



City of Keene Planning Board

AGENDA - AMENDED

Monday, October 28, 2024 6:30 PM City Hall, 2nd Floor Council Chambers

- I. **Call to Order** – Roll Call
- II. **Minutes of Previous Meeting** – September 23, 2024
- III. **Final Vote on Conditional Approvals**
- IV. **Public Hearings**
 - a. **PB-2024-13 – 2-Lot Subdivision – Habitat for Humanity, 0 Old Walpole Rd** – Applicant Monadnock Land Planning, on behalf of owner Monadnock Habitat for Humanity Inc., proposes to subdivide the ~7.18-ac parcel at 0 Old Walpole Rd (TMP #503-005-000) into two lots ~2.35-ac and ~4.83-ac in size. The parcel is located in the Rural District.
 - b. **PB-2024-14 – Cottage Court Conditional Use Permit, Hillside Protection Conditional Use Permit, & Major Site Plan – Timberlane Woods Development, 0 Drummer Rd** - Applicant Fieldstone Land Consultants, on behalf of owner Christopher Farris, proposes a Cottage Court Development consisting of 6 buildings and a total of 36 units on the parcel at 0 Drummer Rd (TMP #515-015-000). A Hillside Protection Conditional Use Permit is requested for impacts to steep slopes. The parcel is ~13.1-ac in size and is located in the Low Density District.
- V. **Advice & Comment**
 - a. **Cottage Court Development & Surface Water CUP – 0 Court St, TMP #228-016-000** – Fieldstone Land Consultants, on behalf of owner Guitard Homes LLC, is seeking input from the Planning Board regarding a potential Cottage Court Development & Surface Water Conditional Use Permit (CUP). The parcel is located in the Low Density District.
- VI. **Master Plan Update** (<https://keenemasterplan.com/>)
- VII. **Training on Site Development Standards** – Snow Storage & Removal, Landscaping, & Screening
- VIII. **Staff Updates**
- IX. **New Business**
- X. **Upcoming Dates of Interest**
 - Joint Committee of the Planning Board and PLD – **Tuesday**, November 12th, 6:30 PM
 - Planning Board Steering Committee – November 12th, 11:00 AM
 - Planning Board Site Visit – November 20th, 8:00 AM – **To Be Confirmed**
 - Planning Board Meeting – November 25th, 6:30 PM

1 **City of Keene**
2 **New Hampshire**

3
4
5 **PLANNING BOARD**
6 **MEETING MINUTES**
7

8 **Monday, September 23, 2024**

6:30 PM

**Council Chambers,
City Hall**

Members Present:

Harold Farrington, Chair
Roberta Mastrogiovanni, Vice Chair
Mayor Jay V. Kahn
Councilor Michael Remy
Armando Rangel
Ryan Clancy
Kenneth Kost
Sarah Vezzani
Michael Hoefler, Alternate (Voting)
Stephon Mehu, Alternate

Staff Present:

Jesse Rounds, Community Development
Director
Mari Brunner, Senior Planner
Megan Fortson, Planner

Members Not Present:

Tammy Adams, Alternate
Randyn Markelon, Alternate

9
10 **I) Call to Order – Roll Call**

11
12 Chair Farrington called the meeting to order at 6:30 PM and a roll call was taken. Mr. Michael
13 Hoefler, Alternate, was invited to participate in the meeting as a voting member.

14
15 **II) Minutes of Previous Meeting – August 26, 2024**

16
17 A motion was made by Roberta Mastrogiovanni to approve the August 26, 2024 meeting minutes.
18 The motion was seconded by Councilor Michael Remy and was unanimously approved.

19
20 **III) Final Vote on Conditional Approvals**

21
22 Chair Farrington stated that as a matter of practice, the Board will now issue a final vote on all
23 conditionally approved plans after all of the “conditions precedent” have been met. This final vote
24 will be the final approval and will start the 30-day appeal clock. The Chair asked if there were any
25 applications tonight that were ready for a final vote.

26
27 Senior Planner, Mari Brunner, stated that there were no applications ready for final vote.

28
29 **IV) Public Hearings**

30 **a. PB-2024-09 – Cottage Court Conditional Use Permit – 30 High St – Applicant Nancy**
31 **M. Clark Esq., on behalf of owner Redion Kadilliu, proposes the conversion of the**
32 **existing two-unit building at 30 High St (TMP #549-065-000) into three units. The parcel**
33 **is 0.17-ac in size and is located in the High Density District.**

34
35 A. Board Determination of Completeness

36
37 Planner, Megan Forston, addressed the Board and stated that the Applicant has requested
38 exemptions from submitting separate existing and proposed conditions plans, a grading plan,
39 landscaping plan, lighting plan, elevations, a drainage report, soil analysis, historic evaluation,
40 screening analysis, and architectural & visual appearance analysis. After reviewing each request,
41 staff have made the preliminary determination that the requested exemptions would have no
42 bearing on the merits of the application and recommend that the Board grant the requested
43 exemptions and accept the application as complete.

44
45 A motion was made by Roberta Mastrogiovanni to accept the application, PB-2024-09, as
46 complete. The motion was seconded by Mayor Kahn and was unanimously approved

47
48 B. Public Hearing

49
50 Mr. Redion Kadilliu, owner of 30 High Street, addressed the Board next. Mr. Kadilliu stated the
51 property before the Board is currently a duplex. The upstairs unit has 5 bedrooms and two
52 bathroom and occupies the second and third floors of the building. The attic space has been
53 converted into a livable space and it was merged into one large unit. The plan in the future would
54 be to split this into two units, so each floor will be a separate unit. The number of bedrooms will
55 not change. The second floor will be a three-bedroom unit and the attic will be a two-bedroom
56 unit. Mr. Kadilliu stated that his plan is to add a kitchen to the attic to make the apartment
57 complete. This concluded his presentation.

58
59 Chair Farrington asked about access to the third floor. Mr. Kadilliu stated there are already two
60 forms of egress as there are two staircases that can be used to access the third floor. He indicated
61 that there is a shared hallway, which has access to the second floor apartment, and there is a spiral
62 staircase that goes into the attic, which has a separate entrance.

63
64 Councilor Remy cautioned the Board about addressing issues that related to building code. Ms.
65 Brunner noted that what the Planning Board is reviewing tonight is a change of use from two units
66 to three units. The property owner has stated there will not be any changes to the exterior of the
67 building as a result of this change.

68
69 Mayor Kahn asked whether this application would go through any conditional review that will
70 take place. Ms. Forston stated that the recommended conditions of approval were included in the
71 staff report. She noted that the two of the conditions of approval are the ones that are usually
72 included as part of all conditional approvals, which include having the owner sign the final plans
73 and submitting five paper copies of the final plans. However, there is one specific to this
74 application regarding arborvitae that the property owner is going to be installing. The Mayor asked
75 whether the Fire Department will be reviewing the staircase for conformity. Ms. Forston stated

76 that the Fire Department will be included as part of the review process when a building permit
77 application is submitted because. Planning staff will also be included in that review process and
78 the Plans Examiner will review the proposal for compliance with the applicable building codes.
79

80 Ms. Forston addressed the Board next and noted that this parcel is owned by Redion Kadilliu and
81 is located at 30 High Street in north central Keene, approximately 300 feet west of Washington
82 Street and Franklin Elementary School. The existing use is a two-family dwelling with a three-
83 bedroom unit on the first floor and a five-bedroom unit on the second and third floors. Notable
84 features on the site include a small, detached barn located at the end of the existing driveway and
85 parking area. She noted that uses adjacent to the property include a mix of single-family, two-
86 family, and multi-family uses.
87

88 The parcel itself is approximately 0.17 acres in size, which is just above 7,400 square feet total.
89 The property is located in the High Density District. The owner is proposing to convert the existing
90 building into a three-unit building by converting the five bedroom apartment on the second and
91 third floors into two separate units. Ms. Forston stated although this lot does not meet the minimum
92 lot size required for three dwelling units in the High Density District, this use is allowed through
93 the new Cottage Court Conditional Use Permit (CUP) process. She noted that because fewer than
94 5 units are proposed, the project does not meet the threshold for Major Site Plan Review.
95

96 Ms. Forston stated staff performed a preliminary determination of regional impact and did not feel
97 the project met the threshold for regional impact.
98

99 She next reviewed the Cottage Court CUP standards, which are outlined under Article 17 of the
100 Land Development Code (LDC), and the applicable Site Development Standards outlined under
101 Article 21. The development is proposed to be on a single parcel of land with a property
102 management entity. That standard appears to be met.
103

104 Dimensional Requirements – The table in the staff report shows the required dimensional standards
105 for a Cottage Court Development (CCD) in the High Density District as well as the dimensional
106 standards for this specific application. The existing building was constructed around 1870 and has
107 two apartments with approximately 3,000 total square feet of gross floor area. The narrative states
108 that the building exterior will remain unchanged and all renovations will take place within the
109 existing building envelope. While the structure does not comply with the 15 foot front or 10 foot
110 side setbacks, these are existing nonconformities and no changes are proposed to the building or
111 site that would increase these nonconformities.
112

113 The setback of the building from the road matches the established building line along the road,
114 which, is allowed within the Cottage Court regulations. Additionally, the structure blends in with
115 the established development patterns in the neighborhood and will continue to do so after its
116 conversion to three units. This standard appears to be met.
117

118 In regards to the dwelling unit size, Ms. Forston stated the Cottage Court standards require that the
119 maximum average size of a unit can be 1,250 square feet of gross floor area and the maximum
120 building footprint can be 900 square feet per unit. The proposed units would average
121 approximately 884 square feet of gross floor area, so this standard appears to be met.

122
123 Parking – The standard requires a minimum of one parking space per unit and a maximum of one
124 parking space per bedroom. The applicant is proposing three apartments with a total of eight
125 bedrooms and eight parking spaces. To minimize the visibility of the parking area from High
126 Street, which is the adjacent public right-of-way, the property owner is proposing to install three
127 arbor vitae. The narrative states that the arborvitaes will be three feet tall at planting and will reach
128 up to 15 feet tall at maturity.

129
130 Planning staff is recommending that the Board include a precedent condition of approval related
131 to the submittal of a security to cover the cost of this landscaping to ensure its health - that standard
132 appears to be met.

133
134 Driveways - The project narrative states that the parking area is proposed to be repaved and
135 restriped in its existing configuration. The driveway is currently 20 feet wide at its entrance, which
136 will allow for the flow of two way traffic - that standard appears to be met.

137
138 Screening – The standard states that either a six foot tall fence or landscaped buffer is required for
139 screening. The subject parcel directly abuts two single-family residences to the south and east, and
140 a two-family residence to the southeast. The property owner is proposing to use an existing fence
141 that runs along the southern portion of the eastern property boundary. There is also an existing
142 fence that runs along most of the southern portion of the eastern property line. At the northern
143 portion of the eastern property boundary, there is going to be a total of seven arborvitae installed
144 to offer privacy between this building and the adjacent single-family home directly to the east. In
145 terms of the southern property line, there is an existing fence and barn which appear to provide
146 sufficient screening - this standard appears to be met

147
148 Ms. Forston addressed the applicable Site Development Standards.

149
150 Snow storage – Snow will be moved to the southwestern corner of the site – this standard appears
151 to be met.

152
153 Landscaping – There will be a total of ten arborvitae installed - three along the public right-of-way
154 and seven along the eastern property line to provide screening from the higher intensity use –this
155 standard appears to be met.

156
157 Screening - Waste storage containers and recycling containers will not be visible from High Street
158 – this standard appears to be met.

159
160 Access Management - There are no changes being proposed to the existing street access. With
161 respect to bicycle access and parking, the plot plan shows that there's going to be a bike rack
162 towards the southeastern corner of the building - this standard appears to be met.

163
164 Ms. Forston noted the architectural standards state that all required off-street parking shall be to
165 the side or rear of the buildings on the proposed site, and such parking shall be screened in
166 accordance with Section 9.4 of the Land Development Code. The existing parking area is to the

167 east of the building. There are no changes proposed to that area and the parking lot is proposed to
168 be screened - this standard appears to be met.

169
170 This concluded the staff comments.

171
172 Mr. Kost stated maybe not for this application, but perhaps staff could reconsider the requirement
173 to install fencing between this type of development and adjacent parcels. Ms. Brunner stated that
174 this type of conversion from 2-units to 3-units was not the target for proposed cottage court
175 developments. She noted that some property owners who do not have enough land area on their
176 lots are looking to go through the Cottage Court CUP process to allow for increased density on
177 their properties without having to go before the Zoning Board to seek a variance for a sub-standard
178 lot size. She explained that Planning Staff are working on submitting an ordinance soon that will
179 remove the density requirement for additional units in zoning districts that have them (such as
180 High Density), which will negate the need for projects like this to come before the Planning Board.

181
182 The Chairman asked for public comment next. Mr. Douglas Hill 123 Elm Street addressed the
183 Board. Mr. Hill stated his question is into and out of the third floor. He also asked why this
184 application could not go before the ZBA for its review and was required to come before the
185 Planning Board instead. Ms. Brunner stated that prior to the Cottage Court Ordinance, this item
186 would have in fact gone before the ZBA for a variance. With the Cottage Court ordinance, since
187 it is under a process called a Conditional Use Permit, which is a special type of zoning relief, it
188 goes through the Planning Board instead of the ZBA. She explained that it is similar to a special
189 exception from the ZBA.

190
191 He asked whether there wasn't a simpler way to have addressed this item. If you're not changing
192 the outside the house, there is sufficient parking – why would it not be easier to go before the ZBA
193 instead. Ms. Brunner in response stated that as she had indicated earlier, there is a lot size issue.
194 Mr. Hill also felt there was not sufficient room between the building and the property line for trees.
195 Ms. Forston clarified that the trees are going to be located on the eastern portion of the building
196 along the edge of the parking lot. They will not be located along the edge of the building.

197
198 C. Board Discussion and Action

199
200 A motion was made by Roberta Mastrogiovanni that the Planning Board approve PB-2024-09 as
201 shown on the plot plan identified as “City of Keene, NH” prepared by Redion Kadilliu at a scale
202 of 1 inch = 18 feet on July 24, 2024 and last revised on August 9, 2024 with the following
203 conditions precedent to final approval and signature by the Planning Board Chair:

- 204 a. Owner's signature appears on the proposed plot plan.
205 b. Submittal of five (5) color paper copies of the approved plan.
206 c. Submittal of a security in an amount and form acceptable to the Community
207 Development Director and City Engineer to cover the cost of landscaping.

208
209 The motion was seconded by Councilor Michael Remy.

210

211 Chair Farrington stated this was a pretty straightforward application and noted that he is glad to
212 see it come forward. He felt that three units is a good fit for the neighborhood. Councilor Remy
213 agreed and stated he does not see any regional impact from this application.
214

215 The Mayor called the Board's attention to page 33 of the agenda packet in reference to Mr. Kost's
216 comments about the landscaping that is being added. He felt adding arborvitae in the proposed
217 location will obscure the view between two buildings, which could impact that existing neighbor
218 more so than providing any assistance to that neighbor. He did not feel that recommendation was
219 helpful. Ms. Brunner stated staff does agree and suggested asking the applicant if they would
220 consider a shorter shrub with a smaller maximum height.
221

222 Councilor Remy asked whether the Board has the authority to say it does not believe screening is
223 required for a Cottage Court Development. Ms. Brunner stated that would require a variance from
224 the ZBA.
225

226 Mr. Hofer noted the abutter is going to have a view of six vehicles. Ms. Brunner stated the parking
227 lot is going to be repaved in its existing configuration and there will be parking along that property
228 line. Ms. Brunner stated it would be difficult to know if the neighbor would like a view of parked
229 cars versus shorter trees or taller trees. The Board standards are what they are at the present time.
230 Ms. Brunner also noted that this applicant also owns the abutting property. Installing a different
231 type of shrub, it is up to the Board to discuss this with the applicant.
232

233 The Chair invited the applicant to address this issue. The applicant stated he was agreeable to
234 whatever the Board would like to see here.
235

236 The Mayor felt this was a good project that met City standards. He stated he also appreciates the
237 quality of the application. He stated he hoped more large single family homes in Keene could be
238 turned into multi family dwelling units.
239

240 The motion made by Roberta Mastrogiovanni carried on a unanimous vote.
241

242 **b. SPR-806, Modification #2A – Major Site Plan – Applebee's, 40 Key Rd - Applicant**
243 **Apple New England LLC, on behalf of owner RAM 3 Keene Properties LLC, proposes**
244 **modifications to the exterior of Applebee's Grill & Bar located at 40 Key Rd (TMP #111-**
245 **016-000), including painting the existing unfinished brick exterior and the installation of**
246 **new lighting. The parcel is 0.83-ac in size and is located in the Commerce District.**
247

248 A. Board Determination of Completeness
249

250 Planner, Megan Forston, addressed the Board and stated the Applicant has requested exemptions
251 from submitting a grading plan, landscaping plan, lighting plan, soil analysis, drainage report,
252 traffic analysis, historic evaluation architecture and visual appearance analysis, screening analysis,
253 and elevations showing the building dimensions. After reviewing each request, staff have made
254 the preliminary determination that the requested exemptions but have no bearing on the merits of
255 the application and recommend that the Board accept the application as complete.
256

257 A motion was made by Roberta Mastrogiovanni to accept application, PB-2024-06, as complete.
258 The motion was seconded by Councilor Michael Remy and was unanimously approved
259

260 B. Public Hearing

261
262 Mr. Eric Elfreich, the Applebee's General Manager, addressed the Board next. He stated that
263 Applebee's has been located in Keene since 1994. He indicated the pictures included in the Board's
264 packet are an accurate representation of what is being proposed for this site. New lighting is being
265 proposed and they are also looking to paint the building. He noted that the existing brick will
266 remain, but it will be painted.
267

268 Staff comments were next. Ms. Forston addressed the Board and stated she has been working with
269 Rachael Cooper out of the Applebee's corporate office in Ohio. She stated her understanding is
270 that Applebee's is doing a redecorating project, nothing structural. As part of this updated project,
271 they would like to make some changes to the outside of the building including painting, lighting,
272 and adding some updated signage.
273

274 Ms. Forston stated that staff does not have the ability to review major changes to architecture and
275 visual appearance at the staff level or at the Minor Project Review Committee level. This is the
276 reason why this application is coming to the Board for its review. Not because of its complexity,
277 but just due to the fact that there is going to be quite a big difference in what the building will look
278 like after the renovations.
279

280 Ms. Forston went on to say there is no regional impact from staff's preliminary review.
281

282 She noted the light fixture cut sheet that the applicant has submitted complies with the full cut-off
283 requirement and the color temperature standards, which dictate that a light has to have a color
284 temperature of 3,500 Kelvin or less.
285

286 With respect to architecture and visual appearance standards – the standard states that, "*front*
287 *facades and exterior walls shall be articulated to express an architectural identity to avoid a*
288 *uniform appearance, and architectural details shall give the impression of being integral to and*
289 *compatible with the overall design.*"
290

291 Ms. Forston noted this building is going to be painted in a white and tan color scheme.
292 There is an existing entry tower at the northeastern corner of the building which is made of a stone
293 product on the outside and is going to be recovered with simulated wood paneling. Ms. Forston
294 indicated the proposed design and elevations were included in the staff report, and noted that it is
295 up to the Board to review whether they feel the proposed elevations meet the Board's applicable
296 standards. This concluded staff comments.
297

298 Mr. Kost stated what he read in the staff report is the lighting being proposed are up lights, but that
299 they will not be installing light bulbs in the top portion of the fixture. He felt however, in a few
300 years, if ownership of this establishment should change and someone starts installing light bulbs
301 now you end up with up non-compliant lights on this site. Ms. Forston stated that since sending
302 out this agenda packet, the applicant has updated the proposed light fixture. It is going to be very

303 similar to what is shown and it will have a cap on the top which will eliminate the ability of
304 someone to be able to install a bulb that would point upwards.

305
306 Ms. Clancy asked for clarification as to what was going to happen with the existing landscaping,
307 whether it was going to be removed to allow for painting of the building. Ms. Forston, in response,
308 stated the applicant has indicated that they will not be making any changes to the site other than
309 painting the building, change the finish materials, and update the lighting.

310
311 Ms. Forston went on to say that because the only part of this work that is going to require a building
312 permit is the replacement of the lighting, the applicant is seeking final approval at this meeting
313 tonight. They have submitted five copies of the plans that have been signed by the property owner.

314
315 The Chair asked for public comment next. With no comments from the public, the public hearing
316 was closed. The Chairman asked the applicant to address Mr. Clancy's question about landscaping.
317 Mr. Elfreich stated their landscaper has already trimmed back all landscaping so the painters could
318 start their work.

319
320 C. Board Discussion and Action

321
322 A motion was made by Roberta Mastrogiovanni that the Planning Board approve SPR-806,
323 Modification #2A as shown on the elevations titled "Applebee's" prepared by Flynn Group on
324 August 14, 2024 and last revised on September 4, 2024 with no conditions."

325
326 The motion was seconded by Councilor Michael Remy.

327
328 Councilor Remy felt what is being proposed blends well with other uses in the area. He stated he
329 also agrees there is no regional impact and is comfortable approving this motion with no
330 conditions. Mr. Kost stated he does not feel the color looks aggressive at all and felt it was a very
331 soothing color. He felt the landscaping looks good as well and was happy to move ahead with the
332 final approval.

333
334 Chair Farrington stated he has seen a refurbished Applebee's in other parts of the country and what
335 he has seen looks attractive.

336
337 The motion made by Roberta Mastrogiovanni carried on a unanimous vote.

338
339 **V. Master Plan Update** (www.keenemasterplan.com)

340
341 Ms. Brunner addressed this item. She stated that the Master Plan is still in the phase one, which is
342 the visioning phase of the project; however, this phase is going to be coming to a close shortly.
343 The Steering Committee's next meeting is scheduled for Tuesday, October 1st and on Saturday,
344 October 5th a Community Forum will be held in Heberton Hall at the Keene Public Library from
345 9:00 AM to 12:00 PM. At the October 5th meeting, the community vision will be unveiled to the
346 public.

347

348 Ms. Brunner stated that at the October 5th meeting, there will be some breakout groups for
349 participants to dive into specific topic areas and the next phase will be to come up with an actual
350 plan on how to achieve that vision. Ms. Brunner stated she will send the Board a link to the next
351 Steering Committee agenda packet. She noted some of the themes the Steering Committee has
352 identified are housing, transportation, economy, workforce, environment, and a healthy vibrant
353 community and neighborhoods. Each of these themes will have a task force assigned to come up
354 with specific actions and strategies.

355
356 Mr. Clancy asked whether the state requires any specific themes to be part of a master plan. Ms.
357 Brunner stated the state requires two sections in a Master Plan - a vision for the community and a
358 land use plan.

359
360 The Mayor noted that this is a City Master Plan, but it will have regional impacts as well on the
361 regional economy and regional transportation. Ms. Brunner agreed the Mayor is correct, the
362 Steering Committee has really been talking about Keene being the hub of the region as well as the
363 economic, social and education center. The area that draws people. For example, when regional
364 impact is referred to by Cheshire Medical Center, they describe expanding their recruiting territory
365 into Massachusetts and Vermont.

366
367 It was noted that the Master Plan provides us with terminology, a vision, and goals. It was also
368 noted that having some data that supports that vision will be important. Mr. Rounds stated they
369 did something called a Community Snapshot Report, which is available on the project website and
370 it addresses this issue to some extent. He added after October 1st, once all the pillars are solidified,
371 there will be someone assigned to lead that process and do a more in-depth analysis.

372
373 **VI. Training on Site Development Standards: Drainage & Stormwater Management /**
374 **Sediment & Erosion Control**
375

376 Ms. Brunner stated staff last month touched on the site plan review process in general. She
377 indicated that this evening she was planning on reviewing the first couple of site development
378 standards.

379
380 Standard 1 – General: Review of Board’s authority, the purpose and applicability of the Board’s
381 regulations.

382
383 Standards 2 and 3 are related to drainage, stormwater management and sediment and erosion
384 control, which are interrelated.

385
386 Ms. Brunner stated the Board’s authority is given to them by both City Council and through State
387 Statute. The Board has authority to adopt and amend their site development standards under both
388 of these sources of authority. State Statute 674:44 requires that the Board outline what their review
389 procedure is, the purpose of its standards, and specify what the standards are and include provisions
390 for guarantees.

391
392 Performance – This includes requiring a security for projects, such as a check or letter of credit.
393

394 Provisions – This Board offers applicants the option to waiver for most portions of their
395 regulations. Ms. Brunner noted that the Board has to offer some sort of relief if an applicant is not
396 able to meet the standards.

397
398 Ms. Brunner explained the other items that must be submitted by an applicant as part of a complete
399 application, including a notice list, abutter labels, fees, etc.

400
401 In the Board’s regulations, the stated purpose of the Site Development Standards is for the safe
402 and orderly development of the community; sustainable design and development, protecting water
403 quality and preventing stormwater runoff; promoting high quality site and building design; and
404 protecting against hazards, unsightliness, and nuisances to abutting property owners.

405
406 The purpose statement must also include having development that is appropriate for public and
407 private services and utilities that are available to support that development. Making sure services
408 can access the development, such as fire rescue, is an important component of site plan review.
409 Additionally, other factors must be evaluated, such as whether a development is going to increase
410 traffic significantly, etc.

411
412 The statement also refers safe pedestrian, bicycle, and vehicular circulation; the preservation or
413 enhancement of historic and cultural character; and development that maintains the quality of life
414 and will not impose unreasonable costs upon the city. An example would be evaluating whether a
415 development is going to require a large expenditure of public money. If so, this should be part of
416 the Board’s review to make sure the cost of development is borne by the developer and not the
417 general taxpayer.

418
419 Ms. Brunner noted these standards are applied to all development in Keene, unless it is a single-
420 family or a two-family home or site work for as part of an investigation done in support of the
421 proposal. For example, digging test pits to get data to support an application is allowed; however,
422 site work as part of a development is not allowed until an applicant is received approval from the
423 Planning Board. In this context, development means any form of land improvement or construction
424 involving land structures or infrastructure, as well as any change of use.

