WITH DISABILITIES ACT, LATEST EDITIONS.
17. PAINTED ISLANDS SHALL BE 4 INCHES WIDE DIAGONAL LINES 3 FEET ON CENTER.
18. ON-SITE SNOW STORAGE SHALL OCCUR ALONG THE EDGES OF PROPOSED PAVEMENT AREAS AS SHOWN IN THE UPLANDS.
19. LAYOUT OF BUILDING CORNERS SHALL BE PERFORMED BY A LICENSED LAND SURVEYOR AND SHALL BE BASED UPON THE ARCHITECT'S FINAL FOUNDATION PLAN.
20. SEE DETAILS FOR SIGN LEGENDS.
21. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE CONSTRUCTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE FACILITIES AND THEIR COMPONENTS DURING DEMOLITION AND CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE OWNERS REPRESENTATIVE. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIE-DOWNS. SUCH MATERIALS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AT THE COMPLETION OF THE PROJECT.
22. METHODS OF DEMOLITION, CONSTRUCTION AND ERECTION ARE THE CONTRACTOR'S RESPONSIBILITY UNLESS OTHERWISE SPECIFIED. IT IS THE CONTRACTORS' RESPONSIBILITY TO PROVIDE AND MAINTAIN ENVIRONMENTAL CONTROLS AS REQUIRED BY FEDERAL, STATE AND MUNICIPAL REGULATIONS AND PERMITS. ENVIRONMENTAL CONTROLS SHALL INCLUDE BUT SHALL NOT BE LIMITED TO DUST CONTROL AND SILT BARRIERS.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO STRUCTURES OR UTILITIES OR INJURIES TO THE PUBLIC DURING THE CONSTRUCTION PHASE CAUSED BY HIMSELF, HIS EMPLOYEES, HIS SUBCONTRACTORS OR EMPLOYEES OF SAME. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL TEMPORARY FACILITIES FOR THE PROTECTION OF THE WORK, WORKERS AND PUBLIC SAFETY.
24. ALL LAYOUT SHALL BE PERFORMED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR UNDER CONTRACT WITH THE CONTRACTOR.

## GRADING NOTES:

1. ALL ROAD (INCLUDING PARKING LOT AND DRAINAGE) WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS FOR CONSTRUCTION OF THE CITY OF DOVER, N.H. AND "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION", LATEST EDITION.
2. CONTRACTOR SHALL RETAIN A GEOTECHNICAL ENGINEERING CONSULTANT APPROVED BY THE OWNER, TO CONDUCT COMPACTION TESTING AND FILL GRADATION MONITORING PER THE ABOVE REFERENCED "STANDARD SPECIFICATIONS".
3. SEE EROSION CONTROL NOTES & DETAIL SHEET FOR TEMPORARY AND PERMANENT EROSION CONTROL MEASURES.
4. ALL DRAINAGE PIPES SHALL BE HDPE OR APPROVED EQUAL UNLESS OTHERWISE NOTED.
5. ALL DISTURBED AREAS NOT OTHERWISE CALLED FOR SURFACE TREATMENT SHALL RECEIVE 6" OF HIGH QUALITY LOAM AND SHALL BE SEEDED WITH GRASS.
6. ALL SITEWORK CONSTRUCTION SHALL BE ADVANCED USING "BEST MANAGEMENT PRACTICES" SANCTIONED BY THE USDA SCS AND NHDES.
7. TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED, UTILIZED AND MAINTAINED UNTIL BASE MATERIALS ARE CONSTRUCTED.
8. CONTRACTOR SHALL PROVIDE A FINISH GRADED SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE AND UNDER RAISED STRUCTURES.
9. DENSITY REQUIREMENTS:

| LOCATION | MINIMUM DENSITY |
|---|---|
| BELOW PAVED OR CONCRETE AREAS | 95% |
| TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL | 95% |
| BELOW LOAM AND SEED AREA | 95% |

*ALL PERCENTAGES SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH AASHTO STANDARD 180, METHOD C. FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH AASHTO STANDARD T-191, T-204, OR T-238 AND T-239.

10. SEE GENERAL EROSION CONTROL NOTES ON DETAIL SHEET.
11. PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS WITHIN THE WORK LIMITS AND AS SHOWN ON PLAN. MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED AND UPSTREAM AREAS HAVE BEEN STABILIZED.
12. INSPECT SILT BARRIERS AFTER EACH RAIN STORM OF 1/4 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE STRUCTURE HEIGHT.
13. A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED FRO THIS PROJECT. THE SWPPP MUST INCLUDE THE APPROPRIATE BEST MANAGEMENT PRACTICES (BMP'S) TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM THE SITE. PARTIES RESPONSIBLE FOR DEVELOPING THE SWPPP SHOULD REFER TO THE EPA NPDES CONSTRUCTION GENERAL PERMITS NOTICE OF INTENT FOR A COMPLETE OUTLINE OR REQUIRED ELEMENTS. THESE PLANS AND THE STORMWATER MANAGEMENT SYSTEM INSPECTION & MAINTENANCE PLAN PREPARED FOR THIS PROJECT MAY BE UTILIZED IN FULFILLING THE REQUIREMENTS.

## UTILITY NOTES:

1. THE PROJECT SITE IS SERVED BY ON SITE WELL WATER AND SEPTIC.
2. THE BEST AVAILABLE INFORMATION WAS USED TO DETERMINE THE LOCATION AND SIZE OF EXISTING UTILITIES. THE LOCATION IS NOT GUARANTEED BY THE OWNER OR THE ENGINEER. THE EXACT SIZE AND LOCATION OF UTILITIES SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR PRIOR TO COMMENCING WORK. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO ANTICIPATE CONFLICTS AND REPAIR EXISTING UTILITIES AS NECESSARY TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE OWNER.
3. ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATIONS WITH THE RESPECTIVE UTILITY OWNERS PRIOR TO WORK BEING PERFORMED. CALL DIGSAFE AT 1-888-388-7233 OR "811".
4. ALL PROPOSED UTILITY SERVICES SHALL BE UNDERGROUND WITHIN THE SITE.
5. UNDERGROUND ELECTRIC, TELEPHONE, AND CABLE TV CONDUITS SHALL BE INSTALLED IN ACCORDANCE WITH/PER PSNH, VERIZON, COMCAST, AND UNITIL STANDARDS.
6. PROPOSED INSTALLATION OF UNDERGROUND CONDUITS FOR TELEPHONE, ELECTRIC AND GAS SERVICE SHALL BE COORDINATED WITH THE RESPECTIVE CONTACTS ARE AS FOLLOWS:
   ELECTRIC: PSNH 1.800.362.7764
   NATURAL GAS: UNTIL
   CABLE: COMCAST 603.334.3615
7. SEE ELECTRICAL DRAWINGS AND DETAILS FOR OUTDOOR LIGHTING CONDUIT LOCATIONS.
8. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.
9. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.

PLANNING FILE NO.: P15-38

| No. | DATE | BY | REVISION |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

# NOTE SHEET

JOHNSON CREEK VILLAGE
CARE HOME
TAX MAP H, LOT 1
DOVER, NEW HAMPSHIRE

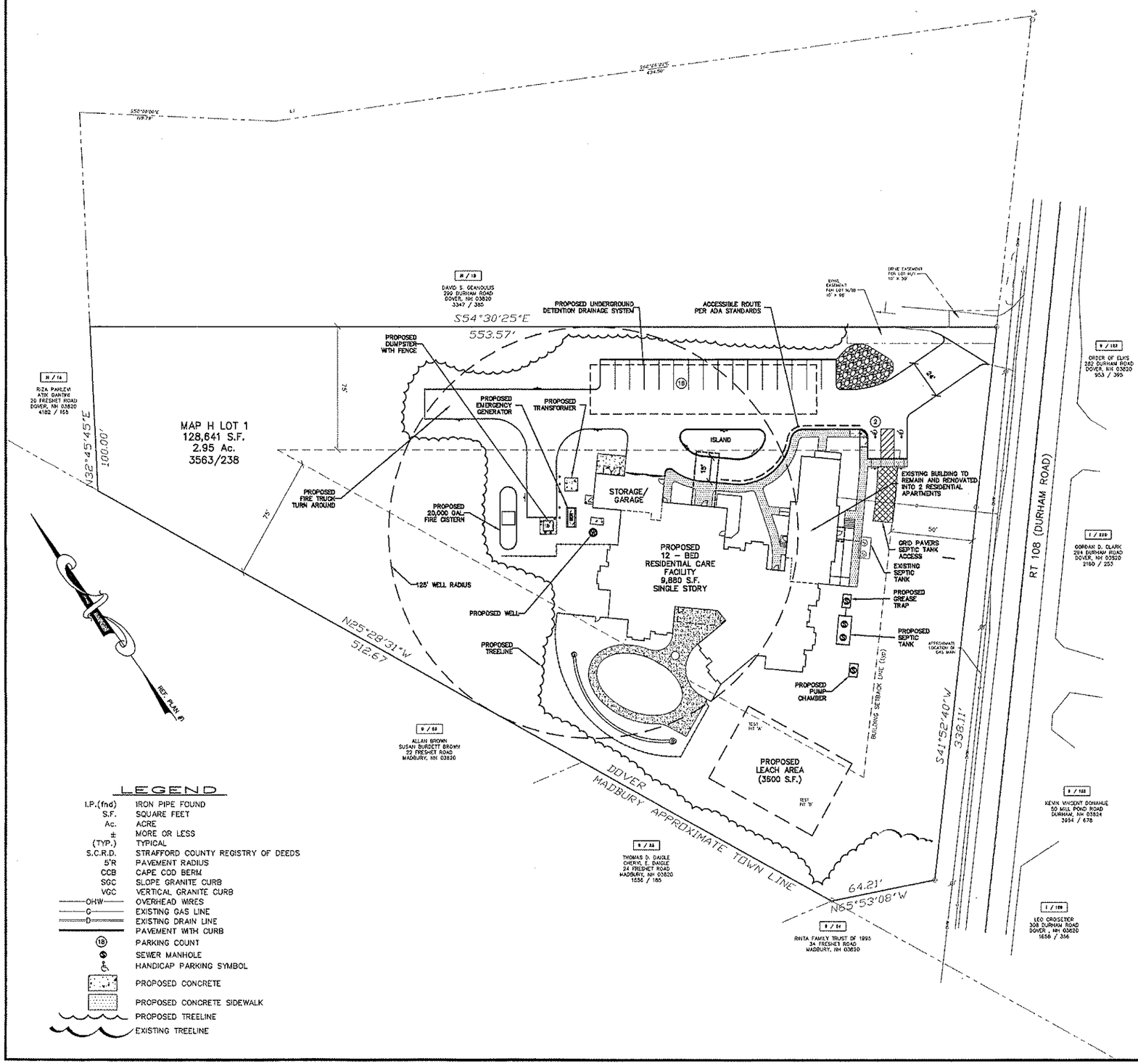
GRAPHIC SCALE

30 0 15 30 60 120
( IN FEET )

1430-SITE.DWG

civilworks
engineers•surveyors
P.O. Box 1166
Dover, NH 603-749-0443

DESIGN: DCL
SCALE: AS SHOWN
DATE: 7-9-2015
SHEET: 2 OF 19
PROJECT #14102




## LEGEND

| | |
|---|---|
| I.P.(fnd) | IRON PIPE FOUND |
| S.F. | SQUARE FEET |
| Ac. | ACRE |
| ± | MORE OR LESS |
| (TYP.) | TYPICAL |
| S.C.R.D. | STRAFFORD COUNTY REGISTRY OF DEEDS |
| 5'R | PAVEMENT RADIUS |
| CCB | CAPE COD BERM |
| SGC | SLOPE GRANITE CURB |
| VGC | VERTICAL GRANITE CURB |
| OHW | OVERHEAD WIRES |
| G | EXISTING GAS LINE |
| D | EXISTING DRAIN LINE |
| | PAVEMENT WITH CURB |
| (18) | PARKING COUNT |
| | SEWER MANHOLE |
| | HANDICAP PARKING SYMBOL |
| | PROPOSED CONCRETE |
| | PROPOSED CONCRETE SIDEWALK |
| | PROPOSED TREELINE |
| | EXISTING TREELINE |

**SITE NOTES:**

1. THE INTENT OF THIS PLAN IS TO SHOW SITE IMPROVEMENTS ASSOCIATED WITH CONSTRUCTION OF A 9,880 S.F. ELDERLY ASSISTED CARE HOME FOR 12 RESIDENTS WITH TWO (2) ACCESSORY APARTMENTS, FOR STAFF ONLY CONTAINED WITHIN THE EXISTING STRUCTURE.
2. OWNER OF RECORD:
   REAL MCKOY PROPERTIES, LLC
   P.O. BOX 1727
   DOVER, NH 03821
   SCRD: BOOK 3563 PAGE 238
3. THE PARCEL IS SHOWN AS LOT 1 ON MAP H OF THE CITY OF DOVER AX ASSESSOR'S MAPS.
4. THE PROJECT PARCEL CONTAINS 2.95 ACRES OR 128,641 SF.
5. THE PARCEL IS LOCATED IN THE B-4, HOTEL/RETAIL DISTRICT AND IS SUBJECT TO THE FOLLOWING ZONING DIMENSIONAL AND DENSITY REQUIREMENTS:

| | REQUIRED | PROVIDED | |
|---|---|---|---|
| MINIMUM LOT SIZE | 5 ACRES | 2.95 ACRES | |
| MINIMUM FRONTAGE | 400 FT | 338.11 FT | |
| MINIMUM YARD SETBACKS | | | |
| FRONT | 50 FT | ±81 FT | |
| SIDE | 75 FT | ±78 FT | |
| REAR | 75 FT | ±420 FT | |
| MAXIMUM LOT COVERAGE | 33% | 10% | |
| MAXIMUM BUILDING HEIGHT | 55 FT | 31 FT | |

6. LAND USE CALCULATIONS

| | REQUIRED | EXISTING(%) | PROPOSED(%) |
|---|---|---|---|
| BUILDINGS | 33% (MAX) | 2,570 SF (2%) | 12,450 SF (9.6%) |
| PAVEMENT/SIDEWALKS | 33% (MAX) | 11,677 SF (9%) | 18,145 SF (14%) |
| GREEN SPACE | 33% (MIN) | 114,890 SF (89%) | 98,841 SF (77%) |

7. PARKING REQUIREMENTS PER CHAPTER 149-14.C(1)
   ELDERLY CAR: 12 UNITS; 0.5 SPACES/UNITS = 6 SPACES
   EMPLOYEES: 8 (MAX.SHIFT); 1 SPACE/EMPL = 8 SPACES
   APARTMENTS: 2 APARTMENT; 1.9 SPACES/UNIT = 4 SPACES
   TOTAL REQUIRED: 18 SPACES
   TOTAL PROVIDED: 18 SPACES (16 STANDARD AND 2 ACCESSIBLE)

**REFERENCE PLANS:**

1. EXISTING CONDITIONS PLAN, PREPARED FOR REAL MCKOY PROPERTIES LLC, TAX MAP H, LOT 1, 301 DURHAM ROAD, CITY OF DOVER, COUNTY OF STRAFFORD, STATE OF NEW HAMPSHIRE, SCALE: 1"=30', DATED: APRIL 2015, PREPARED BY McENEANEY SURVEY ASSOCIATES, INC., P.O. BOX 681 - 24 CHESTNUT STREET, DOVER NH 03820 (603) 742-0911.

PLANNING FILE NO.: P15-38

| No. | DATE | BY | REVISION |
|---|---|---|---|

# OVERALL SITE PLAN

## JOHNSON CREEK VILLAGE CARE HOME
## TAX MAP H, LOT 1
## DOVER, NEW HAMPSHIRE

GRAPHIC SCALE

30 0 15 30 60 120

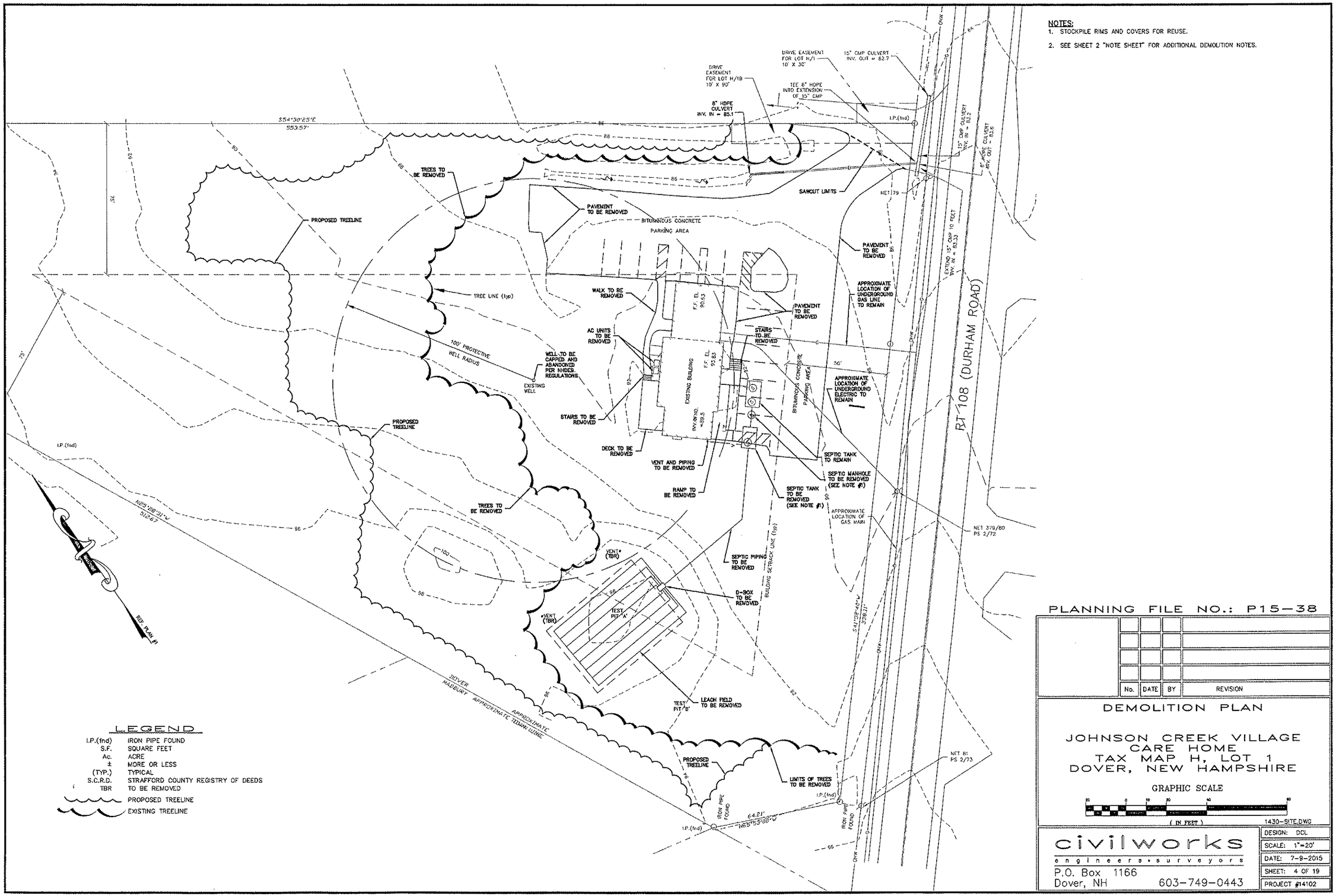
( IN FEET )

1430-SITE.DWG

civilworks
engineers • surveyors
P.O. Box 1166
Dover, NH 603-749-0443

DESIGN: DCL
SCALE: 1"=30'
DATE: 7-9-2015
SHEET: 3 OF 19
PROJECT #14102

NOTES:
1. STOCKPILE RIMS AND COVERS FOR REUSE.
2. SEE SHEET 2 "NOTE SHEET" FOR ADDITIONAL DEMOLITION NOTES.




LEGEND

| | |
|---|---|
| I.P.(fnd) | IRON PIPE FOUND |
| S.F. | SQUARE FEET |
| Ac. | ACRE |
| ± | MORE OR LESS |
| (TYP.) | TYPICAL |
| S.C.R.D. | STRAFFORD COUNTY REGISTRY OF DEEDS |
| TBR | TO BE REMOVED |
| | PROPOSED TREELINE |
| | EXISTING TREELINE |

PLANNING FILE NO.: P15-38

| No. | DATE | BY | REVISION |
|---|---|---|---|
| | | | |

# DEMOLITION PLAN

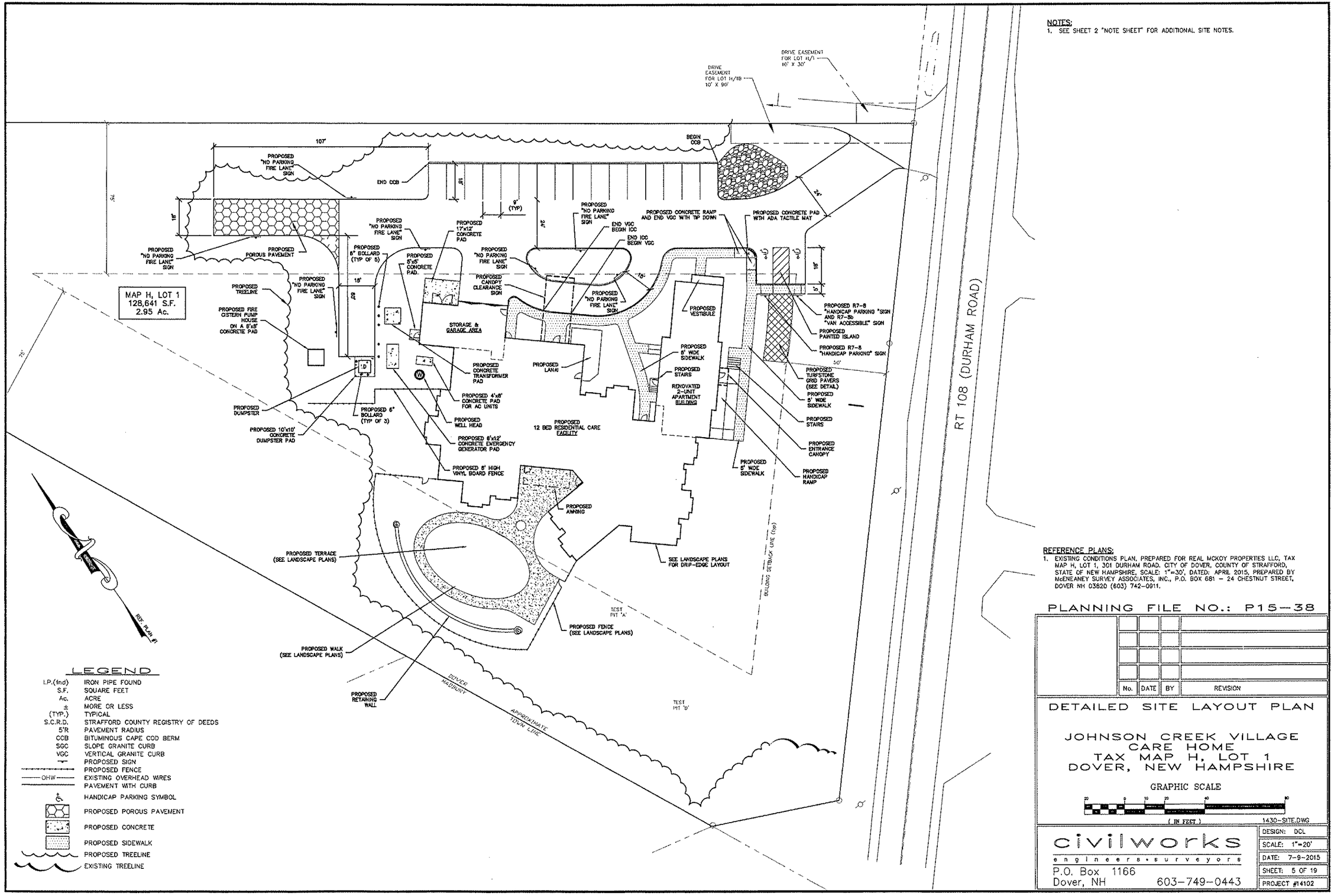
## JOHNSON CREEK VILLAGE CARE HOME
## TAX MAP H, LOT 1
## DOVER, NEW HAMPSHIRE

GRAPHIC SCALE

( IN FEET ) 1430-SITE.DWG

civilworks
engineers • surveyors
P.O. Box 1166
Dover, NH 603-749-0443

| | |
|---|---|
| DESIGN: | DCL |
| SCALE: | 1"=20' |
| DATE: | 7-9-2015 |
| SHEET: | 4 OF 19 |
| PROJECT #14102 | |




## LEGEND

| | |
|---|---|
| I.P.(fnd) | IRON PIPE FOUND |
| S.F. | SQUARE FEET |
| Ac. | ACRE |
| ± | MORE OR LESS |
| (TYP.) | TYPICAL |
| S.C.R.D. | STRAFFORD COUNTY REGISTRY OF DEEDS |
| 5'R | PAVEMENT RADIUS |
| CCB | BITUMINOUS CAPE COD BERM |
| SGC | SLOPE GRANITE CURB |
| VGC | VERTICAL GRANITE CURB |
| | PROPOSED SIGN |
| | PROPOSED FENCE |
| -OHW- | EXISTING OVERHEAD WIRES |
| | PAVEMENT WITH CURB |
| | HANDICAP PARKING SYMBOL |
| | PROPOSED POROUS PAVEMENT |
| | PROPOSED CONCRETE |
| | PROPOSED SIDEWALK |
| | PROPOSED TREELINE |
| | EXISTING TREELINE |

NOTES:
1. SEE SHEET 2 "NOTE SHEET" FOR ADDITIONAL SITE NOTES.

REFERENCE PLANS:
1. EXISTING CONDITIONS PLAN, PREPARED FOR REAL MCKOY PROPERTIES LLC, TAX MAP H, LOT 1, 301 DURHAM ROAD. CITY OF DOVER, COUNTY OF STRAFFORD, STATE OF NEW HAMPSHIRE, SCALE: 1"=30', DATED: APRIL 2015, PREPARED BY McENEANEY SURVEY ASSOCIATES, INC., P.O. BOX 681 – 24 CHESTNUT STREET, DOVER NH 03820 (603) 742-0911.

PLANNING FILE NO.: P15-38

| No. | DATE | BY | REVISION |
|---|---|---|---|
| | | | |

# DETAILED SITE LAYOUT PLAN

## JOHNSON CREEK VILLAGE CARE HOME
## TAX MAP H, LOT 1
## DOVER, NEW HAMPSHIRE

GRAPHIC SCALE
20 0 10 20 40 80
( IN FEET )

1430-SITE.DWG

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engineers • surveyors
P.O. Box 1166
Dover, NH 603-749-0443

| | |
|---|---|
| DESIGN: | DCL |
| SCALE: | 1"=20' |
| DATE: | 7-9-2015 |
| SHEET: | 5 OF 19 |
| PROJECT #1410 | |

NOTES:
1. SEE ARCHITECTURAL DRAWING FOR STAIR, RAMP AND PORCH DETAILS.
2. SEE LANDSCAPE PLAN FOR LANDSCAPE & HARDSCAPE DETAILS.
3. SEE SHEET 2 "NOTE SHEET" FOR ADDITIONAL GRADING & DRAINAGE NOTES.

MAP H, LOT 1
128,641 S.F.
2.95 Ac.

BT 108 (DURHAM ROAD)

LEGEND

| | |
|---|---|
| I.P.(fnd) | IRON PIPE FOUND |
| S.F. | SQUARE FEET |
| Ac. | ACRE |
| ± | MORE OR LESS |
| (TYP.) | TYPICAL |
| S.C.R.D. | STRAFFORD COUNTY REGISTRY OF DEEDS |
| x 92.00 | EXISTING SPOT GRADE |
| --94-- | EXISTING GRADE |
| 92 | PROPOSED FINISH GRADE |
| x 92.00 | PROPOSED SPOT GRADE |
| PUD | PROPOSED UNDERDRAIN LINE |
| PD | PROPOSED DRAIN LINE |
| | PAVEMENT WITH CURB |
| | SILT BARRIER |
| | PROPOSED CATCHBASIN |
| | INLET PROTECTION |
| | HANDICAP PARKING SYMBOL |
| | PROPOSED POROUS PAVEMENT |
| | PROPOSED CONCRETE |
| | PROPOSED SIDEWALK |
| | PROPOSED TREELINE |
| | EXISTING TREELINE |

PLANNING FILE NO.: P15-38

| No. | DATE | BY | REVISION |
|---|---|---|---|

GRADING PLAN

JOHNSON CREEK VILLAGE
CARE HOME
TAX MAP H, LOT 1
DOVER, NEW HAMPSHIRE

GRAPHIC SCALE
30 0 10 20 40 60
( IN FEET )

civilworks
engineers • surveyors
P.O. Box 1166
Dover, NH 603-749-0443

1430-SITE.DWG
DESIGN: DCL
SCALE: 1"=20'
DATE: 7-9-2015
SHEET: 6 OF 19
PROJECT #14102

NOTES:
1. SEE SHEET 2 "NOTE SHEET" FOR ADDITIONAL UTILITY NOTES.
2. UNDERGROUND FIRE SUPPRESSION SUPPLY LINE TO BUILDING SHALL BE FLUSHED PRIOR TO CONNECTION ACTIVATION OF SYSTEM.

MAP H, LOT 1
128,641 S.F.
2.95 Ac.

