



# TOWN OF EXETER, NEW HAMPSHIRE

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10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 • FAX 772-4709  
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## LEGAL NOTICE EXETER PLANNING BOARD AGENDA

The Exeter Planning Board will meet on Thursday, May 26, 2022 at 7:00 P.M. in the Nowak Room of the Exeter Town Office building located at 10 Front Street, Exeter, New Hampshire to consider the following:

**APPROVAL OF MINUTES:** May 12, 2022

### **NEW BUSINESS: PUBLIC HEARINGS**

The application of Rafferty Investment Group LLC for a minor subdivision of an existing 7.3-acre parcel located at 54 Drinkwater Road into two (2) residential lots. The subject property is located in the R-1, Low Density Residential zoning district. Tax Map Parcel #106-1. PB Case #22-4.

The application of Willey Creek Co. for site plan review, lot line adjustment and Wetlands and Shoreland conditional use permits for the proposed relocation of Building D of the Ray Farm Condominium development and associated site improvements off of Ray Farmstead Road (Willey Creek Road). The subject properties are located in the C-3, Epping Road Highway Commercial zoning district and are identified as Tax Map Parcel #47-8-1 and #47-9. PB Case #22-3.

The application of Exonian Properties LLC for a minor site plan review of a proposed multi-family condominium development within the existing structure located at 43 Front Street (former First Baptist Church). The subject property is located in the R-2, Single Family Residential zoning district. Tax Map Parcel #72-198. PB Case #22-6.

The application of PSNH d/b/a Eversource Energy for a Wetland and Shoreland Conditional Use Permits for proposed maintenance/repair activities along the existing A126 Transmission Line; and the replacement of five (5) transmission structures within the limits of the existing ROW corridor between Route 101 eastbound and the Exeter/Brentwood town line, and approx. 1,500 feet west of Captain's Way (to the west of Newfields Road/NH Route 85). The subject properties are located in the RU-Rural and R-1, Low Density Residential zoning districts. Tax Map Parcels #25-1, #20-8, #24-3, #30-9, #30-8. PB Case #22-7.

### **OTHER BUSINESS**

- Master Plan Discussion
- Field Modifications
- Bond and/or Letter of Credit Reductions and Releases

**EXETER PLANNING BOARD**  
*Langdon J. Plumer, Chairman*

**TOWN OF EXETER  
PLANNING BOARD  
NOWAK ROOM – TOWN OFFICE BUILDING  
10 FRONT STREET  
MAY 12, 2022  
DRAFT MINUTES**

**I. PRELIMINARIES:**

**BOARD MEMBERS PRESENT BY ROLL CALL:** Chair Langdon Plumer, Vice-Chair Aaron Brown, Pete Cameron, Clerk, John Grueter, Jennifer Martel, Nancy Belanger Select Board Representative, and Robin Tyner, Alternate.

**STAFF PRESENT:** Town Planner Dave Sharples

**II. CALL TO ORDER:** Chair Plumer called the meeting to order at 7:00 PM and introduced the members.

**III. OLD BUSINESS**

**APPROVAL OF MINUTES**

April 14, 2022

Ms. English, Mr. Cameron, Jen Martel and Mr. Grueter recommended edits. Mr. Grueter asked Corey Belden from Altus Engineering to describe Lines 67-68 in greater detail.

***Mr. Cameron motioned to approve the April 14, 2022 meeting minutes as amended. Ms. English seconded the motion. A vote was taken, all were in favor, the motion passed 7-0-0.***

**IV. NEW BUSINESS**

**PUBLIC HEARINGS**

1. The continued public hearing on the application of Philips Exeter Academy for a multi-family site plan review, lot line adjustment and Shoreland Conditional Use Permit for the proposed construction of a faculty neighborhood development and associated site improvements on High Street and Gilman Lane C-1, Central Area Commercial and R-2, Single Family Residential zoning districts  
Tax Map Parcels #71-117, #71-118 and #71-119  
Planning Board Case #22-2

Chair Plumer read out loud the Public Hearing Notice.



41 Mr. Sharples noted the applicants will be asking for a Lot Line Adjustment, Multi-Family Site Plan  
42 Review, Shoreland Conditional Use Permit and waivers: for work within five (5') of the property line and  
43 use of fertilizer for one year. A site walk was conducted by the Board on April 20, 2022 and he will  
44 obtain the minutes from Barbara for approval.

45  
46 Corey Belden with Altus Engineering presented the additions to the application on behalf of PEA which  
47 was last presented to the Board on April 14, 2022. He noted Mark Leighton and Heather Taylor from  
48 PEA were present along with Christine O'Brien and Rob Haversham from Marketplace Architects and  
49 Steve Pernaw, the traffic engineer.

50  
51 Mr. Belden reviewed the improvements proposed after the site walk concerns were noted, to drainage  
52 with the internal storage reservoir rain garden, setbacks of the proposed buildings, grade at High Street  
53 in front of the duplex and the swale being created in the back corner of one building.

54  
55 Ms. English asked if off-site runoff from the lot where the old High Street Market was located were  
56 calculated and Mr. Belden explained the off-site runoff is being collected.

57  
58 Ms. English asked about the plantings in front of the new house on High Street. HDC had commented  
59 they wanted to cover up the foundation; she asked about the foundation veneer and Mr. Leighton  
60 commented that the veneers were too thick – 8-12" so it is not feasible. He noted PEA would like to  
61 keep it simple and consistent with other property in the neighborhood as far as landscaping.

62  
63 Mr. Grueter asked about a house on High Street that is remaining that has earth raised up about three  
64 feet from there and why they wouldn't want to match that. Mr. Leighton noted they could do that.  
65 There is a porch entrance.

66  
67 Ms. Martel asked about drainage. She observed during the site walk that it had rained heavily a few  
68 days earlier and there was a lot of standing water. She looked at the grading plan and the collection of  
69 drainage in a low point. She noted she observed nothing on the plan to keep it in/prevent overflow.  
70 The yard drain could become clogged with leaves and there should be a failsafe. Mr. Belden explained  
71 the proposed use of a bee hive grate and described the rounded dome which prevents clogging. Ms.  
72 Martel pointed out the elevation rim, referencing PYD#8 and .85 elevation with 42 contour right next to  
73 that and questioned if water can be stored in that .185" area for example with 6" of leaf litter would it  
74 clog. Mr. Belden noted he could doublecheck and believed there was a good depth and expects to get a  
75 foot but will verify that. He noted their intent is to maintain storage of up to at least a 25-year storm  
76 event but there is not a lot of surface water there. The roof flows have been reduced in front and goes  
77 to a catch basin, diverted to the roadway drainage and then to the rain garden systems.

78  
79 Ms. Martel noted the current conditions are wooded and by adding a lot of impervious surface it will not  
80 be the same volume of runoff. Mr. Belden noted the significant improvements will reduce by one-third.  
81 They are also collecting it and making a significant improvement to current conditions. He referenced  
82 reduction of the impervious of the roofs by one-half.

83

84 Ms. Martel referenced the 100-year storm and ability to capture without the wooded area. She noted  
85 that concentrating the runoff could cause the system to be overwhelmed resulting in runoff to the  
86 adjacent neighbor's properties. She referenced using rip rap attenuators as one possibility. Mr. Belden  
87 indicated he would verify the 50-year storm criteria noting the 100-year storm is a big event. Ms. Martel  
88 noted the 100-year event is happening more frequently these days. The stormwater system has to have  
89 some sort of overflow. She noted concerns with concentrating the flow of water in a swale and sending  
90 it to one point with no failsafe for overflow.

91  
92 Chair Plumer asked the elevation and capacity of the drain and if he anticipates standing water and  
93 excess flowing away. Mr. Belden gave calculations of 2.04 CFS, two cubic feet per second which is  
94 adequate for the 25-year storm event. The drain is sized to account for that with an 8" inlet pipe  
95 adequate with 2 CFS coming to that point. He noted there is not significant flow there and they have  
96 significantly reduced the water shed. He noted they have an 8" culvert and can put in a 12" if the  
97 concern is that it is inadequate. DES and the Town asked for the 50-year storm. Chair Plumer noted the  
98 100 year are more frequent, storms are longer and likely to be 2-3 storms in a row, exceeding three  
99 days.

100  
101 Ms. English asked Mr. Sharples if UEI could look at that again and address Ms. Martel's questions. Mr.  
102 Sharples noted that UEI has already reviewed but he will ask Ms. Martel's questions specifically. He  
103 noted the regulations are up to the 50-year storm, not 100, that would be another conversation. Ms.  
104 Martel clarified that she was not asking for up to the 100-year storm but is concerned with the proximity  
105 to three abutters, collecting concentrated stormwater. Mr. Belden noted the regulation is to not  
106 increase peak flows and not to go off site.

107  
108 Ms. Martel asked about the drip edge of the buildings and Mr. Belden explained they will have drip  
109 edges, 6" of rock, but not underdrains. Each building will have foundation drains all around.

110  
111 Ms. English asked about the comments made by the Natural Resource Planner and Conservation  
112 Commission concerning supplemental plantings in the buffers. Mr. Belden noted more would be added  
113 but does not appear on the plans we have. He pointed out the two areas where additional wetland  
114 buffer plantings will be. Mr. Sharples advised that Ms. Murphy the Natural Resource Planner indicated  
115 all of Ms. Murphy's and the Conservation Commission's comments have been addressed.

116  
117 Ms. English asked about snow plowing and snow storage. Mr. Belden pointed out those areas. Ms.  
118 English asked about the location of the new plantings. Ms. Martel noted they are Sweet Gum and  
119 Flowering Dogwood 15-20' from the edge of pavement. Mr. Belden noted there are a lot of utility lines  
120 to contend with and those were the best position, 15 plus feet from center of tree to the edge of  
121 pavement.

122  
123 Ms. English asked the area marked to the southern end and Mr. Belden noted that is the existing 10  
124 Gilman Lane and indicated how the garage would be facing another direction.

125  
126 Ms. English asked about trash collection and Mr. Belden noted the Academy takes care of that.

127

128 Ms. English asked about the sidewalk from High Street which goes directly onto pavement of the  
129 neighbor. Mr. Belden noted there is a bit of off-site buffer between while it is not well maintained. Ms.  
130 English noted it would be nice to have the entrance be visually pleasing. Mr. Leighton indicated they  
131 have had discussions with the owner who has not expressed any desire to put anything there. The trees  
132 are going away and will be replaced with grass or mulch.

133  
134 Ms. English asked about the house south of the Zwaan property and the proposed buffer there. Mr.  
135 Leighton noted he has had conversations with the property owner and Mr. Zwaan is comfortable with  
136 that.

137  
138 Ms. Martel asked if there were an updated plan since March 31<sup>st</sup> and Mr. Belden indicated there was  
139 not, but he could include a letter concerning the revised plantings and abutter properties.

140  
141 Ms. Martel asked about the wooden screen fence and Mr. Belden noted the materials are being agreed  
142 upon with the abutters. Mr. Leighton noted it could be 6' wooden pickets or vinyl.

143  
144 Ms. English asked while it is not in the Board's purview, to describe the environmental action plans by  
145 PEA on campus. Mr. Leighton explained the buildings will be using air source heat pumps with electric  
146 for heat and cooling. Solar on the rooftops was not feasible due to rooftop orientation but the climate  
147 action plan could result in a large on the ground solar panel array. He noted one section of the front of  
148 the property will have irrigation.

149  
150 Ms. Tyner asked about the use of fertilizer and referenced statements made in past meetings about  
151 changing over to something more environmentally friendly. She asked if there were any consultations  
152 with their Sustainability Club or the Piscataqua River Gatekeepers as to a better way to establish the site  
153 for this project. She noted with unhealthy rivers, estuaries and oceans it would be great to be able to  
154 use their resources to do something better.

155  
156 Chair Plumer opened the hearing to the public for comments and questions at 8:09 PM.

157  
158 John Donnell of 25 High Street expressed concerns about his ability in the future to safely exit High  
159 Street and turnaround in his driveway. He presented a letter which Vice-Chair Brown read out loud. He  
160 noted one neighbor has already sacrificed their front yard for parking and turn around with fast moving  
161 three lanes of traffic which makes backing out dangerous.

162  
163 Mr. Leighton detailed the proposal for PEA to have a 10' Lot Line Adjustment with the Donnell's noting  
164 that Mr. Donnell has suggested another idea which they will be discussing on Tuesday.

165  
166 Chair Plumer closed the hearing to the public at 8:14 PM for deliberations.

167  
168 Ms. Belanger referenced the aerial view of Mr. Donnell's driveway and questioned whether the angle  
169 could be straightened out.

170

171 Vice-Chair Brown asked Mr. Belden about impervious surface calculations. Mr. Belden noted presently  
172 18.5%, post project 27.6%. Mr. Belden summarized the drainage and shoreland permit.

173  
174 Chair Plumer asked about the waivers. Mr. Sharples reviewed the criteria for granting waivers: public  
175 health, safety, welfare, not injurious to the public and noted they are providing fences and sidewalk  
176 which are not detrimental.

177  
178 Mr. Sharples reviewed the criteria that the parcel be unique and features not generally applicable to  
179 other property. Mr. Belden noted the site conditions dictate a necessity to work within this area.

180  
181 Mr. Sharples reviewed the criteria for topographical hardship and Mr. Belden noted the fence along a  
182 property line is standard practice and the hardship is grading is not allowed within 5'.

183  
184 Mr. Sharples reviewed the criteria for the intent to have a smooth transition between property and  
185 noted it is for grading not working within. There will be a slight grading at the curb cut.

186  
187 Mr. Sharples noted it would not vary the provisions of the zoning ordinance or Master Plan as there is  
188 nothing in the ordinance or the Master Plan concerning that.

189  
190 ***Vice-Chair Brown motioned after reviewing the criteria for granting waivers the Planning Board will***  
191 ***grant the request of Philips Exeter Academy, Planning Board Case #22-2 under Article 9.6.3.4 of the***  
192 ***site plan and subdivision regulations for a waiver for grading within 5' of the property line. Ms.***  
193 ***Belanger seconded the motion. A vote was taken, English – aye, Grueter – aye, Brown – aye, Plumer –***  
194 ***aye, Cameron – aye, Martel – aye and Belanger aye. The motion passed unanimously 7-0-0.***

195  
196 Ms. Martel asked about conditions and if the depressed area could get another look. Mr. Sharples  
197 noted it could be a COA with the later motion.

198  
199 Mr. Belden presented the criteria under Section 9.3.4 (f)(C)(2) for granting a waiver for use of fertilizer  
200 and noted they would use 50% slow-release nitrogen for the maximum period of one year to establish  
201 planting. He reviewed the uniqueness and how establishment of grass would help with the stormwater  
202 drainage process here. He discussed the physical topography and again referenced the detriment to the  
203 stormwater system if plantings were not quickly established here. He noted it would not be contrary to  
204 the spirit and intent of the regulations or vary the terms of the zoning ordinance or Master Plan.

205  
206 Mr. Sharples questioned why a waiver was being requested as the applicants appear to be meeting the  
207 criteria. Mr. Belden answered that they were instructed to do so at the TRC Meeting. Mr. Sharples  
208 noted they are outside the 100' buffer in 12a and 12b. The regulations state that you cannot get a  
209 waiver for 100' of shoreline anyway. He referenced Comment #6 of the NRP and that the 121 lbs. per SF  
210 is not exceeding regulations and varies depending on the water body. Ms. Belanger noted no fertilizer is  
211 allowed within the 300' buffer of the shoreland protection district.

212  
213 Mr. Belden indicated if the use can be outside the 100' he would withdraw the request for the shoreland  
214 protection district waiver.

215 Chair Plumer asked about the request for a Lot Line Adjustment and what lines are being added. Mr.  
216 Belden showed the existing and proposed lines on the plan to merge two lots into a single lot (outlined  
217 in blue) plus the 10' sliver being deeded to 25 High Street shown in red. Mr. Sharples noted the frontage  
218 would be more conforming.

219

220 **Mr. Grueter motioned that the Board approve the request of Philips Exeter Academy, Planning Board**  
221 **Case #22-2 for a Lot Line Adjustment with the condition read out loud by the Town Planner:**

222

223 **1. a dwg file of the plan shall be provided to the Town Planner showing all property lines and**  
224 **monumentation prior to signing the final plans. This plan must be in NAD 1983 State Plane New**  
225 **Hampshire FIPS 2800 feet coordinates; and**

226

227 **2. All monumentation shall be set in accordance with Section 9.25 of the Site Plan Review and**  
228 **Subdivision Regulations prior to signing the final plans.**

229

230 **Ms. Belanger seconded the motion. A vote was taken: Belanger – aye, Martel – aye, Cameron – aye,**  
231 **Plumer – aye, Brown – aye, English – aye and Grueter – aye. The motion passed unanimously 7-0-0.**

232

233 Mr. Belden showed the 300' buffer line from the Exeter River on the plan noting that DES has a 250'  
234 requirement for a shoreland permit. He noted the applicants met with the Conservation Commission  
235 and received recommendation for approval with four conditions which were addressed in the revised  
236 plans and application. Attachment A addresses the criteria. Chair Plumer noted those were presented  
237 to the Board before and don't need to be reread. Mr. Belden noted he went back and looked for the  
238 best possible removal rate of nitrogen and phosphorus from the site and went with the internal storage  
239 reservoir rain garden system which has higher removal rates than the gravel wetland.

240

241 **Ms. English motioned after reviewing the criteria for the Shoreland Conditional Use Permit the Board**  
242 **grant approval of the request of Philips Exeter Academy, Planning Board Case #22-2 for a Shoreland**  
243 **Conditional Use Permit be approved. Ms. Belanger seconded the motion. A vote was taken: English –**  
244 **aye, Grueter – aye, Brown – aye, Plumer – aye, Cameron – aye, Martel – aye and Belanger – aye. The**  
245 **motion passed unanimously 7-0-0.**

246

247 Mr. Sharples referenced out loud the proposed conditions of approval for the Multi Family Site Plan:

248

249 1. An electronic as-built plan of the entire property with details accepted to the Town shall be provided  
250 prior to the certificate of occupancy (C/O). This plan shall be in a dwg or dxf file format and in NAD 1983  
251 State Plane New Hampshire FIPS 2800 feet coordinates; All monumentation shall be set in accordance  
252 with Section 9.25 of the Site Plan Review and Subdivision Regulations prior to the issuance of a  
253 Certificate of Occupancy.

254

255 2. A pre-construction meeting shall be arranged by the applicant and their contractor with the Town  
256 Engineer prior to any site work commencing. The following must be submitted for review and approval  
257 prior to the preconstruction meeting.

258

- 259           1. The SWPPP (storm water pollution prevention plan), if applicable, be submitted to and  
260 received for approval by DPW prior to preconstruction meeting; and  
261           ii. a project schedule and construction cost estimate.  
262
- 263           3. Third party construction inspection fees shall be paid prior to scheduling the preconstruction  
264 meeting.  
265
- 266           4. The Stormwater System Operations and Maintenance Report in the Stormwater Management  
267 Operation and Maintenance Manual shall be completed and submitted to the Town Engineer annually  
268 on or before January 31<sup>st</sup>. This requirement shall be an ongoing condition of approval.  
269
- 270           5. All applicable State permit approval numbers shall be noted on the final plans.  
271
- 272           6. All appropriate fees to be paid including but not limited to: sewer/water connection fees, impact  
273 fees, and inspection fees prior to the issuance of a building permit or a Certificate of Occupancy  
274 whichever is applicable as determined by the Town.  
275
- 276           7. All landscaping shown on plans shall be maintained and any dead or dying vegetation shall be  
277 replaced, no later than the following growing season as long as the site plan remains valid. This  
278 condition is not intended to circumvent the revocation procedures set forth in State statutes.  
279
- 280           8. If determined applicable by the Exeter DPW the applicant shall submit the land use and stormwater  
281 management information about the project using the PTAPP online municipal tracking tool. The PTAPP  
282 submittal must be accepted by the DPW prior to the preconstruction meeting.  
283
- 284           9. UEI will review the final plans to determine that the drainage area in the most eastern northeast  
285 corner of the site will function as designed.  
286
- 287           10. The final landscape plan shall show the additional plantings agreed upon by the abutters and as  
288 stated by the applicant.  
289
- 290           Mr. Sharples discussed the proposed condition concerning Mr. Donnell's driveway at 35 High Street and  
291 proposed the wording use reasonable effort to work with Mr. Donnell to resolve a solution. He noted  
292 PEA is proposing to give him 10" of property and is meeting with Mr. Donnell on Tuesday to suggest Mr.  
293 Donnell's other proposal. Vice-Chair Brown noted PEA has offered to work with him on the turnaround  
294 and deed him 10.' Mr. Belden noted there are multiple vehicles parked there that kind of stack and  
295 would block that. Mr. Leighton noted there are opportunities on his property that Mr. O'Donnell can  
296 take. Mr. Sharples noted the Town has a sewer easement. Vice-Chair Brown questioned whether it  
297 was reasonable for this Board to solve Mr. Donnell's ability to exit High Street where his property has  
298 always been. Mr. Sharples noted the condition is to make a reasonable effort to find a solution, to work  
299 on one. Chair Plumer opined that the effort can be measured and documented. Vice-Chair Brown  
300 noted they have already offered the 10.'  
301

302 Ms. English asked about dealing with the front elevation on High Street. Mr. Belden proposed raising  
303 the grade to 18” to reduce the reveal. Mr. Grueter recommended the grade be similar to the other  
304 structure at 35 High Street.

305

306 The Board agreed the condition concerning Mr. Donnell’s driveway would read:

307

308 #11. The applicant shall work with Mr. Donnell on a solution to the turnaround issue of Mr. O’Donnell’s  
309 driveway outlined on Mr. Donnell’s letter dated May 12, 2022 submitted to the Planning Board.

310

311 #12. Final landscape plans shall show a note that the use of fertilizers shall meet the requirements of  
312 Section 9.3.4. (f)12(a)and(b).

313

314 #13. The final plans shall show a raise in grade of the new structure to about 18” above the sidewalk,  
315 similar to 35 High Street.

316

317 Mr. Sharples reread the proposed conditions of approval.

318

319 **Mr. Grueter motioned that the Board grant the request of Philips Exeter Academy, Planning Board**  
320 **Case #22-2 for a multi-family site plan with the conditions as read by the Town Planner. Ms. Belanger**  
321 **seconded the motion. A vote was taken: Belanger – aye, Martel – aye, Cameron – aye, Plumer aye,**  
322 **Brown – aye, Grueter – aye, and English – aye. The motion passed unanimously 7-0-0.**

323

324 2. The application of Rafferty Investment Group LLC for a minor subdivision of an existing 7.3-acre  
325 parcel located at 54 Drinkwater Road into two (2) residential lots.

326 R-1, Low Density Residential zoning district

327 Tax Map Parcel #106-1

328 Planning Board Case #22-4

329

330 Chair Plumer read out loud the Public Hearing Notice.

331

332 Mr. Sharples advised that he has spoken with the applicant earlier and after looking at the plan the 75’  
333 well radius was not identified. He recommended the Planning Board not act on that until the Board sees  
334 it or table the application to May 26<sup>th</sup>. He noted he has not heard from the applicant and recommended  
335 tabling it to the May 26<sup>th</sup> meeting.

336

337 **Mr. Cameron motioned that the Board table the application of Rafferty Investment Group LLC,**  
338 **Planning Board Case #22-4 to the May 26, 2022 Planning Board meeting at 7:00 PM. Ms. Belanger**  
339 **seconded the motion. A vote was taken, all were in favor, the motion passed unanimously 7-0-0.**

340

341 4. The application of Seneca Hipkiss for a lot line adjustment of the common boundary line between the  
342 properties located at 14 Riverbend Circle and 110 Linden Street

343 R-2 Single Family Residential zoning district

344 Tax Map Parcels #104-28 and #104-76

345 Planning Board Case #22-5

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388

Chair Plumer read out loud the Public Hearing Notice.

Mr. Sharples noted the applicant is seeking a lot-line adjustment between the property at 14 Riverbend Circle and the abutting property at 110 Linden Street owned by TpJP-Invest LLC. Four acres will be transferred by the adjustment from the TpJP-Invest LLC property and combined with the existing .86-acre parcel at 14 Riverbend Circle. The applicant has submitted a LLA plan dated April 12, 2022 and supporting documents. There was no TRC review but the materials have been reviewed by Code Enforcement Officer Doug Easement and found to be in compliance with the zoning regulations.

Mr. Sharples added that the applicant submitted a request for several waivers and did not need any of them. The minor subdivision regulations state “as deemed necessary by the Town Planner.” He noted it is a simple Lot Line Adjustment adding four acres to one parcel and reducing the 10 acres that fronts on Linden Street to 6.61 acres and he doesn’t see the need for any of the waivers.

Chair Plumer opened the hearing to the public for comments and questions at 9:25 PM.

Seneca Hipkiss of Riverbend Circle, the applicant, stated the purpose is purely conservation. With the removal of trees and all that has happened above us. Given opportunity to purchase this piece of land which abuts the Conservation land on the river below us with no plans to ever build or develop it.

Vice-Chair Brown noted he saw no issues with this, it is straightforward.

**Mr. Cameron motioned to open Planning Board Case #22-5. Ms. Belanger seconded the motion. A vote was taken, all were in favor, the motion passed unanimously 7-0-0.**

Mr. Sharples suggested two conditions of approval:

**1. a dwg file of the lot line adjustment plan be provided to the Town Planner showing all property lines and monumentation prior to signing the final plans. This plan must be in NAD 1983 State Plane New Hampshire FIPS 2800 feet coordinates; and**

**2. All monumentation shall be set in accordance with Section 9.25 of the Site Plan Review and Subdivision Regulations prior to signing the final plans.**

**Ms. English motioned that the Planning Board approve the request of Seneca Hipkiss, Planning Board Case #22-5 for a Lot Line Adjustment with the two conditions read by the Town Planner. Ms. Belanger seconded the motion. A vote was taken: English - aye, Grueter - aye, Brown – aye, Plumer – aye, Cameron – aye, Martel - aye and Belanger – aye. The motion passed 7-0-0.**

**V. OTHER BUSINESS**

- Election of Officers



389 Mr. Cameron asked if anyone else would be willing to serve as Clerk, he is willing if no  
390 one else wants to. Vice-Chair Brown and Chair Plumer indicated the same for the Vice-  
391 Chair Position.

392 **Mr. Grueter motioned to nominate the existing three officers for another year. Ms.**  
393 **English seconded the motion. Mr. Cameron, Chair Plumer and Vice-Chair Brown**  
394 **abstained. The motion passed 4-0-3.**

395 Mr. Cameron reminded there were other positions to serve on, HDC (John Grueter is on)  
396 HAC (Mr. Cameron and Ms. Belanger are on), RPC (Chair Plumer and Ms. English are on -  
397 could have three), Heritage (Chair Plumer) and MPOC.

- 398 • Master Plan Discussion

399  
400 Mr. Sharples noted MPOC is meeting tomorrow to discuss a proposal from RPC  
401 to conduct the approval by the voters and are bringing that to the Committee to  
402 get that under contract and get started.

403  
404 Mr. Sharples noted he will be looking at a town-wide zoning ordinance regarding  
405 various land uses. They signed a Memorandum of Understanding with a  
406 company that does a physical health analysis of the communities. NH Housing  
407 selected four communities and look at cost of infrastructure, where are we  
408 spending more than we are getting, types of developments, shaping policy,  
409 create developments that will pay for themselves.

- 410  
411 • Field Modifications

- 412  
413 • Bond and/or Letter of Credit Reductions and Release

414

#### 415 **VIII. TOWN PLANNER'S ITEMS**

416 Mr. Sharples advised that he received a letter per RSA 675:54 from a Charter School (Friends of Coastal  
417 Waters) on Holland Way which will be utilizing the existing building. He advised that being a  
418 governmental building it is exempt from local land use regulations unless there is a substantial change.  
419 The Board can choose to have a hearing within 30 days however it would be non-binding. The Board has  
420 no authority to require them to do anything and there are no plans to modify the exterior of the  
421 building.

422 Chair Plumer asked if this was the old TYCO building and Mr. Sharples indicated it is.

423 Mr. Cameron asked the date of the letter and Mr. Sharples noted the 30 days start today.

424 Vice-Chair Brown asked if there were a substantial change would they be required to come and see us.  
425 Mr. Sharples indicated government land uses are subject to life, safety and building but not land use  
426 regulations.

427 Vice-Chair Brown did not think it was necessary. Mr. Grueter agreed they are not requesting anything.  
428 Mr. Sharples also noted the Select Board will have the same opportunity but not an obligation. Ms.  
429 Martel asked if abutters would be notified, and Mr. Sharples indicated that is what is usually done but  
430 there is no funding to pay for it so he may have to ask the applicants to pay for that. Ms. Martel noted  
431 one benefit would be for the abutters to have the chance to ask questions, for transparency. Mr.  
432 Cameron asked if the Planning Board was the best option or the governing body. Mr. Cameron agreed  
433 the Board doesn't need to get involved. Ms. English agreed with Ms. Martel. Mr. Grueter asked Ms.  
434 Belanger if the Select Board were looking to do this, and she indicated their next meeting was on May  
435 30<sup>th</sup> but this letter just came out today so she is not even sure if they have it yet. Mr. Cameron changed  
436 his position and recommended to go ahead and do the review Mr. Sharples recommended asking the  
437 charter school representatives to come in on May 26<sup>th</sup> or June 9<sup>th</sup>.

438 **IX. CHAIRPERSON'S ITEMS**

439 **X. PB REPRESENTATIVE'S REPORT ON "OTHER COMMITTEE ACTIVITY"**

440 **XI. ADJOURN.**

441 *Mr. Cameron motioned to adjourn the meeting at 10 PM. Ms. Belanger seconded the motion. A vote*  
442 *was taken all were in favor, the motion passed 7-0-0.*

443

444 Respectfully submitted,

445 Daniel Hoijer,

446 Recording Secretary

447 Via Exeter TV



# TOWN OF EXETER

## *Planning and Building Department*

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 • FAX 772-4709

[www.exeternh.gov](http://www.exeternh.gov)

---

**Date:** May 19, 2022  
**To:** Planning Board  
**From:** Dave Sharples, Town Planner  
**Re:** Rafferty Investment Group LLC PB Case #22-4

The Applicant is seeking a minor subdivision of an existing 7.3-acre parcel located at 54 Drinkwater Road into two (2) residential building lots. The Applicant intends to demolish the existing home and to remove all accessory structures and debris currently on the property. The subject property is located in the R-1, Low Density Residential zoning district and is identified as Tax Map Parcel #106-1.

The Applicant submitted a minor subdivision plan and supporting documents, dated April 4<sup>th</sup>, 2022, which were provided in the 5/12/22 PB meeting packet.

As noted at the 5/12/22 PB meeting, I had contacted the Applicant to discuss the delineation of the proposed well location (and well radius) on the newly created lot and requested that a revised plan be submitted. The Applicant was not able to provide a revised plan in time for the meeting, and did not attend. Subsequently, the Board voted to continue the application to the 5/26/22 meeting to give the Applicant the opportunity to provide a revised plan. The revised subdivision plan, dated 5/20/22, is enclosed for your review.

There are no waivers being requested for this application.

I will be prepared with suggested conditions of approval at the meeting in the event the board decides to take action on the request.

### **Planning Board Motion:**

**Minor Subdivision Motion:** I move that the request of Rafferty Investment Group LLC (PB Case #22-4) for Minor Subdivision approval be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

Thank You.

Enclosures



RECEIVED

APR 4 2022

TOWN OF EXETER  
MINOR SUBDIVISION, MINOR  
SITE PLAN, AND/OR LOT LINE  
ADJUSTMENT APPLICATION

EXETER PLANNING OFFICE

5/12/22  
PA date

**OFFICE USE ONLY**

**THIS IS AN APPLICATION FOR:**

MINOR SITE PLAN

MINOR (3lots or less) SUBDIVISION (2) LOTS

LOT LINE ADJUSTMENT

PB #22-4	APPLICATION
4/4/22	DATE RECEIVED
\$ 125.00	APPLICATION FEE
50.00	PLAN REVIEW FEE
90.00	ABUTTER FEE
50.00	LEGAL NOTICE FEE
	INSPECTION FEE
\$ 315.00	TOTAL FEES
	AMOUNT REFUNDED

pd. v#107 \$315.00  
lwr

1. NAME OF LEGAL OWNER OF RECORD: Charles L. Dunbar  
 ADDRESS: 54 Drinkwater Rd, Exeter, NH 03833  
 TELEPHONE: (603) 583-7160

2. NAME OF APPLICANT: Rafferty Investment Group LLC  
 ADDRESS: 371 Islington St., Ste. A, Portsmouth, NH 03801  
 TELEPHONE: (603) 767-8929

3. RELATIONSHIP OF APPLICANT TO PROPERTY IF OTHER THAN OWNER: \_\_\_\_\_  
Prospective buyer  
 (Written permission from Owner is required, please attach.)

4. DESCRIPTION OF PROPERTY:  
 ADDRESS: 54 Drinkwater Rd, Exeter, NH 03833  
 TAX MAP: 106 PARCEL #: 1 ZONING DISTRICT: R-1  
 AREA OF ENTIRE TRACT: 7.3 acres PORTION BEING DEVELOPED: 7.3 acres



5. EXPLANATION OF PROPOSAL: Remove current structures and debris, subdivide current lot into 2 buildable lots.

6. ARE MUNICIPAL SERVICES AVAILABLE? (YES/NO) No  
IF YES, WATER AND SEWER SUPERINTENDENT MUST GRANT WRITTEN APPROVAL FOR CONNECTION. IF NO, SEPTIC SYSTEM MUST COMPLY WITH W.S.P.C.C. REQUIREMENTS.

7. LIST ALL MAPS, PLANS AND OTHER ACCOMPANYING MATERIAL SUBMITTED WITH THIS APPLICATION:

<u>ITEM:</u>	<u>NUMBER OF COPIES</u>
A. <u>Survey</u>	<u>22</u>
B. _____	_____
C. _____	_____
D. _____	_____
E. _____	_____
F. _____	_____

8. ANY DEED RESTRICTIONS AND COVENANTS THAT APPLY OR ARE CONTEMPLATED (YES/NO) No IF YES, ATTACH COPY.

9. NAME AND PROFESSION OF PERSON DESIGNING PLAN:

NAME: Adam Fogg  
ADDRESS: 25 Nute Rd, Dover, NH 03820  
PROFESSION: Surveyor TELEPHONE: (603) 659-8939

10. LIST ALL IMPROVEMENTS AND UTILITIES TO BE INSTALLED: Construction of 2 single family homes on septic and well.



**11. HAVE ANY SPECIAL EXCEPTIONS OR VARIANCES BEEN GRANTED BY THE ZONING BOARD OF ADJUSTMENT TO THIS PROPERTY PREVIOUSLY?**

(Please check with the Planning Department Office to verify) (YES/NO) No IF YES, LIST BELOW AND NOTE ON PLAN.

**NOTICE:**

I CERTIFY THAT THIS APPLICATION AND THE ACCOMPANYING PLANS AND SUPPORTING INFORMATION HAVE BEEN PREPARED IN CONFORMANCE WITH ALL APPLICABLE TOWN REGULATIONS, INCLUDING BUT NOT LIMITED TO THE "SITE PLAN REVIEW AND SUBDIVISION REGULATION" AND THE ZONING ORDINANCE. FURTHERMORE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE "SITE PLAN REVIEW AND SUBDIVISION REGULATIONS", I AGREE TO PAY ALL COSTS ASSOCIATED WITH THE REVIEW OF THIS APPLICATION.

DATE 4/1/2022 APPLICANT'S SIGNATURE 

ACCORDING TO RSA 676.4.I (c), THE PLANNING BOARD MUST DETERMINE WHETHER THE APPLICATION IS COMPLETE WITHIN 30 DAYS OF SUBMISSION. THE PLANNING BOARD MUST ACT TO EITHER APPROVE, CONDITIONALLY APPROVE, OR DENY AN APPLICATION WITHIN SIXTY FIVE (65) DAYS OF ITS ACCEPTANCE BY THE BOARD AS A COMPLETE APPLICATION. A SEPARATE FORM ALLOWING AN EXTENSION OR WAIVER TO THIS REQUIREMENT MAY BE SUBMITTED BY THE APPLICANT.

12/15/21

To Whom It May Concern:

I, Charles L. Dunbar, the deeded owner of 54 Drinkwater Road in Exeter, NH grant Rafferty Investment Group LLC and its agent(s), Nicholas Drouin, and Amanda Drouin permission to acquire a demolition permit in order to fulfill the agreed upon provisions from our Purchase and Sales Agreement.

If you have any questions or concerns, please contact me at 603-583-7160.

Sincerely,

AuthentiSIGN  
*Charles Dunbar*  
12/15/2021 10:16:04 AM EST

Charles L. Dunbar

12/15/2021





ABUTTERS: PLEASE LIST ALL PERSONS WHOSE PROPERTY IS LOCATED IN NEW HAMPSHIRE AND ADJOINS OR IS DIRECTLY ACROSS THE STREET OR STREAM FROM THE LAND UNDER CONSIDERATION BY THE BOARD. THIS LIST SHALL BE COMPILED FROM THE EXETER TAX ASSESSOR'S RECORDS.

TAX MAP 106-3  
 NAME Robert Tuttle  
 ADDRESS 56 Drinkwater  
Exeter, NH 03833

TAX MAP Surveyor  
 NAME Atlantic Surveying  
 ADDRESS 25 Nute Rd,  
Dover, NH 03820

TAX MAP 107-10  
 NAME Town of Exeter  
 ADDRESS 10 Front St  
Exeter, NH 03833

TAX MAP \_\_\_\_\_  
 NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_

TAX MAP 107-1  
 NAME Kyle Barnett, Andrea Nelson  
 ADDRESS 58 Drinkwater Rd  
Exeter, NH 03833

TAX MAP \_\_\_\_\_  
 NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_

TAX MAP 107-2  
 NAME Peter and Kathleen Corsigli  
 ADDRESS 64 Drinkwater Rd  
Exeter, NH 03833

TAX MAP \_\_\_\_\_  
 NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_

TAX MAP 107-3  
 NAME Jose Salema  
 ADDRESS 66 Drinkwater Rd  
Exeter, NH 03833

TAX MAP \_\_\_\_\_  
 NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_

TAX MAP 71-119  
 NAME Phillips Exeter Academy  
 ADDRESS 20 Main St  
Exeter, NH 03833

TAX MAP \_\_\_\_\_  
 NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_

TAX MAP 93-11  
 NAME Town of Exeter Conservation Commission  
 ADDRESS 10 Front St  
Exeter, NH 03833

TAX MAP \_\_\_\_\_  
 NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_

TAX MAP Developer  
 NAME Rafferty Investment Group LLC  
 ADDRESS 371 Hslington St, Ste. A  
Portsmouth, NH 03801

TAX MAP \_\_\_\_\_  
 NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_

**Please attach additional sheets if needed**





## **CHECKLIST FOR LOT LINE ADJUSTMENT, MINOR SITE PLAN, or MINOR SUBDIVISION PLAN PREPARATION**

The checklist on the following page has been prepared to assist you in the preparation of your subdivision plan. The checklist items listed correspond to the subdivision plan requirements set forth in Section 7 of the “Site Plan Review and Subdivision Regulations”. Unless otherwise indicated, all section references within this checklist refer to these regulations. Each of the items listed on this checklist must be addressed prior to the technical review of subdivision plans by the Technical Review Committee (TRC). See Section 6.5 of the “Site Plan Review and Subdivision Regulations”. This checklist **DOES NOT** include all of the detailed information required for subdivision and lot line adjustment plans and therefore should not be the sole basis for the preparation of these plans. For a complete listing of subdivision plan requirements, please refer to Section 7 of the “Site Plan Review and Subdivision Regulations”. In addition to these required plan items, the Planning Board will review subdivision plans based upon the standards set forth in Sections 8 and 9 of the “Site Plan Review and Subdivision regulations”. As the applicant, it is **YOUR RESPONSIBILITY** to familiarize yourself with these standards and to prepare your plans in conformance with them.

Please complete this checklist by marking each item listed in the column labeled “Applicant” with one of the following: “X” (information provided); “NA” (note applicable); “W” (waiver requested). For all checklist items marked “NA”, a final determination regarding applicability will be made by the TRC. For all items marked “W”, please refer to Section 11 of the “Site Plan Review and Subdivision Regulations” for the proper waiver request procedure. All waiver requests will be acted upon by the Planning Board at a public hearing. Please contact the Planning Department office, if you have any questions concerning the proper completion of this checklist.

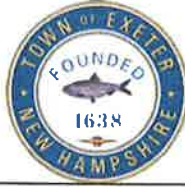
All of the required information for the plans listed in the checklist must be provided on separate sheets, unless otherwise approved by the TRC.

**NOTE: AN INCOMPLETE CHECKLIST WILL BE GROUNDS FOR REJECTION OF YOUR APPLICATION.**



## CHECK LIST FOR MINOR SITE PLAN REVIEW, MINOR SUBDIVISION AND LOT LINE ADJUSTMENT

APPLICANT	TRC	REQUIRED EXHIBITS, SEE REGULATION 6.6.2.4
X	<input type="checkbox"/>	a) The name and address of the property owner, authorized agent, the person or firm preparing the plan, and the person or firm preparing any other data to be included in the plan.
W	<input type="checkbox"/>	b) Title of the site plan, subdivision or lot line adjustment, including Planning Board Case Number.
X	<input type="checkbox"/>	c) Scale, north arrow, and date prepared.
X	<input type="checkbox"/>	d) Location of the land/site under consideration together with the names and address of all owners of record of abutting properties and their existing use.
X	<input type="checkbox"/>	e) Tax map reference for the land/site under consideration, together with those of abutting properties.
X	<input type="checkbox"/>	f) Zoning (including overlay) district references.
X	<input type="checkbox"/>	g) A vicinity sketch showing the location of the land/site in relation to the surrounding public street system and other pertinent location features within a distance of 1,000-feet.
X	<input type="checkbox"/>	h) For minor site plan review only, a description of the existing site and proposed changes thereto, including, but not limited to, buildings and accessory structures, parking and loading areas, signage, lighting, landscaping, and the amount of land to be disturbed.
NA	<input type="checkbox"/>	i) If deemed necessary by the Town Planner, natural features including watercourses and water bodies, tree lines, and other significant vegetative cover, topographic features and any other environmental features which are significant to the site plan review or subdivision design process.
NA	<input type="checkbox"/>	j) If deemed necessary by the Town Planner, existing contours at intervals not to exceed 2-feet with spot elevations provided when the grade is less than 5%. All datum provided shall reference the latest applicable US Coast and Geodetic Survey datum and should be noted on the plan.
X	<input type="checkbox"/>	k) If deemed necessary by the Town Planner for proposed lots not served by municipal water and sewer utilities, a High Intensity Soil Survey (HISS) of the entire site, or portion thereof. Such soil surveys shall be prepared and stamped by a certified soil scientist in accordance with the standards established by the Rockingham County Conservation District. Any cover letters or explanatory data provided by the certified soil scientist shall also be submitted.
X	<input type="checkbox"/>	l) State and federal jurisdictional wetlands, including delineation of required setbacks.
X	<input type="checkbox"/>	m) A note as follows: "The landowner is responsible for complying with all applicable local, State, and Federal wetlands regulations, including any permitting and setback requirements required under these regulations."
X	<input type="checkbox"/>	n) Surveyed exterior property lines including angles and bearings, distances, monument locations, and size of the entire parcel. A professional land surveyor licensed in New Hampshire must attest to said plan.



NA	<input type="checkbox"/>	o) For minor site plans only, plans are not required to be prepared by a professional engineer or licensed surveyor unless deemed essential by the Town Planner or the TRC.
X	<input type="checkbox"/>	p) For minor subdivisions and lot line adjustments only, the locations, dimensions, and areas of all existing and proposed lots.
X	<input type="checkbox"/>	q) The lines of existing abutting streets and driveways locations within 100-feet of the site.
NA	<input type="checkbox"/>	r) The location, elevation, and layout of existing catch basins and other surface drainage features.
X	<input type="checkbox"/>	s) The footprint location of all existing structures on the site and approximate location of structures within 100-feet of the site.
NA	<input type="checkbox"/>	t) The size and location of all existing public and private utilities.
NA	<input type="checkbox"/>	u) The location of all existing and proposed easements and other encumbrances.
NA	<input type="checkbox"/>	v) All floodplain information, including contours of the 100-year flood elevation, based upon the Flood Insurance Rate Map for Exeter, as prepared by the Federal Emergency Management Agency, dated May 17, 1982.
X	<input type="checkbox"/>	w) The location of all test pits and the 4,000-square-foot septic reserve areas for each newly created lot, if applicable.
NA	<input type="checkbox"/>	x) The location and dimensions of all property proposed to be set aside for green space, parks, playgrounds, or other public or private reservations. The plan shall describe the purpose of the dedications or reservations, and the accompanying conditions thereof (if any).
X	<input type="checkbox"/>	y) A notation shall be included which explains the intended purpose of the subdivision. Include the identification and location of all parcels of land proposed to be dedicated to public use and the conditions of such dedications, and a copy of such private deed restriction as are intended to cover part of all of the tract.
NA	<input type="checkbox"/>	z) Newly created lots shall be consecutively numbered or lettered in alphabetical order. Street address numbers shall be assigned in accordance with <u>Section 9.17 Streets</u> of these regulations.
NA	<input type="checkbox"/>	aa) The following notations shall also be shown: <ul style="list-style-type: none"> <li>• Explanation of proposed drainage easements, if any</li> <li>• Explanation of proposed utility easement, if any</li> <li>• Explanation of proposed site easement, if any</li> <li>• Explanation of proposed reservations, if any</li> <li>• Signature block for Board approval as follows:</li> </ul>
<input type="checkbox"/>	<input type="checkbox"/>	Town of Exeter Planning Board _____ Chairman    Date

April 4, 2022

## Letter of Explanation

To The Exeter NH Planning Board,

Rafferty Investment Group LLC (hereafter RIG) is currently under agreement to purchase the property owned by Charles L. Dunbar, located at 54 Drinkwater Road. With granted permission from Mr. Dunbar, RIG presents this application to the Planning Board regarding a minor subdivision.

RIG is looking to subdivide the current 7.3 acre lot into two(2) separate buildable lots that are within town and State requirements. RIG is looking to demolish the severely dilapidated existing home on the property, as it is no longer salvageable, and poses health and safety concerns. RIG will also remove all existing secondary structures, sheds/garages, and debris from the property in an attempt to clean up grounds to make it more aesthetically pleasing for all.

RIG's plan is to construct two(2) single family homes, on separate lots, meeting town and State requirements and specifications. RIG is asking for the Planning Board to grant approvals to subdivide the current 7.3 acre lot into two(2) separate lots. Please refer to the attached survey for more details.

Thank you,



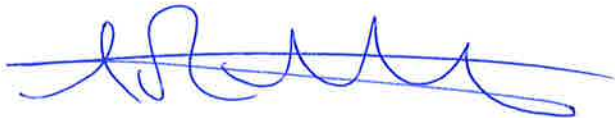
Scott Rafferty  
Owner - Rafferty Investment Group LLC

April 4, 2022

To The Exeter NH Planning Board,

Rafferty Investment Group LLC acknowledges that the landowner is responsible for complying with all applicable local, State, and federal wetlands regulations, including any permitting and setback requirements required under these regulations.

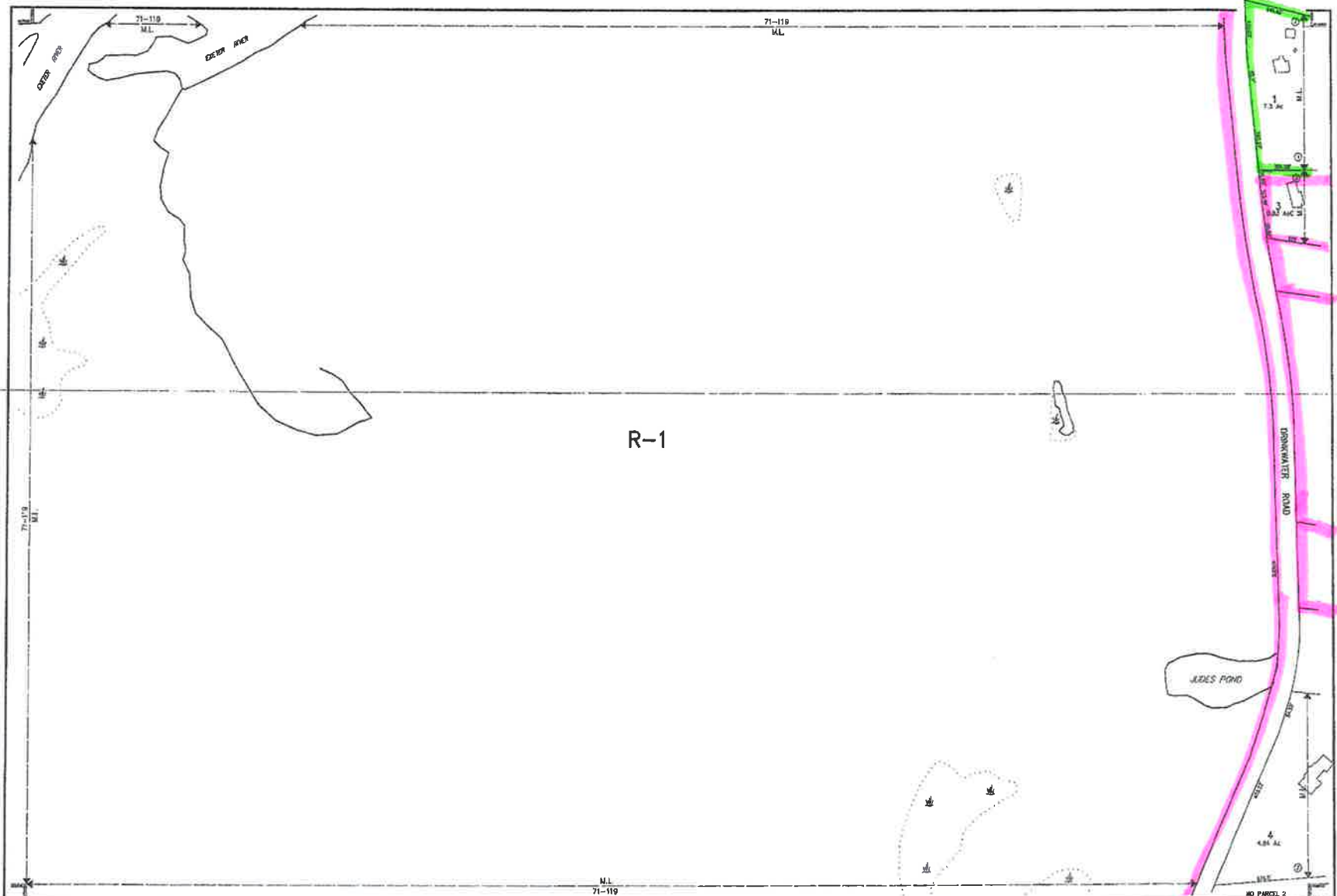
Thank you,

A handwritten signature in blue ink, appearing to read 'S. Rafferty', written over a horizontal line.

Scott Rafferty  
Owner - Rafferty Investment Group LLC

SUBJECT

ABUTTER



TAX MAPS

THIS MAP IS FOR ASSESSMENT PURPOSES. IT IS NOT VALID FOR LEGAL DESCRIPTION OR CONVEYANCE.  
 THE HORIZONTAL DATUM IS THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM.  
 PHOTOGRAPHY DATE: APRIL 20, 1995  
 COMPLETION DATE: MARCH 29, 1995

PRODUCED BY 1999 BY  
**Geo Technologies**  
 11 FREEDMAN STREET, LITTLETON, CO 80120  
 303.948.1100

AREA SURVEYED: 71-119 M.L.  
 AREA CALCULATED: 71-119 M.L.  
 RECORDS ENGINEER: 71-119 M.L.  
 SCALED DIMENSION: 71-119 M.L.  
 WATCH LINE: 71-119 M.L.  
 WATER: 71-119 M.L.

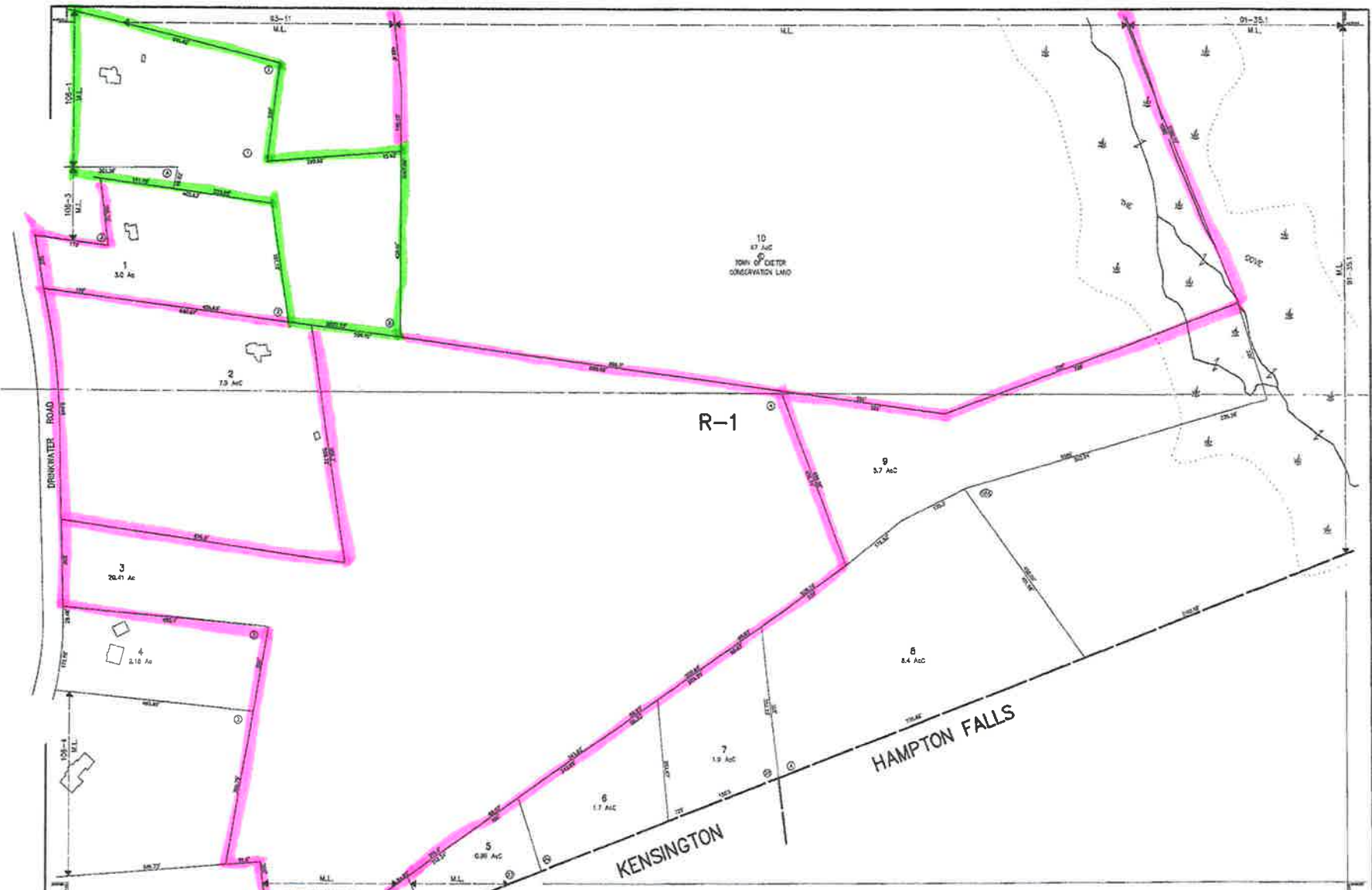
LEGEND  
 EXEMPT PROPERTY: SHOWN WITH RED LINE  
 RIGHT OF WAY: SHOWN WITH BLACK LINE  
 COARSE ENGINEERING: SHOWN WITH DASHED LINE  
 BOUNDARY: SHOWN WITH SOLID LINE  
 UNRESOLVED: SHOWN WITH DOTTED LINE

SCALE 1" = 100'  
 FEET 0 100 200 300  
 METERS 0 25 50 75  
 REVISED TO: APRIL 1, 2021

PROPERTY MAPS  
**EXETER**  
 NEW HAMPSHIRE

INDEX DIAGRAM  
 MAP NO. 106  
 110 100 100 100





THIS MAP IS FOR ASSESSMENT PURPOSES. IT IS NOT VALID FOR LEGAL DESCRIPTION OR CONVEYANCE.  
 THE HORIZONTAL DATUM IS THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM.  
 PHOTOGRAPHY DATE: APRIL 20, 1983  
 COMPLETION DATE: MARCH 29, 1988

PRODUCED IN 1988 BY  
**HA Technologies**  
 1111 PLAZA DRIVE, SUITE 100, EXETER, NH 03824  
 TEL: 603/853-1111 FAX: 603/853-1112

AREA SURVEYED: ACC  
 AREA OCCUPIED: ACC  
 SQUARE ENCLASURE: SWPT  
 QUANTITY: SWPT

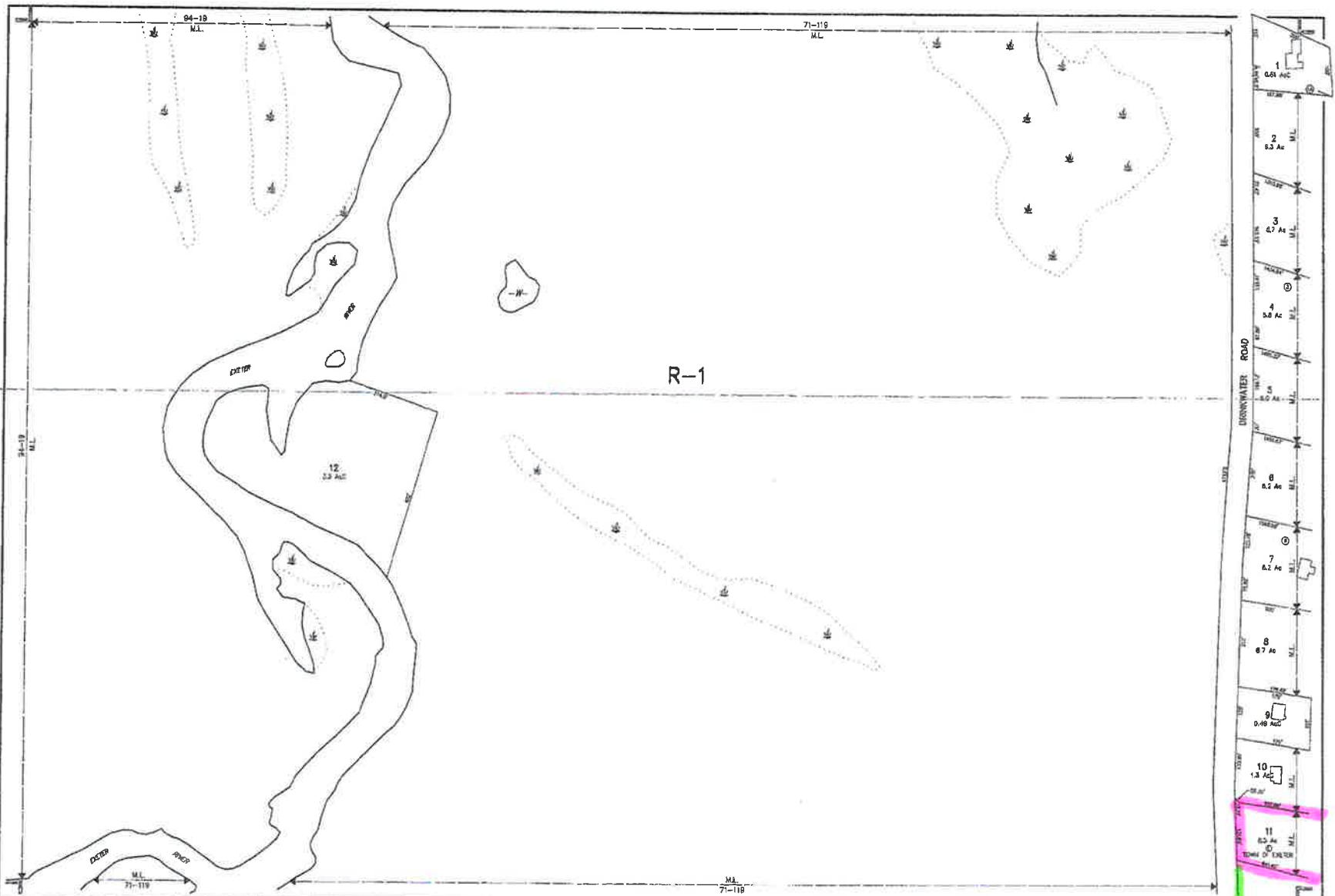
LEGEND  
 SPOT ELEVATIONS  
 BOUNDARY LINES  
 DUNE LINES  
 RIGHT OF WAY  
 TOWNSHIP BOUNDARIES  
 BOUNDARIES  
 WETLANDS

SCALE 1" = 100'  
 FEET 0 50 100 150 200 250  
 METERS 0 25 50 75  
 REVISED TO: APRIL 1, 2021

PROPERTY MAPS  
**EXETER**  
 NEW HAMPSHIRE

INDEX DIAGRAM  
 107

MAP NO.  
**107**



THIS MAP IS FOR ASSESSMENT PURPOSES. IT IS NOT VALID FOR LEGAL DESCRIPTION OR CONVEYANCE.

THE HORIZONTAL DATUM IS THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM.

PHOTOGRAPHY DATE: APRIL 25, 1995

COMPLETION DATE: MARCH 28, 1998

PRODUCED BY

1 PLUMBING STREET LITTLETON, COLORADO 80120  
800.541.1700

AREA SURVEY: AA  
 AREA CALCULATED: AC  
 SECOND DIMENSION: SD  
 SEALED DIMENSION: SDP  
 WATCH LINE: ML  
 WATER: W

LEGEND

EXEMPT PROPERTY: EXEMPT PROPERTY SURVEY NO. 100  
 TIME USE: TIME USE  
 RIGHT OF WAY: RIGHT OF WAY  
 CONVEYOR GROUPSHIP: CONVEYOR GROUPSHIP  
 BUILDING: BUILDING  
 SETBACK: SETBACK

SCALE 1" = 100'

REVISOR TO: APRIL 1, 2021

PROPERTY MAPS

# EXETER

NEW HAMPSHIRE

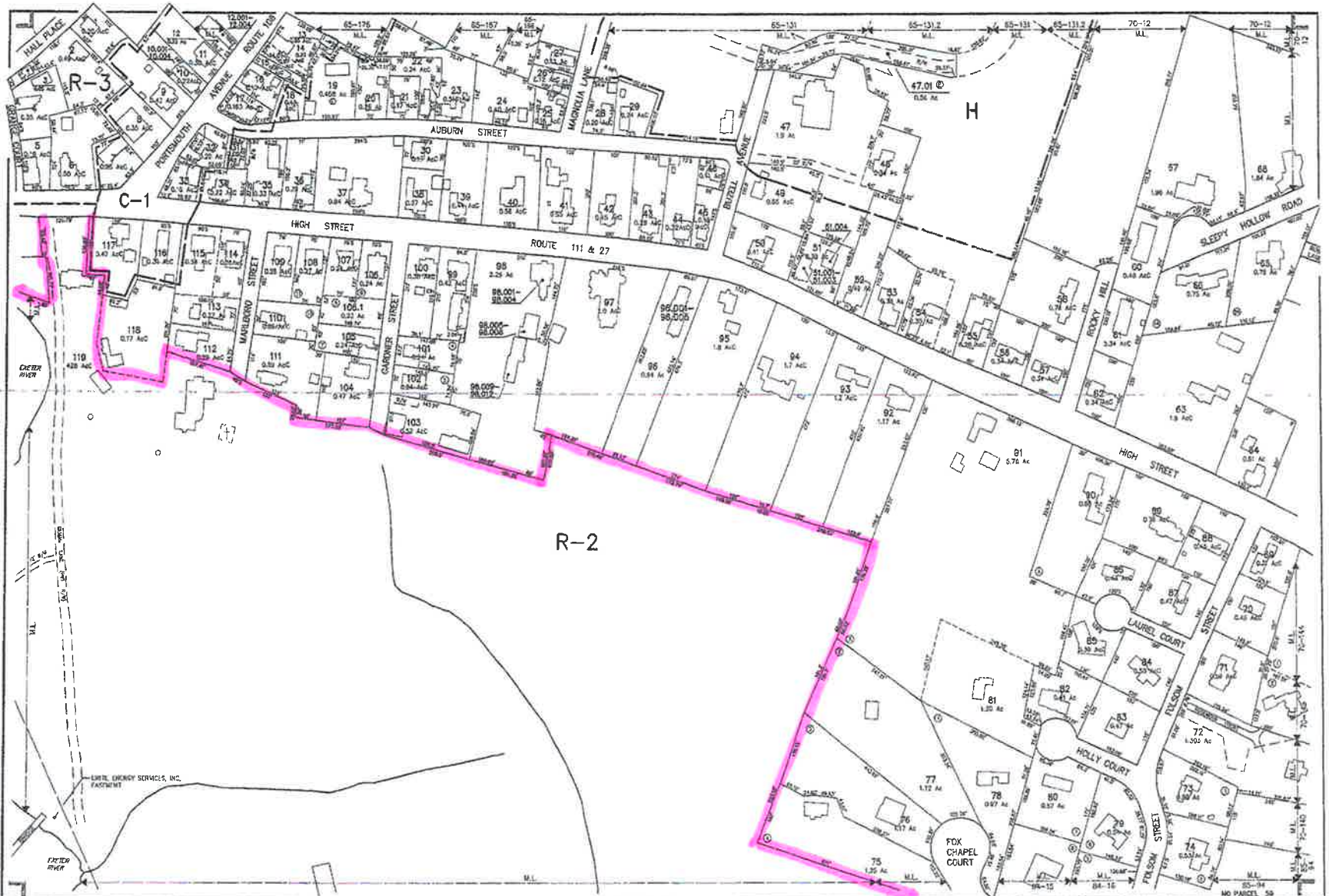
INDEX DIAGRAM

83	84	85
84	84	82
100	100	107

MAP NO.

# 93





THIS MAP IS FOR ASSESSMENT PURPOSES. IT IS NOT VALID FOR LEGAL DESCRIPTION OR CONVEYANCE.  
 THE HORIZONTAL DATUM IS THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM.  
 PHOTOGRAPHY DATE: APRIL 25, 1995  
 COMPLETION DATE: MARCH 29, 1996

PRODUCED BY  
 MVI Technologies  
 1000 STATE STREET, SUITE 100, EXETER, NH 03824  
 603.775.1111

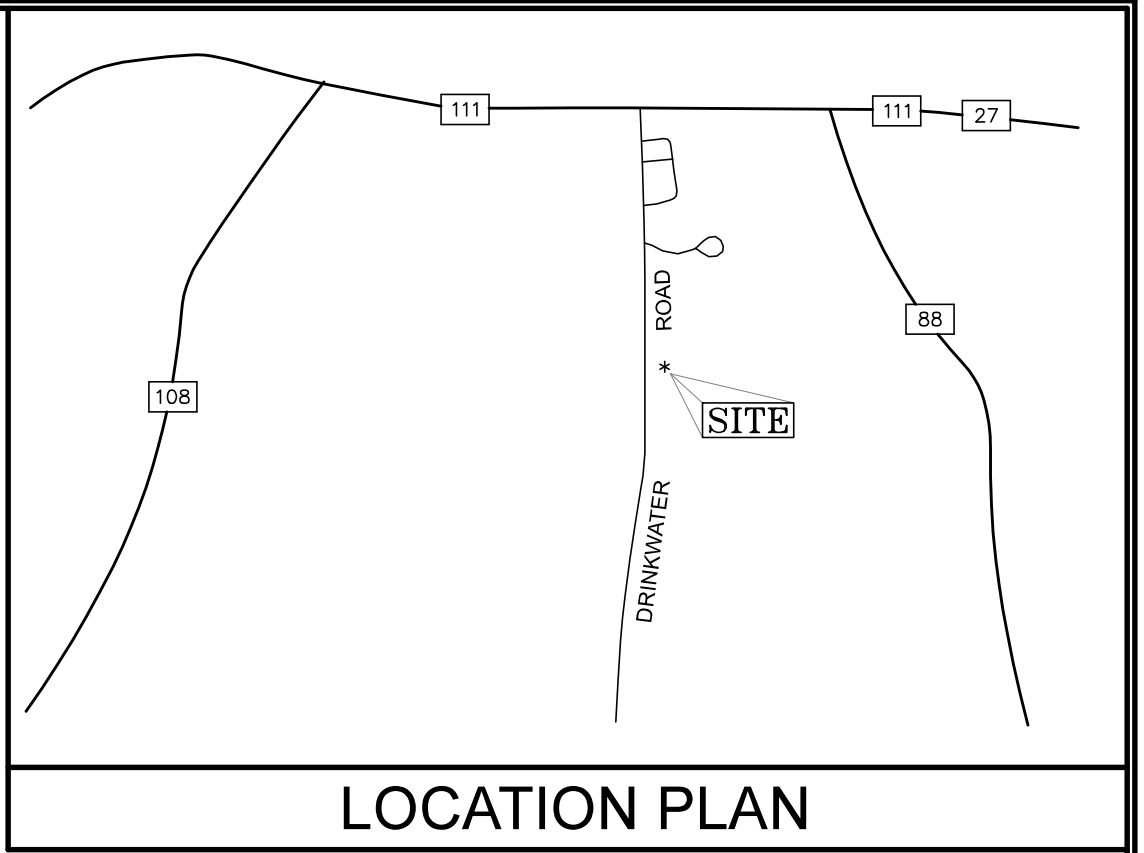
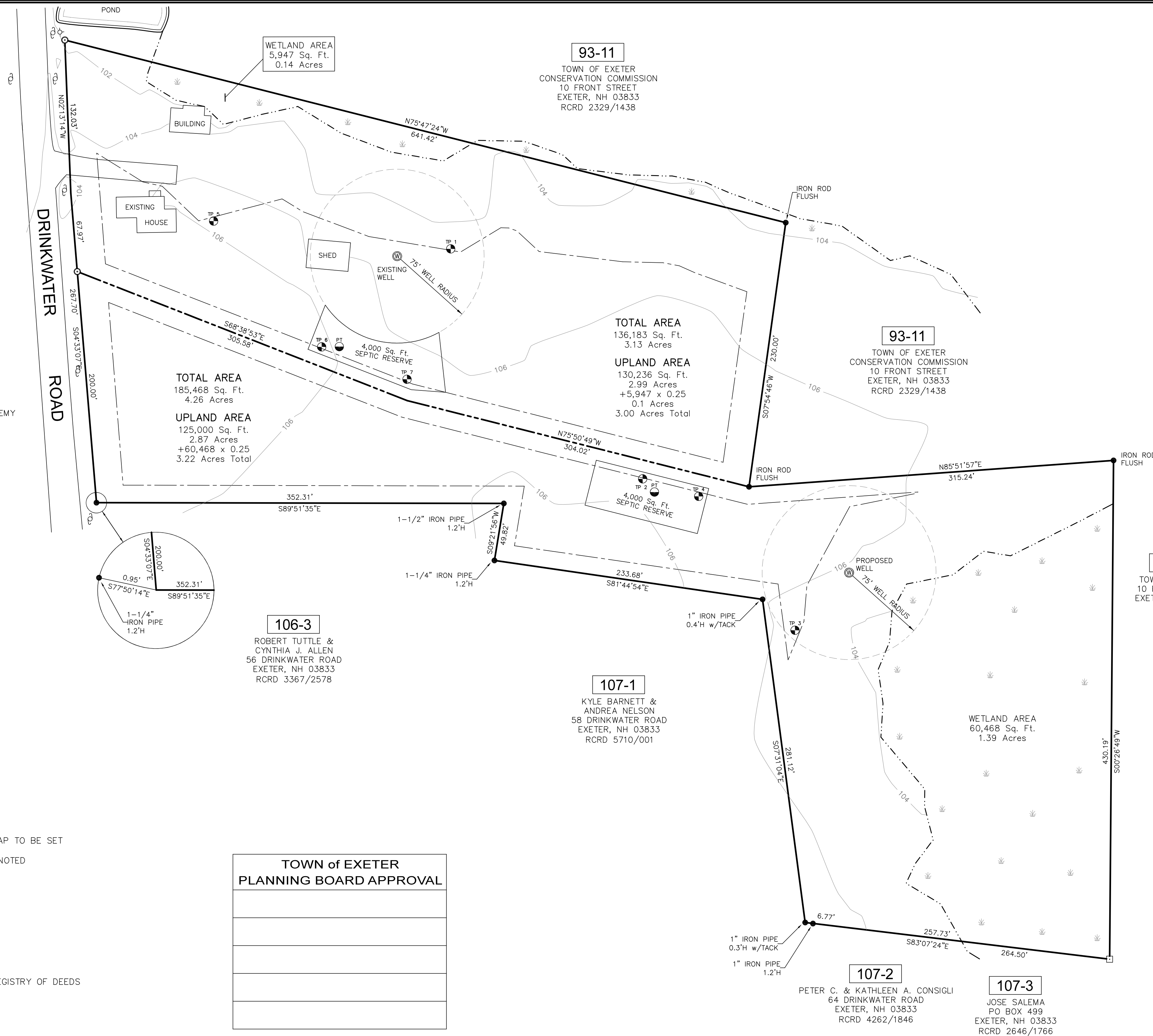
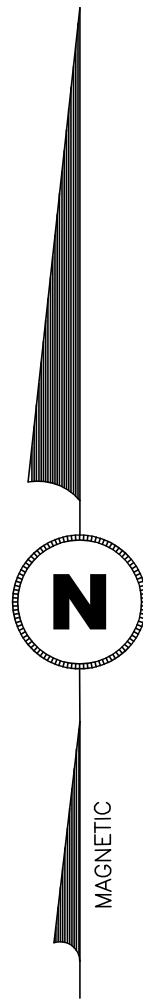
LEGEND  
 AREA CALCULATED  
 RECORD SHOWN  
 SCALE ENGINER  
 MATCH LINE  
 NORTH

PROPERTY  
 SUBPARCEL LOT NO.  
 ZONE LINE  
 RIGHT OF WAY  
 COMMON OWNERSHIP  
 EASEMENT

SCALE 1" = 100'  
 FEET  
 METERS  
 REVISED TO: APRIL 1, 2021

PROPERTY MAPS  
**EXETER**  
 NEW HAMPSHIRE

INDEX DIAGRAM  
 MAP NO. **71**



**71-119**  
 PHILLIPS EXETER ACADEMY  
 20 MAIN STREET  
 EXETER, NH 03833

**93-11**  
 TOWN OF EXETER  
 CONSERVATION COMMISSION  
 10 FRONT STREET  
 EXETER, NH 03833  
 RCRD 2329/1438

**93-11**  
 TOWN OF EXETER  
 CONSERVATION COMMISSION  
 10 FRONT STREET  
 EXETER, NH 03833  
 RCRD 2329/1438

**TOTAL AREA**  
 185,468 Sq. Ft.  
 4.26 Acres

**UPLAND AREA**  
 125,000 Sq. Ft.  
 2.87 Acres  
 +60,468 x 0.25  
 3.22 Acres Total

**TOTAL AREA**  
 136,183 Sq. Ft.  
 3.13 Acres

**UPLAND AREA**  
 130,236 Sq. Ft.  
 2.99 Acres  
 +5,947 x 0.25  
 0.1 Acres  
 3.00 Acres Total

**107-10**  
 TOWN OF EXETER  
 10 FRONT STREET  
 EXETER, NH 03833

**106-3**  
 ROBERT TUTTLE &  
 CYNTHIA J. ALLEN  
 56 DRINKWATER ROAD  
 EXETER, NH 03833  
 RCRD 3367/2578

**107-1**  
 KYLE BARNETT &  
 ANDREA NELSON  
 58 DRINKWATER ROAD  
 EXETER, NH 03833  
 RCRD 5710/001

**107-2**  
 PETER C. & KATHLEEN A. CONSIGLI  
 64 DRINKWATER ROAD  
 EXETER, NH 03833  
 RCRD 4262/1846

**107-3**  
 JOSE SALEMA  
 PO BOX 499  
 EXETER, NH 03833  
 RCRD 2646/1766

**LEGEND**

- 5/8" IRON ROD w/ID CAP TO BE SET
- IRON ROD OR PIPE AS NOTED
- GRANITE BOUND FOUND
- ⊕ UTILITY POLE
- ⊕ DRY HYDRANT
- ⊕ EXISTING WELL
- n/f NOW OR FORMERLY
- R.C.R.D. ROCKINGHAM COUNTY REGISTRY OF DEEDS
- WETLAND LINE
- BUILDING SETBACK LINE

TOWN of EXETER PLANNING BOARD APPROVAL	

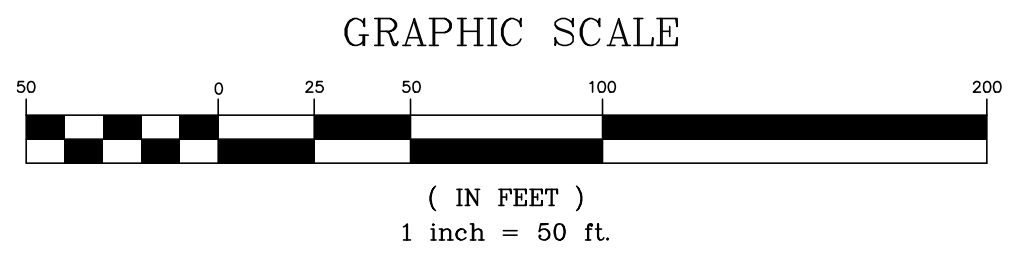
**NOTES**

- RANDOM TRAVERSE ERROR OF CLOSURE IS LESS THAN 1 PART IN 10,000.
- OWNER OF RECORD:  
 CHARLES L. & VICKI L. DUNBAR  
 54 DRINKWATER ROAD  
 EXETER, NH 03833  
 TAX MAP 106, LOT 1  
 R.C.R.D. BOOK 2531, PAGE 145
- REFERENCE PLAN:  
 "SUBDIVISION OF LAND FOR LEWIS H. PAGE IN EXETER, N.H." BY PARKER SURVEY ASSOC., INC. DATED AUGUST, 1978.  
 R.C.R.D. PLAN No. D-8216
- ZONING DIMENSIONAL AND DENSITY REQUIREMENTS ARE AS FOLLOWS:
  - a. ZONING DISTRICT: R-1 LOW DENSITY
  - b. MINIMUM LOT SIZE IS 3 ACRES
  - c. MINIMUM LOT FRONTAGE IS 200 Ft.
  - d. BUILDING SETBACKS:
    - FRONT: 25'
    - REAR: 25'
    - SIDE: 15'
    - WETLANDS: 75'
- U.S.D.A. SOIL TYPE: 313A - DEERFIELD LOAMY SAND

Pursuant to RSA 676:18, and RSA 672:14  
 "I certify that this Survey Plot 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."

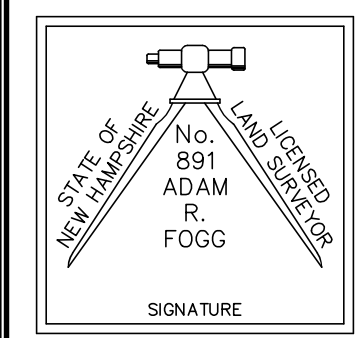
Adam R. Fogg, LLS No. 891 Dated

ISSUE	DATE	DESCRIPTION	BY	CHKD.	APP.



**ATLANTIC**  
 SURVEY CO, LLC  
 25 Nute Road, Dover, New Hampshire 03820

PREPARED BY:  
 SURVEYORS  
 PLANNERS  
 SEPTIC DESIGNERS  
 603-659-8939



DATE: April, 2022  
 FIELDWORK BY: AF, TF  
 DESIGNED BY: AF  
 CAD FILE: 22102  
 PROJECT No.: 22102  
 SHEET 1 OF 1

**SUBDIVISION of LAND**  
 PREPARED FOR  
**Charles L. & Vicki L. Dunbar**  
 LOCATED AT  
**54 Drinkwater Road, Exeter, N.H.**



# TOWN OF EXETER

## *Planning and Building Department*

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 • FAX 772-4709

[www.exeternh.gov](http://www.exeternh.gov)

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**Date:** May 19, 2022  
**To:** Planning Board  
**From:** Dave Sharples, Town Planner  
**Re:** Willey Creek Company PB Case #22-3

The Applicant has submitted applications and plans for site plan review, lot line adjustment and Wetlands and Shoreland Conditional Use Permits along with supporting documents, dated 3/29/22, for the proposed relocation of Building D of the Ray Farm Condominium development on Willey Creek Road (off of Ray Farmstead Road). The subject properties are located in the C-3, Epping Road Highway Commercial zoning district and are identified as Tax Map Parcel #47-8-1 and #47-9.

The Applicant is proposing to consolidate approximately 4.29-acres of upland area of the CKT property (Tax Map Parcel #47-8-1) and combine it with the Ray Farm property (Tax Map Parcel #47-8) to create the site for the proposed relocation of Building D. Building D will be constructed in the identical manner as Buildings A, B and C, inclusive of 32 units instead of the 20 units Building D was approved for in 2017.

The Wetlands and Shoreland Protection Conditional Use Permit applications address the proposed wetlands and buffer impacts resulting from the proposed grading, pavement and gravel areas related to the two proposed wetland area crossings, drainage and stormwater management infrastructure associated with the proposed relocation. As of the writing of this memo, the Applicant has not yet appeared before the Conservation Commission for review of their Wetlands and Shoreland Conditional Use permits. They were not prepared to submit for the May meeting, however, are expected to be filing for the June 14<sup>th</sup> Conservation Commission meeting. At this time, we have not received written comments from the Conservation Commission so I would recommend that the Board not take action on the CUP at this time until written comments are received.

The Applicant appeared before the Zoning Board of Adjustment at its November 17<sup>th</sup>, 2022 meeting and was granted a variance (ZBA Case #21-12) to permit the proposed multi-family residential use of the additional property area being added to the existing Ray Farm development parcel (Tax Map Parcel #47-8) to accommodate the proposed relocation of Building D and to increase the total number of units in the Ray Farm project from 116 to 128. A copy of the decision letter and minutes from that meeting are enclosed for your review.

The Applicant is requesting a waiver from Section 11.3.1.2 of the Board's Site Plan Review and Subdivision Regulations to allow less than a 25-foot setback between Building D and the driveway/parking area. A copy of the waiver request letter is enclosed with the supporting documents for review.

A Technical Review Committee (TRC) meeting was held on Thursday, April 21st, 2022. A copy of the TRC comment letter, dated 4/27/22 and the UEI comment letter, dated 4/25/22 are enclosed for your review. Revised plans and supporting documents were received on May 17<sup>th</sup>, 2022 and are enclosed for your review. Also enclosed is a letter from Russell Hilliard, Esq., dated May 16, 2022, on behalf of his client W. Scott Carlisle, III.

The applicant responded to the TRC letter but did not address the Natural Resource Planner comments nor was a written waiver request provided to exceed 1,200 feet in street length. A traffic memo was also not provided as requested by the TRC.

Regarding the waiver request, Section 13.7 states:

**“All requests for waivers shall be submitted in writing by the applicant at the time when the application is filed for consideration. The petition shall fully state the grounds for the waiver and all the facts relied upon by the applicant.”**

The applicant clearly acknowledges the need to submit the waiver request as evidenced by the response in Denis Hamel's May 17, 2022 letter (see response to Town Planner Comments # 13 on page 3 and Mr. Pasay's letter where he states: "The applicant anticipates filing at a future date updated Conditional Use Permit Applications and corresponding analyses which address the Town's Natural Resource Planner's TRC comments as well Waiver requests which the applicant will request at a future hearing". However, the applicant has failed to provide a written request as required by the regulations. It is worth noting that this is an important part of this application as the waiver is to exceed the 1,200-foot maximum street length per Section 9.17.2 and could significantly impact the current design of the project.

The TRC also requested a traffic memo addressing the additional units. The applicant responded by stating one will be provided. The TRC requested this memo under the authority of Section 7.14. This memo has not been received.

As also stated above, the applicant has not responded to any of the Natural Resource Planner comments except to state that they anticipate "filing at a future date". The TRC determined that this information is needed for the Planning Board to properly evaluate the proposal. The TRC comment letter also states: "In order to be heard at the May 26<sup>th</sup>,

2022 Planning Board meeting, please submit any revised plans along with a letter responding to these comments (and other review comments, if applicable) no later than May 17<sup>th</sup>, 2022.

I am pointing this information out as the Board routinely asks me if the plans are complete for review purposes prior to making a motion to accept jurisdiction on the application and start the 65-day statutory timeframe. I am not in a position to state definitively that this application is complete due to the outstanding items detailed above. However, it is ultimately the Board's decision to determine if the application is complete and I would advise the Board to consider the information provided here to help make that determination.

Thank You.

Enclosures





TOWN OF EXETER, NEW HAMPSHIRE  
10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 • FAX  
772-4709  
[www.exeternh.gov](http://www.exeternh.gov)

November 22, 2021

Justin L. Pasay, Esquire  
Donahue, Tucker & Ciandella PLLC  
16 Acadia Lane  
POB 630  
Exeter, New Hampshire 03833-4924

Re: Zoning Board of Adjustment Case #20-8  
Variance Request – CKT Associates  
Ray Farmstead Road, Exeter, N. H.  
Tax Map Parcel #47-8, #47-8.1 and #47-9

Dear Attorney Pasay:

This letter will serve as official confirmation that the Zoning Board of Adjustment, at its November 17<sup>th</sup>, 2021 meeting, voted to grant your request for a variance from Article 4, Section 4.2 Schedule I: Permitted Uses to permit an age-restricted residential use (for the proposed relocation of Building D in the Ray Farm Active Adult Community) to be located on Ray Farmstead Road, as presented, including the increase in the number of residential units from 116 units to 128 units.

Please be advised that in accordance with Article 12, Section 12.4 of the Town of Exeter Zoning Ordinance entitled "Limits of Approval" that all approvals granted by the Board of Adjustment shall only be valid for a period of three (3) years from the date such approval was granted; therefore, should substantial completion of the improvements, modifications, alterations or changes in the property not occur in this period of time, this approval will expire.

If you should have any questions, please do not hesitate to contact the Building Department office at (603) 773-6112.

Sincerely,

Robert V. Prior  
Vice Chairman  
Exeter Zoning Board of Adjustment

cc: Jonathan Shafmaster, CKT Associates  
Ray Farm LLC  
Denis Hamel, P.E. GM2 Associates  
Douglas Eastman, Building Inspector/Code Enforcement Officer  
Janet Whitten, Deputy Assessor  
Dave Sharples, Town Planner

RVP:bsm

Town of Exeter  
Zoning Board of Adjustment  
November 17, 2021, 7 PM  
Town Offices, Nowak Room  
Final Minutes

**Preliminaries**

**Members Present:** Vice-Chair Robert Prior, Clerk Esther Olson-Murphy, Rick Thielbar, Laura Davies, Martha Pennell - Alternate, Christopher Merrill - Alternate, Anne Surman - Alternate

**Members Absent:** Chair Kevin Baum

**Call to Order:** Acting Chair Robert Prior called the meeting to order at 7 PM.

**I. New Business**

- A. The application of CKT Associates for a variance from Article 4, Section 4.2 Schedule I: Permitted Uses to permit an age-restricted residential use (for the proposed relocation of Building D in the Ray Farm Active Adult Community) to be located on Ray Farmstead Road. The subject property is located in the C-3, Epping Road Highway Commercial zoning district. Tax Map Parcel #47-8.1 and #47-9. ZBA Case #21-12.

Attorney Justin Pasay of DTC Lawyers; John Shafmaster and Bill Blackett, the owners; and Dennis Hamill from DM2 Engineering were present to discuss the application. Attorney Pasay said the application involves relocating Building D, the fourth building in the Ray Farm project. The original variance was issued in 2014 to a different entity, and the Willey Creek group took it over in 2017. There were to be four buildings total, three with 32 units and one, Building D, with 20 units, because the area was constrained. Buildings A and B and a clubhouse are completed, and we anticipate Building C's completion in 2022. We would like to move it away from Epping Road and the Mobil Station to the opposite edge of the site. Building D would be identical to the other three buildings. The proposal would take four acres of an upland area and combine it with the existing area. The overall development will be enlarged from 11.5 acres to 15 acres, and the density will decrease.

Mr. Prior said the parcel was approved for 116 units, and the reason the applicant is here is that they're taking property from other zoning districts and appending them, so the variance approval does not cover the new parcel. Mr. Prior asked if the 2014 decision referenced a specific number of units, and Mr. Pasay said yes, it was only 116 units.

Mr. Hamill discussed the original property line and the parcel being added for the new building. Access to it is from Building C, which avoids a larger area of wetland impact. It's 350 feet from Building A, where Building A to the original Building D was 380 feet. The original Building D required a wetland setback waiver, but the new Building D

45 does not. This building can connect to town water and sewer. It will look exactly like the  
46 other buildings, and will not be visible from Epping Road.

47 Ms. Davies asked about the easement. Mr. Pasay said the owner of the back  
48 parcel, Mr. Carlisle, has an easement for a private right of way, so he can use that and  
49 improve it to access his lot, but there's no requirement for Mr. Shafmaster to convey the  
50 fee interest of the land underneath the easement. Mr. Carlisle would have to obtain the  
51 relief necessary for frontage and wetlands and could improve his property.

52 Ms. Davies asked if the Fire Department has reviewed the circuitous access to  
53 Building D, and Mr. Hamill said they haven't yet gone to the FD, but they will be adding a  
54 turnaround for larger vehicles such as fire trucks. Mr. Prior asked about the length of the  
55 road. Mr. Hamill said 1,820 feet. Ms. Davies asked about the typical length of a cul de  
56 sac, and Mr. Prior said the Planning Board wants a max of around 1,250 feet. Mr.  
57 Thielbar asked whether it's possible to add a second access road. Mr. Hamill said it's  
58 physically possible, but there are sensitive wetland areas we'd have to cross. Mr.  
59 Thielbar said it's a long drive, and the extra people of Building D will add to the traffic  
60 along that route. They should consider having a circular access road instead. Mr. Prior  
61 said that's not the plan before us.

62 Mr. Shafmaster said Building D was not in a good building location, and required  
63 a waiver for setbacks from wetland. This new proposal would have a net increase of 12  
64 units and the wetland area would never be used for development. He would like to put in  
65 an enclosed dog area in this location for residents of the community. The first building  
66 and clubhouse were overbudget and he's been clawing his way back. This new building  
67 would be in keeping with what he's done before.

68 Mr. Pasay said these are unique properties and the use is reasonable. They  
69 have frontage on Epping Road and Ray Farmstead Road, awkwardly sized, and  
70 constrained by the wetlands. The remnant parcel, lot 9, is located in the C3 and viable  
71 for future commercial use, and this would avoid the impact of going through the  
72 wetlands. Attorney Pasay went through the variance criteria. 1) The variance will not be  
73 contrary to the public interest and 2) the spirit of the ordinance will be observed; yes, the  
74 proposal does not conflict to a marked degree with the ordinance, will not alter the  
75 essential character of the neighborhood, and will not threaten the public health, safety or  
76 welfare. The C3 district is intended to promote reasonable development. The relocation  
77 of Building D will accomplish better light and air for Building D, lessen the density of the  
78 overall project, and prevent overcrowding of land and undue concentration. It's good for  
79 the environment in that it avoids wetlands impact. It will make the remnant parcels  
80 available to be used consistently with the C3 District. This does not alter the essential  
81 character of the neighborhood, as it's identical to the other buildings on the property. It  
82 will protect public health and safety by avoiding impacts of direct access from Epping  
83 Road. 3) Substantial justice is done; yes, there is no gain to the general public from  
84 denying the variance. Granting the variance is in the public interest because we're  
85 promoting reasonable development of an upland area without the negative impacts of  
86 going through the wetland. 4) The proposal will not diminish surrounding property  
87 values; yes, the price of these units has gone considerably up (30-40%) since their  
88 purchase in 2018/2019. The condo declaration reserves the right to use this area in



89 future development, so any buyers were on notice that this would happen. There is a  
90 350 foot site distance, which is consistent with where Building D was supposed to be.  
91 The use is consistent with what was expected on the site. 5) Literal enforcement of  
92 zoning ordinance will result in an undue hardship; yes, it doesn't make sense to apply  
93 this zoning ordinance to this unique property. Lots 8.1 and 9 can accommodate the  
94 proposal, and are burdened by significant wetlands in the area of direct access. 8.1 is  
95 small and awkwardly shaped. The topography is a challenge. The purpose of the  
96 ordinance is being advanced because this will lessen congestion, increase light and air,  
97 and avoid undue concentration of population. They will also be preserving the areas of  
98 the parcel that are most suitable for commercial development. Special conditions mean  
99 that there's no reasonable use without relief given, and the only way to get to this  
100 property without wetlands impact is the means proposed.

101 Mr. Prior asked if they are prevented from putting Building D where it's currently  
102 located. Mr. Pasay said no.

103 Mr. Prior opened the meeting to public comment. He cautioned that the only thing  
104 under consideration is the residential use in this zone, not the location of the building or  
105 the access road.

106 Anthony Laburdi of 7 Willey Creek Road, Unit 202, Building A, said he and his  
107 wife moved to the development in 2019. He is a member of the Board of Directors of  
108 Ray Farm Associates, but he's only speaking for himself. The developer has been  
109 responsive to the residents. He met with us three weeks ago on why he's moving the  
110 building, and satisfied most of our questions. Mr. Laburdi said he and his wife are in  
111 favor of the petition to change the zoning. In two years his property has appreciated  
112 36%.

113 Marty Kennedy of 7 Willey Creek Road, Building A, said his concern with the  
114 original proposal was that the parking lot and access to Building C were on a disputed  
115 50 foot wide easement. This revised plan shows the lot pushed back off the easement,  
116 but it doesn't fully address his concerns. Mr. Carlisle, the owner of the lot in the back,  
117 plans to develop that property with access through the easement. The town views the  
118 easement as having access through that lot, but Mr. Shafmaster says that's probably not  
119 going to happen. The residents of Ray Farm are more than just abutters, we will own the  
120 lot after the last unit is sold. If the access to the rear parcel will be through the easement,  
121 the residents need to be aware of that. Why does there need to be a road between  
122 Building C and D? Building D could have access by extending Ray Farmstead Road. We  
123 need to consider pedestrian safety and mobility. The applicant should not be allowed to  
124 build anything on the original site of Building D in the future.

125 Mr. Prior said the right of way is not disputed. The Carlisle property is accessed  
126 only through this right of way, so in order to be developed, it will be through this right of  
127 way. Willey Creek Road is a private road and would not see an increase of traffic from  
128 any development of the Carlisle property; the access would be from Ray Farmstead  
129 Road.

130 Doug Minott of 7 Willey Creek Road said the residents will take over the new  
131 parcel. The right of way is Mr. Carlisle's to do with as he sees fit, and the residents  
132 shouldn't be absorbing that. He read a letter that he had submitted to the Board

133 regarding his view and the vegetated buffer they currently have. He is opposed to the  
134 application because he does think it will diminish surrounding property values and  
135 compromise their right to the undisturbed use of their property through the disturbance of  
136 the construction.

137 Rosemary Demarco of 24 Willey Creek, Building B, said she approves of the  
138 plans that Mr. Shafmaster has for Building D.

139 Adriana Christopher of 7 Willey Creek, Building A, said they're in favor of the  
140 proposal. The new location would be better than the original location. The development  
141 is wonderful to live in and the builder has done a fantastic job.

142 Mr. Pasay said some of the comments were Planning Board concerns. We have  
143 been transparent with the negotiations with Mr. Carlisle. Concerns about property  
144 values, but this area of the property is zoned C3, this use is the best possible use. The  
145 building will be 350 feet away from Building A, about the same as what was proposed for  
146 Building D. In every deed, there's a reference to the public document of the condo  
147 declaration which says that this property could be added to the condominium. The  
148 market analysis doesn't support the conclusion that it will diminish market value.

149 Bill Blackett, the CFO for Mr. Shafmaster, said he has data that says the value of  
150 the real estate is going up and will not be diminished. There's been a 26% increase from  
151 Building A to Building C. Putting in Building D, units there would be \$700,000, where  
152 Building A was originally \$490,000. Unit 301 in Building A was a recent resale, it was  
153 bought for \$466,000 and sold for \$605,000.

154 Mr. Shafmaster said he's had two meetings with 30-40 residents about his plans,  
155 and he addressed their concerns by moving Building D away. Regarding Mr. Minott's  
156 concerns about noise and blasting, during the second meeting he had his sitework guy  
157 give him a bid to do any work on this building coming in off Commerce Way and doing  
158 the construction work from behind, which would eliminate dust, noise, road issues, etc.  
159 so his concerns were addressed. Regarding value, where Building D was originally,  
160 there is a Mobil Station there that is lit nearly 24 hours a day. The original Building D  
161 would have had lesser value units because of this proximity, which would create  
162 confusion in the market.

163 Mr. Prior closed the public session.

164 Mr. Prior said this will require technical review and Planning Board approval. The  
165 only thing the ZBA is considering is whether residential use can be allowed on this C3  
166 parcel.

167 Ms. Surman said it goes against the grain to continue to make C3 properties on  
168 Epping Road residential. Folks have concerns about mixing residential and commercial  
169 and it's a slippery slope. However, now it's there and Mr. Shafmaster has done a  
170 fabulous job. The area is tough with a lot of wetlands. Going forward this area should be  
171 commercial, but this location for the new building is far superior to where it was. Mr. Prior  
172 said the original vote for allowing residential on this property was 3-2. In 2014 Epping  
173 Road was a different road than now. We are considering the residential use on this  
174 parcel and the increase in the number of units by 12, since the original application  
175 specified a certain number of units.

176 Mr. Thielbar went through the variance criteria. 1) The variance will not be  
177 contrary to the public interest and 2) The spirit of the ordinance will be observed; yes,  
178 there does not seem to be much negative side. The land in question is basically an  
179 island, and is difficult to access in any other way. It's not negative to the public interest  
180 and the spirit of the ordinance is observed. Mr. Prior said if not developed with Building  
181 D, that parcel, while difficult to access, could be developed commercially. It would be  
182 better for residents of buildings A, B, and C to abut another residential property rather  
183 than a commercial property. Mr. Thielbar continued with the variance criteria: 3)  
184 Substantial justice is done; yes, he can't see a downside to the proposal. It clearly  
185 benefits the applicant. An additional section of land will stay as it is now, and it's the part  
186 we all drive by, which is a benefit to the rest of the community. Mr. Prior said "harm to  
187 the general public" includes those who own condos there. People who live in Buildings  
188 A, B, and C will own in common the land underlying the property. This will increase the  
189 amount owned by 3.9 acres, which increases the value of the units. Mr. Thielbar  
190 continued with the criteria: 4) The proposal will not diminish surrounding property values;  
191 yes, there's no sufficient evidence that there will be a significant loss in value. It was  
192 unrealistic to think that the land in question was going to stay undeveloped. Mr. Prior  
193 said selling during construction may have a temporary setback in value, but ultimately  
194 the value will increase. Ms. Davies said in her opinion as a valuation professional, more  
195 units don't equal a lower value. This is a successful project and a few more units aren't  
196 going to change the unit values. Regarding the proximity, there's a good amount of  
197 distance from Building A to Building D. There will be some disruption to the existing  
198 buildings during construction, but they won't see it once it's done. Mr. Thielbar continued  
199 with the criteria: 5) Literal enforcement of zoning ordinance will result in an undue  
200 hardship; yes, the original location of Building D limits the capacity and is not in a good  
201 area. The land proposed to be used is difficult to access but there is a way to  
202 productively use it. Everything on this site had hardship due to the water. Mr. Prior said  
203 we have to consider the parcel as proposed. Is there hardship on the newly designed  
204 parcel? Yes, getting to that upland portion is extremely difficult. The special conditions of  
205 the property create a hardship which is access.  
206

207 Mr. Thielbar moved to accept the application of CKT Associates for a variance from Article 4,  
208 Section 4.2 Schedule I: Permitted Uses to permit an age-restricted residential use for the  
209 proposed relocation of Building D in the Ray Farm Active Adult Community to be located on Ray  
210 Farmstead Road as shown in the submitted documents, with the understanding that the project  
211 will go to the Planning Board. Ms. Surman seconded. Mr. Prior said we should add a comment  
212 that the number of units is also expanded.

213  
214 Ms. Davies made a motion to add an amendment that we would also be granting an increase in  
215 the number of units from 116 to 128. Mr. Thielbar seconded the amendment. Mr. Prior, Mr.  
216 Thielbar, Ms. Davies, Ms. Olson-Murphy, and Ms. Surman voted aye and the amendment  
217 passed 5-0.  
218

219 Regarding the amended motion, Mr. Prior, Mr. Thielbar, Ms. Davies, Ms. Olson-Murphy, and  
220 Ms. Surman voted aye and the amended motion passed 5-0.

221  
222 Mr. Prior called for a five-minute break. Ms. Davies left the meeting at this time.  
223 The meeting reconvened at 8:50 PM.

- 224  
225 B. The application of Roger Elkus for a variance from Article 5, Section 5.5.3 to  
226 permit the proposed construction of a second principal building (residential) on  
227 the property located at 181 High Street. The subject property is located in the R-  
228 2, Single Family Residential zoning district. Tax Map Parcel #70-119. ZBA Case  
229 #21-13.

230  
231 Attorney Sharon Somers of DTC Lawyers was present to discuss the application.  
232 She said the owners would like to put a proposed dwelling in the location that juts out  
233 onto Ridgewood. This building would be no larger than 2,128 square feet, or 56' x 38'. It  
234 would conform with the setbacks, height restrictions, etc.

235 Mr. Prior asked if this is a lot line adjustment, and Attorney Somers said no, only  
236 variance relief to allow two principal dwellings on one lot. Ms. Surman asked if it would  
237 become a condominium, and Attorney Somers said it could, but it wouldn't have to. The  
238 zoning calls for one principal dwelling on a lot, but we are proposing two principal  
239 dwellings on a lot. The property is too big for the owners right now. The existing dwelling  
240 could be better used by a larger family with kids, for example.

241 Mr. Prior asked if the proposed house would meet all the size, access, area, lot  
242 coverage, and setback requirements for a single-family dwelling? Attorney Somers said  
243 yes. It's allowed to have two driveways on a single lot, and the property next door, Map  
244 70 Lot 20, has two driveways.

245 Mr. Thielbar said the ZBA rejected a similar application regarding this property in  
246 2019. Attorney Somers said the application in 2019 was for frontage relief because there  
247 is only 90 feet of frontage on Ridgewood Terrace, and was done in connection with a  
248 subdivision proposal. The new application is not a subdivision, it's to have two dwelling  
249 units on a single lot.

250 Mr. Prior said he asked if this unit would meet all requirements for a separate lot,  
251 and she said yes, but it actually doesn't. Attorney Somers said it's correct that it wouldn't  
252 meet the requirements as a separate lot, but that's not what's proposed. It would  
253 conform to all building setbacks, height, open space, etc.

254 Attorney Somers went through the variance criteria. 1) The variance will not be  
255 contrary to the public interest. She said the purpose of the zoning in requiring one  
256 dwelling on a lot is to prevent overcrowding. There will be no alteration of the essential  
257 character of the neighborhood. The neighborhood is single family homes, and this is just  
258 an additional family home. They will be on a lot which is well-sized to support both of  
259 them. There are no public safety issues. This would be a small house, around 2,000  
260 square feet, and will not result in excess population or traffic concerns. Between the two  
261 houses, it would be equivalent to a five bedroom property on 1.7 acres, which is  
262 adequate.

263 Ms. Surman asked what the address of the second house would be, which could  
264 be an issue for the Fire Department. Attorney Somers said she didn't know, but that  
265 could be worked out if the variance were granted and the building permit was pulled.

266 Attorney Somers continued with the variance criteria: 2) The spirit of the  
267 ordinance is observed; this is usually considered together with criteria 1 about public  
268 interest. 3) Substantial justice is done; yes, there is no gain to the public if this variance  
269 were denied. The applicant has a variety of options about what can go into this large 1.7  
270 acre parcel, such as an accessory structure like a barn or garage, or with a special  
271 exception it could have an accessory dwelling unit. The loss to the applicant would be  
272 that they can't have a modestly sized dwelling in the location that they would like. 4) The  
273 proposal will not diminish surrounding property values; yes, there won't be any  
274 diminution in value. 5) Literal enforcement of zoning ordinance will result in an undue  
275 hardship; yes, the size and configuration of the lot creates the hardship. There is a fair  
276 and substantial relationship between this proposal and the public purpose of the zoning  
277 ordinance, which is to prevent overcrowding on the land or excess additional population.  
278 Putting a 2,000 square foot dwelling on this area would not constitute overcrowding. The  
279 proposed use is reasonable because the lot is big enough to contain the proposed use.  
280 Large accessory units could go in there already, this proposal is only slightly different.

281 Mr. Prior asked if there are other 2 family properties in the neighborhood.  
282 Attorney Somers said no, but in 2000 there was a subdivision to create lot 119/1; prior to  
283 that subdivision there were two units on the lot. Mr. Prior said the second unit wasn't a  
284 dwelling unit until after the subdivision. Prior to that, it was a garage.

285 Mr. Thielbar said this is essentially a resubmittal of their 2019 request which was  
286 rejected. Attorney Somers said under the Fisher test, this is a material change of the  
287 proposed use. Previously, it was a subdivision proposal, but this is one lot with two  
288 dwellings. An accessory dwelling unit is not on the table because it's too small and  
289 wouldn't be able to be condo'd. An addition doesn't work. If this Board were to allow a  
290 second dwelling unit on some other portion of the property, it still wouldn't maintain open  
291 space because a driveway would have to go in.

292 Mr. Prior opened the session to public comment.

293 Matthew Forsyth, the neighbor to the south, said his concern is that his house  
294 has severe water issues, and where the applicants are proposing to build a house also  
295 collects water. If they build up, it will put even more water in his basement. He would like  
296 to see the proposed size of the house and a runoff water plan that's signed off on by the  
297 neighbors be conditions of the variance.

298 Mr. Prior closed the public session and allowed the applicant to address the  
299 Board.

300 Mr. Elkus said he knows this proposal is similar to the request two years ago.  
301 The house is a lot to take care of. He and his wife want to stay in Exeter, but do it in a  
302 more modest way. Not a lot of thought was put into how this lot was subdivided. If it had  
303 100 instead of 90 frontage feet, we would be able to subdivide. There are nearby houses  
304 that are smaller than the lot they're looking at building on, but they were grandfathered  
305 in.

306 Attorney Somers said regarding Mr. Forsyth's concern, they may want to table  
307 the issue so that she can discuss with her client whether this is an amenable condition.  
308 Mr. Prior said if the variance is approved, it would be conditional on Planning Board  
309 approval, and the Planning Board could address that issue. Attorney Somers said that  
310 the Planning Board wouldn't have jurisdiction because it's not a multi-family; three  
311 homes is the cut off for that.

312 Ms. Surman said it would make more sense to create it as a condo or a rental,  
313 since by definition there is only one primary dwelling on a lot. Attorney Somers said we  
314 would be amenable to treating it as two condominium units.

315 Mr. Prior said before the Board goes through the variance criteria, he would like  
316 to hear the applicants further address "hardship."

317 Attorney Somers said she would like a five-minute break to speak with her client  
318 about the water issues, since this is the first she's hearing of it.

319 Mr. Prior called for a five-minute recess. The meeting reconvened at 9:25 PM.

320 Attorney Somers asked to table the application to give her client the opportunity  
321 to talk with his neighbors.

322 Ms. Olson-Murphy made a motion to table this application until the next meeting. Mr. Thielbar  
323 seconded. Mr. Thielbar, Mr. Merrill, Mr. Prior, Ms. Olson-Murphy, and Ms. Surman voted aye,  
324 and the motion passed 5-0.

325  
326 **II. Other Business**

327 **A. Extension of Case 18-24.**

328 Mr. Prior said nothing about the application or property have changed, so it's  
329 reasonable to extend for the requested time of one additional year.

330 Mr. Thielbar made a motion to grant the extension of Case 18-24 for one year. Ms. Surman  
331 seconded. Mr. Thielbar, Mr. Merrill, Mr. Prior, Ms. Olson-Murphy, and Ms. Surman voted aye,  
332 and the motion passed 5-0.

333  
334 **B. Minutes of October 19, 2021**

335 Ms. Surman made a motion to accept the minutes of Oct 19, 2021 as presented. Mr. Thielbar  
336 seconded. Mr. Thielbar, Mr. Merrill, Mr. Prior, and Ms. Surman voted aye, and the motion  
337 passed 4-0.

338  
339 **III. Adjournment**

341 Ms. Surman moved to adjourn. Mr. Merrill seconded. All were in favor and the meeting was  
342 adjourned at 9:30 PM.

343  
344 Respectfully Submitted,  
345 Joanna Bartell  
346 Recording Secretary

# TOWN OF EXETER

## *Planning and Building Department*

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[www.exeternh.gov](http://www.exeternh.gov)

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**Date:** April 27, 2022

**To:** Denis Hamel, P.E., GM2  
Jonathan Shafmaster, Ray Farm LLC  
Justin Pasay, Esquire

**From:** Dave Sharples, Town Planner

**Re:** Site Plan Review TRC Comments  
PB Case #22-3 Willey Creek Co - Ray Farm, LLC  
Tax Map Parcel #47-8-1 and #47-9

The following comments are provided as a follow-up for technical review of the site plans and supporting documents submitted on March 29, 2022 for the above-captioned project. The TRC meeting was held on Thursday, April 21<sup>st</sup>, 2022 and materials were reviewed by Town departments.

### **TOWN PLANNER COMMENTS**

1. Are there any known environmental hazards on the site? If so, provide detail.
2. Show monuments in accordance with Section 9.25.
3. Provide all professional stamps (P.E., Wetland Scientist, LLS, etc.) on the applicable plans per Section 7.2.1 and 7.2.2 for the Planning Board submission.
4. Identify significant trees per Section 7.4.7. Be sure to identify all trees within the limit of work and along the proposed gravel access drive from Commerce Way to the site.
5. Please clarify the parking requirements and waivers on the cover sheet as it appears to indicate what is required as part of the prior approval and also the information does not appear accurate (i.e. 1233 parking stalls). Suggest treating this as a standalone application and provide details regarding parking and waivers requested that are specific to this application.
6. Add snow storage areas on plans per Section 7.5.14.
7. Add note per Section 7.5.16.
8. Please provide further details on the 14' wide gravel access road and how it will be constructed. Are all buffer impacts resulting in the creation of this access road included in

the CUP? There is a reference in the Gove memo that appears to indicate that this is an “existing woods road”. While there is packed down soil from bike and pedestrian use, it doesn’t not appear to be a road.

9. Provide information to determine if Section 9.6.3 is being satisfied.
10. Was the landscape plan created by a Licensed Landscape Architect? Are the plantings low maintenance and chosen for all site conditions? Will irrigation be required? If so, show locations on landscape plan.
11. Provide updated traffic memo addressing the additional units.
12. Sixteen (16) parking stalls are proposed along the front of Building D. This requires a parking island per Section 9.7.5.5.
13. Section 9.17.2 allows a maximum dead-end street of 1,200 feet. It appears that the access roadway exceeds 1,500 feet. Please see Section 9.17.10.B that states “An access road used to serve three or more units is considered a road (or street)”. Also see the definition of Street in Section 5.3.4.
14. The access road to Building D appears to conflict with the TIF Road (so called) design. Whether that road is built as a TIF road or built by Carlisle, it shows as access to the Carlisle property on a plan approved by the Planning Board for subdivision in 2017. To town planning staff it appears that the construction of this new accessway to proposed Building D will conflict with the intended construction of that road, though the applicant’s attorney represents that it does not. To resolve this, I recommend that the Planning Board refers this issue to the town’s outside engineering consultant for its guidance specifically on whether the proposed construction of this accessway to Building D would interfere with a road to be built through the Carlisle easement, whether it remains as a private roadway or becomes public.
15. Provide information on the Lighting Plan to determine compliance with all requirements set forth in Section 9.20.
16. Provide information that the project meets Section 11.2 and 11.3.
17. Confirm if there will be any grading within 5 feet of any exterior property line.
18. How will trash pick-up for the residential use and commercial uses be handled? Will there be any internal trash storage? No dumpsters are shown on the plans.
19. Please discuss potential addressing of the site/buildings with the Code Enforcement Officer and Deputy Fire Chief.

## **PUBLIC WORKS COMMENTS**

1. The layout of this roadway is not compatible with the Phase II Ray Farmstead Rd design. I compared this concept plan to the TIF Phase II portion of Ray Farmstead Rd that previously



went through final design by the developer and engineer. I assumed that both would be eventually built. In fact, the drainage pond in Phase I was designed and already built with runoff contributions from Phase II accounted for.

- A. The Building D roadway would intersect Ray Farmstead Rd at approximately STA 11+68. Ray Farmstead Rd centerline would be at elevation +/- 117.0 ft while Building D roadway is at +/- elevation 120.0 ft. (a difference of 3.0 ft)
  - B. The Building D roadway should intersect Ray Farmstead Rd on a straight-away and not on a curve. The intersection of the roadways should be perpendicular to each other.
  - C. The utilities for Building D need to be designed with the Ray Farmstead utility extensions in mind. Assuming that Phase II - Ray Farmstead Rd is built and accepted by the Town, it is not customary to have private utility corridors crossing a town right-of-way.
2. There is offsite area that contributes to the stormwater runoff through the proposed development. The sketches of the Pre-development and Post-development drainage areas do not show this offsite area.
  3. Check the pipe orientations and headwall detail for the headwall near STA 2+40.
  4. The existing utility information for Building C is different from the approved plan. It seems that additional utilities have already been installed without town approval or inspection.

### **FIRE DEPARTMENT COMMENTS**

In an e-mail from Ass't. Fire Chief Pizon, dated 4/7/22, it was indicated that Deputy Fire Chief Jason Fritz had previously met with the Applicant (and representatives) to go over the Fire Department requirements, and it was noted that the requirements were the same as for the other buildings

### **NATURAL RESOURCE PLANNER COMMENTS**

#### **CUPs**

- The application does not contain enough information to demonstrate it meets 9.6.1 B.2. (*"No alternative design .....or which has less detrimental impacts on the wetland or wetland buffer is feasible"*) or 9.6.1.B.4 (*"That the design, construction and maintenance*

*of the proposed use will, to the extent feasible minimize detrimental impact on the wetland or wetland buffer”).*

- You have demonstrated that an alternate location for Building D is feasible with your prior approved plans. Your proposal did not include a determination that the previous location would cause a greater wetland impact. Please provide a calculation of impacts that would result from locating the larger 32 Unit Building D to the original location. This is necessary to determine whether your proposal meets the aforementioned condition.
- The application states the gravel construction access road is necessary for construction to avoid conflicts with the developed portions of the lot however, prior plans for the construction of Building D, the recent construction of Building B, and the ongoing construction of Building C all entail driving through the developed portion of the lot for construction purposes, thereby demonstrating it is feasible. Further, eliminating this from the proposal will eliminate impacts to vernal pool buffers and eliminate a need for the temporary wetland crossing. Therefore, it is unclear how inclusion of this gravel construction access road can meet either condition.
- Your proposal has not documented that accessing Building D via the extension of Ray Farmstead Road is infeasible, or quantified the impacts in order to compare with the impacts resulting from the connection between Building C and D and the construction access road. This analysis should also consider that it will be creating a redundant wetland crossing within the wetland system serving Watson brook when the Ray Farmstead Road is extended as you acknowledged in your wetland application amendment to the State NHDES (File# 2017-01530) for the original proposal.
- The application does not meet 9.6.1.B.3 (impact evaluation) because it does not consider impacts to the 100-foot vernal pool buffer from widening the existing trail to meet the 14-20' wide construction access road called out in the plans.
- I am also concerned that conclusions within the impact evaluation did not consider all project related impacts adequately in order to meet 9.6.1.B.3 for the following reasons:

- The construction access road is described as requiring minor widening in some portions however it is currently best described as a foot path and the plans indicate resurfacing and widening to 14-20 feet. There is no quantification of this. Without these details, it is not possible to consider impacts to the resources. Further, there is no evaluation of sedimentation or runoff from the steep slope of the construction roadway which slopes directly into the wetland feeding Watson Brook. No stormwater management is described to address this. The only management offered is adding silt sock/fence along the linear edge of the road. This is also relevant to Shoreland CUP 9.3.4 (G)2.a. (“not detrimental to surface water quality”).
- The new location of Building D is within the State Wildlife Action Plan’s Highest Ranked Habitat in the Region category but this was not mentioned so it is unclear if this was considered. This is also relevant to Shoreland CUP 9.3.4. (G) 2.c. (“undue damage to....wildlife habitat”). Further the impact evaluation report identified a constriction for wildlife movement within the wetland at the crossing between Building C and D. As this is described as a primary function of the wetlands, and a larger crossing structure has not been considered, this also does not appear to meet Shoreland CUP criteria 9.3.4.(G).2.c.
- The application is missing the restoration plan for the temporary buffer impacts in order to meet Wetland CUP 9.6.1.B.7 (restoration proposal).
- Please clarify what the intent of the Open Space is at the former Building D location. Is it intended to remain free of buildings?

General Comments:

- The Conservation Commission will want a site walk. I recommend proposing dates that work for the applicant’s team prior to the 5/10 meeting when the additional info requested is submitted. They will want the ability to ask questions of the wetland scientist during the walk, so Brendan’s presence is requested. With later sunsets, 5 pm before the meeting or early mornings tend to fit best with work schedules.
- Soil stockpiling within the wetland buffer should be avoided.
- What are the nutrient removal efficiencies for the proposed stormwater structures?
- I did not see detail on the temporary crossing structure. Please provide. Has the applicant considered removing the damaged culvert from this crossing to improve wetland function?

- The original application indicated that there may be sensitive plant species present and follow up surveys would be conducted during the appropriate growing period prior to construction. When were these surveys conducted and what was the result? Were surveys also conducted within the proposed new location for Building D?
- Given the presence of wetlands, there is a potential for entrapment of amphibians from the deep sump catch basins. Is there potential to avoid the use of deep sumps?
- Please confirm all erosion control silt sock and matting materials are limited to natural material such as jute or coconut matting as photodegrading plastic causes wildlife impacts. Please add note accordingly.
- I did not see snow storage (Site and Sub Regs 7.5.14) or significant trees (remaining or to be removed) indicated (SS Regs 7.4.7). Please provide.
- Please confirm the selected lighting meets our lighting requirements for dark sky compliant, full cut-off shielding (SS Regs 9.20.4).
- *Miscanthus sinensis* is proposed for perennial grasses. This species is on the [NH Invasive Species Watch List](#). Some native suggestions for replacement: *Sorghastrum nutans* or *Andropogon gerardii*.
- What size is the culvert under the road between building C and D? It would be helpful to have this shown on the grading and drainage plans to identify whether it is sufficiently sized. Did the designs consider sufficient sizing for hydraulic capacity, wildlife and aquatic organism passage? Have elevated rainfall regime been considered in designs?
- Add requirement for wetland boundary disks to be installed along wetland buffers within the development (SS 9.9.1).

In order to be heard at the May 26<sup>th</sup>, 2022 Planning Board meeting, please submit any revised plans along with a letter responding to these comments (and other review comments, if applicable) **no later than May 17<sup>th</sup>, 2022**, but sooner if possible, to allow staff adequate time to review the revisions and responses prior to the planning board hearing.

2187.00

April 25, 2022

David Sharples, Town Planner  
Town Planning Office, Town of Exeter  
10 Front Street  
Exeter, NH 03833

**Re: Ray Farm Building D**  
**Design Review Engineering Services**  
Exeter, New Hampshire

**Site Information:**

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Tax Map/Lot#	Map #47, Lot 8	Review No. 1
Address:	Ray Farmstead Road	
Lot Area:	15.75 acres (total after lot line adjustment)	
Proposed Use:	Residential	
Water:	Town	
Sewer:	Town	
Zoning District:	C-3	
Applicant:	Willey Creek Co., LLC, 158 Shattuck Way Newington, NH 03801	
Design Engineer:	GM2 Associates, Amesbury, Massachusetts	

**Application Materials Received:**

- Site plan set entitled “Ray Farm” “Site Development Plans for Building D off Ray Farmstead Road, Exeter, NH” dated January 11, 2022, prepared by GM2 Associates.
- Site plan application materials prepared by GM2 Associates.
- CUP application prepared by GM2 Associates.
- Drainage report and stormwater maintenance manual prepared by GM2 Associates.

Dear Mr. Sharples:

Based on our review of the above information, we offer the following comments in accordance with the Town of Exeter Regulations and standard engineering practice.

**General**

1. The plans should be stamped by the engineer, surveyor, wetlands scientist, et al. as appropriate.

2. An NHDES Sewer Connection Permit should be added to the list of permits on the plan set cover. Any revisions or modifications made in the field during construction since the prior NHDES approval should be submitted for after-the-fact review as well as those required for the approval of Building D.
3. It is unclear if the Proposed Building D (32-units) is intended to replace the previously approved Building D (20-units) and complete the project or if the applicant's intent is to preserve the option to re-permit the former Building D for construction at a later time. The application should be clear if the intent is that the project will be complete of all phases following the construction of the proposed Building D.

#### **Lot Line Adjustment Plan**

4. The General Notes (3) identifies W. Scott Carlisle as the beneficiary of the existing ROW/Easement through the project's parcels. Any encumbrance to that ROW should be reviewed by the beneficiary for concurrence.
5. It appears that Parcel 047-008-0002 exists but is labelled as "Proposed Lot II" in the lot line adjustment plan. Please confirm and adjust the label as appropriate.

#### **Existing Conditions Plan**

6. Near Station 2+60 Right is a round shape with small "x" in it. That symbology is missing from the legend. Please identify what the shape is intended to portray.

#### **Site Plan**

7. The length of the internal roadway exceeds the Town limit per section 9.17.2 of the Site Plan regulations.
8. The internal roadway must meet all other requirements of section 9.17.2.
9. The proposed project's design appears to disregard the ROW through Parcel A as well as the TIF Road design of 2018. The project plans should include the stationing from the TIF Road design and identify the station equation representing the point of intersection.
10. The roadway between Building C and Building D should be realigned to cross the intersection with the right-of-way at a 90-degree angle. Please see the Town of Exeter Standard Specifications for Construction Section E.III.D.2. Note that per the regulations, if this requirement cannot be met on both sides of the ROW, the roadway must be designed and stamped by a professional traffic engineer.
11. Confirm sight distance per the above-referenced Town regulation can be achieved at the ROW intersection per alignment geometry.
12. How will solid waste disposal be handled? No dumpster enclosure is shown on the plan.
13. There appears to be clearing within the 40' wetland buffer in the vicinity of Station 3+50 Left.
14. Confirm emergency vehicle access and turning movements are accommodated within the roadway widths and curb radii.





15. It appears to UE that the greater Ray Farm Condominium project would benefit from utilizing the extended TIF Road ROW/design rather than extending the access road for Ray Farm an additional 818 +/- feet as proposed. Benefits include:
- A. Avoidance of future coordination issues with the ROW/TIF Road.
  - B. Improved Emergency Access to Building D and potentially Buildings A through C.
  - C. Reduced total footprint impact when compared to the proposed 860' 14' wide access road.
  - D. Potential for reduced total wetland impacts.
  - E. Reduced commercial traffic through Industrial Drive and Commercial Way.

### Utility Plans

16. All utilities should be designed for isolation on both sides of the ROW at the crossing.
17. It is unclear how ownership of utilities crossing the right-of-way will be handled.
18. UE understands the proposed gas line is a private utility, however generally speaking, the placement of a utility spur around/behind a building is not advised.
19. A note should be added to the plan indicating the contractor must obtain a valid utility pipe installer's license and the job supervisor or foreman must be certified by the town prior to working on any water, sewer, or drainage pipes that are in a town street or right of way, or that will connect or may be connected to a town water, sewer, or drainage system. A licensed supervisor or foreman must be present during construction of these utilities.
20. The terminus of the water main with a stub toward the abutting CKT parcel implies future extension plans, per comment 3 above, the application should be clear regarding the greater intent, if any.

### Grading and Drainage Plans

21. Has the 24" culvert proposed at station 2+53 been evaluated for wildlife passage requirements? The applicant should evaluate the wildlife corridor needs of the wetland system being restricted by the culvert.
22. The culvert crossing at Station 2+53 could be shortened significantly by utilizing taller headwalls or gravity retaining walls.
23. Restoration notes should be provided at each headwall. Will it be loam and seed? Riprap? In addition, the proposed tree line should be pushed out at those locations since equipment will need to access the area for installation of the headwalls and culvert.
24. Embankment slopes of steeper than 3:1 slope should be fitted with guardrails.
25. Where will foundation drains discharge?
26. Note 2 on several sheets refers to the TIF road plan. The proposed elevation of the access roadway is inconsistent with the design grades of the TIF road plans. Specifically, the intersection of the two roads differ by approximately 3.5 vertical feet.
27. The temporary easement lines for the construction access should be shown on sheet C1.23.
28. The perimeter drainage, labelled RD (roof drain?) should be fitted with clean-outs or better still, structures (i.e. nyoplast units), for access and cleaning. UE questions the layout as it would appear to be breaking the RD system at the northern corner of the building where



the northeasterly run would discharge to, or the vicinity of CB 2 may be preferable to running the RD water all the way around the building.

29. What is the finished treatment of the access road (to Commerce Way) once the project is complete – grassed, remain gravel? Note – the project proposes a swale that will discharge water to the access road and ultimately off site that, as graded, will not make it to the stormwater treatment downstream of CB2.

### **Profile Sheets**

30. The profile slope of the access road is 3% whereas the typical section of the proposed TIF road is a normal crown with 2% cross slopes.
31. Please note the maximum allowable grade within 50' of the future pavement of the ROW is 3% per the Town of Exeter Standard Specifications for Construction.
32. Show the temporary bridge in the profile view of the construction access road.
33. The access road profile approaches 15% for over 200' of its length. In addition to the steep grades, there appears to be the potential for vehicles to bottom out at the wetland crossing, particularly delivery trucks. Please confirm the vehicles will have no issue navigating the profile grades as shown.
34. Show the proposed temporary culvert at the construction access road wetlands crossing in the plan view. Label the slope and inverts. Since the wetlands will be spanned, what is the purpose of the culvert?
35. The proposed contours in the plan view do not match the profile view in the area of the temporary bridge. The profile indicates fill to station 9+97, while the plan view shows fill ending before the bridge. In addition, the profile indicates there will be fill within the wetlands rather than a temporary span.
36. The existing edges of gravel and the existing and proposed tree lines should be shown along the construction access route.
37. Add the edge of ROW lines to the profile view on sheet C1.41.

### **Erosion Control Plans**

38. Ultimate restoration of the construction access road should be labeled.

### **Landscape Plan**

39. Utilities should be added to the plan to assess potential conflicts. Proposed grading should be added as well.
40. Will an irrigation system be installed? If so, it should be shown on the plan.

### **Stormwater Design and Modeling**

41. The Pre and Post Development Plans for review of the HydroCAD model were attached to the CUP submittal. Please merge those into the stormwater analysis.
42. The Pre and Post Development Plans are missing call-outs for ponds, modelled CB ponds, reaches and other HydroCAD model nodes requiring a significant amount of interpretation to evaluate the features and their modelled limits. As such, the drainage review is not complete. The review will be completed upon resubmittal with labels.





43. UE is concerned about the simple Pre- model being used as a baseline for comparison to the post-model. While it is typical that the pre-models are simpler than post-models, as a quantitative analysis common features modelled in one model should be replicated as appropriate in the other model; an example being Post-Development Reach 5R (“Stream Channel”) should be modelled in the Pre-Development which would necessitate the Pre-Development Subcatchment E1 being broken up accordingly. It would seem reasonable that the post- model would define the Stream Channel Reach to correspond to the culvert at Stat 2+52 to address other comments within this review.
44. Subcatchment D8 is orphaned.
45. UE questions the size and routing of Subcatchment D1 as 50% of it is utilizing at least some portion of the Reach 5R for conveyance.
46. Rainfall amounts must be increased by 15% per AoT regulation Env-Wq 1503.08.
47. The project has not demonstrated its compliance with the Pollutant Loading removal requirements per the Town of Exeter stormwater treatment regulations.
48. Provide pipe sizing calculations for all drainage pipes and culverts, including the culvert at Station 2+52.
49. The project is required to comply with Exeter regulation section 9.3.3.6 regarding the evaluation of the effects of sea level rise.
50. **PTAP Database:** The Applicant is requested to enter project related stormwater tracking information contained in the site plan application documents using the Great Bay Pollution Tracking and Accounting Program (PTAP) database ([www.unh.edu/unhsc/ptapp](http://www.unh.edu/unhsc/ptapp)) and submit the entry for review.

A written response is required to facilitate future reviews. Please contact us if you have any questions.

Very truly yours,  
UNDERWOOD ENGINEERS, INC.



Allison M. Rees, P.E.  
Project Manager



Robert J. Saunders, P.E.  
Senior Project Engineer





CELEBRATING OVER 35 YEARS OF SERVICE TO OUR CLIENTS

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NICHOLAS R. AESCHLIMAN

17 May 2022

Langdon Plumer, Chair  
Exeter Planning Board  
10 Front Street  
Exeter, NH 03833

**Re: Planning Board Case #22-3**

Dear Chair Plumer and Board Members –

This firm represents the Applicant in the above referenced Planning Board case. Please find enclosed herewith a revised Site Plan set and Storm Water Report with calculations from Denis M. Hamel, P.E. at GM2 Associates ("GM2") as well as a GM2 Letter responding to the Town's TRC comments, all with requisite number of copies. The Applicant and its team of consultants look forward to discussing the Applicant's project proposal with the Planning Board at its 26 May 2022 meeting. The Applicant anticipates filing at a future date updated Conditional Use Permit Applications and corresponding analyses which address the Town's Natural Resource Planner's TRC comments as well as Waiver Requests which the Applicant will request the Planning Board review at a future hearing. The Applicant anticipates appearing before the Town's Conservation Commission at its next meeting on 14 June 2022.

By this letter, the Applicant responds to several TRC Comments which GM2 did not respond to, to include Town Planner Comment 14, Public Works Comment 1, and Underwood Engineering Comments 4, 9, 10, 11, 15, 16, 17, 30 and 31, all of which pertain to the potential extension of the existing public Ray Farmstead Road over an existing 50-foot private easement on the Applicant's Property benefiting the owner of abutting land currently owned by Scott Carlisle ("Mr. Carlisle's Private Easement" or the "Private Easement") (the "TRC Comments"). This letter also responds to correspondence filed with the Planning Board on 16 May 2022 by Upton & Hatfield, LLP on behalf of Mr. Carlisle ("Attorney Hilliard's Letter").

As the Planning Board is aware, there is ongoing litigation involving the Town of Exeter, the Applicant and Mr. Carlisle regarding the potential extension of Ray Farmstead Road over Mr. Carlisle's Private Easement to access Mr. Carlisle's Property. To summarize the foundational subject of that litigation, the Town and Mr. Carlisle maintain that the Applicant has a legal obligation to permit the Town to site and construct a public road over the Private Easement. The Applicant maintains, as it expressly has for years, that it does not consent to the extension of Ray Farmstead Road as a public road over Mr. Carlisle's Private Easement and has never agreed to convey the necessary property interests to the Town to convert the Private Easement into a public road.

**DONAHUE, TUCKER & CIANDELLA, PLLC**  
16 Acadia Lane, P.O. Box 630, Exeter, NH 03833

111 Maplewood Avenue, Suite D, Portsmouth, NH 03801

Towle House, Unit 2, 164 NH Route 25, Meredith, NH 03253

83 Clinton Street, Concord, NH 03301

The TRC Comments which the Applicant responds to by this letter unfortunately put the Planning Board in the middle of this private dispute between the Applicant and the Town by improperly assuming that Ray Farmstead Road will be extended as a public road over the Private Easement as a matter of fact and by stating that the Applicant's proposal is not compatible with same. In so doing, the TRC Comments conflate the reality of the existing conditions of the underlying Property inclusive of the Private Easement, with the speculative and unestablished nature of the potential extension of the public Ray Farmstead Road over the Private Easement. To be clear, the "TIF Road design" which the TRC Comments consistently refer to, was produced by the Applicant and provided to the Town at the Town's request in 2018. This design has not been reviewed, approved or permitted. Further, the Applicant expressly declined to convey to the Town the property interests necessary to convert the Private Easement into a public road. As such, the so-called "TIF Road extension" is theoretical in nature.

Attorney Hilliard's letter suffers from the same false premise as the TRC Comments: that construction of the public extension of Ray Farmstead Road over the Private Easement will occur as a matter of fact. On the contrary, Mr. Carlisle's improper "dedication" of a public road over land he does not own pursuant to a 2017 subdivision application which did not have the Applicant's authorization, does not create a legal obligation on the Applicant to facilitate said construction. Indeed, as Note 7 of the Subdivision Plan indicates, "Upon approval by the Town, the Proposed Road will be conveyed to the Town." Only the Applicant, the owner of the underlying land, has the authority to convey title of the roadway to the Town. For these reasons, like the TRC Comments, Attorney Hilliard's allegations regarding the compatibility of the Applicant's proposal with the theoretical "TIF Road extension" are irrelevant to the Planning Board's review.

To avoid this very dilemma, for months the Applicant made unrequited attempts to discuss an alternative access to Mr. Carlisle's Property with the Town and counsel for Mr. Carlisle. Specifically, the Applicant has been open to the idea of facilitating access to Mr. Carlisle's Property over other property owned by the Applicant off Commerce Way. The Applicant anticipates that that proposed alternative access would, as depicted in the plans filed herewith by GM2, cause considerably less direct wetland, wetland buffer and shoreland impact than extending Ray Farmstead Road over Mr. Carlisle's Private Easement.<sup>1</sup> The Town is under a contractual obligation to confer and cooperate with the Applicant in this regard. Instead of exploring the viability of this possibility, or even responding to the Applicant and engaging in a discussion, the Town elected to file a lawsuit.

The Planning Board is required to review applications in light of existing conditions, not in light speculative future development which has not been reviewed, approved or permitted. As such, the TRC Comments which are the subject of this letter are irrelevant to the Planning Board's jurisdictional obligations and the Applicant respectfully requests that the Planning Board

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<sup>1</sup> Specifically, as depicted on GM2's plans, the extension of Ray Farmstead Road over Mr. Carlisle's Private Easement is projected to cause 2,280 sf of direct wetland impact, 15,715 sf of total wetland buffer impact, and 232,124 sf of total shoreland impact where the alternative access to Mr. Carlisle's Property from Commerce Way is only projected to cause approximately 712 sf of direct wetland impact (a reduction of 69%), approximately 13,285 sf of total wetland buffer impact (a reduction of 15%) and no shoreland impacts.

Langdon Plumer, Chair  
Exeter Planning Board  
17 May 2022  
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treat said comments as such. In short, consideration of the comments implicating the Private Easement or the TIF Road extension is improper.

Finally, in an effort to help remove this issue from the Planning Board's consideration and ensure it remains where it belongs, with the Court, the Applicant would be comfortable with a condition of Planning Board approval stating that if the extension of Ray Farmstead Road over the existing Private Easement is ever reviewed, approved and permitted, the Applicant will pursue amended site plan approval for the parking, grading and water/sewer connection reconfigurations that would be necessary for Building D to be fully compatible with same. GM2 has already looked at what would be required to ensure full compatibility between Building D and an extended Ray Farmstead Road and is comfortable that the underlying alterations would be the appropriate subject of an amended site plan review by the Planning Board.

Thank you for your time and consideration. We look forward to appearing before the Planning Board on 26 May.

Very truly yours,  
DONAHUE, TUCKER & CIANDELLA, PLLC



Justin L. Pasay  
JLP/LH

Cc: Jon Shafmaster  
Gove Environmental, Inc. (email only)  
GM2 Associates  
Chris Hilson, Esq. (email only)  
Walter Mitchel, Esq. (email only)  
Russ Hilliard, Esq. (email only)



May 17, 2022

Mr. Dave Sharples  
Planning Department  
Town of Exeter  
Front Street  
Exeter, NH 03833

Dear Mr. Sharples:

Subject: Response to **Town Comments to Ray Farm Building D Re-location Site Plan Review Application as discussed at the TRC meeting held on April 21, 2022**

*Headquarters*  
115 GLASTONBURY BLVD  
GLASTONBURY CT 06033  
860.659.1416

10 CABOT ROAD  
SUITE 101B  
MEDFORD MA 02155  
617.776.3350

6 CHESTNUT ST  
SUITE 110  
AMESBURY MA 01913  
978.388.2157

197 LOUDON RD  
SUITE 310  
CONCORD NH 03301  
603.856.7854

200 MAIN ST  
PAWTUCKET RI 02860  
401.726.4084

The comments from the Town Departments and their consultants are listed. Our response is directly below each comment and is bold italic text.

### **TOWN PLANNER COMMENTS**

1. Are there any known environmental hazards on the site? If so, provide detail.

***We are unaware of any environmental hazards on the site.***

2. Show monuments in accordance with Section 9.25.

***Monuments “to be set” have been added to the plan.***

3. Provide all professional stamps (P.E., Wetland Scientist, LLS, etc.) on the applicable plans per Section 7.2.1 and 7.2.2 for the Planning Board submission.

***Stamps by the professionals preparing the plans will be added when the plans are final. There will be further comments by the Planning Board and Conservation Commission as the process continues.***

4. Identify significant trees per Section 7.4.7. Be sure to identify all trees within the limit of work and along the proposed gravel access drive from Commerce Way to the site.

***There were several significant trees (greater than 21” in diameter) found in or near the development area that will need to be cut down. All are white pine trees. The***

**trees near the development area that pose a significant threat were also identified as to be cut down. For the trees outside the development area, the stumps will remain. The trees are shown on the Site Plans C1.11 and C1.12.**

5. Please clarify the parking requirements and waivers on the cover sheet as it appears to indicate what is required as part of the prior approval and also the information does not appear accurate (i.e. 1233 parking stalls). Suggest treating this as a standalone application and provide details regarding parking and waivers requested that are specific to this application.

**The Site Data and parking data has been revised and clarified.**

6. Add snow storage areas on plans per Section 7.5.14.

**Snow storage notes and location have been added to the Site Plans C1.11 and C1.12.**

7. Add note per Section 7.5.16.

**The note per section 7.5.16 has been added to the General Notes sheet G1.20 under section General Notes #20.**

8. Please provide further details on the 14' wide gravel access road and how it will be constructed. Are all buffer impacts resulting in the creation of this access road included in the CUP? There is a reference in the Gove memo that appears to indicate that this is an "existing woods road". While there is packed down soil from bike and pedestrian use, it doesn't not appear to be a road.

**The Temporary Construction Access Road has been removed from the plan set. Construction vehicles will access the site from the existing Ray Farm project.**

9. Provide information to determine if Section 9.6.3 is being satisfied.

**The upland area where Building D was and defined as Phase IV of the approved project is 1.35 acres. The new area being added to the approved project is 4.28 acres. The area where Building D was will remain open space**



**and used by the residents as passive recreation. No buildings will be placed in this area. This area (1.35 acres) is 31.5% of the new land being added and complies with Section 9.6.3.**

10. Was the landscape plan created by a Licensed Landscape Architect? Are the plantings low maintenance and chosen for all site conditions? Will irrigation be required? If so, show locations on landscape plan.

**A Landscape Architect will stamp the Landscape plans. There will be irrigation for Building D as it is for the other three building and the Community Building. The irrigation system is installed only after the site improvements are in place in order not to interfere with landscape and hardscapes. The irrigation will not be shown on the design plans.**

11. Provide updated traffic memo addressing the additional units.

**The Traffic Engineer will provide a memo about the additional traffic generated by the additional twelve units.**

12. Sixteen (16) parking stalls are proposed along the front of Building D. This requires a parking island per Section 9.7.5.5.

**The parking has been modified to not have more than 15 spaces in a row. A landscaped island was added to the front parking.**

13. Section 9.17.2 allows a maximum dead-end street of 1,200 feet. It appears that the access roadway exceeds 1,500 feet. Please see Section 9.17.10.B that states "An access road used to serve three or more units is considered a road (or street)". Also see the definition of Street in Section 5.3.4.

**A waiver request will be submitted to allow the access drive as submitted.**

14. The access road to Building D appears to conflict with the TIF Road (so called) design. Whether that road is built as a TIF road or built by Carlisle, it shows as access to the Carlisle property on a plan approved by the Planning

Board for subdivision in 2017. To town planning staff it appears that the construction of this new accessway to proposed Building D will conflict with the intended construction of that road, though the applicant's attorney represents that it does not. To resolve this, I recommend that the Planning Board refers this issue to the town's outside engineering consultant for its guidance specifically on whether the proposed construction of this accessway to Building D would interfere with a road to be built through the Carlisle easement, whether it remains as a private roadway or becomes public.

***Please see letter from DTC Lawyers dated May 17, 2022.***

15. Provide information on the Lighting Plan to determine compliance with all requirements set forth in Section 9.20.

***The requirements of Section 9.20 will be met and added to the Lighting Plans.***

- 16 Provide information that the project meets Section 11.2 and 11.3.

***We believe that the project complies with applicable portions of Sections 11.2 and 11.3.***

17. Confirm if there will be any grading within 5 feet of any exterior property line.

***There will no grading within five feet of any property line.***

- 18 How will trash pick-up for the residential use and commercial uses be handled? Will there be any internal trash storage? No dumpsters are shown on the plans.

***There will be no outside dumpsters. The trash will be collected inside the basement area and set out for private pickup weekly which is the same as the other three buildings.***

- 19 Please discuss potential addressing of the site/buildings with the Code Enforcement Officer and Deputy Fire Chief.



***The applicant met with the Fire Department and discussed the access requirements for the Fire Department apparatus. The plans have been revised to accommodate the largest fire vehicle. The Fire Department approved the location of the fire hydrants as shown on the plans.***

### **PUBLIC WORKS COMMENTS**

1. The layout of this roadway is not compatible with the Phase II Ray Farmstead Rd design. I compared this concept plan to the TIF Phase II portion of Ray Farmstead Rd that previously went through final design by the developer and engineer. I assumed that both would be eventually built. In fact, the drainage pond in Phase I was designed and already built with runoff contributions from Phase II accounted for.
  - A. The Building D roadway would intersect Ray Farmstead Rd at approximately STA 11+68. Ray Farmstead Rd centerline would be at elevation +/- 117.0 ft while Building D roadway is at +/- elevation 120.0 ft. (a difference of 3.0 ft)
  - B. The Building D roadway should intersect Ray Farmstead Rd on a straight-away and not on a curve. The intersection of the roadways should be perpendicular to each other.
  - C. The utilities for Building D need to be designed with the Ray Farmstead utility extensions in mind. Assuming that Phase II - Ray Farmstead Rd is built and accepted by the Town, it is not customary to have private utility corridors crossing a town right-of-way.

***Please see letter from DTC Lawyers dated May 17, 2022.***

- 2 There is offsite area that contributes to the stormwater runoff

through the proposed development. The sketches of the Pre-development and Post-development drainage areas do not show this offsite area.

***The offsite stormwater runoff from the Carlisle property does not affect the stormwater system. Some flow arrows on the Pre-Development and Post Development were added that indicate that the stormwater from the Carlisle property bypass the development in the same fashion for both scenarios. The stormwater flow goes to the two streams on each side of the development. He flow does not enter the developed stormwater system. The offsite flow is the same for the Pre-Development as the Post-Development and will not affect the design. The offsite flow is considered for the sizing of the cross culvert for the access drive. That culvert is oversized to allow for small wildlife to pass.***

- 3 Check the pipe orientations and headwall detail for the headwall near STA 2+40.

***The headwalls were eliminated with the installation of the large block retaining walls.***

- 4 The existing utility information for Building C is different from the approved plan. It seems that additional utilities have already been installed without town approval or inspection.

***The Sewer extension and water extension were installed without public review. The submitted plans show them and will be approved or adjusted based on review by the Town.***

## FIRE DEPARTMENT COMMENTS

In an e-mail from Ass't. Fire Chief Pizon, dated 4/7/22, it was indicated that Deputy Fire Chief Jason Fritz had previously met with the Applicant (and representatives) to go over the Fire Department requirements, and it was noted that the requirements were the same as for the other

buildings

**No Comment needed.**

## NATURAL RESOURCE PLANNER COMMENTS

**All the comments will be addresses with the CUP application.**

CUPs

- The application does not contain enough information to demonstrate it meets 9.6.1 B.2.  
*{ "No alternative design .....or which has less detrimental impacts on the wetland or wetland buffer is feasible" } or 9.6.1.B.4 ( That the design, construction and maintenance of the proposed use will, to the extent feasible minimize detrimental impact on the wetland or wetland buffer " ).*
  - o You have demonstrated that an alternate location for Building D is feasible with your prior approved plans. Your proposal did not include a determination that the previous location would cause a greater wetland impact. Please provide a calculation of impacts that would result from locating the larger 32 Unit Building D to the original location. This is necessary to determine whether your proposal meets the aforementioned condition.
  - o The application states the gravel construction access road is necessary for construction to avoid conflicts with the developed portions of the lot however, prior plans for the construction of Building D, the recent construction of Building B, and the ongoing construction of Building C all entail driving through the developed portion of the lot for construction purposes, thereby demonstrating it is feasible. Further, eliminating this from the proposal will eliminate impacts to vernal pool buffers and eliminate a need for the temporary wetland crossing.

Therefore, it is unclear how inclusion of this gravel construction access road can meet either condition.

- o Your proposal has not documented that accessing Building D via the extension of Ray Farmstead Road is infeasible, or quantified the impacts in order to compare with the impacts resulting from the connection between Building C and D and the construction access road. This analysis should also consider that it will be creating a redundant wetland crossing within the wetland system serving

Watson brook when the Ray Farmstead Road is extended as you acknowledged in your wetland application amendment to the State NHDES (File# 2017-01530) for the original proposal.

- The application does not meet 9.6.1.B.3 (impact evaluation) because it does not consider impacts to the 100-foot vernal pool buffer from widening the existing trail to meet the 14-20' wide construction access road called out in the plans.
- I am also concerned that conclusions within the impact evaluation did not consider all project related impacts adequately in order to meet 9.6.1.B.3 for the following reasons:
  - o The construction access road is described as requiring minor widening in some portions however it is currently best described as a foot path and the plans indicate resurfacing and widening to 14-20 feet. There is no quantification of this. Without these details, it is not possible to consider impacts to the resources. Further, there is no evaluation of sedimentation or runoff from the steep slope of the construction roadway which slopes directly into the wetland feeding Watson Brook. No stormwater management is described to address this. The only management offered is adding silt sock/fence along the linear edge of the road. This is also relevant to Shoreland CUP

9.3.4 (G)2.a. ("not detrimental to surface water quality").

- o The new location of Building D is within the State Wildlife Action Plan's Highest Ranked Habitat in the Region category but this was not mentioned so it is unclear if this was considered. This is also relevant to Shoreland CUP 9.3.4. (G) 2.c. ("undue damage to....wildlife habitat"). Further the impact evaluation report identified a constriction for wildlife movement within the wetland at the crossing between Building C and D. As this is described as a primary function of the wetlands, and a larger crossing structure has not been considered, this also does not appear to meet Shoreland CUP criteria 9.3.4.(G).2.c.
- The application is missing the restoration plan for the temporary buffer impacts in order to meet Wetland CUP 9.6.1.B.7 (restoration proposal).
- Please clarify what the intent of the Open Space is at the former Building D location. Is it intended to remain free of buildings?

General Comments:

- The Conservation Commission will want a site walk. I recommend proposing dates that work for the applicant's team prior to the 5/10 meeting when the additional info requested is submitted. They will want the ability to ask questions of the wetland scientist during the walk, so Brendan's presence is requested. With later sunsets, 5 pm before the meeting or early mornings tend to fit best with work schedules.
- Soil stockpiling within the wetland buffer should be avoided.
- What are the nutrient removal efficiencies for the proposed stormwater structures?
- I did not see detail on the temporary crossing structure. Please provide. Has the applicant considered removing the damaged culvert from this crossing to improve wetland function?
- The original application indicated that there may be sensitive plant species present and follow up surveys would be conducted during the appropriate growing period prior to construction. When were these surveys conducted

and what was the result? Were surveys also conducted within the proposed new location for Building D?

- Given the presence of wetlands, there is a potential for entrapment of amphibians from the deep sump catch basins. Is there potential to avoid the use of deep sumps?
- Please confirm all erosion control silt sock and matting materials are limited to natural material such as jute or coconut matting as photodegrading plastic causes wildlife impacts. Please add note accordingly.
- I did not see snow storage (Site and Sub Regs 7.5.14) or significant trees (remaining or to be removed) indicated (SS Regs 7.4.7). Please provide.
- Please confirm the selected lighting meets our lighting requirements for dark sky compliant, full cut-off shielding (SS Regs 9.20.4).
- *Miscanthus sinensis* is proposed for perennial grasses. This species is on the NH [Invasive Species Watch List](#). Some native suggestions for replacement: *Sorghastrum nutans* or *Andropogon gerardii*.
- What size is the culvert under the road between building C and D? It would be helpful to have this shown on the grading and drainage plans to identify whether it is sufficiently sized. Did the designs consider sufficient sizing for hydraulic capacity, wildlife and aquatic organism passage? Have elevated rainfall regime been considered in designs?
- Add requirement for wetland boundary disks to be installed along wetland buffers within the development (SS 9.9.1).

In order to be heard at the May 26th, 2022 Planning Board meeting, please submit any revised plans along with a letter responding to these comments (and other review comments, if applicable) no **later than May 17th, 2022**, but sooner if possible, to allow staff adequate time to review the revisions and responses prior to the planning board hearing.

## Underwood Engineers Comments

### General

1. The plans should be stamped by the engineer, surveyor, wetlands scientist, et al. as appropriate.

***The plans will be stamped by the appropriate professionals for the final submittal.***

2. An NHDES Sewer Connection Permit should be added to the list of permits on the plan set cover. Any revisions or modifications made in the field during construction since the prior NHDES approval should be submitted for after-the-fact review as well as those required for the approval of Building D.

***A Sewer Connection Permit for the additional flow will be applied for.***

3. It is unclear if the Proposed Building D (32-units) is intended to replace the previously approved Building D (20-units) and complete the project or if the applicant's intent is to preserve the option to re-permit the former Building D for construction at a later time. The application should be clear if the intent is that the project will be complete of all phases following the construction of the proposed Building D.

***Building D will be enlarged to be the same as the other three buildings and re-located to site for which this Site Plan Review was submitted. The location where the original Building D was located will remain as part of the development, but be open space. No new buildings will be placed in the old location***

*Lot Line Adjustment Plan*

4. The General Notes (3) identifies W. Scott Carlisle as the beneficiary of the existing ROW/Easement through the project's parcels. Any encumbrance to that ROW should be reviewed by the beneficiary for concurrence.

***That is an issue between the owner of the land and Mr. Carlisle.***

5. It appears that Parcel 047-008-0002 exists but is labelled as "Proposed Lot II" in the lot line adjustment plan. Please confirm and adjust the label as appropriate.

***The Note has been removed and not appropriate for this plan.***

Existing Conditions Plan

6. Near Station 2+60 Right is a round shape with small "x" in it. That symbology is missing from the legend. Please identify what the shape is intended to portray.

***The object is a large surface boulder. A symbol for that has been added to the Legend on sheet G1.20***

Site Plan

7. The length of the internal roadway exceeds the Town limit per section 9.17.2 of the Site Plan regulations.

***A waiver request will be submitted for the length of Road.***

8. The internal roadway must meet all other requirements of section 9.17.2.

***A waiver request from the subdivision road requirements will be submitted.***

9. The proposed project's design appears to disregard the ROW through Parcel A as well as the TIF Road design of 2018. The project plans should include the stationing from the TIF Road design and identify the station equation representing the point of intersection.

***Please see letter from DTC Lawyers dated May 17, 2022.***

10. The roadway between Building C and Building D should be realigned to cross the intersection with the right-of-way at a 90-degree angle. Please see the Town of Exeter Standard Specifications for Construction Section E.III.D.2. Note that per the regulations, if this requirement cannot be met on both sides of the ROW, the roadway must be designed and stamped by a professional traffic engineer.

***Please see letter from DTC Lawyers dated May 17, 2022.***

11. Confirm sight distance per the above-referenced Town regulation can be achieved at the ROW intersection per alignment geometry.



**Please see letter from DTC Lawyers dated May 17, 2022.**

12. How will solid waste disposal be handled? No dumpster enclosure is shown on the plan.

**There are no exterior dumpsters. The trash will be handled as it is for the other three buildings. See the response to Dave Sharples comment # 18 above.**

13. There appears to be clearing within the 40' wetland buffer in the vicinity of Station 3+50 Left.

**There is no grading of disturbing the surface in this area. See the Grading plan C1.21.**

14. Confirm emergency vehicle access and turning movements are accommodated within the roadway widths and curb radii.

**The Applicant met with the Fire Department for their vehicles and they are satisfied.**

- 15.

It appears to UE that the greater Ray Farm Condominium project would benefit from utilizing the extended TIF Road ROW/design rather than extending the access road for Ray Farm an additional 818 +/- feet as proposed. Benefits include:

- a. Avoidance of future coordination issues with the ROW/TIF Road.

It appears to UE that the greater Ray Farm Condominium project would benefit from utilizing the extended TIF Road ROW/design rather than extending the access road for Ray Farm an additional 818 +/- feet as proposed. Benefits include:

- b. Avoidance of future coordination issues with the ROW/TIF Road.

- A. Improved Emergency Access to Building D and potentially Buildings A through C.
- B. Reduced total footprint impact when compared to the proposed 860' 14' wide access road.
- C. Potential for reduced total wetland impacts.
- D. Reduced commercial traffic through Industrial Drive and Commercial Way.

**Please see letter from DTC Lawyers dated May 17, 2022.**

Utility Plans

16. All utilities should be designed for isolation on both sides of the ROW at the crossing.

**Please see letter from DTC Lawyers dated May 17, 2022.**

17. It is unclear how ownership of utilities crossing the right-of-way will be handled.

**Please see letter from DTC Lawyers dated May 17, 2022.**

- UE understands the proposed gas line is a private utility, however generally speaking, the placement of a utility spur around/behind a building is not advised.

**The other buildings have gas along the rear of the building.**

- A note should be added to the plan indicating the contractor must obtain a valid utility pipe installer's license and the job supervisor or foreman must be certified by the town prior to working on any water, sewer, or drainage pipes that are in a town street or right of way, or that will connect or may be connected to a town water, sewer, or drainage system. A licensed supervisor or foreman must be present during construction of these utilities.

**Note 1. Was added to the General Notes sheet G1.20, Contractors Responsibilities.**

20. The terminus of the water main with a stub toward the abutting CKT parcel implies future extension plans, per comment 3 above, the application should be clear regarding the greater intent, if any.

**The water stub at the end of the proposed water main at sta. 8+28 is for future looping of the water main to Commerce Way if the Town has that desire.**

*Grading and Drainage Plans*

21. Has the 24" culvert proposed at station 2+53 been evaluated for wildlife passage requirements? The applicant should evaluate the wildlife corridor needs of the wetland system being restricted by the culvert.

**Wildlife passage and restrictions will be evaluated with**

***the Wetland Permit application. The culvert has been enlarged to 36”.***

22. The culvert crossing at Station 2+53 could be shortened significantly by utilizing taller headwalls or gravity retaining walls.

***Large block retaining walls have been incorporated into the design for that purpose.***

23. Restoration notes should be provided at each headwall. Will it be loam and seed? Riprap? In addition, the proposed tree line should be pushed out at those locations since equipment will need to access the area for installation of the headwalls and culvert.

***The headwalls have been removed due to the retaining walls. Rip-Rap has been added to the outlet end.***

24. Embankment slopes of steeper than 3:1 slope should be fitted with guardrails.

***Guard rails have been added to the plan.***

25. Where will foundation drains discharge?

***A footing drain has been added to the Grading/Drainage plans. See sheet C1.22***

26. Note 2 on several sheets refers to the TIF road plan. The proposed elevation of the access roadway is inconsistent with the design grades of the TIF road plans. Specifically, the intersection of the two roads differ by approximately 3.5 vertical feet.

***That note has been removed from the plans.***

27. The temporary easement lines for the construction access should be shown on sheet CI.23.

***The Temporary Construction Access Road has been removed from the project.***

28. The perimeter drainage, labelled RD (roof drain?) should be fitted with clean-outs or better still, structures (i.e. nyoplast units), for access and cleaning. UE questions the layout as it would appear to be breaking the RD system at the northern corner of the building where the northeasterly run would discharge to, or the vicinity of CB 2 may be preferable to running the RD water all the

way around the building.

***Cleanout have been added to the roof drain piping at the corners. We will discharge all the roof runoff into a infiltration basin located under the parking area in front of the building.***

29. What is the finished treatment of the access road (to Commerce Way) once the project is complete -grassed, remain gravel? Note -the project proposes a swale that will discharge water to the access road and ultimately off site that, as graded, will not make it to the stormwater treatment downstream of CB2.

***The temporary access road has been removed from the project.***

#### **Profile Sheets**

30. The profile slope of the access road is 3% whereas the typical section of the proposed TIF road is a normal crown with 2% cross slopes.

***Please see letter from DTC Lawyers dated May 17, 2022.***

31. Please note the maximum allowable grade within 50' of the future pavement of the ROW is 3% per the Town of Exeter Standard Specifications for Construction.

***Please see letter from DTC Lawyers dated May 17, 2022.***

32. Show the temporary bridge in the profile view of the construction access road.

***The access road and bridge have been removed from the project.***

33. The access road profile approaches 15% for over 200' of its length. In addition to the steep grades, there appears to be the potential for vehicles to bottom out at the wetland crossing, particularly delivery trucks. Please confirm the vehicles will have no issue navigating the profile grades as shown.

***The access road and bridge have been removed from the project.***

34. Show the proposed temporary culvert at the construction access road wetlands crossing in the plan view. Label the slope and inverts. Since the wetlands will be spanned, what is the purpose of the culvert?

***The access road and bridge have been removed from the project.***

35. The proposed contours in the plan view do not match the profile view in the area of the temporary bridge. The profile indicates fill to station 9+97, while the plan view shows fill ending before the bridge. In addition, the profile indicates there will be fill within the wetlands rather than a temporary span.

***The access road and bridge have been removed from the project.***

36. The existing edges of gravel and the existing and proposed tree lines should be shown along the construction access route.

***The access road and bridge have been removed from the project.***

37. Add the edge of ROW lines to the profile view on sheet Cl.41.

***The Center line of the Easement is shown on the Profiles. The edges of the Easement have been added.***

#### Erosion Control Plans

38. Ultimate restoration of the construction access road should be labeled.

***The access road and bridge have been removed from the project.***

#### Landscape Plan

39. Utilities should be added to the plan to assess potential conflicts. Proposed grading should be added as well.

***The landscaping will be adjusted during installation to avoid any conflicts with the utilities or other items onsite.***

40. Will an irrigation system be installed? If so, it should be shown on the plan.

***An irrigation system will be installed. It will be the last item to be installed and will adjust as needed to provide watering coverage and avoid conflicts with landscaping and structures.***

#### Stormwater Design and Modeling

41. The Pre and Post Development Plans for review of the HydroCAD model were attached to the CUP submittal. Please merge those into the stormwater analysis.

***The Water shed plans will be submitted with the stormwater***

**report.**

42. The Pre and Post Development Plans are missing call-outs for ponds, modelled CB ponds, reaches and other HydroCAD model nodes requiring a significant amount of interpretation to evaluate the features and their modelled limits. As such, the drainage review is not complete. The review will be completed upon resubmittal with labels.

***On the Hydro-Cad Model Diagram all the Nodes and Subcatchments are labeled to which structure they go to. The Grading plans label all the structures. The Watershed Plans are at too small of a scale to label all the structures.***

43. UE is concerned about the simple Pre- model being used as a baseline for comparison to the post-model. While it is typical that the pre-models are simpler than post-models, as a quantitative analysis common features modelled in one model should be replicated as appropriate in the other model; an example being Post-Development Reach SR ("Stream Channel") should be modelled in the Pre-Development which would necessitate the Pre-Development Subcatchment EI being broken up accordingly. It would seem reasonable that the post- model would define the Stream Channel Reach to correspond to the culvert at Stat 2+S2 to address other comments within this review.

***The Pre-Developed Watershed was divided into to Subcatchments to more resemble the Post-Development Watershed. The Post-Development Subcatchment D1 (by-passing the basins) was divided into two subcatchments to more resemble the Pre-Development.***

44. Subcatchment D8 is orphaned.

***Subcatchment D8 does not enter any structures associated with Building D. It does flow to a Focal Point for the Building C system. The area is small and will not overload the Focal Point. The stormwater will be treated through the Focal Point and then discharged into an infiltration system before being released. Some of the area that flows into Focal Point 11 on the Building D site was flowing into Focal Point at Building C and we considered it a wash.***

45. UE questions the size and routing of Subcatchment DI as SO% of it is utilizing at least some portion of the Reach SR for conveyance.

**See Response to comment 43 above.**

46. Rainfall amounts must be increased by 15% per AoT regulation Env-Wq 1S03.08.5

***The rainfall amounts have been increased by 15 %.***

47. The project has not demonstrated its compliance with the Pollutant Loading removal requirements per the Town of Exeter stormwater treatment regulations.

***In review of the stormwater treatment requirements, it states that total Nitrogen and Phosphorus be reduced by 60%. In the New Hampshire Stormwater Manual, Volume 2, Appendix B, Pollutant Removal Efficiencies table, indicates that Infiltration systems greater than 75' from surface waters, Nitrogen is 60% and Phosphorus is 65% in removal efficiencies. All stormwater runoff from pavement for this project is directed to a deep sump hooded catch basin, then through a "Focal Point" (manufacturer claims 40% Nitrogen removal), and then into an infiltration basin (60% TN, 65% TP).***

48. Provide pipe sizing calculations for all drainage pipes and culverts, including the culvert at Station 2+S2.

***The Drainage Pipes within the drainage system are modeled in Hydro-Cad with the outlets of structures. The culvert has been sized separately because it receives runoff from off site. A separate report for this culvert will be provided.***

49. The project is required to comply with Exeter regulation section 9.3.3.6 regarding the evaluation of the effects of sea level rise.

***The entire developed portion of the site is higher than elevation 100. It is unlikely to be affected by sea level rise.***

50. **PTAP Database:** The Applicant is requested to enter project related stormwater tracking information contained in the site plan application documents using the Great Bay Pollution Tracking and Accounting Program (PTAP) database ([www.unh.edu/unhsc/ptapp](http://www.unh.edu/unhsc/ptapp)) and submit

the entry for review.

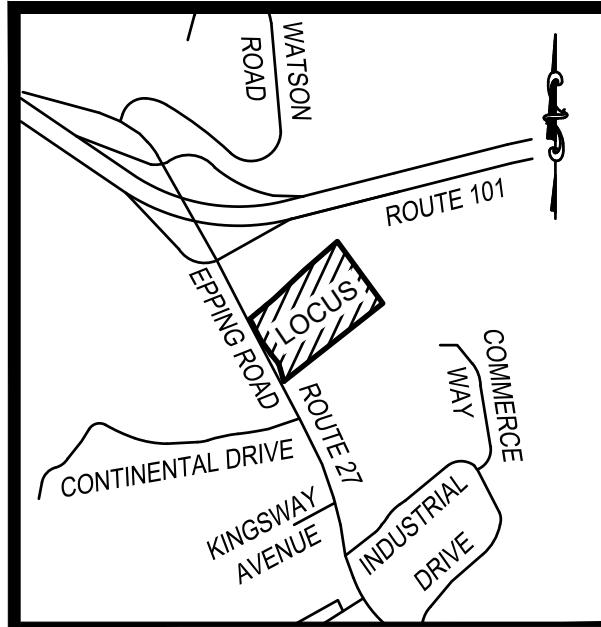
***We have not submitted anything to Great Bay Pollution Tracking and Accounting Program. We will discuss with our Environmental Consultant to determine what may be needed.***

Respectfully,

*Denis M. Hamel*

Denis M. Hamel, CPESC  
Site/Civil Project Manager





**LOCUS MAP**  
SCALE: 1" = 3000'

# Ray Farm

## Active Adult Community

### Site Development Plans for Building D off Ray Farmstead Road, Exeter, NH

#### SHEET INDEX

G1.10	TITLE SHEET
G1.20	GENERAL NOTES, LEGEND, & ABBREVIATIONS
V1.10	MINOR SUBDIVISION PLAN
V1.11, V1.12	EXISTING CONDITIONS
C1.10	OVERALL SITE PLAN
C1.11, C1.12	SITE PLANS
C1.21, C1.22	GRADING AND DRAINAGE PLANS
C1.31, 1.32	UTILITY PLANS
C1.41	PLAN & PROFILES
C1.51	EROSION AND SEDIMENT CONTROL PLAN
C5.11 TO C5.16	DETAILS
C1.24	WETLAND IMPACTS
C1.25	WETLAND BUFFER IMPACT PLAN
C1.26	WATERSHED PLAN



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Sheet Title:

## TITLE SHEET

Project Title:

**Ray Farm  
Condominium**  
Ray Farmstead Road  
Exeter, NH 03833  
Rockingham County

Applicant/Owner:

**Ray Farm, LLC**  
158 Shattuck Way  
Newington, NH 03801

#### REVISION BLOCK

NO.	DATE	DESC	BY
1	5.10.22	TRC COMMENTS	DH

#### DIMENSIONAL REQUIREMENTS (C-3 DISTRICT)

	REQUIRED
MINIMUM LOT AREA	40,000 SF
MINIMUM LOT WIDTH	175 FEET
MINIMUM LOT DEPTH	225 FEET
MINIMUM YARD SETBACKS	
FRONT	50 FEET
SIDE	30 FEET
REAR	25 FEET
MAXIMUM BUILDING COVERAGE	40 %
MINIMUM OPEN SPACE	20 %
MAXIMUM HEIGHT	50 FEET

#### LOCUS PARCEL

OKT ASSOCIATES  
MAP 47, PARCELS, 8 & 9  
(SEE MINOR SUBDIVISION PLAN V1.10)

#### TOTAL SITE DENSITY

TOTAL PARCEL AREA  
15.75 Acres (686,127 SF)  
TOTAL NUMBER OF UNITS - 128  
DENSITY = 5,360.4 SF PER UNIT

#### BUILDING D SITE DATA

PROPOSED USE - ACTIVE ADULT COMMUNITY (VARIANCE GRANTED)  
FOUR STORY 32 UNIT BUILDING, WITH INSIDE PARKING AT BASEMENT LEVEL

PARKING REQUIRED - 32 UNITS x 2 SPACES PER UNIT +  
1 SPACE PER 4 UNITS = 72 SPACES REQUIRED

PARKING PROVIDED - 58 TOTAL (1.81 SPACES/UNIT) (WAIVER REQUESTED)  
36 IN PARKING GARAGE BELOW BUILDING 22 SURFACE PARKING

#### TOTAL SITE DATA

PROPOSED USE - ACTIVE ADULT COMMUNITY (VARIANCE GRANTED)  
4 BUILDINGS WITH 4-32 UNIT BUILDINGS, = 128 UNITS

PARKING REQUIRED - 128 UNITS x 2 SPACES PER UNIT +  
1 SPACE PER 4 UNITS = 288 SPACES REQUIRED

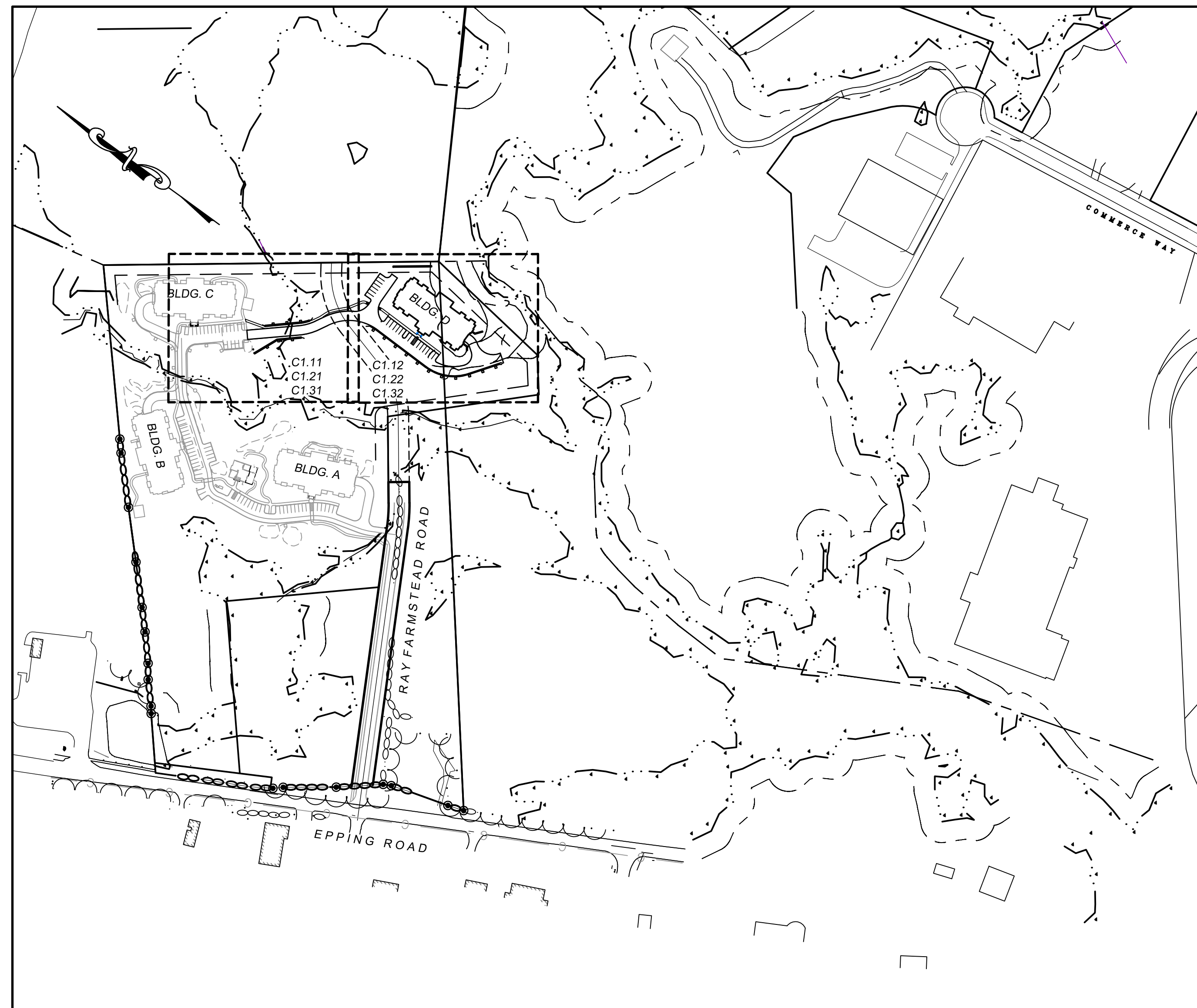
PARKING PROVIDED - 233 TOTAL (1.82 SPACES/UNIT) (WAIVER REQUESTED)  
144 IN PARKING GARAGE BELOW BUILDINGS  
89 SURFACE PARKING

#### WAIVERS

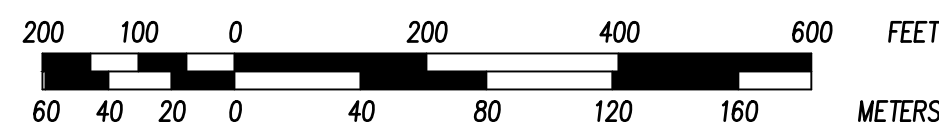
1. WAIVER FOR WETLAND IMPACTS - 9.9.2 SITE PLAN REVIEW REGULATIONS
2. WAIVER FOR PARKING - 5.6.5 ZONING ORDINANCE
3. WAIVER FOR ROADWAY DESIGN PLANS - 7.5.7 AND 7.7 SITE PLAN REVIEW REGULATIONS
4. WAIVER FOR PARKING SETBACKS - 11.3.1.2 SITE PLAN REVIEW REGULATIONS
5. WAIVER FOR RECREATIONAL AREAS - 11.3.4 SITE PLAN REVIEW REGULATIONS
6. WAIVER FOR LENGTH OF ROAD - 9.17.2 SITE PLAN REVIEW REGULATION

#### PERMITS

ALTERATION OF TERRAIN - AOT 1335 (PREVIOUSLY APPROVED)  
ALTERATION OF TERRAIN - AOT XXXX (FOR BUILDING D)  
DREDGE AND FILL - FILE NO. 2017-01530 (PREVIOUSLY APPROVED)  
DREDGE AND FILL - FILE NO. XXXX-XXX (ASSOCIATED WITH BUILDING D)



SCALE: 1"=200'



TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

PROJ. MGR.: D. HAMEL  
FIELD: J. SALVAGGIO / R. SMITH  
DESIGN: D. HAMEL  
DRAWN: D. HAMEL  
CHECKED: D. GIANGRANDE  
DATE: 01-11-2022  
FILE: 16042 D T1.DWG  
FBK:  
JOB #: 16042 D

SHEET G1.10

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## GENERAL NOTES

- ELEVATIONS BASED ON NAVD 1988. PLANS ARE NH STATE PLAIN NAD83 COORDINATE SYSTEM.
- OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT ASSESSOR'S MAPS AND DO NOT CONSTITUTE CERTIFICATION TO TITLE OR OWNERSHIP.
- EXISTING CONDITIONS DATA FROM AN ON THE GROUND SURVEY CONDUCTED BY W.C. CAMMETT ENG., NOVEMBER OF 2016 THROUGH APRIL OF 2017, AND GM2 ASSOCIATES IN DECEMBER OF 2021.
- WETLANDS AND SOILS INFORMATION PROVIDED BY GOVE ENVIRONMENTAL SERVICES.
- THERE IS NO FLOOD PLAIN ON THIS SITE ACCORDING TO THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 330130 0401 E.
- THE ORIGINAL PARCEL IS LOCATED AT 183 EPPING ROAD AND IS SHOWN AS LOT 8 ON EXETER TAX MAP 47. IT HAS AN AREA OF 960,175 S.F.± (22.04 ACRES±).
- EXISTING 50' WIDE RIGHT OF WAY IS FOR THE BENEFIT OF N. SCOTT CARLISLE. SEE BOOK 3794 PAGE 1963 FOR NOTICE OF EASEMENT.
- THE PERIMETER SURVEY PERFORMED BY W.C. CAMMETT ENG. WITH A 5" TOTAL STATION AND AN ERROR OF CLOSURE OF BETTER THAN 1:32,000.
- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, WATER AND ANY OTHER PRIVATE OR MUNICIPAL UTILITIES WITH THE APPROPRIATE UTILITY COMPANY.
- WHERE EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RECORD FOR RESOLUTION OF THE CONFLICT.
- EXISTING UTILITY POLES, WILL BE RELOCATED BY OTHERS, IF NECESSARY.
- EXCAVATION SHALL ONLY OCCUR WITHIN THE LIMIT OF WORK, AS SHOWN.
- IF AREAS OUTSIDE THE LIMIT OF PROPOSED WORK IS DISTURBED BY THE CONTRACTOR'S OPERATIONS, THE AREAS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- JOINTS BETWEEN NEW BITUMINOUS CONCRETE ROADWAY PAVEMENT AND SAW CUT EXISTING PAVEMENT SHALL BE SEALED WITH BITUMEN, INFRARED SEAL, AND BACK SANDED.
- EXISTING SIGNS AND/OR MAILBOXES WITHIN THE PROJECT LIMITS THAT ARE DISTURBED SHALL BE REMOVED AND RELOCATED AS APPLICABLE.
- ALL DISTURBED AREAS OUTSIDE OF THE NEW PAVEMENT LIMITS SHALL BE LOAMED (4" MINIMUM DEPTH) AND SEEDED.
- A MINIMUM OF 10' HORIZONTAL AND 18" VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN WATER MAINS AND SEWER LINES.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE EXETER WATER AND SEWER DEPARTMENT WHEN MAKING THE CONNECTIONS.
- ALL WORK SHALL COMPLY WITH EXETER'S "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF PUBLIC UTILITIES IN EXETER" NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
- ALL WATER, SEWER, ROAD (INCLUDING PARKING LOT), AND DRAINAGE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 9.3 STORMWATER MANAGEMENT STANDARDS, STORMWATER MANAGEMENT PLAN, AND EROSION AND SEDIMENT CONTROL STANDARDS AND THE STANDARD SPECIFICATION FOR CONSTRUCTION OF PUBLIC UTILITIES IN EXETER, NEW HAMPSHIRE.