425
426 Standard 2: Drainage and Stormwater Management: This standard is split into four sections:
427 (1) Run off volume and velocity – The Board’s regulations state that you cannot increase the
428 amount of runoff or velocity of runoff moving off of a site. You can decrease it, but you can’t
429 increase it. This can be determined through a drainage report, which is reviewed by Engineering
430 Staff as part of the Planning Board application review process.

431
432 Ms. Brunner went on to say that drainage reports use a model called Hydrocod. This system
433 anticipates the conditions for a 25-year rainfall event using data from Cornell University. What is
434 more common or typical is for communities to look at a 10-year storm event; however, Keene
435 requires a 25-year storm model. If someone is looking at developing on a hillside, a 50-year storm
436 event calculation is required. Ms. Brunner referred to a recent example of a car wash application.

437
438 Mr. Kost asked if the City would be looking for either the same amount or less water runoff from
439 a site. Ms. Brunner answered in the affirmative. Ms. Brunner also talked about Low Impact Design

440 (LID) measure requirements in the code, which state that treatment systems and contamination
441 prevention measures shall be utilized during and as part of construction. This is required to assure
442 proper discharge of surface waters into flood plain compensatory storage basins.

443
444 She further noted that any new drainage grates have to be bike friendly by being designed so that
445 the grates need are parallel to the wheel.

446
447 Sediment and Erosion Control: She explained that the goal with this standard is slightly different.
448 It focuses on preventing erosion and sedimentation, which is carrying of sediment off site, both
449 during construction and after.

450
451 Ms. Brunner noted that there are varieties of ways this can be done. The City refers to the New
452 Hampshire Storm Water Manual for best practices. Minimizing the area of disturbance is probably
453 the number one thing to do. Making sure that you are not disturbing an area larger than what you
454 need to. Other goals of this standard include making sure that we are protecting water bodies,
455 wetlands, storm sewer inlets, etc.

456
457 She explained that if you have disturbance uphill from a surface water body, applicants must
458 making sure that there are perimeter controls in place and that they are installed properly and
459 maintained. Making sure slope stabilization happens within a reasonable time frame is important,
460 especially when you have stockpiles of materials on the site.

461
462 Additionally, any trees that are to remain on the site have to be protected. The Board's standards
463 require construction fencing is put around the root system of the trees to make sure that
464 construction vehicles don't park right up against the trunk of the tree. Pre-treating stormwater
465 runoff using some of those LID design features and following the Best Practices from New
466 Hampshire Storm Water Manual is also required.

467
468 Ms. Brunner indicated that the Board's regulations allow them to require the submittal of a security
469 deposit for sedimentation and erosion control measures, especially for larger projects. This is for
470 the purpose of assuring that erosion control measures work properly and to ensure that revegetation
471 and slope stabilization take place in timely manner.

472
473 She explained that Planning Staff have are continually working to increase collaboration with the
474 Commercial Building Inspector to make sure site inspections are performed frequently throughout
475 the duration of the project to ensure that sedimentation and erosion control measures are working
476 continuously. In certain situations, the City may require that inspections be done by a qualified
477 firm or individual. One example of that would be when the City had the Earth Excavation Permit
478 application. The applicant started work before they received a permit and they cut into the wetlands
479 buffer, which they were not allowed to do. A remediation plan had to be put in place and the City
480 brought in a wetlands scientist at the applicant's expense to look at the site and come up with an
481 effective remediation plan.

482
483 Ms. Brunner went on to state that mulching can also be used as a temporary or permanent feature
484 in addition to installing temporary vegetation, which can be done for longer projects. She referred

485 to a rendering included a handout given to the Planning Board members, which showed the
486 installation of an erosion control blanket, which can be used on slopes during construction.

487
488 Diversion – This standard entails making sure you are diverting water away from areas that are
489 vulnerable to erosion using a slope drain. Diversion is used in tandem with sediment and erosion
490 control measure to make sure you are not sending water over a slope that has exposed soil. She
491 explained that measures like silt fencing should be installed in areas where water will flow.

492
493 Filter sacks can also be used and are similar to roles of fabric that help filter water. Sediment traps
494 and sediment basins can also be used.

495
496 Mr. Hoefler noted that he has seen silt fencing left on a site years after the project has been
497 completed. Ms. Brunner agreed it is supposed to be removed unless the material they are using is
498 compostable or biodegradable. In that case, silt fencing can be left out until it biodegrades
499 naturally.

500
501 This concluded the presentation from staff.

502
503 **VII. Staff Updates**

504
505 **a. InvestNH HOP Grant Application Update**

506
507 Ms. Brunner addressed this item as well. She indicated the Planning Board voted to issue a letter
508 of support for the InvestNH HOP grant applications at their last meeting. After this meeting,
509 Planning Staff went before City Council with two different grant options and asked for support
510 for both items. The first one was related to short-term rentals and the second one was related to
511 housing opportunity zones, which would take advantage of a tax credit opportunity. After
512 discussion, the City Council voted to support both applications and authorize the Mayor to write
513 a letter of support for both. She noted that they will not be including the letter of support from
514 the Planning Board for the short-term rentals application.

515
516 Councilor Remy stated the Board was not necessarily opposed to submit an application related
517 to short-term rentals. He felt that the issue was whether this was the really the right use of these
518 funds. He recalled that the Board voted to write a general letter that would be signed by the
519 Planning Board Chair to give staff flexibility. Staff agreed this is what they now recall as well.

520
521 Mr. Rounds indicated that tonight will be his last Planning Board meeting as he will be leaving
522 his position with the City. He extended his appreciation to the Board.

523
524 **VIII. New Business**

525
526 None

527
528 **IX. Upcoming Dates of Interest**

- 529
530
- Joint Committee of the Planning Board and PLD – Tuesday, October 15th, 6:30 PM
 - Planning Board Steering Committee – October 15th, 11:00 AM

- 531 • Planning Board Site Visit – October 23rd, 8:00 AM – To Be Confirmed
- 532 Planning Board Meeting – October 28th, 6:30 PM

533

534 There being no further business, Chair Farrington adjourned the meeting at 8:15 PM.

535

536 Respectfully submitted by,
537 Krishni Pahl, Minute Taker

538

539 Reviewed and edited by,
540 Megan Fortson, Planner



CITY OF KEENE
NEW HAMPSHIRE

MEMORANDUM

TO: Planning Board
FROM: Community Development Staff
DATE: October 21, 2024
SUBJECT: Agenda Item III - Final Vote on Conditional Approvals

Recommendation:

To grant final approval for any projects that have met all their “conditions precedent to final approval.”

Background:

This is a standing agenda item in response to the “George Stergiou v. City of Dover” opinion issued by the NH Supreme Court on July 21, 2022. As a matter of practice, the Planning Board issues a final vote on all conditionally approved projects after the “conditions precedent to final approval” have been met. This final vote will be the final approval and will start the 30-day appeal clock.

As of the date of this packet, the following applications are ready for final approval:

- 1. CLSS-CUP-03-23 – Congregate Living & Social Services Conditional Use Permit – Keene Serenity Center, 24 Vernon St.**
- 2. PB-2024-09 – Cottage Court Conditional Use Permit – 30 High St**

If any projects meet their conditions precedent between date of this packet and the meeting, they will be identified and discussed during this agenda item.

All Planning Board actions, including final approvals, are posted on the City of Keene website the day after the meeting at [KeeneNH.gov/planning-board](https://www.keene-nh.gov/planning-board).

STAFF REPORT

PB2024-13 – Subdivision – Two Lot Subdivision – 0 Old Walpole Road

Request:

Applicant Monadnock Land Planning, on behalf of owner Monadnock Habitat for Humanity Inc., proposes to subdivide the ~7.18-ac parcel at 0 Old Walpole Rd (TMP #503-005-000) into two lots ~2.35-ac and ~4.83-ac in size. The parcel is located in the Rural District.

Background:

This application proposes to subdivide an existing 7.1-acre vacant parcel into two residential building lots. The parent parcel is located on the southern side of Old Walpole Road, west of Hilltop Drive and east of Abbott Road. The property is approximately 3,500 feet from the Old Walpole/West Surry Road roundabout.

Lot 1 will be a 2.35-acre parcel with approximately 307 feet of frontage and lot 2 will be a 4.83-acre parcel with approximately 466 feet of frontage. Both lots will be developed as single-family residences with a shared driveway. Existing natural features include steep slopes and wetlands; however, the proposed development of these lots will not impact these natural features.



Fig1: 0 Old Walpole Rd outlined in yellow

Determination of Regional Impact:

After reviewing the application, staff have made a preliminary evaluation that the proposed subdivision does not appear to have the potential for “regional impact” as defined in RSA 36:55. The Board will need to make a final determination as to whether the proposal, if approved, could have the potential for regional impact.

Completeness:

The applicant has requested an exemption from submitting a traffic study and other technical reports and analyses. After reviewing each exemption request, staff have determined that granting the request would have no bearing on the merits of the application and recommend that the Board accept the application as complete.

Application Analysis: The following is a review of the Planning Board development standards relevant to this application.

20.2.2 Character of Land for Subdivision

The applicant states in their narrative that each lot will have sufficient buildable upland for a single-family residence and two parking spaces. There is a municipal fire hydrant near the property and the lots are not in the 100-year flood plain. There are steep slopes and wetlands to the rear of the lots that will not be impacted by this development. Conditions of approval related

STAFF REPORT

to the submittal and review of a stormwater management plan for each lot prior to the issuance of a building permit and that the wetland buffer be flagged and inspected by City staff prior to site development are suggested below. It appears that this standard has been met.

20.2.3 Scattered or Premature Development

Existing development along Old Walpole Road is similar in character to this proposal and abutting lots to the north and south are developed with single family residences. The applicant states that the proposed development will fit into the character of the existing neighborhood. It appears that this standard has been met.

20.2.4 Preservation of Existing Features

The subject property is characterized by steep slopes, wetlands, and tree cover. Much of the property is undevelopable due to these features. The applicant intends to minimize the amount of disturbance required to develop the lots to reduce costs. There are existing stone walls along the boundary of the parent parcel that will remain. The applicant is also exploring the possibility of placing a conservation easement on portions of the lots to further preserve existing features. It appears that this standard has been met.

20.2.7 Fire Protection & Water Supply

A municipal fire hydrant served by City water is located across the street from the northeastern corner of the subject property. The Fire Department had no concerns related to fire protection for this application. It appears that this standard has been met.

20.2.8 Utilities

The proposed lots will be served by private wells and septic systems. The applicant has dug test pits to verify soil composition is suitable for septic and that a wellhead with a 75' buffer can be placed on each lot. Since the proposed lots are less than five acres in size, a condition of approval related to DES Subdivision Approval is proposed with the suggested motion language. It appears that this standard has been met.

Recommended Motion:

If the Board is inclined to approve this request, the following motion is recommended:

Approve PB2024-13 as shown on the plan set identified as "Subdivision Plan Prepared for Habitat for Humanity, INC." prepared by David A Mann Survey at a scale of 1 inch = 80 feet, dated September 3, 2024 with the following conditions:

- 1. Prior to final approval and signature by the Planning Board Chair, the following conditions precedent shall be met:**
 - A. Owner's signature appears on the plan.**
 - B. Inspection of lot monuments by the Public Works Director or their designee following their installation or the submittal of a security in an amount deemed satisfactory to the Public Works Director to ensure that the monuments will be set.**
 - C. Subdivision approval from the New Hampshire Department of Environmental Services shall be obtained.**
 - D. Submittal of four (4) full sized paper copies, two (2) mylar copies, and a digital copy of the final plan set.**

STAFF REPORT

- E. Submittal of a check in the amount of \$51.00 made out to the City of Keene to cover recording fees.**
- 2. Subsequent to final approval and signature by the Planning Board Chair, the following conditions shall be met:**
 - A. Prior to the issuance of a building permit for new residential construction, a Stormwater management plan shall be submitted to the Community Development Department for review and approval by the City Engineer.**
 - B. At the City Engineer's discretion, the 75-ft. wetland buffer shall be flagged and inspected by the Community Development Director or their designee prior to site development.**



City of Keene, NH Planning Board Subdivision Application

If you have questions about how to complete this form, please call: (603) 352-5440 or email: communitydevelopment@keenenh.gov

SECTION 1: PROJECT INFORMATION

PROJECT NAME: Subdivision Plan, Monadnock Habitat for Humanity	NUMBER OF LOTS PROPOSED: 2 Lots
PROJECT ADDRESS(ES): Old Walpole Road,	

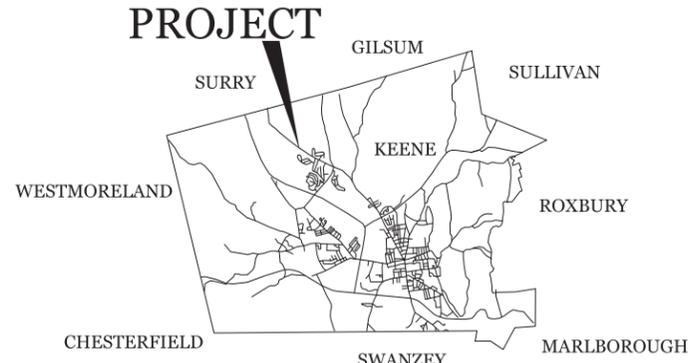
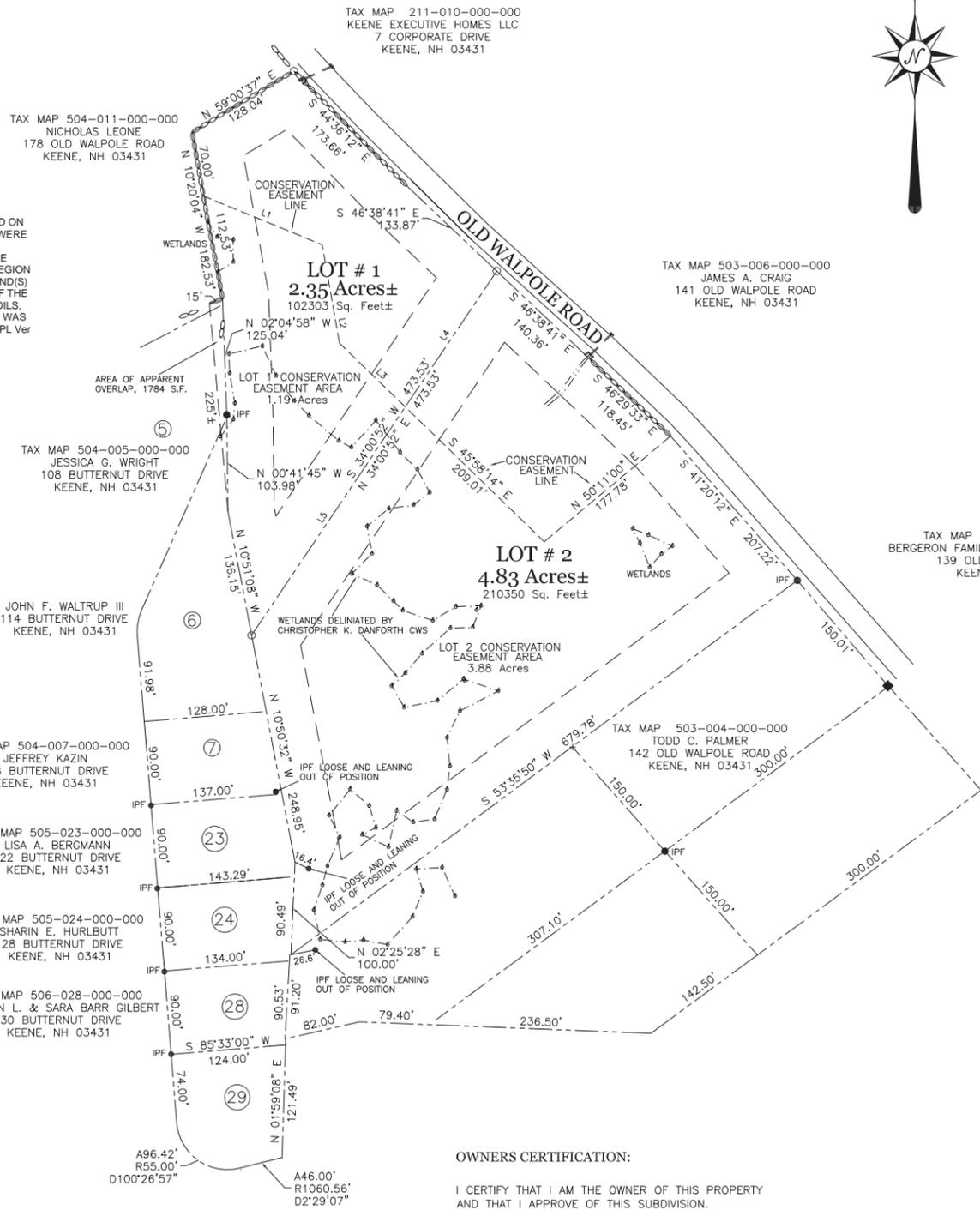
SECTION 2: CONTACT INFORMATION

PROPERTY OWNER	APPLICANT
NAME/COMPANY: Monadnock Habitat for Humanity	NAME/COMPANY: Monadnock Habitat for Humanity
MAILING ADDRESS: PO Box 21, Keene	MAILING ADDRESS: PO Box 21, Keene, NH
PHONE: 603 357 8474	PHONE: 603 357 8474
EMAIL: keenan.matt1@gmail.com	EMAIL: keenan.matt1@gmail.com
SIGNATURE: 	SIGNATURE: 
PRINTED NAME: Matt Keenan	PRINTED NAME: Matt Keenan

AUTHORIZED AGENT (if different than Owner/Applicant)	FOR OFFICE USE ONLY:	
NAME/COMPANY: Monadnock Land Planning	TAX MAP PARCEL #(s): 503 005 000 000 000	
MAILING ADDRESS: 139 Old Walpole Rd.	----- -----	
PHONE: 603 209 3050	----- -----	
EMAIL: monadnocklp@ne.rr.com	PARCEL SIZE: 7.18-ac	DATE STAMP: 
SIGNATURE: David Bergeron <small>Digitally signed by David Bergeron Date: 2024.10.08 10:04:20 -04'00'</small>	ZONING: Rural	
PRINTED NAME: Dave Bergeron	PROJECT #: PB-2024-B	

APPROVED BY THE
 KEENE PLANNING BOARD on _____
 CERTIFIED BY CHAIRMAN _____

WETLAND SCIENTIST CERTIFICATION:
 JURISDICTIONAL WETLANDS SHOWN ON THIS PLAN WERE DELINEATED ON 10/20/2023 BY CHRISTOPHER DANFORTH, CWS #077. THE WETLANDS WERE DELINEATED ACCORDING TO THE CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL (1987) AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS MANUAL: NORTHCENTRAL AND NORTHEAST REGION (VER. 2, JANUARY 2012). DOMINANT HYDRIC SOILS WITHIN THE WETLAND(S) WERE IDENTIFIED USING THE "FIELD INDICATORS OF HYDRIC SOILS OF THE UNITED STATES" A GUIDE FOR IDENTIFY AND DELINEATING HYDRIC SOILS, NRCS VERSION 8.1, 2017. DOMINANCE OF HYDROPHYTIC VEGETATION WAS DETERMINED USING THE USACE NATIONAL WETLAND PLANT LIST, RWPL Ver 3.6, 2022.



NOTES

- BEARINGS ARE BASED ON A 2023 MAGNETIC OBSERVATION.
- PLAN REFERENCES:
 A. PROPERTY LINE EXTENSIONS, R.&B. FEE - E.&E. LARRABEE PROP. PREPARED BY N.W. GRANDIN, DATED 1-16-74, RECORDED IN BK.28 PG.45.
 B. LONGMEADOW SECTION 6 AND SECTION 5, PAKO HOMES, INC PREPARED BY HERBERT RUSSELL, DATED MARCH 2 1970, BK.18 PG.20.
 3. ASSESSOR INFORMATION BASED ON TOWN RECORDS:
 TAX MAP 503-005-000-000
 MONADNOCK HABITAT FOR HUMANITY, INC.
 PO BOX 21
 KEENE, N.H. 03431
 VOL. 3163 PAGE 298
- CONTOURS: SEE EXISTING CONDITIONS PLAN.
- ZONING DISTRICT: RURAL
 LOT SIZE, 2 ACRES (MIN.)
 FRONTAGE, 50 FT. (MIN.)
 LOT WIDTH AT BLDG LINE, 200 FT. (MIN.)
 SETBACKS FRONT, REAR AND SIDE, 50 FT. (MIN.)
- THE RIGHT OF WAY OF OLD WALPOLE ROAD IS BASED ON PHYSICAL EVIDENCE FOUND i.e. IRON PINS/STONEWALLS AND IS SUBJECT TO AND BENEFITED BY THE LAYOUT.
- LOT 1 AND LOT 2 WILL BE ACCESSED via a SHARED DRIVEWAY THAT WILL BE REVIEWED AND APPROVED BY THE CITY ENGINEER THROUGH A STREET ACCESS PERMIT APPLICATION. ANY FUTURE MODIFICATION TO THE STREET ACCESS OF LOT 1 OR LOT 2 WILL BE REVIEWED AND APPROVED BY THE CITY ENGINEER THROUGH A STREET ACCESS PERMIT APPLICATION.

LINE TABLE

LINE	BEARING	DISTANCE
L1	S 87°41'31" E	138.20'
L2	S 09°58'07" E	107.62'
L3	S 45°58'14" E	98.94'
L4	N 34°00'52" E	178.72'
L5	S 34°00'52" W	296.95'

LEGEND

- MONUMENT FOUND
- IRON PIN SET
- IRON PIN FOUND
- ⊥ CULVERT PIPE
- STONEWALL
- UTILITY POLE
- ⊙ GUY ANCHOR
- ②② ORIGINAL LOT # SEE NOTE 2B
- BOUNDARY LINES
- - - APPROX. BOUNDARY LINES
- - - SETBACKS
- - - DELINEATED WETLANDS
- - - CONSERVATION EASEMENT LINE

OWNERS CERTIFICATION:
 I CERTIFY THAT I AM THE OWNER OF THIS PROPERTY AND THAT I APPROVE OF THIS SUBDIVISION.

DATED _____

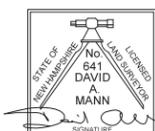
**SUBDIVISION PLAN
 PREPARED FOR
 MONADNOCK HABITAT FOR HUMANITY, INC.**

OLD WALPOLE ROAD
 CITY OF KEENE
 COUNTY OF CHESHIRE
 STATE OF NEW HAMPSHIRE
 SCALE: 1 INCH = 80 FEET
 SEPTEMBER 3, 2024



THIS SURVEY AND PLAT WERE PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION FROM A TOTAL STATION RANDOM OFFSET CONTROL TRAVERSE. THIS IS A RURAL STANDARD PROPERTY SURVEY. DIMENSIONS SHOWN HEREON ARE SUBJECT TO THE CLOSURE WITH RESPECT TO THE SURVEY CLASSIFICATION. THIS SURVEY AND PLAT ARE SUBJECT TO ANY ITEMS THAT A TRUE AND ACCURATE TITLE ABSTRACT AND OPINION MAY REVEAL, CONSULT LEGAL COUNSEL FOR ALL MATTERS REGARDING TITLE.