DRIVE EASEMENT FOR LOT H/1 10' X 30'
DRIVE EASEMENT FOR LOT H/1B 10' X 90'
TEE 8" HDPE INTO EXTENSION OF 15" CMP
15" CMP CULVERT INV. OUT = 82.7
15" CMP CULVERT INV. IN = 83.2
8" HDPE CULVERT INV. OUT = 83.6
EXTEND 15" CMP 10 FEET INV. IN = 83.3
NET 79
RT 108 (DURHAM ROAD)
PROPOSED FIRE DEPARTMENT STORTZ CONNECTION
STORAGE & GARAGE AREA
PROPOSED 20,000 GAL FIRE CISTERN
PROPOSED CISTERN PUMP HOUSE
PROPOSED CISTERN FILL LINE
PROPOSED FIRE SERVICE
PROPOSED WELL
PROPOSED WATER LINE
PROPOSED CISTERN LINES
12 BED PROPOSED RESIDENTIAL CARE FACILITY
RENOVATED 2-UNIT APARTMENT BUILDING
EXISTING SEPTIC TANK
INV.=88.55
PROPOSED 1,000 GAL GREASE TRAP
INV.=88.90
INV.=88.4
INV.=88.3
PROPOSED 3,500 GAL SEPTIC TANK
INV.=88.65
INV.=88.3
INV.=87.90
PROPOSED 1,000 GAL PUMP TANK
INV.=88.05
BUILDING SETBACK LINE (TYP.)
PROPOSED 2" FORCE MAIN
125 FT PROTECTIVE WELL RADIUS
TEST PIT 'A'
TEST PIT 'B'
PROPOSED LEACH FIELD 3800 S.F.
PROPOSED DISTRIBUTION BOX
APPROXIMATE LOCATION OF GAS MAIN
NET 379/80 PS 2/72
NET 81 PS 2/73
DOVER
MADBURY
APPROXIMATE TOWN LINE
REF PLAN #1

## LEGEND

| | |
|---|---|
| I.P.(fnd) | IRON PIPE FOUND |
| S.F. | SQUARE FEET |
| Ac. | ACRE |
| ± | MORE OR LESS |
| (TYP.) | TYPICAL |
| S.C.R.D. | STRAFFORD COUNTY REGISTRY OF DEEDS |
| | PROPOSED SIGN |
| OHW | OVERHEAD WIRES |
| G | EXISTING GAS |
| PG | PROPOSED GAS |
| PW | PROPOSED WATER |
| PUGU | PROPOSED UNDERGROUND UTILITIES |
| | PROPOSED FENCE |
| E | EXISTING ELECTRIC |
| PE | PROPOSED ELECTRIC |
| PD | PROPOSED DRAIN LINE |
| PUD | PROPOSED UNDERDRAIN LINE |
| FS | PROPOSED FIRE SERVICE |
| | PAVEMENT WITH CURB |
| | SILT BARRIER |
| | PROPOSED CATCHBASIN |
| | HANDICAP PARKING SYMBOL |
| | PROPOSED CONCRETE |
| | PROPOSED SIDEWALK |
| | PROPOSED TREELINE |
| | EXISTING TREELINE |

PLANNING FILE NO.: P15-38

| No. | DATE | BY | REVISION |
|---|---|---|---|

UTILITY PLAN

JOHNSON CREEK VILLAGE
CARE HOME
TAX MAP H, LOT 1
DOVER, NEW HAMPSHIRE

GRAPHIC SCALE
20 0 10 20 40 80
( IN FEET )

1430-SITE.DWG

civilworks
engineers • surveyors
P.O. Box 1166
Dover, NH 603-749-0443

DESIGN: DCL
SCALE: 1"=20'
DATE: 7-9-2015
SHEET: 7 OF 19
PROJECT #14102

## DESCRIPTION

THE INTENT OF THIS PLAN IS TO SHOW SITE IMPROVEMENTS ASSOCIATED WITH CONSTRUCTION OF A 9,880 S.F. ELDERLY ASSISTED CARE HOME FOR 12 RESIDENTS WITH TWO (2) ACCESSORY APARTMENTS. FOR STAFF ONLY CONTAINED WITHIN THE EXISTING STRUCTURE.

## PROJECT NAME AND LOCATION

REAL MCKOY PROPERTIES, LLC.
P.O. BOX 1727
Dover, NH 03821

LATITUDE N43°09'43"
LONGITUDE W70°53'43"

## DISTURBED AREA

±76,110 square feet

## SEQUENCE OF MAJOR ACTIVITIES

1. Contractor shall prepare the SWPPP and obtain the NOI a minimum of 2 weeks prior to commencement of site work.
2. Place temporary erosion and sediment control BMP's
3. All erosion control and perimeter controls shall be installed prior to commencing earth moving operations.
4. Selective demolition of existing structures and utilities
5. Clear and grub vegetated areas and regrade site to subgrade
6. Install drainage control structures and swales
7. Install underground utilities and foundations for structures
8. Place gravels and fine grade
9. Swales and ponds (as applicable) shall be constructed early on in the construction sequence and before rough grading of the site and all ditched and swales shall be stabilized prior to directing runoff to them.
10. Stabilize, roadways & parking lots within 72 hours of achieving finished grade.
11. all cut and fill slopes shall be loamed and seeded (as applicable) within 72 hours of achieving finish grade.
12. All erosion control measures shall be inspected at least weekly and after every 1/4" of rainfall.
13. In all cases the smallest practical area shall be disturbed during construction and in NO case shall exceed 5 acres at any one time before disturbed areas are stabilized. All disturbed areas shall be stabilized within 14 days of initial disturbance.
14. When all site work is complete and all disturbed areas are stabilized remove all temporary erosion control measures and file the EPA – N.O.T.

## DEFINITIONS

An area shall be considered stable of one of the following has occurred.

1. Base course gravels have been installed in areas to be paved
2. A minimum of 85% vegetated growth has been established
3. A minimum of 3" of non-erosive material such as stone or rip-rap has been installed; or
4. Erosion control blankets have been properly installed

## INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES OF EROSION AND SEDIMENT CONTROLS

A. GENERAL

These are the general inspection and maintenance practices that will be used to implement the plan.

- All ditches and swales shall be stabilized prior to directing runoff to them.
- The smallest practical portion of the site will be denuded at one time.
- All control measures will be inspected at least once each week and following any storm event of 1/2 inch or greater.
- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of report.
- Built up sediment will be removed from silt fence or check dams when it has reached one third the height of the fence or dam.
- All diversion dikes will be inspected and any breaches promptly repaired.
- Temporary seeding and planting will be inspected for bare spots, washouts, and unhealthy growth.
- A maintenance inspection report will be made after each inspection.
- A representative of the owner, will be responsible for inspections, maintenance and repair activities, and filling out the inspection and maintenance report.
- All areas shall be stabilized within 72 hours of achieving finish grade

B. FILTERS

1. Silt Fence
   a. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester or ethylene yarn and shall be certified by the manufacturer or supplier as conforming to the following requirements:

| Physical Property | Test | Requirements |
|---|---|---|
| Filtering Efficiency | VTM-51 | 75% minimum |
| Tensile Strength at 20% Maximum Elongation* | VTM-52 | Extra Strength 50 lb/in in (min) |
| Standard Strength 30 lb/in in (min) | | |
| Flow Rate | VTM-51 | 0.3 gal/sf/min (min) |

   * Requirements reduced by 50 percent after six (6) months of installation.

   Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six (6) months of expected usable construction life at a temperature range of 0 degrees F to 120 Degrees F.

   b. The height of a silt fence shall not exceed thirty-six (36) inches.
   c. The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are necessary, filter cloth shall be spliced together only at support post, with a minimum six (6) inch overlap, and securely sealed.
   d. Posts shall be spaced a maximum of ten (10) feet apart at the barrier location and driven securely into the ground (minimum of 12 inches). When extra strength fabric is used without the wire support fence, post spacing shall not exceed 6 feet.
   e. Posts for silt fences shall be 2-inch diameter wood with a minimum length of 5 feet.
   f. Wire fence reinforcement for silt fences using standard strength filter cloth shall be a minimum of 42 inches in height, a minimum of 14 gauge and shall have a maximum mesh spacing of 6 inches.
   g. A trench shall be excavated approximately four (4) inches wide and four (4) inches deep along the line of posts and upslope from the barrier.
   h. When standard strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least one (1) inch long, tie wires or hog rings. The wire shall extend no more than 36 inches above the original ground surfaces.
   i. The "standard strength" filter fabric shall be stapled or wired to the fence, and eight (8) inches of the fabric shall be extended into the trench. The fabric shall not extend more than 36 inches above the original ground surface. Filter fabric shall not be stapled to existing trees.
   j. When extra strength filter fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case, the filter fabric is stapled or wired directly to the posts with all other provisions of item (i) applying.
   k. The trench shall be backfilled and the soil compacted over the filter fabric.
   l. Silt fences shall be removed when they have served their useful purpose, but not before the upslope areas has been permanently stabilized.
2. Sequence of Installation
   Sediment barriers shall be installed prior to any soil disturbance of the contributing drainage area above them.
3. Maintenance
   a. Check dams and silt fence barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. They shall be repaired if there are any signs of erosion or sedimentation below them. Any required repairs shall be made immediately. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind them, sediment barriers shall be replaced with a temporary check dam.
   b. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier still is necessary, the fabric shall be replaced promptly.
   c. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately one third (1/3) the height of the barrier.
   d. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform with the existing grade, prepared and seeded.

C. MULCHING

1. Timing
   In order for mulch to be effective, it must be in place prior to major storm events. There are two (2) types of standards which shall be used to assure this.
   a. Apply mulch prior to any storm event. It will be necessary to closely monitor weather predictions, usually by contacting the National Weather Service in Concord, to have adequate warning of significant storms.
   b. Required Mulching within a specified time period. The time period can range from 14 to 21 days of inactivity on a area, the length of time varying with site conditions. Professional judgement shall be used to evaluate the interaction of site conditions (soil erodibility, season of year, extent of disturbance, proximity to sensitive resources, etc.) and the potential impact of erosion on adjacent areas to choose an appropriate time restriction.
2. Application Rate
   Mulch shall be applied at a rate of between 1.5 to 2 tons per acre, or 90 to 100 pounds per 1000 square feet.
3. Guidelines for Winter Mulch Application. When mulch is applied to provide protection over winter (past the growing season) it shall be at a rate of 6,000 pounds of hay or straw per acre. A tackifier may be added to the mulch.
4. Maintenance All mulches must be inspected periodically, in particular after rainstorms, to check for rill erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied.
5. Excelsior Matting Excelsior Matting shall be used in place of mulch on all slopes steeper than 3:1.

D. TEMPORARY GRASS COVER

1. Seedbed Preparation
   Apply fertilizer at the rate of 600 pounds per acre of 10-10-10. Apply limestone (equivalent to 50 percent calcium plus magnesium oxide) at a rate of three (3) tons per acre.
2. Seeding
   a. Utilize annual rye grass at a rate of 40 lbs/acre.
   b. Where the soil has been compacted by construction operations, loosen soil to a depth of two (2) inches before applying fertilizer, lime and seed.
   c. Apply seed uniformly by hand, cyclone seeder, or hydroseeder (slurry including seed and fertilizer). Hydroseedings, which include mulch, may be left on soil surface. Seeding rates must be increased 10% when hydroseeding.
3. Maintenance
   Temporary seedings shall be periodically inspected. At a minimum, 95% of the soil surface should be covered by vegetation. If any evidence of erosion or sedimentation is apparent, repairs shall be made and other temporary measures used in the interim (mulch, filter barriers, check dams, etc.).

E. PERMANENT SEEDING

1. Bedding – stones larger than 1 ½ ", trash, roots, and other debris interfere with seeding and future maintenance of the area should be removed. Where feasible, the soil should be tilled to a depth of 4" to prepare a seedbed and mix fertilizer into the soil.
2. Fertilizer – lime and fertilizer should be applied evenly over the area prior to or at the time of seeding and incorporated into the soil. Kinds and amounts of lime and fertilizer should be based on an evaluation of soil tests. When a soil test is not available, the following minimum amounts should be applied:

   Agricultural Limestone @ 100 lbs. per 1,000 s.f.
   10-20-20 fertilizer @ 12 lbs. per 1,000 s.f.
3. Seed Mixture (recommended)

| Rate: Type | LBS. per Acre | LBS. per 1,000 s.f. |
|---|---|---|
| Tall Fescue | 20 | 0.45 |
| Creeping Red Fescue | 20 | 0.45 |
| Birdsfoot Trefoil | 8 | 0.20 |
| Total | 48 | 1.10 |

4. Sodding – sodding is done where it is desirable to rapidly establish cover on a disturbed area. Sodding on area may be substituted for permanent seeding procedures anywhere on site. Bed preparation, fertilizing, and placement of sod shall be performed according to the S.C.S. Handbook.

   Sodding is recommended for steep sloped areas, areas immediately adjacent to sensitive water courses, easily erodible soils (fine sand/silt) etc.
5. Provide a minimum of 4 inches (5 inches loose) of topsoil to all areas to be seeded.

F. STORM DRAIN INLET PROTECTION

1. Straw/Hay Bale Inlet Structure
   a. Bales shall be either wire bound or string tied with the bindings oriented around the sides rather than over and under the bales.
   b. Bales shall be placed lengthwise in a single row surrounding the inlet with the ends of adjacent bales pressed together.
   c. The filter barrier shall be entrenched and backfilled. A trench shall be excavated around the inlet the width of bale to a minimum depth of four (4) inches. After the bales are staked, the excavated soil shall be backfilled and compacted against the filter barrier.
   d. Each bale shall be securely anchored and held in place by at least two (2) stakes or rebars driven through the bale.
   e. Loose straw/hay shall be wedged between bales to prevent water from entering between bales.
   f. All structures should be inspected after every rainstorm and repairs made as necessary.
   g. Sediment should be removed from the devices after the sediment has reached a maximum of one-third the depth of the trap.
   h. Haybales should be removed and the area repaired as soon as the contributing drainage area to the inlet has been completely stabilized.

## TIMING OF CONTROLS/MEASURES

As indicated in the sequence of Major Activities the silt fences shall be installed prior to commencing any clearing or grading of the site. Structural controls shall be installed concurrently with the applicable activity. Areas where construction activity temporarily ceases for more than twenty one (21) days will be stabilized with a temporary seed and mulch within fourteen (14) days of the last disturbance. Once construction activity ceases permanently in an area, silt fences and any earth/dikes will be removed once permanent measures are established. All areas shall be stabilized within 72 hours of achieving finish grade.

## WASTE DISPOSAL

A. WASTE MATERIALS

All waste materials will be collected and stored in securely lidded receptacles. All trash and construction debris from the site will be deposited in a dumpster. No construction waste materials will be buried on site. All personnel will be instructed regarding the correct procedure for waste disposal by the superintendent.

B. HAZARDOUS WASTE

All hazardous waste materials will be disposed of in the manner specified by local or state regulation or by the manufacturer. Site personnel will be instructed in these practices by the superintendent.

C. SANITARY WASTE

All sanitary waste will be collected from the portable units a minimum of once per week by a licensed sanitary waste management contractor.

## SPILL PREVENTION

A. MATERIAL MANAGEMENT PRACTICES

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances during construction to stormwater runoff:

Good Housekeeping:

The following good housekeeping practices will be followed on site during the construction project:

- An effort will be made to store only sufficient amounts of products to do the job.
- All materials stored on site will be stored in a neat, orderly manner in their proper (original if possible) containers and, if possible, under a roof or other enclosure.
- Manufacturer's recommendations for proper use and disposal will be followed.
- The site superintendent will inspect daily to ensure proper use and disposal of materials.
- Substances will not be mixed with one another unless recommended by the manufacturer.
- Whenever possible all of a product will be used up before disposing of the container.

Hazardous Products:

The following practices will be used to reduce the risks associated with hazardous materials:

- Products will be kept in their original containers unless they are not resealable.
- Original labels and material safety data will be retained for important product information.
- Surplus product that must be disposed of will be discarded according to the manufacturer's recommended methods of disposal.

B. PRODUCT SPECIFICATION PRACTICES

The following product specific practices will be followed on site:

Petroleum Products:

All on site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Any asphalt based substances used on site will be applied according to the manufacturer's recommendations.

Fertilizers:

Fertilizers used will be applied only in the minimum amounts directed by the specifications. Once applied fertilizer will be worked into the soil to limit exposure to stormwater. Storage will be in a covered shed or enclosed trailers. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

Paints:

All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be disposed of properly according to manufacturer's instructions or state and local regulations.

Concrete Trucks:

Concrete trucks will discharge and wash out surplus concrete or drum wash water in a contained area on site.

C. SPILL CONTROL PRACTICES

In addition to good housekeeping and material management practices discussed in the previous section the following practices will be followed for spill prevention and cleanup:

- Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area on site. Equipment and materials will include but not be limited to brooms, dustpans, mops, rags, gloves, goggles, kitty litter, sand, sawdust and plastic or metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the appropriate state or local government agency, regardless of the size.
- The spill prevention plan will be adjusted to include measures to prevent this type of spill from recurring and how to cleanup the spill if it recurs. A description of the spill, its cause, and the cleanup measures will be included.
- The site superintendent responsible for day-to-day site operations will be the spill prevention and cleanup coordinator.

## MAINTENANCE OF STORMWATER MANAGEMENT FACILITIES

The project proponent is responsible for the maintenance of all stormwater facilities during construction and the property owner is responsible after construction is complete.

## CATCH BASINS & STORMWATER TREATMENT STRUCTURES

1. Catch basins & Stormwater treatment structures should be inspected on a monthly basis and/or after a major rainfall event to assure that debris or sediments do not reduce the effectiveness of the system.

## WINTER CONSTRUCTION NOTES

1. All proposed post-development vegetated areas which do not exhibit a minimum of 85 % vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized by seeding and installing erosion control blankets on slopes greater than 3:1, and seeding and placing 3 to 4 tons of mulch per acre, secured with anchored netting, elsewhere. The placement of erosion control blankets or mulch and netting shall not occur over accumulated snow or on frozen ground and shall be completed in advance of thaw or spring melt.
2. All slopes which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th shall be stabilized with stone or erosion control blankets.
3. After October 15th, incomplete road surfaces shall be protected with a minimum of 3-inches of crushed gravel per NHDOT Item 403.3, or if construction is to continue through the winter season be cleared of any accumulated snow after each storm event.

The project proponent is required to manage construction to meet the requirements of AGR 3800 relative to controlling invasive species and controlling fugitive dust in accordance with ENV-A 1002.
AGR 3800 Prohibited Invasive Plant Species Rules

The rule, Agr 3800, states : "No person shall collect, transport, import, export, move, buy, sell, distribute, propagate or transplant any living and viable portion of any plant species, which includes all of their cultivars and variaties, listed in Table 3800.1, New Hampshire prohibited invasive species list". A complete copy of the rules can be accessed on the internet at http://agriculture.nh.gov/topics/plants_insects.htm.

Env-A 1002 FUGITIVE DUST: Precautions to Prevent, Abate, and Control Fugitive Dust.
(a) Any person engaged in any activity within the state that emits fugitive dust, other than those listed in Env-A 1002.02(b), shall take precautions throughout the duration of the activity in order to prevent, abate, and control the emission of fugitive dust.

(b) Precautions required by (a), above, shall include but not be limited to the following:

(1) The use of water or hydrophilic material on operations or surfaces, or both;

(2) The application of asphalt, water or hydrophilic material, or tarps or other such covers to material stockpiles;

(3) The use of hoods, fans, fabric filters, or other devices to enclose and vent areas where materials prone to producing fugitive dust are handled;

(4) The use of containment methods for sandblasting or similar operations; and

(5) The use of vacuums or other suction devices to collect airborne particulate matter.

BLASTING

1) All activities associated with blasting need to be optimized to prevent the release of chemicals associated with blasting activities to the environment.
2) Identify drinking water wells located within 2000 feet of the proposed blasting activities. Develop a groundwater quality sampling program to monitor for nitrate and nitrite either in the drinking water supply wells or in other wells that are representative of the drinking water supply wells in the area. The plan must include pre and post blast water quality monitoring and be approved by NHDES prior to initiating blasting. The groundwater sampling program must be implemented once approved by NHDES.
3) The following Best Management Procedures for blasting shall be complied with:
   (1) Loading practices. The following blasthole loading practices to minimize environmental effects shall be followed:
      (a) Drilling logs shall be maintained by the driller and communicated directly to the blaster. The logs shall indicate depths and lengths of voids, cavities, and fault zones or other weak zones encountered as well as groundwater conditions.
      (b) Explosive products shall be managed on-site so that they are either used in the borehole, returned to the delivery vehicle, or placed in secure containers for off-site disposal.
      (c) Spillage around the borehole shall either be placed in the borehole or cleaned up and returned to an appropriate vehicle for handling or placement in secured containers for off-site disposal.
      (d) Loaded explosives shall be detonated as soon as possible and shall not be left in the blasthloles overnight, unless weather or other safety concerns reasonably dictate that detonation should be postponed.
      (e) Loading equipment shall be cleaned in an area where wastewater can be properly contained and handled in a manner that prevents release of contaminants to the environment.
      (f) Explosives shall be loaded to maintain good continuity in the column load to promote complete detonation. Industry accepted loading practices for priming, stemming, decking and column rise need to be attended to.
   (2) Explosive Selection. The following BMPs shall be followed to reduce the potential for groundwater contamination when explosives are used:
      (a) Explosive products shall be selected that are appropriate for site conditions and safe blast execution.
      (b) Explosive products shall be selected that have the appropriate water resistance for the site conditions present to minimize the potential for hazardous affect of the product upon groundwater.
   (3) Prevention of Misfires. Appropriate practices shall be developed and implemented to prevent misfires.
   (4) Muck Pile Management. Muck piles (the blasted pieces of rock) and rock piles shall be managed in a manner to reduce the potential for contamination by implementing the following measures:
      (a) Remove the muck pile from the blast area as soon as reasonably possible.
      (b) Manage the interaction of blasted rock piles and stormwater to prevent contamination of water supply wells or surface water.
   (5) Spill Prevention Measures and Spill Mitigation. Spill prevention and spill mitigation measures shall be implemented to prevent the release of fuel and other related substances to the environment. The measures shall include at a minimum:
      (a) The fuel storage requirements shall include:
         1. Storage of regulated substances on an impervious surface;
         2. Secure storage areas against unauthorized entry;
         3. Label regulated containers clearly and visibly;
         4. Inspect storage areas weekly;
         5. Cover regulated containers in outside storage areas;
         6. Wherever possible, keep regulated containers that are stored outside more than 50 feet from surface water and storm drains, 75 feet from private wells, and 400 feet from public wells; and
         7. Secondary containment is required for containers containing regulated substances stored outside, except for on premise use heating fuel tanks, or aboveground or underground storage tanks otherwise regulated.
      (b) The fuel handling requirements shall include:
         1. Except when in use, keep containers containing regulated substances closed and sealed;
         2. Place drip pans under spigots, valves, and pumps;
         3. Have spill control and containment equipment readily available in all work areas;
         4. Use funnels and drip pans when transferring regulated substances; and
         5. Perform transfers of regulated substances over an impervious surface.
      (c) The training of on-site employees and the on-site posting of release response information describing what to do in the event of a spill of regulated substances.
      (d) Fueling and maintenance of excavation, earthmoving and other construction related equipment will comply with the regulations of the New Hampshire Department of Environmental Services [note these requirements are summarized in WD-DWGB-22-6 Best Management Practices for Fueling and Maintenance of Excavation and Earthmoving Equipment" or its successor document. (see <http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/documents/dwgb-22-6.pdf>

PLANNING FILE NO.: P15-38

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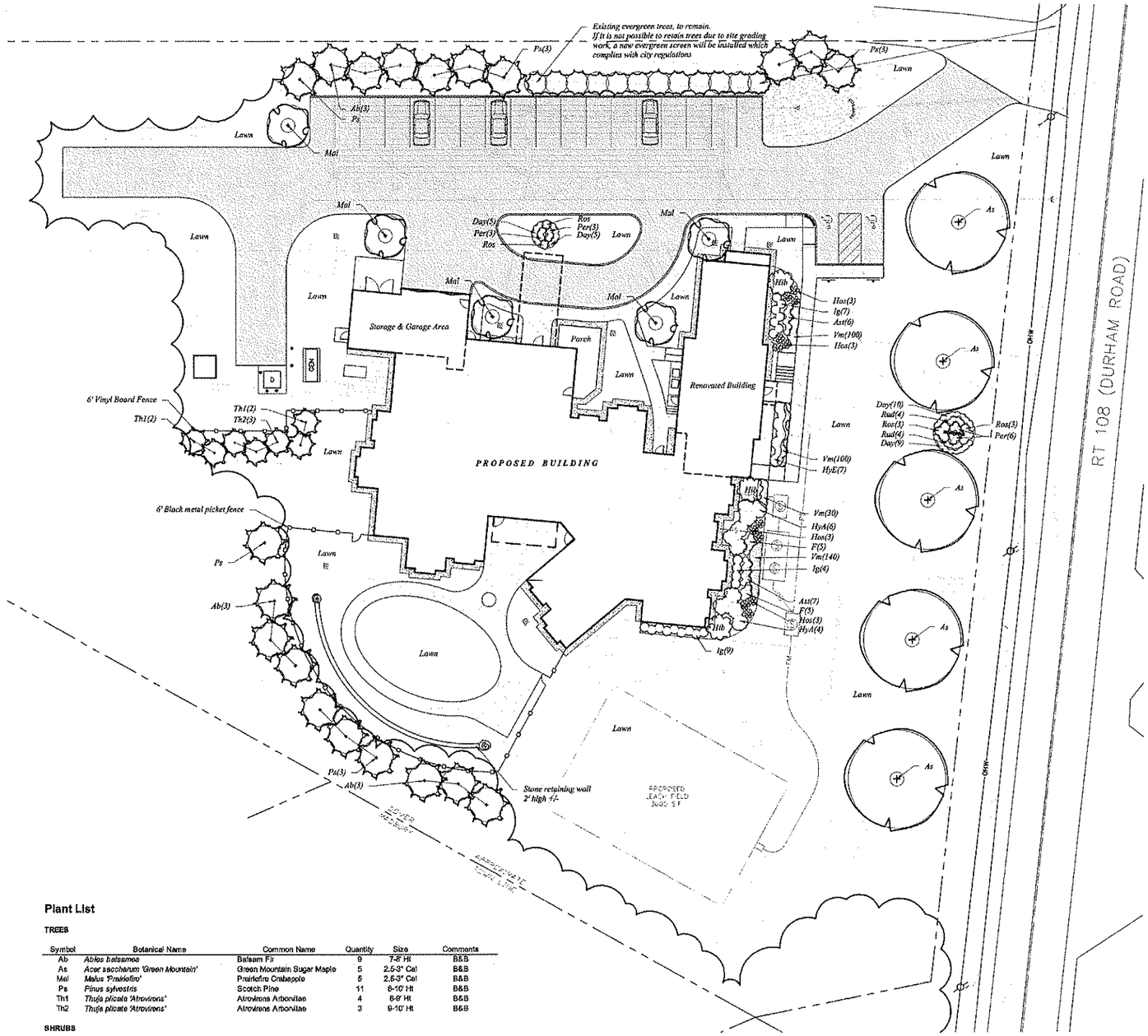
# EROSION CONTROL NOTES

JOHNSON CREEK VILLAGE
CARE HOME
TAX MAP H, LOT 1
DOVER, NEW HAMPSHIRE

1430-SITE.DWG

civilworks
engineers • surveyors
P.O. Box 1166
Dover, NH 603-749-0443

DESIGN: DCL
SCALE: AS SHOWN
DATE: 7-9-2015
SHEET: 8 OF 19
PROJECT #14102




## Plant List

**TREES**

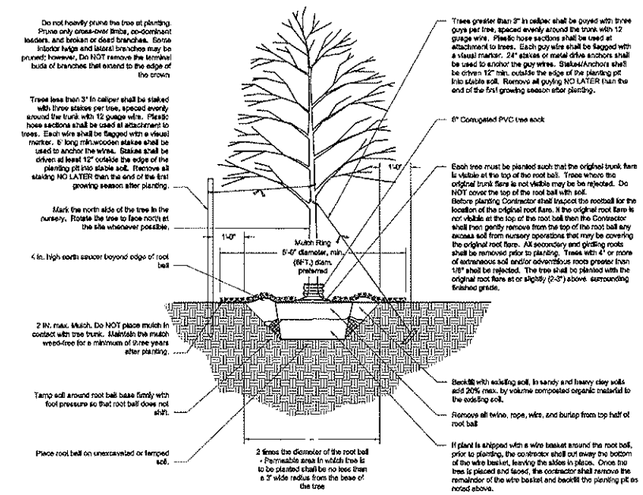
| Symbol | Botanical Name | Common Name | Quantity | Size | Comments |
|---|---|---|---|---|---|
| Ab | *Abies balsamea* | Balsam Fir | 9 | 7-8' Ht | B&B |
| As | *Acer saccharum 'Green Mountain'* | Green Mountain Sugar Maple | 5 | 2.5-3" Cal | B&B |
| Mal | *Malus 'Prairiefire'* | Prairiefire Crabapple | 5 | 2.5-3" Cal | B&B |
| Ps | *Pinus sylvestris* | Scotch Pine | 11 | 8-10' Ht | B&B |
| Th1 | *Thuja plicata 'Atrovirens'* | Atrovirens Arborvitae | 4 | 8-8' Ht | B&B |
| Th2 | *Thuja plicata 'Atrovirens'* | Atrovirens Arborvitae | 3 | 9-10' Ht | B&B |

**SHRUBS**

| Symbol | Botanical Name | Common Name | Quantity | Size | Comments |
|---|---|---|---|---|---|
| Hib | *Hibiscus syriacus 'Ardens'* | Ardens Rose-of -Sharon | 3 | 6-7' Ht | |
| HyA | *Hydrangea arborescens 'Annabelle'* | Annabelle Hydrangea | 10 | 5 gal | |
| HyE | *Hydrangea macrophylla 'Endless Summer'* | Endless Summer Hydrangea | 7 | 5 gal | |
| Ig | *Ilex glabra 'Shamrock'* | Shamrock Inkberry | 20 | 5 gal | Full to ground |
| Ros | *Rosa 'Knockout'* | Knockout Rose | 6 | 3 gal | |

**PERENNIALS, GROUNDCOVERS, VINES and ANNUALS**

| Symbol | Botanical Name | Common Name | Quantity | Size | Comments |
|---|---|---|---|---|---|
| Ast | *Astilbe 'Fanal'* | Rubyred Astilbe | 13 | 1 gal | |
| Day | *Hemerocallis 'Big Time Happy'* | Big Time Happy Daylily | 29 | 1 gal | |
| F | *Matteuccia struthiopteris* | Ostrich Fern | 10 | 1 gal | |
| Hos | *Hosta 'Frances Williams'* | Frances Williams Hosta | 12 | 1 gal | |
| Per | *Perovskia atriplicifolia 'Little Spire'* | Russian Sage | 12 | 1 gal | |
| Rud | *Rudbeckia fulgida 'Goldsturm'* | Black-Eyed Susan | 8 | 1 gal | |
| Vm | *Vinca minor 'Bowles'* | Bowles Periwinkle | 8 | 50/flat | |