## MATERIAL NOTES

- CRUSHED GRAVEL - NHDOT 304.3
- GRAVEL - NHDOT 304.2
- SAND - NHDOT 304.1
- BACKFILL MATERIAL - EARTH MATERIAL FREE FROM ROCKS LARGER THAN 3", DEBRIS, STUMPS, CLAY, ORGANIC MATTER, ICE, FROZEN SOIL, AND EXCESSIVE MOISTURE.
- LOAM - NHDOT 641.2.1
- CRUSHED STONE - GRADED CRUSHED ROCK TO THE SIZE SPECIFIED, WITH LESS THAN 2% FINES PASSING THE #200 SIEVE.
- PLACING AND COMPACTION OF FILL MATERIALS SHALL COMPLY WITH NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 304.3.4, 304.3.5, AND 304.3.6.
- PAVEMENTS SHALL COMPLY WITH SECTIONS 401, 403, AND 410 OF NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

## CONSTRUCTION NOTES

- PRIOR TO ANY EXCAVATION, DIG-SAFE AND EXETER DPW (603-773-6157) SHALL BE NOTIFIED TO LOCATE ALL PERTINENT UTILITIES INCLUDING WATER, SEWER, AND DRAINAGE.
- THIS PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER Agr 3800 RELATIVE TO INVASIVE SPECIES.
- ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY RAINFALL OF ONE HALF INCH OR MORE.
- DO NOT CLEAR AND STRIP THE ENTIRE SITE AT ONE TIME. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION. IN NO CASE SHALL MORE THAN 3 ACRES BE DISTURBED AT ONE TIME. STABILIZE THE AREA BEFORE MOVING ON TO THE NEXT AREA. DISTURBED AREAS REMOVED OPEN FOR MORE THAN 30 DAYS, SHALL BE STABILIZED.
- WOODY MATERIAL REMOVED DURING THE CLEARING PROCESS MAY BE GROUND UP AND USED AS MULCH FOR EROSION CONTROL TO STABILIZE APPROPRIATE AREAS.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
  - BASE COURSE GRAVEL HAS BEEN INSTALLED IN AREAS TO BE PAVED
  - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
  - A MINIMUM OF 3 INCH OF NON EROSION MATERIAL SUCH AS RIP-RAP HAS BEEN INSTALLED
  - OR EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED
- ALL AREAS SHALL BE STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE SEEDING SPECIFICATIONS ARE AS FOLLOWS:

### TEMPORARY SEEDING FOR EROSION CONTROL DURING CONSTRUCTION:

SPECIES	POUNDS/1000 SF	REMARKS
WINTER RYE	2.5	BEST FOR FALL SEEDING. AUG. 15 TO SEPT. 15. SEED TO A DEPTH OF 1"
OATS	2.0	BEST FOR SPRING SEEDING. NO LATER THAN MAY 15. SEED TO A DEPTH OF 1"
ANNUAL RYEGRASS	1.0	SEED EARLY SPRING. AUG. 15 TO SEPT. 15. SEED TO A DEPTH OF 0.25"
PERNIAL RYEGRASS	0.7	SEED BETWEEN APRIL 1 TO AUG. 15. SEED TO A DEPTH OF 0.5"

### PERMANENT VEGETATION SEED MIXTURE:

SPECIES	POUNDS/1000 SF
TALL FESCUE	0.45
CREeping RED FESCUE	0.45
BIRDFOOT TREFOIL	0.20
<b>TOTAL</b>	<b>1.10</b>

- ALL RE-VEGETATED AREAS THAT DO NOT EXHIBIT 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS (ON 3:1 SLOPES OR GREATER). SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, OR SECURING WITH ANCHORED NETTING. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER SNOW OR FROZEN GROUND AND SHALL BE COMPLETED PRIOR TO AN ACCUMULATION OF SNOW AND/OR FROST.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15, INCOMPLETE ROADS 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.
- CONCRETE WASH OUT SHALL BE CONDUCTED IN THE AREAS SHOWN ON SHEET C1.51" AND USE THE CONCRETE WASH OUT DETAIL SHOWN ON SHEET C5.11.
- NO STUMPS OR DEBRIS SHALL BE BURIED ONSITE. ALL STUMPS AND CONSTRUCTION DEBRIS SHALL BE STORED ONSITE UNTIL THEY CAN BE DISPOSED OFF SITE IN A FACILITY CAPABLE OF HANDLING SUCH MATERIALS.
- TEMPORARY PORTABLE TOILETS SHALL BE PROVIDED AND PROPERLY MAINTAINED ONSITE FOR THE DURATION OF THE PROJECT.
- VEHICLE MAINTENANCE SHALL BE PERFORMED OFF SITE. ANY VEHICLE LEAKING OIL OR GREASE SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE. FUEL AND OILS SHALL BE STORED IN AN APPROVED LOCATION AND COMPLY WITH LOCAL, STATE, AND FEDERAL REGULATIONS. IN NO CASE SHALL THEY BE STORED WITHIN 100' OF WETLAND AREAS.

## EXISTING

	EXISTING CONTOURS
	SPOT GRADE
	WETLAND BOUNDARY WETLAND FLAG
	CENTER LINE STREAM
	SIGN
	LIGHT POLE
	FLARED END SECTION
	GUY WIRE
	UTILITY POLE
	CATCH BASIN
	DRAIN MANHOLE
	SEWER MANHOLE
	FIRE HYDRANT
	WATER VALVE
	GAS VALVE
	DRAINAGE LINE
	GAS LINE (APPROX.)
	OVERHEAD WIRE
	TREE LINE
	STONE WALL
	DECIDUOUS TREE
	CONIFEROUS TREE
	SIDEWALK
	EDGE OF PAVEMENT
	BUILDING
	TEST PIT
	IRON ROD FOUND
	IRON ROD SET
	DRILL HOLE FOUND
	MAIL BOX
	CONCRETE SURFACE
	METAL GUARD RAIL
	EASEMENT LINE
	ZONING BOUNDARY LINE
	PROPERTY LINE
	LEDGE
	SURFACE BOULDER
	FLAG POLE
	POST (METAL)
	40' WETLAND BUFFER
	50' WETLAND BUFFER
	75' WETLAND BUFFER
	BIKE TRAIL LINE (APPROX.)
	WATERSHED (FROM GIS)
	DRAIN ZONE LINE
	SOIL LINE (BY GOVE)
	SOIL TYPE (BY GOVE)

## CONSTRUCTION LAYOUT CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL VERTICAL AND HORIZONTAL LOCATIONS OF SITE ELEMENTS INCLUDING BUT NOT LIMITED TO BUILDINGS, UTILITIES, ROADS, AND GRADING. THE OWNER WILL PROVIDE HORIZONTAL AND VERTICAL CONTROL POINT DESCRIPTIONS AND LOCATIONS TO THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN, PROTECT, AND ESTABLISH NEW IF NECESSARY, ALL CONTROL POINTS DURING THE DURATION OF THE PROJECT.

## GEOTECHNICAL TESTING

THE OWNER MAY RETAIN A GEOTECHNICAL ENGINEER TO PERFORM TESTING OF COMPLETED SITE WORK INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF; GRAVEL, CRUSHED STONE, SAND, COMMON FILL, COMPACTION, AND CONCRETE. THE CONTRACTOR SHALL COOPERATE WITH THE HIRED GEOTECHNICAL ENGINEER AND ALLOW FULL ACCESS TO THE SITE AND DELIVERY RECEIPTS OF MATERIALS DELIVERED. WHEN TESTING RESULTS INDICATE NON-COMPLIANCE WITH THE CONTRACT DOCUMENTS AND/OR STANDARD CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL CORRECT THE DEFICIENCY AT NO COST TO THE OWNER.

## LEGEND

	CONTOUR
	SPOT GRADE
	RIP-RAP
	EROSION CONTROL
	SIGN
	LIGHT POLE
	GUY WIRE
	UTILITY POLE
	CATCH BASIN
	DRAIN MANHOLE
	FLARED END SECTION
	SEWER MANHOLE
	FIRE HYDRANT
	WATER VALVE
	WELL
	TELEPHONE AND CATV PEDESTAL
	TREE
	SHRUB
	PERCOLATION TEST
	DEEP HOLE TEST
	DRAIN PIPE
	UNDERGROUND COMMUNICATION (TELEPHONE, CATV) UNDERGROUND ELECTRIC
	SEWER PIPE (GRAVITY)
	SEWER PIPE (FORCE MAIN)
	ROOF DRAIN
	FOUNDATION DRAIN
	WATER PIPE
	GAS PIPE
	OVERHEAD WIRES
	FENCE
	CURBING
	GUARD RAIL
	RETAINING WALL
	TREE LINE
	DETAIL CALL
	BUILDING
	PORTLAND CEMENT CONCRETE
	GRAVEL
	BITUMINOUS CONCRETE
	LANDSCAPING

## CONTRACTOR RESPONSIBILITIES

- THE CONTRACTOR SHALL OBTAIN A UTILITY PIPE INSTALLER'S LICENSE AND THE JOB SUPERVISOR OR FOREMAN MUST BE CERTIFIED BY THE TOWN PRIOR TO WORKING ON ANY WATER, SEWER, OR DRAINAGE PIPES THAT ARE IN A TOWN STREET OR RIGHT OF WAY, OR THAT WILL CONNECT OR MAY BE CONNECTED TO A TOWN WATER, SEWER, OR DRAINAGE SYSTEM. A LICENSED SUPERVISOR OR FOREMAN MUST BE PRESENT DURING CONSTRUCTION OF THESE UTILITIES.
- THE OWNER SHALL PROVIDE THE CONTRACTOR COPIES OF ALL PERMITS ISSUED FOR THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL PERMIT REQUIREMENTS THAT HAVE BEEN ISSUED FOR THIS PROJECT INCLUDING BUT NOT LIMITED TO; NPDES CONSTRUCTION GENERAL PERMIT ISSUED BY THE EPA, ALTERATION OF TERRAIN PERMIT ISSUED BY NHDES, SITE PLAN REVIEW PERMIT ISSUED BY THE TOWN OF EXETER, AND THE DREDGE AND FILL PERMIT ISSUED BY NHDES WETLANDS BUREAU.
- CONTRACTOR SHALL MAINTAIN THE SITE IN AN ORDERLY FASHION. ALL CONSTRUCTION EQUIPMENT SHALL BE PROPERLY MAINTAINED AND SECURED WHEN NOT IN USE. THE CONTRACTOR SHALL MAINTAIN RECORDS OF THE SIZE AND LOCATION (INCLUDING SWING TIES), OF ALL UNDERGROUND UTILITIES INSTALLED. THE RECORDS SHALL BE MADE AVAILABLE TO THE OWNER UPON REQUEST.
- THE CONTRACTOR SHALL PROVIDE A CONSTRUCTION SCHEDULE TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. THE SCHEDULE SHALL BE UPDATED ON A WEEKLY BASIS AT A MINIMUM.

## ABBREVIATIONS

UTILITIES	
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYLCHLORIDE PIPE
C.I.	CAST IRON PIPE
COND	CONDUIT
D.I.	DUCTILE IRON PIPE
HYD.	HYDRANT
INV.	INVERT ELEVATION
UP	UTILITY POLE
TSV & B	TAPPING SLEEVE, VALVE AND BOX

## GENERAL

PROP.	PROPOSED
MIN.	MINIMUM
MAX.	MAXIMUM
EXIST.	EXISTING
STA	STATION
GRAN.	GRANITE
DRIVE	DRIVEWAY
ELEV.	ELEVATION
N.T.S.	NOT TO SCALE
TYP.	TYPICAL
APPROX.	APPROXIMATE
CEM. CONC.	CEMENT CONCRETE
BIT. CONC.	BITUMINOUS CONCRETE
ROW	RIGHT OF WAY
CL	CENTERLINE
WALK	SIDEWALK
TBM	TEMPORARY BENCH MARK
SGE	SLOPED GRANITE EDGING

## TREES

12" B	12" BIRCH
12" C	12" CEDAR
12" M	12" MAPLE
12" O	12" OAK
12" P	12" PINE

## ROADWAY

H.P.	HIGH POINT
L.P.	LOW POINT
A.D.	ALGEBRAIC DIFFERENCE
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
PRC	POINT OF REVERSE CURVATURE
PCC	POINT OF COMPOUND CURVATURE
CC	CENTER OF CURVE
PVC	POINT OF VERTICAL CURVATURE
PVT	POINT OF VERTICAL TANGENCY
PVRC	POINT OF VERTICAL REVERSE CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
OD	OUTSIDE DIAMETER
ID	INSIDE DIAMETER
DIA. Ø	DIAMETER
R	RADIUS
TYP.	TYPICAL
L	LENGTH
DP.	DEPTH
EQ.	EQUIVALENT

TOWN OF EXETER PLANNING BOARD

CHAIRMAN DATE



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Sheet Title:

# General Notes

Project Title:

## Ray Farm Condominium

Ray Farmstead Road  
Exeter, NH 03833  
Rockingham County

Applicant/Owner:

Ray Farm, LLC  
158 Shattuck Way  
Newington, NH 03801

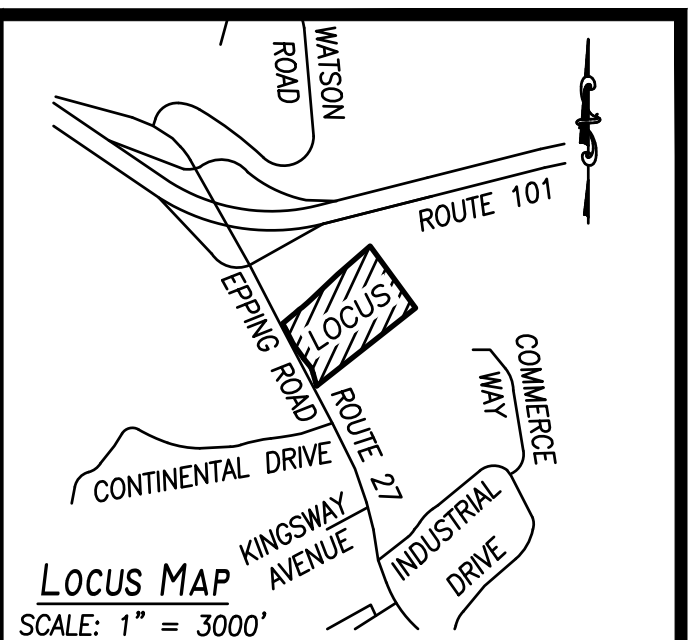
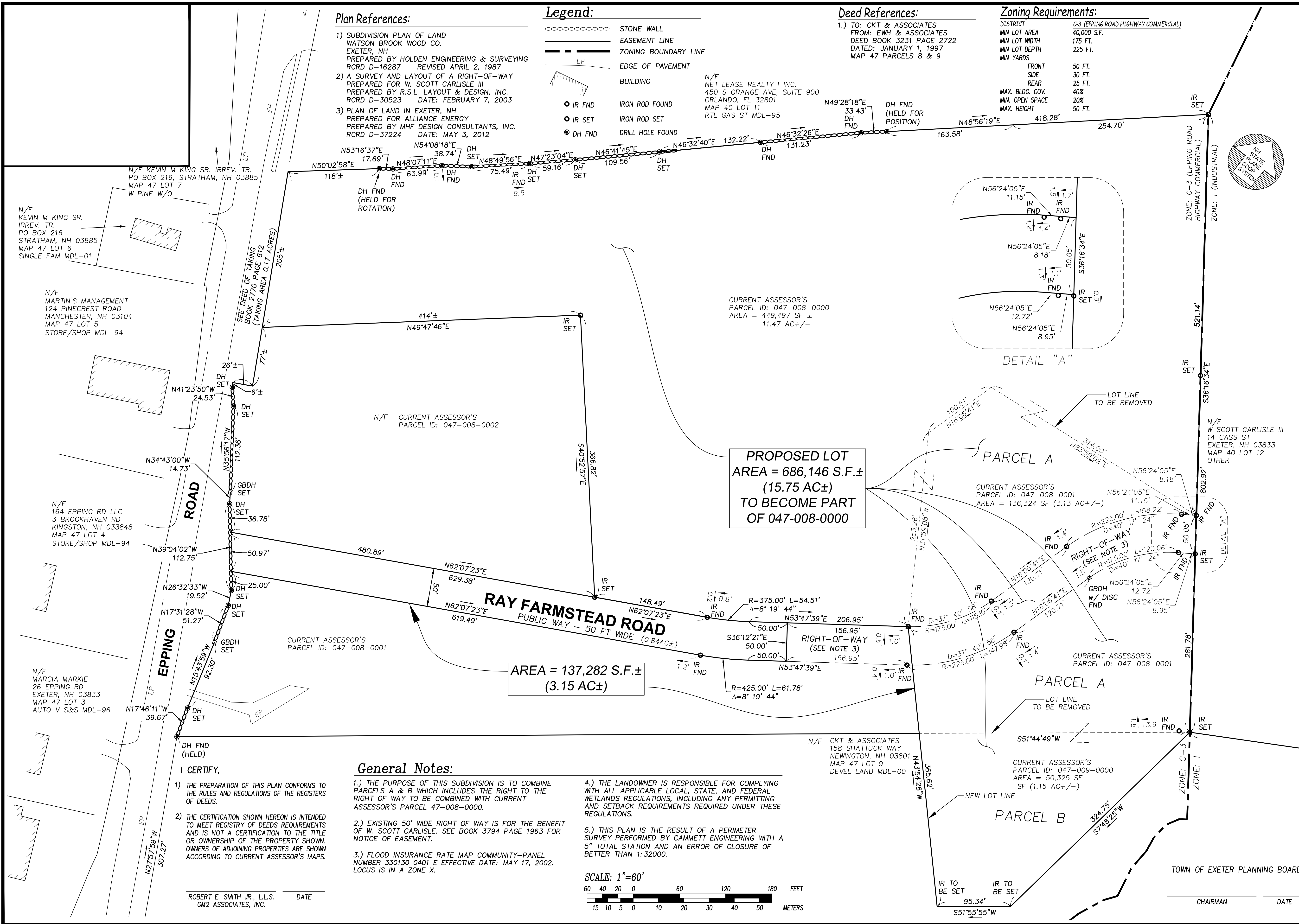
## REVISION BLOCK

NO.	DATE	DESC	BY
1	5.10.22	TRC COMMENTS	DH


PROJ. MGR.:	D. HAMEL
FIELD:	J. SALVAGGIO / R. SMITH
DESIGN:	D. HAMEL
DRAWN:	D. HAMEL
CHECKED:	D. GIANGRANDE
DATE:	01-11-2022
FILE:	16042 D GN.DWG
FBK:	
JOB #:	16042 D

SHEET G1.20

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**Lot Line Adjustment Plan**

**"Ray Farm" Active Adult Community**

Epping Road  
 Exeter, NH 03833  
 Rockingham County

**Applicant:**  
 Willey Creek Company  
 158 Shattuck Way  
 Newington, NH 03801

**Owner:**  
 CKT & Associates  
 158 Shattuck Way  
 Newington, NH 03801

REVISION			
NO.	DATE	DESCRIPTION	BY
1	11.23.21	MINOR EDITS	RS
2	02.01.22	MINOR EDITS	RS

**PROJ. MGR.:** D. HAMEL  
**FIELD:** M. MICHAUD / A. BICK  
**DESIGN:** D. HAMEL  
**DRAWN:** J. SALVAGGIO  
**CHECKED:** R. SMITH  
**DATE:** 5-12-2022  
**FILE:** 16042 SUB NOV 2021.DWG  
**FBK:**  
**JOB #:** 16042

**SHEET 1 of 1 VI.10**





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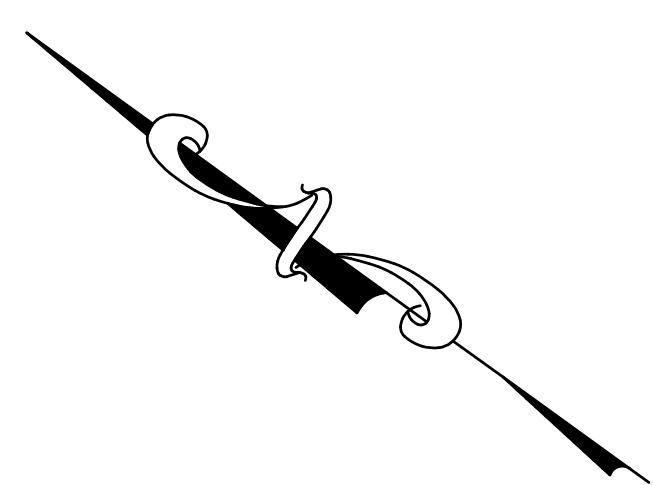
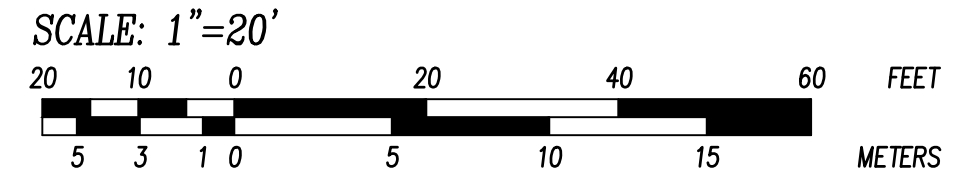
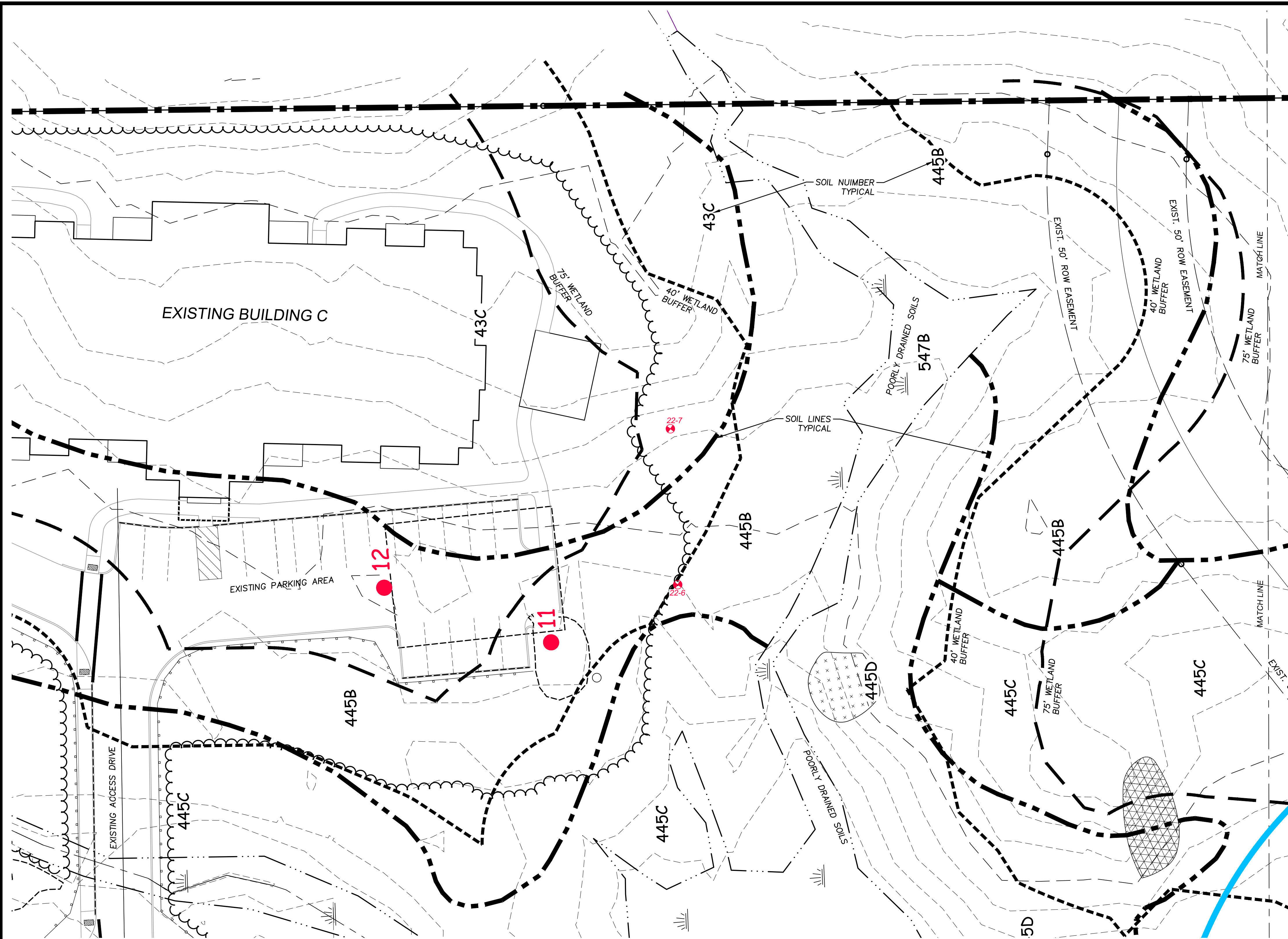
Sheet Title:  
**EXISTING  
 CONDITIONS**

Project Title:  
**Ray Farm  
 Condominium**  
 Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:  
**Ray Farm, LLC**  
 158 Shattuck Way  
 Newington, NH 03801

REVISION BLOCK			
NO.	DATE	DESC	BY
1	5.10.22	TRC COMMENTS	DH

PROJ. MGR.: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D EC.DWG  
 FBK:  
 JOB #: 16042 D



**SOILS DATA (2016)**

NO.	SOIL DESCRIPTION	HYDROLOGIC GROUP	SLOPE
43	CANTON, VERY STONY	B	0 - 8%
115	SCARBORO MUCK	C	8 - 15%
343	CANTON, EXTREMELY BOULDERY	D	15 - 25%
445	NEWFIELDS, VERY STONY	B	0 - 8%
500	UDORTHENTS, LOAMY	B	0 - 8%
547	WALPOLE, VERY STONY	C	8 - 15%

**WETLAND NOTES:**

The limits of jurisdictional wetlands as shown on this plan were delineated by Gove Environmental Services, Inc., between November 2014 to April 2015 AND November 2021 in accordance with:

- US Army Corps of Engineers Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Technical Report ERDC/EL TR-12-1, January 2012, Version 2.0
- Field Indicators of Hydric Soils in the United States, Version 7.0, 2010 AND (for disturbed site) Field Indicators for Identifying Hydric Soils in New England, Version 3. NEIWPCC Wetlands Work Group (April 2004)
- North American Digital Flora: National Wetland Plant List, current version.

**SOIL NOTES:**

The soils mapping is within the technical standards of the National Cooperative Soil Survey. It is a special purpose product, intended for infiltration requirements by the NH DES Alteration of Terrain Bureau. It was produced by a professional soil scientist, and is not a product of the USDA Natural Resources Conservation Service. There is a report that accompanies this mapping.

The site specific soil survey was produced October 20, 2016, May 2, 2022 and was prepared by James P. Gove, CSS # 004, Gove Environmental Services, Inc..

Soils were identified with the New Hampshire State-wide Numerical Soils Legend, USDA NRCS, Durham, NH. Issue # 10, January 2011. The numerical legend was amended to identify the correct soil components of the complex.

Hydrologic Soil Group from Ksat Values for New Hampshire Soils, Society of Soil Scientist of New England, Special Publication No. 5, September, 2009.

**SOILS DATA (2022)**

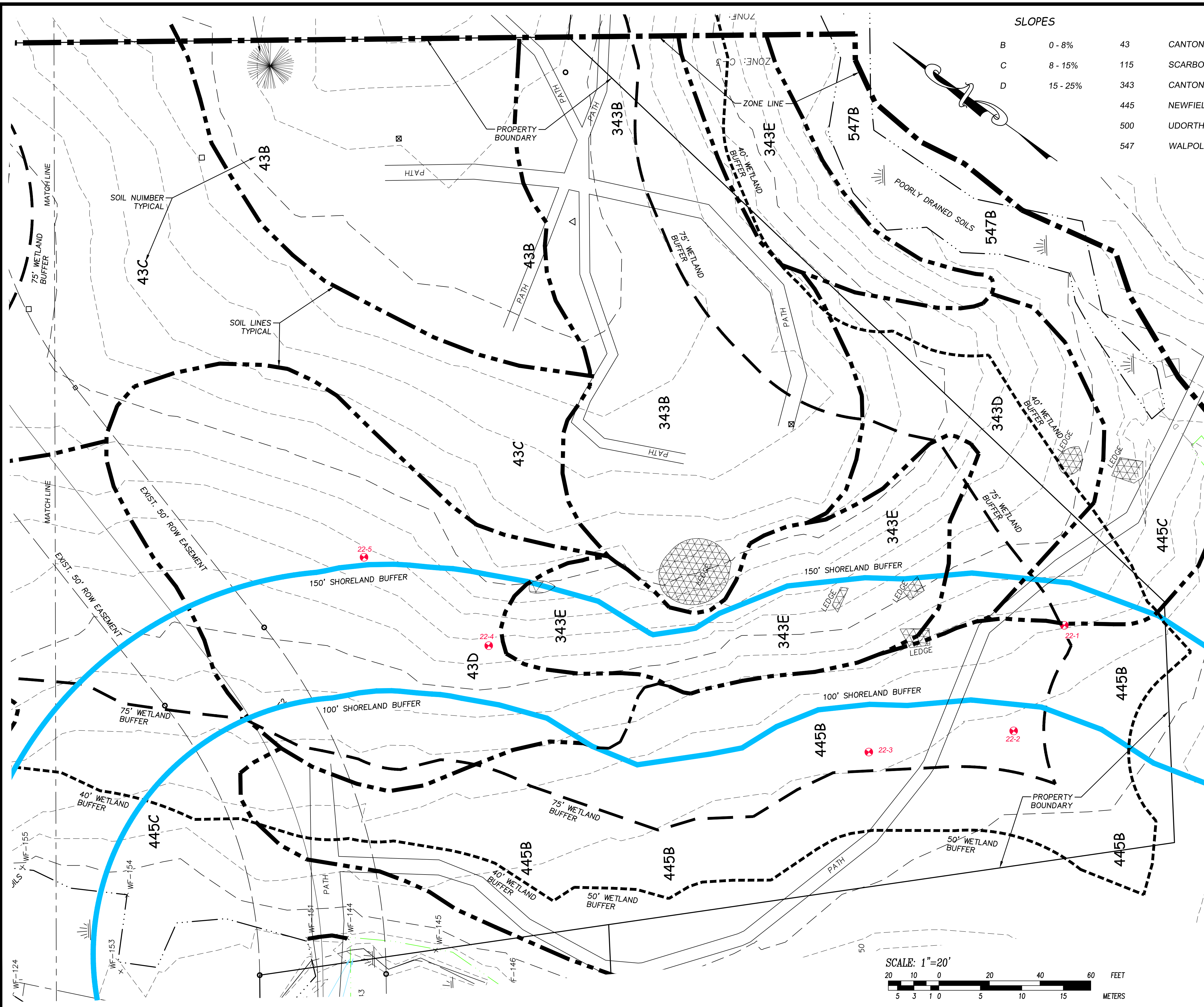
343	Canton, extremely bouldery	Hydro Soil Group B
445	Newfields, very stony	Hydro Soil Group B
547	Walpole, very stony	Hydro Group C

**SLOPES**

B	0 - 8%
C	8 - 15%
D	15 - 25%



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**SLOPES**

B	0 - 8%	43
C	8 - 15%	115
D	15 - 25%	343

**SOILS DATA**

CANTON, VERY STONY	: HYDROLOGIC GROUP - B
SCARBORO MUCK	: HYDROLOGIC GROUP - D
CANTON, EXTREMELY BOULDERY	: HYDROLOGIC GROUP - B
NEWFIELDS, VERY STONY	: HYDROLOGIC GROUP - B
UDORTHENTS, LOAMY	: HYDROLOGIC GROUP - B
WALPOLE, VERY STONY	: HYDROLOGIC GROUP - C

**WETLAND NOTES:**

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Sheet Title:  
**EXISTING  
 CONDITIONS**

Project Title:  
**Ray Farm  
 Condominium**  
 Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:  
**Ray Farm, LLC**  
 158 Shattuck Way  
 Newington, NH 03801

**REVISION BLOCK**

NO.	DATE	DESC	BY
1	5.10.22	TRC COMMENTS	DH

PROJ. MGR.: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D EC.DWG  
 FBK:  
 JOB #: 16042 D





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Sheet Title:

# OVERALL SITE PLAN

Project Title:

## Ray Farm Condominium

Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:

Ray Farm, LLC  
 158 Shattuck Way  
 Newington, NH 03801

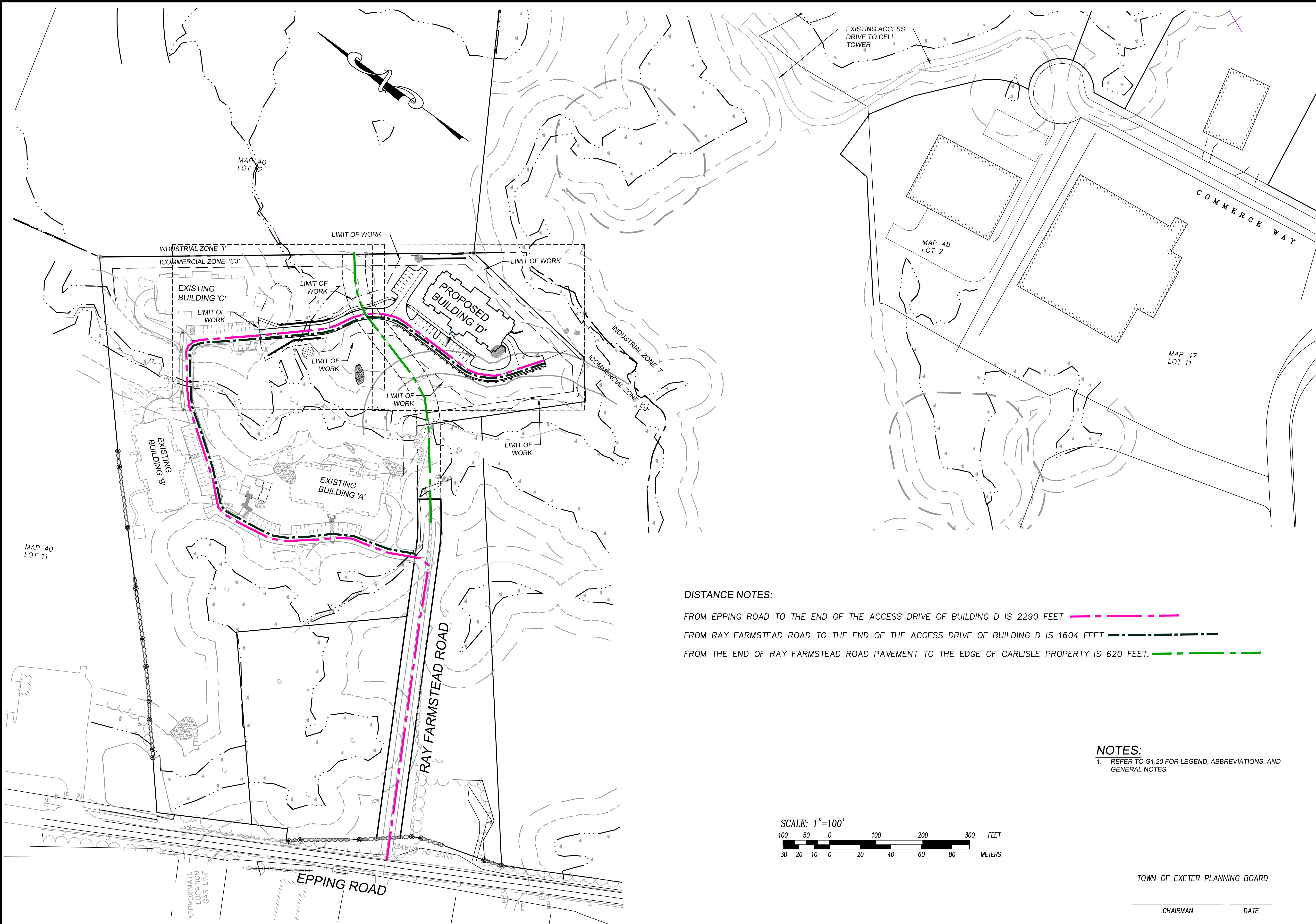
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NO.	DATE	DESC	BY	
1	5.10.22	TRC COMMENTS	DH	

PROJ. MGR.: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D 5P.DWG  
 FBK:  
 JOB #: 16042 D

TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

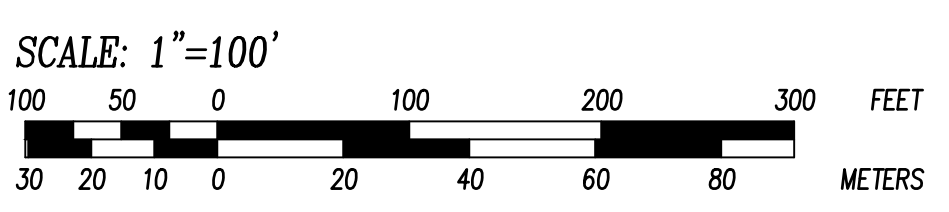
SHEET **CI.10**



**DISTANCE NOTES:**

- FROM EPPING ROAD TO THE END OF THE ACCESS DRIVE OF BUILDING D IS 2290 FEET.
- FROM RAY FARMSTEAD ROAD TO THE END OF THE ACCESS DRIVE OF BUILDING D IS 1604 FEET
- FROM THE END OF RAY FARMSTEAD ROAD PAVEMENT TO THE EDGE OF CARLISLE PROPERTY IS 620 FEET.

**NOTES:**  
 1. REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.



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Sheet Title:

# SITE PLAN

Project Title:

## Ray Farm Condominium

Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:

Ray Farm, LLC  
 158 Shattuck Way  
 Newington, NH 03801

REVISION BLOCK

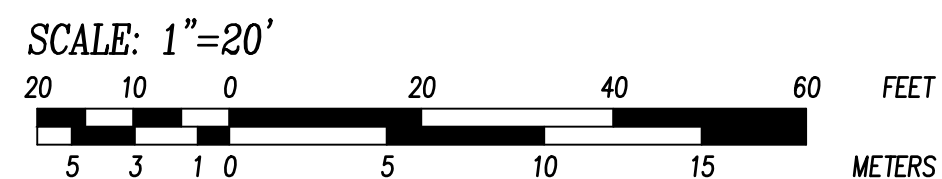
NO.	DATE	DESC	BY
1	5.10.22	TRC COMMENTS	DH

NOTES:

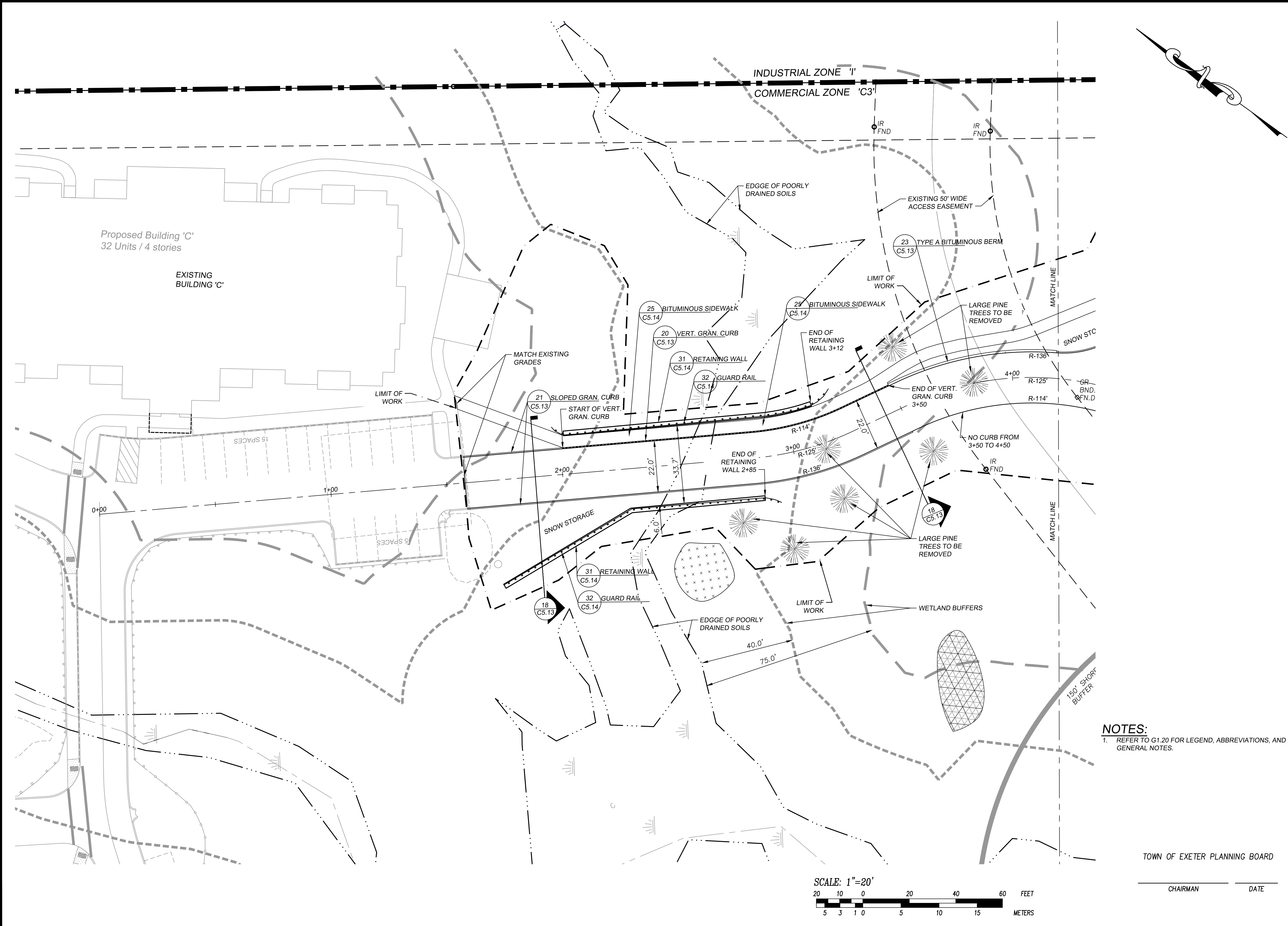
- REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.

TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_



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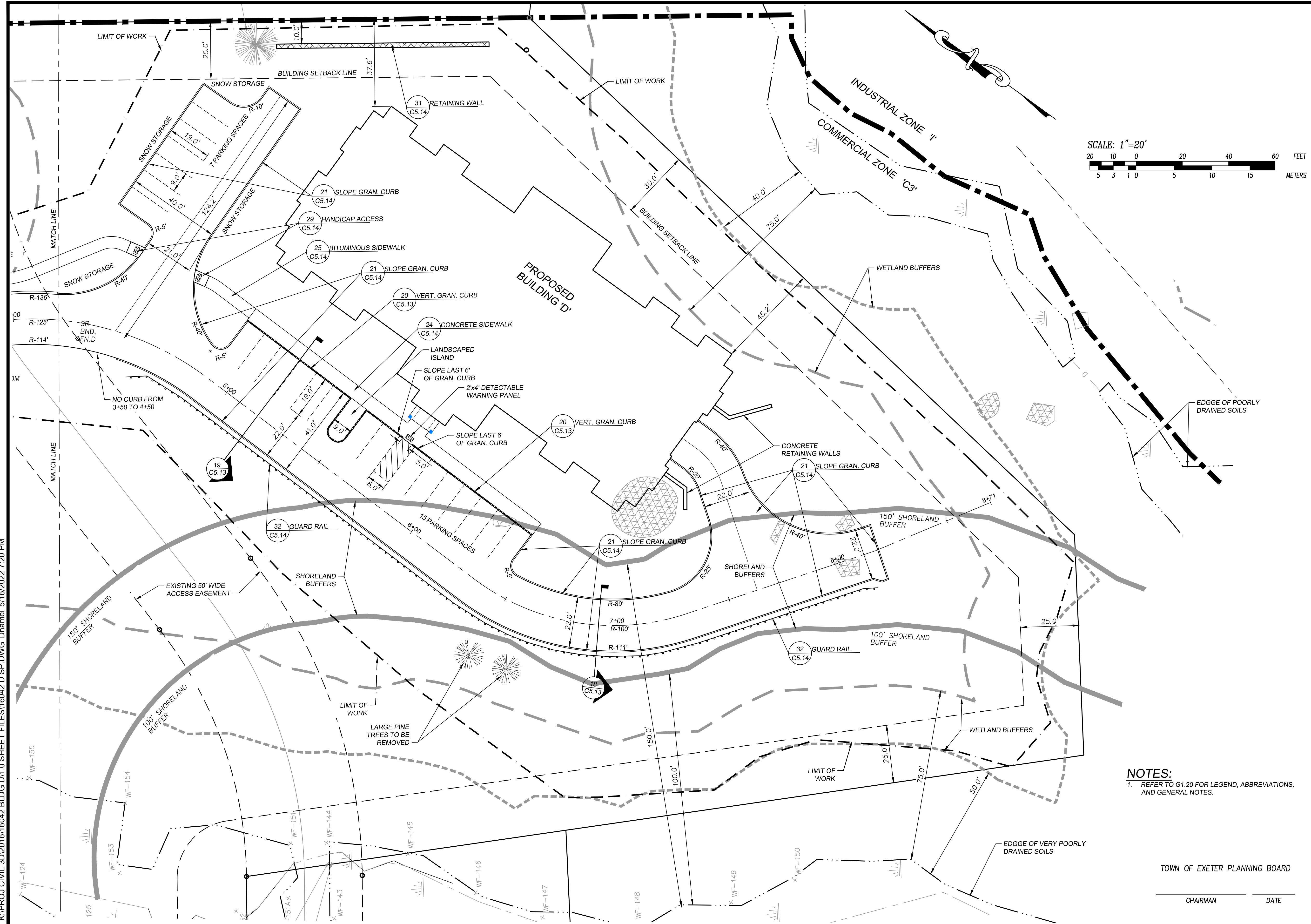
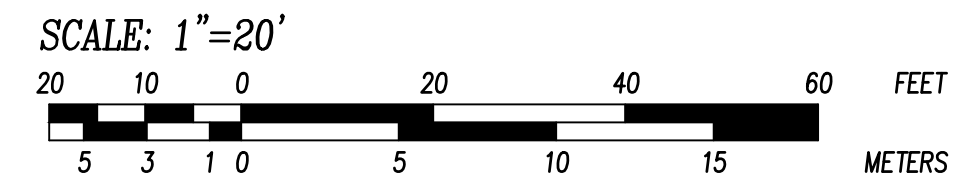
# SITE PLAN

Project Title:

**Ray Farm  
 Condominium**  
 Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:

**Ray Farm, LLC**  
 158 Shattuck Way  
 Newington, NH 03801



**NOTES:**  
 1. REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.

TOWN OF EXETER PLANNING BOARD  
 \_\_\_\_\_  
 CHAIRMAN                      DATE

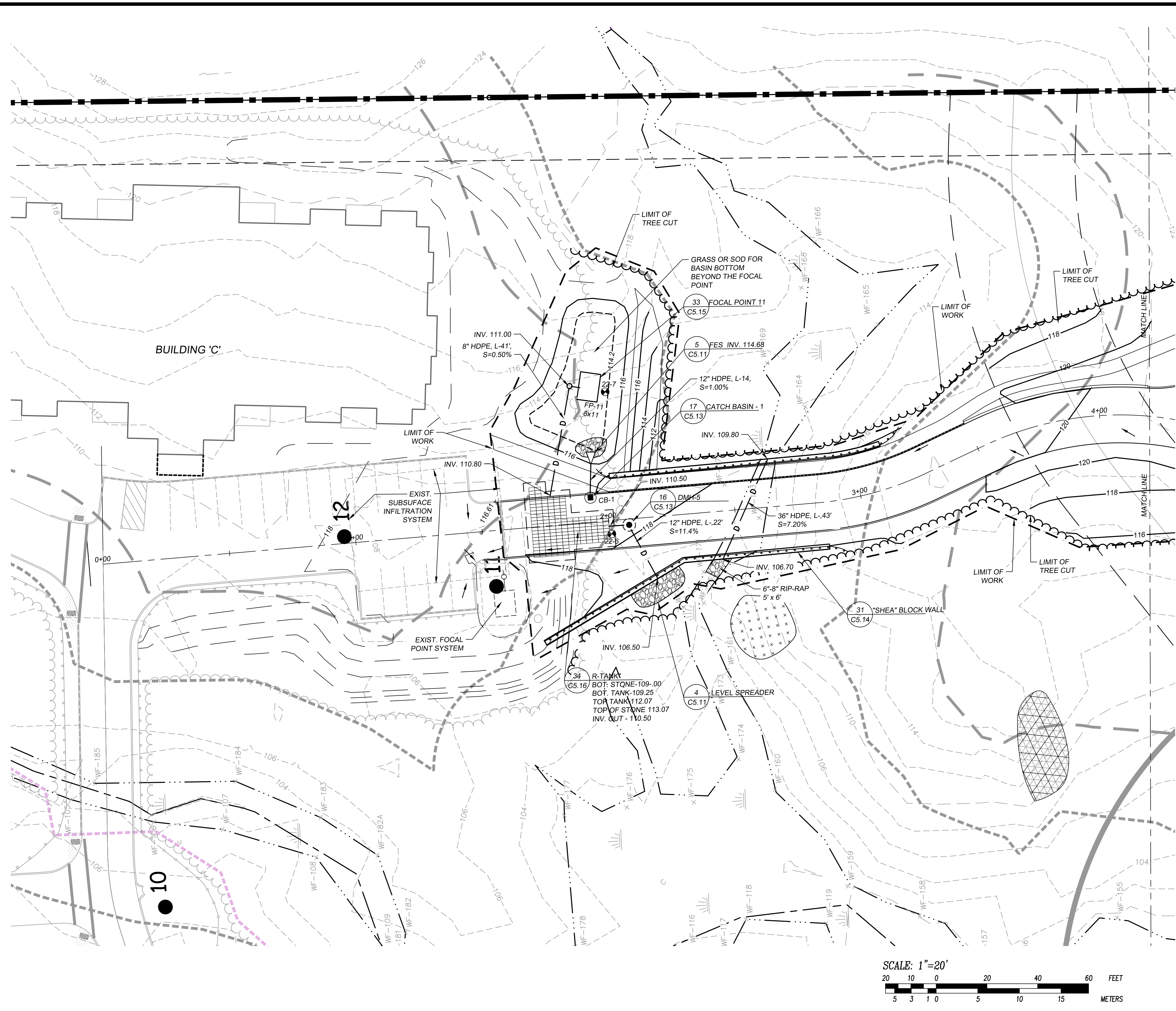
REVISION BLOCK				
NO.	DATE	DESC	BY	
1	5.10.22	TRC COMMENTS	DH	

PROJ. MGR: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D 5P.DWG  
 FBK:  
 JOB #: 16042 D

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**DRAINAGE STRUCTURES**

CB-1 R-117.15  
12" INV. OUT 114.82

DMH-5 R-117.90  
12" INV. IN - 110.44  
12" INV. OUT - 109.00

SOIL TEST LOGGED BY DENIS HAMEL 5-3-2022

SOIL TEST 22-6  
0-6" Sandy Loam 10 YR 3/2  
6"-13" Loamy Sand 10 YR 5/6  
13"-36" Loamy Sand 2.5Y 5/6  
SHWT @17", No Water, No Ledge

SOIL TEST 22-7  
0-4" Sandy Loam 10 YR 3/2  
4"-13" Loamy Sand 10 YR 5/6  
13"-36" Loamy Sand 2.5Y 5/4  
SHWT @13", No Water, No Ledge



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# GRADING/ DRAINAGE PLAN

**Ray Farm  
Condominium**

Ray Farmstead Road  
Exeter, NH 03833  
Rockingham County

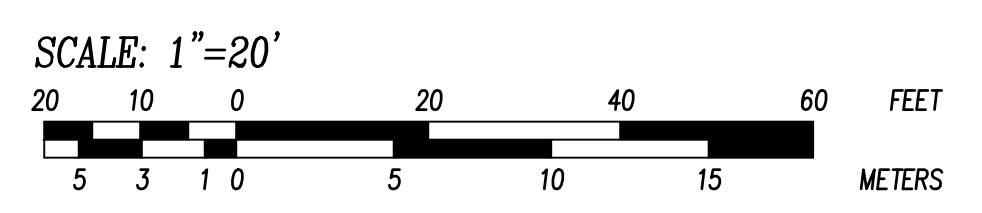
Applicant/Owner:  
**Ray Farm, LLC**  
158 Shattuck Way  
Newington, NH 03801

REVISION BLOCK				
NO.	DATE	DESC	BY	
1	4.26-22	REVISE WET IMPACTS	DH	

**NOTES:**  
1. REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.

TOWN OF EXETER PLANNING BOARD

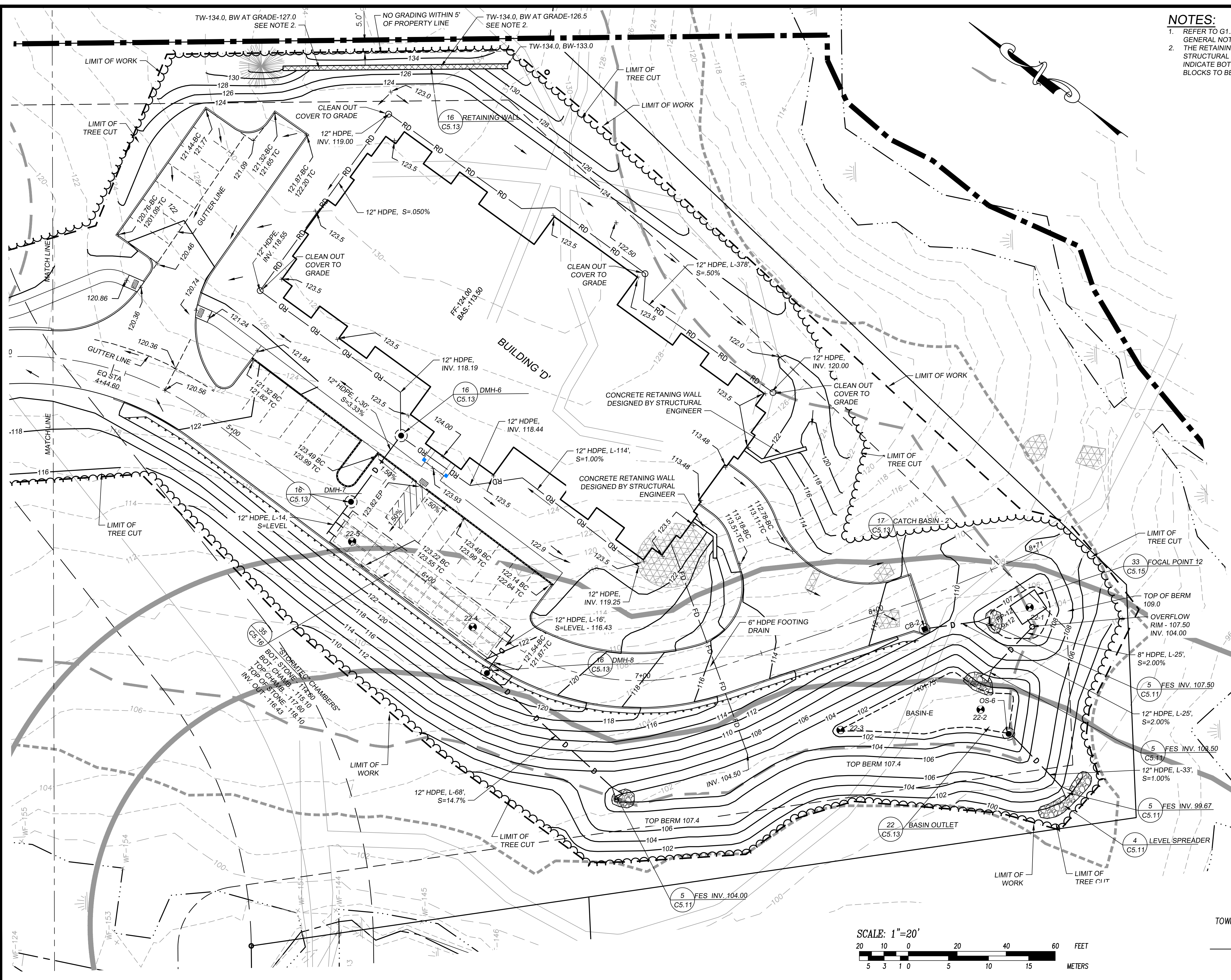
CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_



PROJ. MGR.: D. HAMEL  
FIELD: J. SALVAGGIO / R. SMITH  
DESIGN: D. HAMEL  
DRAWN: D. HAMEL  
CHECKED: D. GIANGRANDE  
DATE: 01-11-2022  
FILE: 16042 D GR.DWG  
FBK:  
JOB #: 16042 D



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**NOTES:**  
 1. REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.  
 2. THE RETAINING WALL SHALL BE DESIGNED BY A STRUCTURAL ENGINEER. THE DEGN PLANS SHALL INDICATE BOTTOM OF WALL ELEVATIONS AND SIZE OF BLOCKS TO BE USED.

**DRAINAGE STRUCTURES**

CB-2	R-111.09	12" INV. OUT 108.00
DMH-6	R-123.50	12" INV. IN - 118.10 12" INV. OUT - 118.00
DMH-7	R-123.16	12" INV. IN - 117.00 12" INV. OUT - 116.43
DMH-8	R-122.10	12" INV. IN - 116.43 12" INV. OUT - 114.00
OS-6	RIM 105.50	TOP OF STRUCTURE-104.83 3" ORIFICE-103.00 6" ORIFICE-104.00 12" HDPE OUT-99.67

SOIL TEST LOGGED BY  
 JIM GOVE 5-2-2022

SOIL TEST 22-1  
 0-7" Sandy Loam 10 YR 3/2  
 7"-39" Loamy Sand 10 YR 5/6  
 39"-42" Loamy Sand 2.5Y 5/4  
 SHWT @39", No Water, Large Boulder

SOIL TEST 22-2  
 0-4" Sandy Loam 10 YR 3/2  
 4"-30" Sandy Loam 10 YR 5/6  
 30"-49" Loamy Sand 2.5Y 5/4  
 SHWT @30", No Water, No Ledge

SOIL TEST 22-3  
 0-5" Sandy Loam 10 YR 3/2  
 5"-31" Sandy Loam 10 YR 4/6  
 31"-52" Loamy Sand 2.5Y 5/4  
 SHWT @31", No Water, Large Boulder

SOIL TEST 22-4  
 0-6" Sandy Loam 10 YR 3/2  
 6"-35" Loamy Sand 10 YR 5/6  
 35"-60" Loamy Sand 2.5Y 5/4  
 SHWT @35", No Water, No Ledge

SOIL TEST 22-5  
 0-8" Sandy Loam 10 YR 3/2  
 8"-24" Sandy Loam 10 YR 5/6  
 24"-44" Loamy Sand 2.5Y 5/4  
 44"-55" Loamy Sand 2.5Y 5/4  
 SHWT @44", No Water, No Ledge



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# GRADING/ DRAINAGE PLAN

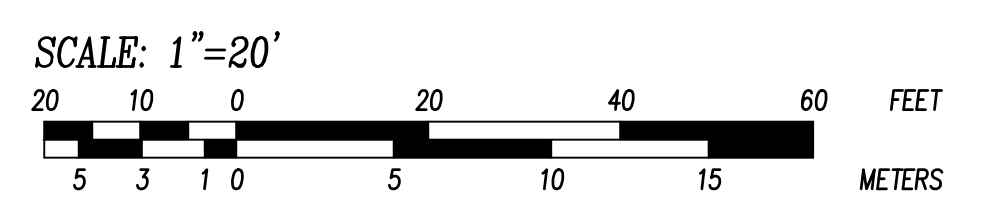
## Ray Farm Condominium

Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:  
**Ray Farm, LLC**  
 158 Shattuck Way  
 Newington, NH 03801

REVISION BLOCK				
NO.	DATE	DESC	BY	
1	4.26-22	REVISE WET IMPACTS	DH	

PROJ. MGR.: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D GR.DWG  
 FBK:  
 JOB #: 16042 D



TOWN OF EXETER PLANNING BOARD

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Sheet Title:

# UTILITY PLAN

Project Title:

## Ray Farm Condominium

Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:

Ray Farm, LLC  
 158 Shattuck Way  
 Newington, NH 03801

### REVISION BLOCK

NO.	DATE	DESC	BY
1	5.10.22	TRC COMMENTS	DH

PROJ. MGR.: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D UT.DWG  
 FBK:  
 JOB #: 16042 D

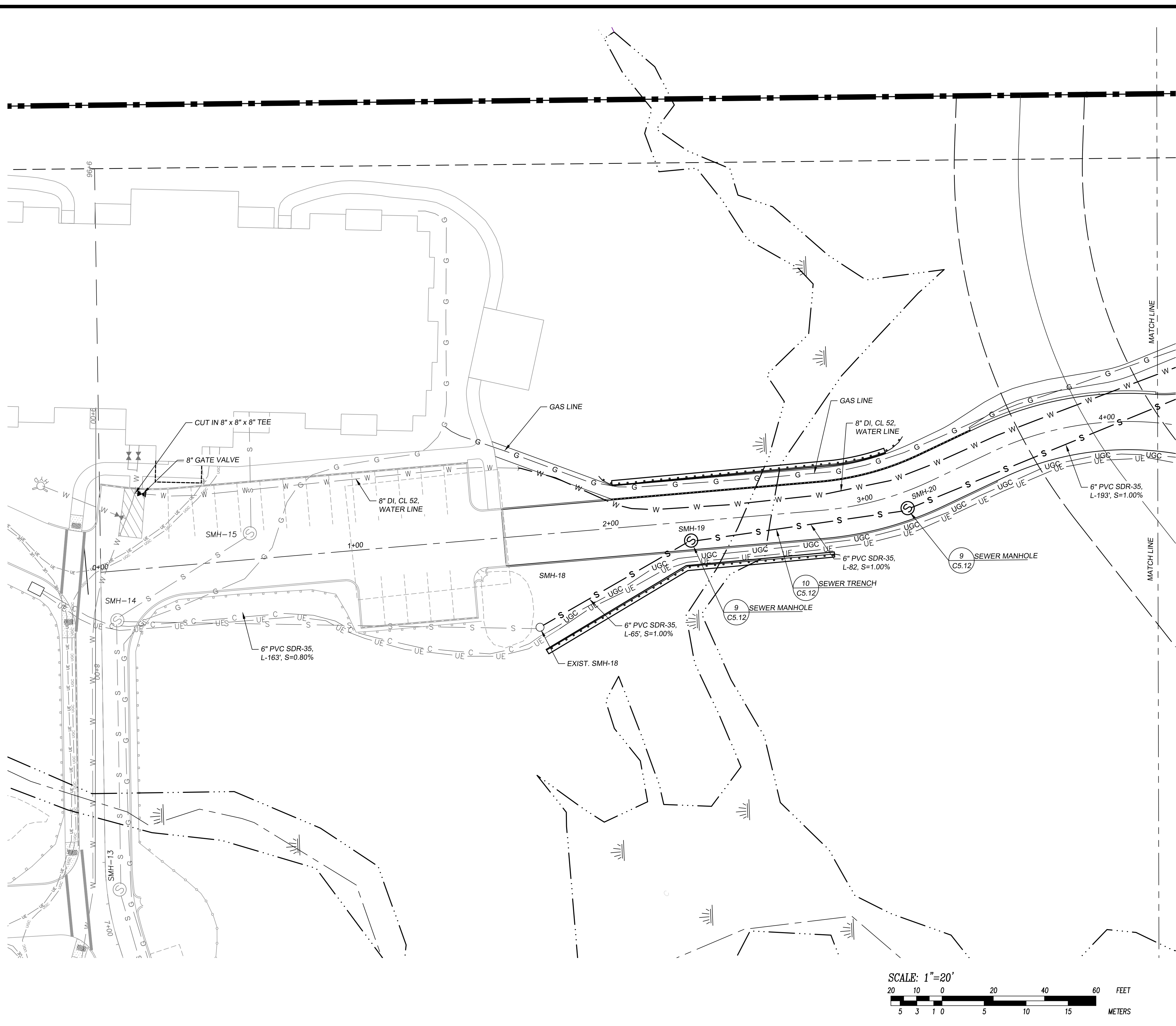
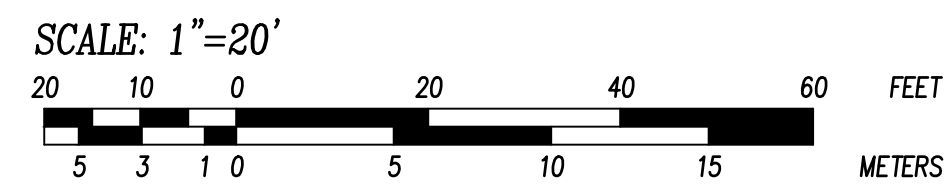
SHEET C1.31

SEWER STRUCTURES	
SMH-14 EXISTING 6" INV. IN 110.60 (EX) 6" INV. OUT 110.50 (EX)	SMH-15 EXISTING 6" INV. IN 111.28 (EX) 6" INV. OUT 111.20 (EX)
SMH-18 EXISTING 6" INV. IN 111.97 (PROP) INV. OUT 111.87 (EX)	SMH-19 R-118.27 6" INV. IN 112.72 6" INV. OUT 112.62
SMH-20 R-119.10 6" INV. IN 113.64 6" INV. OUT 113.54	SMH-21 R-123.00 6" INV. IN 115.67 6" INV. OUT 115.57

**NOTES:**  
 1. REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.

TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_



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Sheet Title:

# UTILITY PLAN

Project Title:

## Ray Farm Condominium

Ray Farmstead Road  
Exeter, NH 03833  
Rockingham County

Applicant/Owner:

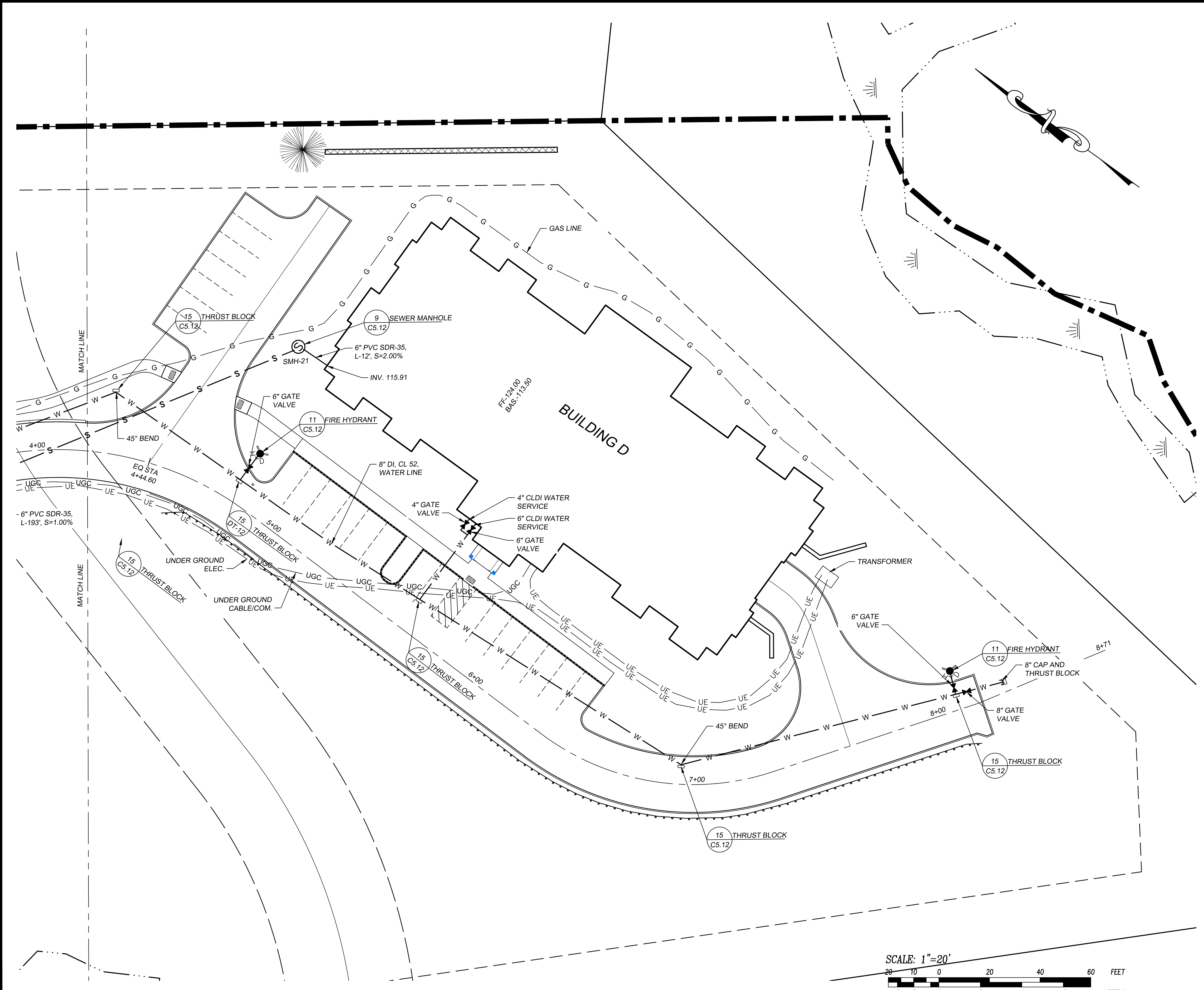
Ray Farm, LLC  
158 Shattuck Way  
Newington, NH 03801

### REVISION BLOCK

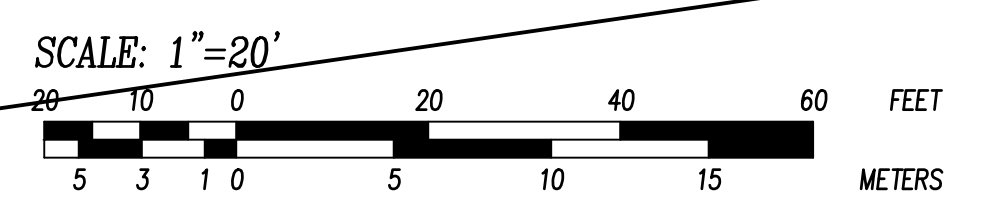
NO.	DATE	DESC	BY
1	5.10.22	TRC COMMENTS	DH

**SEWER STRUCTURES**

SMH-20 R-119.10	SMH-21 R-123.00
6" INV. IN 113.64	6" INV. IN 115.67
6" INV. OUT 113.54	6" INV. OUT 115.57



**NOTES:**  
1. REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.



TOWN OF EXETER PLANNING BOARD

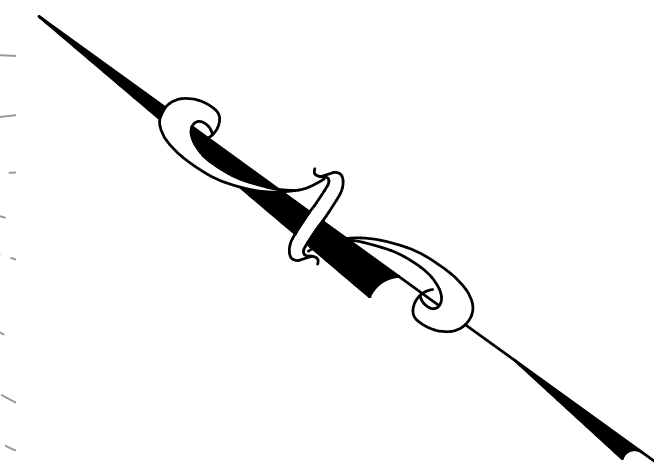
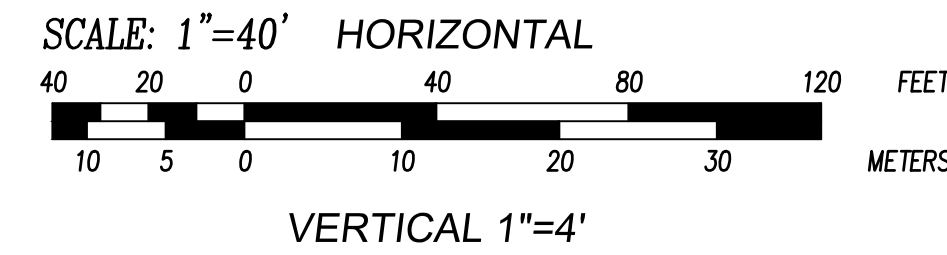
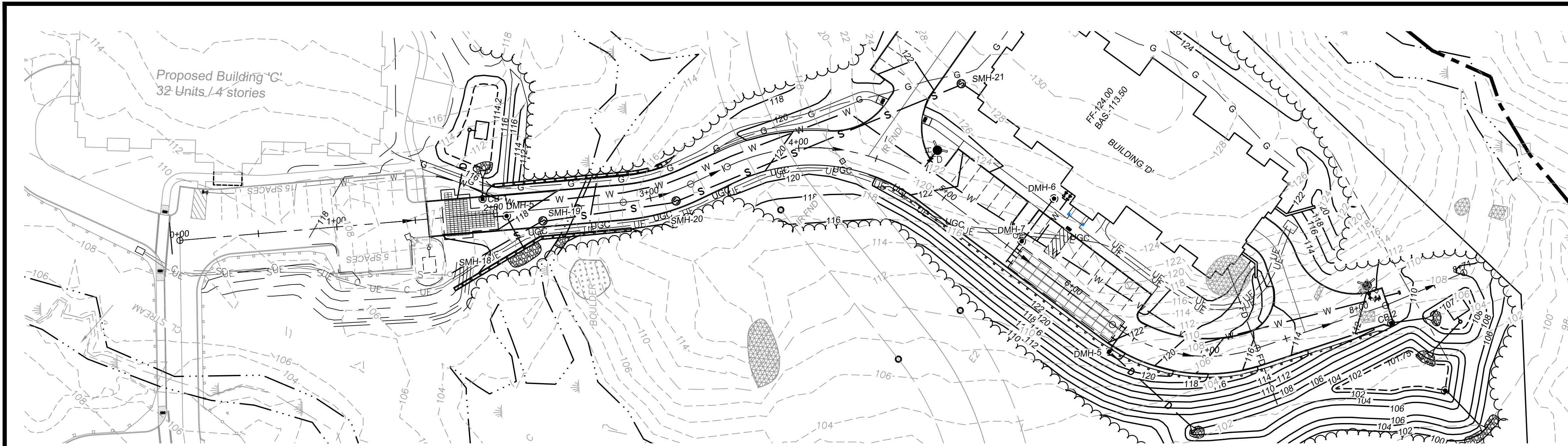
CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

PROJ. MGR: D. HAMEL  
FIELD: J. SALVAGGIO / R. SMITH  
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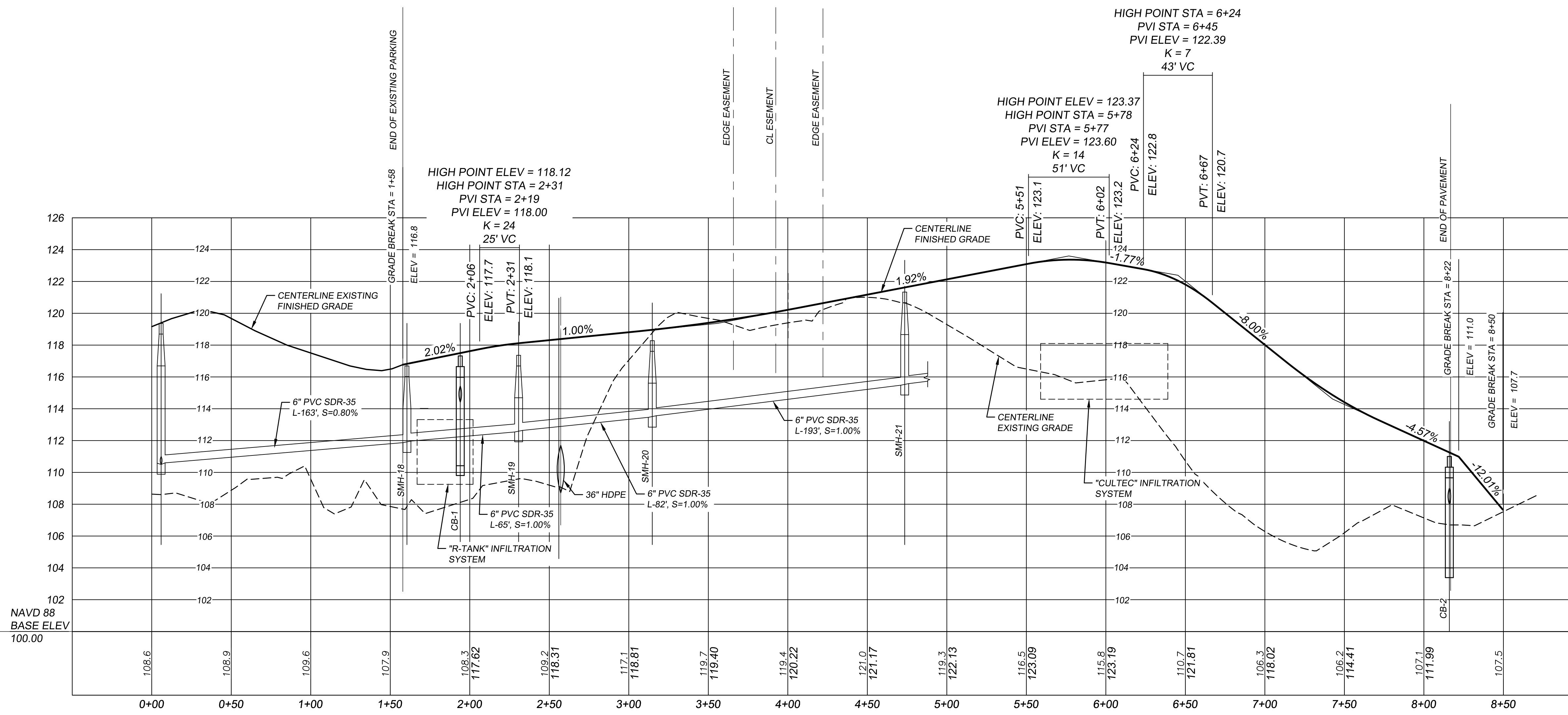
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Sheet Title:  
**PLAN  
 PROFILE**

Project Title:  
**Ray Farm  
 Condominium**  
 Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:  
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 CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

PROJ. MGR.: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D.PR.DWG  
 FBK:  
 JOB #: 16042 D





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Sheet Title:

# EROSION AND SEDIMENT CONTROL PLAN

Project Title:

## Ray Farm Condominium

Ray Farmstead Road  
Exeter, NH 03833  
Rockingham County

Applicant/Owner:

Ray Farm, LLC  
158 Shattuck Way  
Newington, NH 03801

REVISION BLOCK			
NO.	DATE	DESC	BY
1	5.10.22	TRC COMMENTS	DH

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### Construction Notes

- PRIOR TO ANY EXCAVATION, DIG-SAFE AND EXETER DPW (603-773-6157) SHALL BE NOTIFIED TO LOCATE ALL PERTINENT UTILITIES INCLUDING WATER, SEWER, AND DRAINAGE.
- THIS PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER Agr 3800 RELATIVE TO INVASIVE SPECIES.
- ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY RAINFALL OF ONE HALF INCH OR MORE.
- DO NOT CLEAR AND STRIP THE ENTIRE SITE AT ONE TIME. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION. IN NO CASE SHALL MORE THAN 3 ACRES BE DISTURBED AT ONE TIME. STABILIZE THE AREA BEFORE MOVING ON TO THE NEXT AREA. DISTURBED AREAS REMAINING OPEN FOR MORE THAN 30 DAYS, SHALL BE STABILIZED.
- WOODY MATERIAL REMOVED DURING THE CLEARING PROCESS MAY BE GROUND UP AND USED AS MULCH FOR EROSION CONTROL TO STABILIZE APPROPRIATE AREAS.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
  - BASE COURSE GRAVEL HAS BEEN INSTALLED IN AREAS TO BE PAVED
  - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
  - A MINIMUM OF 3 INCH OF NON EROSIIVE MATERIAL SUCH AS RIP-RAP HAS BEEN INSTALLED
  - OR EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED
- ALL AREAS SHALL BE STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE

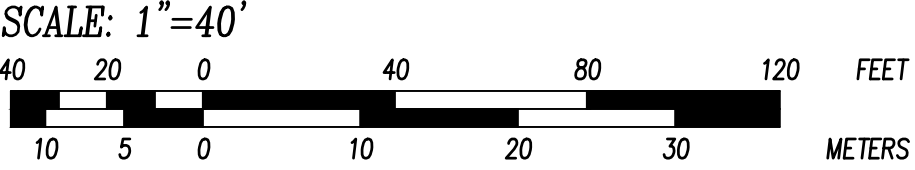
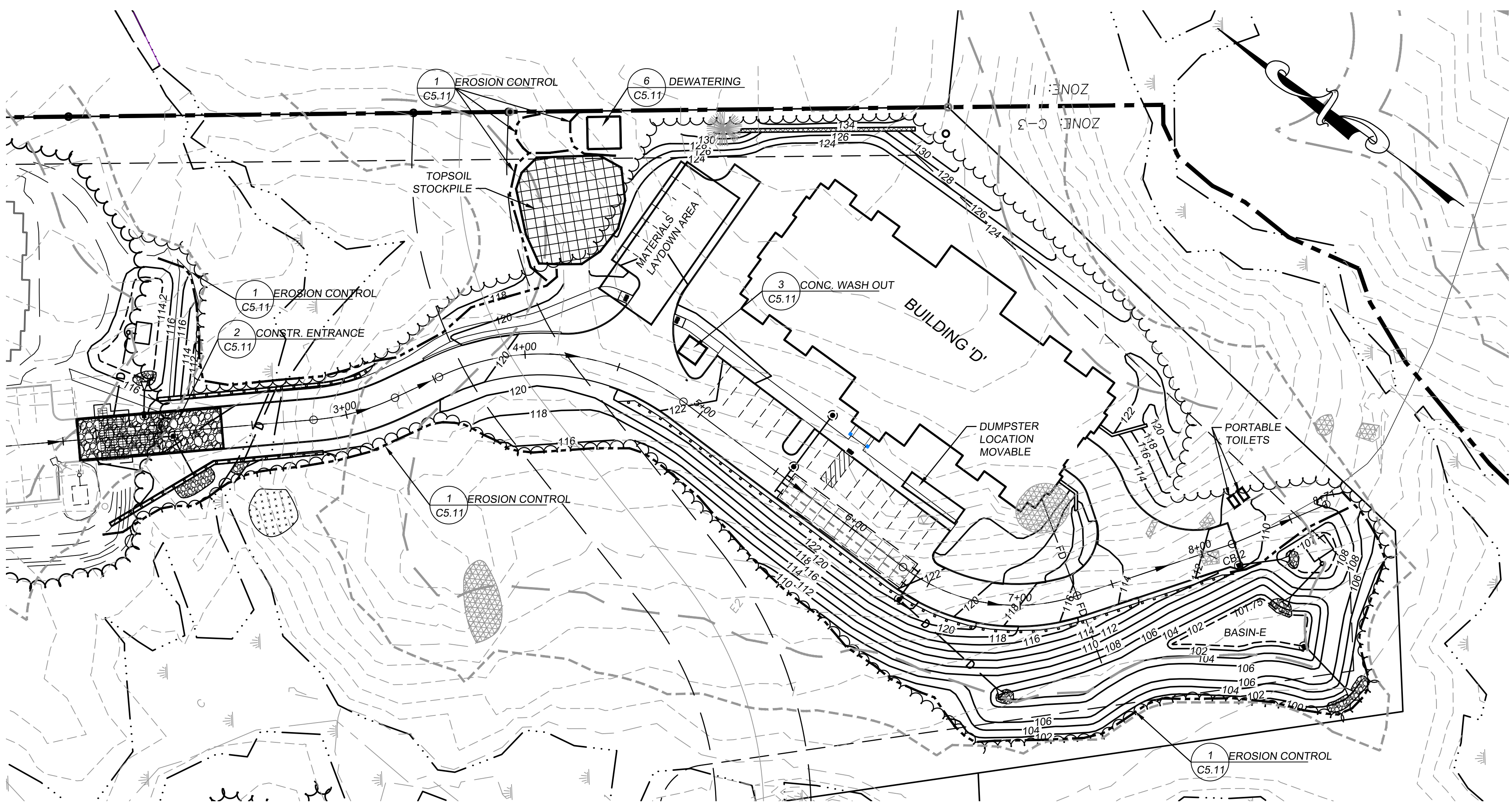
SEEDING SPECIFICATIONS ARE AS FOLLOWS:

TEMPORARY SEEDING FOR EROSION CONTROL DURING CONSTRUCTION:			
SPECIES	POUNDS/1000 SF	REMARKS	
WINTER RYE	2.5	BEST FOR FALL SEEDING. AUG. 15 TO SEPT. 15.	
OATS	2.0	BEST FOR SPRING SEEDING. NO LATER THAN	
ANNUAL RYEGRASS	1.0	SEED EARLY SPRING. AUG. 15 TO SEPT. 15.	
PERENIAL RYEGRASS	0.7	SEED BETWEEN APRIL 1 TO AUG. 15. SEED TO A	
DEPTH OF 0.5"			
PERMANENT VEGETATION SEED MIXTURE:			
SPECIES	POUNDS/1000 SF		
TALL FESCUE	0.45		
CREEPING RED FESCUE	0.45		
BIRDSFOOT TREFOL	0.20		
TOTAL	1.10		

- ALL RE-VEGETATED AREAS THAT DO NOT EXHIBIT 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS (ON 3:1 SLOPES OR STEEPER). SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, OR SECURING WITH ANCHORED NETTING. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER SNOW OR FROZEN GROUND AND SHALL BE COMPLETED PRIOR TO AN ACCUMULATION OF SNOW AND/OR FROST.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15, INCOMPLETE ROADS 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.
- CONCRETE WASH OUT SHALL BE CONDUCTED IN THE AREAS SHOWN ON SHEETS C1.51 AND C1.52. AND USE THE CONCRETE WASH OUT DETAIL SHOWN ON SHEET C5.11.
- NO STUMPS OR DEBRIS SHALL BE BURIED ONSITE. ALL STUMPS AND CONSTRUCTION DEBRIS SHALL BE STORED ONSITE UNTIL THEY CAN BE DISPOSED OFFSITE IN A FACILITY CAPABLE OF HANDLING SUCH MATERIALS.
- TEMPORARY PORTABLE TOILETS SHALL BE PROVIDED AND PROPERLY MAINTAINED ONSITE FOR THE DURATION OF THE PROJECT.
- VEHICLE MAINTENANCE SHALL BE PERFORMED OFF SITE. ANY VEHICLE LEAKING OIL OR GREASE SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE. FUEL AND OILS SHALL BE STORED IN AN APPROVED LOCATION AND COMPLY WITH LOCAL, STATE, AND FEDERAL REGULATIONS. IN NO CASE SHALL THEY BE STORED WITHIN 100' OF WETLAND AREAS.

**NOTES:**  
 1. REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.

TOWN OF EXETER PLANNING BOARD  
 CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_



### Construction Sequence

- PRIOR TO CLEARING, OR EARTH MOVING ACTIVITIES, INSTALL TEMPORARY EROSION CONTROLS AS SHOWN. SEE SHEET C5.11 FOR EROSION CONTROL DETAILS AND TECHNIQUES.
- INSTALL CONSTRUCTION ENTRANCE.
- STRIP TOPSOIL AND STOCKPILE IN DESIGNATED AREA. INSTALL TEMPORARY EROSION CONTROLS AROUND STOCKPILE. BOULDERS AND LARGE ROCKS GREATER THAN TWO FEET IN DIAMETER SHALL BE STOCKPILED SEPARATELY IN A DESIGNATED AREA.
- CONSTRUCT TEMPORARY SEDIMENT BASINS AND OUTLET SWALES IN SAME LOCATION AS THE FINAL BASINS AS SHOWN ON THE PLANS. ADDITIONAL TEMPORARY ROWS OF COMPOST SOCK MAY BE REQUIRED IN THE SWALES. INSTALL OUTLET PROTECTION RIP-RAP AS SHOWN PRIOR TO DIRECTING ANY STORMWATER TO THE BASINS. THE FORE-BAYS WILL SERVE AS CONSTRUCTION PERIOD SEDIMENT SETTLING AREAS BUT MUST BE CLEANED AFTER PARKING/LOADING AREAS ARE PAVED, BUILDINGS CONSTRUCTED, AND UTILITIES INSTALLED.
- CREATE SWALES TO DIRECT STORMWATER FROM THE DEVELOPED PORTION OF THE SITE TO THE TEMPORARY BASINS. IMMEDIATELY STABILIZE THE SLOPES OF THE BASINS BY SEEDING AND MULCHING WITHIN 72 HOURS OF ACHIEVING FINISHED GRADES. ALTERNATE METHODS OF SLOPE STABILIZATION MAY BE REQUIRED IF WORK IS PERFORMED OUTSIDE THE GROWING SEASON.
- PREPARE BUILDING SITE TO BE CONSTRUCTED. INSTALL THE BUILDING FOUNDATION AND IMMEDIATELY BRING THE FILL UP TO DESIGN GRADES. CONSTRUCT THE SLOPES IN THE AREAS SHOWN ON THE GRADING PLANS. STABILIZE THE SLOPE WITH SELECTED PLANT MATERIALS AND SEED IMMEDIATELY.
- ROUGH GRADE PARKING AREAS TO SUBBASE ELEVATIONS. FILL WILL BE REQUIRED TO BRING PARKING AREAS TO THE DESIGN GRADES. IMPORTED FILL SHALL BE COMPACTED TO A MINIMUM OF 95% DENSITY. WATER MAY BE REQUIRED TO BRING THE FILL TO THE APPROPRIATE MOISTURE CONTENT FOR PROPER COMPACTION. DO NOT OVER WATER AND CREATE RUNOFF. DO NOT CONTINUE THE FILLING OPERATION DURING INTENSE RAINFALL OR IF RAINFALL IS ANTICIPATED. INSTALL ADDITIONAL EROSION CONTROL AT THE BASE OF SLOPES WHEN RAIN IS ANTICIPATED, AND LEAVE IT IN PLACE UNTIL SLOPES ARE STABILIZED OR ADDITIONAL FILL IS INSTALLED.
- INSTALL PERMANENT STORMWATER TREATMENT DEVICES INCLUDING THE "FOCAL POINT" BIO-RETENTION SYSTEMS AS SHOWN ON THE PLANS. DO NOT ALLOW STORMWATER FLOW TO THE DEVICES FROM UNSTABILIZED AREAS. IF STORMWATER FLOWS ARE ANTICIPATED TO REACH THE TREATMENT DEVICES PRIOR TO FINAL STABILIZATION, ENCASE THE DEVICES WITH FILTER FABRIC.
- INSTALL UNDERGROUND UTILITIES. BACKFILL AND COMPACT TRENCHES. IF DEWATERING IS REQUIRED TO INSTALL UTILITIES OR STRUCTURES, CONSTRUCT THE DEWATERING AREA AS PER THE DETAIL ON SHEET C 5.11 AND PLACE IN THE DESIGNATED AREA. ADDITIONAL ROWS OF COMPOST SOCK MAY BE REQUIRED AT THE DISCHARGE POINT IF THE WATER IS NOT CLEAR. INSTALL AND COMPACT PARKING AREA GRAVEL. INSTALL THE BINDER COURSE IN PARKING AREAS WITHIN 72 HOURS OF PLACING GRAVEL.
- INSTALL UTILITY CONNECTIONS. SPREAD TOPSOIL IN GRASS AND LANDSCAPED AREAS AND IMMEDIATELY SEED AND MULCH IF NEEDED. ADDITIONAL EROSION CONTROL MAY BE NEEDED TO CONTROL EROSION AND SILTS FROM ENTERING THE TEMPORARY SETTLEMENT BASIN.

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# DETAILS

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Exeter, NH 03833  
Rockingham County

Applicant/Owner:

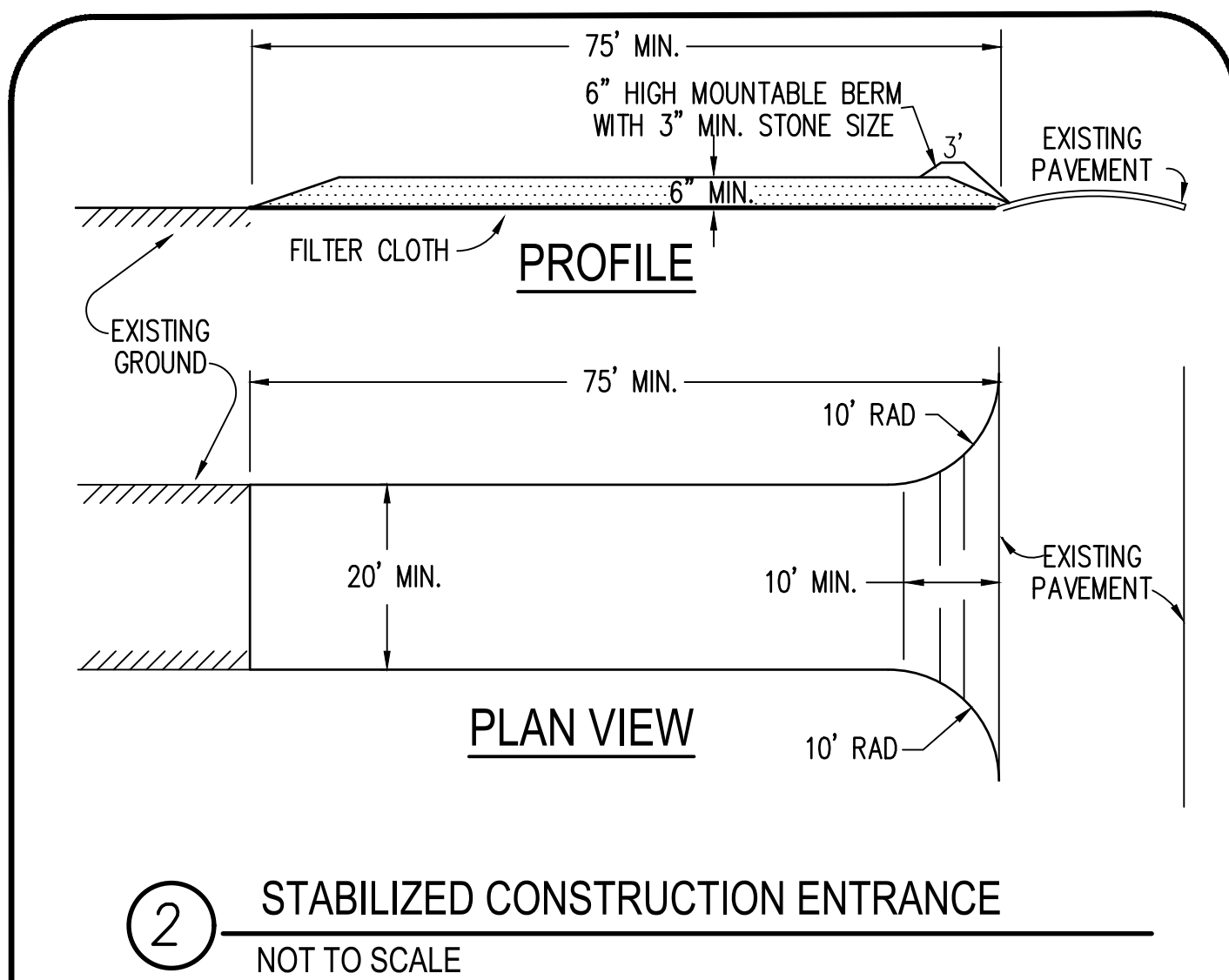
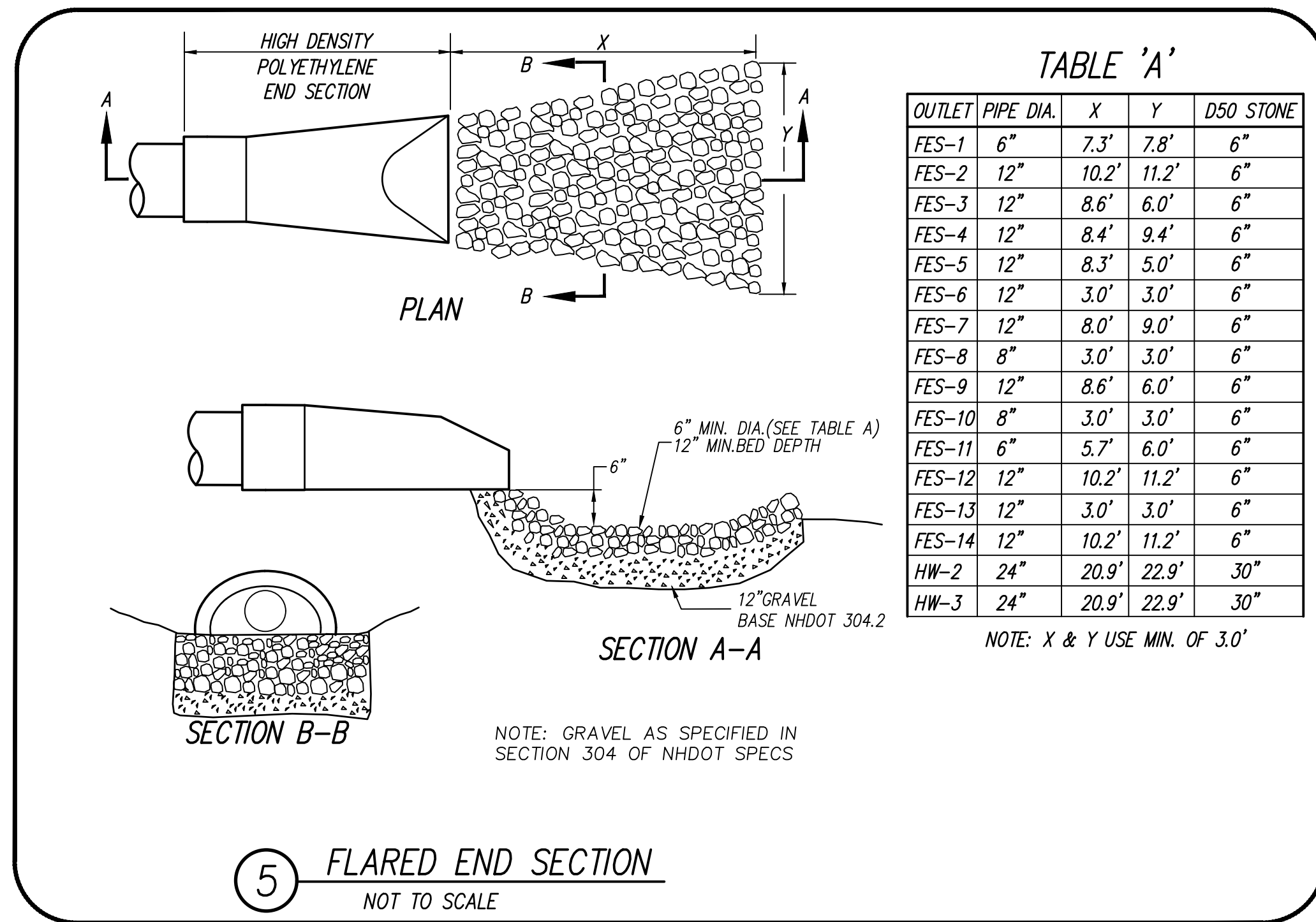
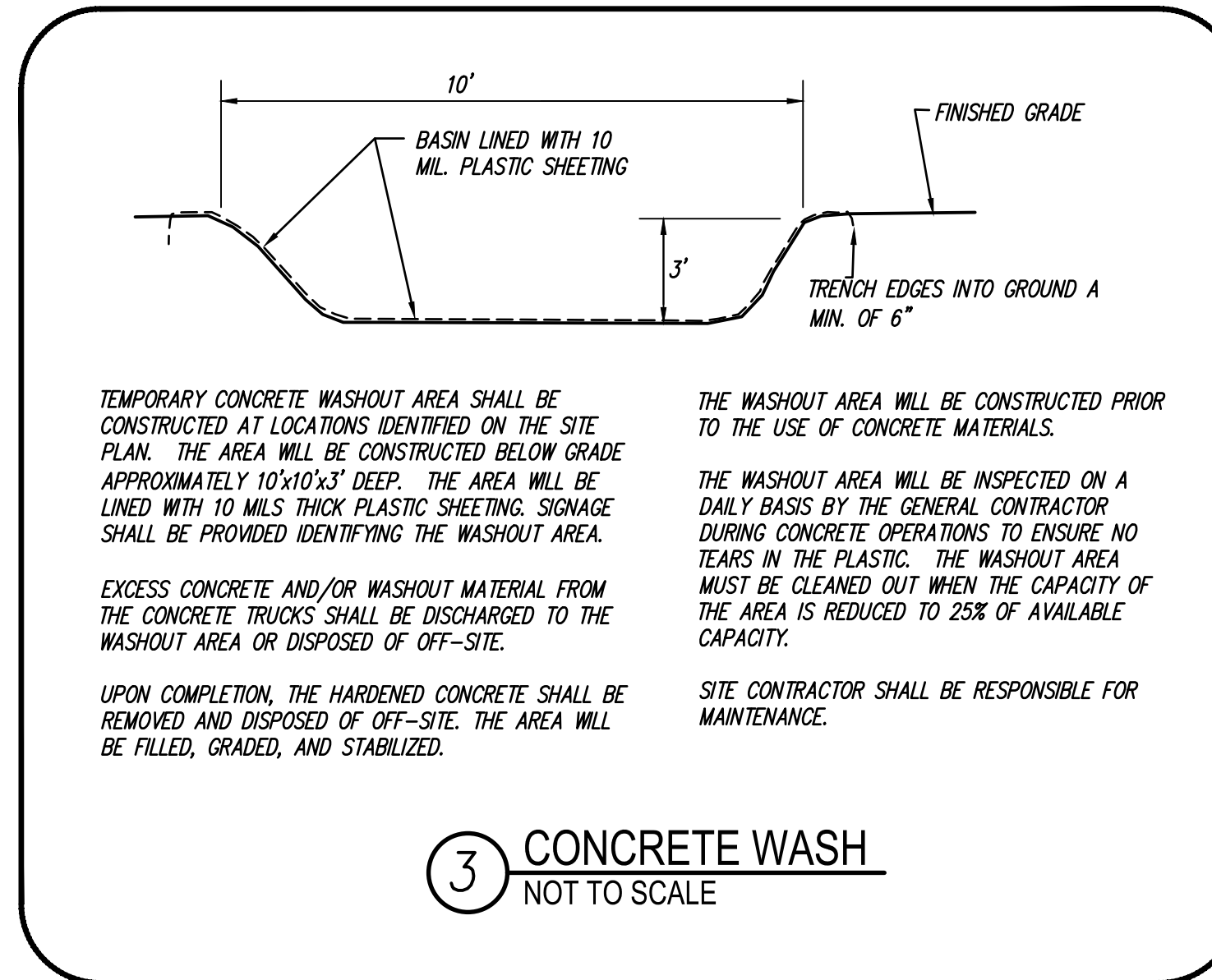
Ray Farm, LLC  
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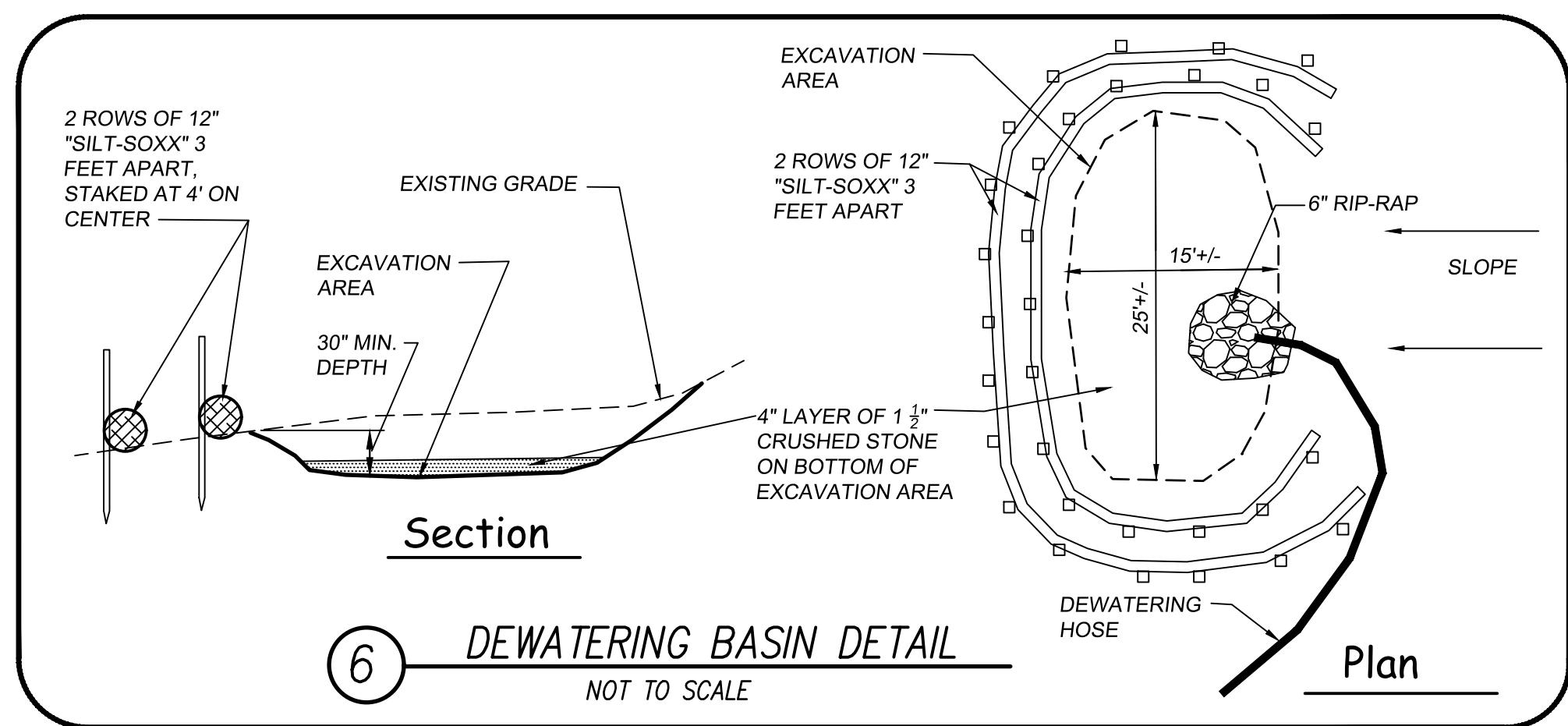
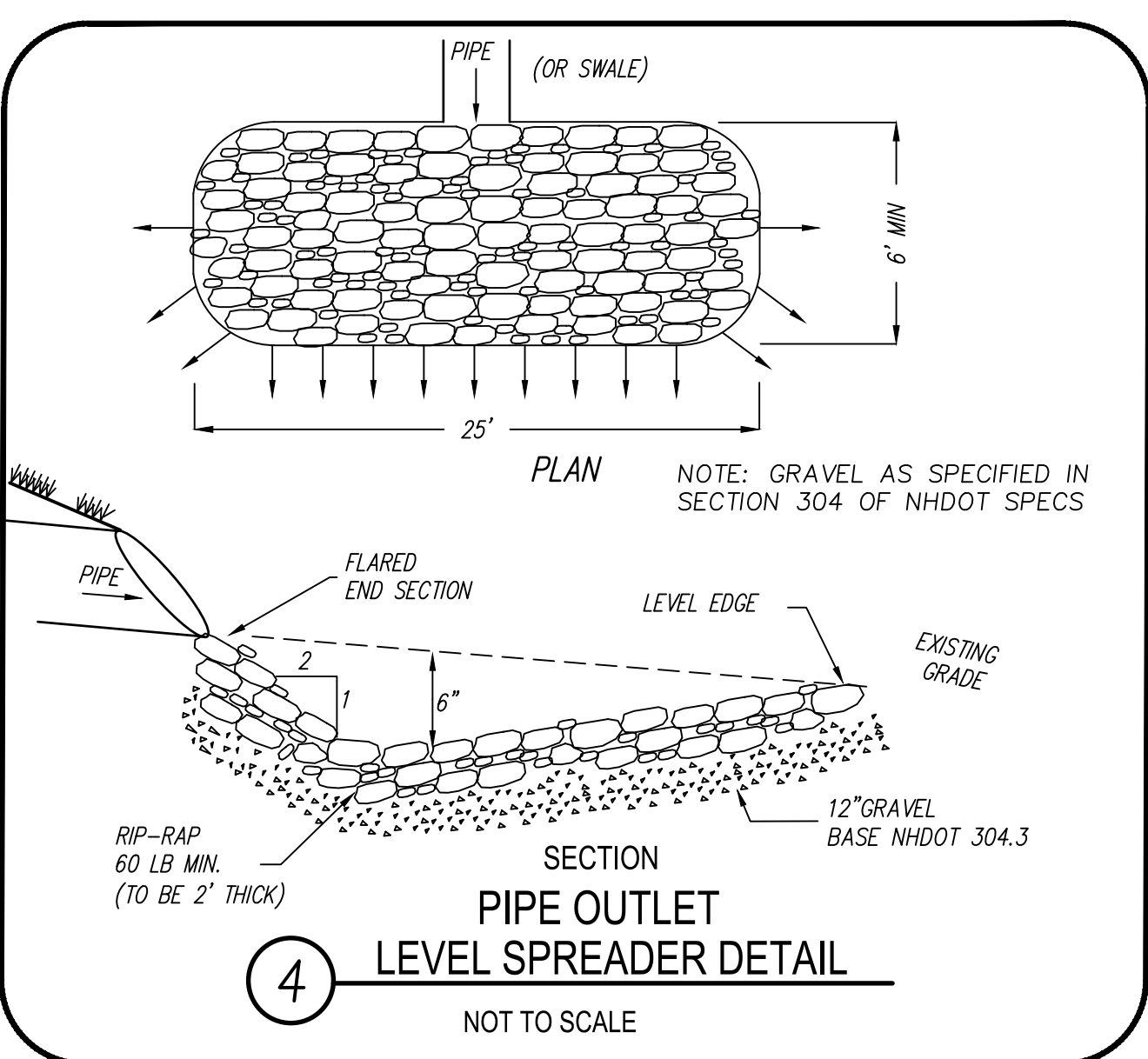
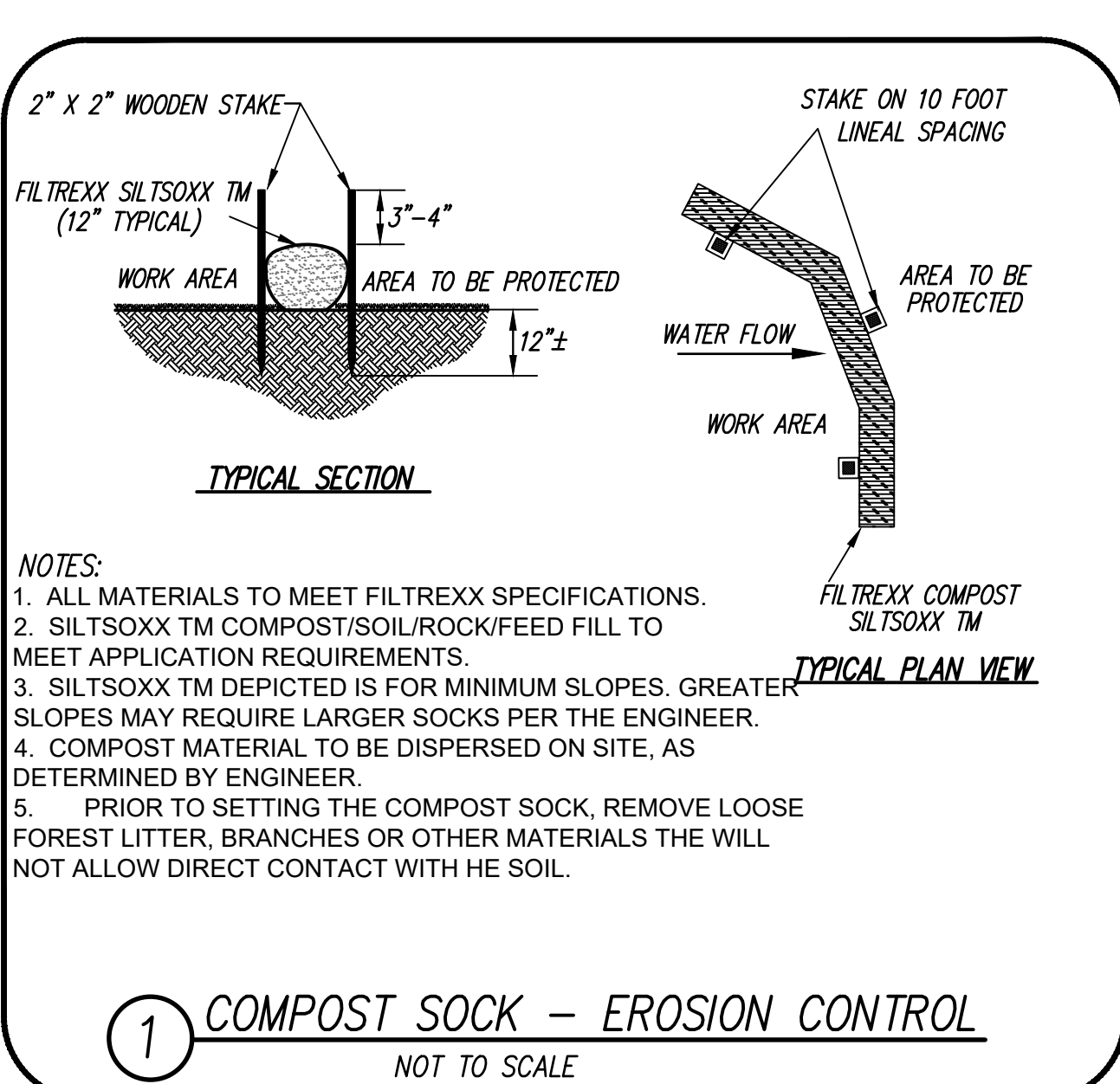
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SHEET C5.11



### Construction Specifications

- STONE SIZE - USE 3" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - AS REQUIRED, BUT NOT LESS THAN 75 FEET
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - TWENTY (20) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAINFALL EVENT.

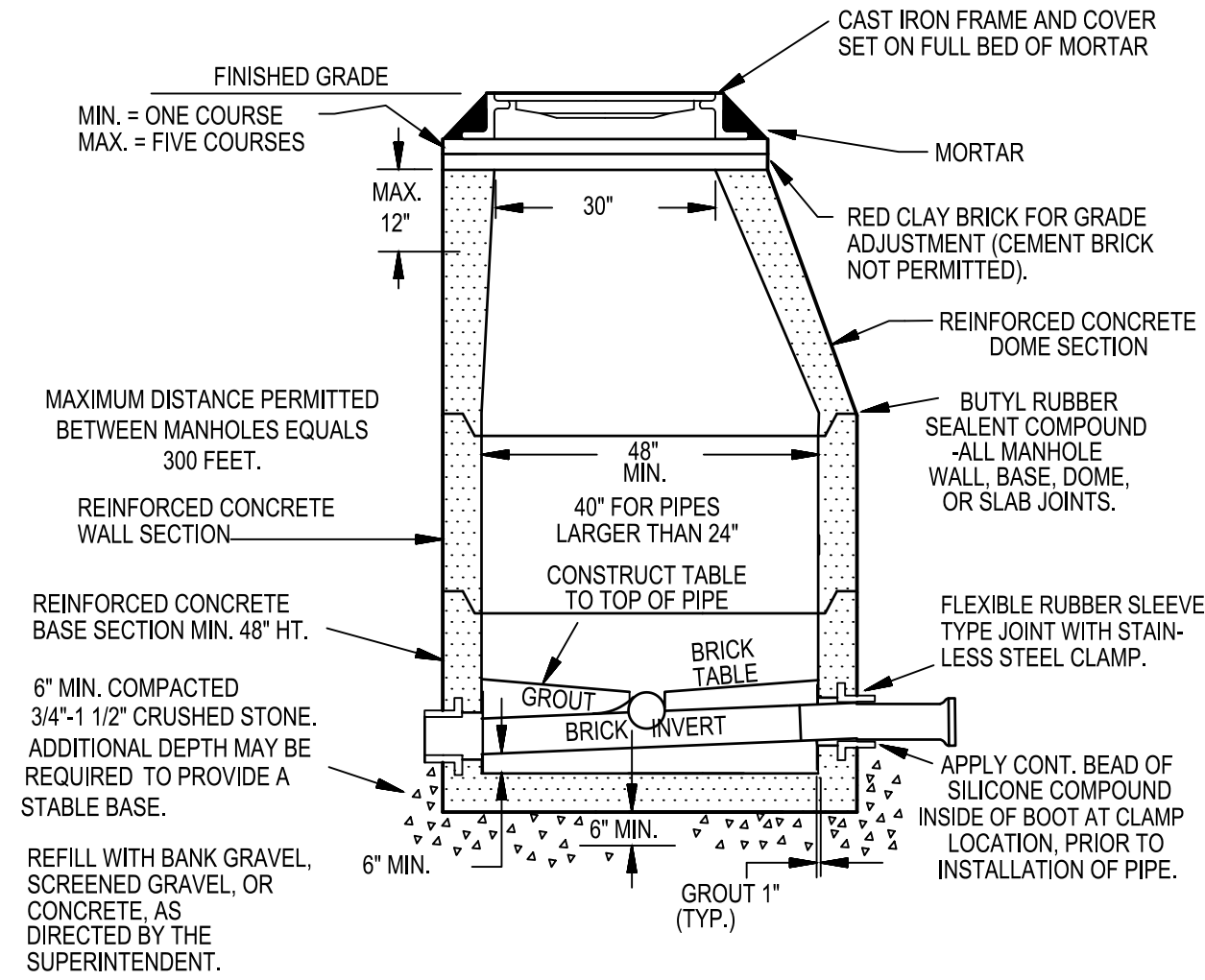
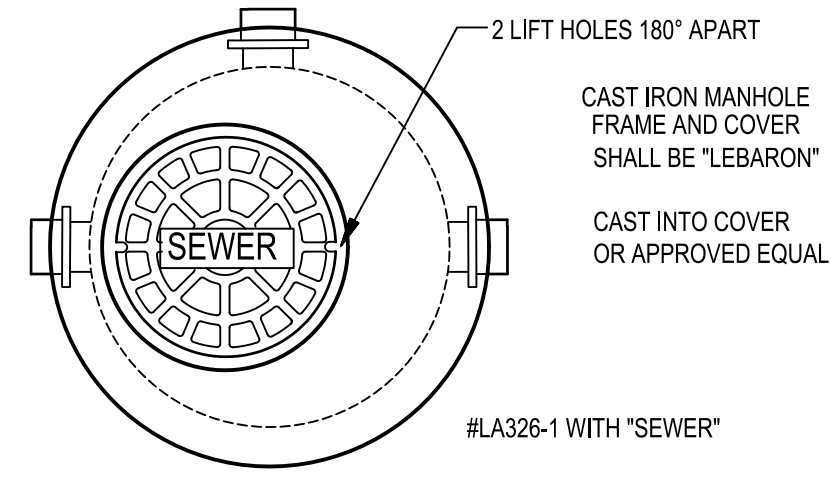


NOTES:  
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TOWN OF EXETER PLANNING BOARD

CHAIRMAN DATE

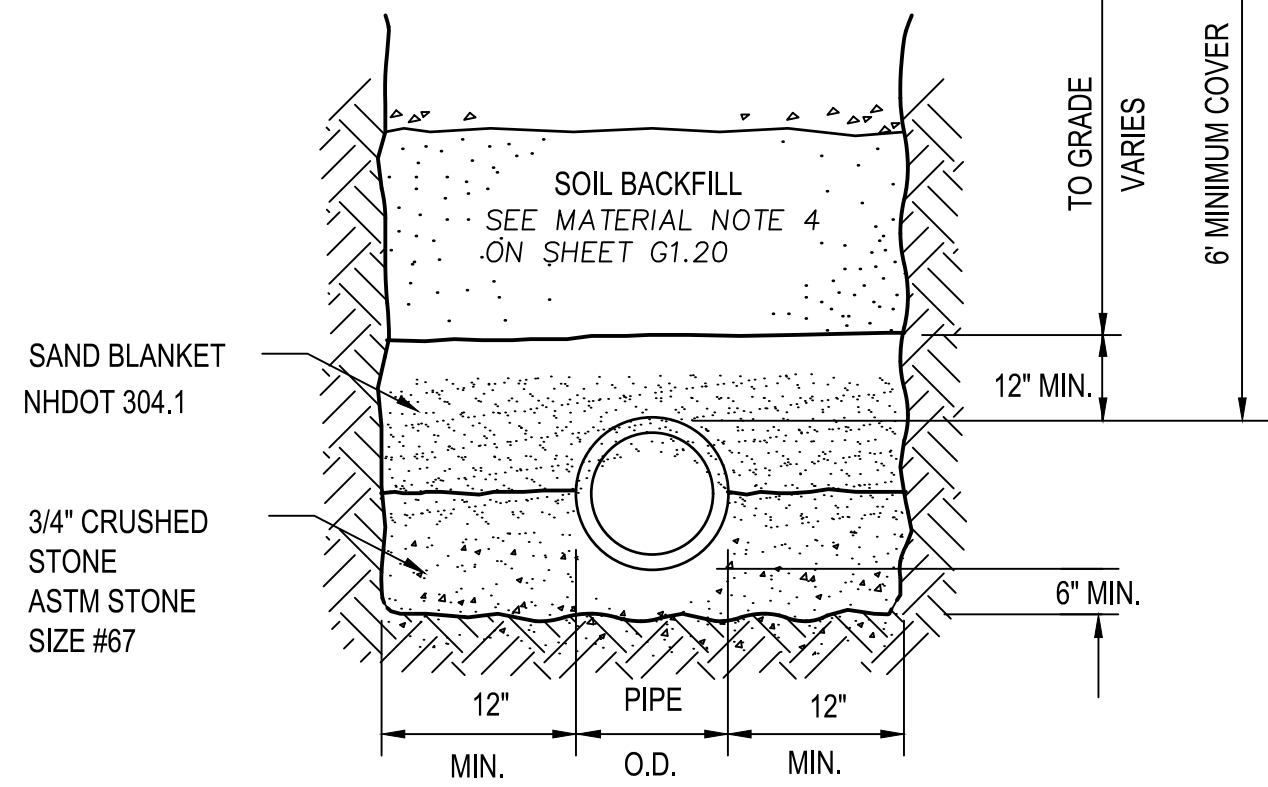
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**MANHOLE TESTING: VACUUM TEST MANHOLE FOR LEAKAGE**  
 THE INITIAL VACUUM GAUGE TEST PRESSURE SHALL BE 10 INCHES Hg. THE MINIMUM TEST HOLD FOR A 1 INCH DROP TO 9 INCHES Hg SHALL BE NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP, 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP, AND NOT LESS THAN 3 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP.

- NOTES:
- GRAVEL AS SPECIFIED IN SECTION 304 OF NHDOT SPECS
  - SEWER MANHOLE SHALL BE RATED FOR H-20 LOADING
  - BRICK INVERTS TO BE INSTALLED AFTER TESTING
  - NO STEPS IN MANHOLE
  - BRICKS FOR GRADE ADJUSTMENTS ARE A MAXIMUM OF 5 COURSES

**9 SEWER MANHOLE**  
NOT TO SCALE

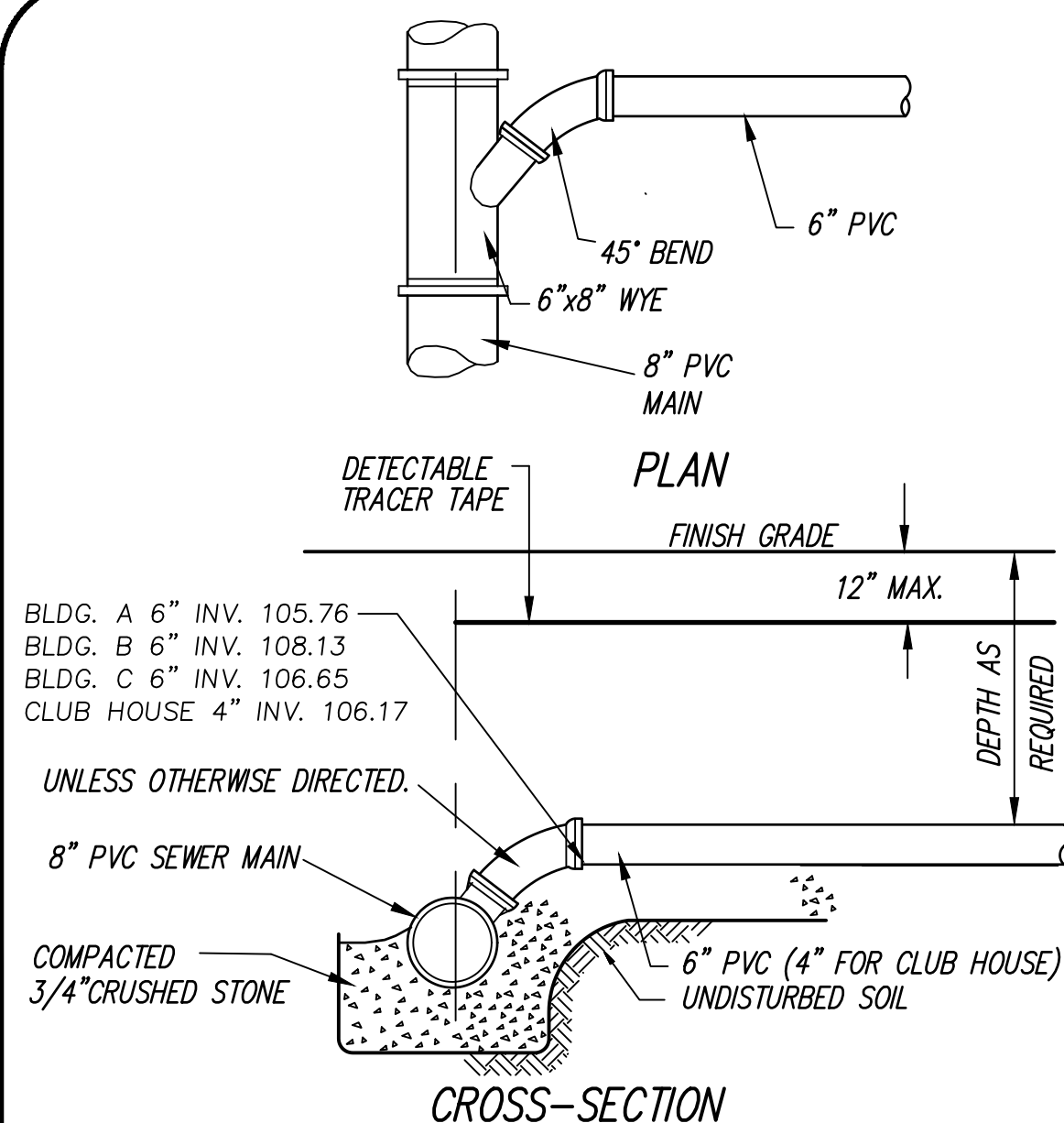


- NOTES:
- GRAVITY SEWER TO BE PVC SDR 35 CONFORMING TO ASTM D3034-04a
  - PLASTIC SEWER PIPE SHALL HAVE A PIPE STIFFNESS RATING OF AT LEAST 46 POUNDS PER SQUARE INCH AT 5% PIPE DIAMETER AS MEASURED WITH ASTM D2412-02 DURING MANUFACTURE.
  - JOINT SEALS OF PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D3212-96(a) AND BE PUSH-ON, BELL-AND-SPIGOT TYPE.
  - SAND BLANKET SHALL BE FREE OF ORGANIC MATERIALS, 100% PASSING 1/2" SIEVE, AND MAXIMUM 15% PASSING #200 SIEVE.
  - COMPACT BEDDING AND SAND BLANKET IN MAXIMUM OF 12" LIFTS.
  - COMPACT BACKFILL MATERIAL IN MAXIMUM OF 12" LIFTS.

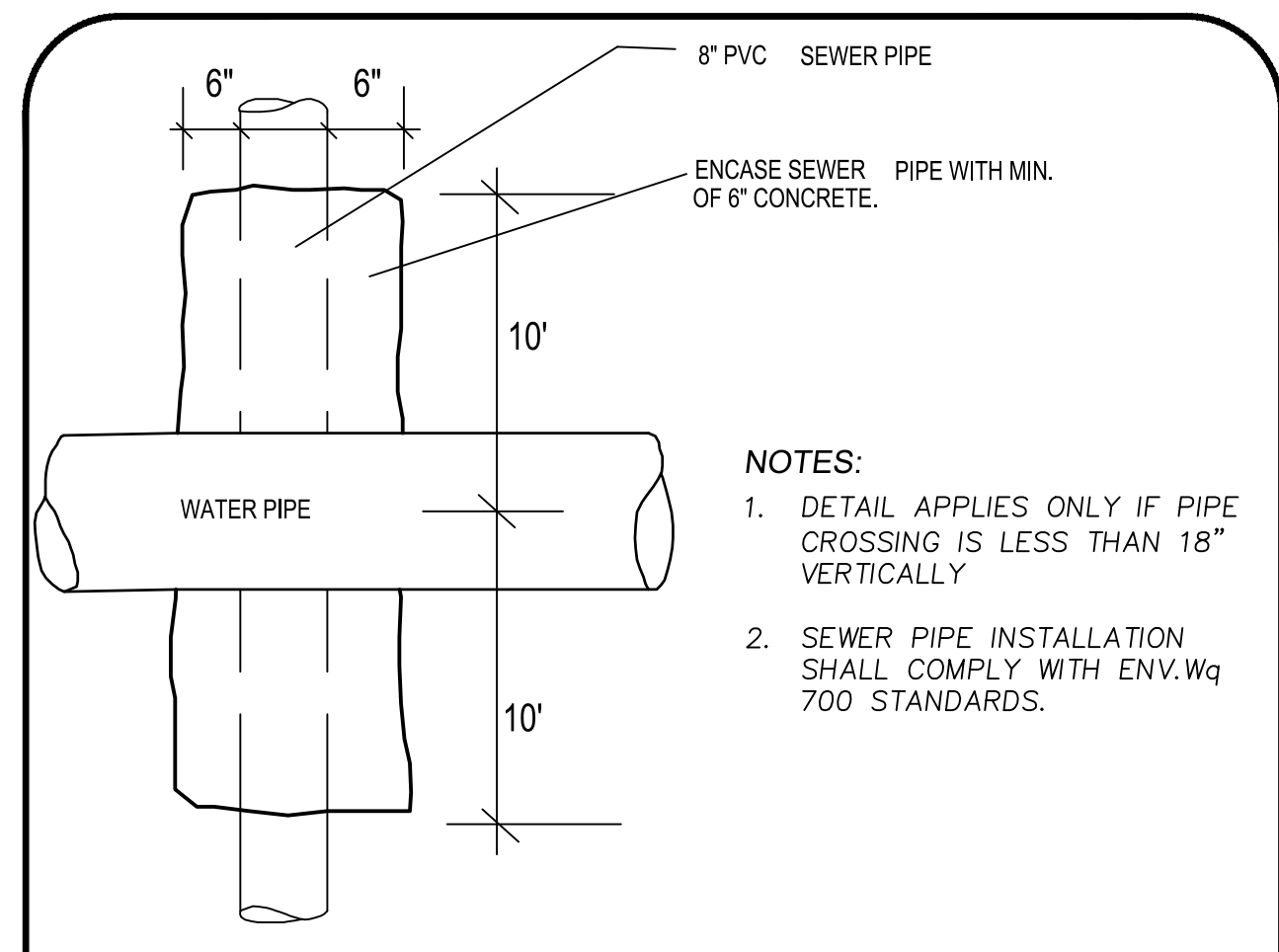
**GRAVITY SEWER PIPE TESTING**  
 LOW PRESSURE AIR TESTS SHALL BE USED FOR ALL NEW GRAVITY SEWERS CONFORMING TO ASTM F1417 "STANDARD TEST METHOD OF INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW-PRESSURE AIR" OR UNI-BELL PVC PIPE ASSOCIATION UNI-B-6, "LOW PRESSURE AIR TESTING OF INSTALLED SEWER PIPE (1998).

DEFLECTION TEST ALL PLASTIC SEWER PIPE NOT LESS THAN 30 DAYS NOR MORE THAN 90 DAYS FOLLOWING INSTALLATION. MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 5 1/2% OF AVERAGE INSIDE DIAMETER.

**10 SEWER TRENCH**  
NOT TO SCALE

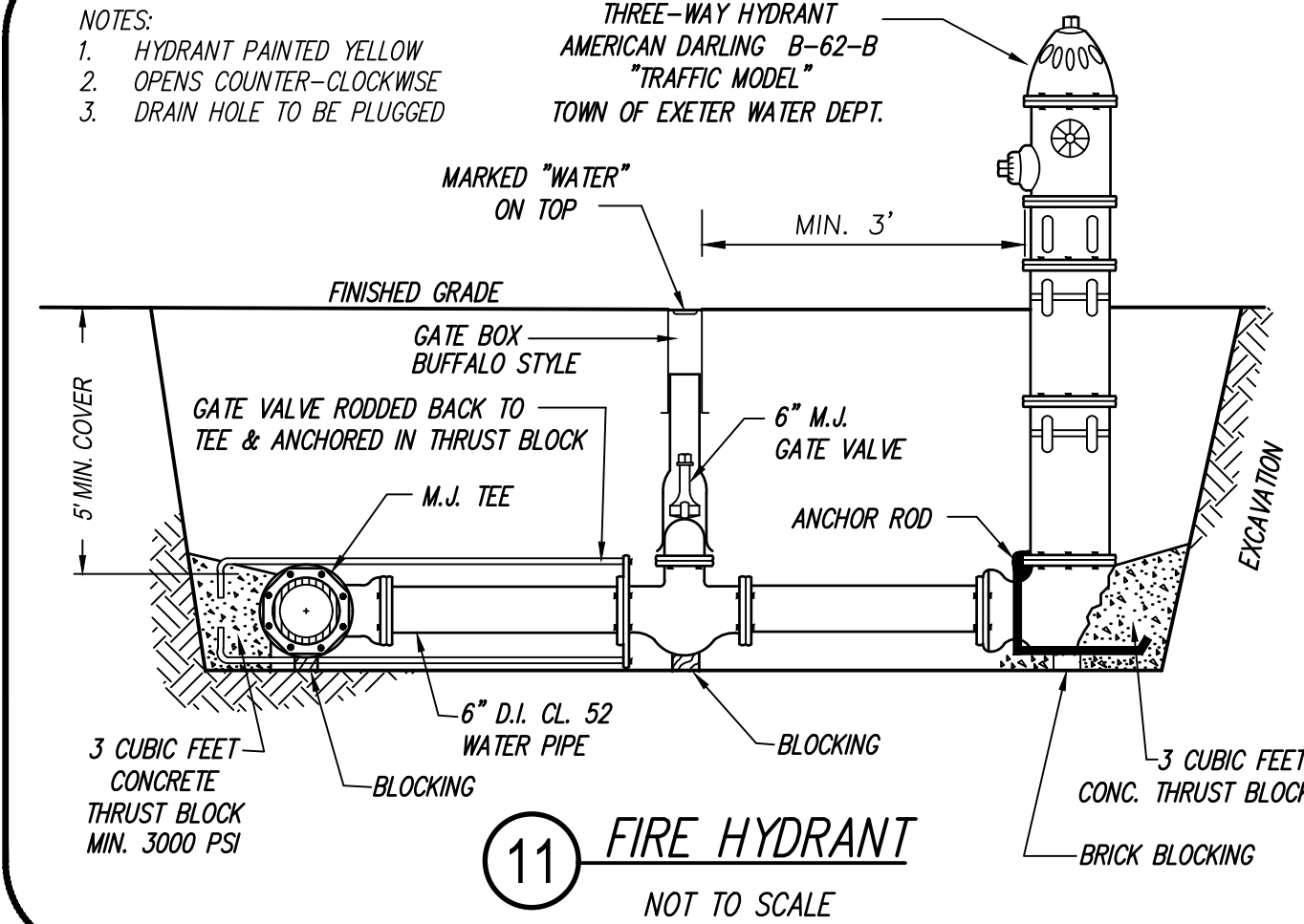


**13 BUILDING CONNECTION DETAIL**  
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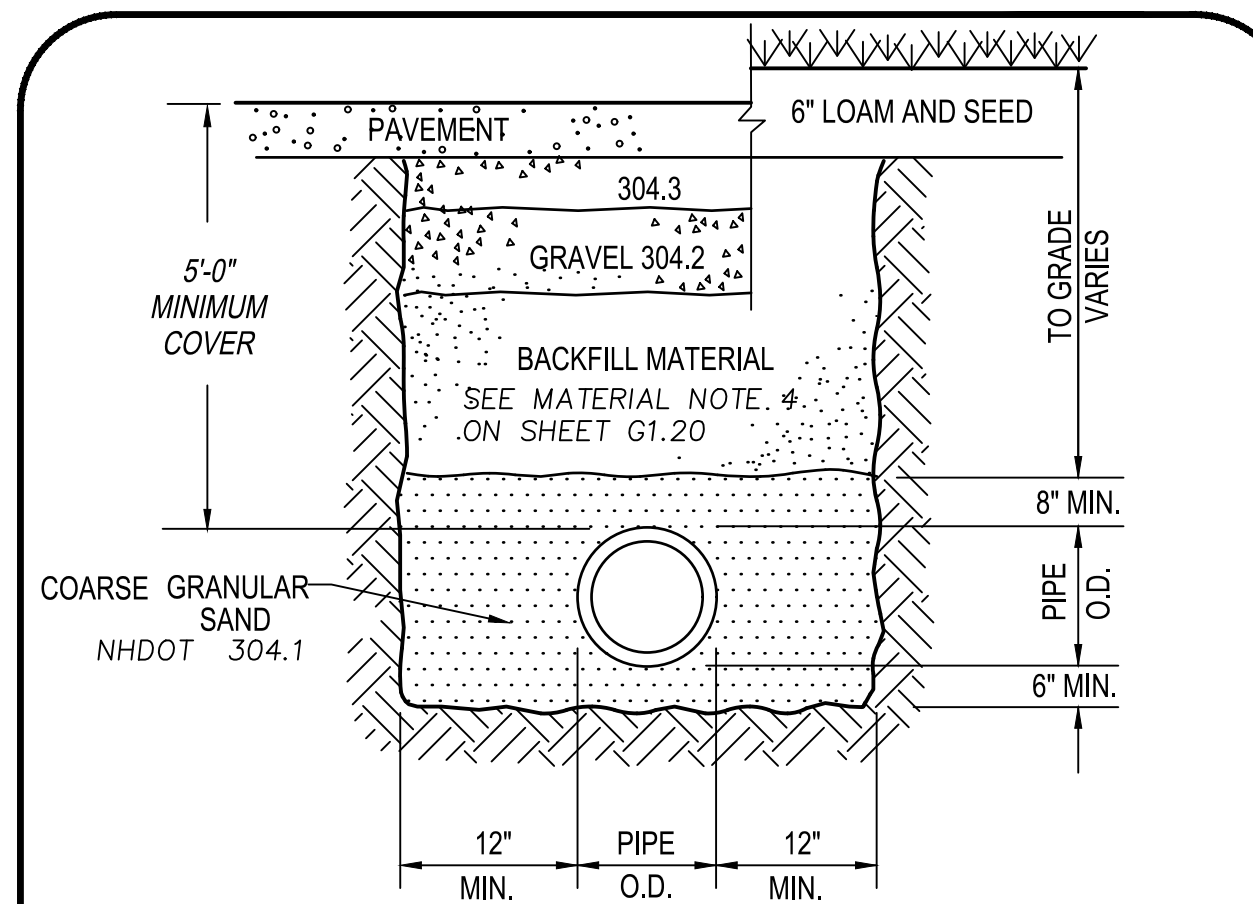


- NOTES:
- DETAIL APPLIES ONLY IF PIPE CROSSING IS LESS THAN 18" VERTICALLY
  - SEWER PIPE INSTALLATION SHALL COMPLY WITH ENV.Wq 700 STANDARDS.

**14 SEWER / WATER CROSSING**  
NOT TO SCALE

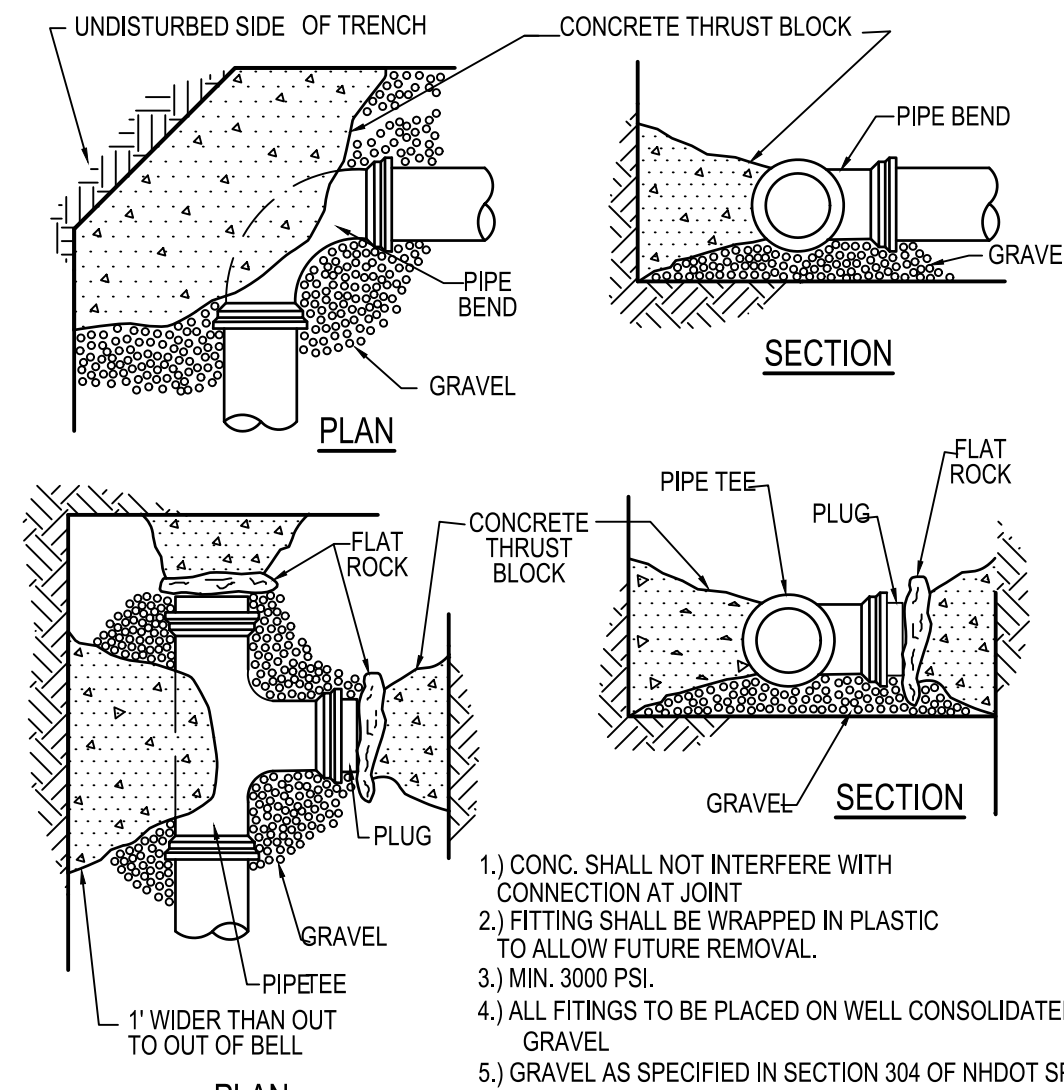


**11 FIRE HYDRANT**  
NOT TO SCALE



- NOTE:
- SEE SITE PLAN FOR PIPE SIZES AND SERVICE.
  - WATER PIPE TO BE DUCTILE IRON (D.I.) CLASS 52
  - GRAVEL AS SPECIFIED IN SECTION 304 OF NHDOT SPECS

**12 WATER TRENCH**  
NOT TO SCALE



**15 THRUST BLOCK PLACEMENT ON BENDS, TEES AND PLUGS**  
NOT TO SCALE

- NOTES:
- REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.