DAVID A. MANN LLS 641



DAVID A MANN SURVEY
 40 GULF ROAD
 CHESTERFIELD, N.H. 03443
 603 903 7259

REVISION BLOCK: 10/9/24 NOTES, CONL. EASEMENT

TWO LOT RESIDENTIAL SUBDIVISION

OLD WALPOLE ROAD, KEENE, NEW HAMPSHIRE



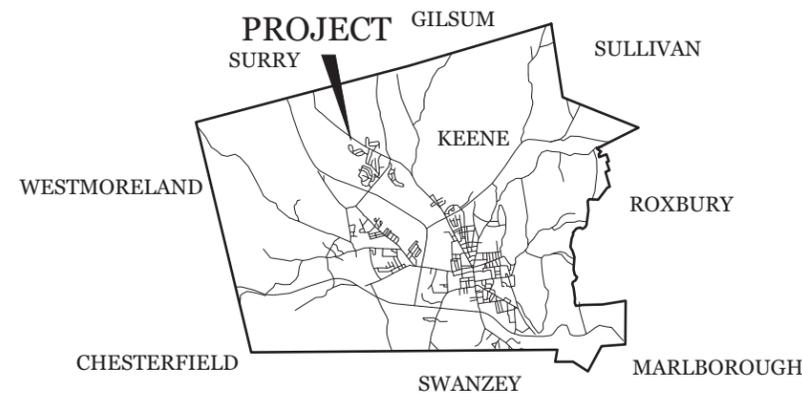
Liza Sargent 9/19/24
LIZA P. SARGENT DATE
R.C.E. NUMBER: 13365

PREPARED FOR:

MONADNOCK HABITAT FOR HUMANITY

P.O. BOX 21
KEENE, NH 03431
(781) 760-3636

<p>APPROVED BY THE APPLICANT:</p> <hr/> <p>ON _____</p> <p>INSPECTION PERMISSION: UPON APPROVAL OF THIS SITE PLAN, THE OWNER GRANTS PERMISSION FOR THE MEMBERS OR AGENTS OF THE KEENE PLANNING BOARD TO INSPECT THIS SITE AS NECESSARY.</p>
<p>APPROVED BY THE KEENE PLANNING BOARD</p> <hr/> <p>ON _____</p> <p>CERTIFIED BY CHAIRMAN _____</p>



INDEX OF PLANS

- N-1 NOTES AND DETAILS
- S-1 EXISTING CONDITIONS
- C-1 SITE PLAN
- C-2 LOT 1 SEPTIC
- C-3 LOT 2 SEPTIC

PREPARED BY

<p>Wetland Scientist:</p> <p>Danforth Enviromental Consulting, LLC 654 New Boston Road Francestown, NH 03043 PHONE (603) 547-7100</p>	<p>Land Planner:</p> <p>Monadnock Land Planning, LLC 139 Old Walpole Road Keene, NH 03431 PHONE (603) 209-3050</p>	<p>Civil Engineer:</p> <p>SVE Associates 439 West River Road Brattleboro, Vermont 05302 PHONE (802) 257-0561</p>	<p>Land Surveyor:</p> <p>David A. Mann Survey 40 Gulf Road Chesterfield, New Hampshire 03443 PHONE (603) 903-7259</p>
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September 19, 2024

GENERAL CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL CALL DIG-SAFE, AT 1-888-344-7233 AT LEAST 72 HOURS BEFORE THE START OF EXCAVATION.
2. THE CONTRACTOR IS EXPECTED TO BE AWARE OF AND COMPLY WITH ALL PERMITS AND PERMIT CONDITIONS.
3. ALL TRENCHING, EXCAVATION, SHEETING, SHORING, ETC. SHALL COMPLY WITH THE MOST CURRENT OSHA REGULATIONS.
4. THE CONTRACTOR SHALL NOTIFY SVE ASSOCIATES IF FIELD CONDITIONS VARY FROM THAT SHOWN ON THE PLAN(S). THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLAN(S) UNLESS SO AUTHORIZED BY SVE ASSOCIATES.
5. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH SITE PLANS AND SPECIFICATIONS PROVIDED OR IN ACCORDANCE WITH NH DEP'T OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
6. IN CASE OF CONFLICTS, THE MOST STRINGENT INTERPRETATION OF THE PLANS, SPECIFICATIONS, LOCAL OR STATE REGULATIONS, OR PERMIT CONDITIONS SHALL APPLY. THE ENGINEER SHALL BE THE DETERMINANT AS TO WHAT APPLIES.
7. ALL KNOWN SUBSURFACE UTILITIES AND STRUCTURES HAVE BEEN INDICATED ON THE PLAN(S) AS ACCURATELY AS POSSIBLE. THE EXACT LOCATION MAY VARY AND THE CONTRACTOR IS CAUTIONED TO PROCEED WITH CARE.
8. CONTRACTOR SHALL VERIFY ALL BENCH MARKS, INVERTS, PIPES AND STRUCTURES ELEVATIONS PRIOR TO START OF WORK. IMMEDIATELY NOTIFY SVE ASSOCIATES IF THE FIELD INFORMATION DOES NOT MATCH PLAN INFORMATION.
9. THE OWNER WILL PROVIDE BENCH MARKS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL OTHER LAYOUT AND FOR REPLACEMENT OF LAYOUT COMPLETED BY THE OWNER.
10. CONTRACTOR SHALL PROVIDE A FULL SET OF AS-BUILT DRAWINGS TO THE OWNER WITH SWING TIES OR COORDINATES, LOCATING ALL FITTINGS, STRUCTURES, PIPES, ETC. THE AS-BUILTS SHALL INDICATE MATERIALS, PIPE LENGTHS INSTALLED, ALL INVERTS, AND ALL STRUCTURE ELEVATIONS. ACCEPTANCE OF THE WORK IS SUBJECT TO ACCEPTANCE OF THE AS-BUILTS BY THE ENGINEER AND OWNER.
11. MONUMENTATION THAT HAS BEEN DISTURBED SHALL BE RESET BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR AT NO COST TO THE OWNER.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DE-WATERING AT NO ADDITIONAL COST TO THE OWNER.
13. ALL SURFACES SHALL BE GRADED TO DRAIN.
14. ALL TREES WHOSE ROOTS HAVE BEEN DAMAGED SHALL BE REMOVED AT THE CONTRACTOR'S EXPENSE.
15. THE CONTRACTOR SHALL RESTORE ALL DISTURBED SURFACES TO THEIR ORIGINAL CONDITION OR BETTER. ALL NEW AND EXISTING PIPES AND STRUCTURES SHALL BE CLEANED. ALL SIGNS SHALL BE REPLACED. ALL DAMAGED VEGETATION SHALL BE REPLACED.

SEDIMENT AND EROSION CONTROL NOTES:

1. INSTALL ALL SEDIMENT & EROSION CONTROL MEASURES IN ACCORDANCE WITH MANUFACTURER'S DIRECTION OR DETAILS PROVIDED. PERIMETER CONTROLS MUST BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR ALL EROSION CONTROL. THEY SHALL TAKE ALL MEASURED NEEDED TO MINIMIZE EROSION TO THE GREATEST EXTENT POSSIBLE, AT NO COST TO THE OWNER, REGARDLESS OF DETAIL SHOWN ON THESE PLANS.
3. THE CONTRACTOR SHALL INSPECT AND REPAIR ALL SEDIMENT AND EROSION CONTROL MEASURES DAILY WHILE UNDER CONSTRUCTION, THEN AFTER EACH RAINFALL OF 0.5" IN 24 HOURS AND NOT LESS THAN ONCE A WEEK THEREAFTER UNTIL ALL UPHILL SOILS ARE WELL STABILIZED.
4. SEED, FERTILIZE & MULCH ALL FINISH GRADED AREAS WITHIN 72 HOURS OF FINISH GRADING. ROADWAY STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
5. SEDIMENT CONTROLS AND/OR SILT FENCES SHALL BE REPLACED WHEN CLOGGED AND NO LONGER FUNCTIONAL.
6. SEDIMENT CONTROLS AND/OR SILT FENCES SHALL REMAIN IN PLACE UNTIL ALL UPHILL VEGETATED AREAS ARE STABILIZED.
7. ALL SOIL STOCKPILES SHALL BE SEEDED AND MULCHED IF LEFT IN PLACE MORE THAN 21 DAYS.
8. SEEDING OF ALL DISTURBED AREAS SHALL BE COMPLETED NOT LATER THAN OCTOBER 15TH.
9. STABILIZATION OF ALL WORK AREAS SHALL BE COMPLETED NOT MORE THAN 45 DAYS FOLLOWING THE START OF WORK.
10. ALL SOIL SLOPES STEEPER THAN 3: 1 SHALL BE COVERED WITH EROSION CONTROL FABRIC, S150 FROM NORTH AMERICAN GREEN OR APPROVED EQUAL.
11. STABILIZE ALL DRAINAGE SWALES, BASINS, BERMS AND DITCHES PRIOR TO DIRECTING RUNOFF TO THEM.
12. CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE SEDIMENT AND EROSION CONTROLS AS REQUESTED BY THE ENGINEER.
13. LIMIT THE AREA OF DISTURBANCE TO SMALLEST PRACTICAL AREA.
14. LOT CONSTRUCTION SHALL NOT COMMENCE UNTIL AFTER ASSOCIATED ROADWAY AND DRAINAGE IS COMPLETE AND STABLE.

WINTER CONSTRUCTION REQUIREMENTS:

1. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND 1) INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, or 2) PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING. THE INSTALLATION OF EROSION CONTROL BLANKETS AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF SPRING THAW OR SPRING MELT EVENTS.
2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
3. AFTER OCTOBER 15th, INCOMPLETE ROAD OR PARKING SURFACES WHERE WORK HAS STOPPED FOR THE WINTER SEASON SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL MEETING NHDOT ITEM 304.3 SPECIFICATIONS.

PROJECT SPECIFIC NOTES:

1. ALL STORM DRAIN TO BE HIGH DENSITY SMOOTH BORE POLYETHYLENE, HANCOR OR APPROVED EQUAL, U.N.O.
2. ALL AREAS TO BE VEGETATED SHALL RECEIVE A MINIMUM OF 6" OF LOAM, SEED AND MULCH. IF PLANS OR SPECIFICATIONS HAVE CONFLICTING DEPTHS OF LOAM, 6" OF LOAM SHALL BE THE PREVAILING DEPTH USED.
3. SEEDING OF ALL DISTURBED AREAS SHALL BE COMPLETED NOT LATER THAN OCTOBER 15TH.
4. SEEDING OF ALL FINISHED AREAS SHALL BE COMPLETED NOT MORE THAN 72 HOURS AFTER FINISH GRADING.
5. STABILIZATION OF ALL WORK AREAS SHALL BE COMPLETED NOT MORE THAN 45 DAYS FOLLOWING THE START OF WORK.
6. BROOM, WASH AND APPLY TACK COAT TO BASE PAVEMENT PRIOR TO WEAR COURSE PLACEMENT.
7. STABILIZE ALL DRAINAGE SWALES PRIOR TO DIRECTING RUNOFF TO THEM.
8. PER RSA 79:10 IF TREE CUTTING EXCEEDS 10,000 BOARD FEET OR OVER 20 CORDES OF FUEL WOOD, CONTRACTOR SHALL FILE "NOTICE OF INTENT TO CUT WOOD OR TIMBER" WITH LOCAL AUTHORITY & PAY TAXES AS NEEDED.

SEQUENCE OF WORK:

THE SEQUENCE OF WORK SHALL BE FOLLOWED WITHIN EACH PHASE OF THE PROJECT. AT NO TIME OR PLACE SHALL PROJECT PHASING SUPERCEDE SOUND SEDIMENT AND EROSION CONTROL PLANNING.

1. INSTALL SILT FENCE IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS, IN LOCATIONS DETAILED ON THIS PLAN OR AS ORDERED BY THE ENGINEER.
2. CONSTRUCT THE STABILIZED CONSTRUCTION ENTRANCE TO PREVENT TRACKING OF SEDIMENT OFFSITE.
3. CONSTRUCT AND STABILIZE THE DETENTION CONTROLS AND ALL INLET/OUTLET SWALES.
4. CLEAR AND GRUB THE DRIVEWAY CORRIDOR.
5. INSTALL WELL FOLLOWED BY OTHER UTILITIES.
6. CONSTRUCT DRIVE IN ACCORDANCE WITH APPROVED PLANS.
7. CLEAR & GRUB HOUSE/PARKING AREA. CONSTRUCT NEW PARKING LOT AND HOUSES.
8. LOAM AND SEED DISTURBED AREAS, STABILIZE SLOPES WITH MATTING WHERE SPECIFIED.
9. REMOVE SILT FENCE AFTER ALL UPHILL SOILS ARE STABILIZED.

DUST CONTROL:

DUST CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION.

1. PHASE CONSTRUCTION AND SEQUENCE EARTH DISTURBANCE ACTIVITIES TO REDUCE THE AREA OF LAND DISTURBED AT ANY ONE TIME.
2. MAINTAIN AS MUCH NATURAL VEGETATION AS IS PRACTICABLE.
3. USE TRAFFIC CONTROL TO RESTRICT TRAFFIC TO PREDETERMINED ROUTES.
4. USE TEMPORARY MULCHING, PERMANENT MULCHING, TEMPORARY VEGETATIVE COVER, PERMANENT VEGETATIVE COVER TO REDUCE THE NEED FOR DUST CONTROL.
5. APPLY WATER, OR OTHER DUST INHIBITING AGENTS OR TACKIFIERS, AS APPROVED BY THE NHDES.

SITE DATA TABLE

TAX MAP #:	503-005-000-0000, 309,276 SQ. FT. ± 7.1± ACRES	
ZONE:	RESIDENTIAL	
LOT SIZE:	AVAILABLE: 7.1± ACRES	REQUIRED: 2 AC
FRONTAGE:	00 FEET	50 FEET
LOT WIDTH:	NONE	200 FEET
BLDG. HEIGHT:	ALLOWED: 35 FEET	PROPOSED: LESS THAN 35 FEET
BUILDING SETBACKS:		
FRONT:	50'	
REAR:	50'	
SIDES:	50'	
PAVEMENT SETBACKS:		
PARKING AREA: ≤ 10,000 SF		
FRONT/SIDE/REAR:	8 FT	
LOT COVERAGE:	MAXIMUM:	PROPOSED:
BUILDINGS:	10% (30,928 SF/0.71 AC)	1% (1,914 SF/0.04 AC)
PAVEMENT:	20% (61,855 SF/1.42 AC)	1% (4,040 SF/0.09 AC)
TOTAL IMPERMEABLE:	20% (61,855 SF/1.42 AC)	2% (5,954 SF/0.14 AC)
PARKING:	REQUIRED:	PROPOSED:
9' X 18':	2 SPACES/UNIT	4

SEED SPECIFICATIONS

TEMPORARY SEED

PERENNIAL RYE GRASS

PERMANENT SEED:

ALL MOWABLE AREAS: PARK SEED NHDOT TYPE 15
(CONSERVATION MIX ACCEPTABLE, AS APPROVED BY ENGINEER)

CREeping RED FESCUE	40 LB/AC
PERENNIAL RYEGRASS	50 LB/AC
KENTUCKY BLUEGRASS	25 LB/AC
REDTOP	5 LB/AC

TOTAL: 120 LB/AC

ALL SLOPES 5:1 OR STEEPER: SLOPE SEED NHDOT TYPE 45
(OR OTHER WILDFLOWER MIX APPROVED BY ENGINEER)

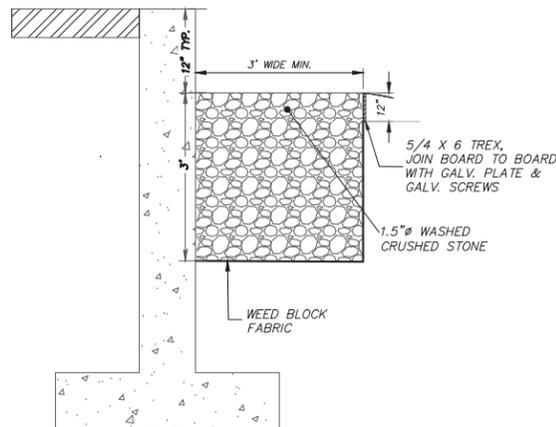
CREeping RED FESCUE	35 LB/AC
PERENNIAL RYEGRASS	30 LB/AC
REDTOP	5 LB/AC
ALSIKE CLOVER	5 LB/AC
LANCE-LEAVED COREOPSIS	5 LB/AC
OXEYE DAISY	3 LB/AC
BUTTERFLY WEED	3 LB/AC
BLACKKEYED SUSAN	3 LB/AC
WILD LUPINE	3 LB/AC

TOTAL: 95 LB/AC

STABILIZATION DEFINITION:

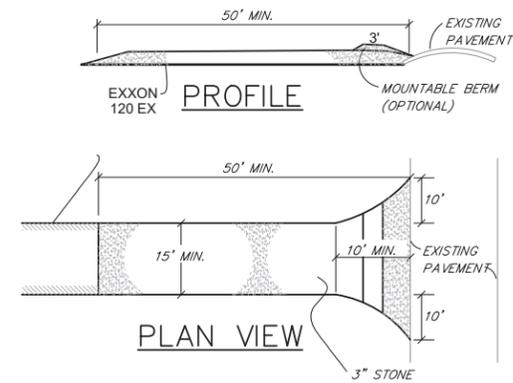
AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

1. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
2. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
3. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED;
4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.



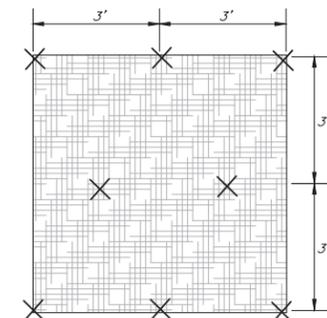
STONE DRIP STRIP

SCALE: 1" = 1'



STABILIZED CONSTRUCTION ENTRANCE

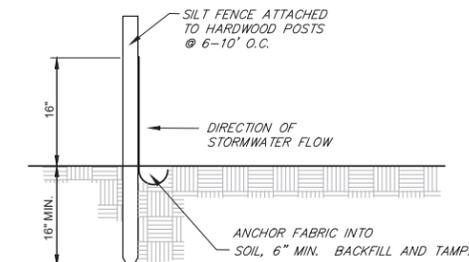
NOT TO SCALE



EROSION CONTROL MATTING SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S DIRECTIONS, THIS IS ONLY A GUIDELINE. ROLL OUT MATTING DOWNHILL AND STAPLE AS REQUIRED FOR SLOPE. MATTING SHOULD OVERLAP BY A MINIMUM OF 4 INCHES AND STAPLED AT THE EDGE OF EACH ROLL.

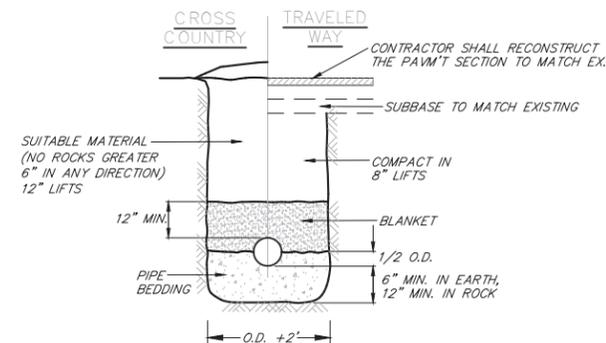
EROSION CONTROL BLANKET

NOT TO SCALE



SILT FENCE

NOT TO SCALE



PIPE MATERIAL BEDDING BLANKET

DUCTILE IRON	6" SAND	12" SAND
PVC	6" SAND	12" SAND
HDPE	6" SAND	12" SAND
PLASTIC	6" SAND	12" SAND
COPPER	6" SAND	12" SAND
SDR 35	6" STONE	12" SAND

STONE HALF WAY UP PIPE & 12" SAND ABOVE

PIPE IN TRENCH DETAIL

NOT TO SCALE



Liza Sargent 9/19/24

LIZA P. SARGENT DATE
R.C.E. NUMBER: 13365

NO.	REVISION	DATE	DWN	CHK

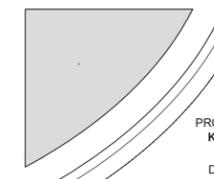
SVE

Engineering
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NOTES & DETAILS

HABITAT FOR HUMANITY
MONADNOCK HABITAT
P.O. BOX 21
KEENE, NEW HAMPSHIRE



PROJ. #
K2777

DATE:
05-AUG-24

DESIGN: LPS SHEET

DRAWN: AUG

CHECKED: LPS

22 of 23

N-1

Drainage Summary

for

Monadnock Habitat for Humanity Proposed two lot residential subdivision 0 Old Walpole Road, Keene, NH

**Prepared by SVE Associates
August 6, 2024**

A comparison of peak stormwater runoff for the 25-year rainfall events in the post-development conditions was completed by SVE Associates using HydroCad 10.0 software. The storm event used in the model was Type III, 24-hour storm with the following rainfall depth for Keene, NH:

25 Year Event: 4.87 inches

OVERVIEW:

This project will consist of constructing two single family residences with shared driveway and parking areas.

EXISTING CONDITIONS:

The existing conditions of this property include forest and wetlands. Currently stormwater runoff sheet flows from Old Walpole Road downhill to the southern property line.

PROPOSED CONDITIONS:

The proposed conditions, modeled in the “Post-Development” drainage model, consist of the proposed residences, shared driveway and four parking spaces. With the proposed construction, stormwater runoff will flow from the roofs to drip strips along the residences and infiltrate into the soil.

The portion of stormwater runoff that sheet flows across the paved shared driveway will flow to the stone lined swale and infiltrate into the ground surface. The infiltration rate used (7 in/hr) is half of the published Ksat value (14 in/hr).

The balance of the site will continue to sheet flow from Old Walpole Road to the south.

SVE Associates

Engineering * Surveying * Landscape Architecture * Planning
P.O. Box 1818, Brattleboro, VT 05302 Phone: (802) 257-0561 Fax (802) 257-0721 E-mail svek@sveassoc.com
P:\Project\NH PROJECTS\K2777 Habitat for Humanity\Hydrocad\K2777 Drainage Summary PB.doc

	25 year	
	<i>Existing</i>	<i>Proposed</i>
	<i>Runoff (cfs)</i>	<i>Runoff (cfs)</i>
<i>Summary Node 100R</i>	7.93	7.37

CONCLUSION:

There will be no adverse impact to downstream abutters due to stormwater runoff from the proposed two single-family residences and shared driveway. Overall, there is no significant change in stormwater runoff post development.



SVE Associates

STAFF REPORT

PB-2024-14 – COTTAGE COURT & HILLSIDE PROTECTION CONDITIONAL USE PERMITS & MAJOR SITE PLAN – TIMBERLANE WOODS DEVELOPMENT, 0 DRUMMER RD

Request:

Applicant Fieldstone Land Consultants, on behalf of owner C. Eric Farris, proposes a Cottage Court Development to construct 6 townhouse buildings containing 36 dwelling units on the parcel at 0 Drummer Rd (TMP #515-015-000). A Hillside Protection Conditional Use Permit is requested for impacts to steep slopes. The parcel is ~13.1-ac in size and is located in the Low Density District.

Background:

The 13.1-acre tract of land that is the subject of this proposal is located between Drummer Road and Timberlane Drive, with about 818 feet of frontage along Timberlane Drive and 160 feet of frontage on Drummer Road. The site is currently forested and undeveloped, although logging has taken place on the eastern end of the property near Timberlane Drive. Wetlands are present towards the western portion of the parcel and steep slopes are present on the northeastern portion of the site. The property is located in the Low Density District.



Figure 1. Aerial image of the property located at 0 Drummer Rd (parcel shaded in yellow).

This parcel was previously the subject of a Major Site Plan & Conservation Residential Development (CRD) Subdivision application, SPR-04-22 & S-04-22, for the construction of five new buildings with a total of 26 new dwelling units. The CRD development option required that each of the buildings be placed on their own lot and that 50% of the land be permanently conserved as open space. The Planning Board conditionally approved this application on November 28, 2022 and the applicant has subsequently received three extensions to the timeframe to satisfy the precedent conditions of approval for this application. Subsequent to the initial Planning Board approval, a new development option called "Cottage Court" was created that allows for greater flexibility in site design. The applicant is seeking to develop the site through this process.

The proposed Cottage Court Development (CCD) will be located on the northeastern portion of the parcel along Timberlane Drive and will consist of six town-home style buildings containing a total of 36 units including efficiency (studio) apartments, 1-bedroom units, and 2-bedroom units. This proposed development would impact more than 20,000 sf of precautionary slopes (15-25% grade), which requires the submittal of a Hillside Protection CUP. Additionally, Major Site Plan review is required due to the fact that more than five dwelling units are proposed as part of the development.

STAFF REPORT

Determination of Regional Impact:

After reviewing the application, staff have made a preliminary evaluation that the proposed development does not appear to have the potential for “regional impact” as defined in RSA 36:55. The Board will need to make a final determination as to whether the proposal, if approved, could have the potential for regional impact.

Completeness:

The applicant has requested exemptions from submitting elevations, an historic evaluation, screening analysis, and architectural & visual appearance analysis. After reviewing each request, staff have made the preliminary determination that granting the requested exemptions would have no bearing on the merits of the application and recommend that the Board accept the application as complete.

Departmental Comments:

- **Engineering Staff Comments:** Any future subdivision of the property will require that each parcel have its own separate service connection to City Infrastructure.

APPLICATION ANALYSIS – ARTICLE 12 - HILLSIDE PROTECTION CUP REGULATIONS:

Article 12.3.1 – Generally: This Article of the LDC states that clearing, grading, and construction shall be performed in a way that will not cause undue adverse impact to the physical environment, that existing natural and vegetative cover shall be retained, and structures shall be designed and sited in a manner that limits the removal of vegetation and grading. This Article of the code also states that erosion and sediment control measures shall be installed according to the best management practices outlined in the most recent addition of the *“Erosion and Sediment Control Design Handbook for Developing Areas of New Hampshire.”*

There are a total of six buildings and 36 dwelling units proposed as part of this Cottage Court Development (CCD) that will be accessed using a shared driveway off Timberlane Drive as shown in Figure 2. As part of the plan set, the applicant submitted a slope exhibit plan, which is included as an attachment to this staff report, showing that ~54,075 sf of existing precautionary slopes (slopes with a grade between 15-25%) will be impacted as part of this development due to the installation of drainage measures, the construction of buildings, and the creation of the driveway. The limit of vegetation clearing appears to be limited to the area required for construction. The narrative states that the site will be developed using best management practices following the NHDES Alteration of Terrain permit requirements for site stabilization, erosion control measures, and stormwater management. Sheet 4 of the submitted plan set shows the installation of a stabilized construction entrance, silt fencing, silt socks over existing catch basins, and the construction of stone check dams as the proposed sediment and erosion control measures.

Planning Staff recommend that the Board include a precedent condition of approval related to the submittal of a security to cover the cost of the installation and maintenance of the erosion control measures. Additionally, Planning Staff are recommending that the Board include scheduling a pre-construction meeting and an inspection of the erosion and sediment control measures as subsequent conditions of approval that would need to be met prior to the commencement of site work.

STAFF REPORT

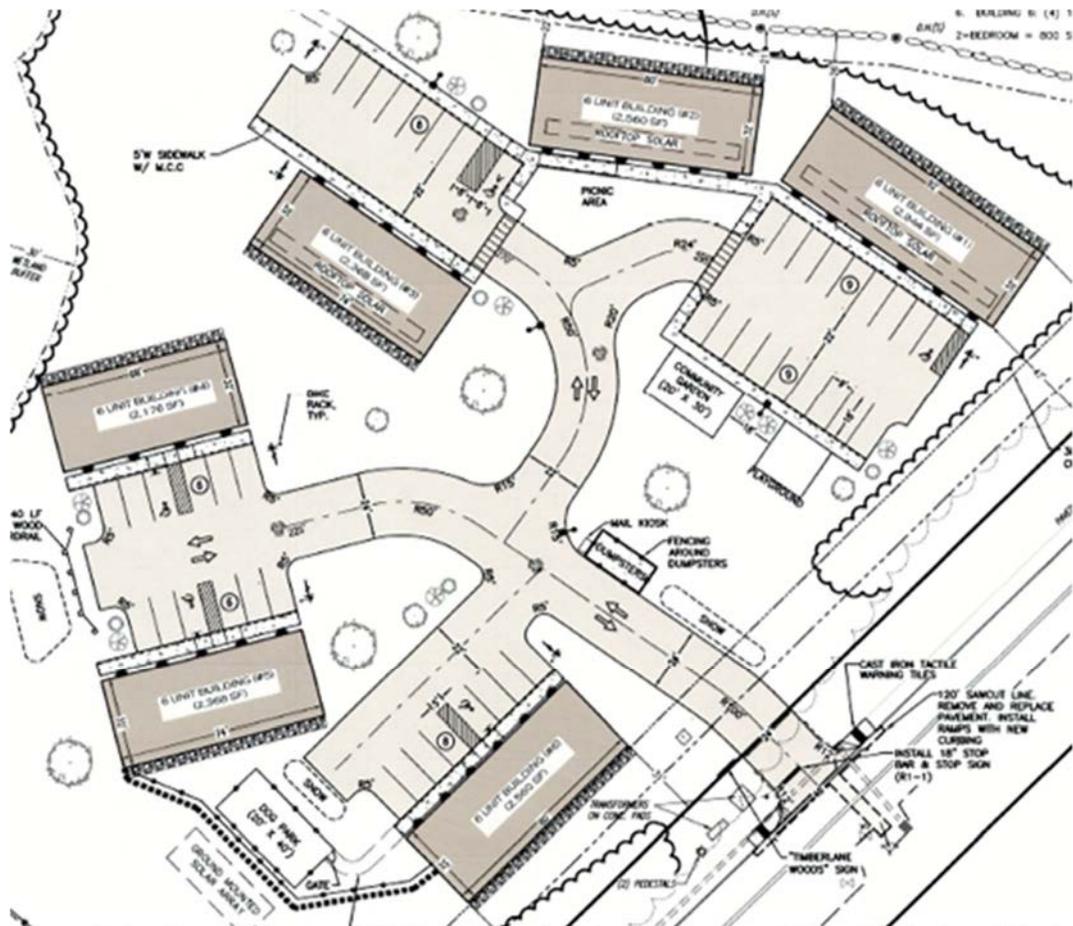


Figure 2. A snippet of the proposed conditions plan showing the layout of the Timberlane Woods Cottage Court Development.