## *Tree Planting Detail*

## *Landscape Notes*

1. Design is based on drawings by Civilworks, Inc dated 7/30/2015 and may require adjustment due to actual field conditions.
2. The contractor shall follow best management practices during construction and shall take all means necessary to stabilize and protect the site from erosion.
3. Erosion Control shall be in place prior to construction.
4. Erosion Control to consist of Hay Bales and Erosion Control Fabric shall be staked in place between the work and Water bodies, Wetlands and/or drainage ways prior to any construction.
5. The Contractor shall verify layout and grades and inform the Landscape Architect or Client's Representative of any discrepancies or changes in layout and/or grade relationships prior to construction.
6. It is the contractor's responsibility to verify drawings provided are to the correct scale prior to any bid, estimate or installation. A graphic scale bar has been provided on each sheet for this purpose. If it is determined that the scale of the drawing is incorrect, the landscape architect will provide a set of drawings at the correct scale, at the request of the contractor.
7. Trees to Remain within the construction zone shall be protected from damage for the duration of the project by snow fence or other suitable means of protection to be approved by Landscape Architect or Client's Representative. Snow fence shall be located at the drip line at a minimum and shall include any and all surface roots. Do not fill or mulch on the trunk flare. Do not disturb roots. In order to protect the integrity of the roots, branches, trunk and bark of the tree(s) no vehicles or construction equipment shall drive or park in or on the area within the drip line(s) of the tree(s). Do not store any refuse or construction materials or portalets within the tree protection area.
8. Location, support, protection, and restoration of all existing utilities and appurtenances shall be the responsibility of the Contractor.
9. The Contractor shall verify exact location and elevation of all utilities with the respective utility owners prior to construction. Call DIGSAFE at 1-888-344-7233.
10. The Contractor shall procure any required permits prior to construction.
11. Prior to any landscape construction activities Contractor shall test all existing loam and loam from off-site intended to be used for lawns and plant beds using a thorough sampling throughout the supply. Soil testing shall indicate levels of pH, nitrates, macro and micro nutrients, texture, soluble salts, and organic matter. Contractor shall provide Landscape Architect with test results and recommendations from the testing facility along with soil amendment plans as necessary for the proposed plantings to thrive. All loam to be used on site shall be amended as approved by the Landscape Architect prior to placement.
12. Contractor shall notify landscape architect or owner's representative immediately if at any point during demolition or construction a site condition is discovered which may negatively impact the completed project. This includes, but is not limited to, unforeseen drainage problems, unknown subsurface conditions, and discrepancies between the plan and the site. If a contractor is aware of a potential issue, and does not bring it to the attention of the landscape architect or owner's representative immediately, they may be responsible for the labor and materials associated with correcting the problem.
13. The Contractor shall furnish and plant all plants shown on the drawings and listed thereon. All plants shall be nursery-grown under climatic conditions similar to those in the locality of the project. Plants shall conform to the botanical names and standards of size, culture, and quality for the highest grades and standards as adopted by the American Association of Nurserymen, Inc. in the American Standard of Nursery Stock, American Standards Institute, Inc. 230 Southern Building, Washington, D.C. 20005.
14. A complete list of plants, including a schedule of sizes, quantities, and other requirements is shown on the drawings. In the event that quantity discrepancies or material omissions occur in the plant materials list, the planting plans shall govern.
15. All plants shall be legibly tagged with proper botanical name.
16. The Contractor shall guarantee all plants for not less than one year from time of acceptance.
17. Owner or Owner's Representative will inspect plants upon delivery for conformity to Specification requirements. Such approval shall not effect the right of inspection and rejection during or after the progress of the work. The Owner reserves the right to inspect and/or select all trees at the place of growth and reserves the right to approve a representative sample of each type of shrub, herbaceous perennial, annual, and ground cover at the place of growth. Such sample will serve as a minimum standard for all plants of the same species used in this work.
18. No substitutions of plants may be made without prior approval of the Owner or the Owner's Representative for any reason.
19. All landscaping shall be provided with either of the following
    a. An underground sprinkling system
    b. An outside hose attachment within 150 feet
20. If an automatic irrigation system is installed, all irrigation valve boxes shall be located within planting bed areas.
21. All disturbed areas will be dressed with 6" of topsoil and planted as noted on the plans or seeded except plant beds. Plant beds shall be prepared to a depth of 12" with 75% loam and 25% compost.
22. Trees, ground cover, and shrub beds shall be mulched to a depth of 2" with one-year-old, well-composted, shredded native bark not longer than 4" in length and ½" in width, free of woodchips and sawdust. Mulch for ferns and herbaceous perennials shall be no longer than 1" in length. Trees in lawn areas shall be mulched in a 5' diameter min. saucer. Color of mulch shall be black.
23. Drip strip shall extend to 6" beyond roof overhang and shall be edged with 3/16" thick metal edger.
24. In no case shall mulch touch the stem of a plant nor shall mulch ever be more than 3" thick total (including previously applied mulch) over the root ball of any plant.
25. Secondary lateral branches of deciduous trees overhanging vehicular and pedestrian travel ways shall be pruned up to a height of 8' to allow clear and safe passage of vehicles and pedestrians under tree canopy.
26. Snow shall be stored a minimum of 5' from shrubs and trunks of trees.
27. Landscape Architect is not responsible for the means and methods of the contractor.

0 5 10 20 40

WOODBURN & COMPANY
*Landscape Architecture, LLC*
103 Kent Place
Newmarket, NH 03857
Tel 603.659.5949
Fax: 603.659.5939

# *Johnson Creek Village*

*Landscape Plan*

*Dover, New Hampshire*

| | |
|---|---|
| *Drawn By:* | *VM* |
| *Checked By:* | *RW* |
| *Scale:* | *1" = 20' - 0"* |
| *Date:* | *July 30, 2015* |
| *Revisions:* | *August 10, 2015 Per TRC Comments* |

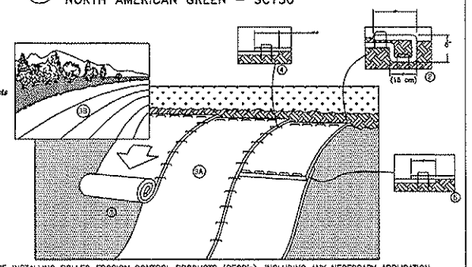
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*Sheet 17*

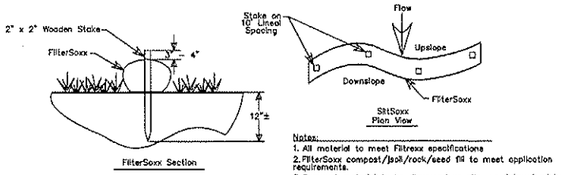
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NORTH AMERICAN GREEN
EROSION CONTROL *Products Guaranteed* SOLUTIONS

## (1) SLOPE INSTALLATION
### NORTH AMERICAN GREEN – SC150

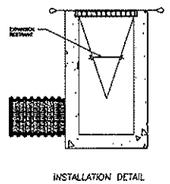


1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
   NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL THE RECP's (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE "DOT SYSTEM", STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2" – 5" (5 CM – 12.5 CM) OVERLAP DEPENDING ON RECP's TYPE.
5. CONSECUTIVE RECP's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP's WIDTH.
   NOTE:
   *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.




1. *SEE EROSION CONTROL NOTES FOR MATERIAL, INSTALLATION AND MAINTENANCE REQUIREMENTS.*

## (3) Filter Barrier Detail
*NOT TO SCALE*




SILTSACK®
SPECIFICATIONS

NOTE: THE SILTSACK WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS, AS SUPPLIED BY AN AMOCO OF FORTINCRUTIN OR APPROVED EQUAL

REGULAR FLOW SILTSACK®
FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF

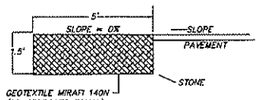
| PROPERTIES | TEST METHOD | UNITS |
|---|---|---|
| GRAB TENSILE STRENGTH | ASTM D-4632 | 300 LBS |
| GRAB TENSILE ELONGATION | ASTM D-4632 | 30 % |
| PUNCTURE | ASTM D-4833 | 120 LBS |
| MULLEN BURST | ASTM D-3786 | 600 PSI |
| TRAPEZOID TEAR | ASTM D-4533 | 120 LBS |
| UV RESISTANCE | ASTM D-4355 | 90 % |
| APPARENT OPENING SIZE | ASTM D-4751 | #6 US SIEVE |
| FLOW RATE | ASTM D-4491 | 44 GAL/MIN/SQ FT |
| PERMITTIVITY | ASTM D-4491 | 0.55 SEC -1 |

HI-FLOW SILTSACK®
FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF

| PROPERTIES | TEST METHOD | UNITS |
|---|---|---|
| GRAB TENSILE STRENGTH | ASTM D-4632 | MAY LBS |
| GRAB TENSILE ELONGATION | ASTM D-4632 | 30 % |
| PUNCTURE | ASTM D-4833 | 125 LBS |
| MULLEN BURST | ASTM D-3786 | 420 PSI |
| TRAPEZOID TEAR | ASTM D-4533 | 45 LBS |
| UV RESISTANCE | ASTM D-4355 | 90 % |
| APPARENT OPENING SIZE | ASTM D-4751 | #6 US SIEVE |
| FLOW RATE | ASTM D-4491 | 200 GAL/MIN/SQ FT |
| PERMITTIVITY | ASTM D-4491 | 1.5 SEC -1 |

OIL-ABSORBANT SILTSACK®
FOR AREAS WHERE THERE IS A CONCERN FOR OIL RUN-OFF OR SPILLS.
DEPENDING ON YOUR PARTICULAR APPLICATION, THE SILTSACK CAN BE MADE FROM EITHER ONE OF THE ABOVE FABRICS WITH AN OIL-ABSORBANT PILLOW INSERT OR, MADE COMPLETELY FROM AN OIL-ABSORBANT SILTSACK, WITH A WOVEN PILLOW INSERT.

## (4) DETAIL OF INLET SEDIMENT CONTROL DEVICE
*NOT TO SCALE*

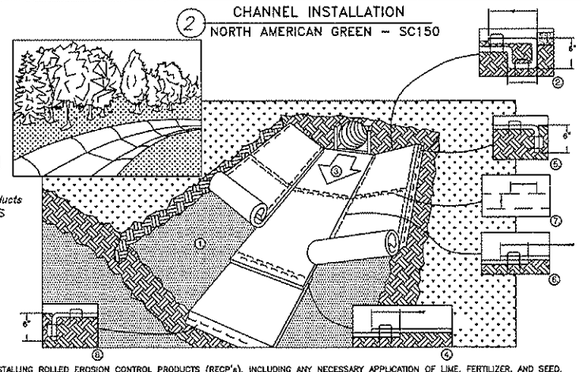



*NOTES:*
1. *RIP-RAP APPLICATIONS SHALL CONSIST OF d50 = 6" (MIN) STONE WITH A STONE LAYER THICKNESS OF 1.5' (MIN) ON FILTER FABRIC WITH A 6" THICK (MIN) GRAVEL BASE. SEE GRADING PLAN FOR APRON LOCATIONS.*

## (5) RIP-RAP APRON
*NOT TO SCALE*

NORTH AMERICAN GREEN
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## (2) CHANNEL INSTALLATION
### NORTH AMERICAN GREEN – SC150



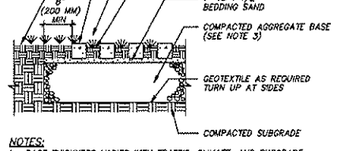
1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
   NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECP's IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" ACROSS THE WIDTH OF THE RECP's.
3. ROLL CENTER RECP's IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE RECP's END OVER END (SHINGLE STYLE) WITH A 4" – 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE RECP's.
5. FULL LENGTH EDGE OF RECP's AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECP's MUST BE OVERLAPPED APPROXIMATELY 2" – 5" (DEPENDING ON RECP's TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECP's MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. NOTE: * IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.




CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.




*NOTES:*
1. *BASE THICKNESS VARIES WITH TRAFFIC, CLIMATE, AND SUBGRADE.*
2. *MINIMUM BASE THICKNESS: 6" RESIDENTIAL DRIVEWAYS*
   *6" FIRELANES & PARKING LOTS.*
3. *SUPPLIER SHALL PROVIDE SITE SPECIFIC DESIGN FOR DESIGN ENGINEER REVIEW & ACCEPTANCE PRIOR TO INSTALLATION. H-20 LOADING REQUIRED.*

## (6) CONCRETE GRID PAVERS
*NOT TO SCALE*

PLANNING FILE NO.: P15-38

| No. | DATE | BY | REVISION |
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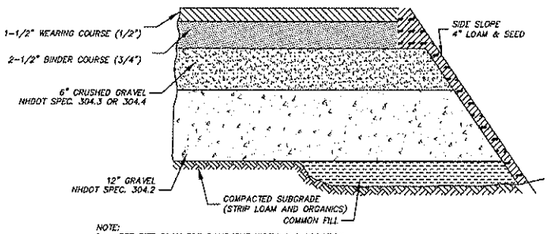
EROSION CONTROL DETAILS

JOHNSON CREEK VILLAGE
CARE HOME
TAX MAP H, LOT 1
DOVER, NEW HAMPSHIRE

1430-SITE.DWG

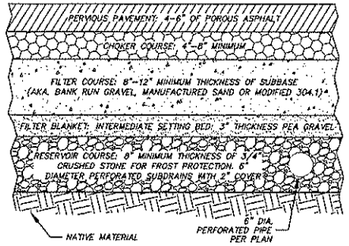
civilworks
engineers • surveyors
P.O. Box 1166
Dover, NH 603-749-0443

| | |
|---|---|
| DESIGN: | DCL |
| SCALE: | AS SHOWN |
| DATE: | 7-9-2015 |
| SHEET: | 9 OF 19 |
| PROJECT #14102 | |



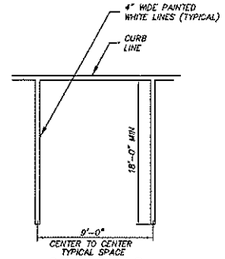

NOTE:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.

(7) TYPICAL PAVEMENT SECTION
NOT TO SCALE

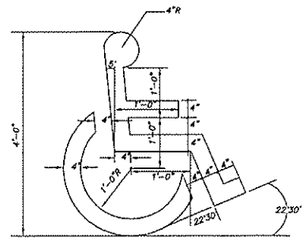



NOTE:
1. SEE SITE PLAN FOR LOCATION OF POROUS PAVEMENT, PAVEMENT WIDTH AND LOCATION.
2. CONSTRUCTION MATERIALS SHALL NOT BE STORED ON THE POROUS PAVEMENT OR BASE MATERIALS.
3. PLACEMENT OF POROUS PAVEMENT AND BASE MATERIALS SHALL BE MONITORED BY THE DESIGN ENGINEER. ADVISE THE CITY ENGINEER AS TO INSTALLATION SCHEDULE.
4. CRUSHED STONE, BANK RUN GRAVEL & CRUSHED GRAVEL MATERIALS SHALL CONFORM WITH NHDOT STD. SPECIFICATIONS, SECTION 304.
5. POROUS PAVEMENT SHALL CONFORM WITH GENERAL POROUS BITUMINOUS PAVING SPECIFICATIONS PREPARED BY THE UNH STORMWATER CENTER 2/16).
6. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.

(8) POROUS PAVEMENT SECTION
NOT TO SCALE

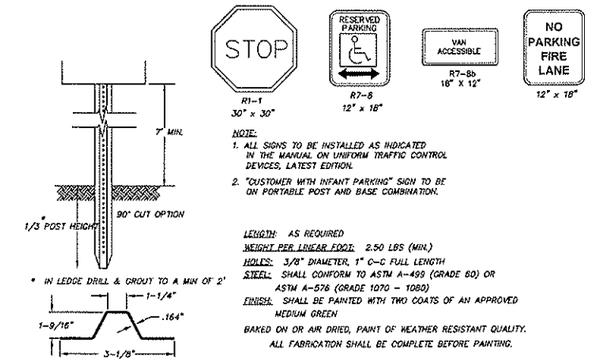



STANDARD
(9) PARKING STALL
NOT TO SCALE




NOTE: SYMBOL TO BE PAINTED IN ALL HANDICAPPED SPACES

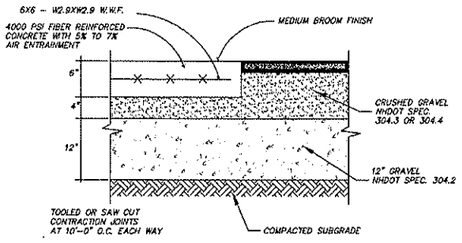
PAINTED
(10) HANDICAP SYMBOL
NOT TO SCALE




NOTE:
1. ALL SIGNS TO BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
2. "CUSTOMER WITH INFANT PARKING" SIGN TO BE ON PORTABLE POST AND BASE COMBINATION.

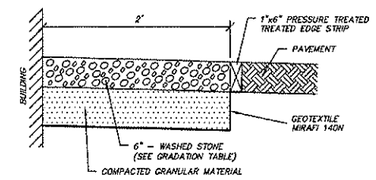
LENGTH: AS REQUIRED
WEIGHT PER LINEAR FOOT: 2.50 LBS (MIN.)
HOLES: 3/8" DIAMETER, 1" O-C FULL LENGTH
STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-576 (GRADE 1070 - 1080)
FINISH: SHALL BE PAINTED WITH TWO COATS OF AN APPROVED MEDIUM GREEN
BAKED ON OR AIR DRIED, PAINT OF WEATHER RESISTANT QUALITY.
ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.

(11) SIGN LEGEND & SIGN POST
NOT TO SCALE




NOTE: PITCH CONCRETE PAD GRADING TO CENTER

(12) DUMPSTER DETAIL
NOT TO SCALE

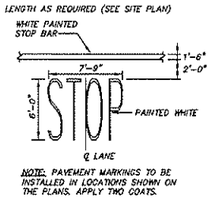



WASHED STONE

| SIEVE SIZE | % FINER BY WEIGHT |
|---|---|
| 1" | 100 |
| 3/4" | 90 - 100 |
| 3/8" | 20 - 55 |
| # 4 | 0 |

NOTES:
SEE SITE PLAN FOR LIMITS OF DRIP STRIP.

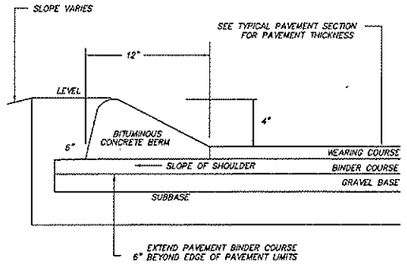
(13) DRIP STRIP
NOT TO SCALE



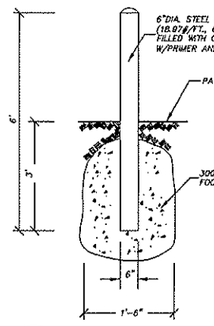

NOTE: PAVEMENT MARKINGS TO BE INSTALLED IN LOCATIONS SHOWN ON THE PLANS. APPLY TWO COATS.

STOP BAR & LEGEND

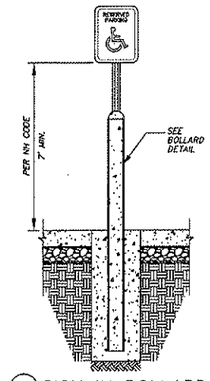
(14) PAVEMENT MARKINGS
NOT TO SCALE




(15) BITUMINOUS CAPE COD BERM
NOT TO SCALE

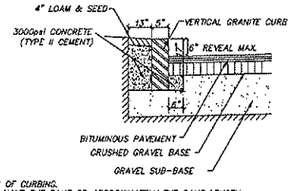



(16) BOLLARD DETAIL
NOT TO SCALE



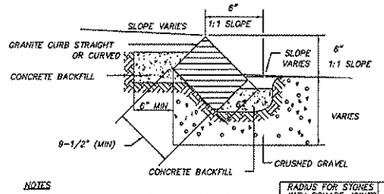

(17) SIGN IN BOLLARD
NOT TO SCALE

| RADIUS | MAX. LENGTH |
|---|---|
| 21' | 3' |
| 22'-28' | 4' |
| 29'-35' | 5' |
| 36'-42' | 6' |
| 43'-49' | 7' |
| 50'-56' | 8' |
| 57'-60' | 9' |
| OVER 60' | 10' |




NOTES
1. SEE SITE PLAN FOR LIMITS OF CURBING.
2. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.
3. MINIMUM LENGTH OF CURB STONES = 3'
4. MAXIMUM LENGTH OF CURB STONES = 10'
5. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES (SEE CHART).
6. ALL RADII 20 FEET AND SMALLER TO BE CONSTRUCTED USING CURVED SECTIONS.

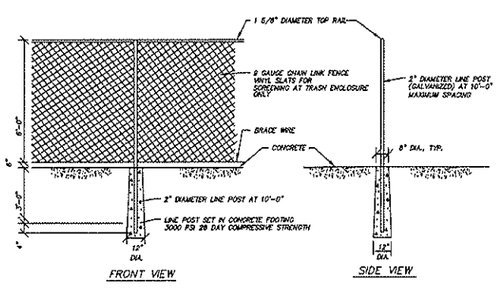
(18) VERTICAL GRANITE CURB
NOT TO SCALE




NOTES
1. ADJOINING STONES OF STRAIGHT CURB LAID ON CURVES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH
2. MINIMUM LENGTH OF STRAIGHT CURB STONES = 18"
3. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 8'
4. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES - SEE CHART

| RADIUS FOR STONES WITH SQUARE JOINTS | MAXIMUM LENGTH |
|---|---|
| 16'-26' | 1'-6" |
| 29'-41' | 2' |
| 42'-55' | 3' |
| 56'-68' | 4' |
| 69'-82' | 5' |
| 83'-96' | 6' |
| 97'-110' | 7' |
| OVER 110' | 8' |

(19) SLOPED GRANITE CURBING
NOT TO SCALE




NOTES:
1. DUMPSTER CHAINLINK FENCE SHALL HAVE GREEN VINYL PRIVACY SLATS.

(20) CHAINLINK FENCE DETAIL
NOT TO SCALE

PLANNING FILE NO.: P15-38

| No. | DATE | BY | REVISION |
|---|---|---|---|

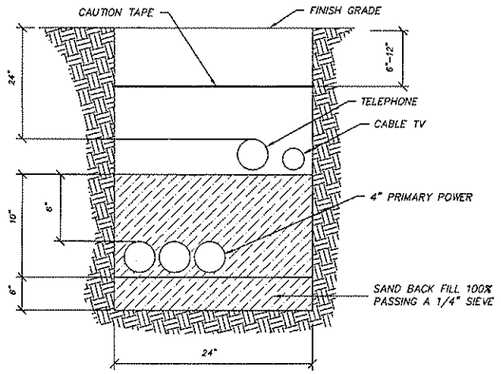
DETAIL SHEET

JOHNSON CREEK VILLAGE
CARE HOME
TAX MAP H, LOT 1
DOVER, NEW HAMPSHIRE

1430-SITE.DWG

civilworks
engineers • surveyors
P.O. Box 1166
Dover, NH 603-749-0443

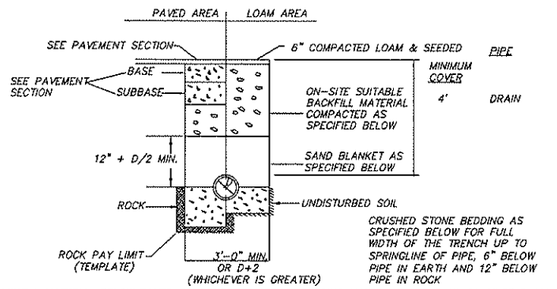
| | |
|---|---|
| DESIGN: | DCL |
| SCALE: | AS SHOWN |
| DATE: | 7-9-2015 |
| SHEET: | 10 OF 19 |
| PROJECT #: | 14102 |




1. TELEPHONE CONDUIT SHALL BE 3" SCHEDULE 40 PVC, WITH STEEL SWEEPS AT RISER POLE, 90° BENDS AND AT BUILDING.
2. LEAVE PULL ROPE IN ALL CONDUITS FOR CABLE INSTALLATION.
3. FOR COMPLETE SPECIFICATIONS SEE "PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE CONSTRUCTION SPECIFICATIONS FOR UNDERGROUND CONDUIT SYSTEMS".
4. CONTRACTOR SHOULD VERIFY THE NUMBER & SIZE OF CONDUIT WITH THE APPROPRIATE UTILITIES.

(21) UTILITY TRENCH

NOT TO SCALE




BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.

SAND BLANKET & BEDDING

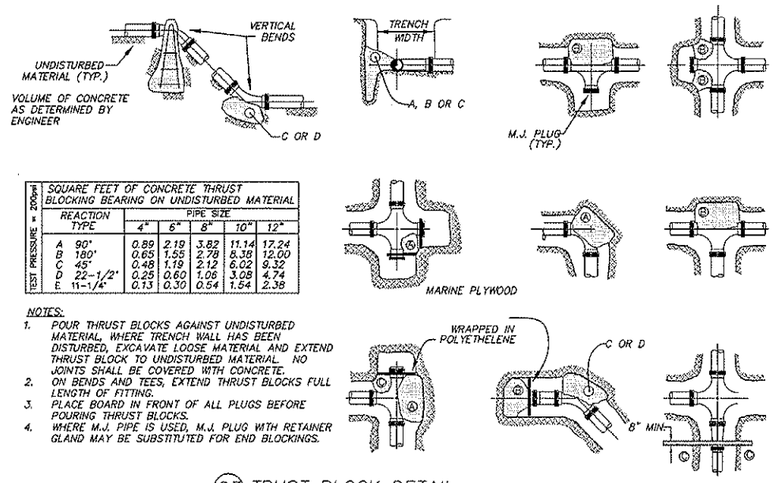
| SIEVE SIZE | % FINER BY WEIGHT |
|---|---|
| 1/2" | 90 – 100 |
| 200 | 0 – 15 |
| (FOR WATER MAIN BEDDING) | |

3/4" CRUSHED STONE BEDDING

| SIEVE SIZE | % FINER BY WEIGHT |
|---|---|
| 1" | 100 |
| 3/4" | 90 – 100 |
| 1/2" | 20 – 50 |
| 3/8" | 0 – 20 |
| # 4 | 0 – 5 |

(22) DRAINAGE TRENCH

NOT TO SCALE




TEST PRESSURE = 200psi

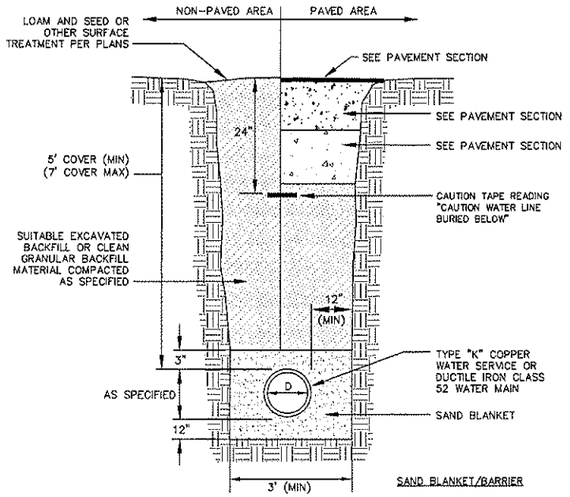
SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL

| REACTION TYPE | | PIPE SIZE 4" | 6" | 8" | 10" | 12" |
|---|---|---|---|---|---|---|
| A | 90° | 0.89 | 2.19 | 3.82 | 11.14 | 17.74 |
| B | 180° | 0.65 | 1.55 | 2.78 | 8.38 | 12.00 |
| C | 45° | 0.48 | 1.19 | 2.12 | 6.02 | 9.32 |
| D | 22-1/2° | 0.25 | 0.60 | 1.06 | 3.08 | 4.74 |
| E | 11-1/4° | 0.13 | 0.30 | 0.54 | 1.54 | 2.38 |

NOTES:
1. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL, WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE.
2. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
3. PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS.
4. WHERE M.J. PIPE IS USED, M.J. PLUG WITH RETAINER GLAND MAY BE SUBSTITUTED FOR END BLOCKINGS.

(23) TRUST BLOCK DETAIL

NOT TO SCALE




SAND BLANKET/BARRIER

| SIEVE SIZE | % FINER BY WEIGHT |
|---|---|
| 1/2" | 90 – 100 |
| 200 | 0 – 15 |

NOTES
1. BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.