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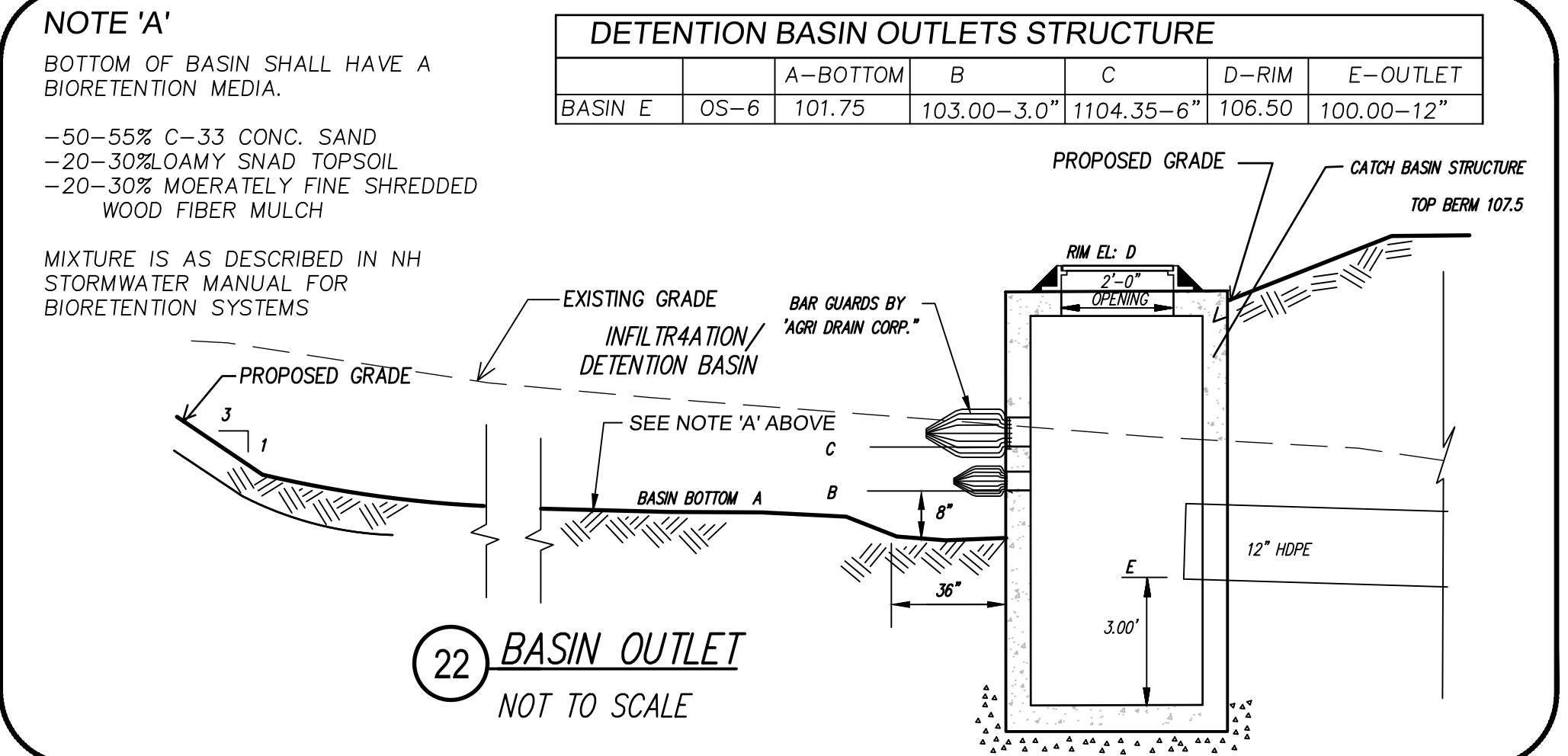
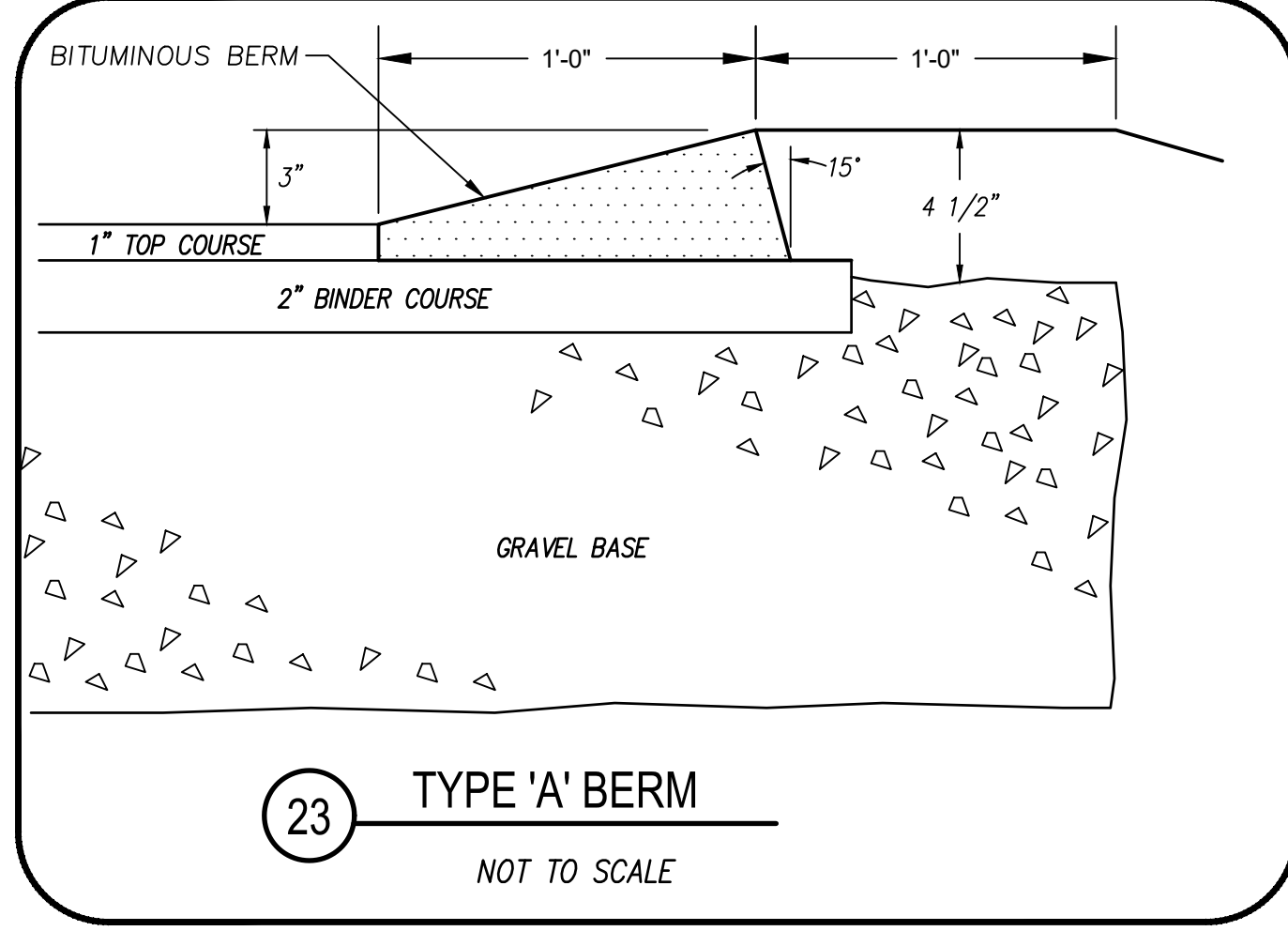
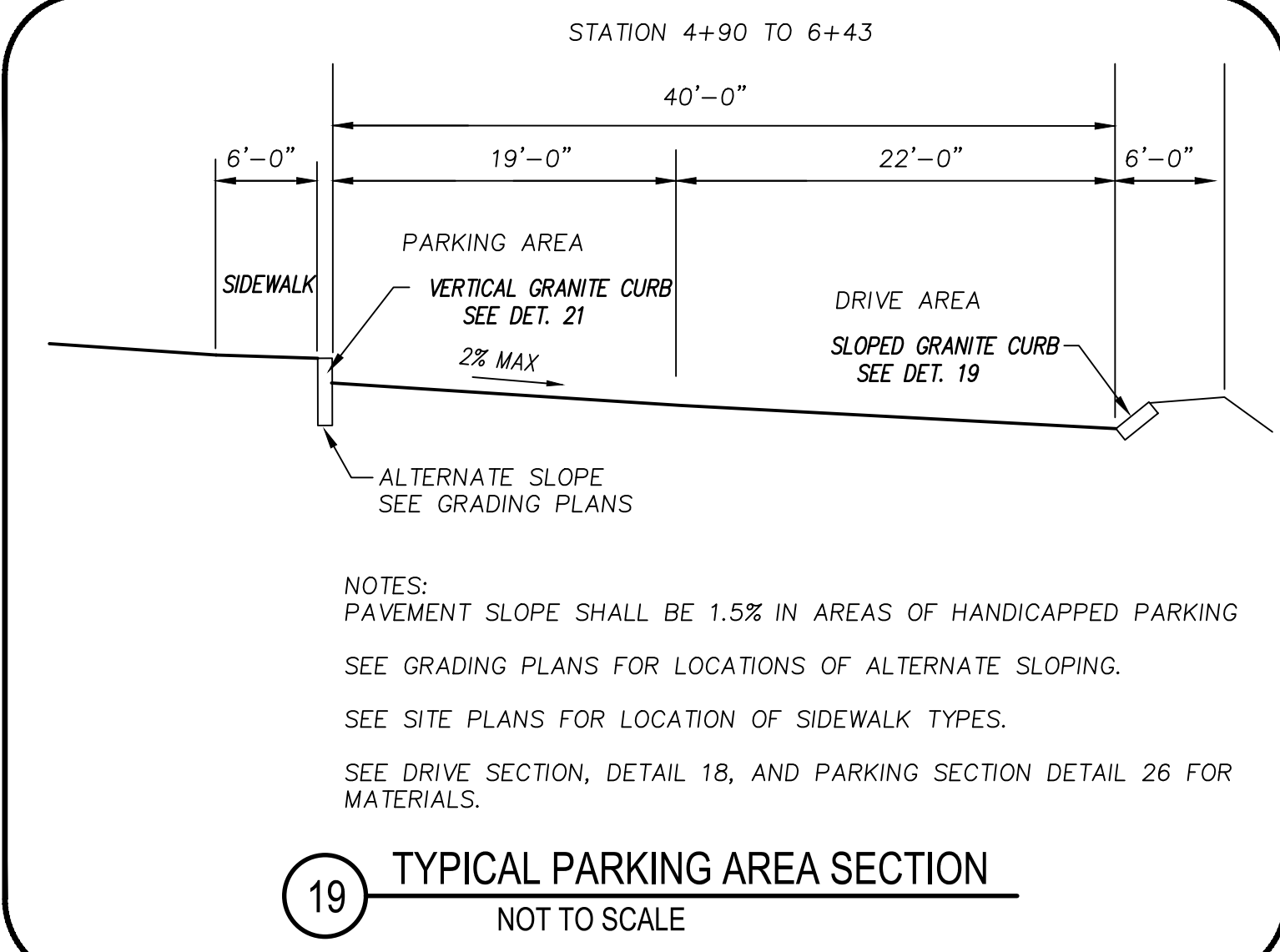
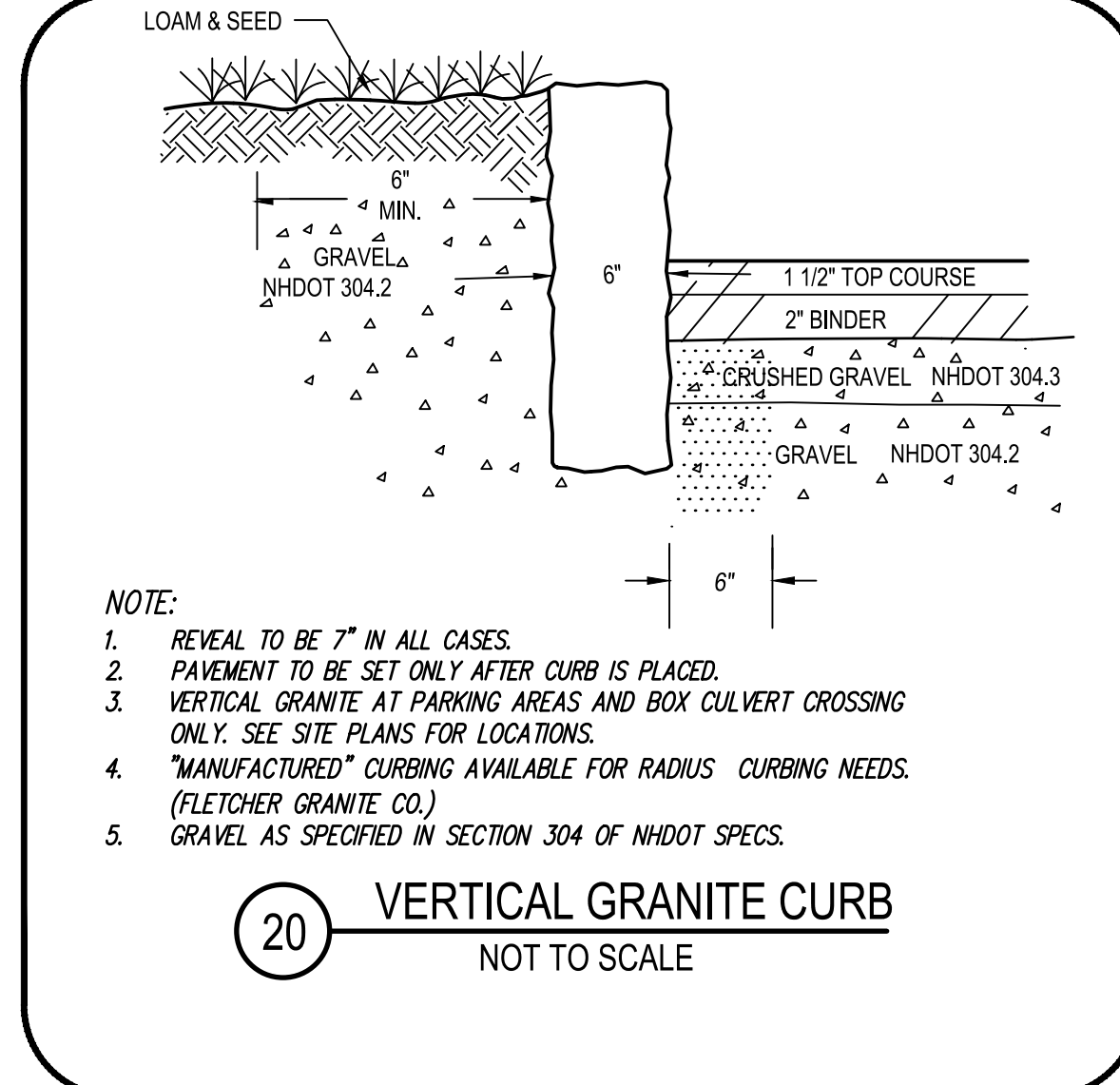
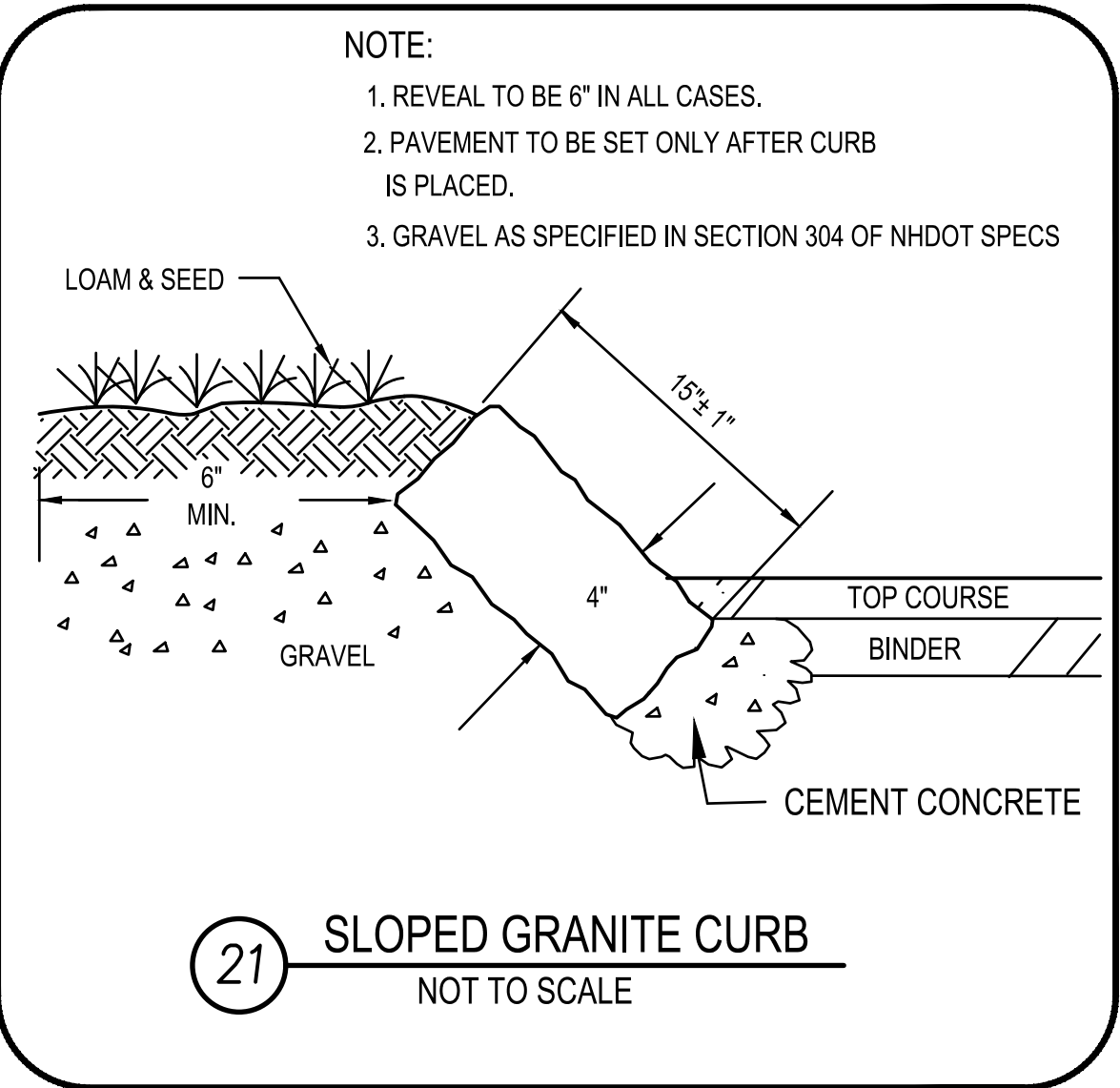
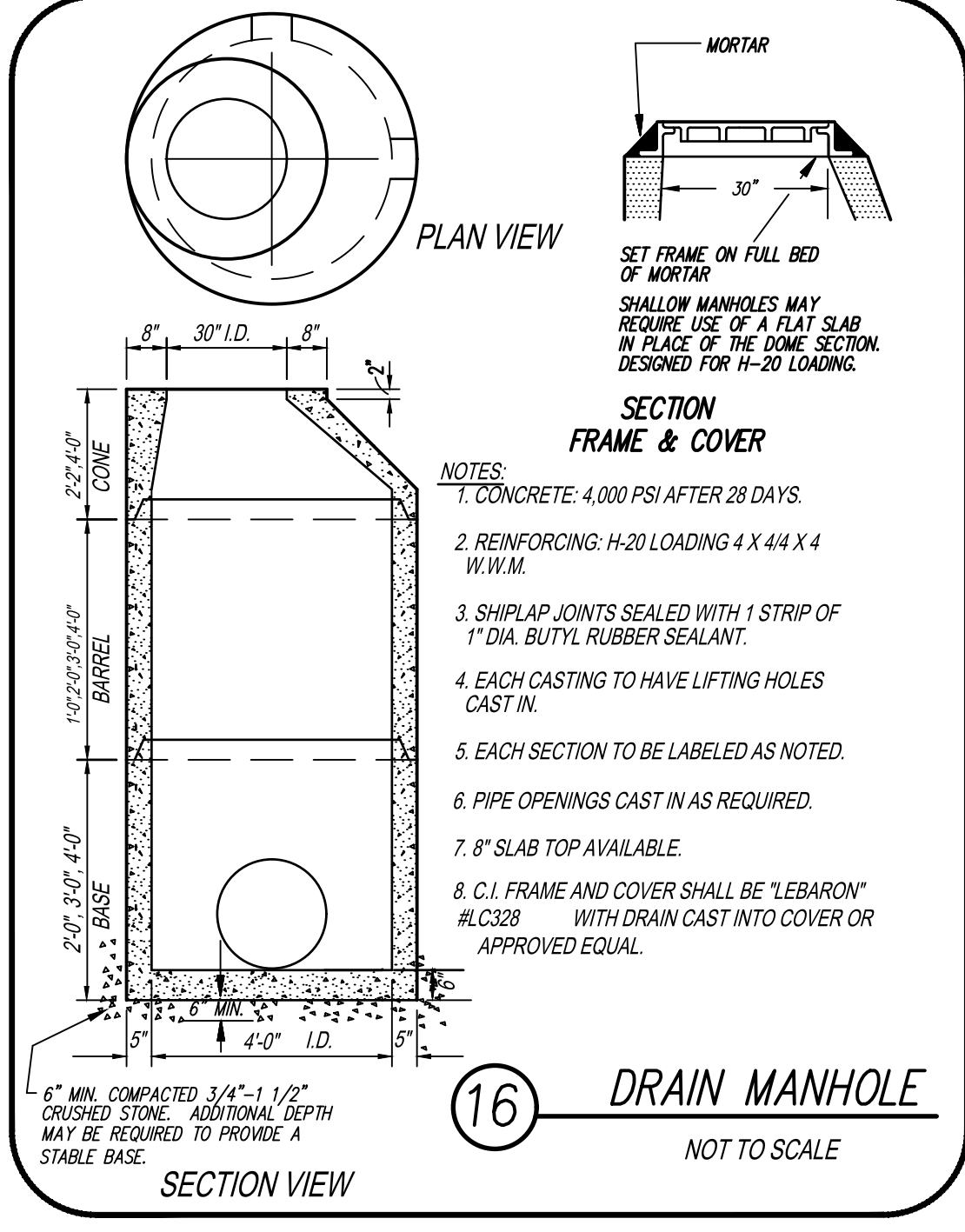
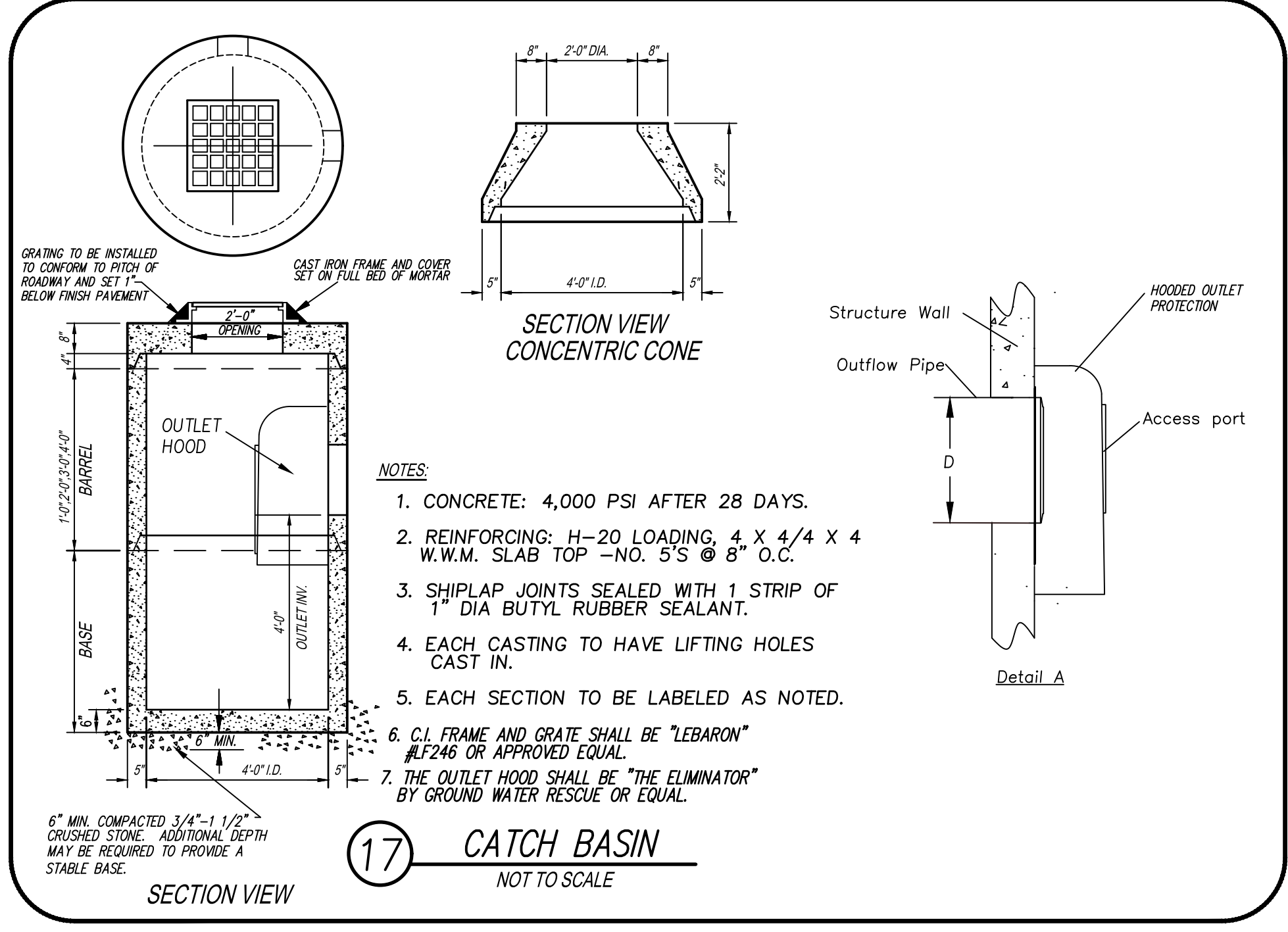
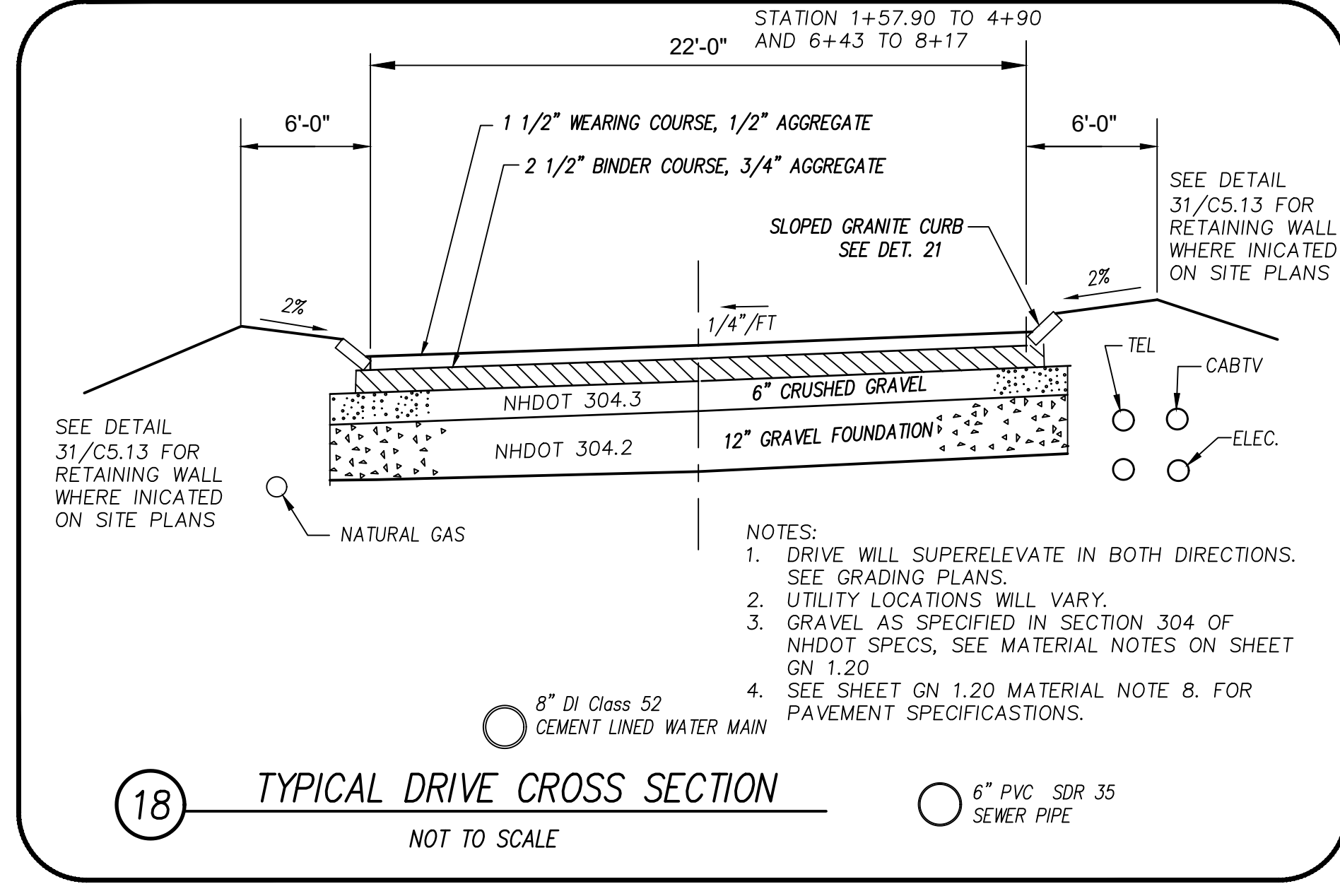
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TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

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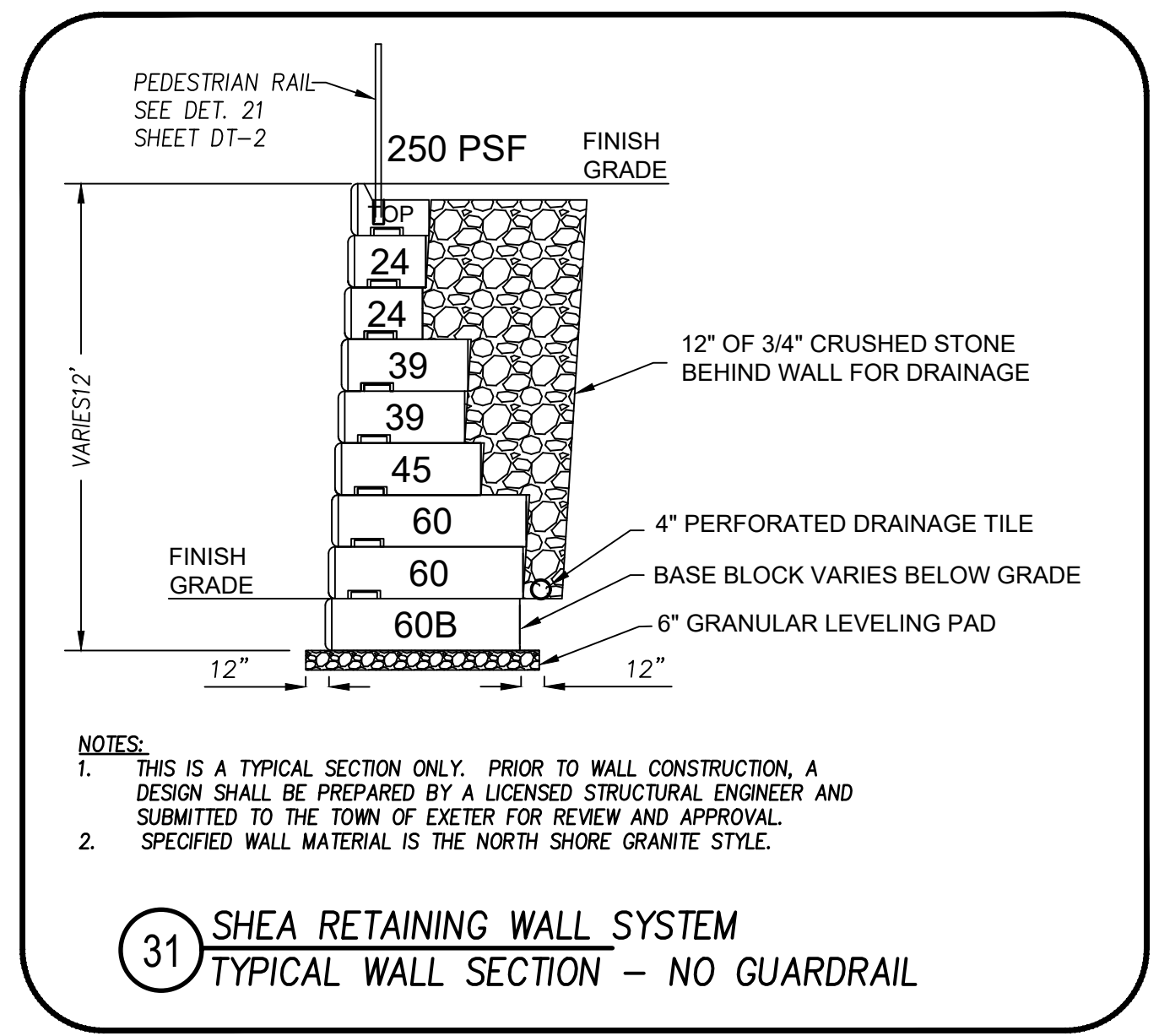
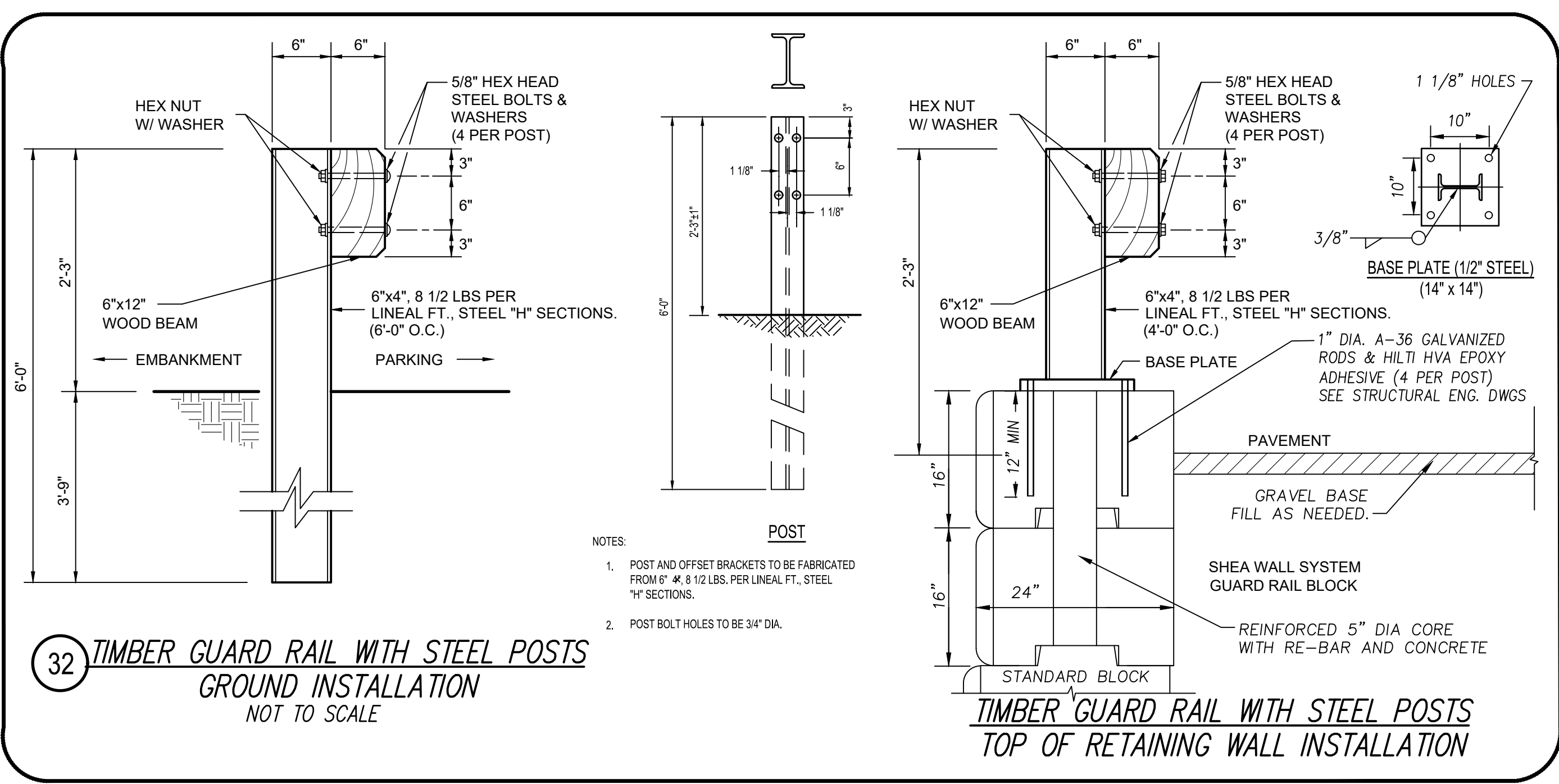
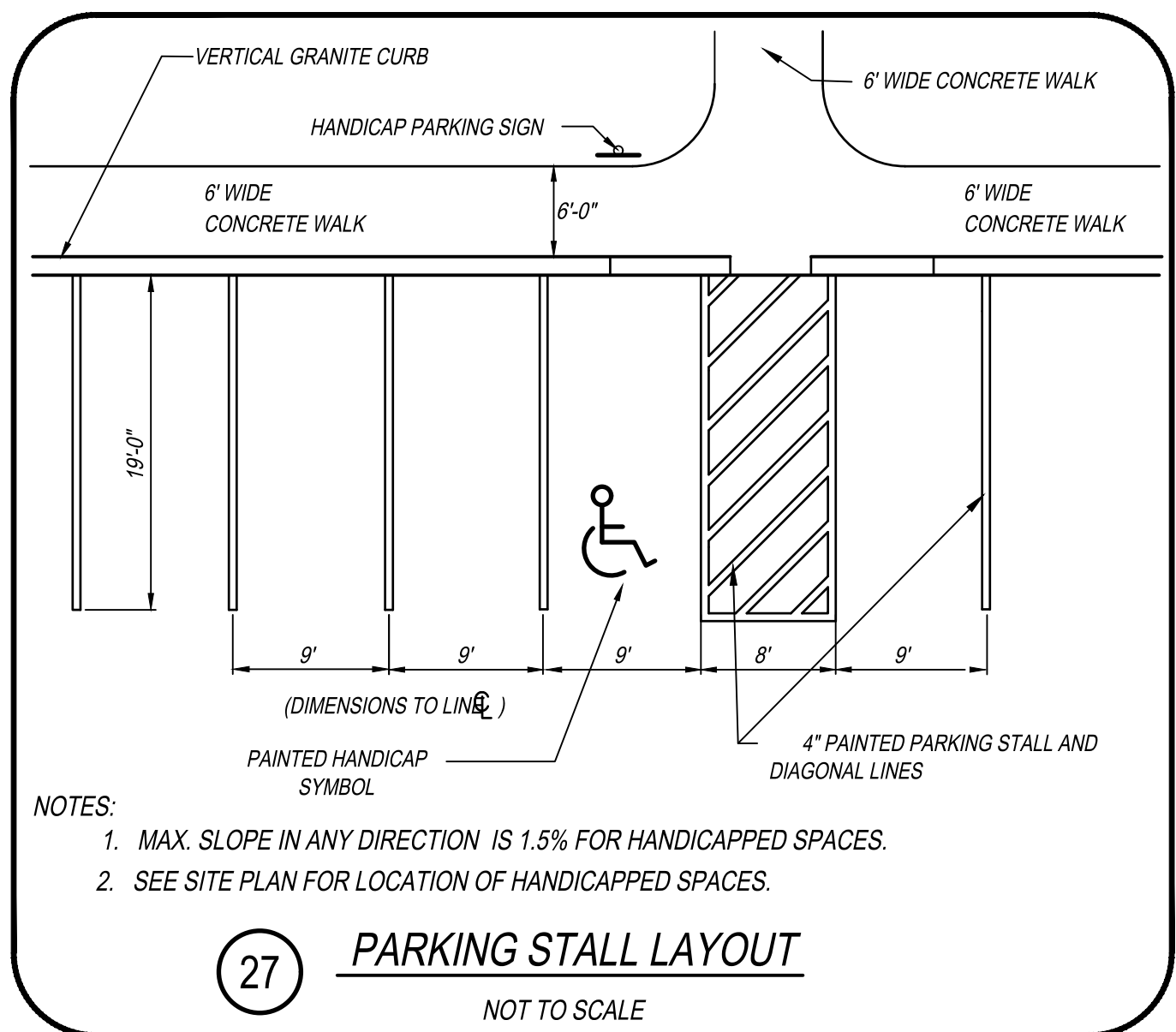
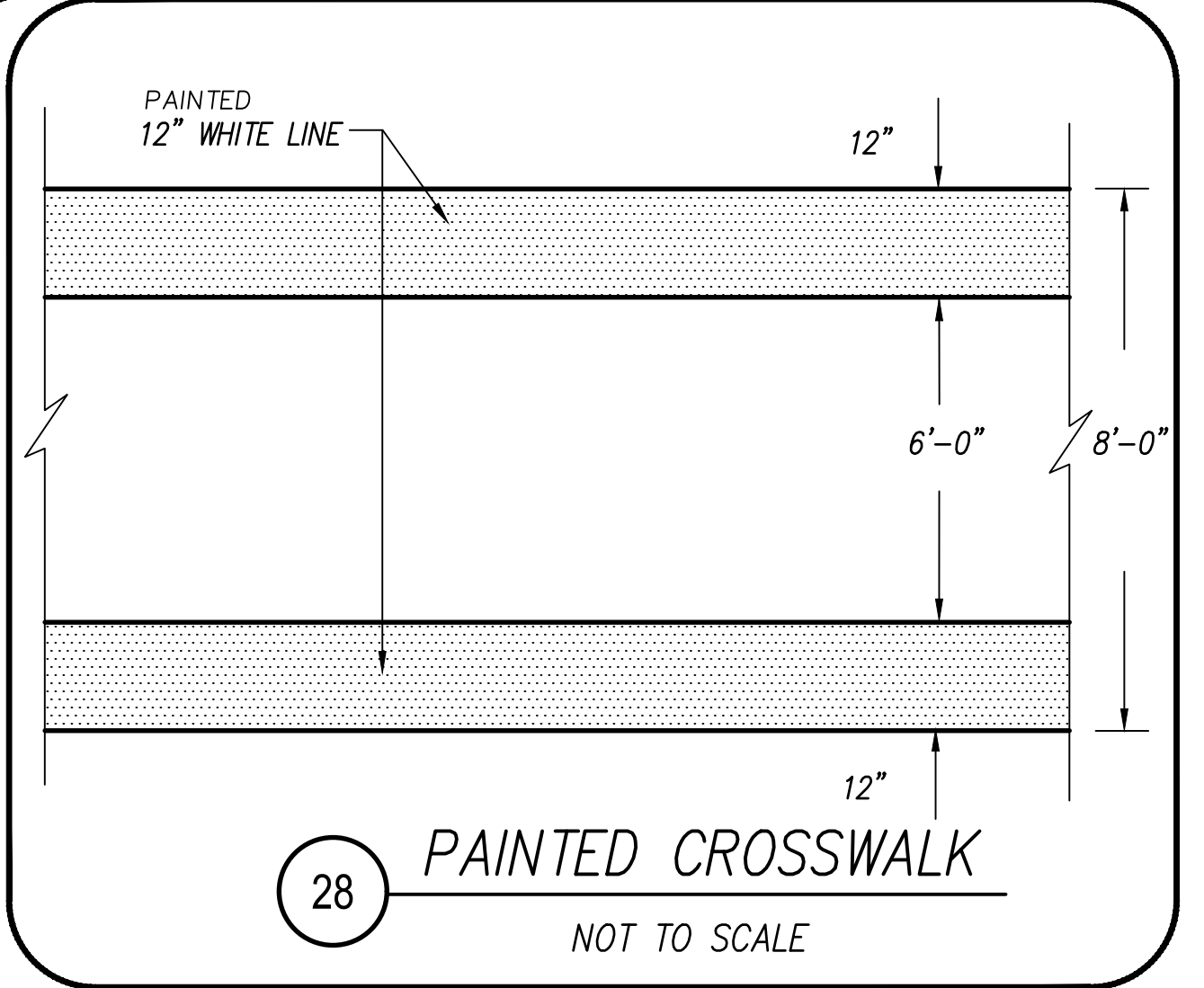
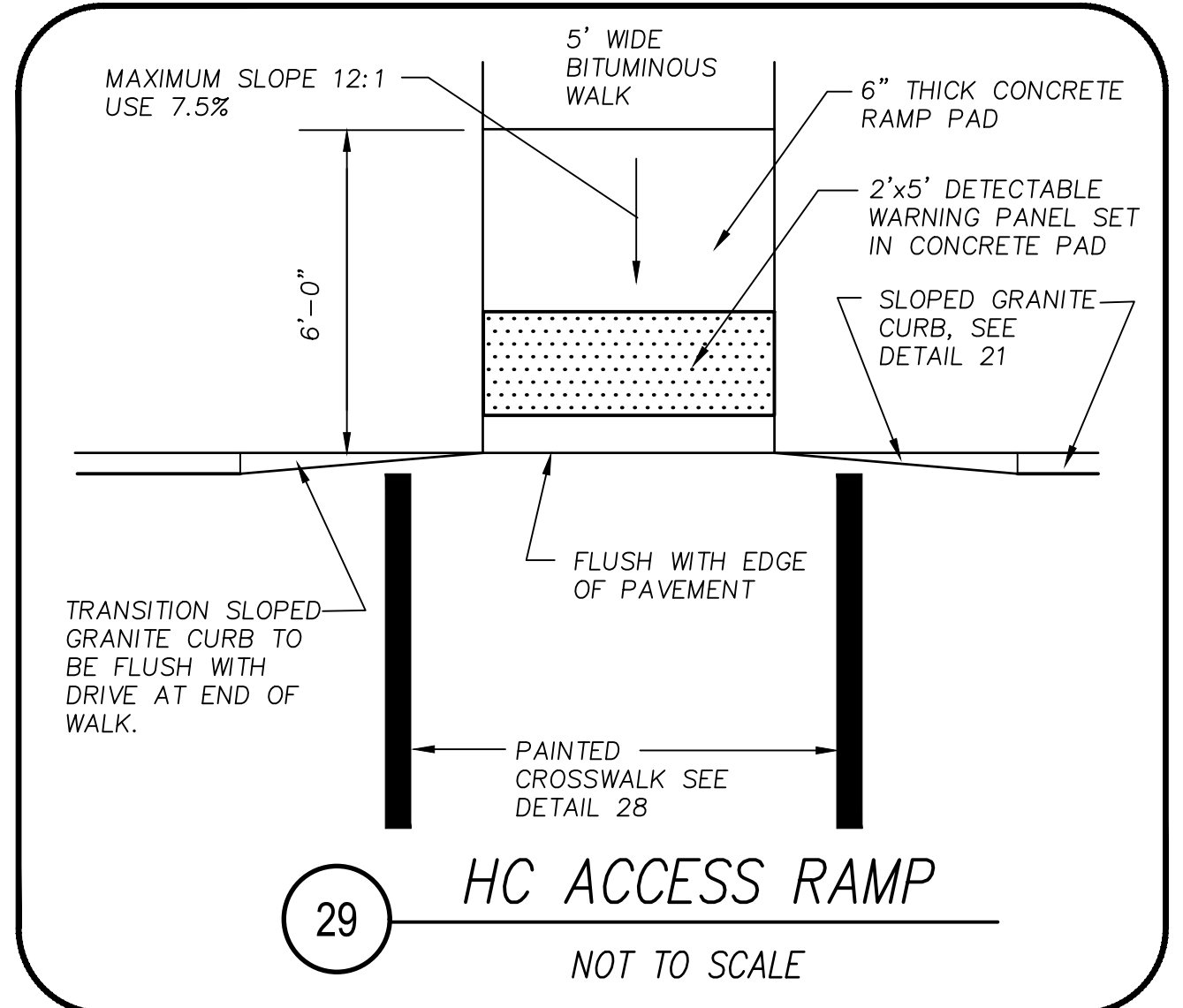
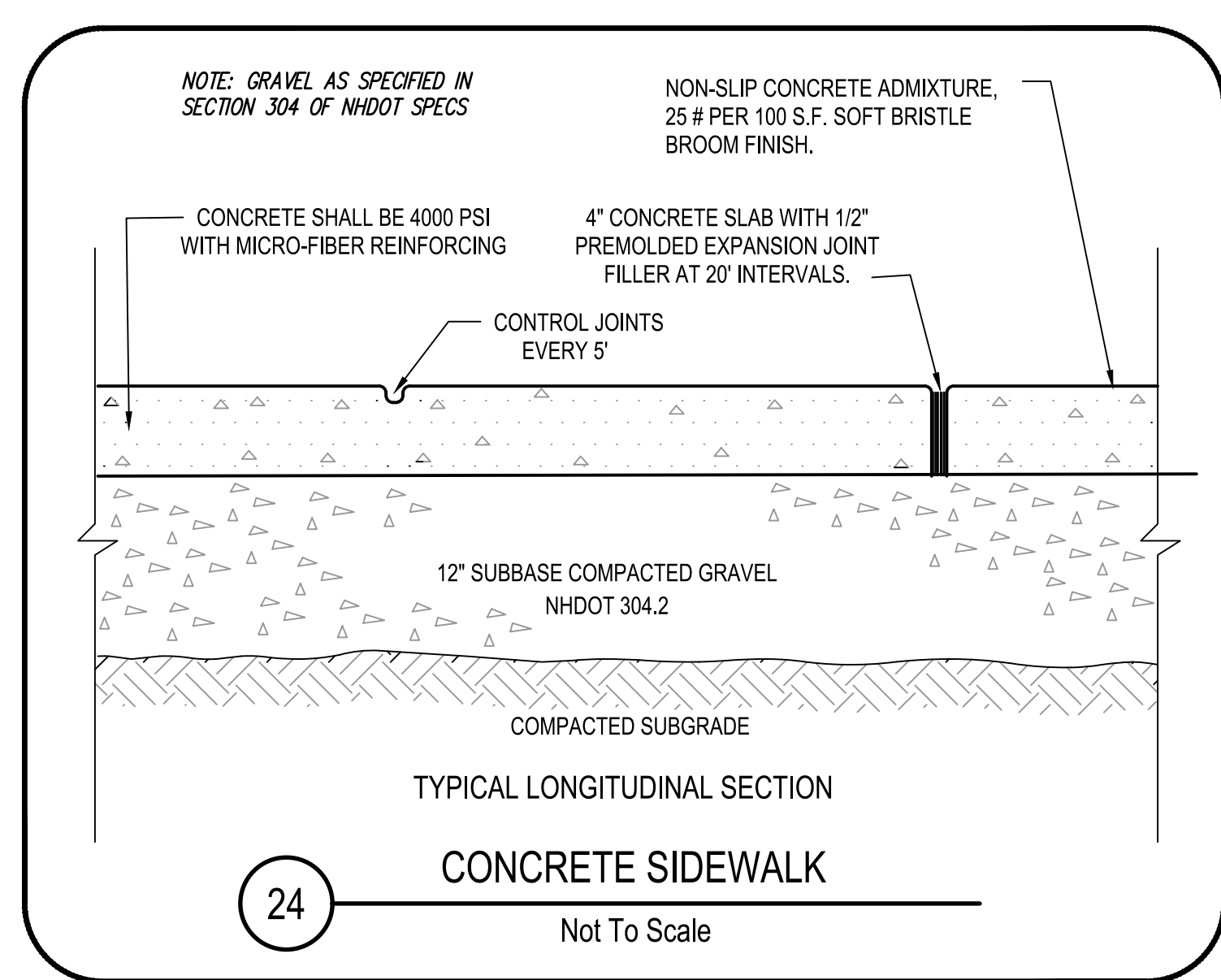
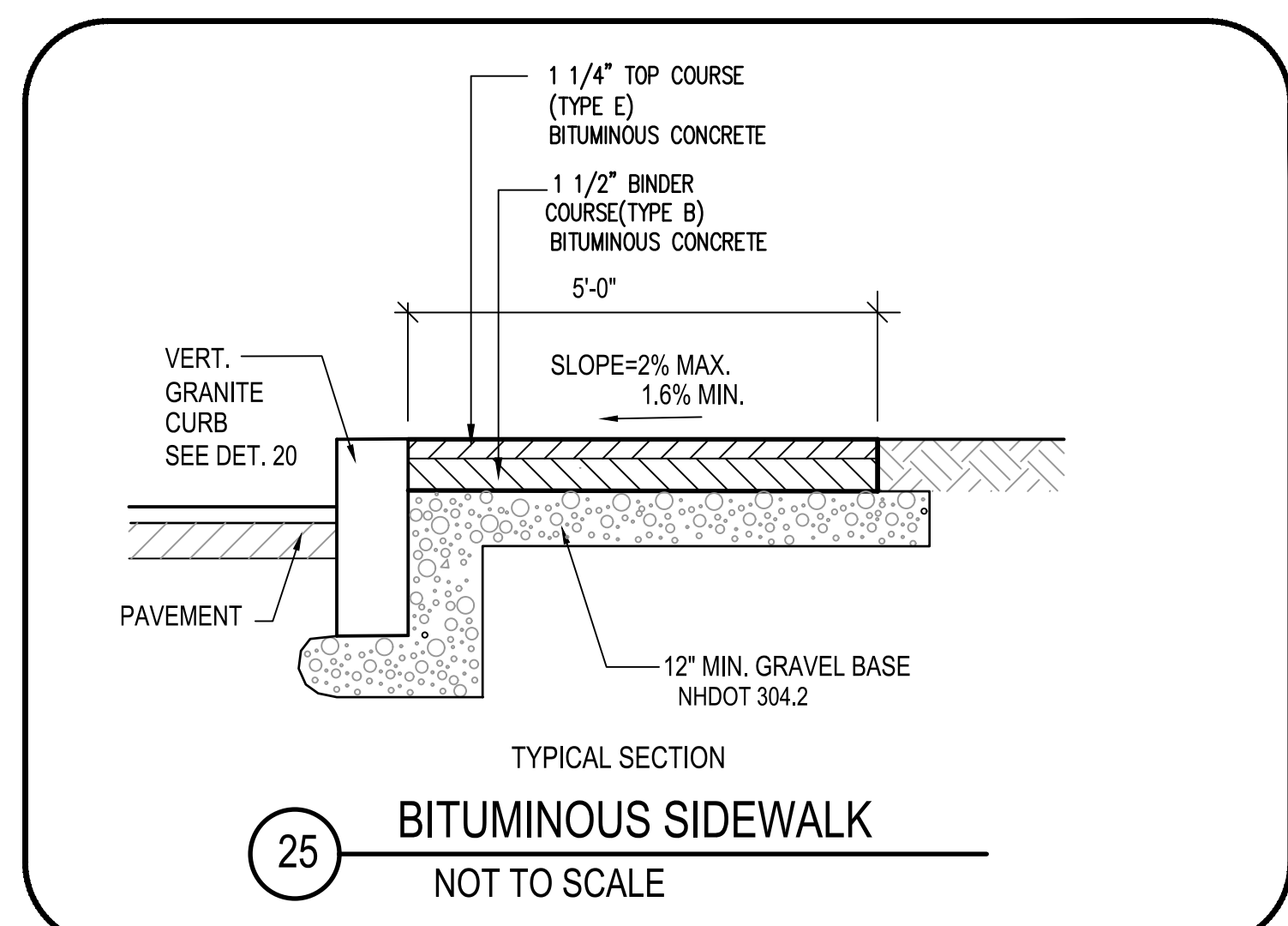
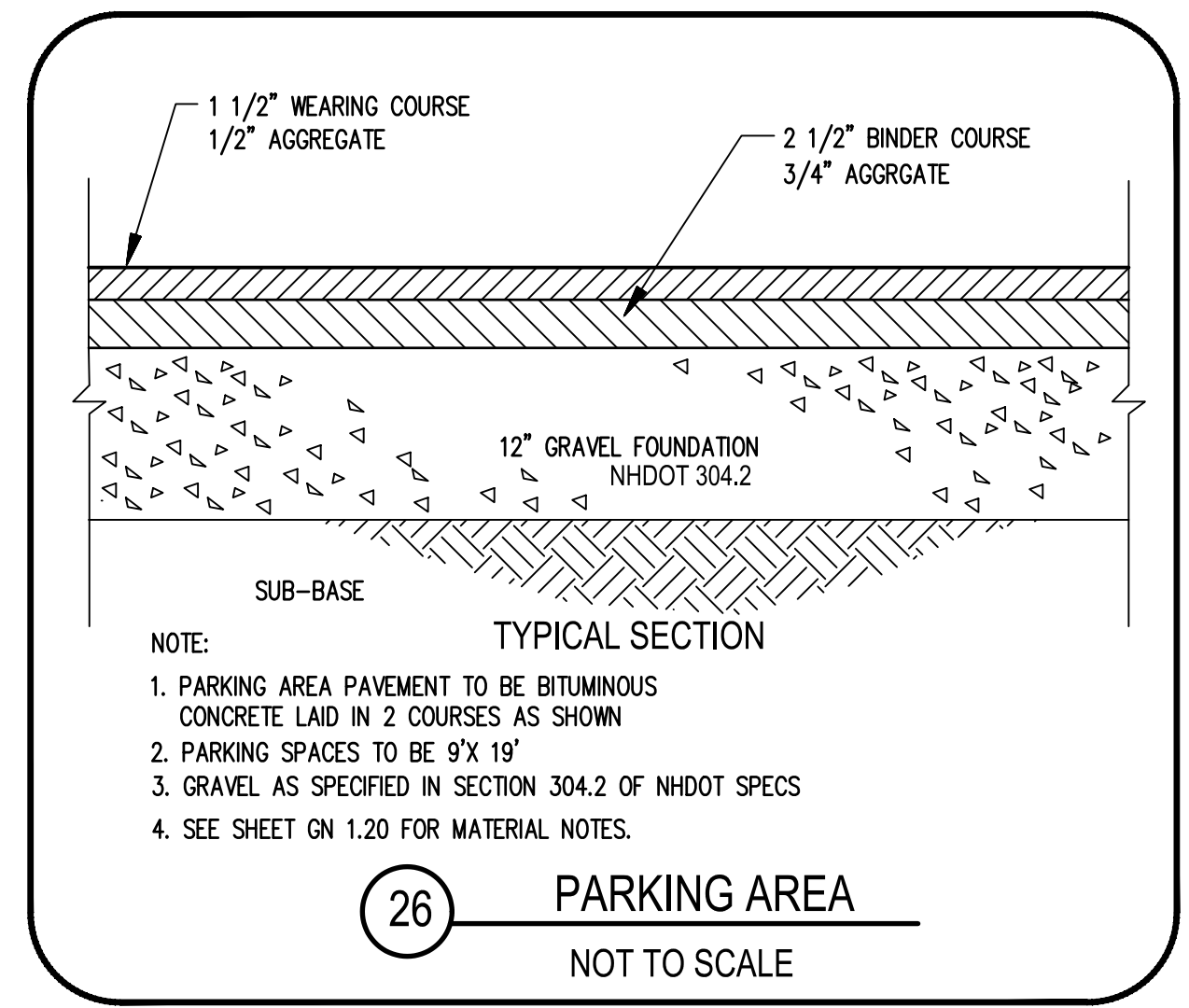
Project Title:  
**Ray Farm  
 Condominium**  
 Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:  
**Ray Farm, LLC**  
 158 Shattuck Way  
 Newington, NH 03801

REVISION BLOCK			
NO.	DATE	DESC	BY
1	5.10.22	TRC COMMENTS	DH

PROJ. MGR.:	D. HAMEL
FIELD:	J. SALVAGGIO / R. SMITH
DESIGN:	D. HAMEL
DRAWN:	D. HAMEL
CHECKED:	D. GIANGRANDE
DATE:	01-11-2022
FILE:	16042 D.DT.DWG
FBK:	
JOB #:	16042.D

TOWN OF EXETER PLANNING BOARD  
 CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_



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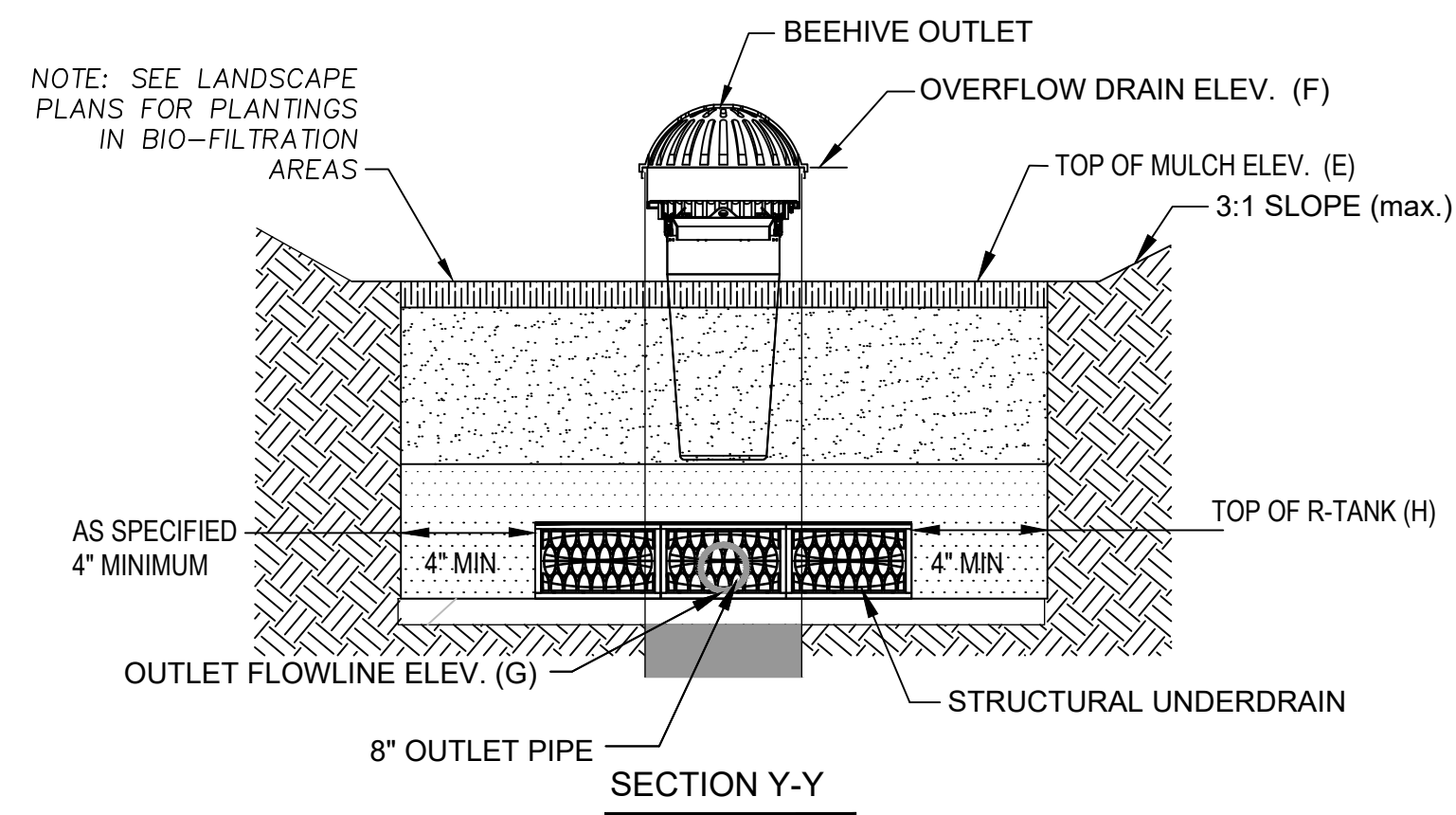
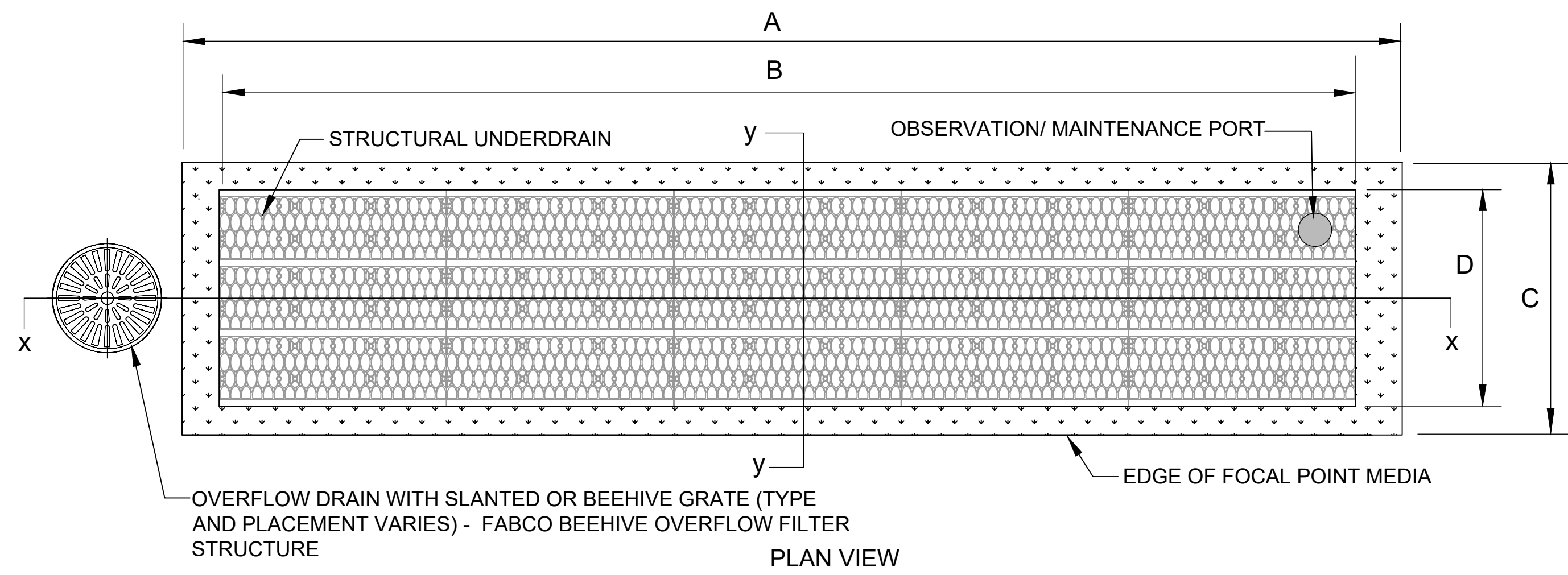


33

BIO-FILTRATION SYSTEM "FOCAL POINT"

NOT TO SCALE

NOTE: PRODUCTS ON THIS SHEET ARE DISTRIBUTE BY "ACF ENVIRONMENTAL",  
 -25-A PROGRESS AVENUE NASHUA, NH 03062 (603) 589-9255  
 -23 FAITH DR. GORHAM, ME 04038 (207) 272 4431 CONTACT ROBERT WOODMAN

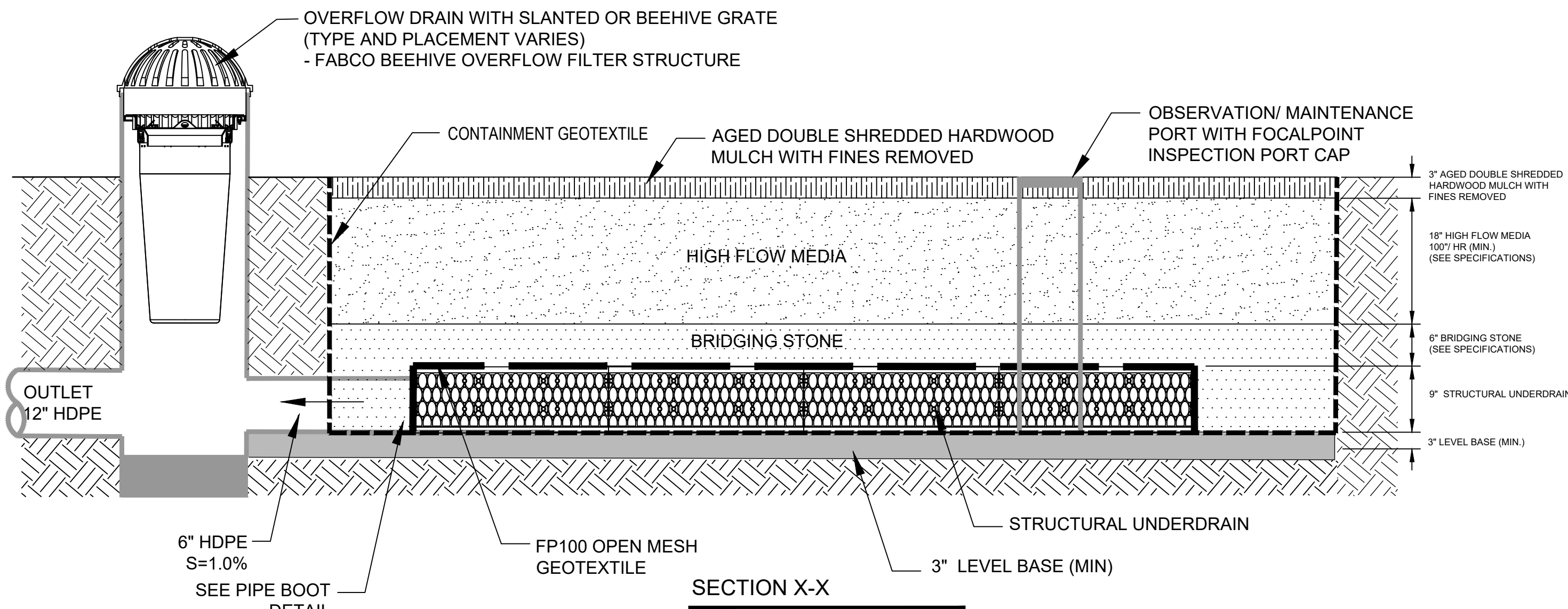


'BEEHIVE' OVERFLOW / OUTLET DATA

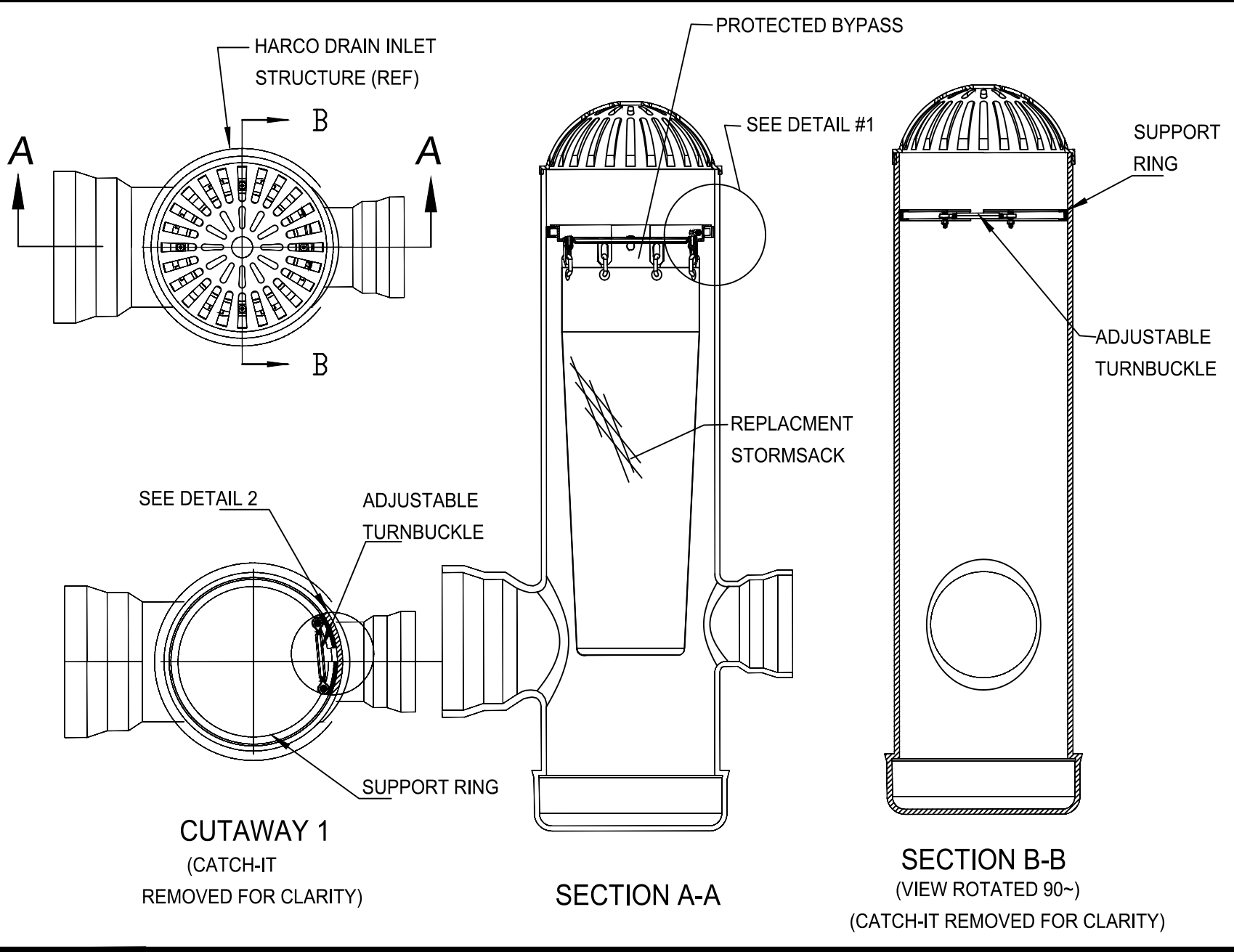
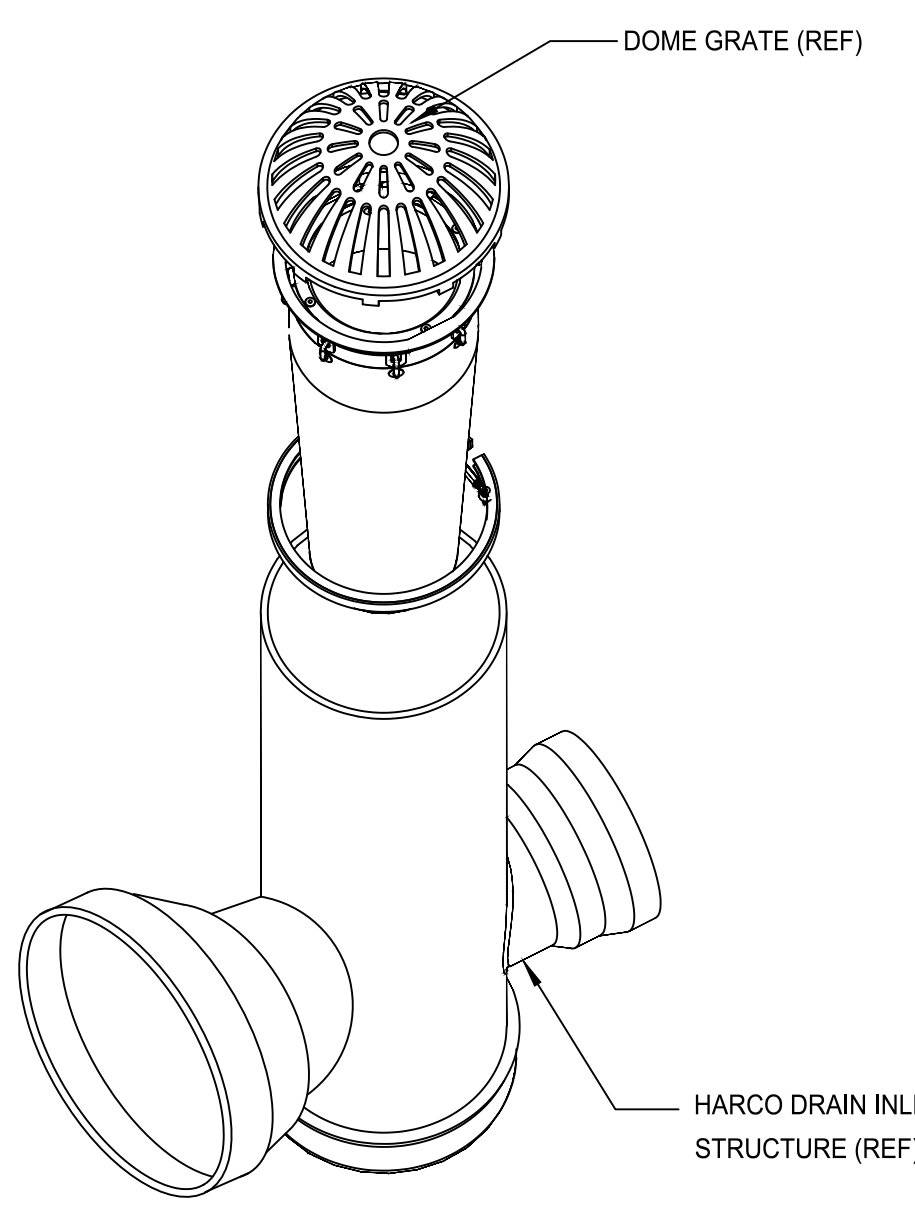
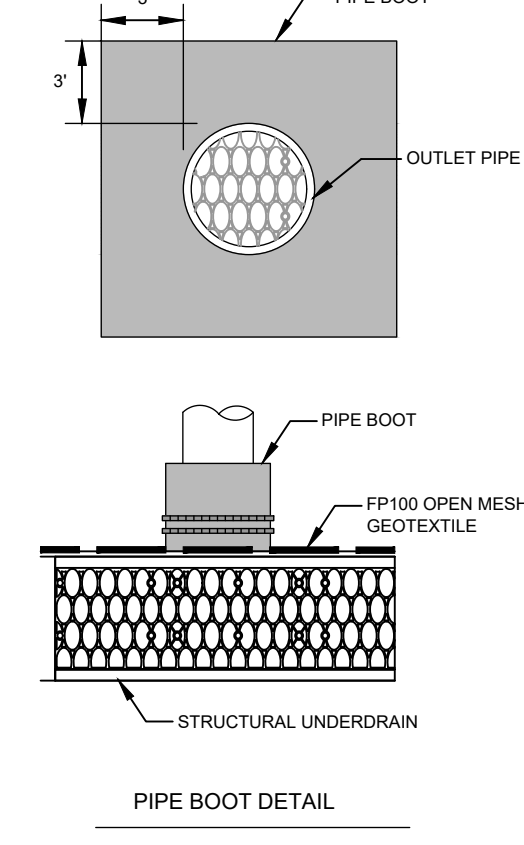
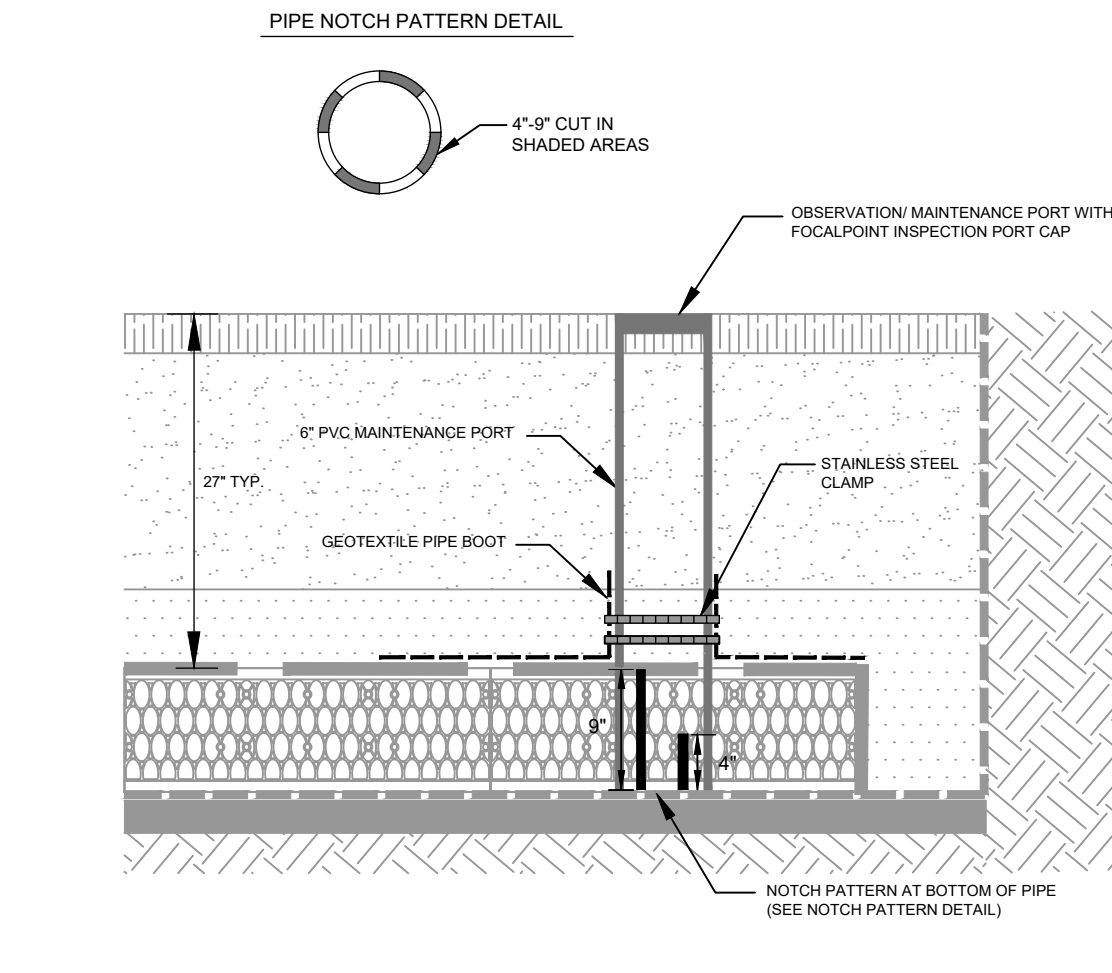
	DIA.	RIM ELEV. "F"	INLET/INV.	OUTLET/INV.
FP-11	12"	115.00	8"/111.00	8"/111.00
FP-12	12"	107.50	8"/104.00	8"/104.00

FOCAL POINT DATA

	A	B	C	D	E	F	G	H
FP-11	11.00'	9.38' (4 CHAMB)	8.00'	6.56' (5 CHAMB.)	114.20	115.00	111.00	111.95
FP-12	12.00'	9.38' (4 CHAMB)	9.00'	7.87' (6 CHAMB.)	107.00	107.50	104.00	104.75



OBSERVATION / MAINTENANCE PORT



NOTES:  
 1. REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.

TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_



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DETAILS

Project Title:  
**Ray Farm Condominium**  
 Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:  
**Ray Farm, LLC**  
 158 Shattuck Way  
 Newington, NH 03801

REVISION BLOCK

NO.	DATE	DESC	BY
1	5.10.22	TRC COMMENTS	DH

PROJ. MGR.: D. HAMEL  
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 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D.DT.DWG  
 FBK:  
 JOB #: 16042 D

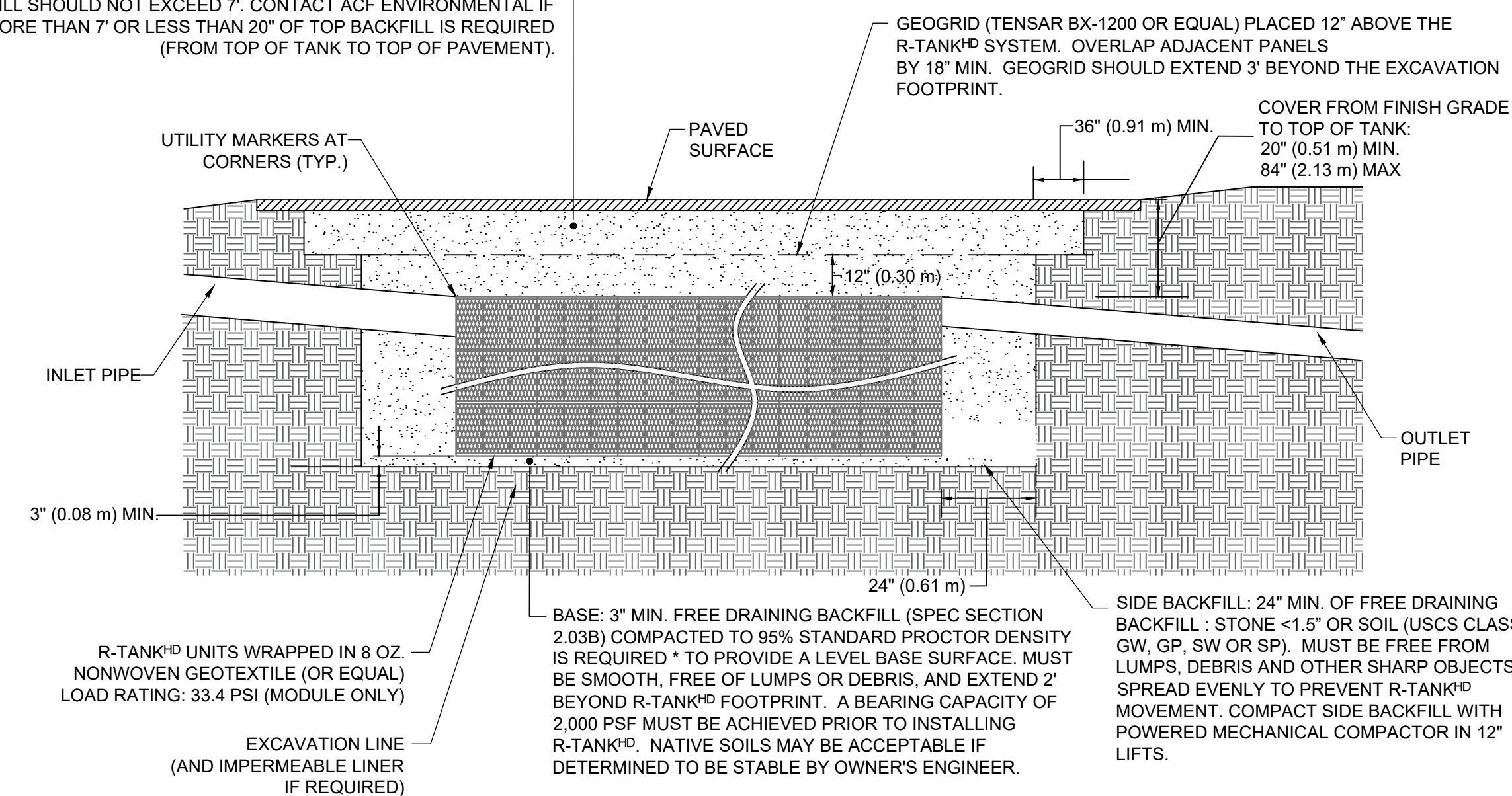
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TOTAL COVER: 20" MINIMUM AND 84" MAXIMUM. FIRST 12" MUST BE FREE DRAINING BACKFILL: STONE <1.5" OR SOIL (USCS CLASS GW, GP, SW OR SP). ADDITIONAL FILL MAY BE STRUCTURAL FILL (SPEC SECTION 2.03C) STONE OR SOIL (USCS CLASS SM, SP, SW, GM, GP OR GW) WITH MAX CLAY CONTENT <10%, MAX 25% PASSING NO. 200 SIEVE, AND MAX PLASTICITY INDEX OF 4. A MIN. 12" COVER MUST BE MAINTAINED BETWEEN BACKFILL EQUIPMENT AND THE TOP OF THE R-TANK™ SYSTEM AT ALL TIMES. TOTAL HEIGHT OF TOP BACKFILL SHOULD NOT EXCEED 7' OR LESS THAN 20" OF TOP BACKFILL IS REQUIRED (FROM TOP OF TANK TO TOP OF PAVEMENT).

NOTES:  
 • FOR COMPLETE MODULE DATA, SEE APPROPRIATE R-TANK® MODULE SHEET  
 • INSTALLATIONS PER THIS DETAIL MEET GUIDELINES OF H20 LOADING PER THE 1983, 13TH EDITION OF THE AMERICAN ASSOCIATION OF STATE, HIGHWAY AND TRAFFIC OFFICIALS (AASHTO) STANDARD SPECIFICATIONS  
 • PRE-TREATMENT STRUCTURES NOT SHOWN



\* FOR INFILTRATION APPLICATIONS, BASE SHALL BE 4" MIN. UNCOMPACTED FREE DRAINING BACKFILL (SPEC SECTION 2.03B) TO PROVIDE A LEVEL BASE SURFACE. MUST BE SMOOTH, FREE OF LUMPS OR DEBRIS, AND EXTEND 2' BEYOND R-TANK® FOOTPRINT. A BEARING CAPACITY OF 2,000 PSF MUST BE ACHIEVED PRIOR TO INSTALLING R-TANK®.



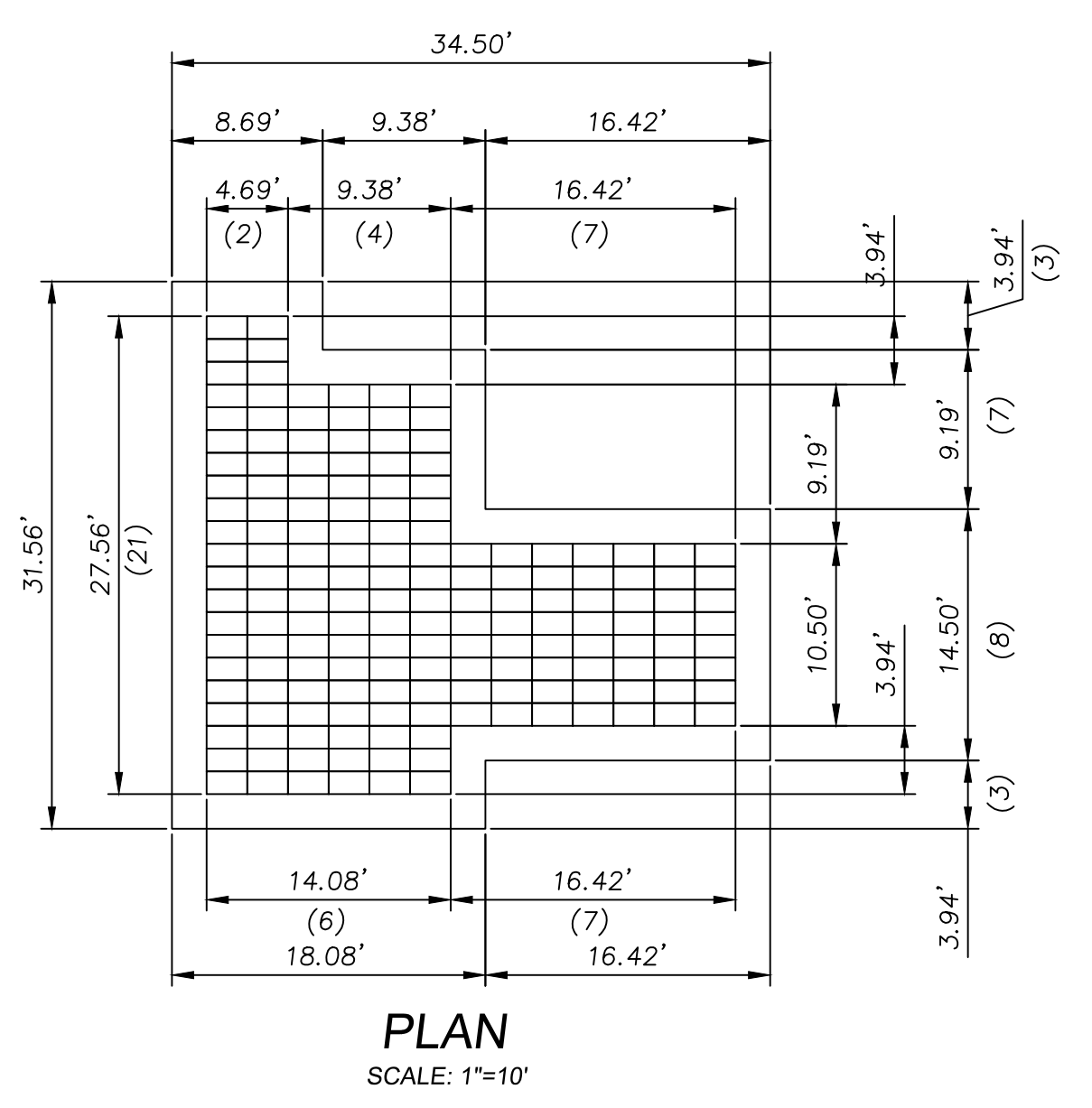
R-TANK<sup>HD</sup> - HS-20 LOADS

AUG 2016 REV

FOR ADDITIONAL INFORMATION PLEASE CONTACT: ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com

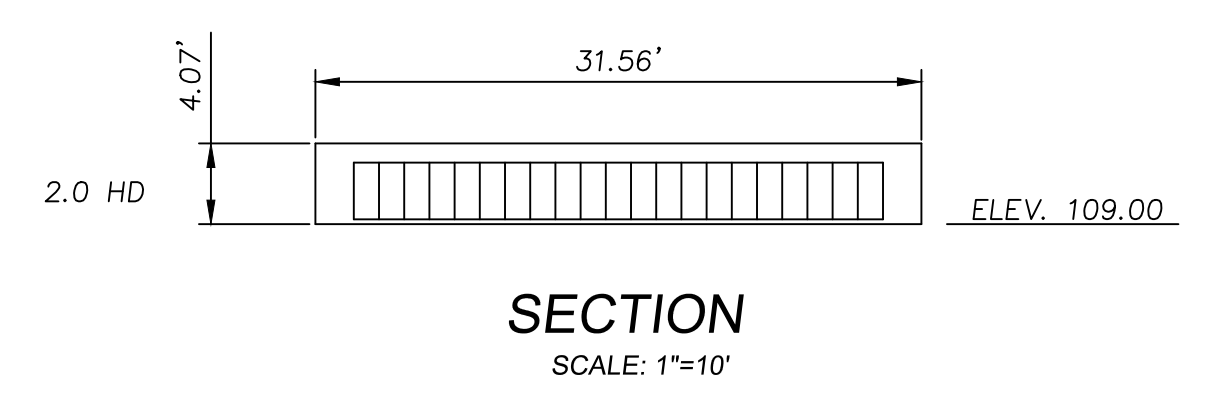
CONSTRUCTION NOTES:

- SUBSURFACE INFILTRATION CHAMBER BASINS:
- DO NOT ALLOW CONSTRUCTION TRAFFIC ON EXPOSED SOIL SURFACE IN AREA OF THE INFILTRATION SYSTEMS. IF FEASIBLE, PERFORM EXCAVATIONS AND ERECTION OUTSIDE THE LIMITS OF THE INFILTRATION SYSTEM
  - AFTER THE INFILTRATION SYSTEM AREA IS EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY TILLER OR A DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.
  - DO NOT PLACE INFILTRATION SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.



INFILTRATION SYSTEM 4 (INFIL-4)  
TOTAL OF 170 2.0 HD CHAMBERS

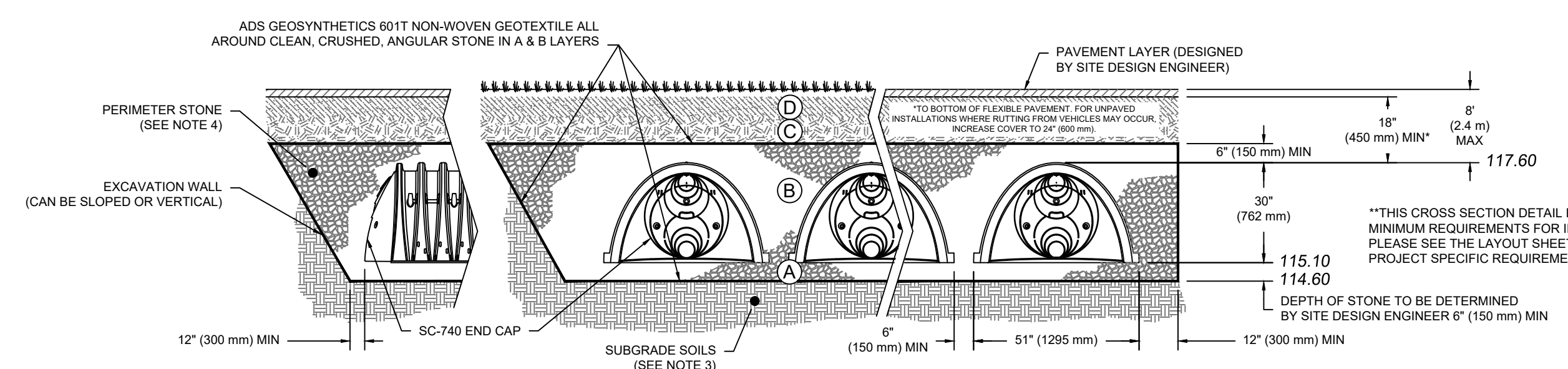
34 R-TANK INFILTRATION SYSTEM



ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL-GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>2,3</sup>

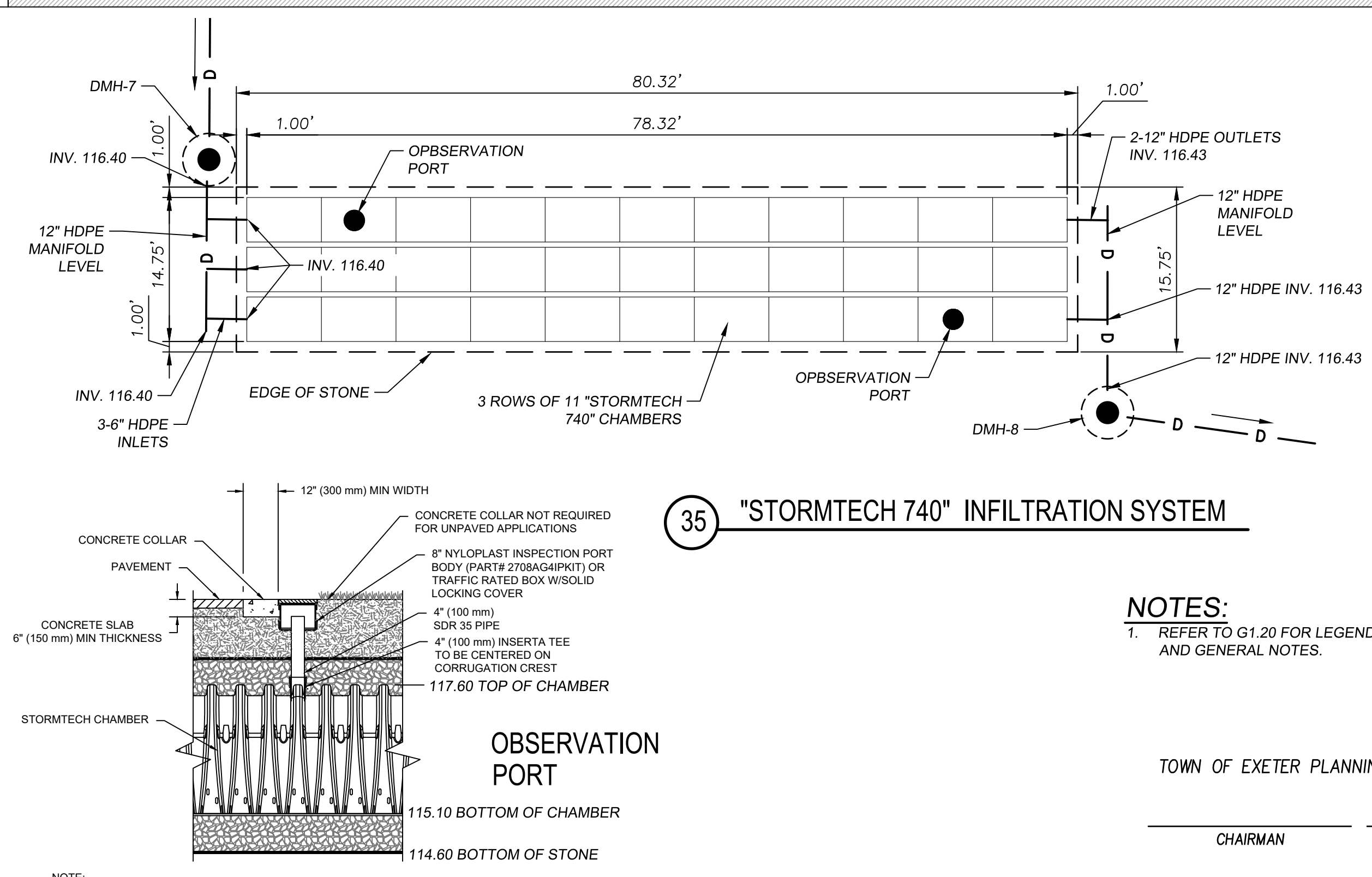
PLEASE NOTE:  
 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".  
 2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.  
 3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.  
 4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 650 LBS/(MIN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

1 SC-740 CROSS SECTION DETAIL



NOTES:  
 1. REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.

TOWN OF EXETER PLANNING BOARD  
 CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_



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Sheet Title: DETAILS

Project Title:  
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REVISION BLOCK			
NO.	DATE	DESC	BY
1	5.10.22	TRC COMMENTS	DH

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 FBK:  
 JOB #: 16042 D

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## **Stormwater Analysis**

**“Ray Farm” Building D  
Ray Farmstead Road  
Exeter, New Hampshire**

**Date: March 22, 2022  
Revised May 13, 2022**

Project #16042 Bldg D  
GM2 Associates  
6 Chestnut Street, Amesbury, MA

## TABLE OF CONTENTS

### Stormwater Analysis

Project Narrative / Results / Summary  
Rainfall Table – Northeast Regional Climate Center  
Pre-Development Analysis: Drainage Diagram  
Pre-Development Analysis: 2-year, 10-year, 25-year, 50-year, 100-year  
Post-Development Analysis: Drainage Diagram  
Post Development Analysis: 2-year, 10-year, 25-year 50-year, 100-year

## PROJECT NARRATIVE

### GENERAL

The Parcel is located off Ray Farmstead Road in Exeter, New Hampshire. It is situated in the “Commercial” zoning district. A variance was granted by the Exeter Zoning Board of Adjustments in November 2021 to allow the relocated Building D to have 32 multifamily units in the Commercial Zone. This project is part of the Ray Farm Condominium development approved in 2017. The previously approved plan showed a Building D near the abutting Mobil Station. This proposal is to re-locate Building D to land beyond Building C on land owned by the developer. That land will be combined with the original Ray Farm parcel. The area where Building D was previously approved will be open space and not developed.

The site is wooded with sloping knolls and a intrmittent stream and running from the East of the site to the West. There is another stream that runs from Noith to the South and becomes perinial at the right of way easement to the Carlisle property and is known as Watson Brook. Upland soils on the site are mainly Newfields with some Canton soils on a couple of the knolls. There are wetland soils associated with the streams and swales that cross the site and are mapped as Walpoe. Soil Mapping prepared by Gove Environmental Services located in Exeter, NH. See the accompanying design plans and the Pre-Development Drainage Zones plan in the rear pocket.



## PRE-DEVELOPMENT DRAINAGE CONDITIONS

The Site consists of undeveloped land with subcatchments E1 and E2. See (*Pre-Development Drainage Zones*) and the calculation data for a detailed description of subcatchment data.

## PROPOSED

The proposed development includes the construction of one, four story building with thirty two housing units. The building will have garage located in the basement. Associated utilities, surface parking, stormwater management systems, and landscaping are located onsite. The project will be serviced by municipal water and sewer. Natural gas service will be utilized for the energy source.. See the accompanying design plans for a detailed description of the proposed development.

## STORMWATER MANAGEMENT SYSTEM

The proposed stormwater management system includes; Bio-Treatment systems known as “Focal Point” will treat all the runoff from the paved areas onsite, Subsurface infiltration chambers, Sediment Forebays, Detention Basins, and grass treatment swales, level spreaders, and rip-rap outlet protection. The stormwater systems outlet to the wetland system associated with the stream.

## POST-DEVELOPMENT DRAINAGE CONDITIONS

Drainage patterns resulting from the proposed development are delineated on (*Post-Development Drainage Zones*). Subcatchments D1 and D2 by-passes the Stormwater treatment systems, and comprise of natural landscape and the side slopes of the stormwater systems, drives and buildings.. Subcatchment D8 is a small area flows to the existing Focal Point associated with Building C. D2 thru D7 represents the proposed developed area which flows to the stormwater treatment systems. See (*Post-Development Drainage Zones*) and the calculation data for a detailed description of subcatchment data.

# DESIGN OBJECTIVES / METHODOLOGY

## STORMWATER MANAGEMENT SYSTEM

The design objectives for the on-site storm water drainage system were to safely control, treat, and infiltrate stormwater runoff from the proposed development and to maintain the



overall stormwater runoff conditions of the Site. The drainage system was designed to accommodate runoff resulting from a 2, 10, 25, 50 and 100 year frequency design storm. The general drainage patterns of the Site will remain essentially unaltered. The stormwater flows from offsite a diverted around developed area and does not mix with the stormwater from the developed area.

## RUNOFF QUANTIFICATION

A drainage analysis was performed using pre- and post-development site criteria to estimate the effects of the proposed development on stormwater runoff conditions. Stormwater runoff rates were calculated for the 2, 10, 25, 50 and 100 year design storm events. The analysis was performed using HydroCAD™, a computerized stormwater modeling system that combines SCS hydrology techniques with standard hydraulic equations.

Total site runoff figures were obtained by summing hydrographs and not by direct addition of peak flows from individual subcatchments. Since peak flows from the individual subcatchments occur at different times, the total runoff figure listed may not equal the sum of the individual peak flows from the various subcatchments. This method provides a more realistic total flow figure than that obtained by direct addition of peak flows.

The Rainfall amounts used are from Extreme Precipitation Tables by Northeast Regional Climate Center. The amounts have increased from this table by 15% as suggested by the NHDES Alteration of Terrain regulations.

Rainfall	NRCC	+15%	Total
2 Year	3.18	0.48	3.66
10 Year	4.85	0.73	5.58
25 Year	6.17	0.93	7.10
50 Year	7.41	1.11	8.52
100 Year	8.90	1.34	10.24

## RESULTS

### STORMWATER RUNOFF COMPARISON

The following table summarize hydrologic and hydraulic conditions resulting from pre and post development peak storm water runoff that flow to the southerly property line and shown as Design Point "A".

<b>RESULTS ARE ANALYZED AT SUMMARY REACH "A"</b>		
<b>Storm Event</b>	<b>Pre-Development CFS (Vol. af)</b>	<b>Post-Development CFS (Vol. af)</b>
2	1.50 (0.242 af)	1.16 (0.308 af)
10	6.05 (0.719 af)	5.95 (0.867 af)
25	10.71 (1.197 af)	10.70 (1.391 af)
50	15.56 (1.696 af)	15.04 (1.924 af)
100	21.85 (2.350 af)	20.30 (2.607 af)

### SUMMARY

Existing stormwater runoff drainage patterns will remain essentially unchanged under post-development conditions. The site will continue to drain to the wetland area and stream at the western portion of the site and beyond. Peak discharge rates are slightly lower in the post-developed conditions through the use of the stormwater management systems. The stormwater management system does allow the 100 year storm event to safely pass though without overtopping the berms.

# Extreme Precipitation Tables

## Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Smoothing	Yes
State	New Hampshire
Location	
Longitude	70.975 degrees West
Latitude	43.000 degrees North
Elevation	0 feet
Date/Time	Thu, 27 Jan 2022 11:29:10 -0500

### Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.40	0.50	0.66	0.82	1.04	1yr	0.71	0.99	1.22	1.57	2.03	2.66	2.86	1yr	2.35	2.75	3.16	3.87	4.48	1yr
2yr	0.32	0.50	0.62	0.81	1.02	1.30	2yr	0.88	1.18	1.51	1.93	2.47	3.18	3.53	2yr	2.82	3.39	3.90	4.63	5.27	2yr
5yr	0.37	0.58	0.73	0.98	1.25	1.61	5yr	1.08	1.46	1.89	2.43	3.13	4.05	4.53	5yr	3.58	4.36	4.98	5.91	6.68	5yr
10yr	0.41	0.65	0.82	1.12	1.46	1.89	10yr	1.26	1.72	2.24	2.89	3.75	4.85	5.49	10yr	4.30	5.28	6.00	7.11	7.99	10yr
25yr	0.48	0.76	0.97	1.34	1.78	2.35	25yr	1.54	2.14	2.79	3.64	4.75	6.17	7.07	25yr	5.46	6.80	7.67	9.10	10.13	25yr
50yr	0.54	0.87	1.11	1.55	2.09	2.78	50yr	1.80	2.53	3.31	4.35	5.69	7.41	8.56	50yr	6.56	8.23	9.25	10.96	12.14	50yr
100yr	0.60	0.97	1.26	1.79	2.44	3.28	100yr	2.11	2.98	3.94	5.19	6.81	8.90	10.38	100yr	7.88	9.98	11.14	13.22	14.55	100yr
200yr	0.68	1.11	1.44	2.07	2.86	3.88	200yr	2.47	3.53	4.66	6.19	8.15	10.69	12.57	200yr	9.46	12.09	13.43	15.95	17.44	200yr
500yr	0.81	1.33	1.74	2.52	3.52	4.83	500yr	3.04	4.40	5.84	7.80	10.34	13.63	16.22	500yr	12.06	15.59	17.20	20.46	22.18	500yr

### Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.24	0.37	0.45	0.61	0.75	0.89	1yr	0.64	0.87	0.95	1.25	1.53	2.21	2.52	1yr	1.95	2.43	2.87	3.42	3.95	1yr
2yr	0.32	0.49	0.60	0.81	1.00	1.19	2yr	0.87	1.16	1.37	1.81	2.33	3.07	3.43	2yr	2.72	3.30	3.79	4.49	5.05	2yr
5yr	0.35	0.55	0.68	0.93	1.19	1.41	5yr	1.02	1.38	1.62	2.12	2.74	3.74	4.16	5yr	3.31	4.00	4.59	5.55	6.19	5yr
10yr	0.39	0.60	0.75	1.05	1.35	1.62	10yr	1.17	1.59	1.82	2.41	3.08	4.29	4.81	10yr	3.80	4.62	5.30	6.49	7.08	10yr
25yr	0.45	0.69	0.86	1.22	1.61	1.94	25yr	1.39	1.90	2.12	2.79	3.59	4.81	5.81	25yr	4.26	5.59	6.40	7.96	8.84	25yr
50yr	0.50	0.76	0.95	1.37	1.84	2.23	50yr	1.59	2.18	2.36	3.14	4.03	5.42	6.68	50yr	4.80	6.42	7.37	9.31	10.24	50yr
100yr	0.56	0.85	1.07	1.54	2.11	2.56	100yr	1.82	2.51	2.65	3.51	4.51	6.10	7.66	100yr	5.40	7.37	8.49	10.88	11.84	100yr
200yr	0.63	0.95	1.20	1.74	2.42	2.94	200yr	2.09	2.88	2.95	3.93	5.05	6.82	9.69	200yr	6.04	9.31	9.79	12.73	13.72	200yr
500yr	0.74	1.10	1.41	2.06	2.92	3.55	500yr	2.52	3.47	3.42	4.55	5.89	7.88	11.89	500yr	6.98	11.44	11.80	15.67	16.62	500yr

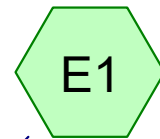
### Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.28	0.44	0.53	0.72	0.88	1.08	1yr	0.76	1.05	1.26	1.71	2.16	2.94	3.13	1yr	2.60	3.01	3.55	4.22	4.96	1yr
2yr	0.33	0.51	0.63	0.85	1.05	1.26	2yr	0.91	1.23	1.48	1.94	2.48	3.37	3.65	2yr	2.99	3.51	4.04	4.81	5.59	2yr
5yr	0.40	0.62	0.77	1.05	1.34	1.61	5yr	1.15	1.57	1.87	2.47	3.15	4.36	4.93	5yr	3.86	4.74	5.41	6.28	7.20	5yr
10yr	0.47	0.73	0.90	1.26	1.63	1.96	10yr	1.40	1.91	2.25	3.01	3.79	5.43	6.21	10yr	4.81	5.97	6.78	7.76	8.91	10yr
25yr	0.58	0.89	1.11	1.58	2.08	2.54	25yr	1.79	2.48	2.91	3.90	4.84	7.57	8.46	25yr	6.70	8.14	9.12	10.30	11.35	25yr
50yr	0.68	1.04	1.30	1.86	2.51	3.08	50yr	2.16	3.01	3.54	4.74	5.85	9.48	10.71	50yr	8.39	10.30	11.45	12.76	13.94	50yr
100yr	0.81	1.22	1.52	2.20	3.02	3.74	100yr	2.61	3.66	4.31	5.78	7.08	11.88	13.56	100yr	10.51	13.03	14.35	15.83	17.14	100yr
200yr	0.95	1.42	1.80	2.61	3.64	4.56	200yr	3.14	4.45	5.25	7.05	8.55	14.93	15.71	200yr	13.21	15.11	18.02	19.61	21.09	200yr
500yr	1.17	1.75	2.25	3.27	4.65	5.89	500yr	4.01	5.76	6.81	9.19	11.00	20.23	21.10	500yr	17.90	20.28	24.32	26.08	27.79	500yr

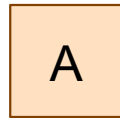




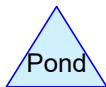
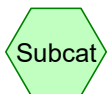
to channel



Exist Watershed



Dsign Point A



## 16042 D Pre Development

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### Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.096	61	>75% Grass cover, Good, HSG B (E2)
0.160	82	Dirt roads, HSG B (E1, E2)
0.029	98	Paved parking, HSG B (E2)
5.107	55	Woods, Good, HSG B (E1, E2)
0.569	70	Woods, Good, HSG C (E1, E2)
0.100	77	Woods, Good, HSG D (E2)

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## Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
5.392	HSG B	E1, E2
0.569	HSG C	E1, E2
0.100	HSG D	E2
0.000	Other	

**16042 D Pre Development**

Type III 24-hr 2 Year Rainfall=3.66"

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**Summary for Subcatchment E1: Exist Watershed**

Runoff = 0.48 cfs @ 12.29 hrs, Volume= 0.066 af, Depth&gt; 0.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2 Year Rainfall=3.66"

Area (ac)	CN	Description
1.123	55	Woods, Good, HSG B
0.265	70	Woods, Good, HSG C
0.065	82	Dirt roads, HSG B
1.453	59	Weighted Average
1.453		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.2	58	0.0700	4.26		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.3	105	0.1800	6.83		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
1.2	257	0.0600	3.67		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
4.3	275	0.0050	1.06		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
15.4	720	Total			

**Summary for Subcatchment E2: to channel**

Runoff = 1.07 cfs @ 12.45 hrs, Volume= 0.177 af, Depth&gt; 0.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2 Year Rainfall=3.66"

Area (ac)	CN	Description
0.029	98	Paved parking, HSG B
3.984	55	Woods, Good, HSG B
0.304	70	Woods, Good, HSG C
0.100	77	Woods, Good, HSG D
0.095	82	Dirt roads, HSG B
0.096	61	>75% Grass cover, Good, HSG B
4.608	57	Weighted Average
4.579		99.37% Pervious Area
0.029		0.63% Impervious Area



**16042 D Pre Development**

Type III 24-hr 2 Year Rainfall=3.66"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.3	88	0.0800	4.55		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.2	70	0.0900	4.83		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.9	168	0.0400	3.22		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.2	90	0.1600	6.44		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.3	22	0.0050	1.14		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
10.5	745	0.0020	1.18	3.55	<b>Channel Flow, Stream Channel</b> Area= 3.0 sf Perim= 5.0' r= 0.60' n= 0.040 Earth, cobble bottom, clean sides
21.8	1,208	Total			

**Summary for Reach A: Dsign Point A**

Inflow Area = 6.061 ac, 0.48% Impervious, Inflow Depth > 0.48" for 2 Year event  
 Inflow = 1.50 cfs @ 12.42 hrs, Volume= 0.242 af  
 Outflow = 1.50 cfs @ 12.42 hrs, Volume= 0.242 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

**16042 D Pre Development**

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Type III 24-hr 10 Year Rainfall=5.58"

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**Summary for Subcatchment E1: Exist Watershed**

Runoff = 1.81 cfs @ 12.24 hrs, Volume= 0.186 af, Depth&gt; 1.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10 Year Rainfall=5.58"

Area (ac)	CN	Description
1.123	55	Woods, Good, HSG B
0.265	70	Woods, Good, HSG C
0.065	82	Dirt roads, HSG B
1.453	59	Weighted Average
1.453		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.2	58	0.0700	4.26		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.3	105	0.1800	6.83		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
1.2	257	0.0600	3.67		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
4.3	275	0.0050	1.06		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
15.4	720	Total			

**Summary for Subcatchment E2: to channel**

Runoff = 4.43 cfs @ 12.35 hrs, Volume= 0.533 af, Depth&gt; 1.39"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10 Year Rainfall=5.58"

Area (ac)	CN	Description
0.029	98	Paved parking, HSG B
3.984	55	Woods, Good, HSG B
0.304	70	Woods, Good, HSG C
0.100	77	Woods, Good, HSG D
0.095	82	Dirt roads, HSG B
0.096	61	>75% Grass cover, Good, HSG B
4.608	57	Weighted Average
4.579		99.37% Pervious Area
0.029		0.63% Impervious Area

**16042 D Pre Development**

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Type III 24-hr 10 Year Rainfall=5.58"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.3	88	0.0800	4.55		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.2	70	0.0900	4.83		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.9	168	0.0400	3.22		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.2	90	0.1600	6.44		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.3	22	0.0050	1.14		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
10.5	745	0.0020	1.18	3.55	<b>Channel Flow, Stream Channel</b> Area= 3.0 sf Perim= 5.0' r= 0.60' n= 0.040 Earth, cobble bottom, clean sides
21.8	1,208	Total			

**Summary for Reach A: Dsign Point A**

Inflow Area = 6.061 ac, 0.48% Impervious, Inflow Depth > 1.42" for 10 Year event  
 Inflow = 6.05 cfs @ 12.32 hrs, Volume= 0.719 af  
 Outflow = 6.05 cfs @ 12.32 hrs, Volume= 0.719 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

**16042 D Pre Development**

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Type III 24-hr 25 Year Rainfall=7.10"

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**Summary for Subcatchment E1: Exist Watershed**

Runoff = 3.13 cfs @ 12.23 hrs, Volume= 0.305 af, Depth&gt; 2.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25 Year Rainfall=7.10"

Area (ac)	CN	Description
1.123	55	Woods, Good, HSG B
0.265	70	Woods, Good, HSG C
0.065	82	Dirt roads, HSG B
1.453	59	Weighted Average
1.453		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.2	58	0.0700	4.26		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.3	105	0.1800	6.83		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
1.2	257	0.0600	3.67		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
4.3	275	0.0050	1.06		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
15.4	720	Total			

**Summary for Subcatchment E2: to channel**

Runoff = 7.90 cfs @ 12.33 hrs, Volume= 0.892 af, Depth&gt; 2.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25 Year Rainfall=7.10"

Area (ac)	CN	Description
0.029	98	Paved parking, HSG B
3.984	55	Woods, Good, HSG B
0.304	70	Woods, Good, HSG C
0.100	77	Woods, Good, HSG D
0.095	82	Dirt roads, HSG B
0.096	61	>75% Grass cover, Good, HSG B
4.608	57	Weighted Average
4.579		99.37% Pervious Area
0.029		0.63% Impervious Area

**16042 D Pre Development**

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Type III 24-hr 25 Year Rainfall=7.10"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.3	88	0.0800	4.55		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.2	70	0.0900	4.83		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.9	168	0.0400	3.22		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.2	90	0.1600	6.44		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.3	22	0.0050	1.14		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
10.5	745	0.0020	1.18	3.55	<b>Channel Flow, Stream Channel</b> Area= 3.0 sf Perim= 5.0' r= 0.60' n= 0.040 Earth, cobble bottom, clean sides
21.8	1,208	Total			

**Summary for Reach A: Dsign Point A**

Inflow Area = 6.061 ac, 0.48% Impervious, Inflow Depth > 2.37" for 25 Year event  
 Inflow = 10.71 cfs @ 12.30 hrs, Volume= 1.197 af  
 Outflow = 10.71 cfs @ 12.30 hrs, Volume= 1.197 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

**16042 D Pre Development**

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Type III 24-hr 50 Year Rainfall=8.52"

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**Summary for Subcatchment E1: Exist Watershed**

Runoff = 4.51 cfs @ 12.22 hrs, Volume= 0.429 af, Depth&gt; 3.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 50 Year Rainfall=8.52"

Area (ac)	CN	Description
1.123	55	Woods, Good, HSG B
0.265	70	Woods, Good, HSG C
0.065	82	Dirt roads, HSG B
1.453	59	Weighted Average
1.453		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.2	58	0.0700	4.26		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.3	105	0.1800	6.83		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
1.2	257	0.0600	3.67		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
4.3	275	0.0050	1.06		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
15.4	720	Total			

**Summary for Subcatchment E2: to channel**

Runoff = 11.54 cfs @ 12.32 hrs, Volume= 1.268 af, Depth&gt; 3.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 50 Year Rainfall=8.52"

Area (ac)	CN	Description
0.029	98	Paved parking, HSG B
3.984	55	Woods, Good, HSG B
0.304	70	Woods, Good, HSG C
0.100	77	Woods, Good, HSG D
0.095	82	Dirt roads, HSG B
0.096	61	>75% Grass cover, Good, HSG B
4.608	57	Weighted Average
4.579		99.37% Pervious Area
0.029		0.63% Impervious Area

**16042 D Pre Development**

Type III 24-hr 50 Year Rainfall=8.52"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.3	88	0.0800	4.55		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.2	70	0.0900	4.83		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.9	168	0.0400	3.22		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.2	90	0.1600	6.44		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.3	22	0.0050	1.14		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
10.5	745	0.0020	1.18	3.55	<b>Channel Flow, Stream Channel</b> Area= 3.0 sf Perim= 5.0' r= 0.60' n= 0.040 Earth, cobble bottom, clean sides
21.8	1,208	Total			

**Summary for Reach A: Dsign Point A**

Inflow Area = 6.061 ac, 0.48% Impervious, Inflow Depth > 3.36" for 50 Year event  
 Inflow = 15.56 cfs @ 12.29 hrs, Volume= 1.696 af  
 Outflow = 15.56 cfs @ 12.29 hrs, Volume= 1.696 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

**16042 D Pre Development**

Type III 24-hr 100 Year Rainfall=10.24"

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**Summary for Subcatchment E1: Exist Watershed**

Runoff = 6.27 cfs @ 12.22 hrs, Volume= 0.589 af, Depth&gt; 4.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100 Year Rainfall=10.24"

Area (ac)	CN	Description
1.123	55	Woods, Good, HSG B
0.265	70	Woods, Good, HSG C
0.065	82	Dirt roads, HSG B
1.453	59	Weighted Average
1.453		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.2	58	0.0700	4.26		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.3	105	0.1800	6.83		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
1.2	257	0.0600	3.67		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
4.3	275	0.0050	1.06		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
15.4	720	Total			

**Summary for Subcatchment E2: to channel**

Runoff = 16.26 cfs @ 12.31 hrs, Volume= 1.761 af, Depth&gt; 4.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100 Year Rainfall=10.24"

Area (ac)	CN	Description
0.029	98	Paved parking, HSG B
3.984	55	Woods, Good, HSG B
0.304	70	Woods, Good, HSG C
0.100	77	Woods, Good, HSG D
0.095	82	Dirt roads, HSG B
0.096	61	>75% Grass cover, Good, HSG B
4.608	57	Weighted Average
4.579		99.37% Pervious Area
0.029		0.63% Impervious Area



**16042 D Pre Development**

Type III 24-hr 100 Year Rainfall=10.24"

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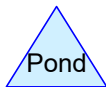
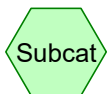
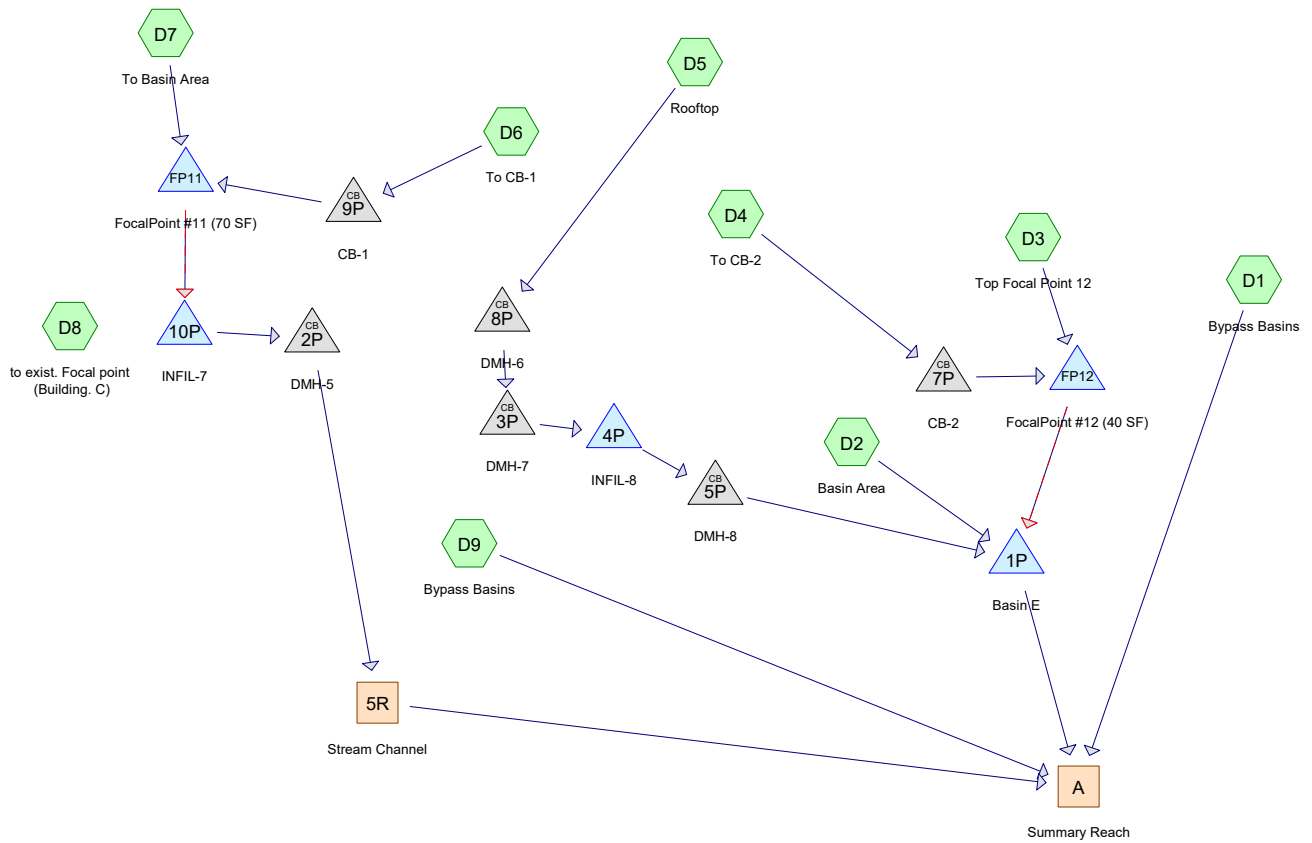
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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.3	88	0.0800	4.55		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.2	70	0.0900	4.83		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.9	168	0.0400	3.22		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.2	90	0.1600	6.44		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.3	22	0.0050	1.14		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
10.5	745	0.0020	1.18	3.55	<b>Channel Flow, Stream Channel</b> Area= 3.0 sf Perim= 5.0' r= 0.60' n= 0.040 Earth, cobble bottom, clean sides
21.8	1,208	Total			

**Summary for Reach A: Dsign Point A**

Inflow Area = 6.061 ac, 0.48% Impervious, Inflow Depth > 4.65" for 100 Year event  
 Inflow = 21.85 cfs @ 12.28 hrs, Volume= 2.350 af  
 Outflow = 21.85 cfs @ 12.28 hrs, Volume= 2.350 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs



**Routing Diagram for 16042 D Post Development**  
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### Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.286	61	>75% Grass cover, Good, HSG B (D1, D2, D4, D6, D7, D9)
0.061	82	Dirt roads, HSG B (D1, D9)
0.012	96	Gravel surface, HSG B (D3)
0.578	98	Paved parking, HSG B (D3, D4, D6, D7, D8)
0.365	98	Roofs, HSG B (D5)
3.236	55	Woods, Good, HSG B (D1, D3, D9)
0.423	70	Woods, Good, HSG C (D1, D9)
0.100	77	Woods, Good, HSG D (D9)

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## Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
5.538	HSG B	D1, D2, D3, D4, D5, D6, D7, D8, D9
0.423	HSG C	D1, D9
0.100	HSG D	D9
0.000	Other	

**16042 D Post Development**

Type III 24-hr 2 Year Rainfall=3.66"

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**Summary for Subcatchment D1: Bypass Basins**

Runoff = 0.45 cfs @ 12.23 hrs, Volume= 0.055 af, Depth&gt; 0.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2 Year Rainfall=3.66"

Area (ac)	CN	Description
0.762	55	Woods, Good, HSG B
0.305	70	Woods, Good, HSG C
0.055	61	>75% Grass cover, Good, HSG B
0.011	82	Dirt roads, HSG B
1.133	60	Weighted Average
1.133		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.2	71	0.0900	4.83		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.2	88	0.1700	6.64		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
3.1	551	0.0380	2.92		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
12.9	735	Total			

**Summary for Subcatchment D2: Basin Area**

Runoff = 0.11 cfs @ 12.11 hrs, Volume= 0.010 af, Depth&gt; 0.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2 Year Rainfall=3.66"

Area (ac)	CN	Description
0.199	61	>75% Grass cover, Good, HSG B
0.199		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D3: Top Focal Point 12**

Runoff = 0.07 cfs @ 12.11 hrs, Volume= 0.006 af, Depth&gt; 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2 Year Rainfall=3.66"

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Type III 24-hr 2 Year Rainfall=3.66"

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Area (ac)	CN	Description
0.007	98	Paved parking, HSG B
0.012	96	Gravel surface, HSG B
0.062	55	Woods, Good, HSG B
0.081	65	Weighted Average
0.074		91.36% Pervious Area
0.007		8.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D4: To CB-2**

Runoff = 0.81 cfs @ 12.10 hrs, Volume= 0.060 af, Depth> 1.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2 Year Rainfall=3.66"

Area (ac)	CN	Description
0.187	98	Paved parking, HSG B
0.381	61	>75% Grass cover, Good, HSG B
0.568	73	Weighted Average
0.381		67.08% Pervious Area
0.187		32.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	15	0.5000	0.29		<b>Sheet Flow,</b> Grass: Dense n= 0.240 P2= 3.18"
2.0	245	0.0160	2.04		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.0	28	0.4000	10.18		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.7	100	0.0150	2.49		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
2.4					<b>Direct Entry, Adjustment to 6 min</b>
6.0	388	Total			

**Summary for Subcatchment D5: Rooftop**

Runoff = 1.27 cfs @ 12.09 hrs, Volume= 0.103 af, Depth> 3.39"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2 Year Rainfall=3.66"

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Type III 24-hr 2 Year Rainfall=3.66"

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Area (ac)	CN	Description
0.365	98	Roofs, HSG B
0.365		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D6: To CB-1**

Runoff = 1.26 cfs @ 12.09 hrs, Volume= 0.090 af, Depth&gt; 2.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2 Year Rainfall=3.66"

Area (ac)	CN	Description
0.330	98	Paved parking, HSG B
0.180	61	>75% Grass cover, Good, HSG B
0.510	85	Weighted Average
0.180		35.29% Pervious Area
0.330		64.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D7: To Basin Area**

Runoff = 0.15 cfs @ 12.10 hrs, Volume= 0.012 af, Depth&gt; 1.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2 Year Rainfall=3.66"

Area (ac)	CN	Description
0.028	98	Paved parking, HSG B
0.110	61	>75% Grass cover, Good, HSG B
0.138	69	Weighted Average
0.110		79.71% Pervious Area
0.028		20.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

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Type III 24-hr 2 Year Rainfall=3.66"

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**Summary for Subcatchment D8: to exist. Focal point (Building. C)**

Runoff = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af, Depth> 3.39"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2 Year Rainfall=3.66"

Area (ac)	CN	Description
0.026	98	Paved parking, HSG B
0.026		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D9: Bypass Basins**

Runoff = 0.71 cfs @ 12.45 hrs, Volume= 0.117 af, Depth> 0.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2 Year Rainfall=3.66"

Area (ac)	CN	Description
0.050	82	Dirt roads, HSG B
2.412	55	Woods, Good, HSG B
0.118	70	Woods, Good, HSG C
0.100	77	Woods, Good, HSG D
0.361	61	>75% Grass cover, Good, HSG B
3.041	57	Weighted Average
3.041		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.9	257	0.0860	4.72		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.9	235	0.0550	4.19	4.19	<b>Channel Flow,</b> Area= 1.0 sf Perim= 3.0' r= 0.33' n= 0.040 Mountain streams
10.5	745	0.0020	1.18	3.55	<b>Channel Flow,</b> Area= 3.0 sf Perim= 5.0' r= 0.60' n= 0.040 Winding stream, pools & shoals
21.7	1,262	Total			



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## Summary for Reach 5R: Stream Channel

Inflow Area = 0.648 ac, 55.25% Impervious, Inflow Depth > 1.41" for 2 Year event  
 Inflow = 0.40 cfs @ 12.54 hrs, Volume= 0.076 af  
 Outflow = 0.31 cfs @ 12.71 hrs, Volume= 0.075 af, Atten= 22%, Lag= 10.3 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 1.09 fps, Min. Travel Time= 11.4 min  
 Avg. Velocity = 0.59 fps, Avg. Travel Time= 21.4 min

Peak Storage= 216 cf @ 12.71 hrs  
 Average Depth at Peak Storage= 0.10'  
 Bank-Full Depth= 1.50' Flow Area= 4.5 sf, Capacity= 20.16 cfs

3.00' x 1.50' deep channel, n= 0.030 Earth, grassed & winding  
 Length= 750.0' Slope= 0.0120 '/'  
 Inlet Invert= 101.00', Outlet Invert= 92.00'



## Summary for Reach A: Summary Reach

Inflow Area = 6.035 ac, 15.19% Impervious, Inflow Depth > 0.61" for 2 Year event  
 Inflow = 1.16 cfs @ 12.55 hrs, Volume= 0.308 af  
 Outflow = 1.16 cfs @ 12.55 hrs, Volume= 0.308 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

## Summary for Pond 1P: Basin E

Inflow Area = 1.213 ac, 46.08% Impervious, Inflow Depth > 1.25" for 2 Year event  
 Inflow = 1.49 cfs @ 12.21 hrs, Volume= 0.127 af  
 Outflow = 0.15 cfs @ 14.09 hrs, Volume= 0.076 af, Atten= 90%, Lag= 113.0 min  
 Discarded = 0.02 cfs @ 14.09 hrs, Volume= 0.015 af  
 Primary = 0.13 cfs @ 14.09 hrs, Volume= 0.061 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Peak Elev= 103.43' @ 14.09 hrs Surf.Area= 2,387 sf Storage= 2,960 cf

Plug-Flow detention time= 235.2 min calculated for 0.076 af (60% of inflow)  
 Center-of-Mass det. time= 137.0 min ( 983.9 - 846.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	101.75'	16,886 cf	<b>Custom Stage Data (Irregular)</b> Listed below (Recalc)

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Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
101.75	1,000	165.0	0	0	1,000
102.00	1,387	180.0	297	297	1,414
104.00	2,863	387.0	4,162	4,459	10,771
106.00	4,468	413.0	7,272	11,731	12,610
107.00	5,875	439.0	5,155	16,886	14,423

Device	Routing	Invert	Outlet Devices
#1	Primary	100.00'	<b>12.0" Round Culvert</b> L= 33.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 100.00' / 99.67' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	103.00'	<b>3.0" Vert. Orifice/Grate</b> C= 0.600
#3	Device 1	104.35'	<b>6.0" Vert. Orifice/Grate</b> C= 0.600
#4	Device 1	106.50'	<b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads
#5	Discarded	101.75'	<b>0.300 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.02 cfs @ 14.09 hrs HW=103.43' (Free Discharge)

↳ **5=Exfiltration** (Exfiltration Controls 0.02 cfs)

**Primary OutFlow** Max=0.13 cfs @ 14.09 hrs HW=103.43' TW=0.00' (Dynamic Tailwater)

↳ **1=Culvert** (Passes 0.13 cfs of 6.47 cfs potential flow)  
 ↳ **2=Orifice/Grate** (Orifice Controls 0.13 cfs @ 2.65 fps)  
 ↳ **3=Orifice/Grate** ( Controls 0.00 cfs)  
 ↳ **4=Orifice/Grate** ( Controls 0.00 cfs)

**Summary for Pond 2P: DMH-5**

Inflow Area = 0.648 ac, 55.25% Impervious, Inflow Depth > 1.41" for 2 Year event  
 Inflow = 0.40 cfs @ 12.54 hrs, Volume= 0.076 af  
 Outflow = 0.40 cfs @ 12.54 hrs, Volume= 0.076 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.40 cfs @ 12.54 hrs, Volume= 0.076 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 109.31' @ 12.54 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	109.00'	<b>12.0" Round Culvert</b> L= 22.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 109.00' / 106.50' S= 0.1136 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=0.40 cfs @ 12.54 hrs HW=109.31' TW=101.07' (Dynamic Tailwater)

↳ **1=Culvert** (Inlet Controls 0.40 cfs @ 1.90 fps)

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**Summary for Pond 3P: DMH-7**

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 3.39" for 2 Year event  
 Inflow = 1.27 cfs @ 12.09 hrs, Volume= 0.103 af  
 Outflow = 1.27 cfs @ 12.09 hrs, Volume= 0.103 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.27 cfs @ 12.09 hrs, Volume= 0.103 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Peak Elev= 117.21' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	116.40'	<b>12.0" Round Culvert</b> L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 116.40' / 116.40' S= 0.0000 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=1.24 cfs @ 12.09 hrs HW=117.20' TW=116.65' (Dynamic Tailwater)  
 ↑1=Culvert (Barrel Controls 1.24 cfs @ 2.51 fps)

**Summary for Pond 4P: INFIL-8**

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 3.39" for 2 Year event  
 Inflow = 1.27 cfs @ 12.09 hrs, Volume= 0.103 af  
 Outflow = 0.82 cfs @ 12.20 hrs, Volume= 0.066 af, Atten= 36%, Lag= 6.5 min  
 Discarded = 0.01 cfs @ 5.45 hrs, Volume= 0.015 af  
 Primary = 0.81 cfs @ 12.20 hrs, Volume= 0.051 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Peak Elev= 116.84' @ 12.20 hrs Surf.Area= 0.030 ac Storage= 0.044 af

Plug-Flow detention time= 164.7 min calculated for 0.066 af (64% of inflow)  
 Center-of-Mass det. time= 67.8 min ( 814.5 - 746.8 )

Volume	Invert	Avail.Storage	Storage Description
#1A	114.60'	0.028 af	<b>15.75'W x 81.94'L x 3.50'H Field A</b> 0.104 af Overall - 0.035 af Embedded = 0.069 af x 40.0% Voids
#2A	115.10'	0.035 af	<b>ADS_StormTech SC-740 +Cap</b> x 33 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 33 Chambers in 3 Rows
		0.062 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	114.60'	<b>0.300 in/hr Exfiltration over Surface area</b>
#2	Primary	116.43'	<b>12.0" Round Culvert X 2.00</b> L= 3.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 116.43' / 116.43' S= 0.0000 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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**Discarded OutFlow** Max=0.01 cfs @ 5.45 hrs HW=114.64' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=0.80 cfs @ 12.20 hrs HW=116.83' TW=114.46' (Dynamic Tailwater)

↑**2=Culvert** (Barrel Controls 0.80 cfs @ 1.99 fps)

### Summary for Pond 5P: DMH-8

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 1.67" for 2 Year event  
Inflow = 0.81 cfs @ 12.20 hrs, Volume= 0.051 af  
Outflow = 0.81 cfs @ 12.20 hrs, Volume= 0.051 af, Atten= 0%, Lag= 0.0 min  
Primary = 0.81 cfs @ 12.20 hrs, Volume= 0.051 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 114.46' @ 12.20 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	114.00'	<b>12.0" Round Culvert</b> L= 68.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 114.00' / 104.00' S= 0.1471 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=0.80 cfs @ 12.20 hrs HW=114.46' TW=102.33' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 0.80 cfs @ 2.30 fps)

### Summary for Pond 7P: CB-2

Inflow Area = 0.568 ac, 32.92% Impervious, Inflow Depth > 1.26" for 2 Year event  
Inflow = 0.81 cfs @ 12.10 hrs, Volume= 0.060 af  
Outflow = 0.81 cfs @ 12.10 hrs, Volume= 0.060 af, Atten= 0%, Lag= 0.0 min  
Primary = 0.81 cfs @ 12.10 hrs, Volume= 0.060 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 108.46' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	108.00'	<b>12.0" Round Culvert</b> L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 108.00' / 107.50' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=0.81 cfs @ 12.10 hrs HW=108.46' TW=107.34' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 0.81 cfs @ 2.31 fps)

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### Summary for Pond 8P: DMH-6

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 3.39" for 2 Year event  
Inflow = 1.27 cfs @ 12.09 hrs, Volume= 0.103 af  
Outflow = 1.27 cfs @ 12.09 hrs, Volume= 0.103 af, Atten= 0%, Lag= 0.0 min  
Primary = 1.27 cfs @ 12.09 hrs, Volume= 0.103 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Peak Elev= 118.59' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	118.00'	<b>12.0" Round Culvert</b> L= 30.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 118.00' / 117.00' S= 0.0333 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=1.24 cfs @ 12.09 hrs HW=118.58' TW=117.20' (Dynamic Tailwater)  
↑1=Culvert (Inlet Controls 1.24 cfs @ 2.60 fps)

### Summary for Pond 9P: CB-1

Inflow Area = 0.510 ac, 64.71% Impervious, Inflow Depth > 2.13" for 2 Year event  
Inflow = 1.26 cfs @ 12.09 hrs, Volume= 0.090 af  
Outflow = 1.26 cfs @ 12.09 hrs, Volume= 0.090 af, Atten= 0%, Lag= 0.0 min  
Primary = 1.26 cfs @ 12.09 hrs, Volume= 0.090 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Peak Elev= 115.49' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	114.82'	<b>12.0" Round Culvert</b> L= 14.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 114.82' / 114.68' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=1.24 cfs @ 12.09 hrs HW=115.48' TW=114.67' (Dynamic Tailwater)  
↑1=Culvert (Barrel Controls 1.24 cfs @ 3.18 fps)

### Summary for Pond 10P: INFIL-7

Inflow Area = 0.648 ac, 55.25% Impervious, Inflow Depth > 1.89" for 2 Year event  
Inflow = 0.50 cfs @ 12.40 hrs, Volume= 0.102 af  
Outflow = 0.41 cfs @ 12.54 hrs, Volume= 0.083 af, Atten= 19%, Lag= 8.1 min  
Discarded = 0.01 cfs @ 9.25 hrs, Volume= 0.007 af  
Primary = 0.40 cfs @ 12.54 hrs, Volume= 0.076 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Peak Elev= 110.87' @ 12.54 hrs Surf.Area= 0.017 ac Storage= 0.024 af

Plug-Flow detention time= 107.9 min calculated for 0.083 af (81% of inflow)  
Center-of-Mass det. time= 45.7 min ( 895.4 - 849.7 )

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Volume	Invert	Avail.Storage	Storage Description
#1A	109.00'	0.015 af	<b>17.12'W x 43.88'L x 4.07'H Field A</b> 0.070 af Overall - 0.034 af Embedded = 0.036 af x 40.0% Voids
#2A	109.25'	0.032 af	<b>ACF R-Tank HD 2 x 170 Inside #1</b> Inside= 15.7"W x 33.9"H => 3.52 sf x 2.35'L = 8.3 cf Outside= 15.7"W x 33.9"H => 3.70 sf x 2.35'L = 8.7 cf 170 Chambers in 10 Rows
		0.047 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	110.50'	<b>12.0" Round Culvert</b> L= 6.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 110.50' / 110.44' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Discarded	109.00'	<b>0.300 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.01 cfs @ 9.25 hrs HW=109.05' (Free Discharge)

↳ **2=Exfiltration** (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=0.40 cfs @ 12.54 hrs HW=110.86' TW=109.31' (Dynamic Tailwater)

↳ **1=Culvert** (Barrel Controls 0.40 cfs @ 2.29 fps)

**Summary for Pond FP11: FocalPoint #11 (70 SF)**

Inflow Area =	0.648 ac, 55.25% Impervious, Inflow Depth > 1.89" for 2 Year event
Inflow =	1.42 cfs @ 12.09 hrs, Volume= 0.102 af
Outflow =	0.50 cfs @ 12.40 hrs, Volume= 0.102 af, Atten= 65%, Lag= 18.5 min
Primary =	0.20 cfs @ 11.70 hrs, Volume= 0.095 af
Secondary =	0.30 cfs @ 12.40 hrs, Volume= 0.008 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 115.09' @ 12.40 hrs Surf.Area= 88 sf Storage= 1,159 cf

Plug-Flow detention time= 32.9 min calculated for 0.102 af (100% of inflow)

Center-of-Mass det. time= 32.8 min ( 849.7 - 816.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	111.95'	40 cf	<b>8.00'W x 11.00'L x 2.25'H FocalPoint</b> 198 cf Overall x 20.0% Voids
#2	114.20'	3,745 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) -Impervious
		3,785 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
114.20	1,033	0	0
116.00	1,913	2,651	2,651
116.50	2,462	1,094	3,745

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Device	Routing	Invert	Outlet Devices
#1	Primary	111.00'	<b>8.0" Round Culvert</b> L= 41.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 111.00' / 110.79' S= 0.0051 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Device 1	111.95'	<b>100.000 in/hr Exfiltration over Surface area</b> Phase-In= 0.10'
#3	Secondary	115.00'	<b>12.0" Horiz. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads

**Primary OutFlow** Max=0.20 cfs @ 11.70 hrs HW=112.16' TW=109.81' (Dynamic Tailwater)

↳ **1=Culvert** (Passes 0.20 cfs of 1.22 cfs potential flow)

↳ **2=Exfiltration** (Exfiltration Controls 0.20 cfs)

**Secondary OutFlow** Max=0.30 cfs @ 12.40 hrs HW=115.09' TW=110.78' (Dynamic Tailwater)

↳ **3=Orifice/Grate** (Weir Controls 0.30 cfs @ 1.00 fps)

**Summary for Pond FP12: FocalPoint #12 (40 SF)**

Inflow Area =	0.649 ac, 29.89% Impervious, Inflow Depth > 1.21" for 2 Year event
Inflow =	0.88 cfs @ 12.10 hrs, Volume= 0.065 af
Outflow =	0.61 cfs @ 12.22 hrs, Volume= 0.065 af, Atten= 31%, Lag= 7.1 min
Primary =	0.25 cfs @ 11.95 hrs, Volume= 0.060 af
Secondary =	0.36 cfs @ 12.22 hrs, Volume= 0.006 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 107.61' @ 12.22 hrs Surf.Area= 108 sf Storage= 335 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 5.2 min ( 853.5 - 848.3 )

Volume	Invert	Avail.Storage	Storage Description
#1	104.75'	49 cf	<b>9.00'W x 12.00'L x 2.25'H FocalPoint</b> 243 cf Overall x 20.0% Voids
#2	107.00'	1,363 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) -Impervious
		1,412 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
107.00	380	0	0
108.00	678	529	529
109.00	990	834	1,363

Device	Routing	Invert	Outlet Devices
#1	Primary	104.00'	<b>8.0" Round Culvert</b> L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 104.00' / 103.50' S= 0.0200 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Device 1	104.75'	<b>100.000 in/hr Exfiltration over Surface area</b> Phase-In= 0.10'
#3	Secondary	107.50'	<b>12.0" Horiz. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads

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**Primary OutFlow** Max=0.25 cfs @ 11.95 hrs HW=105.07' TW=101.94' (Dynamic Tailwater)

└─**1=Culvert** (Passes 0.25 cfs of 1.44 cfs potential flow)

└─**2=Exfiltration** (Exfiltration Controls 0.25 cfs)

**Secondary OutFlow** Max=0.32 cfs @ 12.22 hrs HW=107.60' TW=102.40' (Dynamic Tailwater)

└─**3=Orifice/Grate** (Weir Controls 0.32 cfs @ 1.03 fps)



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**Summary for Subcatchment D1: Bypass Basins**

Runoff = 1.61 cfs @ 12.20 hrs, Volume= 0.152 af, Depth&gt; 1.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10 Year Rainfall=5.58"

Area (ac)	CN	Description
0.762	55	Woods, Good, HSG B
0.305	70	Woods, Good, HSG C
0.055	61	>75% Grass cover, Good, HSG B
0.011	82	Dirt roads, HSG B
1.133	60	Weighted Average
1.133		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.2	71	0.0900	4.83		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.2	88	0.1700	6.64		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
3.1	551	0.0380	2.92		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
12.9	735	Total			

**Summary for Subcatchment D2: Basin Area**

Runoff = 0.37 cfs @ 12.10 hrs, Volume= 0.028 af, Depth&gt; 1.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10 Year Rainfall=5.58"

Area (ac)	CN	Description
0.199	61	>75% Grass cover, Good, HSG B
0.199		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D3: Top Focal Point 12**

Runoff = 0.19 cfs @ 12.10 hrs, Volume= 0.014 af, Depth&gt; 2.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10 Year Rainfall=5.58"

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Area (ac)	CN	Description
0.007	98	Paved parking, HSG B
0.012	96	Gravel surface, HSG B
0.062	55	Woods, Good, HSG B
0.081	65	Weighted Average
0.074		91.36% Pervious Area
0.007		8.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D4: To CB-2**

Runoff = 1.79 cfs @ 12.09 hrs, Volume= 0.128 af, Depth> 2.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10 Year Rainfall=5.58"

Area (ac)	CN	Description
0.187	98	Paved parking, HSG B
0.381	61	>75% Grass cover, Good, HSG B
0.568	73	Weighted Average
0.381		67.08% Pervious Area
0.187		32.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	15	0.5000	0.29		<b>Sheet Flow,</b> Grass: Dense n= 0.240 P2= 3.18"
2.0	245	0.0160	2.04		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.0	28	0.4000	10.18		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.7	100	0.0150	2.49		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
2.4					<b>Direct Entry, Adjustment to 6 min</b>
6.0	388	Total			

**Summary for Subcatchment D5: Rooftop**

Runoff = 1.95 cfs @ 12.09 hrs, Volume= 0.161 af, Depth> 5.29"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10 Year Rainfall=5.58"

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Area (ac)	CN	Description
0.365	98	Roofs, HSG B
0.365		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D6: To CB-1**

Runoff = 2.25 cfs @ 12.09 hrs, Volume= 0.164 af, Depth&gt; 3.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10 Year Rainfall=5.58"

Area (ac)	CN	Description
0.330	98	Paved parking, HSG B
0.180	61	>75% Grass cover, Good, HSG B
0.510	85	Weighted Average
0.180		35.29% Pervious Area
0.330		64.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D7: To Basin Area**

Runoff = 0.37 cfs @ 12.10 hrs, Volume= 0.027 af, Depth&gt; 2.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10 Year Rainfall=5.58"

Area (ac)	CN	Description
0.028	98	Paved parking, HSG B
0.110	61	>75% Grass cover, Good, HSG B
0.138	69	Weighted Average
0.110		79.71% Pervious Area
0.028		20.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

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Type III 24-hr 10 Year Rainfall=5.58"

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**Summary for Subcatchment D8: to exist. Focal point (Building. C)**

Runoff = 0.14 cfs @ 12.09 hrs, Volume= 0.011 af, Depth> 5.29"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10 Year Rainfall=5.58"

Area (ac)	CN	Description
0.026	98	Paved parking, HSG B
0.026		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D9: Bypass Basins**

Runoff = 2.93 cfs @ 12.35 hrs, Volume= 0.352 af, Depth> 1.39"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10 Year Rainfall=5.58"

Area (ac)	CN	Description
0.050	82	Dirt roads, HSG B
2.412	55	Woods, Good, HSG B
0.118	70	Woods, Good, HSG C
0.100	77	Woods, Good, HSG D
0.361	61	>75% Grass cover, Good, HSG B
3.041	57	Weighted Average
3.041		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.9	257	0.0860	4.72		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.9	235	0.0550	4.19	4.19	<b>Channel Flow,</b> Area= 1.0 sf Perim= 3.0' r= 0.33' n= 0.040 Mountain streams
10.5	745	0.0020	1.18	3.55	<b>Channel Flow,</b> Area= 3.0 sf Perim= 5.0' r= 0.60' n= 0.040 Winding stream, pools & shoals
21.7	1,262	Total			

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## Summary for Reach 5R: Stream Channel

Inflow Area = 0.648 ac, 55.25% Impervious, Inflow Depth > 3.03" for 10 Year event  
 Inflow = 1.76 cfs @ 12.23 hrs, Volume= 0.164 af  
 Outflow = 1.52 cfs @ 12.32 hrs, Volume= 0.163 af, Atten= 13%, Lag= 5.4 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 1.97 fps, Min. Travel Time= 6.4 min  
 Avg. Velocity = 0.75 fps, Avg. Travel Time= 16.7 min

Peak Storage= 578 cf @ 12.32 hrs  
 Average Depth at Peak Storage= 0.26'  
 Bank-Full Depth= 1.50' Flow Area= 4.5 sf, Capacity= 20.16 cfs

3.00' x 1.50' deep channel, n= 0.030 Earth, grassed & winding  
 Length= 750.0' Slope= 0.0120 '/'  
 Inlet Invert= 101.00', Outlet Invert= 92.00'



## Summary for Reach A: Summary Reach

Inflow Area = 6.035 ac, 15.19% Impervious, Inflow Depth > 1.72" for 10 Year event  
 Inflow = 5.95 cfs @ 12.31 hrs, Volume= 0.867 af  
 Outflow = 5.95 cfs @ 12.31 hrs, Volume= 0.867 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

## Summary for Pond 1P: Basin E

Inflow Area = 1.213 ac, 46.08% Impervious, Inflow Depth > 2.74" for 10 Year event  
 Inflow = 4.04 cfs @ 12.12 hrs, Volume= 0.277 af  
 Outflow = 0.41 cfs @ 13.56 hrs, Volume= 0.220 af, Atten= 90%, Lag= 86.5 min  
 Discarded = 0.02 cfs @ 13.56 hrs, Volume= 0.020 af  
 Primary = 0.39 cfs @ 13.56 hrs, Volume= 0.200 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Peak Elev= 104.55' @ 13.56 hrs Surf.Area= 3,267 sf Storage= 6,135 cf

Plug-Flow detention time= 229.6 min calculated for 0.220 af (79% of inflow)  
 Center-of-Mass det. time= 160.4 min ( 986.3 - 825.8 )

Volume	Invert	Avail.Storage	Storage Description
#1	101.75'	16,886 cf	<b>Custom Stage Data (Irregular)</b> Listed below (Recalc)

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Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
101.75	1,000	165.0	0	0	1,000
102.00	1,387	180.0	297	297	1,414
104.00	2,863	387.0	4,162	4,459	10,771
106.00	4,468	413.0	7,272	11,731	12,610
107.00	5,875	439.0	5,155	16,886	14,423

Device	Routing	Invert	Outlet Devices
#1	Primary	100.00'	<b>12.0" Round Culvert</b> L= 33.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 100.00' / 99.67' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	103.00'	<b>3.0" Vert. Orifice/Grate</b> C= 0.600
#3	Device 1	104.35'	<b>6.0" Vert. Orifice/Grate</b> C= 0.600
#4	Device 1	106.50'	<b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads
#5	Discarded	101.75'	<b>0.300 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.02 cfs @ 13.56 hrs HW=104.55' (Free Discharge)

↑**5=Exfiltration** (Exfiltration Controls 0.02 cfs)

**Primary OutFlow** Max=0.39 cfs @ 13.56 hrs HW=104.55' TW=0.00' (Dynamic Tailwater)

↑**1=Culvert** (Passes 0.39 cfs of 7.61 cfs potential flow)

↑**2=Orifice/Grate** (Orifice Controls 0.28 cfs @ 5.74 fps)

↑**3=Orifice/Grate** (Orifice Controls 0.11 cfs @ 1.51 fps)

↑**4=Orifice/Grate** ( Controls 0.00 cfs)

**Summary for Pond 2P: DMH-5**

Inflow Area = 0.648 ac, 55.25% Impervious, Inflow Depth > 3.03" for 10 Year event

Inflow = 1.76 cfs @ 12.23 hrs, Volume= 0.164 af

Outflow = 1.76 cfs @ 12.23 hrs, Volume= 0.164 af, Atten= 0%, Lag= 0.0 min

Primary = 1.76 cfs @ 12.23 hrs, Volume= 0.164 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 109.72' @ 12.23 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	109.00'	<b>12.0" Round Culvert</b> L= 22.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 109.00' / 106.50' S= 0.1136 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=1.73 cfs @ 12.23 hrs HW=109.72' TW=101.22' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 1.73 cfs @ 2.88 fps)

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**Summary for Pond 3P: DMH-7**

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 5.29" for 10 Year event  
 Inflow = 1.95 cfs @ 12.09 hrs, Volume= 0.161 af  
 Outflow = 1.95 cfs @ 12.09 hrs, Volume= 0.161 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.95 cfs @ 12.09 hrs, Volume= 0.161 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Peak Elev= 117.45' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	116.40'	<b>12.0" Round Culvert</b> L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 116.40' / 116.40' S= 0.0000 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=1.90 cfs @ 12.09 hrs HW=117.44' TW=117.01' (Dynamic Tailwater)  
 ←1=Culvert (Barrel Controls 1.90 cfs @ 2.90 fps)

**Summary for Pond 4P: INFIL-8**

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 5.29" for 10 Year event  
 Inflow = 1.95 cfs @ 12.09 hrs, Volume= 0.161 af  
 Outflow = 1.76 cfs @ 12.13 hrs, Volume= 0.123 af, Atten= 10%, Lag= 2.3 min  
 Discarded = 0.01 cfs @ 3.40 hrs, Volume= 0.016 af  
 Primary = 1.75 cfs @ 12.13 hrs, Volume= 0.107 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Peak Elev= 117.04' @ 12.13 hrs Surf.Area= 0.030 ac Storage= 0.048 af

Plug-Flow detention time= 139.3 min calculated for 0.123 af (77% of inflow)  
 Center-of-Mass det. time= 60.7 min ( 800.2 - 739.5 )

Volume	Invert	Avail.Storage	Storage Description
#1A	114.60'	0.028 af	<b>15.75'W x 81.94'L x 3.50'H Field A</b> 0.104 af Overall - 0.035 af Embedded = 0.069 af x 40.0% Voids
#2A	115.10'	0.035 af	<b>ADS_StormTech SC-740 +Cap</b> x 33 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 33 Chambers in 3 Rows
		0.062 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	114.60'	<b>0.300 in/hr Exfiltration over Surface area</b>
#2	Primary	116.43'	<b>12.0" Round Culvert X 2.00</b> L= 3.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 116.43' / 116.43' S= 0.0000 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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**Discarded OutFlow** Max=0.01 cfs @ 3.40 hrs HW=114.64' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=1.71 cfs @ 12.13 hrs HW=117.04' TW=114.71' (Dynamic Tailwater)

↑**2=Culvert** (Barrel Controls 1.71 cfs @ 2.47 fps)

### Summary for Pond 5P: DMH-8

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 3.53" for 10 Year event  
Inflow = 1.75 cfs @ 12.13 hrs, Volume= 0.107 af  
Outflow = 1.75 cfs @ 12.13 hrs, Volume= 0.107 af, Atten= 0%, Lag= 0.0 min  
Primary = 1.75 cfs @ 12.13 hrs, Volume= 0.107 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 114.72' @ 12.13 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	114.00'	<b>12.0" Round Culvert</b> L= 68.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 114.00' / 104.00' S= 0.1471 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=1.71 cfs @ 12.13 hrs HW=114.71' TW=103.33' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 1.71 cfs @ 2.87 fps)

### Summary for Pond 7P: CB-2

Inflow Area = 0.568 ac, 32.92% Impervious, Inflow Depth > 2.70" for 10 Year event  
Inflow = 1.79 cfs @ 12.09 hrs, Volume= 0.128 af  
Outflow = 1.79 cfs @ 12.09 hrs, Volume= 0.128 af, Atten= 0%, Lag= 0.0 min  
Primary = 1.79 cfs @ 12.09 hrs, Volume= 0.128 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 108.73' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	108.00'	<b>12.0" Round Culvert</b> L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 108.00' / 107.50' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=1.76 cfs @ 12.09 hrs HW=108.72' TW=107.79' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 1.76 cfs @ 2.90 fps)



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### Summary for Pond 8P: DMH-6

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 5.29" for 10 Year event  
Inflow = 1.95 cfs @ 12.09 hrs, Volume= 0.161 af  
Outflow = 1.95 cfs @ 12.09 hrs, Volume= 0.161 af, Atten= 0%, Lag= 0.0 min  
Primary = 1.95 cfs @ 12.09 hrs, Volume= 0.161 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Peak Elev= 118.77' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	118.00'	<b>12.0" Round Culvert</b> L= 30.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 118.00' / 117.00' S= 0.0333 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=1.90 cfs @ 12.09 hrs HW=118.76' TW=117.44' (Dynamic Tailwater)  
↑1=Culvert (Inlet Controls 1.90 cfs @ 2.97 fps)

### Summary for Pond 9P: CB-1

Inflow Area = 0.510 ac, 64.71% Impervious, Inflow Depth > 3.86" for 10 Year event  
Inflow = 2.25 cfs @ 12.09 hrs, Volume= 0.164 af  
Outflow = 2.25 cfs @ 12.09 hrs, Volume= 0.164 af, Atten= 0%, Lag= 0.0 min  
Primary = 2.25 cfs @ 12.09 hrs, Volume= 0.164 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Peak Elev= 115.79' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	114.82'	<b>12.0" Round Culvert</b> L= 14.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 114.82' / 114.68' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=2.20 cfs @ 12.09 hrs HW=115.78' TW=115.21' (Dynamic Tailwater)  
↑1=Culvert (Barrel Controls 2.20 cfs @ 3.64 fps)

### Summary for Pond 10P: INFIL-7

Inflow Area = 0.648 ac, 55.25% Impervious, Inflow Depth > 3.54" for 10 Year event  
Inflow = 2.08 cfs @ 12.16 hrs, Volume= 0.191 af  
Outflow = 1.76 cfs @ 12.23 hrs, Volume= 0.171 af, Atten= 15%, Lag= 3.9 min  
Discarded = 0.01 cfs @ 7.55 hrs, Volume= 0.007 af  
Primary = 1.76 cfs @ 12.23 hrs, Volume= 0.164 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Peak Elev= 111.36' @ 12.23 hrs Surf.Area= 0.017 ac Storage= 0.030 af

Plug-Flow detention time= 73.3 min calculated for 0.171 af (90% of inflow)  
Center-of-Mass det. time= 30.8 min ( 860.9 - 830.1 )

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Volume	Invert	Avail.Storage	Storage Description
#1A	109.00'	0.015 af	<b>17.12'W x 43.88'L x 4.07'H Field A</b> 0.070 af Overall - 0.034 af Embedded = 0.036 af x 40.0% Voids
#2A	109.25'	0.032 af	<b>ACF R-Tank HD 2 x 170 Inside #1</b> Inside= 15.7"W x 33.9"H => 3.52 sf x 2.35'L = 8.3 cf Outside= 15.7"W x 33.9"H => 3.70 sf x 2.35'L = 8.7 cf 170 Chambers in 10 Rows
		0.047 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	110.50'	<b>12.0" Round Culvert</b> L= 6.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 110.50' / 110.44' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Discarded	109.00'	<b>0.300 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.01 cfs @ 7.55 hrs HW=109.04' (Free Discharge)

↳ **2=Exfiltration** (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=1.73 cfs @ 12.23 hrs HW=111.35' TW=109.72' (Dynamic Tailwater)

↳ **1=Culvert** (Barrel Controls 1.73 cfs @ 3.26 fps)

**Summary for Pond FP11: FocalPoint #11 (70 SF)**

Inflow Area =	0.648 ac, 55.25% Impervious, Inflow Depth > 3.54" for 10 Year event
Inflow =	2.62 cfs @ 12.09 hrs, Volume= 0.191 af
Outflow =	2.08 cfs @ 12.16 hrs, Volume= 0.191 af, Atten= 21%, Lag= 4.4 min
Primary =	0.20 cfs @ 11.45 hrs, Volume= 0.137 af
Secondary =	1.88 cfs @ 12.16 hrs, Volume= 0.054 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 115.32' @ 12.17 hrs Surf.Area= 88 sf Storage= 1,507 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 29.3 min ( 830.1 - 800.8 )

Volume	Invert	Avail.Storage	Storage Description
#1	111.95'	40 cf	<b>8.00'W x 11.00'L x 2.25'H FocalPoint</b> 198 cf Overall x 20.0% Voids
#2	114.20'	3,745 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) -Impervious
		3,785 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
114.20	1,033	0	0
116.00	1,913	2,651	2,651
116.50	2,462	1,094	3,745

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Device	Routing	Invert	Outlet Devices
#1	Primary	111.00'	<b>8.0" Round Culvert</b> L= 41.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 111.00' / 110.79' S= 0.0051 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Device 1	111.95'	<b>100.000 in/hr Exfiltration over Surface area</b> Phase-In= 0.10'
#3	Secondary	115.00'	<b>12.0" Horiz. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads

**Primary OutFlow** Max=0.20 cfs @ 11.45 hrs HW=112.14' TW=110.59' (Dynamic Tailwater)

↳ **1=Culvert** (Passes 0.20 cfs of 1.20 cfs potential flow)

↳ **2=Exfiltration** (Exfiltration Controls 0.20 cfs)

**Secondary OutFlow** Max=1.81 cfs @ 12.16 hrs HW=115.31' TW=111.25' (Dynamic Tailwater)

↳ **3=Orifice/Grate** (Weir Controls 1.81 cfs @ 1.83 fps)

**Summary for Pond FP12: FocalPoint #12 (40 SF)**

Inflow Area =	0.649 ac, 29.89% Impervious, Inflow Depth > 2.61" for 10 Year event
Inflow =	1.97 cfs @ 12.09 hrs, Volume= 0.141 af
Outflow =	1.92 cfs @ 12.12 hrs, Volume= 0.141 af, Atten= 3%, Lag= 1.3 min
Primary =	0.25 cfs @ 11.70 hrs, Volume= 0.101 af
Secondary =	1.67 cfs @ 12.12 hrs, Volume= 0.041 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 107.80' @ 12.12 hrs Surf.Area= 108 sf Storage= 447 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 5.0 min ( 832.0 - 827.0 )

Volume	Invert	Avail.Storage	Storage Description
#1	104.75'	49 cf	<b>9.00'W x 12.00'L x 2.25'H FocalPoint</b> 243 cf Overall x 20.0% Voids
#2	107.00'	1,363 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) -Impervious
		1,412 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
107.00	380	0	0
108.00	678	529	529
109.00	990	834	1,363

Device	Routing	Invert	Outlet Devices
#1	Primary	104.00'	<b>8.0" Round Culvert</b> L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 104.00' / 103.50' S= 0.0200 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Device 1	104.75'	<b>100.000 in/hr Exfiltration over Surface area</b> Phase-In= 0.10'
#3	Secondary	107.50'	<b>12.0" Horiz. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads

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**Primary OutFlow** Max=0.25 cfs @ 11.70 hrs HW=105.01' TW=102.10' (Dynamic Tailwater)

└─**1=Culvert** (Passes 0.25 cfs of 1.38 cfs potential flow)

└─**2=Exfiltration** (Exfiltration Controls 0.25 cfs)

**Secondary OutFlow** Max=1.61 cfs @ 12.12 hrs HW=107.79' TW=103.28' (Dynamic Tailwater)

└─**3=Orifice/Grate** (Weir Controls 1.61 cfs @ 1.76 fps)

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**Summary for Subcatchment D1: Bypass Basins**

Runoff = 2.73 cfs @ 12.19 hrs, Volume= 0.247 af, Depth&gt; 2.62"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25 Year Rainfall=7.10"

Area (ac)	CN	Description
0.762	55	Woods, Good, HSG B
0.305	70	Woods, Good, HSG C
0.055	61	>75% Grass cover, Good, HSG B
0.011	82	Dirt roads, HSG B
1.133	60	Weighted Average
1.133		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.2	71	0.0900	4.83		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.2	88	0.1700	6.64		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
3.1	551	0.0380	2.92		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
12.9	735	Total			

**Summary for Subcatchment D2: Basin Area**

Runoff = 0.62 cfs @ 12.10 hrs, Volume= 0.045 af, Depth&gt; 2.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25 Year Rainfall=7.10"

Area (ac)	CN	Description
0.199	61	>75% Grass cover, Good, HSG B
0.199		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D3: Top Focal Point 12**

Runoff = 0.29 cfs @ 12.10 hrs, Volume= 0.021 af, Depth&gt; 3.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25 Year Rainfall=7.10"



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Area (ac)	CN	Description
0.007	98	Paved parking, HSG B
0.012	96	Gravel surface, HSG B
0.062	55	Woods, Good, HSG B
0.081	65	Weighted Average
0.074		91.36% Pervious Area
0.007		8.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D4: To CB-2**

Runoff = 2.62 cfs @ 12.09 hrs, Volume= 0.188 af, Depth> 3.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25 Year Rainfall=7.10"

Area (ac)	CN	Description
0.187	98	Paved parking, HSG B
0.381	61	>75% Grass cover, Good, HSG B
0.568	73	Weighted Average
0.381		67.08% Pervious Area
0.187		32.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	15	0.5000	0.29		<b>Sheet Flow,</b> Grass: Dense n= 0.240 P2= 3.18"
2.0	245	0.0160	2.04		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.0	28	0.4000	10.18		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.7	100	0.0150	2.49		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
2.4					<b>Direct Entry, Adjustment to 6 min</b>
6.0	388	Total			

**Summary for Subcatchment D5: Rooftop**

Runoff = 2.48 cfs @ 12.09 hrs, Volume= 0.207 af, Depth> 6.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25 Year Rainfall=7.10"

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Area (ac)	CN	Description
0.365	98	Roofs, HSG B
0.365		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D6: To CB-1**

Runoff = 3.04 cfs @ 12.09 hrs, Volume= 0.224 af, Depth&gt; 5.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25 Year Rainfall=7.10"

Area (ac)	CN	Description
0.330	98	Paved parking, HSG B
0.180	61	>75% Grass cover, Good, HSG B
0.510	85	Weighted Average
0.180		35.29% Pervious Area
0.330		64.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D7: To Basin Area**

Runoff = 0.57 cfs @ 12.09 hrs, Volume= 0.041 af, Depth&gt; 3.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25 Year Rainfall=7.10"

Area (ac)	CN	Description
0.028	98	Paved parking, HSG B
0.110	61	>75% Grass cover, Good, HSG B
0.138	69	Weighted Average
0.110		79.71% Pervious Area
0.028		20.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

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**Summary for Subcatchment D8: to exist. Focal point (Building. C)**

Runoff = 0.18 cfs @ 12.09 hrs, Volume= 0.015 af, Depth> 6.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25 Year Rainfall=7.10"

Area (ac)	CN	Description
0.026	98	Paved parking, HSG B
0.026		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D9: Bypass Basins**

Runoff = 5.23 cfs @ 12.32 hrs, Volume= 0.589 af, Depth> 2.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25 Year Rainfall=7.10"

Area (ac)	CN	Description
0.050	82	Dirt roads, HSG B
2.412	55	Woods, Good, HSG B
0.118	70	Woods, Good, HSG C
0.100	77	Woods, Good, HSG D
0.361	61	>75% Grass cover, Good, HSG B
3.041	57	Weighted Average
3.041		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.9	257	0.0860	4.72		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.9	235	0.0550	4.19	4.19	<b>Channel Flow,</b> Area= 1.0 sf Perim= 3.0' r= 0.33' n= 0.040 Mountain streams
10.5	745	0.0020	1.18	3.55	<b>Channel Flow,</b> Area= 3.0 sf Perim= 5.0' r= 0.60' n= 0.040 Winding stream, pools & shoals
21.7	1,262	Total			

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## Summary for Reach 5R: Stream Channel

Inflow Area = 0.648 ac, 55.25% Impervious, Inflow Depth > 4.40" for 25 Year event  
 Inflow = 2.69 cfs @ 12.22 hrs, Volume= 0.237 af  
 Outflow = 2.51 cfs @ 12.29 hrs, Volume= 0.236 af, Atten= 7%, Lag= 3.9 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 2.36 fps, Min. Travel Time= 5.3 min  
 Avg. Velocity = 0.84 fps, Avg. Travel Time= 15.0 min

Peak Storage= 797 cf @ 12.29 hrs  
 Average Depth at Peak Storage= 0.35'  
 Bank-Full Depth= 1.50' Flow Area= 4.5 sf, Capacity= 20.16 cfs

3.00' x 1.50' deep channel, n= 0.030 Earth, grassed & winding  
 Length= 750.0' Slope= 0.0120 '/'  
 Inlet Invert= 101.00', Outlet Invert= 92.00'



## Summary for Reach A: Summary Reach

Inflow Area = 6.035 ac, 15.19% Impervious, Inflow Depth > 2.77" for 25 Year event  
 Inflow = 10.70 cfs @ 12.29 hrs, Volume= 1.391 af  
 Outflow = 10.70 cfs @ 12.29 hrs, Volume= 1.391 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

## Summary for Pond 1P: Basin E

Inflow Area = 1.213 ac, 46.08% Impervious, Inflow Depth > 4.02" for 25 Year event  
 Inflow = 5.63 cfs @ 12.12 hrs, Volume= 0.406 af  
 Outflow = 1.06 cfs @ 12.62 hrs, Volume= 0.341 af, Atten= 81%, Lag= 29.9 min  
 Discarded = 0.03 cfs @ 12.62 hrs, Volume= 0.022 af  
 Primary = 1.04 cfs @ 12.62 hrs, Volume= 0.319 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Peak Elev= 105.15' @ 12.62 hrs Surf.Area= 3,742 sf Storage= 8,244 cf

Plug-Flow detention time= 183.2 min calculated for 0.340 af (84% of inflow)  
 Center-of-Mass det. time= 124.5 min ( 940.8 - 816.4 )

Volume	Invert	Avail.Storage	Storage Description
#1	101.75'	16,886 cf	<b>Custom Stage Data (Irregular)</b> Listed below (Recalc)

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Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
101.75	1,000	165.0	0	0	1,000
102.00	1,387	180.0	297	297	1,414
104.00	2,863	387.0	4,162	4,459	10,771
106.00	4,468	413.0	7,272	11,731	12,610
107.00	5,875	439.0	5,155	16,886	14,423

Device	Routing	Invert	Outlet Devices
#1	Primary	100.00'	<b>12.0" Round Culvert</b> L= 33.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 100.00' / 99.67' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	103.00'	<b>3.0" Vert. Orifice/Grate</b> C= 0.600
#3	Device 1	104.35'	<b>6.0" Vert. Orifice/Grate</b> C= 0.600
#4	Device 1	106.50'	<b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads
#5	Discarded	101.75'	<b>0.300 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.03 cfs @ 12.62 hrs HW=105.15' (Free Discharge)

↳ **5=Exfiltration** (Exfiltration Controls 0.03 cfs)

**Primary OutFlow** Max=1.04 cfs @ 12.62 hrs HW=105.15' TW=0.00' (Dynamic Tailwater)

↳ **1=Culvert** (Passes 1.04 cfs of 8.15 cfs potential flow)

↳ **2=Orifice/Grate** (Orifice Controls 0.34 cfs @ 6.85 fps)

↳ **3=Orifice/Grate** (Orifice Controls 0.70 cfs @ 3.57 fps)

↳ **4=Orifice/Grate** ( Controls 0.00 cfs)

**Summary for Pond 2P: DMH-5**

Inflow Area = 0.648 ac, 55.25% Impervious, Inflow Depth > 4.40" for 25 Year event

Inflow = 2.69 cfs @ 12.22 hrs, Volume= 0.237 af

Outflow = 2.69 cfs @ 12.22 hrs, Volume= 0.237 af, Atten= 0%, Lag= 0.0 min

Primary = 2.69 cfs @ 12.22 hrs, Volume= 0.237 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 110.01' @ 12.22 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	109.00'	<b>12.0" Round Culvert</b> L= 22.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 109.00' / 106.50' S= 0.1136 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=2.67 cfs @ 12.22 hrs HW=110.00' TW=101.33' (Dynamic Tailwater)

↳ **1=Culvert** (Inlet Controls 2.67 cfs @ 3.40 fps)



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**Summary for Pond 3P: DMH-7**

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 6.79" for 25 Year event  
 Inflow = 2.48 cfs @ 12.09 hrs, Volume= 0.207 af  
 Outflow = 2.48 cfs @ 12.09 hrs, Volume= 0.207 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.48 cfs @ 12.09 hrs, Volume= 0.207 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Peak Elev= 117.68' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	116.40'	<b>12.0" Round Culvert</b> L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 116.40' / 116.40' S= 0.0000 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=2.42 cfs @ 12.09 hrs HW=117.65' TW=117.11' (Dynamic Tailwater)  
 ←1=Culvert (Barrel Controls 2.42 cfs @ 3.16 fps)

**Summary for Pond 4P: INFIL-8**

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 6.79" for 25 Year event  
 Inflow = 2.48 cfs @ 12.09 hrs, Volume= 0.207 af  
 Outflow = 2.29 cfs @ 12.12 hrs, Volume= 0.169 af, Atten= 8%, Lag= 2.1 min  
 Discarded = 0.01 cfs @ 2.50 hrs, Volume= 0.016 af  
 Primary = 2.29 cfs @ 12.12 hrs, Volume= 0.153 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Peak Elev= 117.14' @ 12.12 hrs Surf.Area= 0.030 ac Storage= 0.050 af

Plug-Flow detention time= 126.1 min calculated for 0.169 af (82% of inflow)  
 Center-of-Mass det. time= 58.2 min ( 794.4 - 736.2 )

Volume	Invert	Avail.Storage	Storage Description
#1A	114.60'	0.028 af	<b>15.75'W x 81.94'L x 3.50'H Field A</b> 0.104 af Overall - 0.035 af Embedded = 0.069 af x 40.0% Voids
#2A	115.10'	0.035 af	<b>ADS_StormTech SC-740 +Cap</b> x 33 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 33 Chambers in 3 Rows
		0.062 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	114.60'	<b>0.300 in/hr Exfiltration over Surface area</b>
#2	Primary	116.43'	<b>12.0" Round Culvert X 2.00</b> L= 3.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 116.43' / 116.43' S= 0.0000 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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**Discarded OutFlow** Max=0.01 cfs @ 2.50 hrs HW=114.64' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=2.22 cfs @ 12.12 hrs HW=117.13' TW=114.85' (Dynamic Tailwater)

↑**2=Culvert** (Barrel Controls 2.22 cfs @ 2.66 fps)

### Summary for Pond 5P: DMH-8

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 5.02" for 25 Year event  
Inflow = 2.29 cfs @ 12.12 hrs, Volume= 0.153 af  
Outflow = 2.29 cfs @ 12.12 hrs, Volume= 0.153 af, Atten= 0%, Lag= 0.0 min  
Primary = 2.29 cfs @ 12.12 hrs, Volume= 0.153 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 114.86' @ 12.12 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	114.00'	<b>12.0" Round Culvert</b> L= 68.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 114.00' / 104.00' S= 0.1471 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=2.22 cfs @ 12.12 hrs HW=114.85' TW=104.14' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 2.22 cfs @ 3.13 fps)

### Summary for Pond 7P: CB-2

Inflow Area = 0.568 ac, 32.92% Impervious, Inflow Depth > 3.96" for 25 Year event  
Inflow = 2.62 cfs @ 12.09 hrs, Volume= 0.188 af  
Outflow = 2.62 cfs @ 12.09 hrs, Volume= 0.188 af, Atten= 0%, Lag= 0.0 min  
Primary = 2.62 cfs @ 12.09 hrs, Volume= 0.188 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 108.97' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	108.00'	<b>12.0" Round Culvert</b> L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 108.00' / 107.50' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=2.58 cfs @ 12.09 hrs HW=108.96' TW=107.90' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 2.58 cfs @ 3.33 fps)

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### Summary for Pond 8P: DMH-6

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 6.79" for 25 Year event  
Inflow = 2.48 cfs @ 12.09 hrs, Volume= 0.207 af  
Outflow = 2.48 cfs @ 12.09 hrs, Volume= 0.207 af, Atten= 0%, Lag= 0.0 min  
Primary = 2.48 cfs @ 12.09 hrs, Volume= 0.207 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Peak Elev= 118.92' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	118.00'	<b>12.0" Round Culvert</b> L= 30.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 118.00' / 117.00' S= 0.0333 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=2.42 cfs @ 12.09 hrs HW=118.90' TW=117.65' (Dynamic Tailwater)  
↑1=Culvert (Inlet Controls 2.42 cfs @ 3.24 fps)

### Summary for Pond 9P: CB-1

Inflow Area = 0.510 ac, 64.71% Impervious, Inflow Depth > 5.28" for 25 Year event  
Inflow = 3.04 cfs @ 12.09 hrs, Volume= 0.224 af  
Outflow = 3.04 cfs @ 12.09 hrs, Volume= 0.224 af, Atten= 0%, Lag= 0.0 min  
Primary = 3.04 cfs @ 12.09 hrs, Volume= 0.224 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Peak Elev= 116.07' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	114.82'	<b>12.0" Round Culvert</b> L= 14.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 114.82' / 114.68' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=2.97 cfs @ 12.09 hrs HW=116.04' TW=115.42' (Dynamic Tailwater)  
↑1=Culvert (Barrel Controls 2.97 cfs @ 3.94 fps)

### Summary for Pond 10P: INFIL-7

Inflow Area = 0.648 ac, 55.25% Impervious, Inflow Depth > 4.91" for 25 Year event  
Inflow = 2.85 cfs @ 12.15 hrs, Volume= 0.265 af  
Outflow = 2.70 cfs @ 12.22 hrs, Volume= 0.245 af, Atten= 5%, Lag= 3.9 min  
Discarded = 0.01 cfs @ 6.50 hrs, Volume= 0.008 af  
Primary = 2.69 cfs @ 12.22 hrs, Volume= 0.237 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Peak Elev= 111.66' @ 12.22 hrs Surf.Area= 0.017 ac Storage= 0.034 af

Plug-Flow detention time= 59.6 min calculated for 0.245 af (92% of inflow)  
Center-of-Mass det. time= 26.3 min ( 846.2 - 820.0 )

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Volume	Invert	Avail.Storage	Storage Description
#1A	109.00'	0.015 af	<b>17.12'W x 43.88'L x 4.07'H Field A</b> 0.070 af Overall - 0.034 af Embedded = 0.036 af x 40.0% Voids
#2A	109.25'	0.032 af	<b>ACF R-Tank HD 2 x 170 Inside #1</b> Inside= 15.7"W x 33.9"H => 3.52 sf x 2.35'L = 8.3 cf Outside= 15.7"W x 33.9"H => 3.70 sf x 2.35'L = 8.7 cf 170 Chambers in 10 Rows
		0.047 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	110.50'	<b>12.0" Round Culvert</b> L= 6.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 110.50' / 110.44' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Discarded	109.00'	<b>0.300 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.01 cfs @ 6.50 hrs HW=109.04' (Free Discharge)

↳ **2=Exfiltration** (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=2.67 cfs @ 12.22 hrs HW=111.65' TW=110.00' (Dynamic Tailwater)

↳ **1=Culvert** (Barrel Controls 2.67 cfs @ 3.69 fps)

**Summary for Pond FP11: FocalPoint #11 (70 SF)**

Inflow Area =	0.648 ac, 55.25% Impervious, Inflow Depth > 4.91" for 25 Year event
Inflow =	3.61 cfs @ 12.09 hrs, Volume= 0.265 af
Outflow =	2.85 cfs @ 12.15 hrs, Volume= 0.265 af, Atten= 21%, Lag= 3.9 min
Primary =	0.20 cfs @ 11.10 hrs, Volume= 0.166 af
Secondary =	2.65 cfs @ 12.15 hrs, Volume= 0.099 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 115.49' @ 12.15 hrs Surf.Area= 88 sf Storage= 1,779 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 27.5 min ( 820.0 - 792.4 )

Volume	Invert	Avail.Storage	Storage Description
#1	111.95'	40 cf	<b>8.00'W x 11.00'L x 2.25'H FocalPoint</b> 198 cf Overall x 20.0% Voids
#2	114.20'	3,745 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) -Impervious
		3,785 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
114.20	1,033	0	0
116.00	1,913	2,651	2,651
116.50	2,462	1,094	3,745

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Device	Routing	Invert	Outlet Devices
#1	Primary	111.00'	<b>8.0" Round Culvert</b> L= 41.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 111.00' / 110.79' S= 0.0051 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Device 1	111.95'	<b>100.000 in/hr Exfiltration over Surface area</b> Phase-In= 0.10'
#3	Secondary	115.00'	<b>12.0" Horiz. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads

**Primary OutFlow** Max=0.20 cfs @ 11.10 hrs HW=112.09' TW=110.74' (Dynamic Tailwater)

↳ **1=Culvert** (Passes 0.20 cfs of 1.16 cfs potential flow)

↳ **2=Exfiltration** (Exfiltration Controls 0.20 cfs)

**Secondary OutFlow** Max=2.64 cfs @ 12.15 hrs HW=115.49' TW=111.60' (Dynamic Tailwater)

↳ **3=Orifice/Grate** (Orifice Controls 2.64 cfs @ 3.36 fps)

**Summary for Pond FP12: FocalPoint #12 (40 SF)**

Inflow Area =	0.649 ac, 29.89% Impervious, Inflow Depth > 3.86" for 25 Year event
Inflow =	2.92 cfs @ 12.09 hrs, Volume= 0.209 af
Outflow =	2.74 cfs @ 12.12 hrs, Volume= 0.209 af, Atten= 6%, Lag= 1.7 min
Primary =	0.25 cfs @ 11.60 hrs, Volume= 0.132 af
Secondary =	2.49 cfs @ 12.12 hrs, Volume= 0.077 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 107.92' @ 12.12 hrs Surf.Area= 108 sf Storage= 527 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 5.3 min ( 821.7 - 816.4 )

Volume	Invert	Avail.Storage	Storage Description
#1	104.75'	49 cf	<b>9.00'W x 12.00'L x 2.25'H FocalPoint</b> 243 cf Overall x 20.0% Voids
#2	107.00'	1,363 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) -Impervious
		1,412 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
107.00	380	0	0
108.00	678	529	529
109.00	990	834	1,363

Device	Routing	Invert	Outlet Devices
#1	Primary	104.00'	<b>8.0" Round Culvert</b> L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 104.00' / 103.50' S= 0.0200 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Device 1	104.75'	<b>100.000 in/hr Exfiltration over Surface area</b> Phase-In= 0.10'
#3	Secondary	107.50'	<b>12.0" Horiz. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads



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**Primary OutFlow** Max=0.25 cfs @ 11.60 hrs HW=105.00' TW=102.56' (Dynamic Tailwater)

↳ **1=Culvert** (Passes 0.25 cfs of 1.38 cfs potential flow)

↳ **2=Exfiltration** (Exfiltration Controls 0.25 cfs)

**Secondary OutFlow** Max=2.43 cfs @ 12.12 hrs HW=107.91' TW=104.15' (Dynamic Tailwater)

↳ **3=Orifice/Grate** (Orifice Controls 2.43 cfs @ 3.09 fps)

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**Summary for Subcatchment D1: Bypass Basins**

Runoff = 3.87 cfs @ 12.19 hrs, Volume= 0.345 af, Depth&gt; 3.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 50 Year Rainfall=8.52"

Area (ac)	CN	Description
0.762	55	Woods, Good, HSG B
0.305	70	Woods, Good, HSG C
0.055	61	>75% Grass cover, Good, HSG B
0.011	82	Dirt roads, HSG B
1.133	60	Weighted Average
1.133		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.2	71	0.0900	4.83		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.2	88	0.1700	6.64		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
3.1	551	0.0380	2.92		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
12.9	735	Total			

**Summary for Subcatchment D2: Basin Area**

Runoff = 0.87 cfs @ 12.10 hrs, Volume= 0.063 af, Depth&gt; 3.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 50 Year Rainfall=8.52"

Area (ac)	CN	Description
0.199	61	>75% Grass cover, Good, HSG B
0.199		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D3: Top Focal Point 12**

Runoff = 0.40 cfs @ 12.09 hrs, Volume= 0.029 af, Depth&gt; 4.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 50 Year Rainfall=8.52"

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Area (ac)	CN	Description
0.007	98	Paved parking, HSG B
0.012	96	Gravel surface, HSG B
0.062	55	Woods, Good, HSG B
0.081	65	Weighted Average
0.074		91.36% Pervious Area
0.007		8.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D4: To CB-2**

Runoff = 3.43 cfs @ 12.09 hrs, Volume= 0.246 af, Depth&gt; 5.20"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 50 Year Rainfall=8.52"