Article 12.3.3 – Precautionary Slope Standards: This Article of the LDC outlines the uses that are allowed in areas of precautionary slopes, including the installation of public and private utility lines, logging, construction trails, and other activities. The property owner logged the proposed development area prior to the issuance of the previous Planning Board conditional approval in 2022, which is allowed under this Article of the code. As part of this application, the owner will be installing private utility lines for domestic water, fire protection, sewer, and underground electricity passing through areas of precautionary slopes.

This Article of the LDC also states that the removal of vegetation, grading of slopes, erection of buildings, addition of impermeable surfaces, and removal of native soil in areas of precautionary slopes cannot exceed 20,000 sf on an individual lot; however, this Article specifies that the Board may increase the area of precautionary slopes to be impacted through the issuance of a Hillside CUP. As stated previously, the slope exhibit shows that ~54,075-sf of precautionary slopes are proposed to be impacted as a result of this development. The Board will need to make a determination as to whether or not the applicant has sufficiently demonstrated that this is the most suitable portion of the site to be developed.

Article 12.3.5 – Site Preparation, Grading, & Construction Standards: This Article of the LDC states that the highest point of a structure shall be 50' vertically below and 50' horizontally from the top of a ridgeline or hilltop as measured at approximate right angles to the ridgeline or hilltop.

STAFF REPORT

Additionally, structures built on precautionary slopes shall be set into the topography using earth sheltering and graded areas shall not be larger than the area necessary to construct all buildings, accessory buildings or structures, plus the area needed to accommodate access, parking, and turnaround areas.

The project narrative states that the site will be constructed using best management practices and following the NH DES Alteration of Terrain (AOT) permit requirements for site stabilization, erosion control measures, and stormwater management practices. The area to be graded appears to be limited to the area required for construction of the required site features, and the proposed development is proximate to a prominent hilltop or ridgeline. The slope exhibit and grading plan show that the buildings will be constructed at approximately the same grade as ground level. The Board may wish to ask the applicant to provide additional information about how the site was designed with these standards in mind.

Article 12.3.6 – View Clearing: This Article states that trees on precautionary and prohibitive slopes may be removed beyond the building area for a width of clear cutting not to exceed 25' and extending outward from the edge of the clearing within the building area at an angle of 45-degrees or less on both sides, to a point down-slope where the tops of the trees are at the same elevations as the ground floor of the building. This Article of the LDC also states that a plan detailing any proposed clearing for views on prohibitive or precautionary slopes shall be submitted in conjunction with a site plan review application.

As mentioned previously in the staff report, the property owner logged the proposed development area prior to the conditional approval of the previous site plan and subdivision applications, which is allowed in areas of precautionary slopes per Article 12.3.3.A.3 of the LDC. The proposed conditions plan on Sheet 3 of the plan set delineates the edge of the tree clearing and the project narrative states that the extent of this clearing was based on the location of the 30' surface water buffer along the western portion of the proposed development area. The narrative also states that no additional clearing will be required in order for the site to be developed. This standard appears to be met.

Article 12.3.7 – Drainage & Stormwater Management: This Article of the code states that drainage management systems shall be designed to accommodate the stormwater volumes associated with a 50-year, 24-hour storm event; that runoff shall be dispersed within the subject lot, and that natural drainage courses shall not be disturbed and shall be incorporated as an integral part of the drainage and stormwater design. The project narrative states that the development meets the threshold for the submittal of an AOT permit to the New Hampshire Division of Environmental Services (NH DES) where the drainage design, erosion controls, and stormwater management will be reviewed/approved by the state.

Additionally, the narrative states that the impervious surfaces on the site will have stormwater runoff treated and retained on-site to meet or reduce the runoff when compared to the undeveloped state of the property. The applicant states that the stormwater management system has been designed to handle the 2-, 10-, and 50-year storm events required to meet the City of Keene and NH DES regulations. Planning Staff recommend that the Board consider including the submittal of an approved AOT permit application as a precedent condition of approval for this application. This standard appears to be met.

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APPLICATION ANALYSIS – ARTICLE 17 – COTTAGE COURT CUP REGULATIONS:

Article 17.4 – Permitted Uses: This Article of the LDC outlines the residential and non-residential uses that are allowed as part of CCDs in the various zoning districts in Keene. Additionally, the specific standards for commercial uses and uses that are accessory to the primary residential use are outlined. As part of this project, the applicant is proposing to construct six townhome-style buildings containing a total of 36 units on a single lot in the Low Density District. This use is allowed as long as the units are attached horizontally and contain between 4-6 total dwelling units per building. The proposed conditions plan shows the accessory structures and features to be incorporated into the development, including mail kiosks, a community garden, dumpster area, playground, dog park, small-scale ground-mounted solar array, and a picnic area. This standard appears to be met.

Article 17.5.1 – Development Types Allowed: This Article of the code states that projects may be developed on either a single parcel with either a property management entity (if rental units) or a Homeowners’ or Condominium Association (if for sale). Additionally, developments can also consist of multiple individual lots. The project narrative states that the development will be located on a single lot and will be owned by a single entity who will be responsible for all maintenance on the site.

Units will be rented out to individuals as apartments and will include some workforce housing. Available units will include efficiency (studio) apartments, 1-bedroom units, and 2-bedroom units. Table 1 shows a breakdown of the types of units that will be offered, the gross floor area of each type, and the overall number of each type of unit proposed.

Table 2: Proposed unit type, number of units, and gross floor area.

Unit Type	Total Gross Floor Area	Number of Units Proposed
Efficiency (Studio)	512-sf	6
1-Bedroom	640-sf	20
2-Bedroom	800-sf	10

Article 17.5.2 – Dimensional Standards: Table 2 shows the required dimensional standards for a cottage court development located in the Low Density District as well as the dimensional standards proposed as part of this specific application. The proposed development exceeds the setbacks required for both Cottage Court developments and the Low Density District. This standard appears to be met.

Table 2: Required vs. proposed dimensional standards.

	Required	Proposed
Minimum tract size	None	13.1-ac
Minimum tract frontage	30'	817.88' (along Drummer Rd)
Perimeter setback from road	Setbacks from existing roads external to the development may be less than the underlying zoning district in order to match an established building line along the road.	31' minimum

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Perimeter setback from other tract boundaries	Rear: 20' Side: 10'	Rear: greater than 20' (exact setback unknown) Side: 21' minimum
Density	None	36 units per 13.1 acres (~2.7 units per acre)
Height	2.5 stories or 35' max	2.5 stories

Article 17.5.3 – Conditional Use Permit Standards:

- A. Dwelling Unit Size:** This standard requires that all new units within a development can have a maximum average size of 1,250-sf of gfa per unit (excluding garages) and a maximum footprint of 900-sf per unit (excluding porches and garages). The submitted materials show that the total gross floor area of all units is 23,872 sf, which averages out to ~663 sf gfa per unit. The proposed conditions plan shows the footprint of each building, and the narrative states that the footprint of each individual unit will not exceed 900 sf. Staff recommend that the submittal of architectural elevations and floor plans prior to the issuance of a building permit be included as a condition of approval to ensure the final building design complies with this standard. This standard appears to be met.
- B. Parking:** This Article of the code states that a minimum of one parking space per unit is required and a maximum of 1 parking space per bedroom can be provided. Parking may be provided in surfaces spaces or in garages. The proposed conditions plan shows 46 surface parking spaces in four parking areas around the site, 1 for each bedroom. This standard appears to be met.
- C. Building Separation:** This standard states that the separation between buildings shall be determined by applicable building and fire codes. In the project narrative, the applicant states the northern two buildings will be the closest together on the site with a total of 10.95' of separation. The Building Official / Fire Marshal had no concerns about the distance between any of the buildings on the site. This standard appears to be met.
- D. Driveways:** This standard states that driveways providing access to three or more units and driveways internal to the site shall have a minimum width of 20' and a maximum width of 24' for two-way traffic. The proposed conditions plan shows a two-way flow of traffic throughout the site and into all parking areas with a maximum width of 24' and a minimum width of 22'. This standard appears to be met.
- E. Screening:** This Article of the code states that a 6'-tall semi-opaque or opaque fence shall be required if the proposed building type (not density) is more intense than the adjacent building type. This standard goes on to state that the Planning Board may approve a landscaped buffer in lieu of a fence. The proposed conditions plan shows the current extent of the clearing around the perimeter of the developed area. The project narrative states that this existing vegetated buffer will remain along Timberlane Drive and the northern boundary to serve as screening for the property.

Additionally, the narrative states that the southern and western property boundaries will be screened by the existing wooded buffer in these areas, which will also be maintained. Planning Staff recommend that the Board include a precedent condition of approval related to

STAFF REPORT

maintaining a vegetated buffer around the perimeter of the property. If the areas along the western and southern portions of the property and Timberlane Drive were to be cleared of the existing vegetation, the development would be visible from adjacent properties and the road. The Board will need to make a determination as to whether or not this standard has been met or if additional screening will need to be provided.

- F. **Architectural Guidelines:** This Article of the Cottage Court standards outlines the architectural design features that make a CCD easier or more difficult for the Planning Board to approve. The standard states that new developments should endeavor to “fit in” and be respectful of the context of the existing neighborhood.

The project narrative states that the buildings will be constructed with a townhouse style and will be 2.5 stories in height. Building exteriors will be finished with natural tones and finish materials will include painted steel roofing; vinyl clapboard siding; vinyl clad windows; vinyl shutters on facades facing parking areas, driveways, and streets; and composite decking. Rooftop solar is proposed to be added on the southwestern facing buildings.

The applicant submitted a conceptual rendering as part of this application as shown in Figure 3; however, during correspondence with City Staff, the property owner has expressed flexibility regarding the proposed exterior building design. Planning Staff recommend that a precedent condition of approval be included related to the submittal of elevations showing the final exterior design and materials for the buildings.

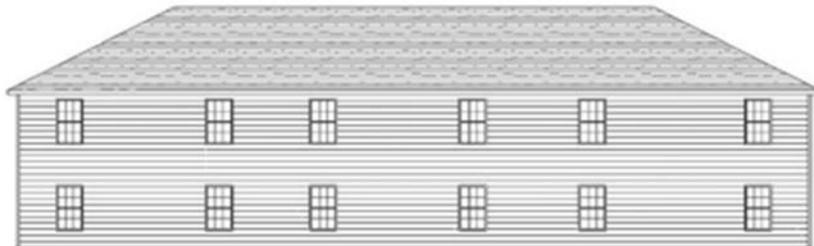


Figure 3. A snippet of the renderings submitted showing conceptual proposed designs for the architecture & visual appearance of the buildings.

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APPLICATION ANALYSIS – ARTICLE 21 – SITE DEVELOPMENT STANDARDS:

Article 21.1 – Drainage & Stormwater Management: This Site Development Standard states that the development of a site shall not result in increased volume or velocity of runoff onto adjacent properties or surface water bodies; that an applicant shall submit a drainage report stamped by a NH licensed engineer; that the proposed design shall incorporate Low Impact Development (LID) measures; and that treatment systems that divert runoff into surface waters, wellfield protection areas, or floodplain compensatory storage areas must meet the Federal Clean Water Act standards and shall be designed to prevent sediment loading in these areas.

The applicant submitted a Storm Water Management Report which demonstrates that the post-development condition will result in a net decrease in the volume and velocity of storm water runoff from the site for 2-year, 10-year, and 50-year storms. The grading & drainage plan on sheet 4 of the plan set shows the stormwater management system consisting of four driveway culverts, one treatment swale, three catch basins, a level spreader, and a detention basin.

Due to the presence of wetlands in close proximity to the development area, Planning Staff recommend that a precedent condition of approval related to the flagging and inspection of the 30' wetland buffer by Community Development Staff prior to the commencement of site work be included. This standard appears to be met.

Article 21.3 – Sediment & Erosion Control: This development standard states that projects shall be designed to prevent erosion and sedimentation during and subsequent to construction and states that all proposed measures shall comply with the most recent version of the NH Department of Environmental Services NH Stormwater Manual. As discussed previously in this report, the project narrative states that temporary erosion control measures used as part of this project will include the installation of catch basin silt-socks, silt fencing, and a stabilized construction entrance. Permanent erosion control measures will include the installation of stone rip-rap at the rear of the buildings, stone check dams along Articles of the driveway, established vegetation, erosion control matting, and asphalt pavement. Details for these items can be found on sheet 8 of the plan set. This standard appears to be met.

Article 21.4 – Snow Storage & Removal: This Article of the LDC states that snow cannot be moved into areas of surface waters, that runoff from snowmelt must be directed so that it does not cause erosion, and that snow cannot be stored in parking spaces that are required to fulfill the minimum parking requirements outlined in Article 9.2 of the LDC. Snow storage areas are shown along the eastern side of the entry driveway, along the western side of the southernmost parking lot, and along the western side of the parking lot between buildings #4 & #5. This standard appears to be met.

Article 21.5 – Landscaping: This Article of the LDC states that all landscaping must be hardy to the local regional climate conditions; cannot include any invasive species; must be installed using best practices; protective devices must be installed around existing landscaping; that all landscaping must be installed where it will not impede the safety of pedestrians, bicyclists, or motorists; and shall be maintained in perpetuity as a feature on the approved site plan. Article 9.4.5.A of the LDC requires that for parking lots with 10 or more parking spaces, 1 tree must be planted for every 10 parking spaces.

STAFF REPORT

Given that there are a total of 46 parking spaces proposed as part of this development, the applicant has included 5 Red Maple trees on the landscaping plan on sheet 6 of the plan set to fulfill this requirement. Additionally, 4 Hawthorne trees, 8 rhododendron shrubs, 5 winterberry shrubs, and 3 dwarf alberta spruce are proposed around the site to provide a visual buffer between the six buildings. Planning Staff recommend the submittal of a security to cover the cost of landscaping and its installation. This standard appears to be met.

Article 21.6 – Screening: This standard states that trash collection areas, ground-mounted and roof-mounted mechanical equipment, and solar energy systems shall all be installed and screened with landscaping or some other form of screening to minimize the visibility of these features from adjacent properties and the public right-of-way. The project narrative states that HVAC equipment will either be roof-mounted or ground-mounted behind the buildings to minimize visibility. The plan shows that the transformer installed near the entrance to the development will be screened by dwarf alberta spruce and the dumpster will be screened with a fence.

Article 21.6.1.A of the LDC states that landscaping or screening should be used to, *“Form a buffer between single-family and multifamily dwellings, which are different in height, form or materials than the adjacent single-family dwellings; and Screen parking lots from adjacent properties.”* The project narrative states that the existing vegetated buffer along Timberlane Drive will screen the development from view of the public right-of-way. In order to ensure that this screening is maintained into the future, Planning Staff recommend that the Board include a precedent condition of approval related to a 30’ no-cut buffer being shown along the northern and eastern property boundaries on the proposed conditions plan. The Board will also need to make a determination as to whether this existing vegetation is sufficient to serve as screening.

Article 21.7 – Lighting: This Article of the code states that all light fixtures must be full cut-off with a color rendering index greater than 70 and a color temperature of 3,500K or less. Light levels cannot exceed 0.1-footcandles (fc) at property lines or 1-fc at the right-of-way. In residential zoning districts, light fixtures are allowed to be mounted at a maximum height of 15’. Additionally, parking lot lighting cannot exceed an average of 3.5-fc and must have a uniformity ratio (the ratio of the average to the minimum light levels) that does not exceed 5:1 in footcandles.

The submitted photometric plan shows that four parking lot lights and 32 wall-pack lights are proposed to be installed. The pole lights will be mounted at a height of 14’ above ground level and will have a color rendering index of 80 and a color temperature of 3,000K. The maximum average lighting level for all parking spaces is 1.42-fc and the maximum uniformity ratio is 4.73-fc. Both of these numbers are below the max values identified above. The proposed wall-pack light fixtures have a color rendering index of 90 and a color temperature of 3,000K. Upon reviewing the full cut sheet for the wall-pack light fixture, Planning Staff discovered that this fixture is labeled as not being “dark skies compliant” (i.e. – full cut-off). Planning Staff recommend that the Board include a precedent condition of approval related to the submittal of a cut sheet for an updated wall-pack light fixture that is full cut-off.

Article 21.8 – City Sewer & Water: This Article of the LDC states that all sewer and water utilities shall comply with the City’s utility standards outlined in Chapter 98 of the Code of Ordinances and that the City may require technical studies at the applicant’s expense to ensure that existing water and sewer capacity is sufficient for all proposed developments. The applicant is proposing to install new separate domestic water, fire protection, and sewer lines to service all 36 units. Given that these utilities will only be serving one residential lot, they can remain privately owned and

STAFF REPORT

maintained and do not need to be accepted by City Council as public infrastructure. At the time of this staff report, the applicant was working on updating the plan set to ensure that this was made clear. Planning Staff recommend that the Board include a precedent condition of approval related to the submittal of a security to cover the cost of preparing an as-built plan. This standard appears to be met.

Article 21.9 – Traffic & Access Management: This standard states that residential developments involving 10 or more units must submit traffic study prepared by a traffic engineering licensed in the State of NH using the most recent version of the Institute of Transportation Engineers (ITE) Trip Generation Manual. Additionally, this standard states that the number of curb cuts on a site should be limited; should provide connections (such as walkways, sidewalks, and bicycle lanes within the property and between adjoining properties); that bicycle parking should be provided for all commercial developments; and that pedestrian facilities should be designed to comply with the State Building Code.

The proposed conditions plan shows that tip-downs with tactile warning tiles will be installed in the existing sidewalk where the entrance to the development will be located. In addition to this, each building will have an accessible parking space close to the entrance with access to a sidewalk connecting to the buildings. A gravel path is also shown on the proposed conditions plan to connect the site to the existing woods road on the northern portion of the site, so that residents do not have to travel along Timberlane Drive to access the adjacent Old Gilsum Road trail. At the time of this staff report, Engineering Staff were reviewing the traffic study submitted as part of the revised materials for this application. Planning Staff can provide an update on their feedback on this report at the Planning Board meeting.

Article 21.10 – Filling & Excavation: This standard states that all development involving the commercial taking of earth must comply with the Earth Excavation Regulations outlined under Article 25 of the LDC. Additionally, any placement of fill within the floodplain must comply with the floodplain regulations outlined under Article 25 of the LDC. If fill or excavation will be completed and will have an impact on wetlands, the applicant must comply with all federal and state wetlands regulations and procedures. Finally, any project involving 50 or more trucks of earth or gravel entering or leaving a site must submit a plan showing the proposed truck routes, which then must be reviewed by the Community Development, Police, Engineering, and State Highway Departments.

In their response to staff comments, the applicant explained that while 50 truckloads of dirt would not be entering the site; there will be more than 50 trucks of exported material based on the cut/fill calculations. Trucks leaving the site will travel down Timberlane Drive to Elm Street, head south along Elm Street to High Street, and then north on Washington Street to access Route 9. This standard appears to be met.

Article 21.11 – Surface Waters & Wetlands: This Article of the LDC states that all proposed development must comply with the Surface Water Protection Ordinance outlined under Article 11 of the LDC, as well as any other applicable City, State, or federal regulations. The site has a large area of wetlands located to the southwest of the proposed development area. The proposed conditions plan shows the location of these wetlands as well as the 30' buffer that must be maintained in the Low Density District. The northwestern corner of building #4 is located very close to the edge of the 30' buffer, so Planning Staff are recommending that a subsequent condition of approval related to the flagging and inspection of the surface water buffer prior to

STAFF REPORT

the commencement of site work be included in the motion for this application. There do not appear to be any other areas on the site where work will be completed close to the surface water buffer. This standard appears to be met.

Article 21.12 – Hazardous & Toxic Materials: This Article of the LDC outlines the requirements for any projects involving hazardous or toxic materials. The project narrative states that there are none associated with this project. This standard appears to be met.

Article 21.13 – Noise: This Article of the LDC outlines the requirements for projects involving potentially loud levels of noise. The project narrative states that the increase in noise will be minimal, given that the site will be located far away from the nearest residential home. This standard appears to be met.

Article 21.14 – Architecture & Visual Appearance: This Article of the LDC outlines the architectural standards for new development, redevelopment, and additions related to the massing/scale of buildings, the inclusion of architectural features to provide visual interest, and the placement of the building on a site in relation to the surrounding properties and the public right-of-way. Article 21.14.3.D of the LDC states that all required off-street parking shall be to the side or rear of buildings on the proposed site.

None of the parking proposed as part of this project will be located between the public right-of-way and the buildings and the development will be screened by the existing vegetated buffer, so this standard appears to be met. The Board may wish to consider asking the applicant to designate a 30' no-cut buffer along the eastern and northern property boundaries on the final plan and include this as a precedent condition of approval.

Recommended Motion:

If the Board is inclined to approve this request, the following motion is recommended:

“Approve PB-2024-14 as shown on the plan set identified as “Multi-Family Residential Development, Tax Map 515, Lot 15, Timberlane Woods” prepared by Fieldstone Land Consultants at varying scales on September 20, 2024 and last revised on October 14, 2024 with the following conditions:

- 1. Prior to final approval and signature of the plans by the Planning Board Chair, the following conditions precedent shall be met:***
 - a. Owner’s signature appears on the plan.***
 - b. Submittal of five paper copies and a digital copy of the final plan set stamped by an engineer and certified wetlands scientist licensed in the State of NH.***
 - c. Submittal of an updated proposed conditions plan with a 30’ “no-cut buffer” labeled along the boundaries of the proposed development area.***
 - d. Submittal of five full sized, color paper copies and a digital copy of the final elevations stamped by a NH-licensed architect showing each building façade with the proposed exterior building materials/finish colors labeled.***
 - e. Submittal of an updated cut sheet for a wall-pack light fixture that complies with the lighting standards outlined under Article 21.7 of the LDC.***
 - f. Submittal of an approved Alteration of Terrain Permit application to the Community Development Department.***

STAFF REPORT

- g. Submittal of a security to cover the cost of sediment and erosion control, landscaping, and as-built plans in a form and amount acceptable to the City Engineer.*
- 2. Subsequent to final approval, the following conditions subsequent shall be met:**
 - a. Prior to the commencement of site work, a preconstruction meeting will be scheduled with Community Development Staff.*
 - b. Prior to the commencement of site work, the erosion and sediment control measures shall be inspected by the Community Development Department to ensure compliance with this application and all City of Keene regulations.*
 - c. Prior to the commencement of site work, the 30' wetlands buffer shall be flagged and inspected by the Community Development Department to ensure compliance with the Surface Water Protection Ordinance and all City of Keene regulations.*
 - d. Following the installation of landscaping, the applicant shall contact Community Development Staff to schedule an initial landscaping inspection.*
 - e. After 1 full growing season (a minimum of 1 year), the applicant shall contact Community Development Staff to conduct a final landscaping inspection."*



City of Keene, NH

Cottage Court Conditional Use Permit (CUP) Application

If you have questions about how to complete this form, please call: (603) 352-5440 or email: communitydevelopment@keenenh.gov

SECTION 1: PROJECT INFORMATION

PROJECT NAME: TIMBERLANE WOODS - COTTAGE COURT OVERLAY

NUMBER OF NEW DWELLING UNITS PROPOSED: 36 UNITS

(Please note: Proposals that include the creation of 5 or more new units will require concurrent Major Site Plan review. See the Major/Minor Site Plan application for additional information.)

PROJECT ADDRESS(ES): DRUMMER RD. AND TIMBERLANE DRIVE

DOES THIS PROJECT INCLUDE A PROPOSAL TO SUBDIVIDE ONE OR MORE PARCELS?

- YES
 NO

AVERAGE GROSS FLOOR AREA OF ALL PROPOSED UNITS (In SF): 14,976 SF

(If yes, a Subdivision application will need to be submitted and reviewed currently with the Cottage Court application. See the Article 20 of the [Land Development Code \(LDC\)](#) for additional information.)

SECTION 2: CONTACT INFORMATION

PROPERTY OWNER

APPLICANT

NAME/COMPANY: CHRISTOPHER ERIC FARRIS

NAME/COMPANY: SAME AS OWNER

MAILING ADDRESS: 34 ROLLINS ROAD, EPPING, NH 03042

MAILING ADDRESS:

PHONE: 603-365-1820

PHONE:

EMAIL: E_FARRIS@HOTMAIL.COM

EMAIL:

SIGNATURE: *John Noonan* % FIELDSTONE LAND CONS.