(24) WATER MAIN TRENCH

NOT TO SCALE

PLANNING FILE NO.: P15-38

| No. | DATE | BY | REVISION |
|---|---|---|---|
| | | | |

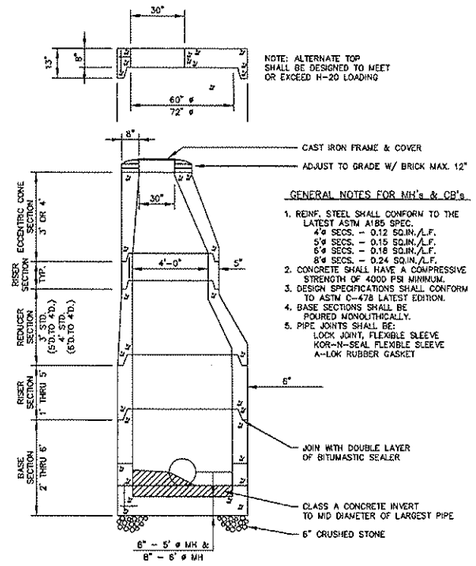
DETAIL SHEET

JOHNSON CREEK VILLAGE
CARE HOME
TAX MAP H, LOT 1
DOVER, NEW HAMPSHIRE

1430-SITE.DWG

civilworks
engineers • surveyors
P.O. Box 1166
Dover, NH 603-749-0443

DESIGN: DCL
SCALE: AS SHOWN
DATE: 7-9-2015
SHEET: 11 OF 19
PROJECT #14102

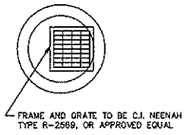



GENERAL NOTES FOR MH's & CB's

1. REINF. STEEL SHALL CONFORM TO THE LATEST ASTM A185 SPEC.
   4'ø SECS. – 0.12 SQ.IN./L.F.
   5'ø SECS. – 0.15 SQ.IN./L.F.
   6'ø SECS. – 0.18 SQ.IN./L.F.
   8'ø SECS. – 0.24 SQ.IN./L.F.
2. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 4000 PSI MINIMUM.
3. DESIGN SPECIFICATIONS SHALL CONFORM TO ASTM C-478 LATEST EDITION.
4. BASE SECTIONS SHALL BE POURED MONOLITHICALLY.
5. PIPE JOINTS SHALL BE:
   LOCK JOINT, FLEXIBLE SLEEVE
   KOR-N-SEAL FLEXIBLE SLEEVE
   A-LOK RUBBER GASKET

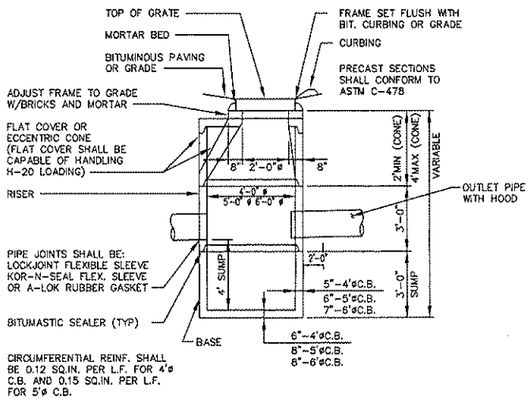
(25) STANDARD 4 FT. DIA. MANHOLE

NOT TO SCALE




(26) GRATE DETAIL

NOT TO SCALE

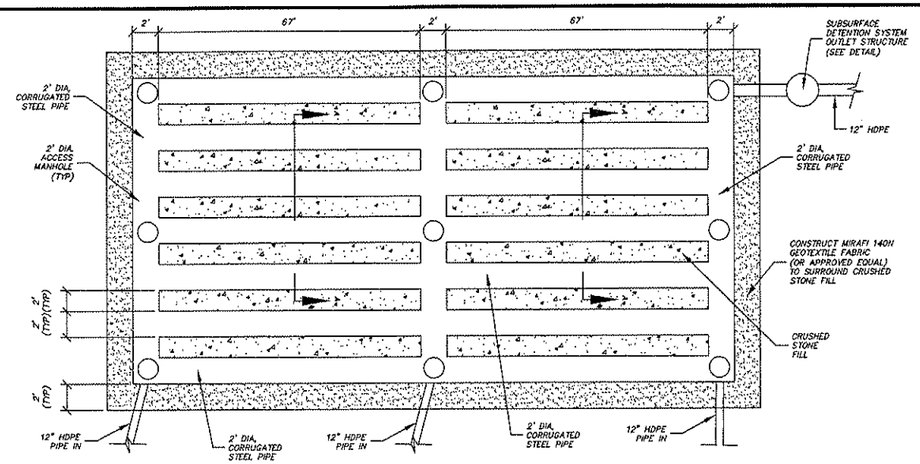



(27) PRE-CAST REINFORCED CATCH BASIN

NOT TO SCALE

SPECIFICATIONS

1. All construction shall conform with the State of New Hampshire Department of Transportation (NHDOT), "Standard Specifications for Road and Bridge Construction"; hereinafter referred to as the "Standard Specifications".
2. Catch basins and manholes shall be pre-cast reinforced concrete designed by an engineer registered in New Hampshire, and able to withstand loadings of 8 tons (H20 Loading).
3. Manholes shall have cast iron frames and covers with 30" inside diameter openings. A 3-inch (minimum) letter "D" for drain shall be plainly cast into the center of each cover.
4. Catch basins and manholes shall be adjusted to grade with courses of brick. Maximum adjustment to grade shall be 12 inches. Frames shall be set on a full bed of mortar, true to grade and concentric with the masonry. All voids between the top of the structure and the bottom flange of the frame shall be completely filled to make a watertight fit. A ring of mortar at least one inch thick and pitched to shed water away from the frame, shall be placed over and around the outside of the bottom flange. The mortar shall extend to the outer edge of the masonry all around its circumference and shall be finished smooth. No visible leakage will be permitted.
5. Invert channels of sewer manholes shall be formed smoothly to the largest pipe radius. Changes in grade shall be formed smoothly and evenly. The floor of the structure outside the channels shall be sloped towards the channels at approximately 1/2 inch per foot. The floor at the channel shall match the crown of the largest pipe.
6. Trench construction will conform with Section 603.3.1 of the Standard Specifications (1974).
7. Wood sheeting or a suitable trench box shall be used to support the trench as necessary. If wood sheeting is used, it shall be driven at a distance of 1 foot from the outside diameter of the pipe to a depth 6 inches below the invert of the pipe. Wood sheeting shall be cut off and left in place to an elevation not less than 1 foot above the top of the pipe, but not greater than 3 feet below the finished grade.
8. Bedding shall conform with Section 603.3.2 of the Standard Specifications (1974).
9. Backfill material will conform with Section 603.3.5 of the Standard Specifications (1974) and, in addition, shall exclude debris, pieces of pavement, organic matter, top soil, all wet or soft muck, peat or clay, all excavated ledge material, frozen material, all rocks over 6 inches in largest dimension, or any material which, as determined by the Engineer, will not provide sufficient support or maintain the completed construction in a stable condition. Backfill shall not be placed on frozen or previously frozen material.
10. All backfill and bedding compaction shall meet the requirements of AASHTO 99 Method C. Density shall be 95 percent. Compaction shall be 6 inch lifts for bedding and backfill to a plane 1 foot above the pipe and in 12 inch lifts thereafter by an approved mechanical compactor.
11. Should frozen material be encountered, it shall not be placed in the backfill nor shall backfill be placed upon frozen material. Previously frozen material shall be removed as required before new backfill is placed.
12. The Contractor shall be responsible for any damage to frames and grates during and from the time of removal from the existing structure to and during the time of resetting, and shall replace in kind any damaged frames or grates at no additional compensation.
13. All trenches will be covered and debris, including any rejected materials, shall be removed daily. Strict safety precautions shall be maintained at all times.
14. Location of utilities shown on the plans are approximate.
    a) the Contractor shall, 48 hours prior to construction, notify the utility companies and have all utilities in the vicinity of the construction marked in the field.
    b) after the utilities have been located and prior to construction, the Contractor with the Engineer, shall layout the proposed drainage system in the field and rectify any utility conflicts which may be found.
    c) Any conflicts with utilities found during construction by the Contractor shall be immediately brought to the attention of the Engineer and the Utility Company and properly rectified.
    d) The Contractor is responsible for the cost of repair for any utilities damaged during construction. The Contractor shall contact the Utility Company to repair any damages, however, the Contractor may make appropriate repairs with the Utility Company's permission.
15. Complete shop drawings for pipe, manholes, catch basins, frames, grates and covers shall be submitted in triplicate for approval by the Engineer prior to the start of construction. Each shop drawing shall be checked and initialized by the Contractor to indicate approval before it is submitted to the Engineer.
16. Shop drawings for flat concrete covers shall be stamped prior to submission for approval by a New Hampshire Registered Professional Engineer.
17. Brick masonry for setting frames and brick and mortar plugs shall conform to the Standard Specification Section 604.2.4.



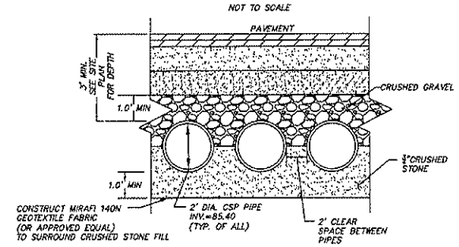

NOTES:
1. CONTRACTOR TO CONSTRUCT AN UNDERGROUND DETENTION SYSTEM WITH (7) 2' DIAMETER PIPES FOR A MINIMUM OF 342 L.F. WITH (3) 2' DIAMETER HEADERS.
2. THE SUBSURFACE DETENTION SYSTEM TO BE GALVANIZED STEEL PIPE DESIGNED FOR HS-20 LOADING.
3. ALL ACCESS MANHOLES AND COVERS SHALL MEET HS-20 LOADING REQUIREMENTS.
4. CONTRACTOR SHALL PROVIDE A SUBSURFACE DETENTION SYSTEM DESIGNED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN NEW HAMPSHIRE UNDER CONTRACT TO THE CONTRACTOR.
5. FOR STRUCTURAL SYSTEM DESIGN NOTE THE DEPTH OF BURY AS SHOWN ON THE GRADING PLAN.
6. THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL COMPONENTS OF THE SUBSURFACE DETENTION SYSTEM COMPLETE AND IN PLACE.

SHOP DRAWING REQUIREMENTS:
1. CONTRACTOR SHALL SUBMIT AN ENGINEERED SHOP DRAWING OF THE SUBSURFACE DETENTION SYSTEM PREPARED BY AND SEALED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN NEW HAMPSHIRE. THE ENGINEERED SHOP DRAWING SHALL BE SUBMITTED TO THE OWNER FOR REVIEW AND ACCEPTANCE. THE ENGINEERED SHOP DRAWING MUST BE REVIEWED AND ACCEPTED BY THE OWNER PRIOR TO ANY WORK BEGINNING ON THE DETENTION SYSTEM.
2. SHOP DRAWING INCLUDES PIPE MATERIALS AND SPECIFICATIONS, BACKFILL MATERIAL, SPECIFICATIONS AND MANUFACTURERS' RECOMMENDED INSTALLATION PROCEDURES AND MATERIALS.

PERMIT REQUIREMENTS:
1. THE CONTRACTOR IS REQUIRED TO COORDINATE WITH THE BUILDING INSPECTOR AND OBTAIN ANY PERMITS REQUIRED FOR THE CONSTRUCTION OF THE UNDERGROUND DETENTION SYSTEM. THIS INCLUDES PROVIDING THE BUILDING INSPECTOR WITH ANY AND ALL CALCULATIONS AND PLANS NECESSARY FOR ISSUANCE OF A BUILDING PERMIT AS REQUIRED.

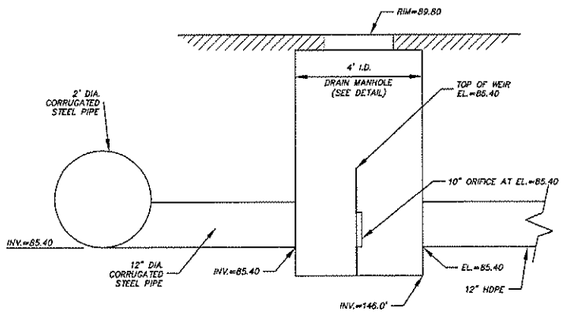
CONSTRUCTION REVIEW AND CERTIFICATION:
1. THE CONTRACTORS' DESIGN ENGINEER SHALL WITNESS AND INSPECT THE DETENTION SYSTEM DURING CONSTRUCTION AND SHALL CERTIFY TO THE OWNER THAT THE DETENTION SYSTEM WAS CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERED SHOP DRAWING AND THE APPROVED PLANS AND SPECIFICATIONS SUBMITTED AND APPROVED AS PART OF THE BUILDING PERMIT.

(28) SUBSURFACE DETENTION SYSTEM
PLAN VIEW
NOT TO SCALE



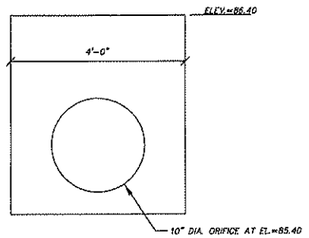

NOTE:
1. CONSTRUCT (7)-2.0' DIAMETER PIPES WITH (3) 2.0' DIAMETER HEADERS.

(29) SUBSURFACE DETENTION AREA
SECTION A-A
NOT TO SCALE




(30) SUBSURFACE DETENTION OUTLET STRUCTURE (OS-1)

NOT TO SCALE




(31) 1/8" GALVANIZED STEEL CONTROL STRUCTURE

NOT TO SCALE

PLANNING FILE NO.: P15-38

| No. | DATE | BY | REVISION |
|---|---|---|---|
| | | | |

DETAIL SHEET

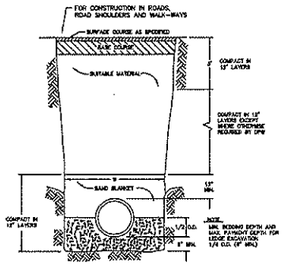
JOHNSON CREEK VILLAGE
CARE HOME
TAX MAP H, LOT 1
DOVER, NEW HAMPSHIRE

1430-SITE.DWG

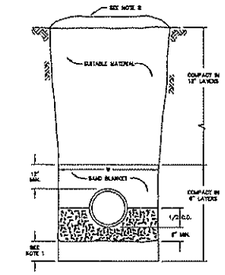
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Dover, NH 603-749-0443

| | |
|---|---|
| DESIGN: | DCL |
| SCALE: | AS SHOWN |
| DATE: | 7-9-2015 |
| SHEET: | 12 OF 19 |
| PROJECT # | 14102 |

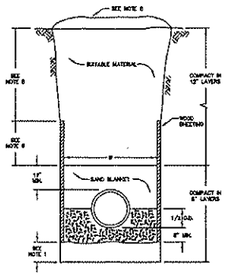
# (32) STANDARD TRENCH SECTION




LEDGE CONSTRUCTION




EARTH CONSTRUCTION




EARTH CONSTRUCTION WITH SHEETING

NOTES:

1.) ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE. REFILL WITH BEDDING MATERIAL. SEE ALSO NOTE 7.

2.) BEDDING : SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33 STONE SIZE NO. 67.

| | |
|---|---|
| 100% PASSING | 1 INCH SCREEN |
| 90 – 100% PASSING | 3/4 INCH SCREEN |
| 20 – 55% PASSING | 3/8 INCH SCREEN |
| 0 – 10% PASSING | #4 SIEVE |
| 0 – 5% PASSING | #8 SIEVE |

– CRUSHED STONE 1/2 INCH – 1 1/2 INCH MAY BE USED INSTEAD OF SCREENED GRAVEL WHERE ALLOWED BY THE ENGINEER.

3.) SAND BLANKET : CLEAN SAND FREE FROM ORGANIC MATTER SO GRADED THAT 90–100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAN 15% WILL PASS A #200 SIEVE.

4.) SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALK–WAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION.

IN CROSS–COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK OR PEAT, IF HE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE AND POSSIBLY RECONSTRUCTION, WHEN NECESSARY, WILL BE PRESERVED.

5.) BASE COURSE : IF ORDERED BY THE ENGINEER, SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS, (D.O.T.).

6.) WOOD SHEETING : IF REQUIRED, WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID–DIAMETER, IT SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE. WHERE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISHED GRADE, BUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.

7.) W = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.

8.) FOR CROSS COUNTRY CONSTRUCTION : BACKFILL OR FILL SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

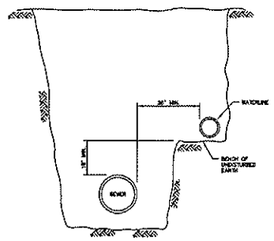
9.) CONCRETE FOR ENCASEMENT SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (3000#) CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS STANDARD SPECIFICATIONS AS FOLLOWS:

CEMENT: 6.0 BAGS PER CUBIC YARD
WATER : 5.75 GALLONS PER BAG CEMENT
MAXIMUM SIZE OF AGGREGATE: 1 INCH

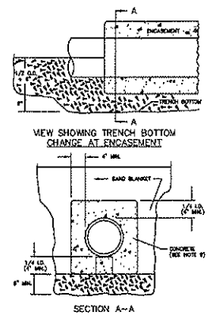
10.) NEW HAMPSHIRE WATER SUPPLY AND POLLUTION CONTROL COMMISSION (NH DES) DESIGN STANDARDS REQUIRE 10 FT. SEPARATION. HOWEVER, SHOULD CONSTRUCTION OPERATIONS REVEAL OR EXPOSE A WATERLINE (MAIN OR SERVICE) RUNNING APPROXIMATELY PARALLEL AND LESS THAN 10 FT. HORIZONTAL FROM THE PROPOSED SEWER INSTALLATION AND WHERE IT IS NOT PRACTICABLE TO RELOCATE THE SEWER, THE FOLLOWING METHODS OF PROTECTION MUST BE EMPLOYED.

A. IF THE WATERLINE CAN BE KEPT AT LEAST 18 INCHES ABOVE AND 3 FEET TO ONE SIDE OF THE SEWER, AS SHOWN AND SUPPORTED ON A BENCH OF ORIGINAL SOIL NO OTHER PROTECTION IS REQUIRED.

11.) IF FULL CASEMENT IS UTILIZED, DEPTH OF CONCRETE BELOW PIPE SHALL BE 1/4 I.D. (4" MIN.) BLOCK SUPPORT SHALL BE SOLID CONCRETE BLOCKS.




WATER AND SEWER IN SAME TRENCH
( SPECIAL CONDITIONS SEE NOTE 10 )




VIEW SHOWING TRENCH BOTTOM CHANGE AT ENCASEMENT

SECTION A–A

CONCRETE FULL ENCASEMENT
( SEE NOTE 11 )

PLANNING FILE NO.: P15–38

| No. | DATE | BY | REVISION |
|---|---|---|---|
| | | | |
| | | | |
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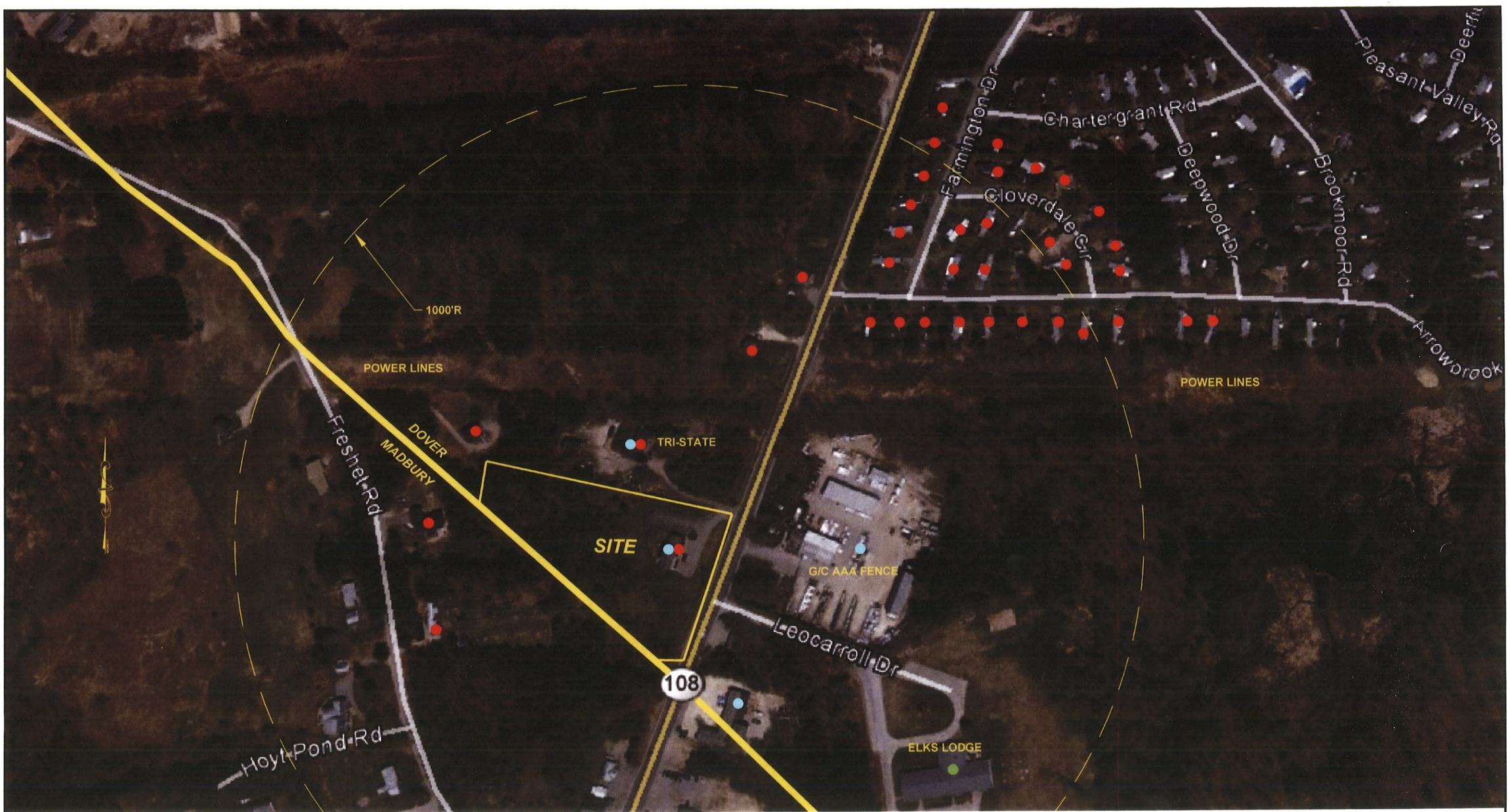
DETAIL SHEET

JOHNSON CREEK VILLAGE
CARE HOME
TAX MAP H, LOT 1
DOVER, NEW HAMPSHIRE

1430–SITE.DWG

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DESIGN: DCL
SCALE: AS SHOWN
DATE: 7–9–2015
SHEET: 13 OF 19
PROJECT #14102




- RESIDENTIAL
- BUSINESS
- OTHER

GRAPHIC SCALE

100 0 50 100 200 400

( IN FEET )
1 inch = 100 ft.

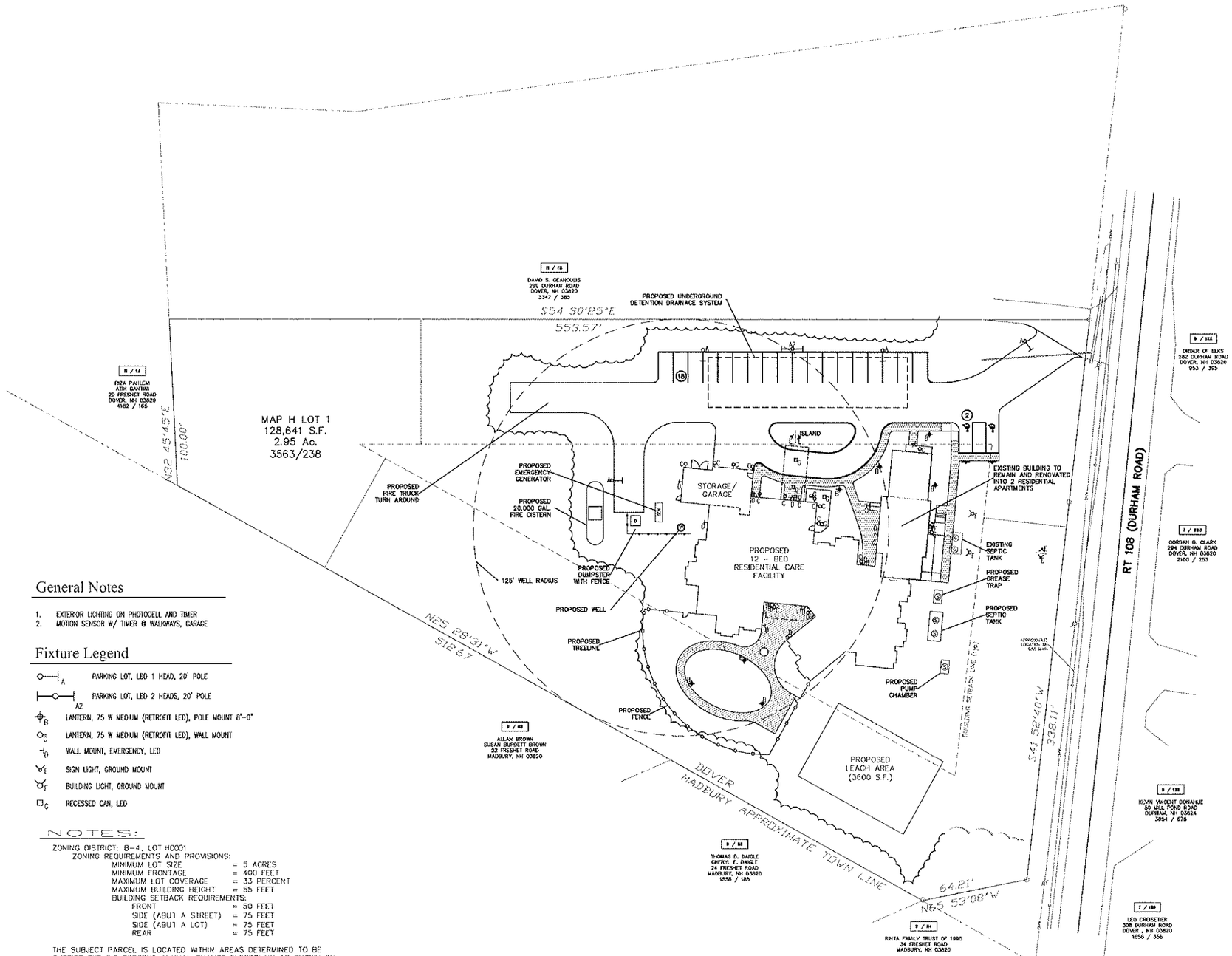
NEIGHBORHOOD PLAN

JOHNSON CREEK VILLAGE
CARE HOME
TAX MAP H, LOT 1
DOVER, NEW HAMPSHIRE

1430-SITE.DWG

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| | |
|---|---|
| DESIGN: | DCL |
| SCALE: | AS SHOWN |
| DATE: | 7-9-2015 |
| SHEET: | 14 OF 19 |
| PROJECT #: | 14102 |




## General Notes

1. EXTERIOR LIGHTING ON PHOTOCELL AND TIMER
2. MOTION SENSOR W/ TIMER @ WALKWAYS, GARAGE

## Fixture Legend

- A — PARKING LOT, LED 1 HEAD, 20' POLE
- A2 — PARKING LOT, LED 2 HEADS, 20' POLE
- B — LANTERN, 75 W MEDIUM (RETROFIT LED), POLE MOUNT 8'-0"
- C — LANTERN, 75 W MEDIUM (RETROFIT LED), WALL MOUNT
- D — WALL MOUNT, EMERGENCY, LED
- E — SIGN LIGHT, GROUND MOUNT
- F — BUILDING LIGHT, GROUND MOUNT
- G — RECESSED CAN, LED

## NOTES:

ZONING DISTRICT: B-4, LOT H0001
ZONING REQUIREMENTS AND PROVISIONS:

| | |
|---|---|
| MINIMUM LOT SIZE | = 5 ACRES |
| MINIMUM FRONTAGE | = 400 FEET |
| MAXIMUM LOT COVERAGE | = 33 PERCENT |
| MAXIMUM BUILDING HEIGHT | = 55 FEET |
| BUILDING SETBACK REQUIREMENTS: | |
| FRONT | = 50 FEET |
| SIDE (ABUT A STREET) | = 75 FEET |
| SIDE (ABUT A LOT) | = 75 FEET |
| REAR | = 75 FEET |

THE SUBJECT PARCEL IS LOCATED WITHIN AREAS DETERMINED TO BE OUTSIDE THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN AS SHOWN ON FLOOD INSURANCE RATE MAP COMMUNITY NUMBER 330145; PANEL 0320; SUFFIX D; MAP NUMBER 33017C0320D; EFFECTIVE DATE MAY 17, 2005.

LOT AREA CALCULATIONS:

TOTAL PARCEL AREA = 128,641 S.F.