Area (ac)	CN	Description
0.187	98	Paved parking, HSG B
0.381	61	>75% Grass cover, Good, HSG B
0.568	73	Weighted Average
0.381		67.08% Pervious Area
0.187		32.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	15	0.5000	0.29		<b>Sheet Flow,</b> Grass: Dense n= 0.240 P2= 3.18"
2.0	245	0.0160	2.04		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.0	28	0.4000	10.18		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.7	100	0.0150	2.49		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
2.4					<b>Direct Entry, Adjustment to 6 min</b>
6.0	388	Total			

**Summary for Subcatchment D5: Rooftop**

Runoff = 2.98 cfs @ 12.09 hrs, Volume= 0.249 af, Depth&gt; 8.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 50 Year Rainfall=8.52"

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Area (ac)	CN	Description
0.365	98	Roofs, HSG B
0.365		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D6: To CB-1**

Runoff = 3.77 cfs @ 12.09 hrs, Volume= 0.282 af, Depth&gt; 6.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 50 Year Rainfall=8.52"

Area (ac)	CN	Description
0.330	98	Paved parking, HSG B
0.180	61	>75% Grass cover, Good, HSG B
0.510	85	Weighted Average
0.180		35.29% Pervious Area
0.330		64.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D7: To Basin Area**

Runoff = 0.76 cfs @ 12.09 hrs, Volume= 0.054 af, Depth&gt; 4.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 50 Year Rainfall=8.52"

Area (ac)	CN	Description
0.028	98	Paved parking, HSG B
0.110	61	>75% Grass cover, Good, HSG B
0.138	69	Weighted Average
0.110		79.71% Pervious Area
0.028		20.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

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**Summary for Subcatchment D8: to exist. Focal point (Building. C)**

Runoff = 0.21 cfs @ 12.09 hrs, Volume= 0.018 af, Depth> 8.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 50 Year Rainfall=8.52"

Area (ac)	CN	Description
0.026	98	Paved parking, HSG B
0.026		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D9: Bypass Basins**

Runoff = 7.63 cfs @ 12.32 hrs, Volume= 0.837 af, Depth> 3.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 50 Year Rainfall=8.52"

Area (ac)	CN	Description
0.050	82	Dirt roads, HSG B
2.412	55	Woods, Good, HSG B
0.118	70	Woods, Good, HSG C
0.100	77	Woods, Good, HSG D
0.361	61	>75% Grass cover, Good, HSG B
3.041	57	Weighted Average
3.041		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.9	257	0.0860	4.72		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.9	235	0.0550	4.19	4.19	<b>Channel Flow,</b> Area= 1.0 sf Perim= 3.0' r= 0.33' n= 0.040 Mountain streams
10.5	745	0.0020	1.18	3.55	<b>Channel Flow,</b> Area= 3.0 sf Perim= 5.0' r= 0.60' n= 0.040 Winding stream, pools & shoals
21.7	1,262	Total			



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## Summary for Reach 5R: Stream Channel

Inflow Area = 0.648 ac, 55.25% Impervious, Inflow Depth > 5.71" for 50 Year event  
 Inflow = 3.16 cfs @ 12.24 hrs, Volume= 0.308 af  
 Outflow = 3.06 cfs @ 12.30 hrs, Volume= 0.307 af, Atten= 3%, Lag= 3.6 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 2.53 fps, Min. Travel Time= 4.9 min  
 Avg. Velocity = 0.90 fps, Avg. Travel Time= 13.9 min

Peak Storage= 908 cf @ 12.30 hrs  
 Average Depth at Peak Storage= 0.40'  
 Bank-Full Depth= 1.50' Flow Area= 4.5 sf, Capacity= 20.16 cfs

3.00' x 1.50' deep channel, n= 0.030 Earth, grassed & winding  
 Length= 750.0' Slope= 0.0120 '/'  
 Inlet Invert= 101.00', Outlet Invert= 92.00'



## Summary for Reach A: Summary Reach

Inflow Area = 6.035 ac, 15.19% Impervious, Inflow Depth > 3.82" for 50 Year event  
 Inflow = 15.04 cfs @ 12.28 hrs, Volume= 1.924 af  
 Outflow = 15.04 cfs @ 12.28 hrs, Volume= 1.924 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

## Summary for Pond 1P: Basin E

Inflow Area = 1.213 ac, 46.08% Impervious, Inflow Depth > 5.27" for 50 Year event  
 Inflow = 6.92 cfs @ 12.12 hrs, Volume= 0.533 af  
 Outflow = 1.44 cfs @ 12.59 hrs, Volume= 0.459 af, Atten= 79%, Lag= 28.1 min  
 Discarded = 0.03 cfs @ 12.59 hrs, Volume= 0.024 af  
 Primary = 1.41 cfs @ 12.59 hrs, Volume= 0.435 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Peak Elev= 105.78' @ 12.59 hrs Surf.Area= 4,274 sf Storage= 10,770 cf

Plug-Flow detention time= 163.1 min calculated for 0.458 af (86% of inflow)  
 Center-of-Mass det. time= 109.8 min ( 919.2 - 809.4 )

Volume	Invert	Avail.Storage	Storage Description
#1	101.75'	16,886 cf	<b>Custom Stage Data (Irregular)</b> Listed below (Recalc)

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Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
101.75	1,000	165.0	0	0	1,000
102.00	1,387	180.0	297	297	1,414
104.00	2,863	387.0	4,162	4,459	10,771
106.00	4,468	413.0	7,272	11,731	12,610
107.00	5,875	439.0	5,155	16,886	14,423

Device	Routing	Invert	Outlet Devices
#1	Primary	100.00'	<b>12.0" Round Culvert</b> L= 33.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 100.00' / 99.67' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	103.00'	<b>3.0" Vert. Orifice/Grate</b> C= 0.600
#3	Device 1	104.35'	<b>6.0" Vert. Orifice/Grate</b> C= 0.600
#4	Device 1	106.50'	<b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads
#5	Discarded	101.75'	<b>0.300 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.03 cfs @ 12.59 hrs HW=105.78' (Free Discharge)

↑**5=Exfiltration** (Exfiltration Controls 0.03 cfs)

**Primary OutFlow** Max=1.41 cfs @ 12.59 hrs HW=105.78' TW=0.00' (Dynamic Tailwater)

↑**1=Culvert** (Passes 1.41 cfs of 8.69 cfs potential flow)  
 ↑**2=Orifice/Grate** (Orifice Controls 0.39 cfs @ 7.84 fps)  
 ↑**3=Orifice/Grate** (Orifice Controls 1.03 cfs @ 5.23 fps)  
 ↑**4=Orifice/Grate** ( Controls 0.00 cfs)

**Summary for Pond 2P: DMH-5**

Inflow Area = 0.648 ac, 55.25% Impervious, Inflow Depth > 5.71" for 50 Year event  
 Inflow = 3.16 cfs @ 12.24 hrs, Volume= 0.308 af  
 Outflow = 3.16 cfs @ 12.24 hrs, Volume= 0.308 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.16 cfs @ 12.24 hrs, Volume= 0.308 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 110.20' @ 12.24 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	109.00'	<b>12.0" Round Culvert</b> L= 22.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 109.00' / 106.50' S= 0.1136 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=3.15 cfs @ 12.24 hrs HW=110.19' TW=101.39' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 3.15 cfs @ 4.01 fps)

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**Summary for Pond 3P: DMH-7**

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 8.19" for 50 Year event  
 Inflow = 2.98 cfs @ 12.09 hrs, Volume= 0.249 af  
 Outflow = 2.98 cfs @ 12.09 hrs, Volume= 0.249 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.98 cfs @ 12.09 hrs, Volume= 0.249 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Peak Elev= 117.88' @ 12.08 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	116.40'	<b>12.0" Round Culvert</b> L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 116.40' / 116.40' S= 0.0000 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=2.90 cfs @ 12.09 hrs HW=117.85' TW=117.19' (Dynamic Tailwater)  
 ↑1=Culvert (Barrel Controls 2.90 cfs @ 3.70 fps)

**Summary for Pond 4P: INFIL-8**

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 8.19" for 50 Year event  
 Inflow = 2.98 cfs @ 12.09 hrs, Volume= 0.249 af  
 Outflow = 2.79 cfs @ 12.12 hrs, Volume= 0.211 af, Atten= 7%, Lag= 1.9 min  
 Discarded = 0.01 cfs @ 1.95 hrs, Volume= 0.016 af  
 Primary = 2.78 cfs @ 12.12 hrs, Volume= 0.195 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Peak Elev= 117.23' @ 12.12 hrs Surf.Area= 0.030 ac Storage= 0.051 af

Plug-Flow detention time= 116.4 min calculated for 0.211 af (85% of inflow)  
 Center-of-Mass det. time= 55.6 min ( 789.6 - 734.1 )

Volume	Invert	Avail.Storage	Storage Description
#1A	114.60'	0.028 af	<b>15.75'W x 81.94'L x 3.50'H Field A</b> 0.104 af Overall - 0.035 af Embedded = 0.069 af x 40.0% Voids
#2A	115.10'	0.035 af	<b>ADS_StormTech SC-740 +Cap</b> x 33 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 33 Chambers in 3 Rows
		0.062 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	114.60'	<b>0.300 in/hr Exfiltration over Surface area</b>
#2	Primary	116.43'	<b>12.0" Round Culvert X 2.00</b> L= 3.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 116.43' / 116.43' S= 0.0000 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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**Discarded OutFlow** Max=0.01 cfs @ 1.95 hrs HW=114.64' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=2.70 cfs @ 12.12 hrs HW=117.21' TW=115.01' (Dynamic Tailwater)

↑**2=Culvert** (Barrel Controls 2.70 cfs @ 2.82 fps)

### Summary for Pond 5P: DMH-8

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 6.41" for 50 Year event  
Inflow = 2.78 cfs @ 12.12 hrs, Volume= 0.195 af  
Outflow = 2.78 cfs @ 12.12 hrs, Volume= 0.195 af, Atten= 0%, Lag= 0.0 min  
Primary = 2.78 cfs @ 12.12 hrs, Volume= 0.195 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 115.04' @ 12.12 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	114.00'	<b>12.0" Round Culvert</b> L= 68.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 114.00' / 104.00' S= 0.1471 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=2.70 cfs @ 12.12 hrs HW=115.01' TW=104.76' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 2.70 cfs @ 3.43 fps)

### Summary for Pond 7P: CB-2

Inflow Area = 0.568 ac, 32.92% Impervious, Inflow Depth > 5.20" for 50 Year event  
Inflow = 3.43 cfs @ 12.09 hrs, Volume= 0.246 af  
Outflow = 3.43 cfs @ 12.09 hrs, Volume= 0.246 af, Atten= 0%, Lag= 0.0 min  
Primary = 3.43 cfs @ 12.09 hrs, Volume= 0.246 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 109.32' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	108.00'	<b>12.0" Round Culvert</b> L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 108.00' / 107.50' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=3.36 cfs @ 12.09 hrs HW=109.29' TW=108.08' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 3.36 cfs @ 4.28 fps)

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### Summary for Pond 8P: DMH-6

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 8.19" for 50 Year event  
Inflow = 2.98 cfs @ 12.09 hrs, Volume= 0.249 af  
Outflow = 2.98 cfs @ 12.09 hrs, Volume= 0.249 af, Atten= 0%, Lag= 0.0 min  
Primary = 2.98 cfs @ 12.09 hrs, Volume= 0.249 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Peak Elev= 119.12' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	118.00'	<b>12.0" Round Culvert</b> L= 30.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 118.00' / 117.00' S= 0.0333 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=2.90 cfs @ 12.09 hrs HW=119.09' TW=117.85' (Dynamic Tailwater)  
↑1=Culvert (Inlet Controls 2.90 cfs @ 3.70 fps)

### Summary for Pond 9P: CB-1

Inflow Area = 0.510 ac, 64.71% Impervious, Inflow Depth > 6.64" for 50 Year event  
Inflow = 3.77 cfs @ 12.09 hrs, Volume= 0.282 af  
Outflow = 3.77 cfs @ 12.09 hrs, Volume= 0.282 af, Atten= 0%, Lag= 0.0 min  
Primary = 3.77 cfs @ 12.09 hrs, Volume= 0.282 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Peak Elev= 116.42' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	114.82'	<b>12.0" Round Culvert</b> L= 14.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 114.82' / 114.68' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=3.44 cfs @ 12.09 hrs HW=116.39' TW=115.56' (Dynamic Tailwater)  
↑1=Culvert (Inlet Controls 3.44 cfs @ 4.38 fps)

### Summary for Pond 10P: INFIL-7

Inflow Area = 0.648 ac, 55.25% Impervious, Inflow Depth > 6.23" for 50 Year event  
Inflow = 3.34 cfs @ 12.17 hrs, Volume= 0.336 af  
Outflow = 3.17 cfs @ 12.24 hrs, Volume= 0.316 af, Atten= 5%, Lag= 4.5 min  
Discarded = 0.01 cfs @ 5.65 hrs, Volume= 0.008 af  
Primary = 3.16 cfs @ 12.24 hrs, Volume= 0.308 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Peak Elev= 111.87' @ 12.24 hrs Surf.Area= 0.017 ac Storage= 0.037 af

Plug-Flow detention time= 51.9 min calculated for 0.316 af (94% of inflow)  
Center-of-Mass det. time= 23.6 min ( 836.2 - 812.6 )



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Volume	Invert	Avail.Storage	Storage Description
#1A	109.00'	0.015 af	<b>17.12'W x 43.88'L x 4.07'H Field A</b> 0.070 af Overall - 0.034 af Embedded = 0.036 af x 40.0% Voids
#2A	109.25'	0.032 af	<b>ACF R-Tank HD 2 x 170 Inside #1</b> Inside= 15.7"W x 33.9"H => 3.52 sf x 2.35'L = 8.3 cf Outside= 15.7"W x 33.9"H => 3.70 sf x 2.35'L = 8.7 cf 170 Chambers in 10 Rows
		0.047 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	110.50'	<b>12.0" Round Culvert</b> L= 6.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 110.50' / 110.44' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Discarded	109.00'	<b>0.300 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.01 cfs @ 5.65 hrs HW=109.04' (Free Discharge)

↳ **2=Exfiltration** (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=3.15 cfs @ 12.24 hrs HW=111.86' TW=110.19' (Dynamic Tailwater)

↳ **1=Culvert** (Barrel Controls 3.15 cfs @ 4.01 fps)

**Summary for Pond FP11: FocalPoint #11 (70 SF)**

Inflow Area =	0.648 ac, 55.25% Impervious, Inflow Depth > 6.23" for 50 Year event
Inflow =	4.53 cfs @ 12.09 hrs, Volume= 0.336 af
Outflow =	3.34 cfs @ 12.17 hrs, Volume= 0.336 af, Atten= 26%, Lag= 4.6 min
Primary =	0.20 cfs @ 10.60 hrs, Volume= 0.189 af
Secondary =	3.13 cfs @ 12.17 hrs, Volume= 0.147 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 115.69' @ 12.17 hrs Surf.Area= 88 sf Storage= 2,113 cf

Plug-Flow detention time= 26.3 min calculated for 0.336 af (100% of inflow)

Center-of-Mass det. time= 26.3 min ( 812.6 - 786.4 )

Volume	Invert	Avail.Storage	Storage Description
#1	111.95'	40 cf	<b>8.00'W x 11.00'L x 2.25'H FocalPoint</b> 198 cf Overall x 20.0% Voids
#2	114.20'	3,745 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) -Impervious
		3,785 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
114.20	1,033	0	0
116.00	1,913	2,651	2,651
116.50	2,462	1,094	3,745

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Device	Routing	Invert	Outlet Devices
#1	Primary	111.00'	<b>8.0" Round Culvert</b> L= 41.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 111.00' / 110.79' S= 0.0051 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Device 1	111.95'	<b>100.000 in/hr Exfiltration over Surface area</b> Phase-In= 0.10'
#3	Secondary	115.00'	<b>12.0" Horiz. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads

**Primary OutFlow** Max=0.20 cfs @ 10.60 hrs HW=112.13' TW=110.74' (Dynamic Tailwater)

↳ **1=Culvert** (Passes 0.20 cfs of 1.19 cfs potential flow)

↳ **2=Exfiltration** (Exfiltration Controls 0.20 cfs)

**Secondary OutFlow** Max=3.10 cfs @ 12.17 hrs HW=115.67' TW=111.79' (Dynamic Tailwater)

↳ **3=Orifice/Grate** (Orifice Controls 3.10 cfs @ 3.95 fps)

**Summary for Pond FP12: FocalPoint #12 (40 SF)**

Inflow Area =	0.649 ac, 29.89% Impervious, Inflow Depth > 5.08" for 50 Year event
Inflow =	3.83 cfs @ 12.09 hrs, Volume= 0.275 af
Outflow =	3.33 cfs @ 12.14 hrs, Volume= 0.275 af, Atten= 13%, Lag= 2.8 min
Primary =	0.25 cfs @ 11.35 hrs, Volume= 0.158 af
Secondary =	3.08 cfs @ 12.14 hrs, Volume= 0.116 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 108.16' @ 12.14 hrs Surf.Area= 108 sf Storage= 693 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 5.5 min ( 814.4 - 808.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	104.75'	49 cf	<b>9.00'W x 12.00'L x 2.25'H FocalPoint</b> 243 cf Overall x 20.0% Voids
#2	107.00'	1,363 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) -Impervious
		1,412 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
107.00	380	0	0
108.00	678	529	529
109.00	990	834	1,363

Device	Routing	Invert	Outlet Devices
#1	Primary	104.00'	<b>8.0" Round Culvert</b> L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 104.00' / 103.50' S= 0.0200 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Device 1	104.75'	<b>100.000 in/hr Exfiltration over Surface area</b> Phase-In= 0.10'
#3	Secondary	107.50'	<b>12.0" Horiz. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads

**16042 D Post Development**

*Type III 24-hr 50 Year Rainfall=8.52"*

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**Primary OutFlow** Max=0.25 cfs @ 11.35 hrs HW=104.90' TW=102.82' (Dynamic Tailwater)

└─**1=Culvert** (Passes 0.25 cfs of 1.27 cfs potential flow)

└─**2=Exfiltration** (Exfiltration Controls 0.25 cfs)

**Secondary OutFlow** Max=3.05 cfs @ 12.14 hrs HW=108.15' TW=104.89' (Dynamic Tailwater)

└─**3=Orifice/Grate** (Orifice Controls 3.05 cfs @ 3.88 fps)

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Type III 24-hr 100 Year Rainfall=10.24"

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**Summary for Subcatchment D1: Bypass Basins**

Runoff = 5.34 cfs @ 12.18 hrs, Volume= 0.472 af, Depth&gt; 5.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100 Year Rainfall=10.24"

Area (ac)	CN	Description
0.762	55	Woods, Good, HSG B
0.305	70	Woods, Good, HSG C
0.055	61	>75% Grass cover, Good, HSG B
0.011	82	Dirt roads, HSG B
1.133	60	Weighted Average
1.133		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.2	71	0.0900	4.83		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.2	88	0.1700	6.64		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
3.1	551	0.0380	2.92		<b>Shallow Concentrated Flow,</b> Grassed Waterway Kv= 15.0 fps
12.9	735	Total			

**Summary for Subcatchment D2: Basin Area**

Runoff = 1.20 cfs @ 12.09 hrs, Volume= 0.085 af, Depth&gt; 5.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100 Year Rainfall=10.24"

Area (ac)	CN	Description
0.199	61	>75% Grass cover, Good, HSG B
0.199		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D3: Top Focal Point 12**

Runoff = 0.54 cfs @ 12.09 hrs, Volume= 0.038 af, Depth&gt; 5.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100 Year Rainfall=10.24"

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Type III 24-hr 100 Year Rainfall=10.24"

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Area (ac)	CN	Description
0.007	98	Paved parking, HSG B
0.012	96	Gravel surface, HSG B
0.062	55	Woods, Good, HSG B
0.081	65	Weighted Average
0.074		91.36% Pervious Area
0.007		8.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D4: To CB-2**

Runoff = 4.42 cfs @ 12.09 hrs, Volume= 0.319 af, Depth> 6.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100 Year Rainfall=10.24"

Area (ac)	CN	Description
0.187	98	Paved parking, HSG B
0.381	61	>75% Grass cover, Good, HSG B
0.568	73	Weighted Average
0.381		67.08% Pervious Area
0.187		32.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	15	0.5000	0.29		<b>Sheet Flow,</b> Grass: Dense n= 0.240 P2= 3.18"
2.0	245	0.0160	2.04		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.0	28	0.4000	10.18		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.7	100	0.0150	2.49		<b>Shallow Concentrated Flow,</b> Paved Kv= 20.3 fps
2.4					<b>Direct Entry, Adjustment to 6 min</b>
6.0	388	Total			

**Summary for Subcatchment D5: Rooftop**

Runoff = 3.59 cfs @ 12.09 hrs, Volume= 0.301 af, Depth> 9.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100 Year Rainfall=10.24"

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Type III 24-hr 100 Year Rainfall=10.24"

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Area (ac)	CN	Description
0.365	98	Roofs, HSG B
0.365		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D6: To CB-1**

Runoff = 4.65 cfs @ 12.09 hrs, Volume= 0.352 af, Depth&gt; 8.29"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100 Year Rainfall=10.24"

Area (ac)	CN	Description
0.330	98	Paved parking, HSG B
0.180	61	>75% Grass cover, Good, HSG B
0.510	85	Weighted Average
0.180		35.29% Pervious Area
0.330		64.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D7: To Basin Area**

Runoff = 1.00 cfs @ 12.09 hrs, Volume= 0.072 af, Depth&gt; 6.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100 Year Rainfall=10.24"

Area (ac)	CN	Description
0.028	98	Paved parking, HSG B
0.110	61	>75% Grass cover, Good, HSG B
0.138	69	Weighted Average
0.110		79.71% Pervious Area
0.028		20.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>



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Type III 24-hr 100 Year Rainfall=10.24"

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**Summary for Subcatchment D8: to exist. Focal point (Building. C)**

Runoff = 0.26 cfs @ 12.09 hrs, Volume= 0.021 af, Depth> 9.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100 Year Rainfall=10.24"

Area (ac)	CN	Description
0.026	98	Paved parking, HSG B
0.026		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment D9: Bypass Basins**

Runoff = 10.75 cfs @ 12.31 hrs, Volume= 1.162 af, Depth> 4.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100 Year Rainfall=10.24"

Area (ac)	CN	Description
0.050	82	Dirt roads, HSG B
2.412	55	Woods, Good, HSG B
0.118	70	Woods, Good, HSG C
0.100	77	Woods, Good, HSG D
0.361	61	>75% Grass cover, Good, HSG B
3.041	57	Weighted Average
3.041		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	25	0.0100	0.04		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.18"
0.9	257	0.0860	4.72		<b>Shallow Concentrated Flow,</b> Unpaved Kv= 16.1 fps
0.9	235	0.0550	4.19	4.19	<b>Channel Flow,</b> Area= 1.0 sf Perim= 3.0' r= 0.33' n= 0.040 Mountain streams
10.5	745	0.0020	1.18	3.55	<b>Channel Flow,</b> Area= 3.0 sf Perim= 5.0' r= 0.60' n= 0.040 Winding stream, pools & shoals
21.7	1,262	Total			

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**Summary for Reach 5R: Stream Channel**

Inflow Area = 0.648 ac, 55.25% Impervious, Inflow Depth > 7.32" for 100 Year event  
Inflow = 3.74 cfs @ 12.24 hrs, Volume= 0.395 af  
Outflow = 3.65 cfs @ 12.30 hrs, Volume= 0.393 af, Atten= 2%, Lag= 3.5 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Max. Velocity= 2.68 fps, Min. Travel Time= 4.7 min  
Avg. Velocity = 0.97 fps, Avg. Travel Time= 12.9 min

Peak Storage= 1,019 cf @ 12.30 hrs  
Average Depth at Peak Storage= 0.45'  
Bank-Full Depth= 1.50' Flow Area= 4.5 sf, Capacity= 20.16 cfs

3.00' x 1.50' deep channel, n= 0.030 Earth, grassed & winding  
Length= 750.0' Slope= 0.0120 '/'  
Inlet Invert= 101.00', Outlet Invert= 92.00'



**Summary for Reach A: Summary Reach**

Inflow Area = 6.035 ac, 15.19% Impervious, Inflow Depth > 5.18" for 100 Year event  
Inflow = 20.30 cfs @ 12.27 hrs, Volume= 2.607 af  
Outflow = 20.30 cfs @ 12.27 hrs, Volume= 2.607 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

**Summary for Pond 1P: Basin E**

Inflow Area = 1.213 ac, 46.08% Impervious, Inflow Depth > 6.82" for 100 Year event  
Inflow = 8.49 cfs @ 12.12 hrs, Volume= 0.690 af  
Outflow = 1.77 cfs @ 12.59 hrs, Volume= 0.606 af, Atten= 79%, Lag= 28.1 min  
Discarded = 0.04 cfs @ 12.59 hrs, Volume= 0.026 af  
Primary = 1.73 cfs @ 12.59 hrs, Volume= 0.579 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
Peak Elev= 106.49' @ 12.59 hrs Surf.Area= 5,131 sf Storage= 14,072 cf

Plug-Flow detention time= 152.5 min calculated for 0.604 af (88% of inflow)  
Center-of-Mass det. time= 103.4 min ( 906.0 - 802.6 )

Volume	Invert	Avail.Storage	Storage Description
#1	101.75'	16,886 cf	<b>Custom Stage Data (Irregular)</b> Listed below (Recalc)

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Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
101.75	1,000	165.0	0	0	1,000
102.00	1,387	180.0	297	297	1,414
104.00	2,863	387.0	4,162	4,459	10,771
106.00	4,468	413.0	7,272	11,731	12,610
107.00	5,875	439.0	5,155	16,886	14,423

Device	Routing	Invert	Outlet Devices
#1	Primary	100.00'	<b>12.0" Round Culvert</b> L= 33.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 100.00' / 99.67' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	103.00'	<b>3.0" Vert. Orifice/Grate</b> C= 0.600
#3	Device 1	104.35'	<b>6.0" Vert. Orifice/Grate</b> C= 0.600
#4	Device 1	106.50'	<b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads
#5	Discarded	101.75'	<b>0.300 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.04 cfs @ 12.59 hrs HW=106.49' (Free Discharge)

↳ **5=Exfiltration** (Exfiltration Controls 0.04 cfs)

**Primary OutFlow** Max=1.73 cfs @ 12.59 hrs HW=106.49' TW=0.00' (Dynamic Tailwater)

↳ **1=Culvert** (Passes 1.73 cfs of 9.25 cfs potential flow)  
 ↳ **2=Orifice/Grate** (Orifice Controls 0.43 cfs @ 8.83 fps)  
 ↳ **3=Orifice/Grate** (Orifice Controls 1.30 cfs @ 6.61 fps)  
 ↳ **4=Orifice/Grate** ( Controls 0.00 cfs)

**Summary for Pond 2P: DMH-5**

Inflow Area = 0.648 ac, 55.25% Impervious, Inflow Depth > 7.32" for 100 Year event  
 Inflow = 3.74 cfs @ 12.24 hrs, Volume= 0.395 af  
 Outflow = 3.74 cfs @ 12.24 hrs, Volume= 0.395 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.74 cfs @ 12.24 hrs, Volume= 0.395 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 110.48' @ 12.24 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	109.00'	<b>12.0" Round Culvert</b> L= 22.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 109.00' / 106.50' S= 0.1136 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=3.72 cfs @ 12.24 hrs HW=110.47' TW=101.44' (Dynamic Tailwater)

↳ **1=Culvert** (Inlet Controls 3.72 cfs @ 4.74 fps)

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**Summary for Pond 3P: DMH-7**

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 9.89" for 100 Year event  
 Inflow = 3.59 cfs @ 12.09 hrs, Volume= 0.301 af  
 Outflow = 3.59 cfs @ 12.09 hrs, Volume= 0.301 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.59 cfs @ 12.09 hrs, Volume= 0.301 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Peak Elev= 118.09' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	116.40'	<b>12.0" Round Culvert</b> L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 116.40' / 116.40' S= 0.0000 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=3.32 cfs @ 12.09 hrs HW=118.06' TW=117.29' (Dynamic Tailwater)  
 ↑1=Culvert (Inlet Controls 3.32 cfs @ 4.23 fps)

**Summary for Pond 4P: INFIL-8**

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 9.89" for 100 Year event  
 Inflow = 3.59 cfs @ 12.09 hrs, Volume= 0.301 af  
 Outflow = 3.39 cfs @ 12.12 hrs, Volume= 0.263 af, Atten= 5%, Lag= 1.7 min  
 Discarded = 0.01 cfs @ 1.55 hrs, Volume= 0.016 af  
 Primary = 3.38 cfs @ 12.12 hrs, Volume= 0.247 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Peak Elev= 117.32' @ 12.12 hrs Surf.Area= 0.030 ac Storage= 0.053 af

Plug-Flow detention time= 107.0 min calculated for 0.263 af (87% of inflow)  
 Center-of-Mass det. time= 52.1 min ( 784.4 - 732.3 )

Volume	Invert	Avail.Storage	Storage Description
#1A	114.60'	0.028 af	<b>15.75'W x 81.94'L x 3.50'H Field A</b> 0.104 af Overall - 0.035 af Embedded = 0.069 af x 40.0% Voids
#2A	115.10'	0.035 af	<b>ADS_StormTech SC-740 +Cap</b> x 33 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 33 Chambers in 3 Rows
		0.062 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	114.60'	<b>0.300 in/hr Exfiltration over Surface area</b>
#2	Primary	116.43'	<b>12.0" Round Culvert X 2.00</b> L= 3.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 116.43' / 116.43' S= 0.0000 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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**Discarded OutFlow** Max=0.01 cfs @ 1.55 hrs HW=114.64' (Free Discharge)

↑1=Exfiltration (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=3.29 cfs @ 12.12 hrs HW=117.31' TW=115.26' (Dynamic Tailwater)

↑2=Culvert (Barrel Controls 3.29 cfs @ 3.00 fps)

## Summary for Pond 5P: DMH-8

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 8.11" for 100 Year event  
Inflow = 3.38 cfs @ 12.12 hrs, Volume= 0.247 af  
Outflow = 3.38 cfs @ 12.12 hrs, Volume= 0.247 af, Atten= 0%, Lag= 0.0 min  
Primary = 3.38 cfs @ 12.12 hrs, Volume= 0.247 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 115.30' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	114.00'	<b>12.0" Round Culvert</b> L= 68.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 114.00' / 104.00' S= 0.1471 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=3.29 cfs @ 12.12 hrs HW=115.26' TW=105.36' (Dynamic Tailwater)

↑1=Culvert (Inlet Controls 3.29 cfs @ 4.19 fps)

## Summary for Pond 7P: CB-2

Inflow Area = 0.568 ac, 32.92% Impervious, Inflow Depth > 6.75" for 100 Year event  
Inflow = 4.42 cfs @ 12.09 hrs, Volume= 0.319 af  
Outflow = 4.42 cfs @ 12.09 hrs, Volume= 0.319 af, Atten= 0%, Lag= 0.0 min  
Primary = 4.42 cfs @ 12.09 hrs, Volume= 0.319 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 109.86' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	108.00'	<b>12.0" Round Culvert</b> L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 108.00' / 107.50' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=4.32 cfs @ 12.09 hrs HW=109.81' TW=108.34' (Dynamic Tailwater)

↑1=Culvert (Inlet Controls 4.32 cfs @ 5.50 fps)

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**Summary for Pond 8P: DMH-6**

Inflow Area = 0.365 ac, 100.00% Impervious, Inflow Depth > 9.89" for 100 Year event  
 Inflow = 3.59 cfs @ 12.09 hrs, Volume= 0.301 af  
 Outflow = 3.59 cfs @ 12.09 hrs, Volume= 0.301 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.59 cfs @ 12.09 hrs, Volume= 0.301 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Peak Elev= 119.40' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	118.00'	<b>12.0" Round Culvert</b> L= 30.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 118.00' / 117.00' S= 0.0333 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=3.49 cfs @ 12.09 hrs HW=119.35' TW=118.06' (Dynamic Tailwater)  
 ↑1=Culvert (Inlet Controls 3.49 cfs @ 4.44 fps)

**Summary for Pond 9P: CB-1**

Inflow Area = 0.510 ac, 64.71% Impervious, Inflow Depth > 8.29" for 100 Year event  
 Inflow = 4.65 cfs @ 12.09 hrs, Volume= 0.352 af  
 Outflow = 4.65 cfs @ 12.09 hrs, Volume= 0.352 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.65 cfs @ 12.09 hrs, Volume= 0.352 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Peak Elev= 117.06' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	114.82'	<b>12.0" Round Culvert</b> L= 14.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 114.82' / 114.68' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=4.20 cfs @ 12.09 hrs HW=116.97' TW=115.73' (Dynamic Tailwater)  
 ↑1=Culvert (Inlet Controls 4.20 cfs @ 5.35 fps)

**Summary for Pond 10P: INFIL-7**

Inflow Area = 0.648 ac, 55.25% Impervious, Inflow Depth > 7.85" for 100 Year event  
 Inflow = 3.85 cfs @ 12.18 hrs, Volume= 0.424 af  
 Outflow = 3.74 cfs @ 12.24 hrs, Volume= 0.404 af, Atten= 3%, Lag= 3.7 min  
 Discarded = 0.01 cfs @ 4.85 hrs, Volume= 0.008 af  
 Primary = 3.74 cfs @ 12.24 hrs, Volume= 0.395 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs  
 Peak Elev= 112.03' @ 12.24 hrs Surf.Area= 0.017 ac Storage= 0.039 af

Plug-Flow detention time= 45.0 min calculated for 0.404 af (95% of inflow)  
 Center-of-Mass det. time= 21.2 min ( 827.0 - 805.8 )



**16042 D Post Development**

Type III 24-hr 100 Year Rainfall=10.24"

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Volume	Invert	Avail.Storage	Storage Description
#1A	109.00'	0.015 af	<b>17.12'W x 43.88'L x 4.07'H Field A</b> 0.070 af Overall - 0.034 af Embedded = 0.036 af x 40.0% Voids
#2A	109.25'	0.032 af	<b>ACF R-Tank HD 2 x 170 Inside #1</b> Inside= 15.7"W x 33.9"H => 3.52 sf x 2.35'L = 8.3 cf Outside= 15.7"W x 33.9"H => 3.70 sf x 2.35'L = 8.7 cf 170 Chambers in 10 Rows
		0.047 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	110.50'	<b>12.0" Round Culvert</b> L= 6.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 110.50' / 110.44' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Discarded	109.00'	<b>0.300 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.01 cfs @ 4.85 hrs HW=109.04' (Free Discharge)

↳ **2=Exfiltration** (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=3.72 cfs @ 12.24 hrs HW=112.03' TW=110.47' (Dynamic Tailwater)

↳ **1=Culvert** (Barrel Controls 3.72 cfs @ 4.74 fps)

**Summary for Pond FP11: FocalPoint #11 (70 SF)**

Inflow Area =	0.648 ac, 55.25% Impervious, Inflow Depth > 7.85" for 100 Year event
Inflow =	5.65 cfs @ 12.09 hrs, Volume= 0.424 af
Outflow =	3.85 cfs @ 12.18 hrs, Volume= 0.424 af, Atten= 32%, Lag= 5.4 min
Primary =	0.20 cfs @ 10.10 hrs, Volume= 0.213 af
Secondary =	3.65 cfs @ 12.18 hrs, Volume= 0.211 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 115.93' @ 12.18 hrs Surf.Area= 88 sf Storage= 2,558 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 25.3 min ( 805.8 - 780.5 )

Volume	Invert	Avail.Storage	Storage Description
#1	111.95'	40 cf	<b>8.00'W x 11.00'L x 2.25'H FocalPoint</b> 198 cf Overall x 20.0% Voids
#2	114.20'	3,745 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) -Impervious
		3,785 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
114.20	1,033	0	0
116.00	1,913	2,651	2,651
116.50	2,462	1,094	3,745

**16042 D Post Development**

Type III 24-hr 100 Year Rainfall=10.24"

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Device	Routing	Invert	Outlet Devices
#1	Primary	111.00'	<b>8.0" Round Culvert</b> L= 41.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 111.00' / 110.79' S= 0.0051 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Device 1	111.95'	<b>100.000 in/hr Exfiltration over Surface area</b> Phase-In= 0.10'
#3	Secondary	115.00'	<b>12.0" Horiz. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads

**Primary OutFlow** Max=0.20 cfs @ 10.10 hrs HW=112.12' TW=110.75' (Dynamic Tailwater)

↳ **1=Culvert** (Passes 0.20 cfs of 1.19 cfs potential flow)

↳ **2=Exfiltration** (Exfiltration Controls 0.20 cfs)

**Secondary OutFlow** Max=3.63 cfs @ 12.18 hrs HW=115.92' TW=111.98' (Dynamic Tailwater)

↳ **3=Orifice/Grate** (Orifice Controls 3.63 cfs @ 4.62 fps)

**Summary for Pond FP12: FocalPoint #12 (40 SF)**

Inflow Area =	0.649 ac, 29.89% Impervious, Inflow Depth > 6.61" for 100 Year event
Inflow =	4.95 cfs @ 12.09 hrs, Volume= 0.358 af
Outflow =	4.05 cfs @ 12.15 hrs, Volume= 0.358 af, Atten= 18%, Lag= 3.6 min
Primary =	0.25 cfs @ 11.10 hrs, Volume= 0.187 af
Secondary =	3.80 cfs @ 12.15 hrs, Volume= 0.171 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 108.51' @ 12.15 hrs Surf.Area= 108 sf Storage= 962 cf

Plug-Flow detention time= 5.7 min calculated for 0.358 af (100% of inflow)

Center-of-Mass det. time= 5.7 min ( 807.5 - 801.8 )

Volume	Invert	Avail.Storage	Storage Description
#1	104.75'	49 cf	<b>9.00'W x 12.00'L x 2.25'H FocalPoint</b> 243 cf Overall x 20.0% Voids
#2	107.00'	1,363 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) -Impervious
		1,412 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
107.00	380	0	0
108.00	678	529	529
109.00	990	834	1,363

Device	Routing	Invert	Outlet Devices
#1	Primary	104.00'	<b>8.0" Round Culvert</b> L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 104.00' / 103.50' S= 0.0200 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Device 1	104.75'	<b>100.000 in/hr Exfiltration over Surface area</b> Phase-In= 0.10'
#3	Secondary	107.50'	<b>12.0" Horiz. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads

**16042 D Post Development**

*Type III 24-hr 100 Year Rainfall=10.24"*

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Page 63

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**Primary OutFlow** Max=0.25 cfs @ 11.10 hrs HW=104.95' TW=103.14' (Dynamic Tailwater)

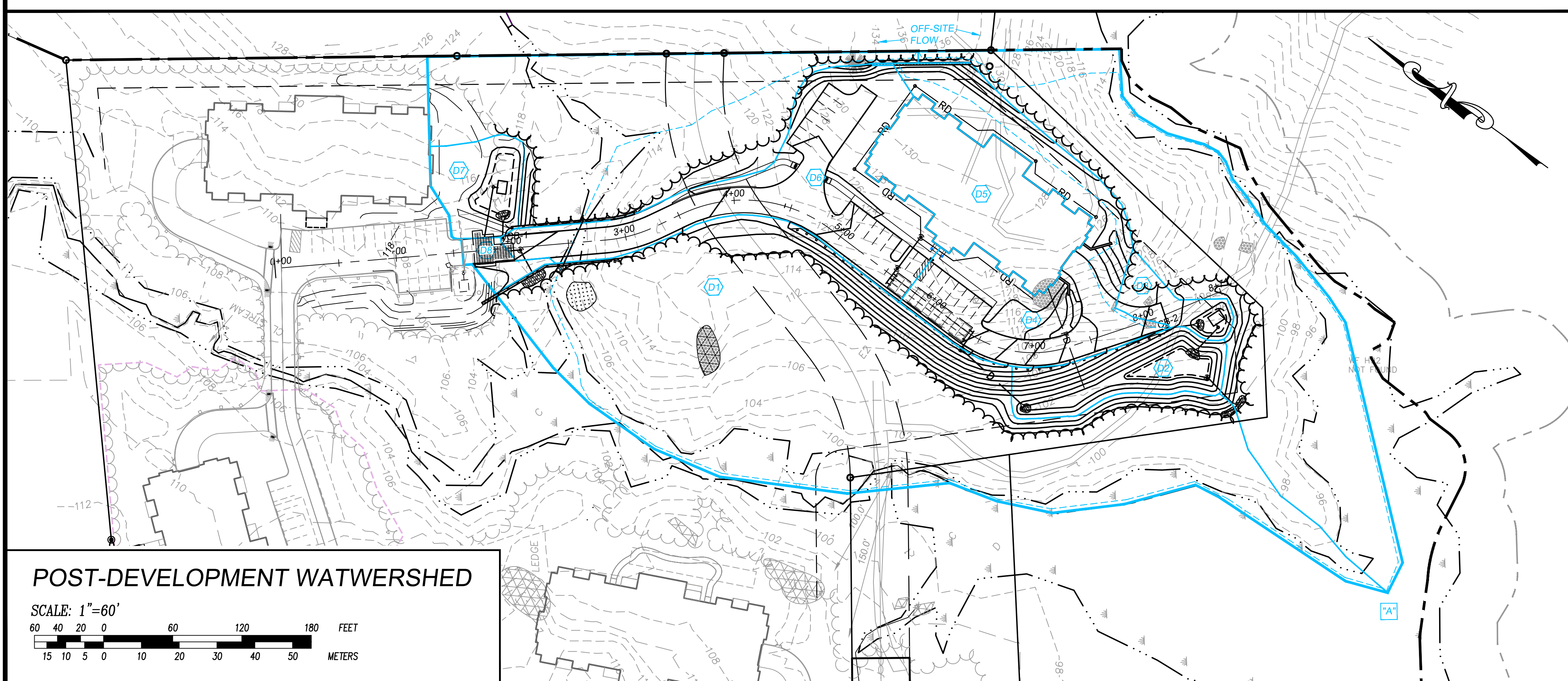
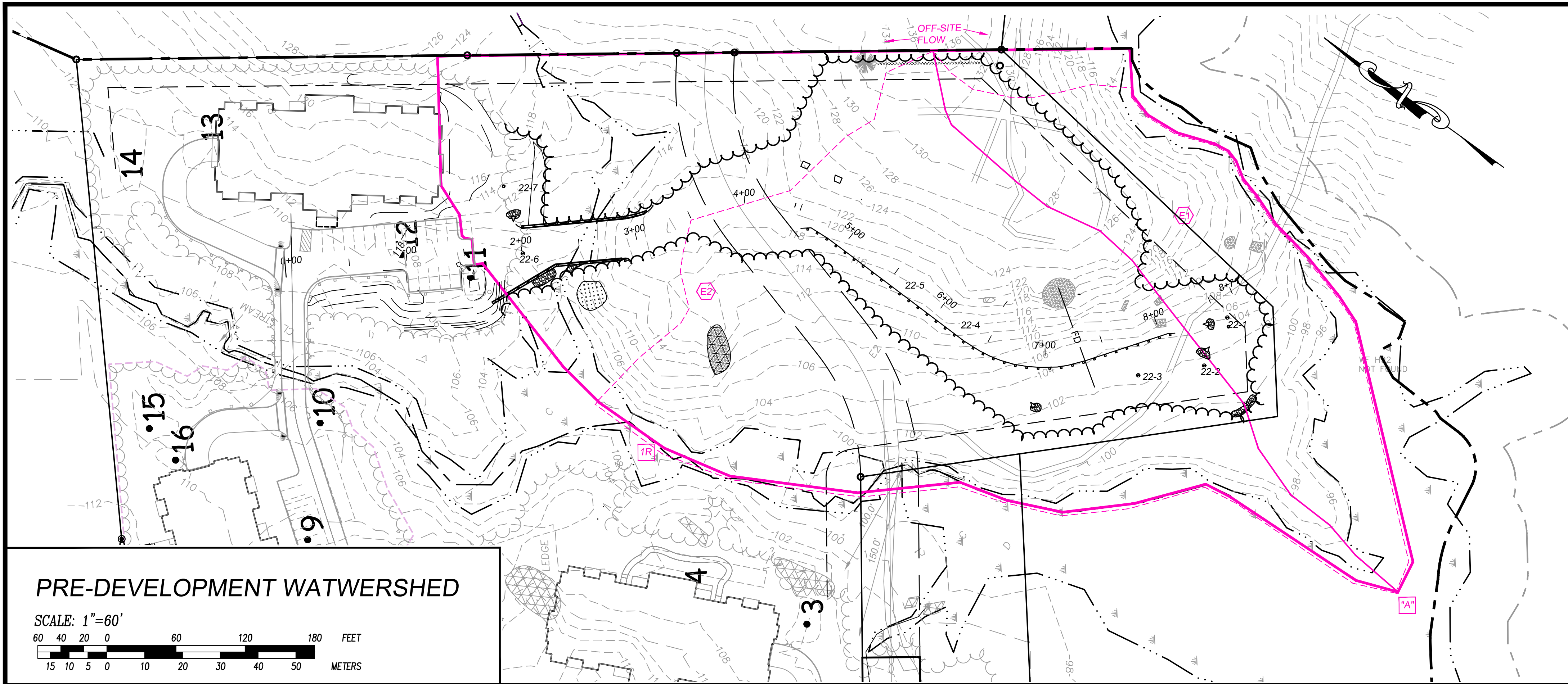
└─**1=Culvert** (Passes 0.25 cfs of 1.32 cfs potential flow)

└─**2=Exfiltration** (Exfiltration Controls 0.25 cfs)

**Secondary OutFlow** Max=3.79 cfs @ 12.15 hrs HW=108.51' TW=105.58' (Dynamic Tailwater)

└─**3=Orifice/Grate** (Orifice Controls 3.79 cfs @ 4.83 fps)





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**WATERSHED  
 PLANS**

**Ray Farm  
 Condominium**

Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:

Ray Farm, LLC  
 158 Shattuck Way  
 Newington, NH 03801

REVISION BLOCK				
NO.	DATE	DESC	BY	
1	4.26-22	REVISE WET IMPACTS	DH	

**NOTES:**  
 1. REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.

TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

PROJ. MGR: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D GR.DWG  
 FBK:  
 JOB #: 16042 D





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Sheet Title:

# WETLAND IMPACT PLAN

Project Title:

## Ray Farm Condominium

Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:

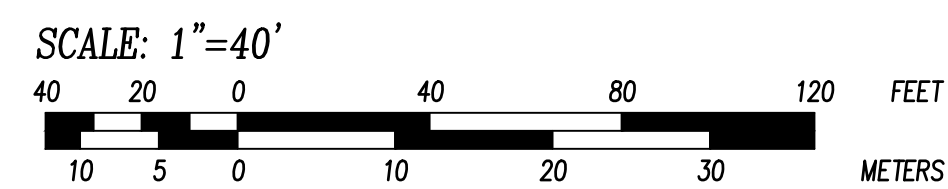
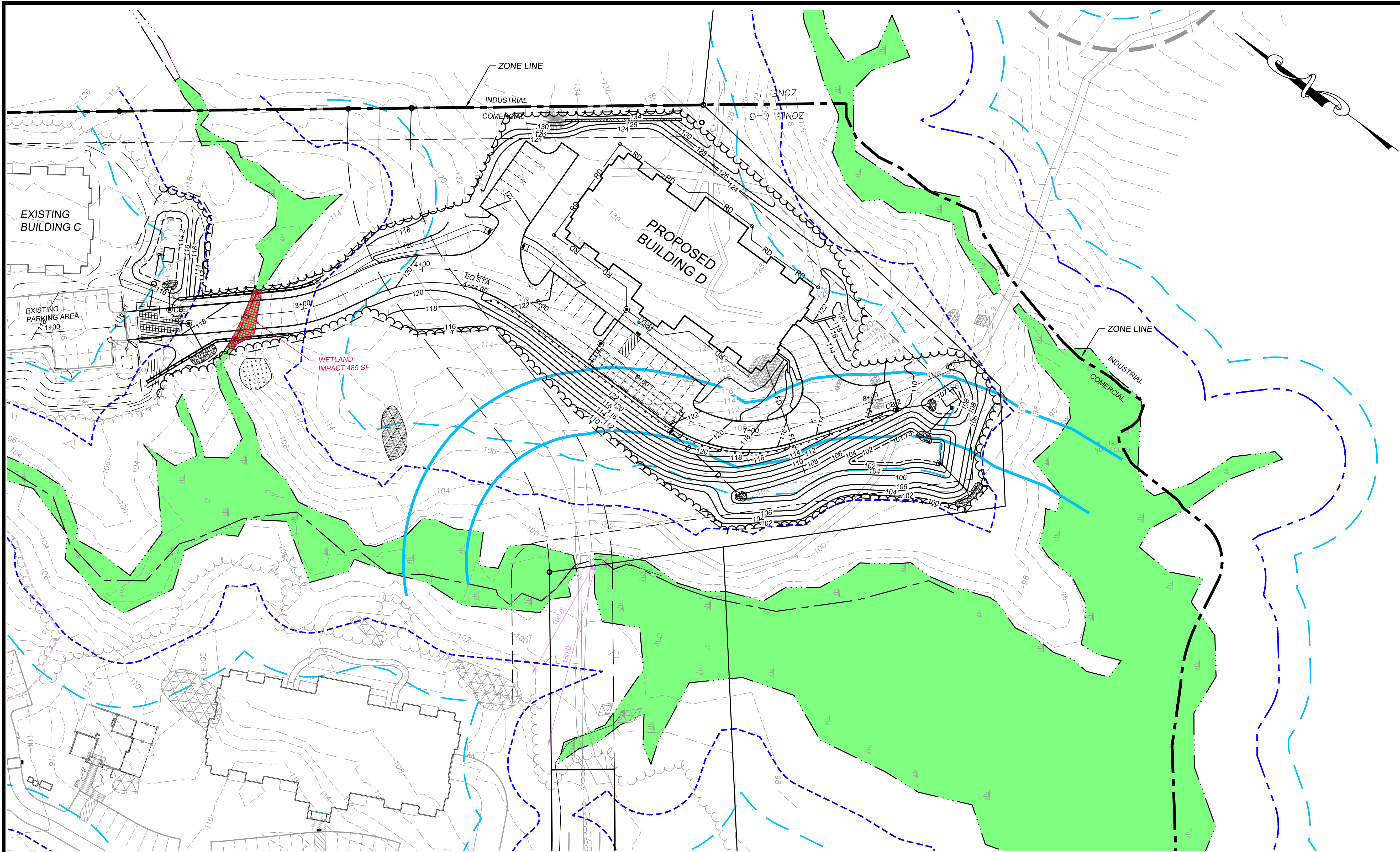
Ray Farm, LLC  
 158 Shattuck Way  
 Newington, NH 03801

REVISION BLOCK				
NO.	DATE	DESC	BY	
1	4.26-22	REVISE WET IMPACTS	DH	

PROJ. MGR.: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D GR.DWG  
 FBK:  
 JOB #: 16042 D

TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_



### DIRECT WETLAND IMPACTS

WETLAND IMPACT - AREA 1 485 SF

TOTAL WETLAND IMPACT 485 SF

### NOTES:

1. REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.

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# WETLAND AND SHORELAND BUFFER IMPACT PLAN

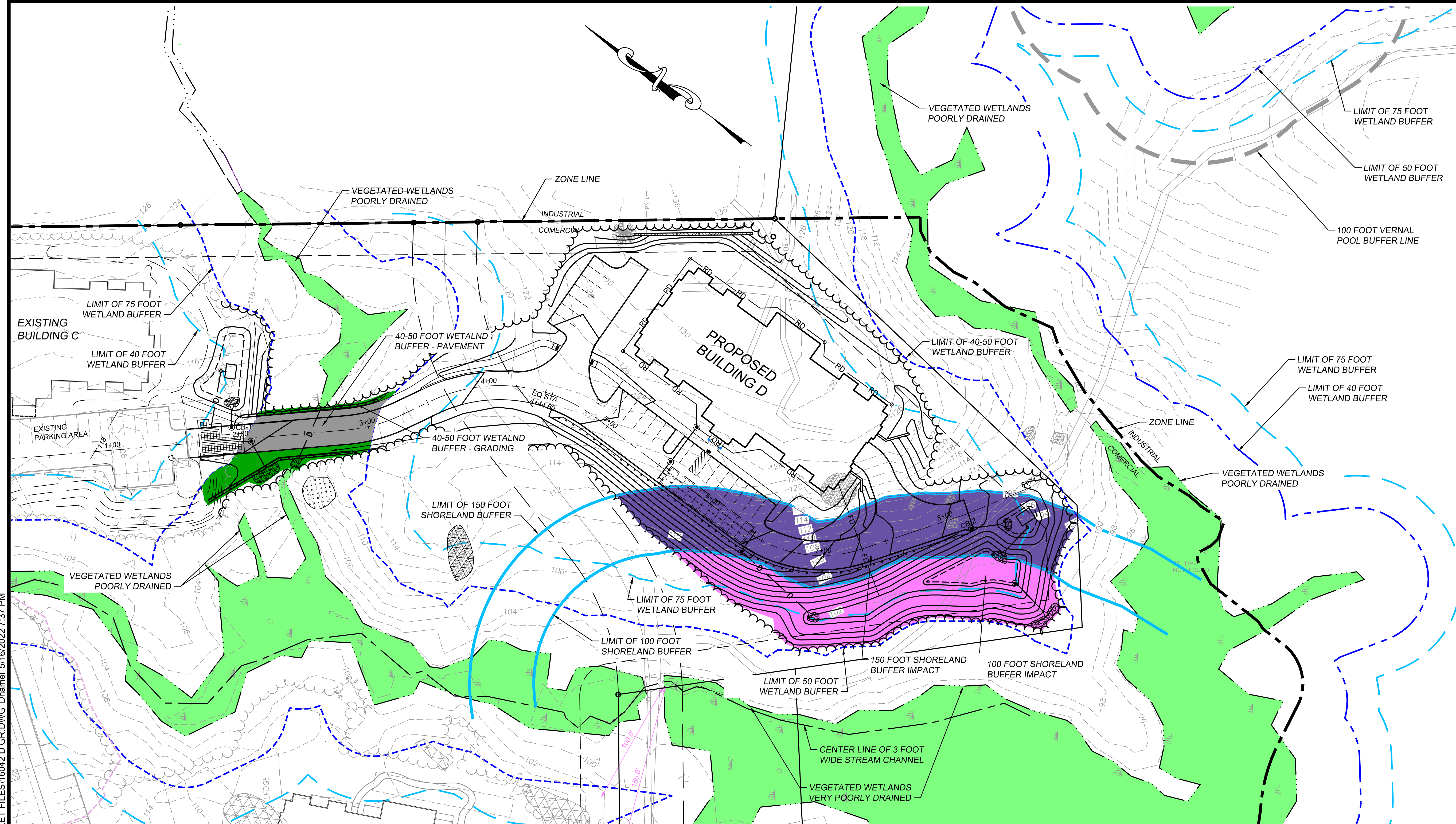
## Ray Farm Condominium

Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

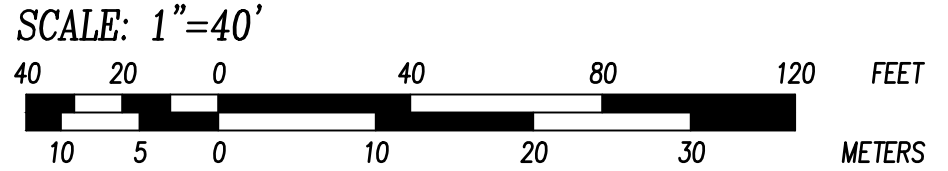
Applicant/Owner:

Ray Farm, LLC  
 158 Shattuck Way  
 Newington, NH 03801

REVISION BLOCK				
NO.	DATE	DESC	BY	
1	4.26-22	REVISE WET IMPACTS	DH	



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### WETLAND BUFFER IMPACTS

	40-50 FOOT WETLAND BUFFER IMPACT - PAVEMENT	2858 SF
	40-50 FOOT WETLAND BUFFER IMPACT - GRAVEL	0 SF
	40-50 FOOT WETLAND BUFFER IMPACT - GRADING	2489 SF
	75 FOOT WETLAND BUFFER IMPACT	0 SF
<b>TOTAL WETLAND BUFFER IMPACTS</b>		<b>5,347 SF</b>

### SHORELAND BUFFER IMPACTS

	100 FOOT SHORELAND BUFFER IMPACT	9128 SF
	150 FOOT SHORELAND BUFFER IMPACT	16,560 SF
<b>TOTAL SHORELAND BUFFER IMPACT</b>		<b>25,688 SF SF</b>

**NOTES:**  
 1. REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.

TOWN OF EXETER PLANNING BOARD  
 CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

PROJ. MGR.: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D GR.DWG  
 FBK:  
 JOB #: 16042 D



Russell F. Hilliard  
James F. Raymond  
Barton L. Mayer  
Heather M. Burns  
Lauren Simon Irwin  
Michael S. McGrath\*  
Jeanne S. Saffan\*\*  
Susan Aileen Lowry  
Michael P. Courtney\*  
Peter W. Leberman  
Nathan C. Midolo\*\*\*  
Brooke Lovett Shilo  
Stephanie J. Thomson\*\*\*\*



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*Of Counsel*  
Norman H. Makechnie  
Jeffrey R. Crocker

\* Also admitted in MA  
\*\* Also admitted in MA & NY  
\*\*\* Also admitted in MN  
\*\*\*\* Also admitted in VT

May 16, 2022

**RECEIVED**

**MAY 17 2022**

**EXETER PLANNING OFFICE**

*Via Fax and U.S. Mail*

Langdon Plumer, Chair  
Exeter Planning Board  
10 Front Street  
Exeter, NH 03833-3792

Re: Application of CKT Associates for Site Plan Review (May 26, 2022 Hearing)  
Planning Board Case #22-3

Dear Chair Plumer:

I represent W. Scott Carlisle, III, owner of property adjoining the parcel that is the subject of this application.

Mr. Carlisle has a right-of-way over the CKT property as depicted on the enclosed road design (prepared by CKT) that has been approved by the Town, as well as the subdivision of his property shown on the enclosed plan and approval letter. This right-of-way is also part of the Town's TIF District, to be constructed in accordance with the approved road design (as has CKT's portion of the road).

The application's supporting documents depict ways, parking, and site work associated with the proposed relocation of the building being placed directly on the layout of the TIF road accessing his property.

CKT's proposed road crossing interferes with the approved TIF road design: it is several feet higher than the TIF road, designed to continue from the existing road to Mr. Carlisle's land, and includes incompatible sidewalks and utilities.

Mr. Carlisle wants your Board to be aware that he does not consent to this, or any interference with, the Town's TIF road and his right-of-way.

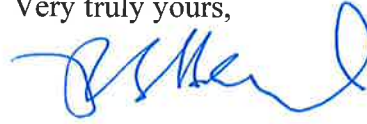
Mr. Carlisle and I plan to attend the hearing on the application and will answer any questions the Board may have.

159 Middle Street, Portsmouth, NH 03801  
Concord – Hillsborough – Peterborough – Portsmouth

May 16, 2022  
Page 2

Thank you for your consideration.

Very truly yours,



Russell F. Hilliard  
rhilliard@uptonhatfield.com  
(603) 436-7046

RFH/sem  
Enclosures

cc: W. Scott Carlisle, III (w/ Enclosures)(via Electronic Mail only)  
Justin L. Pasay, Esq. (w/ Enclosures)(via Electronic Mail only)  
Walter L. Mitchell (w/ Enclosures)(via Electronic Mail only)



# TOWN OF EXETER, NEW HAMPSHIRE

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 • FAX 772-4709

[www.exeternh.gov](http://www.exeternh.gov)

August 25, 2017

W. Scott Carlisle, III  
14 Cass Street  
Exeter, New Hampshire 03833

Re: PB Case #17-26 W. Scott Carlisle, III  
Minor Subdivision - Property off of Epping Road, Exeter, N.H  
Tax Map Parcel #40-12

Dear Mr. Carlisle:

Please be advised that at the meeting of August 24<sup>th</sup>, 2017, the Exeter Planning Board voted to **APPROVE** the above-captioned application for a minor subdivision, as presented, subject to the following conditions:

1. A dwg file of the subdivision plan shall be provided to the Town Planner showing all property lines and monumentation prior to signing the final plans;
2. This approval shall not be final until the applicant presents to the Board, and the Board and its engineers approve, a design for both the un-built portion of the so-called TIF road to the applicant's property, and the roadway and cul-de-sac within the property;
3. The potential discrepancy regarding the location of the common boundary line between the subject parcel and the abutting parcel (Tax Map 47 Lot 8) shall be resolved between the property owners; and,
4. These conditions shall be met prior to recording the subdivision plan.

The Board also approved the following waivers from the Site Plan Review and Subdivision Regulations in conjunction with the minor subdivision plan:

- Section 7.4.7 – Natural Features for significant trees - 16" diameter (caliper) or greater
- Section 7.5.4 – High Intensity Soil Survey (HISS) information

Both of the above waivers shall be specific to this subdivision application and shall not apply to any subsequent application submitted for the property.

Please feel free to contact the Planning Department at 773-6114 with any questions.

Sincerely,

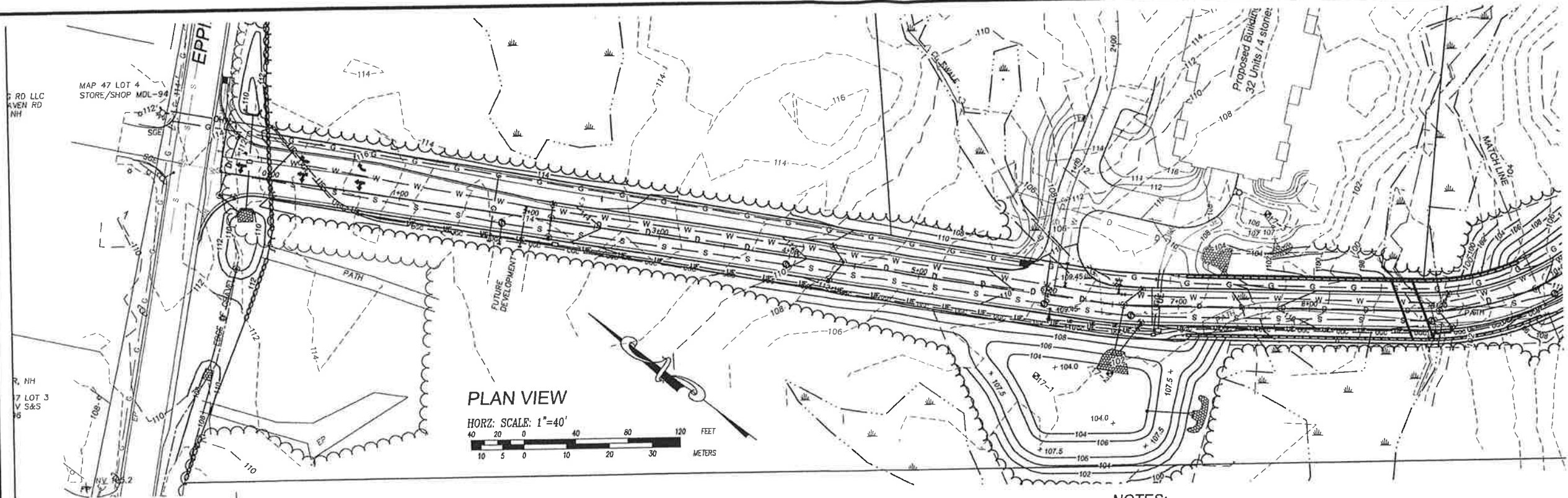
Langdon J. Plumer  
Chairman  
Exeter Planning Board

cc: ✓ Jonathan S. Ring, P.E., President, Jones & Beach Engineers, Inc.  
Douglas Eastman, Building Inspector/Code Enforcement Officer

LJP:bsm

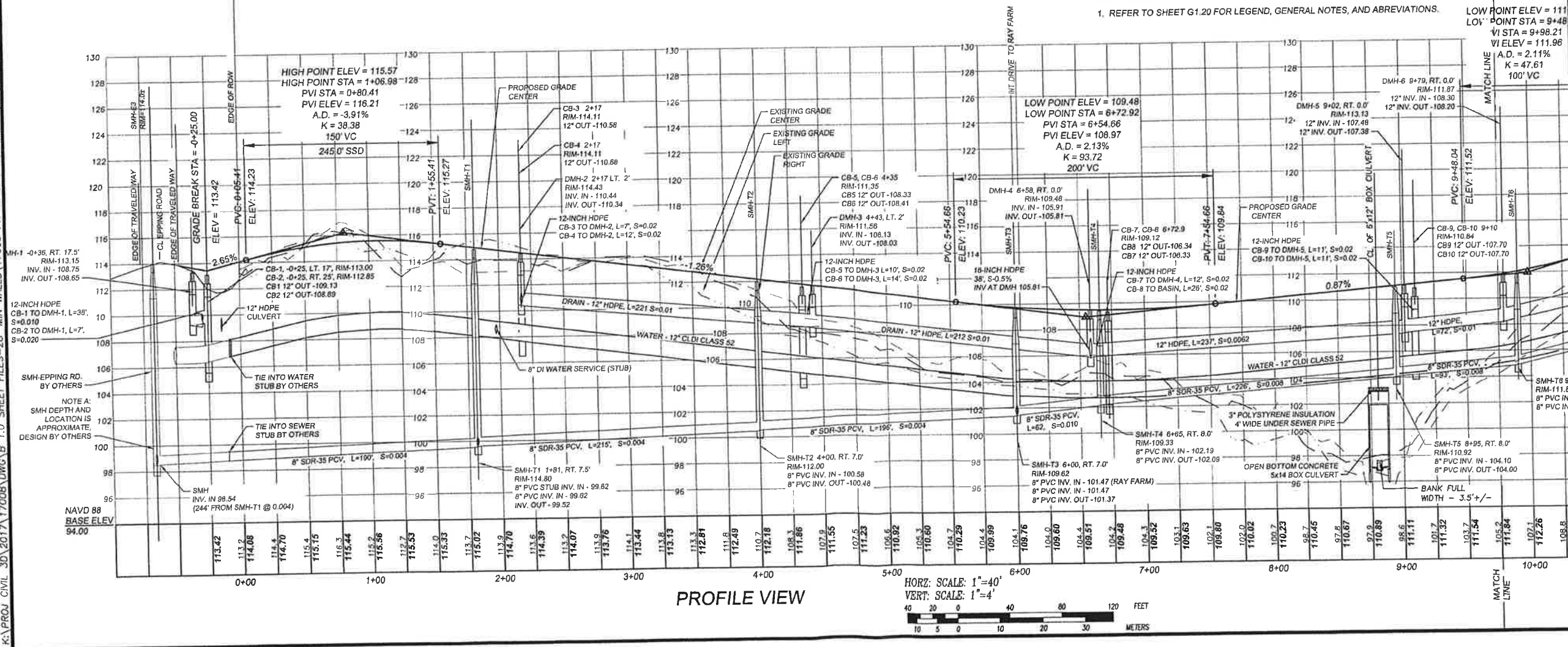
f:\town planner\planning\decision letters\pb #17-26 carlisle subdivision -epping road-let.docx

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**PLAN VIEW**  
 HORZ. SCALE: 1"=40'  
 40 20 0 20 40 80 120 FEET  
 10 5 0 10 20 30 METERS

**NOTES:**  
 1. REFER TO SHEET G120 FOR LEGEND, GENERAL NOTES, AND ABBREVIATIONS.



**PROFILE VIEW**  
 HORZ. SCALE: 1"=40'  
 VERT. SCALE: 1"=4'  
 40 20 0 20 40 80 120 FEET  
 10 5 0 10 20 30 METERS

APPROVED BY THE TOWN OF EXETER  
 DEPARTMENT OF PUBLIC WORKS

DATE: \_\_\_\_\_



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Sheet Title:  
**Plan / Profile**

Project Title:  
**"TIF Road"**  
 Proposed Road  
 off Epping Road  
 Exeter, NH 03833  
 Rockingham County

Applicant:  
**Town of Exeter**  
 10 Front Street  
 Exeter NH 03833

Owner:  
**CKT & Associates**  
 158 Shattuck Way  
 Newington, NH 03801

REVISION			
NO.	DATE	DESCRIPTION	BY
1	2-26-18	SUBMIT TO TOWN	DH
2	4-20-18	WIDEN ROAD TO 28'	DH
3	7-02-18	REVISE PHASE II	DH
4	7-18-18	FINAL SUBMISSION	DH

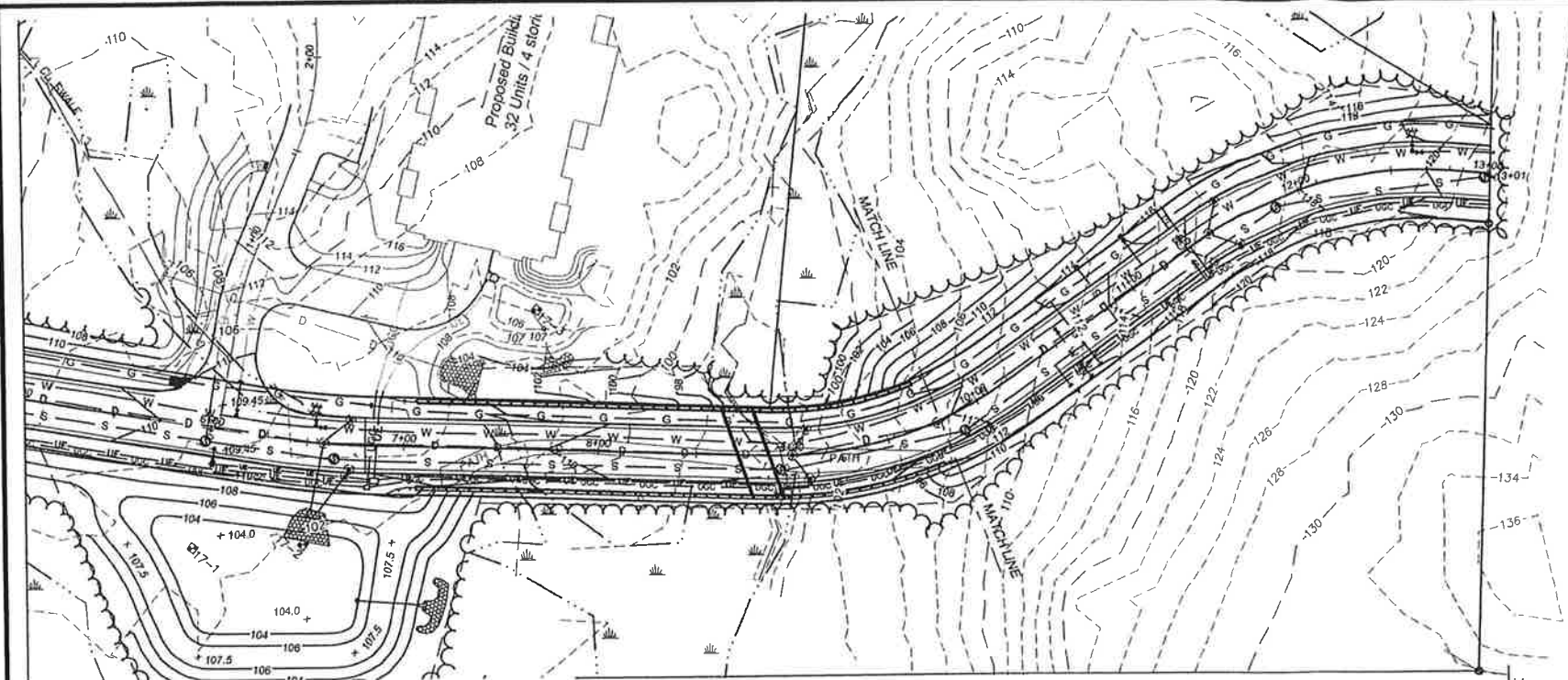
PROFESSIONAL ENGINEER  
 STATE OF NEW HAMPSHIRE  
 ROBERT B. BLANCHETTE, JR.  
 No. 15366  
 Date: *10 July 2018*

PROJ MGR.: D. HAMEL  
 FIELD: M. MICHAUD / A. BICK  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: W. CAMMETT / R. BALNCHETTE  
 DATE: 2/20/2018  
 FILE: 17006 PR-TIF.DWG  
 FBK:  
 JOB #: 17006

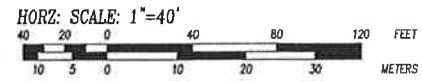
SHEET **C1.41**



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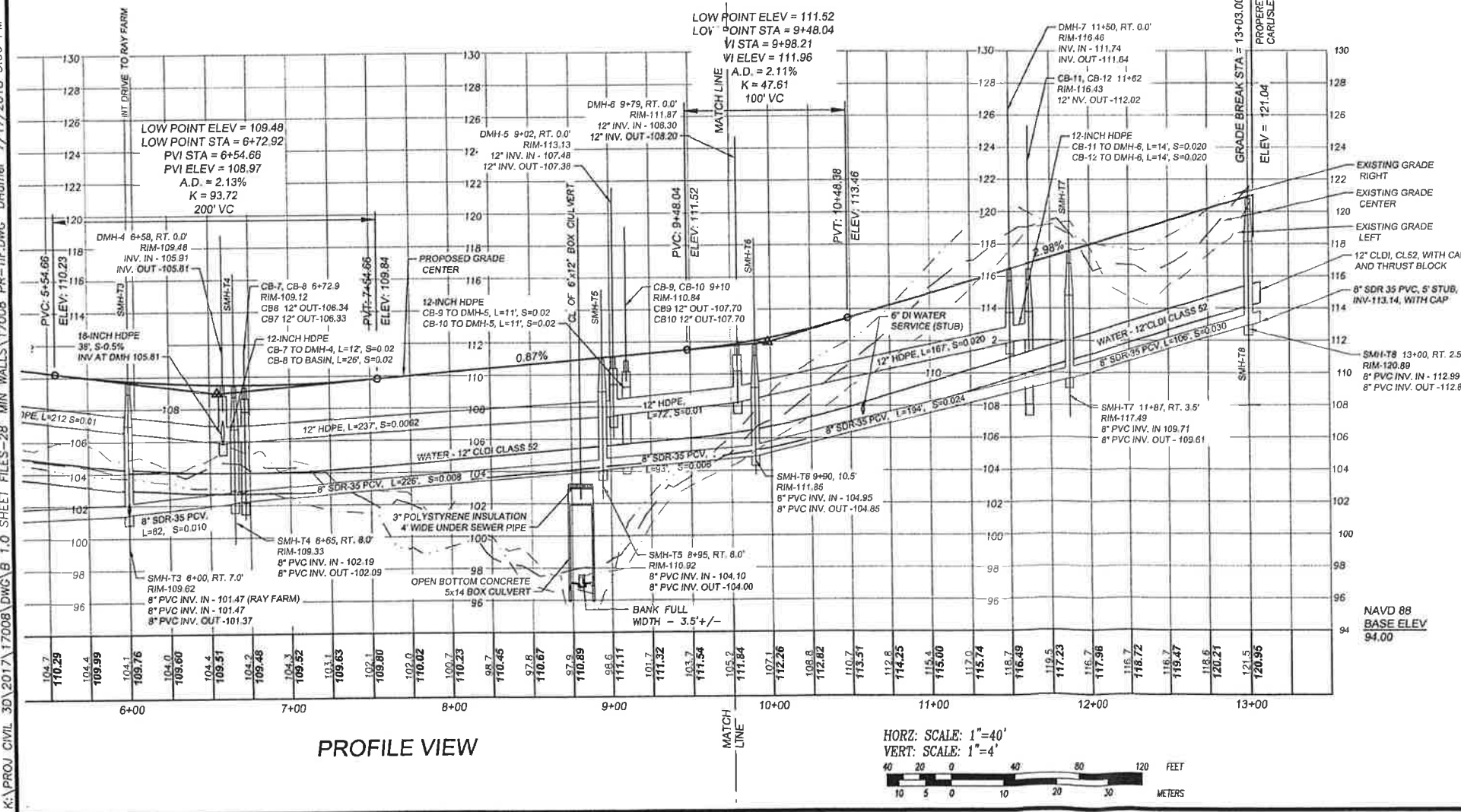


PLAN VIEW

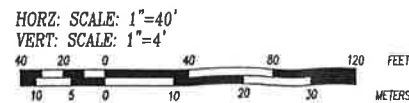


NOTES:

1. REFER TO SHEET G1.20 FOR LEGEND, GENERAL NOTES, AND ABBREVIATIONS.



PROFILE VIEW



APPROVED BY THE TOWN OF EXETER  
DEPARTMENT OF PUBLIC WORKS

DATE: \_\_\_\_\_



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Plan / Profile

Project Title:  
"TIF Road"  
Proposed Road  
off Epping Road  
Exeter, NH 03833  
Rockingham County

Applicant:  
Town of Exeter  
10 Front Street  
Exeter NH 03833

Owner:  
CKT & Associates  
158 Shattuck Way  
Newington, NH 03801

REVISION			
NO.	DATE	DESCRIPTION	BY
1	2-26-18	SUBMIT TO TOWN	DH
2	4-20-18	WIDEN ROAD TO 28'	DH
3	7-02-18	REVISE PHASE II	DH
4	7-16-18	FINAL SUBMISSION	DH



Date: 10 JULY 2018

PROJ. MGR.: D. HAMEL  
FIELD: M. MICHAUD / A. BICK  
DESIGN: D. HAMEL  
DRAWN: D. HAMEL  
CHECKED: W. CAMMETT / R. BALANCHETTE  
DATE: 2/20/2018  
FILE: 17008\_PR-TIF.DWG  
FBK:  
JOB #: 17008

SHEET C1.42



**PLAN REFERENCES**

1. "FLAT OF LAND EXETER, N.H. FOR W. SCOTT CARLISLE, III" BY DURGIN-SCHOFIELD ASSOCIATES, DATED FEBRUARY 23, 1989, RECORDED AT RCRO AS PLAN D-19078.
2. "FLAT OF LAND EXETER, N.H. FOR W. SCOTT CARLISLE, III" BY DURGIN-SCHOFIELD ASSOCIATES, DATED APRIL 26, 1988, RECORDED AT RCRO AS PLAN D-17892.
3. "A SURVEY AND LAYOUT OF A RIGHT-OF-WAY SEE NOTE #7 PREPARED FOR W. SCOTT CARLISLE III AND SITUATED IN THE TOWN OF EXETER, N.H.," DATED MARCH 17, 2003, PREPARED BY RSL LAYOUT & DESIGN, INC., RECORDED AT RCRO AS PLAN D-30523.
4. "SUBDIVISION PLAN OF LAND WATSON BROOK WOOD CO. EXETER, NH," PREPARED BY HOLDEN ENGINEERING & SURVEYING, INC., DATED DECEMBER 24, 1986, RECORDED AT THE RCRO AS PLAN D-16287.
5. "PLAN OF LAND ASSESSORS MAP 40 LOT 11 PREPARED FOR ALLIANCE ENERGY," PREPARED BY MHF DESIGN CONSULTANTS, INC., DATED MAY 14, 2012, RECORDED AT THE RCRO AS PLAN D-37224.
6. "PLANS OF PROPOSED F.A.P. PROJECT NO. F018-2(8) NH PROJECT NO P-3380 SOUTH SIDE ROAD," DATED JUNE 1, 1959.
7. "MINOR SUBDIVISION PLAN FOR RAY FARM ACTIVE ADULT COMMUNITY," PREPARED BY CAMMETT ENGINEERING, DATED MAY 8, 2017, AS LAST REVISED, AND TO BE RECORDED.

**LEGEND**

EXISTING	PROPOSED	DESCRIPTION
○	—	PROPERTY LINES
○	—	IRON PIPE/IRON ROD
○	—	DRILL HOLE FOUND
○	—	BOUND FOUND
○	—	ROW FENCE POST
○	—	TREE W/ WIRE
○	—	STUMPS W/ WIRE
○	—	MAJOR CONTOUR
○	—	MINOR CONTOUR
○	—	FRESHWATER WETLANDS LINE
○	—	IRON ROD/DRILL HOLE
○	—	STONE/GRANITE BOUND
○	—	FENCE POST

**ABUTTERS**

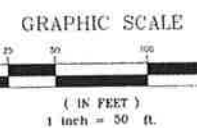
- TAX MAP 40 LOT 13  
TOWN OF EXETER CONSERVATION COMMISSION  
10 FRONT STREET  
EXETER, NH 03833  
BK: 3667 PG: 2469
- TAX MAP 40 LOT 14  
STATE OF NEW HAMPSHIRE  
PO BOX 463  
CONCORD, NH 03302  
BK: 2368 PG: 1332
- TAX MAP 47 LOT 4  
164 EPPING ROAD, LLC  
3 BROOKHAVEN ROAD  
KINGSTON, NH 03848  
BK: 3775 PG: 0784
- TAX MAP 40 LOT 8  
STATE OF NEW HAMPSHIRE  
PO BOX 483  
CONCORD, NH 03302  
BK: 2992 PG: 896

6" x 6" BOUND FND  
0.8' EXPOSED  
N114°15'24"E  
(S14°15'24"E  
0.27')  
SURVEY TIE-LINE

IRON PIN FND  
1.2' EXPOSED  
RSL #490

STATE OF N.H. ROUTE 101 EASTBOUND

TAX MAP 40 LOT 11  
NET LEASE REALTY I, INC.  
ATTN: INGRID IRVAN  
450 S ORANGE AVE., SUITE 90  
ORLANDO, FL 32801  
BK: 5731 PG: 1874



TAX MAP 40 LOT 13

TAX MAP 40 LOT 12  
PROPOSED EXISTING AREA  
802,124 S.F.  
18.41 AC.  
(AREA PER PROPERTY LINES  
FROM PLAN, REF. 1 D-19078  
18.55 AC.)

LOT 2  
241,379 S.F.  
5.54 ACRES

LOT 3  
190,312 S.F.  
4.36 ACRES

LOT 1  
350,058 S.F.  
8.04 ACRES

CUL-DE-SAC  
20,576 S.F.  
0.47 ACRES

AREA "C"  
2,780 S.F.  
0.06 AC.

AREA "A"  
2,386 S.F.  
0.06 AC.

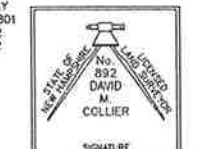
AREA "B"  
480 S.F.  
0.01 AC.

**SUBDIVISION NOTES:**

1. THE INTENT OF THIS PLAN IS TO PROVIDE A LOT LINE ADJUSTMENT WITH MAP 40 LOT 12 AND MAP 47 LOT 8, AND THEN TO SUBDIVIDE MAP 40 LOT 12 INTO THREE (3) LOTS FOR COMMERCIAL DEVELOPMENT PURPOSES, TO BE SERVICED BY MUNICIPAL WATER AND SEWER WITH ACCESS VIA THE PROPOSED TOWN OF EXETER T.I.F. ROAD.
2. ZONING DISTRICT: INDUSTRIAL  
LOT AREA MINIMUM = 40,000 S.F.  
LOT FRONTAGE MINIMUM = 150'  
BUILDING SETBACKS (MINIMUM):  
FRONT SETBACK = 50'  
SIDE SETBACK = 20'  
REAR SETBACK = 50'  
WETLAND NO CUT/NO DISTURB SETBACK = 40'  
WETLAND PARKING/BUILDING SETBACK = 75'  
MAX. BUILDING HEIGHT = 50'  
MAX. BUILDING COVERAGE = 40%  
OPEN SPACE MINIMUM = 25%
3. SUBJECT PROPERTY IS NOT LOCATED WITHIN FEDERALLY DESIGNATED 100 YEAR FLOOD HAZARD ZONE, REFERENCE FEMA COMMUNITY PANEL NUMBERS: 33015C0238E, 33015C0401E, 33015C0239E, AND 33015C0402E, DATED MAY 17, 2005.
4. GRANITE BOUNDS TO BE SET AT ALL ROADWAY POINTS OF CURVATURE AND TANGENCY. IRON RODS WITH SURVEY CAPS TO BE SET AT ALL PROPERTY CORNERS AND ANGLE POINTS, UNLESS OTHERWISE INDICATED. ALL MONUMENTS SET ARE 5/8" IRON RODS WITH ALUMINUM CAPS MARKED "JONES & BEACH ENGINEERS BOUNDARY, DO NOT DISTURB STRATHAM, N.H." AS SHOWN.
5. WETLANDS WERE DELINEATED BY GOVE ENVIRONMENTAL SERVICES, INC. DURING SUMMER, 2015, AND LOCATED BY JONES & BEACH ENGINEERS, INC.
6. LANDOWNERS ARE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING PERMITTING REQUIRED UNDER THESE REGULATIONS.
7. UPON APPROVAL BY THE TOWN, THE PROPOSED ROAD WILL BE CONVEYED TO THE TOWN.
8. ALL BOOK AND PAGE NUMBERS REFER TO THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
9. THE TAX MAP AND LOT NUMBERS AND ABUTTING OWNERS ARE BASED ON THE TOWN OF EXETER TAX RECORDS AND ARE SUBJECT TO CHANGE.
10. THIS SURVEY IS NOT A CERTIFICATION TO OWNERSHIP OR TITLE OF LANDS SHOWN. OWNERSHIP AND ENCUMBRANCES ARE MATTERS OF TITLE EXAMINATION NOT OF A BOUNDARY SURVEY. THE INTENT OF THIS PLAN IS TO RETRACE THE BOUNDARY LINES OF DEEDS REFERENCED HEREON. OWNERSHIP OF ADJOINING PROPERTIES IS ACCORDING TO ASSESSOR'S RECORDS. THIS PLAN MAY OR MAY NOT INDICATE ALL ENCUMBRANCES EXPRESSED, IMPLIED OR PRESCRIPTIVE.
11. ANY USE OF THIS PLAN AND/OR ACCOMPANYING DESCRIPTIONS SHOULD BE DONE WITH LEGAL COUNSEL TO BE CERTAIN THAT TITLES ARE CLEAR, THAT INFORMATION IS CURRENT, AND THAT ANY NECESSARY CERTIFICATES ARE IN PLACE FOR A PARTICULAR CONVEYANCE, OR OTHER USES.
12. PARCEL "1" TO BE DEEDED FROM MAP 40, LOT 12 TO MAP 47, LOT 8, AND IS THE TOTAL OF AREA "A", PLUS AREA "B", AND AREA "C".

**CERTIFICATION:**

I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN UNADJUSTED LINEAR ERROR OF CLOSURE THAT EXCEEDS BOTH THE MINIMUM OF 1:10,000 AS DEFINED IN SECTION 503.04 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES AND THE MINIMUM OF 1:15,000 AS DEFINED IN SECTION 4.2 OF THE N.H.L.S.A. ETHICS AND STANDARDS.



DAVID M. COLLIER, LLS 892 DATE:  
ON BEHALF OF JONES & BEACH ENGINEERS, INC.

PROJECT PARCEL  
TOWN OF EXETER  
TAX MAP 40, LOT 12

APPLICANT/OWNER  
W. SCOTT CARLISLE, III  
14 CASS STREET  
EXETER, NH 03833  
BK 4244, PG 1653

TOWN OF EXETER PLANNING BOARD CASE NO. 17-26  
CHAIRPERSON DATE:

TOTAL PROPOSED  
LOT AREA  
802,124 SQ. FT.  
18.41 ACRES

Design: JSR Draft: PLB Date: 8/1/16  
Checked: JSR Scale: 1"=50' Project No.: 15098  
Drawing Name: 15098-CONCEPT.dwg  
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REV.	DATE	REVISION	BY
5	8/28/19	ISSUED ROAD DESIGN FOR REVIEW	PLB
4	1/29/19	REVISED FOR CONCEPTUAL ROAD DESIGN	PLB
3	12/20/17	MINOR REVISIONS	PLB
2	9/20/17	REVISED PER PLANNING BOARD CONDITIONS	PLB
1	7/11/17	ISSUED FOR PLANNING BOARD	PLB
REV.	DATE	REVISION	BY

Designed and Produced in NH  
**J/B Jones & Beach Engineers, Inc.**  
Civil Engineering Services  
85 Portsmouth Ave. PO Box 219 Stratham, NH 03885  
603-772-4746  
FAX: 603-772-0227  
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **LOT LINE ADJUSTMENT & SUBDIVISION PLAN TAX MAP 40 LOT 12 & TAX MAP 47 LOT 8**  
Project: **CARLISLE SUBDIVISION OFF EPPING ROAD, EXETER, NH**  
Owner of Record: **W. SCOTT CARLISLE, III & CKT ASSOCIATES**  
14 CASS STREET, EXETER, NH 03833 & 158 SHATTUCK WAY, NEWINGTON, NH 03801

DRAWING No.  
**A1**  
SHEET 1 OF 4  
JBE PROJECT NO. 15098

**PLAN REFERENCES**

- "PLAT OF LAND EXETER, N.H. FOR W. SCOTT CARLISLE, III," BY DURON-SCHOFIELD ASSOCIATES, DATED FEBRUARY 23, 1989, RECORDED AT RCRD AS PLAN D-19078.
- "PLAT OF LAND EXETER, N.H. FOR W. SCOTT CARLISLE, III," BY DURON-SCHOFIELD ASSOCIATES, DATED APRIL 26, 1988, RECORDED AT RCRD AS PLAN D-17692.
- "A SURVEY AND LAYOUT OF A RIGHT-OF-WAY SEE NOTE #7 PREPARED FOR W. SCOTT CARLISLE III AND SITUATED IN THE TOWN OF EXETER, N.H.," DATED MARCH 17, 2003, PREPARED BY RSL LAYOUT & DESIGN, INC., RECORDED AT RCRD AS PLAN D-30523.
- "SUBDIVISION PLAN OF LAID WATSON BROOK WOOD CO. EXETER, NH," PREPARED BY HOLDEN ENGINEERING & SURVEYING, INC., DATED DECEMBER 24, 1986, RECORDED AT THE RCRD AS PLAN D-16267.
- "PLAN OF LAND ASSESSORS MAP 40 LOT 11 PREPARED FOR ALLIANCE ENERGY," PREPARED BY MHF DESIGN CONSULTANTS, INC., DATED MAY 14, 2012, RECORDED AT THE RCRD AS PLAN D-37224.
- "PLANS OF PROPOSED F.A.P. PROJECT NO. F018-2(8) NH PROJECT NO P-3380 SOUTH SIDE ROAD", DATED JUNE 1, 1959.
- "MINOR SUBDIVISION PLAN FOR RAY FARM ACTIVE ADULT COMMUNITY," PREPARED BY CAMMETT ENGINEERING, DATED MAY 9, 2017, AS LAST REVISED, AND TO BE RECORDED.

**LEGEND**

EXISTING	PROPOSED	DESCRIPTION
—	—	PROPERTY LINES
○	○	IRON PIPE/ROD RD
○	○	DRILL HOLE FOUND
○	○	BOUND FOUND
○	○	ROW FENCE POST
○	○	TREE W/ WIRE
○	○	STUMPS W/ WIRE
○	○	MAJOR CONTOUR
○	○	MINOR CONTOUR
○	○	FRESHWATER WETLANDS LINE
○	○	IRON ROD/DRILL HOLE
○	○	STONE/GRANITE BOUND
○	○	FENCE POST

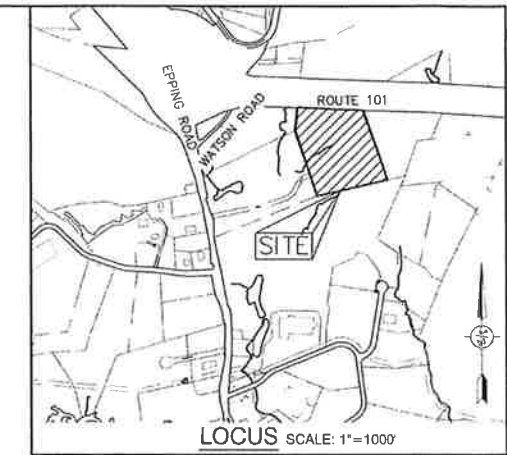
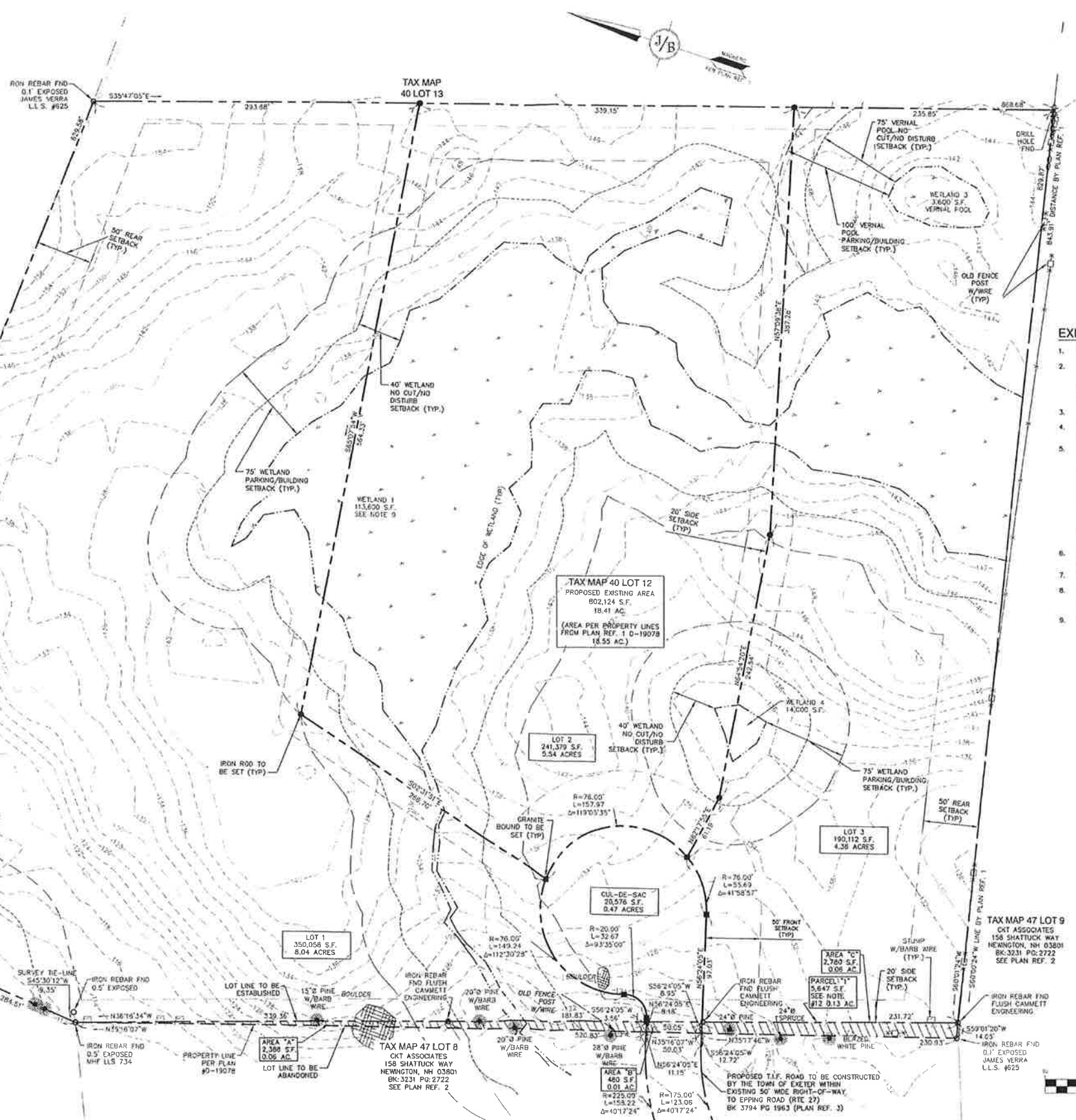
**ABUTTERS**

- TAX MAP 40 LOT 13**  
TOWN OF EXETER CONSERVATION COMMISSION  
10 FRONT STREET  
EXETER, NH 03833  
BK: 3687 PG: 2469
- TAX MAP 40 LOT 14**  
STATE OF NEW HAMPSHIRE  
PO BOX 453  
CONCORD, NH 03302  
BK: 2368 PG: 1332
- TAX MAP 47 LOT 4**  
164 EPPING ROAD, LLC  
3 BROOKHAVEN ROAD  
KINGSTON, NH 03848  
BK: 3775 PG: 0784

- TAX MAP 40 LOT 8**  
STATE OF NEW HAMPSHIRE  
PO BOX 483  
CONCORD, NH 03302  
BK: 2992 PG: 899
- 6" x 6" ROUND END  
0.8' EXPOSED  
[5143424]C  
0.273  
SURVEY TIE-LINE

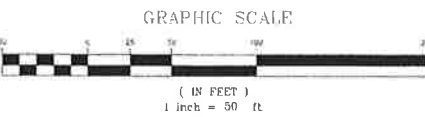
- TAX MAP 40 LOT 11**  
NET LEASE REALTY 1 INC.  
ATTN: RIGOLD IRVIN  
450 S ORANGE AVE., SUITE 90  
ORLANDO, FL 32801  
BK: 5731 PG: 1874

STATE OF N.H. ROUTE 101 EASTBOUND



**EXISTING CONDITIONS NOTES:**

- THE INTENT OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS OF EXETER TAX MAP 40 LOT 12.
- UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER JONES & BEACH ENGINEERS, INC. NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 1-888-DIG-SAFE (1-888-341-7233).
- VERTICAL DATUM: ASSUMED. HORIZONTAL DATUM: MAGNETIC PER REFERENCE PLAN 7.
- SUBJECT PROPERTY IS NOT LOCATED WITHIN FEDERALLY DESIGNATED 100 YEAR FLOOD HAZARD ZONE. REFERENCE FEMA COMMUNITY PANEL NUMBERS: 33015C0238E, 33015C0401E, 33015C0238E, AND 33015C0402E, DATED MAY 17, 2003.
- THE LIMITS OF JURISDICTIONAL WETLANDS WERE DELINEATED BY JAMES GOVE, OF GOVE ENVIRONMENTAL SERVICES, INC. DURING SUMMER, 2015 IN ACCORDANCE WITH THE FOLLOWING GUIDANCE DOCUMENTS:
  - THE CORPS OF ENGINEERS FEDERAL MANUAL FOR IDENTIFYING AND DELINEATING JURISDICTIONAL WETLANDS.
  - THE NORTH CENTRAL & NORTHEAST REGIONAL SUPPLEMENT TO THE FEDERAL MANUAL.
  - THE CURRENT VERSION OF THE FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, AS PUBLISHED BY THE NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION AND/OR THE CURRENT VERSION OF THE FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, AS PUBLISHED BY THE USDA, NRCS, AS APPROPRIATE.
  - THE CURRENT NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS, AS PUBLISHED BY THE US FISH AND WILDLIFE SERVICE.
- WETLAND IMPACTS SHALL NOT OCCUR UNTIL ALL PERMITS HAVE BEEN ACQUIRED AND IMPACT MITIGATION REQUIREMENTS HAVE BEEN SATISFIED.
- WETLAND BOUNDARIES AND CONSTRUCTION LIMITS ARE TO BE CLEARLY MARKED PRIOR TO THE START OF CONSTRUCTION.
- ALL WATER, SEWER, ROAD (INCLUDING PARKING LOTS), AND DRAINAGE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 9.5 GRADING, DRAINAGE, AND EROSION & SEDIMENT CONTROL, AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION OF PUBLIC UTILITIES IN EXETER, NH.
- VERY POORLY GRAINED SOILS ARE EVIDENT 10 FEET OR MORE INSIDE CENTRAL EDGE OF WETLAND LINE.



<b>PROJECT PARCEL</b> TOWN OF EXETER TAX MAP 40, LOT 12
<b>APPLICANT/OWNER</b> W. SCOTT CARLISLE, III 14 CASS STREET EXETER, NH 03833 BK 4244, PG 1863
<b>TOTAL PROPOSED</b> LOT AREA 802,124 SQ. FT. 18.41 ACRES

Design: JSR	Draft: PLB	Date: 8/1/16
Checked: JSR	Scale: 1"=50'	Project No.: 15098
Drawing Name: 15098-CONCEPT.dwg		
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3	12/20/17	MINOR REVISIONS	PLB
2	9/20/17	REVISED PER PLANNING BOARD CONDITIONS	PLB
1	7/11/17	ISSUED FOR PLANNING BOARD	PLB

Designed and Produced in NH

**J/B Jones & Beach Engineers, Inc.**  
Civil Engineering Services

85 Portsmouth Ave.  
PO Box 219  
Stratham, NH 03885

603-772-4748  
FAX: 603-772-0227  
E-Mail: JBE@JONESANDBEACH.COM

Plan Name: <b>EXISTING CONDITIONS PLAN - SUBDIVISION</b>
Project: <b>CARLISLE SUBDIVISION OFF EPPING ROAD, EXETER, NH</b>
Owner of Record: <b>W. SCOTT CARLISLE, III &amp; CKT ASSOCIATES</b> 14 CASS STREET, EXETER, NH 03833 & 158 SHATTUCK WAY, NEWINGTON, NH 03801

DRAWING No.	<b>C1</b>
SHEET 2 OF 4	JBE PROJECT NO. 15098

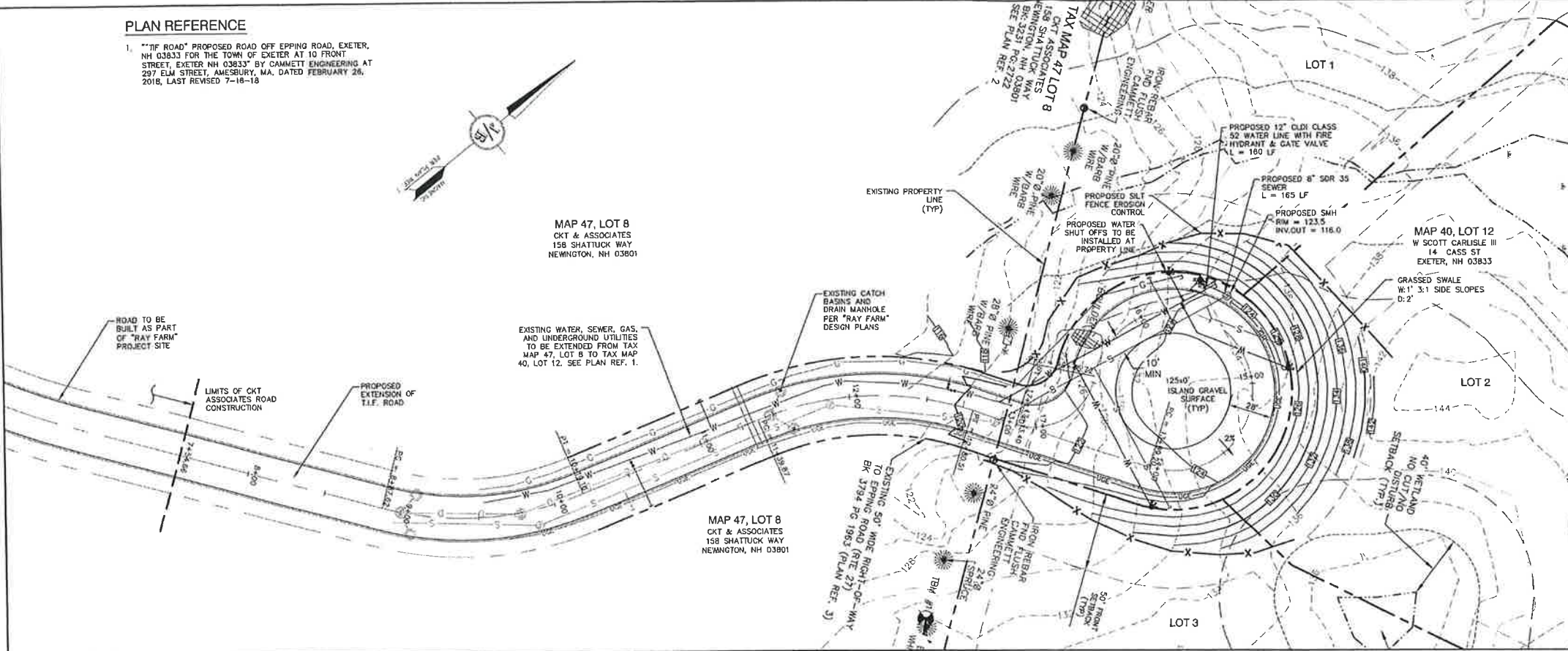


**PLAN REFERENCE**

1. "IF ROAD" PROPOSED ROAD OFF EPPING ROAD, EXETER, NH 03833 FOR THE TOWN OF EXETER AT 10 FRONT STREET, EXETER NH 03833 BY CHAMMETT ENGINEERING AT 287 ELM STREET, AMESBURY, MA, DATED FEBRUARY 26, 2018, LAST REVISED 7-18-18

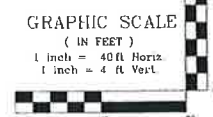
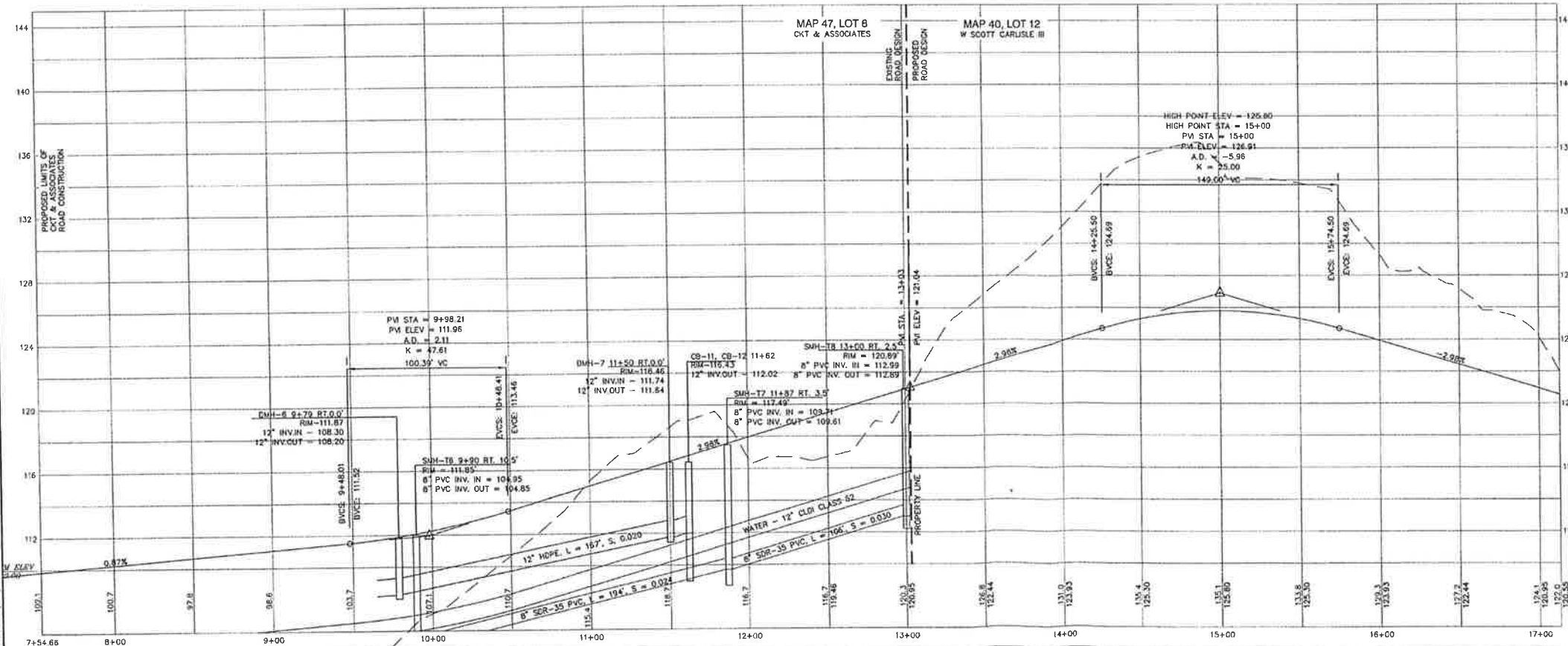


MAP 47, LOT 8  
CKT & ASSOCIATES  
158 SHATTUCK WAY  
NEWINGTON, NH 03801



**NOTES:**

1. THIS SITE WILL REQUIRE A USEPA NPDES PERMIT FOR STORMWATER DISCHARGE FOR THE CONSTRUCTION SITE. THE CONSTRUCTION SITE OPERATOR SHALL DEVELOP AND IMPLEMENT A CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN (SWPPP), WHICH SHALL REMAIN ON SITE AND BE MADE ACCESSIBLE TO THE PUBLIC. THE CONSTRUCTION SITE OPERATOR SHALL SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA REGIONAL OFFICE SEVEN DAYS PRIOR TO COMMENCEMENT OF ANY WORK ON SITE. EPA WILL POST THE NOI AT [HTTP://CFPUB.EPA.GOV/NPDES/STORMWATER/NOI/NOISEARCH.CFM](http://cfpub.epa.gov/npdes/stormwater/NOI/NOISEARCH.CFM). AUTHORIZATION IS GRANTED UNDER THE PERMIT ONCE THE NOI IS SHOWN IN "ACTIVE" STATUS ON THIS WEBSITE. A COMPLETED NOTICE OF TERMINATION SHALL BE SUBMITTED TO THE NPDES PERMITTING AUTHORITY WITHIN 30 DAYS AFTER EITHER OF THE FOLLOWING CONDITIONS HAVE BEEN MET:
  - A. FINAL STABILIZATION HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE; OR
  - B. ANOTHER OPERATOR/PERMITTEE HAS ASSUMED CONTROL OVER ALL AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED. PROVIDE DPW WITH A COPY OF THE NOTICE OF TERMINATION (NOT).
2. ALL ROAD AND DRAINAGE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR THE TOWN, AND NHDOT SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WHICHEVER IS MORE STRINGENT.
3. AS-BUILT PLANS TO BE SUBMITTED TO THE TOWN PRIOR TO ACCEPTANCE OF THE ROADWAY.
4. DEVELOPER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLAND REGULATIONS, INCLUDING ANY PERMITTING AND SETBACK REQUIREMENTS REQUIRED UNDER THESE REGULATIONS.
5. CONTRACTOR TO COORDINATE AND COMPLETE ALL WORK REQUIRED FOR THE RELOCATION AND/OR INSTALLATION OF ELECTRIC, CATV, TELEPHONE, AND FIRE ALARM PER UTILITY DESIGN AND STANDARDS. LOCATIONS SHOWN ARE APPROXIMATE. LOW PROFILE STRUCTURES SHALL BE USED TO THE GREATEST EXTENT POSSIBLE.
6. THIS PLAN HAS BEEN PREPARED BY JONES & BEACH ENGINEERS, INC. FOR MUNICIPAL AND STATE APPROVALS AND FOR CONSTRUCTION BASED ON DATA OBTAINED FROM ON-SITE FIELD SURVEY AND EXISTING MUNICIPAL RECORDS. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCY FROM DATA SHOWN ON THE DESIGN PLANS. THIS INCLUDES ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE, FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS OF THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON-SITE CONDITIONS MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED.
7. SILTATION AND EROSION CONTROLS SHALL BE INSTALLED PRIOR TO CONSTRUCTION, SHALL BE MAINTAINED DURING CONSTRUCTION, AND SHALL REMAIN UNTIL SITE HAS BEEN STABILIZED WITH PERMANENT VEGETATION. SEE DETAIL SHEET E1 FOR ADDITIONAL NOTES ON EROSION CONTROL.
8. ALL DISTURBED AREAS NOT STABILIZED BY NOVEMBER 1st SHALL BE COVERED WITH AN EROSION CONTROL BLANKET. PRODUCT TO BE SPECIFIED BY THE ENGINEER.
9. FINAL DRAINAGE, GRADING AND EROSION PROTECTION MEASURES SHALL CONFORM TO REGULATIONS OF THE PUBLIC WORKS DEPARTMENT.
10. CONTRACTOR TO VERIFY EXISTING UTILITIES AND TO NOTIFY ENGINEER OF ANY DISCREPANCY IMMEDIATELY.
11. FUTURE DRIVEWAYS TO BE REVIEWED AND APPROVED BY PUBLIC WORKS. ALL DRIVEWAYS TO HAVE CULVERTS UNLESS APPROVED BY THE TOWN ROAD AGENT.
12. RETAINING WALLS SHALL BE DESIGNED AND STAMPED BY A LICENSED PROFESSIONAL ENGINEER. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER PRIOR TO INSTALLATION.
13. DRAINAGE INSPECTION AND MAINTENANCE SCHEDULE: SILT FENCING WILL BE INSPECTED DURING AND AFTER STORM EVENTS TO ENSURE THAT THE FENCE STILL HAS INTEGRITY AND IS NOT ALLOWING SEDIMENT TO PASS. SEDIMENT BUILD UP IN SWALES WILL BE REMOVED IF IT IS DEEPER THAN SIX INCHES, AND IS TO BE REMOVED FROM SWALES BELOW THE INLET OF CULVERTS SEMIANNUALLY, AS WELL AS FROM CATCH BASINS. FOLLOWING MAJOR STORM EVENTS, THE STAGE DISCHARGE CUTLET STRUCTURES ARE TO BE INSPECTED AND ANY DEBRIS REMOVED FROM THE ORIFICE, TRASH TRAP AND EMERGENCY SPILL WAY. INFREQUENTLY, SEDIMENT MAY ALSO HAVE TO BE REMOVED FROM THE SUMP OF THE STRUCTURE.
14. CONTRACTOR MUST HAVE A VALID PIPE INSTALLER'S LICENSE FROM THE PUBLIC WORKS DEPARTMENT BEFORE WORKING ON ANY DRAINAGE AND/OR UTILITY CONSTRUCTION.
15. ALL DRAINAGE INFRASTRUCTURE SHALL BE INSTALLED AND STABILIZED PRIOR TO DIRECTING ANY RUNOFF TO IT.
16. COMPACTION TESTING SERVICES (I.E. NUCLEAR DENSITY TESTS) ARE TO BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER RETAINED BY THE CONTRACTOR FOR ROADWAY CONSTRUCTION.
17. ROADWAY TO BE CONSTRUCTED PER DETAILS BY OTHERS. SEE PLAN REF. 1.



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Design: JSR    Draft: PLB    Date: 8/1/18  
 Checked: JSR    Scale: 1"=50'    Project No.: 15098  
 Drawing Name: 15098-CONCEPT.dwg  
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Designed and Produced in NH

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Civil Engineering Services

85 Portsmouth Ave.    603-772-4746  
 PO Box 219    FAX: 603-772-0227  
 Stratham, NH 03885    E-Mail: JBE@JONESANDBEACH.COM

Plan Name:	<b>PLAN AND PROFILE</b>
Project:	<b>CARLISLE SUBDIVISION OFF EPPING ROAD, EXETER, NH</b>
Owner of Record:	<b>W. SCOTT CARLISLE, III    &amp;    CKT ASSOCIATES 14 CASS STREET, EXETER, NH 03833    158 SHATTUCK WAY, NEWINGTON, NH 03801</b>

DRAWING No. **P1**  
 SHEET 3 OF 4  
 JBE PROJECT NO. 15098



**TEMPORARY EROSION CONTROL NOTES**

- THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME. AT NO TIME SHALL AN AREA IN EXCESS OF 5 ACRES BE EXPOSED AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.
- EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AT LOCATIONS AS REQUIRED, DIRECTED BY THE ENGINEER.
- ALL DISTURBED AREAS (INCLUDING POOL AREAS BELOW THE PROPOSED WATERLINE) SHALL BE RETURNED TO PROPOSED GRADES AND ELEVATIONS. DISTURBED AREAS SHALL BE LOAMED WITH A MINIMUM OF 6" OF SCREENED ORGANIC LOAM AND SEEDED WITH SEED MIXTURE 'C' AT A RATE NOT LESS THAN 1.10 POUNDS OF SEED PER 1,000 S.F. OF AREA (48 LBS. / ACRE).
- SILT FENCES AND OTHER BARRIERS SHALL BE INSPECTED EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 0.25" OR GREATER. ALL DAMAGED AREAS SHALL BE REPAIRED, AND SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED OF.
- AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AND THE AREA DISTURBED BY THE REMOVAL SMOOTHED AND RE-VEGETATED.
- AREAS MUST BE SEEDED AND MULCHED OR OTHERWISE PERMANENTLY STABILIZED WITHIN 3 DAYS OF FINAL GRADING, OR TEMPORARILY STABILIZED WITHIN 14 DAYS OF THE INITIAL DISTURBANCE OF SOIL. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
- ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING NORTH AMERICAN GREEN S75 EROSION CONTROL BLANKETS (OR AN EQUIVALENT APPROVED IN WRITING BY THE ENGINEER) 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 MELT EVENTS.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15th, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3" OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
  - BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
  - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
  - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED, OR
  - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- FUGITIVE DUST CONTROL IS REQUIRED TO BE CONTROLLED IN ACCORDANCE WITH ENV-A 1000, AND THE PROJECT IS TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR'S NAME, ADDRESS, AND PHONE NUMBER SHALL BE SUBMITTED TO DES VIA EMAIL (SEE BELOW).
- PRIOR TO CONSTRUCTION, A PHASING PLAN THAT DELINEATES EACH PHASE OF THE PROJECT SHALL BE SUBMITTED. ALL TEMPORARY SEDIMENT BASINS THAT WILL BE NEEDED FOR DEWATERING WORK AREAS SHALL BE LOCATED AND IDENTIFIED ON THIS PLAN.
- IN ORDER TO ENSURE THE STABILITY OF THE SITE AND EFFECTIVE IMPLEMENTATION OF THE SEDIMENT AND EROSION CONTROL MEASURES SPECIFIED IN THE PLANS FOR THE DURATION OF CONSTRUCTION, THE CONTRACTOR SHALL BE IN STRICT COMPLIANCE WITH THE FOLLOWING INSPECTION AND MAINTENANCE REQUIREMENTS IN ADDITION TO THOSE CALLED FOR IN THE SMPPP:
  - A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL OR A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE ("MONITOR") SHALL BE EMPLOYED TO INSPECT THE SITE FROM THE START OF ALTERATION OF TERRAIN ACTIVITIES UNTIL THE SITE IS IN FULL COMPLIANCE WITH THE SITE SPECIFIC PERMIT ("PERMIT").
  - DURING THIS PERIOD, THE MONITOR SHALL INSPECT THE SUBJECT SITE AT LEAST ONCE A WEEK, AND IF POSSIBLE, DURING ANY 1/2 INCH OR GREATER RAIN EVENT (I.E. 1/2 INCH OF PRECIPITATION OR MORE WITHIN A 24 HOUR PERIOD). IF UNABLE TO BE PRESENT DURING SUCH A STORM, THE MONITOR SHALL INSPECT THE SITE WITHIN 24 HOURS OF THIS EVENT.
  - THE MONITOR SHALL PROVIDE TECHNICAL ASSISTANCE AND RECOMMENDATIONS TO THE CONTRACTOR ON THE APPROPRIATE BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROLS REQUIRED TO MEET THE REQUIREMENTS OF RSA 485 A:17 AND ALL APPLICABLE DES PERMIT CONDITIONS.
  - WITHIN 24 HOURS OF EACH INSPECTION, THE MONITOR SHALL SUBMIT A REPORT TO DES VIA EMAIL (RIDGELY MAUCK AT: RIDGELY.MAUCK@DES.NH.GOV).
  - THE MONITOR SHALL MEET WITH DES TO DECIDE UPON A REPORT FORMAT. THE REPORT FORMAT SHALL BE REVIEWED AND APPROVED BY DES PRIOR TO THE START OF CONSTRUCTION.

**SEEDING SPECIFICATIONS**

- GRADING AND SHAPING**
  - SLOPES SHALL NOT BE STEEPER THAN 2:1 WITHOUT APPROPRIATE EROSION CONTROL MEASURES AS SPECIFIED ON THE PLANS (3:1 SLOPES OR FLATTER ARE PREFERRED).
  - WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.
- SEEDBED PREPARATION**
  - SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
  - STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND FERTILIZER AND LIME MIXED INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.
- ESTABLISHING A STAND**
  - LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. TYPES 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, 2 TONS PER ACRE OR 100 LBS. PER 1,000 SQ.FT.
    - NITROGEN(N), 50 LBS. PER ACRE OR 1.1 LBS. PER 1,000 SQ.FT.
    - PHOSPHATE(P2O5), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ.FT.
    - POTASH(K2O), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ.FT.
 (NOTE: THIS IS THE EQUIVALENT OF 500 LBS. PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS. PER ACRE OF 5-10-10.)
  - SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH 2/8 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.
  - REFER TO THE "SEEDING GUIDE" AND "SEEDING RATES" TABLES ON THIS SHEET FOR APPROPRIATE SEED MIXTURES AND RATES OF SEEDING. ALL LEGUMES (CROWNVETCH, BIRDSFOOT, TREFOL AND FLATPEA) MUST BE INOCULATED WITH THEIR SPECIFIC INOCULANT PRIOR TO THEIR INTRODUCTION TO THE SITE.
  - WHEN SEEDING AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDING AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20th OR FROM AUGUST 10th TO SEPTEMBER 1st.
- MULCH**
  - HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
  - MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING. HAY OR STRAW MULCH SHALL BE PLACED AT A RATE OF 90 LBS PER 1000 S.F.
- MAINTENANCE TO ESTABLISH A STAND**
  - PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.
  - FERTILIZATION NEEDS SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIALS TAKE 2 TO 3 YEARS TO BECOME FULLY ESTABLISHED.
  - IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, ANNUAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR	GOOD	GOOD	FAIR
	B	POOR	GOOD	FAIR	FAIR
	C	POOR	GOOD	EXCELLENT	GOOD
	D	FAIR	EXCELLENT	EXCELLENT	POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER	A	GOOD	GOOD	GOOD	FAIR
	B	GOOD	EXCELLENT	EXCELLENT	FAIR
	C	GOOD	EXCELLENT	EXCELLENT	FAIR
LIGHTLY USED PARKING LOTS, COD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES	A	GOOD	GOOD	GOOD	FAIR
	B	GOOD	GOOD	FAIR	POOR
	C	GOOD	EXCELLENT	EXCELLENT	FAIR
PLAY AREAS AND ATHLETIC FIELDS (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	E	FAIR	EXCELLENT	EXCELLENT	2/
	F	FAIR	EXCELLENT	EXCELLENT	2/
GRAVEL PIT, SEE NH-PM-24 IN APPENDIX FOR RECOMMENDATION REGARDING RECLAMATION OF SAND AND GRAVEL PITS.					

1/ REFER TO SEEDING MIXTURES AND RATES IN TABLE BELOW.  
2/ POORLY DRAINED SOILS ARE NOT DESIRABLE FOR USE AS PLAYING AREA AND ATHLETIC FIELDS.

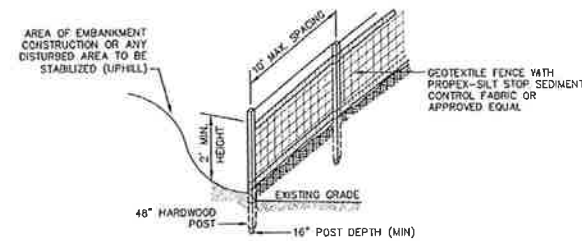
NOTE: TEMPORARY SEED MIX FOR STABILIZATION OF TURF SHALL BE WINTER RYE OR OATS AT A RATE OF 3.5 LBS. PER 1000 S.F. AND SHALL BE PLACED PRIOR TO OCTOBER 15th, IF PERMANENT SEEDING NOT YET COMPLETE.

**SEEDING GUIDE**

MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.
A TALL FESCUE	20	0.45
CREeping RED FESCUE	20	0.45
RED TOP	2	0.05
TOTAL	42	0.95
B TALL FESCUE	15	0.35
CREeping RED FESCUE	10	0.25
CROWN VETCH	15	0.35
OR FLAT PEA	30	0.75
TOTAL	40 OR 55	0.95 OR 1.35
C TALL FESCUE	20	0.45
CREeping RED FESCUE	20	0.45
BIRDS FOOT TREFOL	8	0.20
TOTAL	48	1.10
D TALL FESCUE	20	0.45
FLAT PEA	30	0.75
TOTAL	50	1.20
E CREeping RED FESCUE 1/2	50	1.15
KENTUCKY BLUEGRASS 1/2	50	1.15
TOTAL	100	2.30
F TALL FESCUE 1	150	3.60

1/ FOR HEAVY USE ATHLETIC FIELDS CONSULT THE UNIVERSITY OF NEW HAMPSHIRE COOPERATIVE EXTENSION TURF SPECIALIST FOR CURRENT VARIETIES AND SEEDING RATES.

**SEEDING RATES**

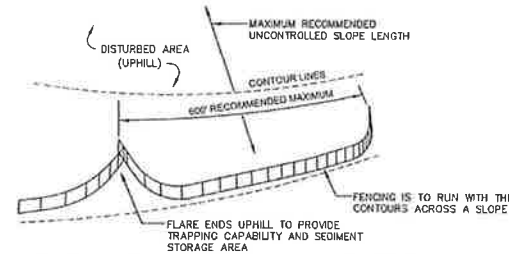


**CONSTRUCTION SPECIFICATIONS:**

- WOVEN FABRIC FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. FILTER CLOTH SHALL BE FASTENED TO WOVEN WIRE EVERY 24" AT TOP, MID AND BOTTOM AND EMBEDDED IN THE GROUND A MINIMUM OF 8" AND THEN COVERED WITH SOIL.
- THE FENCE POSTS SHALL BE A MINIMUM OF 48" LONG, SPACED A MAXIMUM 10' APART, AND DRIVEN A MINIMUM OF 16" INTO THE GROUND.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THE ENDS OF THE FABRIC SHALL BE OVERLAPPED 6", FOLDED AND STAPLED TO PREVENT SEDIMENT FROM BY-PASSING.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED AND PROPERLY DISPOSED OF WHEN IT IS 6" DEEP OR VISIBLE 'BULGES' DEVELOP IN THE SILT FENCE.
- PLACE THE ENDS OF THE SILT FENCE UP CONTOUR TO PROVIDE FOR SEDIMENT STORAGE.

**SILT FENCE**

NOT TO SCALE



- SILT FENCES SHALL BE REMOVED WHEN NO LONGER NEEDED AND THE SEDIMENT COLLECTED SHALL BE DISPOSED AS DIRECTED BY THE ENGINEER. THE AREA DISTURBED BY THE REMOVAL SHALL BE SMOOTHED AND REVEGETATED.

**MAINTENANCE:**

- SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE DONE IMMEDIATELY.
- IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
- SEDIMENT DEPOSITS THAT ARE REMOVED, OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED, SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

Design: JSR	Draft: PLB	Date: 8/1/18
Checked: JSR	Scale: AS NOTED	Project No.: 15098
Drawing Name: 15098-CONCEPT.dwg		
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.		



REV.	DATE	REVISION	BY
5	6/28/19	ISSUED ROAD DESIGN FOR REVIEW	PLB
4	1/29/19	REVISED FOR CONCEPTUAL ROAD DESIGN	PLB
3	12/20/17	MINOR REVISIONS	PLB
2	9/20/17	REVISED PER PLANNING BOARD CONDITIONS	PLB
1	7/11/17	ISSUED FOR PLANNING BOARD	PLB

Designed and Produced in NH

**J/B Jones & Beach Engineers, Inc.**

85 Portsmouth Ave. PO Box 219 Stratham, NH 03085

Civil Engineering Services

603-772-4746  
FAX: 603-772-0227  
E-Mail: JBE@JONESANDBEACH.COM

Plan Name:	<b>EROSION AND SEDIMENT CONTROL DETAILS</b>
Project:	<b>CARLISLE SUBDIVISION OFF EPPING ROAD, EXETER, NH</b>
Owner of Record:	W. SCOTT CARLISLE, III & CKT ASSOCIATES 14 CASS STREET, EXETER, NH 03833 & 158 SHATTUCK WAY, NEWINGTON, NH 03801

DRAWING No.

**E1**

SHEET 4 OF 4  
JBE PROJECT NO. 15098

**Lot Line Adjustment**

**Multi-family Site Plan Review**

**Ray Farm – Re-location of Building D**

**Date: March 28- 2022**

Prepared by GM2 Associates  
6 Chestnut Street Suite 110  
Amesbury, MA



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Cover Letter of explanation

Lot Line Adjustment Application

Lot Line Adjustment Plan (7 full size plans and 15 11x17 plans under separate cover)

Multi-Family Site Plan Review Application and Checklist

Application to Connect – Sewer, Water, Stormwater

List of Abutters

Abutters Mailing stickers (3 sets)

Filling Fee Calculations

Application Fee

Waiver Requests – Parking Setbacks, Parking Spaces, Wetland impacts, Roadway Design

Site – Civil Plans (7 sets of 23 full size Sheets and 15 sets of 11x17 size under separate cover)

Architectural Plans (7 sets of 2 full size Sheets and 15 sets of 11x17 size under separate cover)

Lighting Plan (7 full size plans and 15 11x17 Plans under separate cover)

Wetland impact, Wetland Buffer Impact, and Stormwater Water plans

(7 color sets of 3 full size sheet and 15 color sets of 3 11x17 sheets under separate cover)

Stormwater Analysis (7 booklets 8.5x11 sheets under separate cover)

Stormwater BMP Maintenance Manual



March 22, 2022

Langdon Plumer, Chair  
Exeter Planning Board  
10 Front Street  
Exeter, NH 03833

Re: Site Plan Review Application  
Ray Farm – Building D re-location

Dear Chair Plumer and Board Members:

*Headquarters*  
115 GLASTONBURY BLVD  
GLASTONBURY CT 06033  
860.659.1416

10 CABOT ROAD  
SUITE 101B  
MEDFORD MA 02155  
617.776.3350

6 CHESTNUT ST  
SUITE 110  
AMESBURY MA 01913  
978.388.2157

197 LOUDON RD  
SUITE 310  
CONCORD NH 03301  
603.856.7854

200 MAIN ST  
PAWTUCKET RI 02860  
401.726.4084

This Firm represents Ray Farm, LLC (the “Applicant”), which is the declarant of the Ray Farm Condominium, a 55+ senior living development in Exeter located on property off of Ray Farmstead Road which is further identified as Town Tax Map 47, Lot 8 (the “Ray Farm Property” or the “Project”). By this letter, the Applicant requests a Site Plan Review with the Planning Board on 12 May 2022 pursuant to Section 6.1.1 of the Site Plan Review and Subdivision Regulations of the Town of Exeter.

By way of brief background, the Project, as approved by the Planning Board on 27 July 2017, consists of four distinct residential buildings (Buildings A – D) containing 116 units, a 2,000 sf clubhouse, and corresponding site improvements, all serviced by a private driveway accessed via Ray Farmstead Road. As approved, Buildings A, B and C are identical in design, size and footprint, and each contains 32 dwelling units. Building D was approved to be located in close proximity to Epping Road and the Mobil Gas Station and has a different design than Buildings A, B and C, containing only 20 dwelling units.

Since the Project’s approval, Ray Farmstead Road was built and accepted by the Town as Town Road, and Buildings A and B, as well as the clubhouse, are finished and completely occupied. Building C is being constructed and will be completed shortly in the spring of 2022. More than 40% of the units in Building C are pre-sold.

As the Applicant considered the completion of the Project via construction of Building D as originally approved, a more attractive alternative emerged. Specifically, the Applicant now proposes the relocation of Building D to abutting property to the southeast of the Ray Farm Property identified as Tax Map 47, Lot 8.1 (the “Applicant’s Abutting Property”). The Applicant proposes to construct the relocated Building D in the identical manner as Buildings A, B and C, inclusive of 32 units instead of the 20 units Building D was approved for in 2017. The proposed relocation of Building D is depicted on the plans provided herewith by GM2 Engineering (formally W.C. Cammett Engineering). The relocated Building D would be accessed via an extended internal roadway from Building C, which would require minor wetland crossing.

To accomplish its redesign, the Applicant proposes to consolidate approximately 4.29-acres of the upland area of the Applicant's Abutting Property and combine the same with the Ray Farm Property (Town Tax Map 47, Lot 8). The additional 4.29 acres added to the Ray Farm Property would be the site of the relocated Building D.

The net result of the Applicant's proposal would be a Ray Farm Property that is approximately 15.76 acres in size rather than the existing 11.46 acres. Reconfigured as proposed, the Ray Farm Property would continue to comply in all respects with all local Zoning regulations and would have less density than what was approved by the Planning Board in 2017. The area of the Ray Farm Property which was originally approved to accommodate Building D, will remain an open space area of the Ray Farm Project.

In support of its proposal, the Applicant received approval from the Zoning Board of Adjustment on November 17, 2021 to permit an age-restricted use for the proposed relocation of Building D on the Applicant's Abutting Property, which is Zoned in the C-3 Zoning District, and to increase the total number of residential units in the Project from 116 to 128.

The remnant area of the Applicant's Abutting Property post-subdivision and consultation will be approximately 3.16 acres in size, will have ample frontage along Epping Road and Ray Farmstead Road, will remain in the C-3 Zoning District, will comply in all respects with applicable Zoning regulations and could accommodate viable C-3 commercial development in the future.

The Applicant's proposal will require a Wetlands Conservation District Conditional Use Permit and Shoreland Protection District Conditional Use Permit and the Applicant welcomes any comments the Planning Board may have regarding these prospective applications.

In the meantime, if you have any questions do not hesitate to contact me.

Very truly yours,

GM2 Associates



Denis M. Hamel, CPESC

Project Manager

cc: Jonathan Shafmaster  
Justin Pasay, Esq. DT&C. PLLC  
Brendan Quigley, Gove Environmental

# Town of Exeter



## Planning Board Application for

- **Minor Site Plan Review**
- **Minor Subdivision**
- **Lot Line Adjustment**

*January 2019*



## **Town of Exeter Application for Minor Subdivision, Minor Site Plan, and/or Lot Line Adjustment**

**Date:** January 2019

**Memo To:** Applicants for Minor Subdivision, Minor Site Plan, and/or Lot Line Adjustment

**From:** Planning Department

**Re:** Guidelines for Processing Applications

The goal of the Planning Board is to process applications as quickly and efficiently as possible. To this end, we have designed an application procedure which is simple and easy to follow (see attached). If some of the information being requested seems irrelevant, please check with the Planning Department office, it may be that your particular proposal does not warrant such information.

It is strongly recommended that prior to submitting an application you discuss your proposal informally with the Town Planner. The Town Planner will review your proposal for conformance with the applicable Town regulations and advise you as to the procedures for obtaining Planning Board approval. Please contact the Planning Department office at (603) 773-6112 to schedule an appointment.

The key to receiving a prompt decision from the Planning Board is to adhere closely to the Board's procedures. A chart outlining the "Planning Board Review Process" is attached for your information. Please be aware that a technical review of your proposal by the Technical Review Committee (TRC) will likely precede Planning Board determination. Staff will gladly review the Application process with you so that you understand the various milestones in the process. A checklist is attached to this application to assist you in preparing your plans.

Copies of the applicable "Site Review and Subdivision Regulations" are available on-line on the Town's web site ([www.exeternh.gov](http://www.exeternh.gov)) or maybe purchased at the Planning Department office on the second floor to the Town Office Building located at 10 Front Street.

It is strongly recommended that you become familiar with these regulations, as they are the basis for review and approval.





**TOWN OF EXETER, NH**  
**APPLICATION FOR MINOR SITE PLAN REVIEW,**  
**MINOR SUBDIVISION and/or LOT LINE ADJUSTMENT**

A completed application shall contain the following items, although please note that some items may not apply such as waivers or conditional use permit:

- |  |       |
|--|-------|
| 1. Application for Hearing   | ( X ) |
| 2. Abutter's List Keyed to the Tax Map (including name and business address of all professionals responsible for the submission (engineer, landscape architect, wetland scientist, etc.) | ( X ) |
| 3. Checklist for plan requirements   | ( X ) |
| 4. Letter of Explanation   | ( X ) |
| 5. Written request and justification for waiver(s) from Site Plan/Sub Regulations  |       |
| 6. Application to Connect and/or Discharge to Town of Exeter Sewer, Water, or Storm Water Drainage System(s) - if applicable   | ( )   |
| 7. Application Fees  | ( X ) |
| 8. Seven (7) copies of 24'x36' plan set  | ( X ) |
| 9. Fifteen (15) 11"x 17" copies of the plan set  | ( X ) |
| 10. Three (3) pre-printed 1"x 2 5/8" labels for each abutter, the applicant and all consultants.   | ( X ) |

**NOTES:** All required submittals must be presented to the Planning Department Office for distribution to other Town departments. Any material submitted directly to other departments will not be considered.



**TOWN OF EXETER  
MINOR SUBDIVISION, MINOR  
SITE PLAN, AND/OR LOT LINE  
ADJUSTMENT APPLICATION**

**OFFICE USE ONLY**

**THIS IS AN APPLICATION FOR:**

MINOR SITE PLAN  
 MINOR (3lots or less)  
SUBDIVISION                       LOTS

LOT LINE ADJUSTMENT

_____	<b>APPLICATION</b>
_____	<b>DATE RECEIVED</b>
_____	<b>APPLICATION FEE</b>
_____	<b>PLAN REVIEW FEE</b>
_____	<b>ABUTTER FEE</b>
_____	<b>LEGAL NOTICE FEE</b>
_____	<b>INSPECTION FEE</b>
_____	<b>TOTAL FEES</b>
_____	<b>AMOUNT REFUNDED</b>

1. **NAME OF LEGAL OWNER OF RECORD:** CKT Associate

**ADDRESS:** 158 Shattuck Way Newington NH 03801

**TELEPHONE:** (603) 431-3170

2. **NAME OF APPLICANT:** Willey Creek Company

**ADDRESS:** 158 Shattuck Way Newington, NH 03801

**TELEPHONE:** (603) 431-3170

3. **RELATIONSHIP OF APPLICANT TO PROPERTY IF OTHER THAN OWNER:** \_\_\_\_\_

Same

(Written permission from Owner is required, please attach.)

4. **DESCRIPTION OF PROPERTY:**

**ADDRESS:** off Rayfarmstead Road

**TAX MAP:** 47      **PARCEL #:** 8-1, 9      **ZONING DISTRICT:** C3

**AREA OF ENTIRE TRACT:** 15.75 Acres      **PORTION BEING DEVELOPED:** 2.55 Acres



5. **EXPLANATION OF PROPOSAL:** Add land the the Rasy Farm project to re-locate Buil;dinf D

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6. **ARE MUNICIPAL SERVICES AVAILABLE? (YES/NO)** Yes  
**IF YES, WATER AND SEWER SUPERINTENDENT MUST GRANT WRITTEN APPROVAL FOR CONNECTION. IF NO, SEPTIC SYSTEM MUST COMPLY WITH W.S.P.C.C. REQUIREMENTS.**

7. **LIST ALL MAPS, PLANS AND OTHER ACCOMPANYING MATERIAL SUBMITTED WITH THIS APPLICATION:**

<u>ITEM:</u>	<u>NUMBER OF COPIES</u>
A. <u>Lot Line Adjustment Plan</u>	
B. _____	
C. _____	
D. _____	
E. _____	
F. _____	

8. **ANY DEED RESTRICTIONS AND COVENANTS THAT APPLY OR ARE CONTEMPLATED (YES/NO)** Yes exist ROW easement IF YES, ATTACH COPY.

9. **NAME AND PROFESSION OF PERSON DESIGNING PLAN:**

**NAME:** Robert E. Smith jr  
**ADDRESS:** 6 Chestnut Street Suite 110 Amesbury, MA  
**PROFESSION:** Profesional Land Surveyor **TELEPHONE:** (978) 572-6431

10. **LIST ALL IMPROVEMENTS AND UTILITIES TO BE INSTALLED:** \_\_\_\_\_

water, sewer, gas, underground electric, underground com

---



**11. HAVE ANY SPECIAL EXCEPTIONS OR VARIANCES BEEN GRANTED BY THE ZONING BOARD OF ADJUSTMENT TO THIS PROPERTY PREVIOUSLY?**

(Please check with the Planning Department Office to verify) (YES/NO) Yes IF YES, LIST BELOW AND NOTE ON PLAN.

---

Variance from Zoning Board of Adjustment to allow 32 Unit Residential building in the C3 district

---

**NOTICE:**

I CERTIFY THAT THIS APPLICATION AND THE ACCOMPANYING PLANS AND SUPPORTING INFORMATION HAVE BEEN PREPARED IN CONFORMANCE WITH ALL APPLICABLE TOWN REGULATIONS, INCLUDING BUT NOT LIMITED TO THE "SITE PLAN REVIEW AND SUBDIVISION REGULATION" AND THE ZONING ORDINANCE. FURTHERMORE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE "SITE PLAN REVIEW AND SUBDIVISION REGULATIONS", I AGREE TO PAY ALL COSTS ASSOCIATED WITH THE REVIEW OF THIS APPLICATION.

DATE 3-28-2022 APPLICANT'S SIGNATURE

ACCORDING TO RSA 676.4.I (c), THE PLANNING BOARD MUST DETERMINE WHETHER THE APPLICATION IS COMPLETE WITHIN 30 DAYS OF SUBMISSION. THE PLANNING BOARD MUST ACT TO EITHER APPROVE, CONDITIONALLY APPROVE, OR DENY AN APPLICATION WITHIN SIXTY FIVE (65) DAYS OF ITS ACCEPTANCE BY THE BOARD AS A COMPLETE APPLICATION. A SEPARATE FORM ALLOWING AN EXTENSION OR WAIVER TO THIS REQUIREMENT MAY BE SUBMITTED BY THE APPLICANT.



**ABUTTERS:** PLEASE LIST ALL PERSONS WHOSE PROPERTY IS LOCATED IN NEW HAMPSHIRE AND ADJOINS OR IS DIRECTLY ACROSS THE STREET OR STREAM FROM THE LAND UNDER CONSIDERATION BY THE BOARD. THIS LIST SHALL BE COMPILED FROM THE EXETER TAX ASSESSOR'S RECORDS.

**See Attached List**

TAX MAP \_\_\_\_\_  
NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

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ADDRESS \_\_\_\_\_

**Please attach additional sheets if needed**





## **CHECKLIST FOR LOT LINE ADJUSTMENT, MINOR SITE PLAN, or MINOR SUBDIVISION PLAN PREPARATION**

The checklist on the following page has been prepared to assist you in the preparation of your subdivision plan. The checklist items listed correspond to the subdivision plan requirements set forth in Section 7 of the "Site Plan Review and Subdivision Regulations". Unless otherwise indicated, all section references within this checklist refer to these regulations. Each of the items listed on this checklist must be addressed prior to the technical review of subdivision plans by the Technical Review Committee (TRC). See Section 6.5 of the "Site Plan Review and Subdivision Regulations". This checklist **DOES NOT** include all of the detailed information required for subdivision and lot line adjustment plans and therefore should not be the sole basis for the preparation of these plans. For a complete listing of subdivision plan requirements, please refer to Section 7 of the "Site Plan Review and Subdivision Regulations". In addition to these required plan items, the Planning Board will review subdivision plans based upon the standards set forth in Sections 8 and 9 of the "Site Plan Review and Subdivision Regulations". As the applicant, it is **YOUR RESPONSIBILITY** to familiarize yourself with these standards and to prepare your plans in conformance with them.

Please complete this checklist by marking each item listed in the column labeled "Applicant" with one of the following: "X" (information provided); "NA" (note applicable); "W" (waiver requested). For all checklist items marked "NA", a final determination regarding applicability will be made by the TRC. For all items marked "W", please refer to Section 11 of the "Site Plan Review and Subdivision Regulations" for the proper waiver request procedure. All waiver requests will be acted upon by the Planning Board at a public hearing. Please contact the Planning Department office, if you have any questions concerning the proper completion of this checklist.

All of the required information for the plans listed in the checklist must be provided on separate sheets, unless otherwise approved by the TRC.

**NOTE: AN INCOMPLETE CHECKLIST WILL BE GROUNDS FOR REJECTION OF YOUR APPLICATION.**



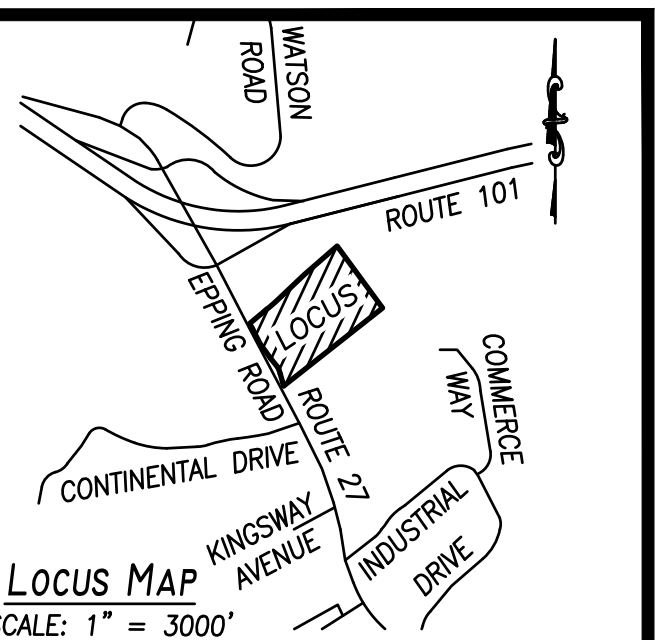
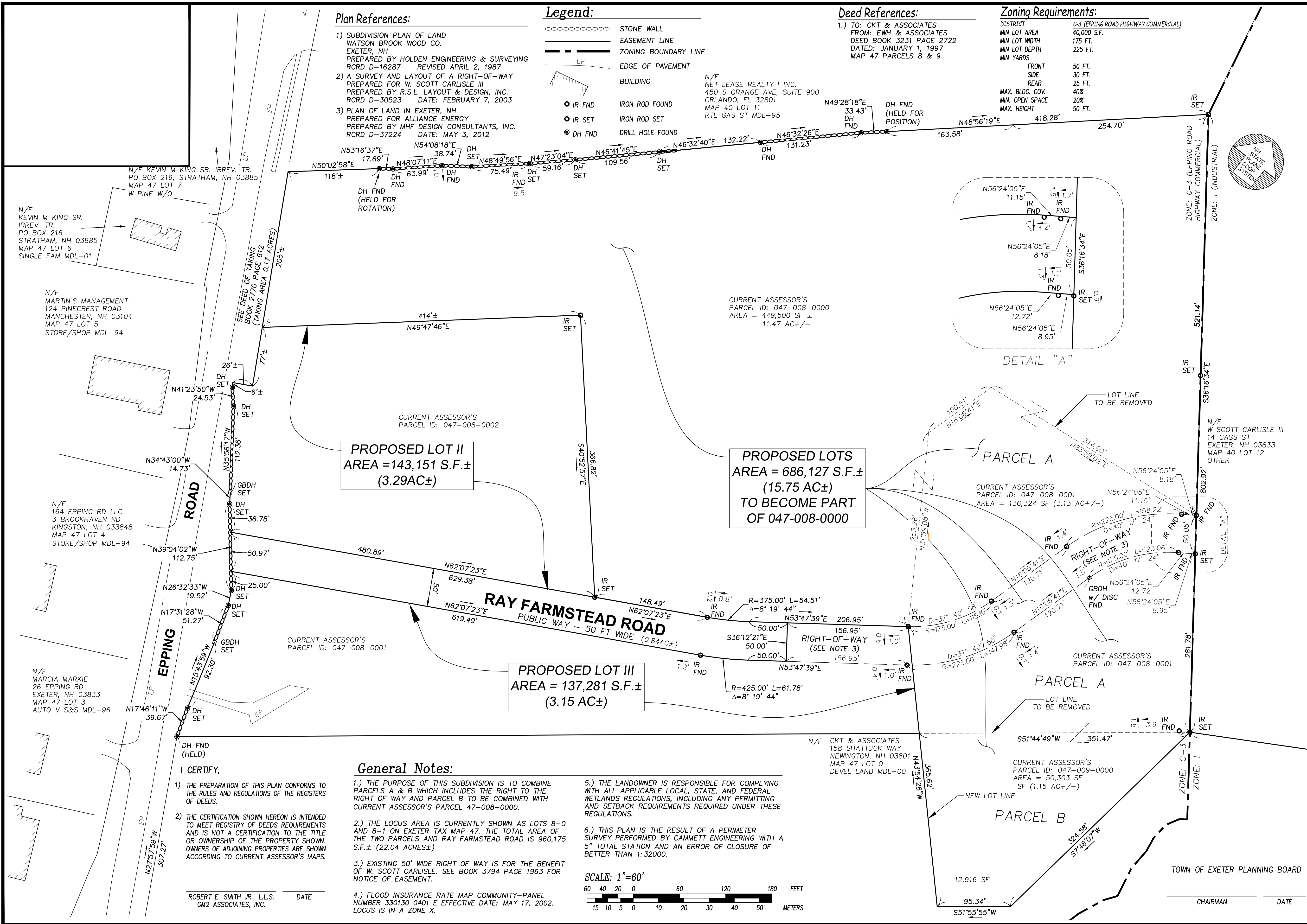
## CHECK LIST FOR MINOR SITE PLAN REVIEW, MINOR SUBDIVISION AND LOT LINE ADJUSTMENT

APPLICANT	TRC	REQUIRED EXHIBITS, SEE REGULATION 6.6.2.4
<input checked="" type="checkbox"/>	<input type="checkbox"/>	a) The name and address of the property owner, authorized agent, the person or firm preparing the plan, and the person or firm preparing any other data to be included in the plan.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	b) Title of the site plan, subdivision or lot line adjustment, including Planning Board Case Number.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	c) Scale, north arrow, and date prepared.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	d) Location of the land/site under consideration together with the names and address of all owners of record of abutting properties and their existing use.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	e) Tax map reference for the land/site under consideration, together with those of abutting properties.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	f) Zoning (including overlay) district references.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	g) A vicinity sketch showing the location of the land/site in relation to the surrounding public street system and other pertinent location features within a distance of 1,000-feet.
<input type="checkbox"/>	<input type="checkbox"/>	h) For minor site plan review only, a description of the existing site and proposed changes thereto, including, but not limited to, buildings and accessory structures, parking and loading areas, signage, lighting, landscaping, and the amount of land to be disturbed.
<input type="checkbox"/>	<input type="checkbox"/>	i) If deemed necessary by the Town Planner, natural features including watercourses and water bodies, tree lines, and other significant vegetative cover, topographic features and any other environmental features which are significant to the site plan review or subdivision design process.
<input type="checkbox"/>	<input type="checkbox"/>	j) If deemed necessary by the Town Planner, existing contours at intervals not to exceed 2-feet with spot elevations provided when the grade is less than 5%. All datum provided shall reference the latest applicable US Coast and Geodetic Survey datum and should be noted on the plan.
<input type="checkbox"/>	<input type="checkbox"/>	k) If deemed necessary by the Town Planner for proposed lots not served by municipal water and sewer utilities, a High Intensity Soil Survey (HISS) of the entire site, or portion thereof. Such soil surveys shall be prepared and stamped by a certified soil scientist in accordance with the standards established by the Rockingham County Conservation District. Any cover letters or explanatory data provided by the certified soil scientist shall also be submitted.
<input type="checkbox"/>	<input type="checkbox"/>	l) State and federal jurisdictional wetlands, including delineation of required setbacks.
<input type="checkbox"/>	<input type="checkbox"/>	m) A note as follows: "The landowner is responsible for complying with all applicable local, State, and Federal wetlands regulations, including any permitting and setback requirements required under these regulations."
<input checked="" type="checkbox"/>	<input type="checkbox"/>	n) Surveyed exterior property lines including angles and bearings, distances, monument locations, and size of the entire parcel. A professional land surveyor licensed in New Hampshire must attest to said plan.





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**G&M2**  
 6 CHESTNUT STREET, AMESBURY, MA.  
 Phone: (978) 388-2157  
 CONSULTING ENGINEERS &  
 LAND SURVEYORS SINCE 1988  
 www.gm2inc.com

Sheet Title:  
**Lot Line Adjustment Plan**  
 Project Title:  
**"Ray Farm" Active Adult Community**  
 Epping Road  
 Exeter, NH 03833  
 Rockingham County

Applicant:  
**Willey Creek Company**  
 158 Shattuck Way  
 Newington, NH 03801

Owner:  
**CKT & Associates**  
 158 Shattuck Way  
 Newington, NH 03801

REVISION			
NO.	DATE	DESCRIPTION	BY
1	11.23.21	MINOR EDITS	RS
2	02.01.22	MINOR EDITS	RS

PROJ. MGR.: D. HAMEL  
 FIELD: M. MICHAUD / A. BICK  
 DESIGN: D. HAMEL  
 DRAWN: J. SALVAGGIO  
 CHECKED: R. SMITH  
 DATE: 11-03-21  
 FILE: 16042 SUB\_NOV 2021.DWG  
 FBK:  
 JOB #: 16042

# Town of Exeter



## Planning Board Application for Site Plan Review

*October 2019*





## SITE PLAN REVIEW APPLICATION CHECKLIST

A COMPLETED APPLICATION FOR SITE PLAN REVIEW MUST CONTAIN THE FOLLOWING

1. Application for Hearing ( X )
2. Abutter's List Keyed to Tax Map ( X )  
(including the name and business address of every engineer, architect,  
land surveyor, or soils scientist whose professional seal appears on any  
plan submitted to the Board)
3. Completed- " Checklist for Site Plan Review" ( X )
4. Letter of Explanation ( X )
5. Written Request for Waiver (s) from " Site Plan Review and Subdivision  
Regulations" ( X )  
(if applicable)
6. Completed "Preliminary Application to Connect and /or Discharge to Town  
of Exeter- Sewer, Water or Storm Water Drainage System(s)"( if applicable) ( X )
7. Planning Board Fees ( X )
8. Seven (7) full-sized copies of Site Plan ( X )
9. Fifteen (15) 11"x17" copies of the final plan to be submitted **TEN DAYS**  
**PRIOR** to the public hearing date. ( X )
10. Three (3) pre-printed 1"x 2 5/8" labels for each abutter, the applicant and  
all consultants. ( X )

**NOTES:** All required submittals must be presented to the Planning Department office for distribution to other Town departments. Any material submitted directly to other departments will not be considered.



# TOWN OF EXETER, NH APPLICATION FOR SITE PLAN REVIEW

### OFFICE USE ONLY

**THIS IS AN APPLICATION FOR:**

- COMMERCIAL SITE PLAN REVIEW
- INDUSTRIAL SITE PLAN REVIEW
- MULTI-FAMILY SITE PLAN REVIEW
- MINOR SITE PLAN REVIEW
- INSTITUTIONAL/NON-PROFIT SPR

_____	APPLICATION #
_____	DATE RECEIVED
_____	APPLICATION FEE
_____	PLAN REVIEW FEE
_____	ABUTTERS FEE
_____	LEGAL NOTICE FEE
_____	TOTAL FEES

_____	INSPECTION FEE
_____	INSPECTION COST
_____	REFUND (IF ANY)

1. NAME OF LEGAL OWNER OF RECORD: CKT Associates

\_\_\_\_\_ TELEPHONE: ( 603 ) 431-3170

ADDRESS: 158 Shattuck Way Newington, NH 03801

2. NAME OF APPLICANT: Willey Creek Co.

ADDRESS: 158 Shattuck Way Newington NH 03801

\_\_\_\_\_ TELEPHONE: ( 603 ) 431-3170

3. RELATIONSHIP OF APPLICANT TO PROPERTY IF OTHER THAN OWNER: \_\_\_\_\_

Same

(Written permission from Owner is required, please attach.)

4. DESCRIPTION OF PROPERTY: Wooded with variable slopes with areas of wetlands

ADDRESS: off Ray Farmstead Road

TAX MAP: 47 PARCEL #: 8-1, 9 ZONING DISTRICT: C3

AREA OF ENTIRE TRACT: 15.75 Acres PORTION BEING DEVELOPED: 2.55 Acres



5. **ESTIMATED TOTAL SITE DEVELOPMENT COST \$** \$1.2 million+/-
6. **EXPLANATION OF PROPOSAL:** Re-locate previopusly approved Building D to new location shown on the attached plans along with all required apputances
7. **ARE MUNICIPAL SERVICES AVAILABLE? (YES/NO)** Yes

If yes, Water and Sewer Superintendent must grant written approval for connection.  
If no, septic system must comply with W.S.P.C.C. requirements.

8. **LIST ALL MAPS, PLANS AND OTHER ACCOMPANYING MATERIAL SUBMITTED WITH THIS APPLICATION:**

<u>ITEM:</u>	<u>NUMBER OF COPIES</u>
A. <u>Site - Civil Plans (23 Sheets)</u>	<u>7 full size, 15 11x17</u>
B. <u>Architectural (2 Sheets)</u>	<u>7 Full size, 15 11x17</u>
C. <u>Wetland impact plans (3 Sheets)</u>	<u>7 Full size, 15 11x17</u>
D. <u>Stormwater Analysis booklet</u>	<u>7 sets</u>
E. _____	_____
F. _____	_____

9. **ANY DEED RESTRICTIONS AND COVENANTS THAT APPLY OR ARE CONTEMPLATED (YES/NO)** Yes, exist ROW Easement **IF YES, ATTACH COPY.**

10. **NAME AND PROFESSION OF PERSON DESIGNING PLAN:**

**NAME:** David Giangrande, PE Denis Hamel, CPESC

**ADDRESS:** 6 Chestnut Street Suite 110 Amesbury, MA 01903

**PROFESSION:** Civil Engineer **TELEPHONE:** ( 978 ) 572-6429

11. **LIST ALL IMPROVEMENTS AND UTILITIES TO BE INSTALLED:**

Tie into existing water and sewer lines of the Ray Farm project, new stormwater mitigation BMP's.

Paved access drive from near existing Building C to the re-located Building D along with parking, lighting

landscappings and walkways. Temporary construction access to Commerce Way.



**12. HAVE ANY SPECIAL EXCEPTIONS OR VARIANCES BEEN GRANTED BY THE ZONING BOARD OF ADJUSTMENT TO THIS PROPERTY PREVIOUSLY?**

IF YES, DESCRIBE BELOW. (Please check with the Planning Department Office to verify)

A Variance was granted by the Zoning Board of Adjustment to allow a 32 unit multifamily building in the C3 Commercial Zone.

**13. WILL THE PROPOSED PROJECT INVOLVE DEMOLITION OF ANY EXISTING BUILDINGS OR APPURTENANCES? IF YES, DESCRIBE BELOW.**

(Please note that any proposed demolition may require review by the Exeter Heritage Commission in accordance with Article 5, Section 5.3.5 of the Exeter Zoning Ordinance).

No

**14. WILL THE PROPOSED PROJECT REQUIRE A "NOTICE OF INTENT TO EXCAVATE" (State of NH Form PA-38)? IF YES, DESCRIBE BELOW.**

No

**NOTICE:** I CERTIFY THAT THIS APPLICATION AND THE ACCOMPANYING PLANS AND SUPPORTING INFORMATION HAVE BEEN PREPARED IN CONFORMANCE WITH ALL APPLICABLE REGULATIONS; INCLUDING BUT NOT LIMITED TO THE "SITE PLAN REVIEW AND SUBDIVISION REGULATIONS" AND THE ZONING ORDINANCE. FURTHERMORE, IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 15.2 OF THE "SITE PLAN REVIEW AND SUBDIVISION REGULATIONS", I AGREE TO PAY ALL COSTS ASSOCIATED WITH THE REVIEW OF THIS APPLICATION.

DATE 3-24-22 OWNER'S SIGNATURE [Signature]

ACCORDING TO RSA 676.4.I ( c ), THE PLANNING BOARD MUST DETERMINE WHETHER THE APPLICATION IS COMPLETE WITHIN 30 DAYS OF SUBMISSION. THE PLANNING BOARD MUST ACT TO APPROVE, CONDITIONALLY APPROVE, OR DENY AN APPLICATION WITHIN SIXTY FIVE (65) DAYS OF ITS ACCEPTANCE BY THE BOARD AS A COMPLETE APPLICATION. A SEPARATE FORM ALLOWING AN EXTENSION OR WAIVER TO THIS REQUIREMENT MAY BE SUBMITTED BY THE APPLICANT.



**ABUTTERS:** PLEASE LIST ALL PERSONS WHOSE PROPERTY IS LOCATED IN NEW HAMPSHIRE AND ADJOINS OR IS DIRECTLY ACROSS THE STREET OR STREAM FROM THE LAND UNDER CONSIDERATION BY THE BOARD. THIS LIST SHALL BE COMPILED FROM THE EXETER TAX ASSESSOR'S RECORDS.

**See Attached List**

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 ADDRESS \_\_\_\_\_

**Please attach additional sheets, if needed**





## **CHECKLIST FOR SITE PLAN REVIEW**

The checklist on the following page has been prepared to assist you in the preparation of your site plan. The checklist items listed correspond to the site plan requirements set forth in Section 7 of the "Site Plan Review and Subdivision Regulations". Unless otherwise indicated, all section references within this checklist refer to these regulations. Each of the items listed on this checklist must be addressed by the applicant prior to technical review of the site plan by the Technical Review Committee (TRC) See section 6.5. of the "Site Plan Review and Subdivision Regulations". This checklist **DOES NOT** include all of the detailed information required for site plan preparation and therefore should not be the sole basis for the preparation of these plans. For a complete listing of site plan requirements, please refer to Section 7 of the "Site Plan Review and Subdivision Regulations". In addition to these required plan items, the Planning Board will review site plans based upon the standards set forth in Sections 8 and 9 of the "Site Plan Review and Subdivision Regulations". As the applicant, it is **YOUR RESPONSIBILITY** to familiarize yourself with these standards and to prepare your plans in conformance with them.

Please complete this checklist by marking each item in the column labeled "Applicant" with one of the following: "X: (information provided); "NA" (not applicable); "W: (waiver requested). For all checklist items marked "NA", a final determination regarding applicability will be made by the TRC. For all items marked "W", please refer to Section 13 of the "Site Plan Review and Subdivision Regulations" for the proper request procedure to be followed. If waivers are requested, a justification letter for requested waivers is strongly suggested. All waiver requests will be acted upon by the Planning Board at a public hearing. Please contact the Planning Department office if you have any questions concerning the proper completion of this checklist.

All of the required information for the plans listed in the checklist must be provided on separate sheets, unless otherwise approved by the TRC.

**NOTE: AN INCOMPLETE CHECKLIST WILL BE GROUNDS FOR REJECTION OF YOUR APPLICATION.**



# SITE PLAN REQUIREMENTS

## 7.4 Existing Site Conditions Plan

Submission of this plan will not be applicable in all cases. The applicability of such a plan will be considered by the TRC during its review process as outlined in Section 6.5 Technical Review Committee (TRC) of these regulations. The purpose of this plan is to provide general information on the site, its existing conditions, and to provide the base data from which the site plan or subdivision will be designed. The plan shall show the following:

APPLICANT	TRC	REQUIRED EXHIBITS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.1 Names, addresses, and telephone numbers of the owner, applicant, and person(s) or firm(s) preparing the plan.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.2 Location of the site under consideration, together with the current names and addresses of owners of record, of abutting properties and their existing land use.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.3 Title, date, north arrow, scale, and Planning Board Case Number.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.4 Tax map reference for the site under consideration, together with those of abutting properties.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.5 Zoning (including overlay) district references.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.6 A vicinity sketch or aerial photo showing the location of the land/site in relation to the surrounding public street system and other pertinent location features within a distance of 2,000-feet, or larger area if deemed necessary by the Town Planner.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.7 Natural features including watercourses and water bodies, tree lines, significant trees (20-inches or greater in diameter at breast height) and other significant vegetative cover, topographic features, and any other environmental features that are important to the site design process.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.8 Man-made features such as, but not limited to, existing roads, structures, and stone walls. The plan shall also indicate which features are to be retained and which are to be removed or altered.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.9 Existing contours at intervals not to exceed 2-feet with spot elevations provided when the grade is less than 5%. All datum provided shall reference the latest applicable US Coast and Geodetic Survey datum and should be noted on the plan.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.10 A High Intensity Soil Survey (HISS) of the entire site, or appropriate portion thereof. Such soil surveys shall be prepared by a certified soil scientist in accordance with the standards established by the Rockingham County Conservation District. Any cover letters or explanatory data provided by the certified soil scientist shall also be submitted.



<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.11 State and Federally designated wetlands, setback information, total wetlands proposed to be filled, other pertinent information and the following wetlands note: "The landowner is responsible for complying with all applicable local, state, and federal wetlands regulations, including any permitting and setback requirements required under these regulations."
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.12 Surveyed property lines including angles and bearings, distances, monument locations, and size of the entire parcel. A professional land surveyor licensed in New Hampshire must attest to said plan.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.13 The lines of existing abutting streets and driveway locations within 200-feet of the site.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.14 The location, elevation, and layout of existing catch basins and other surface drainage features.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.15 The shape, size, height, location, and use of all existing structures on the site and approximate location of structures within 200-feet of the site.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.16 The size and location of all existing public and private utilities, including off-site utilities to which connection is planned.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.17 The location of all existing easements, rights-of-way, and other encumbrances.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.18 All floodplain information, including the contours of the 100-year flood elevation, based upon the Flood Insurance Rate Map for Exeter, as prepared by the Federal Emergency Management Agency, dated May 17, 1982.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.19 All other features which would fully explain the existing conditions of the site.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.4.20 Name of the site plan or subdivision.



### 7.5 Proposed Site Conditions Plan (Pertains to Site Plans Only)

The purpose of this plan is to illustrate and fully explain the proposed changes taking place within the site. The proposed site conditions plan shall depict the following:

APPLICANT	TRC	REQUIRED EXHIBITS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.5.1 Proposed grades and topographic contours at intervals not to exceed 2-feet with spot elevations where grade is less than 5%. All datum provided shall reference the latest applicable US Coast and Geodetic Survey datum and should be noted on the plan.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.5.2 The location and layout of proposed drainage systems and structures including elevations for catch basins.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.5.3 The shape, size, height, and location of all proposed structures, including expansion of existing structures on the site and first floor elevation(s). Building elevation(s) and a rendering of the proposed structure(s).
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.5.4 High Intensity Soil Survey (HISS) information for the site, including the total area of wetlands proposed to be filled.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.5.5 State and Federally designated wetlands, setback information, total wetlands proposed to be filled, other pertinent information and the following wetlands note: "The landowner is responsible for complying with all applicable local, state, and federal wetlands regulations, including any permitting and setback requirements required under these regulations."
<input type="checkbox"/> N/A	<input type="checkbox"/>	7.5.6 Location and timing patterns of proposed traffic control devices.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.5.7 The location, width, curbing and paving of all existing and proposed streets, street rights-of-way, easements, alleys, driveways, sidewalks and other public ways. The plan shall indicate the direction of travel for one-way streets. See Section 9.14 – Roadways, Access Points, and Fire Lanes for further guidance.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.5.8 The location, size and layout of off-street parking, including loading zones. The plan shall indicate the calculations used to determine the number of parking spaces required and provided. See Section 9.13 – Parking Areas for further guidance.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.5.9 The size and location of all proposed public and private utilities, including but not limited to: water lines, sewage disposal facilities, gas lines, power lines, telephone lines, cable lines, fire alarm connection, and other utilities.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.5.10 The location, type, and size of all proposed landscaping, screening, green space, and open space areas.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.5.11 The location and type of all site lighting, including the cone(s) of illumination to a measurement of 0.5-foot-candle.
<input type="checkbox"/>	<input type="checkbox"/>	7.5.12 The location, size, and exterior design of all proposed signs to be located on the site.
<input type="checkbox"/>	<input type="checkbox"/>	7.5.13 The type and location of all solid waste disposal facilities and accompanying screening.