SIGNATURE:

PRINTED NAME: CHRISTOPHER ERIC FARRIS

PRINTED NAME:

AUTHORIZED AGENT
(if different than Owner/Applicant)

FOR OFFICE USE ONLY:

NAME/COMPANY: FIELDSTONE LAND CONSULTANTS. PLLC

TAX MAP PARCEL #(s): 515-019-000-000-000

MAILING ADDRESS: 206 ELM ST., MILFORD, NH 03055

PHONE: 603-672-5456

PARCEL SIZE: 1.1 ac

DATE STAMP:

EMAIL: jenoonan@fieldstonelandconsultants.com

ZONING DISTRICT: Low Density



SIGNATURE:

PRINTED NAME: JOHN NOONAN

PROJECT #: PB-2024-14



City of Keene, NH Planning Board Major / Minor Project Application

If you have questions about how to complete this form, please call: (603) 352-5440 or email: communitydevelopment@keenenh.gov

SECTION 1: PROJECT INFORMATION

PROJECT NAME: TIMBERLANE WOODS - COTTAGE COURT DEVELOPMENT	TYPE OF APPLICATION BEING SUBMITTED: <input checked="" type="checkbox"/> MAJOR PROJECT APPLICATION <input type="checkbox"/> MINOR PROJECT APPLICATION
PROJECT ADDRESS(ES): DRUMMER RD. AND TIMBERLANE DRIVE	

SECTION 2: CONTACT INFORMATION

OWNER	APPLICANT
NAME/COMPANY: CHRISTOPHER ERIC FARRIS	NAME/COMPANY: Same as owner
MAILING ADDRESS: 34 ROLLINS ROAD, EPPING, NH 03042	MAILING ADDRESS:
PHONE: 603-365-1820	PHONE:
EMAIL: E_farris@hotmail.com	EMAIL:
SIGNATURE: <i>Christopher Eric Farris</i>	SIGNATURE:
PRINTED NAME: CHRISTOPHER ERIC FARRIS	PRINTED NAME: CHRISTOPHER ERIC FARRIS

AUTHORIZED AGENT (if different than Owner/Applicant)	FOR OFFICE USE ONLY:	
NAME/COMPANY: FIELDSTONE LAND CONSULTANTS, PLLC	TAX MAP PARCEL #(s): 515-015-000000-000	
MAILING ADDRESS: 206 ELM ST, MILFORD, NH 03055		
PHONE: 603-672-5456	PARCEL SIZE: 13.1-ac	DATE STAMP: 
EMAIL: jnoonan@fieldstonelandconsultants.com	ZONING DISTRICT: Low density	
SIGNATURE: <i>John Noonan</i>	PROJECT #: PB-2024-14	
PRINTED NAME: JOHN NOONAN		



City of Keene, NH

Hillside Protection Conditional Use Permit (CUP) Application

If you have questions about how to complete this form, please call: (603) 352-5440 or email: communitydevelopment@keeneh.gov

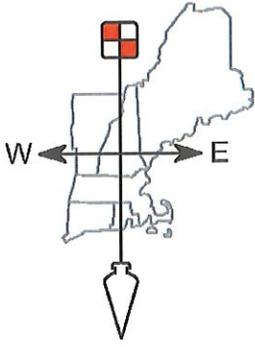
SECTION 1: PROJECT INFORMATION

PROJECT NAME: TIMBERLANE WOODS - COTTAGE COURT OVERLAY	AREA OF PRECAUTIONARY SLOPES TO BE IMPACTED: <i>(in square feet)</i> 54,075 S.F.
PROJECT ADDRESS(ES): DRUMMER ROAD & TIMBERLANE DRIVE	

SECTION 2: CONTACT INFORMATION

PROPERTY OWNER	APPLICANT
NAME/COMPANY: CHRISTOPHER ERIC FARRIS	NAME/COMPANY: SAME AS OWNER
MAILING ADDRESS: 34 ROLLINS ROAD, EPPING, NH 03042	MAILING ADDRESS:
PHONE: 603-365-1820	PHONE:
EMAIL: E_FARRIS@HOTMAIL.COM	EMAIL:
SIGNATURE:	SIGNATURE:
PRINTED NAME: CHRISTOPHER ERIC FARRIS	PRINTED NAME:

AUTHORIZED AGENT <i>(if different than Owner/Applicant)</i>	FOR OFFICE USE ONLY:	
NAME/COMPANY: FIELDSTONE LAND CONSULTANTS, PLLC	TAX MAP PARCEL #(s): 515 015 - 000 - 000 000	
MAILING ADDRESS: 206 ELM ST., MILFORD, NH 03055	_____	
PHONE: 603-672-5456	PARCEL SIZE: B.1 ac	DATE STAMP: 
EMAIL: jnoonan@fieldstonelandconsultants.com	ZONING DISTRICT: Low Density	
SIGNATURE:		
PRINTED NAME: JOHN NOONAN	PROJECT #: 15-2024-14	



FIELDSTONE

Surveying ♦ Engineering
Land Planning ♦ Septic Designs

LAND CONSULTANTS, PLLC

206 Elm Street, Milford, NH 03055 - Phone: 603-672-5456 - Fax: 603-413-5456
www.FieldstoneLandConsultants.com

Cottage Court Development Site Plan and CUP Narrative TIMBERLANE WOODS

Farris Development, LLC
Tax Map Parcel 515, Lot 15
Drummer Road & Timberlane Drive
Keene, New Hampshire

October 14, 2024

Project Narrative:

Fieldstone Land Consultants, on behalf of Farris Development, LLC, are submitting these applications for Planning Board approval. The three applications submitted are the Conditional Use Permit (CUP) Application for Cottage Court Overlay, CUP for Hillside Protection, and Major Site Plan Application. The proposal consists of developing Tax Map Lot 515-15 as a multi-family residential development with six (6) buildings, each containing six (6) units. The units will be a mix of two-bedroom, one-bedroom, and one-bedroom efficiency apartments, all under the 900 S.F. limit. The Planning Board had previously approved a CRD Subdivision and Site Plan for a very similar development on this property (per S-04-22 and SPR-04-22). The applicant has decided to utilize the recently adopted Cottage Court Overlay regulations to slightly increase the density from the approved plan and to not subdivide the property to simplify the project.

The existing Tax Map Lot 515-15 has 570,000 square feet or 13.1+/- acres with 817.88 feet of frontage along Timberlane Drive, and an additional 160 +/- feet along Drummer Road. The lot is located in the Low Density District per the Zoning Map and the use of Multi-Family Dwelling is permitted in this district with the caveat of a maximum of 6 Dwelling Units per building structure (6 units per building proposed). The parcel is currently undeveloped with a mix of forest, cleared land with low-growth vegetation, and forested wetlands towards the Drummer Road side of the property.

The proposed buildings will have access from Timberlane Drive with a central driveway that branches off into four parking lots. The site will be owned by a single entity with apartment rented as workforce housing. The property owner will be responsible for all maintenance of the access road, driveways and parking lots. The water and sewer infrastructure will be owned by the City of Keene, with an easement provided. The driveway intersections will allow for emergency vehicle turning movements.

All six (6) proposed buildings will contain six (6) units. The sizes of the buildings will vary, as there is a mix of two-bedroom, one-bedroom, and efficiency apartments. The mix of dwelling unit types will be approximately (28% of two-bedroom + 55% of one-bedroom + 17% of efficiency). The buildings will have three building floors (2.5 stories) and will be a townhouse architectural style. This new submittal does not include garages. The surface parking provided will allow for one parking space per bedroom

Timberlane Woods CUP & SPR
Tax Map Parcel 515-15
Keene, NH

(46 total).

The residential development will be serviced by the municipal water and sanitary sewer infrastructure that is located along Timberlane Drive. The infrastructure will be extended into the development, and owned by the City of Keene, as it serves more than six dwelling units. Easements will be provided to the City of Keene for the infrastructure. The stormwater management will be constructed on site and maintained by the property owner. The project will disturb more than 100,000 S.F. of land, requiring an Alteration of Terrain permit with NHDES.

The area of impacts to precautionary slopes (15-25%) exceeds the 20,000 S.F. threshold, therefore, a Hillside Protection Conditional Use Permit is required. The previous CRD subdivision that was approved had smaller individual building lots, where none of the lots exceeded the 20,000 S.F. limit. As the land is no longer being subdivided, the impacts exceed 20,000 S.F. limit for one lot. Therefore, we have added the criteria for the Hillside CUP to the list below.

The development standards for the three applications are outlined below with descriptions on how the standards are met in this submission.

Hillside Protection Overlay CUP Standards (Article 12.3 of the LDC):

12.3.1 Generally: The slopes impacted are precautionary slopes, with more than 20,000 SF for the building lot.

12.3.2 Prohibitive Slope Standards: We are not impacting prohibitive slopes.

12.3.3 Precautionary Slope Standards: There is 54,075 square feet of precautionary slopes that will be impacted. After the project is developed, there will be new slopes that fall within the 15-25% slope range. The project consists of installing erosion control measures, drainage improvements to control storm runoff, and the site is plateaued to blend into the topography of the land. The development is only using a small portion of the property, with only 2.6% building coverage and 7.7% of impervious coverage on the lot.

12.3.4 Standards for Commercial Alpine: Not applicable.

12.3.5 Site Preparation, Grading & Construction Standards: The site will be constructed using best management practices and following the NHDES Alteration of Terrain permit requirements for site stabilization, erosion control measures, and stormwater management practices.

12.3.6 View Clearing: The site has been logged and the extents of the clearing were based on the wetland buffer setback. There is no additional clearing required on the site for the development to be constructed.

12.3.7 Drainage & Stormwater Management: The site will require an NHDE Alteration of Terrain permit, where the drainage design, erosion controls, and stormwater management will be reviewed by the state. The impervious surfaces will have storm runoff treated and detained to meet or reduce the runoff when compared to the undeveloped state of the property. As designed, the stormwater management system will handle the 2, 10, and 50 year storm events to meet the City of Keene and NHDES requirements.

Cottage Court Overlay CUP Standards (Article 17.5.3 of the LDC):

17.5.3.A Dwelling Unit Sizes: The dwelling unit sizes vary based on 2-bed, 1-bed, and efficiency apartment type; all units will meet the maximum of 900 footprint area, and 1250 S.F. in gross floor area. The unit sizes are listed on SP-1 sheet.

17.5.3.B Parking: The parking provided is surface parking (asphalt surface) with 46 spaces meeting the 1 space per bedroom standard. The parking lots will not be visible from the City street based on vegetated buffer, building orientation, and grade changes across the site.

17.5.3.C Building Separation: The buildings are separated to meet building and fire codes. The two closest buildings are 10.95 feet apart (northern two buildings).

17.5.3.D Driveways: The driveways will meet the requirements of this section. The main driveway will be 24' wide with gravel shoulders, street lighting, and trees. The other driveways will be 22' wide to match the minimum drive aisle width of the parking lots they serve. The intersections of the driveways have radial corners to allow for turnaround of emergency vehicles, such as a ladder truck.

17.5.3.E Internal Roads: The development will not have a "road" with a defined right-of-way. There will be an easement for utilities, owned by the City.

17.5.3.F Screening: The proposed buildings will be screened from adjacent properties and the City Street. There is a vegetated buffer to remain along Timberlane Drive and the northern property line. The southern and western boundaries have a substantial amount of forest to remain as a buffer. The grades between the abutting lots and the City Street also provide screening to the site.

Site Development Standards (Article 21 of the LDC):

21.2. Drainage & Stormwater: The site will be designed to convey the drainage away from the buildings and off the paved driveways. The stormwater will be managed to provide treatment and retention of rainstorm runoff waters. The systems have been designed to match or reduce the stormwater runoff that exists on the undeveloped site for the 2, 10, and 50 year storm events, as required by NHDES and the City of Keene.

21.3 Sediment & Erosion Control: Temporary erosion control measures consisting of catch basin silt-socks, silt fencing, and a stabilized construction entrance will be used during the construction process. The permanent erosion control measures will consist of stone rip-rap, stone check dams, established vegetation, erosion control matting, and asphalt pavement.

21.4 Snow Storage & Removal: Snow will be stored on site. Locations shown on site plans.

21.5 Landscaping: Landscaping will meet the City LDC standards and is provided around the buildings.

21.6 Screening: The perimeter of the site will have trees maintained for natural screening from the public way. The HVAC equipment for the buildings will be roof mounted or placed behind the buildings to not be visible from the public way. The transformer for the development will be screened by evergreen shrubs. There is vegetated buffer and earthen berm between Timberlane Drive and the site, which will provide overall screening for the development.

21.7 Lighting: All lighting will meet the City LDC standards and will not impact the public. Details are shown on the LT-1 Lighting Plan.

Timberlane Woods CUP & SPR
Tax Map Parcel 515-15
Keene, NH

21.8 Sewer & Water: Sewer and water will be municipal services, which includes fire protection water to each building. Easements will be provided to the City to allow access to the municipal infrastructure.

21.9 Traffic & Access Management: Traffic increases are outlined and access will be off Timberlane Drive with a private road, built to City road standards. The traffic report submitted and approved previously, is still relevant to the minor increase in units (30 approved, 36 proposed).

21.10 Filling & Excavation: The proposed grading will require filling in some areas and excavation in other areas. The materials these grade changes are mostly on site. Select gravels for construction will need to be hauled to the site. Any excavations within the City right-of-way will be outlined in the Excavation Permit with Keene Public Works.

21.11 Surface Waters & Wetlands: There are no impacts to surface waters or wetlands on the site. The wetland buffer of 30' will be maintained & marked during construction.

21.12 Hazardous & Toxic Materials: There are none associated with this project.

21.13 Noise: Noise increase will be minimal and the project is buffered from the nearest residential home.

21.14 Architecture & Visual Appearance: The architecture will be town-house style that is 2.5 stories in height. The colors will be natural tones and fit with the nearby neighborhoods in the City. The materials will consist of painted steel roofing, vinyl clapboard siding, windows are vinyl clad, vinyl shutters (on all sides facing parking areas, driveway and streets), PVC trim boards, railing combination of vinyl and aluminum, and decking will be composite. The buildings will be very similar to those previously approved by the Planning Board, however, there will not be garages. The applicant has added solar arrays on three of the southwestern facing buildings, and a ground mounted solar array near the detention basin.

Waiver Request 1 (Parking to the Side/Rear of Buildings):

§ 20.14.3.D Site Design and Relationship to Surrounding Community: *States All required off-street parking shall be to the side or rear of buildings...:* We are requesting the waiver from the LDC Section 20.14.3.D for the requirement that parking be located to the side or rear of a building. The existing lot has frontage off Timberlane Drive and Drummer Road. Based on the orientation of Building 4 the parking is in front of the building. The building directly across the driveway will block the view of the parking spaces at Building 4. The view of this building and associated parking is also screened from view of the public way, by the land topography, vegetation and other proposed buildings. This waiver was granted for the CRD Subdivision and Site Plan for this building orientation.

A. Specific circumstances relative to the subdivision, or conditions of the land in such subdivision, indicate that the waiver will properly carry out the spirit and intent of the regulations; The spirit and intent of the ordinance will be met as the proposed parking will not be visible from a public way. The topography, vegetation, and adjacent building will block this parking from the Timberlane Drive frontage. Technically this parking will be located to the rear of Building 5.

B. Granting the waiver will not increase the potential for creating adverse impacts to abutters, the community or the environment; The granting of this waiver will not create any adverse impacts to the abutters, community or environment. The parking will be located in a manner that reduces disturbance

Timberlane Woods CUP & SPR
Tax Map Parcel 515-15
Keene, NH

to the land and spaces face the building. This will eliminate the possibility of headlights shining toward abutting properties, and the parking spaces will not be visible from the public street, Timberlane Drive.

C. Consideration will also be given as to whether strict conformity with the regulations would pose an unnecessary hardship to the applicant; If the regulation was enforced with strict conformity, the applicant would have an unnecessary hardship placed upon them. The hardship would be in the form of re-design, a longer timeframe for approvals, construction scheduling, and disturbing more land to rotate the building and parking to face away from Timberlane Drive.

MULTI-FAMILY RESIDENTIAL DEVELOPMENT

- TAX MAP 515, LOT 15 -

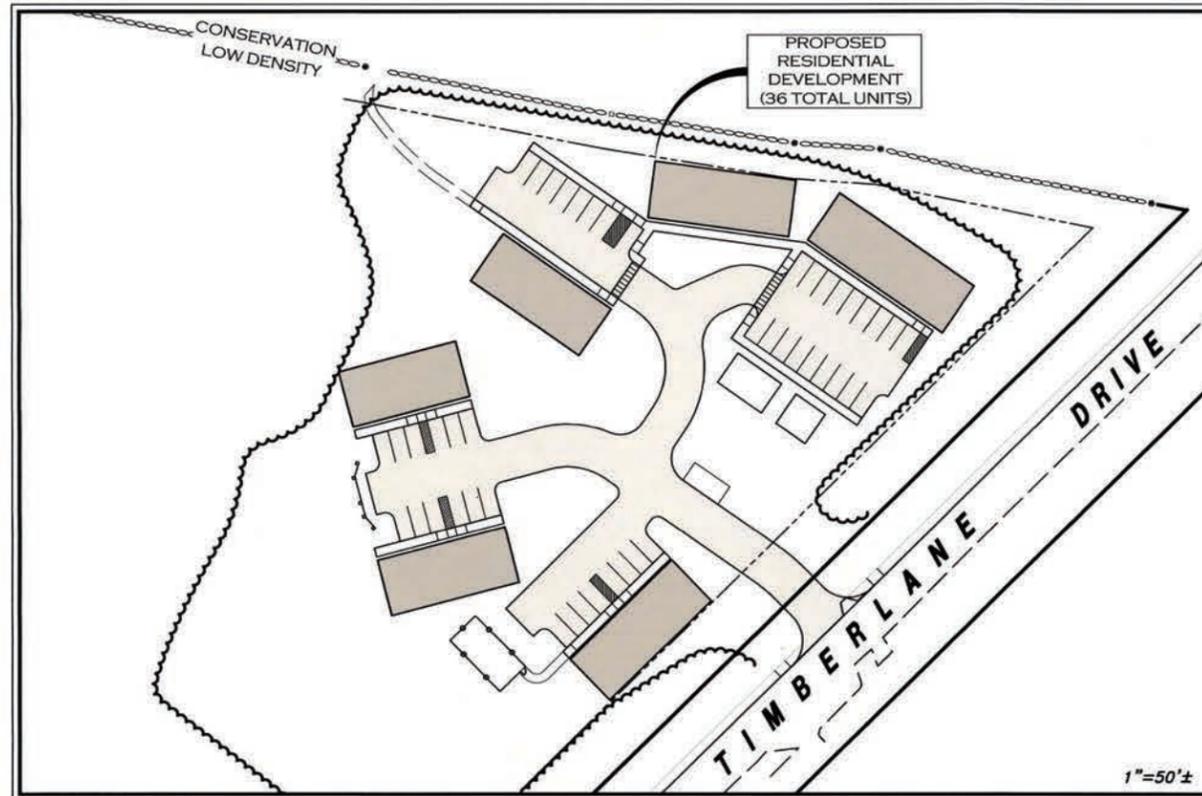
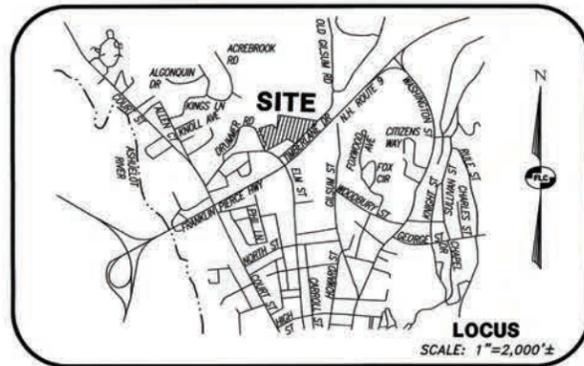
TIMBERLANE WOODS

DRUMMER ROAD & TIMBERLANE DRIVE

KEENE, NH 03431

SEPTEMBER 20, 2024

LAST REVISED: OCTOBER 14, 2024



SHEET INDEX		
PAGE	SHEET	TITLE
1	CV-1	COVER SHEET
2	EX-1	EXISTING CONDITIONS PLAN
3	SP-1	SITE PLAN
4	GR-1	GRADING & DRAINAGE PLAN
5	UT-1	UTILITY PLAN
6	LS-1	LANDSCAPING PLAN
7	LT-1	LIGHTING PLAN
8	DT-1	EROSION CONTROL DETAILS
9	DT-2	CONSTRUCTION DETAILS
10	DT-3	CONSTRUCTION DETAILS
11	DT-4	SEWER DETAILS
12	DT-5	WATER & DRAINAGE DETAILS
13	EH-1	EXHIBIT PLAN - FIRE ACCESS

APPLICANT AND OWNER:
CHRISTOPHER E. FARRIS
34 ROLLINS ROAD, EPPING, NH 03042

1. THE LOCATION OF THE UTILITIES SHOWN ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PRESERVE ALL UTILITY SERVICES.

2. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING AND COORDINATING WITH ALL UTILITY COMPANIES AND JURISDICTIONAL AGENCIES PRIOR TO AND DURING CONSTRUCTION.

3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND PROPOSED WORK PRIOR TO CONSTRUCTION.

CONTACT DIG SAFE
72 HOURS PRIOR
TO CONSTRUCTION
DIGSAFE.COM
811

Surveying ♦ Engineering ♦ Land Planning ♦ Permitting ♦ Septic Designs

FIELDSTONE
LAND CONSULTANTS, PLLC

206 Elm Street, Milford, NH 03055
Phone: (603)-672-5456 Fax: (603)-413-5456
www.FieldstoneLandConsultants.com



LAND-OWNER SIGNATURE

OWNER: _____ DATE: _____

APPROVED BY THE KEENE PLANNING BOARD

ON: _____ CERTIFIED BY: _____
CHAIRMAN: _____ AND _____
SECRETARY: _____

REV.	DATE	DESCRIPTION	C/O	DR	CK
A	10/14/24	REVS PER STAFF COMMENTS		JEN	CEB
FILE: 3145CV01.dwg	PROJ. NO. 3145.01	SHEET: CV-1	PAGE NO. 1	OF 13	

ABUTTERS:

TAX MAP 102 LOT 1
CITY OF KEENE
3 WASHINGTON STREET
KEENE, NH 03431
(CONSERVATION LAND)
TAX MAP 103 LOT 1
LEO P. & BONNIE SUE ECHAVARRIA
PMB 417, 63 EMERALD STREET
KEENE, NH 03431
VOL.2424 PG.899 3/30/07
(459 ELM STREET)
TAX MAP 515 LOT 14
LISA RUSS
JOSEPH DARBY
19 DRUMMER ROAD
KEENE, NH 03431
VOL.1629 PG.760 1/1/84
(19 DRUMMER ROAD)
TAX MAP 515 LOT 16
RYON H. & CAITLIN N. CLARKE
13 DRUMMER ROAD
KEENE, NH 03431
VOL.3074 PG.505 6/21/19
(13 DRUMMER ROAD)
TAX MAP 515 LOT 17
DONALD J. DODDY JR.
MARGARET E. ELLIS
11 DRUMMER ROAD
KEENE, NH 03431
VOL.1166 PG.505 11/1/86
(11 DRUMMER ROAD)
TAX MAP 515 LOT 18
BRIAN D. CUGLEY
9 DRUMMER ROAD
KEENE, NH 03431
VOL.2628 PG.764 3/26/10
(9 DRUMMER ROAD)
TAX MAP 102 LOT 41
STATE OF NEW HAMPSHIRE
PO 483
CONCORD, NH 03302
(OFF ROUTE 9)

TAX MAP 515 LOT 19
DAVID W. PLOPPERT
10 DRUMMER ROAD
KEENE, NH 03431
VOL.898 PG.557 5/22/75
(10 DRUMMER ROAD)
TAX MAP 515 LOT 20
JENNIFER J. BROWN, LLC
40 BAINE ROAD
MARLOW, NH 03456
VOL.3065 PG.553 5/21/19
(14 DRUMMER ROAD)
TAX MAP 515 LOT 21
LIBBY S. LYNN REV. TRUST
22 DRUMMER ROAD
KEENE, NH 03431
VOL.2450 PG.232 6/26/07
(22 DRUMMER ROAD)
TAX MAP 515 LOT 22
MARTHA M. LANDRY REV. TRUST
51 GREEN ACRES ROAD
KEENE, NH 03431
VOL.2898 PG.290 3/13/15
(51 GREEN ACRES ROAD)
TAX MAP 515 LOT 28
LUCIA A. BERGERON
479 ELM STREET
KEENE, NH 03431
VOL.2958 PG.735 9/6/16
(479 ELM STREET)
TAX MAP 515 LOT 29
JODY A. LEACH
37 MIDDLE STREET
KEENE, NH 03431
VOL.3046 PG.121 11/5/18
(471 ELM STREET)
TAX MAP 520 LOT 4
MICHELLE C. YOUNG
431 ELM STREET
KEENE, NH 03431
VOL.2128 PG.775 4/16/04
(431 ELM STREET)
TAX MAP 520 LOT 18
CATHERINE E. SHAND
PO BOX 34
CHARLESTOWN, NH 03603
VOL.796 PG.196
(GILSUM STREET)

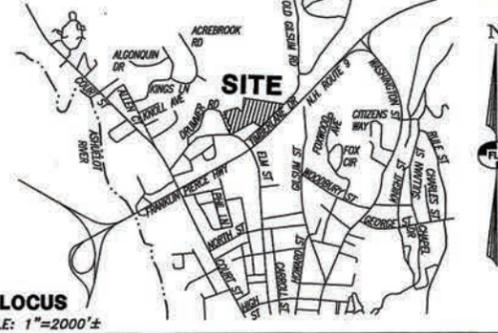
TAX MAP 515 LOT 30
SARAH A. PARENTEAU
463 ELM STREET
KEENE, NH 03431
VOL.3045 PG.128 10/31/18
(463 ELM STREET)
TAX MAP 521 LOT 4
PAUL CHESTER DUBRISKE
GAIL MARIE DUBRISKE
454 ELM STREET
KEENE, NH 03431
VOL.2234 PG.53 4/11/05
(454 ELM STREET)
TAX MAP 521 LOT 5
SARAH D. VEZZANI
464 ELM STREET
KEENE, NH 03431
VOL.2455 PG.749 8/7/07
(464 ELM STREET)
TAX MAP 521 LOT 6
FREDERICK H. HAAS III
PO BOX 664
KEENE, NH 03431
VOL.2831 PG.125 7/26/13
(470 ELM STREET)
TAX MAP 103 LOT 4
URSULA COLE
272 GILSUM STREET
KEENE, NH 03431
VOL.1571 PG.830 8/1/86
(272 GILSUM STREET)
TAX MAP 103 LOT 5
MAGICHEVA FAMILY TRUST
MARINA V. MAGICHEVA,
TRUSTEE
274 GILSUM STREET
KEENE, NH 03431
VOL.2859 PG.408 9/13/13
(274 GILSUM STREET)

NRCS SOILS LEGEND:
SOURCE: USDA NRCS WEB SOIL SURVEY

15	SEARSPORT MUCKY PEAT
26B	WINDSOR LOAMY SAND 3 TO 8% SLOPES
61C	TURNBRIDGE-LYMAN-ROCK OUTCROP COMPLEX 8 TO 15% SLOPES
61D	TURNBRIDGE-LYMAN-ROCK OUTCROP COMPLEX 15 TO 25% SLOPES
495	OSSIPEE MUCKY PEAT

102-1
(DRUMMER HILL CONSERVATION AREA)

CERTIFICATION:
I HEREBY CERTIFY THAT THE EXISTING IMPROVEMENTS SHOWN ARE THE RESULT OF AN ON-SITE FIELD SURVEY PERFORMED BY FIELDSTONE LAND CONSULTANTS, PLLC DURING THE MONTH OF DECEMBER, 2021.