Progress Print
Not For Construction

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634 Central Avenue, Dover, NH 03820
E-Mail ag@agarchitects.com
www.agarchitects.com
Phone: 603-743-3700
Fax: 603-743-3777

# Johnson Creek Village

Dover, New Hampshire

Consultant:

Revisions:

| | |
|---|---|
| Date: | 7 August 2015 |
| Scale: | 1" = 30'-0" |
| Drawn By: BG | Checked By: AG |
| Sheet: of | File: 14b660-C201-03 |

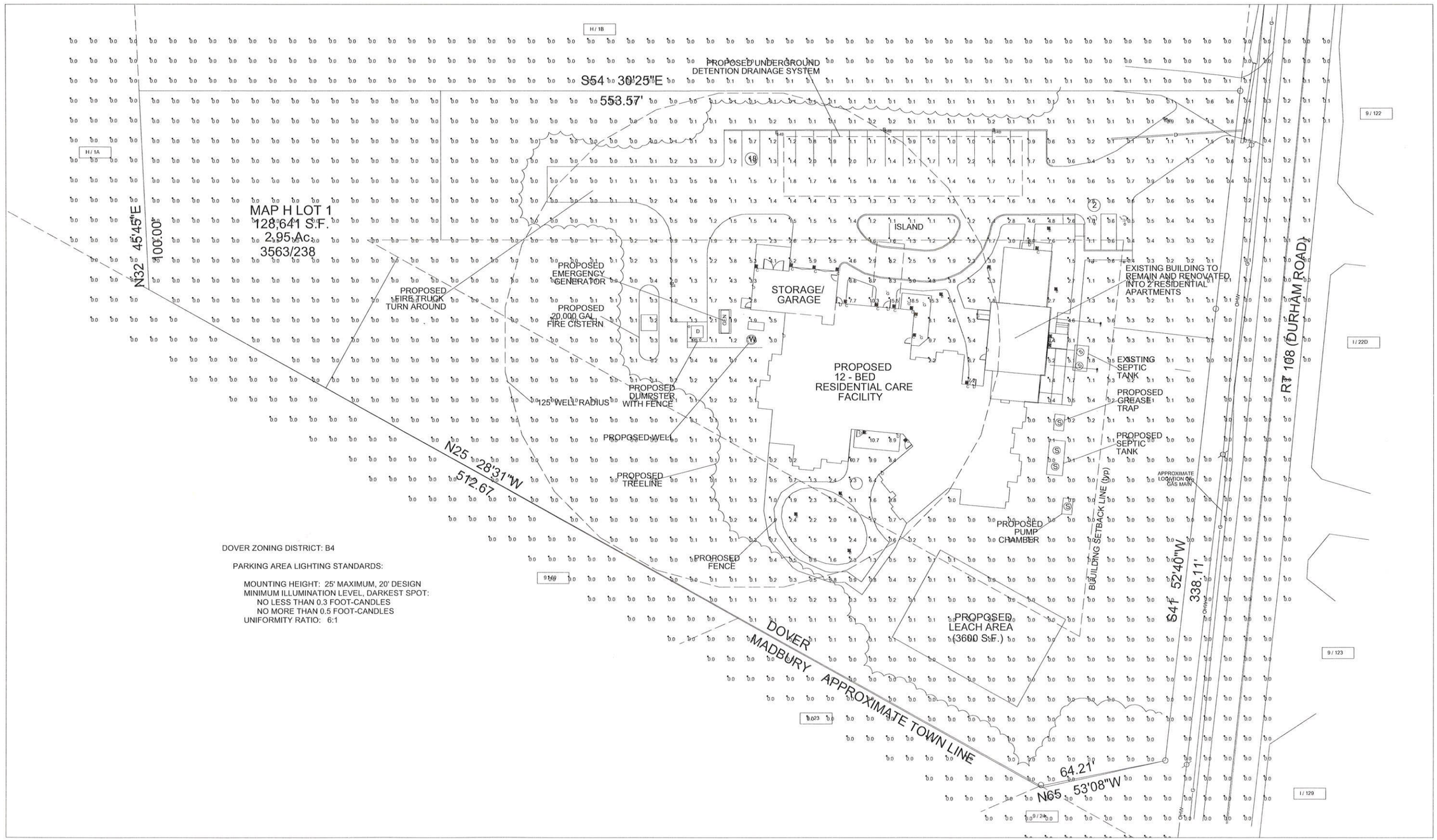
Sheet Title:
Site Lighting Plan

Sheet Number
C2.1
Sheet 15

| Calculation Summary | | | | | |
|---|---|---|---|---|---|
| **Label** | **Avg** | **Max** | **Min** | **Avg/Min** | **Max/Min** |
| DROP OFF LOOP | 3.18 | 8.2 | 1.2 | 2.65 | N.A. |
| OFF PROPERTY | N.A. | 0.5 | 0.0 | N.A. | N.A. |
| PARKING AREA | 1.36 | 4.4 | 0.3 | 4.53 | N.A. |
| WHOLE SITE | N.A. | 18.5 | 0.0 | N.A. | N.A. |

| Luminaire Schedule (note fixture catalogue numbers are not complete) | | | | | | |
|---|---|---|---|---|---|---|
| **Type** | **Symbol** | **Qty** | **Lum. Lumens** | **LLF** | **Lum. Watts** | **Description** |
| S4 | | 1 | 5714 | 0.920 | 65 | 22NB-65-T4-4K |
| D | | 13 | 1772 | 0.900 | 22.2 | LNC-9LU-4K-4 |
| G | | 5 | 1147 | 0.900 | 14.42 | LF6SQLEDG4 WITH 6SQLED5G430K |
| B | | 7 | 4629 | 0.900 | 193 | D241 PA |
| S4B | | 4 | 4092 | 0.920 | 70 | VP-S_22NB-70_BLC_4K |
| F | | 2 | 2061 | 0.900 | 26.5 | FSL7 |
| C | | 16 | 4629 | 0.900 | 193 | WALL D241 PA |

NOTES:
1) EXACT MOUNTING DETAILS TO BE DETERMINED AT JOBSITE BY OTHERS.
2) CALCULATIONS MAY SHOW THE EFFECT OF SHADOWING CAUSED BY BUILDINGS AND OBJECTS WITHIN THE CALCULATED SPACE OR IN THE SITE AREA.
3) READINGS SHOWN ARE INITIAL HORIZONTAL FOOTCANDLES TAKEN AS SHOWN IN CALCULATION SUMMARY UNLESS OTHERWISE INDICATED.
4) THIS CALCULATION IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO SWANEY LIGHTING ASSOCIATES AND STANDARD ASSUMPTIONS OF THE SPACE AND/OR SITE.
5) CONFORMANCE TO CODES AND OTHER LOCAL REQUIREMENTS AS DETERMINED BY THE AHJ ARE THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.
6) THIS LAYOUT DRAWING MUST BE COORDINATED WITH THE SITE LOCATION FOR CORRECT FIXTURE ORIENTATION.
7) CHECK GRAPHIC SCALE. DOCUMENTS PRINTED OR PLOTTED FROM ELECTRONIC FILES MAY OCCUR AT OTHER THAN THE DESIRED OR ASSUMED GRAPHIC SCALES. IT IS THE RESPONSIBILITY OF THE RECIPIENT TO VERIFY THAT THE PRINTED OR PLOTTED-TO-SCALE DRAWING IS PRINTED TO SCALE.




DOVER ZONING DISTRICT: B4

PARKING AREA LIGHTING STANDARDS:

MOUNTING HEIGHT: 25' MAXIMUM, 20' DESIGN
MINIMUM ILLUMINATION LEVEL, DARKEST SPOT:
NO LESS THAN 0.3 FOOT-CANDLES
NO MORE THAN 0.5 FOOT-CANDLES
UNIFORMITY RATIO: 6:1

PLAN VIEW

SHEET 16

JOHNSON CREEK VILLAGE
DOVER, NH
SITE LIGHTING LAYOUT

Cocheco site 7-30-15.AGI

GENERATED BY SWANEY LIGHTING, SCARBOROUGH ME - 207-883-7100 - swaneylighting.com

GENERATED FOR: AG ARCHITECTS

SCALE NOT TO SCALE

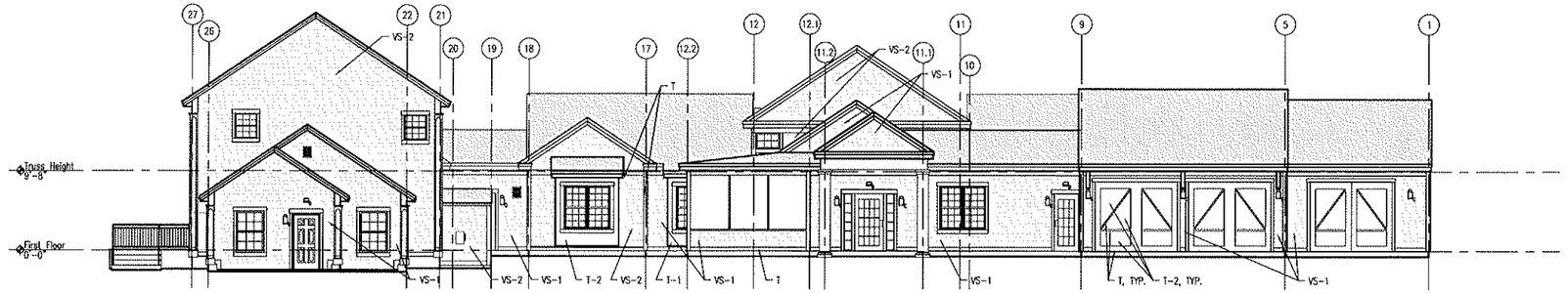
SHEET 16

Page 1 of 1

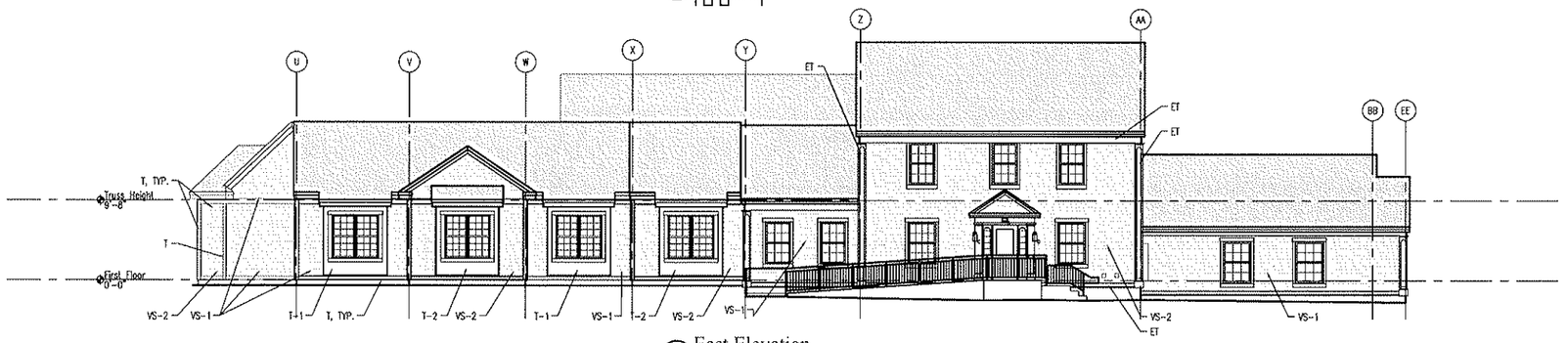
Date:7/30/2015

SWANEY LIGHTING ASSOCIATES, INC.

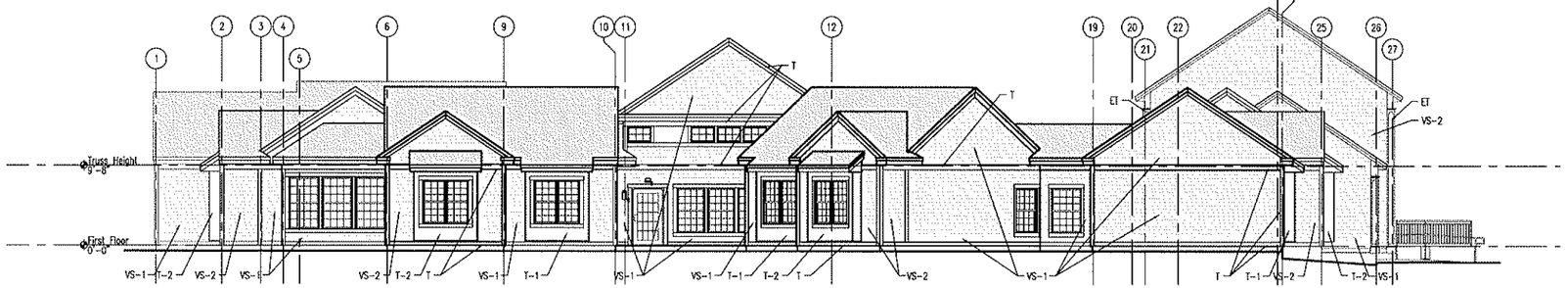
NOTICE: THIS DRAWING IS THE EXCLUSIVE PROPERTY OF SWANEY LIGHTING ASSOCIATES. ITS ACCEPTANCE CONSTITUTES AN AGREEMENT THAT THE DRAWING WILL BE TREATED AS CONFIDENTIAL; THIS DRAWING IS TO BE USED FOR NO PURPOSE OTHER THAN AS DETAILED IN WRITING BY SWANEY LIGHTING ASSOCIATES, AND IS NOT TO BE COPIED OR REPRODUCED IN ANY FORM, RETURNED UPON REQUEST AND IS NOT TO BE COMMUNICATED, DISCLOSED OR COPIED; EXCEPT AS EXPRESSLY AUTHORIZED IN WRITING BY SWANEY LIGHTING ASSOCIATES.
NOTICE: THE INTENT OF THIS LIGHTING LAYOUT IS TO SUGGEST THE BEST UTILIZATION OF LIGHTING FIXTURES INCLUDED IN THIS DRAWING. IT IS PROVIDED USING FIXTURE PHOTOMETRICS FURNISHED BY THE MANUFACTURER. AS SWANEY LIGHTING ASSOCIATES HAS NO CONTROL OF FIXTURE PERFORMANCE SHOWN IN IES FILE IS NOT THE RESPONSIBILITY OF THE MANUFACTURER. IT'S USE FOR ANY OTHER PURPOSE IS NOT AUTHORIZED BY SWANEY LIGHTING ASSOCIATES.



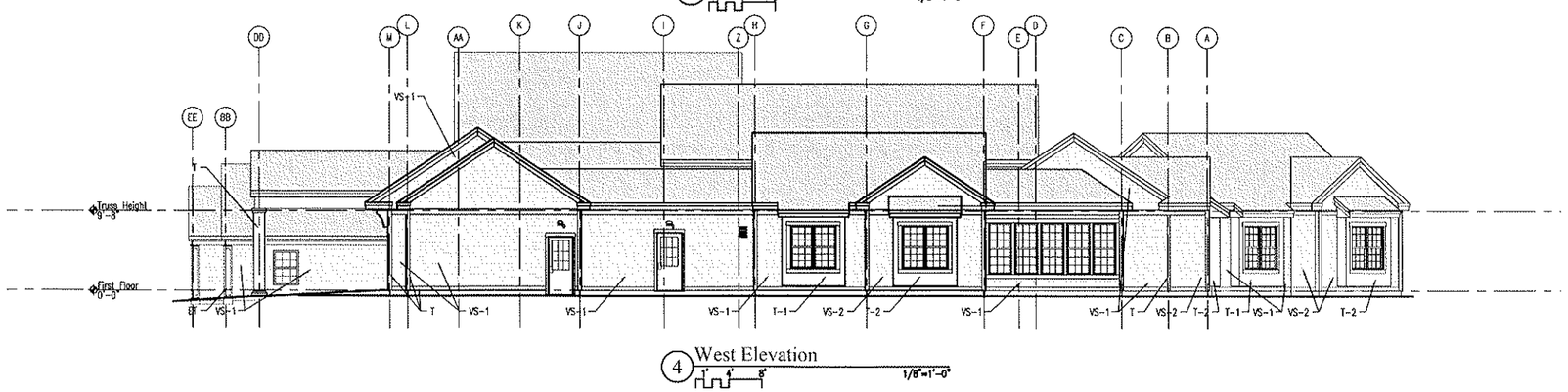

1 North Elevation 1/8"=1'-0"




2 East Elevation 1/8"=1'-0"



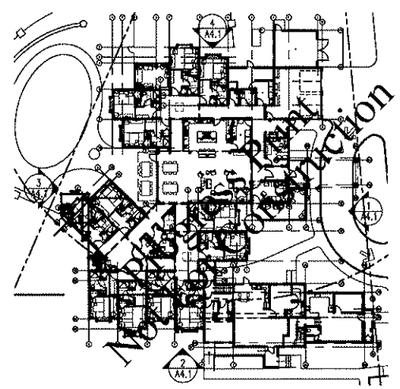

3 South Elevation 1/8"=1'-0"




4 West Elevation 1/8"=1'-0"

## Legend

| | |
|---|---|
| VS-1 | VINYL SIDING, RED |
| VS-2 | VINYL SIDING, TAN |
| T | TRIM, WHITE CELLULAR PVC |
| ET | EXISTING TRIM, WHITE |
| T-1 | TRIM, CELLULAR PVC PAINTED RED |
| T-2 | TRIM, CELLULAR PVC PAINTED TAN |
| $\square_C$ | LIGHT FIXTURE, WALL LANTERN |
| $\square_D$ | EMERGENCY LIGHT FIXTURE |




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www.agarchitects.com
Phone: 603-743-3700
Fax: 603-743-3777

# Johnson Creek Village

Dover, New Hampshire

Plan N

Consultant:

Revisions:

| | |
|---|---|
| Date: | 7 August 2015 |
| Scale: | 1/8" = 1'-0" |
| Drawn By: JG | Checked By: AG |
| Sheet: of | File: 146660-A401-05 |

Sheet Title: Elevations

Sheet Number: A4.1

Sheet 18

2 Second Floor Plan 1/8"=1'-0"

3 Basement Floor Plan 1/8"=1'-0"

1 First Floor Plan 1/8"=1'-0"

| | | |
|---|---|---|
| 9,198.5 GSF | HOME | |
| 365.1 GSF | HOME, STORAGE | |
| 253.5 GSF | HOME, LANAI | |
| 1,294.1 GSF | APARTMENT 1, FIRST FLOOR | |
| 1,441.2 GSF | APARTMENT 1, BASEMENT | |
| 866.6 GSF | APARTMENT 2, FIRST FLOOR | |
| 1,020 GSF | APARTMENT 2, SECOND FLOOR | |

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Phone: 603-743-3700
Fax: 603-743-3777

# Johnson Creek Village

Dover, New Hampshire

Plan N

Consultant:

Revisions:

Date: 7 August 2015

Scale: 1/8" = 1'-0"

Drawn By: JG | Checked By: AG

Sheet: of | File: 146660-A2D1.dwg

Sheet Title: Basement, First and Second Floor Plans

Sheet Number: A2.1

Sheet 19

# Johnson Creek Village

## Exterior Perspective

AG Architects Project No. 14-666
7 August 2015

AG Architects, PC
34 Central Avenue, Dover, NH 03820
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Phone 603-743-3700
Fax 603-743-3777



CITY OF DOVER

# PLANNING BOARD - STAFF MEMO FILE #P15-43

Application Type: Site Plan Review
Applicant(s): Geoff Aleva, PE
Owner(s): Bob McGuire
Location: 50 Crosby Road (Assessor's Map G, Lot 31-1)

**INTENT:** To construct 12,000 sq.ft. building with 17 parking spaces

**LOTS/UNITS PROPOSED:** One

**AGENDA ITEM** #: 4-F

**ACRES:** 34 acres

**ZONING DISTRICT:** Rural Restricted Industrial (I-2)

**EXISTING LAND USE:** Industrial

**PROPOSED LAND USE:** Steel industrial building for contractor office and storage

**SURROUNDING LAND USE:** Industrial uses and vacant land

**ZBA ACTION:** None

**ATTACHMENT:** Site Plan application and plans; TRC minutes

**APPLICATION IS COMPLETE:** Yes

**NOTICES SENT:** Abutter notices were sent by certified mail for this meeting

**PERMITS REQUIRED:** None

**WAIVERS REQUESTED:**

- Waiver to Chapter 149-13.A(12), the requirement that landscape plan be stamped by a Professional Landscape Architect

**Summary of Request and Background**
A very similar application and plan was conditionally approved by the Planning Board on June 3, 2013, but was never signed granting final approval. Therefore, the plan has expired and the applicant has brought back a very similar application requesting site plan approval to construct a 12,000 sq. ft. industrial building with 17 parking spaces.

The applicant appeared before the Technical Review Committee on August 6, 2015 (see TRC minutes).

In May 2006, DBIDA granted a waiver from the Deed Restrictions and Protective Covenant created for the Crosby Road Industrial Park which requires a 25 foot side setback. A meeting is scheduled in September where DBIDA will determine whether that vote is still valid. Therefore, a condition has been placed below.

**Waiver Request:**
The applicant is requesting a waiver from Chapter 149-13.A.(12) to waive the requirement that a landscape plan is prepared by a NH licensed Professional Landscape Architect. The applicant has submitted a letter dated July 10, 2015 that includes the justification for the request. The Planning Department supports the waiver for the reasons stated by the applicant.

**Consistency with Land Use Regulations**
Chapter 149-4 of the Site Review Regulations of the City Code provides for site review by the Planning Board of new construction of various types. The site is located in the Rural Restricted Industrial (I-2) district, which encourages manufacturing, distribution, storage, warehousing, wholesaling, and similar activities that expand the economic base and provide employment opportunities. The district also encourages business uses such as publishing, hotels, restaurants, offices, personal services, etc. This plan is consistent with those regulations, however if the tenancy changes, the applicant will need to appear before the Board again.

**STAFF RECOMMENDATION:**

The Planning Department recommends that the Planning Board accept the application, hold the public hearing, and approve the site plan with the following conditions:

**Conditions to Be Met Prior to Signing of Plans:**

1. The owner's signatures shall be added to the final plan submitted for signature.
2. The applicant shall provide the Planning Department with a digital version of the final plan.

CITY OF DOVER

# PLANNING BOARD - STAFF MEMO FILE #P15-43

Application Type: Site Plan Review
Applicant(s): Geoff Aleva, PE
Owner(s): Bob McGuire
Location: 50 Crosby Road (Assessor's Map G, Lot 31-1)

3. Revise plan to add a note that any changes of use other than industrial manufacturing shall require that the applicant comply with the Site Plan Regulations.
4. The applicant shall provide an architectural rendering sheet.
5. The applicant shall provide a lot plan with abutter information, property line dimensions and bearings.
6. Applicant shall submit in writing approval of an amended driveway permit or reasoning as to why an amended permit is unnecessary.
7. Applicant shall revise plan to include stamp and signature of the surveyor and engineers.
8. Applicant shall revise sheet L1 to add a note indicating the intent of this plan.
9. Applicant shall revise plan to add parking calculation based off of the new parking requirements.
10. Applicant shall confirm with Building Official that the handicap parking space complies with ADA regulations.
11. Applicant shall revise plan to show fire lanes.
12. Applicant shall include a turnaround template including driveway area for the fire department apparatus.
13. The applicant shall obtain approval from DBIDA on the covenant waiver.
14. Applicant to revise plan to indicate how the runoff from the roof area will be collected and conveyed.
15. Applicant shall revise traffic analysis to add description of road way, sight distance, trip distribution, and public transit sections.
16. The approval includes the granting of the waivers requested for the reasons stated by the applicant. The Board finds that the criteria of Chapter 149-19.A have been met.

**Conditions to Be Met Prior to Any Construction Activity:**

17. Construction hours shall be limited to Monday-Friday 7 AM-6 PM, Saturday 8 AM-5 PM, with no Sunday hours. Hours of construction shall be documented on a site construction sign along with the contact information for the general contractor. Said signage shall be located and approved by the City Engineer or Director of Planning and Community Development.

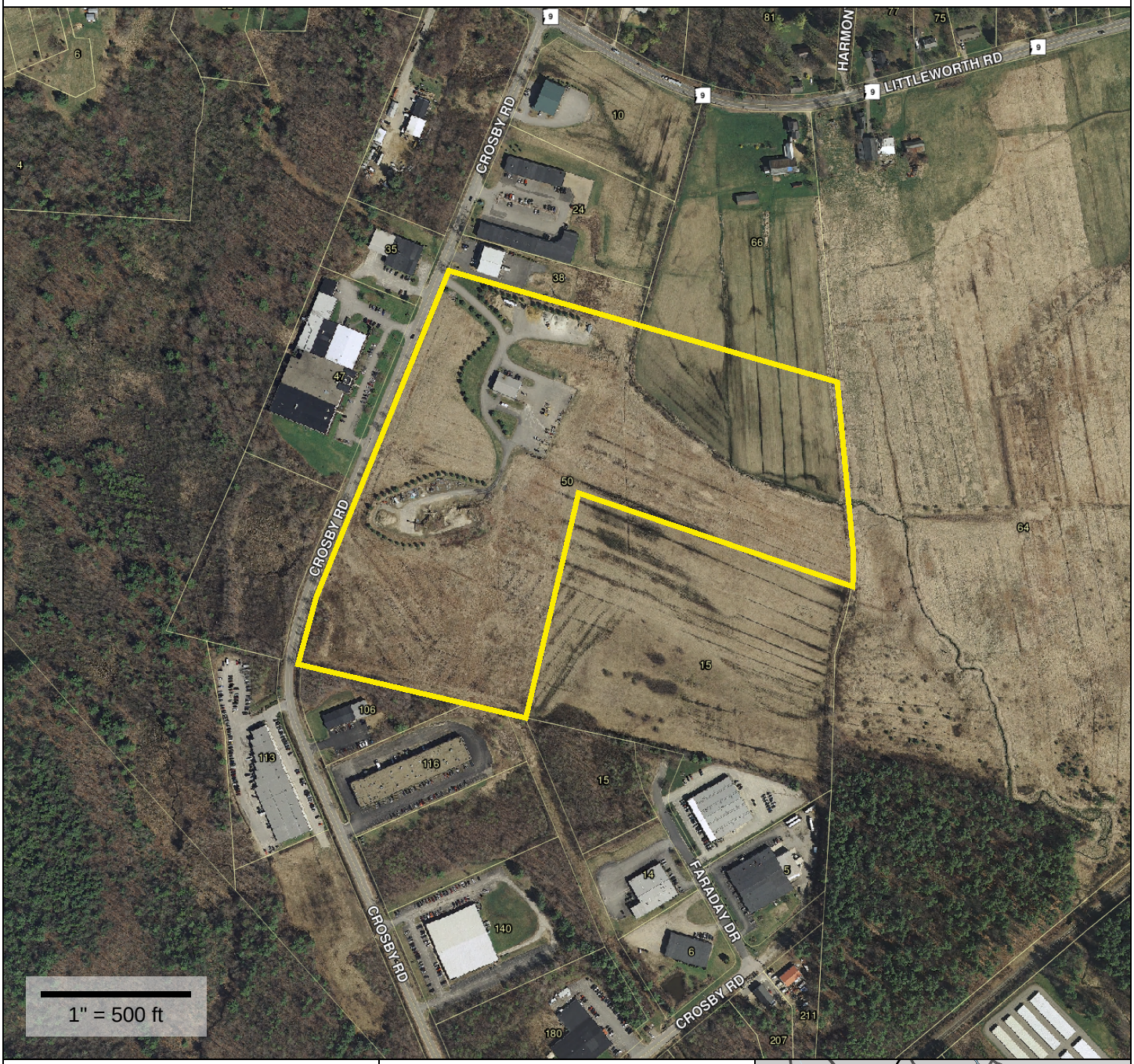
**Conditions to Be Met Prior to Issuance of a Building Permit:**

18. Any new building shall pay the current impact fees in place at the time of building permit application.
19. Any new building shall be assessed the current water/sewer investment fees in place at the time of application for water/sewer service.

**Conditions to Be Met Prior to Issuance of a Certificate of Occupancy:**

20. The applicant shall provide a letter of credit or other form of security acceptable to the City for any unfinished work.

# 50 Crosby Road



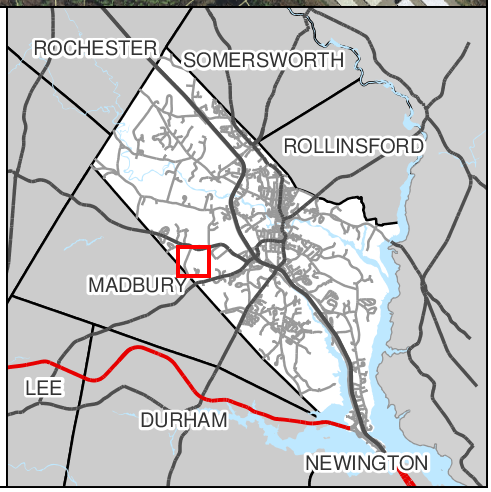

**Property Information**

| | |
|---|---|
| **Property ID** | G0031-001000 |
| **Location** | 50 CROSBY RD |
| **Owner** | MCGUIRE A ROBERT JR TRUST<br>HORIZON TRUST OF NEW HAMP |

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

The City makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated January 1, 2015



# City of Dover, New Hampshire
# SITE REVIEW APPLICATION

RECEIVED
Planning Office
AUG 13 2015
Dover, New Hampshire

[Revision Date: April 23, 2013]

| Office Use Only | Project #: | P15-43 | Date Received: | AUG 13 2015 |
|---|---|---|---|---|
| | Amount Paid: | $2040.00 | Time Received: | Dover, New Hampshire |

## APPLICANT AND OWNER INFORMATION

Name of Applicant: GEOFF ALEVA, PE Telephone # 207-384-2550

Address of Applicant: PO Box 100, SOUTH BERWICK, ME 03908

E-Mail Address: geoff@civcon.com

Name of Property Owner (*if different from applicant*): BOB MCGUIRE Telephone # 603-235-0800

Address of Property Owner: 1 RAYNES AVE #1, PORTSMOUTH, NH 03801

## PROPERTY INFORMATION

Address of Property: 50 CROSBY ROAD

Assessor's Map # 6 Lot(s) # 31-1

Zoning District(s) I-2 Overlay District(s) _____

Size of Parcel: 1,148,317 sq. ft. 34.0 ac. Property Deed: Book 3993 Page: 238

Existing Use of Property: INDUSTRIAL

## SITE PLAN INFORMATION

Describe Proposed Use: INDUSTRIAL

Area of Parcel to be Developed: 311,267 (EXISTING, NO CHANGE) sq. ft.

If Multi-family Residential, Specify Number of Units & Buildings Proposed: _____

Number of Parking Spaces: Existing 0 Proposed 17

Highway Access (check where applicable): ✓ City Street ____ State Highway

Number of Employees Total: 12-16 In Maximum Shift: 12-16

Disposition of Parcel:

Building Footprint 12,000 sq. ft.

Total Building Area 12,000 sq. ft.

Building Setbacks:

Front Yard 35 ft.

Rear Yard 10 ft.

Paved Area 57,000 (LESS THAN EXISTING) sq. ft. Side Yard: Right 10 ft. Left 10 ft.

City Water? ✓ Yes ___ No How far is city water from the property? EXISTING ON PROPERTY

City Sewer? ✓ Yes ___ No How far is city sewer from the property? EXISTING ON PROPERTY

**BUILDING INFORMATION**

Type of Building to be Built: STEEL INDUSTRIAL BUILDING

Height of Building: 20 ft Finished Floor Elevation: 102.5

Number of Seats (where applicable) _____

**WAIVER REQUESTS**

Site Review Regulations section(s) to be waived: ARTICLE IV 149-13.A(12)

Justification for waiver request(s) (*attach additional sheets as needed*): LANDSCAPE IMPROVEMENTS ARE BEING MADE TO THE SITE PER THE PREVIOUSLY APPROVED SITE PLAN.

**SURVEYOR INFORMATION**

Name of Surveyor and Company (Licensed in N.H.) NA.

Address _____ Telephone #: _____

Professional License #: _____ E-mail address: _____

**ENGINEER INFORMATION**

Name of Engineer and Company (Licensed in N.H.) GEOFF ALEVA, PE CIVIL CONSULTANTS

Address PO BOX 100 SOUTH BERWICK, ME 03908 Telephone #: 207-384-2550

Professional License #: _____ E-mail address: geoff@civcon.com

**SIGNATURES**

I/We hereby submit this application to the City of Dover Planning Board and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant or as agent, I attest that I am duly authorized to act in this capacity.