<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.5.14 Location of proposed on-site snow storage.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.5.15 Location and description of all existing and proposed easement(s) and/or right-of-way.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.5.16 A note indicating that: "All water, sewer, road (including parking lot), and drainage work shall be constructed in accordance with Section 9.5 Grading, Drainage, and Erosion & Sediment Control and the Standard Specifications for Construction of Public Utilities in Exeter, New Hampshire". See Section 9.14 Roadways, Access Points, and Fire Lanes and Section 9.13 Parking Areas for exceptions.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.5.17 Signature block for Board approval

**OTHER PLAN REQUIREMENTS (See Section Indicated)**

- 7.7 Construction plan
- 7.8 Utilities plan
- 7.9 Grading, drainage and erosion & sediment control plan
- 7.10 Landscape plan
- 7.11 Drainage Improvements and Storm Water Management Plan
- 7.12 Natural Resources Plan
- 7.13 Yield Plan



Abutter List for Ray Farm - Parcels 47-8 & 47-9

March 20, 2022

<b>abutters_id_fiel</b>	<b>abutters_owner1</b>	<b>abutters_address</b>	<b>abutters_town</b>	<b>abuta</b>	<b>abutte</b>	<b>abutters_location</b>
047-008-0001	CKT ASSOCIATES	158 SHATTUCK WAY	NEWINGTON	NH	03801	RAY FARMSTEAD RD
047-008-0002	CKT ASSOCIATES	158 SHATTUCK WAY	NEWINGTON	NH	03801	RAY FARMSTEAD RD
047-011-0000	BOATOFGARTEN LLC	PO BOX 4430	MANCHESTER	NH	03108	32 INDUSTRIAL DR
040-012-0000	CARLISLE W SCOTT III	14 CASS ST	EXETER	NH	03833	ROUTE 101
047-005-0000	GLADSTONE REALTY LLC	12 BILLS WAY	BEDFORD	NH	03110	166 EPPING RD
040-011-0000	NET LEASE REALTY I INC	450 S ORANGE AVE SUITE 900	ORLANDO	FL	32801	191 EPPING RD
049-008-0000	EXETER TOWN OF	10 FRONT STREET	EXETER	NH	03833	0 ROUTE 101
039-003-0000	EXETER TOWN OF	10 FRONT STREET	EXETER	NH	03833	FORT ROCK TOWN FOREST
055-058-0000	STOCKBRIDGE REAL ESTATE LLC	141 EPPING RD	EXETER	NH	03833	141 EPPING RD
055-055-0000	BARR PROPERTIES REALTY TRUST	143 GILES RD	EAST KINGSTON	NH	03827	150 EPPING RD
055-056-0002	EXETER CROWN PROPERTY LLC	PO BOX 216	STRATHAM	NH	03885	2 KINGS WAY AVE
047-006-0000	GATEWAY AT EXETER LLC	20 TRAFALGAR SQUARE SUITE 610	NASHUA	NH	03063	170 EPPING RD
047-010-0000	DRAGONFLY REALTY LLC	101 EMERSON RD	MILFORD	NH	03055	151 EPPING RD
047-001-0001	156 EPPING ROAD LLC	156 EPPING RD UNIT 1	EXETER	NH	03833	156 EPPING RD
047-001-0002	158 EPPING ROAD LLC	156 EPPING ROAD	EXETER	NH	03833	158 EPPING RD
048-002-0000	NORTHEAST DISTRIBUTION LTD	11 COMMERCE WAY	EXETER	NH	03833	11 COMMERCE WAY
048-003-0000	C MARINE DYNAMICS REALTY LLC	8 COMMERCE WAY	EXETER	NH	03833	8 COMMERCE WAY
055-056-0001	GRANITE GROUP PROPERTIES LLC	6 STORRS ST	CONCORD	NH	03301	152 EPPING RD
047-007-0000	GATEWAY AT EXETER LLC	20 TRAFALGAR SQUARE SUITE 610	NASHUA	NH	03063	EPPING RD
047-012-0000	SIDNEY TRUST	C/O WALL INDUSTRIES	WESTFORD	MA	01886	37 INDUSTRIAL DR
047-002-0000	DABROWSKI REALTY HOLDINGS OF NH LLC	6920 POINTE INVERNESS WAY 301	FT WAYNE	IN	46804	160 EPPING RD
047-003-0000	MARKIE MARCIA	26 EPPING RD	EXETER	NH	03833	162 EPPING RD
040-013-0000	EXETER TOWN OF	10 FRONT STREET	EXETER	NH	03833	0 ROUTE 101
055-057-0000	EPPING RD 149 LLC	12 KINGSTON RD UNIT D	EXETER	NH	03833	149 EPPING RD
047-009-0000	CKT ASSOCIATES	158 SHATTUCK WAY	NEWINGTON	NH	03801	159 EPPING RD
047-009-0001	BEZIO SCHULTZ STPIERRE	40 INDUSTRIAL DR	EXETER	NH	03833	40 INDUSTRIAL DR
047-004-0000	BAKERPROP LLC	953 ISLINGTON ST #230	PORTSMOUTH	NH	03801	164 EPPING RD
047-008-0000	RAY FARM LLC	158 SHATTUCK WAY	NEWINGTON	NH	03108	15 WALLEY CREEK RD
	David Giangrande, PE	6 Chestnut Street Suite 110	Amesbury	MA	01913	
	Robert E. Smith Jr. LLS	6 Chestnut Street Suite 110	Amesbury	MA	01913	
	James Gove, CSS, CWS	8 Continental Drive Unit H	EXETER	NH	03833	
	Brendan Quigley, CWS	8 Continental Drive Unit H	EXETER	NH	03833	

**WAIVER FOR PARKING SETBACKS FROM BUILDING**

The Applicant requests a waiver from the requirements of Section 11.3.1.2 of the Site Plan Review and Subdivision Regulations to allow less than 25 feet between Building D and the driveway as follows:

Closest Distance	Furthest Distance	Average Distance
14.9'	30.0'	25.5'

**SITE PLAN REVIEW REGULATIONS WAIVER REQUIREMENTS:**

**13.1.1 Where the Board finds that extraordinary hardships, practical difficulties, or unnecessary expense would result from strict compliance with the foregoing regulations or the purposes of these regulations may be served to a greater extent by an alternative proposal, it may approve waivers to these regulations. The purpose of granting waivers under provisions of these regulation shall be to insure that an applicant is not unduly burdened, as opposed to merely inconvenienced, by said regulations. The Board shall not approve any waiver(s) unless a majority of those present shall find that:**

**13.1.2. The granting of the waiver will not be detrimental to the public safety, health and welfare or injurious to other property, and will promote the public interest.**

The site has been designed to allow for safe pedestrian and vehicular traffic notwithstanding its location within the setback. Allowing the reduced setback allows less impact to the wetland buffers on the site. There is a substantial amount of landscaping proposed for the areas between the buildings and the parking and/or access drives which will achieve the objective of the regulation.

**13.1.3 The waiver will not, in any manner, vary the provisions of the Exeter Zoning Ordinance, Exeter Master Plan, or official maps.**

Allowing this reduced setback will not violate the spirit of the Zoning Ordinance or Exeter Master Plan and will allow less impact in the wetland buffer.

**13.1.4 Such waiver(s) will substantially secure the objectives, standards and requirements of these regulations.**

Granting this waiver would secure the objectives, standards and requirements of the Town's regulation by reducing impacts on the wetland buffer without impacting public safety or the aesthetics of the project which will be thoroughly landscaped.

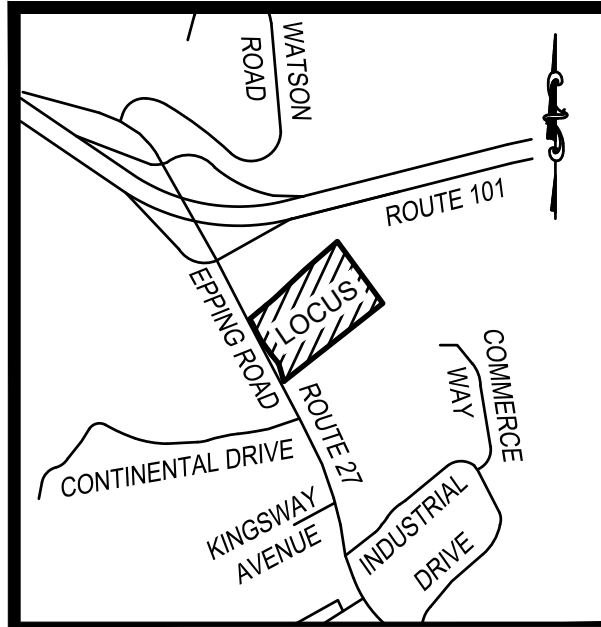
**13.1.5 A particular and identifiable hardship exists or a specific circumstance warrants the granting of a waiver. Factors to be considered in determining the existence of the hardship shall include, but not be limited to: topography; existing site features; geographic location of the property; and size/magnitude of project being evaluated.**

Given the site's existing topography and wetlands, granting this waiver offers greater protection to allow more of the site to remain in its nature state and further protects the wetlands.

Respectfully submitted,  
WILLEY CREEK CO., LLC

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Johnathan Shafmaster



LOCUS MAP  
SCALE: 1" = 3000'

# Ray Farm

## Active Adult Community

### Site Development Plans for Building D off Ray Farmstead Road, Exeter, NH

#### SHEET INDEX

G1.10	TITLE SHEET
G1.20	GENERAL NOTES, LEGEND, & ABBREVIATIONS
V1.10	MINOR SUBDIVISION PLAN
V1.11, V1.12	EXISTING CONDITIONS
C1.10	OVERALL SITE PLAN
C1.11, C1.12	SITE PLANS
C1.21 TO C1.23	GRADING AND DRAINAGE PLANS
C1.31, 1.32	UTILITY PLANS
C1.41, 1.42	PLAN & PROFILES
C1.51, 1.52	EROSION AND SEDIMENT CONTROL PLANS
C5.11 TO C5.16	DETAILS
C1.24	WETLAND IMPACTS
C1.25	WETLAND BUFFER IMPACT PLAN
C1.26	WATERSHED PLAN



6 CHESTNUT STREET, AMESBURY, MA.  
Phone: (978) 388-2157  
CONSULTING ENGINEERS &  
LAND SURVEYORS SINCE 1988  
www.gm2inc.com

Sheet Title:

## TITLE SHEET

Project Title:

**Ray Farm  
Condominium**  
Ray Farmstead Road  
Exeter, NH 03833  
Rockingham County

Applicant/Owner:

**Ray Farm, LLC**  
158 Shattuck Way  
Newington, NH 03801

#### DIMENSIONAL REQUIREMENTS (C-3 DISTRICT)

	REQUIRED
MINIMUM LOT AREA	40,000 SF
MINIMUM LOT WIDTH	175 FEET
MINIMUM LOT DEPTH	225 FEET
MINIMUM YARD SETBACKS	
FRONT	50 FEET
SIDE	30 FEET
REAR	25 FEET
MAXIMUM BUILDING COVERAGE	40 %
MINIMUM OPEN SPACE	20 %
MAXIMUM HEIGHT	50 FEET

#### LOCUS PARCEL

OKT ASSOCIATES  
MAP 47, PARCELS, 8 & 9  
(SEE MINOR SUBDIVISION PLAN V1.10)

#### TOTAL SITE DENSITY

TOTAL PARCEL AREA  
15.75 Acres (686,127 SF)  
TOTAL NUMBER OF UNITS - 128  
DENSITY = 5,360.4 SF PER UNIT

#### TOTAL SITE DATA

PROPOSED USE - ACTIVE ADULT COMMUNITY (VARIANCE GRANTED)  
4 BUILDINGS WITH 4-32 UNIT BUILDINGS, = 128 UNITS

PARKING REQUIRED - 128 UNITS x 2 SPACES PER UNIT +  
1 SPACE PER 4 UNITS = 288 SPACES REQUIRED

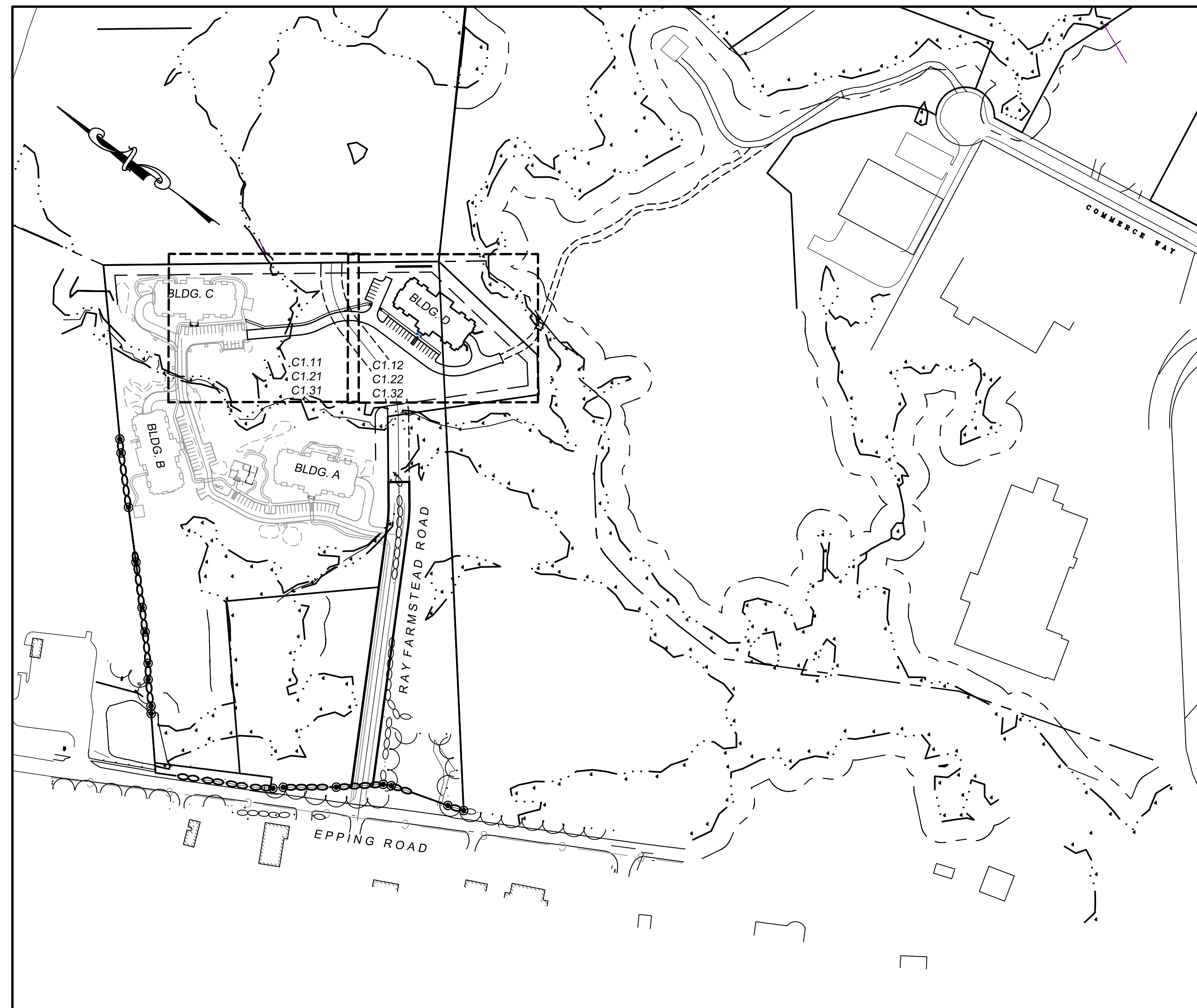
PARKING PROVIDED - 1233 TOTAL (1.82 SPACES/UNIT) (WAIVER  
REQUESTED) 144 IN PARKING GARAGE BELOW BUILDINGS  
89 SURFACE PARKING

#### WAIVERS

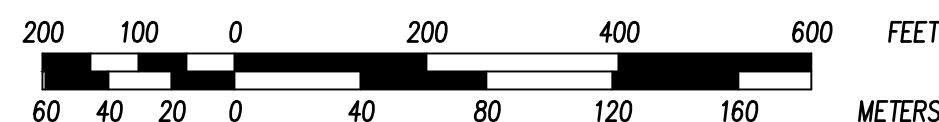
1. WAIVER FOR WETLAND IMPACTS - 9.9.2 SITE PLAN REVIEW REGULATIONS
2. WAIVER FOR PARKING - 5.6.5 ZONING ORDINANCE
3. WAIVER FOR ROADWAY DESIGN PLANS - 7.5.7 AND 7.7 SITE PLAN REVIEW REGULATIONS
4. WAIVER FOR PARKING SETBACKS - 11.3.1.2 SITE PLAN REVIEW REGULATIONS
5. WAIVER FOR RECREATIONAL AREAS - 11.3.4 SITE PLAN REVIEW REGULATIONS

#### PERMITS

ALTERATION OF TERRAIN - AOT 1335 (PREVIOUSLY APPROVED)  
ALTERATION OF TERRAIN - AOT XXXX (FOR BUILDING D)  
DREDGE AND FILL - FILE NO. 2017-01530 (PREVIOUSLY APPROVED)  
DREDGE AND FILL - FILE NO. XXXX-XXX (ASSOCIATED WITH BUILDING D)



SCALE: 1"=200'



TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

#### REVISION BLOCK

NO.	DATE	DESC	BY

PROJ. MGR: D. HAMEL  
FIELD: J. SALVAGGIO / R. SMITH  
DESIGN: D. HAMEL  
DRAWN: D. HAMEL  
CHECKED: D. GIANGRANDE  
DATE: 01-11-2022  
FILE: 16042 D T1.DWG  
FBK:  
JOB #: 16042 D

SHEET G1.10

K:\PROJ\CIVIL\_3D\2016\16042 BLDG D\1.0 SHEET FILES\16042 D T1.DWG D:\hamel 3/27/2022 8:23 AM



## GENERAL NOTES

- ELEVATIONS BASED ON NAVD 1988. PLANS ARE NH STATE PLAIN NAD83 COORDINATE SYSTEM.
- OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT ASSESSOR'S MAPS AND DO NOT CONSTITUTE CERTIFICATION TO TITLE OR OWNERSHIP.
- EXISTING CONDITIONS DATA FROM AN ON THE GROUND SURVEY CONDUCTED BY W.C. CAMMETT ENG., NOVEMBER OF 2016 THROUGH APRIL OF 2017, AND GM2 ASSOCIATES IN DECEMBER OF 2021.
- WETLANDS AND SOILS INFORMATION PROVIDED BY GOVE ENVIRONMENTAL SERVICES.
- THERE IS NO FLOOD PLAIN ON THIS SITE ACCORDING TO THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 330130 0401 E.
- THE ORIGINAL PARCEL IS LOCATED AT 183 EPPING ROAD AND IS SHOWN AS LOT 8 ON EXETER TAX MAP 47. IT HAS AN AREA OF 960,175 S.F.± (22.04 ACRES±).
- EXISTING 50' WIDE RIGHT OF WAY IS FOR THE BENEFIT OF N. SCOTT CARLISLE. SEE BOOK 3794 PAGE 1963 FOR NOTICE OF EASEMENT.
- THE PERIMETER SURVEY PERFORMED BY W.C. CAMMETT ENG. WITH A 5" TOTAL STATION AND AN ERROR OF CLOSURE OF BETTER THAN 1:32,000.
- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, WATER AND ANY OTHER PRIVATE OR MUNICIPAL UTILITIES WITH THE APPROPRIATE UTILITY COMPANY.
- WHERE EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER OF RECORD FOR RESOLUTION OF THE CONFLICT.
- EXISTING UTILITY POLES, WILL BE RELOCATED BY OTHERS, IF NECESSARY.
- EXCAVATION SHALL ONLY OCCUR WITHIN THE LIMIT OF WORK, AS SHOWN.
- IF AREAS OUTSIDE THE LIMIT OF PROPOSED WORK IS DISTURBED BY THE CONTRACTOR'S OPERATIONS, THE AREAS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- JOINTS BETWEEN NEW BITUMINOUS CONCRETE ROADWAY PAVEMENT AND SAW CUT EXISTING PAVEMENT SHALL BE SEALED WITH BITUMEN, INFRARED SEAL, AND BACK SANDED.
- EXISTING SIGNS AND/OR MAILBOXES WITHIN THE PROJECT LIMITS THAT ARE DISTURBED SHALL BE REMOVED AND RELOCATED AS APPLICABLE.
- ALL DISTURBED AREAS OUTSIDE OF THE NEW PAVEMENT LIMITS SHALL BE LOAMED (4" MINIMUM DEPTH) AND SEEDED.
- A MINIMUM OF 10' HORIZONTAL AND 18" VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN WATER MAINS AND SEWER LINES.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE EXETER WATER AND SEWER DEPARTMENT WHEN MAKING THE CONNECTIONS.
- ALL WORK SHALL COMPLY WITH EXETER'S "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF PUBLIC UTILITIES IN EXETER" NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

## MATERIAL NOTES

- CRUSHED GRAVEL - NHDOT 304.3
- GRAVEL - NHDOT 304.2
- SAND - NHDOT 304.1
- BACKFIL MATERIAL - EARTH MATERIAL FREE FROM ROCKS LARGER THAN 3", DEBRIS, STUMPS, CLAY, ORGANIC MATTER, ICE, FROZEN SOIL, AND EXCESSIVE MOISTURE.
- LOAM - NHDOT 641.2.1
- CRUSHED STONE - GRADED CRUSHED ROCK TO THE SIZE SPECIFIED, WITH LESS THAN 2% FINES PASSING THE #200 SIEVE.
- PLACING AND COMPACTION OF FILL MATERIALS SHALL COMPLY WITH NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 304.3.4, 304.3.5, AND 304.3.6.
- PAVEMENTS SHALL COMPLY WITH SECTIONS 401, 403, AND 410 OF NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

## CONSTRUCTION NOTES

- PRIOR TO ANY EXCAVATION, DIG-SAFE AND EXETER DPW (603-773-6157) SHALL BE NOTIFIED TO LOCATE ALL PERTINENT UTILITIES INCLUDING WATER, SEWER, AND DRAINAGE.
- THIS PROJECT IS BE TO MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF rsa 430:53 AND CHAPTER Agr 3800 RELATIVE TO INVASIVE SPECIES.
- ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY RAINFALL OF ONE HALF INCH OR MORE.
- DO NOT CLEAR AND STRIP THE ENTIRE SITE AT ONE TIME. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION. IN NO CASE SHALL MORE THAN 3 ACRES BE DISTURBED AT ONE TIME. STABILIZE THE AREA BEFORE MOVING ON TO THE NEXT AREA. DISTURBED AREAS REMAINING OPEN FOR MORE THAN 30 DAYS, SHALL BE STABILIZED.
- WOODY MATERIAL REMOVED DURING THE CLEARING PROCESS MAY BE GROUND UP AND USED AS MULCH FOR EROSION CONTROL TO STABILIZE APPROPRIATE AREAS.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
  - BASE COURSE GRAVEL HAS BEEN INSTALLED IN AREAS TO BE PAVED
  - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
  - A MINIMUM OF 3 INCH OF NON EROSION MATERIAL SUCH AS RIP-RAP HAS BEEN INSTALLED
  - OR EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED
- ALL AREAS SHALL BE STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE SEEDING SPECIFICATIONS ARE AS FOLLOWS:

### TEMPORARY SEEDING FOR EROSION CONTROL DURING CONSTRUCTION:

SPECIES	POUNDS/1000 SF	REMARKS
WINTER RYE	2.5	BEST FOR FALL SEEDING. AUG. 15 TO SEPT. 15. SEED TO A DEPTH OF 1"
OATS	2.0	BEST FOR SPRING SEEDING. NO LATER THAN MAY 15. SEED TO A DEPTH OF 1"
ANNUAL RYEGRASS	1.0	SEED EARLY SPRING. AUG. 15 TO SEPT. 15. SEED TO A DEPTH OF 0.25"
PERNIAL RYEGRASS	0.7	SEED BETWEEN APRIL 1 TO AUG. 15. SEED TO A DEPTH OF 0.5"

### PERMANENT VEGETATION SEED MIXTURE:

SPECIES	POUNDS/1000 SF
TALL FESCUE	0.45
CREeping RED FESCUE	0.45
BIRDSFOOT TREFOIL	0.20
TOTAL	1.10

- ALL RE-VEGETATED AREAS THAT DO NOT EXHIBIT 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS (ON 3:1 SLOPES OR GREATER). SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, OR SECURING WITH ANCHORED NETTING. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER SNOW OR FROZEN GROUND AND SHALL BE COMPLETED PRIOR TO AN ACCUMULATION OF SNOW AND/OR FROST.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15, INCOMPLETE ROADS 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.
- CONCRETE WASH OUT SHALL BE CONDUCTED IN THE AREAS SHOWN ON SHEET C1.51" AND USE THE CONCRETE WASH OUT DETAIL SHOWN ON SHEET C5.11.
- NO STUMPS OR DEBRIS SHALL BE BURIED ONSITE. ALL STUMPS AND CONSTRUCTION DEBRIS SHALL BE STORED ONSITE UNTIL THEY CAN BE DISPOSED OFF SITE IN A FACILITY CAPABLE OF HANDLING SUCH MATERIALS.
- TEMPORARY PORTABLE TOILETS SHALL BE PROVIDED AND PROPERLY MAINTAINED ONSITE FOR THE DURATION OF THE PROJECT.
- VEHICLE MAINTENANCE SHALL BE PERFORMED OFF SITE. ANY VEHICLE LEAKING OIL OR GREASE SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE. FUEL AND OILS SHALL BE STORED IN AN APPROVED LOCATION AND COMPLY WITH LOCAL, STATE, AND FEDERAL REGULATIONS. IN NO CASE SHALL THEY BE STORED WITHIN 100' OF WETLAND AREAS.

## LEGEND

### EXISTING

	EXISTING CONTOURS
	SPOT GRADE
	WETLAND BOUNDARY
	WETLAND FLAG
	CENTER LINE STREAM
	SIGN
	LIGHT POLE
	FLARED END SECTION
	GUY WIRE
	UTILITY POLE
	CATCH BASIN
	DRAIN MANHOLE
	SEWER MANHOLE
	FIRE HYDRANT
	WATER VALVE
	GAS VALVE
	DRAINAGE LINE
	GAS LINE (APPROX.)
	OVERHEAD WIRE
	TREE LINE
	STONE WALL
	DECIDUOUS TREE
	CONIFEROUS TREE
	SIDEWALK
	EDGE OF PAVEMENT
	BUILDING
	TEST PIT
	IRON ROD FOUND
	IRON ROD SET
	DRILL HOLE FOUND
	MAIL BOX
	CONCRETE SURFACE
	METAL GUARD RAIL
	EASEMENT LINE
	ZONING BOUNDARY LINE
	PROPERTY LINE
	LEDGE
	FLAG POLE
	POST (METAL)
	40' WETLAND BUFFER
	50' WETLAND BUFFER
	75' WETLAND BUFFER
	BIKE TRAIL LINE (APPROX.)
	WATERSHED (FROM GIS)
	DRAIN ZONE LINE
	SOIL LINE (BY GOVE)
	SOIL TYPE (BY GOVE)

### CONSTRUCTION LAYOUT CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL VERTICAL AND HORIZONTAL LOCATIONS OF SITE ELEMENTS INCLUDING BUT NOT LIMITED BUILDINGS, UTILITIES, ROADS, AND GRADING. THE OWNER WILL PROVIDE HORIZONTAL AND VERTICAL CONTROL POINT DESCRIPTIONS AND LOCATIONS TO THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN, PROTECT, AND ESTABLISH NEW IF NECESSARY, ALL CONTROL POINTS DURING THE DURATION OF THE PROJECT.

### GEOTECHNICAL TESTING

THE OWNER MAY RETAIN A GEOTECHNICAL ENGINEER TO PERFORM TESTING OF COMPLETED SITE WORK INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF; GRAVEL, CRUSHED STONE, SAND, COMMON FILL, COMPACTION, AND CONCRETE. THE CONTRACTOR SHALL COOPERATE WITH THE HIRED GEOTECHNICAL ENGINEER AND ALLOW FULL ACCESS TO THE SITE AND DELIVERY RECEIPTS OF MATERIALS DELIVERED. WHEN TESTING RESULTS INDICATE NON-COMPLIANCE WITH THE CONTRACT DOCUMENTS AND/OR STANDARD CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL CORRECT THE DEFICIENCY AT NO COST TO THE OWNER.

### PROPOSED

	CONTOUR
	SPOT GRADE
	RIP-RAP
	EROSION CONTROL
	SIGN
	LIGHT POLE
	GUY WIRE
	UTILITY POLE
	CATCH BASIN
	DRAIN MANHOLE
	FLARED END SECTION
	SEWER MANHOLE
	FIRE HYDRANT
	WATER VALVE
	WELL
	TELEPHONE AND CATV PEDESTAL
	TREE
	SHRUB
	PERCOLATION TEST
	DEEP HOLE TEST
	DRAIN PIPE
	UNDERGROUND COMMUNICATION (TELEPHONE, CATV)
	UNDERGROUND ELECTRIC
	SEWER PIPE (GRAVITY)
	SEWER PIPE (FORCE MAIN)
	ROOF DRAIN
	FOUNDATION DRAIN
	WATER PIPE
	GAS PIPE
	OVERHEAD WIRES
	FENCE
	CURBING
	GUARD RAIL
	RETAINING WALL
	TREE LINE
	DETAIL CALL
	BUILDING
	PORTLAND CEMENT CONCRETE
	GRAVEL
	BITUMINOUS CONCRETE
	LANDSCAPING

### CONTRACTOR RESPONSIBILITIES

THE OWNER SHALL PROVIDE THE CONTRACTOR COPIES OF ALL PERMITS ISSUED FOR THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL PERMIT REQUIREMENTS THAT HAVE BEEN ISSUED FOR THIS PROJECT INCLUDING BUT NOT LIMITED TO: NPDES CONSTRUCTION GENERAL PERMIT ISSUED BY THE EPA, ALTERATION OF TERRAIN PERMIT ISSUED BY NHDES, SITE PLAN REVIEW PERMIT ISSUED BY THE TOWN OF EXETER, AND THE DREDGE AND FILL PERMIT ISSUED BY NHDES WETLANDS BUREAU. CONTRACTOR SHALL MAINTAIN THE SITE IN AN ORDERLY FASHION. ALL CONSTRUCTION EQUIPMENT SHALL BE PROPERLY MAINTAINED AND SECURED WHEN NOT IN USE. THE CONTRACTOR SHALL MAINTAIN RECORDS OF THE SIZE AND LOCATION (INCLUDING SWING TIES), OF ALL UNDERGROUND UTILITIES INSTALLED. THE RECORDS SHALL BE MADE AVAILABLE TO THE OWNER UPON REQUEST. THE CONTRACTOR SHALL PROVIDE A CONSTRUCTION SCHEDULE TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. THE SCHEDULE SHALL BE UPDATED ON A WEEKLY BASIS AT A MINIMUM.

## ABBREVIATIONS

### UTILITIES

RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYLCHLORIDE PIPE
C.I.	CAST IRON PIPE
COND	CONDUIT
D.I.	DUCTILE IRON PIPE
HYD.	HYDRANT
INV.	INVERT ELEVATION
UP	UTILITY POLE
TSV & B	TAPPING SLEEVE, VALVE AND BOX

### GENERAL

PROP.	PROPOSED
MIN.	MINIMUM
MAX.	MAXIMUM
EXIST.	EXISTING
STA	STATION
GRAN.	GRANITE
DRIVE	DRIVEWAY
ELEV.	ELEVATION
N.T.S.	NOT TO SCALE
TYP.	TYPICAL
APPROX.	APPROXIMATE
CEM. CONC.	CEMENT CONCRETE
BIT. CONC.	BITUMINOUS CONCRETE
ROW	RIGHT OF WAY
CL	CENTERLINE
WALK	SIDEWALK
TBM	TEMPORARY BENCH MARK
SGE	SLOPED GRANITE EDGING

### TREES

12" B	12" BIRCH
12" C	12" CEDAR
12" M	12" MAPLE
12" O	12" OAK
12" P	12" PINE

### ROADWAY

H.P.	HIGH POINT
L.P.	LOW POINT
A.D.	ALGEBRAIC DIFFERENCE
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
PRC	POINT OF REVERSE CURVATURE
PCC	POINT OF COMPOUND CURVATURE
CC	CENTER OF CURVE
PVC	POINT OF VERTICAL CURVATURE
PVT	POINT OF VERTICAL TANGENCY
PVRC	POINT OF VERTICAL REVERSE CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
OD	OUTSIDE DIAMETER
ID	INSIDE DIAMETER
DIA. Ø	DIAMETER
R	RADIUS
TYP.	TYPICAL
L	LENGTH
DP.	DEPTH
EQ.	EQUIVALENT

TOWN OF EXETER PLANNING BOARD

CHAIRMAN DATE



6 CHESTNUT STREET, AMESBURY, MA.

Phone: (978) 388-2157  
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Sheet Title:

# General Notes

Project Title:

## Ray Farm Condominium

Ray Farmstead Road  
Exeter, NH 03833  
Rockingham County

Applicant/Owner:

Ray Farm, LLC  
158 Shattuck Way  
Newington, NH 03801

### REVISION BLOCK

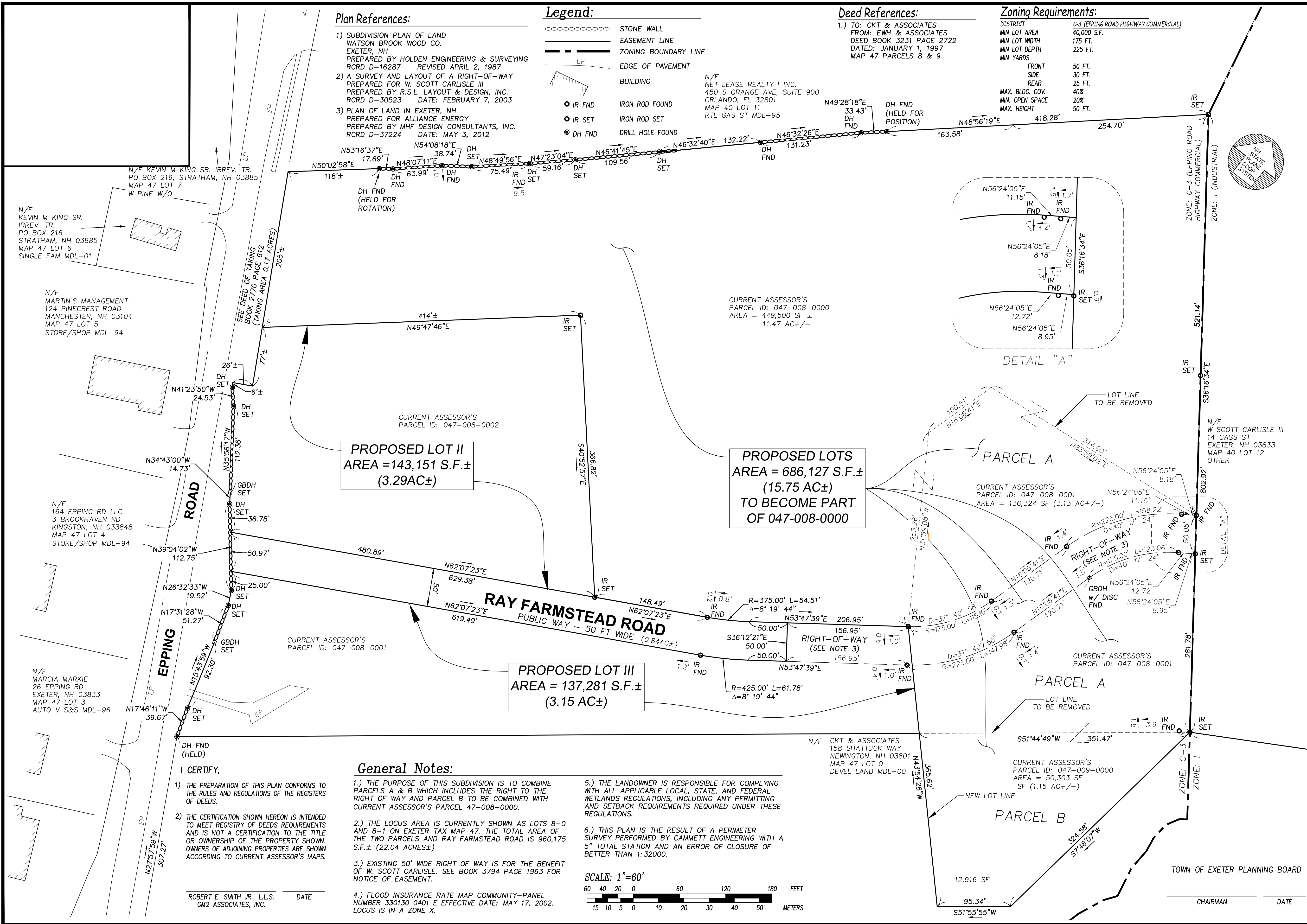
NO.	DATE	DESC	BY

PROJ. MGR.:	D. HAMEL
FIELD:	J. SALVAGGIO / R. SMITH
DESIGN:	D. HAMEL
DRAWN:	D. HAMEL
CHECKED:	D. GIANGRANDE
DATE:	01-11-2022
FILE:	16042 D.GN.DWG
FBK:	
JOB #:	16042 D

SHEET G1.20



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**Plan References:**

- 1) SUBDIVISION PLAN OF LAND WATSON BROOK WOOD CO. EXETER, NH PREPARED BY HOLDEN ENGINEERING & SURVEYING RCRD D-16287 REVISED APRIL 2, 1987
- 2) A SURVEY AND LAYOUT OF A RIGHT-OF-WAY PREPARED FOR W. SCOTT CARLISLE III PREPARED BY R.S.L. LAYOUT & DESIGN, INC. RCRD D-30523 DATE: FEBRUARY 7, 2003
- 3) PLAN OF LAND IN EXETER, NH PREPARED FOR ALLIANCE ENERGY PREPARED BY MHF DESIGN CONSULTANTS, INC. RCRD D-37224 DATE: MAY 3, 2012

**Legend:**

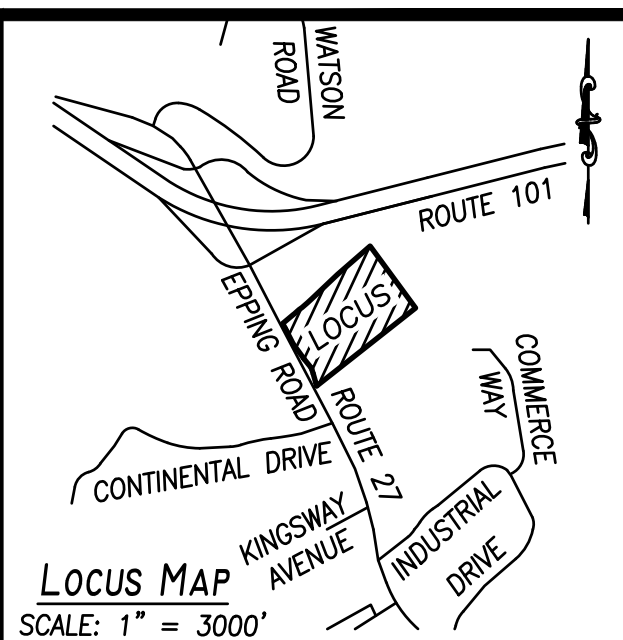
- STONE WALL
- EASEMENT LINE
- ZONING BOUNDARY LINE
- EDGE OF PAVEMENT
- BUILDING
- IRON ROD FOUND
- IRON ROD SET
- DRILL HOLE FOUND

**Deed References:**

- 1.) TO: CKT & ASSOCIATES FROM: EWH & ASSOCIATES DEED BOOK 3231 PAGE 2722 DATED: JANUARY 1, 1997 MAP 47 PARCELS 8 & 9

**Zoning Requirements:**

DISTRICT	C-3 (EPPING ROAD HIGHWAY COMMERCIAL)
MIN LOT AREA	40,000 SF.
MIN LOT WIDTH	175 FT.
MIN LOT DEPTH	225 FT.
MIN YARDS	
FRONT	50 FT.
SIDE	30 FT.
REAR	25 FT.
MAX. BLDG. COV.	40%
MIN. OPEN SPACE	20%
MAX. HEIGHT	50 FT.



LOCUS MAP SCALE: 1" = 3000'



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Sheet Title:  
**Lot Line  
 Adjusment  
 Plan**

Project Title:  
**"Ray Farm"  
 Active Adult  
 Community**  
 Epping Road  
 Exeter, NH 03833  
 Rockingham County

Applicant:  
**Willey Creek Company**  
 158 Shattuck Way  
 Newington, NH 03801

Owner:  
**CKT & Associates**  
 158 Shattuck Way  
 Newington, NH 03801

REVISION			
NO.	DATE	DESCRIPTION	BY
1	11.23.21	MINOR EDITS	RS
2	02.01.22	MINOR EDITS	RS

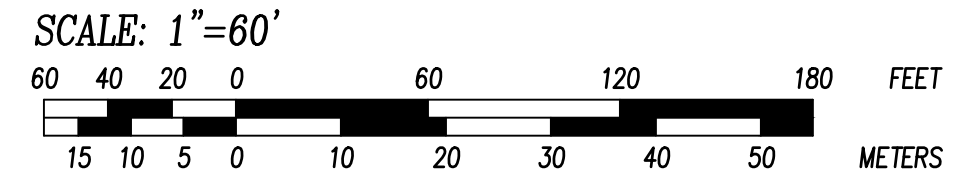
PROJ. MGR.: D. HAMEL
FIELD: M. MICHAUD / A. BICK
DESIGN: D. HAMEL
DRAWN: J. SALVAGGIO
CHECKED: R. SMITH
DATE: 11-03-21
FILE: 16042 SUB NOV 2021.DWG
FBK:
JOB #: 16042

PROJ. MGR.: D. HAMEL  
 FIELD: M. MICHAUD / A. BICK  
 DESIGN: D. HAMEL  
 DRAWN: J. SALVAGGIO  
 CHECKED: R. SMITH  
 DATE: 11-03-21  
 FILE: 16042 SUB NOV 2021.DWG  
 FBK:  
 JOB #: 16042

SHEET 1 of 1 VI.10

**General Notes:**

- 1.) THE PREPARATION OF THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.
- 2.) THE CERTIFICATION SHOWN HEREON IS INTENDED TO MEET REGISTRY OF DEEDS REQUIREMENTS AND IS NOT A CERTIFICATION TO THE TITLE OR OWNERSHIP OF THE PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT ASSESSOR'S MAPS.
- 3.) THE PURPOSE OF THIS SUBDIVISION IS TO COMBINE PARCELS A & B WHICH INCLUDES THE RIGHT TO THE RIGHT OF WAY AND PARCEL B TO BE COMBINED WITH CURRENT ASSESSOR'S PARCEL 47-008-0000.
- 4.) THE LOCUS AREA IS CURRENTLY SHOWN AS LOTS 8-0 AND 8-1 ON EXETER TAX MAP 47. THE TOTAL AREA OF THE TWO PARCELS AND RAY FARMSTEAD ROAD IS 960,175 S.F.± (22.04 ACRES±)
- 5.) THE LANDOWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL WETLANDS REGULATIONS, INCLUDING ANY PERMITTING AND SETBACK REQUIREMENTS REQUIRED UNDER THESE REGULATIONS.
- 6.) THIS PLAN IS THE RESULT OF A PERIMETER SURVEY PERFORMED BY CAMMETT ENGINEERING WITH A 5" TOTAL STATION AND AN ERROR OF CLOSURE OF BETTER THAN 1:32000.
- 7.) EXISTING 50' WIDE RIGHT OF WAY IS FOR THE BENEFIT OF W. SCOTT CARLISLE. SEE BOOK 3794 PAGE 1963 FOR NOTICE OF EASEMENT.
- 8.) FLOOD INSURANCE RATE MAP COMMUNITY-PANEL NUMBER 330130 0401 E EFFECTIVE DATE: MAY 17, 2002. LOCUS IS IN A ZONE X.



ROBERT E. SMITH JR., L.L.S. DATE  
 GM2 ASSOCIATES, INC.

CHAIRMAN DATE





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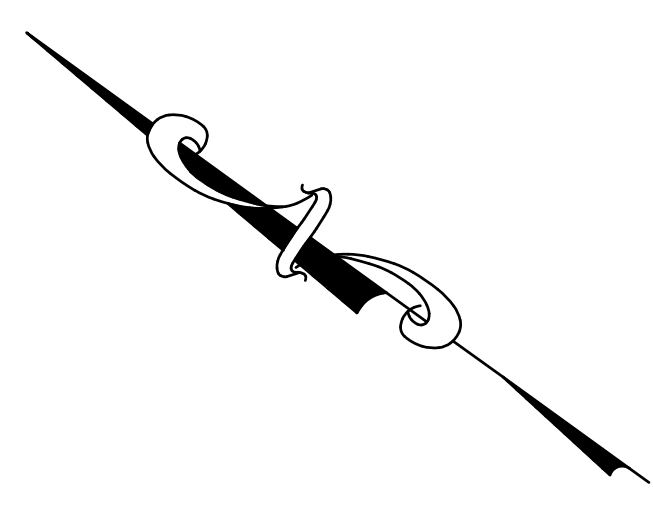
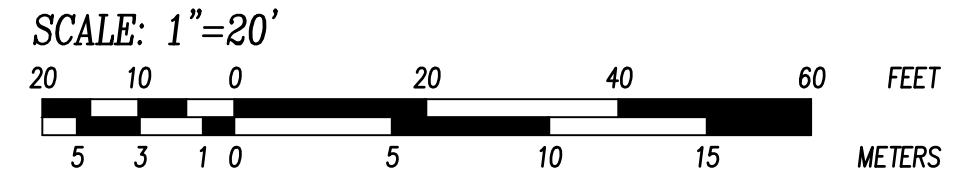
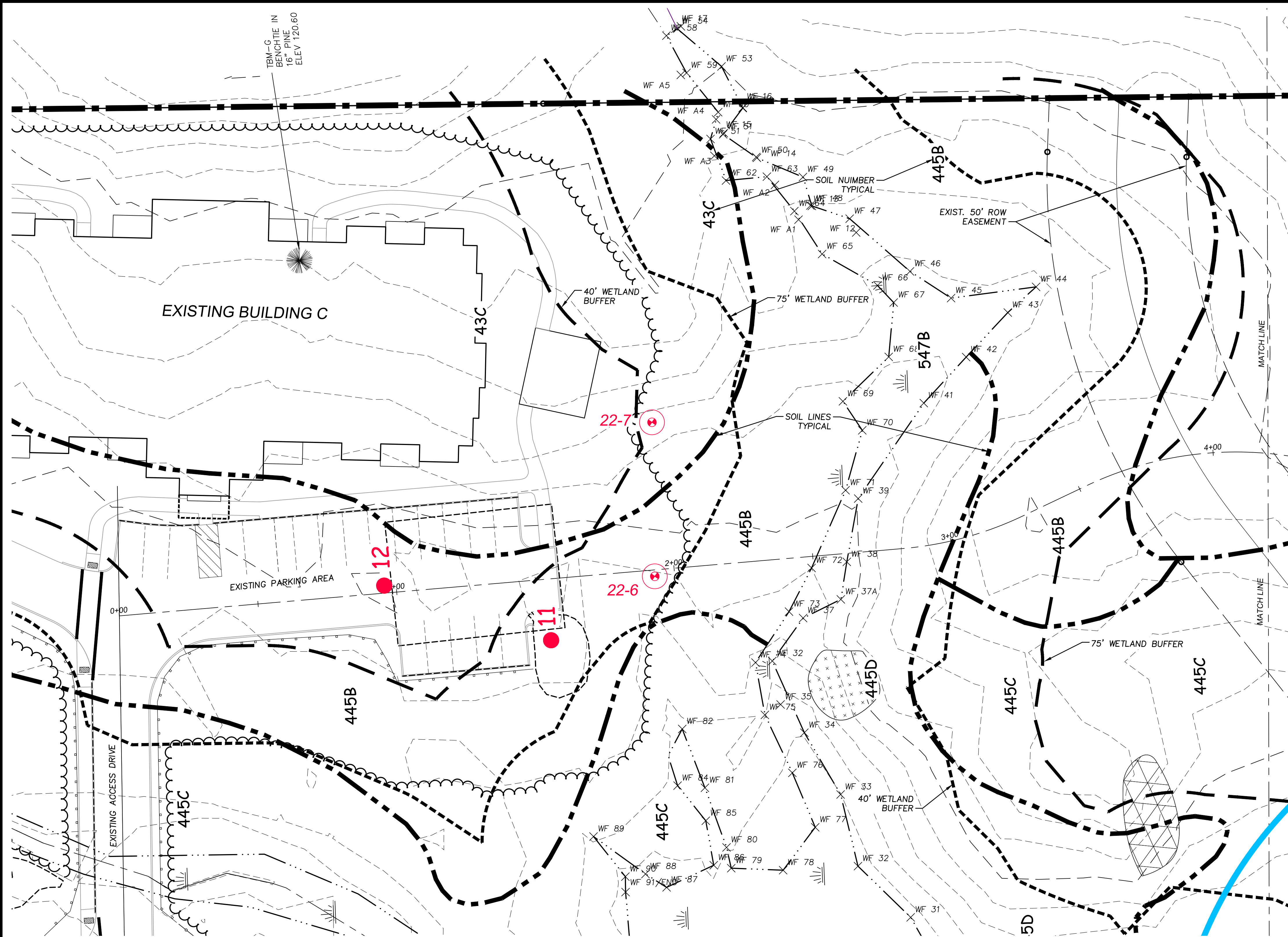
Sheet Title:  
**EXISTING  
 CONDITIONS**

Project Title:  
**Ray Farm  
 Condominium**  
 Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:  
**Ray Farm, LLC**  
 158 Shattuck Way  
 Newington, NH 03801

REVISION BLOCK			
NO.	DATE	DESC	BY

PROJ. MGR.: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D EC.DWG  
 FBK:  
 JOB #: 16042 D



**SOILS DATA**

43	CANTON, VERY STONY : HYDROLOGIC GROUP - B	B	0 - 8%
115	SCARBORO MUCK : HYDROLOGIC GROUP - D	C	8 - 15%
343	CANTON, EXTREMELY BOULDERY : HYDROLOGIC GROUP - B	D	15 - 25%
445	NEWFIELDS, VERY STONY : HYDROLOGIC GROUP - B		
500	UDORTHENTS, LOAMY : HYDROLOGIC GROUP - B		
547	WALPOLE, VERY STONY : HYDROLOGIC GROUP - C		

**SLOPES**

**WETLAND NOTES:**

The limits of jurisdictional wetlands as shown on this plan were delineated by Gove Environmental Services, Inc., between November 2014 to April 2015 AND November 2021 in accordance with:

- US Army Corps of Engineers Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Technical Report ERDC/EL TR-12-1, January 2012, Version 2.0
- Field Indicators of Hydric Soils in the United States, Version 7.0, 2010 AND (for disturbed site) Field Indicators for Identifying Hydric Soils in New England, Version 3. NEIWPCC Wetlands Work Group (April 2004)
- North American Digital Flora: National Wetland Plant List, current version.

**SOIL NOTES:**

The soils mapping is within the technical standards of the National Cooperative Soil Survey. It is a special purpose product, intended for infiltration requirements by the NH DES Alteration of Terrain Bureau. It was produced by a professional soil scientist, and is not a product of the USDA Natural Resources Conservation Service. There is a report that accompanies this mapping.

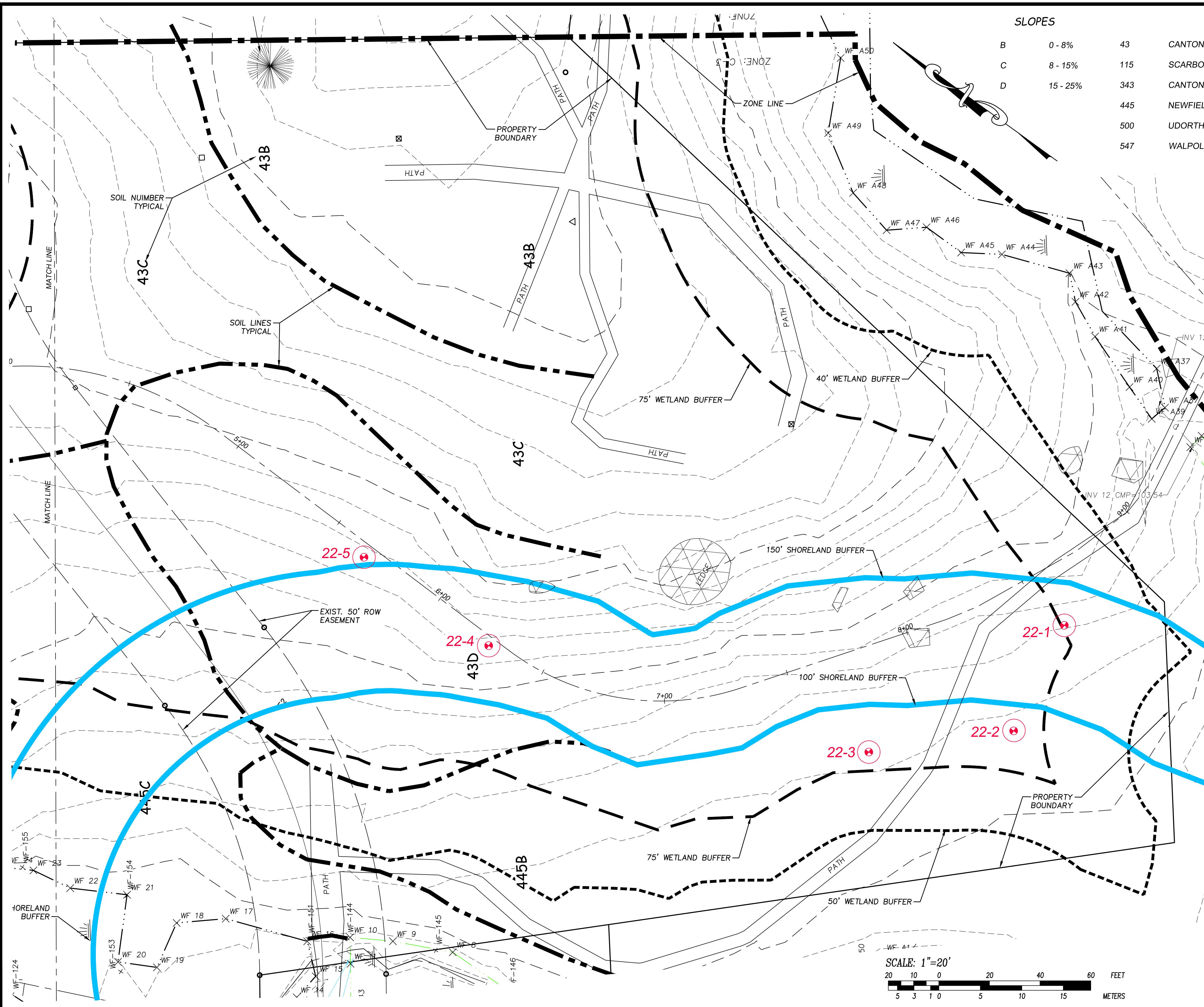
The site specific soil survey was produced October 20, 2016, and was prepared by James P. Gove, CSS # 004, Gove Environmental Services, Inc..

Soils were identified with the New Hampshire State-wide Numerical Soils Legend, USDA NRCS, Durham, NH. Issue # 10, January 2011.

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**SLOPES**

B	0 - 8%	43
C	8 - 15%	115
D	15 - 25%	343

**SOILS DATA**

CANTON, VERY STONY	: HYDROLOGIC GROUP - B
SCARBORO MUCK	: HYDROLOGIC GROUP - D
CANTON, EXTREMELY BOULDERY	: HYDROLOGIC GROUP - B
NEWFIELDS, VERY STONY	: HYDROLOGIC GROUP - B
UDORTHENTS, LOAMY	: HYDROLOGIC GROUP - B
WALPOLE, VERY STONY	: HYDROLOGIC GROUP - C

- WETLAND NOTES:**
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**SOIL NOTES:**

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Sheet Title:

# EXISTING CONDITIONS

Project Title:

## Ray Farm Condominium

Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:

### Ray Farm, LLC

158 Shattuck Way  
 Newington, NH 03801

**REVISION BLOCK**

NO.	DATE	DESC	BY

PROJ. MGR: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D EC.DWG  
 FBK:  
 JOB #: 16042 D





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Sheet Title:

# OVERALL SITE PLAN

Project Title:

## Ray Farm Condominium

Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:

Ray Farm, LLC  
 158 Shattuck Way  
 Newington, NH 03801

REVISION BLOCK

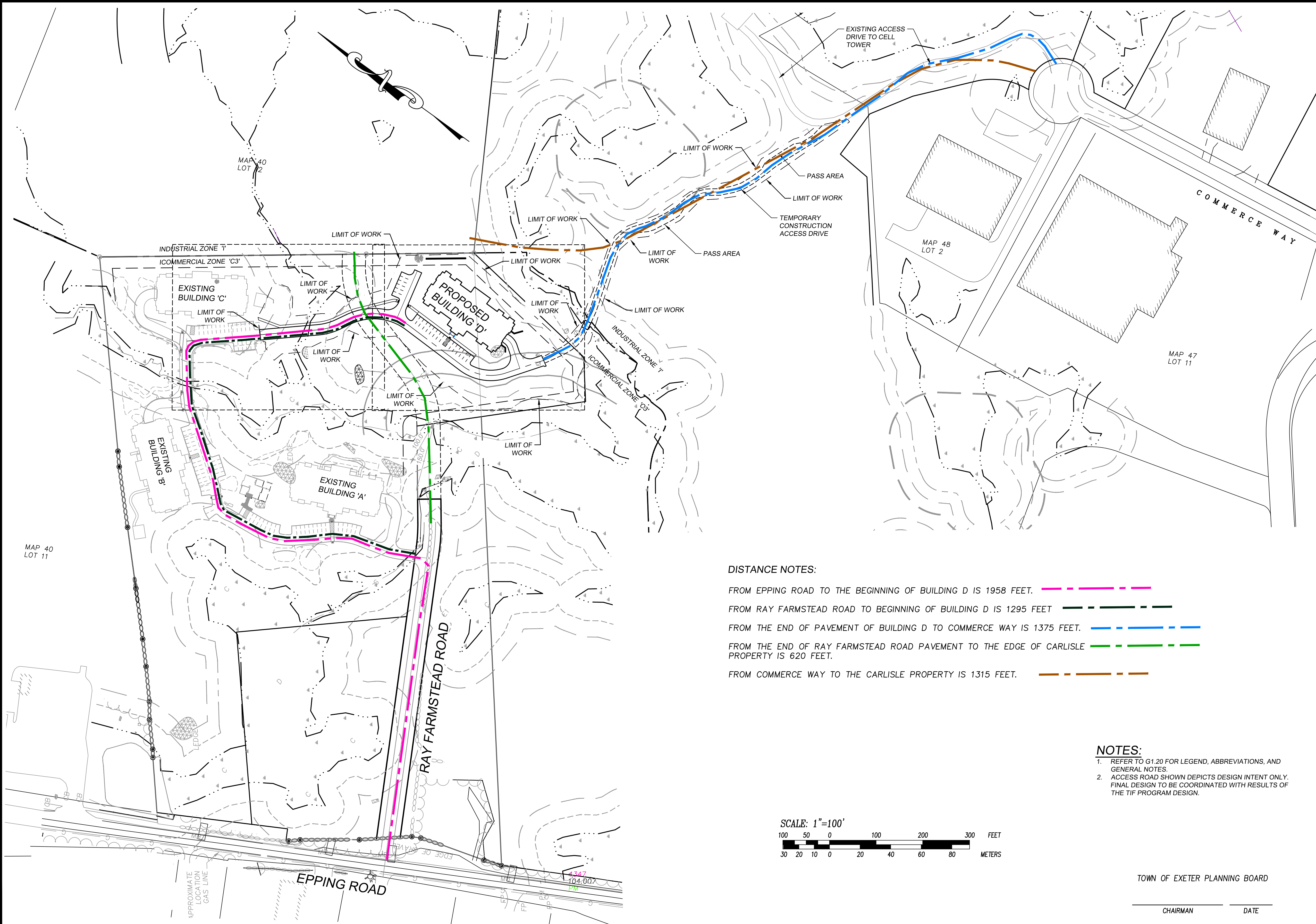
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PROJ. MGR: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D 5P.DWG  
 FBK:  
 JOB #: 16042 D

TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

SHEET C1.10

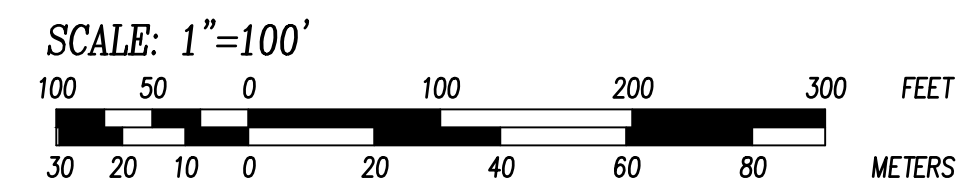


DISTANCE NOTES:

- FROM EPPING ROAD TO THE BEGINNING OF BUILDING D IS 1958 FEET. -----
- FROM RAY FARMSTEAD ROAD TO BEGINNING OF BUILDING D IS 1295 FEET -----
- FROM THE END OF PAVEMENT OF BUILDING D TO COMMERCE WAY IS 1375 FEET. -----
- FROM THE END OF RAY FARMSTEAD ROAD PAVEMENT TO THE EDGE OF CARLISLE PROPERTY IS 620 FEET. -----
- FROM COMMERCE WAY TO THE CARLISLE PROPERTY IS 1315 FEET. -----

NOTES:

1. REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
2. ACCESS ROAD SHOWN DEPICTS DESIGN INTENT ONLY. FINAL DESIGN TO BE COORDINATED WITH RESULTS OF THE TIF PROGRAM DESIGN.



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Sheet Title:

# SITE PLAN

Project Title:

## Ray Farm Condominium

Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:

Ray Farm, LLC  
 158 Shattuck Way  
 Newington, NH 03801

### REVISION BLOCK

NO.	DATE	DESC	BY

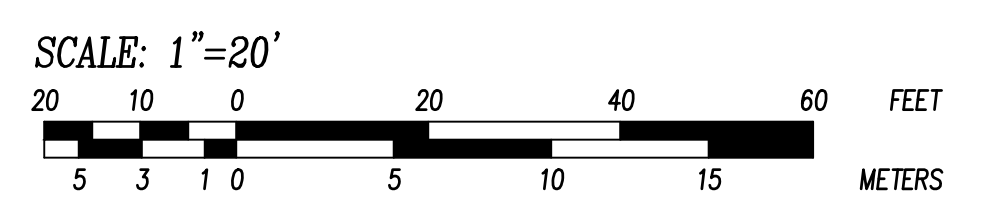
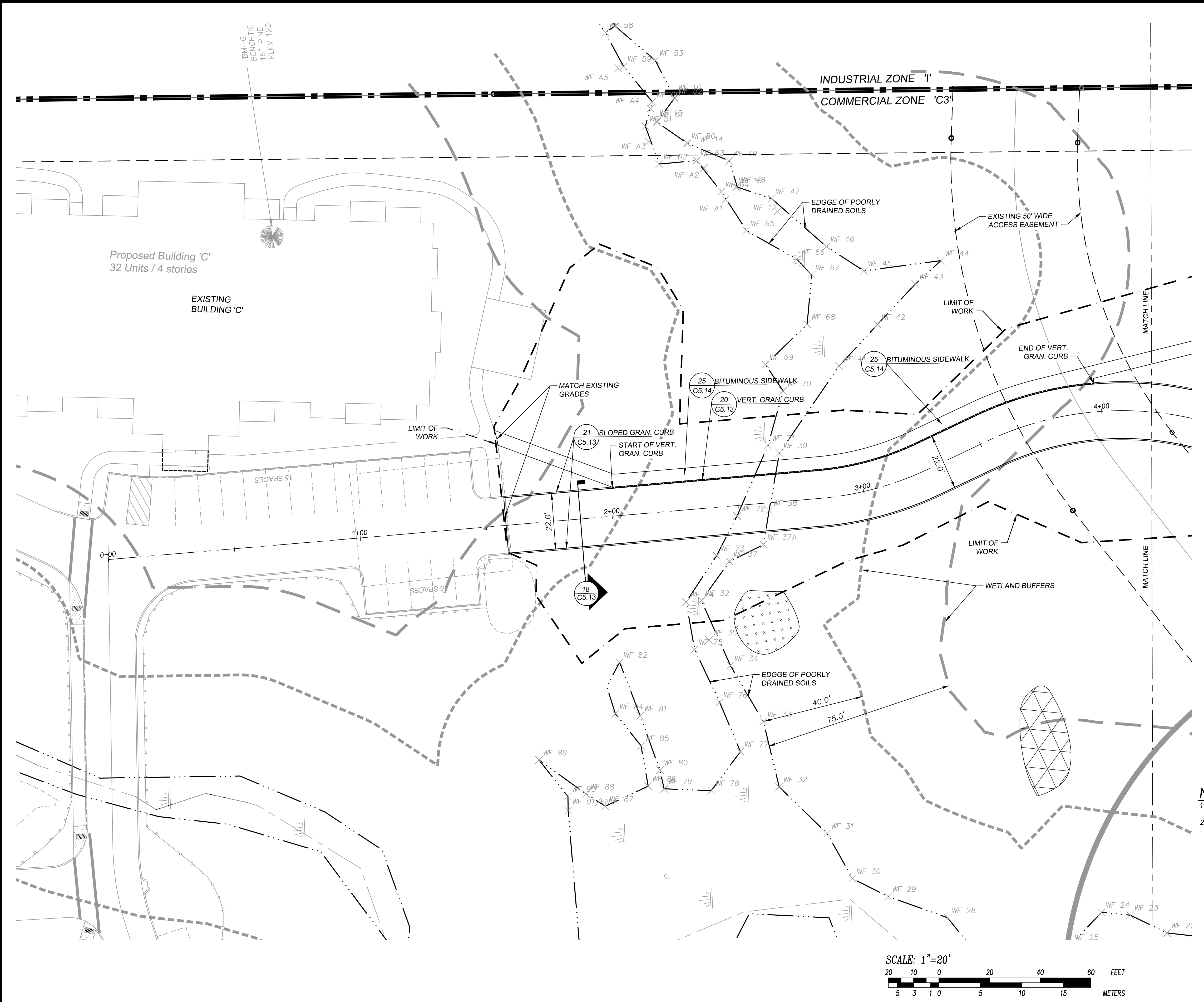
- NOTES:**
- REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
  - ACCESS ROAD SHOWN DEPICTS DESIGN INTENT ONLY. FINAL DESIGN TO BE COORDINATED WITH RESULTS OF THE TIF PROGRAM DESIGN.

TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

PROJ. MGR.: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
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 JOB #: 16042 D

SHEET C1.11



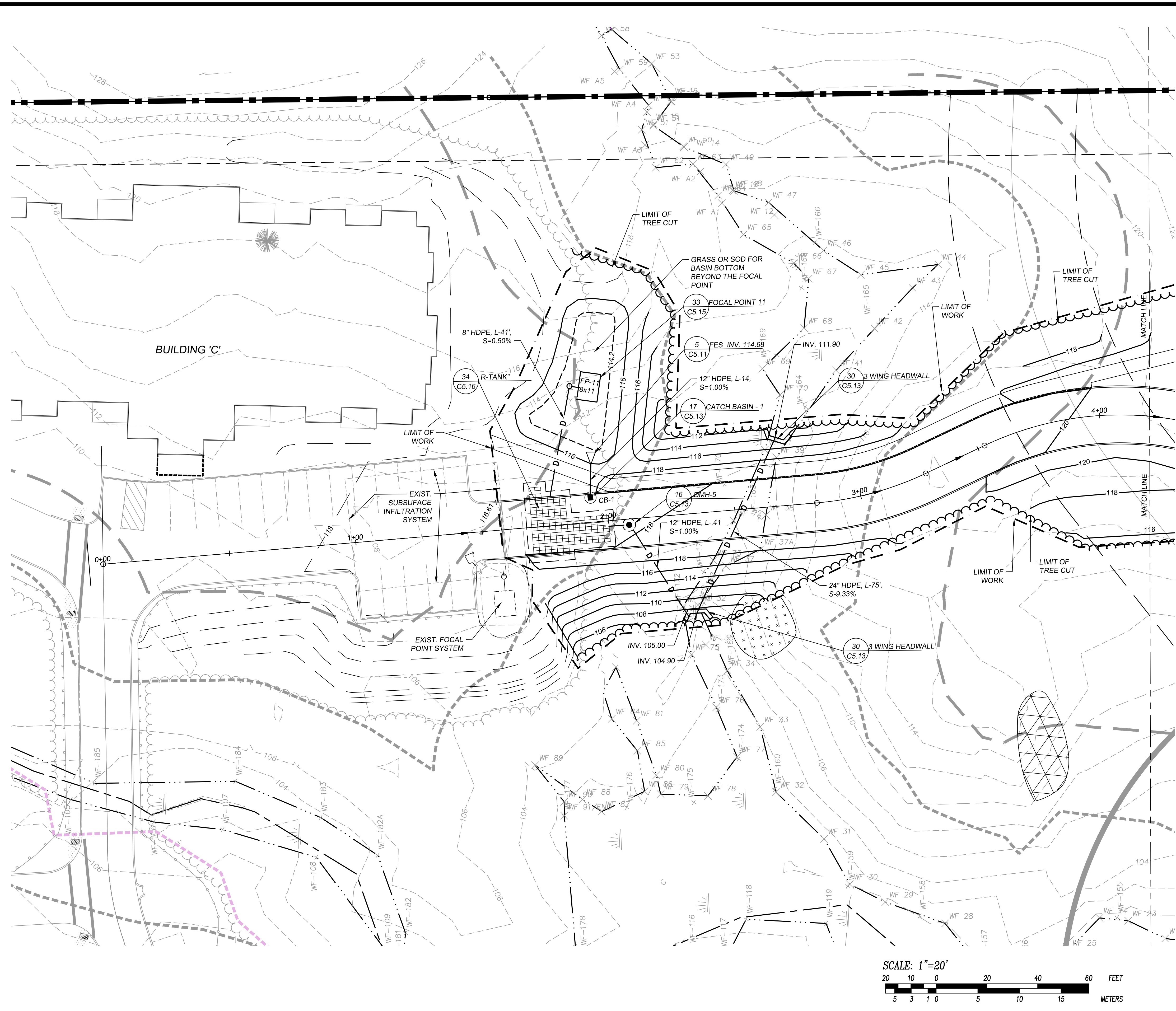
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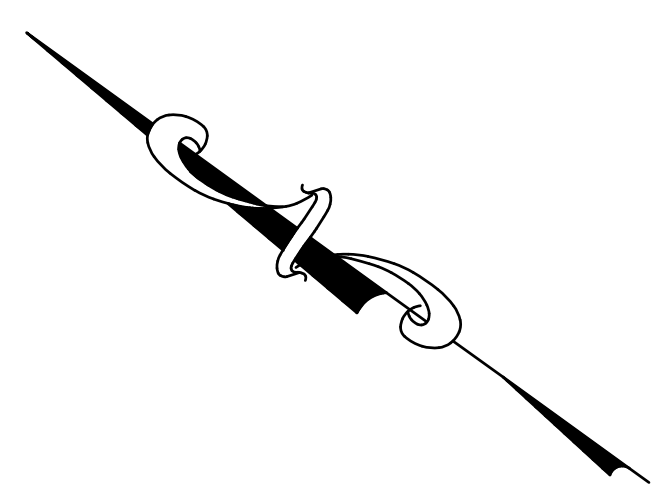
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**DRAINAGE STRUCTURES**

CB-1 R-117.15  
12" INV. OUT 114.82

DMH-5 R-117.90  
12" INV. IN - 110.44  
12" INV. OUT - 109.00



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Sheet Title:  
**GRADING  
AND DRAINAGE  
PLAN**

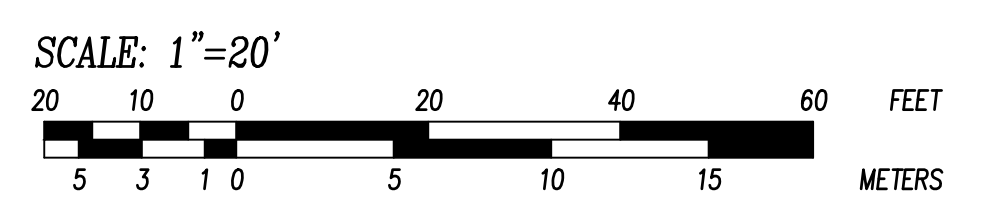
Project Title:  
**Ray Farm  
Condominium**  
Ray Farmstead Road  
Exeter, NH 03833  
Rockingham County

Applicant/Owner:  
**Ray Farm, LLC**  
158 Shattuck Way  
Newington, NH 03801

REVISION BLOCK			
NO.	DATE	DESC	BY

**NOTES:**

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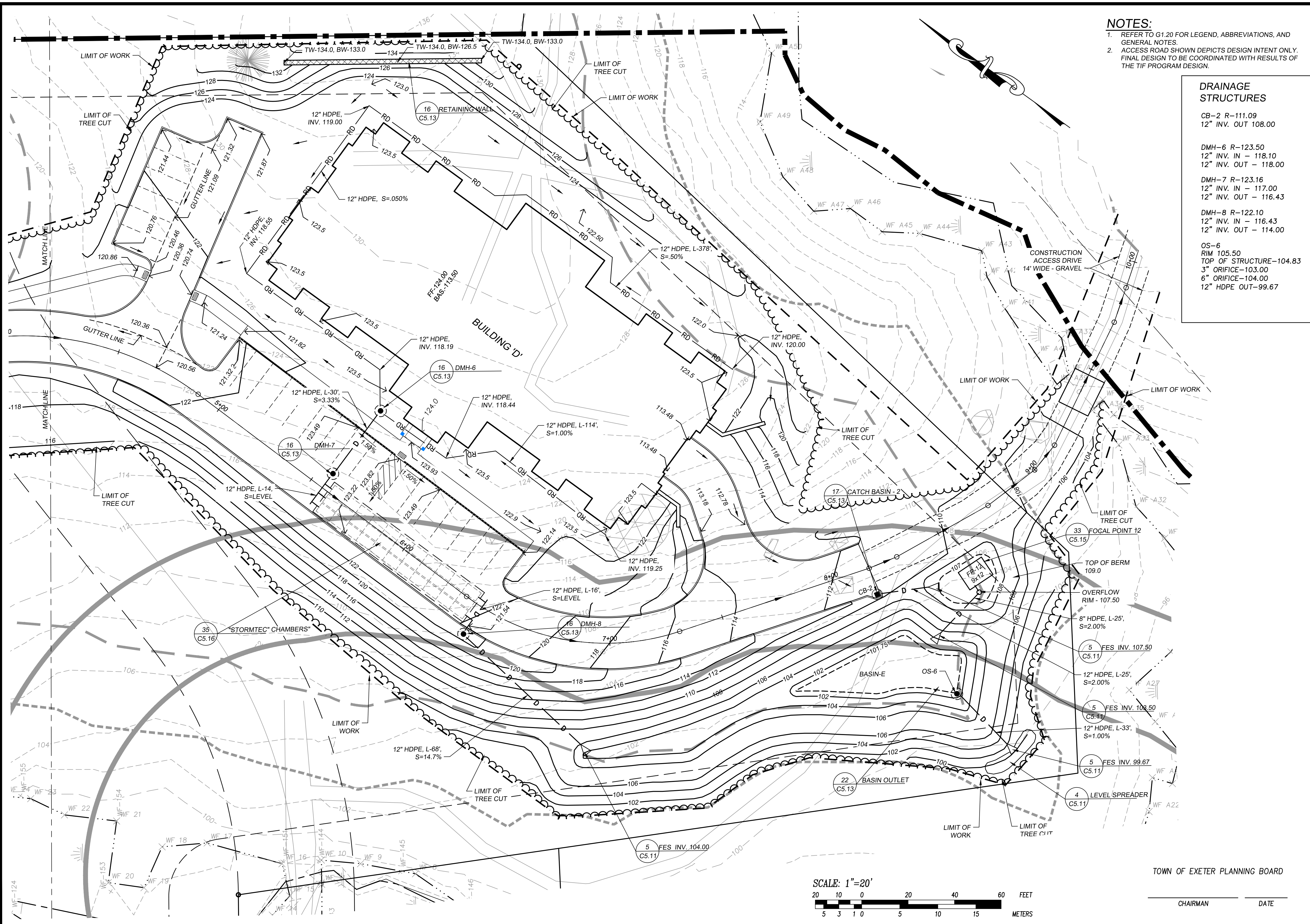
TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

PROJ. MGR.: D. HAMEL  
FIELD: J. SALVAGGIO / R. SMITH  
DESIGN: D. HAMEL  
DRAWN: D. HAMEL  
CHECKED: D. GIANGRANDE  
DATE: 01-11-2022  
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FBK:  
JOB #: 16042 D



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**NOTES:**  
1. REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.  
2. ACCESS ROAD SHOWN DEPICTS DESIGN INTENT ONLY. FINAL DESIGN TO BE COORDINATED WITH RESULTS OF THE TIF PROGRAM DESIGN.

DRAINAGE STRUCTURES	
CB-2	R-111.09 12" INV. OUT - 108.00
DMH-6	R-123.50 12" INV. IN - 118.10 12" INV. OUT - 118.00
DMH-7	R-123.16 12" INV. IN - 117.00 12" INV. OUT - 116.43
DMH-8	R-122.10 12" INV. IN - 116.43 12" INV. OUT - 114.00
OS-6	RIM 105.50 TOP OF STRUCTURE-104.83 3" ORIFICE-103.00 6" ORIFICE-104.00 12" HDPE OUT-99.67



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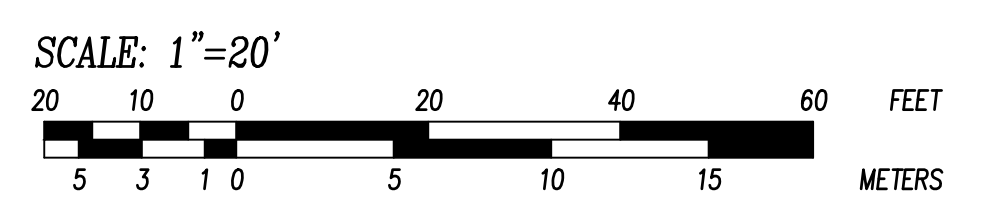
Sheet Title:  
**GRADING  
AND DRAINAGE  
PLAN**

Project Title:  
**Ray Farm  
Condominium**  
Ray Farmstead Road  
Exeter, NH 03833  
Rockingham County

Applicant/Owner:  
**Ray Farm, LLC**  
158 Shattuck Way  
Newington, NH 03801

REVISION BLOCK			
NO.	DATE	DESC	BY

PROJ. MGR.: D. HAMEL  
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 DRAWN: D. HAMEL  
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TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_





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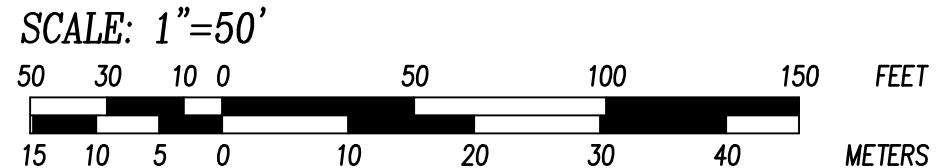
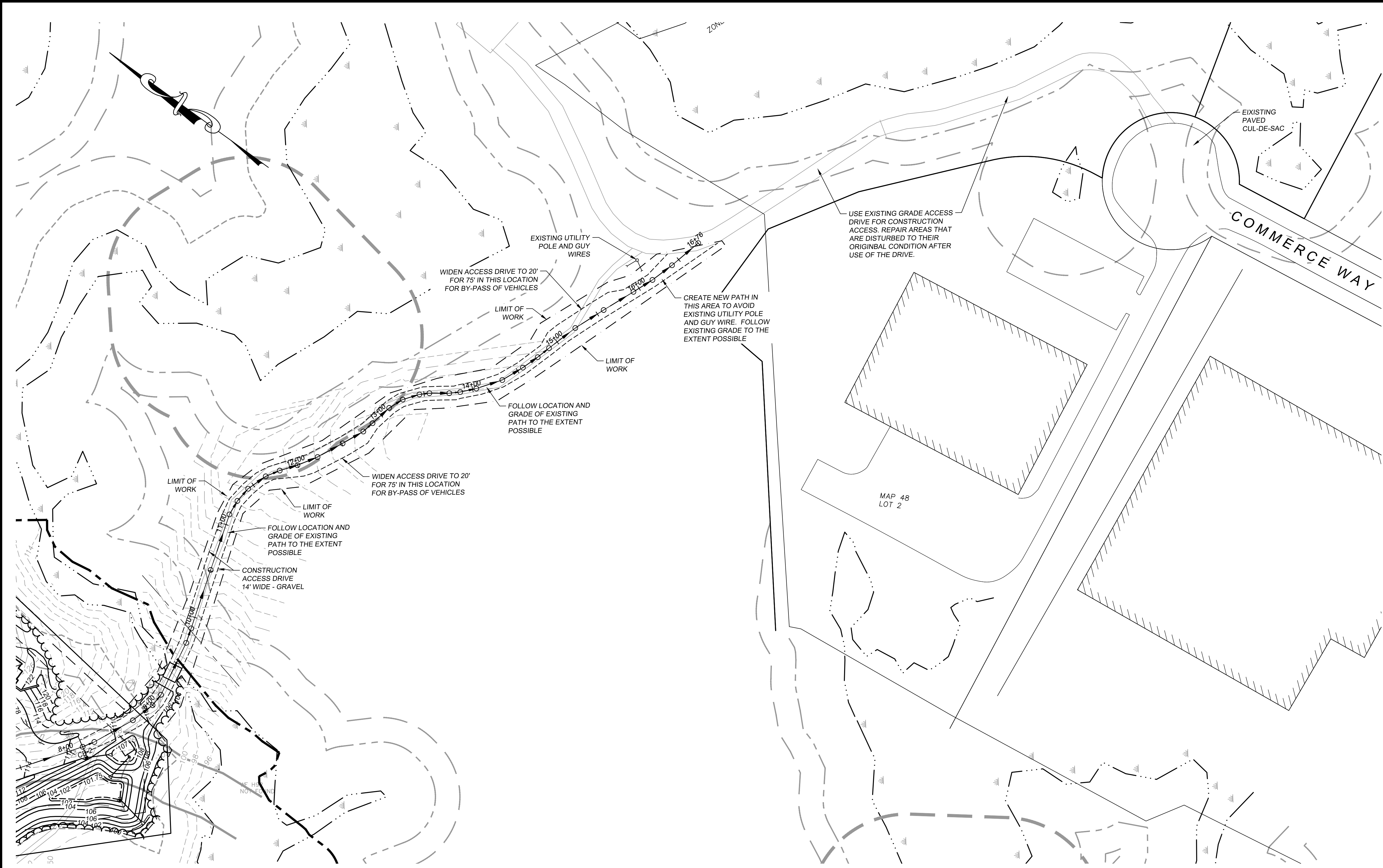
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**GRADING  
 AND DRAINAGE  
 PLAN**

Project Title:  
**Ray Farm  
 Condominium**  
 Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:  
**Ray Farm, LLC**  
 158 Shattuck Way  
 Newington, NH 03801

REVISION BLOCK			
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  - ACCESS ROAD SHOWN DEPICTS DESIGN INTENT ONLY. FINAL DESIGN TO BE COORDINATED WITH RESULTS OF THE TIF PROGRAM DESIGN.

TOWN OF EXETER PLANNING BOARD  
 \_\_\_\_\_  
 CHAIRMAN                      DATE

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Sheet Title:

# UTILITY PLAN

Project Title:

## Ray Farm Condominium

Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:

Ray Farm, LLC  
 158 Shattuck Way  
 Newington, NH 03801

### REVISION BLOCK

NO.	DATE	DESC	BY

PROJ. MGR: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D UT.DWG  
 FBK:  
 JOB #: 16042 D

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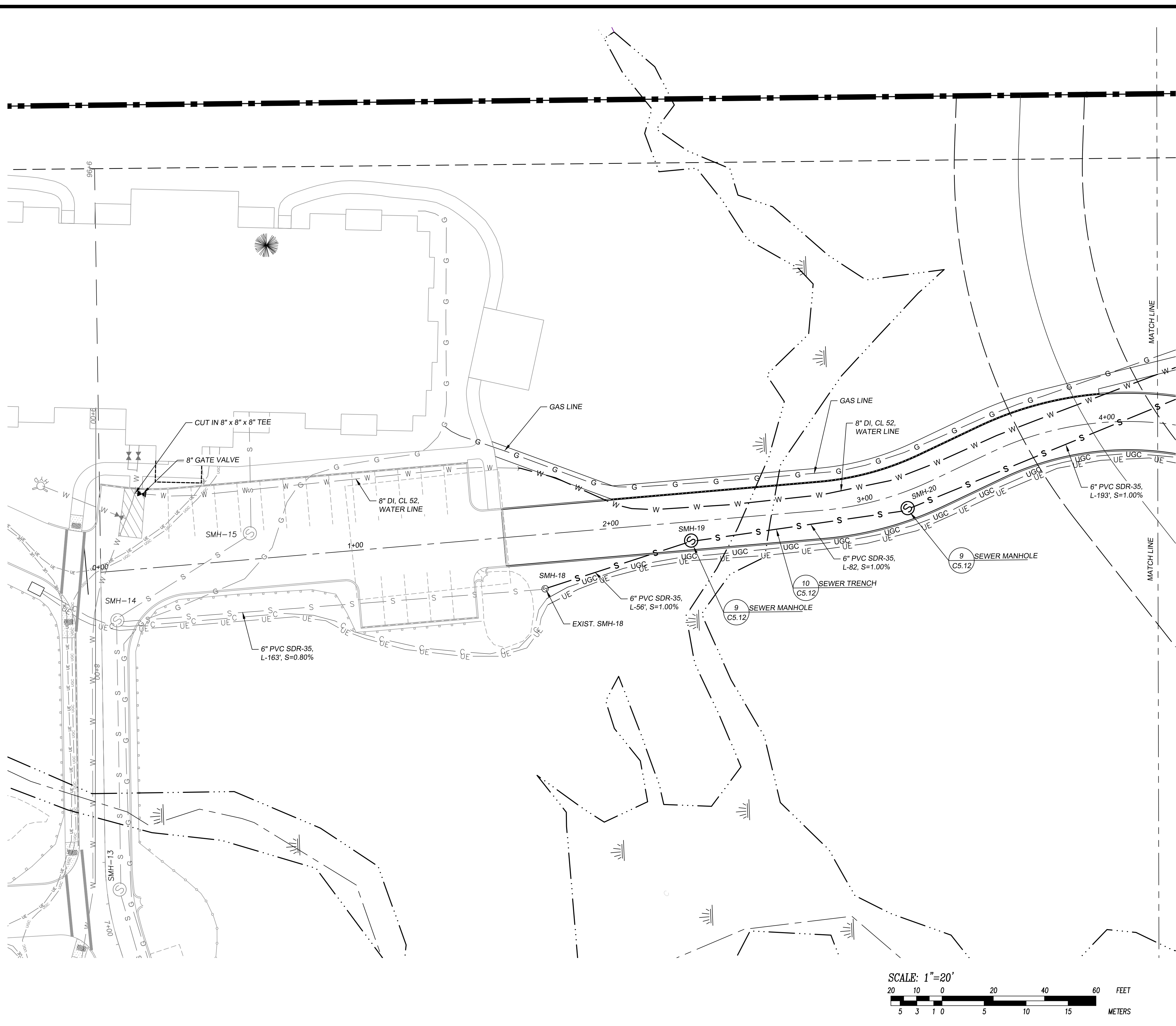
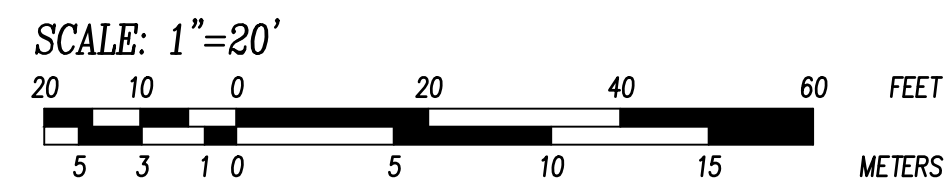
### SEWER STRUCTURES

SMH-14 EXISTING 6" INV. IN 110.60 (EX) 6" INV. OUT 110.50 (EX)	SMH-15 EXISTING 6" INV. IN 111.28 (EX) 6" INV. OUT 111.20 (EX)
SMH-18 EXISTING 6" INV. IN 111.97 (PROP) INV. OUT 111.87 (EX)	SMH-19 R-118.27 6" INV. IN 112.63 6" INV. OUT 112.53
SMH-20 R-119.10 6" INV. IN 113.55 6" INV. OUT 113.45	SMH-21 R-123.00 6" INV. IN 115.58 6" INV. OUT 115.48

- ### NOTES:
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  - ACCESS ROAD SHOWN DEPICTS DESIGN INTENT ONLY. FINAL DESIGN TO BE COORDINATED WITH RESULTS OF THE TIF PROGRAM DESIGN.

TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_



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Sheet Title:

# UTILITY PLAN

Project Title:

## Ray Farm Condominium

Ray Farmstead Road  
Exeter, NH 03833  
Rockingham County

Applicant/Owner:

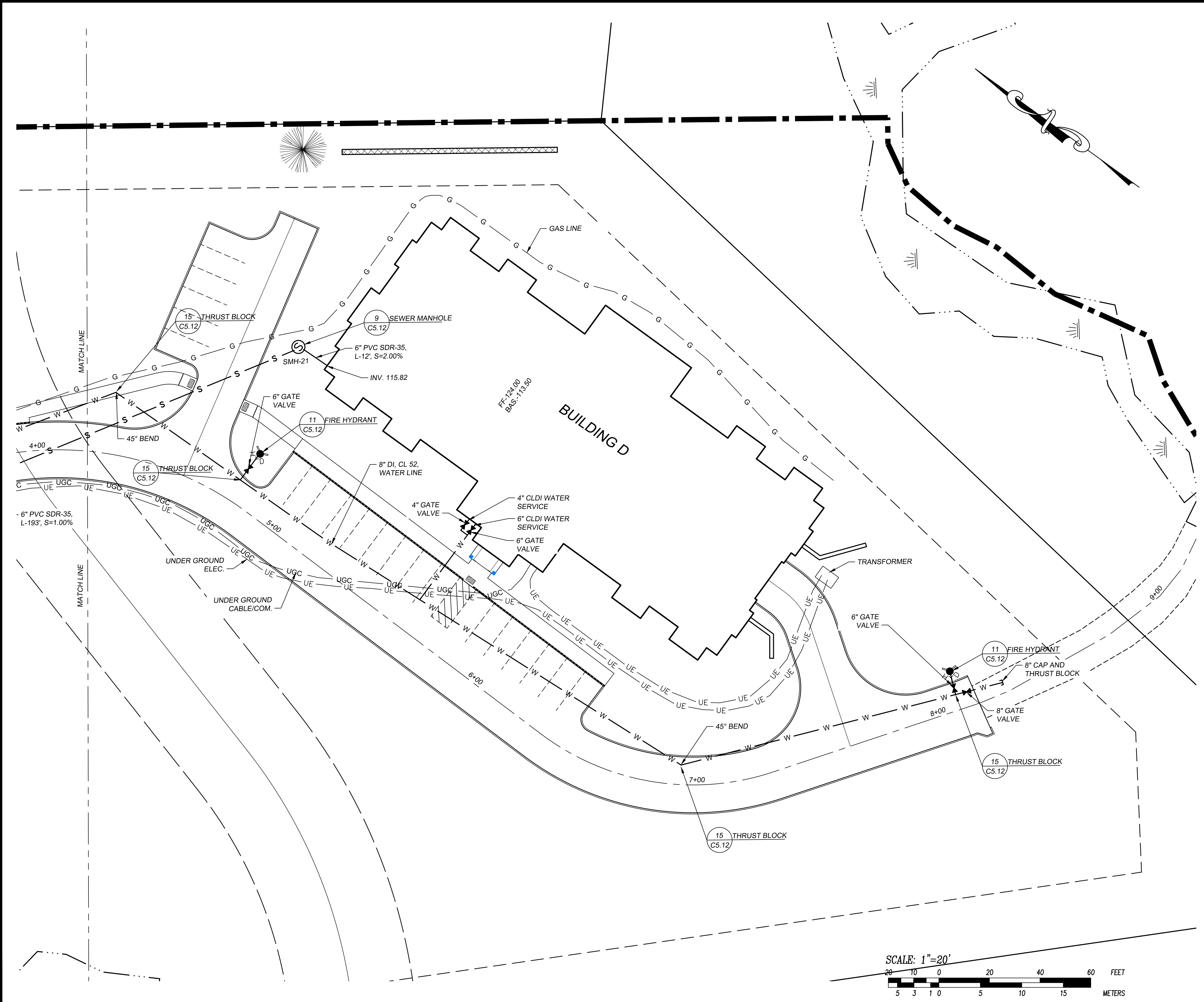
Ray Farm, LLC  
158 Shattuck Way  
Newington, NH 03801

### REVISION BLOCK

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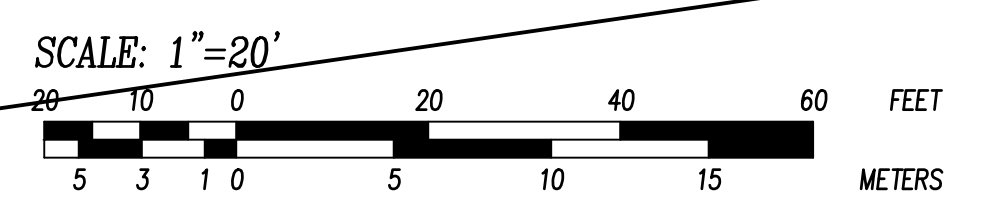
**SEWER STRUCTURES**

SMH-20 R-119.10	SMH-21 R-123.00
6" INV. IN 113.55	6" INV. IN 115.58
6" INV. OUT 113.45	6" INV. OUT 115.48



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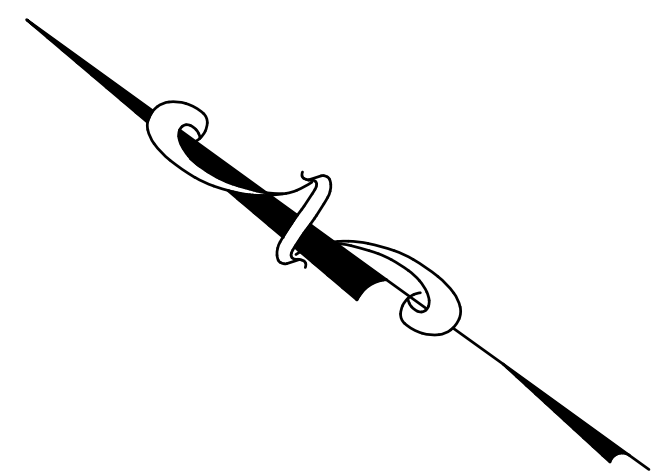
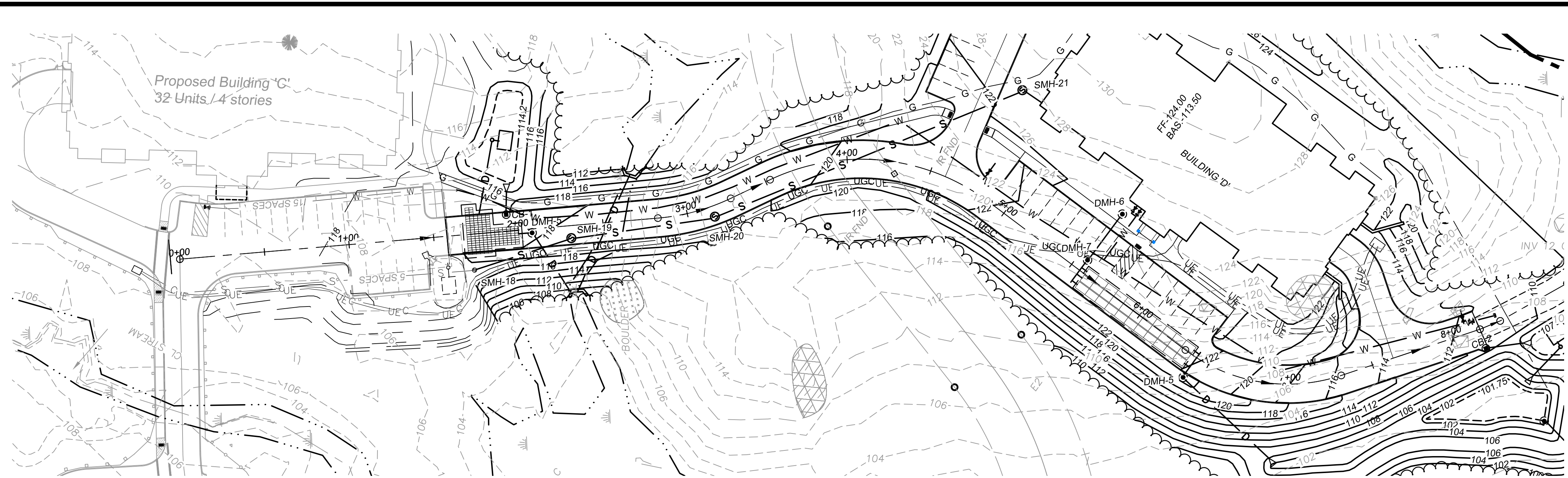
CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

PROJ. MGR.: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
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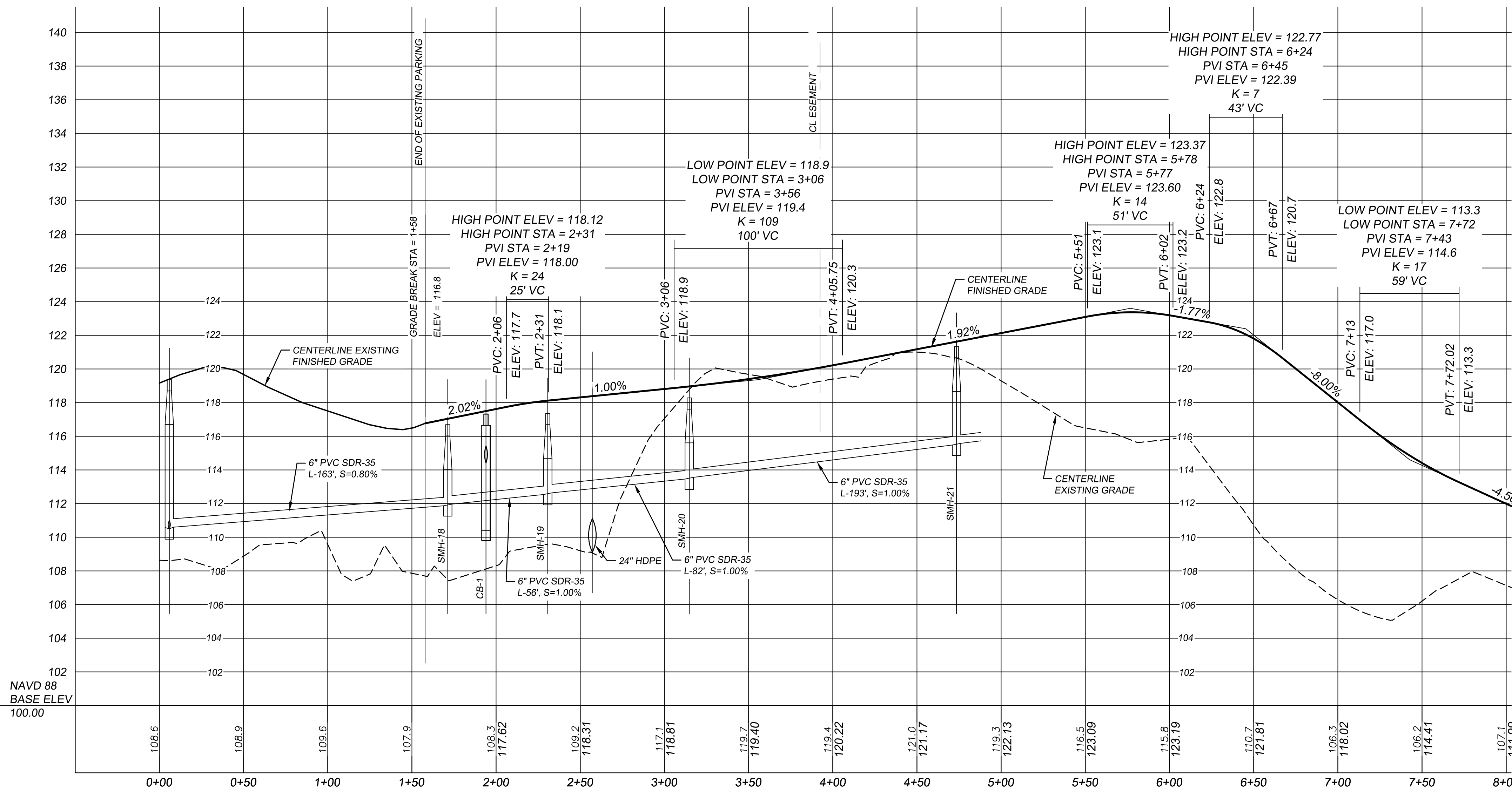
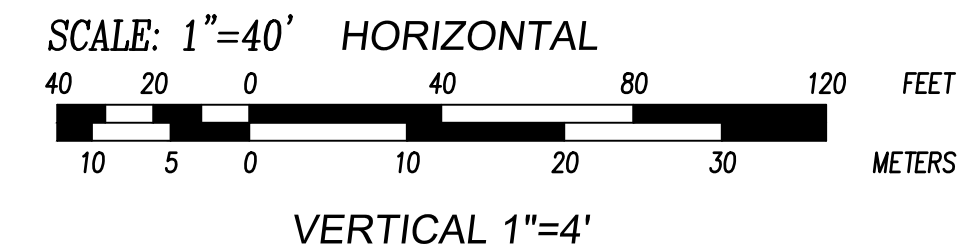


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Sheet Title:  
**PLAN  
 PROFILE**

Project Title:  
**Ray Farm  
 Condominium**  
 Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:  
**Ray Farm, LLC**  
 158 Shattuck Way  
 Newington, NH 03801



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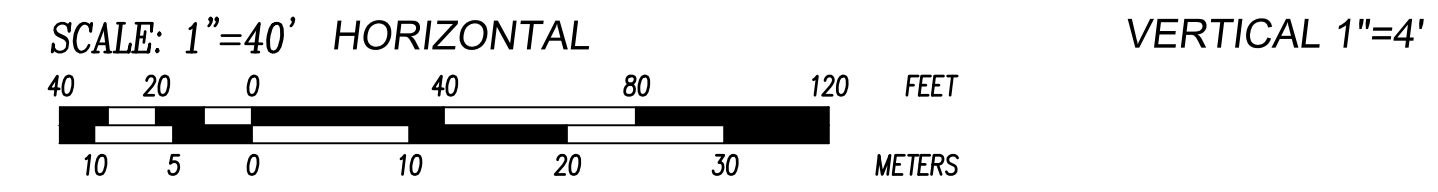
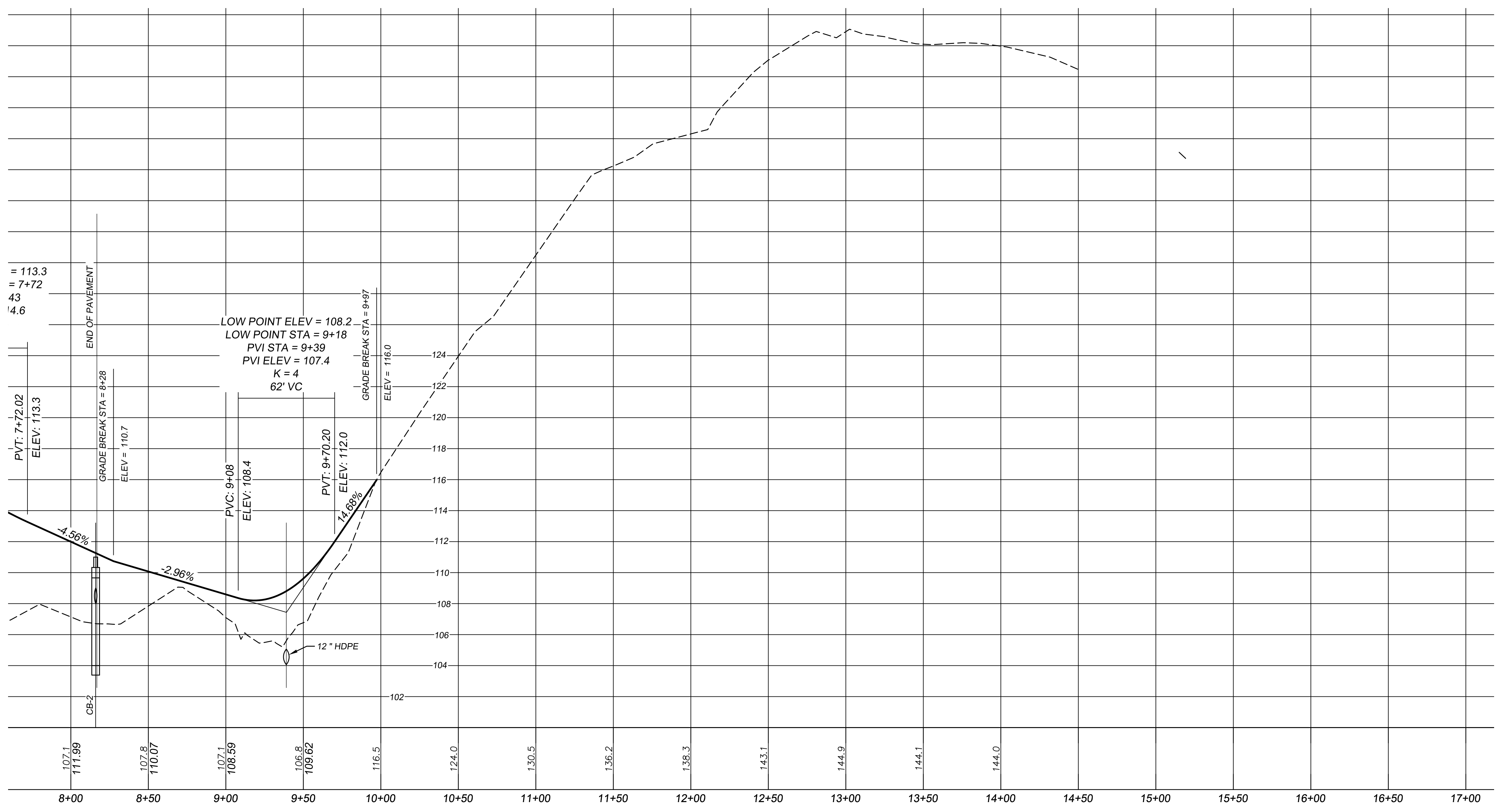
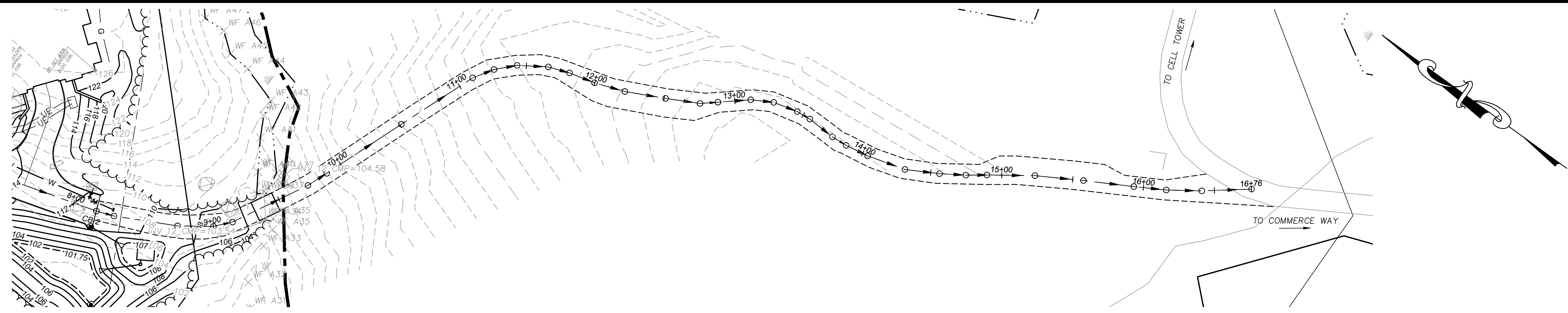
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Sheet Title:  
**EROSION  
 AND SEDIMENT  
 CONTROL PLAN**

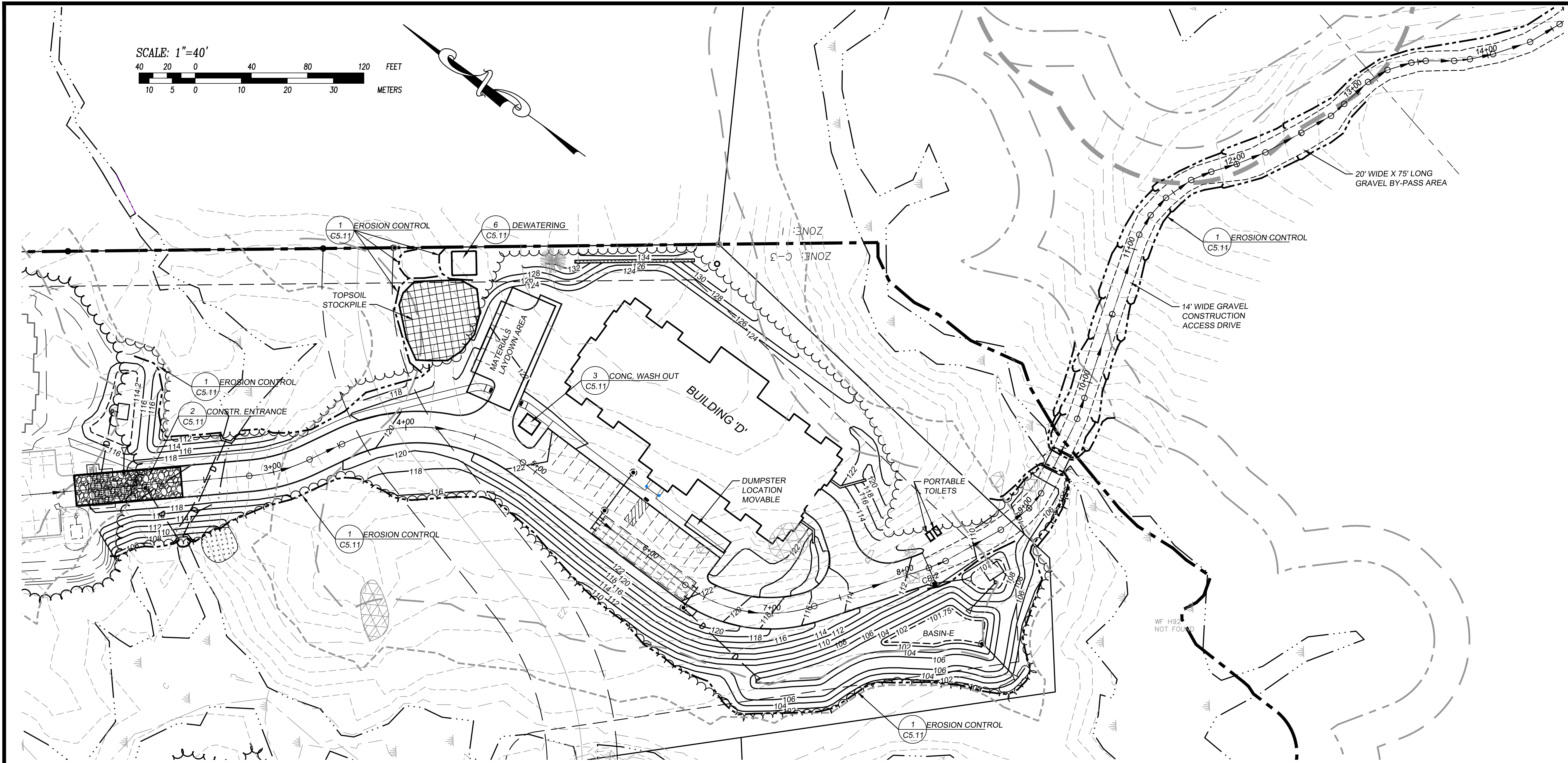
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SHEET C1.51



**Construction Sequence**

NOTE: SEE SHEET C1.52 FOR CONSTRUCTION NOTES

PRIOR TO CLEARING, OR EARTH MOVING ACTIVITIES, INSTALL TEMPORARY EROSION CONTROLS AS SHOWN. SEE SHEET C5.11 FOR EROSION CONTROL DETAILS AND TECHNIQUES.

INSTALL CONSTRUCTION ENTRANCE.

STRIP TOPSOIL AND STOCKPILE IN DESIGNATED AREA. INSTALL TEMPORARY EROSION CONTROLS AROUND STOCKPILE. BOULDERS AND LARGE ROCKS GREATER THAN TWO FEET IN DIAMETER SHALL BE STOCKPILED SEPARATELY IN A DESIGNATED AREA.

CONSTRUCT TEMPORARY SEDIMENT BASINS AND OUTLET SWALES IN SAME LOCATION AS THE FINAL BASINS AS SHOWN ON THE PLANS. ADDITIONAL TEMPORARY ROWS OF COMPOST SOCK MAY BE REQUIRED IN THE SWALES. INSTALL OUTLET PROTECTION RIP-RAP AS SHOWN PRIOR TO DIRECTING ANY STORMWATER TO THE BASINS. THE FORE-BAYS WILL SERVE AS CONSTRUCTION PERIOD SEDIMENT SETTLING AREAS BUT MUST BE CLEANED AFTER PARKING/LOADING AREAS ARE PAVED, BUILDINGS CONSTRUCTED, AND UTILITIES INSTALLED.

CREATE SWALES TO DIRECT STORMWATER FROM THE DEVELOPED PORTION OF THE SITE TO THE TEMPORARY BASINS. IMMEDIATELY STABILIZE THE SLOPES OF THE BASINS BY SEEDING AND MULCHING WITHIN 72 HOURS OF ACHIEVING FINISHED GRADES. ALTERNATE METHODS OF SLOPE STABILIZATION MAY BE REQUIRED IF WORK IS PERFORMED OUTSIDE THE GROWING SEASON.

PREPARE BUILDING SITE TO BE CONSTRUCTED. INSTALL THE BUILDING FOUNDATION AND IMMEDIATELY BRING THE FILL UP TO DESIGN GRADES. CONSTRUCT THE SLOPES IN THE AREAS SHOWN ON THE GRADING PLANS. STABILIZE THE SLOPE WITH SELECTED PLANT MATERIALS AND SEED IMMEDIATELY.

ROUGH GRADE PARKING AREAS TO SUBBASE ELEVATIONS. FILL WILL BE REQUIRED TO BRING PARKING AREAS TO THE DESIGN GRADES. IMPORTED FILL SHALL BE COMPACTED TO A MINIMUM OF 95% DENSITY. WATER MAY BE REQUIRED TO BRING THE FILL TO THE APPROPRIATE MOISTURE CONTENT FOR PROPER COMPACTION. DO NOT OVER WATER AND CREATE RUNOFF. DO NOT CONTINUE THE FILLING OPERATION DURING INTENSE RAINFALL OR IF RAINFALL IS ANTICIPATED. INSTALL ADDITIONAL EROSION CONTROL AT THE BASE OF SLOPES WHEN RAIN IS ANTICIPATED, AND LEAVE IT IN PLACE UNTIL SLOPES ARE STABILIZED OR ADDITIONAL FILL IS INSTALLED.

INSTALL PERMANENT STORMWATER TREATMENT DEVICES INCLUDING THE "FOCAL POINT" BIO-RETENTION SYSTEMS AS SHOWN ON THE PLANS. DO NOT ALLOW STORMWATER FLOW TO THE DEVICES FROM UNSTABILIZED AREAS. IF STORMWATER FLOWS ARE ANTICIPATED TO REACH THE TREATMENT DEVICES PRIOR TO FINAL STABILIZATION, ENCASE THE DEVICES WITH FILTER FABRIC.

INSTALL UNDERGROUND UTILITIES. BACKFILL AND COMPACT TRENCHES. IF DEWATERING IS REQUIRED TO INSTALL UTILITIES OR STRUCTURES, CONSTRUCT THE DEWATERING AREA AS PER THE DETAIL ON SHEET C 5.11 AND PLACE IN THE DESIGNATED AREA. ADDITIONAL ROWS OF COMPOST SOCK MAY BE REQUIRED AT THE DISCHARGE POINT IF THE WATER IS NOT CLEAR. INSTALL AND COMPACT PARKING AREA GRAVEL. INSTALL THE BINDER COURSE IN PARKING AREAS WITHIN 72 HOURS OF PLACING GRAVEL.

INSTALL UTILITY CONNECTIONS. SPREAD TOPSOIL IN GRASS AND LANDSCAPED AREAS AND IMMEDIATELY SEED AND MULCH IF NEEDED. ADDITIONAL EROSION CONTROL MAY BE NEEDED TO CONTROL EROSION AND SILTS FROM ENTERING THE TEMPORARY SETTLEMENT BASIN.

**NOTES:**

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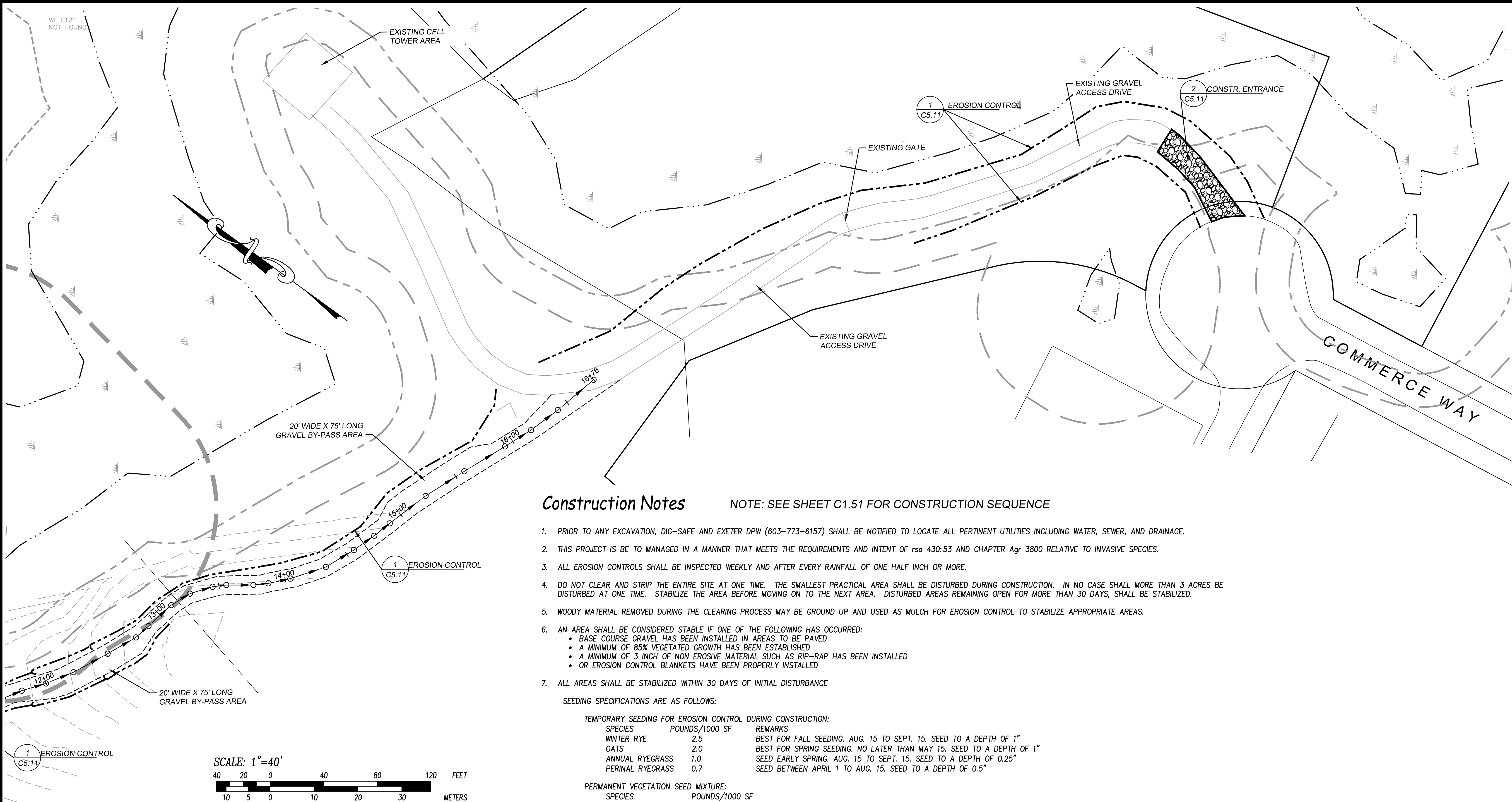
Sheet Title:  
**EROSION  
 AND SEDIMENT  
 CONTROL PLAN**

Project Title:  
**Ray Farm  
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 Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:  
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 158 Shattuck Way  
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 FILE: 16042 D ES.DWG  
 FBK:  
 JOB #: 16042 D



**Construction Notes** NOTE: SEE SHEET C1.51 FOR CONSTRUCTION SEQUENCE

- PRIOR TO ANY EXCAVATION, DIG-SAFE AND EXETER DPW (603-773-6157) SHALL BE NOTIFIED TO LOCATE ALL PERTINENT UTILITIES INCLUDING WATER, SEWER, AND DRAINAGE.
- THIS PROJECT IS BE TO MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER Agr 3800 RELATIVE TO INVASIVE SPECIES.
- ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY RAINFALL OF ONE HALF INCH OR MORE.
- DO NOT CLEAR AND STRIP THE ENTIRE SITE AT ONE TIME. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION. IN NO CASE SHALL MORE THAN 3 ACRES BE DISTURBED AT ONE TIME. STABILIZE THE AREA BEFORE MOVING ON TO THE NEXT AREA. DISTURBED AREAS REMAINING OPEN FOR MORE THAN 30 DAYS, SHALL BE STABILIZED.
- WOODY MATERIAL REMOVED DURING THE CLEARING PROCESS MAY BE GROUND UP AND USED AS MULCH FOR EROSION CONTROL TO STABILIZE APPROPRIATE AREAS.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
  - BASE COURSE GRAVEL HAS BEEN INSTALLED IN AREAS TO BE PAVED
  - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
  - A MINIMUM OF 3 INCH OF NON EROSION MATERIAL SUCH AS RIP-RAP HAS BEEN INSTALLED
  - OR EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED
- ALL AREAS SHALL BE STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE

SEEDING SPECIFICATIONS ARE AS FOLLOWS:

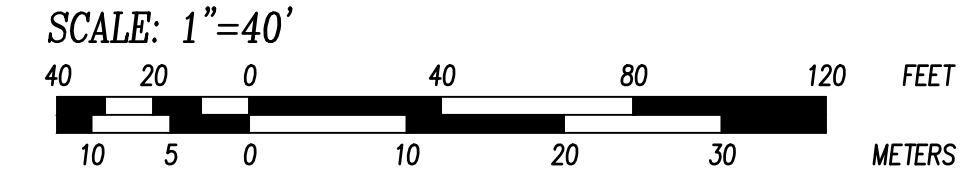
TEMPORARY SEEDING FOR EROSION CONTROL DURING CONSTRUCTION:

SPECIES	POUNDS/1000 SF	REMARKS
WINTER RYE	2.5	BEST FOR FALL SEEDING. AUG. 15 TO SEPT. 15. SEED TO A DEPTH OF 1"
OATS	2.0	BEST FOR SPRING SEEDING. NO LATER THAN MAY 15. SEED TO A DEPTH OF 1"
ANNUAL RYEGRASS	1.0	SEED EARLY SPRING. AUG. 15 TO SEPT. 15. SEED TO A DEPTH OF 0.25"
PERENNIAL RYEGRASS	0.7	SEED BETWEEN APRIL 1 TO AUG. 15. SEED TO A DEPTH OF 0.5"

PERMANENT VEGETATION SEED MIXTURE:

SPECIES	POUNDS/1000 SF
TALL FESCUE	0.45
CREeping RED FESCUE	0.45
BIRDSFOOT TREFOIL	0.20
TOTAL	1.10

- ALL RE-VEGETATED AREAS THAT DO NOT EXHIBIT 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS (ON 3:1 SLOPES OR STEEPER), SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, OR SECURING WITH ANCHORED NETTING. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER SNOW OR FROZEN GROUND AND SHALL BE COMPLETED PRIOR TO AN ACCUMULATION OF SNOW AND/OR FROST.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15, INCOMPLETE ROADS 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.
- CONCRETE WASH OUT SHALL BE CONDUCTED IN THE AREAS SHOWN ON SHEETS C1.51 AND C1.52. AND USE THE CONCRETE WASH OUT DETAIL SHOWN ON SHEET C5.11.
- NO STUMPS OR DEBRIS SHALL BE BURIED ONSITE. ALL STUMPS AND CONSTRUCTION DEBRIS SHALL BE STORED ONSITE UNTIL THEY CAN BE DISPOSED OFF OFFSITE IN A FACILITY CAPABLE OF HANDLING SUCH MATERIALS.
- TEMPORARY PORTABLE TOILETS SHALL BE PROVIDED AND PROPERLY MAINTAINED ONSITE FOR THE DURATION OF THE PROJECT.
- VEHICLE MAINTENANCE SHALL BE PERFORMED OFF SITE. ANY VEHICLE LEAKING OIL OR GREASE SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE. FUEL AND OILS SHALL BE STORED IN AN APPROVED LOCATION AND COMPLY WITH LOCAL, STATE, AND FEDERAL REGULATIONS. IN NO CASE SHALL THEY BE STORED WITHIN 100' OF WETLAND AREAS.



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Sheet Title:

# DETAILS

Project Title:

## Ray Farm Condominium

Ray Farmstead Road  
Exeter, NH 03833  
Rockingham County

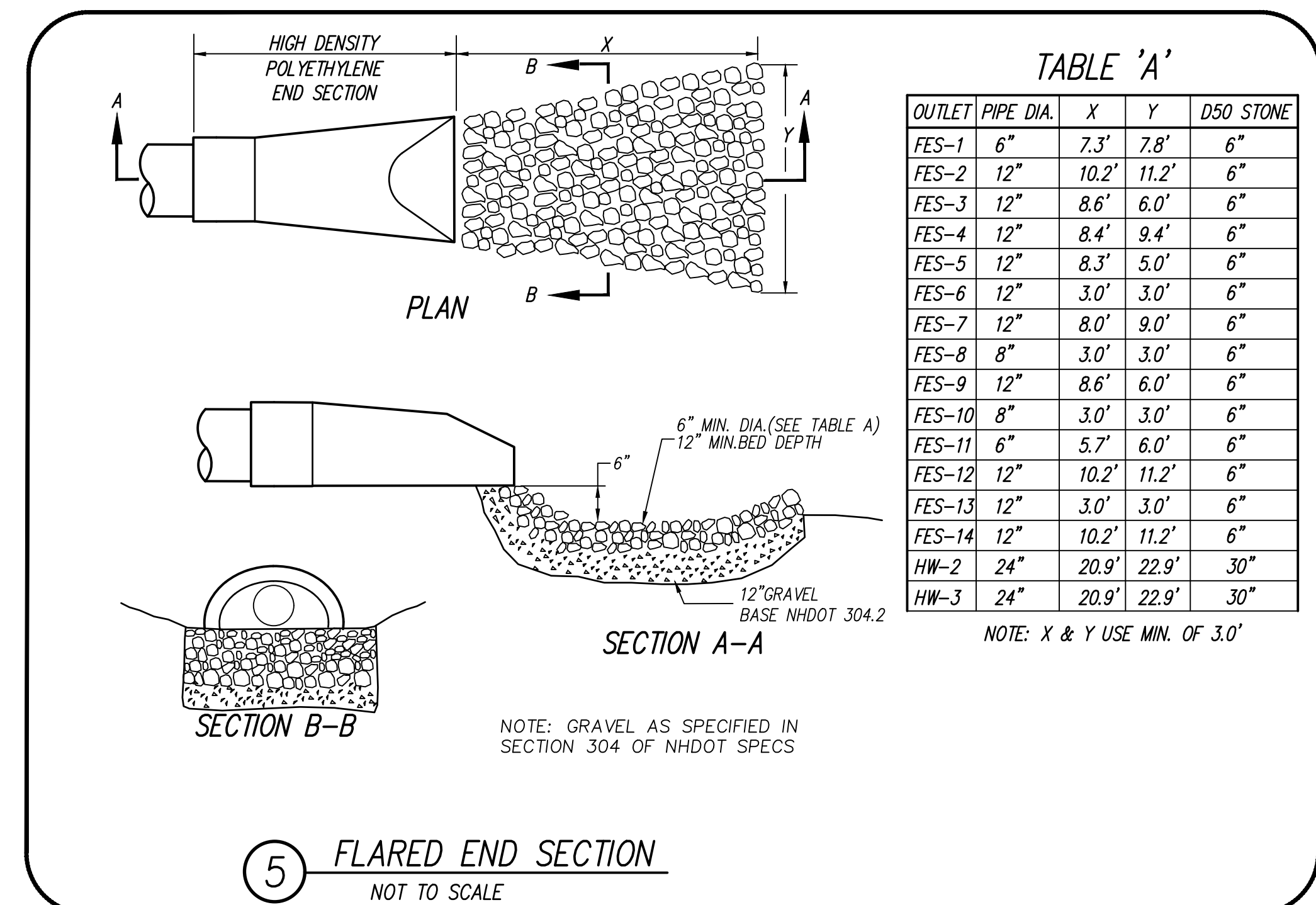
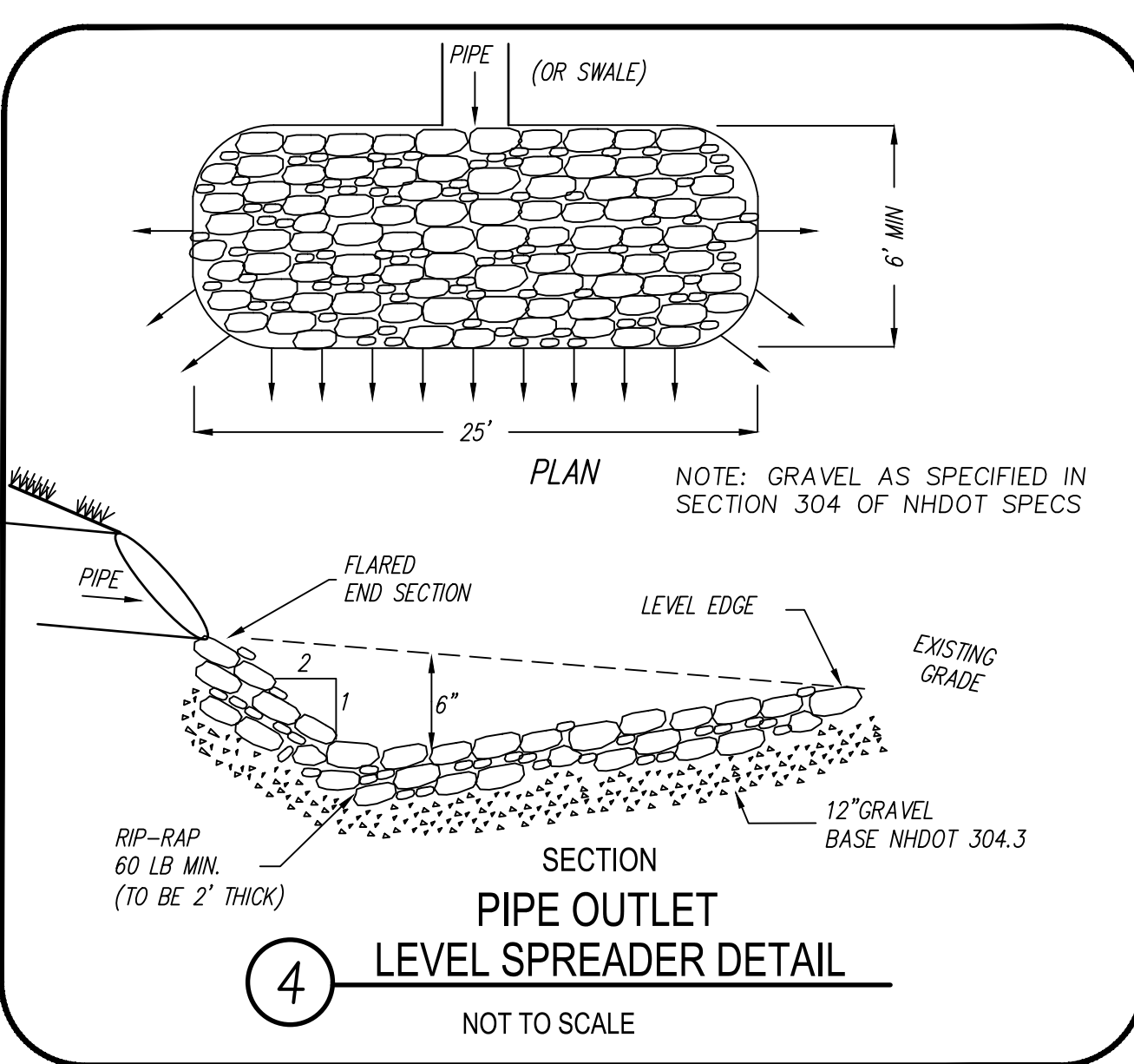
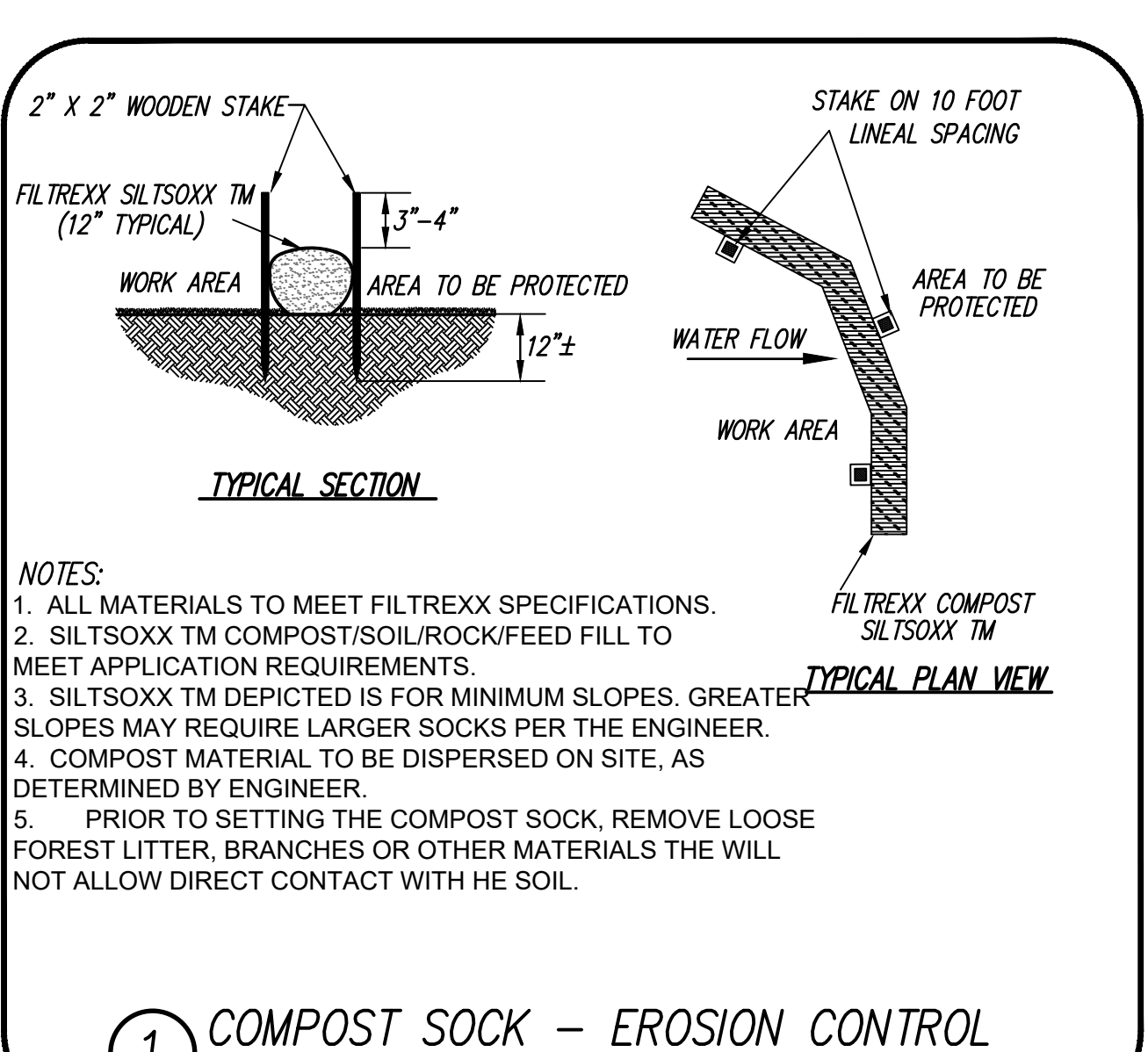
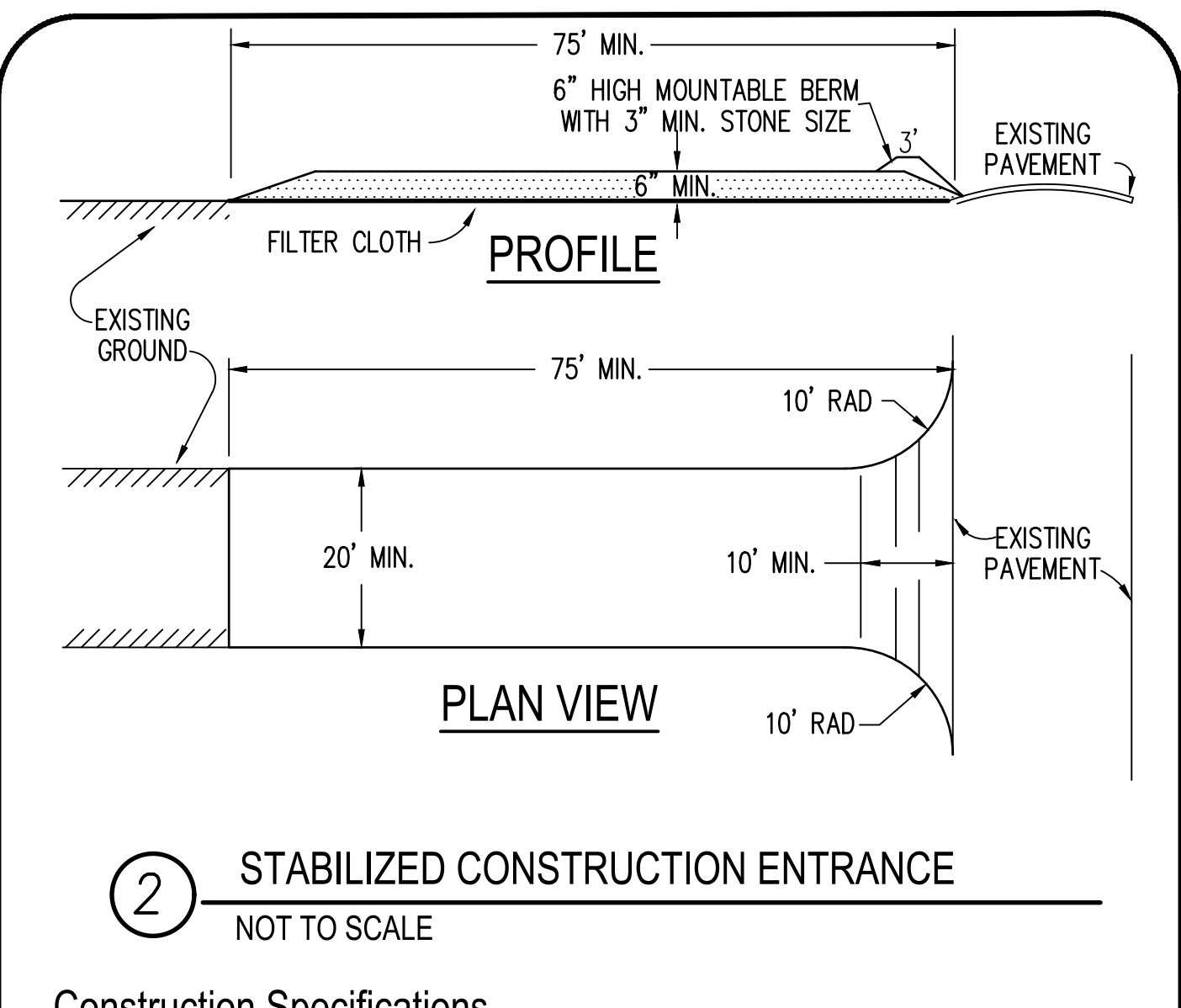
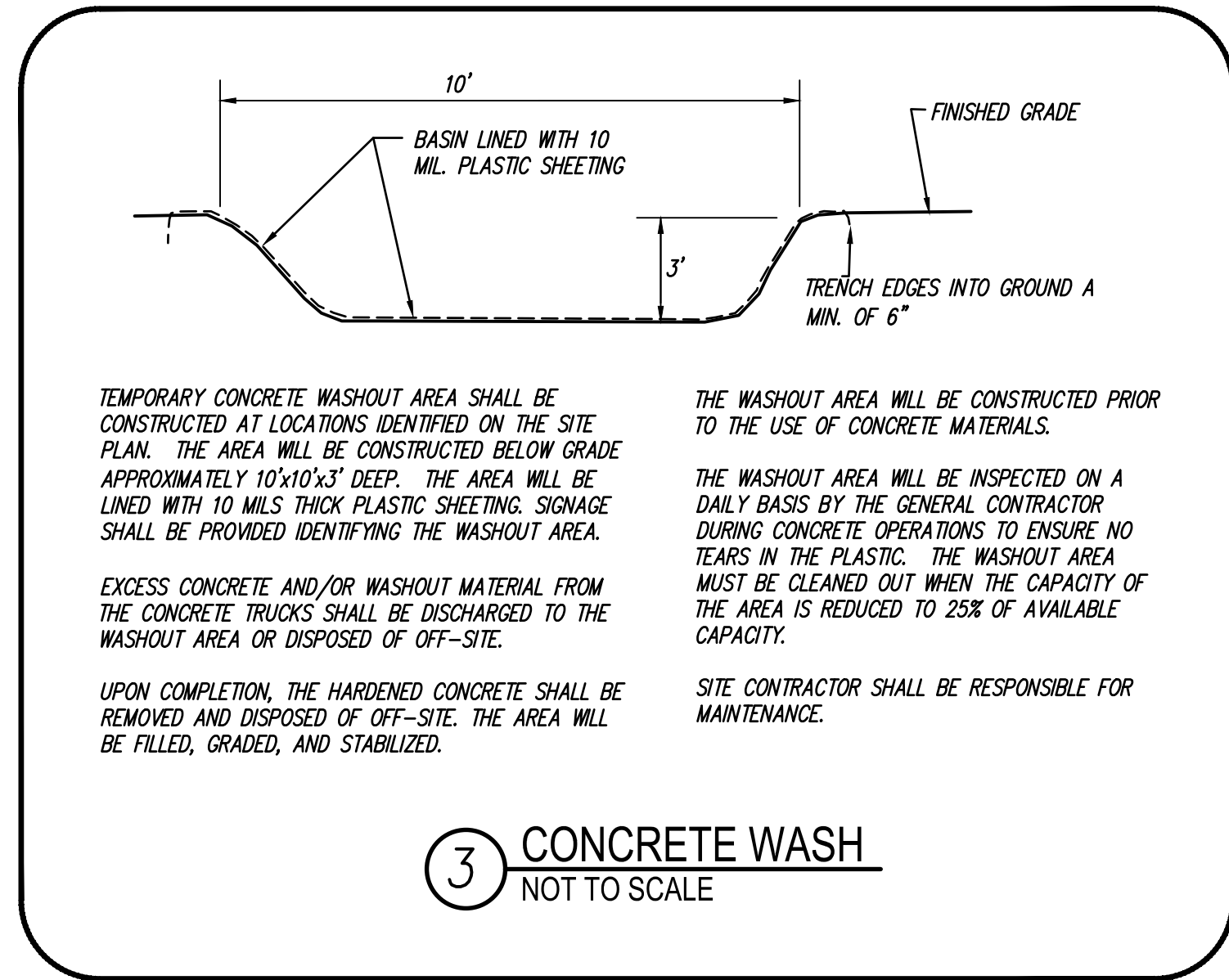
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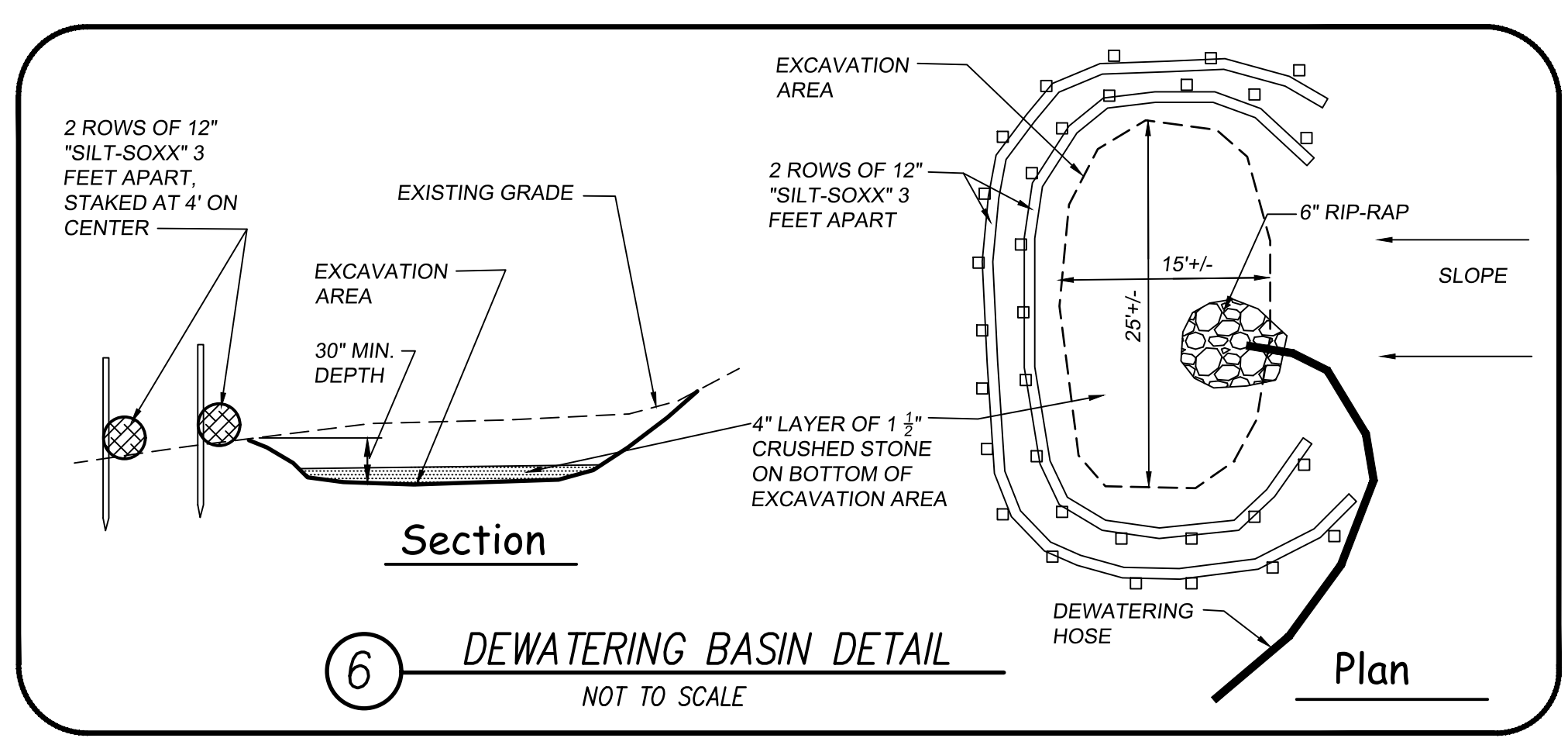
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DRAWN:	D. HAMEL
CHECKED:	D. GIANGRANDE
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FBK:	
JOB #:	16042 D



**Construction Specifications**

- STONE SIZE - USE 3" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - AS REQUIRED, BUT NOT LESS THAN 75 FEET
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - TWENTY (20) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAINFALL EVENT.



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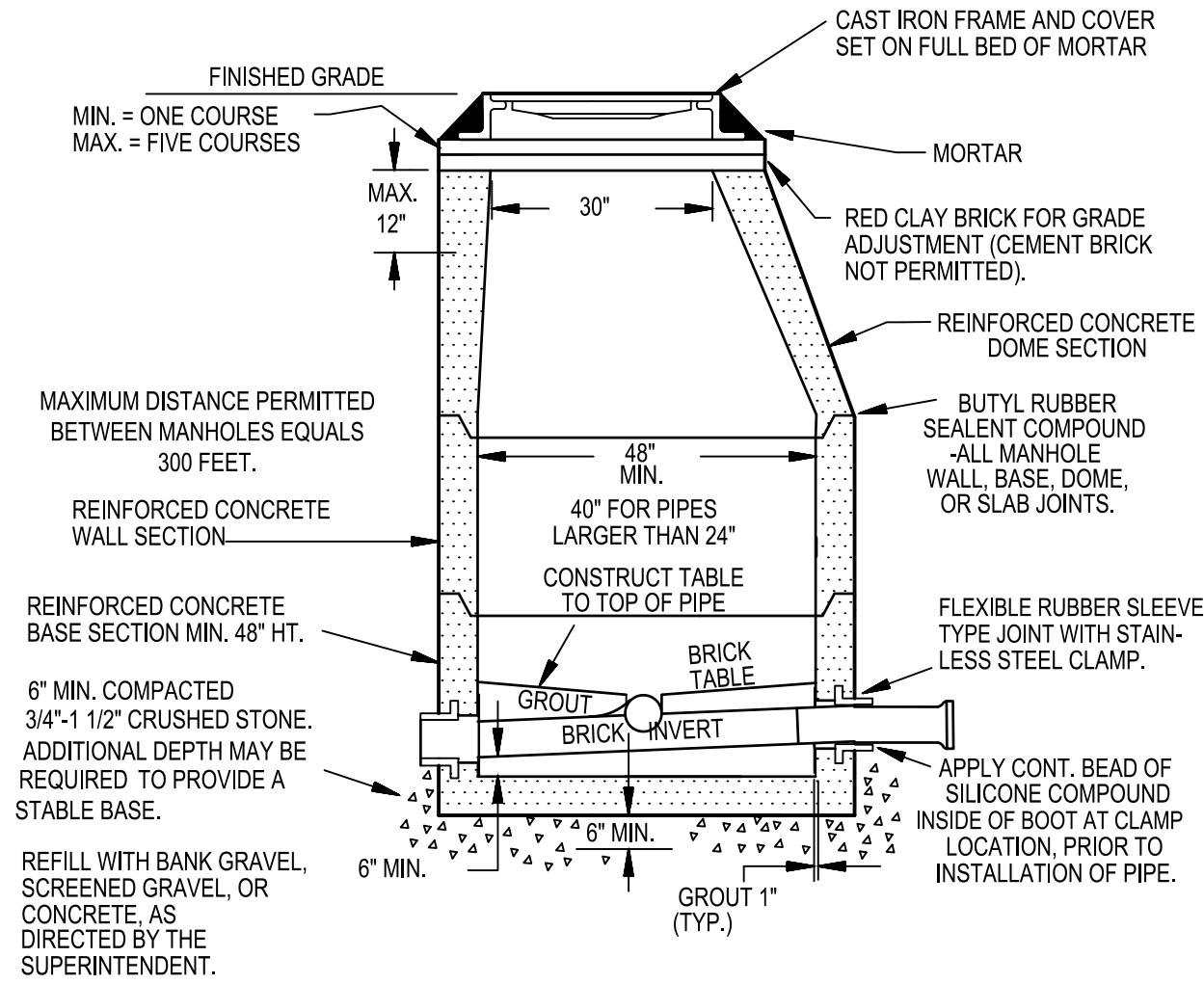
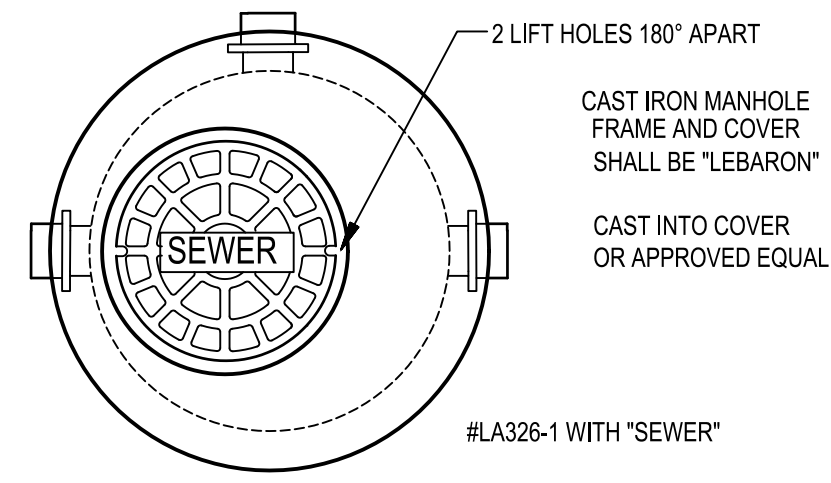
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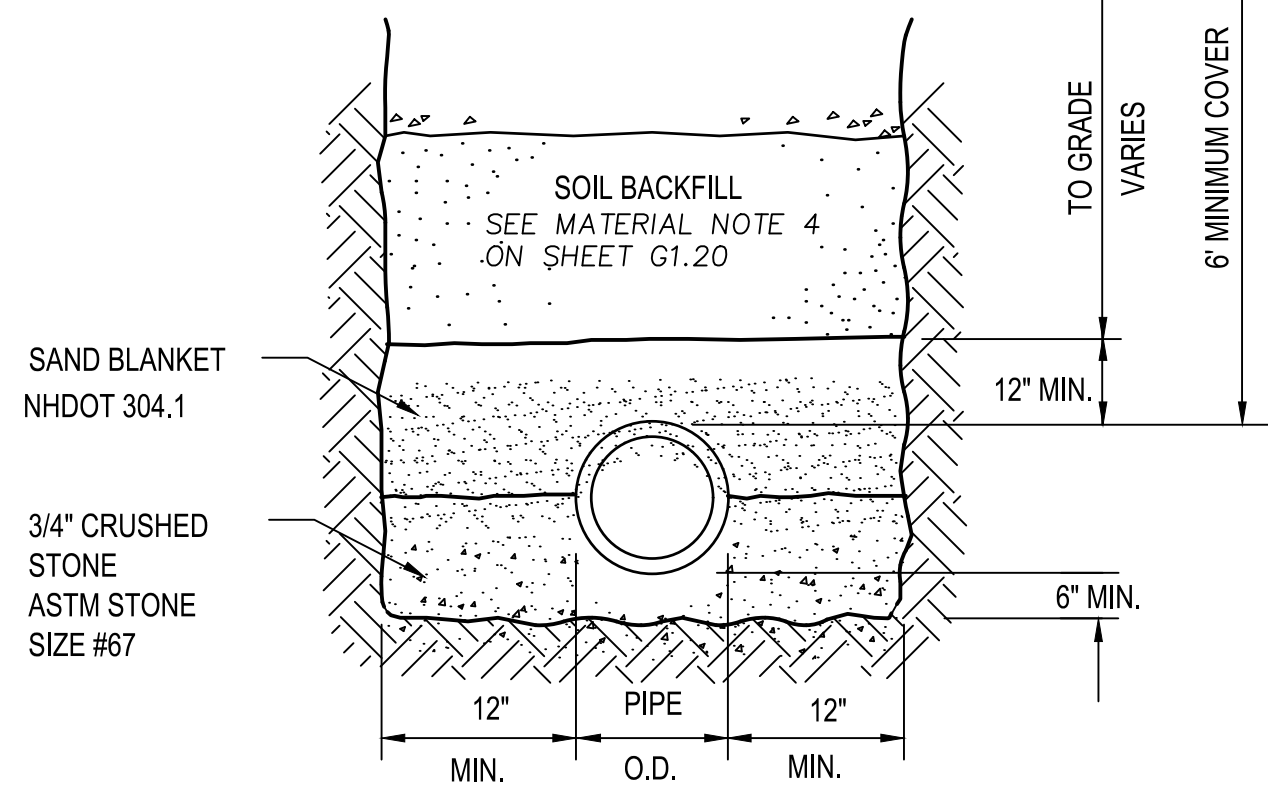
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**MANHOLE TESTING: VACUUM TEST MANHOLE FOR LEAKAGE**  
 THE INITIAL VACUUM GAUGE TEST PRESSURE SHALL BE 10 INCHES Hg. THE MINIMUM TEST HOLD FOR A 1 INCH DROP TO 9 INCHES Hg SHALL BE NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP, 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP, AND NOT LESS THAN 3 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP.

- NOTES:
- GRAVEL AS SPECIFIED IN SECTION 304 OF NHDOT SPECS
  - SEWER MANHOLE SHALL BE RATED FOR H-20 LOADING
  - BRICK INVERTS TO BE INSTALLED AFTER TESTING
  - NO STEPS IN MANHOLE
  - BRICKS FOR GRADE ADJUSTMENTS ARE A MAXIMUM OF 5 COURSES

**9 SEWER MANHOLE**  
NOT TO SCALE

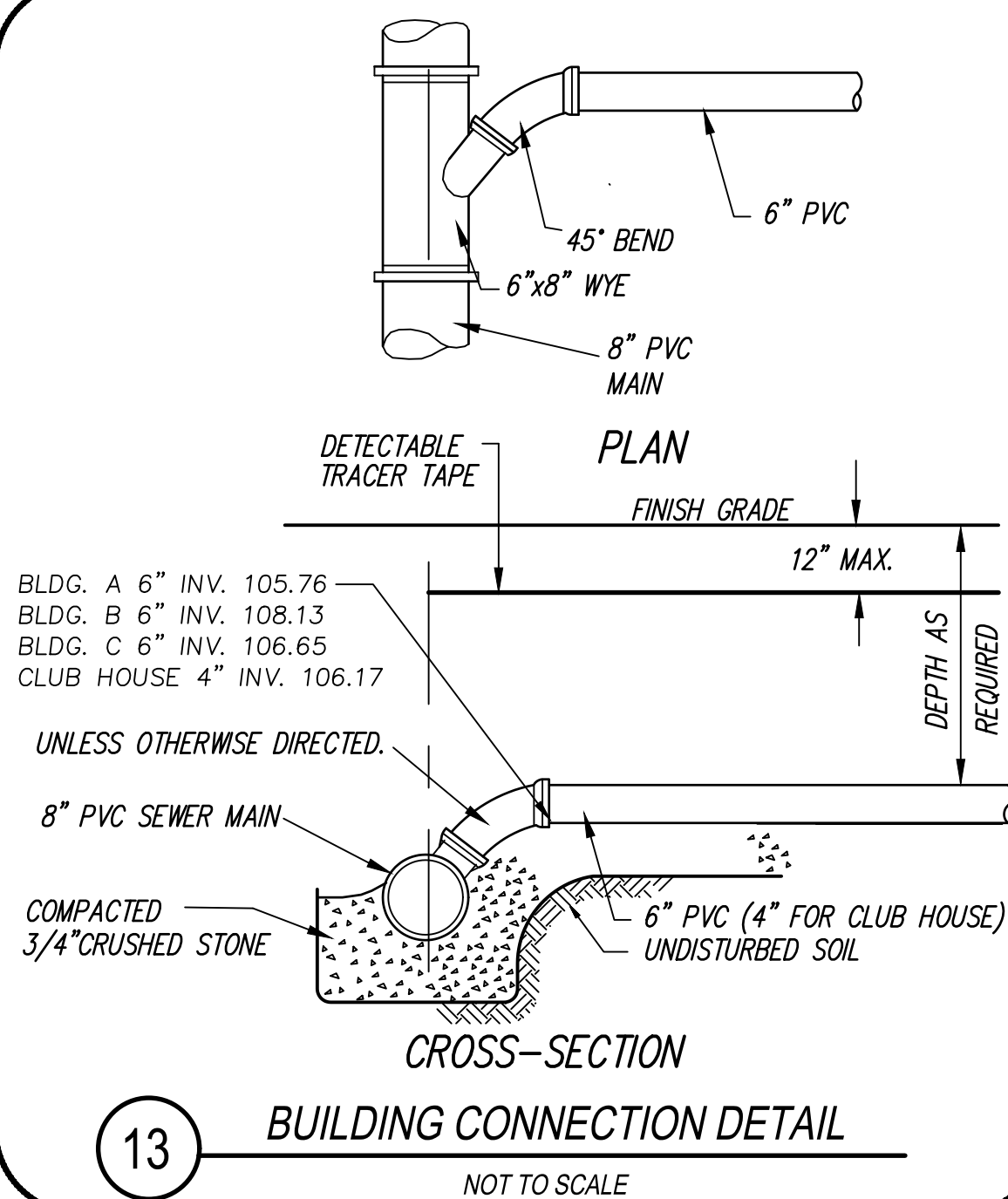


- NOTES:
- GRAVITY SEWER TO BE PVC SDR 35 CONFORMING TO ASTM D3034-04a
  - PLASTIC SEWER PIPE SHALL HAVE A PIPE STIFFNESS RATING OF AT LEAST 46 POUNDS PER SQUARE INCH AT 5% PIPE DIAMETER AS MEASURED WITH ASTM D2412-02 DURING MANUFACTURE.
  - JOINT SEALS OF PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D3212-96(a) AND BE PUSH-ON, BELL-AND-SPIGOT TYPE.
  - SAND BLANKET SHALL BE FREE OF ORGANIC MATERIALS, 100% PASSING 1/2" SIEVE, AND MAXIMUM 15% PASSING #200 SIEVE.
  - COMPACT BEDDING AND SAND BLANKET IN MAXIMUM OF 12" LIFTS.
  - COMPACT BACKFILL MATERIAL IN MAXIMUM OF 12" LIFTS.

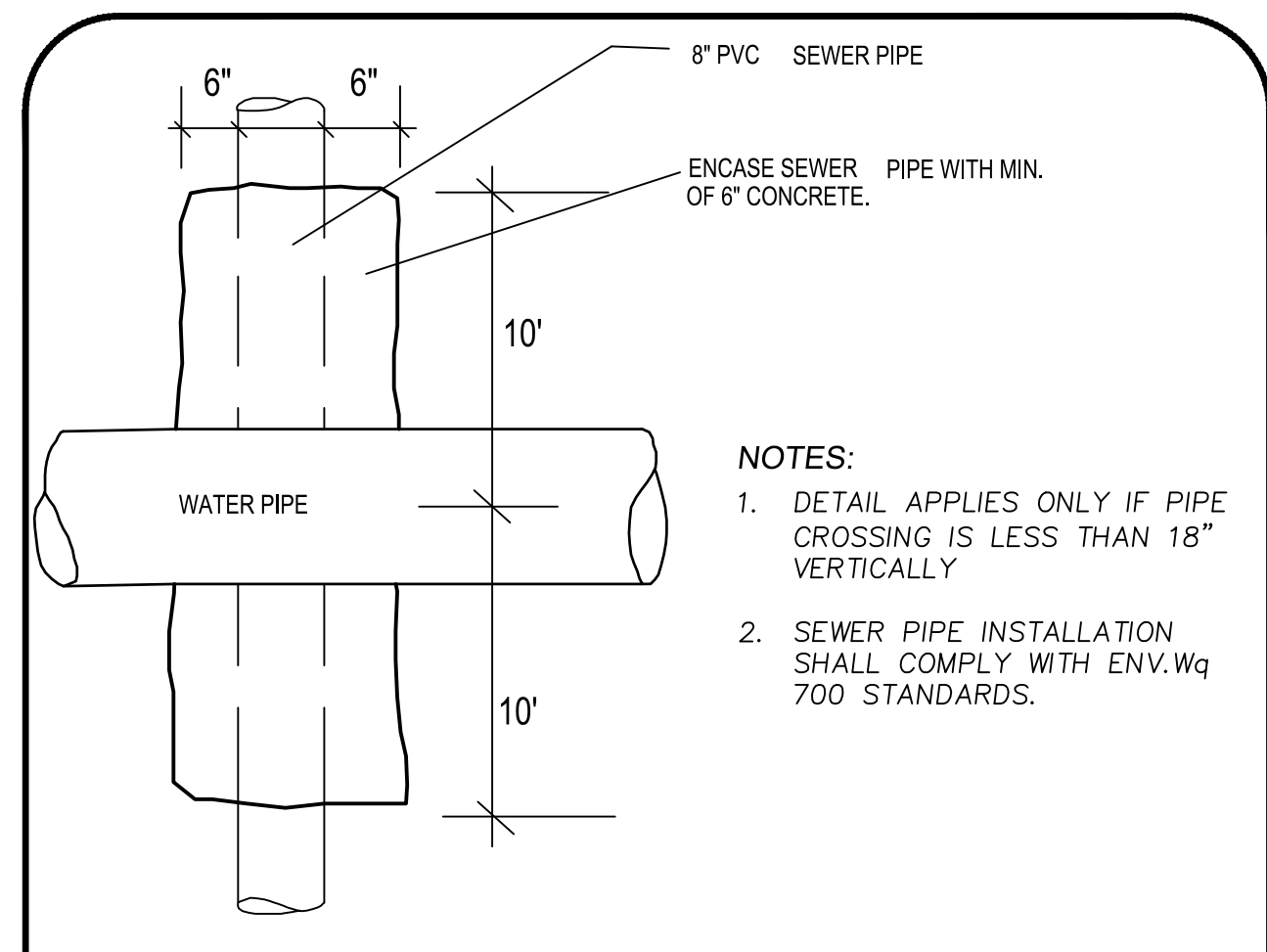
**GRAVITY SEWER PIPE TESTING**  
 LOW PRESSURE AIR TESTS SHALL BE USED FOR ALL NEW GRAVITY SEWERS CONFORMING TO ASTM F1417 "STANDARD TEST METHOD OF INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW-PRESSURE AIR" OR UNI-BELL PVC PIPE ASSOCIATION UNI-B-6, "LOW PRESSURE AIR TESTING OF INSTALLED SEWER PIPE (1998).

DEFLECTION TEST ALL PLASTIC SEWER PIPE NOT LESS THAN 30 DAYS NOR MORE THAN 90 DAYS FOLLOWING INSTALLATION. MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 5 1/2% OF AVERAGE INSIDE DIAMETER.

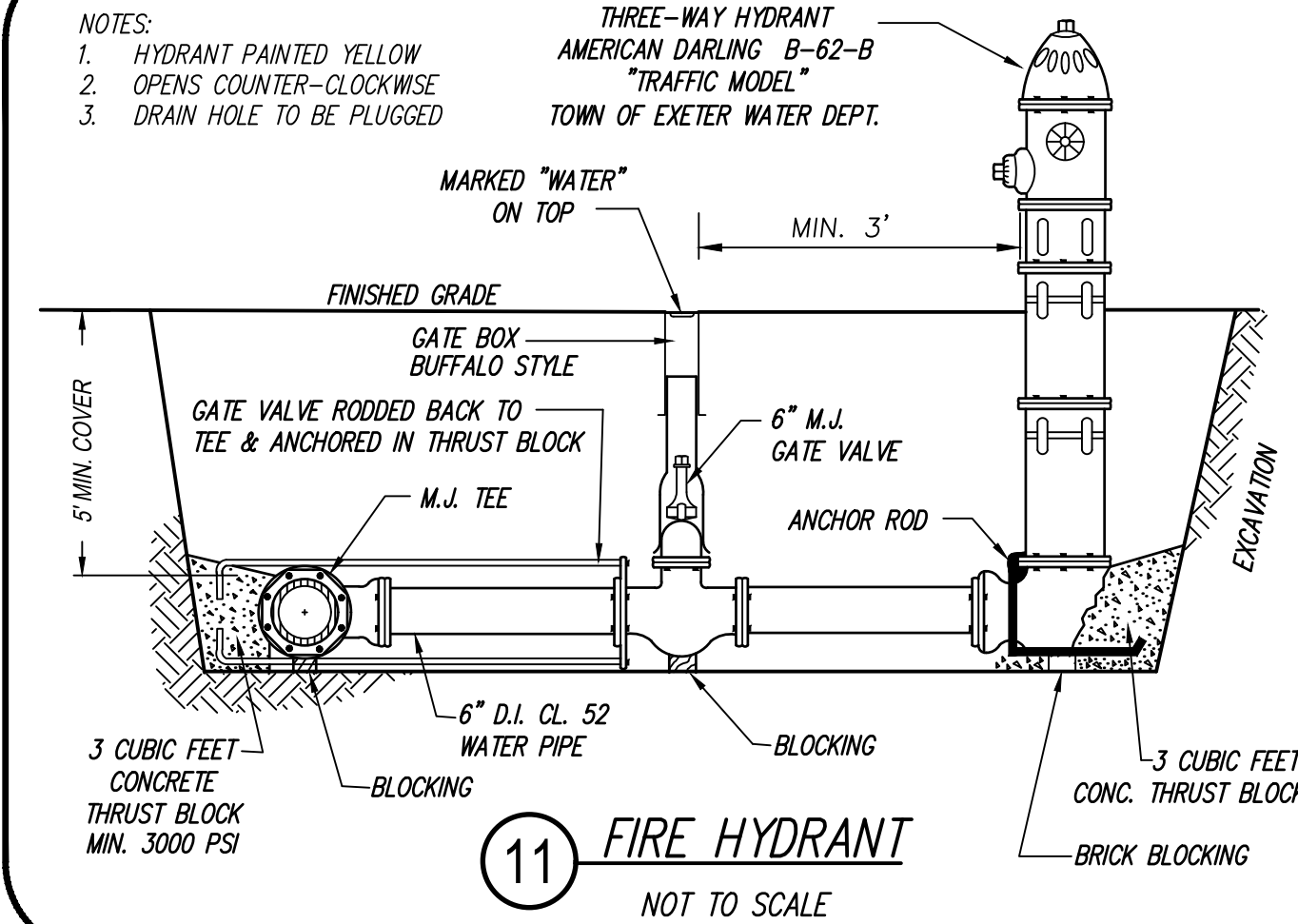
**10 SEWER TRENCH**  
NOT TO SCALE



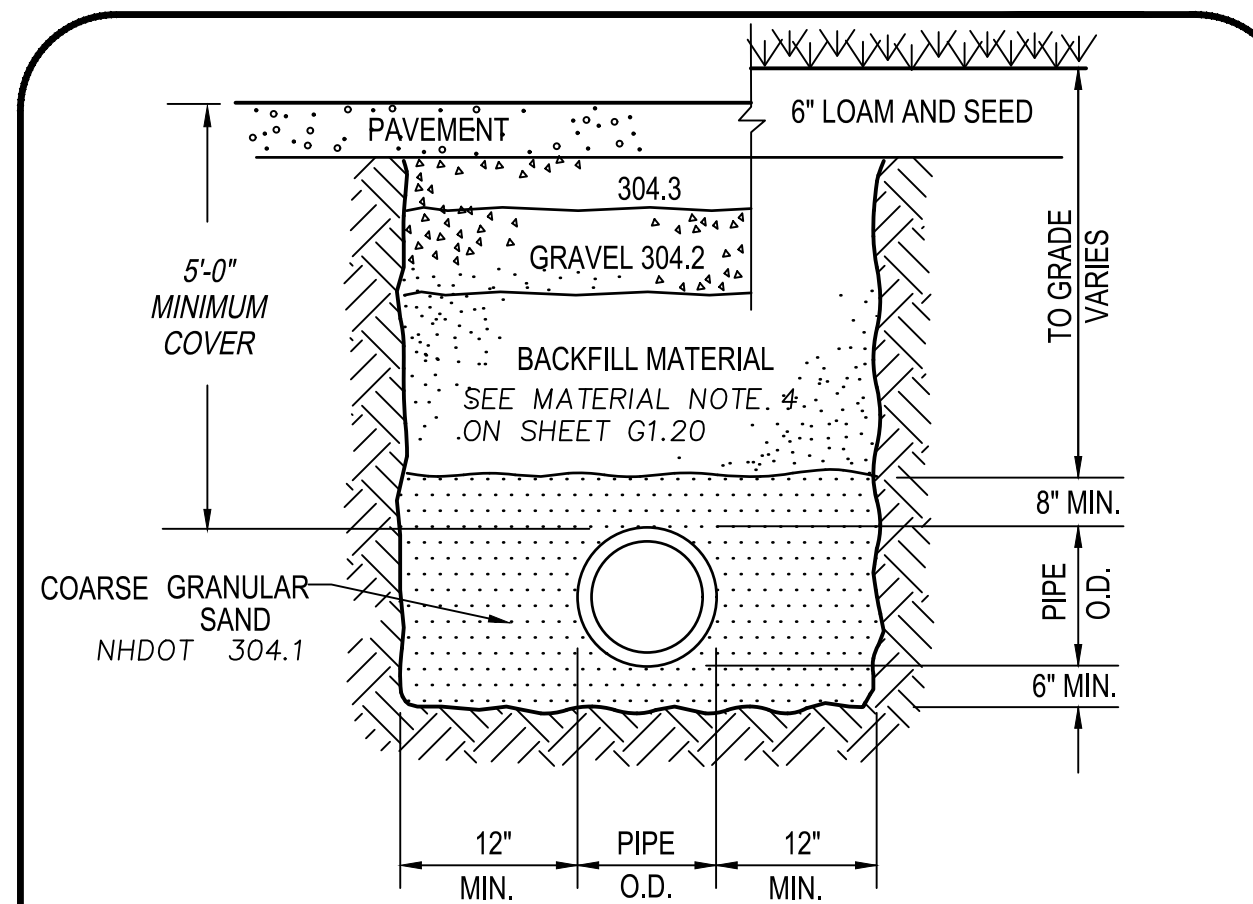
**13 BUILDING CONNECTION DETAIL**  
NOT TO SCALE



**14 SEWER / WATER CROSSING**  
NOT TO SCALE

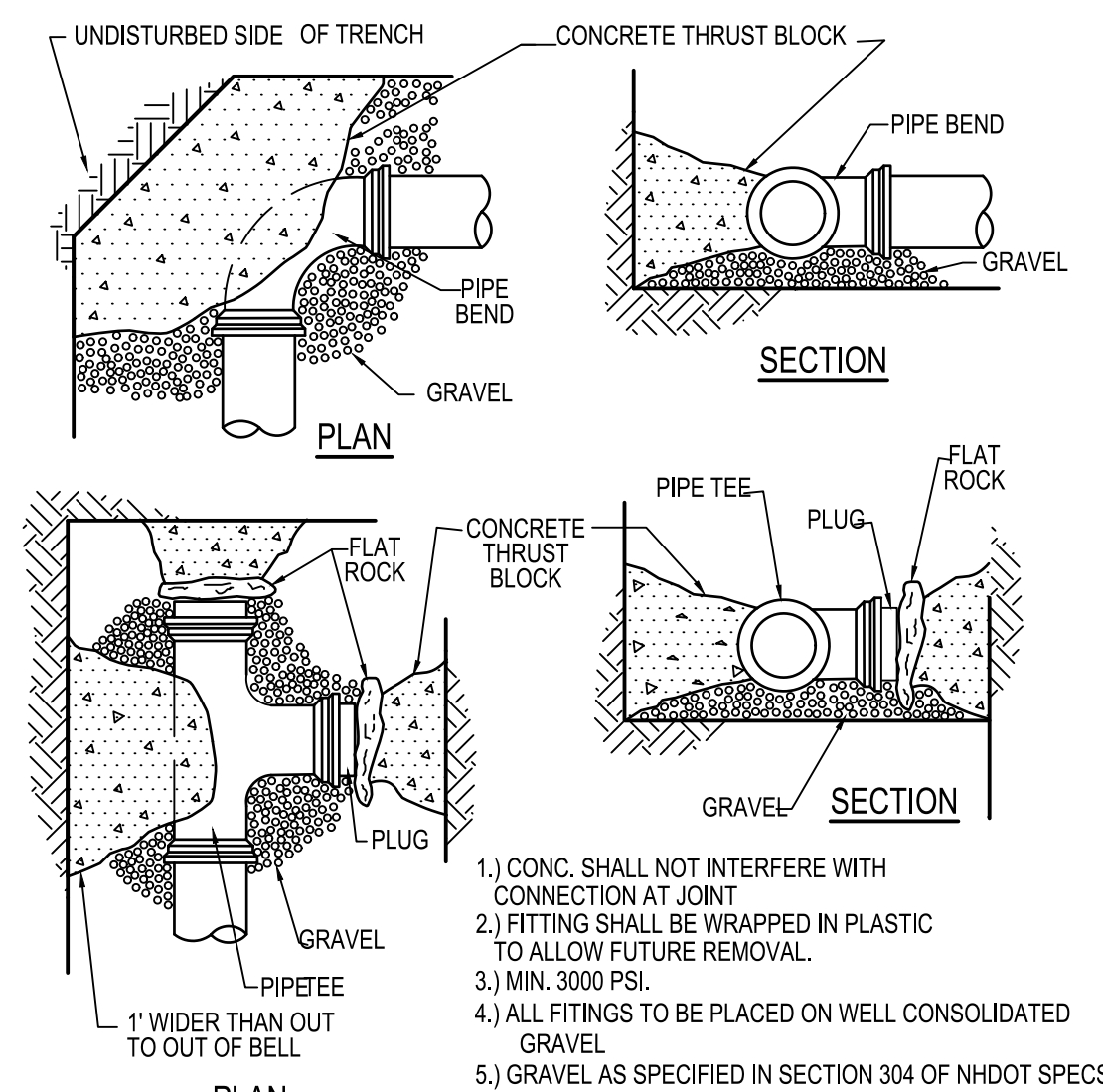


**11 FIRE HYDRANT**  
NOT TO SCALE



- NOTE:
- SEE SITE PLAN FOR PIPE SIZES AND SERVICE.
  - WATER PIPE TO BE DUCTILE IRON (D.I.) CLASS 52
  - GRAVEL AS SPECIFIED IN SECTION 304 OF NHDOT SPECS

**12 WATER TRENCH**  
NOT TO SCALE



**15 THRUST BLOCK PLACEMENT ON BENDS, TEES AND PLUGS**  
NOT TO SCALE

- NOTES:
- REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
  - ACCESS ROAD SHOWN DEPICTS DESIGN INTENT ONLY. FINAL DESIGN TO BE COORDINATED WITH RESULTS OF THE TIF PROGRAM DESIGN.