- NOTES:**
1. THE OWNER OF RECORD OF TAX MAP 515 PARCEL 15 IS CHRISTOPHER E. FARRIS - 34 ROLLINS ROAD, EPPING, NH 03042. DEED REFERENCE TO THE PARCEL IS VOL.3192 PG.736 DATED SEPTEMBER 17, 2021 IN THE C.C.R.D.
 2. THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS FOR TAX MAP 515 PARCEL 15.
 3. THE TOTAL AREA OF TAX MAP 515 PARCEL 15 IS 13.1± ACRES OR 570,000 SQ.FT. WITH 817.88 FT. OF FRONTAGE ALONG TIMBERLANE DRIVE AND 160± FT. OF FRONTAGE ALONG DRUMMER ROAD.
 4. THE SURFACE FEATURES, SITE TOPOGRAPHY, & BOUNDARY INFORMATION SHOWN ARE THE RESULT OF AN ON-SITE FIELD SURVEY BY THIS OFFICE DURING THE MONTH OF DECEMBER, 2021 TOGETHER WITH REFERENCE PLANS AND DEED CITED HEREON.
 5. HORIZONTAL ORIENTATION IS BASED ON THE NH STATE PLANE COORDINATE SYSTEM. VERTICAL DATUM IS NAVD83. BOTH ORIENTATION & DATUM WERE ESTABLISHED BY UPLOADING GPS OBSERVATION TO THE NOAA ONLINE POSITIONING USER SERVICE (OPUS).
 6. ZONING FOR THE SITE IS LD - LOW DENSITY. MINIMUM ZONING REQUIREMENTS ARE:
MIN. LOT AREA: 10,000 SQ.FT.
MIN. FRONTAGE: 60 FT.
MIN. FRONT SETBACK: 15 FT.
MIN. REAR SETBACK: 20 FT.
MIN. SIDE SETBACK: 10 FT.
MAX. IMPERVIOUS COVER: 45%
MAX BUILDING COVERAGE: 35%
 7. THE LOCATION OF UTILITIES SHOWN HAVE BEEN COMPILED IN PART FROM PLANS OF RECORD AND FIELD LOCATION. THE LOCATION OF UNDERGROUND UTILITIES SHOULD BE CONSIDERED APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITIES.
 8. THE SITE IS CURRENTLY VACANT AND SERVICED BY UNDERGROUND ELECTRICITY.
 9. THE SUBJECT PARCEL IS NOT LOCATED IN A FLOOD HAZARD AREA AS DETERMINED FROM THE FLOOD INSURANCE STUDY (FIRM), HILLSBOROUGH COUNTY, CITY OF KEENE, COMMUNITY NO. 330023, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, MAP NUMBERS: 33005C0258E & 33005C0259E, DATED: MAY 23, 2006.
 10. THE SITE LIES IN THE SURFACE WATER PROTECTION OVERLAY DISTRICT - A 30 FT. BUFFER SHALL BE MAINTAINED FROM ALL DELINEATED WETLANDS.
 11. THE SITE DOES NOT LIE WITHIN THE AQUIFER PROTECTION OVERLAY ZONE PER THE "GROUND-WATER RESOURCES OF THE ASHLEUET RIVER BASIN, SOUTHWESTERN, NEW HAMPSHIRE," PREPARED BY HAROLD A. WHITCOMB IN COOPERATION WITH THE NEW HAMPSHIRE WATER RESOURCES BOARD.
 12. LOT 515-15 IS SUBJECT TO A SLOPE & DRAINAGE EASEMENT AS DESCRIBED IN VOL.928 PG.819 DATED MARCH 28, 1977 IN THE C.C.R.D. SEE REFERENCE PLAN #4.
 13. LOT 515-15 IS SUBJECT TO CURRENT USE TAX AS RECORDED IN BK.3151 PG.1346 DATED 2/7/21 IN THE C.C.R.D.

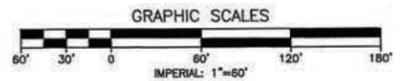
REFERENCE PLANS:

1. "PLANS OF PROPOSED - FEDERAL AID CONSOLIDATED PRIMARY PROJECT - F-012-1(3) - CONTRACT 1 - N.H. PROJECT NO. P-2962-B - CONTRACT 1 - ROUTE 9 BY-PASS", SCALE: 1"=50', DATED: SEPTEMBER, 1975, PREPARED BY: STATE OF NEW HAMPSHIRE - DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS, SHEETS 46 & 47.
2. "TWO LOT SUBDIVISION PLAN - PREPARED FOR - KENNETH R. CASTOR, SR. & MARGUERITE L. CASTOR - OF PROPERTY LOCATED IN - CITY OF KEENE - COUNTY OF CHESHIRE, STATE OF NEW HAMPSHIRE", SCALE: 1"=50', DATED: MARCH 27, 1998, LAST REVISED: JUNE 9, 1998, PREPARED BY: SVE ASSOCIATES & RECORDED IN PLAN CABINET 12, DRAWER 3, NUMBER 74 IN THE C.C.R.D.
3. UNTITLED PLAN OF CATHERINE E. WEBSTER PROPERTY, SCALE: 1"=40', RECORDED IN PLAN BOOK 20, PAGE 15A IN THE C.C.R.D.
4. "PLAN OF LAND OF - CATHERINE E. WEBSTER - IN - KEENE, N.H.", SCALE: 1"=50', DATED: MARCH 28, 1977, PREPARED BY: THE STATE OF NEW HAMPSHIRE, AND RECORDED IN PLAN BOOK 38, PAGE 87 IN THE C.C.R.D.

LEGEND:

- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- ABUTTING LOT LINE
- BUILDING SETBACK LINE
- EDGE OF PAVED ROAD
- ASPHALT CURB
- 10' CONTOUR INTERNAL
- 5' CONTOUR INTERNAL
- CHAIN-LINK FENCE
- ZONE LINE
- DELINEATED WETLANDS
- WETLAND BUFFER
- STONE WALL
- WATER LINE
- SEWER LINE
- ELECTRIC/CABLE PEDESTAL
- TRANSFORMER
- SINGLE POST SIGN
- TEST PIT LOCATION
- EXISTING TREE LINE
- FENCE GATE
- DRAIN LINE
- IRON PIN FOUND
- PN&CP FOUND
- PN & CAP SET
- N.H.C.B.F. FOUND
- IRON PIPE FOUND
- DRILL HOLE SET
- IRON PIN TO BE SET
- CATCH BASIN
- DRAIN MANHOLE
- SEWER MANHOLE
- MANHOLE
- BOLLARD
- WATER HYDRANT
- WATER VALVE
- WATER SHUT-OFF
- AREA OF PRECAUTIONARY SLOPES (15-25%)
- AREA OF PROHIBITIVE SLOPES (>25%)
- EXISTING BUILDING

CERTIFICATION:
WETLANDS WERE DELINEATED IN ACCORDANCE WITH THE US ARMY CORPS OF ENGINEERS 1987 WETLAND DELINEATION MANUAL Y-87-1 AND REGIONAL SUPPLEMENTS FOR NORTHEAST AND NORTH-CENTRAL REGION AND FIELD INDICATORS FOR HYDRIC SOILS IN NEW ENGLAND BY CHRISTOPHER A. GUIDA, C.W.S. IN NOVEMBER OF 2021.



REV.	DATE	DESCRIPTION	C/O	DR	CK
A	5/9/22	REVISED PER STAFF COMMENTS OF APRIL 6, 2022	KPB	DEB	CEB

EXISTING CONDITIONS PLAN
TAX MAP 515 PARCEL 15
(DRUMMER ROAD & TIMBERLANE DRIVE)
KEENE, NEW HAMPSHIRE
PREPARED FOR AND LAND OF:
CHRISTOPHER E. FARRIS
34 ROLLINS ROAD EPPING, NH 03042

SCALE: 1" = 60' MARCH 18, 2022

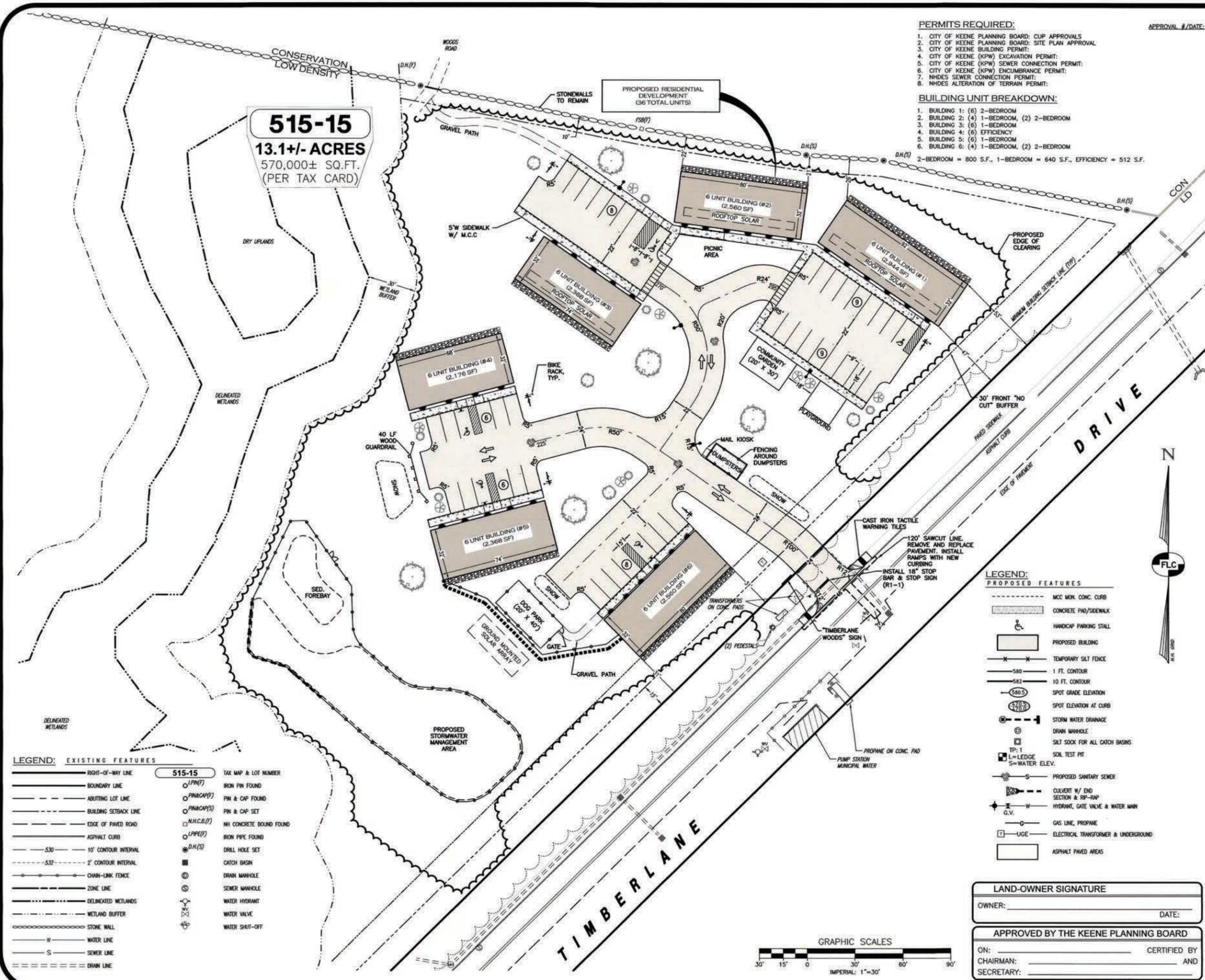
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515-15
13.1+/- ACRES
 570,000± SQ.FT.
 (PER TAX CARD)

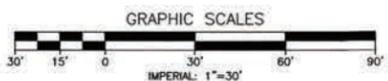
- PERMITS REQUIRED:**
- CITY OF KEENE PLANNING BOARD: CUP APPROVALS
 - CITY OF KEENE PLANNING BOARD: SITE PLAN APPROVAL
 - CITY OF KEENE BUILDING PERMIT
 - CITY OF KEENE (KPW) EXCAVATION PERMIT
 - CITY OF KEENE (KPW) SEWER CONNECTION PERMIT
 - CITY OF KEENE (KPW) ENCUMBRANCE PERMIT
 - NHDES SEWER CONNECTION PERMIT
 - NHDES ALTERATION OF TERRAIN PERMIT
- BUILDING UNIT BREAKDOWN:**
- BUILDING 1: (6) 2-BEDROOM
 - BUILDING 2: (4) 1-BEDROOM, (2) 2-BEDROOM
 - BUILDING 3: (6) 1-BEDROOM
 - BUILDING 4: (6) EFFICIENCY
 - BUILDING 5: (6) 1-BEDROOM
 - BUILDING 6: (4) 1-BEDROOM, (2) 2-BEDROOM
- 2-BEDROOM = 800 S.F., 1-BEDROOM = 640 S.F., EFFICIENCY = 512 S.F.

- NOTES:**
- THE OWNER OF RECORD OF TAX MAP 515 PARCEL 15 IS CHRISTOPHER E. FARRIS - 34 ROLLINS ROAD, EPPING, NH 03042. DEED REFERENCE TO THE PARCEL IS VOL.3192 PG.736 DATED SEPTEMBER 17, 2021 IN THE C.C.R.D.
 - THE PURPOSE OF THIS PLAN IS TO DEPICT A MULTI-FAMILY DWELLING DEVELOPMENT, KNOWN AS "TIMBERLANE WOODS".
 - THE TOTAL AREA OF TAX MAP 515 PARCEL 15 IS 13.1± ACRES OR 570,000 SQ.FT. WITH 817.88 FT. OF FRONTAGE ALONG TIMBERLANE DRIVE AND 160± FT. OF FRONTAGE ALONG DRUMMER ROAD.
 - THE SURFACE FEATURES, SITE TOPOGRAPHY, & BOUNDARY INFORMATION SHOWN ARE THE RESULT OF AN ON-SITE FIELD SURVEY BY THIS OFFICE DURING THE MONTH OF DECEMBER, 2021 TOGETHER WITH REFERENCE PLANS AND DEED CITED HEREON.
 - HORIZONTAL ORIENTATION IS BASED ON THE NH STATE PLANE COORDINATE SYSTEM. VERTICAL DATUM IS NAVD83. BOTH ORIENTATION & DATUM WERE ESTABLISHED BY UPLOADING GPS OBSERVATION TO THE NOAA ONLINE POSITIONING USER SERVICE (OPUS).
 - ZONING FOR THE SITE IS LD - LOW DENSITY. MINIMUM ZONING REQUIREMENTS ARE:
 MIN. LOT AREA: 10,000 SF (13.1 AC/ 570,000 SF)
 MIN. FRONTAGE: 60 FT (977.88 FT. ± COMBINED FRONTAGE)
 MIN. FRONT SETBACK: 15 FT (15 FT MIN., 30' BUFFER PROVIDED)
 MIN. REAR SETBACK: 20 FT (20 FT IS MET)
 MIN. SIDE SETBACK: 10 FT (BUILDINGS OVER 20' FROM PROPERTY LINE)
 MAX. IMPERVIOUS COVER: 45% (14,976 BLDG. ± 28892 IMP. = 43868 SF OR 7.70%)
 MAX. BUILDING COVERAGE: 35% (14,976 SF BUILDINGS = 2.63% BLDG. COVERAGE)
 MAX. BUILDING HEIGHT: 35 FT (30 FT PROPOSED)
 MAX. BUILDING STORIES: 2 (2.5 PROPOSED)
 - ZONING FOR COTTAGE COURT OVERLAY DISTRICT:
 MIN. LOT AREA: NONE
 MIN. FRONTAGE: 30 FT
 MIN. REAR SETBACK: 15 FT
 MIN. SIDE SETBACK: 10 FT
 MAX. IMPERVIOUS COVER: 45% (7.7% IMP. PROPOSED)
 MAX. BUILDING COVERAGE: 35% (2.63% PROPOSED)
 MAX. BUILDING HEIGHT: 35 FT (30 FT PROPOSED)
 MAX. BUILDING STORIES: 2.5 (2.5 PROPOSED)
 - THE LOCATION OF UTILITIES SHOWN HAVE BEEN COMPILED IN PART FROM PLANS OF RECORD AND FIELD LOCATION. THE LOCATION OF UNDERGROUND UTILITIES SHOULD BE CONSIDERED APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITIES.
 - THE SITE IS CURRENTLY VACANT AND SERVICED BY UNDERGROUND ELECTRICITY.
 - THE SUBJECT PARCEL IS NOT LOCATED IN A FLOOD HAZARD AREA AS DETERMINED FROM THE FLOOD INSURANCE STUDY (FIRM), HILLSBOROUGH COUNTY, CITY OF KEENE, COMMUNITY NO. 330023, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, MAP NUMBERS: 330050258E & 330050259E, DATED: MAY 23, 2006.
 - THE SITE LIES IN THE SURFACE WATER PROTECTION OVERLAY DISTRICT - A 30 FT. BUFFER SHALL BE MAINTAINED FROM ALL DELINEATED WETLANDS.
 - THE SITE DOES NOT LIE WITHIN THE AQUIFER PROTECTION OVERLAY ZONE PER THE "GROUND-WATER RESOURCES OF THE ASHUELOT RIVER BASIN, SOUTHWESTERN, NEW HAMPSHIRE," PREPARED BY HAROLD A. WHITCOMB IN COOPERATION WITH THE NEW HAMPSHIRE WATER RESOURCES BOARD.
 - LOT 515-15 IS SUBJECT TO A SLOPE & DRAINAGE EASEMENT AS DESCRIBED IN VOL.928 PG.819 DATED MARCH 28, 1977 IN THE C.C.R.D. SEE REFERENCE PLAN #4.
 - LOT 515-15 IS SUBJECT TO CURRENT USE TAX AS RECORDED IN BK.3151 PG.1346 DATED 2/7/21 IN THE C.C.R.D.
 - PARKING CALCULATION:
 DWELLING, MULTI-FAMILY: 1 SPACES/BED (46 BEDS X 1 = 46 SPACES)
 TOTAL PARKING PROVIDED = 46 SPACES
 - THE ADDRESSES OF EACH BUILDING WILL PROVIDED BY PUBLIC WORKS; NOTIFY THE CITY PUBLIC WORKS STAFF ONCE FOUNDATIONS ARE POURED. EACH BUILDING UNIT TO HAVE A LARGE, EASY TO READ ADDRESS FOR EMERGENCY RESPONSE.
 - ALL FACILITY SIGNS TO BE PERMITTED SEPARATELY WITH THE BUILDING PERMIT.
 - ALL RETAINING WALLS TO BE DESIGNED BY OTHERS.
 - THE TOTAL IMPACTS TO PRECAUTIONARY SLOPES WILL EXCEED 20,000 SF FOR THE LOT. A HILLSIDE PROTECTION CUP APPLICATION WILL BE REQUIRED.
 - THE WATER & SEWER INFRASTRUCTURE WILL BE OWNED BY THE CITY OF KEENE. AN EASEMENT SHALL BE GRANTED TO THE CITY OF KEENE FOLLOWING THE WATER & SEWER.



- LEGEND: EXISTING FEATURES**
- RIGHT-OF-WAY LINE
 - BOUNDARY LINE
 - ABUTTING LOT LINE
 - BUILDING SETBACK LINE
 - EDGE OF PAVED ROAD
 - ASPHALT CURB
 - 10' CONTOUR INTERVAL
 - 2' CONTOUR INTERVAL
 - CHAIN-LINK FENCE
 - ZONE LINE
 - DELINEATED WETLANDS
 - WETLAND BUFFER
 - STONE WALL
 - WATER LINE
 - SEWER LINE
 - DRAIN LINE
- 515-15**
- IRON PIN FOUND
 - PIN & CAP FOUND
 - PIN & CAP SET
 - NH CONCRETE BOUND FOUND
 - IRON PIPE FOUND
 - DRILL HOLE SET
 - CATCH BASIN
 - DRAIN MANHOLE
 - SEWER MANHOLE
 - WATER HYDRANT
 - WATER VALVE
 - WATER SHUT-OFF

- LEGEND: PROPOSED FEATURES**
- MCC MON. CONC. CURB
 - CONCRETE PAD/SIDEWALK
 - HANDICAP PARKING STALL
 - PROPOSED BUILDING
 - TEMPORARY SILT FENCE
 - 1 FT. CONTOUR
 - 10 FT. CONTOUR
 - SPOT GRADE ELEVATION
 - SPOT ELEVATION AT CURB
 - STORM WATER DRAINAGE
 - DRAIN MANHOLE
 - SILT SOCK FOR ALL CATCH BASINS
 - SOIL TEST PIT
 - TP: 1
 - L=LEDGE S=WATER ELEV.
 - PROPOSED SANITARY SEWER
 - CLVERT W/ END SECTION & RP-RAP
 - HYDRANT, GATE VALVE & WATER MAN
 - G.V.
 - GAS LINE, PROPANE
 - LUGE
 - ELECTRICAL TRANSFORMER & UNDERGROUND
 - ASPHALT PAVED AREAS



LAND-OWNER SIGNATURE

OWNER: _____ DATE: _____

APPROVED BY THE KEENE PLANNING BOARD

ON: _____ CERTIFIED BY _____ AND _____

CHAIRMAN: _____ SECRETARY: _____

REV.	DATE	REVS PER STAFF COMMENTS	DESCRIPTION	C/O	DR	CK
A	10/14/24				JEN	CEB

SITE PLAN - COTTAGE CT. OVERLAY
TAX MAP 515 LOT 15
(DRUMMER ROAD & TIMBERLANE DRIVE)
KEENE, NEW HAMPSHIRE

PREPARED FOR:
CHRISTOPHER E. FARRIS
 34 ROLLINS ROAD EPPING, NH 03042

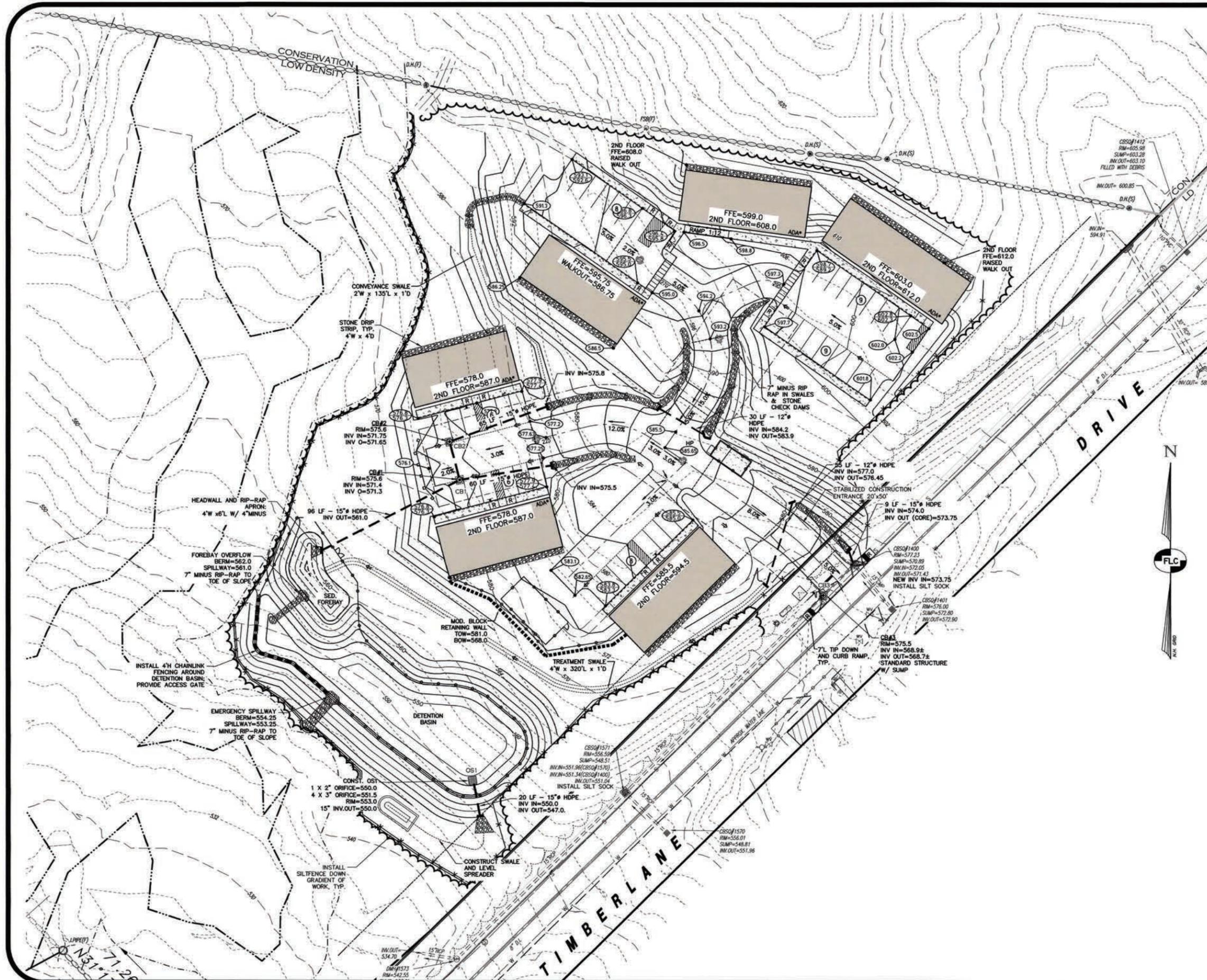
LAND OF:
CHRISTOPHER E. FARRIS
 34 ROLLINS ROAD EPPING, NH 03042

SCALE: 1" = 30' SEPTEMBER 20, 2024

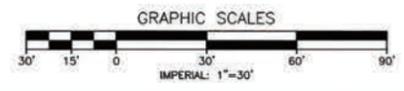
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- GRADING & DRAINAGE NOTES:**
1. THE PROPOSED DRIVEWAYS ARE PRIVATE, SHARED DRIVEWAYS. CITY STREETS ARE MAX 7% GRADE. RURAL STREETS ARE 9% MAX GRADE.
 2. DRIVEWAY MAXIMUM GRADES ARE 15% PER CITY REGS. THE STEEPEST SECTIONS OF THE DRIVEWAYS ARE DESIGNED AT 10%, 12% AND 15% MAX GRADE.
 3. ALL ROAD DITCHES OVER 5% GRADE SHALL HAVE STONE CHECK DAMS AND LINED WITH 4" MINUS RIP RAP STONE.
 4. DUE TO THE CLOSE PROXIMITY OF THE WETLANDS TO THE SITE, THE WETLAND BUFFER MUST BE FLAGGED PRIOR TO INSTALLING SILT FENCE AND STARTING THE SITE GRADING. THE WETLAND BUFFER FLAGGING IS TO BE VERIFIED BY CITY STAFF.
 5. UNITS WITH THE DESIGNATION (*ADA) ARE ADA COMPLIANT UNITS WHERE THE EXTERIOR GRADES MEET ADA REGULATIONS.
 6. THE TOTAL IMPACTS TO PRECAUTIONARY SLOPES WILL EXCEED 20,000 SF FOR THE LOT. A HILLSIDE PROTECTION CUP APPLICATION WILL BE REQUIRED.