Signature of Property Owner: _____ Date: 7/10/15

Signature of Applicant (*if different from owner*): _____ Date: 7/10/15

Signature of Agent: _____ Date: 7/10/15

**AUTHORIZATION TO ENTER SUBJECT PROPERTY**

I, and my successors, hereby authorize members of the Dover Planning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: _____ Date: 7/10/15

**AUTHORIZATION TO COMPLETE THE PROJECT ON SUBJECT PROPERTY**

I, and my successors, hereby the City of Dover or its assigns to enter my property for the purpose of completing the site work as required by the approved plan should the letter or credit or other surety be called. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: _____ Date: 7/10/15

Signature of Applicant (*if different from owner*): _____ Date: _____

**CERTIFICATION OF FEES**

I, and my successors, hereby certify that I understand that the City of Dover collects impact fees, utility investment fees and inspection fees for projects developed in Dover. Said fees must be paid before a Certificate of Occupancy can be obtained for a structure, unless a different payment schedule is agreed to by the applicant and the City prior to approvals being issued by the Dover Planning Board. Additionally, should the property be in "Current Use" it will be subject to the Land Use Change Tax.

Signature of Property Owner: _____ Date: 7/10/15

Signature of Applicant (*if different from owner*): _____ Date: 7/10/15

# CITY OF DOVER SITE REVIEW
# LIST OF ABUTTERS

Pursuant to RSA 676:4, the State Law of New Hampshire, the City of Dover is required to notify the applicant, abutters (including holders of conservation easements), and any professional whose seal is on the plan, of the public hearing by certified mail, return receipt requested. The applicant must obtain the abutter information from the records of the Tax Assessor's Office (not more than five days prior to filing) in order to process the site review application.

**ABUTTER** is defined as the owner of record of a parcel of land located in New Hampshire and that adjoins or is directly within two hundred (200) feet (including land across the street or waterway) of the proposed site under consideration by the Planning Board. For a condominium or other collective form of ownership, abutter means the officers of the collective or association. *(See additional requirement below)*

**Owner:**

| TAX MAP | LOT # | PROPERTY OWNER | MAILING ADDRESS |
|---|---|---|---|
| G | 31-1 | ROBERT A. MCGUIRE JR | |

**Applicant (if different from owner):**

| APPLICANT NAME | APPLICANT COMPANY | MAILING ADDRESS |
|---|---|---|
| GEOFF ALEVA, PE | CIVIL CONSULTANTS | PO BOX 100, SOUTH BERWICK, ME 03908 |

**Surveyor and/or Engineer:**

| NAME | COMPANY | MAILING ADDRESS |
|---|---|---|
| GEOFF ALEVA, PE | CIVIL CONSULTANTS | PO BOX 100, SOUTH BERWICK, ME 03908 |
| | | |

**Conservation Easement Holder:**

| TAX MAP | LOT # | NAME OF EASEMENT HOLDER | MAILING ADDRESS |
|---|---|---|---|
| | | | |

**Abutters:**

| TAX MAP | LOT # | OWNER (S) OF RECORD | MAILING ADDRESS |
|---|---|---|---|
| | | PLEASE SEE ATTACHED | |
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For projects which meet 149-4A, if a condominium association is an abutter, add all owners of individual units that are located within two hundred (200) feet of the common property line for notification by first class mail.

| UNIT # | OWNER (S) OF RECORD | MAILING ADDRESS |
|---|---|---|
| | | |
| | | |
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| | | |

# PLANNING BOARD
# APPLICATION CHECKLIST & FEE SCHEDULE

A. If you are submitting an application for Site Review or a Major Subdivision the applicant shall meet with the Technical Review Committee (TRC). Eight (8) copies of the application and preliminary plan must be submitted. ✓

B. Prior to the submission deadline for Planning Board, fifteen (15) copies of the application and fifteen (15) sets of plans must be submitted. Four (4) 22" x 34"and eleven (11) 11" x 17" (signed by owner). _____

C. **TOTAL FEE** paid by cash or check made payable to "City of Dover"

1. Application fee for the following:

- SUBDIVISION $150.00 x # _____ new lots created = $ 0
- LOT LINE ADJUSTMENT $200.00 (if more than two lots involved, add $100.00 per lot) = $ 0
- SITE REVIEW - RESIDENTIAL $100.00 x # ____ per dwelling unit = $ N/A
- SITE REVIEW – NON-RESIDENTIAL (not to exceed $10,000)
  New construction $.15 sq. ft. x # 12,000 sq. ft. = $1800 $ 1800
  Additions (new floor space) $.10 per sq. ft. x # _____sq. ft. = $ 0
- IMPERVIOUS PAVED AREA (for new development) OR IMPERVIOUS PARKING LOT ADDITIONS (not to exceed $10,000) $.07 sq. ft. x # _____ = $ 0
- MOTEL/HOTEL $35.00 x # ___ per lodging unit = $ 0
- CHANGE OF USE (not to exceed $5,000)
  Existing floor space $.10 per sq. ft. x # ____ sq. ft. = $ 0
- CONDITIONAL USE PERMIT $150.00 x # _____ per application = $ 0
- GRAVEL PIT/ EXTRACTION PERMIT
  Application fee $50.00 = $ 0
  Permit fee $75.00 = $ 0
- EXTENSIONS OF/AMENDMENTS TO/WAIVERS FOR AN APPROVED PLAN ($150.00 minimum) $50.00 x # ____ per hour of review $ 0
- REQUEST FOR REZONING $150.00 = $ 0
- DRIVEWAY WAIVER – $100.00 application fee =
  Letter of rejection from Engineering Department, diagram & letter from owner $ 0

D. **Mailing Labels (Avery 5160)** in triplicate including owner, engineer, architect, land surveyor, or soil scientist whose professional seal appears on the plat with names and addresses for notices.

1. Certified letters fee: # of abutters 18 X $8.00 = $ 144—
2. Applicant & Owner, engineer, architect, land surveyor or soil scientist Certified letters fee # 2 of x $8.00 = $ 16—
3. First Class Mail fee (for individual owner of units within a condominium or other collective form of ownership): # of abutters _____ X $1.00 = $ 0
4. Creating/Printing Abutter Labels fee per sheet _____ x $10.00 = $ 0

E. **Foster's newspaper public notice fee** **$ 80.00**

F. **Digital Version of the Plan** & Archive Fee $1.00 x # _____ per sheet of plan set = $ 0

**TOTAL FEE** **$ 2040**

# *LIST OF ABUTTERS*

**Robert A McGuire Jr Trustee**
**Horizon Trust of New Hampshire**
**Map G Lot 31-1**
**50 Crosby Road, Dover, NH**

| *MAP* | *LOT* | *NAME & MAILING ADDRESS* |
|---|---|---|
| G | 32-A | Fibredyne INC<br>47 Crosby Road<br>Dover, NH 03820 |
| G | 32 | MIESFELDT HERBERT C & MIESFELDT ELIZABETH C<br>28 SPRUCE RD<br>WOLFEBORO, NH 03894 |
| G | 35-A | BENTHAM BRUCE K & BENTHAM CAROLYN A<br>17 STROUD LN<br>BARRINGTON, NH 03825 |
| G | 31-005 | LIEGE CORPORATION<br>PO BOX 982<br>PORTSMOUTH, NH 03802-0982 |
| G | 31-003 | JEWETT COMMERCIAL PARK LLC<br>32 HARRIMAN HILL RD<br>RAYMOND, NH 03077 |
| G | 31 | CASWELL BRUCE<br>68 LITTLEWORTH RD<br>DOVER, NH 03820-4330 |
| G | 2 | RILEY FRED E TRUST 1991 RILEY RUTH K TRUST 1991<br>201 TOLEND RD<br>BARRINGTON , NH 03825-3708 |
| G | 1-L | CHAUVIN ARNOUX INC<br>15 FARADAY DR<br>DOVER, NH 03820 |
| G | 1-O | CHAUVIN ARNOUX INC<br>15 FARADAY DR<br>DOVER, NH 03820 |
| G | 1-K | MCQUADE & MCQUADE INVESTMENTS<br>PO BOX 1409<br>DOVER, NH 03820 |
| G | 1-G | BRENNAN LIAM & MARY B TRUSTEES BRENNAN FAMILY REVOCABLE TRUST<br>65 DUNVEGAN WOODS<br>HAMPTON, NH 03842 |
| G | 1-F | COGEBI INC<br>14 FARADAY DRIVE<br>DOVER, NH 03820 |
| G | 1-I | MCQUADE & MCQUADE INVESTMENTS<br>PO BOX 1409<br>DOVER, NH 03820 |

| | | |
|---|---|---|
| G | 1-J | GREEN RANDALL S TRUSTEE GREEN RANDALL REVOCABLE TRUST<br>229 LITTLEWORTH RD<br>MADBURY, NH 03823 |
| G | 1-N | FORUM COURT CONDOMINIUMS<br>113 CROSBY RD STE 1<br>DOVER, NH 03820 |
| G | 32-C | City of Dover<br>288 CENTRAL AVE<br>DOVER, NH 03820 |
| G | 35-A | BENTHAM BRUCE K & BENTHAM CAROLYN A<br>17 STROUD LN<br>BARRINGTON, NH 03825 |
| G | 31-002 | CROSBY COMMONS CONDOMINIUM<br>14 HILTON DR<br>NEWMARKET, NH 03857-2200 |

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# CIVIL CONSULTANTS MEMORANDUM

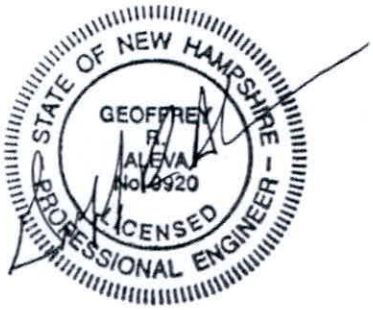
**TO:** **City of Dover Planning and Community Development**

**FROM:** **Geoffrey R. Aleva, PE – Sr. Project Engineer**

**SUBJECT:** **Project Narrative – Maguire Group**

**DATE:** **JULY 10, 2015**
**AUGUST 12, 2015 (REV 1)**

**PROJECT:** **50 CROSBY ROAD**




The developed site currently has a 2 story steel building and paved areas used for the storage of landscaping materials. Improvements to the site will include the construction of a 12,000 SF single story building at the location of the landscaping materials storage. The existing entrance to Crosby Road will remain unchanged.

The property is located at 50 Crosby Road and is known as lot 31-1 on tax map G. The 34.0 acre parcel is in the Rural Restricted Industrial District (I-2).

The proposed 12,000 SF building will require 15 parking spaces (Industrial/Manufacturing use, 1 space / 800 sf). 17 parking spaces will be provided.

The site work will include water, sewer and electrical services from the existing utilities currently on site. The proposed building will be partially located over the existing paved portion of the site. The entrance to the paved parking area will be modified to create a more defined access point. The net result of the building construction and paved parking area modifications will result in a reduction of 33 SF of impervious area.

A catch basin will be installed in the center of the modified access point in place of an existing culvert. A 2 ft gravel filter strip will be installed along the edge of the existing paved area. Stormwater will flow over the filter strip prior to entering the vegetated area beyond. A stormwater memo has been prepared that analyzes the land area impacted by the site improvements. The memo indicates that the design reduces impervious area on site and that it is our opinion that the site improvements will not have a negative impact on properties downstream.

Traffic analysis has been completed for the proposed site improvements. The trips generated by the proposed site improvements and existing site combined do not exceed 100 peak hour trips or 1,000 average daily trips. Based on the number of trips generated by the site, "Advanced" analysis is not required. A Traffic Analysis memo has been prepared detailing our findings.

Existing trees located directly behind the storage bins will be removed. The trees will be replaced per the conditions of the previously approved site plan along the back of the proposed building.

A waiver for the Site Review Regulation Article IV 149-13.A(12) is being requested. It is our opinion that a landscaping plan created by a Professional Landscape Architect is not needed for the subject project. A memo has been prepared to provide support for our waiver request.

Due to the site grades and existing coniferous tree cover, the building will not be visible from Crosby road with

ATTACHMENTS:

- 15 Copies of Site Plan Application, project narrative
- 15 Copies of Traffic Analysis Memo
- 15 Copies of Stormwater Memo
- 14 Copies of 11x17 plan set (1 Copy of 22x34 plan set)
- 15 Copies of Existing Conditions, Neighborhood and Boundary Plan

J:\aaa\2015\1518900\Planning Board 20150825\20150812-1518900-PROJECTNARRATIVE.doc

# CIVIL CONSULTANTS MEMORANDUM

**TO:** **City of Dover Planning and Community Development**

**FROM:** **Geoffrey R. Aleva, PE – Sr. Project Engineer**

**SUBJECT:** **Request for Waiver – Landscape Architect**

**DATE:** **JULY 10, 2015**

**PROJECT:** **50 CROSBY ROAD**




We are requesting a waiver of City of Dover Site Review Regulation Article IV 149-13.A(12). This memorandum will provide the support for our waiver request.

It is our opinion that a Landscape Plan produced by a Professional Landscape Architect is unnecessary for the proposed site plan because the proposed site improvements will not be visible to the public, landscaping will be nearly identical to the existing site and is within the intent and spirit of the regulations.

The proposed site plan was previously approved, but was not constructed. The proposed site improvements include landscaping that remains unchanged from the previously approved site plan.

The site is located within an industrial park. The proposed site improvements will not be visible from Crosby Road and will only be seen from the private drive used to access the existing steel building on the property.

The proposed site improvements carry out the spirit and intent of the landscape plan regulation in that vegetation will be incorporated on the property. Many of the existing trees will remain unharmed. Trees that are removed due to the proposed building location will be replaced as shown on the site plan provided. Please note that the addition of the trees along the back of the proposed building was a Condition of Approval for the previously approved site plan.

J:\aaa\2015\1518900\Town\20150710-1521200-waiver request memo-landscape.doc

# CIVIL CONSULTANTS MEMORANDUM

**TO:** **City of Dover Planning and Community Development**

**FROM:** **Geoff Aleva, PE – Sr. Project Engineer**

**SUBJECT:** **Traffic Analysis, Maguire Group**

**DATE:** **JULY 10, 2015**
**AUGUST 12, 2015 (REV 1)**

**PROJECT:** **50 CROSBY ROAD**




PROJECT INTRODUCTION

The property is located at 50 Crosby Road and is known as lot 31-1 on tax map G. The 34 acre parcel is located in the Rural Restricted Industrial (I-2) District. The site is currently has a warehouse type metal building used for contractor storage and office space. Large bins are located outside for landscaping materials. The existing metal building is to remain and the large exterior bins will be replaced with a 12,000 sf building used for contractor storage and/or contractor offices.

The site is located approximately 950 ft south of the Littleworth Rd (Route 9) and Crosby Road intersection. The entrance to the site is opposite Pentair Residential Filtration and abuts Tactical Defense Solutions.

The single entrance to the site is to remain. The existing speed limit approaching the site is 30 mph from both the north and south.

## TRAFFIC GENERATION / ANALYSIS

The number of trips generated by the site was calculated using the Institute of Transportation Engineers' "Trip Generation Manual", 9th Edition (2012). Trips were calculated using ITE Land Use Code 151 (Mini Warehouse) for the existing building and ITE Land Use Code 715 (Single Tenant Office) for the proposed building. The proposed building may be used as contractor office or storage space. Office space was assumed for the traffic analysis as it will generate more trips than a storage use. Please note that ITE Land Use Code 715 does not provide trips for the Saturday Peak Hour. We have conservatively assumed that the site will generate 80% of the AM Peak Hour during the Saturday Peak Hour.

| Trip Generation | | | |
|---|---|---|---|
| | **Existing Based on ITE 151** | **Proposed New Trips Based on ITE 715** | **Total Trips** |
| **AM Peak Hour** | 2 | 22 | 24 |
| **PM Peak Hour** | 2 | 21 | 23 |
| **Saturday Peak Hour** | 2 | 18 | 20 |

Trip generation does not exceed 100 peak hour trips or 1,000 average daily trips and does not require "Advanced" analysis.



CIVIL
CONSULTANTS
*P.O. Box 100 South Berwick, Maine 03908 207-384-2550*

# CIVIL CONSULTANTS MEMORANDUM

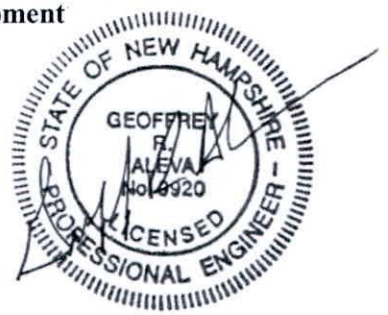
**TO:** **City of Dover Planning and Community Development**

**FROM:** **Geoff Aleva, PE – Sr. Project Engineer**

**SUBJECT:** **Drainage Analysis, Maguire Group**

**DATE:** **JULY 10, 2015**
**AUSUST 12, 2015 (REV 1)**

**PROJECT:** **50 CROSBY ROAD**




The proposed site is located on Map G, Lot 31-1. The mailing address of the site is 50 Crosby Road. The lot is situated on the east side of Crosby Road approximately 950' south of the intersection between Crosby Road and Littleworth Road (Route 9). The site improvements will consist of constructing a 12,000 sf industrial type building located in place of the existing exterior storage bins. The storage bins are located along the northern property line over a paved parking area. The bins are currently used to store landscaping materials.

Approximately 4,923 sf of the building would be located over an existing landscaped area. In addition to the proposed building, 4,950 sf of paved parking would be removed to the west of the proposed building, and 1,127 sf of paved parking area would be removed along the south side of the entrance. Approximately 1,121 sf of landscaping would be removed along the existing entrance to allow for the proposed adjustments. The net result of the site improvements will be a decrease in impervious surface area of 33 sf.

Minor grading changes will be made to the site to account for the removal of the storage bins and the construction of the proposed building. It is our opinion that the proposed grading changes will not change the flow of stormwater across the site.

The roof of the proposed building will slope to the back (north). A stone drip edge, draining to the east, and grading changes will be made to the area to move the water away from the building.

A catch basin will be installed at the uphill end of the culvert currently going under the entrance to the parking area. The catch basin will have a 3' sump and a snout outlet to remove floatables and sediment prior to the stormwater being discharged.

A 2 ft gravel filter trench will be constructed along the edge of the existing paved parking area. The filter strip will act as a buffer between the impervious area and the vegetated land beyond the parking lot.

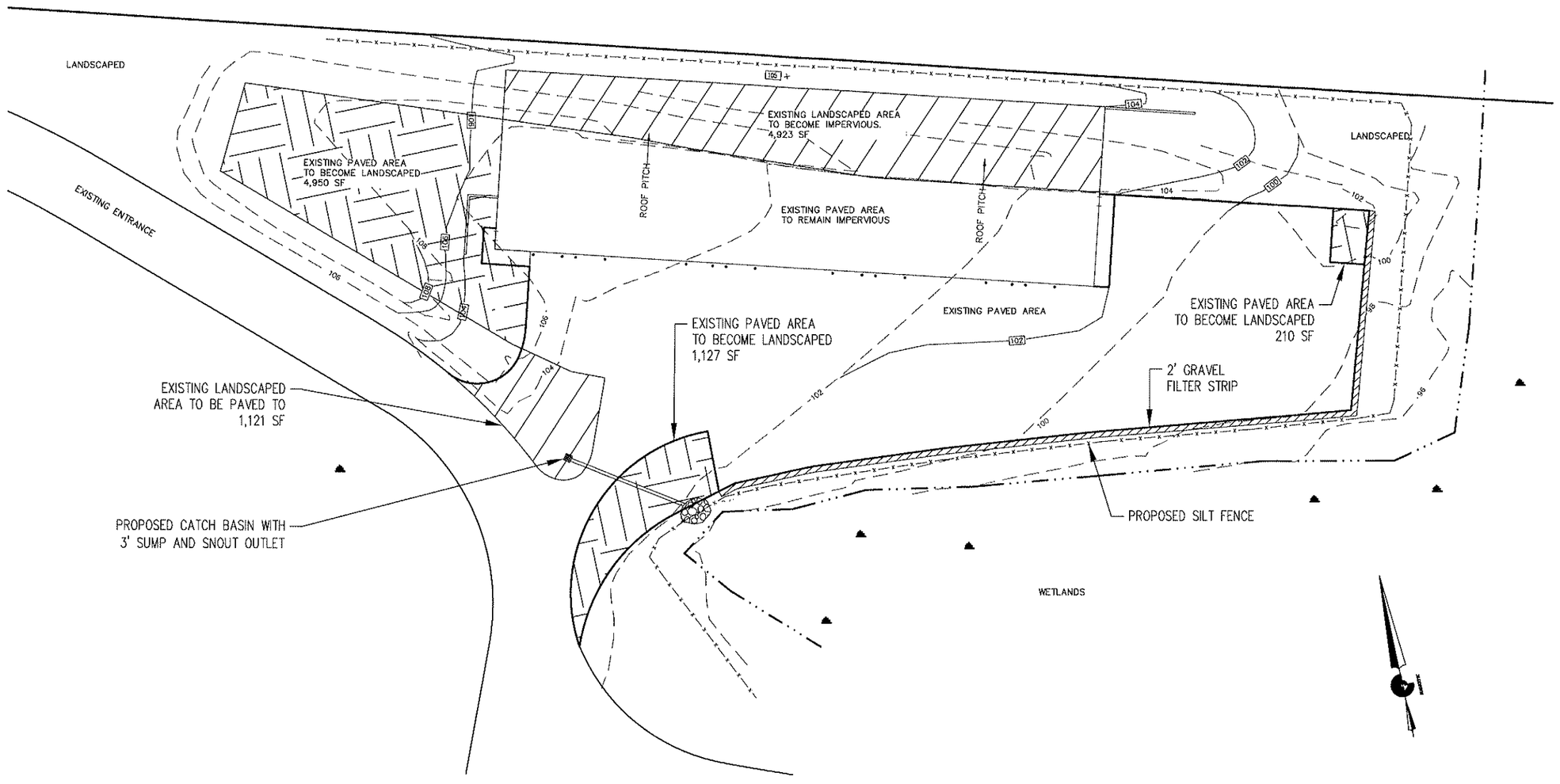
A silt fence will be installed beyond the extents of construction prior to any of the proposed site improvements being constructed. The silt fence will remain in place until landscaped areas have been stabilized.

It is our opinion that the reduction in impervious surface, minor grading changes, and installation of a catch basin with a sump will not adversely impact adjacent properties.

J:\aaa\2015\1518900\Drainage\20150812_DRAINAGE_NARRATIVE-REV1.doc

# PROPOSED SURFACE MODIFICATIONS

4,950 SF –IMPERVIOUS SURFACE REMOVED AND REPLACED WITH LANDSCAPING (GRASS).
1,127 SF – IMPERVIOUS SURFACE REMOVED AND REPLACED WITH LANDSCAPING (GRASS).
4,923 SF – LANDSCAPING REMOVED AND REPLACED WITH IMPERVIOUS SURFACE (PROPOSED BUILDING).
1,121 SF – LANDSCAPING REMOVED AND REPLACED WITH IMPERVIOUS SURFACE (PAVED PARKING).
33 SF – OVERALL CHANGE OF IMPERVIOUS SURFACE TO LANDSCAPING (GRASS).




TAX MAP G LOT NO 31-1

STATE OF NEW HAMPSHIRE – GEOFFREY R. ALENA No. 10920 – LICENSED PROFESSIONAL ENGINEER


© CIVIL CONSULTANTS
CIVIL CONSULTANTS
Engineers
Planners
Surveyors
P.O. Box 100
South Berwick
Maine
03908
207-384-2550
www.civcon.com


| NO. | REVISIONS | INT. | DATE |
|---|---|---|---|
| 2 | PER TRC COMMENTS | MJL | 8/12/15 |
| 1 | PER CLIENT COMMENTS | MJL | 7/23/15 |

RECORD OWNER:
MCGUIRE A ROBERT JR TRUSTEE
HORIZON TRUST OF
NEW HAMPSHIRE
OWNER ADDRESS:
PO BOX 986
DOVER, NH 03821-0986

McGUIRE GROUP
SITE PLAN
50 CROSBY ROAD
DOVER, NEW HAMPSHIRE 03820

PREPARED FOR:
MACQUIRE GROUP
CLIENT ADDRESS: 50 CROSBY ROAD, DOVER, NEW HAMPSHIRE 03820

DATE: 7/10/15
DRAWN BY: MJL
CHECKED BY: GRA
APPROVED BY: GRA

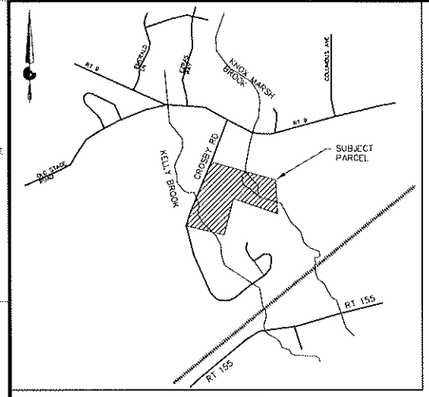
DRAINAGE
PLAN
P-15-43

PROJECT NO: 15-189.00

D1

SHEET: 1 OF 1

CADD FILE: J:\ccc\2015\1518900\Carlson\1518900-Site Plan.dwg




LOCATION PLAN
(NOT TO SCALE)

## NOTE:

1. ASSESSOR'S INFORMATION:
   CITY OF DOVER ASSESSOR'S MAP G LOT 31-1
2. RECORD OWNER:
   ROBERT A McGUIRE TRUSTEE
   PO BOX 988
   DOVER, NH 03821-0988
3. DEED REFERENCE:
   S.C.R.D. 3993/238
4. ZONING INFORMATION:
   RURAL RESTRICTED INDUSTRIAL (I-2) DISTRICT

| | |
|---|---|
| LOT SIZE: | 20,000 SQ.FT. |
| MINIMUM FRONTAGE: | 100' |
| SETBACKS: | |
| FRONT YARD: | 35' |
| SIDE YARD: | 10' |
| REAR YARD: | 10' |
| MAXIMUM BUILDING HEIGHT: | 50' |
| MAXIMUM LOT COVERAGE: | 50% |

5. THE PARCEL IS LOCATED IN FLOOD HAZARD ZONE X AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR THE CITY OF DOVER, COMMUNITY PANEL NO 330145, EFFECTIVE DATE MAY 17 2005.
6. APPROVAL OF THIS PLAN IS BASED ON INFORMATION PRESENTED TO AND ON FILE WITH THE CITY OF DOVER PLANNING BOARD.
7. LOCUS PARCEL CONTAINS 34.00 ACRES MORE OR LESS.
8. UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONTACT DIGSAFE (1-888-344-7233) FOR LOCATION OF ALL EXISTING UTILITIES.
9. THE SUBJECT PARCEL IS ENCUMBERED BY A 30' UTILITY EASEMENT AND A 100' WIDE CONSERVATION DISTRICT, LOCATED 50' TO EACH SIDE OF KNOX MARSH BROOK.
10. AS-BUILT PLANS OF THE SITE SHALL BE SUBMITTED ON A REPRODUCIBLE MYLAR MEDIUM AND IN A DIGITAL DXF FORMAT ON A DISK TO THE CITY OF DOVER'S ENGINEER'S OFFICE UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A L.L.S. OR P.E.
11. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE CITY AND STATE CODES.
12. A PRE-CONSTRUCTION CONFERENCE WITH THE DEVELOPER, DESIGN ENGINEER, EARTHWORK CONTRACTOR AND CITY ENGINEER SHALL OCCUR PRIOR TO ANY EARTH DISTURBING ACTIVITY.
13. HORIZONTAL AND VERTICAL DATUM SHOWN IS BASED UPON THE CITY OF DOVER GEOD COORDINATE GRID, BASED UPON INFORMATION PROVIDED BY THE CITY OF DOVER ENGINEER'S OFFICE.
14. THE PLANS AND SPECIFICATIONS ARE INTENDED TO BE EXPLANATORY OF THE WORK TO BE DONE. SHOULD ANY OMISSION, ERRORS OR DISCREPANCIES APPEAR, THEY SHALL BE SUBJECT TO CORRECTION AND INTERPRETATION BY THE "DESIGN ENGINEER" THEREBY DEFINING AND FULFILLING THE INTENT OF THE PLANS.
15. SOIL TYPES ON THE SITE ARE ScA, HvB, AND WrB (SCANTIC SILT LOAM, HUBTON SILT LOAM, AND WINDSOR LOAMY FINE SAND). THE SOURCE FOR THE SOILS TYPE IS USDA SCS SOIL SURVEY OF STRAFFORD COUNTY, ISSUED MARCH 1973.
16. JURISDICTIONAL WETLANDS SHOWN WERE DELINEATED BY JAMES H. LONG, C.W.S., C.S.S. OF NEW HAMPSHIRE SOIL CONSULTANTS, INC. ON MARCH 29, 2005 IN ACCORD WITH THE 1987 ARMY CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, AS REQUIRED BY THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES WETLAND BUREAU. WETLANDS WERE DELINEATED FOR REFERENCE PLAN #1.
17. TOPOGRAPHIC SURVEY PERFORMED BY McKENZIE SURVEY ASSOCIATES, INC. ON JUNE 1, 2000 AND MARCH 30, 2006 (REFERENCE PLAN #2).
18. THIS PLAN SHOWS ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT AT THE TIME THE TOPOGRAPHIC SURVEY WAS PERFORMED (REFERENCE PLAN #1). THE ABSENCE OF SUBSURFACE STRUCTURES AND UTILITIES, ETC. FROM THIS PLAN, BUT IN EXISTENCE IS NOT INTENDED OR IMPLIED.
19. BOUNDARY INFORMATION OBTAINED FROM "LOT LINE ADJUSTMENT PLAN PREPARED FOR BUSINESS PARTNERS, INC. AND CHAUVIN ARNOUX, INC., CROSBY ROAD AND FARADAY DRIVE, TAX MAP G, LOTS 1-L & 31-1, DOVER, NEW HAMPSHIRE, COUNTY OF STRAFFORD"; PREPARED BY McKENZIE SURVEY ASSOCIATES, INC; DATED: NOV. 5, 1999, SCALE: 1"=100' (REFERENCE PLAN #2).
20. THE PARCEL IS SERVED BY MUNICIPAL WATER AND SEWER.
21. BACKFLOW PREVENTER SHALL BE PROVIDED FOR THE PROPOSED WATER SERVICE.
22. UNDERGROUND ELECTRIC, TELEPHONE, AND CABLE TV CONDUITS SHALL BE INSTALLED IN A SINGLE TRENCH PER PSNH, VERIZON, AND COMCAST STANDARDS.
23. DAILY SEWAGE FLOW TO BE APPROXIMATELY 2,500 GAL BASED ON 15 GPD/100 SF OF BUILDING. FINAL VOLUME TO BE DETERMINED.
24. SEWER PIPE TO BE SDR 35.
25. EXTERIOR LIGHTING TO BE CUT OUT TYPE FIXTURES PER CHAPTER 149-14-E AND SHALL PROVIDE LIGHT DIRECTLY TO SITE ONLY.
26. THE PROPOSED BUILDING IS TO MEET THE REQUIREMENTS OF CHAPTER 109 OF THE CITY CODE.