TOWN OF EXETER PLANNING BOARD  
 CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_



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Sheet Title:  
**DETAILS**

Project Title:  
**Ray Farm Condominium**  
 Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:  
**Ray Farm, LLC**  
 158 Shattuck Way  
 Newington, NH 03801

REVISION BLOCK			
NO.	DATE	DESC	BY

PROJ. MGR.: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D.DT.DWG  
 FBK:  
 JOB #: 16042 D



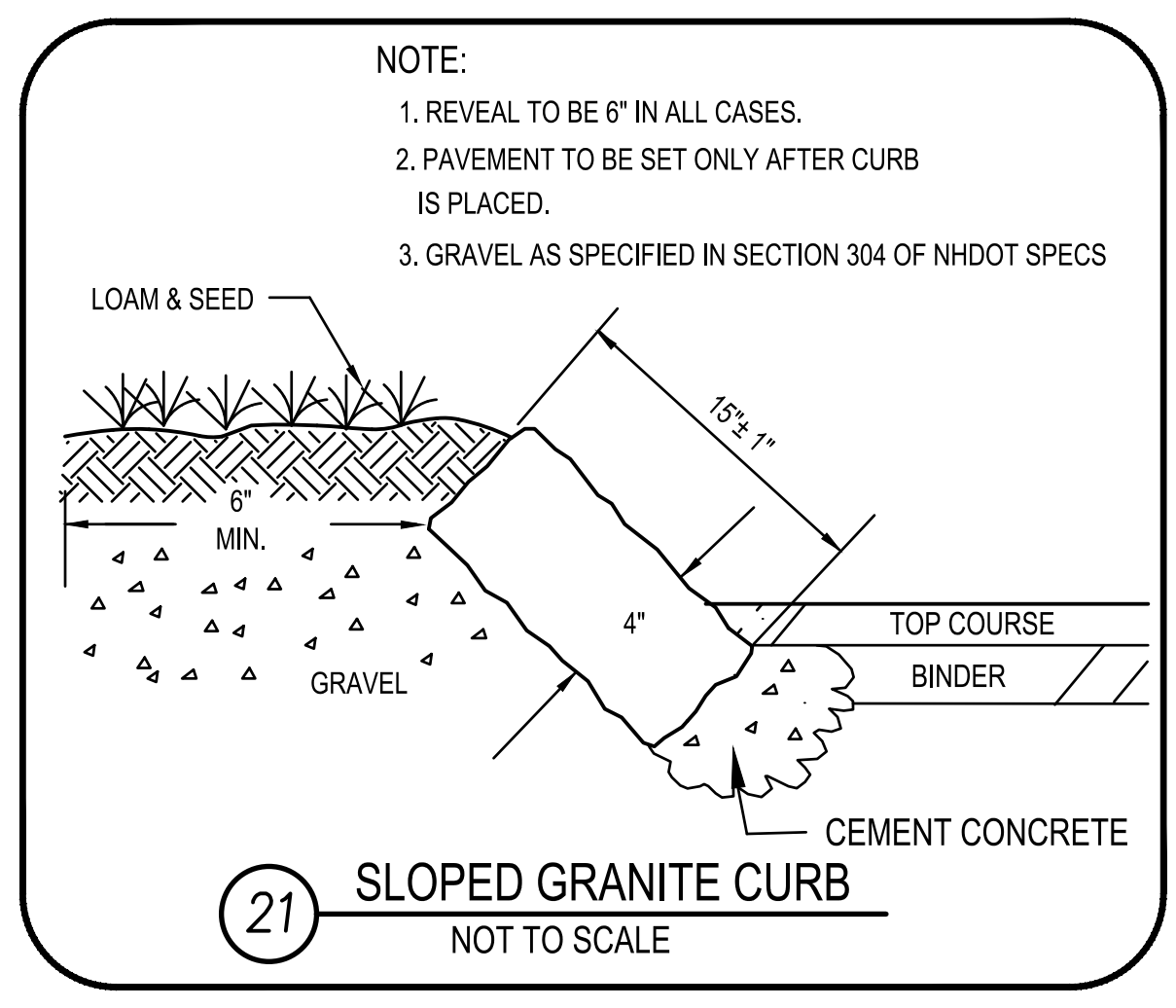
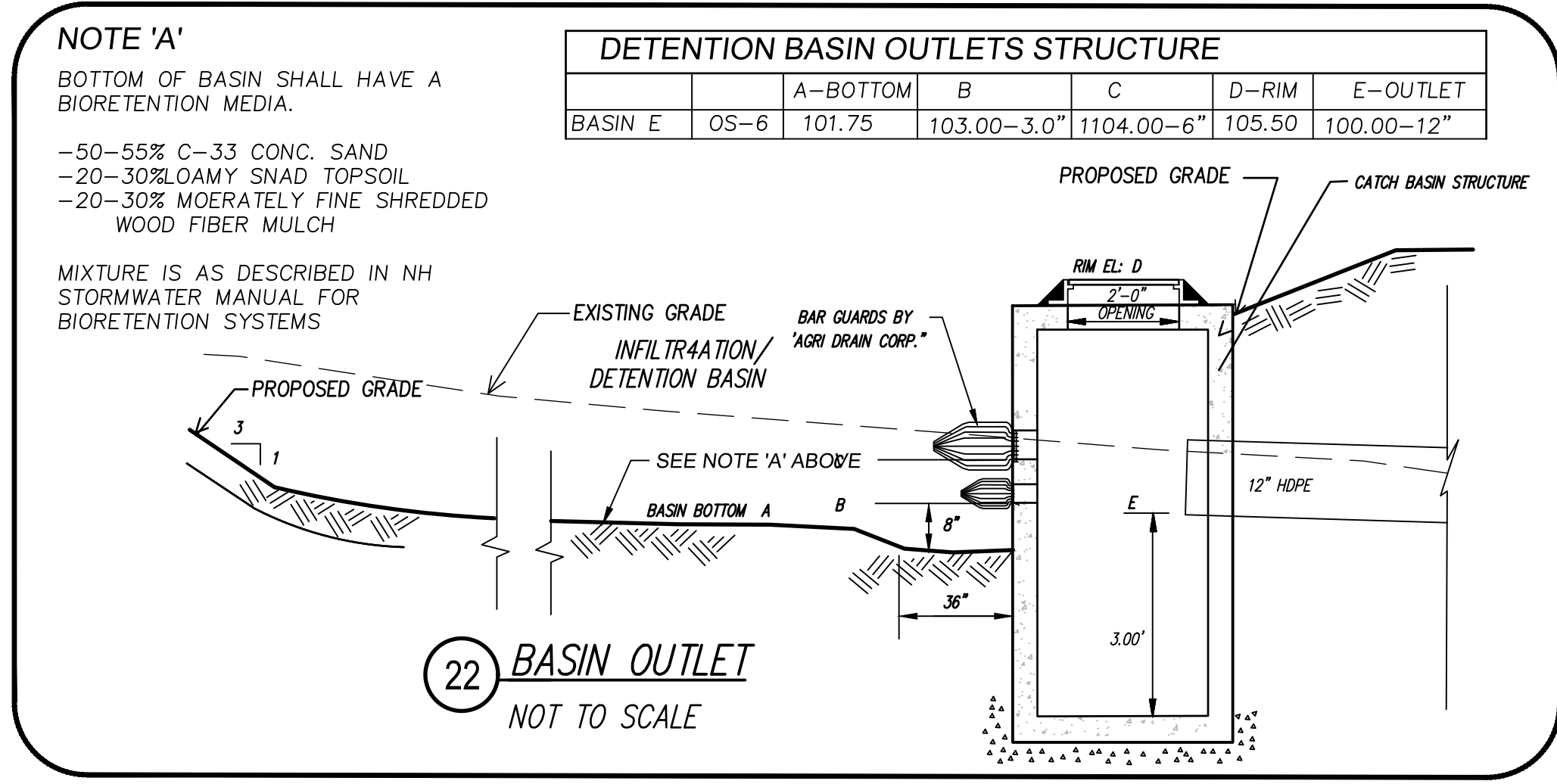
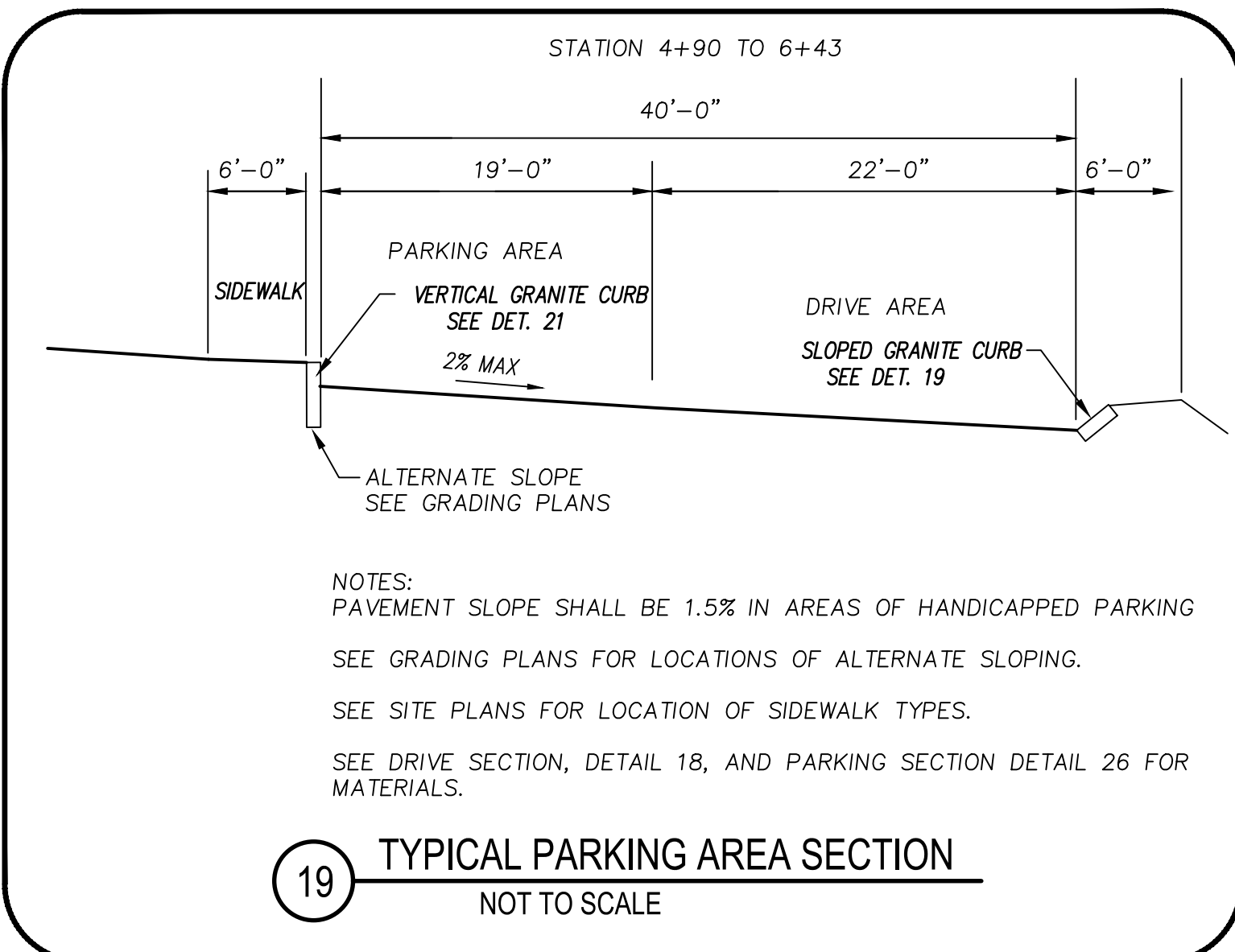
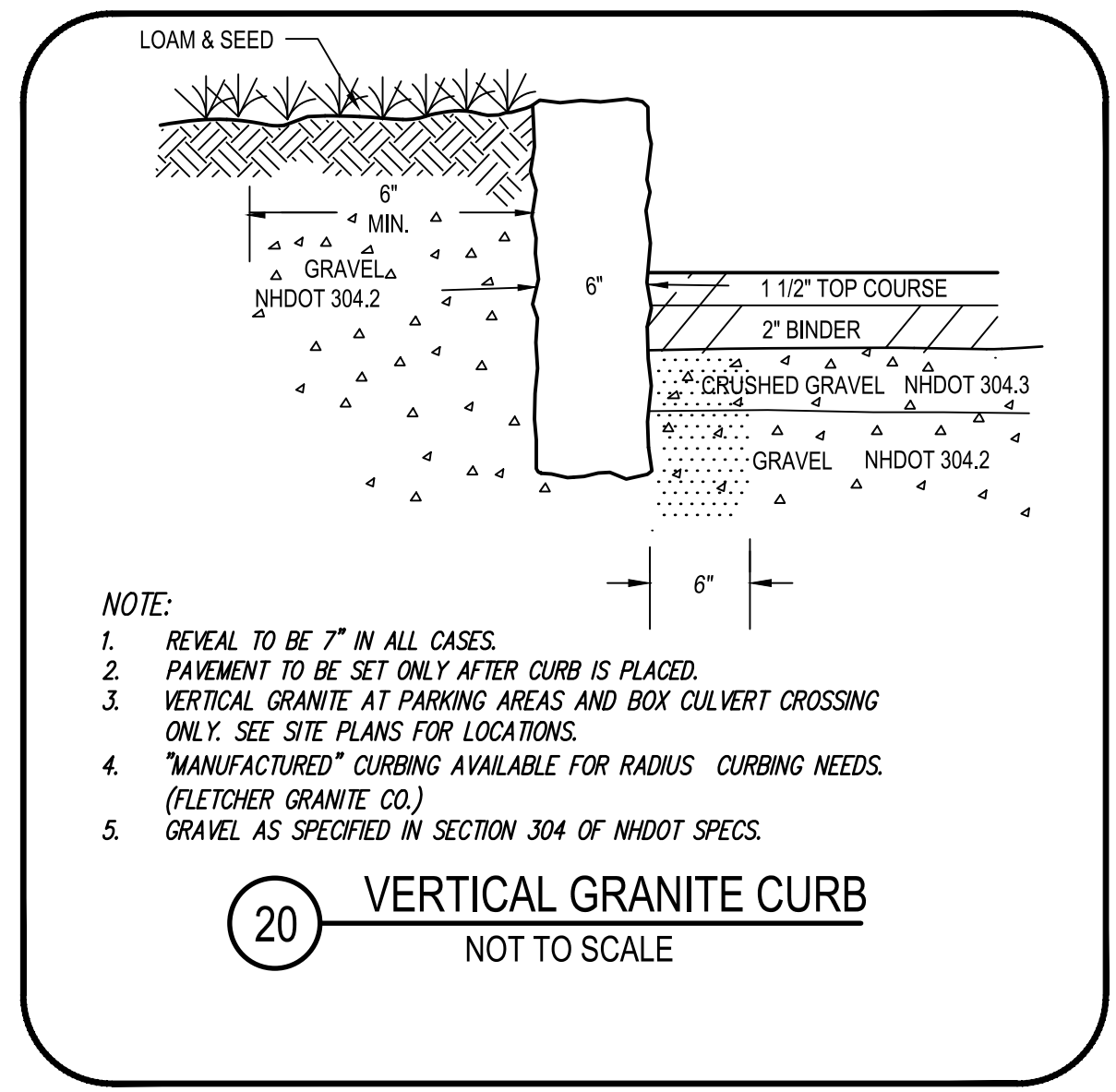
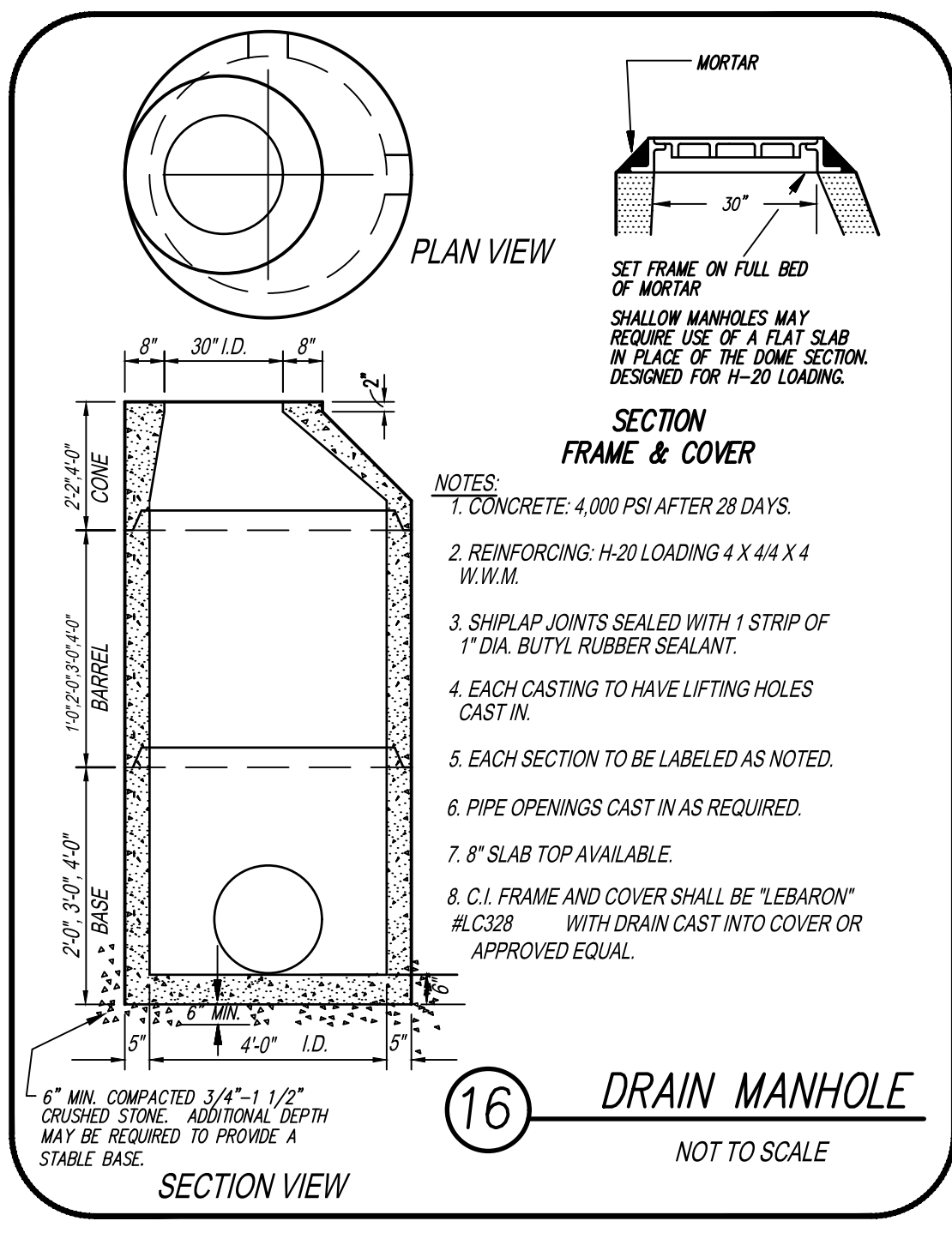
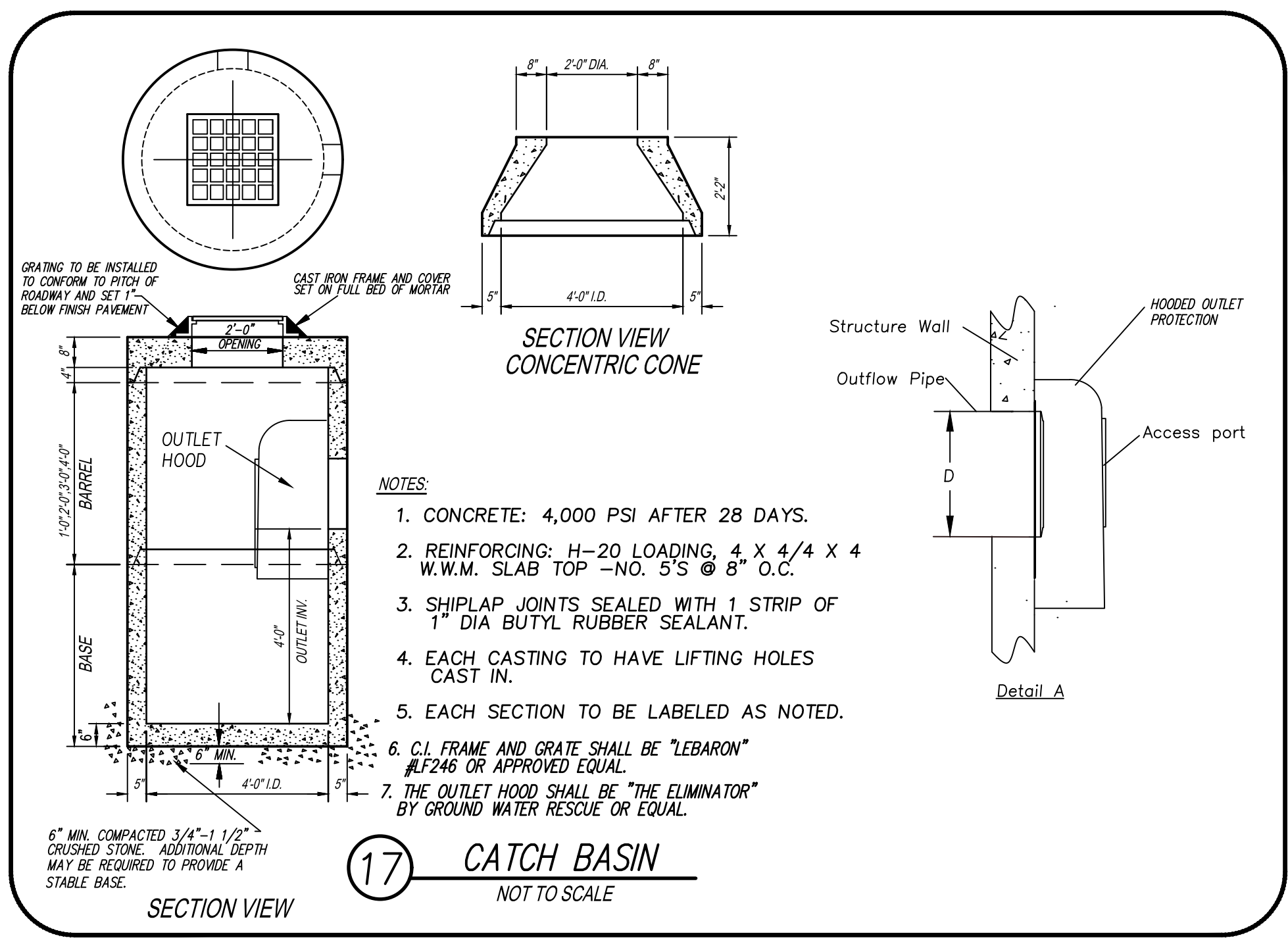
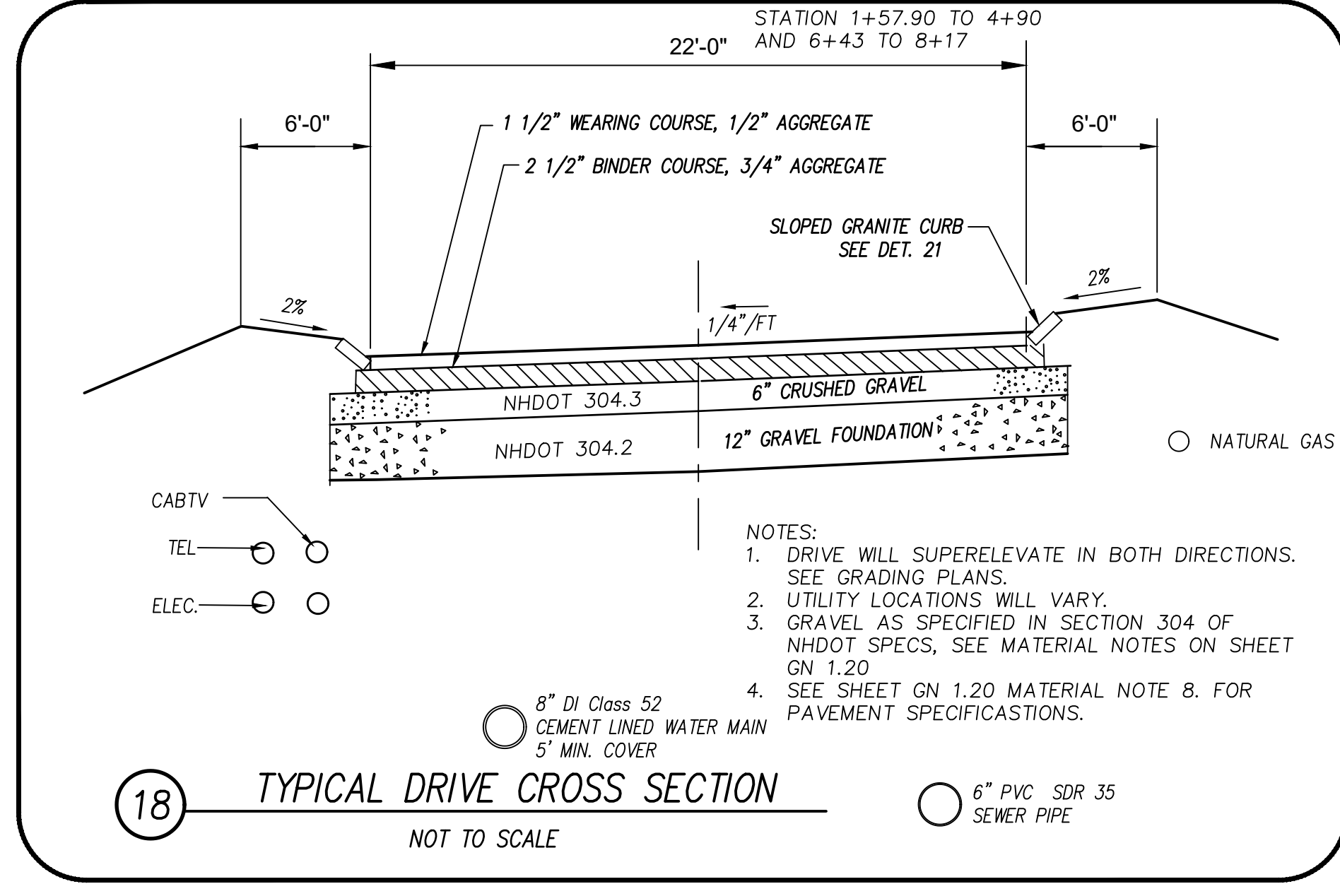
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TOWN OF EXETER PLANNING BOARD

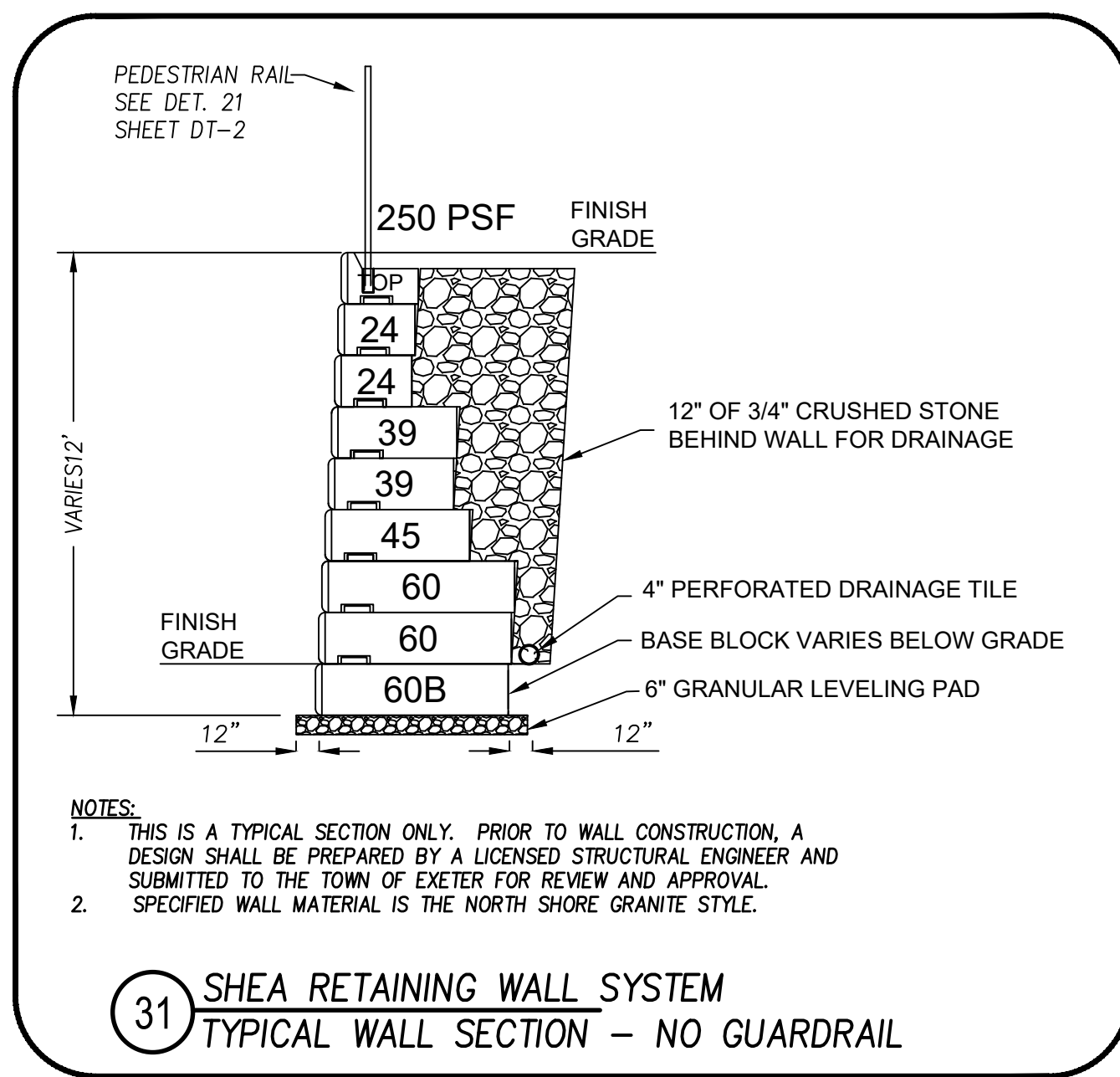
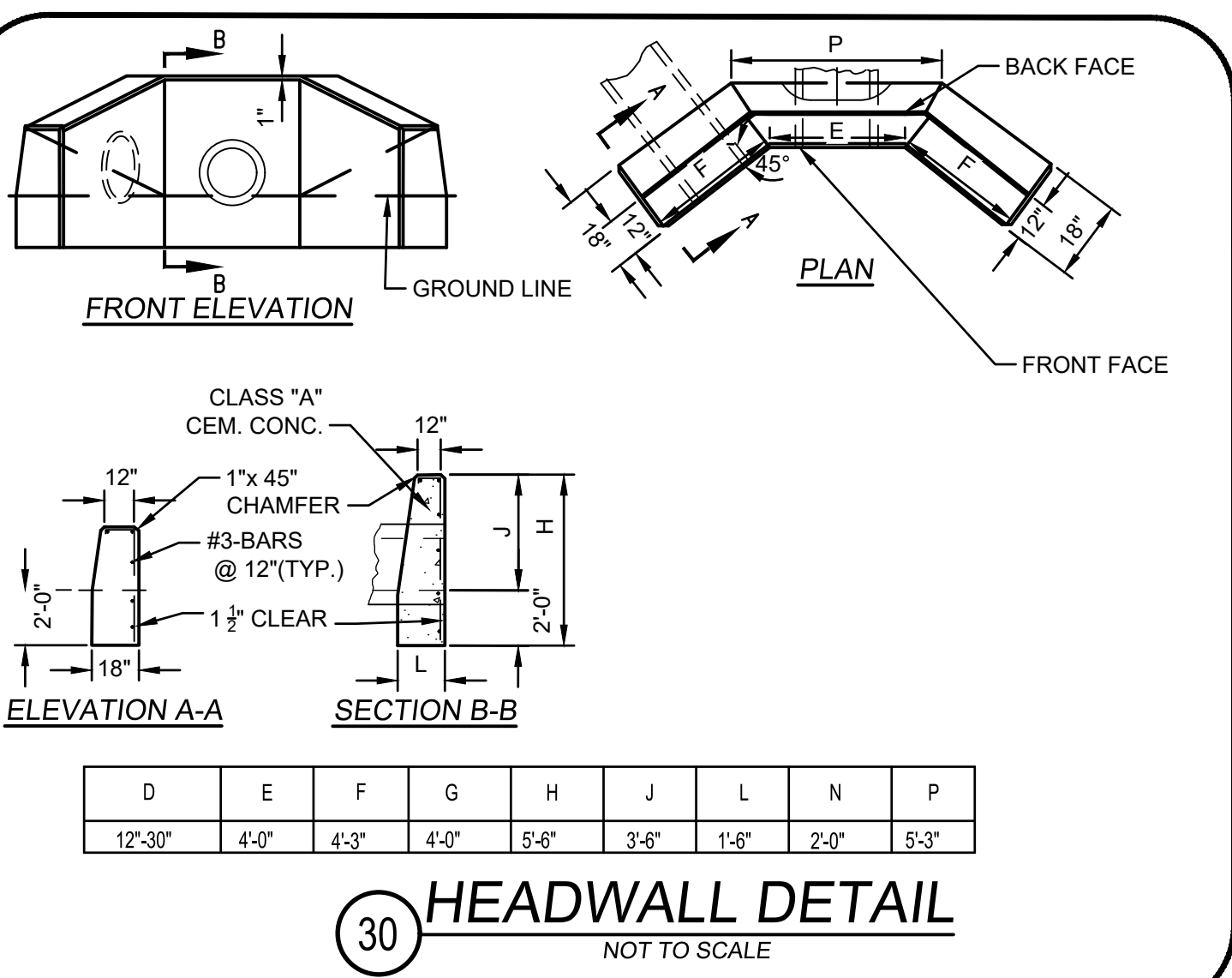
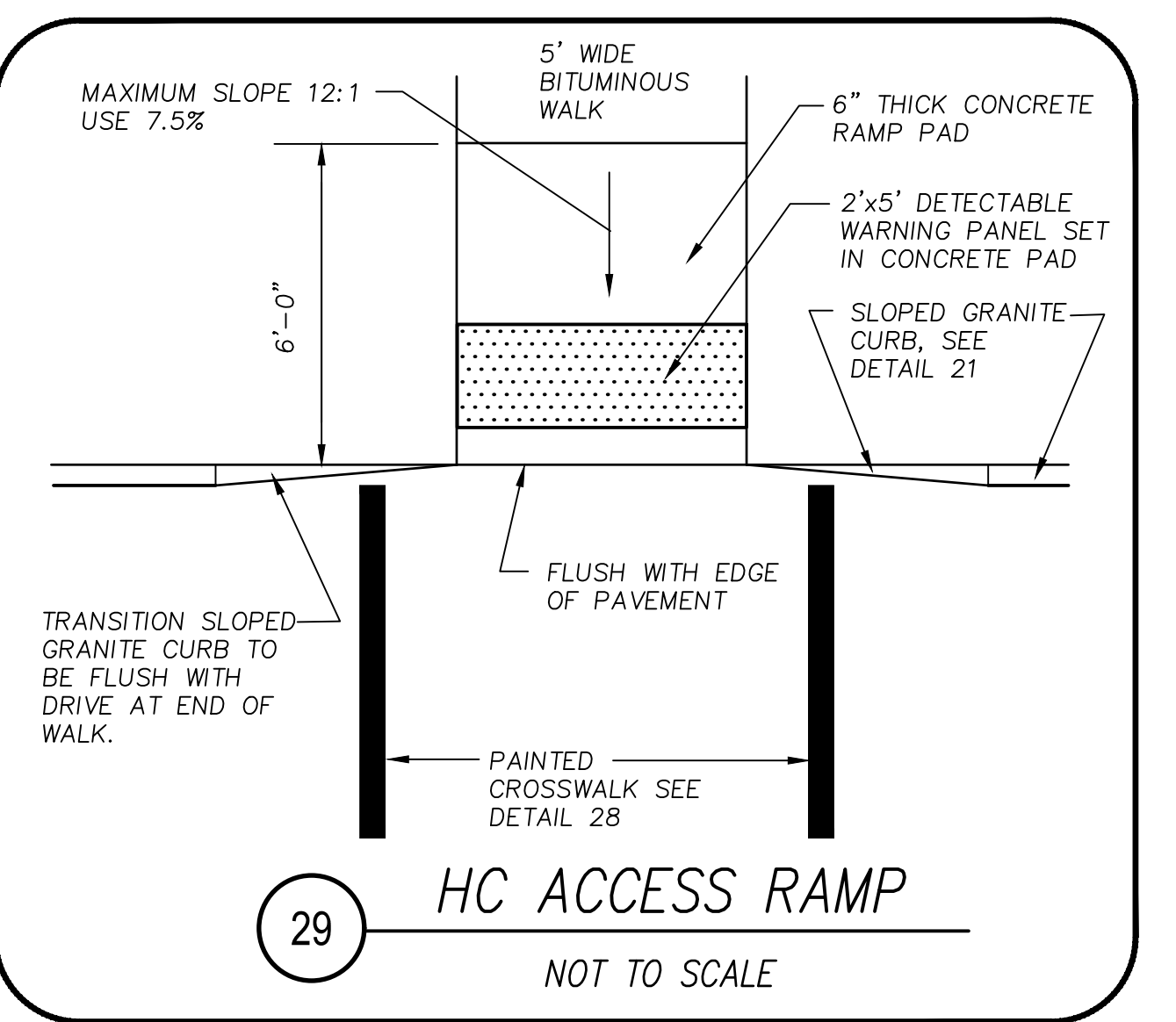
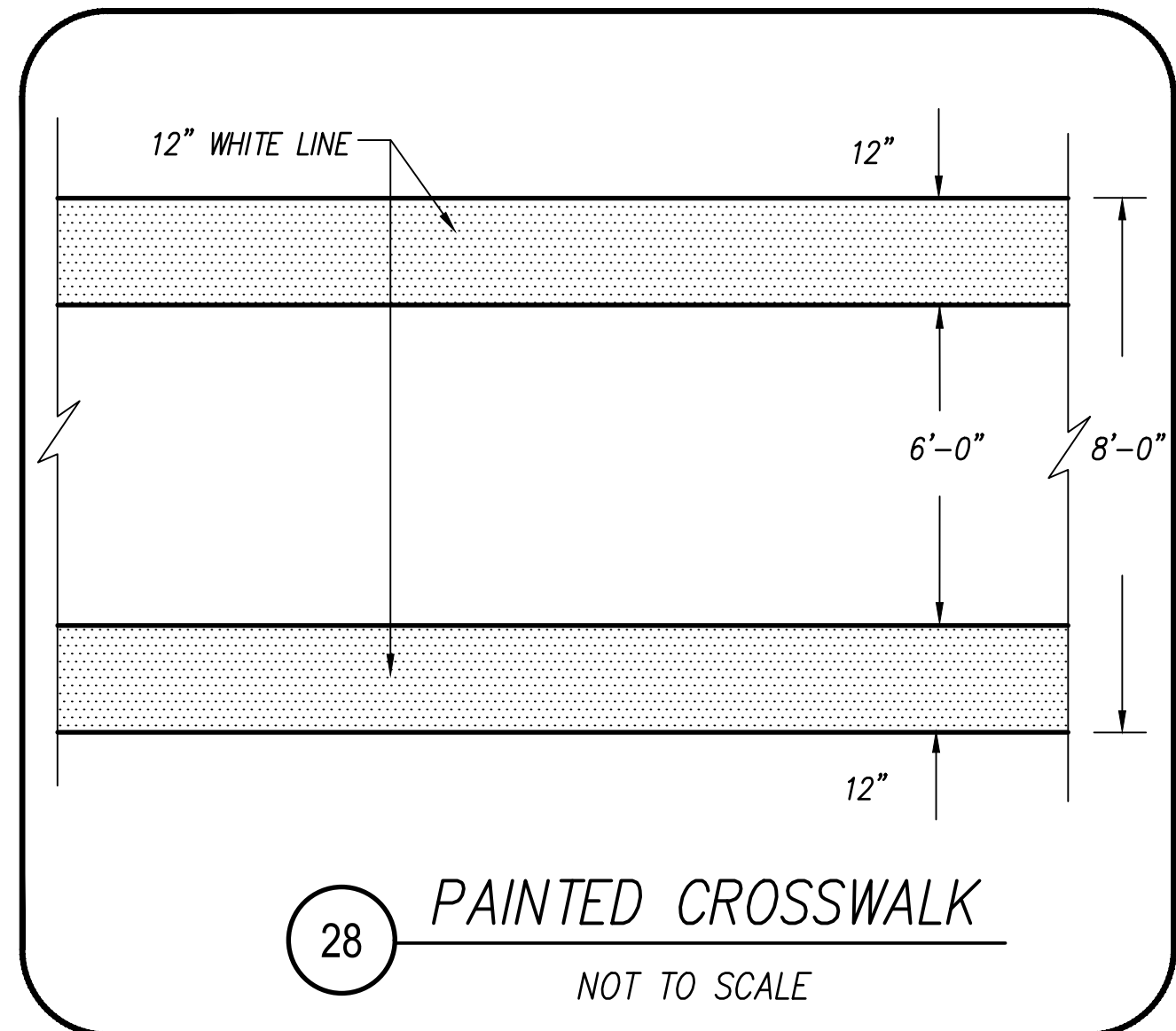
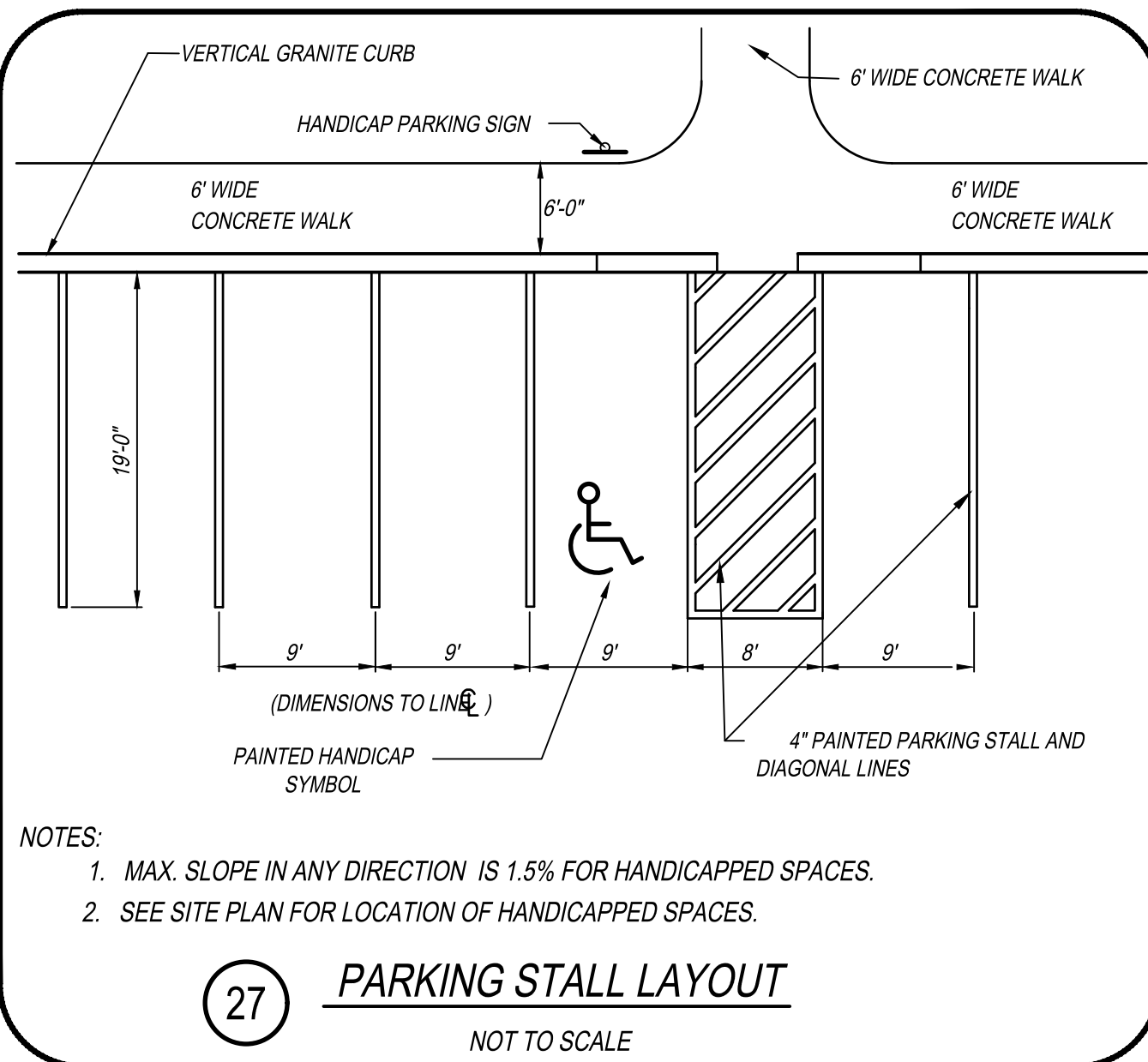
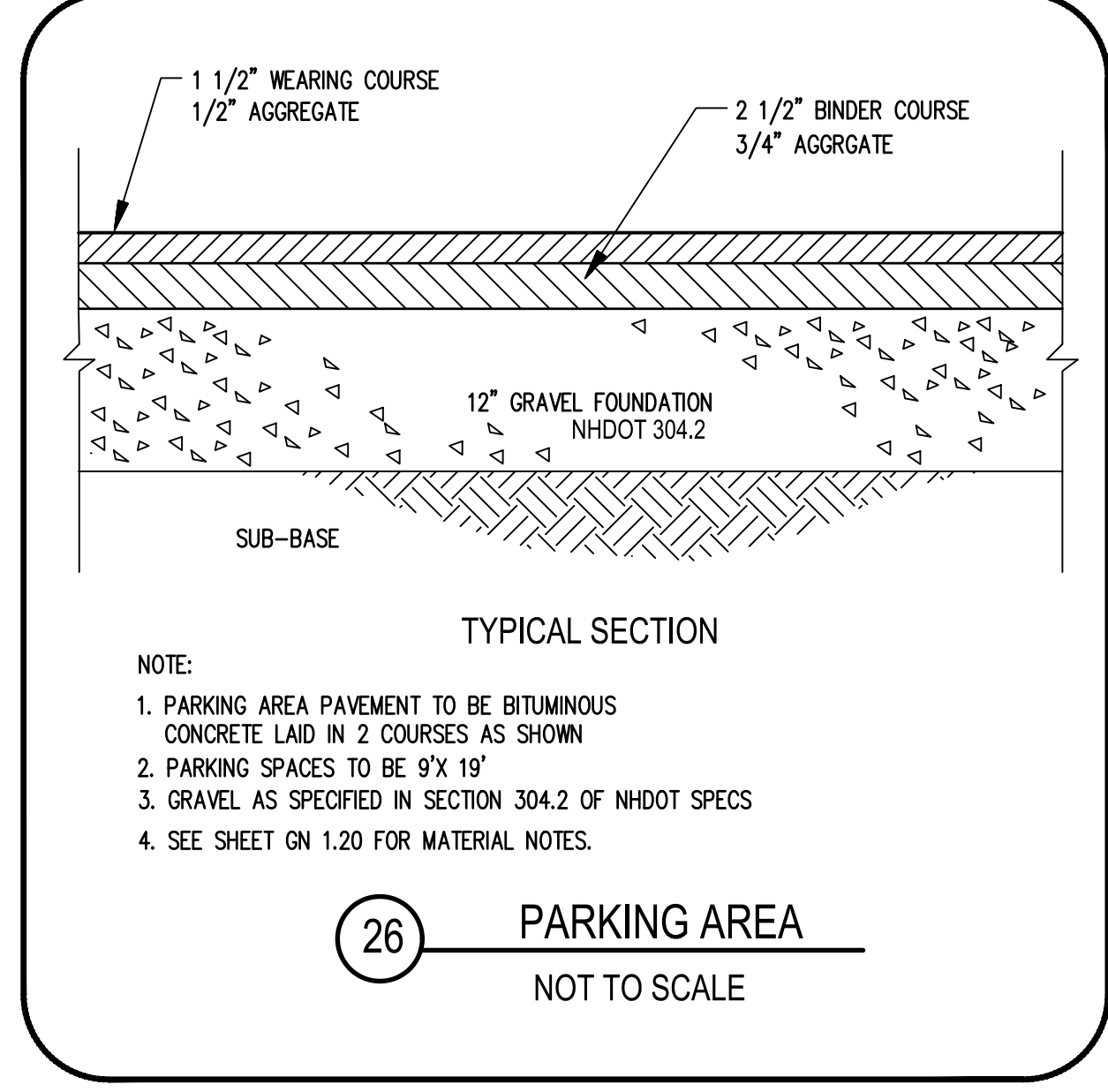
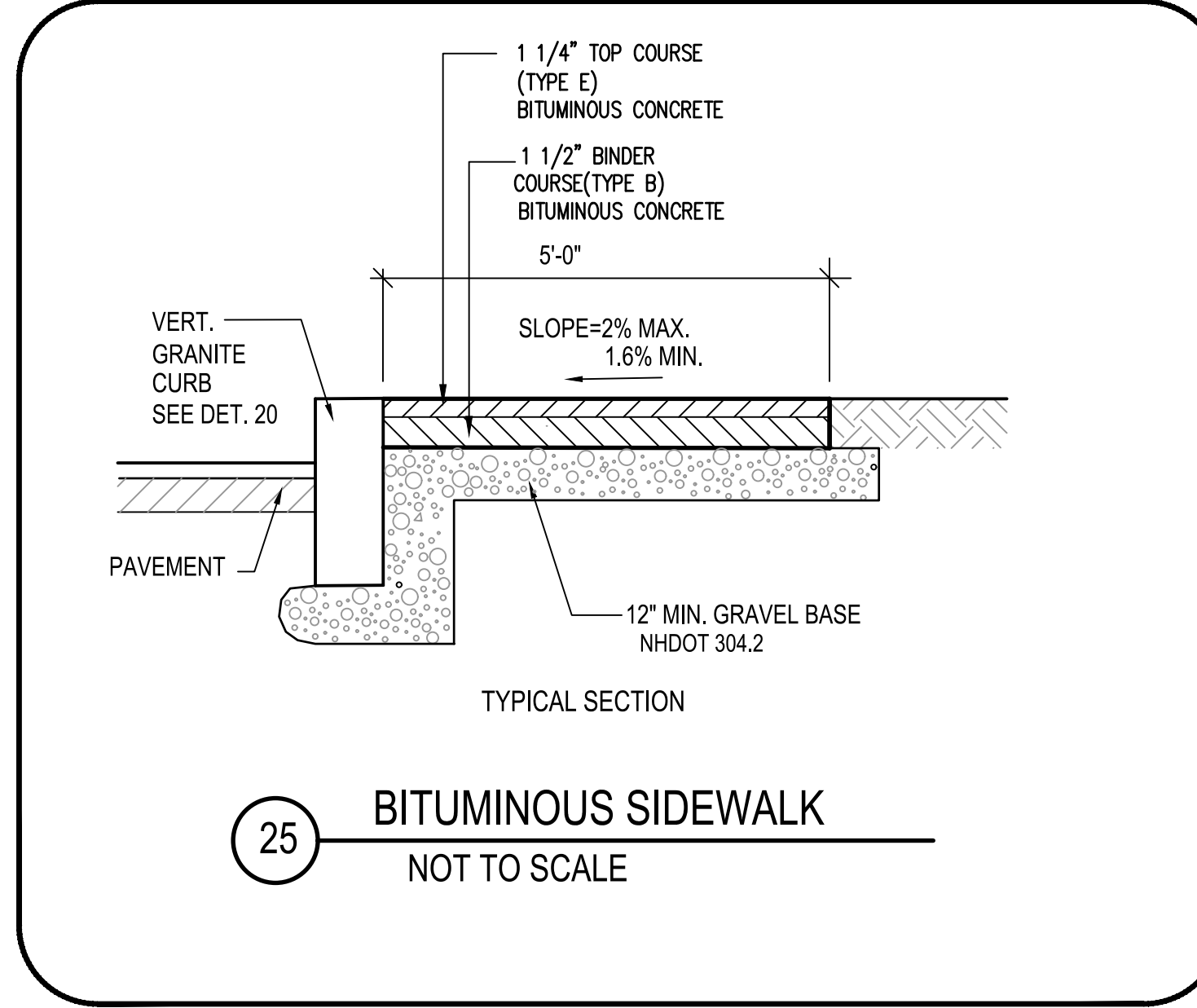
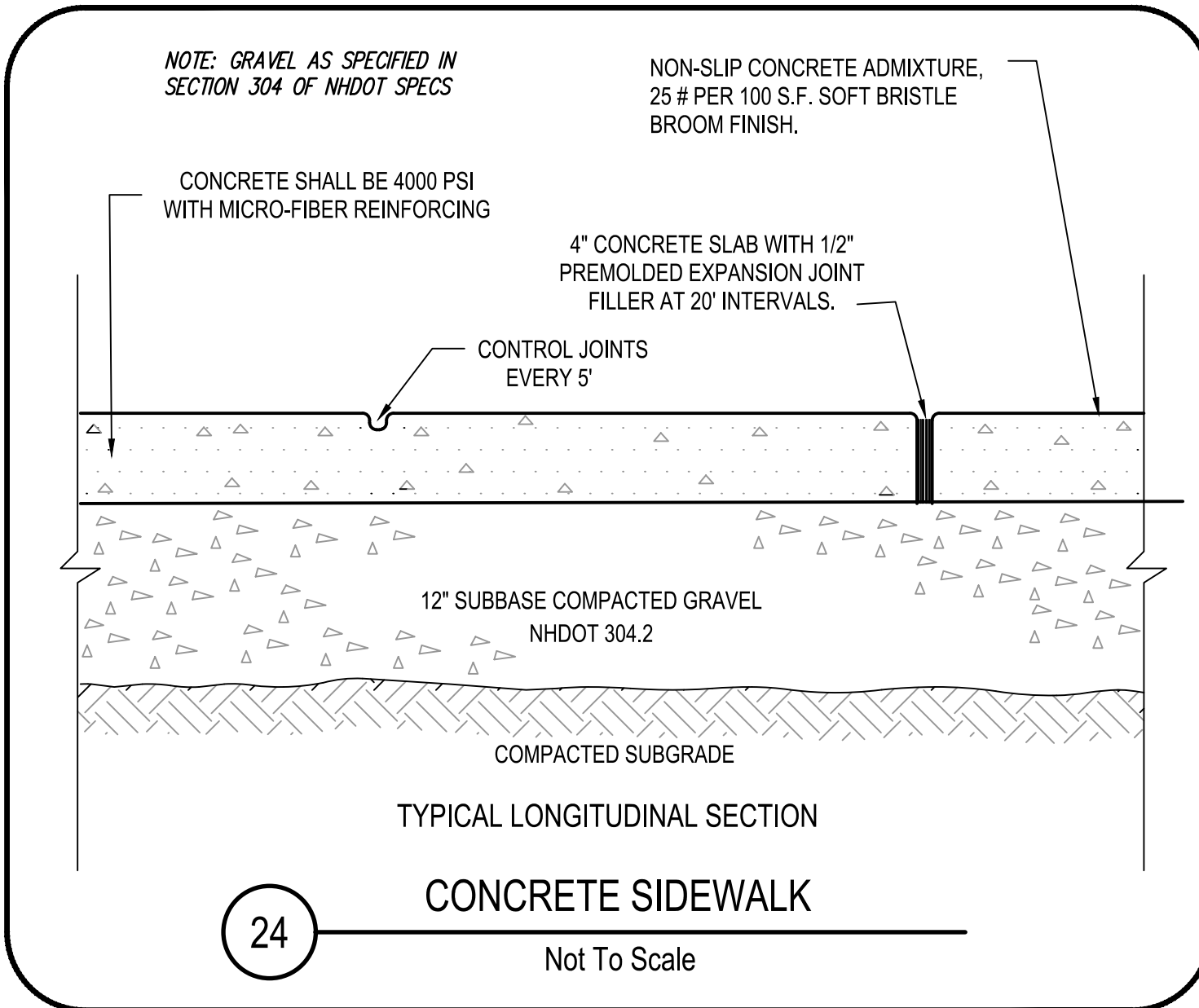
CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

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TOWN OF EXETER PLANNING BOARD

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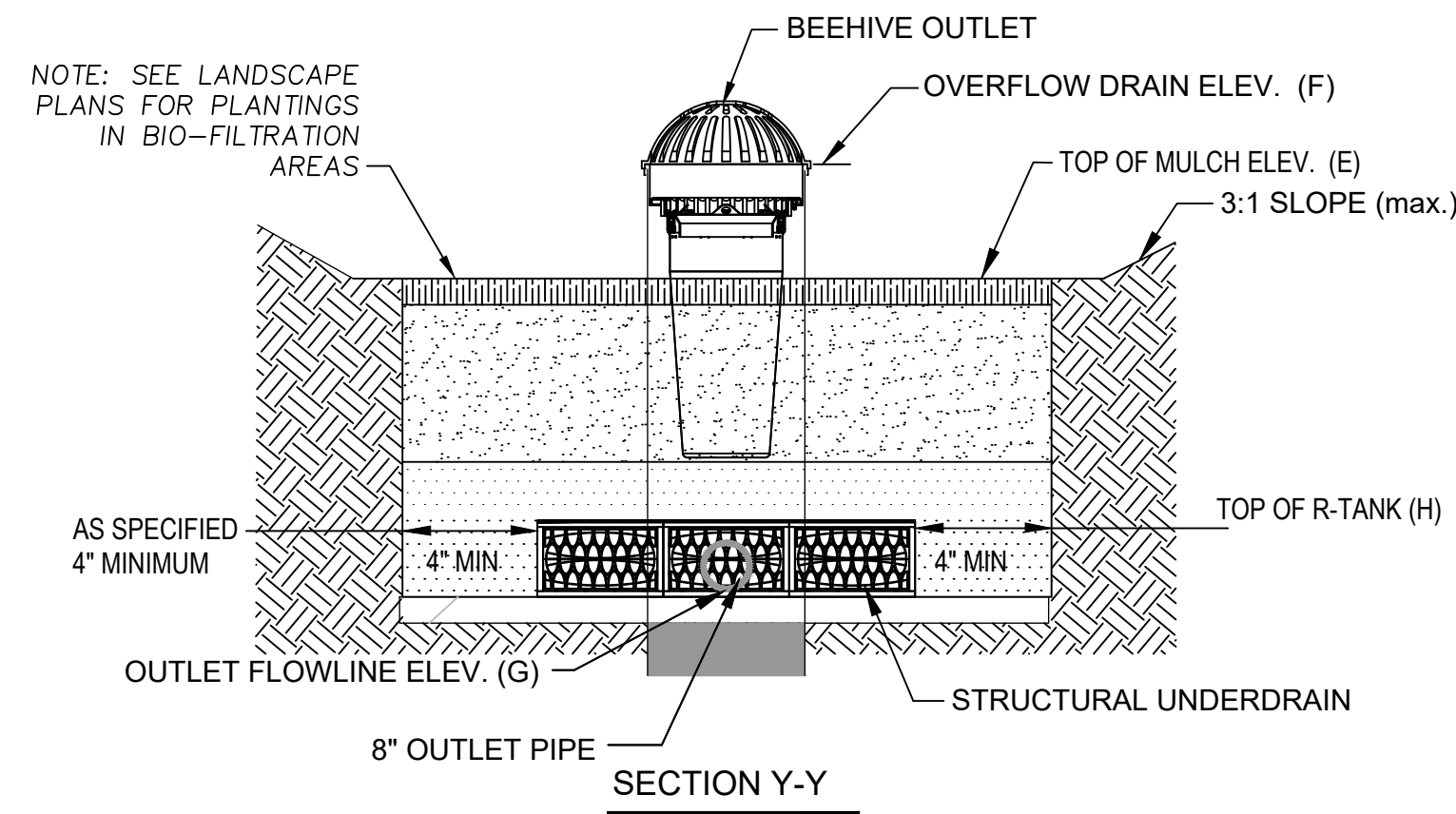
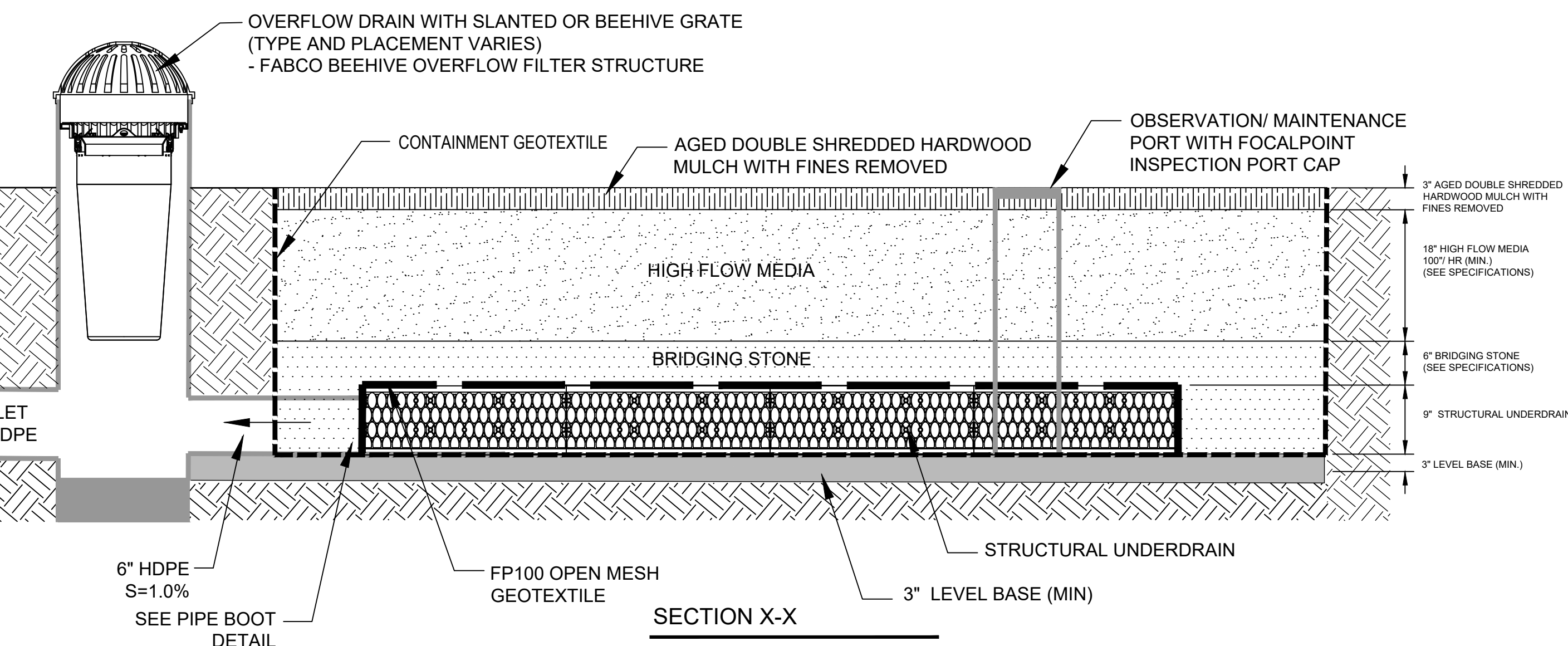
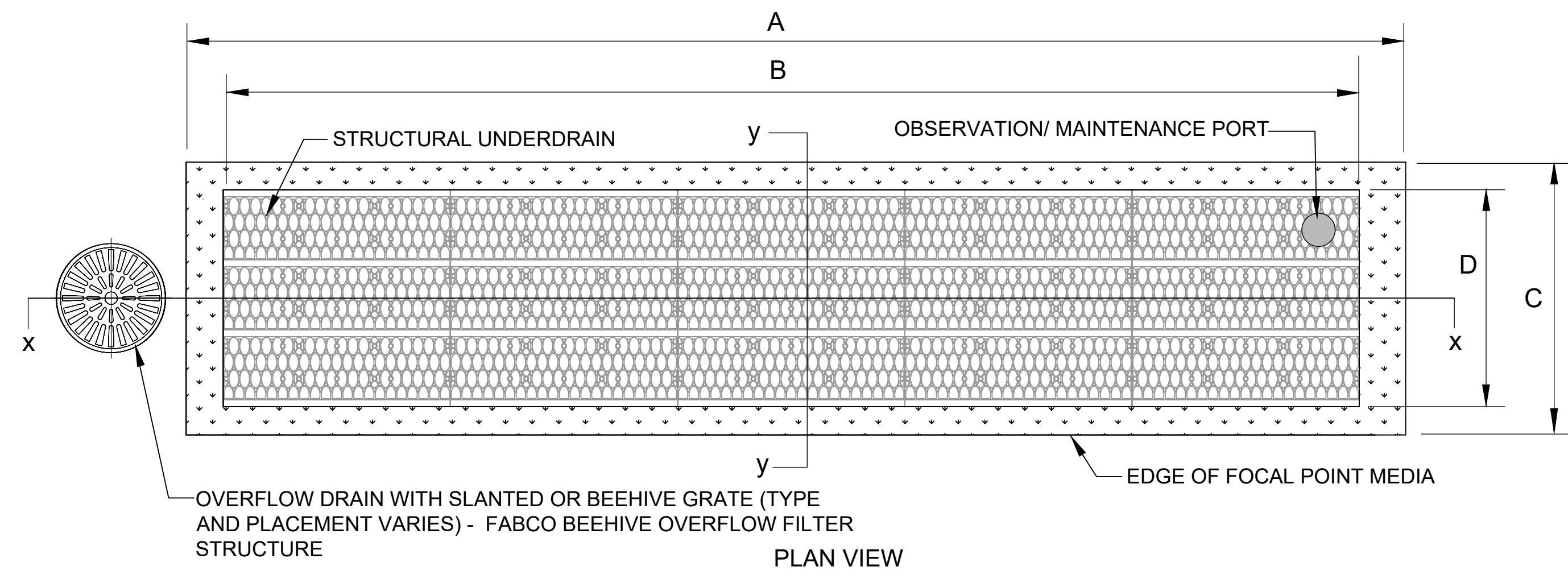
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 FBK:  
 JOB #: 16042 D



# 33 BIO-FILTRATION SYSTEM "FOCAL POINT"

NOT TO SCALE

NOTE: PRODUCTS ON THIS SHEET ARE DISTRIBUTE BY "ACF ENVIRONMENTAL",  
 -25-A PROGRESS AVENUE NASHUA, NH 03062 (603) 589-9255  
 -23 FAITH DR. GORHAM, ME 04038 (207) 272 4431 CONTACT ROBERT WOODMAN



'BEEHIVE' OVERFLOW / OUTLET DATA

	DIA.	RIM ELEV. (F)	INLET/INV.	OUTLET/INV.
FP-11	12"	115.00	8"/111.00	8"/111.00
FP-12	12"	107.50	8"/104.00	8"/104.00

FOCAL POINT DATA

	A	B	C	D	E	F	G	H
FP-11	11.00'	9.38' (4 CHAMB)	8.00'	6.56' (5 CHAMB.)	114.20	115.00	111.00	111.95
FP-12	12.00'	9.38' (4 CHAMB)	9.00'	7.87' (6 CHAMB.)	107.00	107.50	104.00	104.75



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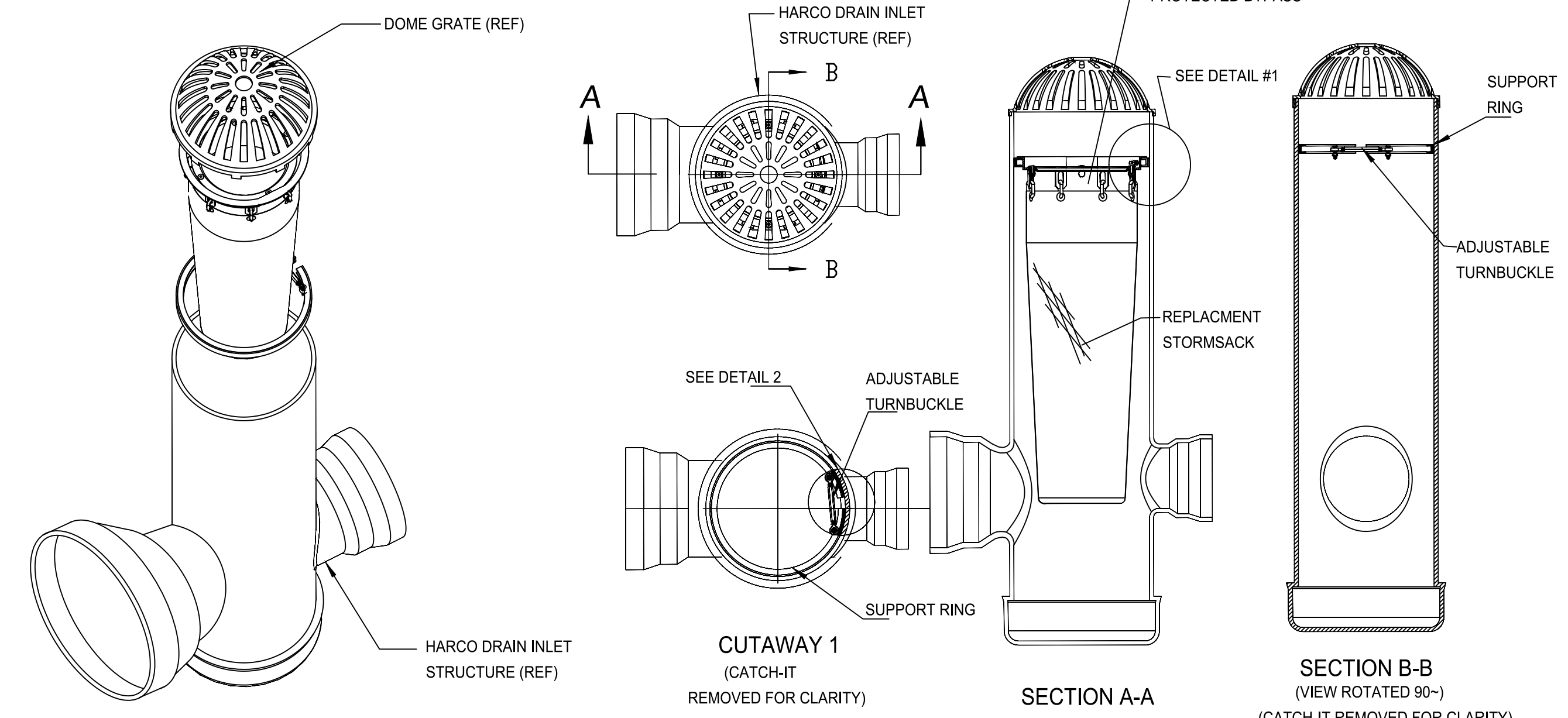
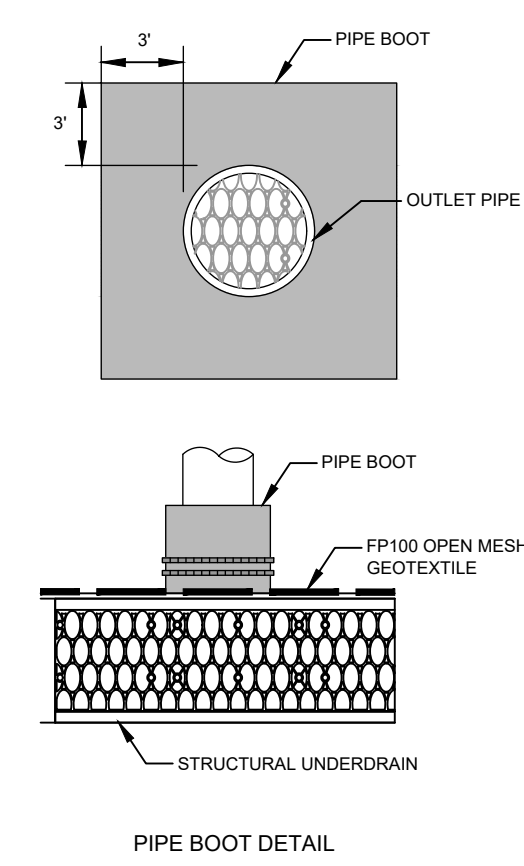
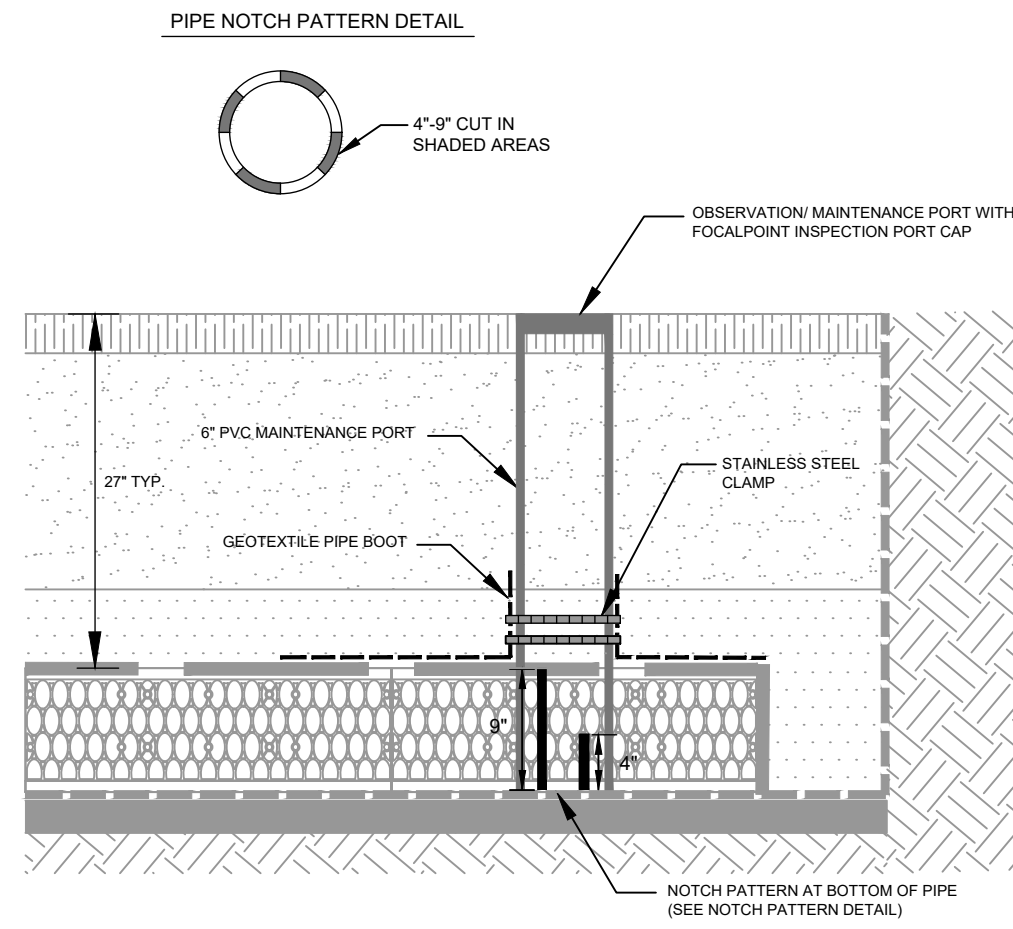
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REVISION BLOCK			
NO.	DATE	DESC	BY

### OBSERVATION / MAINTENANCE PORT



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TOWN OF EXETER PLANNING BOARD  
 CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

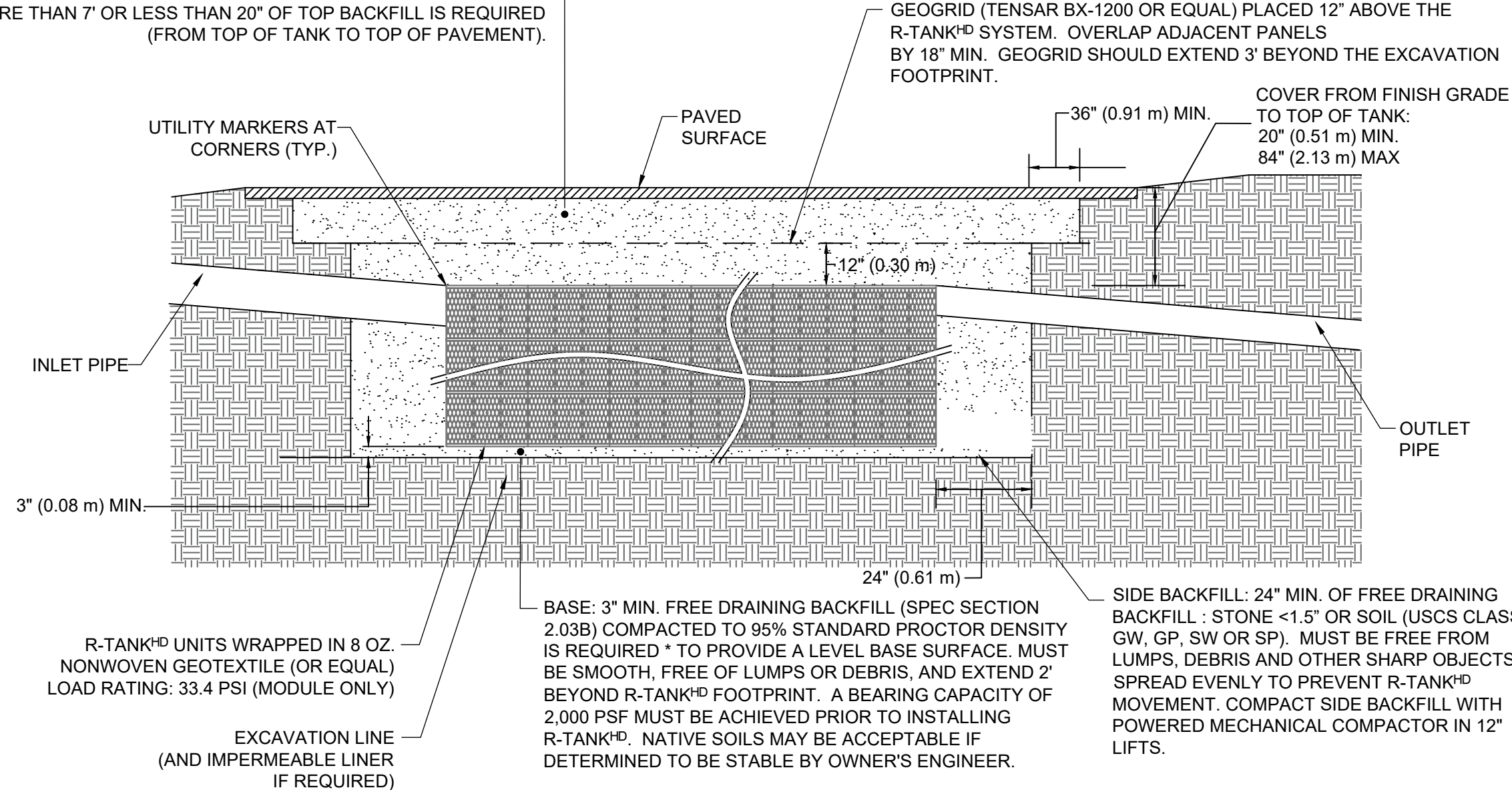
PROJ. MGR.: D. HAMEL  
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 FBK:  
 JOB #: 16042 D

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TOTAL COVER: 20" MINIMUM AND 84" MAXIMUM. FIRST 12" MUST BE FREE DRAINING BACKFILL: STONE <1.5" OR SOIL (USCS CLASS GW, GP, SW OR SP). ADDITIONAL FILL MAY BE STRUCTURAL FILL (SPEC SECTION 2.03C); STONE OR SOIL (USCS CLASS SM, SP, SW, GM, GP OR GW) WITH MAX CLAY CONTENT <10%, MAX 25% PASSING NO. 200 SIEVE, AND MAX PLASTICITY INDEX OF 4. A MIN. 12" COVER MUST BE MAINTAINED BETWEEN BACKFILL EQUIPMENT AND THE TOP OF THE R-TANK™ SYSTEM AT ALL TIMES. TOTAL HEIGHT OF TOP BACKFILL SHOULD NOT EXCEED 7' OR LESS THAN 20" OF TOP BACKFILL IS REQUIRED (FROM TOP OF TANK TO TOP OF PAVEMENT).

- NOTES:
- FOR COMPLETE MODULE DATA, SEE APPROPRIATE R-TANK® MODULE SHEET
  - INSTALLATIONS PER THIS DETAIL MEET GUIDELINES OF H20 LOADING PER THE 1983, 13TH EDITION OF THE AMERICAN ASSOCIATION OF STATE, HIGHWAY AND TRAFFIC OFFICIALS (AASHTO) STANDARD SPECIFICATIONS
  - PRE-TREATMENT STRUCTURES NOT SHOWN



\* FOR INFILTRATION APPLICATIONS, BASE SHALL BE 4" MIN. UNCOMPACTED FREE DRAINING BACKFILL (SPEC SECTION 2.03B) TO PROVIDE A LEVEL BASE SURFACE. MUST BE SMOOTH, FREE OF LUMPS OR DEBRIS, AND EXTEND 2' BEYOND R-TANK® FOOTPRINT. A BEARING CAPACITY OF 2,000 PSF MUST BE ACHIEVED PRIOR TO INSTALLING R-TANK®.



### R-TANK<sup>HD</sup> - HS-20 LOADS

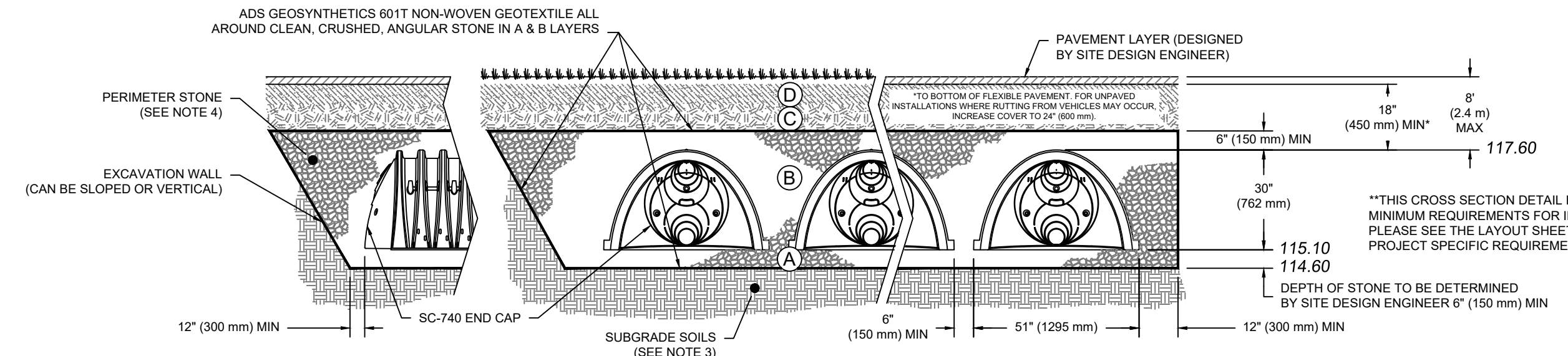
AUG 2016 REV

FOR ADDITIONAL INFORMATION PLEASE CONTACT: ACF ENVIRONMENTAL, 1-800-448-3636, www.acfenvironmental.com

### ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	<b>FINAL FILL:</b> FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	<b>INITIAL FILL:</b> FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL-GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	<b>EMBEDMENT STONE:</b> FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	NO COMPACTION REQUIRED.
A	<b>FOUNDATION STONE:</b> FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>2,3</sup>

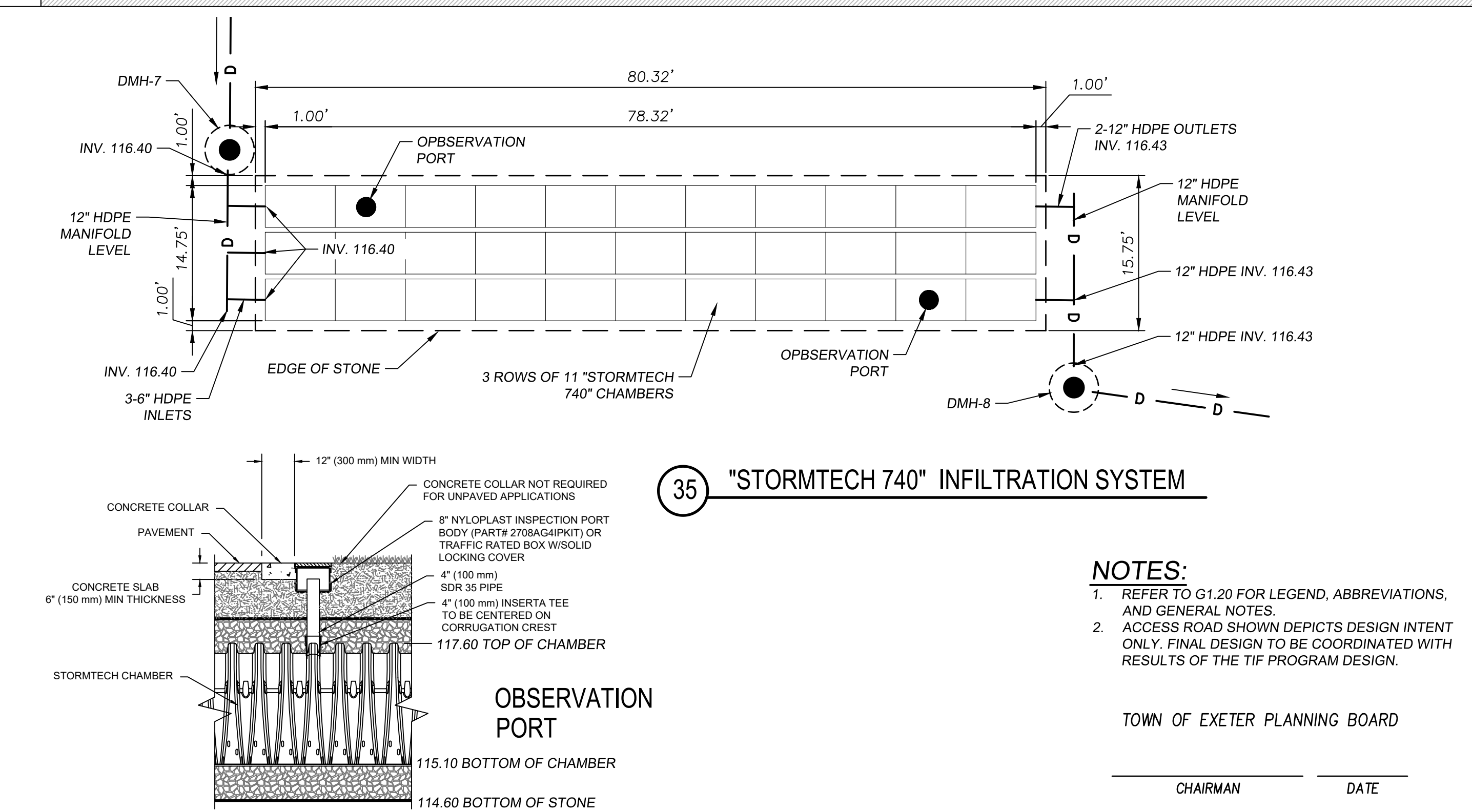
- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
  - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
  - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
  - ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



### NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 650 LBS(INCH AND B) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C). CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

### SC-740 CROSS SECTION DETAIL



- NOTES:
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  - ACCESS ROAD SHOWN DEPICTS DESIGN INTENT ONLY. FINAL DESIGN TO BE COORDINATED WITH RESULTS OF THE TIF PROGRAM DESIGN.

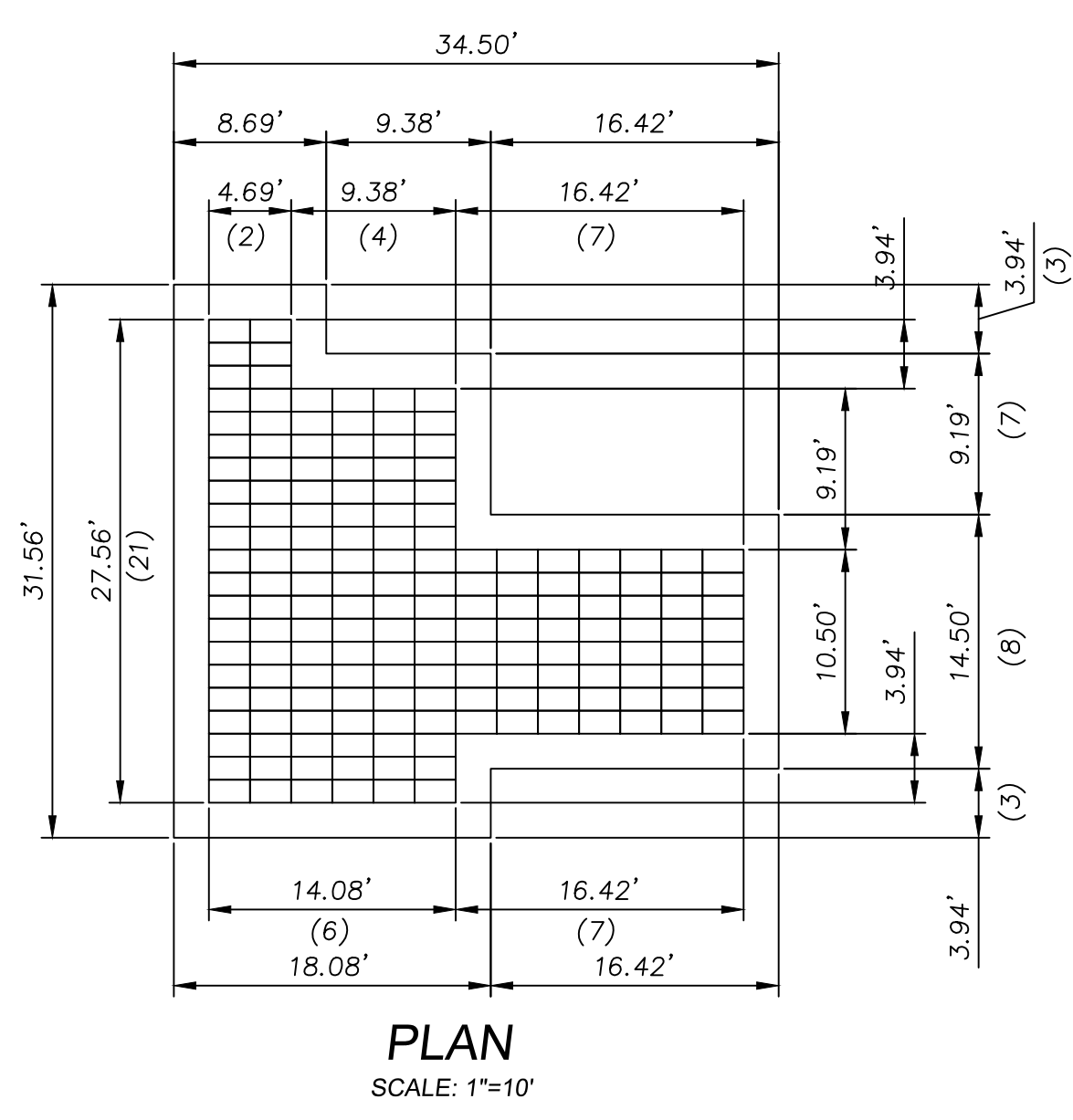
TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

NOTE: INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

### CONSTRUCTION NOTES:

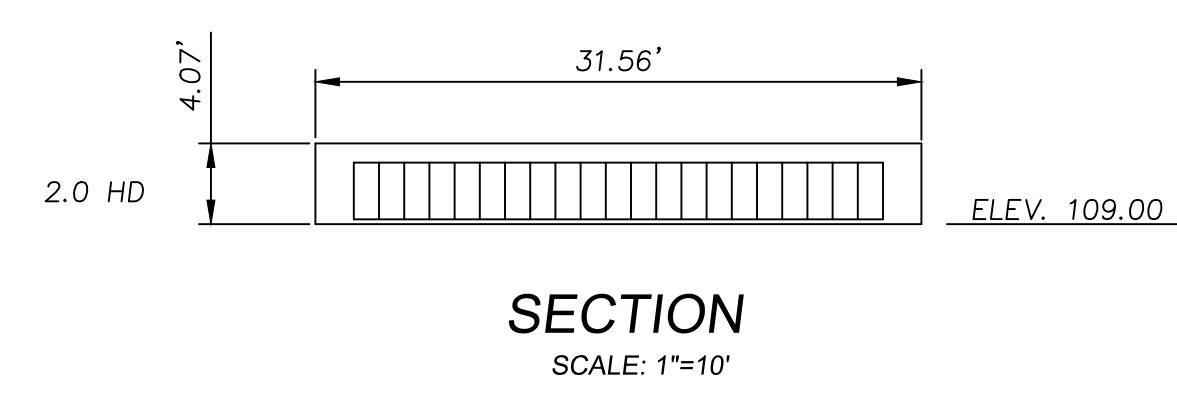
- SUBSURFACE INFILTRATION CHAMBER BASINS:
- DO NOT ALLOW CONSTRUCTION TRAFFIC ON EXPOSED SOIL SURFACE IN AREA OF THE INFILTRATION SYSTEMS. IF FEASIBLE, PERFORM EXCAVATIONS AND ERECTION OUTSIDE THE LIMITS OF THE INFILTRATION SYSTEM
  - AFTER THE INFILTRATION SYSTEM AREA IS EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY TILLER OR A DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.
  - DO NOT PLACE INFILTRATION SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.



### INFILTRATION SYSTEM 4 (INFIL-4)

TOTAL OF 170 2.0 HD CHAMBERS

### 34 R-TANK INFILTRATION SYSTEM



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REVISION BLOCK			
NO.	DATE	DESC	BY

PROJ. MGR.: D. HAMEL  
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DESIGN: D. HAMEL  
DRAWN: D. HAMEL  
CHECKED: D. GIANGRANDE  
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SHEET C5.16

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① EXAMPLE OF EXTERIOR VIEW

PHOTO BY: CLEAR EYE PHOTO

REVISIONS:

RAY FARM ACTIVE ADULT COMMUNITY  
 EPPING ROAD  
 EXETER, NEW HAMPSHIRE 03833, ROCKINGHAM COUNTY



ARCHITECTS  
 233 VAUGHAN STREET  
 SUITE 101  
 PORTSMOUTH, NH 03801  
 (603) 431-2808  
 www.cjarchitects.net

BUILDING D  
 EXAMPLE OF  
 EXTERIOR VIEW

DATE: 3/14/2022  
 DRAWN BY: WWB  
 APPROVED BY: CJG  
 SCALE: N/A  
 JOB NUMBER: 21611

A1.0

NOT FOR CONSTRUCTION



REVISIONS:

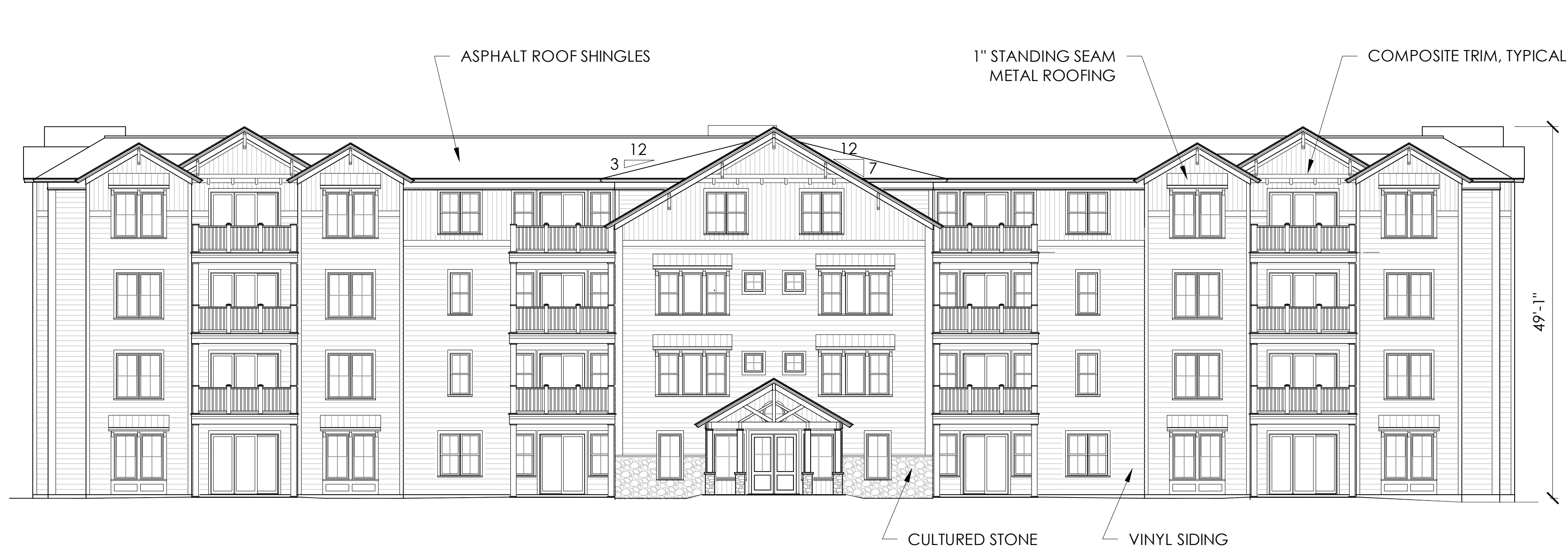
RAY FARM ACTIVE ADULT COMMUNITY  
 EPPING ROAD  
 EXETER, NEW HAMPSHIRE 03833, ROCKINGHAM COUNTY

**ARCHITECTS**  
 233 VAUGHAN STREET  
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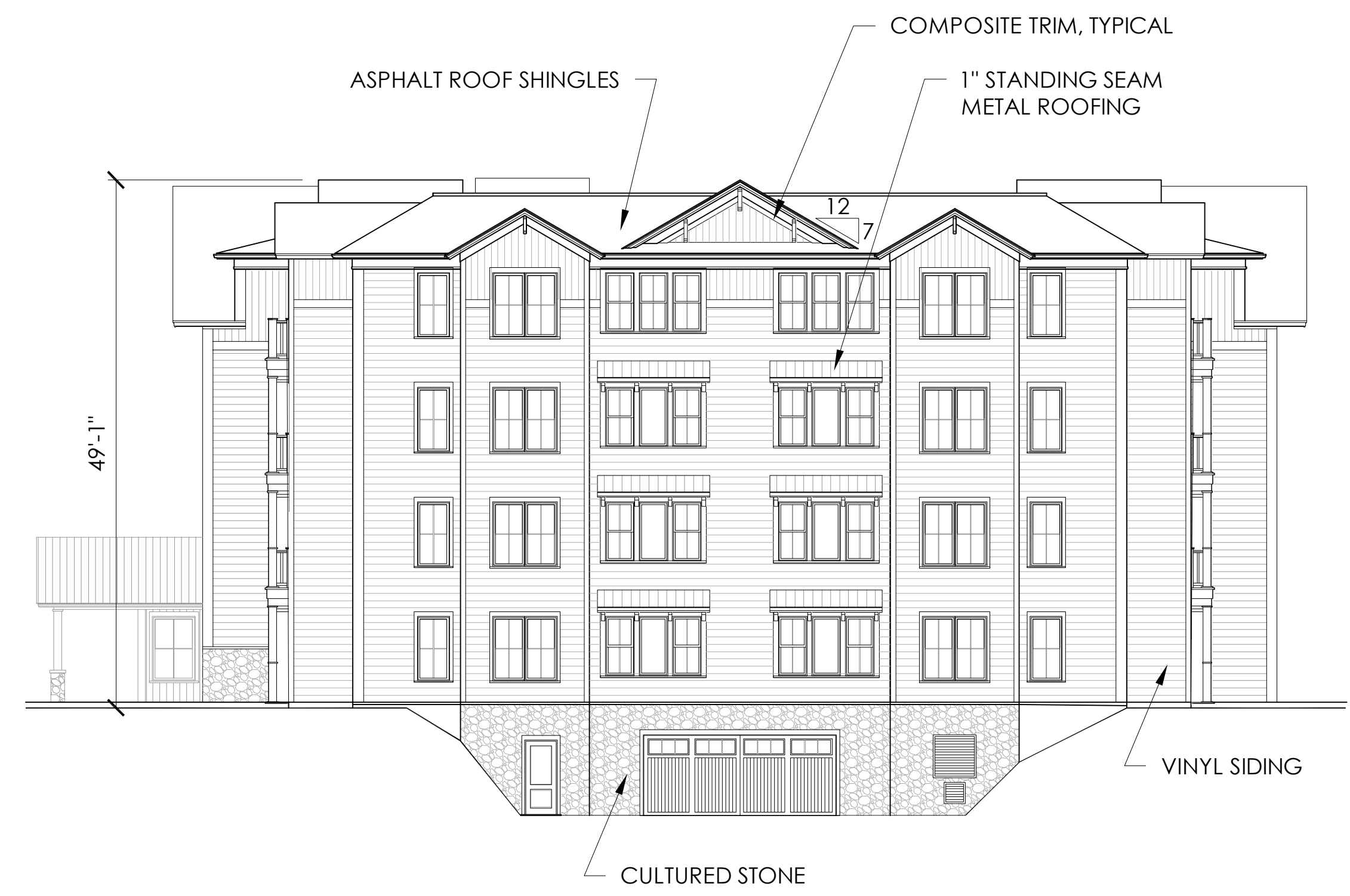
BUILDING D  
 ELEVATIONS

DATE: 3/14/2022  
 DRAWN BY: WWB  
 APPROVED BY: CJG  
 SCALE: 3/32" = 1'-0"  
 JOB NUMBER: 21611

A2.0



1 FRONT ELEVATION  
 3/32" = 1'-0"



2 RIGHT SIDE ELEVATION  
 3/32" = 1'-0"



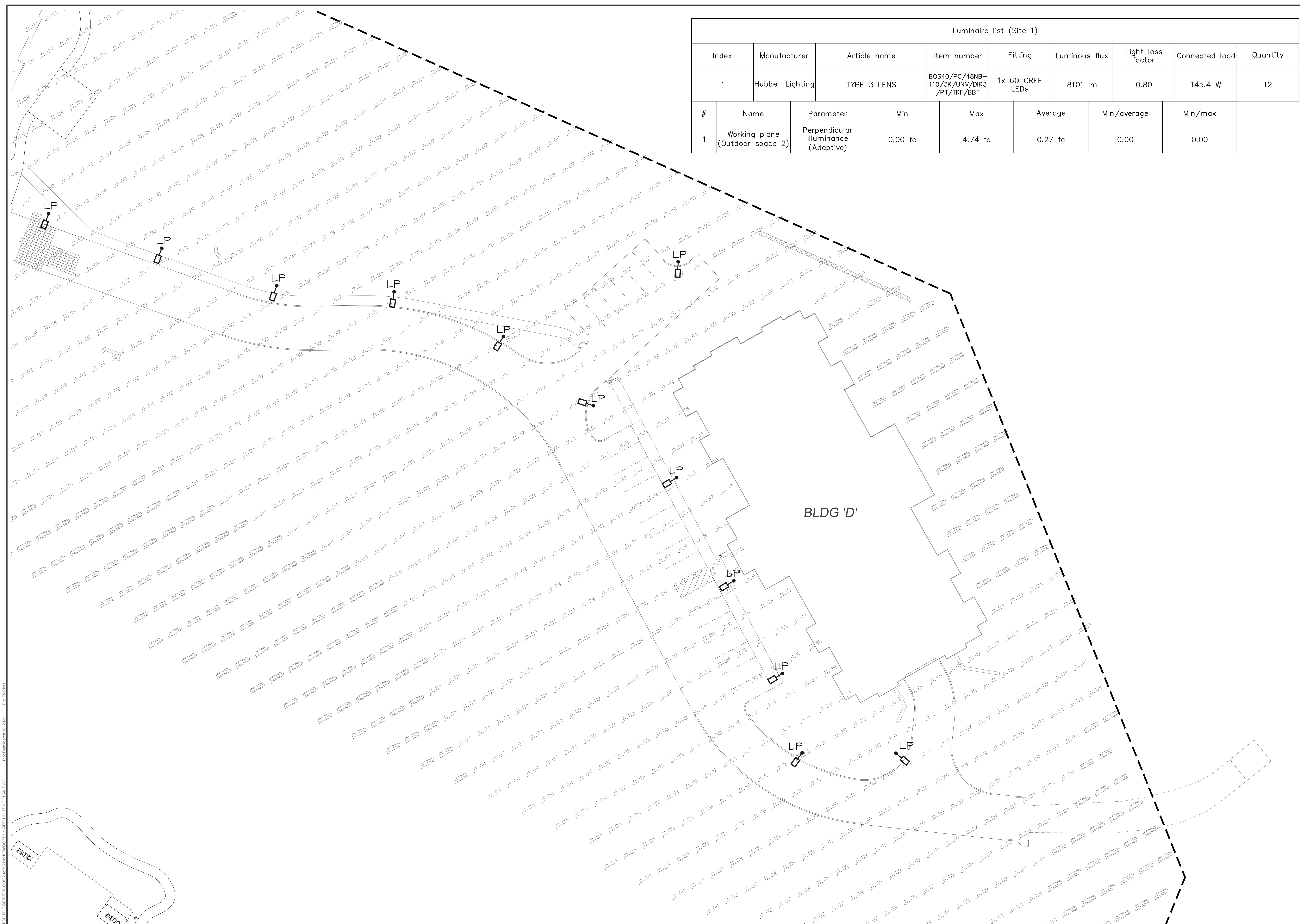
3 BACK ELEVATION  
 3/32" = 1'-0"



4 LEFT SIDE ELEVATION  
 3/32" = 1'-0"

NOT FOR CONSTRUCTION





Luminaire list (Site 1)								
Index	Manufacturer	Article name	Item number	Fitting	Luminous flux	Light loss factor	Connected load	Quantity
1	Hubbell Lighting	TYPE 3 LENS	BOS40/PC/48NB-110/3K/UNV/DIR3/PT/TRF/BBT	1x 60 CREE LEDs	8101 lm	0.80	145.4 W	12
#	Name	Parameter	Min	Max	Average	Min/average	Min/max	
1	Working plane (Outdoor space 2)	Perpendicular illuminance (Adaptive)	0.00 fc	4.74 fc	0.27 fc	0.00	0.00	

Stamp:



Contractor:

REVISIONS		Approved
Date	Description	

Project Name:  
**RAY FARM - SITE**  
 EPPING ROAD  
 EXETER, NH 03833

Title:  
**SITE LIGHTING PLAN**

Drawn: CMM  
 Checked: SF/SH/RFG  
 Date: 03-28-22  
 Scale: 1"=20'-0"  
 Project No.: 222091  
 File No.:

Drawing No.:  
**SE1.1**

J:\SEI\SERVER\2022\222091\DWG\SEI.1 SITE LIGHTING PLAN.DWG  
 Plot Date: March 28, 2022  
 Plot By: chris





6 CHESTNUT STREET, AMESBURY, MA.

Phone: (978) 388-2157  
CONSULTING ENGINEERS &  
LAND SURVEYORS SINCE 1988  
www.gm2inc.com

Sheet Title:

# WETLAND IMPACT PLAN

Project Title:

## Ray Farm Condominium

Ray Farmstead Road  
Exeter, NH 03833  
Rockingham County

Applicant/Owner:

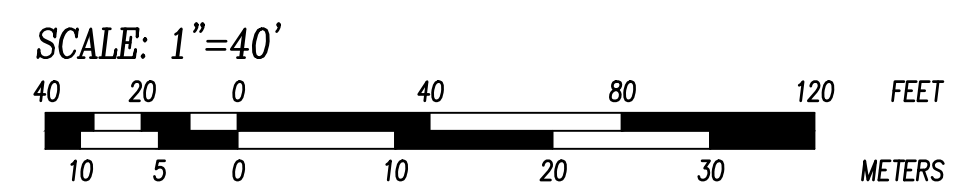
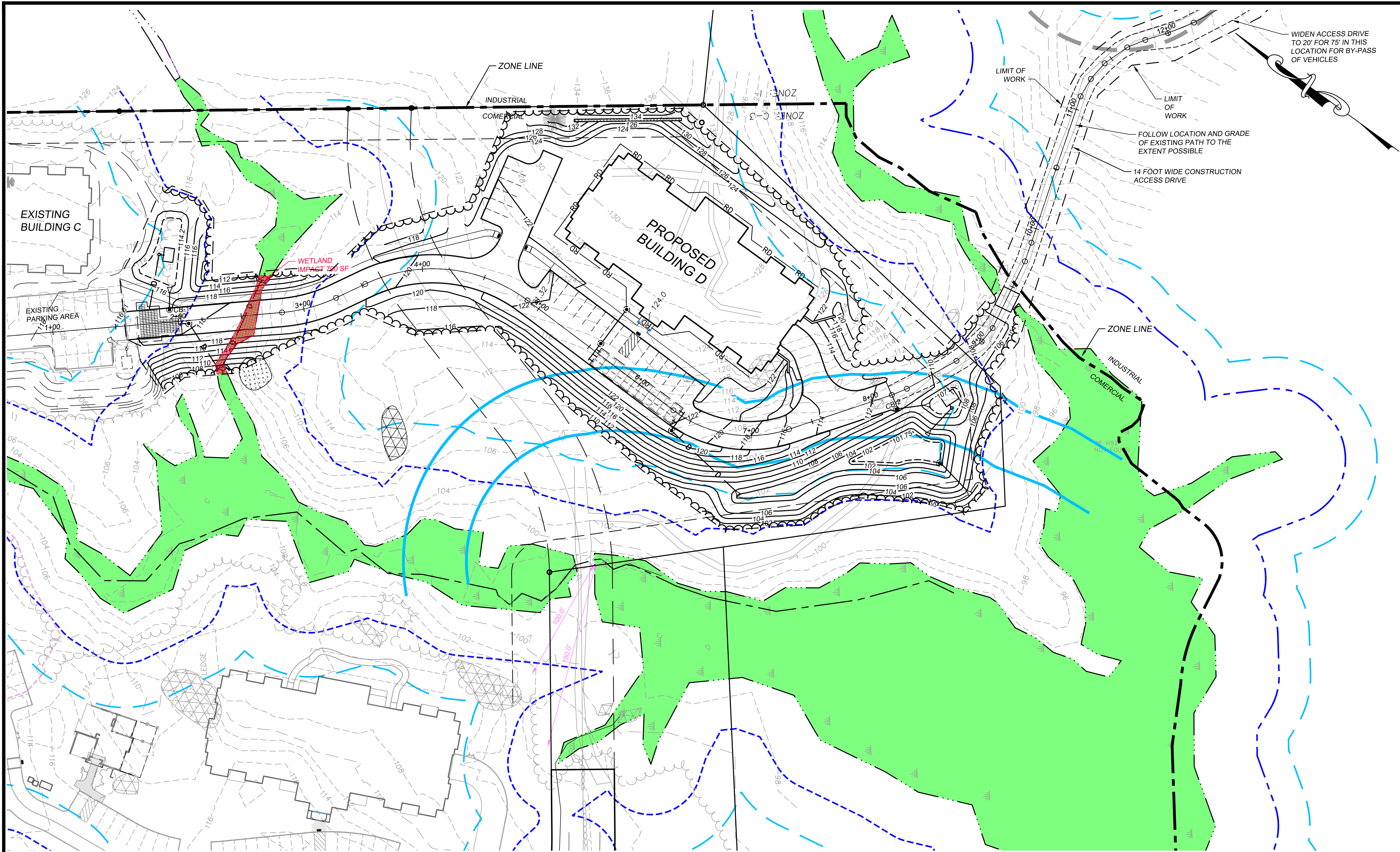
Ray Farm, LLC  
158 Shattuck Way  
Newington, NH 03801

### REVISION BLOCK

NO.	DATE	DESC	BY

PROJ. MGR.: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D GR.DWG  
 FBK:  
 JOB #: 16042 D

SHEET C1.24



### DIRECT WETLAND IMPACTS

WETLAND IMPACT - AREA 1 700 SF

TOTAL WETLAND IMPACT 700 SF

### NOTES:

- REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
- ACCESS ROAD SHOWN DEPICTS DESIGN INTENT ONLY. FINAL DESIGN TO BE COORDINATED WITH RESULTS OF THE TIF PROGRAM DESIGN.

TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

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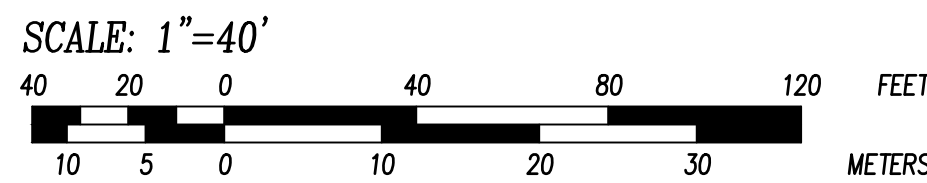
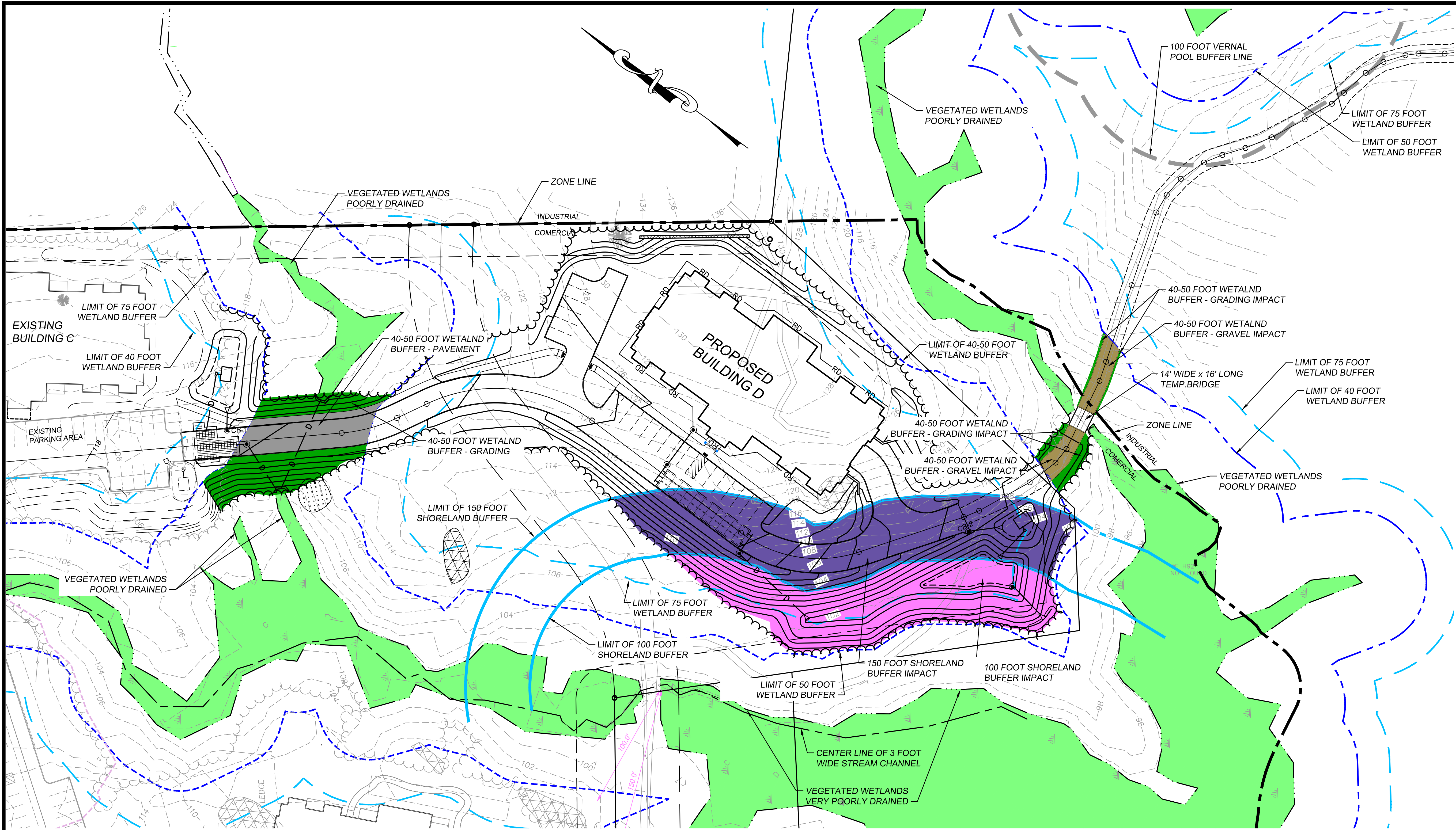
Sheet Title:  
**WETLAND AND  
 SHORELAND  
 BUFFER IMPACT  
 PLAN**

Project Title:  
**Ray Farm  
 Condominium**  
 Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:  
**Ray Farm, LLC**  
 158 Shattuck Way  
 Newington, NH 03801

REVISION BLOCK			
NO.	DATE	DESC	BY

PROJ. MGR.: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D GR.DWG  
 FBK:  
 JOB #: 16042 D



**WETLAND BUFFER IMPACTS**

	40-50 FOOT WETLAND BUFFER IMPACT - PAVEMENT	2858 SF
	40-50 FOOT WETLAND BUFFER IMPACT - GRAVEL	1436 SF
	40-50 FOOT WETLAND BUFFER IMPACT - GRADING	5179 SF
	75 FOOT WETLAND BUFFER IMPACT	0 SF

TOTAL WETLAND BUFFER IMPACTS 9,473 SF

**SHORELAND BUFFER IMPACTS**

	100 FOOT SHORELAND BUFFER IMPACT	9128 SF
	150 FOOT SHORELAND BUFFER IMPACT	16,560 SF

TOTAL SHORELAND BUFFER IMPACT 25,688 SF SF

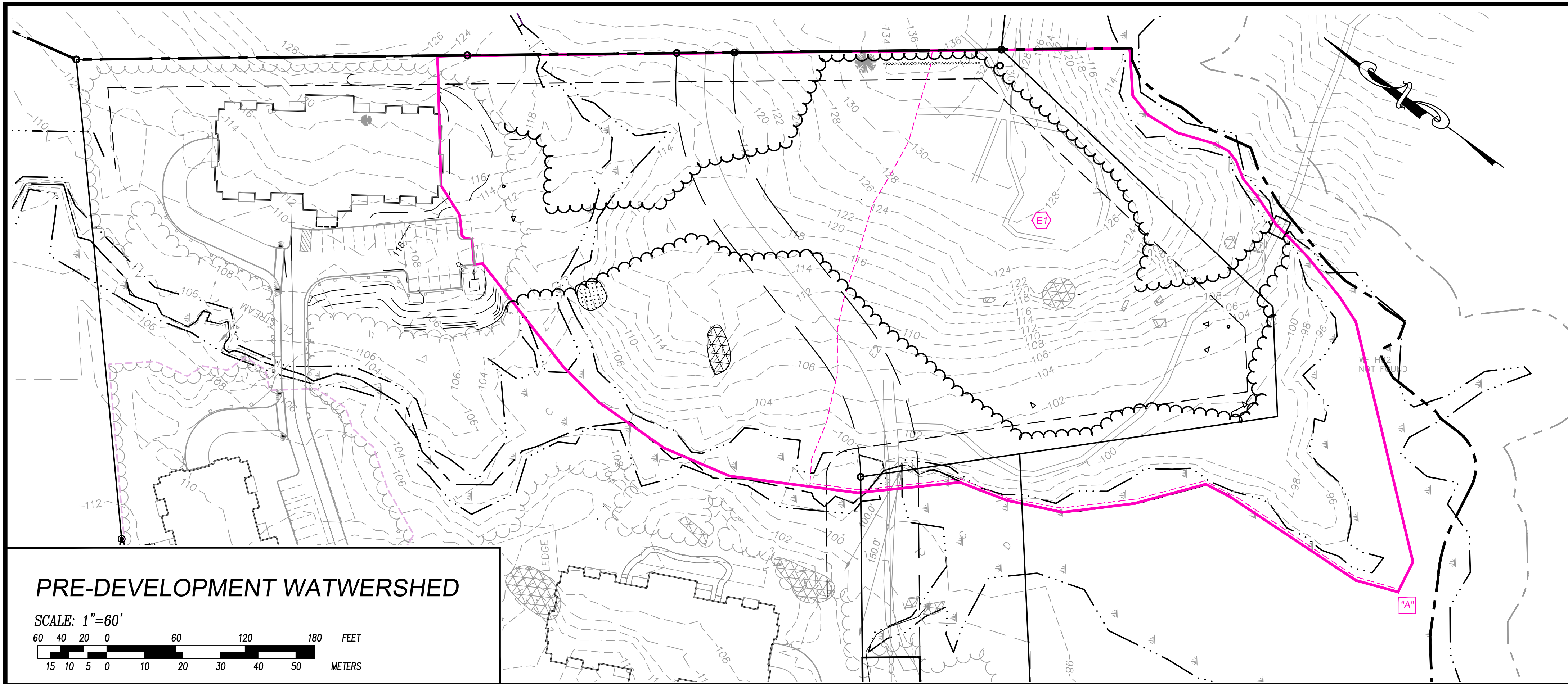
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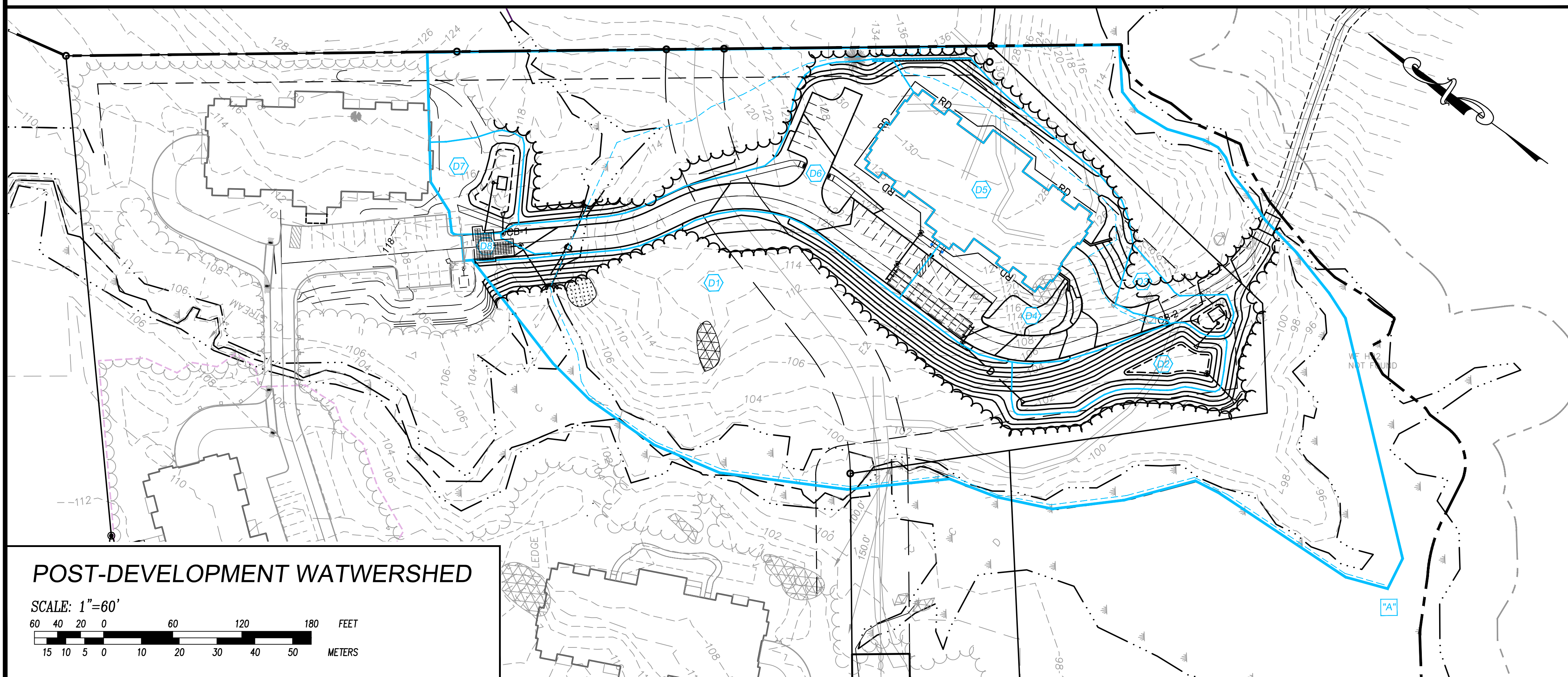
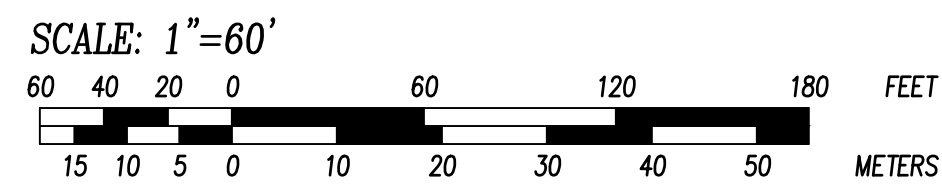
TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

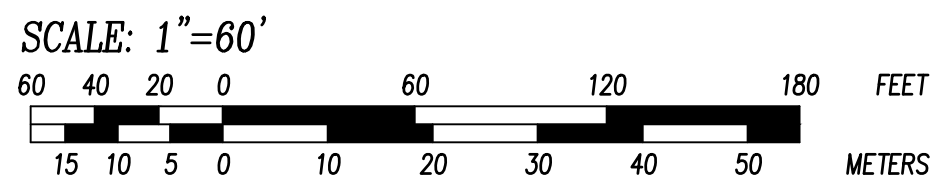




**PRE-DEVELOPMENT WATWERSHED**



**POST-DEVELOPMENT WATWERSHED**



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Sheet Title:  
**WATERSHED  
 PLANS**

Project Title:  
**Ray Farm  
 Condominium**  
 Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:  
**Ray Farm, LLC**  
 158 Shattuck Way  
 Newington, NH 03801

REVISION BLOCK			
NO.	DATE	DESC	BY

- NOTES:**
- REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
  - ACCESS ROAD SHOWN DEPICTS DESIGN INTENT ONLY. FINAL DESIGN TO BE COORDINATED WITH RESULTS OF THE TIF PROGRAM DESIGN.

TOWN OF EXETER PLANNING BOARD

\_\_\_\_\_  
 CHAIRMAN

\_\_\_\_\_  
 DATE

PROJ. MGR.: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D GR.DWG  
 FBK:  
 JOB #: 16042 D





CELEBRATING OVER 35 YEARS OF SERVICE TO OUR CLIENTS

LIZABETH M. MACDONALD  
JOHN J. RATIGAN  
DENISE A. POULOS  
ROBERT M. DEROSIER  
CHRISTOPHER L. BOLDT  
SHARON CUDDY SOMERS  
DOUGLAS M. MANSFIELD  
KATHERINE B. MILLER  
CHRISTOPHER T. HILSON  
HEIDI J. BARRETT-KITCHEN  
JUSTIN L. PASAY  
ERIC A. MAHER  
CHRISTOPHER D. HAWKINS  
BRENDAN A. O'DONNELL  
ELAINA L. HOEPPNER  
WILLIAM K. WARREN

RETIRED  
MICHAEL J. DONAHUE  
CHARLES F. TUCKER  
ROBERT D. CIANDELLA  
NICHOLAS R. AESCHLIMAN

April 1, 2022

Langdon Plumer, Chair  
Exeter Planning Board  
10 Front Street  
Exeter, NH 03833

Re: Conditional Use Permit Applications - Ray Farm – Building D Relocation  
Map 47, Lot 8.1

Dear Chair Plumber and Board Members:

This Firm represents Ray Farm, LLC which is the declarant of the Ray Farm Condominium, a 55+ senior living development in Exeter located on property off of Ray Farmstead Road which is further identified as Town Tax Map 47, Lot 8 (the “Ray Farm Property” or the “Project”), as well as CKT Associates, which is the owner of adjacent land identified as Town Tax Map 47, Lot 8.1 (the “CKT Property”). Enclosed please find two (2) Applications for Conditional Use Permits related to proposed impacts to the Town’s Shoreland Protection District and the Wetlands Conservation District on the Ray Farm Property and CKT Property caused by the proposed relocation of the previously approved fourth building of the Project, together with supporting materials. These applications supplement the Site Plan Review application which was filed on March 29, 2022. Also enclosed is check in the amount of \$100.00 for application filing fees. If you have any questions do not hesitate to contact me.

Very truly yours,  
DONAHUE, TUCKER & CIANDELLA, PLLC

Justin L. Pasay  
JLP/sac  
Enclosures

cc: Jonathan Shafmaster  
Denis Hamel, GM2  
Brendan Quigley, Gove Environmental  
Exeter Conservation Commission w/ 2 copies

DONAHUE, TUCKER & CIANDELLA, PLLC  
16 Acadia Lane, P.O. Box 630, Exeter, NH 03833  
111 Maplewood Avenue, Suite D, Portsmouth, NH 03801  
Towle House, Unit 2, 164 NH Route 25, Meredith, NH 03253  
83 Clinton Street, Concord, NH 03301

# Town of Exeter



## **Planning Board Application for Conditional Use Permit: Shoreland Protection District**

***February 2017***



# Town of Exeter Planning Board Application

## Conditional Use Permit: Shoreland Protection District In accordance with Zoning Ordinance Article: 9.3

### SUBMITTAL REQUIREMENTS:

(see Conservation Commission and Planning Board meeting dates and submission deadlines)

1. One (1) electronic copy of full application, including plans (color copy if available)
2. Fifteen (15) copies of the Application
3. Fifteen (15) 11"x17" and three (3) full sized copies of the plan which must include:
  - Existing Conditions
    - a. Property Boundaries
    - b. Edge of Shoreland and associated Buffer (Shoreland Protection District – SPD)
    - c. Structures, roads/access ways, parking, drainage systems, utilities, wells and wastewater disposal systems and other site improvements
  - Proposed Conditions
    - a. Edge of Shoreland and Shoreland Buffers and distances to the following:
      - i. Edge of Disturbance
      - ii. Structures, roads/access ways, parking, drainage systems, utilities, wells and wastewater disposal systems and other site improvements
    - b. Name and phone number of all individuals whose professional seal appears on the plan
4. If applicant and/or agent is not the owner, a letter of authorization must accompany this application
5. Supporting documents i.e. Letters from the Department of Environmental Services, Standard Dredge and Fill Application and Photos of the property
6. A Town of Exeter Assessors list of names and mailing addresses of all abutters

<b>Required Fees:</b>
Planning Board Fee: <b>\$50.00</b> Abutter Fee: <b>\$10.00</b> Recording Fee (if applicable): <b>\$25.00</b>

The Planning Office must receive the completed application, plans and fees on the day indicated on the Planning Board Schedule of Deadlines and Public Hearings.

APPLICANT	Name: CKT Associates
	Address: 158 Shattuck Way, Newington, NH 03801
	Email Address:
	Phone: 603-431-3170
PROPOSAL	Address: Ray Farmstead Road
	Tax Map # <u>47</u> Lot# <u>8.1</u> Zoning District: <u>C-3</u>
	Owner of Record: CKT Associates
Person/Business performing work outlined in proposal	Name: TBD
	Address:
	Phone:
Professional that delineated wetlands	Name: Brendan Quigley, Gove Environmental
	Address: 8 Continental Drive, Unit H, Exeter, NH 03833
	Phone: 603-778-0654



**Town of Exeter  
 Planning Board Application  
 Conditional Use Permit: Shoreland Protection District**

Detailed Proposal including intent, project description, and use of property: (Use additional sheet as needed)  
 see attached

Shoreland Protection District Impact (in square footage):	
Water Body	Watson Brook
Temporary Impact	<input type="checkbox"/> 300 Foot SPD _____ <input type="checkbox"/> 150 foot SPD _____ <input type="checkbox"/> SPD Building Setback _____ <input type="checkbox"/> 75 Vegetative Buffer _____
Permanent Impact	<input type="checkbox"/> 300 Foot SPD _____ <input checked="" type="checkbox"/> 150 foot SPD <u>16,560 sf</u> <input checked="" type="checkbox"/> SPD Building Setback <u>9,128 sf grading for stormwater management</u> <input type="checkbox"/> 75 Vegetative Buffer _____
Impervious Lot Coverage	SF of Lot within District <u>71,422</u> SF of Impervious within District <u>6,715</u> % of Impervious within District <u>9.4%</u>

List any variances/special exceptions granted by Zoning Board of Adjustment including dates:  
 Variance to allow age restricted residential use granted on November 17, 2021.

Describe how your proposal meets the conditions of Article 9.3.4.G.2 of the Zoning Ordinance (attached for reference):  
 see attached

**ABUTTERS: PLEASE LIST ALL PERSONS WHOSE PROPERTY IS LOCATED IN NEW HAMPSHIRE AND ADJOINS OR IS DIRECTLY ACROSS THE STREET OR STREAM FROM THE LAND UNDER CONSIDERATION BY THE BOARD. THIS LIST SHALL BE COMPILED FROM THE EXETER TAX ASSESSOR'S RECORDS.**

TAX MAP see attached  
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**Please attach additional sheets if needed**

**Conditional Use Permit Criteria**  
**Shoreland Protection District**

9.3.4 G Conditional Uses:

2. The Planning Board may grant a Conditional Use Permit for those uses listed above only after written findings of fact are made which have been reviewed by technical experts from the Rockingham Conservation District, if required by the Planning Board, at the cost of the developer, provided that all of the following are true:

- a. The proposed use will not detrimentally affect the surface water quality of the adjacent river or tributary, or otherwise result in unhealthful conditions.
- b. The proposed use will discharge no waste water on site other than that normally discharged by domestic waste water disposal systems and will not involve on-site storage or disposal of hazardous or toxic wastes as herein defined.
- c. The proposed use will not result in undue damage to spawning grounds and other wildlife habitat.
- d. The proposed use complies with the use regulations identified in Article 9.3.4 Exeter Shoreland Protection District Ordinance – Use Regulations and all other applicable sections of this article.
- e. The design and construction of the proposed use will be consistent with the intent of the purposes set forth in Article 9.3.1 Exeter Shoreland Protection District Ordinance – Authority and Purpose.



# Town of Exeter



**Planning Board Application  
for  
Conditional Use Permit:  
Wetlands Conservation Overlay  
District**

***March 2020***



**Town of Exeter  
 Planning Board Application  
 Conditional Use Permit: Wetland Conservation Overlay District**

Detailed Proposal including intent, project description, and use of property: (Use additional sheet as needed)

see attached

**Wetland Conservation Overlay District Impact (in square footage):**

Temporary Impact	Wetland: (SQ FT.)	Buffer: (SQ FT.)
	<input type="checkbox"/> Prime Wetlands _____	<input type="checkbox"/> Prime Wetlands _____
	<input type="checkbox"/> Exemplary Wetlands _____	<input type="checkbox"/> Exemplary Wetlands _____
	<input type="checkbox"/> Vernal Pools (>200SF) _____	<input type="checkbox"/> Vernal Pools (>200SF) _____
	<input type="checkbox"/> VPD _____	<input type="checkbox"/> VPD _____
	<input type="checkbox"/> PD _____	<input type="checkbox"/> PD _____
	<input type="checkbox"/> Inland Stream _____	<input type="checkbox"/> Inland Stream _____
Permanent Impact	Wetland:	Buffer:
	<input type="checkbox"/> Prime Wetlands _____	<input type="checkbox"/> Prime Wetlands _____
	<input type="checkbox"/> Exemplary Wetlands _____	<input type="checkbox"/> Exemplary Wetlands _____
	<input type="checkbox"/> Vernal Pools (>200SF) _____	<input type="checkbox"/> Vernal Pools (>200SF) _____
	<input type="checkbox"/> VPD _____	<input type="checkbox"/> VPD _____
	<input checked="" type="checkbox"/> PD <u>700 sf</u>	<input checked="" type="checkbox"/> PD <u>9,473 sf</u>
	<input checked="" type="checkbox"/> Inland Stream <u>inc. above</u>	<input type="checkbox"/> Inland Stream <u>inc. above</u>

List any variances/special exceptions granted by Zoning Board of Adjustment including dates:

Variance to permit age-restricted residential use granted on November 17, 2021.

Describe how the proposal meets conditions in **Article 9.1.6.B** of the Zoning Ordinance (attached for reference):

see attached

**ABUTTERS: PLEASE LIST ALL PERSONS WHOSE PROPERTY IS LOCATED IN NEW HAMPSHIRE AND ADJOINS OR IS DIRECTLY ACROSS THE STREET OR STREAM FROM THE LAND UNDER CONSIDERATION BY THE BOARD. THIS LIST SHALL BE COMPILED FROM THE EXETER TAX ASSESSOR'S RECORDS.**

TAX MAP see attached  
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9.1.6. B: Conditions: Prior to issuance of a conditional use permit, the Planning Board shall conclude and make a part of the record, compliance with the following criteria:

1. That the proposed use is permitted in the underlying zoning district;
2. No alternative design which does not impact a wetland or wetland buffer or which has less detrimental impact on the wetland or wetland buffer is feasible;
3. A wetland scientist has provided an impact evaluation that includes the “functions and values” of the wetland(s), an assessment of the potential project-related impacts and concluded to the extent feasible, the proposed impact is not detrimental to the value and function of the wetland(s) or the greater hydrologic system.
4. That the design, construction and maintenance of the proposed use will, to the extent feasible, minimize detrimental impact on the wetland or wetland buffer;
5. That the proposed use will not create a hazard to individual or public health, safety and welfare due to the loss of wetland, the contamination of groundwater, or other reasons;
6. The applicant may propose an increase in wetland buffers elsewhere on the site that surround a wetland of equal or greater size, and of equal or greater functional value than the impacted wetland
7. In cases where the proposed use is temporary or where construction activity disturbs areas adjacent to the immediate use, the applicant has included a restoration proposal revegetating any disturbed area within the buffer with the goal to restore the site as nearly as possible to its original grade and condition following construction.
8. That all required permits shall be obtained from the New Hampshire Department of Environmental Services Water Supply and Pollution Control Division under NH RSA §485-A: 17, the New Hampshire Wetlands Board under NH RSA §483-A, and the United States Army Corps of Engineers under Section 404 of the Clean Water Act.;

## Conditional Use Permit Analysis

This Firm represents Ray Farm, LLC which is the declarant of the Ray Farm Condominium, a 55+ senior living development in Exeter located on property off of Ray Farmstead Road which is further identified as Town Tax Map 47, Lot 8 (the “Ray Farm Property” or the “Project”), as well as CKT Associates, which is the owner of adjacent land identified as Town Tax Map 47, Lot 8.1 (the “CKT Property”). This Conditional Use Permit Analysis provides relevant background regarding the Project and the requested Conditional Use Permits, and supplements and incorporates the Wetland Delineation & Function-Value Report conducted by Brendan Quigley, NHCWS, of Gove Environmental Services, Inc. dated 31 March 2022 (the “Wetland Report”) which Wetland Report is incorporated herein by reference and is enclosed herewith as **Enclosure 1**. Also enclosed herewith are the Project’s Wetland Impact Plans produced by GM2, which plans incorporate three (3) sheets. See Enclosure 2.

Below please find a Project Narrative, description of proposed wetland impacts, and supplemented Conditional Use Permit Analysis analyzing both the Wetland Conservation District Conditional Use Permit criteria and the Shoreland Protection District Conditional Use Permit criteria, which analysis supplements and incorporates that which is found in the Wetland Report. See Enclosure 1.

### Project Narrative

By way of brief background, the Project, as approved by the Planning Board on 27 July 2017, consists of four distinct residential buildings (Buildings A – D) containing 116 units, a 2,000 sf clubhouse, and corresponding site improvements, all serviced by a private driveway accessed via Ray Farmstead Road. See Enclosure 3.<sup>1</sup> As approved, Buildings A, B and C are identical in design, size and footprint, and each contains 32 dwelling units. Building D, as depicted on **Enclosure 1**, was approved to be located in close proximity to Epping Road and the Mobil Gas Station and has a different design than Buildings A, B and C, containing only 20 dwelling units.

Since the Project’s approval, Ray Farmstead Road was built and accepted by the Town as Town Road, and Buildings A and B, as well as the clubhouse, are finished and completely occupied. Building C is being constructed and will be completed shortly in the spring of 2022. More than 40% of the units in Building C are pre-sold.

As the Applicant considered the completion of the Project via construction of Building D as originally approved, a more attractive alternative emerged. Specifically, the Applicant now proposes the relocation of Building D to the CKT Property. The Applicant proposes to construct the relocated Building D in the identical manner as Buildings A, B and C, inclusive of 32 units instead of the 20 units Building D was approved for in 2017. The proposed relocation of Building D is depicted on the plans provided by GM2 Engineering. See also Enclosure 2. As depicted, the relocated Building D is proposed to be accessed via an extended internal roadway from Building C, which would require minor wetland crossing.

---

<sup>1</sup> Approved Site Plan

To accomplish its redesign, the Applicant proposes to consolidate approximately 4.29-acres of the upland area of the CKT Property and combine the same with the Ray Farm Property (Town Tax Map 47, Lot 8). The additional 4.29 acres added to the Ray Farm Property would be the site of the relocated Building D.

The net result of the Applicant's proposal would be a Ray Farm Property that is approximately 15.76 acres in size rather than the existing 11.46 acres. Reconfigured as proposed, the Ray Farm Property would continue to comply in all respects with all local Zoning regulations and would have less density than what was approved by the Planning Board in 2017. The area of the Ray Farm Property which was originally approved to accommodate Building D, will remain an open space area of the Ray Farm Project.

In support of its proposal, the Applicant received approval from the Zoning Board of Adjustment on November 17, 2021 to permit an age-restricted use for the proposed relocation of Building D on the Applicant's Abutting Property, which is Zoned in the C-3 Zoning District, and to increase the total number of residential units in the Project from 116 to 128.

The remnant area of the CKT Property post-subdivision and consultation will be approximately 3.16 acres in size, will have ample frontage along Epping Road and Ray Farmstead Road, will remain in the C-3 Zoning District, will comply in all respects with applicable Zoning regulations and could accommodate viable C-3 commercial development in the future.

### **Proposed Impacts**

- **Wetlands Conservation District**

The Project contemplates 700 sf of direct wetland impact and 9,473 sf of buffer impact within the Town's 40-50 ft Limited Use Buffer caused by grading, pavement and gravel relating to two wetland area crossings. **Enclosure 2.** The first, located approximate to existing Building C, will provide internal access to proposed Building D over poorly drained soils and an intermittent stream area. See Enclosure 1. The second is a temporary crossing over poorly drained soils to the south and east of proposed Building D on the CKT Property. Id.

- **Shoreland Protection District**

The Project also contemplates 9,128 sf of proposed impact to the 100 ft Shoreland Protection District caused by grading and stormwater management infrastructure which will be utilized by Building D, as well as 16,560 sf of impact within the 150 ft Shoreland Protection District caused by grading, drainage infrastructure, and portions of pavement which will serve Building D. **Enclosure 2.**

## Wetlands Conservation District Conditional Use Permit Criteria Analysis

The Project satisfies the applicable Wetlands Conservation District Conditional Use Permit criteria found in Section 9.1.6(B) of the Town's Zoning Ordinance for the reasons stated in **Enclosure 1**, as supplemented below.

- **That the proposed use is permitted in the underlying zoning district. Zoning Ordinance, Section 9.6.1(B)(1).**

The underlying use is an age-restricted 55+ multifamily residential use which is permitted in the C-3 district and on the underlying properties pursuant to the Variance relief obtained by the Applicant on 17 November 2021. Further, the actual use within the Limited Use Buffer includes paving, grading and gravel, all to facilitate permanent and temporary access to the Project, which use is expressly permitted by Section 9.6.1(1) of the Zoning Ordinance. As such, this criteria is satisfied.

- **No alternative design which does not impact a wetland or wetland buffer or which has less detrimental impact on the wetland or wetland buffer is feasible. Zoning Ordinance, Section 9.6.1(B)(2).**

See Enclosure 1, pg. 4. Further, the proposed upland area for relocated Building D is best accessed for development via an extension of the existing driveway serving the rest of the Project, and not via extension of the existing Ray Farmstead Road, which would cause significantly more impact to more valuable wetland resource areas. The Project goal of avoiding and minimizing impact, is evidenced by the approach the Applicant has taken with this development proposal to particularly include the use of viable uplands on the CKT Property, the corresponding proposed lot line adjustment, and the Variance the Applicant had to obtain. On these bases, this criteria is satisfied.

- **A wetland scientist has provided an impact evaluation that includes the “functions and values” of the wetland(s), an assessment of the potential project-related impacts and concluded to the extent feasible, the proposed impact is not detrimental to the value and function of the wetland(s) or the greater hydrologic system. Zoning Ordinance, Section 9.6.1(B)(3).**

See Enclosure 1, pgs. 4-5. Further, as evidenced in **Enclosure 1**, due to the Project's design, impacts will be reasonably mitigated and the “overall wetland function and the greater hydrologic system will not be negatively affected.” **Enclosure 1**, pg. 5. On these bases, this criteria is satisfied.

- **That the design, construction and maintenance of the proposed use will, to the extent feasible, minimize detrimental impact on the wetland or wetland buffer. Zoning Ordinance, Section 9.6.1(B)(4).**

See Enclosure 1, pg. 5. Further, the entirety of the relocated Building D is located out of the wetland and all associated buffers and impacts are limited to one permanent wetland crossing



and one temporary crossing to facilitate construction access. The Project also avoids a much larger and more detrimental impact crossing of Watson Brook if Ray Farmstead Road were to be extended. On these bases, this criteria is satisfied.

- **That the proposed use will not create a hazard to individual or public health, safety and welfare due to the loss of wetland, the contamination of groundwater, or other reasons. Zoning Ordinance, Section 9.6.1(B)(5).**

See Enclosure 1, pg. 5. To summarize, the Project causes no hazard to individual or public health, safety or welfare to the loss of wetland, the contamination of groundwater, or any other reasons. On these bases, this criteria is satisfied.

- **The applicant may propose an increase in wetland buffers elsewhere on the site that surround a wetland of equal or greater size, and of equal or greater functional value than the impacted wetland. Zoning Ordinance, Section 9.6.1(B)(6).**

See Enclosure 1, pg. 5. The proposed relocation of Building D avoids approximately 5,000 sf of Limited Use Buffer impact that was approved to occur pursuant to the original location of Building D. The relocation also avoids approximately 1,300 sf of impact within the 75-foot building setback caused by Building D as originally approved. Finally, the proposal avoids larger and more detrimental impact to the Watson Brook area that would be caused by an extension of Ray Farmstead Road. On these bases, this criteria is satisfied.

- **In cases where the proposed use is temporary or where construction activity disturbs areas adjacent to the immediate use, the applicant has included restoration proposal revegetating any disturbed area within the buffer with the goal to restore the site as nearly as possible to its original grade and condition following construction. Zoning Ordinance, Section 9.6.1(B)(7).**

See Enclosure 1, pg. 5. On these bases, this criteria is satisfied.

- **That all required permits shall be obtained from the New Hampshire Department of Environmental Services Water Supply and Pollution Control Division under NH RSA 485-A:17, the New Hampshire Wetlands Board under NH RSA 483-A, and the United States Army Corps of Engineers under Section 404 of the Clean Water Act. Zoning Ordinance, Section 9.6.1(B)(8).**

The Applicant will obtain all necessary local, State and Federal permits for the Project and welcomes a condition of approval requiring same.

### **Shoreland Protection District Conditional Use Permit Criteria Analysis**

The Project satisfies the applicable Shoreland Protection District Conditional Use Permit criteria found in Section 9.3.4(G)(2) of the Town's Zoning Ordinance for the reasons stated in **Enclosure 1**, as supplemented below.

- **That the proposed use will not detrimentally affect the surface water quality of the adjacent river or tributary, or otherwise result in unhealthful conditions. Zoning Ordinance, Section 9.3.4(G)(2)(a).**

See Enclosure 1, pg. 6. On these bases, this criteria is satisfied.

- **The proposed use will discharge no waste water on site other than that normally discharged by domestic waste water disposal systems and will not involve on-site storage or disposal of hazardous or toxic wastes as herein defined. Zoning Ordinance, Section 9.3.4(G)(2)(b).**

See Enclosure 1, pg. 6. There will be no wastewater discharge on site and no disposal or storage of hazardous or toxic wastes. On these bases, this criteria is satisfied.

- **The proposed use will not result in undue damage to spawning grounds and other wildlife habitat. Zoning Ordinance, Section 9.3.4(G)(2)(c).**

See Enclosure 1, pg. 6. On these bases, this criteria is satisfied.

- **The proposed use complies with the use regulations identified in Article 9.3.4 Exeter Shoreland Protection District Ordinance – Use Regulations and all other applicable sections of this article. Zoning Ordinance, Section 9.3.4(G)(2)(d).**

The Project is compliant with the use regulations contained within Article 9.3.4 of the Exeter Zoning Ordinance and all other applicable sections of the Town’s Shoreland Protection Zoning District Ordinance.

- **The design and construction of the proposed use will be consistent with the intent of the purposes set forth in Article 9.3.1 Exeter Shoreland Protection District Ordinance – Authority and Purpose. Zoning Ordinance, Section 9.3.4(G)(2)(e).**

In relevant part, the purpose of the Exeter Shoreland Protection District Ordinance is to protect, maintain and enhance the water quality of the Squamscott River and its tributaries in Exeter, to conserve and protect aquatic and terrestrial habitat associated with river areas as well as intertidal and riparian areas, to preserve and enhance those recreational and aesthetic values associated with the natural shoreline and river environment, both fresh and salt, and to encourage those uses that can be appropriately located adjacent to shorelines. Zoning Ordinance, Section 9.3.1.

In this case, and as evidenced by **Enclosure 1**, the Project does not threaten the water quality of the Squamscott River or Watson Brook, does not compromise aquatic or terrestrial habitat associated with river areas, and does not affect the recreational or aesthetic values associated with natural shorelines. As a result, the Project is precisely the type of development which is appropriately sited in proximity to the Shoreland Protection District and which should be encouraged.



GOVE ENVIRONMENTAL SERVICES, INC

March 31, 2022

Jonathan Shaftmaster  
Ray Farm, LLC  
158 Shattuck Way  
Newington, NH 03801

Subject: Wetland Delineation & Function-Value Report  
Ray Farm Condominiums  
Exeter, NH

Dear Mr. Shaftmaster:

This wetland report is being submitted in connection with proposed relocation of Building “D” within the Ray Farm Condominium development on Ray Farmstead Drive. This report documents the delineation and functional assessment of wetland resources in the vicinity of the proposed work as well as an evaluation of the proposed work within the context Section 9.1 and 9.3 of the Zoning Ordinance (Wetland Conservation and Shoreland Protection Districts).

## WETLAND DELINEATION

Resource areas on this property were initially delineated in 2014 and 2015 during the early planning stages of the original project. In accordance with state standards which limit the effective lifespan of delineations to five (5) years, the resource areas in proximity to the proposed relocated Building D were re-delineated in the fall of 2021 by Brendan Quigley, NHCWS #249. Wetland boundaries were evaluated utilizing the following standards:

1. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*, (Version 2.0) January 2012, U.S. Army Corps of Engineers.
2. *Field Indicators of Hydric Soils in the United States, A Guide for Identifying and Delineating Hydric Soils*, Version 8.2. United States Department of Agriculture (2018).
3. *New England Hydric Soils Technical Committee. 2019 Version 4, Field Indicators for Identifying Hydric Soils in New England*. New England Interstate Water Pollution Control Commission, Lowell, MA.
4. *National Wetland Plant List*, Version 3.2 (2016).
5. *Classification of Wetlands and Deepwater Habitats of the United States*. USFW Manual FWS/OBS-79/31 (1979).

The updated wetland boundaries were surveyed by GM2, Inc. and are depicted on the plans submitted for Site Plan Approval and Conditional Use Permits. Boundaries did not exhibit appreciable changes from the previous delineation but do encompass additional areas not detailed in the initial project. The vegetated wetland in the vicinity of the proposed new location of Building D is very similar to the forested wetland within the rest of the project site and the surrounding area in general. The dominant wetland type is saturated and seasonally flooded forested wetland dominated by red maple and highbush blueberry (PFO1E). The main portion of wetland in this area of the property lies southwest of the proposed Building D and is directly associated with Watson Brook. This area was largely flooded in 2015 due to downstream beaver activity but is currently free of standing water except within the Watson Brook stream channel which is clearly visible. The soils in this wetland are very poorly drained. Two narrow fingers of forested wetland located north and east of

the proposed building extend from wetland areas located outside the project area and connect to Watson Brook. The soil in these connecting wetlands is poorly drained and both areas contain intermittent streams. There is also a single vernal pool located within the large wetland northwest of Commerce Way. This area is well outside the project except for a small portion of the existing woods road proposed to be utilized for a temporary construction access, which passes through the outer portion of the associated 100-foot Vernal Pool Buffer.

All the wetland in the project area drain to Watson Brook which flows south to Norris Brook and eventually to the Squamscott River. The section of Watson Brook downstream of the existing trail crossing and easement extending from Ray Farmstead Road is perennial, as depicted on the most recent USGS map. Upstream from this location the stream is depicted as intermittent. Subsequently, the downstream section of the stream falls within the Exeter Shoreland Protection District.

The appropriate buffers for wetlands, vernal pools, and Watson Brook specified in the Wetland Conservation District and Shoreland Protection District ordinances are depicted on the project plans.

## FUNCTION & VALUE ASSESSMENT

A wetland function and value assessment was conducted using the US Army Corps Highway Methodology guidelines. Functions are self-sustaining properties of wetlands, which exist in the absence of human involvement. Values refers to the benefits gained by human society from a given wetland or ecosystem and their inherit functions. Functions and values identified as “primary” have been determined to be significant features of the wetland being evaluated. An important distinction is that the primary functions and values of a particular wetland does not necessarily indicating the wetland supports them at a significant *level* in comparison to other wetlands in the region or even near the site.

The Highway Methodology considers 13 functions and values:

1. **Groundwater recharge/discharge:** This function considers the potential for a wetland to serve as a groundwater recharge and/or discharge area. Recharge should relate to the potential for the wetland to contribute water to an aquifer. Discharge should relate to the potential for the wetland to serve as an area where ground water can be discharged to the surface.
2. **Floodflow Alteration:** This function considers the effectiveness of the wetland in reducing flood damage by attenuation of floodwaters for prolonged periods following precipitation events.
3. **Fish and Shellfish Habitat:** This function considers the effectiveness of seasonal or permanent water bodies associated with the wetland in question for fish and shellfish habitat.
4. **Sediment/Toxicant/Pathogen Retention:** This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland as a trap for sediments, toxicants or pathogens.
5. **Nutrient Removal/Retention/Transformation:** This function relates to the effectiveness of the wetland to prevent adverse effects of excess nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers or estuaries.
6. **Production Export:** This function relates to the effectiveness of the wetland to produce food or usable products for human, or other living organisms.
7. **Sediment/Shoreline Stabilization:** This function relates to the effectiveness of a wetland to stabilize stream banks and shorelines against erosion.
8. **Wildlife Habitat:** This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and the wetland edge. Both resident and or migrating species must be considered.





9. **Recreation:** This value considers the effectiveness of the wetland and associated watercourses to provide recreational opportunities such as canoeing, boating, fishing, hunting and other active or passive recreational activities. Consumptive opportunities consume or diminish the plants, animals or other resources that are intrinsic to the wetland, whereas non-consumptive opportunities do not.
10. **Educational/Scientific Value:** This value considers the effectiveness of the wetland as a site for an “outdoor classroom” or as a location for scientific study or research.
11. **Uniqueness/Heritage:** This value relates to the effectiveness of the wetland or its associated water bodies to produce certain special values. Special values may include such things as archeological sites, unusual aesthetic quality, historical events, or unique plants, animals, or geological features.
12. **Visual Quality/Aesthetics:** This value relates to the visual and aesthetic qualities of the wetland.
13. **Threatened or Endangered Species Habitat:** This value relates to the effectiveness of the wetland or associated water bodies to support threatened or endangered species.

Watson Brook and its associated wetland is the predominant resource area associated with the site. The combination of perennial stream flowing through a large wetland area creates conditions which support a number of functions and values, at least at some level. Groundwater discharge and production export for wildlife food sources are functions that are likely supported but not at a level at which they can be considered the wetlands primary functions. Similarly, recreation and aesthetic value can be assigned to these wetlands by virtue of their setting and presence of recreational trails in the vicinity. Support for these values is more general however, and mainly related to the value of open space, in this case mostly upland forest. In the context of wetland values, these are traditionally expressed by wetland specific characteristics such as suitability for boating or fishing, and aesthetically, as more diverse, and observable open wetland area such as a marsh, lake, or river. Although Watson Brook is perennial and may have the potential to support fish habitat, this function is severely limited by downstream crossings that very likely provide a barrier to fish passage.

The most significant functions of the Watson Brook resources are related to water quality, flood attenuation, and wildlife habitat. The wetland and upland buffer adjacent to the stream play an important water quality role for Watson Brook itself and downstream within Norris Brook and the Squamscott River. Though this stream can be characterized as a low energy system, the densely vegetated wetland provides stability to the channel, especially during higher flow events and flooding. The broad wetland area directly adjacent to the stream (the “Contiguous Wetlands”) is able to store water during these events, therefore providing flood attenuation function within the watershed. The stream and wetland also provide wildlife habitat and serve as wildlife corridor within the block of forest generally between Industrial Drive and Route 101. Broader wildlife connectivity is, however, hampered by these roadways, particularly the highway.

The two narrow wetlands and intermittent streams north and east of the proposed building are part of the same interconnected wetland system and therefore support the same set of functions to some degree. Specifically, however, their role is narrower, primarily supporting wetland functions by providing connectivity between the larger wetlands outside the project area and Watson Brook. In this regard connectivity for wildlife is likely the most significant function of these two areas.

## **RELATION TO THE PROPOSED DEVELOPMENT**

Conditional Use Permits (CUP) are being sought for proposed impacts within the Wetlands Conservation and Shoreland Protection Overlay Districts. The proposed wetland and wetland buffer impacts are

associated with construction of a permanent access driveway to access the new location Building D from the existing Building C, and a portion of a temporary construction access. Proposed work within the Vernal Pool Buffer is limited to resurfacing the existing woods road for temporary construction use. Since this does not change the character of the buffer or movement of vernal pool species, it has not been considered as impact. Impacts within the Shoreland Protection District are associated with grading to construct a stormwater management feature and portions of pavement related to parking and circulation around the building. The following sections provide an analysis of these impacts in the context of the CUP criteria contained within Article 9.1.6.B (Wetlands) and Article 9.3.4.G.2 (Shoreland) of Town of Exeter Zoning Ordinance.

#### Wetland Conservation District CUP Criteria--Article 9.1.6.B

*No alternative design which does not impact a wetland or wetland buffer or which has less detrimental impact on the wetland or wetland buffer is feasible;*

Building D is situated on a large area of upland surrounded by wetland or the property line on all sides. A single permanent wetland crossing is proposed at the narrowest possible crossing location which is also able to provide access from the existing development in a consistent manner. A temporary construction access is also proposed to allow construction traffic to access the site from Commerce Way rather than through the existing residential development. This road will utilize an existing woods road with minor improvements and utilize a temporary bridge, at an existing wetland crossing, to provide suitable width. Aside from these impacts, the building and all other areas of disturbance are located outside the 40 or 50-foot wetland buffer. In light of these considerations, no alternative design which does not impact a wetland or wetland buffer, or which has less detrimental impact on the wetland or wetland buffer is feasible.

*A wetland scientist has provided an impact evaluation that includes the “functions and values” of the wetland(s), an assessment of the potential project-related impacts and concluded to the extent feasible, the proposed impact is not detrimental to the value and function of the wetland(s) or the greater hydrologic system.*

A functional evaluation of the wetlands is provided in the previous sections of this letter. The primary functions of the resource areas were determined to be related to water quality, flood attenuation, and wildlife habitat. By limiting wetland impact to a single location for access and locating the remainder of project outside the buffer, the majority of the potential impact to these functions have been avoided. An intact vegetated buffer will continue to provide water quality benefits adjacent to wetland areas while the proposed stormwater management system will ensure that no greater pressure is placed on the wetlands to perform this function. Flood attenuation function should be unaffected as this function is largely associated with Watson Brook and its contiguous wetlands which will not be impacted. Some modest impact to wildlife habitat can be expected as a result of the proposed access driveway which will present an obstacle for wildlife moving along the wetland in that location. The potential impacts of this will be offset, however, by respecting wetland buffers in all other areas of the project and utilizing a pipe that is larger than what is strictly required to allow passage of some species. The proposed project should therefore only result in minor impacts to wetland function by way of restricting wildlife movement at this



particular location but overall wetland function and the greater hydrologic system will not be negatively affected.

*That the design, construction and maintenance of the proposed use will, to the extent feasible, minimize detrimental impact on the wetland or wetland buffer;*

The design of the project minimizes impacts in several ways. Permanent elements of the proposed work have been limited to a single wetland crossing with wetland buffer impacts at either end. The remainder of the project has been located outside wetland buffers. Crossing this narrow wetland and intermittent stream channel to access the proposed building location also avoids a much larger and more impactful crossing of Watson Brook if access followed the easement extending from the end of Ray Farmstead Road. The proposed temporary construction entrance will make use of an existing woods road and utilize a temporary bridge structure to be laid over an existing wetland and stream crossing. Use of the temporary bridge at this location avoids additional impacts that would be otherwise necessary to improve the crossing for construction equipment. The

*That the proposed use will not create a hazard to individual or public health, safety and welfare due to the loss of wetland, the contamination of groundwater, or other reasons;*

At this location the most relevant example of a use that could negatively impact public health, safety or welfare would likely involve direct or extensive impacts to Watson Brook. Such impacts could increase flooding or impact water quality downstream. The project avoids any impact to Watson Brook and will manage and treat runoff with comprehensive stormwater management. The project does not involve wetland impacts or any other uses that would be expected to negatively affect these public interests.

*In cases where the proposed use is temporary or where construction activity disturbs areas adjacent to the immediate use, the applicant has included a restoration proposal revegetating any disturbed area within the buffer with the goal to restore the site as nearly as possible to its original grade and condition following construction.*

Following construction, the bridge used on the temporary construction access will be removed and disturbed buffer areas, exclusive of the existing woods road, be stabilized and restored using a conservation seed mix appropriate for wooded locations. The side slope grading at the permanent access crossing will be treated similarly to achieve a naturally vegetated buffer to each side the access driveway

*The applicant may propose an increase in wetland buffers elsewhere on the site that surround a wetland of equal or greater size, and of equal or greater functional value than the impacted wetland.*

The project only involves buffer impacts in the immediate vicinity of the wetland crossing and maintains intact wetland buffers in all other areas. The proposed new location of Building D will, however, avoid approximately 5,000 SF of wetland buffer impact originally approved for the construction of the building in its previous location. This includes approximately 1,300 SF of the building within the 75-foot building

setback. The wetland in that location contains a unique semi-permanent pond which supports wetland specific wildlife habitat. The habitat supported in this wetland will benefit from an intact buffer.

Shoreland Protection District CUP Criteria--Article 9.3.4.G.2

*The proposed use will not detrimentally affect the surface water quality of the adjacent river or tributary, or otherwise result in unhealthful conditions.*

The proposed impacts within 150 feet of Watson Brook are necessary for the construction of a stormwater management system and a portion of pavement. The water quality in Watson Brook will be protected by adherence to the 100 foot building setback, the comprehensive treatment of all stormwater runoff in a state of the art stormwater management system, and the restoration of graded slopes with native seed mix where feasible. Construction term impacts will be mitigated through best management practices and erosion control as specified on the plans.

*The proposed use will discharge no waste water on site other than that normally discharged by domestic waste water disposal systems and will not involve on-site storage or disposal of hazardous or toxic wastes as herein defined.*

The proposed project will be serviced by sanitary sewer and will not discharge wastewater on site. The proposed residential condominium use will not involve the storage or onsite disposal of hazardous or toxic waste as defined in the Ordinance.

*The proposed use will not result in undue damage to spawning grounds and other wildlife habitat.*

The wildlife habitat associated with Watson Brook concentrated in the stream and the associated wetland areas. This habitat will be preserved intact by avoiding any impacts to the stream, associated wetlands, or 50-foot wetland buffer, therefore maintaining an intact corridor along the stream. Spawning habitat, to the extent it exists, will not be affected. The proposed impacts within the SPD for grading will be vegetated by using a native seed mix. This will create a largely natural condition while also allowing for future access to the basin for maintenance. For these reasons, and considering the minimal nature of the proposed disturbance, the proposed use will not result in undue damage to spawning grounds and other wildlife habitat

This concludes the wetland delineation and wetland functional assessment report. If I can be of further assistance, please feel free to contact me at (603) 778-0644.