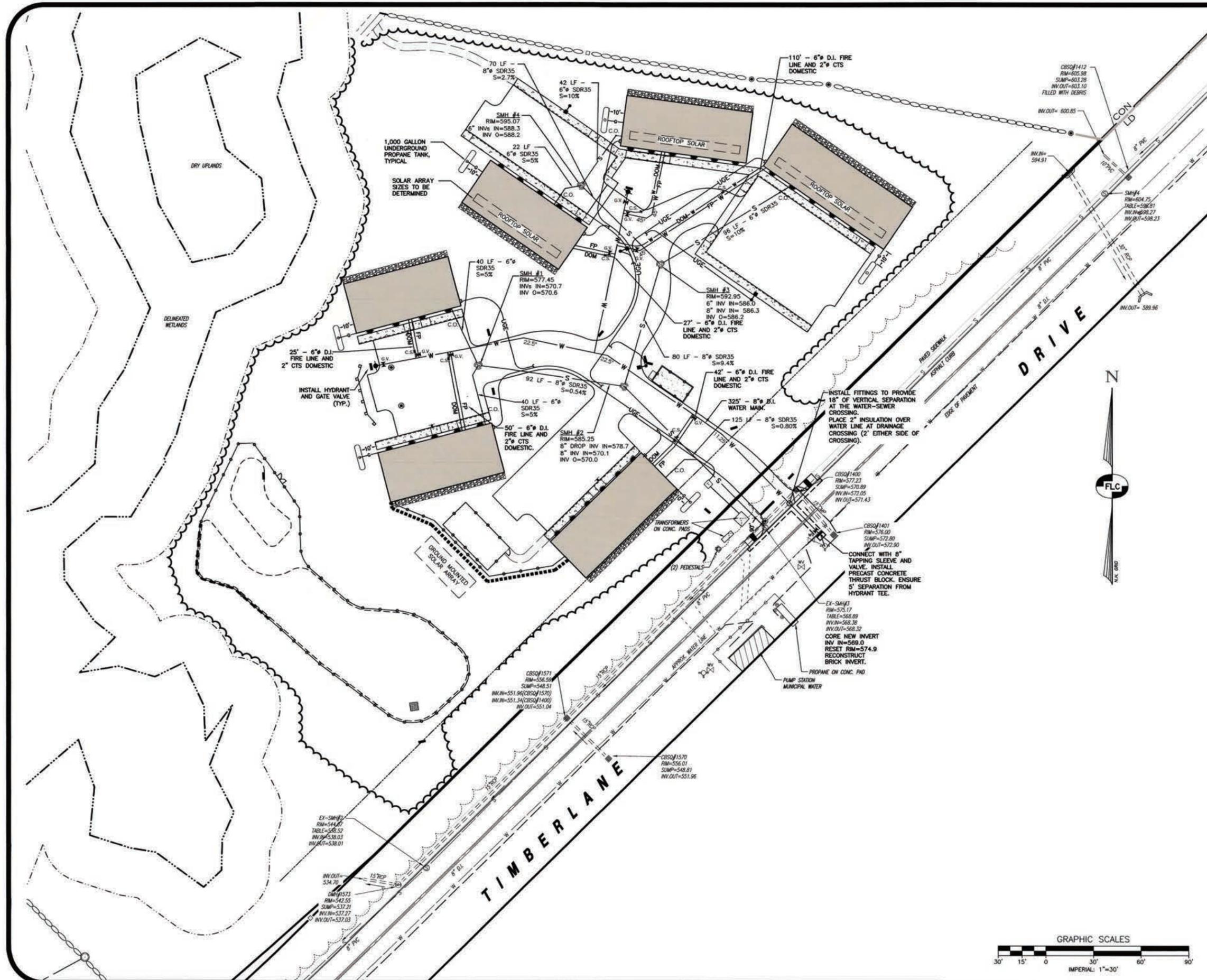
REV.	DATE	REVS PER STAFF COMMENTS DESCRIPTION	C/O	DR	CK
A	10/14/24			JEN	CEB

GRADING & DRAINAGE PLAN
TAX MAP 515 LOT 15
(DRUMMER ROAD & TIMBERLANE DRIVE)
KEENE, NEW HAMPSHIRE
 PREPARED FOR:
CHRISTOPHER E. FARRIS
 34 ROLLINS ROAD EPPING, NH 03042
 LAND OF:
CHRISTOPHER E. FARRIS
 34 ROLLINS ROAD EPPING, NH 03042

SCALE: 1" = 30' SEPTEMBER 20, 2024

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- UTILITY NOTES:**
1. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE CITY OF KEENE AND SHALL BE BUILT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE CITY OF KEENE DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS FOR ROAD CONSTRUCTION AND SEWERS AND THE HDOT STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION APPROVED AND ADOPTED 2010 ARE HEREBY INCORPORATED BY REFERENCE.
 2. ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS AND THE SPECIFICATIONS NOTED ABOVE. ANY ALTERATION OF THIS DESIGN OR CHANGE DURING CONSTRUCTION MAY REQUIRE APPROVAL OF VARIOUS CITY BOARDS OR AGENCIES AND SHALL BE DISCUSSED WITH THE OWNER AND ENGINEER PRIOR TO CONSTRUCTION.
 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS AND SHALL VERIFY THAT ALL THE INFORMATION SHOWN HEREON IS CONSISTENT, COMPLETE, ACCURATE, AND CAN BE OBTAINED PRIOR TO AND/OR DURING CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCIES, ERRORS, OMISSIONS, OR EXISTING UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION SO THAT REMEDIAL ACTION MAY BE TAKEN BEFORE PROCEEDING WITH THE WORK.
 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACT "DIGSAFE" AT LEAST 72 HOURS PRIOR TO THE START OF CONSTRUCTION (1-888-344-7233)
 5. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE TOWN DEPARTMENTS PRIOR TO CONSTRUCTION TO ARRANGE FOR NECESSARY INSPECTIONS. THE WATER AND SEWER CONNECTIONS IN TIMBERLANE DRIVE WILL REQUIRE AN EXCAVATION PERMIT AND COORDINATION WITH KEENE PUBLIC WORKS.
 6. BLASTING, IF REQUIRED, SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF KEENE FIRE DEPARTMENT REGULATIONS
 7. ALL DISTURBED NON-PAVED AREAS SHALL BE LOADED AND SEEDING IMMEDIATELY UPON BEING CONSTRUCTED. THE RETAINING WALLS SHOWN SHALL BE DESIGNED BY OTHERS UNLESS OTHERWISE NOTED.
 8. ALL TRAFFIC SIGNS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
 9. EXISTING PAVEMENT SHALL BE SAW-CUT AS NECESSARY. THE CONTRACTOR SHALL ENSURE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW PAVEMENT.
 10. ALL POWER WORK SHALL CONFORM TO EVERSOURCE STANDARDS. THE POWER SERVICE SIZES SHALL BE VERIFIED BY AN ELECTRICAL ENGINEER AND EVERSOURCE.
 11. ALL TELEPHONE WORK SHALL CONFORM TO CONSOLIDATED COMMUNICATIONS SPECIFICATIONS.
 12. ALL PROPANE GAS WORK SHALL CONFORM TO THE SUPPLIER'S GAS SPECIFICATIONS. PROVIDE SHUTOFF VALVE AND REGULATOR FOR EACH BUILDING. THE PROPANE TANKS SHALL BE INSTALLED BELOW GRADE.
 13. WATER AND SEWER SERVICES TO TIE INTO THE KEENE MUNICIPAL SERVICE. WATER CAPACITY ABOVE THE PUMP STATION IS ADEQUATE FOR FIRE SUPPRESSION, AS VERIFIED BY THE CITY ENGINEER. SEWER CAPACITY ON TIMBERLANE DRIVE IS ADEQUATE, AS VERIFIED BY THE CITY ENGINEER.
 14. SEWER SERVICES AT EACH UNIT SHALL HAVE INDIVIDUAL CLEAN-OUTS INSIDE THE BUILDING.
 15. CONTRACTOR TO COORDINATE WITH CITY DPW ON SEWER TIE-INS ON TIMBERLANE DRIVE. THE EXISTING SEWER FLOW MUST BE MAINTAINED AND PUMP AROUND MANHOLE DURING THE IN.
 16. CONTRACTOR SHALL OBTAIN STRUCTURAL DESIGN PLANS, DETAILS AND SPECIFICATIONS FOR ANY RETAINING WALLS SHOWN ON THIS PLAN PRIOR TO CONSTRUCTION.
 17. ANY MUNICIPAL SERVICES SHALL HAVE AN EASEMENT GRANTED TO THE CITY OF KEENE FOR FUTURE MAINTENANCE OF THE UTILITIES.
 18. ALL BUILDINGS WILL HAVE FIRE SUPPRESSION SPRINKLER SYSTEMS AND TWO FIRE HYDRANTS HAVE BEEN PROVIDED (WITHIN 500' OF ALL BUILDINGS). FIRE HOUSE CAN REACH 150' AROUND EACH BUILDING FROM THE DRIVEWAY.
 19. ALL BUILDING SERVICE CONNECTIONS SHALL HAVE A PRESSURE REDUCING VALVE (PRV) INSTALLED, AS WATER STREET PRESSURE WILL BE 100 PSI ±.
 20. ALL HVAC EQUIPMENT SHALL MEET THE SCREENING STANDARDS OF THE L.D.C.: ROOF MOUNTED EQUIPMENT SHALL BE SETBACK 10' FROM EDGE. GROUND-MOUNTED EQUIPMENT TO BE LOCATED SO AS NOT TO BE VISIBLE FROM THE PUBLIC WAY - SCREEN IF VISIBLE.

SANITARY SEWER CALCULATIONS:

1. THE SEWER DAILY FLOW RATE: 120 GPD/BEDROOM X 46 BEDROOMS = 5,520 GPD
2. INFILTRATION: 264 LF 6" SDR 35 + 367 LF 8" SDR 35
 $[(6" \times 0.05 \text{ MI}) + (8" \times 0.07 \text{ MI})] \times 300 \text{ GPD/INCH-MILE} = 258 \text{ GPD}$
3. AVERAGE DAILY FLOW: 5520 + 258 = 5,778 GPD
4. PEAK DESIGN FLOW: PEAKING FACTOR = 6 (< 100,000 GPD)
 $6 \times 5778 \text{ GPD} = 34,668 \text{ GPD}$

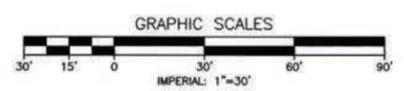
REV.	DATE	REVS PER STAFF COMMENTS	DESCRIPTION	C/O	DR	CK
A	10/14/24					

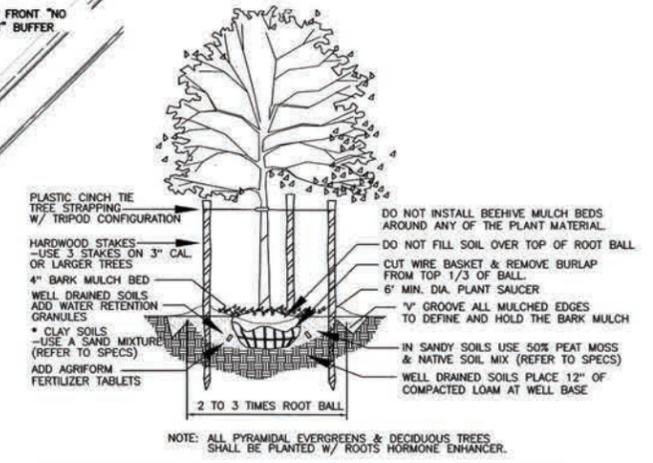
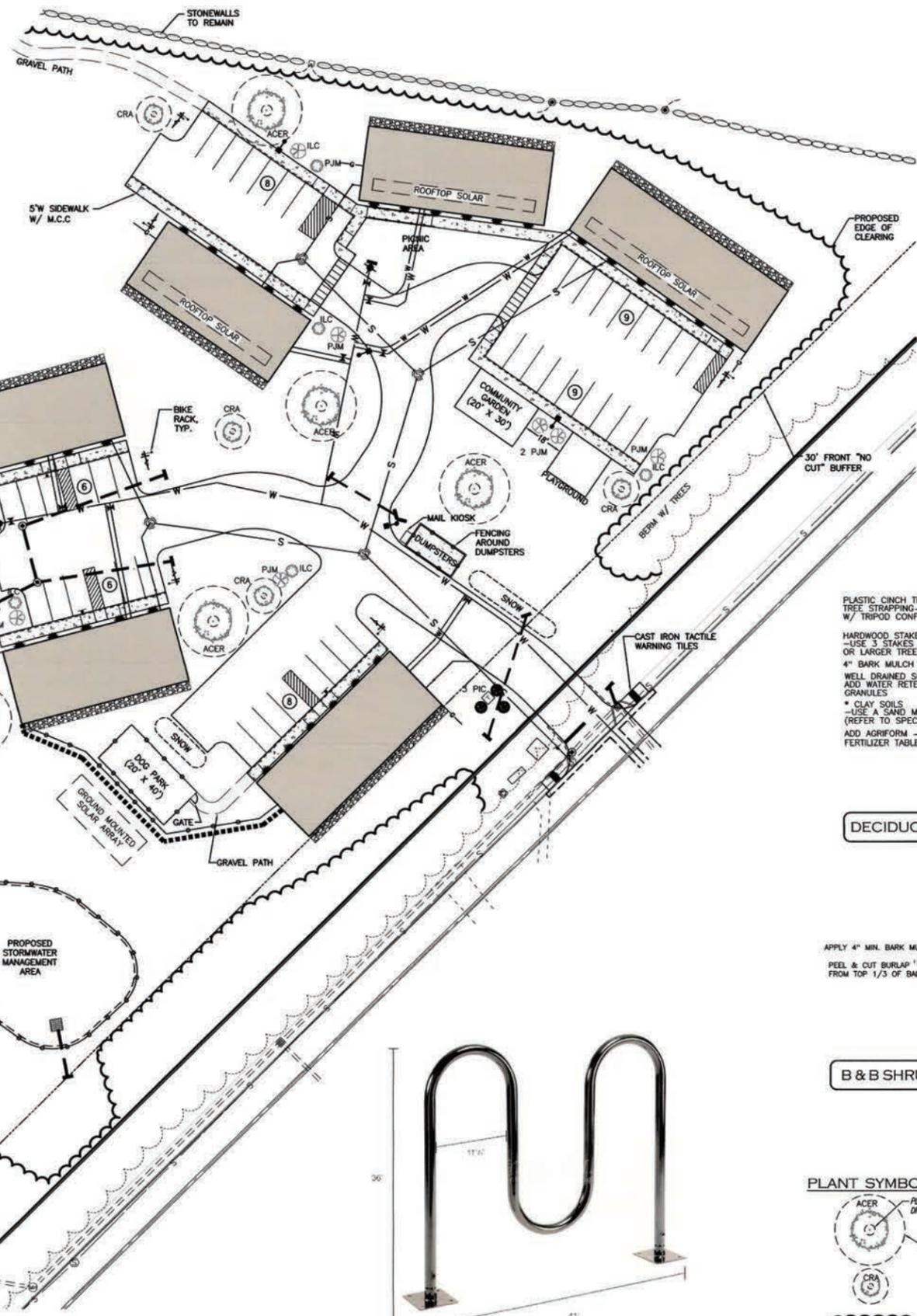
UTILITY PLAN
TAX MAP 515 LOT 15
(DRUMMER ROAD & TIMBERLANE DRIVE)
KEENE, NEW HAMPSHIRE
 PREPARED FOR:
CHRISTOPHER E. FARRIS
 34 ROLLINS ROAD EPPING, NH 03042
 LAND OF:
CHRISTOPHER E. FARRIS
 34 ROLLINS ROAD EPPING, NH 03042

SCALE: 1" = 30' SEPTEMBER 20, 2024

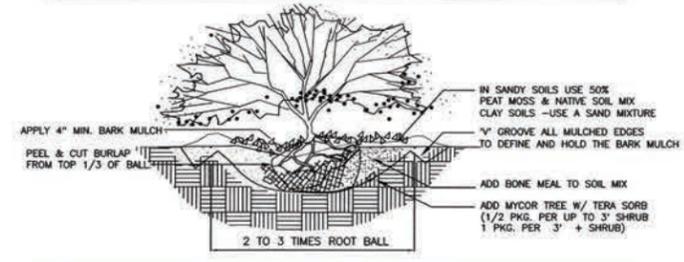
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DECIDUOUS TREE PLANTING DETAIL 1 LS-1



B & B SHRUB PLANTING DETAIL 2 LS-1



- INSTALL 1/2" STAINLESS BOLTS INTO DROP-IN ANCHORS BY HILT.
 - SET TWO 8" SONOTUBES FILLED WITH CONCRETE TO CONNECT BASE PLATES TO.
- 5-BIKE WAVE BIKE RACK

PLANT SYMBOLS	PLANT LIST & NAME	QTY.
	ACER RUBRUM (RED MAPLE TREE)	(5) 3" CAL., 12' TALL, 6" DRIP LINE 40" DRIP LINE AT MATURITY
	CRATAEGUS MACROSPERMA (HAWTHORN)	(4) 1.5" CAL., 6' TALL, 3" DRIP LINE
	LIMITS OF CLEARING - PROPOSED TREELINE	BUFFER TO STREET AND ADJUTING PROPERTIES
	P.J.M. RHODODENDRON SHRUB	(8) 2 GALLON CONTAINER, 1.5' - 2'H
	ILEX VERTICILLATA (WINTERBERRY SHRUB)	(5) 2 GALLON CONTAINER, 1.5' - 2'H
	PICEA GLAUCA (DWARF ALBERTA SPRUCE)	(3) 5 GALLON CONTAINER, 5' - 6'H

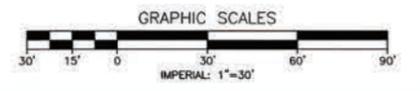
DESIGN NOTES:

- LANDSCAPING REQUIREMENTS:

	REQUIRED	PROPOSED
TREES	5 TREES	4 TREES
1/10 PARKING SPACE (46 SP)	N/A	2:1=10 TREES 4
PARKING PERIMETER TREES	N/A	
ORNAMENTAL TREES	N/A	
SHRUBS:		
EVERGREENS	REQUIRED SCREENING	3 (TRANSFORMER)
NON-EVERGREEN	N/A	20
PERIMETER LANDSCAPING:		
PARKING ON PERIMETER	REQUIRED N/A	PROPOSED N/A
FLOWERS & PLANTS	60% AREA	0%

*THERE IS NO PROPOSED PERIMETER PARKING, AS SPACES ALIGN WITH THE BUILDINGS, SHRUBS ARE PROPOSED BETWEEN THE UNIT DRIVEWAYS.

- LANDSCAPING NOTES:**
- THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR CONTACTING DIG-SAFE AND FOR VERIFICATION OF ALL UTILITIES AND SHALL NOTIFY THE OWNERS REPRESENTATIVE OF ANY CONFLICTS PRIOR TO COMMENCING.
 - EXISTING TREES TO REMAIN SHALL BE PRESERVED AND PROTECTED DURING CONSTRUCTION. TEMPORARY FENCING SHALL BE INSTALLED PRIOR TO THE START OF SITE WORK TO PROTECT ROOT MASSES.
 - EXISTING TREES THAT ARE TO BE REMOVED, SHALL BE REMOVED ENTIRELY FROM THE SITE, INCLUDING STUMPS. NO STUMP-DUMPS ARE ALLOWED ON SITE.
 - UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED WITHIN THE IMMEDIATE AREA NO PLANT MATERIAL SHALL BE INSTALLED.
 - UNLESS OTHERWISE NOTED OR APPROVED, ALL TREES MUST BE BALLED AND BURLAPPED.
 - ALL PLANT MATERIALS INSTALLED SHALL MEET OR EXCEED THE SPECIFICATIONS OF "THE AMERICAN STANDARDS FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERMEN.
 - ANY PROPOSED PLANT MATERIAL SUBSTITUTIONS MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE.
 - ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE INSTALLER FOR ONE YEAR FOLLOWING DATE OF ACCEPTANCE. ANY PLANT MATERIAL THAT IS SIGNIFICANTLY DAMAGED, MISSING, DISEASE RIDDEN, OR DEAD SHALL BE ABATED WITHIN 1-YEAR OR BEFORE THE END OF THE FOLLOWING PLANTING SEASON, WHICHEVER OCCURS FIRST.
 - IN AREAS OF STONE MULCH LAY 6 MIL SHEETS OF "VISQUEEN" TYPE POLYETHYLENE ON COMPACTED SUBGRADE BEFORE PLACING STONE, MINIMUM 6" OVERLAP. PERFORATE SHEETING IN PLANTING BEDS BEFORE PLACING STONE.
 - UNLESS OTHERWISE NOTED LOAM AND SEED ALL DISTURBED AREAS WITH A MINIMUM 4" OF SUITABLE LOAM. SLOPES GREATER THAN 3:1 SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET. SEE SITE PLAN.
 - WHERE APPLICABLE, THE CONTRACTOR SHALL HAVE ALL FALL TRANSPLANTING HAZARD PLANTS DUG IN THE SPRING AND STORED FOR FALL PLANTING.
 - PLANTS SHALL BE INSTALLED WITHIN ONE YEAR OF COMMENCEMENT OF CONSTRUCTION
 - ALL LANDSCAPING SHALL BE LOCATED AND MAINTAINED SO AS NOT TO IMPACT THE LINES OF SIGHT AT THE ENTRANCE AND INTERNAL INTERSECTIONS TO PROVIDE SAFE PASSAGE OF PEDESTRIANS, BICYCLISTS, AND MOTORISTS.
 - ALL LANDSCAPED AREAS WILL BE MAINTAINED TO HAVE A SUFFICIENT AMOUNT OF WATER TO MAINTAIN VIABILITY EITHER BY IRRIGATION OR BY OTHER MEANS.
 - PROPOSED PLANTINGS SHALL NOT CONFLICT WITH SNOW STORAGE AREAS, LIGHT FIXTURES OR UNDERGROUND UTILITIES.
 - ALL LANDSCAPING APPROVED AS PART OF THE SITE PLAN SHALL BE CONSIDERED AS ELEMENTS OF THE SITE, IN THE SAME MANNER AS PARKING, BUILDING MATERIALS, AND OTHER SITE DETAILS. ANY CHANGES WILL REQUIRE APPROVAL BY THE OWNER AND CITY COMMUNITY DEVELOPMENT DIRECTOR.
 - BIKE RACKS ARE PROPOSED AT EACH BUILDING.
 - ALL HVAC EQUIPMENT SHALL BE ROOF MOUNTED OR NOT BE VISIBLE FROM THE PUBLIC RIGHT OF WAY.
 - THE LIMIT OF CLEARING & BUFFER ALONG TIMBERLANE DRIVE SHALL BE MAINTAINED IN PERPETUITY.