## LAND USE:

| | |
|---|---|
| TOTAL LOT AREA: | 1,481,040 SF |
| WETLAND AREA: | 1,169,733 SF (79%) |
| UPLAND AREA: | 311,267 SF (21%) |
| BUILDING: | 15,800 SF |
| PAVED: | 57,000 SF |
| GRAVEL: | 120,294 SF |
| LANDSCAPED: | 117,173 SF |

## REFERENCE PLANS:

1. "SITE PLAN OF LAND R & M PAVING, LOT 31-1, TAX ASSESSOR'S MAP G, 50 CROSBY ROAD, DOVER, NEW HAMPSHIRE, COUNTY OF STRAFFORD." PRODUCED BY CIVIL WORKS, P.O. BOX 1166 DOVER, NEW HAMPSHIRE 03820, DATED 4-5-06.
2. "LOT LINE ADJUSTMENT PLAN PREPARED FOR BUSINESS PARTNERS, INC. AND CHAUVIN ARNOUX, INC., CROSBY ROAD AND FARADAY DRIVE, TAX MAP G, LOTS 1-L & 31-1, DOVER, NEW HAMPSHIRE, COUNTY OF STRAFFORD"; PREPARED BY McKENZIE SURVEY ASSOCIATES, INC.; DATED: NOV. 5, 1999, SCALE: 1"=100'

## SCOPE:

THE INTENT OF THIS PLAN IS TO DETAIL THE CHANGES TO THE SITE ASSOCIATED WITH THE CONSTRUCTION OF THE PROPOSED BUILDING.

## PARKING CALCULATIONS:

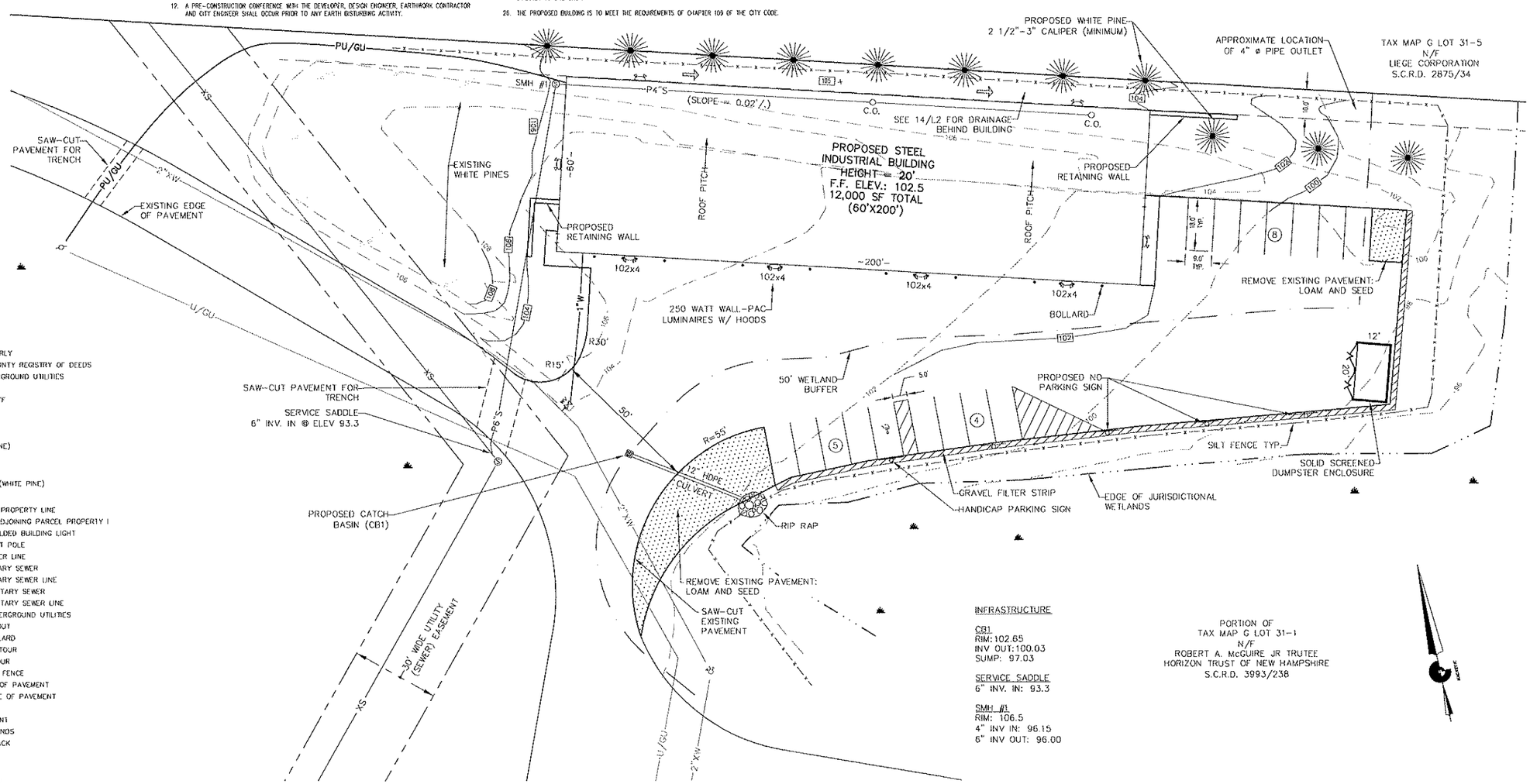
BASED ON PROPOSED PARKING REQUIREMENTS PER CITY OF DOVER SITE REVIEW REGULATIONS 149-14.

INDUSTRIAL/MANUFACTURING: 1 SPACE / 800 SF

12,000 SF / (1 SPACE / 800 SF) = 15 PARKING SPACES

SPACES PROVIDED = 17 PARKING SPACES

## CONDITIONS OF APPROVAL:




## LEGEND:

| | |
|---|---|
| F.F. | FINISH FLOOR |
| INV. | INVERT |
| N/F | NOW OR FORMERLY |
| S.C.R.D. | STRAFFORD COUNTY REGISTRY OF DEEDS |
| U/GU | EXISTING UNDERGROUND UTILITIES |
| WV | WATER VALVE |
| WS | WATER SHUT OFF |
| XW | WATER LINE |
| | CATCH BASIN |
| | TREE (WHITE PINE) |
| | EXISTING TREE (WHITE PINE) |
| | LOCUS PARCEL PROPERTY LINE |
| | APPROXIMATE ADJOINING PARCEL PROPERTY LINE |
| | PROPOSED SHIELDED BUILDING LIGHT |
| | PROPOSED LIGHT POLE |
| W | PROPOSED WATER LINE |
| S | EXISTING SANITARY SEWER |
| XS | EXISTING SANITARY SEWER LINE |
| S | PROPOSED SANITARY SEWER |
| S | PROPOSED SANITARY SEWER LINE |
| PU/GU | PROPOSED UNDERGROUND UTILITIES |
| C.O. | SEWER CLEAN OUT |
| | PROPOSED BOLLARD |
| 106 | PROPOSED CONTOUR |
| 106 | EXISTING CONTOUR |
| X X | PROPOSED SILT FENCE |
| | EXISTING EDGE OF PAVEMENT |
| | PROPOSED EDGE OF PAVEMENT |
| | UTILITY POLE |
| | UTILITY EASEMENT |
| | FLAGGED WETLANDS |
| | WETLAND SETBACK |
| | SETBACK |
| | RIP RAP |
| | PROPOSED SIGN |

TAX MAP G LOT NO. 31-1

STATE OF NEW HAMPSHIRE — GEOFFREY R. LAWRENCE — 14620 — LICENSED PROFESSIONAL ENGINEER

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CIVIL CONSULTANTS
Engineers
Planners
Surveyors
P.O. Box 100
South Berwick
Maine
03908
207-384-2550
www.civcon.com

| NO. | REVISIONS | INT. | DATE |
|---|---|---|---|
| 2 | PER TRC COMMENTS | MJL | 8/12/15 |
| 1 | PER CLIENT COMMENTS | MJL | 7/23/15 |

RECORD OWNER:
ROBERT A McGUIRE JR TRUSTEE
HORIZON TRUST OF
NEW HAMPSHIRE
OWNER ADDRESS:
PO BOX 988
DOVER, NH 03821-0988

McGUIRE GROUP
SITE PLAN
50 CROSBY ROAD
DOVER, NEW HAMPSHIRE 03820

PREPARED FOR:
McGUIRE GROUP
CLIENT ADDRESS: 50 CROSBY ROAD, DOVER, NEW HAMPSHIRE, 03820

1"=20'
0' 20'

DATE: 7/10/15
DRAWN BY: MJL
CHECKED BY: GRA
APPROVED BY: GRA

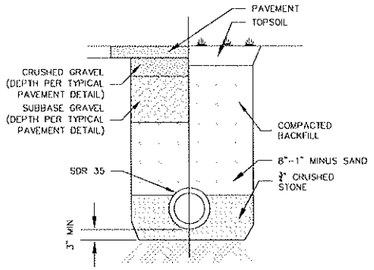
SITE PLAN
P15-43

PROJECT NO: 15-189.00

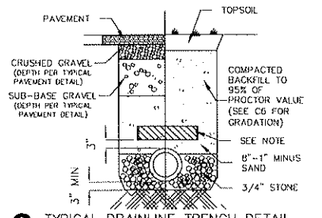
L1

SHEET: 1 OF 3

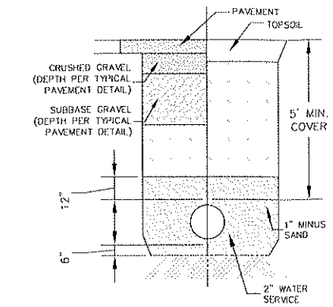
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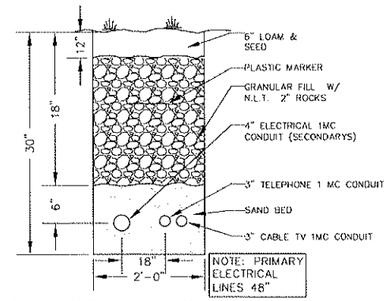

**1.L2** SEWERLINE TRENCH DETAIL
NOT TO SCALE



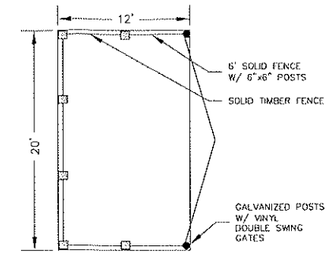

**2.L2** TYPICAL DRAINLINE TRENCH DETAIL
NOT TO SCALE
NOTE: 2"x2' STYROFOAM INSULATION BOARD SHALL BE PLACED IN AREAS WHERE COVER OVER LINE IS LESS THAN 2.5', OR WHERE SHOWN.




**3.L2** WATERLINE TRENCH DETAIL
NOT TO SCALE

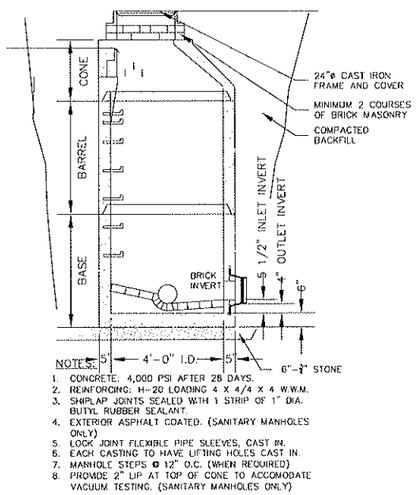



**4.L2** ELECTRICAL & TELEPHONE TRENCH DETAIL
NOT TO SCALE




**5.L2** TYPICAL DUMPSTER ENCLOSURE DETAIL
NOT TO SCALE

NOTE: SHOP DRAWINGS FOR ALL PROPOSED STRUCTURES TO BE SUBMITTED TO CIVIL CONSULTANTS FOR APPROVAL PRIOR TO INSTALLATION



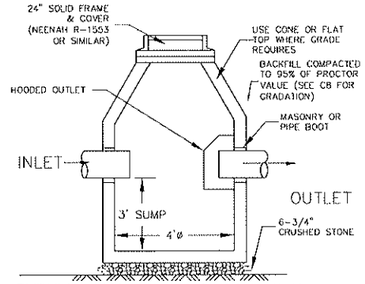

NOTES:
1. CONCRETE: 4,000 PSI AFTER 28 DAYS.
2. REINFORCING: H-20 LOADING 4 X 4/4 X 4 W.W.M.
3. SHIPLAP JOINTS SEALED WITH 1 STRIP OF 1" DIA. BUTYL RUBBER SEALANT.
4. EXTERIOR ASPHALT COATED. (SANITARY MANHOLES ONLY)
5. LOCK JOINT FLEXIBLE PIPE SLEEVES, CAST IN.
6. EACH CASTING TO HAVE LIFTING HOLES CAST IN.
7. MANHOLE STEPS @ 12" O.C. (WHEN REQUIRED)
8. PROVIDE 2" LIP AT TOP OF CONE TO ACCOMODATE VACUUM TESTING. (SANITARY MANHOLES ONLY)

**6.L2** 4' SANITARY MANHOLE
NOT TO SCALE

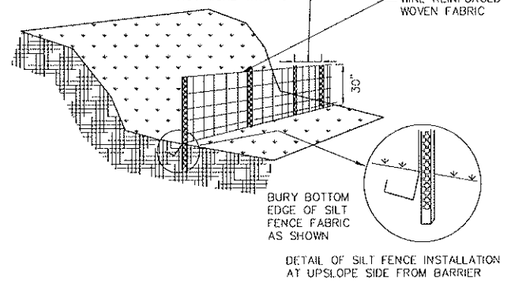
NOTES:
1. CONCRETE: 4,000 PSI AFTER 28 DAYS.
2. REINFORCING: H-20 LOADING 4X4/4X4 W.W.M.
3. SHIPLAP JOINTS SEALED WITH 1 STRIP OF 1" DIA. BUTYL RUBBER SEALANT.
4. LOCK JOINT FLEXIBLE PIPE SLEEVES, CAST IN.
5. EACH CASTING TO HAVE LIFTING HOLES CAST IN.
6. MANHOLE STEPS @ 12" O.C. (WHEN REQUIRED)

NOTE: SHOP DRAWINGS FOR ALL PROPOSED STRUCTURES TO BE SUBMITTED TO CIVIL CONSULTANTS FOR APPROVAL PRIOR TO INSTALLATION

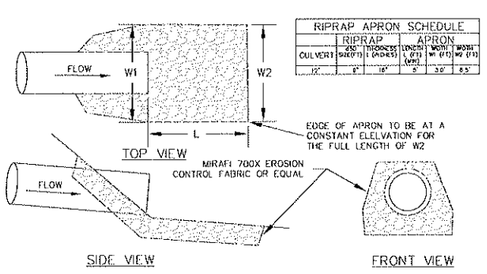
NOTE: CATCH BASIN SHALL HAVE HOODED OUTLETS APPROVED BY CIVIL CONSULTANTS.




**7.L2** TYPICAL MANHOLE CROSS SECTION
NOT TO SCALE



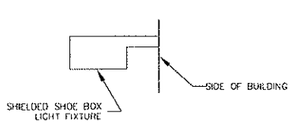

**8.L2** TYPICAL SILT FENCE
NOT TO SCALE



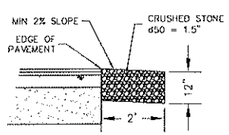

RIPRAP APRON SCHEDULE

| CULVERT | RIPRAP APRON SIZE (FT) | RIPRAP APRON THICKNESS (INCHES) | RIPRAP APRON LENGTH (FT) L | RIPRAP APRON WIDTH W1 (FT) | RIPRAP APRON WIDTH W2 (FT) |
|---|---|---|---|---|---|
| 12" | 8' | 18" | 5' | 3.0' | 8.5' |

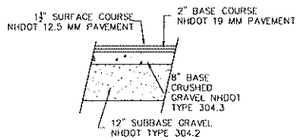
**9.L2** RIPRAP APRON PIPE OUTLET DETAIL
NOT TO SCALE



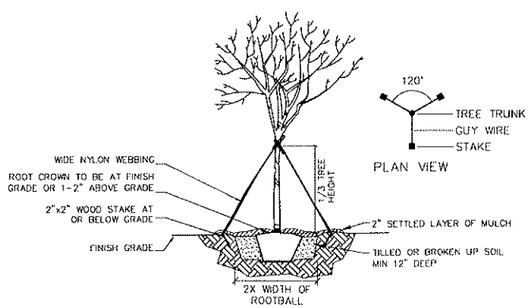

**10.L2** TYPICAL BUILDING MOUNTED LIGHT
NOT TO SCALE



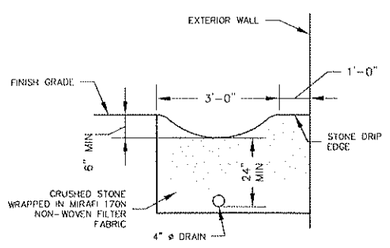

**11.L2** GRAVEL FILTER STRIP
NOT TO SCALE




**12.L2** TYPICAL PAVEMENT SECTION
NOT TO SCALE




**13.L2** TYPICAL PAVEMENT SECTION
NOT TO SCALE




**14.L2** TYPICAL PAVEMENT SECTION
NOT TO SCALE

TAX MAP G LOT NO. 31-1

STATE OF NEW HAMPSHIRE
GEOFFREY A. LAWRENCE
LICENSED PROFESSIONAL ENGINEER

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|---|---|---|---|
| 2 | PER TRC COMMENTS | MJL | 8/12/15 |
| 1 | PER CLIENT COMMENTS | MJL | 7/23/15 |

RECORD OWNER:
MCGUIRE & ROBERT JR TRUSTEE
HORIZON TRUST OF
NEW HAMPSHIRE
OWNER ADDRESS:
PO BOX 988
DOVER, NH 03821-0988

McGUIRE GROUP
SITE PLAN
50 CROSBY ROAD
DOVER, NEW HAMPSHIRE 03820

PREPARED FOR:
MAGUIRE GROUP
CLIENT ADDRESS: 50 CROSBY ROAD, DOVER, NEW HAMPSHIRE, 03820

0' 20'

DATE: 7/10/15
DRAWN BY: MJL
CHECKED BY: GRA
APPROVED BY: GRA

DETAILS

P-15-43

PROJECT NO: 15-189.00

L2

SHEET: 2 OF 3

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## STORMWATER MAINTENANCE PROCEDURES

THE FOLLOWING PROCEDURES WILL BE FOLLOWED FOR INITIAL AND LONG TERM MAINTENANCE OF THE STORMWATER MANAGEMENT FACILITIES AT THIS SITE. NOTE: FOR THE PURPOSES OF THESE PROCEDURES, A MAJOR STORM EVENT IS CLASSIFIED AS A RAINFALL EXCEEDING 3.0 INCHES. A SIGNIFICANT RAINFALL IS 1/2" IN A 24 HOUR PERIOD.

MAINTENANCE LOG
THE RESPONSIBLE PARTY SHALL ESTABLISH A MAINTENANCE LOG/PLAN FOR USE IN RECORDING MAINTENANCE ACTIVITIES. AS A MINIMUM, THE LOG SHALL INCLUDE THE DATE(S) OF ACTIVITIES, WHO PERFORMED THE DUTIES, WHAT WAS DONE (I.E. LOOKED AT DETENTION BERMS, CLEANED DROP INLETS, ETC.), THE RESULTS OF THE ACTIVITY (I.E. ALL STRUCTURES WERE IN GOOD SHAPE, OR, POND #44 NEEDS TO BE REPAIRED). IF ANY ITEM NEEDS TO BE REPAIRED, A FOLLOW-UP ENTRY SHALL SHOW THE DATE THAT REPAIRS WERE COMPLETED.

DETENTION BASINS (INITIAL AND LONG TERM)
MAINTENANCE IS NECESSARY IF DETENTION BASINS ARE TO CONTINUE TO FUNCTION AS ORIGINALLY DESIGNED. THE RESPONSIBLE PARTY SHALL DESIGNATE AN INDIVIDUAL (OR COMPANY) TO MAINTAIN THE STRUCTURES AND THE BASIN AREA.

THE FOLLOWING MAINTENANCE SCHEDULE ARE ITEMS WHICH SHOULD BE CONSIDERED IN FORMULATING A MAINTENANCE PLAN:
1. EMBANKMENT – EMBANKMENTS SHOULD BE INSPECTED ANNUALLY TO DETERMINE IF RODENT BURROWS, WET AREAS, OR EROSION OF THE FILL IS TAKING PLACE.
2. VEGETATION – THE VEGETATED AREAS OF STRUCTURE DEVICES SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH. LIME AND FERTILIZER SHOULD BE APPLIED AS NECESSARY AS DETERMINED BY SOIL TESTS. TREES AND SHRUBS SHOULD BE KEPT OFF THE EMBANKMENT AND EMERGENCY SPILLWAY AREAS.
3. INLETS – PIPE INLETS AND SPILLWAY STRUCTURES SHOULD BE INSPECTED ANNUALLY AND AFTER EVERY MAJOR STORM. ACCUMULATED DEBRIS AND SEDIMENT SHOULD BE REMOVED. IF PIPES ARE COATED, THE COATING SHOULD BE CHECKED AND REPAIRED AS NECESSARY.
4. OUTLETS – PIPE OUTLETS SHOULD BE INSPECTED ANNUALLY AND AFTER EVERY MAJOR STORM. THE CONDITION OF THE PIPES SHOULD BE NOTED AND REPAIRS MADE AS NECESSARY. IF EROSION IS TAKING PLACE, THEN MEASURES SHOULD BE TAKEN TO STABILIZE AND PROTECT THE AFFECTED AREA OF THE OUTLET.
5. SEDIMENT – SEDIMENT SHOULD BE CONTINUALLY CHECKED IN THE BASIN. WHEN SEDIMENT ACCUMULATIONS REACH THE PREDETERMINED DESIGN ELEVATION, THEN THE SEDIMENT SHOULD BE REMOVED AND PROPERLY DISPOSED OF.
6. SAFETY INSPECTIONS – ALL BERMS OVER 3' IN HEIGHT SHALL BE INSPECTED BY A QUALIFIED PROFESSIONAL ENGINEER EVERY 5 YEARS. THE DESIGNATED INDIVIDUAL SHOULD ALSO MAKE INSPECTIONS AFTER EVERY MAJOR STORM EVENT.

LAND GRADING AND SLOPE STABILIZATION
ALL SLOPES SHOULD BE CHECKED PERIODICALLY TO SEE THAT VEGETATION IS IN GOOD CONDITION. ANY RILLS OR DAMAGE FROM EROSION AND ANIMAL BURROWING SHOULD BE REPAIRED IMMEDIATELY TO AVOID FURTHER DAMAGE. IF SEEPS DEVELOP ON THE SLOPES, THE AREA SHOULD BE EVALUATED TO DETERMINE IF THE SEEP WILL CAUSE AN UNSTABLE CONDITION. SUBSURFACE DRAINS OR GRAVEL MULCHING MAY BE REQUIRED TO SOLVE SEEP PROBLEMS. DIVERSIONS, BERMS, AND WATERWAYS IN THE LAND GRADING AREA SHOULD BE CHECKED TO SEE THAT THEY ARE FUNCTIONING PROPERLY. PROBLEMS FOUND DURING THE INSPECTIONS SHOULD BE REPAIRED. SLOPES AND ASSOCIATED PRACTICES UTILIZING VEGETATION SHOULD BE LIMED AND FERTILIZED AS NECESSARY TO KEEP THE VEGETATION HEALTHY. ENCROACHMENT OF UNDESIRABLE VEGETATION SUCH AS WEEDS AND WOODY GROWTH THAT IS NOT PLANNED SHOULD BE CONTROLLED TO AVOID PROBLEMS OF BANK STABILITY IN THE FUTURE.

LEVEL SPREADER
LEVEL SPREADERS SHOULD BE CHECKED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE IF THE LIP HAS BEEN DAMAGED AND THAT THE DESIGN CONDITIONS HAVE NOT CHANGED. ANY SEDIMENT ACCUMULATION SHOULD BE REMOVED. DAMAGE SHOULD BE REPAIRED AND RE-VEGETATED. THE VEGETATION SHOULD BE MOWED OCCASIONALLY TO CONTROL WEEDS AND THE ENCROACHMENT OF WOODY VEGETATION. CLIPPINGS SHOULD BE REMOVED AND DISPOSED OF OUTSIDE THE SPREADER AND AWAY FROM THE OUTLET AREA. FERTILIZATION SHOULD BE DONE AS NECESSARY TO KEEP THE VEGETATION HEALTHY AND DENSE.

OUTLET PROTECTION
OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIPRAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT TO AVOID ADDITIONAL DAMAGE TO THE OUTLET PROTECTION APRON.

STORM DRAIN INLET PROTECTION
ALL STRUCTURES SHALL BE INSPECTED AFTER SIGNIFICANT RAIN EVENTS AND REPAIRED AS NEEDED.

SEDIMENT SHALL BE REMOVED AND THE STORMDRAIN SEDIMENT BARRIER RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.

STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

ALL CATCHBASINS AND STORMDRAIN INLETS SHALL BE CLEANED AT THE END OF CONSTRUCTION AND AFTER THE SITE HAS BEEN FULLY STABILIZED.

STRAW OR HAY BALE BARRIER, SILT FENCE AND FILTER BERM
HAY BALE BARRIERS, SILT FENCES AND FILTER BERMS SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. THEY SHALL BE REPAIRED IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OF THE EDGES OF THE BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM.

SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED.

SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THE DEPOSITS REACH APPROXIMATELY ONE-HALF OF THE HEIGHT OF THE BARRIER.

FILTER BERMS SHOULD BE RESHAPED AS NEEDED.

SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHOULD BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

CULVERTS
CULVERTS MUST BE MAINTAINED BY KEEPING INLETS, TRASH GUARDS, AND COLLECTION BOXES AND STRUCTURES CLEAN AND FREE OF MATERIALS THAT CAN REDUCE THE FLOW. ALL LEAKS SHALL BE REPAIRED TO ENSURE PROPER FUNCTIONING OF THE CULVERT. ANIMAL GUARDS MUST BE INSPECTED AND MAINTAINED IN PROPER WORKING ORDER.

VEGETATED SWALE
TIMELY MAINTENANCE IS IMPORTANT TO KEEP THE VEGETATION IN THE SWALE IN GOOD CONDITION. MOWING SHOULD BE DONE FREQUENTLY ENOUGH TO KEEP THE VEGETATION IN VIGOROUS CONDITION AND TO CONTROL ENCROACHMENT OF WEEDS AND WOODY VEGETATION, HOWEVER IT SHOULD NOT BE MOWED TOO CLOSELY SO AS TO REDUCE THE FILTERING EFFECT. FERTILIZE ON AN "AS NEEDED" BASIS TO KEEP THE GRASS HEALTHY. OVER FERTILIZATION CAN RESULT IN THE SWALE BECOMING A SOURCE OF POLLUTION.

THE SWALE SHOULD BE INSPECTED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE THE CONDITION OF THE SWALE. RILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AS NECESSARY TO PREVENT FURTHER DETERIORATION.

## MAINTENANCE

MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. FOLLOWING THE TEMPORARY AND OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL IN THE SPRING INSPECT AND REPAIR ANY DAMAGES AND/OR BARE SPOTS. AN ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 85% TO 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH.

## STABILIZATION SCHEDULE BEFORE WINTER

SEPTEMBER 15 ALL DISTURBED AREAS MUST BE SEEDED AND MULCHED.
ALL SLOPES MUST BE STABILIZED, SEEDED AND MULCHED.
ALL GRASS-LINED DITCHES AND CHANNELS MUST BE STABILIZED WITH MULCH OR AN EROSION CONTROL BLANKET.
OCTOBER 1 IF THE SLOPE IS STABILIZED WITH AN EROSION CONTROL BLANKET AND SEEDED.
ALL DISTURBED AREAS TO BE PROTECTED WITH ANNUAL GRASS MUST BE SEEDED AT A SEEDING RATE OF 3-LBS PER 1,000 SQUARE FEET AND MULCHED.
NOVEMBER 15 ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED.
SLOPES THAT ARE COVERED WITH RIPRAP MUST BE CONSTRUCTED BY THIS DATE.
DECEMBER 1 ALL DISTURBED AREAS WHERE GROWTH OF VEGETATION FAILS TO BE AT LEAST THREE INCHES TALL OR AT LEAST 75% OF THE DISTURBED SOIL IS COVERED BY VEGETATION, MUST BE PROTECTED FOR OVER-WINTER.
NOTE: THE DATES GIVEN ARE FOR PROJECTS IN SOUTH-CENTRAL MAINE.