Sincerely,



Brendan Quigley, NHCWS  
Gove Environmental Services, Inc.







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 Phone: (978) 388-2157  
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 LAND SURVEYORS SINCE 1988  
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Sheet Title:

# WETLAND IMPACT PLAN

Project Title:

## Ray Farm Condominium

Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:

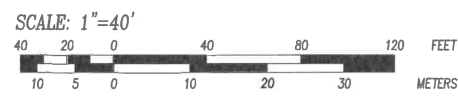
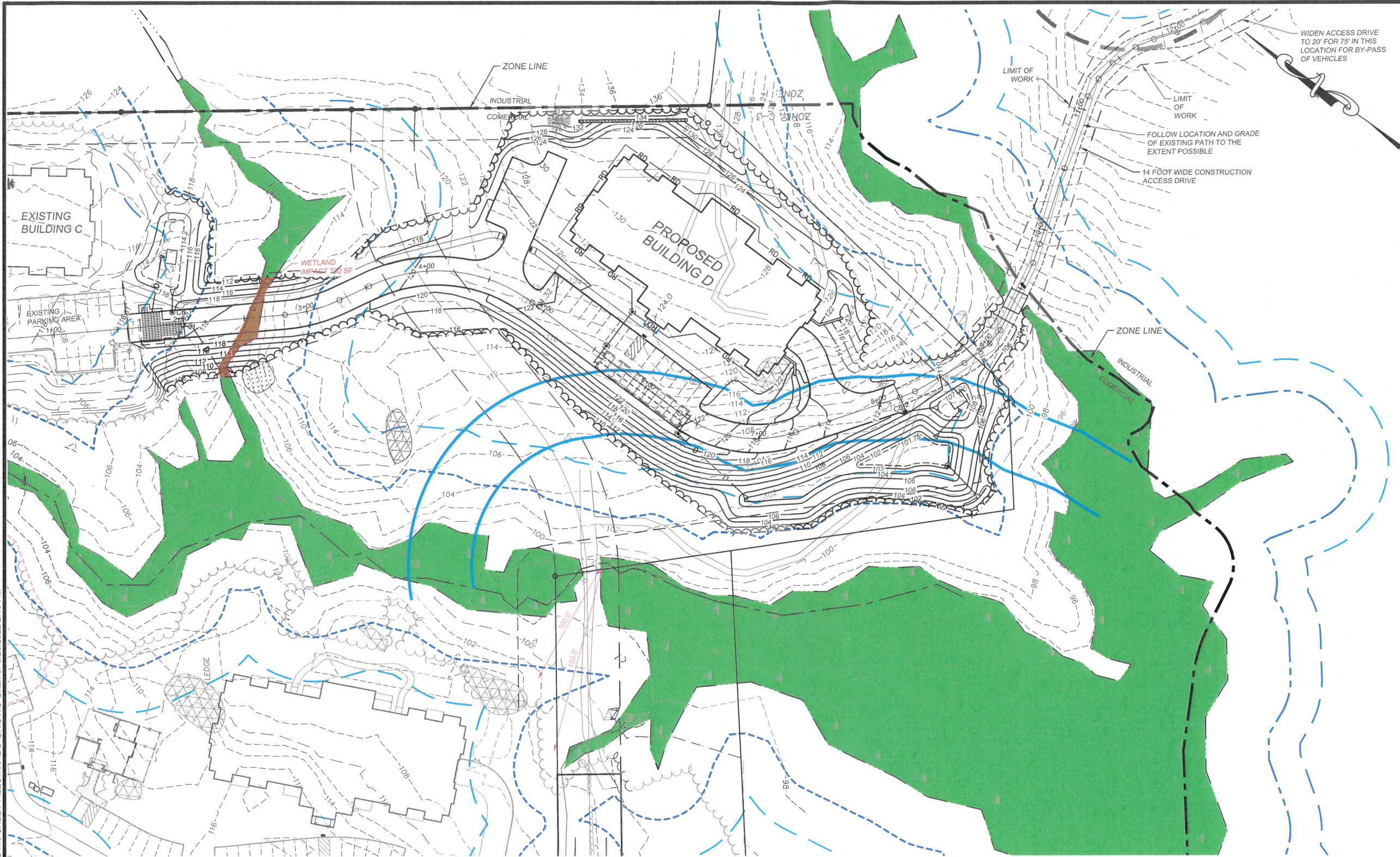
Ray Farm, LLC  
 158 Shattuck Way  
 Newington, NH 03801

REVISION BLOCK

NO.	DATE	DESC	BY

PROJ. MGR.: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D GR.DWG  
 FBK:  
 JOB #: 16042 D

SHEET C1.24



**DIRECT WETLAND IMPACTS**

	WETLAND IMPACT - AREA 1	700 SF
TOTAL WETLAND IMPACT		700 SF

- NOTES:**
- REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
  - ACCESS ROAD SHOWN DEPICTS DESIGN INTENT ONLY. FINAL DESIGN TO BE COORDINATED WITH RESULTS OF THE TIF PROGRAM DESIGN.

TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

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Sheet Title:

# WETLAND AND SHORELAND BUFFER IMPACT PLAN

Project Title:

## Ray Farm Condominium

Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:

Ray Farm, LLC  
 158 Shattuck Way  
 Newington, NH 03801

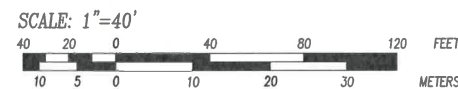
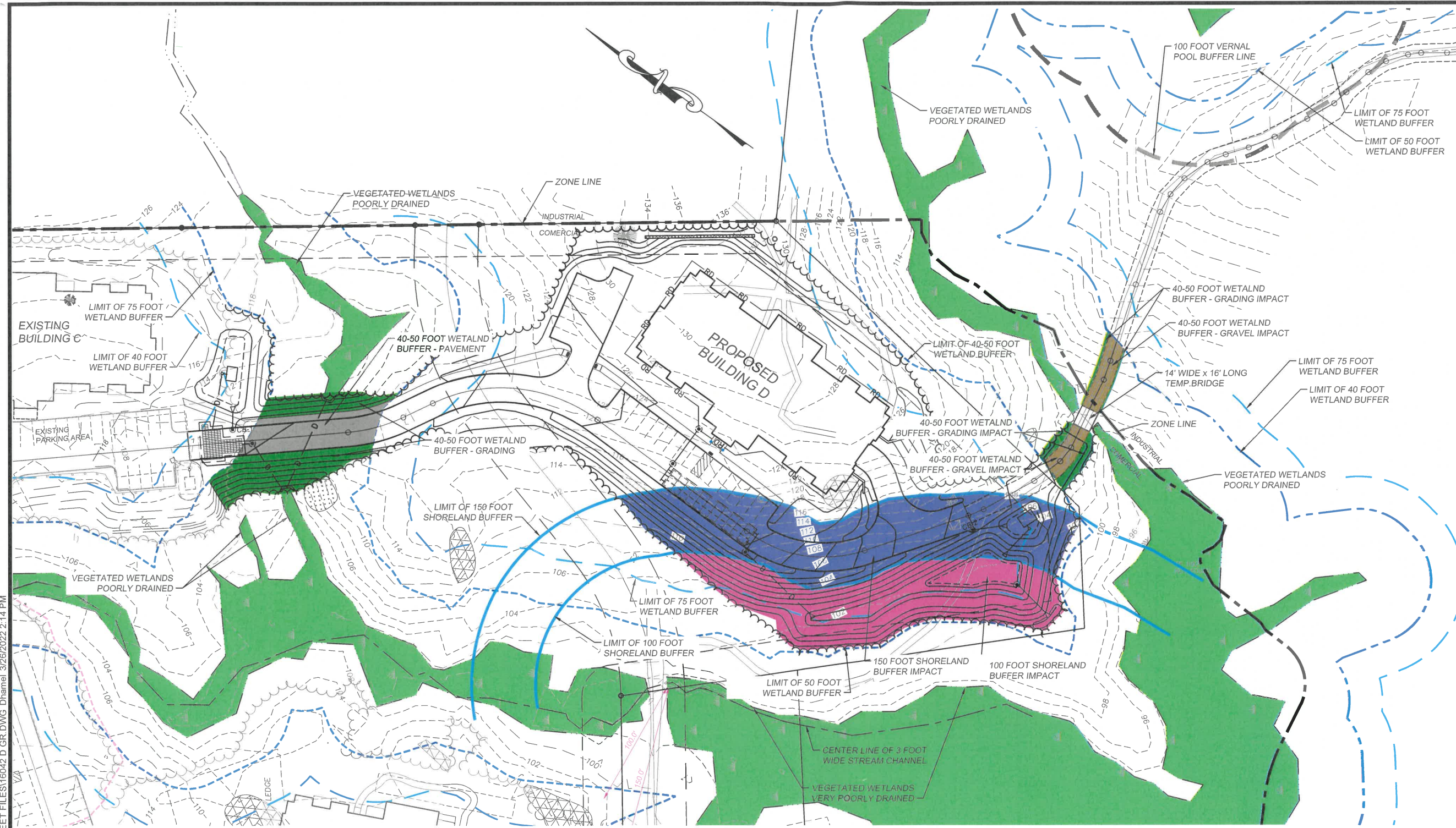
REVISION BLOCK

NO.	DATE	DESC	BY

PROJ. MGR.:	D. HAMEL
FIELD:	J. SALVAGGIO / R. SMITH
DESIGN:	D. HAMEL
DRAWN:	D. HAMEL
CHECKED:	D. GIANGRANDE
DATE:	01-11-2022
FILE:	16042 D GR.DWG
FBK:	
JOB #:	16042 D

TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_



WETLAND BUFFER IMPACTS

	40-50 FOOT WETLAND BUFFER IMPACT - PAVEMENT	2858 SF
	40-50 FOOT WETLAND BUFFER IMPACT - GRAVEL	1436 SF
	40-50 FOOT WETLAND BUFFER IMPACT - GRADING	5179 SF
	75 FOOT WETLAND BUFFER IMPACT	0 SF

TOTAL WETLAND BUFFER IMPACTS 9,473 SF

SHORELAND BUFFER IMPACTS

	100 FOOT SHORELAND BUFFER IMPACT	9128 SF
	150 FOOT SHORELAND BUFFER IMPACT	16,560 SF

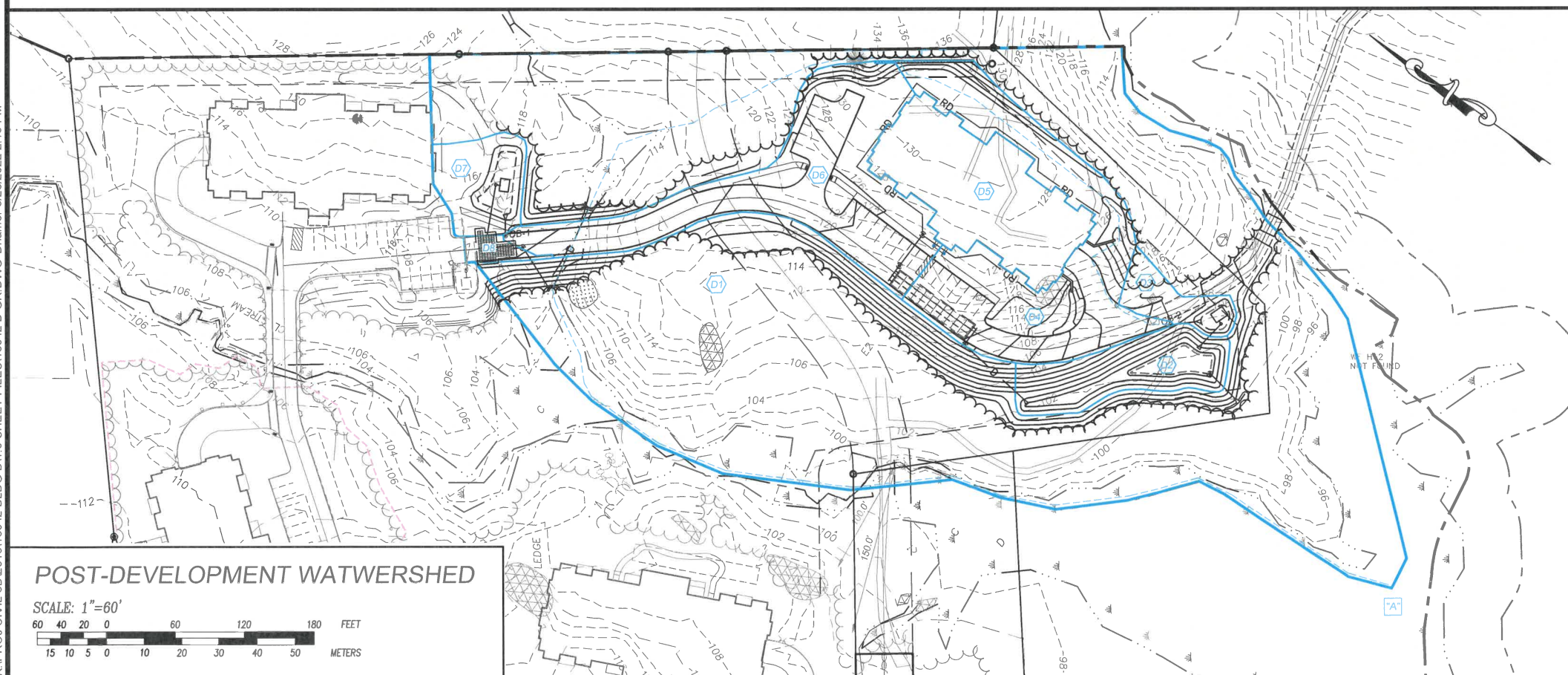
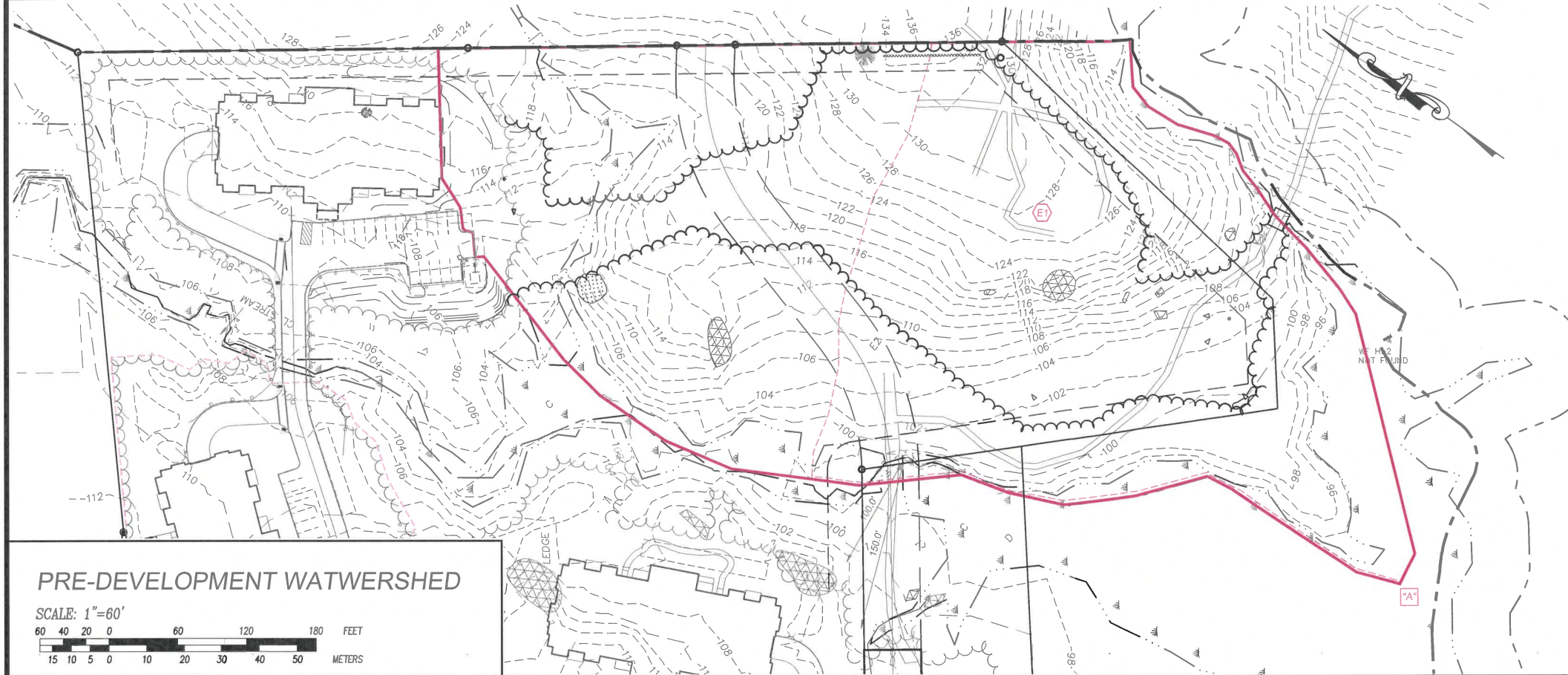
TOTAL SHORELAND BUFFER IMPACT 25,688 SF SF

NOTES:

- REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
- ACCESS ROAD SHOWN DEPICTS DESIGN INTENT ONLY. FINAL DESIGN TO BE COORDINATED WITH RESULTS OF THE TIF PROGRAM DESIGN.

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 Phone: (978) 388-2157  
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 www.gm2inc.com

Sheet Title:  
**WATERSHED PLANS**

Project Title:  
**Ray Farm Condominium**  
 Ray Farmstead Road  
 Exeter, NH 03833  
 Rockingham County

Applicant/Owner:  
**Ray Farm, LLC**  
 158 Shattuck Way  
 Newington, NH 03801

REVISION BLOCK			
NO.	DATE	DESC	BY

**NOTES:**  
 1. REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.  
 2. ACCESS ROAD SHOWN DEPICTS DESIGN INTENT ONLY. FINAL DESIGN TO BE COORDINATED WITH RESULTS OF THE TIF PROGRAM DESIGN.

TOWN OF EXETER PLANNING BOARD

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

PROJ. MGR.: D. HAMEL  
 FIELD: J. SALVAGGIO / R. SMITH  
 DESIGN: D. HAMEL  
 DRAWN: D. HAMEL  
 CHECKED: D. GIANGRANDE  
 DATE: 01-11-2022  
 FILE: 16042 D GR.DWG  
 FBK:  
 JOB #: 16042 D

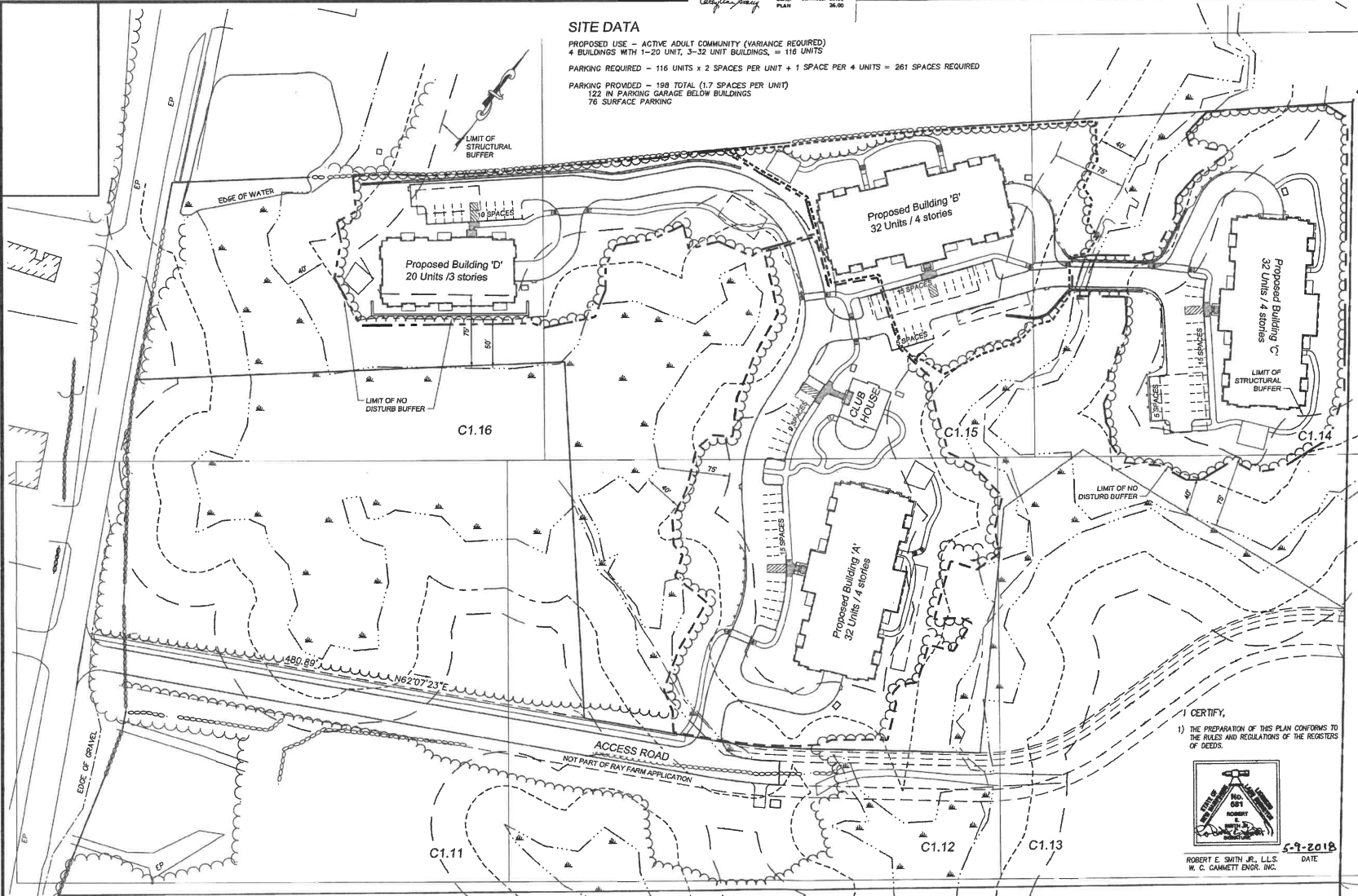
SHEET C1.26

# Enclosure 3

D-40822  
 02/04/2018 03:31:07 PM  
 Register of Deeds, Rockingham County  
 LOST PLAN  
 23.00  
 26.00

**SITE DATA**

PROPOSED USE - ACTIVE ADULT COMMUNITY (VARIANCE REQUIRED)  
 4 BUILDINGS WITH 1-20 UNIT, 3-32 UNIT BUILDINGS, = 116 UNITS  
 PARKING REQUIRED - 116 UNITS x 2 SPACES PER UNIT + 1 SPACE PER 4 UNITS = 261 SPACES REQUIRED  
 PARKING PROVIDED - 198 TOTAL (1.7 SPACES PER UNIT)  
 123 IN PARKING GARAGE BELOW BUILDINGS  
 75 SURFACE PARKING



**CAMMETT ENGINEERING**  
 297 ELM STREET, AMESBURY, MA.  
 Phone: (978) 388-2157 Fax: (978) 388-0428  
 CONSULTING ENGINEERS &  
 LAND SURVEYORS SINCE 1975  
 Visit us on the WEB at www.cammett.com

Project Title:  
**Overall Site Plan**  
 "Ray Farm" Active Adult Community  
 Epping Road  
 Exeter, NH 03833  
 Rockingham County

Applicant:  
 Willey Creek Company  
 158 Shattuck Way  
 Newington, NH 03801  
 Owner:  
 CKT & Associates  
 158 Shattuck Way  
 Newington, NH 03801

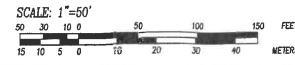
NO.	DATE	DESCRIPTION	BY
A	5.8.2017	TO PLANNING BOARD	DH
B	6.27.2017	PEER REVIEW	DH
C	11.27.17	2nd PEER REVIEW	DH
D	02.07.18	3rd PEER REVIEW	DH

CERTIFY,  
 1) THE PREPARATION OF THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.



ROBERT E. SMITH, JR., L.L.S. DATE: 5-9-2018  
 W. C. CAMMETT ENGR. INC.

**NOTES:**  
 1. REFER TO G1.20 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.  
 2. ACCESS ROAD SHOWN DEPICTS DESIGN INTENT ONLY. FINAL DESIGN TO BE COORDINATED WITH RESULTS OF THE TIF PROGRAM DESIGN.



TOWN OF EXETER PLANNING BOARD  
 Chairman: Robert E. Smith, Jr. DATE: 2/14/18

PROJ MGR: D. HAMEL  
 FIELD: M. MICHAUD / J. SALVAGRO  
 DESIGN: D. TRAUKE  
 DRAWING: D. HAMEL  
 CHECKED: W. CAMMETT / R. BLANCHETTE  
 DATE: 3/23/2017  
 FILE: 16042 3P-OVERALL 22X34.DWG  
 JOB #: 16042  
 SHEET

D-40822





# TOWN OF EXETER

## *Planning and Building Department*

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 • FAX 772-4709

[www.exeternh.gov](http://www.exeternh.gov)

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**Date:** May 19, 2022  
**To:** Planning Board  
**From:** Dave Sharples, Town Planner  
**Re:** Exonian Properties, LLC PB Case #22-6

The Applicant has submitted an application and plans, dated 4/26/22, for a minor site plan review for the proposed conversion of the former First Baptist Church at 43 Front Street into eleven (11) residential condominium units. The subject property is located in the R-2, Single Family Residential zoning district and is identified as Tax Map Parcel #72-198.

The Applicant appeared before the Zoning Board of Adjustment at its March 15<sup>th</sup>, 2022 meeting and was granted a variance for the change in use to permit a multi-family residential use and a second variance for relief from the off-street parking requirements was tabled to the April 19<sup>th</sup>, 2022 meeting, and subsequently approved. A copy of the decision letter and minutes of those meetings are enclosed for your review.

The Applicant met on site with members of the Demolition Review Committee (DRC) on November 12, 2021 to consider the demolition of portions of the existing roof. The DRC determined the structure to be significant and in accordance with Section 5.3.5.D.4. of the Exeter Zoning Ordinance, recommended that a public hearing be scheduled to consider public comment. Please see enclosed letter from the DRC, dated November 15, 2021. A public hearing was conducted by the Heritage Commission on December 15, 2021. A copy of the minutes from that meeting are enclosed as well as the decision letter from the DRC for your review.

The Applicant appeared before the Historic District Commission on three separate occasions for review of the project. A copy of the December 16<sup>th</sup>, 2021, January 20<sup>th</sup>, and February 17<sup>th</sup>, 2022 meeting minutes are enclosed for your review. A copy of the Certificate of Appropriateness, dated February 17<sup>th</sup>, 2022 is also enclosed noting the conditions of the approval.

The proposal is to convert the existing church into residential units and no changes to the exterior of the site are being proposed outside of some black aluminum fencing and exterior wall lighting as shown in Exhibit B. Due to the lack of site improvements, there was no TRC review but the materials have been reviewed by staff for compliance with the planning and zoning regulations.

The Applicant is requesting a waiver from Section 9.13.1 of the Board's Site Plan Review and Subdivision Regulations for relief from the requirement to provide parking in conformance with Section 5.6.6 of the Zoning Ordinance (Off-Street Parking Schedule). A copy of the waiver request letter is enclosed for review.

I will be prepared with suggested conditions of approval at the meeting in the event the board decides to take action on the request.

**Waiver Motions:**

**Parking space (number required) waiver motion:** After reviewing the criteria for granting waivers, I move that the request of Exonian Properties, LLC (PB Case #22-6) for a waiver from Section 9.13.1. to permit less off-street parking than required in accordance with Section 5.6.6 of the Zoning Ordinance be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

**Planning Board Motions:**

**Minor Site Plan Motion:** I move that the request of Exonian Properties, LLC (PB Case #22-6) for Minor Site Plan approval be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

Thank You.

Enclosures

Town of Exeter  
Zoning Board of Adjustment  
April 19, 2022, 7 PM  
Town Offices Nowak Room  
Draft Minutes

I. **Preliminaries**

**Members Present:** Chair Kevin Baum, Vice-Chair Robert Prior, Clerk Esther Olson-Murphy, Rick Thielbar, Laura Davies, Christopher Merrill - Alternate, Martha Pennell – Alternate

**Staff Present:** Doug Eastman, Building Inspector/Code Enforcement Officer and Barbara McEvoy, Deputy Code Enforcement Officer.

**Members Absent:** Anne Surman - Alternate

**Call to Order:** Chair Kevin Baum called the meeting to order at 7 PM.

I. **New Business**

- A. Continued public hearing on the application of Exonian Properties LLC for a variance from Article 5, Section 5.6.6 for relief to provide no on-site parking where 24 spaces are required for the proposed residential development at 43 Front Street. The subject property is located in the R-2, Single Family Residential zoning district. Tax Map Parcel # 72-198. ZBA Case #22-5.

Sharon Sommers of DTC spoke representing Exonian Properties; Principals Florence Ruffner and David Cowie were also present. Attorney Sommers said the Board asked us to revisit the question of where people will park off-site, particularly during the winter months.

Regarding on-site parking, she presented Exhibit B, a conceptual plan, which shows an on-site space that could have three cars while leaving the building in its current configuration. Exhibit C contains the original architectural drawings where additions to the building are noted. The second page shows that there's a certain amount of underpinning of the structural columns required. For underground parking or additional ground level parking, the rear of the building would need to be removed, which is at odds with preserving the integrity of the structure. The slope there is significant and is not conducive to parking.

Regarding off-site parking, Exhibit A shows 155 yards of walking in order to park one's car in the Center Street municipal lot. The Townhouse Common parking lot is 235 yards away. The Exeter River Reservoir municipal parking lot, near the river walkway, is 275 yards away. Following the March ZBA meeting, the Principals spoke with town officials and came up with Exhibit B which has a list of municipal lots downtown and the total number of parking spots: just under 200. Center Street has 10 designated winter spaces; Exeter Reservoir or the "Boat Launch" has 5 winter spaces; the Front Street municipal lot has 22 winter spaces; the Townhouse Common lot has 12 winter spaces. Total on-street

45 parking in the downtown area is 339. The designated winter parking spaces are  
46 first-come first-serve. Town officials said there's not an intensive demand for  
47 these spaces, and a request can be made to expand the number of designated  
48 parking spaces in the future, as long as the DPW felt there wouldn't be difficulties  
49 with plowing. Jennifer Perry has emailed the Board indicating that the DPW is  
50 aware of the situation with winter designated spaces and there is a possibility of  
51 expanding those should the need arise. The applicants also provided photos of  
52 the current parking situation.

53 Mr. Baum said the email from Jennifer Perry indicates that there are 79  
54 overnight spaces available, while the submission says 195. Attorney Sommers  
55 said 195 is the total municipal lot spaces, of which 79 are winter spaces. Ms.  
56 Perry's email also contains the Train Station Lot and Front Street West End,  
57 which are not included in the application; the application looks at 49 overnight  
58 winter spaces, which is an ample number for this property and others that would  
59 like to use them.

60 Mr. Thielbar said people who live in this building would have a right to two  
61 cars, and they won't want to have to rotate them. What would stop a resident  
62 there from permanently claiming one of the nearby spots? Attorney Sommers  
63 said that anyone could decide to keep their car in an on-street spot, except in the  
64 winter. It's up to how the condo association wants to govern itself. Mr. Thielbar  
65 said 49 spaces is not a huge number, and the 24 spaces this property needs  
66 represent a 50% increase in demand for those places. Attorney Sommers said  
67 Public Works is not averse to designating more spaces for winter parking if  
68 demand warrants it.

69 Mr. Baum said he would like to hear more about current winter space use.  
70 Ms. Davies said she called Mr. Sharples and heard that there are tools at the  
71 town's disposal to address the need for additional overnight parking, and the  
72 Town Manager is in favor. The town is willing to look into resident parking permits  
73 if demand requires. He also said he was unaware of a winter parking problem.

74 Ms. Pennel said the loka conversion and other new developments will  
75 also be counting on the lots. Has the town taken into consideration the future  
76 increase in demand? Attorney Sommers said the loka went through the Planning  
77 Board process and it's their job to take that into consideration. The ZBA's job is  
78 to determine if we meet the variance criteria. Mr. Thielbar said we frequently get  
79 requests for "no parking" variances. Parking for residents is a 24 hour demand  
80 for the space. When you give a few extra spots to a restaurant, that's totally  
81 different. Attorney Sommers said the cars won't be present 24 hours a day.

82 Mr. Prior said this is all about overnight parking in the winter. Solving  
83 parking problems isn't necessarily the problem of the Zoning Board, but it is a  
84 responsibility of the developer to help solve them. Are the applicants aware of  
85 any precedents on restricting the number of vehicles that are allowed to be  
86 owned by the condo owners? Attorney Sommers said she's not aware of any  
87 laws; it would be more of a marketing decision. If each unit could only have one  
88 car, that would be 13 spaces, and there's still 10 off-site spaces that would be



89 needed. Mr. Prior said the three on-site spaces are suspicious, because two of  
90 the cars couldn't move out of the spots. Attorney Sommers added that the  
91 applicants also made a good faith effort to find private parking in the area but  
92 were not successful.

93 Mr. Thielbar said he'd like to hear about the costs of underground  
94 parking. Mr. Cowie said it would require a 160 foot runway to get down beneath  
95 the church and we've only got 75 feet. The maximum slope allowed is 15%,  
96 which would be infeasible in this space. The width of the space is only 18 feet so  
97 it couldn't turn. The footings are at all different levels under the church, so it  
98 would all have to be underpinned even if we could get down to that level, which  
99 he thinks is not possible. A structural engineer has been involved in all the steps  
100 so far. The building requires two egress stairs, one of which has to be in the  
101 back, so we're limited in room to come in from the back anyway. You would also  
102 lose any parking behind the church.

103 Mr. Thielbar said a lot of these problems could be solved with hydraulic  
104 lifts for the vehicles to get underground. Mr. Cowie said they explored that  
105 possibility, and it's \$80,000 per vehicle for the system to put your car into a lift  
106 and have it parked, and that's without looking at the cost of installation. Mr.  
107 Thielbar said residents could just get the car down to the underground level via  
108 lift and drive it to a parking space themselves. Mr. Cowie said there's not enough  
109 turning radius for that. Ms. Ruffner said we've owned the church for a year and  
110 done extensive work looking at underground parking, and it's just not feasible.

111 Mr. Merrill said the Academy parks on Spring Street. The Boatyard is full  
112 every Tuesday because of yoga. It's a long walk from the municipal lots in snow  
113 and rain. Mr. Prior said this is a marketing problem for the applicant, not a  
114 problem for the ZBA.

115 Attorney Sommers went through the variance criteria. 1) The variance will  
116 not be contrary to the public interest or would alter the essential character; yes,  
117 we have provided evidence that there is enough space on the street and in  
118 municipal parking lots, including winter parking spaces. The town is also willing to  
119 re-examine adding more designated spaces. There is no evidence that this will  
120 change the essential character of the neighborhood or be contrary to the public  
121 interest. If people don't want to walk a block, that will be a marketing issue. 2)  
122 The spirit of the ordinance will be observed; yes, this has been addressed with  
123 #1.3) Substantial justice is done; yes, the benefit to the applicant of allowing off-  
124 site parking is that it will allow the proposal to proceed. We've received HDC  
125 approval and a use variance. There is no detriment to the public or to the private  
126 in granting this variance. There is physically space for those people to park right  
127 now. 4) The value of surrounding properties will not be diminished; yes, given  
128 the number of spaces that are available, it's not going to impact the neighboring  
129 properties. 5) Literal enforcement of zoning ordinance will result in an undue  
130 hardship; yes, we've exhausted all possible options for providing on-site parking.  
131 We've provided at least 2 spaces on the property. There are significant  
132 impediments to underground parking given the 11 units and the need to renovate

133 this historic building, including cost, slop and turning radius. There is no fair and  
134 substantial relationship between the ordinance and the request. The purpose of  
135 the ordinance is to prevent parking problems, and the evidence shows that there  
136 is off-site parking in the lots for the winter parking and on the street. It's not going  
137 to create a problem. The proposal is a reasonable one. We have a use variance.  
138 We are providing housing to the town.

139 Ms. Davies asked when this property was last used as a church. Mr.  
140 Cowie said they ceased services during Covid but it was still an active church.

141 Mr. Baum opened the hearing to the public.

142 Jessica O'Leary of South Street said the overnight parking in the winter is  
143 an issue. There are a lot of people that park on South Street and in the winter the  
144 dozen spaces at Bow Street are always taken. The pictures were not taken in the  
145 wintertime.

146 Mr. Baum brought the discussion back to the Board.

147 Ms. Davies said regarding Ms. Pennell's concerns that town staff is not  
148 considering the parking for the various upcoming projects, her [Ms. Davies']  
149 conversation with Dave Sharples indicates that they're on top of it and are  
150 prepared to do some modifications such as adding spaces for winter overnight  
151 parking. Mr. Thielbar said it's hard to park in town and we keep adding more  
152 residential parking, which is dramatically different than commercial parking. Mr.  
153 Baum asked the Board to focus on the criteria rather than general parking issues.  
154 Mr. Thielbar said under criteria 1 and 2, we can consider the impact on the  
155 community. Downtown residential parking does not benefit the economy. Mr.  
156 Baum said that's a policy issue.  
157

158 Mr. Prior made a motion to approve the application of Exonian Properties LLC for a  
159 variance from Article 5, Section 5.6.6 for relief to provide no on-site parking where 24  
160 spaces are required for the proposed residential development at 43 Front Street. Mr.  
161 Prior seconded.

162  
163 Mr. Prior went through the variance criteria. 1) The variance will not be contrary to the  
164 public interest and 2) The spirit of the ordinance will be observed; yes, it is the  
165 responsibility of this Board to treat the application in the same manner as every other  
166 application that has come before us. Overnight and winter parking will be tricky, but it's  
167 not contrary to the public interest to grant a variance to this residential property. Mr.  
168 Thielbar said he disagrees; the additional parking demand will inhibit retail sales and  
169 inconvenience other residents who are using those spots. This is a 50% increase in the  
170 demand for overnight parking for a single project. Mr. Prior said it's not a 50% increase,  
171 it's an additional 20-something spots needed. We don't know what the demand is on  
172 those spots. 3) Substantial justice is done; this is a balance between the obvious benefit  
173 to the applicant and any detriment to the public. It will be an issue for the project's  
174 marketing. We can't quantify a detriment to the public by allowing the off-site parking.  
175 Mr. Baum said he wishes we had more information about what the needs are, but from  
176 the facts that he's heard tonight he's convinced that the town officials have confidence

177 that the capacity is there or can be added. Mr. Thielbar said the question posed to the  
178 town officials isn't what he was concerned with. Increasing the designated winter  
179 overnight spots doesn't increase the total number of parking spots. This will be 24  
180 additional permanent spots with no commercial benefit to the town. Ms. Davies said  
181 mixed-use is vital because it brings people downtown. In Manchester, when they added  
182 residential use downtown it made it more lively and safer. Mr. Prior continued with the  
183 criteria. 4) The value of surrounding properties will not be diminished; no, we've had no  
184 testimony to that effect. 5) Literal enforcement of zoning ordinance will result in an undue  
185 hardship; yes, he does believe there would be unnecessary hardship placed on the  
186 applicant by requiring them to provide parking, and perhaps make it unfeasibly  
187 expensive. They would either not turn this into residential or incur costs that they would  
188 not be able to sustain. Mr. Thielbar said he disagrees. It's a significant hardship, but the  
189 cost to provide a parking system will pale in comparison to the cost of the project as a  
190 whole.

191  
192 Mr. Baum, Mr. Prior, Ms. Olson-Murphy, and Ms. Davies voted aye, and Mr. Thielbar  
193 voted nay. The motion passed 4-1.

- 194  
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197 B. The application of Steven Ruhm for a variance from Article 5, Section 5.3.1 A. 2.  
198 and 5.3.1 A.3. to permit the proposed construction of a detached 22' x 20' garage  
199 with less than the required side and rear yard setbacks on the property located at  
200 89 Park Street. The subject property is located in the R-2, Single Family  
201 Residential zoning district. Tax Map Parcel #63-130. ZBA Case #22-6.

202  
203 Caroline Ruhm, the owner, and Brian Frazier, the builder, were present to  
204 discuss the application. Ms. Ruhm said we would like more space to put cars out of sight  
205 and out of the elements in the winter. The house was built on a non-conforming lot so  
206 there is little space for a detached garage. An attached garage would alter the use of the  
207 walk-out basement or the porch. The current shed location is the least obstructive space  
208 on the property. We are proposing as small a garage as we can. It will have quality  
209 roofing and natural siding.

210 Mr. Baum asked if the garage will be closer to the neighbor's property than the  
211 existing shed. Mr. Frazier said it's in the same general vicinity. The lot isn't a right angle,  
212 so we're asking for a few feet off the property line on that side. Mr. Prior said they're  
213 shifting the structure toward Locust Avenue so it doesn't hit the property line as it angles  
214 in.

215 Mr. Thielbar asked if they'd talked to their neighbors. Ms. Ruhm said they talked  
216 to the neighbors on each side as well as across, and they were all ok with it.

217 Mr. Baum asked if there would be a 20 foot height limit, and Mr. Frazier said yes,  
218 it would be 20 feet tall or less.

219 Mr. Baum opened the hearing to the public, but there was no comment. Mr.  
220 Baum closed the public session and brought the discussion back to the Board.

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Ms. Davies made a motion to approve the application for a variance from Article 5, Section 5.3.1 A. 2. and 5.3.1 A.3. to permit the proposed construction of a detached 22' x 20' garage with less than the required side and rear yard setbacks on the property located at 89 Park Street as proposed. Mr. Prior seconded. Mr. Baum asked if the Board wished to go through the criteria, but they were comfortable with the application as presented. Mr. Baum, Mr. Prior, Ms. Olson-Murphy, Ms. Davies, and Mr. Thielbar voted aye. The motion passed 5-0.

- C. The application of Ben and Sarah Anderson for a special exception per Article 4, Section 4.2 Schedule I: Permitted Uses and Article 5, Section 5.2 to permit the operation of a Bed & Breakfast use in the existing accessory structure located at 66 Newfields Road. The subject property is located in the RU-Rural zoning district, Tax Map Parcel #24-29. ZBA Case #22-7.

Justin Pasay of DTC Lawyers spoke representing the applicants. Attorney Pasay said he's presented this application before the Board previously. This is a large property on Newfields Road, 5.5 acres in size. It's improved by a single-family dwelling and attached garage, as well as the Word Barn which has its own dedicated electric, heating, and septic. The Word Barn Cultural Arts Center was permitted in 2017, and makes an important contribution to the cultural scene in Exeter. The Word Barn building has a studio apartment in it which was a long-term rental for decades. The Andersons purchased the property in 2013 and used it for that purpose for years, then in 2017 decided to use the Air BnB platform to rent it to short-term renters, because that was more consistent with the Word Barn use. There have been 471 total guests in the Air BnB, mostly couples from nearby States travelling north who would come and patronize local restaurants and shops. The applicants are not aware of any complaints regarding the use of the unit for transient guests. Their accommodations include breakfast, and there is an area for the guests to dine. In December 2020 the town sent a notice that short-term rentals are not an approved use in Exeter and they need relief.

We came to this Board in July of 2021 to permit a bed & breakfast. At that time, Article 2 of the zoning ordinance defined a bed & breakfast as *"The primary dwelling of the owner-operator that provides exclusively for the lodging of transient guests and whose posted rates shall include breakfast; a bed & breakfast shall not be used for any other hospitality or business related uses; a bed & breakfast shall not have more than four rentable rooms and must have a dining area capable of accommodating the number of registered guests."* The Board at that time denied the application on the grounds that the definition required that the bed & breakfast be housed within the primary dwelling unit, and that the proposed use would be an additional business use on the property, which was not permitted. The variance application was also denied, but the first four criteria of the variance were met, which means that this Board saw the proposal as being consistent with the neighborhood, not being a public threat, not compromising surrounding property values, and that it would accomplish substantial justice, but found that the hardship criteria was not met. We filed an appeal, which is still pending in the Superior Court, but in the meantime, we filed a Citizen's Petition warrant article to



265 amend the bed & breakfast definition in the zoning ordinance. It was signed by 1,700  
266 people. This proposed ordinance removed the requirement that the proposed bed &  
267 breakfast be within the primary dwelling of the property, as well as the prohibition on  
268 other hospitality or business-related uses. That proposed ordinance defined a bed &  
269 breakfast as *“The primary dwelling of the owner-operator and/or detached accessory*  
270 *structure on the same property that provides for the lodging of transient guests and*  
271 *whose posted rates shall include breakfast; a bed & breakfast shall not have more than*  
272 *four rentable rooms and must have a dining area capable of accommodating the number*  
273 *of registered guests.”* The Planning Board voted unanimously to recommend its adoption  
274 at Town Meeting, and 84% of the vote was in favor of this petition. We asked the  
275 Superior Court to stay the hearing to see if we could now get this approval with the  
276 revised ordinance. We do meet the definition of a bed & breakfast as it was changed by  
277 the Town Meeting, because it is owned and operated by the Andersons who live on the  
278 property, it’s a single unit to lodge transient guests, all living accommodations are  
279 included, the rate includes breakfast, and there is a dining area that can accommodate  
280 the registered guests.

281 Mr. Baum asked what the Andersons provide for breakfast. Attorney Pasay said  
282 honey, eggs, toast, and tea and coffee. Mr. Baum said the old ad for the unit says  
283 breakfast is “based on availability”, but Attorney Pasay said there will always be  
284 breakfast provided. Ms. Pennell asked where the breakfast will be provided. Attorney  
285 Pasay said there’s a kitchen area with a welcome package that includes the food. The  
286 dining area is in the studio. Ms. Pennell asked about Meals Tax, and Attorney Pasay  
287 said yes, the State imposes an 8.5% Meals Tax on the total rate of the stay, which  
288 ultimately trickles into a benefit for the town. Ms. Pennell said she feels that the definition  
289 of a bed & breakfast is to go to a separate room where you are served breakfast.  
290 Attorney Pasay said Town Meeting was made aware that we were trying to  
291 accommodate what we are doing within the definition of a bed & breakfast, and it was  
292 universally accepted. This is the rare situation where the ZBA knows what the Planning  
293 Board and the Legislative Body wanted when they voted for this ordinance.

294 Attorney Pasay went through the special exception criteria. 1) The use is  
295 permitted as a special exception under Article 4, Section 4.2 Schedule I; yes, bed &  
296 breakfasts are permitted by special exception in the RU District, and with the  
297 amendment to the ordinance we do meet the definition of a bed & breakfast. 2) The use  
298 is so designed, located, and proposed to be operated so that the public health, safety,  
299 and welfare are protected; yes, the discussion by the Board last summer considered this  
300 issue and found unanimously that it met these criteria. This is a minor and reasonable  
301 use. It operated as a transient Air BnB for two years without any complaints. The  
302 property is very insulated, and the use is indiscernible from the road. There is no public  
303 health threat; there are public interest benefits because it will bring business to town and  
304 pay the State Rooms & Meals Tax. The petition was signed by 1,700 people, and there  
305 is widespread support for the Word Barn and specifically this proposed use. There are  
306 unique circumstances to the property, and the use is benign. 3) The proposed use will  
307 be compatible with the zoned district and adjoining post-1972 development; yes, nothing  
308 about the property’s appearance will change, and it will not alter the character of the

309 neighborhood. The residential use has been in place for decades. This is a less  
310 impactful use than other uses that are permitted by special exception. 4) Adequate  
311 landscaping and screening are provided; yes, there's a wooded buffer on three sides  
312 and there will be no discernable change to the appearance of the property. 5) Adequate  
313 offstreet parking and loading is provided, and ingress and egress is provided to provide  
314 minimum interference on abutting streets; yes, the regulation requires one additional  
315 space for each rented unit, and there is ample space on the property. There are two  
316 striped spaces next to the Word Barn. We will go to the DOT to get a driveway permit for  
317 the additional use. He described the work done by the applicants recently to get current  
318 on the DOT permit, then he resumed the special exception criteria. 6) The use conforms  
319 with all applicable regulations of the district; yes, it's compliant with other regulations.  
320 We're happy with a condition of approval that requires an amendment with DOT, as well  
321 as Mr. Eastman coming out to certify the property. 7) As a condition of special exception  
322 approval, the applicant may be required to obtain town plan review and/or Planning  
323 Board approval of the site plan; in this case, there are no new structures or changes  
324 we're proposing. It's been an existing use for decades. 8) The use shall not adversely  
325 affect nearby or abutting property values; yes, the use is indiscernible from the street or  
326 any neighboring property. We provided a realtor's letter that it will not negatively affect  
327 property values, and will increase this property's value, which will incidentally increase  
328 the property values around it. The final two criteria are not applicable to this application.

329 Ms. Pennell asked why they can't turn this into an apartment. Mr. Thielbar said  
330 the bands make too much noise. Ms. Pennell said they should have it be a short-term.  
331 Mr. Baum said that's what this is getting at, since short-term rentals are not permitted.  
332 Ms. Pennell asked how long they rent the room for, and Attorney Pasay said most  
333 renters are couples for 2-3 nights. The short-term nature of this use is more compatible  
334 with the Word Barn use.

335 Mr. Baum opened the discussion to the public, but there was no comment. Mr.  
336 Baum closed the public session and entered into Board discussion.

337 Mr. Thielbar said those who benefit from temporary rentals should recuse  
338 themselves, and Mr. Prior now meets the requirements for conversion to a bed &  
339 breakfast. Mr. Prior said he [Mr. Prior] is also a property owner, a taxpayer, and many  
340 other things. He does have an accessory dwelling unit that is a rental, so if the Board  
341 feels he needs to recuse himself, he can do so. Mr. Baum said that is a permitted use.  
342 Mr. Prior said anyone with a spare bedroom could run a bed & breakfast out of their  
343 house. It doesn't matter that he has an accessory dwelling unit. Mr. Baum said he  
344 doesn't think it's a conflict.

345 Mr. Thielbar said the intention of a bed & breakfast was for someone to take  
346 guests into their home, serve them a nice meal, and help them become familiar with the  
347 area. This is a motel. What they've submitted meets the definition that they've conned  
348 the Board of Selectmen into accepting. Mr. Baum objected, saying the applicants did  
349 everything they were permitted to do. Mr. Thielbar said he would vote no as a protest,  
350 and Mr. Prior warned that doing so could open the Board to challenges.

351 Mr. Baum went through the special exception criteria. 1) The use is permitted as  
352 a special exception under Article 4, Section 4.2 Schedule I; yes, it clearly meets this

353 definition. It's a detached accessory structure that provides for lodging of transient  
354 guests and includes breakfast. There's no definition of what a breakfast is. It doesn't  
355 have more than four rentable rooms, and it does have a dining area capable of  
356 accommodating the number of guests. The ordinance doesn't say where the dining area  
357 has to be. 2) The use is so designed, located, and proposed to be operated so that the  
358 public health, safety, and welfare are protected; yes, it's a single unit on a large property  
359 which is buffered from the surrounding properties. There's no evidence from when it was  
360 in use that there were issues with it. 3) The proposed use will be compatible with the  
361 zoned district and adjoining post-1972 development; yes, a bed & breakfast is permitted  
362 by special exception in this zone. It's consistent with the existing use and was operated  
363 in this way for several years. 4) Adequate landscaping and screening are provided; yes,  
364 it's one unit within the property, which is buffered. 5) Adequate offstreet parking and  
365 loading is provided; yes, there appears to be sufficient parking for the Word Barn use,  
366 and one unit is not going to tip that. 6) The use conforms with all applicable regulations  
367 of the district; yes, but he would like to see a condition of an approval by the DOT for the  
368 bed & breakfast use. 7) As a condition of special exception approval, the applicant may  
369 be required to obtain town plan review and/or Planning Board approval of the site plan.  
370 He doesn't think that's necessary. This property probably should have had a site plan for  
371 the Word Barn Use, but that's not related to the use being requested tonight. 8) The use  
372 shall not adversely affect nearby or abutting property values; yes, given the buffering  
373 discussed, he sees no adverse effect on property values. The final two criteria are not  
374 applicable to this application.  
375

376 Ms. Davies made a motion to approve the application for a special exception per Article 4,  
377 Section 4.2 Schedule I: Permitted Uses and Article 5, Section 5.2 to permit the operation of a  
378 Bed & Breakfast use in the existing accessory structure located at 66 Newfields Road, with the  
379 condition that further review and approval for the bed & breakfast use by the Department of  
380 Transportation as well as town Building and the Fire Department to ensure that it meets all  
381 applicable local and State standards is required. Mr. Prior seconded. Ms. Davies, Mr. Prior, Mr.  
382 Baum, and Ms. Olson-Murphy voted aye, and Mr. Thielbar abstained. The motion passed 4-0-1.

383  
384  
385 D. The application of The White Apron for a variance from Article 5, Section 5.6.6  
386 seeking relief to permit less parking spaces than required for a social hall use on  
387 the property located at 1 Franklin Street; and a determination as to whether the  
388 "dining/restaurant" use condition imposed by a previous variance granted on said  
389 property in 2014 would apply to the Applicant's proposed use. The subject  
390 property is located in the C-1, Central Area Commercial and R-2, Single Family  
391 Residential zoning districts. Tax Map Parcel #72-71. ZBA Case #22-8.  
392

393 Mr. Baum recused himself from this application. He said this is Mr. Merrill's last  
394 meeting, and thanked Mr. Merrill for his service as an alternate. Mr. Baum left at this  
395 time and Mr. Prior became the acting Chair.

396 The Board took a short break at 9:23 PM, and reconvened at 9:28 PM.

397 Attorney Colby Gamester was present to discuss the application, as well  
398 as owners Jay and Elizabeth Curcio and Zach Smith of Winter Holben  
399 Architecture and Caitlyn Burke of the Boulos Company. Attorney Gamester is  
400 filling in for Attorney Durbin, who was not able to be present.

401 Mr. Prior said there is an issue with one of the applicant's documents: the  
402 landowner authorization letter says Rye instead of Exeter. Attorney Gamester  
403 said the applicant would be happy to provide an updated letter of authorization to  
404 the Board. Mr. Prior said that would be sufficient.

405 Attorney Gamester said the White Apron is a local catering service that  
406 has been in business for 20 years. With the approval of this application, they will  
407 be able to grow their business. The proposed use would consume the first floor  
408 of 1 Franklin Street under the "social hall use" described in the ordinance. It  
409 would provide on-site catering, event services, and community events. There  
410 was concern in 2014 about the first floor being used as a restaurant, and that a  
411 future owner could convert it to a full service restaurant. Conditions were placed  
412 on the approval that the restaurant could not operate until 5 PM. The proposed  
413 use for the White Apron is a social hall and event space; there will be no  
414 restaurant services provided. The application asks that the Board find either that  
415 the use is not subject to the restaurant condition, or to amend the approval to  
416 remove the restaurant condition.

417 The social hall use is a permitted use in the C1 zoning district, where the  
418 majority of the property lies, but a portion of this property sits in the R2 district  
419 where social halls are not permitted. This Board has already found that the social  
420 hall use is reasonable and consistent with the spirit and intent of the ordinance.  
421 Amending the conditions of the approval, or finding that the use is not subject to  
422 the restaurant condition, would allow the White Apron to use the entirety of the  
423 first floor for a single purpose at scheduled times, unlike a general restaurant with  
424 people coming and going.

425 Mr. Prior asked if there would be restrictions on time. Attorney Gamester  
426 said we believe the restriction of 5 PM was created because of the owner's use  
427 of the first floor as a restaurant, with the comings and goings around lunchtime.  
428 We believe that there does not need to be a time restriction around the proposed  
429 use.

430 Mr. Thielbar said the restriction on time of service was related to the  
431 parking. After 5, the Long Block doesn't need the parking and those spaces  
432 would be available to serve the people they would plan to have. Attorney  
433 Gamester said the parking easement is 7 AM - 7 PM, so it doesn't match the 5  
434 PM restriction. That easement is very well protected for the 11 spaces and the  
435 12th overflow spot.

436 Ms. Pennell asked if the catering would be prepared in the kitchen there.  
437 Mr. Curcio said we have a kitchen in Dover NH, where we will produce all the  
438 food for the first year of operation; after that we intend to produce food for events  
439 out of the space.



440 Attorney Gamester said the second part of this request is a variance to  
441 allow 31 parking spaces where 33 are required. For the social hall, the ordinance  
442 requires 1 parking space for every 200 square feet of floor area, which calls for  
443 28 required spaces; there is a 1-bedroom apartment which requires one parking  
444 space; and there are two 2-bedroom apartments which each require two spaces,  
445 for a total of four. These add up to 33 required by the ordinance. In 2014, the  
446 Board chose not to apply the more stringent parking calculations, which would  
447 have forced the applicant to treat the entire first floor as a social hall use. Since  
448 that application, the bedroom count has gone down from what was proposed at  
449 that meeting. There is more available parking on-site today than in 2014.

450 Attorney Gamester went through the variance criteria. 1) The variance will  
451 not be contrary to the public interest and 2) The spirit of the ordinance will be  
452 observed; yes, the current approved use and the proposed use are virtually one  
453 and the same. The de minimis parking deviation is reasonable. The granting of  
454 the variance would not alter the essential character of the neighborhood or  
455 threaten the public health, safety, or welfare. The occupancy load of the building  
456 is currently 197 people, and it would be the same under the White Apron use.  
457 Under the current approval, there's no restriction other than the occupancy load  
458 placed on the property. It can seat up to 60 people in the restaurant and use  
459 other portions of the property up to its occupancy load. Under the proposed use,  
460 there is more predictability, as no one is just showing up to dine. The owners will  
461 coordinate logistics and planning, including guest parking, with the organizer of  
462 each event. 3) Substantial justice is done; yes, there would be no gain to the  
463 public by denying the variance relief sought. The granting of the additional relief  
464 for the de minimus parking deficiency would have no impact on the public, but  
465 there would be a substantial loss to the owner of the property if the relief were  
466 denied. It would also create an injustice to the public by not allowing the creation  
467 of a singular use through the entire first floor of the property. 4) The value of  
468 surrounding properties will not be diminished; yes, the proposed use is not only  
469 consistent with the current approved use, it's more straightforward and logical  
470 than the current use. There's no evidence that this will have an impact on  
471 surrounding properties. 5) Literal enforcement of zoning ordinance will result in  
472 an unnecessary hardship; yes, this property is unique in its environment. It is in  
473 two zones, and the R2 zone is controlling its use. It was constructed as a social  
474 hall. It is suitable for holding private events and functions. There is no fair and  
475 substantial relationship between the ordinance and its application to the property.  
476 We have received letters of support from 8 Clifford Street and 1-9 Water Street.  
477 The letter from the Attorney for the Long Block Condominiums had a correction  
478 regarding the number of parking spaces, but we intend to completely honor the  
479 easement.

480 Mr. Prior said in 2014, his understanding was that this was envisioned as  
481 a private club as part of a larger development. There was the provision that there  
482 might be additional dining offered to those who were not residents to this cluster  
483 of homes. Attorney Gamester said even if this was a limited use in what a social

484 hall would be, it wouldn't limit the members of the social hall from holding events.  
485 He doesn't believe it was limited in the record anywhere to being a private club in  
486 order to hold events.

487 Mr. Thielbar asked about the potential number of people who might be in  
488 the facility. Mr. Eastman said it would fall under maximum occupancy, which is  
489 197. Ms. Davies said the discussion in 2014 was that the members of the private  
490 club were in walking distance of the property, which would reduce the need for  
491 parking. Mr. Prior said there is a large delta between the 197 occupants and the  
492 number of parking spaces required, which is of concern. This owner is doing  
493 event planning which would include parking discussions, but they could sell it to  
494 someone else. Attorney Gamester said the owners knew there were going to be  
495 natural limitations on the property. They will have those conversations with the  
496 organizers of each event. Parking planning will be part of running their business.

497 Mr. Prior opened the hearing to the public.

498 Carl Draucker of 18 Franklin Street, an end unit of the condos on Franklin  
499 Street, said he was a member of the Bungalow Club, the private club referred to  
500 in the 2014 application for the variance. The variance application referred to  
501 limited hours of 6 PM to 9 PM, and 100 members of the club, 15 of whom would  
502 be owners of the Cottage Townhouses. The approval reduced 6 PM to 5 PM.  
503 This request by the White Apron would threaten the public health, safety, and  
504 welfare. After the Bungalow Club closed, there were three weddings, the last of  
505 which lasted until 11 PM with loud music outside. People who left turned north on  
506 Franklin Street, contrary to the one-way direction on that street. Many people  
507 who showed up parked on Franklin Street and blocked a portion of his driveway.  
508 There's no way to control when and how people come to an event such as a  
509 wedding reception. They're going to park on Franklin Street to the extent they  
510 can.

511 John Dal Santo, the majority owner of the Long Block, said his lawyer  
512 sent a letter which was not properly quoted. Presently there are 31 parking spots  
513 on the property, which Long Block may exclusively use 11 from 7 AM to 7 PM  
514 pursuant to the parking easement, but also may use 24/7. Mr. Prior asked if there  
515 are residents in the Long Block building, and Mr. Dal Santo said yes, and there  
516 are also clients who operate there into the evening. Mr. Prior asked if resident  
517 cars parked overnight are identifiable to the applicants, and Mr. Dal Santo said  
518 no, but he would be supportive of that. In the past, people coming to the events  
519 parked in those spaces, and we had them towed.

520 Jessica O'Leary of 15 South Street, behind 1 Franklin, said she agrees  
521 that one of the wedding receptions went very late and was loud, and this is a  
522 concern for an event space going forward. Customers for businesses in the area  
523 park on Franklin and South, and she was blocked in her driveway once by an  
524 event. When the Curcios started in 2018, there was an ancillary parking lot at the  
525 end of South Street, but now there's a 4 unit building there. If there are people  
526 there on the weekend and late at night with loud music, and there's no place to  
527 park, that affects her property values.

528 Scott Kuckler of 12 Clifford Street, which abuts the proposed venue via  
529 his backyard, said this building would be perfect for this use if it weren't  
530 squeezed into this little piece of land in a neighborhood. Regardless of loud  
531 music, 200 people talking is a noise on its own. It's a quiet neighborhood. People  
532 will park for events, not take a shuttle. There will be a significant impact on his  
533 quality of life and the livability of this neighborhood. Other local businesses may  
534 fail because of the parking issue.

535 Tom Grimmett of 22 Franklin Street, one of the 7 units of the Squamscott  
536 House Condo Association, said he's concerned about a business that's vacant  
537 so he would like to see something move in there, but he's also concerned about  
538 the parking. Some of the parking spaces illustrated in the application were not  
539 applicable; he counts only 13 spots for event parking for 197 attendees. Mr. Prior  
540 said the Board has to consider the parking requirements, not the 197 maximum  
541 occupants. It's 1 parking spot for each 200 feet of the social hall plus the  
542 residences upstairs.

543 Attorney Gamester said regarding Mr. Drauckner's point, there were  
544 considerations of the timeline in the 2014 approval, but the Board chose not to  
545 create a time limit on the closing end. That said, his clients are not intending to  
546 have 11 or 12 o'clock events every night. What's approved now is a 60-seat  
547 restaurant and event space. They can run a restaurant but they don't want to. No  
548 matter how many spaces are available, parking will need to be managed. Mr.  
549 Prior asked if the apartments are occupied. Ms. Curcio said yes.

550 Mr. Drauckner said a restaurant will occupy a space for less time than an  
551 event will. Diners will leave after 1 - 2 hours, but an event will last 5 - 6 hours. It  
552 will congest our town.

553 Ms. Davies said she's trying to think of a way to include valet and offsite  
554 parking as a condition. Attorney Gamester said there are different meanings of  
555 valet, it can be managed on-site or off-site. He doesn't believe that the applicants  
556 have secured off-site spots, so the shuttle service would likely be from other lots  
557 such as park-and-ride lots. Conditions go beyond the idea that the White Apron  
558 will be there. The approval could say this applicant or any other owner or lessee  
559 must submit a business plan describing their parking strategy. He doesn't think  
560 it's possible to bind the applicant to anything that may be out of their control.  
561 Everything we're discussing can be done on the property today, but we're trying  
562 to be good neighbors and nix the restaurant aspect to it.

563 Mr. Prior said regarding noise and hours of operation, we don't have a  
564 noise ordinance in Exeter, we rely on the goodwill of neighbors and abutters. Mr.  
565 Eastman said there's a town ordinance related to noise after 11 PM. Attorney  
566 Gamester said it's expected that things will be quieting down by that time.

567 Mr. Prior said there's been no consideration of employee parking.  
568 Attorney Gamester said that's part of the parking calculations.

569 Mr. Thielbar asked if we could have a limitation of no outside music.  
570 Attorney Gamester said the intention is that the music is inside. Mr. Prior said

571 there are outdoor spaces and decks for flow outside. The doors that back up to  
572 South Street would be open.

573 Mr. Prior brought the discussion back to the Board. He said there are two  
574 requests. The first is for a social hall to be located in the R2 zoning district, which  
575 we already approved in 2014, and that's it's not subject to the restaurant/dining  
576 conditions that it's a 60-seat restaurant with restricted hours to no earlier than 5  
577 PM. The use, not the occupancy capacity of the building, is changing. The  
578 wedding receptions held there were perfectly legal, even if unpopular with the  
579 neighbors.

580 Ms. Davies said this has the potential to be less or more intrusive, but it's  
581 a permitted use in the commercial district. Mr. Prior said the question of parking  
582 has to be addressed by the owner of this property and the owners of the Long  
583 Block property. Ms. Davies said it is resolved, it's a question of enforcement.  
584 They can tow. There's no concrete reason to reject a very similar use.

585 Mr. Prior said of the two options, he prefers to say that the use is not  
586 subject to the restrictions on the restaurant use.

587 Ms. Davies made a motion that, regarding the application of The White Apron for a modification  
588 to the 2014 variance, we find that the proposed use is not subject to the 2014 dining/restaurant  
589 condition regarding hours of operation and limitation on the number of seats, and that the  
590 entirety of the first floor be dedicated to a social hall use. Ms. Olson-Murphy seconded. Ms.  
591 Davies, Mr. Merrill, Ms. Davies, Mr. Thielbar and Mr. Prior voted aye, and the motion passed 5-  
592 0.

593  
594  
595 Mr. Prior said there is a definitive parking easement with Long Block that  
596 runs with the property that was signed by Kathleen Mahoney and witnessed by  
597 Mr. Baum (which is why he recused himself). This is a question of enforcement  
598 and towing. That said, the relief being sought is very minor. Ms. Davies said she  
599 doesn't see any practical way to condition a business plan for offsite parking. Mr.  
600 Thielbar said if their customers have a terrible time parking, it will be bad for their  
601 reputation. After all the discussions about how there's really not a shortage of  
602 parking downtown, she doesn't see how we can deny them for two spaces. Mr.  
603 Prior said we should also insist that the 11 PM noise ordinance should be  
604 enforced.

605 Ms. Davies went through the criteria for the parking variance. 1) The  
606 variance will not be contrary to the public interest and 2) The spirit of the  
607 ordinance will be observed; yes, although people have concerns, she doesn't  
608 think granting a variance for just two additional spaces threatens the essential  
609 character of the neighborhood or threatens the public health, safety, or welfare.  
610 3) Substantial justice is done; yes, relief from two required spaces is not, in her  
611 opinion, going to harm the general public or individuals. 4) The value of  
612 surrounding properties will not be diminished; yes, many of the properties have  
613 turned over since this building use was approved, and property values have  
614 skyrocketed in this neighborhood. There's no evidence that values will be



615 diminished. 5) Literal enforcement of zoning ordinance will result in an  
616 unnecessary hardship; yes, there is a lack of parking in downtown Exeter, and  
617 don't have the space to meet the zoning requirements. She does consider that a  
618 hardship.  
619

620 Ms. Davies made a motion that we approve a variance from Article 5, Section 5.6.6 for the  
621 property at 1 Franklin Street seeking relief to permit less parking spaces than required for a  
622 social hall use. Mr. Thielbar seconded, but he said we should talk specific numbers.  
623

624 Mr. Thielbar made a motion to modify the prior motion to state that there will be 31 spaces  
625 where the requirement is 33. Ms. Davies seconded the amendment. The amendment to the  
626 motion passed 5-0. The motion was amended to *Ms. Davies made a motion that we approve a*  
627 *variance from Article 5, Section 5.6.6 for the property located at 1 Franklin Street, seeking relief*  
628 *so that 31 spaces will be provided where the requirement is 33 spaces.]*

629 Ms. Davies, Mr. Prior, Mr. Thielbar, Ms. Olson-Murphy, and Mr. Merrill voted aye, and the  
630 amended motion passed 5-0.

631  
632

633 Ms. Pennell said regarding the definition of a bed & breakfast, she wanted to have the  
634 words "shall have" inserted, ie "a bed & breakfast shall have not more than four rentable rooms  
635 and *shall have* a dining area..." Mr. Prior said that this was a Citizen's Petition and not  
636 professionally prepared. The language cannot be changed, but we can request that the  
637 Planning Board take up the ambiguous language for the next town meeting.  
638

639 **II. Other Business**

640 A. Approval of Minutes: March 15, 2022

641 The minutes were tabled until the next meeting.

642 **III. Adjournment**

643

644 Ms. Olson-Murphy moved to adjourn. Ms. Davies seconded. All were in favor and the meeting  
645 was adjourned at 11:10 PM.

646

647 Respectfully Submitted,  
648 Joanna Bartell  
649 Recording Secretary

650

651

652

Town of Exeter  
Zoning Board of Adjustment  
March 15, 2022, 7 PM  
Town Offices Nowak Room  
Draft Minutes

I. **Preliminaries**

**Members Present:** Robert Prior, Esther Olson-Murphy, Rick Thielbar, Laura Davies, Martha Pennell - Alternate, Christopher Merrill - Alternate

**Members Absent:** Kevin Baum, Anne Surman - Alternate

**Call to Order:** Acting Chair Bob Prior called the meeting to order at 7 PM.

I. **New Business**

- A. The application of Gateway at Exeter, LLC for a variance per Article 4, Section 4.2 Schedule I: Permitted Uses and Section 4.3 Schedule II: Density and Dimensional Regulations (Residential) to permit a multi-family residential development on property located on Epping Road. The subject property is located in the C-3, Epping Road Highway Commercial zoning district. Tax Map Parcel #47-7. ZBA Case #22-4.

Jay Leonard, a lawyer, and Tom Monahan, the principal of Gateway to Exeter LLC, were present to discuss the application. Attorney Leonard said the project has ZBA variance approval from May 22, 2019 and Planning Board approval from Aug/Sept 2020, but there is now a concern regarding a condition of the variance. The previous application was for a mixed-use development, but we haven't been able to get financing for the mixed-use. In Dec 2021, we initiated a process through Mr. Sharples in the Planning Office where we planned just the residential part of the project, and that's the new plan.

Mr. Eastman and Town Counsel are concerned that the mixed-use status could be considered a condition of the variance approval. If that was a condition, it wasn't one that everyone understood, and it wasn't directly related to the variance granted. The mixed-use piece doesn't accomplish any zoning purpose.

There is a change in circumstance in that we want to build just the residential component. Another change in circumstance is that the pandemic changed the commercial and residential rental market, and we can't find a tenant for the commercial property. The other change is the passage of time. All of the other facts that supported the earlier variance are the same, so the conclusion regarding the variance should be the same.

Mr. Monahan can get financing to build the 224 rental units, and the project is exactly the same with regards to the residential property. 25% of those units, or 56 units, are dedicated to workforce housing as defined by the State of NH. 28 of those will be one-bedroom, and 28 will be two-bedroom. These will remain rental properties

45 for 30 years. The workforce housing will have a cost of rent plus utilities that is  
46 affordable to families who have 60% of the area median income (AMI).

47 Mr. Prior says the letter signed by the ZBA is ambiguous as far as the connection  
48 is concerned. He read from the decision letter: "We grant permission for a multi-  
49 family residential project as part of a mixed-use development plan within the area  
50 shown as the site on the display plan submitted and with the application as  
51 presented." There are five stated conditions, but this "as part of" is not a condition.

52 Mr. Prior read the conditions and asked Attorney Leonard to confirm that they  
53 are still the case. 1) The remaining 45 ± acres to the rear of the site remain  
54 undeveloped; Attorney Leonard said yes, we've already drafted a deed with the State  
55 and local people, and that should happen this month. 2) 25% of the residential rental  
56 units qualify as workforce housing rental units as defined under the NH State  
57 workforce housing statute; Attorney Leonard said yes. 3) The restriction for  
58 workforce housing rental shall be for not less than 30 years; Attorney Leonard said  
59 yes. 4) The residential portion shall remain as rental units for not less than 30 years;  
60 Attorney Leonard said yes. 5) The multi-family portion of the complex shall include  
61 not more than 224 residential rental units; Attorney Leonard said yes. Mr. Prior  
62 summarized that they're fully prepared to meet the five conditions.

63 Mr. Prior said there's ambiguity with "part of a mixed-use." There will be a  
64 mixed-use development, but it will be separated in time. They still intend to use the  
65 two acres at the front for non-residential use. Attorney Leonard said that's correct;  
66 the first lot, #47-6, is a little over two acres, and will be dedicated to the commercial  
67 use. We are fully intending to build a commercial use. It was originally proposed as a  
68 40,000-45,000 sq ft property with two stories, but we now can't commit to the size.  
69 We are not asking for a variance to that piece; it would remain zoned as the town  
70 has it zoned. Lot #47-7 is the lot that will have the residential component. It will be  
71 three buildings, two having 75 units and one having 74, just as we first proposed,  
72 and of the size proposed, with a 17,500 sq ft footprint. There will be a total of 224  
73 units. The last lot, #47-7-1, we are going to deed to the town and it will be restricted  
74 by conservation easements. The overseer of that land is the Exeter Conservation  
75 Commission. There are enforcement rights that will be granted to NHDES. The land  
76 [of #47-7-1] can't be developed.

77 Mr. Prior asked if separating the lots is intended to facilitate Mr. Monahan selling  
78 parcel #47-6. Attorney Leonard said he would either sell it or finance it separately,  
79 which requires a separate lot.

80 Ms. Pennell read information from the Planning Board minutes from August 20,  
81 2020 that did not seem to match the conditions set by the ZBA. Attorney Leonard  
82 said using the words "mixed-use" in the decision created an expectation that that  
83 was associated with the variance in Mr. Sharples' interpretation. That interpretation is  
84 what's holding things up. Mr. Prior said it wasn't a condition, but it was part of the  
85 ZBA decision. We don't need to worry about what the Planning Board did or didn't  
86 do; we need to look at the underlying decision that allows residential use in this zone.  
87 Ms. Davies said the inclusion of "mixed-use" was intentional, and we insisted on it.  
88 Mr. Prior said it was part of the application. Ms. Pennell said she doesn't see where

89 the Zoning Board discussed the timing and the commercial building that had to be up  
90 before the other two finished. Mr. Prior said he doesn't believe it was discussed.  
91 Attorney Leonard said we fully expected to build the commercial building, but things  
92 changed. We were trying to minimize the footprint of development, maximize the  
93 undeveloped area, and have buffers in place, and that all continues to be true.

94 Mr. Thielbar said frequently a variance application is simple enough to  
95 approve as submitted, but this request was too much. The applicant should come up  
96 with some bullet points on what we are actually approving. Attorney Leonard said the  
97 variance is for 224 residential multi-family units, of which 25% or 56 units will be  
98 workforce housing. He asked that the Board use the exact same language of the  
99 earlier approval but with no requirement regarding the time of the construction of the  
100 commercial property. The residential and commercial should be independent. Mr.  
101 Eastman said the motion should specify that the variance is for lot #47-7, because  
102 there has been a subdivision.

103 Mr. Prior asked for public comment.

104 Nick Taylor, the Executive Director of the Workforce Housing Coalition of the  
105 Greater Seacoast, spoke in favor of this proposal and its 56 workforce housing units.  
106 NH is short 20,000 housing units and we need those units to continue to grow our  
107 economy. Ms. Davies asked if Mr. Taylor had seen any difficulties with conditions of  
108 approval holding the project to workforce housing. Mr. Taylor said no, not when the  
109 conditions of the approval are clear.

110 Aaron Brown of 11 Deer Haven Drive in Exeter, the Vice Chair of the Exeter  
111 Planning Board, said Ms. Pennell was misinterpreting Planning Board condition 16. If  
112 the Exeter Planning Board had abandoned the commercial aspect of this project, we  
113 would not be here and the applicant would not have tried to sue the town. What  
114 they're not telling you is that they don't want to do the commercial, so they're  
115 separating the lots. Is the ZBA re-hearing this variance? Are they going to unwind a  
116 Planning Board condition? Mr. Prior said the Board is only looking at the ZBA  
117 condition and the ambiguity surrounding "as part of a mixed-use development".  
118 We're not going to rehear the five variance criteria. The applicant needs a  
119 clarification and an extension, because this approval runs out on May 22, 2022. We  
120 allowed residential use in a commercial zone, and none of those factors have  
121 changed, except that indication that it's part of a mixed-use development, which was  
122 part of the statement but not a condition of approval. As a Board, we need to decide  
123 whether we are comfortable not tying it to a commercial use.

124 Mr. Brown said that a proposed zoning amendment to rezone this corridor for  
125 multi-family residential use was defeated by a town vote five or six years ago. The  
126 Planning Board is starting to see residential uses coming in through variances; at  
127 what point do these variances become a rezoning of the property? If it's time for a  
128 zoning change, we should be bringing this back to the voters.

129 Mr. Prior said that's not something that's within the ZBA's purview. It wasn't  
130 necessarily that the voters rejected this, it could be said that they didn't wish to give  
131 blanket approval and are content to allow the ZBA to make a case-by-case decision.



132 In 2019, putting in 224 residential units made a lot of sense to this Board, and  
133 nothing's changed with that.

134 Mr. Brown said to clarify condition 16 of the Planning Board, the project is  
135 allowed to build 112 units and get their occupancy permit before having to build the  
136 commercial project. Mr. Prior said the Planning Board will have to deal with that once  
137 the ZBA process is over.

138 Darren Winham of 3 Juniper Ridge, the Town Economic Development  
139 Director, said it's not true that Mr. Monahan doesn't want to do the commercial. As  
140 soon as the market will allow it, he will do that. He [Mr. Winham] likes that this project  
141 is rental. Workforce housing is a huge issue, and since these are rentals, the cost is  
142 60% of area median income [AMI] vs 80% of AMI for condos. In the case of McKay  
143 Drive, the market was good for market-rate housing and they built two large  
144 buildings; when the market allowed, they found the commercial for the front, and the  
145 Primrose School is going in now.

146 Attorney Leonard said the TIF for the corridor specifically includes reference  
147 to multi-family. It's not contrary to what the town passed. Regarding enforcing  
148 covenants, we have used the same covenants in Londonderry, and they are  
149 enforceable. The financing is tied to tax credits which require these to be in place.  
150 Mr. Monahan does want to develop the commercial property, that's his goal.

151 Mr. Prior closed the public hearing and the Board entered deliberations.

152 Ms. Davies said the intention of the zoning and the TIF was part of the earlier  
153 discussion. The commercial component, and the quality thereof, was important to her  
154 vote in favor of the approval. Now that the property has been subdivided, it can be  
155 subject to any commercial use. How can we ensure that this is a significant, better-  
156 quality commercial property? Mr. Thielbar said someone who buys that property will  
157 want to have it produce as much as possible. Ms. Davies said certain uses might be  
158 willing to pay more for the land but would have lower-quality jobs. Mr. Prior said if the  
159 project had not wanted to put in residential, it would never have appeared at zoning.  
160 If he had wanted to put in a Maaco transmission dealership, it would not have come  
161 to this Board. The concerns of this Board are limited to the residential portion. Ms.  
162 Davies said the residential portion was a trade-off. She had expectations of what the  
163 commercial portion would be. She would like to ensure that this is the kind of  
164 commercial we were promised. Mr. Prior said we didn't specify it would be a two  
165 story office building, we said "as was stated in the application." The application is  
166 unchanged.

167 Mr. Thielbar asked Ms. Davies to read the special exceptions allowed in the  
168 Epping Road commercial zoning on 4-4. Ms. Davies read "gasoline and/or service  
169 stations, sexually-oriented business use, light industry, medical rehab facility, elderly  
170 congregate facilities, churches and places of worship, community buildings, social  
171 halls, clubs, lodges, fraternal organizations, or heliports." Mr. Thielbar said none of  
172 those are the wonderful developments that Ms. Davies is suggesting. Mr. Prior said it  
173 would have to come back to us for a special exception, so we do still have a degree  
174 of control. What we were asked to do in 2019 was facilitate workforce housing, and  
175 nothing has changed, except that it's no longer tied to a commercial development.

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Mr. Prior made a motion that we approve the request for a clarification and modification of the decision that was made May 22, 2019 regarding tax map parcels #47-6 and #47-7 that we no longer consider that the residential development needs to be tied to the commercial development in terms of the timing of the development, and further that we confirm all the conditions of approval that were granted in 2019, and next that we agree that the residential portion of this application refers to #47-7, and we grant a one-year extension to the decision, so that the approval now runs through May 22, 2023. Ms. Pennell seconded. Mr. Thielbar, Ms. Olson-Murphy, Mr. Prior, and Ms. Pennell voted aye, and Ms. Davies voted nay. The motion passed 4-1.

B. The application of Exonian Properties LLC for a variance from Article 5, Section 5.1.2.B. for a change in the purpose of a non-conforming use to permit a multi-family residential use of the existing structure on the property located at 43 Front Street; and a variance from Article 5, Section 5.6.6 for relief to provide no on-site parking where 24 spaces are required. The subject property is located in the R-2, Single Family Residential zoning district. Tax Map Parcel # 72-198. ZBA Case #22-5.

Attorney Sharon Sommers of DTC spoke representing Exonian Properties LLC; the principals of Exonian Properties, Florence Ruffner and David Cowie, were also present. Attorney Sommers said we are seeking relief to allow parking on the street for a multi-family housing project, and to change one non-conforming use, a church, to a new non-conforming use, multi-family residential.

Attorney Sommers went through the variance criteria. 1) The proposed change will not threaten the public health, safety, or welfare. The properties around this site include residential, the Historical Society, and the educational services, dormitories, and churches on Elm Street. A multi-family residential unit will not alter the character of the neighborhood or threaten the public health, safety or welfare. 2) The spirit of the ordinance will be observed; yes, this is considered with #1 and has already been addressed. 3) Substantial justice is done; yes, the benefit to the applicant is that the existing church structure can remain intact with a viable use of multi-family residential, and there is no known detriment to the public. 4) The value of surrounding properties will not be diminished; yes, the residential use will be consistent with other nearby uses, and we're unaware of any evidence that this will diminish property values. 5) Literal enforcement of zoning ordinance will result in an undue hardship; yes, the property was constructed as the First Baptist Church in the 19th century. The applicant would like to keep the church building there and has obtained approval from the HDC to do so. The special condition arises from the focus on keeping the church intact in a viable way. The permitted uses, such as single-family dwellings, public schools, recreation facilities, or open space developments, don't work in the confines of this existing structure. The proposed use is compatible with other nearby uses. There is no fair and substantial relationship with preventing negative impacts and how the ordinance is applied to this property.

220 The proposed use is a reasonable one; yes, none of the permitted uses will work  
221 within the existing structure. The proposed use will be compatible with neighboring  
222 properties and will also help keep the church intact, and is reasonable.

223 Ms. Davies asked if it will be 11 residential condo units, and Attorney  
224 Sommers said yes.

225 Mr. Prior asked if any members of the public wished to speak, but there was  
226 no public comment. Mr. Prior closed the public session and the Board entered  
227 deliberations.

228 Mr. Merrill asked why someone would want to do all this and not just sell the  
229 property to the Academy. Ms. Olson-Murphy said it's not the Board's concern.

230 Ms. Davies said given the site size, location, and zoning, there aren't a lot of  
231 great options other than conversion to residential. She's happy with the use. Mr.  
232 Prior said regarding the use variance, he's satisfied with the presentation and sees  
233 no need to go through the five criteria again.  
234

235 Ms. Davies moved to accept the application of Exonian Properties LLC for a variance  
236 from Article 5, Section 5.1.2.B. for a change in use to permit 11 units of multi-family  
237 residential use in the existing structure at 43 Front Street as proposed. Mr. Thielbar  
238 seconded. Mr. Thielbar, Ms. Olson-Murphy, Mr. Prior, and Ms. Davies voted aye, and  
239 Mr. Merrill voted nay; the motion passed 4-1.

240  
241 Attorney Sommers spoke regarding the parking variance application. We seek to  
242 have no on-site parking, and to have the 24 spaces required by the ordinance covered  
243 either by people parking on the street or at nearby municipal parking lots. She went  
244 through the variance criteria. 1) The variance will not be contrary to the public interest;  
245 yes, having parking on the street will not threaten the public health, safety, or welfare.  
246 The essential character is residential uses, the Historical Society, educational uses, and  
247 churches. The parking needs of those uses are met in part by on-site parking and in part  
248 by using street parking. Adding the parking spaces for 11 residential units to the existing  
249 municipal and street parking will not change the essential character of the neighborhood  
250 or cause any public health, safety, or welfare concerns. 2) The spirit of the ordinance will  
251 be observed; yes, this has been addressed with #1. 3) Substantial justice is done; yes,  
252 the benefit to the applicant of allowing off-site parking is that it will allow the proposal to  
253 proceed, and there is no detriment to the public given the off-site parking already in the  
254 area. 4) The value of surrounding properties will not be diminished; yes, this is  
255 consistent with nearby uses, and we're asking for a modest amount of street parking  
256 we're asking for. The improvements to the property will stabilize or improve the  
257 surrounding property values. 5) Literal enforcement of zoning ordinance will result in an  
258 undue hardship; yes, from the survey presented with the application, the Board can see  
259 that there's no ability to park on site. The applicant could demolish the site and build  
260 something with a smaller footprint to create some on-site parking, but the applicant  
261 wishes to maintain the historical structure, which necessitates finding parking off-site.  
262 The special condition is that to keep the property intact, we need to find parking offsite.  
263 The town has granted the building an occupancy of up to 460 people as a church; the

264 parking needs of that many people would be greater than the at most 24 cars on the  
265 street or in a municipal lot. There is no fair and substantial relationship between the  
266 ordinance and the request. There is a great volume of parking available, some very  
267 close by, such as on Spring Street. At most it would be within a block. The proposed use  
268 is a reasonable one; yes, we seek to keep this church intact and make it a multi-family  
269 residential use, and those people need to park somewhere. Given the amount of street  
270 and municipal parking, we believe the proposal is a reasonable one.

271 Mr. Prior said it would be possible to have parking on-site on the ground floor.  
272 Has that been discussed? Mr. Cowie said we explored underground parking, but it  
273 wasn't economically feasible and there were radius concerns about it being able to wrap  
274 around within the footprint. Putting it on the street level would greatly diminish the  
275 number of units possible, which would also not be economically viable. Ms. Davies  
276 asked if there would be a loading area with short-term parking. Mr. Cowie said we would  
277 use the rear of the church as a drop-off area and handicapped access, but it would not  
278 be used as parking.

279 Mr. Merrill said the buildings at 43 Front Street are condos that already have  
280 difficulty parking. For four months out of the year, you can't park on the street. Where will  
281 these people go? Ms. Davies asked if there had been a parking study. Attorney  
282 Sommers said we did not prepare a parking study. There was a municipal parking study  
283 done several years ago. There are times when Spring Street is empty. The condos there  
284 have at least some parking on-site. There are also spaces along Front Street and in front  
285 of the church. Mr. Prior said the applicant will have a discussion with their investors  
286 about whether you can market a condo with no parking. These are not issues that  
287 concern the Zoning Board. Attorney Sommers said the Board should look at the impact  
288 of 24 cars on the parking needs of the other elements of Exeter. Ms. Davies asked if the  
289 municipal lot allows overnight parking. Mr. Eastman said there are 15 spaces there for  
290 overnight parking in the winter. Ms. Olson-Murphy said the municipal lot on Center  
291 Street is only 24 spaces. Mr. Eastman said there is permitted overnight parking there but  
292 only for 10 spaces. Ms. Davies said she would like to see more of a parking plan. Mr.  
293 Prior pointed out that if it were still a church with 100 people, that would be temporary  
294 parking, not overnight.

295 Ms. Ruffner said there is a municipal lot behind her office building. Ms. Olson-  
296 Murphy said there are 20 spots there, but she doesn't know how many of those are  
297 overnight spots.

298 Attorney Sommers said that the applicants will study the issue further and come  
299 back to the Board. Ms. Davies said if they could secure some dedicated parking spaces  
300 elsewhere that might help. Mr. Prior suggested giving up some space underneath the  
301 building for parking to minimize the impact.

302 Attorney Sommers requested a continuance until the next meeting, April 19th,  
303 where they will provide additional information.

304

305 Mr. Merrill moved to approve a continuance of the hearing to April 19, 2022. Mr. Thielbar  
306 seconded. Mr. Thielbar, Ms. Olson-Murphy, Mr. Prior, Ms. Davies, and Mr. Merrill voted aye,  
307 and the motion passed 5-0.



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311 **II. Other Business**

312 **A. Approval of Minutes: February 15, 2022**

313 Mr. Thielbar moved to approve the minutes of February 15, 2022 as presented. Mr. Merrill  
314 seconded. Mr. Prior, Ms. Olson-Murphy, Ms. Davies, Mr. Thielbar, and Mr. Merrill voted aye,  
315 and the motion passed 5-0.

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317 **III. Adjournment**

318

319 Mr. Thielbar moved to adjourn. Ms. Davies seconded. The motion passed 5-0 and the meeting  
320 was adjourned at 9 PM.

321

322 Respectfully Submitted,

323 Joanna Bartell

324 Recording Secretary

Heritage Commission/Demolition Review Committee

December 15, 2021

Final Minutes

Members Present: Jay Myers, Chairman, Julie Gilman, Select Board Rep., Pam Gjettum, Clerk, John Merkle, Vice Chair, John Grueter, Planning Board Rep., Bill Campbell

Call Meeting to Order: Jay Myers, Chairman, called meeting to order at 7:00 pm in the Nowak Room of the Exeter Town Office Building.

This is a public meeting to discuss a proposal by Exonian Properties LLC for the proposed partial demolition to the roof of the existing structure located at 43 Front Street in order to facilitate dormer windows and balconies. Parcel #72-198.

Members from Exonian Properties were present.

Jay then entertained a motion to open this hearing. Bill made the motion and Pam seconded. All were in favor and motion approved.

Jay said the purpose of this meeting is to consider some applications at the property of 43 Front Street. This is a public hearing so it is an opportunity for the public to hear about the proposed design. We are here because the Zoning Ordinance gives the Heritage Commission an opportunity to preview building demolition. Jay then turned it over to the property owners.

Rob Law spoke and said he had met most of the commission members at the site walk. He is an associate with an architect firm in Boston and he is working with David Cowie and Florence Ruffner of Exonian Properties.

He said our project is about proposing an adaptive use of this beautiful, historic church. We are proposing an eleven unit condo building. He had a few slides to show the commission members. How we are proposing to do this is by infilling with two new floors, a third level and a fourth level. The ground level would be lifted up for accessibility.

Rob said the main thing we are proposing here are dormers on either side of the existing building. In order to do that, portions of the existing lower roof and a portion of the main roof structure will need to be demolished. Another thing he wanted to point out is some of the texts on the slides are red and they represent minor changes to what they had initially submitted to this committee. One of the items that we are proposing is replacing the existing roof with asphalt shingle. In their opinion, a lot of the roof structure design is the addition of the dormers is really going to be a focal point of the building. Going with another material that may have more detailing to it, might draw more attention to it.

Another one of the changes they made to this plan was on the third floor regarding the windows. He said the next change they wanted to highlight is that they are going to propose to keep the tower slate. He said this is really a key part to the building and they felt very strongly the slate should remain in the tower.

Rob said on the front elevation, they are proposing to keep the window heads and jambs as they are, but lower the windowsills to a more residential height.

The front steps are not in good shape and they feel this is a strong part of the architecture and they would like to do what they can to save those existing steps and possibly give them a new life with a stone cladding or something appropriate. The steps would also have new railings.

Finally Rob talked about the rose window. What they are proposing is that they will keep the master frame of the rose window and just remove the stain glass portion and insert clear vision glass.

Jay then asked the commission members if they had any questions, thoughts or comments.

John Grueter said he is confused about what was said about replacing roofing with synthetic slate and at some point it was said the slate would stay on the tower and there was also talk about architectural shingles and asphalt. He then asked this to be clarified.

Rob said their initial submission to the commission was for a synthetic slate product for the entire roof and the tower. After more consideration of what that would mean and look, they felt that the tower should have the slate that is there and be repaired. He said they then wondered what to do with the main expanse of the roof. He said there is some existing scalloping detailing in that slate as it sits now. Once you put a dormer addition there, all of sudden it becomes a focal point of the roof line. He said they felt by putting slate back and having that kind of detailing might make it look too busy and that is why they are changing their position and propose asphalt.

Bill said his concern about the whole project is the fact that this church resides in what he calls a settled area and there has not been much disturbance. He thinks what is proposed is radical and what does it add to the historic nature of this area.

Pam said she shares Bill's concern, but on the other hand, she was afraid that the whole thing might go and this is much better.

Jay said he likes the idea that owners are paying special attention to the steeple and the bell tower and maintaining them.

Rob said they are going to insert a floor in there so it is like lofted living space for that condo unit. He said this is one of those times when they would want to mimic what was there in a new creation way.

Jay then asked John Merkle if he had any comments. John said he is really torn by this but he understands and he likes what they have done. He said they have kept the spirit of what the building was. John said as far as the demolition part of it, he felt it was handled very well.

Bill made a motion to close the public hearing. Julie seconded. All were in favor and public meeting was closed.

Pam made a motion for the commission having no objection to demolition as presented. Julie seconded. All were in favor except for Bill.

With no further business, meeting was adjourned at 7:45 pm.

Respectfully submitted,

Elizabeth Herrick

Recording Secretary



Exeter Heritage Commission  
Demolition Review Committee  
10 Front Street  
Exeter, NH 03833

November 15, 2021

Doug Eastman, Building Inspector  
Town of Exeter  
10 Front Street  
Exeter, NH 03833

RE: Demolition request, Baptist Church at 43 Front Street

Dear Doug:

At 9:00am November 12, 2021 The Exeter Heritage Commission Demolition Review Committee (DRC) met at 43 Front Street to consider demolition of portions of the existing roof. Present at the site HC members Pam Gjettum, Bill Cambell, John Grueter and myself. Also present was the developer, his architect and realtor Florence Ruffner.

The DRC determined the structure to be significant and felt that removal of such portions of the roof would compromise the character of the historic building. As provide for in 5.3.5, section D, para 4 of the Exeter Zoning Ordinance the DRC is suggesting conducting a meeting to consider public comment.

Please advise the applicant that their demolition request will be delayed for up to 30 business days from the Nov 12<sup>th</sup> determination of significance. During this 30-day period, ending December 30<sup>th</sup>, the Heritage Commission will hold a public hearing at the earliest convenience allowing for public input regarding the demolition request.

Sincerely,



Jay L Myers, Chairman  
Exeter Heritage Commission

Exeter Heritage Commission  
Demolition Review Committee  
10 Front Street  
Exeter, NH 03833

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Sincerely,



Jay L Myers, Chairman  
Exeter Heritage Commission

Historic District Commission  
December 16, 2021  
Final Minutes

Call Meeting to Order: Patrick Gordon, Chairman, called meeting to order at 7:00 pm in the Nowak Room of the Exeter Town Office Building.

Members Present: Patrick Gordon, Chairman, Julie Gilman, Select Board Rep., Pam Gjettum, Doug McCallum, Gwen English, Planning Board Rep.

New Business: Public Hearings: The application of Phillips Exeter Academy for the proposed demolition of the existing building located at 8 Gilman Lane. Case #21-11. Also, the application of Phillips Exeter Academy for the proposed construction of two (2) new residential buildings on the property located at 8 Gilman Lane. Case #21-12. At this time, Patrick asked the commission for a motion to tie application Case #21-11 to Case #21-12. Julie said so moved and Gwen seconded. All were in favor and motion approved.

Patrick then asked for a motion for the proposed demolition of 8 Gilman Lane tied to the application for the proposed construction of the triplex at 8 Gilman Lane as one application. As a separate application, the proposed construction of the duplex at the front. After discussion between commission members, Julie withdrew her first motion and Gwen seconded this. All were in favor and motion withdrawn. Pam then made a motion to tie Case #21-11 to Case #21-12 making them one. Gwen seconded. All were in favor and motion favored.

Mark Leighton, Head of Facilities for PEA asked if they could start with the duplex and Patrick then opened the public hearing for the application, Case 21-12 for the proposed construction of a duplex on the property of 8 Gilman Lane.

Next to speak was Rob Harberson of Market Street Architects and he also brought Christina O'Brien from the office to help with the slides. He said what they are trying to do is gain the continuity of the streetscape. He said it is part of the missing tooth. He showed slides of what is there and what is being proposed.

There was a slide that showed two elevations. The difference between the two elevations are chimneys. Rob said there is not a way to bring up true masonry chimneys and so what would be proposed here is something constructed out of a plywood box. He said the challenge we have with it and why we are proposing to not have the chimneys is because it is going to be next to the real chimneys we are keeping at 35 High Street.

Next on the slide are the entries which show them with and without chimneys. This would mask from the street that this is a two unit building.

Rob said at the last meeting they also talked about windows and the proportion and alignment of them have been adjusted to make it look more regular across the front of the building. These are the primary changes from what the commission had seen previously.

Patrick then asked if there was anyone for the frontage from the public who would like to speak and there were none. He then asked if there was anyone against this project who would like to speak.

Nicholas Tolentino spoke and said he had a question regarding the chimneys. Is the actual proposal with or without the chimney.

Mark Leighton spoke and said that we have that question too and that is why we are presenting options to the commission to help us with that.

Rob Harbinson said he would prefer the option without.

Nicholas said his only comment would be that given every other house on that street in close proximity have significant chimneys present that are part of the historic nature of the house. He then said his personal preference would be to include the chimney.

Next from the public to speak was Anthony Zwaan of 7 Marlboro Street. He said this is not entirely for or against, but he chose to speak. He thanked the board for serving. Sticking to the case in hand which is the duplex facing High Street, he wanted to say he is not against placing the duplex on High Street. With Nick, I would like to see a nice rendition of chimneys. He would love to see a great attempt to do that. He likes the proposal to make it a single entrance. He said he has a question about the presentation of the returns on one of the slides, which he pointed out on the slide. He said it looks like a modern looking return which is something you would see on new modern construction rather than the classic New England return.

Patrick then opened it up to the commission members for any questions or comments for the applicant. Pam said she likes the idea of a chimney, but has seen some really terrible ones.

Gwen said she wanted to express her gratitude for the work that has been done to bring this plan in front of us. She really likes the new design. She likes the entryway, the single door. She also likes having the six windows at the top.



Julie said she appreciates the changes to the bay windows but is struggling with the chimneys because what was presented and what was talked about, especially changes in the entrance, are bringing in more of a period of time that would have chimneys. Patrick said he agreed.

Anthony spoke again and said he did not see the first proposal but is hearing that this one is a tremendous improvement. He hopes that you all are taking very close notes about the very excellent suggestions that have been made by the board. Anthony said the academy will do a great job and he is sure the academy realizes how crucial this location is. Every person entering town will see this building.

Patrick then said that he thinks the commission has enough information to accept the application and called for a motion to accept. Gwen said, so moved and Julie seconded. All were in favor and application was accepted.

Patrick said the commission now has enough information to make a decision and he closed the public hearing and there were some great public comments. The approval of the application will have some conditions.

Patrick said there were eight conditions.

1. Front entry door system has side lights and remove the side elevation windows.
2. Raise the entry roof system and trim the front door.
3. Increase the beam depth at the hip roof entries and at the front door roof.
4. Create depth for the eave return at the left garage.
5. Use metal return material at the eaves and rail details.
6. Concrete foundation to be a parched finish with smooth trowel.
7. No vinyl railings or Trek material treads.
8. To include the construction of the chimneys.

Patrick asked for a motion with these conditions and Pam said so moved. Julie seconded. All were in favor and the application approved with conditions.

Mark Leighton said he thinks it was a great discussion last time and this time and he thanked the commission.

Next application and public hearing is Case #21=11 for Phillips Exeter Academy for the proposed demolition of the existing building located at 8 Gilman Lane.

Mark Leighton spoke and said he thought it would be helpful to do a quick recap of what they are doing. He showed slides again to the commission and public. Mark said the

reason they are asking to demolish is that this is a very large single family and it is not in great shape and needs a lot of work. It has over 3,000 square feet of finished area and with our program, our single family homes are below 2,000 square feet. This building has six bedrooms and we only want three to four bedrooms. Mark said one of the primary objectives is relocating Gilman Lane to the intersection. He said this is important to us because it could be an unsafe condition trying to get in and out of there. He then gave a summary of who owned the house and when the academy purchased it. He said through all of their research, they feel between 1880 and 1930, a significant amount of work has happened to this property.

Rob Harberson spoke again and said this property is historic. He thinks most properties in downtown Exeter would have similar historic value relative to the history of the property. He thinks what is different is the scope of architecture. When you go through this building, you see many different eras both in the exterior detailing, as well as the interior features. He said they do not believe there is a lot left at all of the original structure.

The nature of the proposed work is to develop a High Street neighborhood. They will restore the exterior of 35 High Street. They would then replace 8 Gilman Lane with new construction. Rob said another item they wanted to note as well is we are willing to work with the Heritage Commission to develop a plan for mitigation.

Julie asked Rob if he had found anything out about the brick fireplaces. Rob said they have a report that just came back but it is not in the commission's packet. He said Scott Whitticer was hired as a Masonry Consultant and he thinks in general that his findings support a lot of the work in the basement between 1830 and 1890, but certainly not original. There was other work produced between the 1880s and 1930s.

Gwen asked if the gentleman they have has provided this information and is his speciality the materials or is he just a historian. Mark said his expertise is a Masonry Consultant.

Nicholas Tolentino spoke and said he wanted it on record that Scott Whitticer is not a Historic Masonry Specialist. Mark said he does not even know if that exists but all he can say is that what they hired him to do is an assessment of the existing masonry in that building.

Rob Harberson said he would not describe him as a mason. His title is Mason Reconsultant and said in his opinion, he is a masonry expert.

Gwen said the reason she asked the question is that she thinks the most striking feature in the basement was the fireplace. She said it troubles her that nobody is able to tell what the origin is.

Patrick said this chimney is an important feature of the home and thinks it should be preserved. Mark Leighton said they could move it and even put it into 35 High Street.

Patrick said let's say this building was built in 1830. It is 191 years old as we sit here today.. As an architect, I would love to have a building standing 191 years later that someone was trying to save. He does not see the value of replacing this building and losing a structure that has a lot of life left.

Mark Leighton said he respects Patrick's opinion but in order for them to convert it into a use that is feasible for them, it would mean significant changes, cost aside. He said details on the inside would be gone. They would be making changes on the outside. By forcing us to keep it in that spot, you are unnecessarily making us rechange the program which was the primary objective for 8 Gilman Lane. He also thinks this is unnecessary. He said a 3,000 foot single family home is not practical for the academy anymore.

Pam said we are not against what you are trying to do. We just want to save that big old house. She said she thinks the new duplex looks great. Mark said he understands but feels the commission is forcing them into redesigning this.

Patrick said this is exactly why Historic Districts are here. If it was zoning only, the commission would have never met with the academy.

Rob Harberson spoke and said he understands what Patrick and the other members are saying. He said they completely agree with the commission that it is a historical property but professionally, he does not agree at all that it is a historical structure. There is little if anything left from the original house. He said this is something we clearly disagree on and he understands the commission's role.

Nicholas Tolentino spoke again and asked to go to the conclusion slides again. He said one of the things that really stands out to him is the difference in value. The academy values one way and the HDC values the other way and they are not matching. He said the existing structure, the conclusion is that it is not from the 1790s. Based on this conclusion, it was based on the nails and everything else that was taken from the site. Rob Harberson agreed that it was.

Anthony Zwaan spoke again and said he came to this meeting unprepared. He is an abutter of the building but has never been in it. He wanted to comment on the missing tooth comment made by Rob Harbison and he disagrees with it. The front of this building is very attractive in terms of entering town. There is a beauty to the front of this building. He gets that it is impractical for today's purposes but there are some solid bones there and something could be done with this building. He then said that he does not think the triplex is a very good solution.

Mark Leighton asked Patrick if he had received any other letters from abutters and Patrick said he had and he read it.

Patrick then asked if there were any more comments or questions from the commission.

Julie said she knew some people who she would like to take a look at the building but they are not professionals. Mark said they are open to that and asked Julie to have them send their credentials.

Anthony Zwaan spoke and said it sounds like the academy thinks everyone wants them to save this as a single family home and he said no one is saying that. You could save the front of it, the basement and do whatever on the back, even turn it into a duplex and he thinks they would answer many of the concerns raised here today.

Patrick then asked for a motion to table this application. Mark Leighton then asked what information the commission was asking for. Patrick said they would want to have more information about the brick structure in the basement and about the other constructions that have gone on.

Gwen made a motion to table application #21-11 until January 20th. Pam seconded. All were in favor and the application was tabled.

Next on the agenda is the application of Exonian Properties LLC for change in appearance, including and window replacement and partial demolition to the roof of the existing structure located at 43 Front Street in order to facilitate dormer windows and balconies Case #21-13. Patrick asked the applicants if they still wanted to meet because it was late due to the first application taking longer than expected.

Sharon Somers from Donanhue, Tucker & Ciandella, PLLC spoke and she said they would like to continue with their application. She said she is here representing the Exonian Properties. Also with her tonight is Tony Chow from Finegold Alexander Architects and also David Cowie and Florence Ruffner. She said that Tony will give an overview of the presentation. Tony showed slides of churches his company refurbished and slides of what the property will look like. Tony showed a slide showing the church



on the north east corner and what they are proposing to do in transforming this for residential use. They will be adding dormers onto the existing church. They are proposing to basically replace, restore and replace the existing slate because a lot of the slate is not in good shape and is really at the end of its life. With the dormers, they are also proposing windows and balconies. After showing the slides, Tony said he tried to be as efficient as he could.

Patrick then asked if there was anyone from the public who wanted to speak for or against the application and there were none. Patrick then asked the commission members if they had any questions or comments.

Julie said last night at the Heritage Commission Meeting, we did find that the treatment was appropriate for the historic neighborhood given that just about the whole exterior is staying the same and identifiable as a church. We will be missing the glass stained windows but understand why they need to be changed and we found that it was well done. Julie said they did disagree on the roofing material using simulated slate instead. Clearly, the slate is in worse condition than I thought when you see the flyover and the couple of photos that they showed.

Gwen said talking about the roof she does not think she ever noticed it before and it has a lovely pattern on it and with the dormers it does not even make sense to duplicate that.

Tony said they looked closely at this and Gwen is right. There is a lovely pattern here and they would have to remove the entire roof in order to do that and by the time you do that and put back the new dormer situation and what is left Tony thinks might feel like a camel because it is almost like you have a versace of something there but it does not really work. What they felt was important if they are able to achieve as high a quality within the man made products and do a color wave that tries to blend in and match this as much as we are able to. Tony said their intent in kind is to restore the tower with slate which he thinks is highly visible.

Gwen then stated that she is unsure about the doors because she doesn't know what they will look like.

Tony said in this instance, in order to blend the fabric there, they will paint the doors. As far as the unit development goes, he thinks what is really important here is that we wanted to retain the doors and we did it in such a way that it allowed it to be retained. We also had to do something to allow the units to work. Tony said the doors are actually allowing light in.

Julie then asked Tony if they would be needing an elevator in this building and Tony said yes, they do. Julie then asked how this is going to work. Tony said the elevator will be placed facing the center block so the elevator head house does not pop through the roof. Tony said they went through many versions of where and how to put the elevator in.

Doug said the grand stairs are problematic and he thinks it would be interesting to look at an alternative and move the stairs and do something different. Doug said it says come in here everyone.

Tony said they have had a lot of discussions about this as well. Tony said in the interest of trying to be more sensitive to the image of the building, can we work with these stairs and at the top put planters but they pulled back from that idea. Tony showed a slide of a church where they removed the stairs and lowered the arch down to grade to make an accessible entrance.

Doug said that it is a thought and it looks like it is sending the wrong message for the building. Julie said it depends on the configuration of how to get in there.

Tony said it is interesting that people select to live in these buildings and they chose to live there for a reason because it is a kind of different living experience from within.

Patrick asked how many units would be going in and Tony said at the moment there would be eleven. Patrick then asked where they were going to have the parking because it is currently zoned as single family and Tony said yes.

Pam then asked about the side door being a garage. Tony said it is not a garage and it will actually lead to a unit. Tony said they know that parking is an issue and they have looked at a lot of things including putting parking underneath the building but the structure complexity alone made it too difficult.

Pam then mentioned the roofing tiles and said in the design they are a very busy design. Tony said he would ignore what was shown as a picture because they are investigating other options and there are many choices they are looking at. The intent is to be very sympathetic in color and do high quality within the synthetic man made product as they can. He said he knew that tile was very busy and that is not what they are proposing.

Patrick said that he does not think this project fits at all. The proposal of a glass and metal box popping up through the roof of a historic church from 1876. Most of the

examples shown are from Boston and Toronto and all of those have that style of architecture that supports that type. It was completed in 1876 and started in 1875.

Julie said the Heritage Commission disagreed because it is not being preserved in a glass case. The history that Patrick found, is still the history he found. The recognition of the church aspect of it, that it was a church, will lead somebody to that research if they so choose. As far as this not being appropriate for Exeter, Julie said we are hurting for housing units and it would be nice if these housing units would be less expensive as proposed. Julie said we do not dictate uses of buildings and she appreciates the suggestions of what this could be.

Pam said she does hate to see the stained glass go, but she does like seeing the building stay. She does not want the building to be torn down and she wants it to be used.

Tony said these clients are trying to work within what is there. Most of the other clients they did, gutted the interior of the building. These clients are actually trying to work with some of the wood beam structures as part of the residential development and this is highly unusual and not the least expensive way to go. They are trying to be very respectful, even on the inside.

Pam said that they cannot throw out the Paul Revere bell. Tony said absolutely not and if there is a place they could find a home for it, that would be great.

Anthony Zwaan from the public spoke. He again thanked the board for all the research that was done to prepare for this case. Anthony said he looked at the exterior of this building and thought, how is anybody going to do anything with this building. Hats off to any developer who is brave enough to take this on and hats off to the architect for some really creative designs. Anthony said it is tempting to say that this is not what we are used to in Exeter. Having served on the Budget Committee lately, you are converting a church, a non tax revenue generating thing into a residential thing which is going to generate substantial revenue for the town.

David Cowie said the congregation of this church back in the 90s, struggled to keep this church going for as long as they did.

Patrick said in 1876 it was completed for \$37,000 including all of the furnishings.

Patrick said he sees some value in some of the hand sketches Tony has and just walking in the space to see what the ideas of preserving it and not being a full gut, he is interested in that.

Julie said as Patrick mentioned the wall penetrations if there are any or the other roof penetrations you need for services because that will affect what we are seeing here. Patrick said that and some thought on parking.

David Cowie asked if they could be clear that the HDC has purview on the outside and how far do they have to go when the commission starts talking about the inside.

Patrick said he would like to see what the idea was for preserving the interior beams. David asked what the purview for this and Patrick said the purview is what is listed in Article 8 Zoning Ordinance.

Sharon Somers spoke and said what she is understanding is that the commission is interested in what they are doing to the interior as it relates to what might happen on the exterior and she can understand and appreciate it and they do not have a problem proving that information.. She said in terms of the interior layout, how the units might be laid out internally, she thinks that at most, would go towards the Heritage Commission purview rather than this boards purview, which deals with the exterior of the building. Sharon said her understanding is that the Demolition Committee and the Heritage Commission under that umbrella has viewed this as an appropriate project. She said if her understanding is correct, what they would do is come back to you with additional information on the interior of the building only as it pertains to how the various holes are punched in the roof type of thing.

Patrick then read the letter from Jay Myers, Chairman of the Heritage Commission dated 11/15/21. It stated that members of the Demolition Review Committee met at 43 Front Street to consider demolition of portions of the existing roof and suggested having public comments. Pam said there was no public meeting and we met last night and approved it.

Patrick said what they are requesting is penetrations to the exterior and he said he would like to do a site walk.

Patrick then asked for a motion to table the application until the next meeting. Julie said so moved. Pam seconded. All were in favor and the application tabled.



Other Business: Approval of minutes November 18, 2021.

Pam made a motion to table minutes until the next meeting. Gwen seconded. All were in favor and minutes tabled.

With no further business, the meeting was adjourned at 11:15 pm.

Respectfully submitted,

Elizabeth Herrick  
Recording Secretary

1 Historic District Commission

2 January 20, 2022

3 Draft Minutes

4  
5 Call Meeting to Order: Patrick Gordon, Chairman, called meeting to order at 7:00 pm in the  
6 Nowak Room of the Exeter Town Office Building.

7 Members Present: Patrick Gordon, Chairman, Pam Gjettum, Gwen English, Planning Board  
8 Rep., Grayson Shephard, Doug McCallum, Julie Gilman, Select Board Rep.

9 New Business: Public Hearing: The application of Phillips Exeter Academy for the proposed  
10 demolition of the existing building located at 8 Gilman Lane and for the proposed construction  
11 of a new multi-family (triplex) structure on the same property. Case #21-11.

12 Mark Leighton, Director of Facilities at Phillips Exeter Academy spoke. With him tonight is  
13 Heather Taylor, architect, Christine O'Brien from Market Square Architects and Rob Harberson,  
14 who will join via Zoom and David Adams, a Preservation Consultant and he will speak regarding  
15 his report. Mark told this commission that they got approve from the Heritage Commission on  
16 35 High Street regarding the demolition. They also just got approval from the Zoning Board of  
17 Adjustments. Mark said they are back again tonight to talk more about the 8 Gilman Lane  
18 demolition and replacement, if we go that far. Mark said they have not really gotten into the  
19 details of what they would be replacing it with and they had been asking for a three family  
20 which is a large structure. He said they would like to propose an alternate to that. Instead of a  
21 three family is a single family with three bedrooms and then a two family that will have a two  
22 bedroom apartment and a three bedroom apartment. They will both have single garages.  
23 Mark said this is all we have for now, but have slides to talk through, the single family and the  
24 two family.

25 David Adams spoke and said he lives in Portsmouth, NH and is a Preservation Consultant and  
26 has been doing this for fifty something years. David said he was asked first and for most to  
27 identify or anything that could be identified about the fireplaces in the basement of this  
28 building because it is a unique piece of architecture. David said he thinks it was built by  
29 someone trying to evoke some piece from another time. It is a firebox that has never been  
30 used. There is a set kettle in the arch that is set behind this and the set kettle has bricks around  
31 it that are cut so it can sit there. The point is that it was put there and then the rest of the  
32 chimney built up around it. It is not a piece of historic material. David said it may be an old  
33 kettle, but it did not become old there.

34 David said the faux fireplace in the basement supports the only other fireplace in the building  
35 on the first floor and this is a lovely piece of maybe 1915 marble fireplace. This has nothing to  
36 do with an 18<sup>th</sup> century building.

37 David said as far as the rest of the building, there is an old floor frame and it does not look like  
38 the floor frame of a house. This has three separate equal openings which is uncharacteristic of  
39 petitions in the 18<sup>th</sup> century houses. David said he went through the building, eyes only, and  
40 looked carefully for used pieces of material for reused petition locations, reused stairwell  
41 locations and saw none of that. He also looked for reused fireplaces or fireplace openings or  
42 stove chimneys and he saw none of that.

43 David said he has never been in an 18<sup>th</sup> century building that does not have a handmade nail  
44 stuck in something, somewhere. David also said that he could not find an interior piece of  
45 woodwork that related to an earlier house. He said there were three elements that date to  
46 another time that he found inside. There is a tiny little door to the cellar that has moldings on  
47 the edges of the panels that date from 1795 to 1815. The door is on modern hinges and it has  
48 been cut down. David said his guess is that this door was found somewhere else and made to  
49 fit into the small compromised cellar stairwell. There are also two six light sashes in the cellar  
50 serving as cellar windows. He dates the molding on them somewhere between 1795 and 1815.  
51 David said everything if it has been reused, it has been reused in a way that it is hard to believe  
52 they ever had it there before. There is no continuity to it. He said to the best of his ability,  
53 everything has been cleaned out and the building was built in 1830 or 1840.

54 Patrick asked if the granite just above the basement floor is original or added after 1830. David  
55 said it was added after. He said he has never seen anything that is so inconclusive. He really  
56 thought he would be able to find a thing and point to it and say, here it is and it can hang the  
57 whole story on this one thing, but he could not find it.

58 Patrick said we know the structure was gifted as a wedding gift. Patrick thanked David and then  
59 asked the commission members if they had any questions for comments for Mr. Adams.

60 Julie said that she has a letter from Steven C. Mallory, Architectural Conservator of Kensington,  
61 NH and read. Mr. Mallory's findings was very similar to what David Adam's had found.

62 Patrick said there is corroborating information from both Mr. Adams and Mr. Mallory. Mr.  
63 Mallory did recommend full interior and exterior photo documentation of the building to be  
64 deposited in the most relevant and accessible place (the library, historical society, HDC files).

65 Mark stated that his guess is that there was a major replacement on the structure there at  
66 some point in the late 1800s. He said the map from the early 1805 show a structure there and  
67 he thinks it has been replace with what is there now. The structure that is there now has been  
68 completely altered.

69 Julie said the majority of the Heritage Commission members came to the conclusion that the  
70 structure was not worth salvaging and were ok with the demolition.

71 Patrick said his speculation is that there was a structure there at some point in the late 1700s  
72 and that was the land that was gifted and he thinks that was the primary foundation

73 underneath there. Patrick said he thinks the rubble stone foundation that is there is the oldest  
74 portion of the structure.

75 Patrick then asked the commission members if they had any questions about the structure as it  
76 sits today at 8 Gilman Lane. Julie said she had no questions.

77 Pam said it is a little bit better if you keep the house separate.

78 Mark said he just wanted to mention what was said with the Heritage Commission. If this gets  
79 approved and goes through with the demolition is to do a slight demo and would maybe have  
80 David help them with this to tell a story.

81 Patrick said if PEA could jump right to the separate building as opposed to the triplex that  
82 would be a huge leap forward. Mark said that is their preference at this point. He then asked if  
83 the commission could vote on the demolition of 8 Gilman so they could the direction of this is  
84 where you want to go. Patrick said this is where we get into that sticky situation and we cannot  
85 separate because we have made a special exception in the past to vote on demolition only  
86 without knowing what was going to replace it and we had two separate approvals and what  
87 was proposed was never done. Patrick said they have learned their lesson from that and that is  
88 why they tie the two into one decision. They do not make any special exceptions for demolition  
89 first and then a separate approval. Mark said he was just trying to save time.

90 Mark then said that they will focus on what they are proposing as a single family, three  
91 bedroom and a two family, which is really 2/3 of what was a three family and option 2. Patrick  
92 asked him if he any map that shows the existing foundation location. Mark then showed the  
93 commission one of the slides.

94 Doug said he thinks they should take one item from the existing house that is undoubtedly of  
95 historic value and put it in the new one. Mark said they would definitely do that.

96 Christina O'Brien from Market Square Architects spoke and said they are considering putting a  
97 single family and a two family in the space where the three family was. This is mainly to bring  
98 down the massing of the three family building. They are hoping this fits a little better in the  
99 neighborhood and it brings down the scaling and massing. Christina then showed slides to the  
100 commission members showing what is being proposed. For materials, they are proposing a 50  
101 year architectural asphalt shingle. Very similar materials to what they are proposing for 35 High  
102 Street. Christina then passed out some printouts to the commission members of what is being  
103 proposed and this is a new design.

104 Mark Harberson from Market Square Architects spoke via Zoom and said this is a preliminary  
105 pass and the commission will not see the typical detailed package to follow. They wanted to  
106 focus on getting as much information on the existing structure as possible and then reviewing  
107 the site plan and reducing the scale of the three family down to two structures.



108 Next Christina spoke about the two family, as well as showing slides. She said all of the  
109 materials would be the same on this. Christina said these are just preliminary and we are  
110 looking for your feedback and we are open to comments and suggestions.

111 Doug said he had an idea of where they have the two garages together, perhaps put some kind  
112 of landscaping element there.

113 Christina said this is the third choice was the two family with two garages next to each other. It  
114 is the third option.

115 Patrick said, I want to applaud you for making a decision to split the building into two pieces.  
116 Patrick said the triplex was just too out of place. The single family that was presented, minus  
117 the bay window, he thinks that the single family with all of the elevations he sees is very well  
118 developed and they look nice. The two family looks like you sliced it right at the one family and  
119 left what was left over as a two family from the triplex. It kind of looks like left overs of the  
120 triplex.

121 Rob Harberson spoke and said they are further ahead on the single family and they made a first  
122 pass at the two family but it is not as far developed so he thinks that comment is absolutely  
123 accurate.

124 Mark spoke and wanted to ask a question to give better direction to Christina and Rob, is it safe  
125 to assume we can use the single family details and incorporate some of those elements into the  
126 two family. Patrick said yes and he thinks someone earlier said it appears that the proportions  
127 are a little bit more Victorian in that. Patrick said using the proportions and the massing of that  
128 single family that has been presented is a good starting point.

129 Patrick then asked the applicants if they feel they have good direction and was this helpful as a  
130 work session to bring us to a conclusion next meeting. Christina said it was for her and Rob.  
131 Mark also said it was a great process and they seem to be on the right track.

132 Patrick then said he thinks the commission has all the information that is needed and asked for  
133 a motion to continue this application at the next meeting. Julie said so moved and Pam  
134 seconded. All were in favor and application tabled.

135 Next on the agenda is the application of Exonian Properties LLC for change in appearance  
136 including window replacement and partial demolition to the roof of the existing structure  
137 located at 43 Front Street in order to facilitate dormer windows and balconies. Case #21-13.

138 Sharon Somers spoke and said they were here the last time on the 16<sup>th</sup> of December. On  
139 December 15<sup>th</sup>, the Heritage Commission met and authorized the partial demolition of this  
140 property. She asked to have their letter of decision be incorporated into the record here and

141 Finally last week on January 14<sup>th</sup>, there was a site walk on the property that Doug did with  
142 Chairman Gordon and Gwen English. In addition to that, Sharon said she knows there have  
143 been several letters of support that have been submitted today and she hopes the commission

144 members all have copies of. She said the presentation will be done by Tony Chow of Finegold  
145 Architects and he will be presenting the proposal. The contexts of the presentation is to recap  
146 a little bit about what we were talking about last time.

147 Tony Chow spoke and said he would be showing slides again to the commission members as a  
148 follow-up from the last meeting. Their intent is to convert the church into residential use.

149 Julie said she wanted it noted that the color blue on the dormers (shown on the slides) is not  
150 the color they will be because a few people were concerned about it. Tony said it is not the  
151 color that is being proposed.

152 Tony said when you look at the ground floor area, we are proposing a ground level terrace with  
153 an aluminum railing and they are proposing a black color.

154 Tony said for the dormers the material they are proposing is a zinc coated copper and this is a  
155 metal material and has a nice quality to it. Tony said the railings along the dormers, they are  
156 proposing a clear glass railing. Tony showed also that the doors leading out to the balconies are  
157 proposed to be French doors coming out of the residential units.

158 Tony said in regards to the roof, a lot of the slate is in poor condition and needs replacement.  
159 He showed a slide with an example of a luxury asphalt shingle that was put on a historic  
160 building in Cincinnati. Tony said this shingle is highly decorative and has a lot of detail.

161 With the windows, Tony said they are proposing to remove the existing stain glass, the existing  
162 wooden window sashes and refurbish existing wood decorative window frames and replace the  
163 sashes with new wood sashes with insulated glazing.

164 Tony said about the stairs, they looked at the option of removing the stairs entirely and then  
165 replace them with essentially a new arrangement where you have new sort of sheet wall and a  
166 new set of stairs on either side leading to the private unit with their own private terraces.

167 Tony ended his presentation and Patrick asked the commission members if they had any  
168 questions or comments.

169 Kate Desoy spoke and said that she has lived in town for about 10 years and previously she has  
170 lived in Boston. She has seen a bunch of refurbished churches in and around the city. She said  
171 the new additions when they stay new and if they are done with this concept like keeping a lot  
172 of the colors and blending into the roof, you really do not notice it unless you are looking for it.  
173 Kate said there is one in South Boston on West Broadway near the tee station, people walk by it  
174 and really do not even know that it is a residence because the integrity of the church has been  
175 kept and it still looks like a church. Kate then highly recommended that if anyone is concerned  
176 about how it will look try and find and drive by some existing churches that have been  
177 refurbished and see how they look.

178 Grayson stated that he was not at the last meeting when this was discussed but obviously there  
179 was some discussion about a glass railing vs the metal railing. He said he thinks the glass would  
180 be more visible in theory, but thinks it will clash with the design.

181 Tony said at the last meeting they did show pictures on a project where they did use a glass  
182 railing and it largely disappears because some of the church form is so dominant. Tony also  
183 said they are proposing the glass railings rather than the picket ones because he thinks the  
184 picket ones will draw more attention to it.

185 Patrick said a glass railing is going to look great at first and then it is going to get dirty. Patrick  
186 said that Dave and he talked about this a little bit on the site walk.

187 Doug asked about the parking and Dave said they have been having ongoing discussions about  
188 the parking. Dave said they just met today with Dave Sharpel and Doug and are exploring all of  
189 the options. Dave also said that it definitely will be a challenge.

190 Julie spoke about the doors. She said she really does not know what should go there, but she is  
191 thinking maybe solid panels because it is a church. She understands the whole thing is  
192 changing into residential units. Tony said they are open to suggestions but he does want  
193 everyone to know that they need to bring light in because it is living space behind the doors.

194 Patrick thanked Dave for the site walk even though Dave was reluctant to have Patrick and  
195 Gwen go in and check things out, not that our purview extends to the interior but that helped  
196 Patrick immensely to understand the massing of the building, understand where penetrations  
197 were coming through and it made Patrick a lot more comfortable with what is being proposed.

198 Sharon Somers spoke and said at this point, she has listed some items the commission is asking  
199 for but she thinks the commission can take a vote that the application is complete and  
200 hopefully we can come back with these new designs at the next meeting. Patrick said that he  
201 agrees and feels they have enough information to accept the application as complete. Pam  
202 made a motion to accept the application as presented. Gwen seconded. All were in favor and  
203 application accepted. Patrick then said the public meeting is closed and the commission will  
204 discuss what is needed to make a final decision.

205 Sharon then read off the items she had on her list.

- 206 1) Shingles
- 207 2) Front door color
- 208 3) Exploring the option of a shed roof
- 209 4) Specs for the slat fence
- 210 5) Correlation between the design of front door and the side entrance
- 211 6) Landscaping

212 Patrick then asked for a motion to continue the application until next month when the  
213 applicant will come back with what the commission has asked for. Gwen said so moved. All  
214 were in favor and application will be continued at next month's meeting.

215 Other Business: Approval of Minutes for November 18<sup>th</sup> and December 16, 2021. Patrick said  
216 that the December 16<sup>th</sup> minutes were missing some pages and asked the Recording Secretary to  
217 look into this. Patrick made a motion to table both sets of minutes until next meeting. All were  
218 in favor and minutes tabled.

219 With no further business, Patrick adjourned the meeting at 10:25 pm.

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221 Respectfully submitted,

222 Elizabeth Herrick

223 Recording Secretary

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Historic District Commission  
February 17, 2022  
Final Minutes

Call Meeting to Order: Patrick Gordon, Chairman, called meeting to order at 7:00 pm in the Nowak Room of the Exeter Town Office Building.

Members Present: Patrick Gordon, Chairman, Pam Gjettum, Doug McCallum, Gwen English, Planning Board Rep., Julie Gilman, Select Board Rep.

New Business: Public Hearing: Patrick wanted to go right to Other Business for 12 Front Street because there is a full agenda this evening and this one will be short and quick. Case #20-2. Pam made a motion to start with this case. Gwen seconded. All were in favor. John Donigian was present to request a one-year extension that expires on 2/20/22. Patrick asked John if he just wanted to extend for another year and nothing has changed. John said that was correct. Patrick had no problem with this request and called for a motion. Pam made a motion to approve the extension. Julie seconded. All were in favor and extension approved.

Next is the continued hearing on the application of Phillips Exeter Academy for the proposed demolition of the existing building located at 8 Gilman Lane; and for the proposed construction of a new multi-family structure on the same property. Case #21-11.

Patrick said, in light of the agenda we have tonight, please do not recap and just give new information. Christina O'Brien from Market Street Architects spoke and she again showed the commission some slides with the changes that were asked for. Each member had a packet showing drawings and also the material that will be used.

Julie said that a lot of the buildings on High Street are long because they have been added onto. She said these plans echo that. Julie said in her opinion, this is appropriate as far as the massing goes.

Patrick then stated that he gets the sense that all the commission members are happy with the application so he called for a motion for approval of the demolition of 8 Gilman Lane and replacing it with a single family and a two family structure. Julie said so moved. Gwen seconded. All were in favor and the application was approved..

Patrick then said, we would like to make a request that elements of the building be preserved in some way. This was also requested by the Heritage Commission. Christina said they would definitely take this into consideration and put it into the design.

Moving on to the continued public hearing on the application of Exonian Properties LLC for change in appearance, including window replacement and partial demolition to the roof of the existing structure located at 43 Front Street in order to facilitate dormer windows and balconies. Case #21-13.

Sharon Somners spoke and stated she is representing the Exonian Properties LLC. Sharon said, we have been here a number of times and there was an HDC site walk. During the previous meetings that we have had, we presented a substantial amount of information provided by Tony Chow from our architectural team. Sharon said that at these previous meetings, no members from the public came forward either in person or in writing to object to this project. Sharon wanted to remind the commission that there were several letters of support and she gave the names. Janette and Jeffrey Lackey, Lynn Waldwick, Keith Ripple, Laurie Whitney and Jeff Turner and Linda Higgins.

Sharon said the purpose is to present the new items requested by the commission. Tony will present these and there is no reason to recap. Once he is completed with the new slides, the commission will deliberate and after we would request a Certificate of Appropriateness be issued for the project as presented. The two owners, David Cowie and Florence Ruffner are present and available to answer any questions.

Tony then presented the slides to the commission. The first slide was a study requested to compare gable dormers and shed dormers. Tony said they're going to stay with the gable version and are proposing interior window screens.

Tony said what they are proposing is a glass railing system. Tony said he has done glass railings in Boston and the owners seem to really like them because they can see through and there is not something blocking their view. Patrick stated that he thinks the hand rail and bottom stainless steel rail, if painted black, would help it to disappear more. David said he thinks this is a very good point and it should be painted black.

Next, Tony showed a slide showing the Level 3 balconies. These rails will also be black to match the others. The next issue is the roof. The product they are proposing for this has different shapes and would have an alternating pattern. David said their preference is to be uniform. Patrick said he loves it. The tone on tone with the pattern difference matching the original roof, he likes.

Tony then talked about landscaping around the front. He showed a slide with the steps removed and a new entry and side entrances and individualized terraces for the units. There will be some sort of decorative planting in the front and a glass divider going up. This will also provide some sort of privacy. David said they do not want too many planters in the front because it would block the light going in.

Doug said instead of the glass divider, they would be better off with just a planter dividing the two sides. He said the glass divider is a little overkill. There are gates at the bottom leading up to the units and Doug said it looks a little funky and it needs more work. Tony said they can move to the planter idea. Julie then asked Doug to use the pointer and show the area he was talking about to better understand what his concerns were.

Sharon spoke again and said she is looking at the presentation packet we did on January 20th, which was our last meeting, and it looks to her an awful lot like what is being shown on the screen with the exception of a railing in the middle separating the two doors. Sharon then said that her understanding from the last meeting was that the board was in consensus with liking this particular design and she said they were going to tweak what they were going to do in the treatment between the two doors. Sharon said she thinks we are getting a little bit off track here in terms of revisiting the discussion we had the last time because she feels they were in agreement on it.

Doug said, our job is to define the problem and your guys need to figure out the solution.

Sharon said she thinks her clients are happy with the idea of a planter in between the two doors and she said they will take under advisement some of the heights of the wall down below. Doug told her that she has some great designers.

Patrick asked Tony if he understands what Doug is talking about and Tony said that he does.

Tony then showed a slide of the doors and they will have clear glass in them. The proposed side entrance on the Spring Street side will not be a double door because it does not meet ADA requirements because it is not wide enough. Therefore, we will not be able to do two pairs of doors like this on the slide because we need a minimum of six feet and there is only five feet.

Doug said, you can do it with an automatic door. David said, how many times is this door going to be used for access. Most people will be going through and not pushing a button.

Tony said what they are proposing is to create a door in the center with a surround frame and this frame would be done in wood. David then asked if the commission preferred double doors. Patrick said it would be more in keeping with the opening that is there now. Florence then said that it is kind of hard to navigate two doors and asked Tony if they were wide enough and Tony said it is not wide enough. Florence then stated that it would be hard for people to navigate getting in and out with groceries, etc.

Tony ended his presentation and the commission thanked him. Patrick said to the commission members, the options in terms of what to study and what was presented are the following:

1. Dormers vs sheds.
2. Vertical openings on the gable heads with glass.
3. Railings, glass vs the picket and black handle and black base.
4. Same for the Level 3 balconies.
5. Shingles proposed will be a bannings alternating pattern.
6. Front terrace divider no glass, planter element instead.
7. Side entrance will become an entrance with a single glass door with glass sidelights.
8. Massing of the front terrace that Doug talked about.
9. Reduce height at the front railing to 36 inches.

Patrick then called for a motion with conditions, which he then read. Julie said so moved with conditions. Pam seconded. All were in favor and the application approved.

Next on the agenda is the application of Hampshire Development Corporation for changes in appearance of the existing structure located at 173-179 Water Street, including minor

reconfiguration of storefronts and entry points, new windows in existing openings and proposed new window locations. Case #22-02.

Steve Wilson spoke and said he lives in Kensington and has been around this area for quite some time. He said he is here with Shane Forsley. Steve owns Hampshire Development and both are general contractors and developers in the area. The owner of the property is Jones and Wilson. Steve said his company renovated this property in 1999. He said his company is not there to demolish what is there, they are renovation people and they are looking to improve the facade of the building by modern access. The commission members all have packers with pictures and drawings of what is there and what Hampshire Development would like to do. Steve walked the members through what will be renovated. He also said it has been their practice to provide uniform signage on the front of a building. He also said this project is a work in process. In an ideal world, you could spend a tremendous amount of time and money trying to make everything symmetrical as it may have been or not in the day. What we are trying to do is reactivate a rental property in town.

Patrick asked about the elevator. Steve said it is going to be a louver elevator because there is a full service elevator in the front of the building.

Doug asked where the trash went. Steve said right now, we have a dumpster and it is back in the lower left corner of the plan.

Steve said that all the buildings ignore the waterfront too. This building in particular was built as a Woolworths so the retailer in those days did not want any windows in the building unless they faced the street. Closing off all of these windows that existed at one point was not by chance. It was not because they did not want to buy new windows, it gave them more merchandising space. Steve said that the back of this building had a fantastic view. He also said they are in the process of retesting soils and structure in the back of the building because maybe at one point, we want to add a residential component to the back.

Steve said this is what Kevin and he would like to do to the building and it is his opinion that it is in line with what we would be expecting to have done to a building like this to reactivate it and make it marketable.

Patrick then called for a motion to accept the application. Pam made the motion to accept the application and Gwen seconded. All were in favor and the application accepted. Patrick then asked for a motion of appropriateness. Julie made the motion to approve the proposed application for 173-179 Water Street as presented with aluminum clad windows. Pam seconded. All were in favor and the application approved.

The next agenda item is the application of Ted Lavole (d/b/a Yankee Construction LLC) for replacement of windows in the existing residence at 69 High Street. Case #22-3. Ted Lavoie spoke and said he would like to replace the windows at 69 High Street. Ted brought an example of the window they were proposing to use. Ted said they had two bathrooms at the house over the summer. He said they discovered a window they did not even know existed when remodeling the second bathroom. It was buried behind the tile shower. What they are



proposing to do is replace all the windows on High Street and eventually Gardner Street. Patrick asked if Ted had any pictures to show and he said yes. The owner then spoke while Ted loaded the photos onto the computer. The ultimate goal is to replace all of the windows. The third floor windows have already been replaced. It is an old house believed to be around 1870. Windows because of their age are very low to the ground and only open from the bottom. They would just like more functional windows. Some of the glass is broken and it is thin, single panes and they already had one child's behind go through a window.

Until Ted is able to pull up his photos on the computer, Patrick asked for a motion to temporarily pause this application. Pam said so moved and Gwen seconded. All were in favor and the application paused.

Next is the application of Kris Weeks for new construction of a proposed garage addition to the existing residence at 82 High Street. Case # 22-4. Kris spoke and said he is representing the homeowners tonight but only one is here and that is Emily Zuzano. The other owner is Jason Murray. Kris said they have a beautiful home at 82 High Street and it is a single family home. He said what they are proposing is adding a two car garage at the end of the property. The commission members had a packet with drawings. This will be a two story addition and it has a pitched roof line that comes down to the first story. They are trying to minimize the massing. We are proposing a shed dormer on the back to make the second floor space more usable. Off of the garage there will be a mud room on the first floor and there will also be a laundry room. The second floor space is designed as an office and also an activity/multipurpose room. The siding will be wood cedar. Kris said he has the contractor here Bob Scally and he is from Amesbury. Bob has done extensive renovations to historic properties here in New Hampshire and Massachusetts.

Patrick had a comment to either make the dormer wider or make two separate ones. Kris asked Patrick if he would recommend doing two gables with one window in each above the garage doors. Patrick said it is a little bit more of massing and negative, positive voids between first and second floors.

Patrick called for a motion to continue this application until next month's meeting so the applicants can come back with more plans. Pam said so moved. Julie seconded. All were in favor and the application tabled until next month.

Back to the application of Ted Lavoie for replacement windows in the existing residence at 69 High Street. Kris now had photos up on the computer to show the commission members. The home owner stated that his application is for the bathrooms but he would like to do everything with the understanding that they will have the permission and do it over time. Kris will send Barbara in Planning, copies of the photos.

Patrick then asked for a motion of conditional acceptance upon receipt of the front elevation of High Street with the windows identified that will be removed and the specification sheet. Julie seconded. Patrick then withdrew his motion and Julie withdrew her second. Patrick then asked for a motion to accept the application. Julie seconded. All were in favor and the application

accepted. Pam made a motion to approve the application with the applicant submitting a copy of the photograph showing High Street elevation and indicating which windows shall be replaced and this photograph will be sent to Barbara and also the specification sheets. Julie seconded. All were in favor and the application was approved.

Other Business: Approval of minutes for November 18, already approved, December 16, 2021 and January 20, 2022. After review of December 16ths minutes, Julie made a motion to approve as amended. Pam seconded. All were in favor and minutes approved. Patrick asked for a motion to table January 20th minutes until next month. Julie said so moved.

With no further business, Patrick asked for a motion to adjourn. Gwen said so moved. All were in favor and the meeting was adjourned at 10:15 pm.

Respectfully submitted,

Elizabeth Herrick  
Recording Secretary



# Town of Exeter Historic District Commission

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 • FAX 772-4709  
[www.exeternh.gov](http://www.exeternh.gov)

## Certificate of Appropriateness

### Official Use Only

Application No. HDC #21-13 Exonum Properties LLC

Date Application received by the Building Department Office 11-1-2021 (mm/dd/yyyy)

Date Application accepted by Historic District Commission 2-17-2022 (mm/dd/yyyy)

Date Public Hearing held by Historic District Commission 2-17-2022 (mm/dd/yyyy)

### Disposition of Application:

Disapproved

Approved as submitted

Approved with conditions listed below

43 Front Street

Authorized Signature: Patrick H. Jordan

Date of Authorization: 2-17-2022

### Conditions of Approval:

- ① DORMER ROOF SHAPE FOR UPPER UNITS.
- ② DOUBLE HEIGHT CURTAINWALL FOR GABLE END UNITS.  
WITH SPANDREL GLASS AT FLOOR FRAMING.
- ③ GLASS RAILINGS W/ BLACK METAL GUARDRAIL  
AND BASE RAIL AT UPPER UNITS AND 3/4 BALCONIES.
- ④ BANDED ACCENT SHINGLE PATTERN TO RESPECT  
EXISTING ROOF PATTERN CHARACTER.
- ⑤ CENTER DIVIDER BETWEEN FRONT TERRACES  
TO BE MONOLITHIC PLANTER OR PLANTERS.
- ⑥ METAL GUARDRAIL AT FRONT TERRACE TO BE  
36" TO MATCH OTHER PROPOSED RAILINGS. RAISE  
FRONT TERRACE WALL TO ACCOMMODATE CHANGE  
IN RAILING HEIGHT.



CELEBRATING OVER 35 YEARS OF SERVICE TO OUR CLIENTS

LIZABETH M. MACDONALD  
JOHN J. RATIGAN  
DENISE A. POULOS  
ROBERT M. DEROSIER  
CHRISTOPHER L. BOLDT  
SHARON CUDDY SOMERS  
DOUGLAS M. MANSFIELD  
KATHERINE B. MILLER  
CHRISTOPHER T. HILSON  
HEIDI J. BARRETT-KITCHEN  
JUSTIN L. PASAY  
ERIC A. MAHER  
CHRISTOPHER D. HAWKINS  
BRENDAN A. O'DONNELL  
ELAINA L. HOEPPNER  
WILLIAM K. WARREN

---

RETIRED  
MICHAEL J. DONAHUE  
CHARLES F. TUCKER  
ROBERT D. CIANDELLA  
NICHOLAS R. AESCHLIMAN

April 26, 2022

*VIA HAND DELIVERY*

Langdon Plummer, Chairperson  
Town of Exeter Planning Board  
10 Front Street  
Exeter, NH 03833

Re: 43 Front Street / Exonian Properties, LLC

Dear Chair Plummer and Members of the Planning Board:

Enclosed please find an application for site plan review regarding the above referenced property, together with appropriate filing fees. The property formerly housed the First Baptist Church, and is now owned by Exonian Properties, LLC. The applicant intends to completely renovate the interior of the building to create eleven (11) residential condominium units and the proposal for multi-family housing requires site review pursuant to Section 4.3.3 of your site regulations. The site itself will not contain any additional paving, drainage or other changes, although appurtenances to the building such as front steps and terraces will be added. The exterior of the building will remain intact, although some modifications, such as the addition of dormer windows, will be made so as to allow for the interior construction to take place. A perimeter survey of the property is included in this packet for your reference (See Exhibit A).

Prior to this application, the proposal received vigorous review by the Demolition Review Committee and the Historic District Commission. The Demolition Review Committee recommended the removal of a portion of the roof necessary to accommodate dormer windows, and the Historic District Commission approved the proposal as depicted in the applicant's materials of March 15, 2022 (see Exhibit B). The Zoning Board of Adjustment has also granted approval to allow for off-site parking where twenty-four (24) are required.

The applicant seeks approval from this board for site review. Further, the applicant seeks a waiver from Section 9.13.1 of your regulations. This regulation calls for parking to be provided in conformance with the Off-Street Parking Schedule set forth in Article 5, Section 5.6.6 of the zoning ordinance. A copy of the Zoning Board of Adjustment decision is attached, and the effect of this variance is to grant a waiver of the strict letter of the zoning ordinance. P. Loughlin, *New Hampshire Practice: Land Use Planning and Zoning*, Ch. 24, Variances § 24.02 (2010).

DONAHUE, TUCKER & CIANDELLA, PLLC  
16 Acadia Lane, P.O. Box 630, Exeter, NH 03833  
111 Maplewood Avenue, Suite D, Portsmouth, NH 03801  
Towle House, Unit 2, 164 NH Route 25, Meredith, NH 03253  
83 Clinton Street, Concord, NH 03301



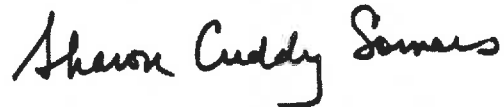
Langdon Plummer, Chairperson  
April 26, 2022  
Page 2

We hope that given the nature of this application with contains minimal changes to the site itself, that the review process can be conducted expeditiously and that the Planning Board will accept the application as being complete at the June 9, 2022 public hearing and reviewed at that same hearing.

Please contact me if you have any questions.

Sincerely,

DONAHUE, TUCKER & CIANDELLA, PLLC

A handwritten signature in black ink that reads "Sharon Cuddy Somers". The signature is written in a cursive, flowing style.

Sharon Cuddy Somers  
[ssomers@dtclawyers.com](mailto:ssomers@dtclawyers.com)

SCS/jh

Enclosures

cc: Exonian Properties, LLC  
Henry Boyd, Millennium Engineers, Inc.  
Finegold Alexander Architects, Inc.



**TOWN OF EXETER, NH**  
**APPLICATION FOR MINOR SITE PLAN REVIEW,**  
**MINOR SUBDIVISION and/or LOT LINE ADJUSTMENT**

A completed application shall contain the following items, although please note that some items may not apply such as waivers or conditional use permit:

- |  |      |
|--|------|
| 1. Application for Hearing   | (X ) |
| 2. Abutter's List Keyed to the Tax Map (including name and business address of all professionals responsible for the submission (engineer, landscape architect, wetland scientist, etc.) | ( )  |
| 3. Checklist for plan requirements   | ( )  |
| 4. Letter of Explanation   | (X ) |
| 5. Written request and justification for waiver(s) from Site Plan/Sub Regulations  | (X ) |
| 6. Application to Connect and/or Discharge to Town of Exeter Sewer, Water, or Storm Water Drainage System(s) - if applicable   | ( )  |
| 7. Application Fees  | (X ) |
| 8. Seven (7) copies of 24'x36' plan set  | (X ) |
| 9. Fifteen (15) 11"x 17" copies of the plan set  | (X ) |
| 10. Three (3) pre-printed 1"x 2 5/8" labels for each abutter, the applicant and all consultants.   | (X ) |

**NOTES:** All required submittals must be presented to the Planning Department Office for distribution to other Town departments. Any material submitted directly to other departments will not be considered.





5. **EXPLANATION OF PROPOSAL:** See attached letter of explanation

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6. **ARE MUNICIPAL SERVICES AVAILABLE? (YES/NO)** Yes  
IF YES, WATER AND SEWER SUPERINTENDENT MUST GRANT WRITTEN APPROVAL FOR CONNECTION. IF NO, SEPTIC SYSTEM MUST COMPLY WITH W.S.P.C.C. REQUIREMENTS.

7. **LIST ALL MAPS, PLANS AND OTHER ACCOMPANYING MATERIAL SUBMITTED WITH THIS APPLICATION:**

<u>ITEM:</u>	<u>NUMBER OF COPIES</u>
A. <u>Boundary plan submitted by surveyor</u>	_____
B. <u>Architectural plan submitted by architect</u>	_____
C. _____	_____
D. _____	_____
E. _____	_____
F. _____	_____

8. **ANY DEED RESTRICTIONS AND COVENANTS THAT APPLY OR ARE CONTEMPLATED (YES/NO)** No IF YES, ATTACH COPY.

9. **NAME AND PROFESSION OF PERSON DESIGNING PLAN:**

**NAME:** Henry Boyd / Millennium Engineering, Inc. **ADDRESS:** 13 Hampton Road, Exeter, NH 03833 **PROFESSION:** Engineer / Surveyor  
**TELEPHONE:** (603) 772-0689

10. **LIST ALL IMPROVEMENTS AND UTILITIES TO BE INSTALLED:** N/A

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**11. HAVE ANY SPECIAL EXCEPTIONS OR VARIANCES BEEN GRANTED BY THE ZONING BOARD OF ADJUSTMENT TO THIS PROPERTY PREVIOUSLY?**

(Please check with the Planning Department Office to verify) (YES/NO) Yes IF YES, LIST BELOW AND NOTE ON PLAN.

**NOTICE:**

I CERTIFY THAT THIS APPLICATION AND THE ACCOMPANYING PLANS AND SUPPORTING INFORMATION HAVE BEEN PREPARED IN CONFORMANCE WITH ALL APPLICABLE TOWN REGULATIONS, INCLUDING BUT NOT LIMITED TO THE "SITE PLAN REVIEW AND SUBDIVISION REGULATION" AND THE ZONING ORDINANCE. FURTHERMORE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE "SITE PLAN REVIEW AND SUBDIVISION REGULATIONS", I AGREE TO PAY ALL COSTS ASSOCIATED WITH THE REVIEW OF THIS APPLICATION.

DATE April 26, 2022 APPLICANT'S SIGNATURE

BY: Sharon Cuddy Somers, Esquire

ACCORDING TO RSA 676.4.I ( c ), THE PLANNING BOARD MUST DETERMINE WHETHER THE APPLICATION IS COMPLETE WITHIN 30 DAYS OF SUBMISSION. THE PLANNING BOARD MUST ACT TO EITHER APPROVE, CONDITIONALLY APPROVE, OR DENY AN APPLICATION WITHIN SIXTY-FIVE (65) DAYS OF ITS ACCEPTANCE BY THE BOARD AS A COMPLETE APPLICATION. A SEPARATE FORM ALLOWING AN EXTENSION OR WAIVER TO THIS REQUIREMENT MAY BE SUBMITTED BY THE APPLICANT.



TOWN OF EXETER, NEW HAMPSHIRE

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 • FAX 772-4709

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April 21, 2022

Sharon Cuddy Somers, Esquire  
Donahue, Tucker & Ciandella, PLLC  
16 Acadia Lane, POB 630  
Exeter, New Hampshire 03833

Re: Zoning Board of Adjustment Case #22-5 - Exonian Properties, LLC  
Variance Requests – Change in Use and Parking  
43 Front Street, Exeter, N. H.  
Tax Map Parcel #72-198

Dear Attorney Somers:

This letter will serve as official confirmation that the Zoning Board of Adjustment, at its March 15<sup>th</sup>, 2022 meeting, voted to grant the above-captioned application for a variance from Article 5, Section 5.1.2.B for a change in the purpose of a non-conforming use to permit a multi-family residential use (consisting of 11 units) of the existing structure on the property located at 43 Front Street, as presented.

Furthermore, at its April 19<sup>th</sup>, 2022 meeting, the Zoning Board of Adjustment voted to grant a variance from Article 5, Section 5.6.6 for relief from the off-street parking requirements to allow for no off-street parking spaces to be provided for the proposed residential development of the subject property, as presented.

Please be advised that in accordance with Article 12, Section 12.4 of the Town of Exeter Zoning Ordinance entitled “Limits of Approval” that all approvals granted by the Board of Adjustment shall only be valid for a period of three (3) years from the date such approval was granted; therefore, should substantial completion of the improvements, modifications, alterations or changes in the property not occur in this period of time, this approval will expire.

If you should have any questions, please do not hesitate to contact the Building Department office at (603) 773-6112.

Sincerely,

Kevin M. Baum  
Chairman  
Exeter Zoning Board of Adjustment

cc: Exonian Properties, LLC, property owner  
Douglas Eastman, Building Inspector/Code Enforcement Officer  
Janet Whitten, Town Assessor  
Dave Sharples, Town Planner

KMB: bsm

## WAIVER REQUEST

The applicant seeks a waiver from the provisions of Section 9.13.1 of the site review regulations. Before the Planning Board can approve a waiver, it must make findings on the following criteria. In support of the waiver request, the applicant states as follows:

1. Section 13.7.1 states that the granting of the waiver will not be detrimental to the public health, safety, or welfare or injurious to other property.

The applicant seeks relief to allow off-site parking where twenty-four (24) on-site parking spaces are required pursuant to the zoning ordinance. As stated in the site review application, this matter is before the Planning Board as a result of the conversion of the church building into an eleven (11) residential unit condominium project but where no significant changes to the site are proposed. That said, granting the waiver will not violate the criteria of Section 13.7.1. The owners, guest and invitees of the residential units will have ample street parking available in the immediate and nearby vicinities. Available street parking will be supplemented by parking in nearby municipal parking lots and the designated parking spaces in such lots will ensure that residents of the church building will have a place to park during overnight winter parking bans.

2. Section 13.7.2 states that the conditions upon which the request for a waiver is based are unique to the property for which the waiver is sought and are not applicable generally to other property.

The property previously contained the First Baptist Church, a nonconforming use. The church, a tax exempt entity, ceased operations in this location, and a new use is now proposed for this historic building which will generate tax revenue and which will add to the emerging trend of having residents in the downtown area. The property contains a small driveway suitable for handicap accessibility, drop-offs, deliveries and possibly two parking spaces. There is no existing parking lot, nor does it contain the space in which to create the required parking. These factors, read together, make the conditions upon which the waiver is requested, unique to this property.

3. Section 13. 7.3 states that because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations are carried out.

The building footprint on the modest size of the lot, coupled with the desire to retain existing historic features and structure means that there is no possibility of creating any additional surface parking on site. Additionally, after extensive investigation by design professionals, the applicants conclude that parking within the building would be a mammoth undertaking and prohibitively expensive. The existing structure is simply too narrow and the existing support system for the 150-year-old building is not only vital but intrinsic and complex. Likewise, the applicants have been unable to identify any shared parking opportunities with

nearby property owners. Further, of the uses which are permitted under the zoning ordinance, the only use which might have space adequate to satisfy off street parking needs would be a single-family dwelling and converting the existing structure into a single-family dwelling would not be a viable proposition.

The multifamily proposal is an allowed use by virtue of recent Zoning Board of Adjustment action and the users of the multifamily units will need to park somewhere and off-site on-street and/or municipal parking are viable options. For these reasons, the requirement for on-site parking would constitute a particular hardship to the owner, and not a mere inconvenience because the requirement would be a roadblock for the ability of the entire proposal to move forward. Accordingly, the Zoning Board of Adjustment voted in favor of granting parking relief for twenty-four (24) spaces.

4. Section 13.7.4 states that the granting of the waiver will not be contrary to the spirit and intent of the regulations.

The intent of the regulations requiring off street parking is to ensure that, to the extent possible, the parking needs of any one property will not unduly burden the parking needs of other nearby properties. As stated earlier, available street and municipal lot parking exists for use by these residential units in a manner which will not be contrary to the spirit and intent of the regulations.

5. Section 13.7.5 states that the waiver will not, in any manner, vary the provisions of the Zoning Ordinance or the Master Plan.

Granting the waiver will not vary the provisions of the Zoning Ordinance because the parking which is the subject of this waiver request is now allowed by virtue of the variance granted by the Zoning Board of Adjustment on April 21, 2022. Granting the waiver will not vary the provisions of the 2018 Master Plan, which notes that based on a 2018 parking study, that there are over four hundred (400) parking spaces downtown. The Master Plan does not indicate that there is a deficiency in the number of parking spaces but does indicate that the Town intends to conduct a parking study for the downtown area and that the recommendations from such a study will hopefully create a comprehensive parking management strategy, including reorganizing to create new parking opportunities without the need to increase the number of parking spaces (see 2018 Master Plan, Parking, page 34-35). The allowance of twenty-four off-site parking spaces near the downtown area will not vary the provisions of the master plan which address parking. Further, the proposal itself honors the other elements of the 2018 Master Plan because it actively advances the need to provide more housing while simultaneously preserving cultural and historical elements of Exeter.



**EXONIAN PROPERTIES, LLC,  
43 FRONT STREET, TAX MAP 72, LOT 198  
ABUTTER LIST**

OWNER/APPLICANT:

72/198 Exonian Properties, LLC  
185 Water Street  
Exeter, NH 03833

ABUTTERS:

72/197 Town of Exeter  
10 Front Street  
Exeter, NH 03833

72/208 & 169 Phillips Exeter Academy  
20 Main Street  
Exeter, NH 03833

72/201 New England Telephone Operations, LLC  
770 Elm Street  
Manchester, NH 03101

72/199-1 Christine E. Spencer  
41 Front Street #1  
Exeter, NH 03833

72/199-2 Susan & Richard Loyd  
7140 Mark Terrace Drive  
Edina, MN 55439

72/199-3 Trivikram V. Godse, Trustee  
Trivikram V. Godse Revocable Trust  
41 Front Street #3  
Exeter, NH 03833

72/199-4 J. Smith Rentals, LLC  
c/o Dr. Petropoulos  
PO Box 265  
Danvers, MA 01923

ATTORNEY: Sharon Cuddy Somers, Esq.  
Donahue, Tucker & Ciandella, PLLC  
PO Box 630  
Exeter, NH 03833

ARCHITECT: Finegold Alexander Architects, Inc.  
77 N. Washington Street  
Boston, MA 02114

ENGINEER: Henry Boyd, P.E.  
Millennium Engineering, Inc.  
13 Hampton Road  
Exeter, NH 03833

Exonian Properties, LLC  
 185 Water Street  
 Exeter, NH 03833

Town of Exeter  
 10 Front Street  
 Exeter, NH 03833

Phillips Exeter Academy  
 20 Main Street  
 Exeter, NH 03833

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Finegold Alexander Architects  
 77 N. Washington Street  
 Boston, MA 02114

**AVERY**

5160

Henry Boyd, P.E.  
Millennium Engineering, Inc.  
13 Hampton Road  
Exeter, NH 03833

Easy Peel Address Labels

Bend along line to expose Pop-up Edge

Henry Boyd, P.E.  
Millennium Engineering, Inc.  
13 Hampton Road  
Exeter, NH 03833

Go to [avery.com/templates](http://avery.com/templates)

Use Avery Template 5160

Henry Boyd, P.E.  
Millennium Engineering, Inc.  
13 Hampton Road  
Exeter, NH 03833

Exh. B



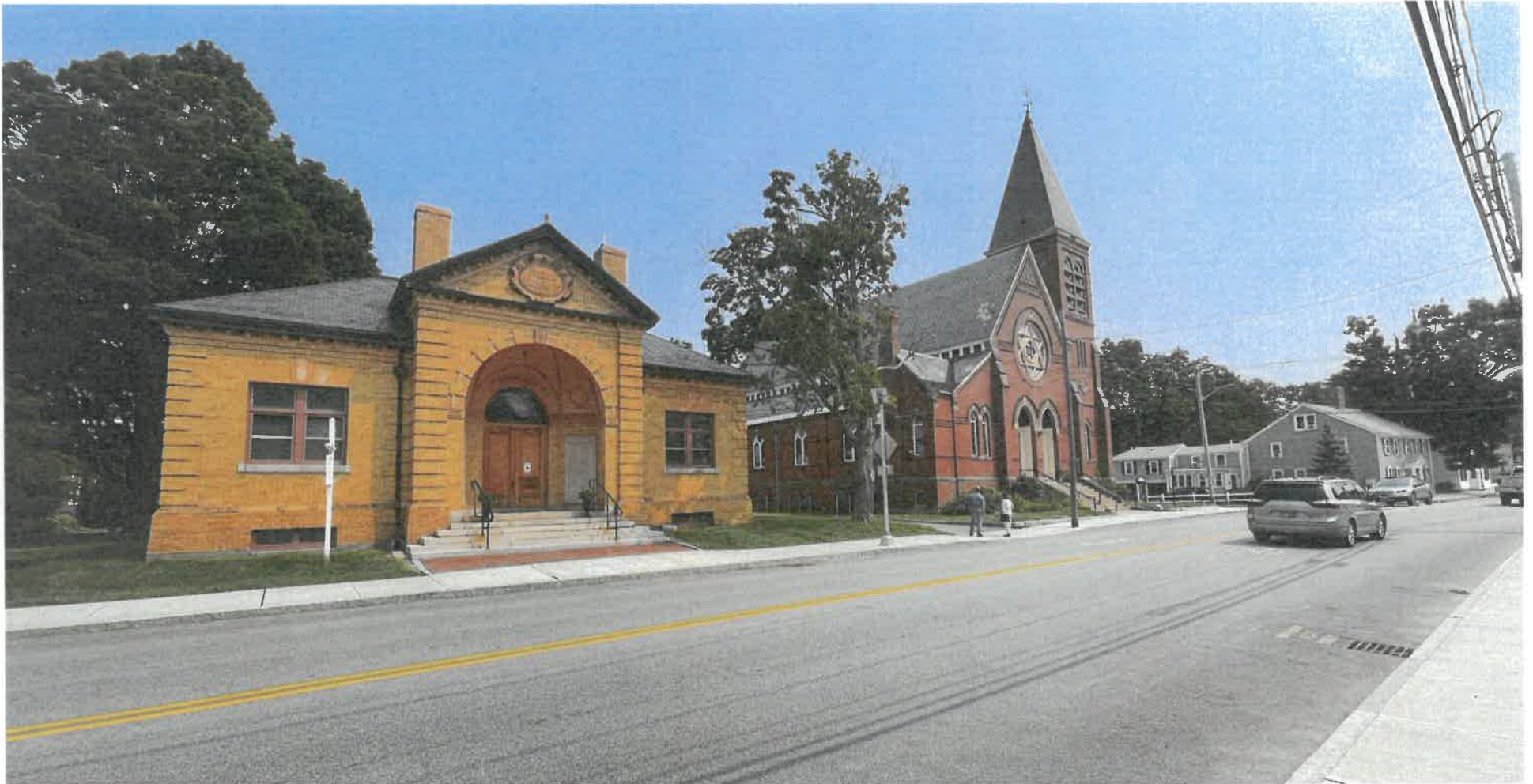
Existing Photo From Southwest Corner

Exeter Church  
2 Spring Street  
Exeter, NH

EXONIAN PROPERTIES, LLC

Finegold Alexander Architects Inc  
10/28/21



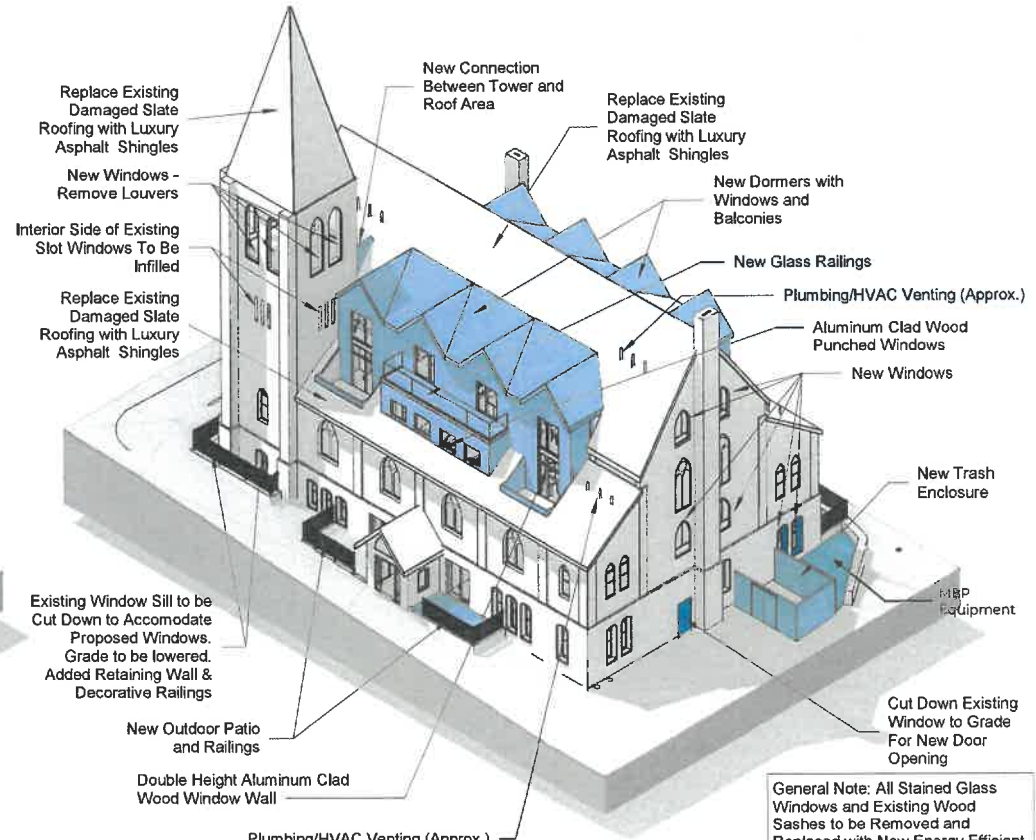
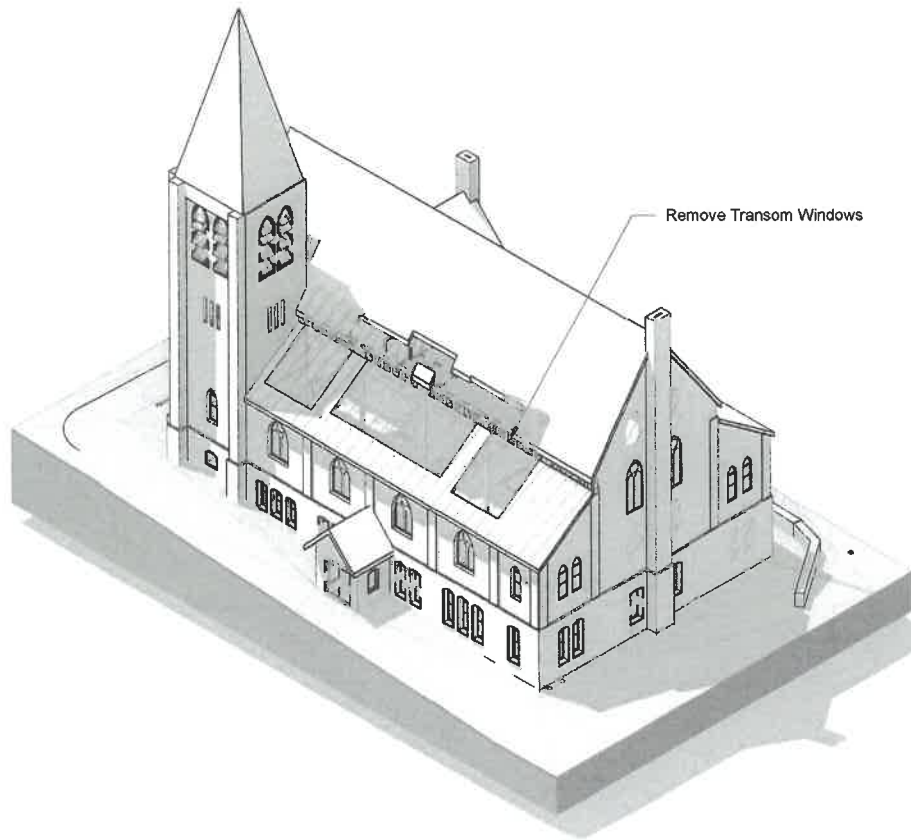


Existing Photo From Northwest Corner

**Exeter Church**  
2 Spring Street  
Exeter, NH

EXONIAN PROPERTIES, LLC

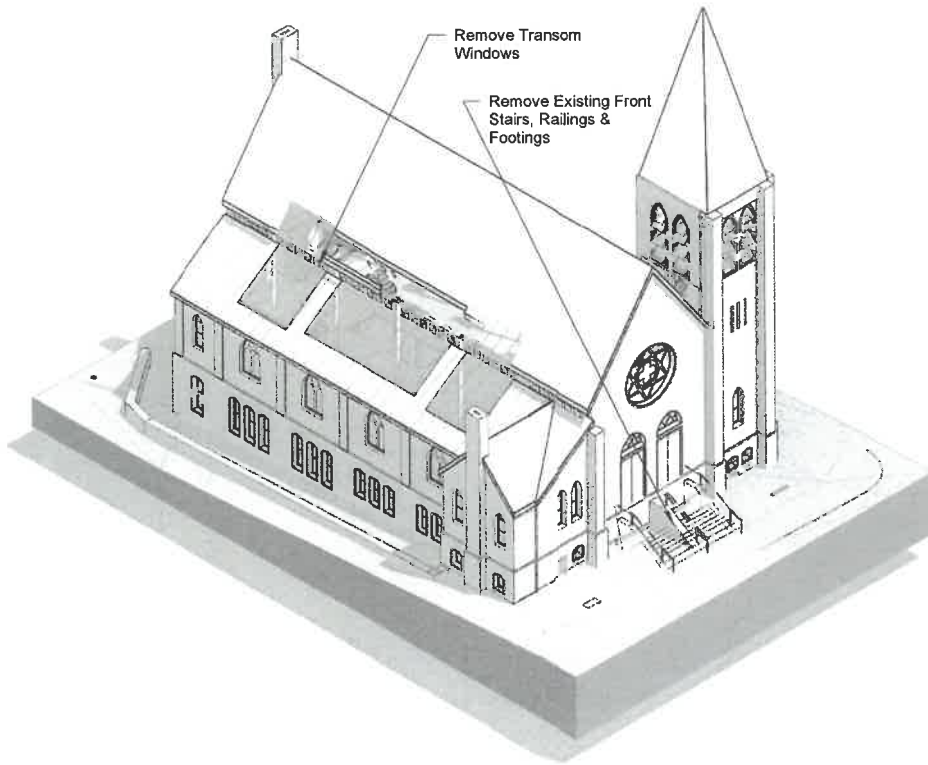
Finagold Alexander Architects Inc  
10/29/21



General Note: All Stained Glass Windows and Existing Wood Sashes to be Removed and Replaced with New Energy Efficient Window Sashes. Existing Wood Window Frames To Be Refurbished.