1. PERMANENT CONTROL MEASURES AFTER WHICH TEMPORARY MEASURES WILL BE REMOVED.
2. PERMANENT RE-VEGETATION OF ALL DISTURBED AREAS, USING NATIVE PLANT MATERIAL WHEN POSSIBLE, SHALL OCCUR WITHIN 30 DAYS FROM THE TIME THE AREAS WERE LAST ACTIVELY WORKED, OR FOR FALL AND WINTER ACTIVITIES, BY JUNE 15. EXCEPT WHERE PRECLUDED BY THE TYPE OF ACTIVITY (E.G.RIPRAP, ROAD SURFACES, ETC.). THE VEGETATIVE COVER SHALL BE MAINTAINED.
3. DISPOSAL OF COLLECTED DEBRIS MUST BE IN CONFORMANCE WITH MAINE SOLID WASTE LAW, TITLE 38 MRSA SECTION 1301 ET. SEQ.
4. LIME AND FERTILIZER APPLICATION RATES SHALL NOT EXCEED THE FOLLOWING:

   GROUND LIMESTONE: 3 TONS/ACRE (130 LBS./1000 S.F.)
   FERTILIZER, 10-10-10 OF EQUIVALENT: 600 LBS./ACRE (14 LBS./1000 S.F.)

   FERTILIZER SHALL NOT BE APPLIED BEFORE START OF THE GROWING SEASON NOR AFTER SEPTEMBER 30. FERTILIZED AREAS SHALL BE MULCHED TO REDUCE OFF-SITE TRANSPORT OF NUTRIENTS UNTIL USED BY VEGETATIVE GROWTH.

## EROSION SEDIMENT CONTROL PRACTICES

1. NO SOIL SHALL BE DISTURBED DURING THE PERIOD OF MARCH 1 THROUGH APRIL 15, NOR DURING ANY OTHER PERIOD WHEN SOILS ARE SATURATED DUE TO RAIN OR SNOW MELT.
2. DISTURBED SOILS SHALL BE STABILIZED WITHIN ONE (1) WEEK FROM THE TIME IT WAS LAST ACTIVELY WORKED USING TEMPORARY OR PERMANENT MEASURES SUCH AS PLACEMENT OF RIPRAP, MULCH OR EROSION CONTROL BLANKET, OR OTHER COMPARABLE MEASURES.
3. HAY OR STRAW MULCH SHALL BE APPLIED AT A RATE OF AT LEAST ONE (1) BALE PER 500 SQUARE FEET (1-2 TONS PER ACRE).
4. IF MULCH IS LIKELY TO BE REMOVED DUE TO TO STEEP SLOPES OR WIND, IT SHALL BE ANCHORED WITH NETTING, PEG OR TWINE, OR OTHER SUITABLE METHOD AND SHALL BE MAINTAINED UNTIL A CATCH OF VEGETATION IS ESTABLISHED OVER THE ENTIRE DISTURBED AREA.
5. IN ADDITION TO PLACEMENT OF RIPRAP, MULCH OR EROSION CONTROL BLANKETS, ADDITIONAL STEPS SHALL BE TAKEN WHERE NECESSARY IN ORDER TO PREVENT SEDIMENTATION OF THE WATER. EVIDENCE OF SEDIMENTATION INCLUDES VISIBLE GULLY EROSION, DISCOLORATION OF WATER BY SUSPENDED PARTICLES AND SLUMPING OF BANKS, SILT FENCES, STAKED HAY BALES AND OTHER SEDIMENTATION CONTROL MEASURES, WHERE PLANNED FOR, SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF WORK, BUT SHALL ALSO BE INSTALLED WHEREVER NECESSARY DUE TO SEDIMENTATION.
6. MULCH OR OTHER TEMPORARY MEASURES SHALL BE MAINTAINED UNTIL THE SITE IS PERMANENTLY STABILIZED WITH VEGETATION OR OTHER PERMANENT CONTROL MEASURES AFTER WHICH TEMPORARY MEASURES WILL BE REMOVED.
7. PERMANENT RE-VEGETATION OF ALL DISTURBED AREAS, USING NATIVE PLANT MATERIAL WHEN POSSIBLE, SHALL OCCUR WITHIN 30 DAYS FROM THE TIME THE AREAS WERE LAST ACTIVELY WORKED, OR FOR FALL AND WINTER ACTIVITIES, BY JUNE 15. EXCEPT WHERE PRECLUDED BY THE TYPE OF ACTIVITY (E.G. RIPRAP, ROAD SURFACES, ETC.). THE VEGETATIVE COVER SHALL BE MAINTAINED.
8. DISPOSAL OF COLLECTED DEBRIS MUST BE IN CONFORMANCE WITH MAINE SOLID WASTE LAW, TITLE 38 MRSA SECTION 1301 ET. SEQ.
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   FERTILIZER, 10-10-10 OF EQUIVALENT: 600 LBS./ACRE
   (14 LBS./1000 S.F.)

   FERTILIZER SHALL NOT BE APPLIED BEFORE START OF THE GROWING SEASON NOR AFTER SEPTEMBER 30. FERTILIZED AREAS SHALL BE MULCHED TO REDUCE OFF-SITE TRANSPORT OF NUTRIENTS UNTIL USED BY VEGETATIVE GROWTH.

## SEEDING AND MIXTURE SCHEDULE

SPREAD TOPSOIL UNIFORMLY 6" DEEP OVER AREAS TO BE RECLAIMED. THE FOLLOWING SEED MIXTURE SHALL BE USED:

LAWNS:

| | |
|---|---|
| KENTUCKY BLUEGRASS | 0.46 LBS./1000 S.F. |
| CREEPING RED FESCUE | 0.46 LBS./1000 S.F. |
| PERENNIAL RYE GRASS | 0.11 LBS./1000 S.F. |
| TOTAL | 1.03 LBS./1000 S.F. |

APPLY LIME AND FERTILIZER AS SPECIFIED UNDER THE EROSION AND SEDIMENTATION CONTROL NOTES. WORK INTO THE TOP (4) INCHES OF SOIL PRIOR TO SEEDING. AFTER SEEDING, APPLY MULCH HAY AS SPECIFIED. ON FLAT AREAS AND NOT EXPOSED TO WIND, THE MULCH WILL BE ANCHORED BY WETTING DOWN. IN OTHER AREAS, JUTE NETTING SHALL BE USED FOR ANCHORAGE. THE ABOVE SEEDING SCHEDULE IS APPLICABLE IF SEEDING DURING THE GROWING SEASON (APRIL 15 TO JUNE 15 AND AUGUST 30 TO SEPTEMBER 30). BETWEEN JUNE 15 AND AUGUST 30, SEEDING WILL BE DELAYED UNTIL AUGUST 30. IF SOIL IS DISTURBED BETWEEN OCTOBER 1 AND NOVEMBER 1, DELAY SEEDING UNTIL NOVEMBER 1. AFTER NOVEMBER 1 AND BEFORE A SNOW COVER FORMS, THE SAME PROCEDURE WILL BE FOLLOWED EXCEPT THE SEED RATE WILL BE DOUBLED. AFTER SNOW COVER AND BEFORE APRIL 15, SEEDING WILL BE DELAYED UNTIL APRIL 15. HAY MULCH WILL BE APPLIED AT A RATE OF 150 LBS./1000 SQUARE FEET. THIS WILL BE ANCHORED BY NON-ASPHALTIC TACKIFIER SPRAYED ON LAWNS AND JUTE NETTING IN DRAINAGE WAYS AND OTHER AREAS.

STATE OF NEW HAMPSHIRE — GEOFFREY A. GRAY — 10820 — LICENSED PROFESSIONAL ENGINEER

© CIVIL CONSULTANTS

CIVIL CONSULTANTS
Engineers
Planners
Surveyors
P.O. Box 100
South Berwick
Maine
03908
207-384-2550
www.civcon.com

| NO. | REVISIONS | INT. | DATE |
|---|---|---|---|
| 2 | PER TRC COMMENTS | MJL | 8/12/15 |
| 1 | PER CLIENT COMMENTS | MJL | 7/23/15 |

RECORD OWNER:
MCGUIRE & ROBERT JR TRUSTEE
HORIZON TRUST OF
NEW HAMPSHIRE
OWNER ADDRESS:
PO BOX 980
DOVER, NH 03821-0980

McGUIRE GROUP
SITE PLAN
50 CROSBY ROAD
DOVER, NEW HAMPSHIRE 03820

PREPARED FOR:
MAGUIRE GROUP
CLIENT ADDRESS: 50 CROSBY ROAD, DOVER, NEW HAMPSHIRE, 03820

0' 20'

DATE: 7/10/15
DRAWN BY: MJL
CHECKED BY: GRA
APPROVED BY: GRA

NOTES

P-15-43

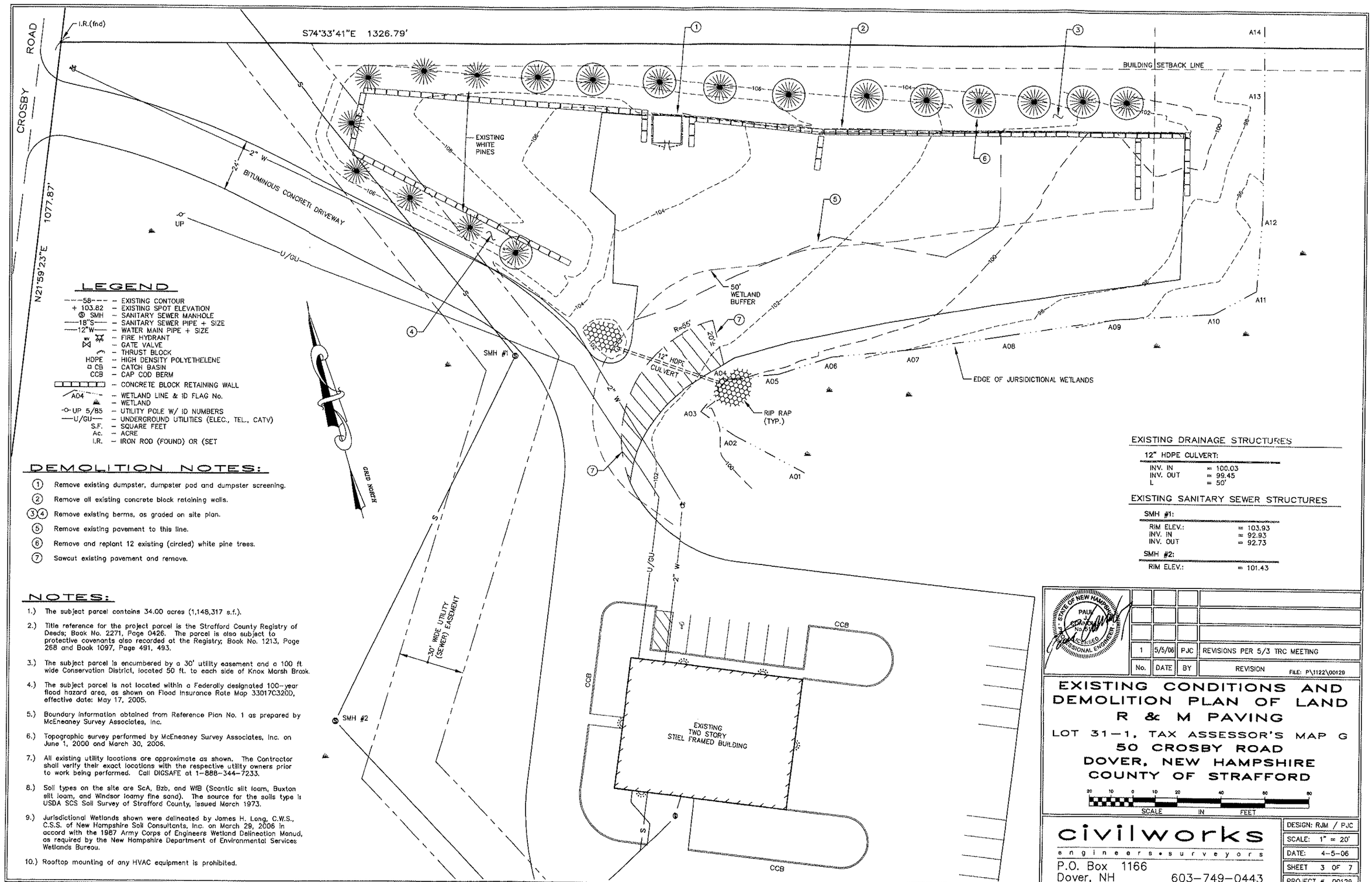
PROJECT NO: 15-189.00

L3

SHEET: 3 OF 3

TAX MAP G LOT NO. 31-1

CADD FILE: J:\cad\2015\1518900\Carlson\1518900-Site Plan.dwg




## LEGEND

| | |
|---|---|
| ---58--- | EXISTING CONTOUR |
| + 103.82 | EXISTING SPOT ELEVATION |
| Ⓢ SMH | SANITARY SEWER MANHOLE |
| ---18"S--- | SANITARY SEWER PIPE + SIZE |
| ---12"W--- | WATER MAIN PIPE + SIZE |
| | FIRE HYDRANT |
| | GATE VALVE |
| | THRUST BLOCK |
| HDPE | HIGH DENSITY POLYETHELENE |
| CB | CATCH BASIN |
| CCB | CAP COD BERM |
| | CONCRETE BLOCK RETAINING WALL |
| A04 | WETLAND LINE & ID FLAG No. |
| | WETLAND |
| -o- UP 5/85 | UTILITY POLE W/ ID NUMBERS |
| ---U/GU--- | UNDERGROUND UTILITIES (ELEC., TEL., CATV) |
| S.F. | SQUARE FEET |
| Ac. | ACRE |
| I.R. | IRON ROD (FOUND) OR (SET |

## DEMOLITION NOTES:

1. Remove existing dumpster, dumpster pad and dumpster screening.
2. Remove all existing concrete block retaining walls.
3. (4) Remove existing berms, as graded on site plan.
5. Remove existing pavement to this line.
6. Remove and replant 12 existing (circled) white pine trees.
7. Sawcut existing pavement and remove.

## NOTES:

1.) The subject parcel contains 34.00 acres (1,148,317 s.f.).

2.) Title reference for the project parcel is the Strafford County Registry of Deeds; Book No. 2271, Page 0426. The parcel is also subject to protective covenants also recorded at the Registry; Book No. 1213, Page 268 and Book 1097, Page 491, 493.

3.) The subject parcel is encumbered by a 30' utility easement and a 100 ft wide Conservation District, located 50 ft. to each side of Knox Marsh Brook.

4.) The subject parcel is not located within a Federally designated 100-year flood hazard area, as shown on Flood Insurance Rate Map 33017C320D, effective date: May 17, 2005.

5.) Boundary information obtained from Reference Plan No. 1 as prepared by McEneaney Survey Associates, Inc.

6.) Topographic survey performed by McEneaney Survey Associates, Inc. on June 1, 2000 and March 30, 2006.

7.) All existing utility locations are approximate as shown. The Contractor shall verify their exact locations with the respective utility owners prior to work being performed. Call DIGSAFE at 1-888-344-7233.

8.) Soil types on the site are ScA, Bzb, and WfB (Scantic silt loam, Buxton silt loam, and Windsor loamy fine sand). The source for the soils type is USDA SCS Soil Survey of Strafford County, issued March 1973.

9.) Jurisdictional Wetlands shown were delineated by James H. Long, C.W.S., C.S.S. of New Hampshire Soil Consultants, Inc. on March 29, 2006 in accord with the 1987 Army Corps of Engineers Wetland Delineation Manual, as required by the New Hampshire Department of Environmental Services Wetlands Bureau.

10.) Rooftop mounting of any HVAC equipment is prohibited.

## EXISTING DRAINAGE STRUCTURES

**12" HDPE CULVERT:**

| | |
|---|---|
| INV. IN | = 100.03 |
| INV. OUT | = 99.45 |
| L | = 50' |

## EXISTING SANITARY SEWER STRUCTURES

**SMH #1:**

| | |
|---|---|
| RIM ELEV.: | = 103.93 |
| INV. IN | = 92.93 |
| INV. OUT | = 92.73 |

**SMH #2:**

| | |
|---|---|
| RIM ELEV.: | = 101.43 |

STATE OF NEW HAMPSHIRE — PAUL J. CONNOLLY No. 5040 — LICENSED PROFESSIONAL ENGINEER

| No. | DATE | BY | REVISION |
|---|---|---|---|
| 1 | 5/5/06 | PJC | REVISIONS PER 5/3 TRC MEETING |

FILE: P\1122\00129

# EXISTING CONDITIONS AND DEMOLITION PLAN OF LAND R & M PAVING

LOT 31-1, TAX ASSESSOR'S MAP G

50 CROSBY ROAD

DOVER, NEW HAMPSHIRE

COUNTY OF STRAFFORD

20 10 0 10 20 40 60 80

SCALE IN FEET

civilworks
engineers • surveyors
P.O. Box 1166
Dover, NH
603-749-0443

| | |
|---|---|
| DESIGN: | RJM / PJC |
| SCALE: | 1" = 20' |
| DATE: | 4-5-06 |
| SHEET | 3 OF 7 |
| PROJECT # | 00129 |

023247 1999 DEC -3 PM 2:22

REGISTER OF DEEDS
STRAFFORD COUNTY

PLAN 57-65

REFERENCE PLANS:

1.) MINOR SUBDIVISION PLAN OF LAND OF NAPOLEON J. & MARYANNE BOUCHER – PROPOSED CROSBY ROAD INDUSTRIAL PARK PHASE II DOVER, NEW HAMPSHIRE. SCALE: 1" = 100'; DATED: NOV. 25, 1986; BY: LECLERC STOWELL ASSOCIATES. RECORDED S.C.R.D. PLAN 30–116.

2.) SUBDIVISION PLAN OF LOTS 1, 2, 3 AND COMPOSITE PLAN OF CROSBY ROAD INDUSTRIAL PARK DOVER, NEW HAMPSHIRE. SCALE: 1" = 100'; DATED: JUNE 30, 1985; BY: LECLERC STOWELL ASSOCIATES. RECORDED S.C.R.D. PLAN 27A–2.

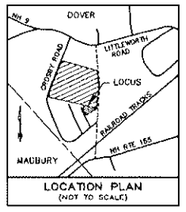
3.) SUBDIVISION OF LOT 4A CROSBY ROAD INDUSTRIAL PARK DOVER, NH – DOVER INDUSTRIAL DEVELOPMENT AUTHORITY. SCALE: 1" = 50'; DATED: MARCH 7, 1983; BY: LECLERC STOWELL ASSOCIATES. RECORDED S.C.R.D. PLAN 24A–121.

4.) "ALTA–ACSM LAND TITLE SURVEY" COCHECO LAND MANAGEMENT, INC. – FARADAY DRIVE, DOVER, NEW HAMPSHIRE. SCALE: 1" = 30'; DATED: MARCH 25, 1998; BY: TRITECH ENGINEERING CORP. NOT RECORDED.

5.) BOUNDARY PLAN – COCHECO LAND MANAGEMENT, INC. – FARADAY DRIVE, DOVER, NEW HAMPSHIRE. SCALE: 1" = 30'; DATED: JULY 27, 1998; BY: TRITECH ENGINEERING CORP. RECORDED S.C.R.D. 54–3.

6.) TOPOGRAPHIC WORKSHEET CROSBY ROAD, DOVER, NEW HAMPSHIRE, PREPARED FOR THE FLATLEY COMPANY. SCALE: 1" = 100'; DATED: DECEMBER 8, 1998; BY: CUOCO & CORMIER. NOT RECORDED.

7.) SUBDIVISION OF LAND FOR THE DOVER INDUSTRIAL DEVELOPMENT AUTHORITY IN DOVER, NH. SCALE: 1" = 50'; DATED: JUNE 21, 1991; BY: BRUCE L. POHOPEK. RECORDED S.C.R.D. 39–39.



LOCATION PLAN
(NOT TO SCALE)

G / 32A
FIBREDYNE, INC.
ROBERT W. MATCHETT
47 CROSBY ROAD
DOVER, NH 03820

G / 32
MIESFELDT REALTY TRUST
HERBERT AND ELIZABETH MIESFELDT TRUSTEES
35 CROSBY ROAD
DOVER, NH 03820

G / 31
MARIE ANNA BOUCHER
NAPOLEON AND MARY ANNE BOUCHER
66 LITTLEWORTH ROAD
DOVER, NH 03820
1580 / 657

I.R.(set)
CITY COORDINATES
N – 250954.06
E – 699894.89

BUILDING SETBACK LINE (TYP.)

S 58°37'42" E
1326.79'

I.R.(set)

100' WIDE CONSERVATION DISTRICT
(SEE NOTE 6)

KNOX MARSH BROOK

HANSON ROAD CLASS VI

S16°42'36"E
625.29'

SEE PLAN #2

CROSBY ROAD

N17°52'22"E
1075.87'

I.R.(set)

S 55°48'58" E
955.77'

NEW LOT LINE

I.R.(set)

S16°42'36"E
214.44'

S 30°40'00" W
214.60'

I.R.(set)

S 23°56'00" W
111.11'

I.R.(set)

S 17°48'22" W
356.33'

N61°20'48"W
15.20'

I.R.(set)

S19°18'00"W
26.62'

STONE BOUND
CITY COORDINATES
N – 249221.84
E – 701142.63

EDGE OF WETLANDS (TYP.)
(SEE NOTE 8)
BUILDING SETBACK LINE

N 28°39'12" E
767.00'

NEW LOT LINE

G / 32C
CONCORD SAVINGS BANK
CROSBY ROAD
DOVER, NH 03820

I.R.(set)

N32°42'59"E
138.23'

I.R.(set)

N28°07'47"E
185.42'

S.S.(fnd)

G / 31-1
NEW PARCEL AREA
1,148,137 S.F.
34.00 Ac.

A
696,876 S.F.
16.00 Ac.

779.42'
N 61°20'48" W

STONE BOUND

STONE BOUND

STONE BOUND

(16.34')

I.R.(set)

376.04'

I.P.(fnd)

N 61°20'48" W

166.22'

I.R.(fnd)

N61°20'48"W

462.22'

LOT LINE TO BE ABANDONED

S 61°20'48" E

I.R.(set)

G / 1M
DEVELOPMENTAL SERVICES
OF STRAFFORD COUNTY
CROSBY ROAD
DOVER, NH 03820

G / 17
RANDALL S. GREEN
THOMAS A. METHVIN
ROSELDA DIONNE
105 CROSBY ROAD
DOVER, NH 03820

G / 11
MCQUADE & MCQUADE INVESTMENTS
VAM ENTERPRISES, INC.
116 CROSBY ROAD
DOVER, NH 03820

G / 1-6
CHAUVIN ARNOUX, INC.
15 FARADAY DRIVE
DOVER, NH 03820

I.R.(fnd)

I.R.(fnd)
(TYP.)

R = 75.31'
L = 88.67'

EXISTING BUILDING
G / 1L
NEW PARCEL AREA
797,272 S.F.
18.30 Ac.

ASPHALT PARKING

N37°44'10"E
129.97'

448.30

S 74°02'50" W
315.31'

N14°39'39"W
315.31'

FARADAY DRIVE

CITY OF DOVER

HANSON RD CLASS VI
343.09'

G / 1E
VIRTUOJS REALTY, L.L.C.
c/o TURBO CAM, INC.
5 FARADAY DRIVE
DOVER, NH 03820

STONE BOUND

G / 1F
COGEBI, INC.
14 FARADAY DRIVE
DOVER, NH 03820

SEE NOTE 10

I.R.(fnd)

G / 2
FRED E. RILEY TRUST
RUTH K. RILEY TRUSTEE
64 LITTLEWORTH ROAD
DOVER, NH 03820

LEGEND

S.S.(fnd) – STEEL STAKE (FOUND)
I.R.(fnd) – IRON ROD (FOUND)
I.P.(fnd) – IRON PIPE (FOUND)
I.R.(set) – IRON ROD W/ PLASTIC I.D. CAP (SET)
-O- – UTILITY POLE
– – – – – EDGE OF PAVEMENT
▲ – WETLANDS

| NO. | DATE | DESCRIPTION | BY | CHK |
|---|---|---|---|---|
| REVISIONS | | | | |

| | | | |
|---|---|---|---|
| 99–1122 | LL ADJ | 99–16 | 42–62 |
| PROJECT NO | TYPE | FIELDBOOK & PAGES | |

NOTES:

1.) OWNERS OF RECORD:

G/31–1 BUSINESS PARTNERS, INC.
P.O. BOX 121
DOVER, NEW HAMPSHIRE 03821
S.C.R.D. VOL. 2155 / PAGE 0039.

G / 1L CHAUVIN ARNOUX, INC.
15 FARADAY DRIVE
DOVER, NEW HAMPSHIRE 03820
S.C.R.D. VOL. 1996 / PAGE 0010.

2.) G/31–1 – DENOTES TAX MAP AND PARCEL NUMBER.

3.) THE INTENT OF THIS PLAN IS TO ADJUST THE LOT LINES AS SHOWN. TRACT A (696,876 S.F. / 16.0 ACRES) ) IS TO BE CONVEYED TO PARCEL G / 1L.
ORIGINAL PARCEL AREAS:
G / 31–1 = 2,178,014 S.F. / 50.00 ACRES
G / 1L = 100,395 S.F. / 2.30 ACRES
NEW PARCEL AREAS:
G / 31–1 = 1,481,137 S.F. / 34.00 ACRES
G / 1L = 797,272 S.F. / 18.30 ACRES

4.) ZONING DISTRICT IS I – 2 RURAL RESTRICTED INDUSTRIAL DISTRICT
MINIMUM LOT SIZE = 10,000 S.F.
MINIMUM FRONTAGE = 100 FEET
BUILDING SETBACK REQUIREMENTS: (SEE BELOW)
FRONT = 35 FEET
REAR = 15 FEET
SIDE (ABUT A LOT) = 12 FEET
SIDE (ABUT A STREET) = 15 FEET
MAXIMUM LOT COVERAGE = 50 PERCENT
MAXIMUM BUILDING HEIGHT = 50 FEET

PROTECTIVE COVENANTS SETBACK REQUIREMENTS:
(SCRD VOL. 1097 / PAGES 491 & 493; VOL. 1213 / PAGE 269)
FRONT = 50 FEET
REAR = 25 FEET
SIDE = 25 FEET

5.) THE SUBJECT PARCELS ARE NOT LOCATED WITHIN ANY FEDERALLY DESIGNATED 100–YEAR FLOOD HAZARD AREAS, AS SHOWN ON FLOOD INSURANCE RATE MAP 33015 0005 B; EFFECTIVE DATE: APRIL 15, 1980.

6.) THE REMAINDER OF PARCEL G / 31–1 IS SUBJECT TO A 100 FOOT WIDE CONSERVATION DISTRICT, LOCATED 50 FEET TO EACH SIDE OF KNOX MARSH BROOK; AS SHOWN ON REFERENCE PLAN #1.

7.) BASIS OF BEARING IS REFERENCE PLAN No. 1. COORDINATES SHOWN ARE FOR REFERENCE TO CITY OF DOVER CONTROL NETWORK AS DERIVED FROM CONTROL STATIONS TR 156 AND TR 157.

8.) WETLANDS SHOWN WERE DELINEATED SCHAUER ENVIRONMENTAL CONSULTANTS, L.L.C. ON SEPTEMBER 14, 1999; AND LOCATED BY THIS OFFICE ON SEPTEMBER 14, 1999.

9.) BOUNDARY INFORMATION SHALL BE PROVIDED IN A DIGITAL DXF FORMAT ON DISK TO THE CITY OF DOVER ENGINEER'S OFFICE.

10.) PARCEL G / 1L IS SUBJECT TO A 25 FOOT WIDE EASEMENT IN FAVOR OF PSNH; WHICH IS LOCATED ALONG FARADAY DRIVE SEE S.C.R.D. VOL. 1280 / PAGE 521.

11.) PARCELS ARE SUBJECT TO PROTECTIVE COVENANTS RECORDED AT S.C.R.D. 1097 / 491 & 493, AND 1213 / 269.

APPROVED
12-4-99
City of Dover Planning Board

Margaret M. Gabriel-President
BUSINESS PARTNERS, INC.

Nimrod S. Smith
CHAUVIN ARNOUX, INC.

OWNERS SIGNATURES

"I HEREBY CERTIFY THAT THIS PLAT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE WHICH HAS A MAXIMUM ERROR OF CLOSURE OF 1 PART IN 15,000."

# LOT LINE ADJUSTMENT PLAN
PREPARED FOR
BUSINESS PARTNERS, INC.
AND
CHAUVIN ARNOUX, INC.
CROSBY ROAD & FARADAY DRIVE
TAX MAP G, LOTS 1L & 31–1
DOVER, NEW HAMPSHIRE
COUNTY OF STRAFFORD

| | |
|---|---|
| DRAWN BY: RJM | FILE: C:\PW\99\99-11222 |
| SCALE: 1" = 100' | DATE: NOVEMBER 5, 1999 |

100 0 50 100 200 400

STATE OF NEW HAMPSHIRE
No. 661
KEVIN M. McENEANEY
LAND SURVEYOR

McEneaney Survey Associates, inc.
P.O. Box 681 – 17 PORTLAND AVENUE
DOVER, NH 03820 (603) 742–0911
SURVEYING – PLANNING – CONSULTING




GOOGLE IMAGE 2014

1"=400'

0' 400'

TAX MAP G LOT NO 31-1

STATE OF NEW HAMPSHIRE
GEOFFREY R. ALENA
No. 10920
LICENSED
PROFESSIONAL ENGINEER

© CIVIL CONSULTANTS
CIVIL CONSULTANTS
Engineers
Planners
Surveyors
P.O. Box 100
South Berwick
Maine
03908
207-384-2550
www.civcon.com

| NO. | REVISIONS | INT. | DATE |
|---|---|---|---|
| 1 | | | |

RECORD OWNER:
MCGUIRE A ROBERT JR TRUSTEE
HORIZON TRUST OF
NEW HAMPSHIRE

OWNER ADDRESS:
PO BOX 988
DOVER, NH 03821-0988

McGUIRE GROUP
SITE PLAN
50 CROSBY ROAD
DOVER, NEW HAMPSHIRE 03820

PREPARED FOR:
MAGUIRE GROUP

CLIENT ADDRESS:
50 CROSBY ROAD, DOVER, NEW HAMPSHIRE 03820

DATE: 7/10/15
DRAWN BY: M.L
CHECKED BY: GRA
APPROVED BY: GRA

NEIGHBORHOOD PLAN

PROJECT NO: 15-189.00

N1

SHEET: 1 OF 1

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