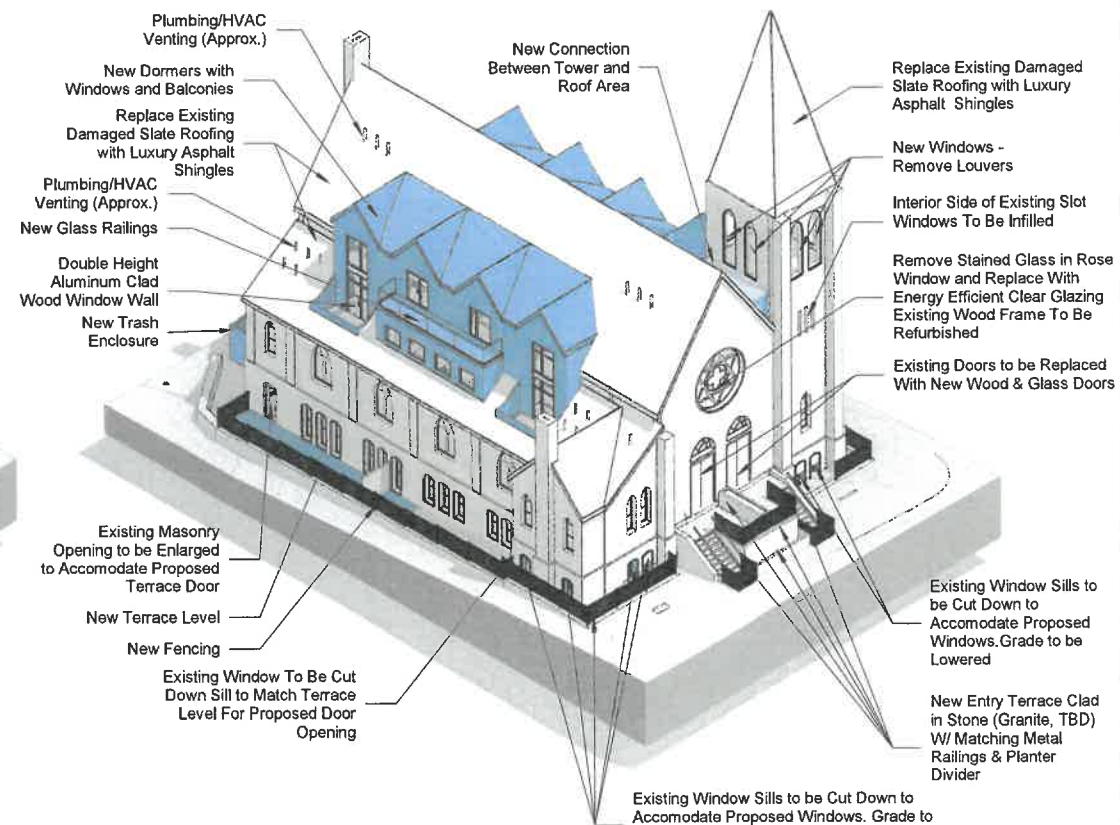
1 North Corner-Existing

2 North Corner-Proposed



Remove Transom Windows  
Remove Existing Front Stairs, Railings & Footings

1 South Corner-Existing



Plumbing/HVAC Venting (Approx.)  
New Dormers with Windows and Balconies  
Replace Existing Damaged Slate Roofing with Luxury Asphalt Shingles  
Plumbing/HVAC Venting (Approx.)  
New Glass Railings  
Double Height Aluminum Clad Wood Window Wall  
New Trash Enclosure  
New Connection Between Tower and Roof Area  
Replace Existing Damaged Slate Roofing with Luxury Asphalt Shingles  
New Windows - Remove Louvers  
Interior Side of Existing Slot Windows To Be Infilled  
Remove Stained Glass in Rose Window and Replace With Energy Efficient Clear Glazing Existing Wood Frame To Be Refurbished  
Existing Doors to be Replaced With New Wood & Glass Doors  
Existing Window Sills to be Cut Down to Accomodate Proposed Windows. Grade to be Lowered  
New Entry Terrace Clad in Stone (Granite, TBD) W/ Matching Metal Railings & Planter Divider  
Existing Window Sills to be Cut Down to Accomodate Proposed Windows. Grade to be Lowered, Added Retaining Wall & Decorative Railings

2 South Corner-Proposed

General Note: All Stained Glass Windows and Existing Wood Sashes to be Removed and Replaced with New Energy Efficient Window Sashes. Existing Wood Window Frames To Be Refurbished.





3D Perspective From Southwest Corner

Exeter Church  
2 Spring Street  
Exeter, NH

EXONIAN PROPERTIES, LLC

Finegold Alexander Architects Inc  
10/29/21





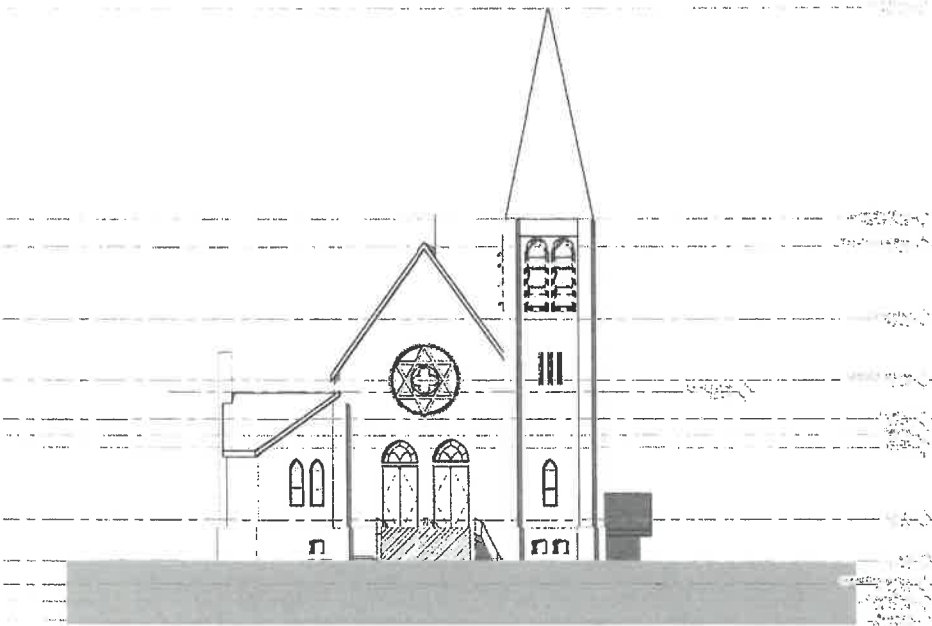
3D Perspective From Northwest Corner

Exeter Church  
2 Spring Street  
Exeter, NH

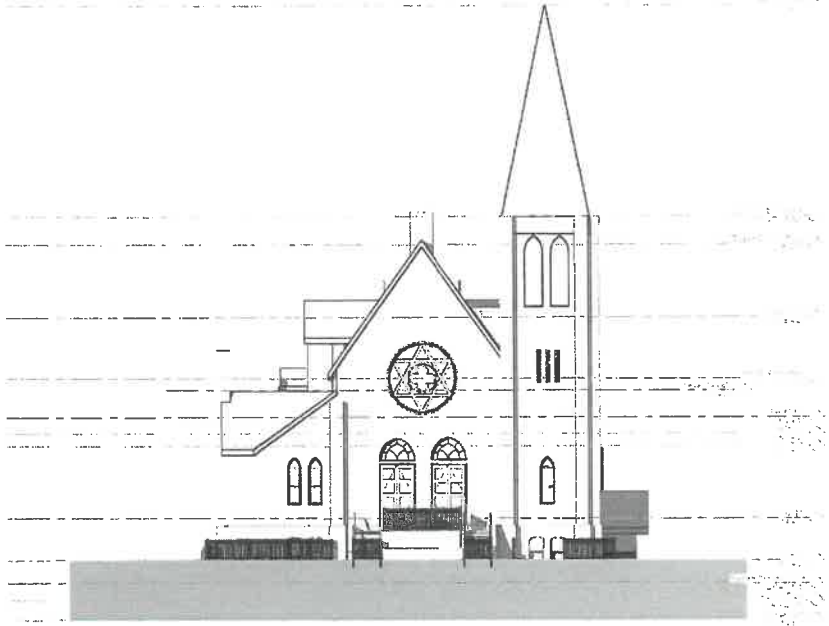
EXONIAN PROPERTIES, LLC

Finegold Alexander Architects Inc  
10/29/21

# South Elevation

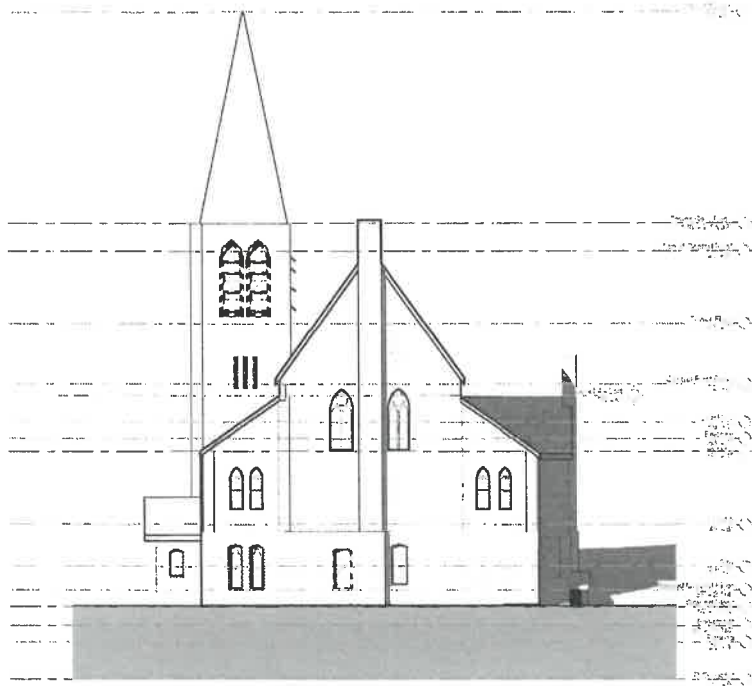


2 South Elevation - Existing  
3/32" = 1'-0"

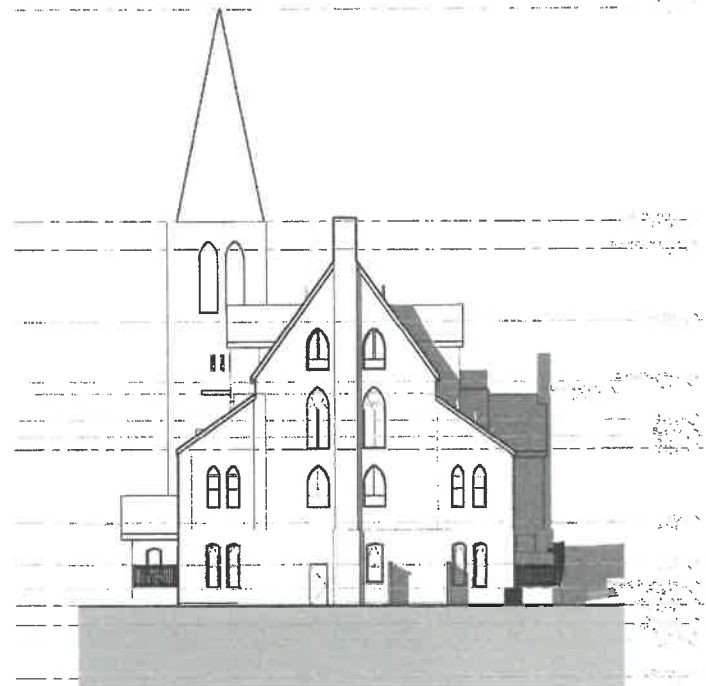


1 South Elevation  
3/32" = 1'-0"

# North Elevation

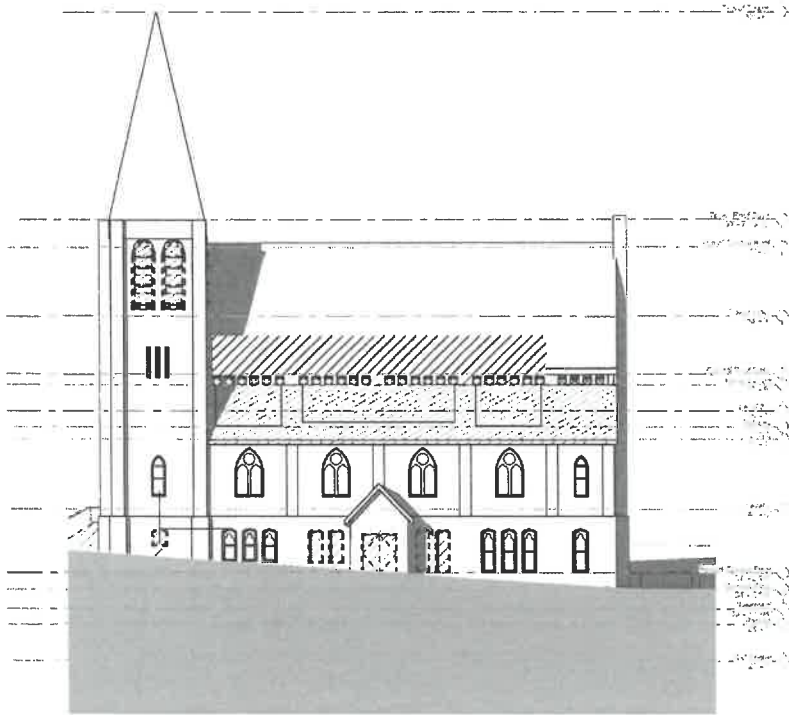


2 Elevation North - Existing  
3/32" = 1'-0"

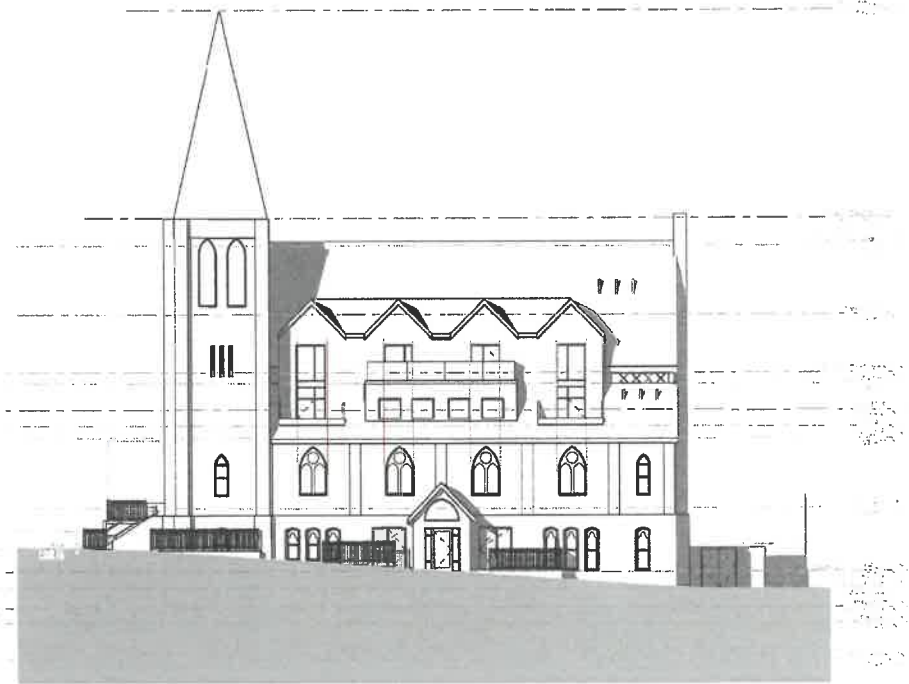


1 North Elevation  
3/32" = 1'-0"

# East Elevation



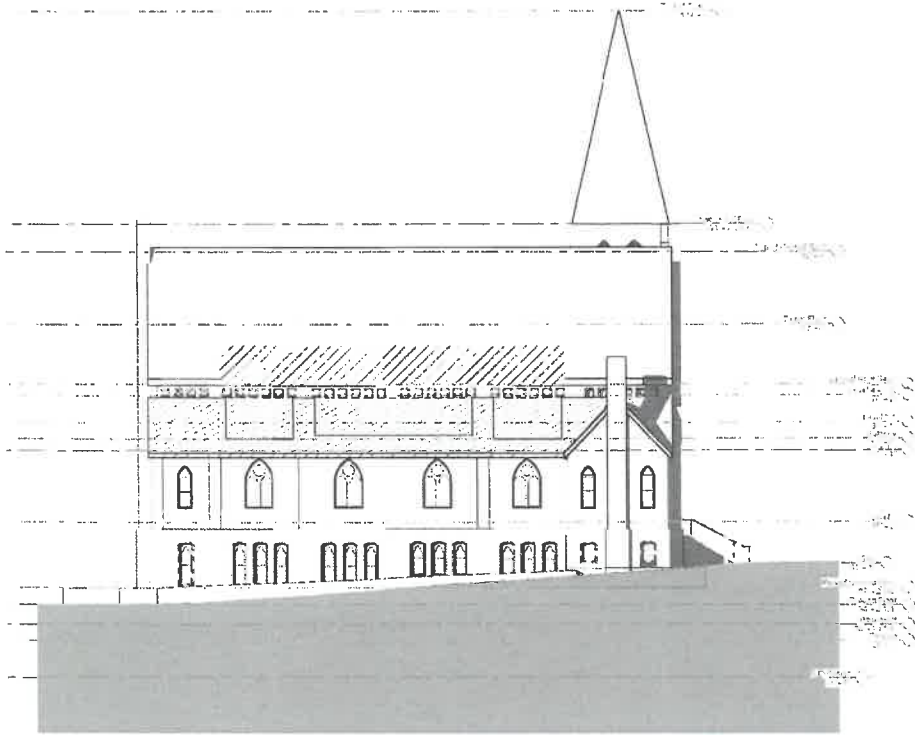
2 East Elevation - Existing  
3/32" = 1'-0"



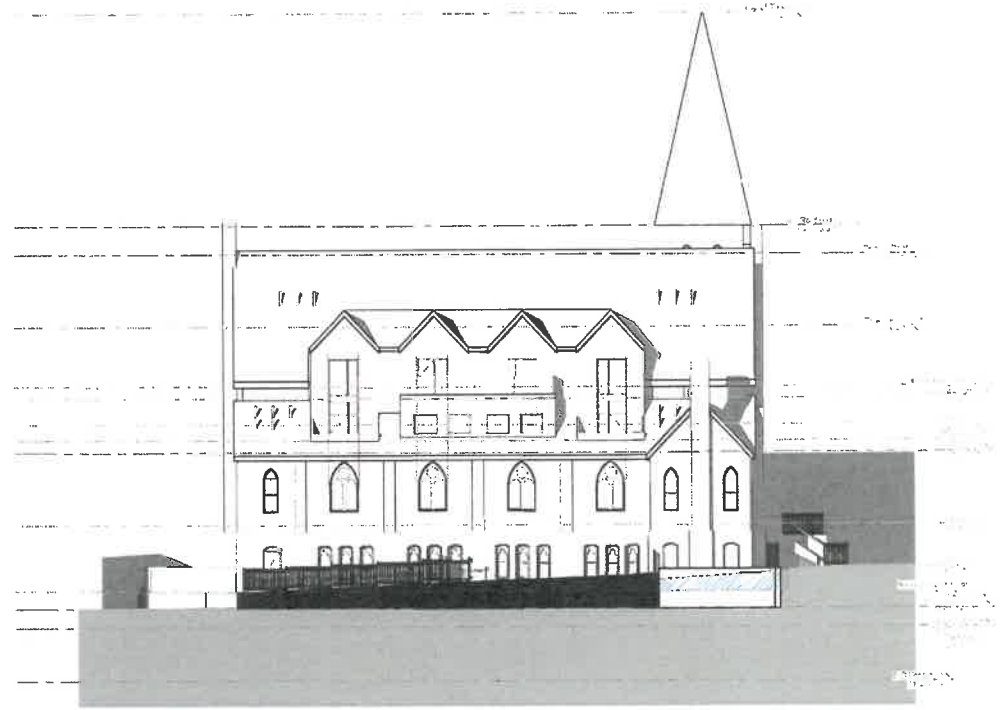
1 East Elevation  
3/32" = 1'-0"



# West Elevation

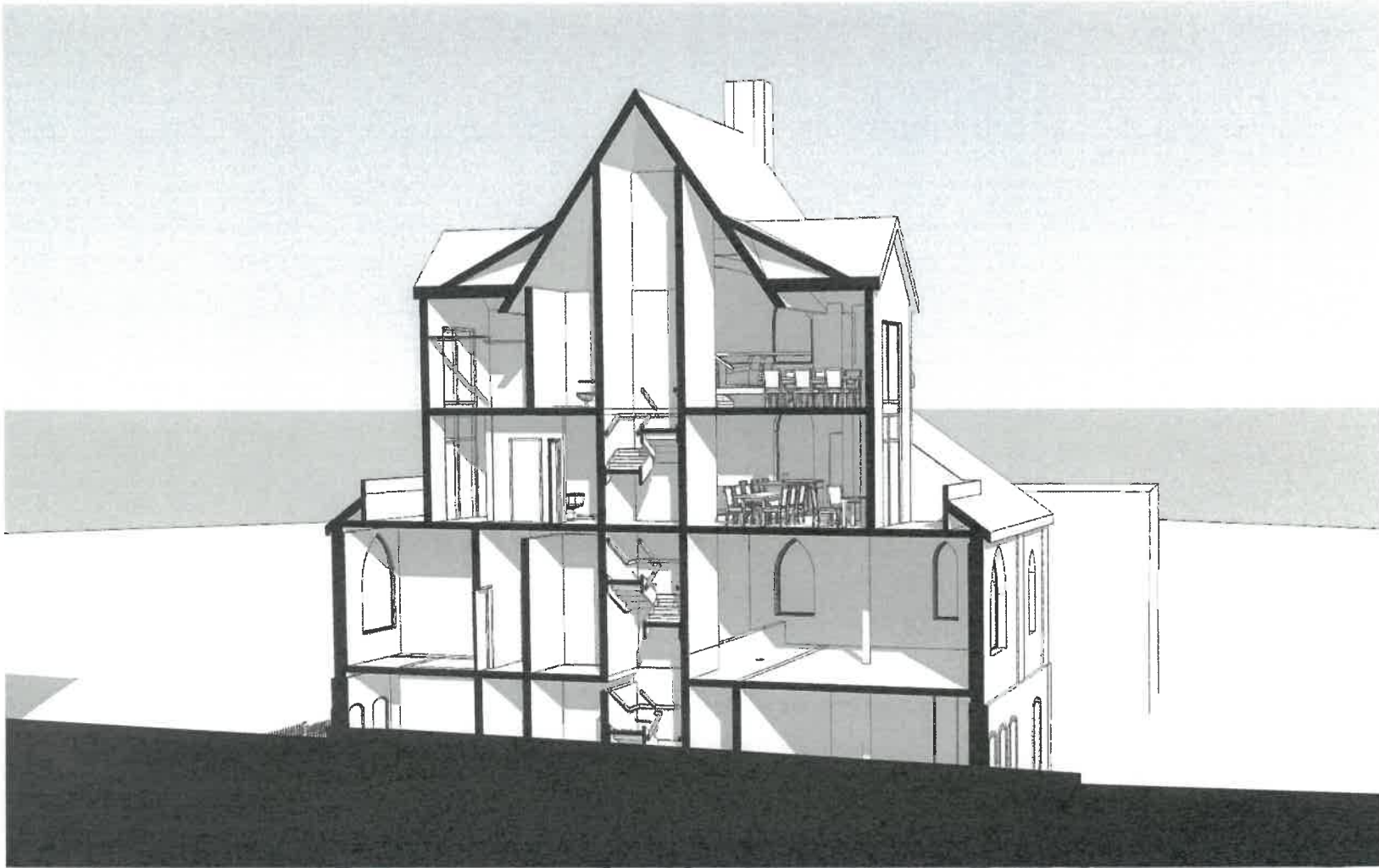


2 West Elevation - Existing  
3/32" = 1'-0"



1 West Elevation  
3/32" = 1'-0"

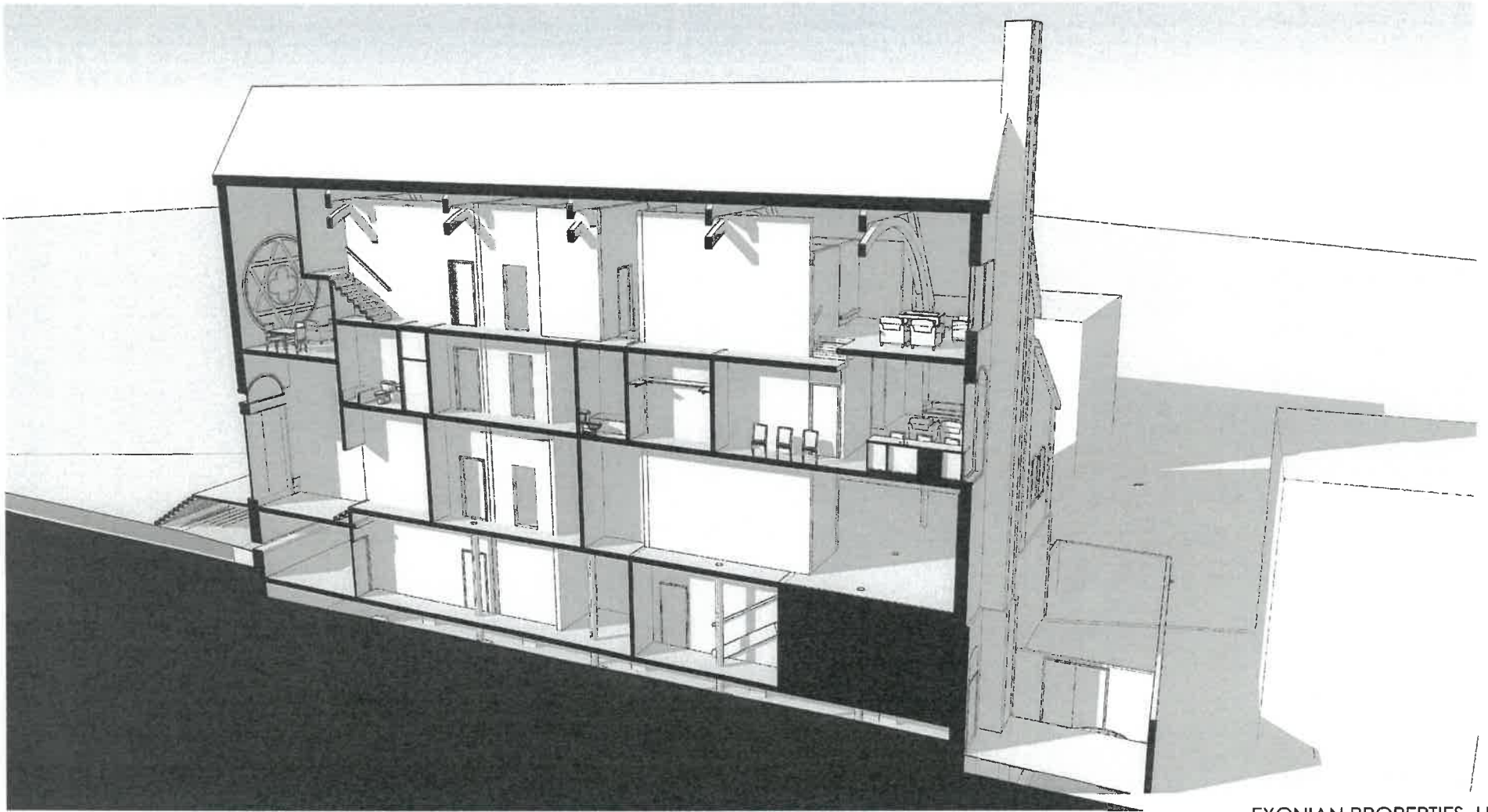
# 3D Sectional Perspective



EXONIAN PROPERTIES, LLC

**FINEGOLD ALEXANDER ARCHITECTS**

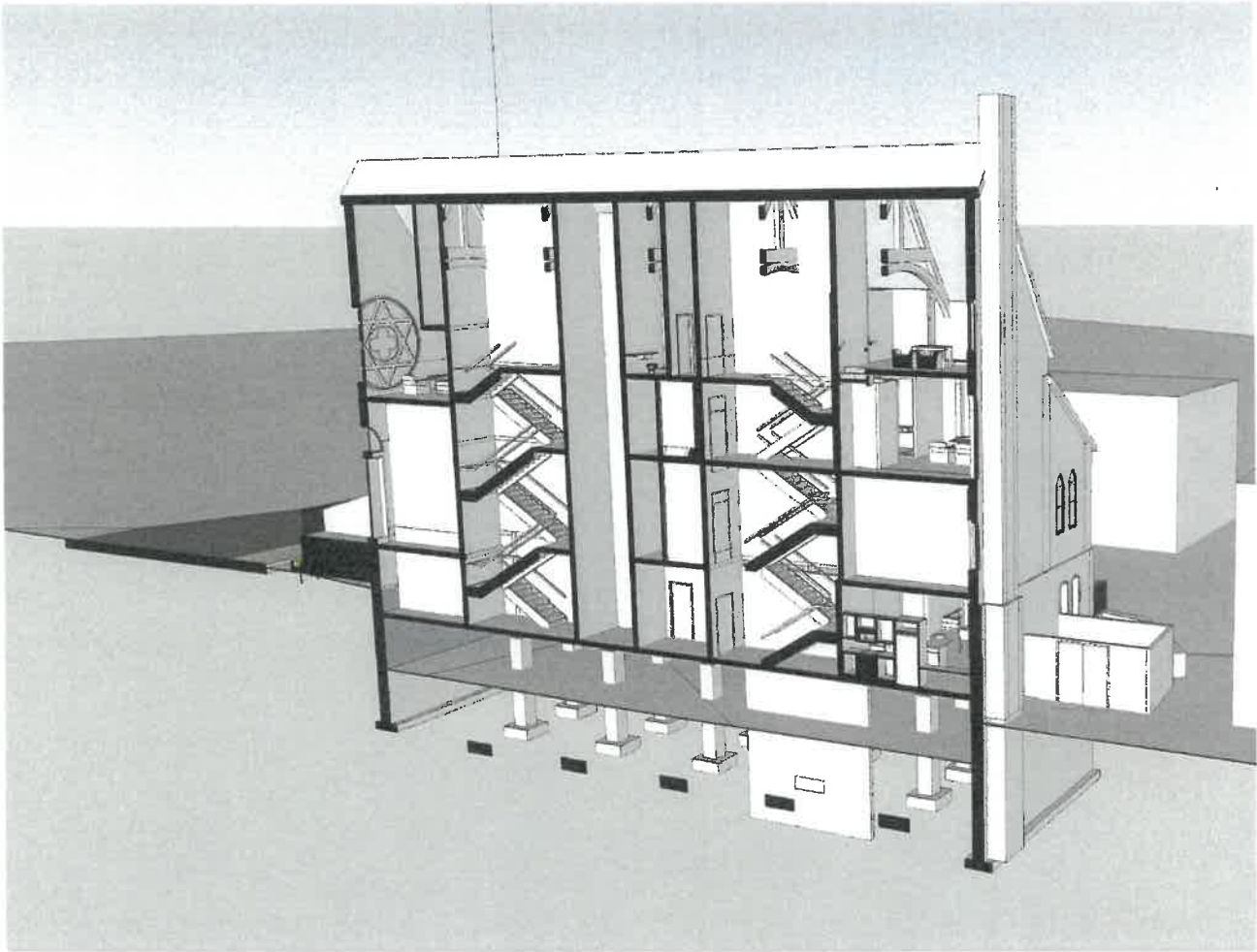
# 3D Sectional Perspective



EXONIAN PROPERTIES, LLC

**FINEGOLD ALEXANDER** ARCHITECTS

# 3D Sectional Perspective (At Elevator Shaft)

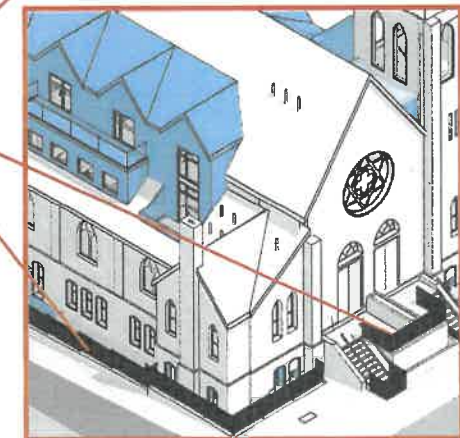
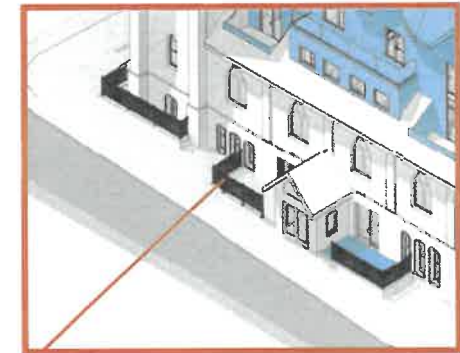


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**FINEGOLD ALEXANDER** ARCHITECTS



# Ground Level Terrace Railings



**Material:** Aluminum Picket Railing


**Color:** Black

EXONIAN PROPERTIES, LLC

**FINEGOLD ALEXANDER** ARCHITECTS

# Ground Level Terrace Railings

Aluminum Picket Railing System



**vista**  
style & simplicity

Aluminum Picket Railing System

- ▼ **Ease of Installation and Quoting**  
Factory attached sleeved brackets mean a quick and simple assembly.
- ▼ **Stair Connection is Simple and Clean**  
Simply insert stair rail into post cut out and fasten in place.
- ▼ **Take Your Picture**  
The same rails and post design creates a consistent frame around your infill of choice. (regular picket, wide picket, framed glass, cable)
- ▼ **Vista Online Project Planner Software**  
Simplifies estimating and installation process.
- ▼ **Safety Assured**  
Tested in accordance with national building codes.

Vista Railing Systems Inc.  
[www.vista-railings.com](http://www.vista-railings.com) or 600-667-8247

Aluminum Picket Railing System

**vista**  
style & simplicity

Aluminum Picket Railing System

2" End Post 24" - PB504 42" - PB488	2" 90° Corner Post 24" - PB300 42" - PB488	2" 45° Corner Post 36" - PB300 42" - PB488	2" Mid Post 24" - PB406 42" - PB410
2 1/2" Blank Post 42" - PB116 42" - PB118	3 1/2" Top Stair Post 36" - PB117 42" - PB121	2 1/2" Bottom Stair Post PB128	2" Mid Stair Post PB124
Level Rail 6" - PB743 8" - PB747 10" - PB748 12" - PB748	4" Regular Picket 24" - PB729 36" - PB730 42" - PB738	6" Regular Picket 24" - PB740 36" - PB741 42" - PB741	4" Wide Picket 24" - PB713 36" - PB713 42" - PB738
4" Stair Pickets Reg: PB513 Wide: PB511	Stair Rail 6" - PB448 8" - PB444	Post Bracket Package PB717	Wall Bracket Package PB724
Stair Bracket Package PB708	100' Glass Rail Adapter PB744	Universal Angle Bracket Package PB709	Aluminum Base Cover 2" - PB714 3 1/2" - PB714

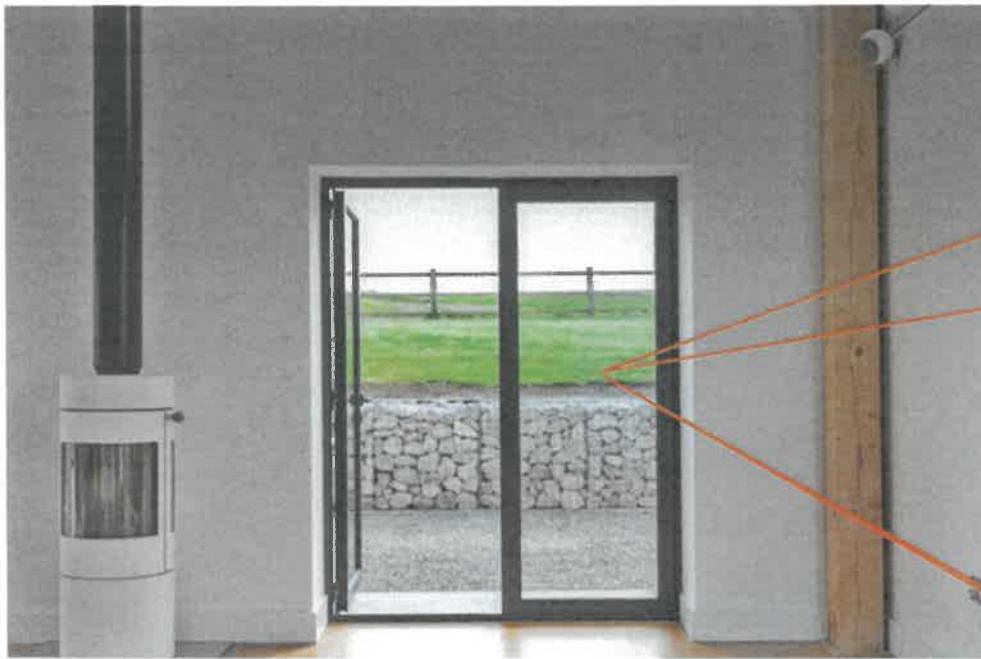
Note: Check out our accessories on page 12 for more products to complete your project. Contact your local building department prior to installation.

Available in:  
 Non-slip  
 Clear  
 Inlay Picket

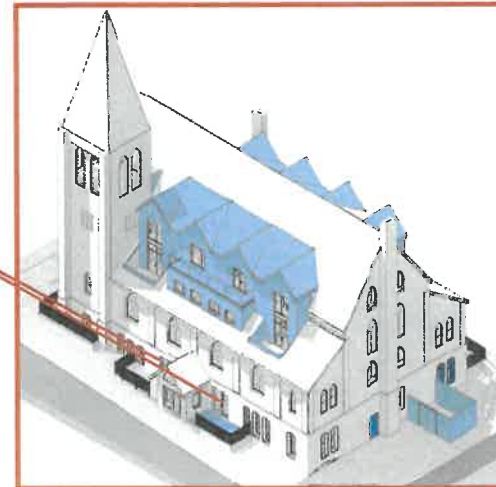
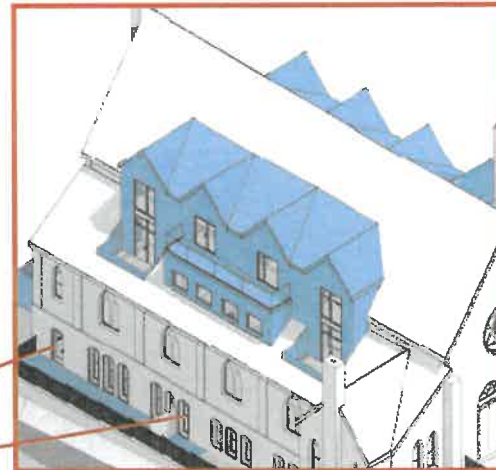
**Material: Aluminum Picket Railing (By Vista or Equal)**

**Color: Black**

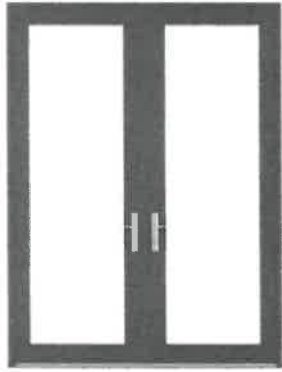
# Ground Floor Terrace Doors



**Material: Aluminum Clad Wood French Doors**



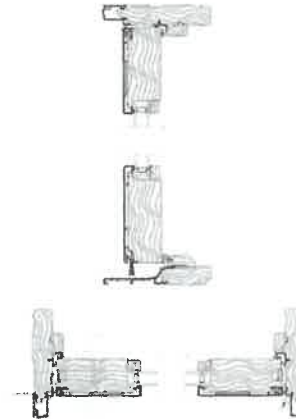
# Ground Floor Terrace Doors



## ARCHITECT SERIES - CONTEMPORARY HINGED PATIO DOOR SPECS & INSTALL DETAILS

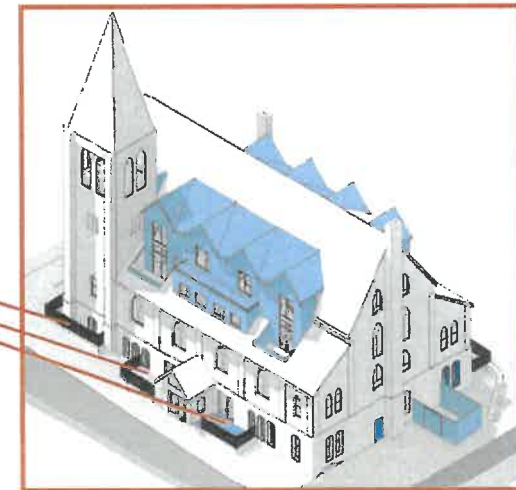
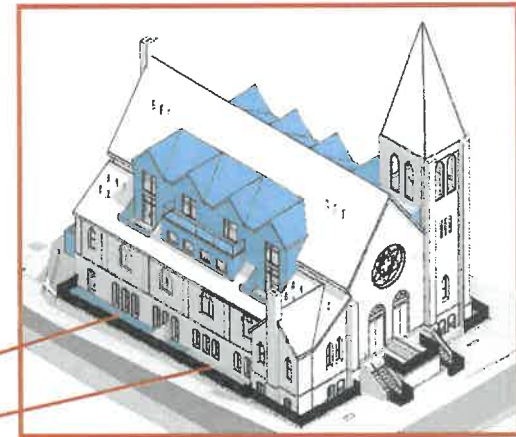
- Durable and distinguished details with nearly endless possibilities
- Single in-swing and out-swing hinged patio doors are available in sizes up to 48" x 119-1/2" in 1/8" increments
- Double in-swing and out-swing hinged patio doors are available in sizes up to 96" x 119-1/2" in 1/8" increments
- In-swing patio doors meet performance class and grade LC40-LC55 and STC 31-32
- Out-swing patio doors meet performance class and grade LC40-LC70 and STC 30-36
- Installation options include Fold-out Fin, Block Frame, EnduraClad Exterior Trim / Brickmould
- EnduraGuard® wood protection formula helps ensure strong protection on every exterior wood surface of our products against the effects of moisture, decay and stains from mold and mildew

**Material: Aluminum Clad Wood French Doors**  
**Pella Architect Series - Contemporary (Black)**





# Ground Level Terrace Walking Surface



**Material: Cementitious 2x2 Pavers**

**Application: On Pedestals For Drainage Beneath**


EXONIAN PROPERTIES, LLC

**FINEGOLD ALEXANDER** ARCHITECTS

# Ground Level Terrace Walking Surface

Porcelain Pavers™ Series





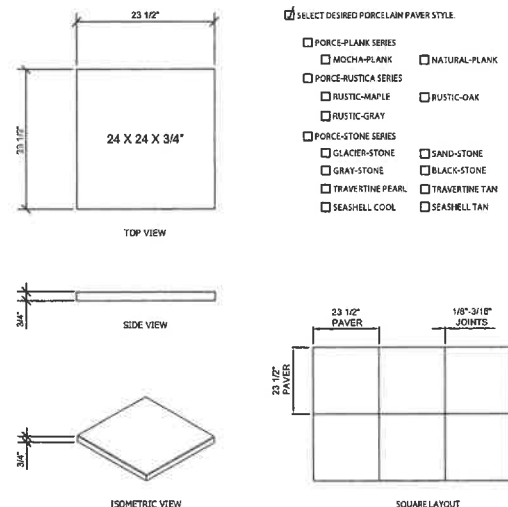
**Tile Tech Inc.**  
Paving the way to a better world

National Distribution Tel: 213-380-6660  
Toll Free: 858-380-6675 Fax: 213-380-6661

**PORCELAIN PAVER DETAILS**  
24" x 24" x 3/4"

SELECT DESIRED PORCELAIN PAVER STYLE

<input type="checkbox"/> PORCE-PLANK SERIES	<input type="checkbox"/> NATURAL-PLANK
<input type="checkbox"/> MOCHA-PLANK	<input type="checkbox"/> RUSTIC-OAK
<input type="checkbox"/> PORCE-RUSTICA SERIES	<input type="checkbox"/> RUSTIC-GRAY
<input type="checkbox"/> RUSTIC-MAPLE	<input type="checkbox"/> SAND-STONE
<input type="checkbox"/> RUSTIC-GRAY	<input type="checkbox"/> BLACK-STONE
<input type="checkbox"/> PORCE-STONE SERIES	<input type="checkbox"/> TRAVERTINE PEARL
<input type="checkbox"/> GLACIER-STONE	<input type="checkbox"/> TRAVERTINE TAN
<input type="checkbox"/> GRAY-STONE	<input type="checkbox"/> SEASHELL COOL
<input type="checkbox"/> SEASHELL COOL	<input type="checkbox"/> SEASHELL TAN



GENERAL NOTES: APPLY TO ALL OF THE ABOVE PRODUCTS  
 1. INSTALLATION MUST BE COMPLETED IN ACCORDANCE WITH TILE TECH PRODUCT SPECIFICATIONS.  
 2. DRAWING NOT TO SCALE.  
 3. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT [WWW.TILETECHPAVERS.COM](http://WWW.TILETECHPAVERS.COM)

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Page 00

**Material:** Porcelain 2x2 Pavers (By Tile Tech or Equal)

**Application:** On Pedestals For Drainage Beneath

EXONIAN PROPERTIES, LLC

FINEGOLD ALEXANDER ARCHITECTS

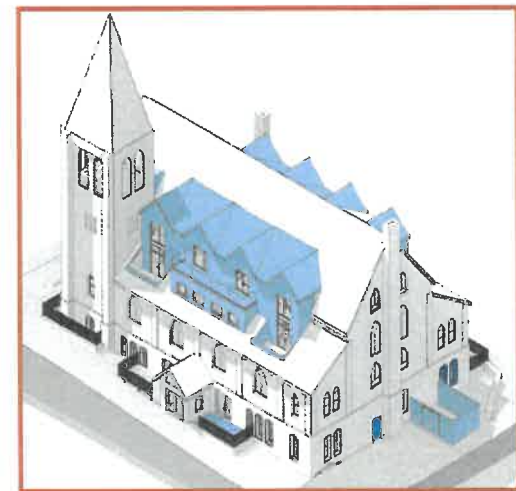
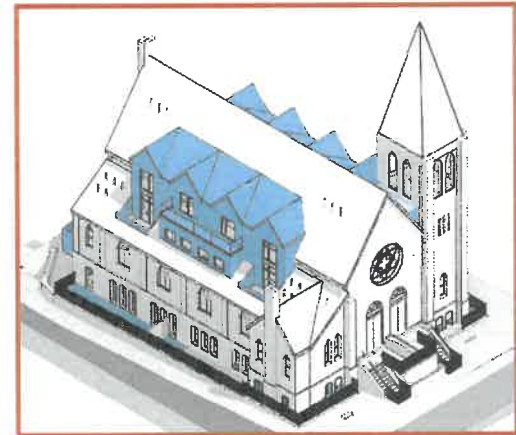
# Replace Copper Gutters & Downspouts



**Note:**  
Gutters & Downspouts  
To Be Designed & Located  
As Needed Per Final Design

**Material:** Red Copper

**Detail:** Match Existing Profiles & Detailing

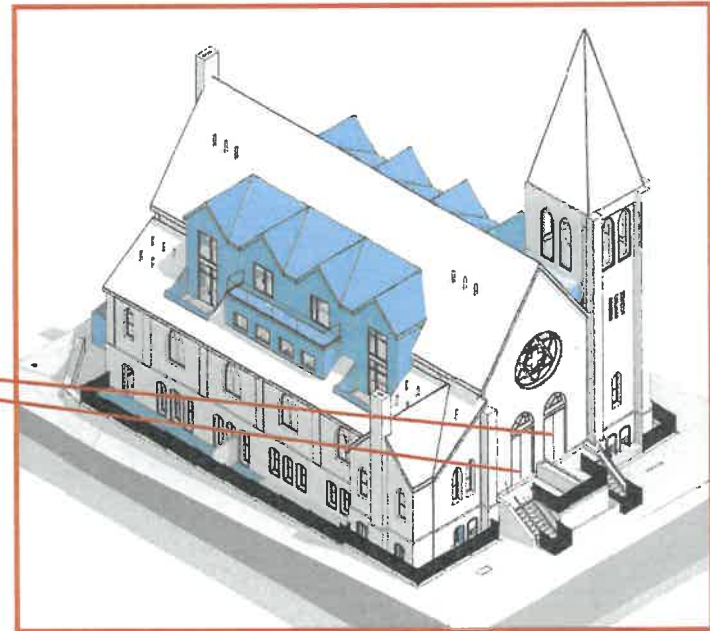
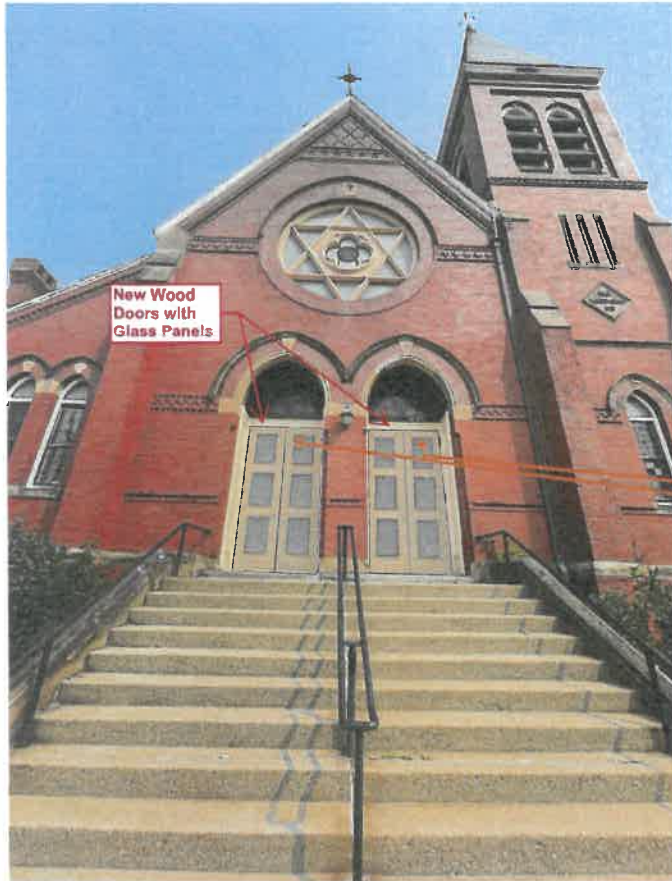


EXONIAN PROPERTIES, LLC

FINEGOLD ALEXANDER ARCHITECTS



## Proposed - Replacement Front Street Entry Doors W/ Neutral Color Applied



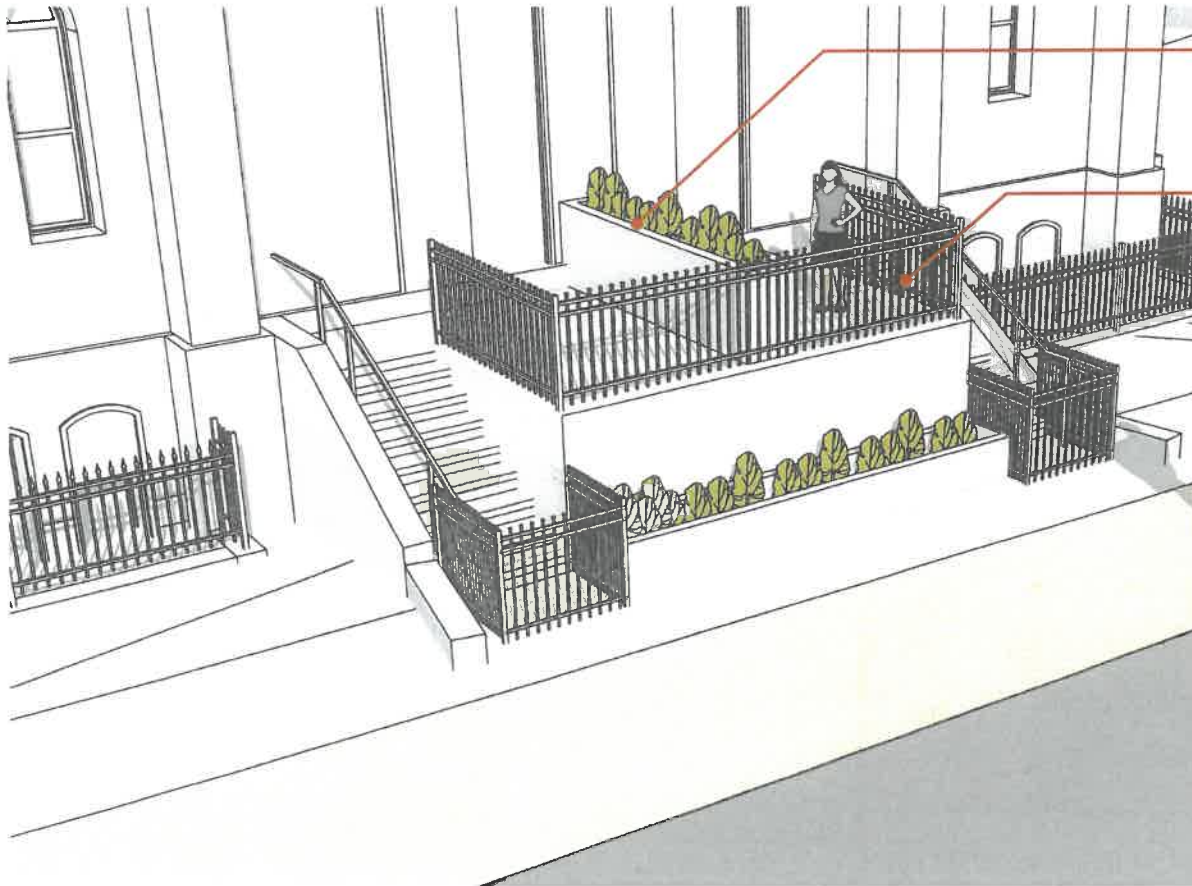
### Scope:

- Replace Existing Decayed Wood Doors With New Wood & Insulated Glass Entry Doors  
(Doors By Pella Architect Series)



# Front Terrace Design - Railings & Planter Divider

Stone Faced Walls, Planter & Steps (Granite, TBD)



**Raised Planter Separation Wall**

**Metal Railing To Match  
Other Terraces**

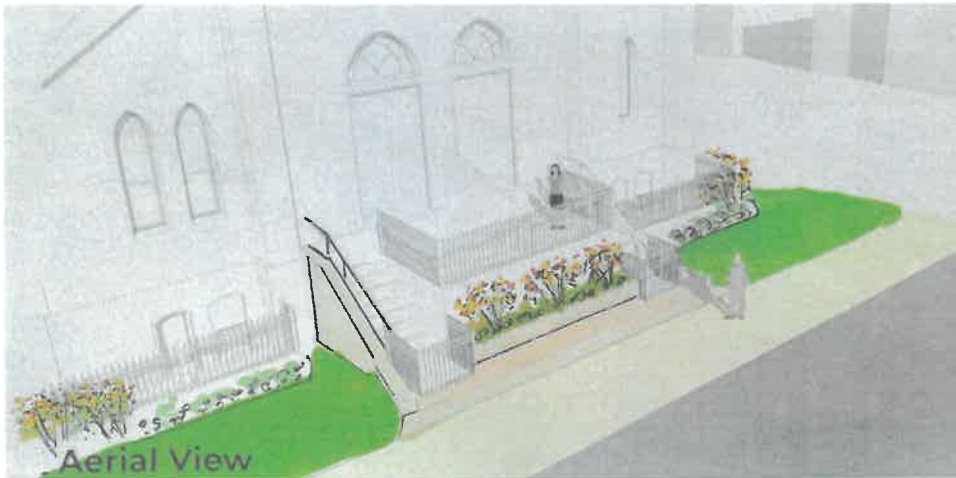


**Material: Black Aluminum  
Picket Railing**

EXONIAN PROPERTIES, LLC

**FINEGOLD ALEXANDER ARCHITECTS**

# Proposed Landscape Treatment



EXETER CHURCH  
Fence and planter sketch

MOLLY JANICKI  
HORTICULTURAL SERVICES



*Amsonia hubrichtii* (left): native perennial with fine textured leaves and beautiful fall foliage. Heat and drought tolerant once established. Light blue flowers in May.

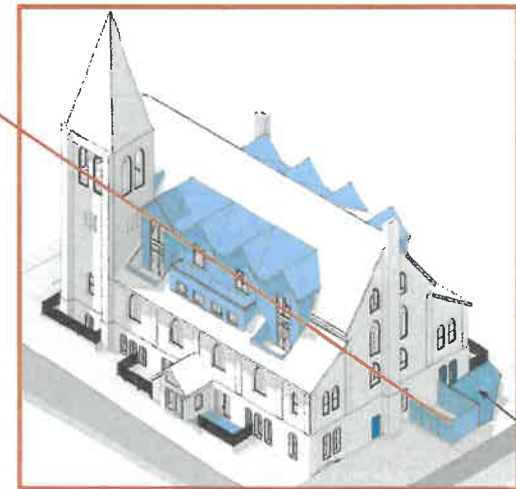
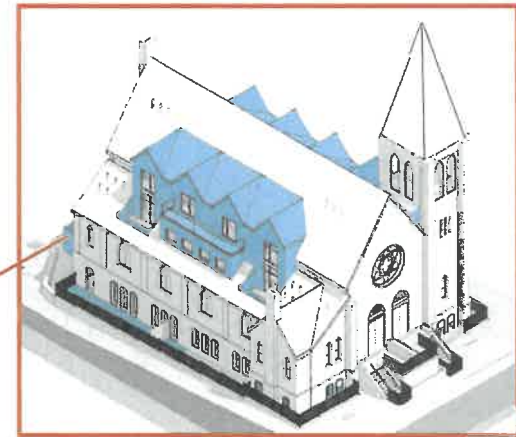
*Geum* (*Waldsteinia*) *fragarioides* (below): native, mat forming groundcover. Yellow flowers in spring and glossy evergreen foliage turns reddish bronze in winter.



EXETER CHURCH  
Fence and planter palette

MOLLY JANICKI  
HORTICULTURAL SERVICES

## Screen Wall at Trash / Mech.



**Product:** Aluminum Horizontal Slat Privacy Fence  
**Location:** Trash/MEP Enclosure & Entry Stair Terrace Option

EXONIAN PROPERTIES, LLC

FINEGOLD ALEXANDER ARCHITECTS



# Screen Wall at Trash / Mech.

**PRIVACY MADE EASY, WE'LL BRING THE How To.**

**STRATCO EZI-SLAT®**  
ALUMINUM SLAT SCREENING

**STRATCO EZI-SLAT®** ALUMINUM SLAT SCREENING

**STYLE AND QUALITY**  
VERSATILE SCREENING SOLUTION

- Superior strength and durability
- Prefabricated panels for easy installation
- Non-weld assembly system
- Safe to use with children and pets
- Manufactured in the USA
- Low maintenance
- 40 Year Warranty

**DESIGN FLEXIBILITY**  
NON-WELD ASSEMBLY SYSTEM

Since you're the one in the driver's seat when it comes to how your fence is installed, you'll find a solution that's right for you.

Ezi-Slat Fence is an ISO 9001 certified system.

How **STRATCO**

**COLOUR RANGE**  
STANDARD STOCKED COLOURS

- WHITE
- GRAY
- BLACK

**CHOOSE BY SLAT HEIGHT**

SLAT HEIGHT	SLAT WIDTH	SLAT LENGTH
12"	12"	12'
12"	12"	18'
12"	12"	24'
12"	12"	30'
12"	12"	36'
12"	12"	42'
12"	12"	48'
12"	12"	54'
12"	12"	60'
12"	12"	66'
12"	12"	72'
12"	12"	78'
12"	12"	84'
12"	12"	90'
12"	12"	96'
12"	12"	102'
12"	12"	108'
12"	12"	114'
12"	12"	120'

**WE'VE GOT FENCING How To.**

The How To's are available to help you get the most out of your fence. For more information, visit our website at [www.stratco.com](http://www.stratco.com) or call us at 1-800-854-7262.

**FENCE SANCTUARY**

How **STRATCO**

Stratco 1700 Independence Blvd., Suite 101, Charlotte, NC 28217  
 www.stratco.com  
 1-800-854-7262  
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**Product: Aluminum Horizontal Slat Privacy Fence**  
**(By Stratco or Equal - Horizontal Slat - Gray or Black)**



# Extruded Aluminum Screen Wall

**STRATCO EZI-SLAT®** ALUMINUM SLAT SCREENING

### STYLE AND QUALITY

#### VERSATILE SCREENING SOLUTION

Ezi-Slat Screening is an innovative, easy-to-install, aluminum slat screening system that offers the latest in architectural style. Ezi-Slat Screening is tough, long lasting, low maintenance and can be adapted to suit a wide variety of applications.

- Super strength powder coated aluminum
- Receiving rail and spacers hold slats without rivets, screws, nails or welding
- Non-weld assembly for easy installation
- Slats do not warp, crack, or splinter
- Manufactured in Australia
- Low maintenance
- 10 Year Warranty\*

#### DESIGN FLEXIBILITY

##### NON-WELD ASSEMBLY SYSTEM

Simply refer to the screen heights shown to determine how many slats are required. With a great range of contemporary colours available, you'll find a solution that's just right for you.

Ezi-Slat can span up to 94½" between supports.

\*10 year limited warranty and colour integrity. Not applicable for marine and base paint applications.



EZI-SLAT COMPONENTS

3" SLATS IN WHITE, GRAY AND BLACK



**Extruded Aluminum Slats  
W/ Durable Finish**



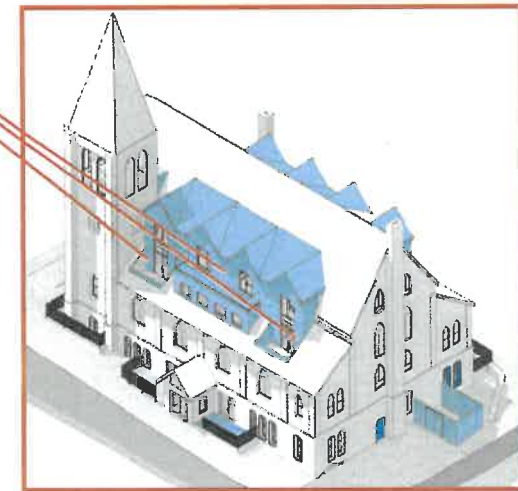
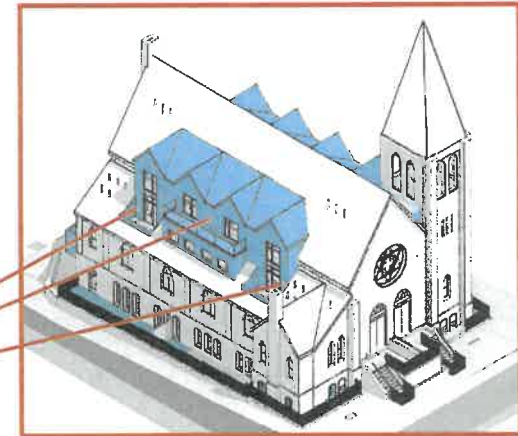
# Exterior Lighting - Levels 3/4 Balconies



**Project Source - Black (Dark Sky Compliant)  
LED Exterior Wall Sconce (Or Similar fixture)**

**Product: Metal Sconce Downlight (Dark Sky Compliant)**

**Location: At New Dormer Balcony Doors Per Code**



EXONIAN PROPERTIES, LLC

**FINEGOLD ALEXANDER** ARCHITECTS

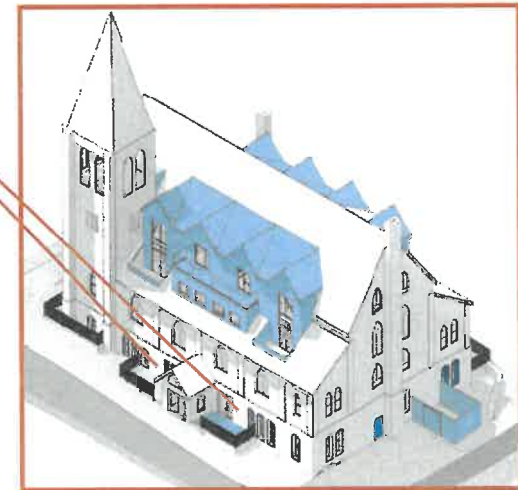
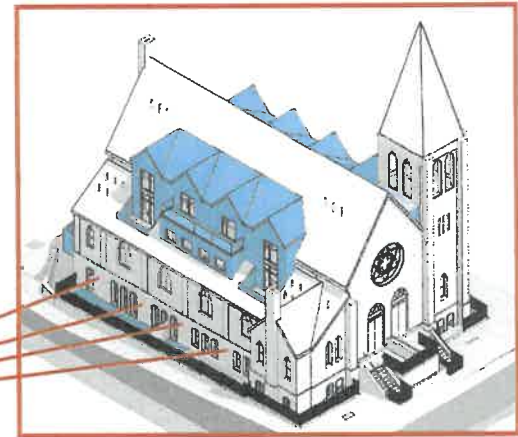
# Exterior Lighting - Ground Level Terraces



**Project Source - Black (Dark Sky Compliant)  
LED Exterior Wall Sconce (Or Similar fixture)**

**Product: Wall Sconce Downlight (Dark Sky Compliant)**

**Location: At Ground Level Terraces**



EXONIAN PROPERTIES, LLC

**FINEGOLD ALEXANDER ARCHITECTS**

# Exterior Lighting - Sconce



**Project Source - Black (Dark Sky Compliant)  
LED Exterior Wall Sconce (Or Similar fixture)**

## SPECIFICATIONS

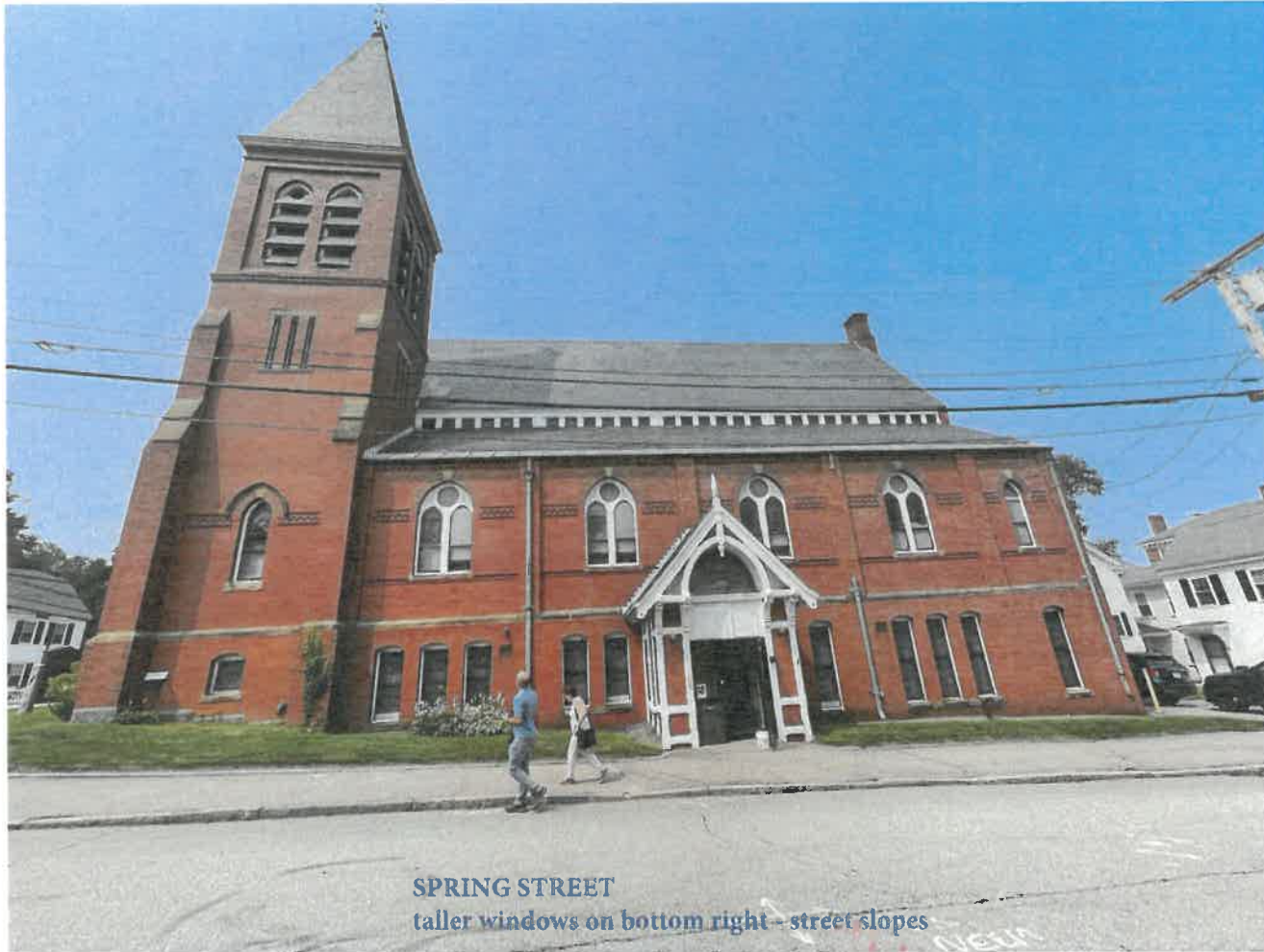
Safety Listing	ETL safety listing
Hardware Included	<input checked="" type="checkbox"/>
ENERGY STAR Certified	<input checked="" type="checkbox"/>
Fixture Depth (Inches)	4.22
Weight (lbs.)	0.6
Motion Sensor	<input checked="" type="checkbox"/>
Wattage Equivalent	1
Dark Sky	<input checked="" type="checkbox"/>
Manufacturer Color/Finish	Black
Fixture Finish	Matte
UNSPSC	28111600
Collection Name	Q4
Weatherproof	<input checked="" type="checkbox"/>
Power Source	Hardwired
Number of Bulbs Required	1
Glass Style	Polycarbonate
Bulb(s) Included	<input checked="" type="checkbox"/>
Material	Cast-aluminum

Recommended Light Bulb Shape	LED
Warranty	5-year limited
Fixture Height (Inches)	4.11
Type	Wall Lantern
Fixture Width (Inches)	4
Glass Color	White
Fixture Color Family	Black
Package Quantity	1
Wattage	1
Weather Resistant	<input checked="" type="checkbox"/>
Light Bulb Base Type	LED
Bulb Type	LED
Style	Transitional
Size	Medium 3-6 inches
Lumens	300

**Product: Wall Sconce Downlight (Dark Sky Compliant)**

**Location: At Ground Level Terraces**

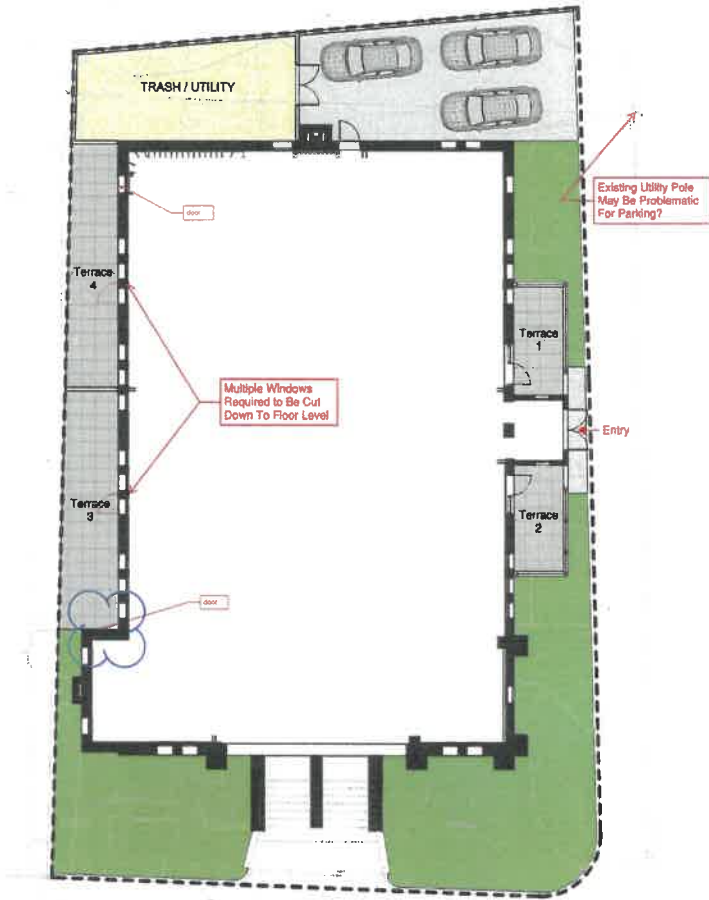




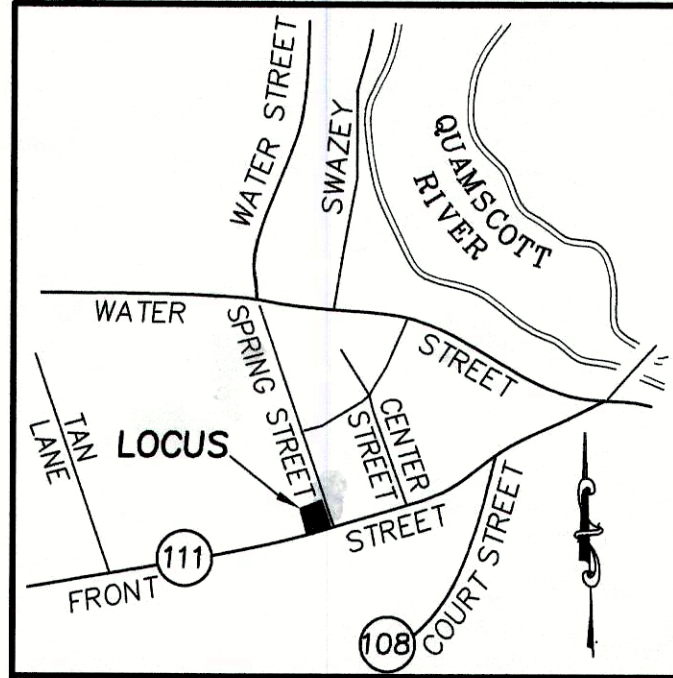
SPRING STREET  
taller windows on bottom right - street slopes



# Surface Parking Plan







**NOTES:**

- 1) THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
- 2) THIS PARCEL DOES NOT LIE WITHIN A FLOOD ZONE. SEE F.I.R.M. COMMUNITY PANEL 33015 0402 E EFFECTIVE DATE MAY 17, 2005.

LOCUS MAP  
NOT TO SCALE

72  
208  
N/F  
PHILLIPS EXETER ACADEMY  
20 MAIN STREET  
EXETER, NH 03833  
BK. 0590 PG. 0012

**PLAN REFERENCE**

"LAND OF THE PHILLIPS EXETER ACADEMY IN RELATION TO LAND OF LIZZIE MODEL"  
DATE: JULY 1943 BY: JOHN W. DURGIN



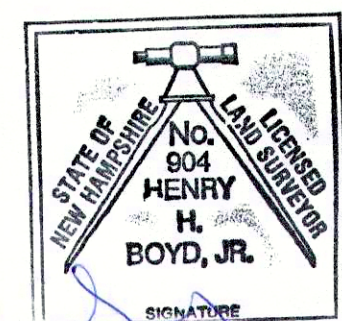
72  
197  
TOWN OF EXETER  
10 FRONT STREET  
EXETER, NH 03833  
BK. 535 PG. 414

"EXETER HISTORICAL SOCIETY"  
EXISTING BUILDING

**LEGEND**

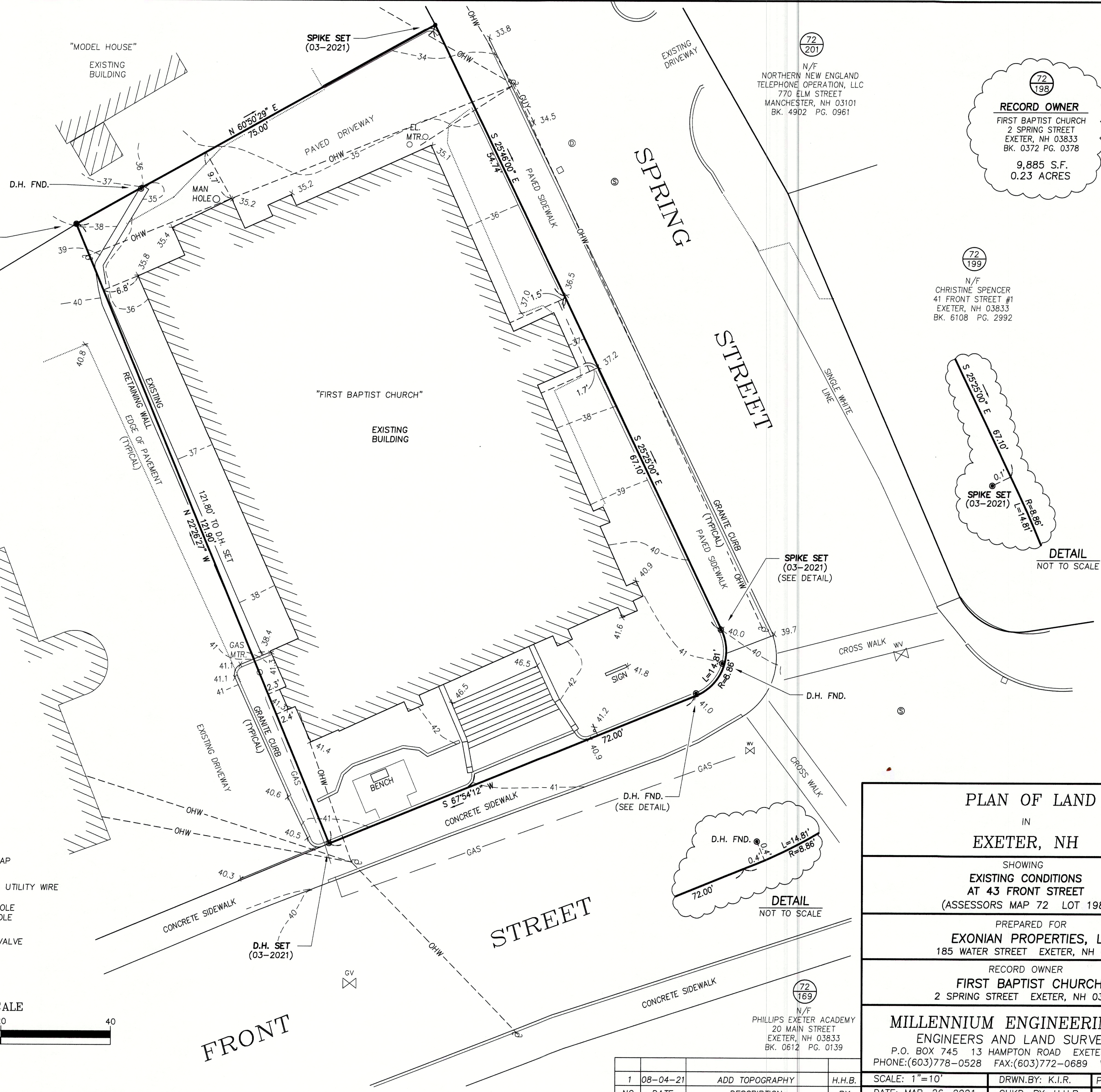
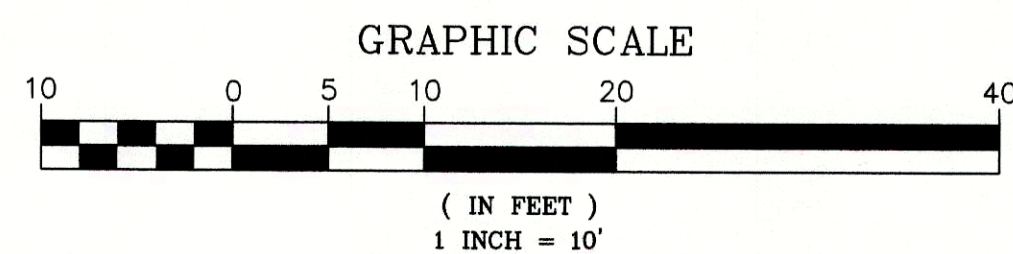
- D.H. DRILL HOLE
- I ROD FND. IRON ROD FOUND
- ○ ○ ASSESSORS MAP AND PARCEL
- OHW --- UNDERGROUND UTILITY WIRE
- ○ ○ UTILITY POLE
- ○ ○ SEWER MAN HOLE
- ○ ○ DRAIN MAN HOLE
- ○ ○ CATCH BASIN
- ○ ○ WATER GATE VALVE

PURSUANT TO RSA 676:18 III AND RSA 672:14  
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.  
I CERTIFY:  
THAT THIS ACTUAL SURVEY WAS MADE ON THE GROUND IN MARCH OF 2021.  
THAT THIS SURVEY CONFORMS TO THE REQUIREMENTS FOR ACCURACY FOR N.H. URBAN SURVEY.  
THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTER OF DEEDS.



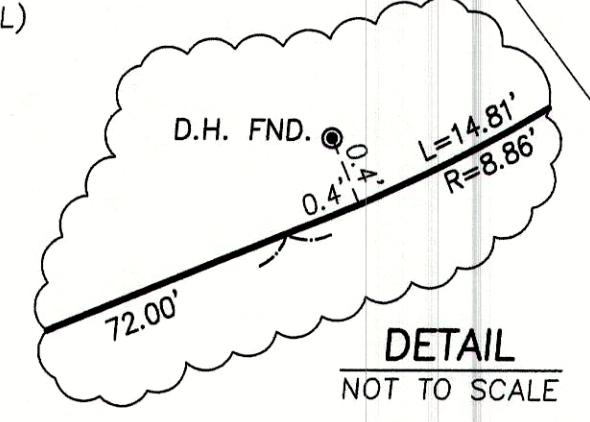
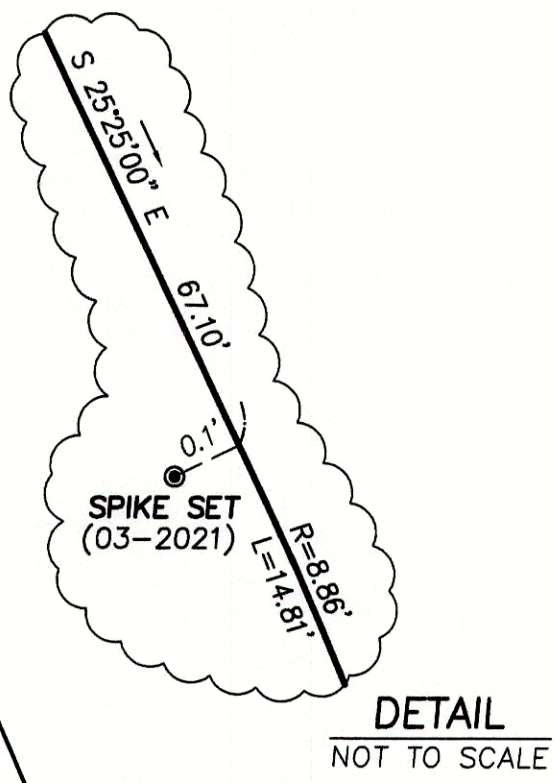
LICENSED LAND SURVEYOR

DATE 08-26-2021



72  
198  
**RECORD OWNER**  
FIRST BAPTIST CHURCH  
2 SPRING STREET  
EXETER, NH 03833  
BK. 0372 PG. 0378  
9,885 S.F.  
0.23 ACRES

72  
199  
N/F  
CHRISTINE SPENCER  
41 FRONT STREET #1  
EXETER, NH 03833  
BK. 6108 PG. 2992



**PLAN OF LAND**  
IN  
**EXETER, NH**

SHOWING  
**EXISTING CONDITIONS**  
AT 43 FRONT STREET  
(ASSESSORS MAP 72 LOT 198)

PREPARED FOR  
**EXONIAN PROPERTIES, LLC**  
185 WATER STREET EXETER, NH 03833

RECORD OWNER  
**FIRST BAPTIST CHURCH**  
2 SPRING STREET EXETER, NH 03833

**MILLENNIUM ENGINEERING INC.**  
ENGINEERS AND LAND SURVEYORS  
P.O. BOX 745 13 HAMPTON ROAD EXETER, NH 03833  
PHONE: (603) 778-0528 FAX: (603) 772-0689 WWW.MEI-NH.COM

1	08-04-21	ADD TOPOGRAPHY	H.H.B.	SCALE: 1"=10'	DRWN. BY: K.I.R.	PROJECT: E212644
NO.	DATE	DESCRIPTION	BY	DATE: MAR. 26, 2021	CHKD. BY: H.H.B.	

1	08-04-21	ADD TOPOGRAPHY	H.H.B.	SCALE: 1"=10'	DRWN. BY: K.I.R.	PROJECT: E212644
NO.	DATE	DESCRIPTION	BY	DATE: MAR. 26, 2021	CHKD. BY: H.H.B.	





# TOWN OF EXETER

## *Planning and Building Department*

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 • FAX 772-4709

[www.exeternh.gov](http://www.exeternh.gov)

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**Date:** May 19, 2022  
**To:** Planning Board  
**From:** Dave Sharples, Town Planner  
**Re:** PSNH – Eversource Energy      **PB Case #22-7**

The Applicant is seeking approval of a Wetlands Conditional Use Permit and a Shoreland Conditional Use Permit for proposed maintenance/repair activities along the existing A126 Transmission Line; and the replacement of five (5) transmission structures within the limits of the existing ROW corridor between Route 101 eastbound and the Exeter/Brentwood town line, and approx. 1,500 feet west of Captain's Way (to the west of Newfields Road/NH Route 85). The subject properties are located in the RU-Rural and R-1, Low Density Residential zoning districts. Tax Map Parcels #25-1, #20-8, #24-3, #30-9, #30-8.

The Applicant submitted plans and supporting documents, dated April 29, 2022, which are enclosed for your review. The Applicant appeared before the Conservation Commission at their May 10<sup>th</sup>, 2022 meeting and presented their proposal. The Commission had no objection to either of the applications and recommended approval with the condition that the trail closure and notification be coordinated with Natural Resource Planner Kristen Murphy prior to the commencement of work. A copy of the meeting minutes and a memo from CC Chairman Andrew Koff, dated 5/18/22, are enclosed for your review.

No TRC meeting was held but the materials were distributed to staff for review. If any comments are received I will update the board at the meeting. There are no waivers being requested for this application. I will be prepared with suggested conditions of approval at the meeting in the event the board decides to act on the request.

### **Planning Board Motion:**

**Conditional Use Permit (Wetlands) Motion:** After reviewing the criteria for a Wetlands Conditional Use permit, I move that the request of PSNH-Eversource Energy (PB Case #22-7) for a Conditional Use Permit be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

**Conditional Use Permit (Shoreland) Motion:** After reviewing the criteria for a Shoreland Conditional Use permit, I move that the request of PSNH-Eversource Energy (PB Case #22-7) for a Conditional Use Permit be APPROVED / APPROVED WITH THE FOLLOWING CONDITIONS / TABLED / DENIED.

Thank You.

Enclosures

**TOWN OF EXETER  
CONSERVATION COMMISSION MEMORANDUM**

---

Date: May 18<sup>th</sup>, 2022  
To: Planning Board  
From: Andrew Koff, Chair, Exeter Conservation Commission  
Subject: Eversource Pole Replacement

**Project Information:**

Project Location: A126 Electric Transmission Line – Utility ROW  
Map/Lot: various  
CC Review Date: 5/10/22  
PB CASE: #22-07

Following a presentation and review of the Wetland and Shoreland Conditional Use Permit, and associated criteria, the Exeter Conservation Commission voted as follows:

The Commission recommended approval of the Wetland Conditional Use Permit with the condition that the trail closure and notification be coordinated with Natural Resource Planner Kristen Murphy prior to the commencement of work.

The Commission recommended approval of the Shoreland Conditional Use Permit.

Should design changes occur in a way that alters impacts to the buffers, we would request an opportunity for additional review.



---

Andrew Koff  
Chair, Exeter Conservation Commission

Exeter Conservation Commission  
May 10, 2022  
Nowack Room  
Exeter Town Offices  
10 Front Street  
Draft Minutes

**Call to Order**

1. Introduction of Members Present (by Roll Call)

Present at tonight's meeting were by roll call, Chair Andrew Koff, Vice-Chair Trevor Mattera, David Short, Alyson Eberhardt, Conor Madison, Select Board representative Nancy Belanger, Don Clement, Alternate, Kyle Welch, Alternate and Bill Campbell, Alternate (remotely).

Staff Present:

Mr. Koff called the meeting to order at 7:09 PM.

2. Public Comment (7:00 PM)

Mr. Koff asked if there were any questions or comments from the public related to non-agenda matters and there was none.

**Action Items**

1. Exeter Trail Race (Ri Fahnestock)

Ri Fahnestock presented the request on behalf of the Exeter Trail Race Committee with directors Sarah Sallade and Chris Dunn to use the trails for the race, which is proposed for Father's Day, the 3<sup>rd</sup> Sunday in June. The details are the same as in the past but with COVID protocols. Race times will be posted on the board. He welcomed a representative from the Commission to set up a table and/or review trail conditions before the race. He doesn't expect any impact issues or impending weather.

Mr. Koff asked how many runners there typically were and Mr. Fahnestock noted usually 100. There are two great courses, one long and one short. The long course goes into Oaklands and the short course into Henderson Swasey. Protocols are discussed at the pre-race meeting and there are aide stations and water. Same day registration is available and refunds for those who registered but can't come to the race.

Mr. Koff noted Alternates Don Clement and Kyle Welch would be active voters.

43 **Mr. Short motioned to approve the event agreement for Exeter Trail Race on June 18, 2022. Mr.**  
44 **Clement seconded the motion. A roll call vote was taken: Eberhardt – aye, Welch – aye, Clement –**  
45 **aye, Koff – aye, Mattera – aye, Short – aye and Madison – aye. The motion passed unanimously 7-0-0.**  
46

47 2. Wetland and Shoreland Conditional Use Permit applications for five pole replacements within the  
48 existing A126 Electric Transmission Line corridor, Exeter NH (Kristopher Wilkes)  
49

50 Kristopher Wilkes from VHB presented the applications on behalf of Eversource for a wetlands and  
51 shoreland conditional use permit recommendation to the Planning Board. Mr. Wilkes noted the project  
52 is to replace wooden pole structures with weathered steel in the same H-frame design but with a slight  
53 height increase of 5-15.’  
54

55 The first structures he noted are off Pine Road and access will be via a gated access to the ROW. There  
56 will be some temporary wetland impact. Timber matting will be used around the access road and work  
57 pad.  
58

59 There is a prime designated wetland between Lines #201 and #200 with temporary impacts to get to  
60 #200 and buffer impacts of 100’ and 40’ in the Town Wetlands Conservation District.  
61

62 There are two structures west of Captain’s Way, #166 and #167 which will utilize existing trails for  
63 access, which will have timber matting placed, to line #167. There is an unnamed perennial stream  
64 running north to south channelizing at the edge of the ROW, not well defined, inundated. The flow will  
65 pass freely under the mats but there will be buffer impact in the wetland and in shoreland protection  
66 area because of the stream, within the 150’ buffer. BMP will use erosion controls prior to the start of  
67 work with wildlife friendly options, biodegradable mats that won’t tangle turtles and snakes. VHB will  
68 hold training with the contractor and do inspections and reports.  
69

70 Mr. Wilkes noted that a state permit is being pursued as well, statutory permit by notification. The  
71 project is scheduled to start mid-July.  
72

73 Jeremy Pennell from Eversource explained how the work area would be closed to the public for safety  
74 and methods of communicating that through the Facebook Page and physical signage. Mr. Short  
75 recommended a temporary reroute of the part of the red trail. Mr. Koff advised that Kristen Murphy the  
76 Natural Resource Planner should be notified of the time frame.  
77

78 Ms. Eberhardt asked about soil disturbance, reseeding and managing spread of invasives. Mr. Wilkes  
79 explained the methods VHB utilizes with the contractors to minimize disturbance, erosion and invasives  
80 and returning the area to the condition it was prior to commencement of the project. He noted the area  
81 bounces back quickly without seeding and does not recommend introducing shrubs especially if they are  
82 non-native because they would need to be maintained and not cut during mowing. Purple Loose Strife  
83 and Glossy Buckthorn were among the invasives noted. Mr. Koff noted there is knotweed in the parking  
84 area. Mr. Wilkes noted equipment and mats are cleaned off before being moved. Equipment is  
85 delivered to the site clean.  
86



87 Ms. Eberhardt asked to describe the dynamic of oversight and Mr. Wilkes noted they have been using  
88 the same contractors for about five years and written reports are provided to Eversource with most  
89 action items fixed on the ground and a record of those items in the report.

90  
91 Ms. Eberhardt asked if the mats were stiff enough to go over. Mr. Wilkes described the size of the mats  
92 16'x4' and how an abutment is created on either side. Mr. Koff noted there will be very little flow in July  
93 short of a major rain fall event. Mr. Wilkes noted the contractors would likely not work on a day with  
94 extremely wet conditions.

95  
96 Mr. Koff summarized the three impact areas with 7,000 SF of direct impact and 26,000 SF of temporary  
97 buffer impact. The Commission reviewed the eight conditions. There was no alternative design with  
98 less impact due to the guardrail on Route 101 and lack of shoulder being a safety concern. Mr. Wilkes is  
99 a wetland scientist and stamped the plan as to the function and values assessment he did not see  
100 anything other than temporary as it will be dry during that time of the year, so it is the right time of year  
101 to do this.

102  
103 Mr. Koff asked about wildlife habitat in the prime wetland and Mr. Wilkes described a lot of scrub shrub  
104 and the Deer Hill Wildlife Management Area in Brentwood nearby which was formed to mitigate  
105 another wetland project. Mr. Wilkes did the data check with NHB, and no plants were identified, and  
106 they are working with Fish & Game concerning rare turtles and black racer and also with training crews  
107 to recognize and report observations. A visual walkthrough is done to make sure species are not up in  
108 the equipment. Mr. Koff noted the project is not detrimental due to its temporary impact the area will  
109 rebound quickly. Mr. Koff noted he is satisfied with the efforts to minimize impacts and there is no  
110 threat to public health, safety and welfare with the coordination of the trail closure and rerouting and  
111 notification to the public. He noted Fort Rock Riders would be another group to communicate with. Mr.  
112 Koff reviewed #6 and noted there is no increase elsewhere – not applicable. #7 no grading is proposed,  
113 and restoration efforts were discussed. Mr. Wilkes described how the old poles would be cut to the  
114 ground and the butt left in the ground in the impacted areas. #8 State permits are in process.

115  
116 Mr. Madison noted he would be recusing himself from voting. Mr. Koff activated Alternate Bill  
117 Campbell.

118  
119 ***Mr. Koff motioned that the Commission after reviewing this application recommends that the wetland***  
120 ***conditional use permit be recommended for approval with the condition that the trail closure and***  
121 ***notification be coordinated with Natural Resource Planner Kristen Murphy prior to the***  
122 ***commencement of work. Mr. Short seconded the motion. A roll call vote was taken: Campbell – aye,***  
123 ***Short – aye, Koff – aye, Mattera – aye, Eberhardt – aye, Welch – aye, Clement – aye. The motion***  
124 ***passed unanimously 7-0-0.***

125  
126 Mr. Koff noted a memo would be drafted to the Planning Board with the Commission's  
127 recommendations.

128  
129 Mr. Wilkes presented the request for the Shoreland CUP. Mr. Koff noted there is a stream west of  
130 Captain's Way with 7,300 SF of impact within the 150' shoreland buffer. Mr. Koff referenced the five

131 criteria for granting the recommendation concerning preserving surface water quality and not causing  
132 unhealthful conditions. Mr. Koff noted there appears to be enough sediment control. In a major rainfall  
133 Mr. Wilkes noted work would stop for the day. There is no discharge of wastewater on site. Mr. Wilkes  
134 detailed the BMPs for refueling vehicles in appropriate locations and procedures for spill reporting. Mr.  
135 Wilkes discussed the rare species and work with Fish & Game. Mr. Koff asked about water bird species  
136 because of Deer Hill and Mr. Wilkes noted they are not on that side of the road, and no access to open  
137 water. That habitat does not exist in the work area.

138  
139 Mr. Koff reviewed Article 9.3.4 and 9.3.1 and asked if there were any questions from the public at 8:25  
140 PM and being none closed the hearing to the public for deliberations.

141  
142 ***Mr. Koff motioned that the Commission after reviewing this application recommends that the***  
143 ***shoreland conditional use permit be recommended for approval to the Planning Board. Mr. Clement***  
144 ***seconded the motion. A vote was taken, the motion passed unanimously 7-0-0.***

145  
146 3. Committee Reports

147  
148 a. Property Management

149  
150 i. Milkweed for Whites Meadow – Expenditure approval (if desired) (shipping cost only)

151  
152 Ms. Murphy reported she reapplied for the grant the Commission was not awarded last year  
153 and was surprised to be selected. The plants would be distributed at Monarch Watch Stations.  
154 There are 160 plants. The project would be labor intensive to prepare the site. Mr. Murphy  
155 detailed the success of a similar planting in another area which she did not feel was greatly  
156 successful. Water would need to be hauled out to the plants throughout the summer. She  
157 noted they would do things differently than they had at the Morrisette property and put out pin  
158 flags and make sure they did not have to compete with other plants. Mr. Campbell noted a  
159 couple of good spots grew out, but Ms. Murphy noted it wasn't what you would expect with 700  
160 plants. However now there is a good seed source out there. Ms. Eberhardt noted Ginny Raub  
161 had success with her plantings and that method may be the way to go. Ms. Murphy noted the  
162 change in mowing practices.

163  
164 Ms. Murphy noted that the Town would get \$450 worth of plants and only pay \$50 for shipping.

165  
166 Mr. Clement asked if they could be distributed to residents and Ms. Murphy noted they must be  
167 at designated Monarch Watch Stations and the requirements for not distributing to areas that  
168 are not registered.

169  
170 The Commission agreed that the project was more work than they could take on right now.

171  
172 b. Trails

173  
174 i. Trail Work Day Report – Expenditure Approval – Trail Bridge Fasteners

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Mr. Short reported the bridge was done two weeks ago and all that is left is the cleanup and he has spoken to Jay Perkins with DPW. The wood supply was donated from a condo deck refurbishment in Kingston so there was only the cost of reimbursing for the hardware.

Mr. Koff noted Alternates Welch and Clement were voting.

**Mr. Koff motioned to reimburse \$113.38 from the Conservation Fund for the screws. Mr. Mattera seconded the motion. A roll call vote was taken, all were in favor, the motion passed unanimously 7-0-0.**

Mr. Short provided a handout of the trail network. He noted the rogue trail is not an issue next to the plank bridge. Mr. Short discussed a trail that could be closed down and is not needed between BLT and the Demoralizer and recommended getting these removed off the trail apps (Trail Forks). Mr. Short will contact Toby and ask him to contact the admin. Mr. Koff explained how expansions happen and promote rutting. Mr. Short noted Jolly Rand is muddy and discussed drainage work done there at one time and ditches that have filled in with leaves over the years and could use some bridging.

Mr. Koff recommended closing Side of Lettuce and asked if more blazing was needed on BLT. He noted a trail west of Jim Bob which could be closed. The trails have had much more use since COVID. Patrons are being courteous and not parking in the 3C1 lot. Mr. Koff thanked Mr. Short for all that work.

c. Outreach Events

i. Alewife Festival 5/14

Mr. Koff noted the Alewife Festival is scheduled for Saturday from 9-1 at Founder's Park and the temperature is forecast to be a high of 88. There will be activities for the kids at the library and with the Tree Committee and other environmental tables. Fish & Game will be showing native fish. The winners of the Alewife Run Guess the Date will be in the running to win a Kayak, t-shirts can be ordered and Sawbellies is selling \$10 pint glasses which if brought to their location get those who present their glass, a free beer. There is a Kayak Tour at the Town Boat Ramp. A waiver will be signed, and a life jacket is required. No pre-registration.

Mr. Clement noted he talked to Eric Turner at the DPW will be doing highlights of the Wastewater Treatment and a side trip up Wheelwright Creek.

Mr. Koff noted there will be environmental films, the Sustainability Committee, DES Climate, Exeter TV with Bob Glowacky's film and Wastewater Treatment updates.

Ms. Murphy noted there will be a Food Truck - Winnies, offering breakfast food, and music from 12-1.

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Mr. Koff and Mr. Mattera will be running the DES groundwater flow model and the Enviroscope models that show how pollutants move and affects of groundwater. Ms. Murphy will print sea rise maps and some trail maps will be available for Raynes and Little River.

ii. Geocaching Event Planning – TBD

The Commission discussed how to get started with geocaching by finding the first ten before placing your own. There is an app to download, and a flyer can describe the date, meeting place and description.

4. Approval of Minutes:

i. March 8, 2022 Meeting

**Mr. Clement motioned to approve the March 8, 2022 meeting minutes. Mr. Koff seconded the motion. A vote was taken, all were in favor, the motion passed unanimously 7-0-0.**

ii. April 12, 2022 Meeting

**Mr. Koff motioned to approve the April 12, 2022 meeting minutes. Mr. Mattera seconded the motion. Mr. Clement abstained. The motion passed 6-0-1.**

5. Correspondence

Mr. Koff thanked Tom Patterson and Kristen Osterwood for their service to the Commission the last two years and noted there are openings for three vacancies, two alternates and one voting member. He recommended Kyle Welch could be moved up by the Select Board to a voting member. Mr. Campbell and Mr. Clement noted they were happy with their alternate status. The next Select Board meeting is on the 31<sup>st</sup>. Mr. Clement noted they are also looking for reps for Exeter Squamscott River Advisory Committee (can have up to 4).

Mr. Campbell noted that Julie Gilman sent a memo concerning HB 307, concerning legislation by the governing body as to the use of firearms on municipal property. Ms. Murphy discussed the Conservation Deeds which did not permit hunting which are not affected and the effect on not being able to restrict properties that do not regulate in the deed already. A letter could be sent by the Commission to voice their concerns or individuals could write to their state reps and/or the Governor. Ms. Belanger recommended reaching out to individual representatives and also the Governor in case it was to pass, comments are open electronically.

6. Other Business

Mr. Koff announced the passing of former Select Board Representative Anne Surman and thanked her for her hard work for the Town, her concern for the community touched a lot of people.



263  
264 Ms. Murphy reported she is having difficulty getting a response to the RFP that went out for Raynes  
265 Farm and is hoping for some feedback from contractors. The price of materials has gone up  
266 significantly and contractors are backlogged with other projects. She will contact the LCHIP  
267 representatives for suggestions.

268  
269 7. Next Meeting: Date Scheduled (6/14/22), Submission Deadline (6/3/22)  
270

271 Adjournment

272  
273 MOTION: Mr. Koff moved to adjourn the meeting at 9:36 PM seconded by Mr. Mattera. A vote was  
274 taken, all were in favor, the motion passed unanimously.

275  
276 Respectfully submitted,

277  
278 Daniel Hoijer, Recording Secretary  
279 Via Exeter TV

280  
281 This meeting was also presented virtually Zoom ID 848 3795 0762



April 29, 2022

Ref: 52889.00

Dave Sharples, Town Planner  
Town of Exeter Planning Board  
10 Front Street  
Exeter, NH 03833

Re: Town of Exeter Conditional Use Permit Applications: Wetlands Conservation Overlay District & Shoreland Protection District - A126 Electric Transmission Line, Exeter, NH

Dear Mr. Sharples,

On behalf of Public Service Company of New Hampshire (PSNH) d/b/a Eversource Energy, VHB is submitting Conditional Use Permit Applications to the Town of Exeter Planning Board for proposed utility maintenance along the existing A126 115-kV transmission line right-of-way (ROW) in Exeter. The Conditional Use Permit Applications are being submitted in accordance with *Article 9* of the Town's Zoning Ordinance. Conditional Use Permits are required for the proposed maintenance work to allow for temporary impacts to wetlands and their respective buffers protected under the Wetlands Conservation Overlay District (*Article 9.1.3*), and to allow for temporary impacts within the 150-foot buffer of an unnamed perennial stream within the Squamscott River HUC 12 Watershed protected under the Shoreland Protection District (*Article 9.3.3*). A Utility Maintenance Activity Statutory Permit-by-Notification for the proposed project will be submitted to the New Hampshire Department of Environmental Services (NHDES) to cover temporary wetland impacts at the state level. Upon submittal of these applications, VHB and PSNH intend on attending the Exeter Conservation Commission meeting on May 10, 2022, followed by a hearing date with the Planning Board on May 26, 2022.

### **Project Description**

PSNH intends to replace five (5) existing 115-kV transmission structures along the A126 transmission line within the limits of the existing ROW corridor between Route 101 eastbound and the Exeter/Brentwood Town Line (east of Pine Road), and approximately 1,500 feet west of Captain's Way, located to the west of Newfields Road/Route 85. The proposed work is part of PSNH's on-going maintenance program conducted to ensure reliable electric service for their customers. The PSNH 115-kV transmission system is an integral part of the regional power system delivering electricity to customers throughout New England. It is critical that the 115-kV system remain operational without interruption from preventable outages.

Existing electric transmission line structures proposed for replacement consist of a two-pole wood H-frame configuration and will be replaced with two-pole weathered steel H-frame structures to meet current industry standards. The most common reason wood poles need replacement is woodpecker damage and internal rot. All the replacement structures will be installed directly in-kind or within 10-feet from their existing locations. Generally, the structures will increase in height ranging from 5-20 feet higher than those existing in order to meet current vertical clearance standards. Lastly, associated guy support

2 Bedford Farms Drive  
Suite 200  
Bedford, New Hampshire 03110  
P 603.391.3900  
F 603.518.7495

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wires and anchors will be replaced. Contingent upon permit approval, work is proposed to commence in early to mid-July 2022. Refer to **Figure 1**, Project Permitting Plans, for more information.

#### Proposed Access and Construction Methods

The proposed work will occur within the limits of the existing cleared transmission line ROW and no additional widening/clearing of the ROW is proposed. Work crews intend to access Structures 200, 201 and 202 immediately west of Route 101 eastbound by utilizing an existing driveway associated with a commercial/industrial business located along Pine Road in Brentwood. Work crews intends to access Structures 166 and 167 directly off of Captain's Way. Access within the ROW to Structures 200-202 will be gained utilizing upland matting or tracked equipment in order to avoid ground disturbance and grading in most areas. Crews plan to follow an existing established access trail within the ROW to reach Structures 166 and 167 off of Captain's Way.

Timber matting will be used at three locations where existing wetlands intersect the proposed ROW access, and at two locations where existing wetlands intersect the approximately 100-foot by 100-foot construction work pad required to stage equipment and crews around each structure during its replacement. Timber matting greatly reduces soil disturbance and rutting and is required per the conditions of the NHDES permit approval. Any construction laydown areas required for equipment and material staging while the maintenance work is carried out will be situated in upland areas along the existing ROW corridor. Once access and work pads are established, the new steel poles will be installed either through direct embedment or constructed on a caisson foundation. Traditional auguring and installation procedures will be used. Any excess excavated spoils will be spread to match existing topography and stabilized with seed and straw mulch cover within adjacent upland areas of the ROW (outside of NHDES jurisdiction). *No poles or associated work pads are proposed to be installed within the bed and/or banks of any surface water, or the jurisdictional limits of any wetland present along the ROW.*

Prior to accessing the ROW with construction equipment, crews will install erosion and sediment control barriers in accordance with permitting plans and details, New Hampshire Department of Environmental Services (NHDES) conditions, and the *Best Management Practices Manual for Utility Maintenance in and Adjacent to Wetlands and Waterbodies in New Hampshire* (or "Utility BMP Manual," March 2019), published by the New Hampshire Department of Natural and Cultural Resources (NHDNCR). Selected best management practices (BMPs) may include silt sock, silt fence, wood chip/compost berms/tubes and/or other approved BMPs. During project construction, control of the spread of invasive species that are currently found within the ROW will also be managed in accordance with NHDES permit conditions and the Utility BMP Manual.

#### Proposed Post-Construction Restoration

As soon as possible after the completion of the structure replacement work, timber matting and all construction debris will be removed from the project ROW and properly disposed of off-site. Stabilization and restoration of disturbed areas/exposed soils will be initiated as timber mats are pulled and structural work is completed. Minimal restoration is anticipated due to the limited impacts of the proposed work, and natural re-colonization of wetlands within the ROW is expected. VHB will visit the project ROW post-construction to assess conditions, provide guidance to work crews on restoration, and to determine



whether or not additional promotion of vegetation (seeding) is required. If required, NHDES approved wetland and upland seed mixes will be placed on affected areas to further promote re-growth. Refer to the Project Plans attached for the location of existing wetlands and surface waters and utility structures, proposed accessways, construction work pads, and timber matting.

### **Wetlands Conservation Overlay District Impacts**

Portions of the proposed project are located within the Town of Exeter Wetlands Conservation Overlay District as outlined in *Article 9.1.3* of the Town's Zoning Ordinance. Temporary impacts related to access and work pad staging will occur directly within wetlands with poorly drained soils and their respective 40-foot Limited Use Buffers. Additionally, temporary impacts associated with access and work pad staging will occur within a NHDES Designated Prime Wetland and its respective 100-foot Limited Use Buffer.

Wetlands along the A126 Line ROW subject to the proposed work were previously delineated by others in support of a previous PSNH project and have been reviewed and confirmed recently by VHB Wetland Scientists as part of this project. Wetland review was performed in accordance with the *1987 Corps of Engineers Wetland Delineation Manual* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0* (January 2012), the *2018 National Wetland Plant List* published by the U.S. Army Corps of Engineers, the *Field Indicators of Hydric Soils in the United States, Version 8.2* published by the Natural Resources Conservation Service ("NRCS"), and the *Field Indicators for Identifying Hydric Soils in New England, Version 4.0* published by the New England Interstate Water Pollution Control Commission. Wetland classifications follow the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al., 1979, revised 1985.)

Wetlands within proximity to the proposed structure replacement work consist of Palustrine, Scrub-Shrub, Broad-Leaved Deciduous or Palustrine, Emergent, Persistent cover types with a Seasonally Flooded/Saturated hydrological regime (PSS1E, PEM1E). Most of these wetlands transition to a Palustrine, Forested, Broad-Leaved Deciduous (PFO1) cover type as they extend north and south outside of the existing cleared limits of the ROW. A single unnamed perennial stream flows south to north through the wetland existing to the west of Captain's Way.

The large wetland complex existing south and west of Route 101 eastbound and intersecting a portion of the A126 Line ROW is designated as NHDES Prime Wetland. A timber mat access road is proposed across this wetland in order to minimize impacts and avoid rutting.

Wetland and upland vegetation along the ROW is periodically mechanically cut to maintain safe vertical and horizontal clearance distances from the existing overhead transmission lines, thus maintaining a dense shrub-type habitat. Species typically found within these wetlands include tree species, which are not permitted to grow beyond a sapling growth stage, including red maple (*Acer rubrum*) and species of birch (*Betula* spp.). Common dominant shrub species found within these wetlands include white meadowsweet (*Spiraea alba*), steeplebush (*Spiraea tomentosa*), maleberry (*Lyonia ligustrina*), arrowwood (*Viburnum recognitum*), buttonbush (*Cephalanthus occidentalis*), common winterberry (*Ilex verticillata*), speckled alder (*Alnus incana*), silky dogwood (*Cornus amomum*), elderberry (*Sambucus canadensis*), sheep laurel (*Kalmia angustifolia*), leatherleaf (*Chamaedaphne calyculata*), Allegheny blackberry (*Rubus*





*allegheensis*), and red raspberry (*Rubus idaeus*). Palustrine emergent portions of these wetlands are typically dominated by soft rush (*Juncus effuses*), various sedges (*Carex* spp.), narrow and broad-leaved cattail (*Typha angustifolia* & *Typha latifolia*, respectively), cinnamon fern (*Osmundastrum cinnamomeum*), species of goldenrod (*Solidago* spp.), blue joint (*Calamagrostis canadensis*), royal fern (*Osmunda regalis*), joe pye-weed (*Eutrochium maculatum*), sweet pepperbush (*Clethra alnifolia*), sphagnum (*Sphagnum* spp.), species of iris (*Iris* spp.), dark green bulrush (*Scirpus atrovirens*), sensitive fern (*Onoclea sensibilis*), deer tongue grass (*Dichantheium clandestinum*), reed canary grass (*Phalaris arundinacea*), bristly dewberry (*Rubis hispides*), and woolgrass (*Scirpus cyperinus*). Finally, a number of invasive plant species are also present such a purple loosestrife (*Lythrum salicaria*) and glossy buckthorn (*Frangula alnus*).

Evidence of wetland hydrology observed during field work included soil saturation, surface water, geomorphic position, drainage patterns, and inundation/saturation visible on aerial imagery. Wetland soils sampled within the ROW generally meet Hydric Soil Indicator F3: Depleted Matrix.

**A total of approximately 3,639 square feet of direct temporary impact is proposed within wetlands with poorly drained soils with approximately 7,738 square feet of temporary impact proposed within their respective 40-foot Limited Use Buffers. Additionally, approximately 3,602 square feet of direct temporary impact is proposed within a NHDES Prime Wetland with approximately 18,331 square feet of temporary impact proposed within its respective 100-foot Limited Use Buffer. No direct impacts are proposed within the banks or bed of a single unnamed perennial stream to the west of Captain’s Way as the channel will be bridged with timber mats from outside its jurisdictional limits.**

The use of an established upland access within the 40 foot buffer zone of Wetlands EW-24 and EW-23 was not calculated as impact since this is an existing trail within the project ROW. Impacts within the Wetland Conservation District Overlay are further outlined in **Table 1** below.

**Table 1: Wetland Conservation District Overlay Impacts**

Wetland ID	Location	Direct Temporary Impact (SF)	Associated Limited Use Buffer Impact (SF)
<b>EW-1 (Poorly Drained)</b>	West of Route 101	517	4,757
<b>EW-2 (Prime Wetland)</b>	West of Route 101	3,602	18,331
<b>EW-23 (Poorly Drained)</b>	West of Captain’s Way	3,122	2,981
<b>Unnamed Perennial Stream</b>	West of Captain’s Way	0	0 <sup>1</sup>
<b>Total:</b>		<b>7,241</b>	<b>26,069</b>

1 – Impacts within the 25’ Limited Use Buffer have been captured under the direct temporary impacts listed for Wetland EW-23.

**Article 9.1.6(B) Conditional Uses - Conditions**

In accordance with the requirements for a Conditional Use Permit, the construction and maintenance of powerlines in the Wetlands Conservation Overlay District is an allowable use if the criteria found in *Article 9.1.6(B)* are met. Evidence that the proposed project meets those criteria is provided below.



**1. That the proposed use is permitted in the underlying zoning district.**

The proposed project is located within zoning districts R-1 (Low Density Residential) and RU (Rural). The existing A126 transmission line ROW has been a permitted use within the current zoning districts since they were established. All project work will be confined within the limits of the existing established ROW with no clearing or widening proposed. The project involves routine maintenance work to an existing transmission line and associated structures that is conducted periodically by PSNH. Since the project aims to improve the reliability of the existing electric transmission system and prevent outages, the project is essential to the productive use of the land within the existing zoning district.

**2. No alternative design which does not impact a wetland or wetland buffer or which has less detrimental impact on the wetland or wetland buffer is feasible.**

The A126 transmission line ROW was established prior to the designation of the Wetlands Conservation Overlay District, and due to the linear nature of the ROW, crosses the Wetlands Conservation Overlay District in numerous locations throughout the Town of Exeter. Access to the ROW is primarily obtained from intersecting public roadways; and, currently established and/or former access trails are typically utilized by work crews to reach the existing electric transmission line infrastructure. Often utilization of existing and/or former ROW trails reduce the need for creation of additional disturbance (road/trail building) within the Wetlands Conservation Overlay District underneath the ROW.

Project impacts to wetlands and their associated buffers were minimized to the maximum extent practicable during the project planning stage. This included modifications to ROW access, the use of upland matting and/or tracked equipment in some areas, and the positioning of structure work pads to stay outside the limits of existing wetlands where possible. Additionally, all wetland crossings proposed will be approached at a 90-degree angle with timber matting in order to limit the crossing width and resultant temporary impact. Finally, the single unnamed perennial stream flowing south to north across the ROW to the west of Captain's Way will be bridged with timber mats in order to avoid bank and/or bed impacts to this surface water. Due to the close proximity of many of the existing structures to the adjacent wetlands, temporary impacts within their respective buffers cannot fully be avoided.

**3. A wetland scientist has provided an impact evaluation that includes the "functions and values" of the wetland(s), an assessment of the potential project-related impacts and concluded to the extent feasible, the proposed impact is not detrimental to the value and function of the wetland(s) or the greater hydrologic system.**

Functions and values of wetlands present along the Project ROW were assessed by VHB using the *Corps Highway Methodology Workbook Supplement* (USACE, 1999). The location of Wetlands EW-1, EW-2, and EW-23 within a cleared ROW corridor, their connectivity to larger complexes that extend outside of the existing ROW edge, the presence of a perennial stream, and the composition of the immediate surrounding landscape (industrial/highway commercial/rural residential) largely dictates



their functions and values. Wetlands to be temporarily impacted by the proposed work are made up of dense scrub-shrub and emergent vegetation which contributes to their capacity to perform water quality and hydrologic functions such as sediment/toxicant/pathogen retention and nutrient removal. Potential sources of pollutants are present from abutting land uses such as commercial/industrial businesses, roadways including Route 101, and maintained residential properties. Their vegetative diversity and position within a linear corridor also contribute to their function to provide wildlife habitat, especially to various bird species. Additionally, their hydrological regime (saturation/inundation) may provide suitable turtle and snake habitat. Lastly, based on the size and landscape position of these wetlands, and their proximity to the built environment and connectivity to perennial streams, they also function to retain floodwaters from sources higher in the watershed and may contribute to groundwater recharge.

The proposed maintenance work will not negatively affect the identified functions and values of these wetlands as project impacts are temporary in nature and over a short duration and will not prevent the impacted wetlands from effectively providing these functions and values following project completion and ROW restoration.

**4. *That the design, construction, and maintenance of the proposed use will, to the extent feasible, minimize detrimental impact on the wetland or wetland buffer.***

The proposed project involves maintenance of an existing transmission line asset which is necessary to maintain an operational electric circuit. Therefore, there are no project alternatives. However, wetland and buffer impacts were minimized to the maximum extent practicable based on field assessments completed by VHB and PSNH which were focused on access and construction staging. Additionally, work crews will conduct all work in accordance with the Utility BMP Manual which includes the deployment of timber matting and erosion and sediment control barriers which are designed to reduce ground disturbance, eliminate rutting, and prevent erosion and sedimentation within sensitive resources including wetlands and surface waters. Additional specific strategies to minimize impacts have been previously outlined under Question 2.

**5. *That the proposed use will not create a hazard to individual or public health, safety and welfare due to the loss of wetland, the contamination of groundwater, or other reasons.***

Proposed structure replacements are part of an ongoing effort by PSNH to refurbish outdated and deficient existing overhead electric transmission infrastructure in the region. Structural and line deficiencies represent a significant reliability risk in terms of line failures and service interruptions to customers. The project will improve the health, safety, and well-being of the general public by enhancing the reliability and operational performance of the existing 115-kV transmission system by reducing the risk of line failures and in turn reducing the potential for outages experienced by customers.

The proposed project only involves temporary impacts to wetlands and their respective buffers. The project will not result in any permanent alterations to wetlands that could impact groundwater or other natural resources. Proposed timber matting is not expected to adversely impact the capacity of



subject wetlands to perform water quantity and/or quality functions but instead will be beneficial by reducing the potential for increased erosion and sediment movement during the construction period. Mats will be monitored daily by the Contractor to ensure they remain clean and free of sediment, so they do not pose a risk of discharge into neighboring wetland and/or streams. Lastly, in addition to matting, appropriate perimeter erosion controls will be installed prior to the start of construction and maintained throughout the duration of the project to reduce the risk of sedimentation into the adjacent wetlands and perennial stream.

**6. *The applicant may propose an increase in wetland buffers elsewhere on the site that surround a wetland of equal or greater size, and of equal or greater functional value than the impacted wetland.***

Criteria 6 is not applicable to the proposed project as the work will not result in any permanent loss to wetlands or their respective buffers. Only temporary impacts resulting from the use of timber matting is proposed and all areas will be restored upon completion of the maintenance work.

**7. *In cases where the proposed use is temporary or where construction activity disturbs areas adjacent to the immediate use, the applicant has included a restoration proposal revegetating any disturbed area within the buffer with the goal to restore the site as nearly as possible to its original grade and condition following construction.***

As soon as possible after the completion of structural replacement work, timber matting and all construction debris will be removed from the project ROW and properly disposed of off-site. Stabilization and restoration of disturbed areas/exposed soils will be initiated as timber mats are pulled and structural work is completed. No grading is proposed within wetland areas. Grading within upland areas associated with access or work pads during project construction, if necessary to create a safe and stable work area, will be restored upon project completion to reduce the lasting overall footprint that was required for construction and to limit environmental risk while retaining access and workable platforms for future maintenance needs.

Restoration of disturbed soils within upland areas surrounding newly installed structures will be stabilized with seed and straw mulch. Coconut fiber erosion control blankets in conjunction with seed will be used to stabilize any slopes greater than 3:1. Minimal restoration is anticipated within wetland areas due to the temporary nature of the impacts. Natural re-colonization/re-bound of wetland vegetation within the project ROW is anticipated once timber mats are removed. VHB will visit the project ROW post-construction to assess conditions, provide guidance to work crews on restoration, and to determine whether or not additional promotion of vegetation (seeding) is required. If required, NHDES approved wetland and upland seed mixes will be placed on affected areas to further promote re-growth.





**8. That all required permits shall be obtained from the New Hampshire Department of Environmental Services Water Supply and Pollution Control Division under NH RSA 485-A:17; the New Hampshire Wetlands Board under NH RSA 483-A, and the United States Army Corps of Engineers under Section 404 of the Clean Water Act.**

In accordance with *RSA 482-A:3, XV*, routine utility maintenance work is exempt from the standard wetland permitting process; however, since the proposed project will result in temporary impacts to wetlands, a Utility Maintenance Activity Statutory Permit-by-Notification will be submitted to NHDES as required to cover environmental permitting at the state level. The project also complies with the provisions of a Self-Verification Project under the US Army Corps of Engineers NH General Permit #6: Utility Line Activities, since it involves “The construction, maintenance, relocation, repair, & removal of utility lines” outlined under GP #6(a), and only involves temporary impacts from the placement of timber mats. No permits are required from the NHDES Water Supply and Pollution Control Division.

**Shoreland Protection District Impacts**

A portion of the proposed project will take place within the Town of Exeter Shoreland Protection District as outlined in *Article 9.3.3* of the Town’s Zoning Ordinance. Temporary impacts related to work pad staging associated with the replacement of Structure 166, located west of Captain’s Way, will occur within the 150-foot buffer of an unnamed perennial stream within the Squamscott River HUC 12 sub-watershed (*Article 9.3.3.C.2*). No direct impacts to the banks or bed of this unnamed perennial stream are proposed.

The unnamed perennial stream flows from south to north across the A126 Line ROW between Structures 167 and 166 both proposed for replacement as part of this project. The unnamed perennial stream is classified as Riverine, Unknown Perennial, Unconsolidated Bottom, Mud (R5UB3) and is bordered by Palustrine Scrub-Shrub (PSS) wetland identified as EW-23. The channel is not well defined as it flows through Wetland EW-23 within the limits of the existing ROW.

Due to the location of existing Structure 166 (to be replaced within the limits of an existing established overhead electric utility ROW), temporary impacts within the 150-foot shoreland buffer of the perennial stream are unavoidable. Structure 167, also proposed for replacement, is located outside the 150-foot buffer and therefore will not result in any shoreland district impacts. It is important to note that direct impacts to bed or banks of this perennial stream will be avoided as crews intend to bridge the channel with timber mats during construction. The placement of a timber mat bridge will also allow flow within this channel to move freely during construction.

***Replacement of Structure 166 will result in approximately 7,299 square feet of temporary impact within the 150-foot shoreland buffer of the perennial stream due to the placement of the construction work pad surrounding the structure that is required to accommodate work crew and equipment staging during replacement. However, temporary disturbance associated with the work pad will be entirely located within uplands and erosion control measures will be implemented along the perimeter of the work pad adjacent to the existing wetland and stream resources.***



**Article 9.3.4(G)(2) Conditional Uses - Conditions**

In accordance with the requirements for a Conditional Use Permit, the construction and maintenance of powerlines in the Shoreland Protection District is an allowable use if the conditions found in *Article 9.3.4(G)(2)* are met. Evidence that the proposed project meets these conditions is provided below.

**a. *The proposed use will not detrimentally affect the surface water quality of the adjacent river or tributary, or otherwise result in unhealthy conditions.***

Replacement of Structure 166 along the A126 Transmission Line will occur within the limits of an existing cleared and continuously maintained ROW. Structure 166 will be replaced in-kind (within 10 feet of its existing location) and will not result in any permanent alterations to existing land use and/or landscape composition that could pose a risk to the surface water quality of the perennial stream or the bordering wetland. Structure 166 is located within an upland area and no additional clearing or widening of the ROW is required to replace the structure.

Prior to the commencement of the structure replacement work, crews will install erosion and sediment control barriers in accordance with the Project Plans and NHDES guidance manuals. Selected perimeter erosion and sediment controls including silt fence or wood chip/compost berms/tubes will be installed between the work area and the perennial stream and bordering wetland in order to reduce the risk of sedimentation into these resources which could temporarily impact water quality. Perimeter erosion controls will be inspected and maintained throughout the construction period and will not be removed until the area surrounding Structure 166 is deemed permanently stable based on NHDES guidance. Grading may be necessary immediately surrounding Structure 166 during construction to create a safe and stable work area; however, the limits of grading will be confined to upland areas only within the limits of the structure work pad as shown on the attached Project Plans. This area will be restored upon project completion to reduce the lasting overall footprint that was required for construction and to limit environmental risk while retaining access and workable platforms for future maintenance needs.

**b. *The proposed use will discharge no waste water on site other than that normally discharged by domestic waste water disposal systems and will not involve on-site storage or disposal of hazardous or toxic wastes as herein defined.***

Not applicable – the project does not involve the discharge of waste water and will not require the on-site storage or disposal of hazardous or toxic wastes.

**c. *The proposed use will not result in undue damage to spawning grounds and other wildlife habitat.***

Replacement of Structure 166 will not result in any impacts to spawning grounds as no direct impacts to the banks or bed of the adjacent perennial stream are proposed. The structure replacement work will be confined to an existing cleared and maintained segment of ROW that has been previously disturbed by fill and removal activities associated with the previous construction of the existing transmission lines and structures and ongoing utility maintenance activities.



VHB is currently consulting with the NH Natural Heritage Bureau (NHB) and NH Fish and Game Department regarding the potential presence of state-listed rare plants or animals within the vicinity of the proposed project work. According to a NHB Datacheck Results Letter dated April 12, 2022, NHB issued no comment regarding the potential presence of rare plants or exemplary natural communities as no records exist within proximity to the project.

Records of several rare turtle and snake species as well as the Pied-billed Grebe were identified by NH Fish and Game on the NHB Datacheck Results Letter. VHB intends to work with Eversource to implement the typical protocols relative to avoidance and minimization of these species. This includes the use of wildlife friendly erosion controls, the scheduling of informative trainings with works crews in the field prior to the commencement of work to educate them on the protected status of these species, visual sweeps of project areas prior to the start of construction activities each day, and immediate reporting if any of the listed species are encountered.

**d. *The proposed use complies with the use regulations identified in Article 9.3.4 Exeter Shoreland Protection District Ordinance – Use Regulations and all other applicable sections of this article.***

The project complies with the use regulations identified in *Article 9.3.4* and fits into Conditional Use *Article 9.3.4(G)(1)(c)*, which identifies work along transmission lines and access ways as permissible with a Conditional Use Permit granted by the Planning Board.

**e. *The design and construction of the proposed use will be consistent with the intent of the purposes set forth in Article 9.3.1 Exeter Shoreland Protection District Ordinance – Authority and Purpose.***

The project involves maintenance of existing electric transmission line infrastructure that currently exists within the Shoreland Protection District and does not represent new construction where typically the intent of the purposes set forth in *Article 9.3.1* would need to be addressed. With that said, efforts to maintain and protect the perennial stream and bordering wetland will be pursued while the maintenance work is carried out as previously described above.

## **Floodplains & Floodways**

According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Maps (FIRM), produced for Rockingham County, the project is located within an Area of Minimal Flood Hazard (Zone X) and therefore is not located within the Town of Exeter Floodplain District. The project will not impact any floodplains or floodways.

## **Property Ownership and Abutters**

All proposed work will occur within the limits of an existing transmission line ROW that is either owned in fee or maintained as easement by PSNH. All owners of parcels where impacts to the Wetlands Conservation Overlay District and Shoreland Protection District are to occur, as well as owners of parcels who abut or are located directly across the street from these properties will be notified of the proposed project in accordance with the Town of Exeter's Conditional Use Permit application process. The list of



owners and abutters and the associated tax maps, as well as three copies of abutters labels as required, are included in the Wetlands Conditional Use Permit Application attached.

Due to the location of the work (encompassing both the Wetlands Conservation and Shoreland Protection Districts), one abutter notification is being sent for both applications in accordance with guidance previously provided by the Town of Exeter.

Please do not hesitate to contact me if you have any questions at (603) 391-3944 or kwilkes@vhb.com.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kristopher Wilkes', written in a cursive style.

Kristopher Wilkes, CWS, CPESC  
Project Manager, Energy and Environmental Services

cc: Jeremy Fennell, PSNH

**Attachments:**

**Town of Exeter Conditional Use Application – Wetlands Conservation District Overlay**

Conditional Use Permit Application – 15 copies  
Figure 1 – Project Permitting Plans – 15 copies bound separately  
Representative Site Photographs – Wetlands CUP

**Town of Exeter Conditional Use Application – Shoreland Protection District**

Conditional Use Permit Application – 15 copies  
Figure 1 – Project Permitting Plans – same as Figure 1 in Wetlands CUP (bound separately)  
Representative Site Photographs – Shoreland CUP

Wetlands & Shoreland CUP Abutters List (one copy bound separately)  
Wetlands & Shoreland CUP Abutter Mailing Labels (3 copies bound separately)



# Town of Exeter



## **Planning Board Application for Conditional Use Permit: Wetlands Conservation Overlay District**

*April 2022*



**Town of Exeter**  
**Planning Board Application**  
**Conditional Use Permit: Wetland Conservation Overlay District**

Detailed Proposal including intent, project description, and use of property: (Use additional sheet as needed)  
 Public Service Company of New Hampshire (PSNH) d/b/a Eversource Energy intends to conduct routine maintenance/repair activities along the existing A126 Transmission Line in Exeter. Proposed work includes the replacement of five (5) existing 115-kV transmission structures within the limits of the existing ROW corridor between Route 101 eastbound and the Exeter/Brentwood Town line (just east of Pine Road), and approximately 1,500 feet west of Captain's Way, located to the west of Newfields Road/Route 85. The proposed work is part of PSNH's on-going maintenance program conducted to ensure reliable electric service for their customers. The PSNH 115-kV transmission system is an integral part of the regional power system delivering electricity to customers throughout New England. It is critical that the 115-kV system remain operational without interruption from preventable outages. This Conditional Use Permit Application is being submitted in accordance with *Article 9* of the Town's Zoning Ordinance and is required for the proposed maintenance work to allow for temporary impacts to wetlands and inland streams and their respective buffers protected under the Wetlands Conservation Overlay District (*Article 9.1.3*). Refer to the attached cover letter for additional details.

**Wetland Conservation Overlay District Impact (in square footage):**

Temporary Impact	Wetland:	(SQ FT.)	Buffer:	(SQ FT.)
	<input checked="" type="checkbox"/> Prime Wetlands	<u>3,602</u>	<input type="checkbox"/> Prime Wetlands	<u>18,331</u>
	<input type="checkbox"/> Exemplary Wetlands	_____	<input type="checkbox"/> Exemplary Wetlands	_____
	<input type="checkbox"/> Vernal Pools (>200SF)	_____	<input type="checkbox"/> Vernal Pools (>200SF)	_____
	<input type="checkbox"/> VPD	_____	<input type="checkbox"/> VPD	_____
	<input checked="" type="checkbox"/> PD	<u>3,363</u>	<input checked="" type="checkbox"/> PD	<u>7,381</u>
	<input type="checkbox"/> Inland Stream	_____	<input type="checkbox"/> Inland Stream	_____
Permanent Impact	Wetland:		Buffer:	
	<input type="checkbox"/> Prime Wetlands	_____	<input type="checkbox"/> Prime Wetlands	_____
	<input type="checkbox"/> Exemplary Wetlands	_____	<input type="checkbox"/> Exemplary Wetlands	_____
	<input type="checkbox"/> Vernal Pools (>200SF)	_____	<input type="checkbox"/> Vernal Pools (>200SF)	_____
	<input type="checkbox"/> VPD	_____	<input type="checkbox"/> VPD	_____
	<input type="checkbox"/> PD	_____	<input type="checkbox"/> PD	_____
	<input type="checkbox"/> Inland Stream	_____	<input type="checkbox"/> Inland Stream	_____

List any variances/special exceptions granted by Zoning Board of Adjustment including dates:

N/A

Describe how the proposal meets conditions in **Article 9.1.6.B** of the Zoning Ordinance (attached for reference):

Refer to the attached cover letter.

Refer to the attached abutters list.

**ABUTTERS: PLEASE LIST ALL PERSONS WHOSE PROPERTY IS LOCATED IN NEW HAMPSHIRE AND ADJOINS OR IS DIRECTLY ACROSS THE STREET OR STREAM FROM THE LAND UNDER CONSIDERATION BY THE BOARD. THIS LIST SHALL BE COMPILED FROM THE EXETER TAX ASSESSOR'S RECORDS.**

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Refer to the attached cover letter.

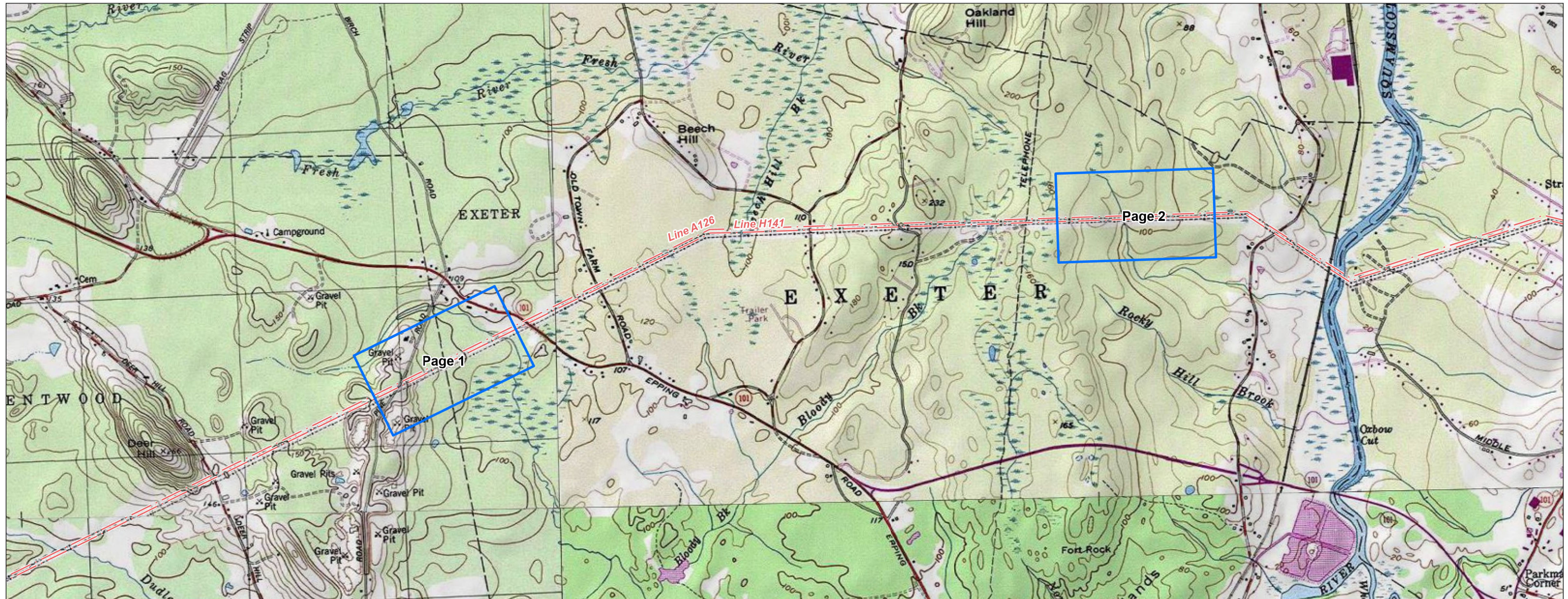
- 9.1.6. B: Conditions: Prior to issuance of a conditional use permit, the Planning Board shall conclude and make a part of the record, compliance with the following criteria:
1. That the proposed use is permitted in the underlying zoning district;
  2. No alternative design which does not impact a wetland or wetland buffer or which has less detrimental impact on the wetland or wetland buffer is feasible;
  3. A wetland scientist has provided an impact evaluation that includes the “functions and values” of the wetland(s), an assessment of the potential project-related impacts and concluded to the extent feasible, the proposed impact is not detrimental to the value and function of the wetland(s) or the greater hydrologic system.
  4. That the design, construction and maintenance of the proposed use will, to the extent feasible, minimize detrimental impact on the wetland or wetland buffer;
  5. That the proposed use will not create a hazard to individual or public health, safety and welfare due to the loss of wetland, the contamination of groundwater, or other reasons;
  6. The applicant may propose an increase in wetland buffers elsewhere on the site that surround a wetland of equal or greater size, and of equal or greater functional value than the impacted wetland
  7. In cases where the proposed use is temporary or where construction activity disturbs areas adjacent to the immediate use, the applicant has included a restoration proposal revegetating any disturbed area within the buffer with the goal to restore the site as nearly as possible to its original grade and condition following construction.
  8. That all required permits shall be obtained from the New Hampshire Department of Environmental Services Water Supply and Pollution Control Division under NH RSA §485-A: 17, the New Hampshire Wetlands Board under NH RSA §483-A, and the United States Army Corps of Engineers under Section 404 of the Clean Water Act.;



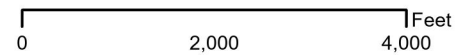
# 2022 - Line A126 - Structure Replacement Project

Exeter, New Hampshire  
Project Plans

Date: April 27, 2022



- Town Boundary
- Overhead Eversource Lines
- Page Index



INDEX OF FIGURES  
Title Sheet / Index Map  
Map Sheets 1-2

NO.	DATE	REVISIONS

PREPARED FOR:



13 Legends Drive  
Hooksett, NH 03106

PREPARED BY:



2 Bedford Farms Drive Suite 200  
Bedford, NH 03110



**Project Plan Notes**

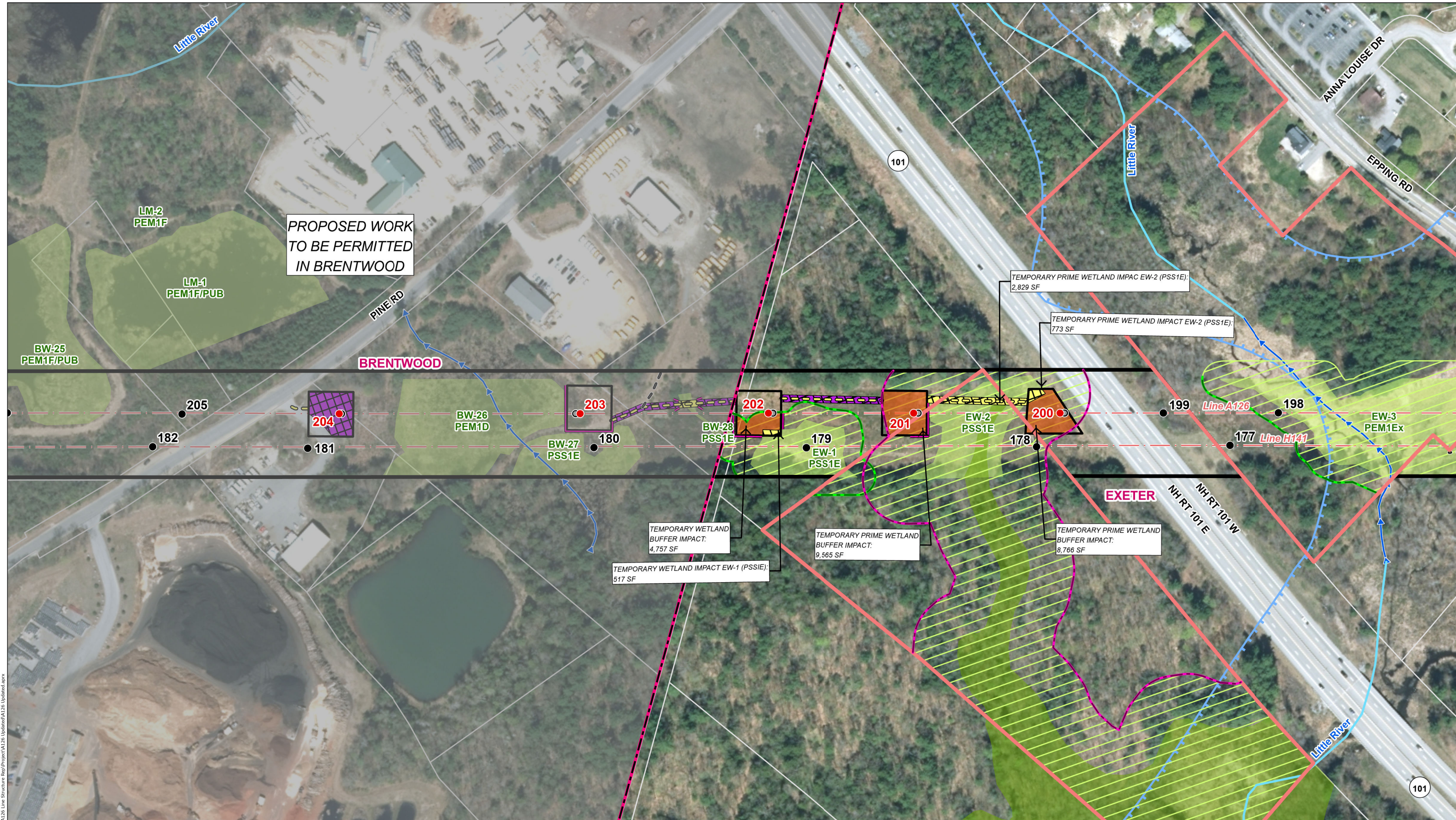
1. This plan set is provided to show jurisdictional impacts and required environmental controls only. Engineering documents should be consulted to determine the scope and location of all other construction activities.
2. Applicant: Public Service Company of New Hampshire, (PSNH) d/b/a Eversource Energy, 13 Legends Drive, Hooksett NH 03106
3. Wetlands were previously delineated along the ROW by others in support of a prior maintenance Line project and have been field reviewed and verified by VHB Wetland Scientists.
4. Wetland delineation/verification was performed to the standards in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0 (January 2012).
5. Hydric soils were reviewed in accordance with Field Indicators for Identifying Hydric Soils in the United States, Version 8.2 published by the Natural Resources Conservation Service, and the Field Indicators for Identifying Hydric Soils in New England, Version 4.0 published by the New England Interstate Water Pollution Control Commission.
6. Dominant wetland vegetation was assessed using the 2018 National Wetland Plant List published by the U.S. Army Corps of Engineers.
7. Wetland classifications follow the USFWS methodology Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979, revised 1985).
8. Wetland function and values were assessed using the Corps Highway Methodology Workbook Supplement (USACOE, 1999).
9. Wetland work was performed utilizing a handheld GPS units capable of submeter accuracy.
10. Proposed construction limits of disturbance are approximate. Contractor is responsible for minimizing earth disturbance, as practicable.
11. The environmental controls shown on these plans may need to be supplemented due to season of work or work methods proposed. Refer to BMP manuals and additional guidance documents, as needed.
12. Erosion and sedimentation control measures shall be installed prior to start of work, shall be maintained, and shall remain in place during construction until all disturbed surfaces are stabilized. Following stabilization, erosion and sedimentation control measures shall be removed off-site and properly disposed.
13. Erosion and sedimentation controls shall be appropriate to the size and nature of the project and to the physical characteristics of the site, including slope, soil type, vegetative cover, and proximity to wetlands or surface waters. The type and installation method of erosion and sediment controls shall be in accordance with the Best Management Practices Manual for Utility Maintenance in and Adjacent to Wetlands and Waterbodies in New Hampshire (March 2019), published by the New Hampshire Department of Natural & Cultural Resources, and Eversource BMP documents as applicable.
14. Temporary stone construction entrances will be used at points of construction ingress/egress from public and private roadways to reduce/eliminate sediment track-out.

15. The selected contractor is responsible for street sweeping at points of ingress/egress from public and private roadways.
16. Selected contractor will be responsible for certifying that all equipment on the project is clean of invasive species prior to arriving onsite. The contractor will also be responsible for cleaning equipment as it is moved within the project to reduce the risk of spreading invasive plant seeds and fragments.
17. Timber swamp matting shown on the plans represents the square footage and alignment of matting which is required and has been approved by the regulators. Additional layers of mats may be required at certain locations. Any increase in the number, change in alignment, or decision not to use swamp mats must be approved by the Permittee or an authorized representative of the Permittee(s) and, as appropriate, regulators.
18. Any excavated material shall be placed outside of jurisdictional areas or removed from the site.
19. If dewatering is required, dewatering basins shall be placed in uplands areas and discharge water into upland areas.
20. Areas of soil disturbance shall be stabilized following construction in accordance with the BMP Manual.



			<b>EVERSOURCE</b> ENERGY	
			<b>2022 - Line A126 - Structure Replacement Project</b>	
			Exeter, NH	
			Date: April 26, 2022	
NO.	DATE	REVISIONS		





PROPOSED WORK  
TO BE PERMITTED  
IN BRENTWOOD

TEMPORARY PRIME WETLAND IMPAC EW-2 (PSS1E):  
2,829 SF

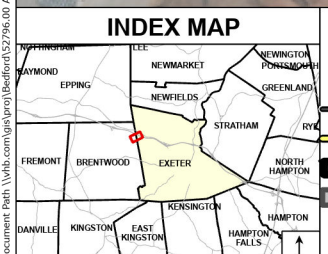
TEMPORARY PRIME WETLAND IMPACT EW-2 (PSS1E):  
773 SF

TEMPORARY WETLAND  
BUFFER IMPACT:  
4,757 SF

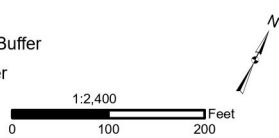
TEMPORARY PRIME WETLAND  
BUFFER IMPACT:  
9,565 SF

TEMPORARY PRIME WETLAND  
BUFFER IMPACT:  
8,766 SF

TEMPORARY WETLAND IMPACT EW-1 (PSS1E):  
517 SF



- Existing Structure
- Existing Structure to be Removed
- Proposed Structure Replacement
- Existing Access
- Proposed Access
- Existing Right-of-Way
- Proposed work to be permitted in Brentwood
- ▭ Workpad
- ▨ Temporary Construction Matting
- ▨ Upland Constriction Matting / Tracked Equipment
- Sediment Control Barrier
- Overhead Eversource Lines
- ▨ Previously Delineated Wetland Resource Area
- ▨ FEMA 100-Year Flood Zone
- ▨ Temporary Wetland District Impact
- ▨ Temporary Shoreland District Impact
- ▨ Wetland Conservation District
- ▨ Shoreland Conservation District
- ▨ NHDES Prime Wetlands
- ▨ Watercourse (Non-Delineated)
- ▨ Delineated Stream
- ▨ 40' Wetlands Buffer
- ▨ 100' Prime Wetland Buffer
- ▨ 150' Shoreland Buffer
- ▨ Town Boundary
- ▨ Eversource Owned Property
- ▨ Parcel Boundary



NO.	DATE	REVISIONS

**EVERSOURCE ENERGY**

**2022 - Line A126  
Structure Replacement Project**

EXETER, NH	MAP SHEET 1 of 2
Date: April, 2022	

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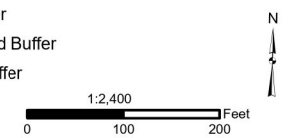




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● Existing Structure	Workpad	Previously Delineated Wetland Resource Area	NHDES Prime Wetlands	Town Boundary
● Existing Structure to be Removed	Temporary Construction Matting	FEMA 100-Year Flood Zone	Watercourse (Non-Delineated)	Eversource Owned Property
● Proposed Structure Replacement	Upland Constriction Matting / Tracked Equipment	Temporary Wetland District Impact	Delineated Stream	Parcel Boundary
— Existing Access	Sediment Control Barrier	Temporary Shoreland District Impact	40' Wetlands Buffer	
— Proposed Access	— Overhead Eversource Lines	Wetland Conservation District	100' Prime Wetland Buffer	
— Existing Right-of-Way		Shoreland Conservation District	150' Shoreland Buffer	
— Proposed work to be permitted in Brentwood				



NO.	DATE	REVISIONS

**EVERSOURCE ENERGY**

**2022 - Line A126  
Structure Replacement Project**

EXETER, NH	MAP SHEET 2 of 2
Date: April, 2022	



**Representative Site Photos – Exeter Wetland CUP  
A126 Line - Structure Replacements, Exeter NH – April 27, 2022**



Photo 1. View northwest at existing Structure 202 proposed for replacement. Photo depicts the approximate location of temporary impacts within Wetland EW-1 and its associated 40' buffer resulting from timber matting and the structure work pad.



Photo 2. View northeast at Wetland EW-2 designated as NHDES Prime Wetland located just west of Route 101 eastbound.



**Representative Site Photos – Exeter Wetland CUP  
A126 Line - Structure Replacements, Exeter NH – April 27, 2022**



Photo 3. View northwest at existing Structure 201 proposed for replacement. Photo depicts the approximate location of temporary impacts within the 100' prime wetland buffer of Wetland EW-2 associated with the structure work pad.



Photo 4. View east at location of proposed timber mat access road through Wetland EW-2 (NHDES Prime Wetland) required in order to access and replace Structure 200 (depicted in photo background).



**Representative Site Photos – Exeter Wetland CUP  
A126 Line - Structure Replacements, Exeter NH – April 27, 2022**



Photo 5. View southeast at existing Structure 200 proposed for replacement. Photo depicts approximate location of temporary impact to Wetland EW-2 and its associated 100' prime wetland buffer resulting from timber matting and the structure work pad.



Photo 6. View west at location of proposed timber matting (temporary impact) across a narrow finger of Wetland EW-23 just southeast of existing Structure 166 proposed for replacement.



**Representative Site Photos – Exeter Wetland CUP  
A126 Line - Structure Replacements, Exeter NH – April 27, 2022**



Photo 7. View northeast at existing Structure 166 proposed for replacement. Photo depicts approx. location of temporary impacts within the 40' wetland buffer of Wetland EW-23 located immediately west of the structure.



Photo 8. View west at location of proposed timber mat access road through Wetland EW-23 required in order to access and replace Structure 167 (depicted in photo background - right).

# Town of Exeter



## **Planning Board Application for Conditional Use Permit: Shoreland Protection District**

*April 2022*





# Town of Exeter Planning Board Application

## Conditional Use Permit: Shoreland Protection District In accordance with Zoning Ordinance Article: 9.3

### SUBMITTAL REQUIREMENTS:

**(see Conservation Commission and Planning Board meeting dates and submission deadlines)**

1. One (1) electronic copy of full application, including plans (color copy if available)
2. Fifteen (15) copies of the Application
3. Fifteen (15) 11"x17" and three (3) full sized copies of the plan which must include:
  - Existing Conditions
    - a. Property Boundaries
    - b. Edge of Shoreland and associated Buffer (Shoreland Protection District – SPD)
    - c. Structures, roads/access ways, parking, drainage systems, utilities, wells and wastewater disposal systems and other site improvements
  - Proposed Conditions
    - a. Edge of Shoreland and Shoreland Buffers and distances to the following:
      - i. Edge of Disturbance
      - ii. Structures, roads/access ways, parking, drainage systems, utilities, wells and wastewater disposal systems and other site improvements
    - b. Name and phone number of all individuals whose professional seal appears on the plan
4. If applicant and/or agent is not the owner, a letter of authorization must accompany this application
5. Supporting documents i.e. Letters from the Department of Environmental Services, Standard Dredge and Fill Application and Photos of the property
6. A Town of Exeter Assessors list of names and mailing addresses of all abutters

**Required Fees:**

Planning Board Fee: **\$50.00** Abutter Fee: **\$10.00** Recording Fee (if applicable): **\$25.00**

**Planning Board Fee: \$50.00 Abutter Fee: N/A - Notified under Wetlands CUP Application Recording Fee: N/A TOTAL: \$50.00**

The Planning Office must receive the completed application, plans and fees on the day indicated on the Planning Board Schedule of Deadlines and Public Hearings.

APPLICANT	Name: Public Service Company of New Hampshire d/b/a Eversource Energy
	Address: 13 Legends Drive, Hooksett NH 03106
	Email Address: jeremy.fennell@eversource.com
	Phone: 603-634-3396
PROPOSAL	Address: Existing Electric Transmission Line Right-of-Way
	Tax Map # <u>see attached</u> Lot# <u>see attached</u> Zoning District: RU, R1
	Owner of Record: Existing Electric Transmission Line Right-of-Way Easement
Person/Business performing work outlined in proposal	Name: Public Service Company of New Hampshire d/b/a Eversource Energy
	Address: 13 Legends Drive, Hooksett NH 03106
	Phone: 603-634-3396
Professional that delineated wetlands	Name: Kristopher Wilkes, VHB (CWS #288)
	Address: 2 Bedford Farms Drive, Suite 200 - Bedford, NH 03110
	Phone: 603-391-3944

**Town of Exeter**  
**Planning Board Application**  
**Conditional Use Permit: Shoreland Protection District**

**Detailed Proposal including intent, project description, and use of property: (Use additional sheet as needed)**

Public Service Company of New Hampshire (PSNH) d/b/a Eversource Energy intends to conduct routine maintenance/repair activities along the existing A126 Transmission Line in Exeter. Proposed work includes the replacement of five (5) existing 115-kV transmission structures within the limits of the existing ROW corridor between Route 101 eastbound and the Exeter/Brentwood Town line (just east of Pine Road), and approximately 1,500 feet west of Captain's Way, located to the west of Newfields Road/Route 85. The proposed work is part of PSNH's on-going maintenance program conducted to ensure reliable electric service for their customers. The PSNH 115-kV transmission system is an integral part of the regional power system delivering electricity to customers throughout New England. It is critical that the 115-kV system remain operational without interruption from preventable outages. This Conditional Use Permit Application is being submitted in accordance with *Article 9* of the Town's Zoning Ordinance and is required for the proposed maintenance work to allow for temporary impacts within the 150 foot buffer of an unnamed perennial stream located within the Squamscott River watershed protected under the Shoreland Protection District (*Article 9.3.3*). Refer to the attached cover letter for additional details.

**Shoreland Protection District Impact (in square footage):**

Water Body	Perennial stream within Squamscott River watershed
<b>Temporary Impact</b>	<input type="checkbox"/> 300 Foot SPD _____ <input checked="" type="checkbox"/> 150 foot SPD <u>7,299 SF</u> <input type="checkbox"/> SPD Building Setback _____ <input type="checkbox"/> 75 Vegetative Buffer _____
<b>Permanent Impact</b>	<input type="checkbox"/> 300 Foot SPD _____ <input type="checkbox"/> 150 foot SPD _____ <input type="checkbox"/> SPD Building Setback _____ <input type="checkbox"/> 75 Vegetative Buffer _____
<b>Impervious Lot Coverage</b>	SF of Lot within District _____ SF of Impervious within District _____ % of Impervious within District _____

List any variances/special exceptions granted by Zoning Board of Adjustment including dates:

N/A

Describe how your proposal meets the conditions of Article 9.3.4.G.2 of the Zoning Ordinance (attached for reference):

Refer to the attached cover letter.



Refer to the attached abutters list included with the Wetlands CUP Application

**ABUTTERS: PLEASE LIST ALL PERSONS WHOSE PROPERTY IS LOCATED IN NEW HAMPSHIRE AND ADJOINS OR IS DIRECTLY ACROSS THE STREET OR STREAM FROM THE LAND UNDER CONSIDERATION BY THE BOARD. THIS LIST SHALL BE COMPILED FROM THE EXETER TAX ASSESSOR'S RECORDS.**

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**Please attach additional sheets if needed**

**Conditional Use Permit Criteria**  
**Shoreland Protection District**

9.3.4 G Conditional Uses: Refer to the attached cover letter.

2. The Planning Board may grant a Conditional Use Permit for those uses listed above only after written findings of fact are made which have been reviewed by technical experts from the Rockingham Conservation District, if required by the Planning Board, at the cost of the developer, provided that all of the following are true:

- a. The proposed use will not detrimentally affect the surface water quality of the adjacent river or tributary, or otherwise result in unhealthful conditions.
- b. The proposed use will discharge no waste water on site other than that normally discharged by domestic waste water disposal systems and will not involve on-site storage or disposal of hazardous or toxic wastes as herein defined.
- c. The proposed use will not result in undue damage to spawning grounds and other wildlife habitat.
- d. The proposed use complies with the use regulations identified in Article 9.3.4 Exeter Shoreland Protection District Ordinance – Use Regulations and all other applicable sections of this article.
- e. The design and construction of the proposed use will be consistent with the intent of the purposes set forth in Article 9.3.1 Exeter Shoreland Protection District Ordinance – Authority and Purpose.

**Representative Site Photos – Exeter Shoreland CUP  
H141 Lines – Structure Replacements, Exeter NH – April 27, 2022**



Photo 1. View northeast at existing Structure 166 proposed for replacement. Photo depicts the approximate location of temporary impacts associated with the structure work pad within the 150 foot shoreland buffer of an unnamed perennial stream that intersects the Project ROW just west of the structure.



Photo 2. View northeast at Wetland EW-23. The unnamed perennial stream is not well defined as it flows through this wetland and across the Project ROW. Structure 166 proposed for replacement is depicted in the photo background.



**Representative Site Photos – Exeter Shoreland CUP  
H141 Lines – Structure Replacements, Exeter NH – April 27, 2022**



Photo 3. View north at the unnamed perennial stream as it flows outside the existing limits of the Project ROW.



## Eversource A126 Line Structure Replacements

### Abutters List: Exeter, NH

Abutter #	Parcel #	Property Address	Owner Name	Co-Owner Name	Owner Mailing Address 1	Owner City	Owner State	Owner Zip
1	020-007-0000	The Oaklands	Town of Exeter		10 Front Street	Exeter	NH	03833
	025-001-0000	Newfields Rd	Town of Exeter		10 Front Street	Exeter	NH	03833
	020-008-0000	The Oaklands	Town of Exeter		10 Front Street	Exeter	NH	03833
	020-003-0000	Oaklands Rd	Town of Exeter		10 Front Street	Exeter	NH	03833
	020-002-0000	The Oaklands	Town of Exeter		10 Front Street	Exeter	NH	03833
	020-001-0000	Off Newfields Rd	Town of Exeter		10 Front Street	Exeter	NH	03833
	030-004-0000	Epping Rd	Town of Exeter		10 Front Street	Exeter	NH	03833
2	024-001-0000	54 Newfields Rd	Limberg Randall Keith II		54 Newfields Rd	Exeter	NH	03833
3	024-003-0000	Newfields Rd	Captains Meadow Homeowners		PO Box 544	Exeter	NH	03833
4	021-002-0000	22 Captains Way	Michael A Mills		22 Captains Way	Exeter	NH	03833
5	024-015-0000	24 Captains Way	Ashley Mitchell		24 Captains Way	Exeter	NH	03833
6	021-032-0000	21 Captains Way	Richard J Bertani		21 Captains Way	Exeter	NH	03833
7	021-031-0000	19 Captains Way	Elizabeth C Andrada Revocable Trust		19 Captains Way	Exeter	NH	03833
8	021-030-0000	17 Captains Way	Francis and Richard Nolan		17 Captains Way	Exeter	NH	03833
9	030-010-0000	Epping Rd	State of New Hampshire		PO Box 483	Concord	NH	03302
10	030-002-0001	Epping Rd	Carl E Bouchard		PO Box 219	Exeter	NH	03833
11	030-009-0000	Epping Rd	Properties Inc		PO Box 270	Hartford	CT	06141-0270
12	030-008-000	Epping Rd	Silver Granada Realty LLC		131 Pine Rd	Brentwood	NH	03833
	029-010-0001	Pine Rd	Silver Granada Realty LLC		131 Pine Rd	Brentwood	NH	03833

Notes:

Color indicates parcels where utility maintenance work or associated access is proposed. Parcels depicted in red on attached tax maps represent abutting parcels.

Town of Exeter  
10 Front Street  
Exeter, NH 03833

Randall Keith Limberg II  
54 Newfields Rd  
Exeter, NH 03833

Captains Meadow Homeowners  
PO Box 544  
Exeter, NH 03833

Michael A Mills  
22 Captains Way  
Exeter, NH 03833

Ashley Mitchell  
24 Captains Way  
Exeter, NH 03833

Richard J Bertani  
21 Captains Way  
Exeter, NH 03833

Elizabeth C Andrada Revocable Trust  
19 Captains Way  
Exeter, NH 03833

Francis and Richard Nolan  
17 Captains Way  
Exeter, NH 03833

State of New Hampshire  
PO Box 483  
Concord, NH 03302

Carl E Bouchard  
PO Box 219  
Exeter, NH 03833

Properties Inc  
PO Box 270  
Hartford, CT 06141-0270

Silver Granada Realty LLC  
131 Pine Rd  
Brentwood, NH 03833



# TOWN OF EXETER

## *Planning and Building Department*

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 • FAX 772-4709

[www.exeternh.gov](http://www.exeternh.gov)

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**Date:** May 19, 2022  
**To:** Planning Board  
**From:** Dave Sharples, Town Planner  
**Re:** Friends of Coastal Waters PB Case #22-8

As discussed at the May 12<sup>th</sup>, 2022 meeting, the Town received correspondence from F.X. Bruton, III, dated May 11, 2022, putting the Town on notice that in accordance with NH RSA 674:54, Friends of Coastal Waters, a New Hampshire 501(c)(3) non-profit organization, d/b/a Coastal Waters Chartered Public School intends to occupy the existing building at 2 Holland Way for use as a publicly funded elementary, middle and public high school. The subject property is located in the CT-Corporate Technology Park zoning district and is identified as Tax Map Parcel #69-2.

The Board discussed the letter and decided to hold a hearing in accordance with the RSA. The Board discussed abutter notification but the RSA is silent on this. However, the applicant agreed to pay for the notice via first class mail to abutters that were sent out earlier this week. It also has been noticed at the Town offices and Library.

As discussed at the last meeting, the board may issue nonbinding comments to the applicant. The proposed use is a "governmental use" which is exempt from local land use regulations. A copy of the letter and supporting documents are enclosed for your review.

Thank You.

Enclosures

FRANCIS X. BRUTON, III  
CATHERINE A. BERUBE  
JOSHUA P. LANZETTA

OF COUNSEL  
JAMES H. SCHULTE

# Bruton & Berube, PLLC

ATTORNEYS AT LAW

601 Central Avenue  
Dover, NH 03820

TEL (603) 749-4529  
(603) 743-6300  
FAX (603) 343-2986

[www.brutonlaw.com](http://www.brutonlaw.com)

May 11, 2022

VIA ELECTRONIC MAIL [dsharples@exeternh.gov](mailto:dsharples@exeternh.gov)

Mr. David Sharples, Town Planner  
Town of Exeter  
10 Front Street  
Exeter, NH 03833

**Re:** Friends of Coastal Waters  
**Owner:** CPEX Park LLC  
**Property:** 2 Holland Way, Exeter, NH  
**Map/Lot:** Tax Map 69, Lot 2  
**Zone:** Corporate/Technology Park Zone ("C/T Zone")

Dear Mr. Sharples:

As you may be aware, this office represents the Friends of Coastal Waters, a New Hampshire 501(c)(3) non-profit organization, d/b/a Coastal Waters Chartered Public School ("Coastal Waters"), which is a publicly funded elementary, middle and public high school. Coastal Waters' charter was approved by the New Hampshire Board of Education on January 13, 2022, pursuant to NH RSA 194-B, *et seq.* This approval provides the school with "public school" status and is considered a "governmental use," pursuant to the provisions of NH RSA 674:54, *et seq.*

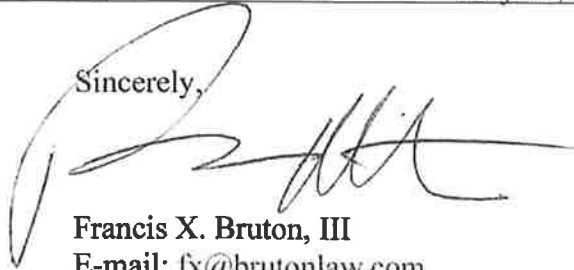
Coastal Waters anticipates opening in the Fall of 2022 with 230 students, drawn from Exeter and the Seacoast region, with a growth of student population up to 320 students as permitted by its charter. The grade levels at Coastal Waters will be grade K through grade 12. Coastal Waters does not currently operate, as it has been recently chartered, however, it has found the ideal location for its facility at 2 Holland Way in Exeter. Coastal Waters will not be making any exterior renovations to the existing building, but will reconfigure some walls within the existing building.

Pursuant to NH RSA 674:54, II, we are providing notice of the above. In addition, we have enclosed plans and specifications related to the anticipated operations of the school and internal reconfiguration of some of the walls of the building.

We anticipate that this notice is sufficient in order for Coastal Waters to move forward as described herein and as set forth on the enclosed plans. We ask that you confirm that such is the case. Should additional review be necessary, please contact me at your earliest convenience.



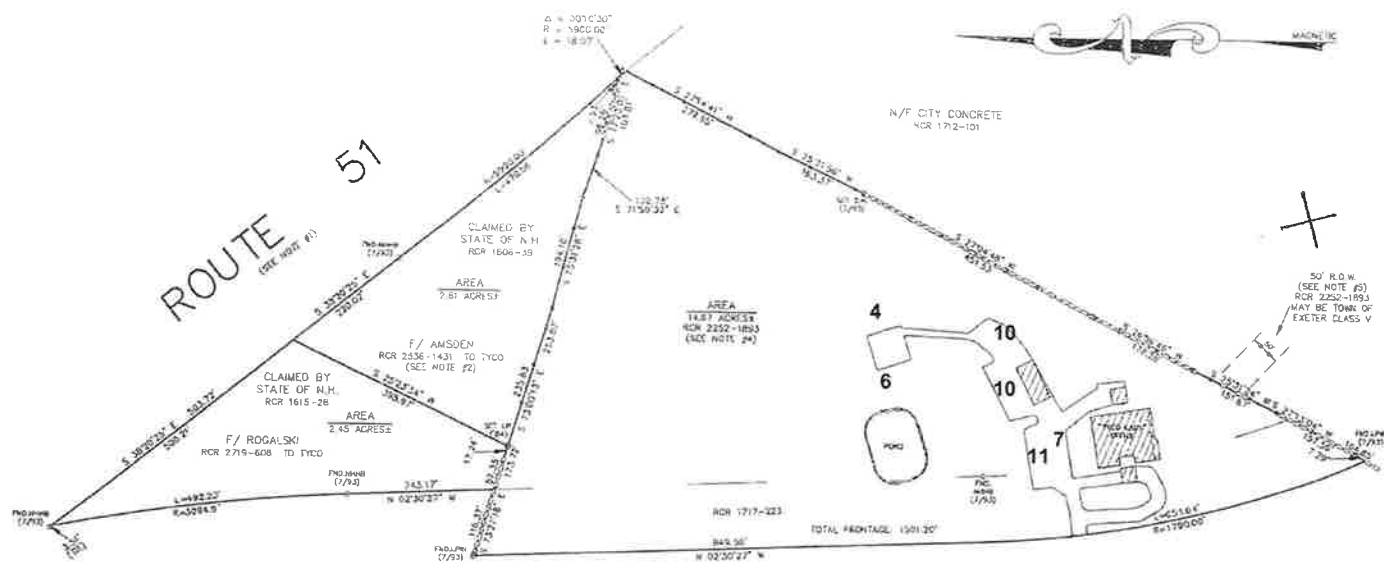
Sincerely,

A handwritten signature in black ink, appearing to read 'Francis X. Bruton, III', written over the word 'Sincerely,'.

Francis X. Bruton, III  
E-mail: [fx@brutonlaw.com](mailto:fx@brutonlaw.com)

FXB/mas  
Enclosures

cc: Friends of Coastal Waters  
CPEX Park LLC  
Civilworks of New England  
Mr. Douglas Eastman, Building Inspector / Code Enforcement Officer



**HOLLAND WAY f/k/a SPUR ROAD**  
(SEE NOTE #3 & 5)

HAMPTON ROAD

**NOTES**

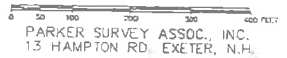
1. SEE "NEW HAMPSHIRE HIGHWAY LAYOUT PROJECT NO. E81" 020-102 SHEETS 33 & 34 OF 102 SHEETS.
2. SEE "PLAN OF LAND FOR TYCO LABORATORIES, INC. IN EXETER, N.H." SCALE: 1"=50' - JULY 1984 - PARKER SURVEY ASSOC., INC. JOB #2433
3. SEE "SUBDIVISION OF LAND FOR J. ARTHUR TUTTS JR. IN EXETER, N.H." SCALE: 1"=100' - MAY 1984 - PARKER SURVEY ASSOC., INC. JOB #2435
4. SEE "PLAN OF LAND TYCO LABORATORIES, INC. N.H. ROUTE 101 BYPASS COUNTY OF ROCKINGHAM, EXETER, N.H. TPE ASSOC. 3-25-78
5. SEE "NEW HAMPSHIRE HIGHWAY LAYOUT PROJECT NO. 020(1) SHEET 8 & 9 OF 72 RCR 02922 - 3 & 4
6. SEE RCR 2264-802 EASEMENT TO EXETER - HAMPTON ELEC. CO.

**LEGEND**

- |       |                       |
|-------|-----------------------|
| FND   | FOUND                 |
| I.P.  | IRON PIPE             |
| LPIN  | IRON PIN              |
| ---   | FENCE                 |
| ----- | STONE WALL            |
| ----- | REMAINS OF STONE WALL |
| ----- | N.H. HIGHWAY BOUND    |
| D.H.  | DRILL HOLE            |
| S.B.  | STONE BOUND           |



PLAT OF LAND  
FOR  
**TYCO LABORATORIES, INC.**  
IN  
**EXETER, N.H.**  
SCALE 1"=100' FEB 1995



PARKER SURVEY ASSOC., INC.  
1.5 HAMPTON RD. EXETER, N.H.



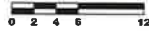


Black - walls  
 High light  
 Construction - remove wall

— Walls to be built

#1 - Rest room  
 - make single  
 Stall restroom

**2 HOLLAND WAY**  
 EXETER, NEW HAMPSHIRE  
 FIRST FLOOR PLAN







- Walls
- Walls to be built
- Walls to be removed (yellow highlight)

## 2 HOLLAND WAY

EXETER, NEW HAMPSHIRE  
SECOND FLOOR PLAN