REV.	DATE	DESCRIPTION	C/O	DR	CK
A	10/14/24	REVS PER STAFF COMMENTS		JEN	CEB

LANDSCAPING PLAN
TAX MAP 515 LOT 15
(DRUMMER ROAD & TIMBERLANE DRIVE)
KEENE, NEW HAMPSHIRE

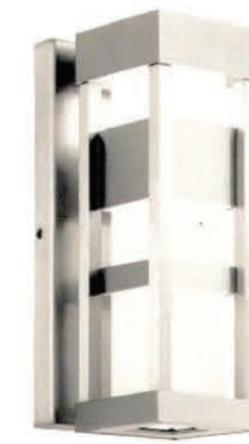
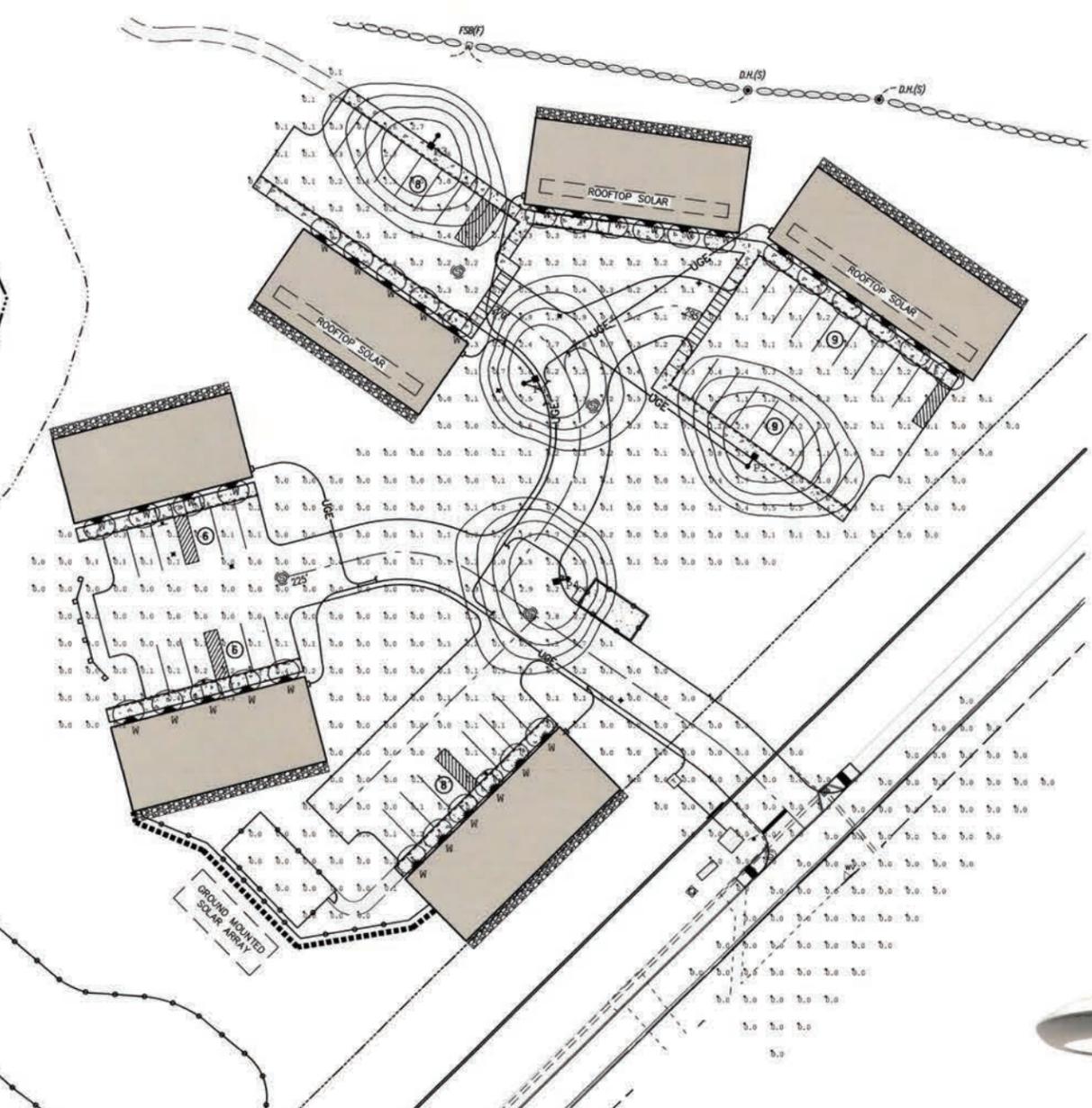
PREPARED FOR:
CHRISTOPHER E. FARRIS
 34 ROLLINS ROAD EPPING, NH 03042

LAND OF:
CHRISTOPHER E. FARRIS
 34 ROLLINS ROAD EPPING, NH 03042

SCALE: 1" = 30' SEPTEMBER 20, 2024

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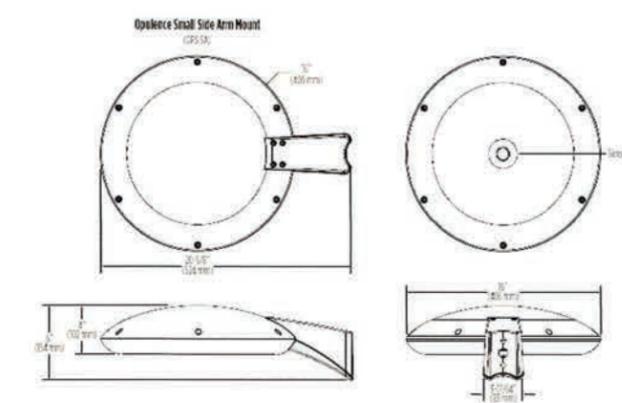
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 Phone: (603) 672-5456 Fax: (603) 413-5456
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Ryler™ LED 3000K 12" Wall Light Brushed Aluminum	
Dimensions	12.00 X 4.75
Base Backplate Extension	5.50"
Weight	5.50 LBS
Height from center of Wall opening (Spec Sheet)	5.50"
Height	12.00"
Width	4.75"
Light Source	250
Delivered Lumens	250
Dimmable	Yes
Expected Life Span (Hours)	40000
Lamp Included	Integrated
Light Source	LED
Max or Nominal Watt	9W
# of Sub-LED Modules	1
Max Voltage Range	100
Mounting/Installation	Interior-Exterior
Location Rating	Wet
Mounting Style	Wall Mount
Mounting Weight	5.50 LBS
Photometrics	
Color Rendering Index	90
Kelvin Temperature	3000K

W-WALL MOUNTED ON UNITS

Opulence Small Side Arm Mount (OPS SA)
Outdoor Area Light



OVERVIEW	
Lumen Package (lm)	3,000 - 14,000
Wattage Range (W)	20 - 100
Efficacy Range (LPW)	134 - 175
Weight lbs (kg)	17 (7.7)
Control Options	IMSBT, ALBCS, 7-Pin



P3/P4 - POLE MOUNTED FIXTURES

PHOTOMETRIC CALCULATIONS - PER BUILDING

PARKING LOT 1
PARKING SPACES ONLY FOR 1ST PARKING LOT ON LEFT
Illuminance (Fc)
Average = 0.15
Maximum = 0.2
Minimum = 0.1
Avg/Min Ratio = 1.50
Max/Min Ratio = 2.00

PARKING LOT 2 - LOWER
PARKING SPACES FOR LOWER PARKING LOT 2 ON LEFT
Illuminance (Fc)
Average = 0.14
Maximum = 0.3
Minimum = 0.1
Avg/Min Ratio = 1.40
Max/Min Ratio = 3.00

PARKING LOT 2 - UPPER
PARKING SPACES FOR UPPER PARKING LOT 2 ON LEFT
Illuminance (Fc)
Average = 0.14
Maximum = 0.3
Minimum = 0.1
Avg/Min Ratio = 1.40
Max/Min Ratio = 3.00

PARKING LOT 3 - LOWER
PARKING SPACES ONLY LOWER - LOWER LOT ON RIGHT
Illuminance (Fc)
Average = 1.42
Maximum = 4.4
Minimum = 0.3
Avg/Min Ratio = 4.73
Max/Min Ratio = 14.67

PARKING LOT 3 - UPPER
PARKING SPACES ONLY UPPER - LOWER LOT ON RIGHT
Illuminance (Fc)
Average = 0.16
Maximum = 0.4
Minimum = 0.1
Avg/Min Ratio = 1.60
Max/Min Ratio = 4.00

PARKING LOT 4
PARKING SPACES ONLY UPPER LOT ON RIGHT
Illuminance (Fc)
Average = 1.29
Maximum = 4.0
Minimum = 0.3
Avg/Min Ratio = 4.30
Max/Min Ratio = 13.33

Symbol	Qty	Label	Arrangement	Description	Tag	[MANUFAC]	CRI	CCT
⊙	2	P3	Single	OPS-SA-6L-3W-UNV-30K8-CXX-EHS / RTPC B2 A156 14 S CXX	14' POLE	LST INDUSTRIES, INC.	80	3000K
⊙	2	P4	Single	OPS-SA-6L-4F-UNV-30K8-CXX-EHS / RTPC B2 A156 14 S CXX	14' POLE	LST INDUSTRIES, INC.	80	3000K
⊙	32	W	Single	59035BALED		KICHLER	90	3000K

DESIGN NOTES:

1. LIGHTING REQUIREMENTS:

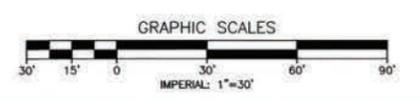
	REQUIRED	PROPOSED
PARKING LOTS AVERAGE	3.5 Fc MAX	0.25 Fc AVG.
MINIMUM	0.1 Fc	0.1 Fc
U. RATIO (AVG/MIN)	5:1	2.5-2.7
MAX AT PROP. LINE	0.1 Fc	0.0 Fc
MAX AT R.O.W.	1.0 Fc	0.0 Fc
SIDEWALKS MINIMUM	0.5 Fc	N.A.
MAXIMUM	5.0 Fc	N.A.
LUMENS	1200 L MAX	N.A.
2. ALL PROPOSED LIGHTING MUST BE GREATER THAN 70 COLOR RENDERING INDEX (90 CRI ON WALL MOUNT LIGHTS, 80 CRI ON POLE LIGHTS PROPOSED).
3. ALL PROPOSED LIGHTING MUST BE 3000 KELVIN COLOR-TEMPERATURE TO MATCH.

LIGHTING NOTES:

1. LIGHTING SHALL BE INSTALLED AND ARRANGED SO AS NOT TO REFLECT OR CAUSE GLARE UPON ABUTTING LAND, HIGHWAYS AND ROADS.
2. ALL FIXTURES ARE FULL CUTOFF, LED FIXTURES, FLOOD LIGHTING AND UP-LIGHTING ARE PROHIBITED.
3. MOUNTING HEIGHT OF ALL PROPOSED POLE MOUNT LIGHTING FIXTURES SHALL BE 14 FEET ABOVE FINISH GRADE.
4. MOUNTING HEIGHT OF ALL PROPOSED WALL MOUNT LIGHTING FIXTURES SHALL BE 9 FEET ABOVE FINISH GRADE ON THE BUILDINGS. LOCATED NEAR DOORWAYS.
5. ALL LIGHTS ARE TO BE SETUP ON PHOTOCELLS TO AUTOMATICALLY TURN OFF DURING DAYLIGHT HOURS. RESIDENTS WILL CONTROL THE OPERATING HOURS OF THE LIGHTS.
6. ALL FIXTURES AND HARDWARE ARE TO BE BRUSHED ALUMINUM IN COLOR TO MATCH.
7. LIGHT FIXTURES ARE AVAILABLE THROUGH EXPOSURE 2-LIGHTING. ANY CHANGE IN FIXTURE MUST BE APPROVED BY THE OWNER, CITY OF KEENE, AND THE DESIGN ENGINEER.



Aluminum Poles
Contemporary RTP



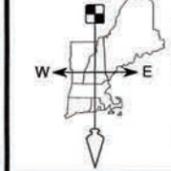
REV.	DATE	REVS PER STAFF COMMENTS	DESCRIPTION	C/O	DR	CEB	CK
A	10/14/24					JEN	CEB

LIGHTING PLAN
TAX MAP 515 LOT 15
(DRUMMER ROAD & TIMBERLANE DRIVE)
KEENE, NEW HAMPSHIRE

PREPARED FOR:
CHRISTOPHER E. FARRIS
34 ROLLINS ROAD EPPING, NH 03042
LAND OF:
CHRISTOPHER E. FARRIS
34 ROLLINS ROAD EPPING, NH 03042

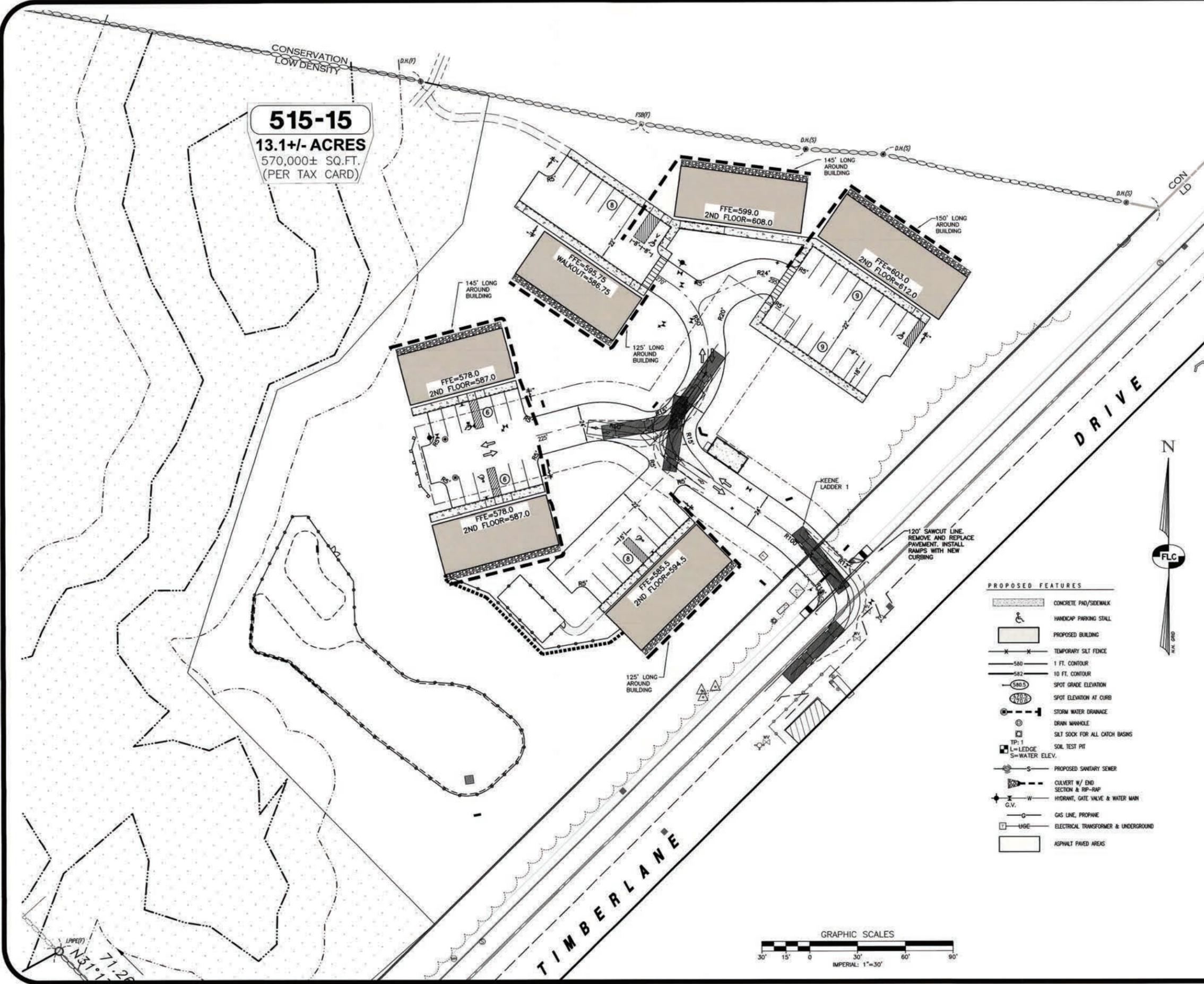
SCALE: 1" = 30' SEPTEMBER 20, 2024

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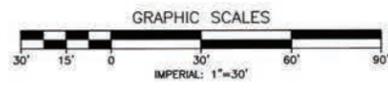
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515-15
13.1+/- ACRES
 570,000± SQ.FT.
 (PER TAX CARD)

- FIRE ACCESS NOTES:**
1. THE FIRE TRUCK SHOWN IS BASED ON DIMENSIONS OF THE KEENE LADDER TRUCK, TOWER 1 AS PROVIDED BY THE KEENE FIRE DEPARTMENT. TRUCKS WILL BE ABLE TO TURN AROUND AT THE INTERSECTION OF THE TWO DRIVEWAYS, AS DEPICTED.
 2. THE DISTANCE OF 150 FEET IS SHOWN AROUND THE BUILDINGS, AS REQUIRED BY KEENE FIRE DEPARTMENT, AS A HOSE WOULD BE LAID OUT.
 3. THE DRIVEWAYS ARE CLEAR FOR A HEIGHT OF 13'-6" OR MORE TO ACCOMMODATE THE FIRE TRUCK.
 4. THE FIRE TRUCK CAN ENTER AND EXIT THE SITE AS SHOWN.
 5. TWO FIRE HYDRANTS HAVE BEEN PROVIDED ON SITE, ONE EXISTING HYDRANT ACROSS TIMBERLANE DRIVE FROM THE SITE.
 6. WATER PRESSURE IS ADEQUATE FOR FIRE PROTECTION IN THIS AREA, AS THE SITE WATER CONNECTION IS ON THE HIGH PRESSURE SIDE OF THE BOOSTER PUMP STATION.

- PROPOSED FEATURES**
- CONCRETE PAD/SIDEWALK
 - HANDICAP PARKING STALL
 - PROPOSED BUILDING
 - TEMPORARY SILT FENCE
 - 1 FT. CONTOUR
 - 10 FT. CONTOUR
 - SPOT GRADE ELEVATION
 - SPOT ELEVATION AT CURB
 - STORM WATER DRAINAGE DRAIN MANHOLE
 - SILT SOCK FOR ALL CATCH BASINS
 - SOIL TEST PIT
 - PROPOSED SANITARY SEWER
 - CULVERT W/ END SECTION & RIP-RAP
 - HYDRANT, GATE VALVE & WATER MAIN
 - GAS LINE, PROPANE
 - ELECTRICAL TRANSFORMER & UNDERGROUND
 - ASPHALT PAVED AREAS



REV.	DATE	DESCRIPTION	C/O	DR	CK

EXHIBIT PLAN - FIRE ACCESS
TAX MAP 515 LOT 15
(DRUMMER ROAD & TIMBERLANE DRIVE)
KEENE, NEW HAMPSHIRE

PREPARED FOR:
CHRISTOPHER E. FARRIS
 34 ROLLINS ROAD EPPING, NH 03042

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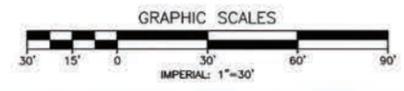
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- GRADING & DRAINAGE NOTES:**
1. THE PROPOSED DRIVEWAYS ARE PRIVATE, SHARED DRIVEWAYS. CITY STREETS ARE MAX 7% GRADE. RURAL STREETS ARE 9% MAX GRADE.
 2. DRIVEWAY MAXIMUM GRADES ARE 15% PER CITY REGS. THE STEEPEST SECTIONS OF THE DRIVEWAYS ARE DESIGNED AT 10%, 12% AND 15% MAX GRADE.
 3. ALL ROAD DITCHES OVER 5% GRADE SHALL HAVE STONE CHECK DAMS AND LINED WITH 4" MINUS RIP RAP STONE.
 4. DUE TO THE CLOSE PROXIMITY OF THE WETLANDS TO THE SITE, THE WETLAND BUFFER MUST BE FLAGGED PRIOR TO INSTALLING SILT FENCE AND STARTING THE SITE GRADING. THE WETLAND BUFFER FLAGGING IS TO BE VERIFIED BY CITY STAFF.
 5. UNITS WITH THE DESIGNATION (*ADA) ARE ADA COMPLIANT UNITS WHERE THE EXTERIOR GRADES MEET ADA REGULATIONS.
 6. THE TOTAL IMPACTS TO PRECAUTIONARY SLOPES (15-25%) WILL EXCEED 20,000 SF FOR THE LOT. A TOTAL OF 54,075 SF OF IMPACTS ARE PROPOSED. A HILLSIDE PROTECTION CUP APPLICATION WILL BE REQUIRED.



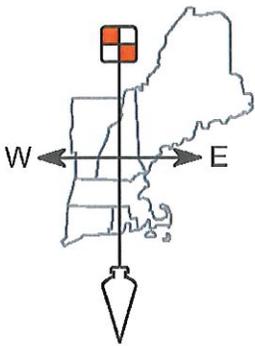
REV.	DATE	DESCRIPTION	C/O	DR	CK

EXHIBIT PLAN - SLOPES
TAX MAP 515 LOT 15
(DRUMMER ROAD & TIMBERLANE DRIVE)
KEENE, NEW HAMPSHIRE
 PREPARED FOR:
CHRISTOPHER E. FARRIS
 34 ROLLINS ROAD EPPING, NH 03042
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SCALE: 1" = 30' OCTOBER 14, 2024
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STORM WATER MANAGEMENT REPORT TIMBERLANE WOODS – MULTI-FAMILY KEENE, NEW HAMPSHIRE

Prepared for:
Farris Development LLC
September 20, 2024

I) INTRODUCTION

This stormwater management report was conducted for a proposed site development known as Timberlane Woods in Keene NH. The property is located on Tax Map Lot 515-15 with frontage on Timberlane Drive and Drummer Road. The proposal is to construct six, 6-unit buildings as a multi-family residential development on the existing lot. There will be one central driveway, with branch driveways providing access to parking lots at each building.

The purpose of this report is to analyze the qualitative and quantitative impacts of the proposed development on stormwater runoff. The objective of the proposed stormwater management system is to mitigate any increases resulting from the proposed development and to meet the drainage guidelines set forth in the City of Keene Land Development Code.

II) SITE DESCRIPTION (EXISTING)

The existing Tax Map Lot 515-15 has 570, 000 square feet or 13.1+/- acres with 817.88 feet of frontage along Timberlane Drive, and an additional 160 +/- feet along Drummer Road. The parcel is currently undeveloped and entirely wooded with forested wetlands towards the Drummer Road side of the property. The property abuts the Drummer Hill Conservation area to the north and the west.

NRCS soil survey maps indicate that the dominant soils present on the site consist of Searsport Mucky Peat (HSG D), Windsor Loamy Sand (HSG A), Turnbridge-Lyman-Rock outcrop complex (HSG C), and Ossipee Mucky Peat (HSG D). The development area is located completely within the Turnbridge-Lyman-Rock outcrop complex soils, per NRCS, with a listed Ksat value of 0.6 in/hour. These Hydrologic Group (HSG) are based on the Ksat Values for New Hampshire Soils, as used by NHDES. Field examination was conducted with test pit excavations in the development area only, which found sands, gravels, and stony soils. Ledge and refusal were encountered in the excavations. The estimated seasonal high-water table varied from 48" to 84" across the test pits, and percolation rates were consistent between 4-6 min/inch.

III) METHODOLOGY

The quantity of runoff and the conveyance of that flow through the site are determined using the software package HydroCAD r 10.10.6a by HydroCAD Software Solutions, LLC. HydroCAD is a computer program for modeling storm water hydrology based on the Soil Conservation Service (SCS) TR-20 method, combined with standard hydraulics calculations used to model detention basins and culverts.

Stormwater management systems are designed in accordance with the methodology for the "Best Management Practices" (BMP's), as outlined in the New Hampshire Storm Water Manual, Volume 2.

IV) DRAINAGE DESIGN

In accordance with the City of Keene and NHDES standards, there will be no increase in the peak flow rate of surface runoff. In order to demonstrate this, the two (2), ten (10), and fifty (50) year frequency storm events have been evaluated using a Type III, 24-hour storm distribution. These design storms have been analyzed to compare the Pre and Post-Development peak flow rates for the site (see comparison table).

Pre-Development Drainage Conditions:

The Pre-Development Drainage Area Plan outlines the two areas where water flows off the property. The first observation point is the catch basin (CBSQ#1571) in Timberlane Drive, which is part of the municipal stormwater drainage system. The second observation point is the wetland complex to the southwest, within the Open Space lot. These two areas are modeled as Observation Points, OP 1 and OP 2, in the drainage report. A third observation point is modeled as a Summary of all off-site stormwater, shown as SUM.

Post-Development Drainage Conditions:

The proposed drainage systems were designed to capture runoff from the buildings and paved areas, and direct the flow to stormwater management systems. There are 9 Subcatchments modeled in the post-development condition.

The default saturated conductivity rate (Ksat) for Turnbridge-Lyman-Rock outcrop complex soils is 0.6 in/hour for the low end in the C-horizon. An exfiltration rate of 0.3 in/hr was used for the infiltration systems, which provides a factor of safety of 2.0. The test pits in this area had a field measured percolation rate of 4 - 6 min/in.

The drainage system has been designed to collect the stormwater runoff from most of the new impervious surfaces on-site and direct it to the proposed stormwater management systems. The majority of the site will drain to the detention basin, so water will runoff in the same manner as in the existing condition. The net result is that virtually all of the new paved areas will receive

qualitative treatment and there will be a reduction of peak rates of runoff leaving this site for all storm events.

V) SUMMARY

The intent of the stormwater management system for this project is to address the qualitative and quantitative aspects of the stormwater runoff so that there are no downstream adverse impacts created by the project. To mitigate the resulting increases in runoff volume and peak rates due to the development of Lot 515-15, this project proposes that a stormwater management system consisting of three (3) catch basins, four (4) driveway culverts, one (1) treatment swale, one (1) level spreader, and one (1) detention basin to be constructed. The net result is that the new buildings and paved areas will receive qualitative treatment and there will be no increase in the peak rates of runoff leaving the site.

The stormwater management design for this project therefore complies with the stormwater standards set forth in the City of Keene’s Land Development Code.

The following table is a summary of the attached calculations and show a comparison of the peak flow rates at the outlet point for the site. The values presented are based on pre- and post-development conditions.

Table 1.1: Peak Flow Rates (CFS)/Volume (AF) to OBSERVATION POINT 1 (OP1)

STORM FREQUENCY	PRE-DEV. RUNOFF (CFS/AF)	POST-DEV. RUNOFF (CFS/AF)	CHANGE (CFS/AF)
2-YEAR	0.93/0.108	0.49/0.06	-0.44/-0.048
10-YEAR	2.14/0.234	0.99/0.116	-1.15/-0.118
50-YEAR	4.22/0.453	1.79/0.210	-2.34 /-0.243

Table 1.2: Peak Flow Rates (CFS)/Volume (AF) to OBSERVATION POINT 2 (OP2)

STORM FREQUENCY	PRE-DEV. RUNOFF (CFS/AF)	POST-DEV. RUNOFF (CFS/AF)	CHANGE (CFS/AF)
2-YEAR	0.91/0.102	0.60/0.166	-0.31/0.064
10-YEAR	2.35/0.234	1.93/0.386	-0.42/0.152
50-YEAR	4.92/0.474	4.81/0.795	-0.11 /0.321

Table 1.3: Peak Flow Rates (CFS)/Volume (AF) to SUMMARY (SUM) – TOTAL OFFSITE FLOW

STORM FREQUENCY	PRE-DEV. RUNOFF (CFS/AF)	POST-DEV. RUNOFF (CFS/AF)	CHANGE (CFS/AF)
2-YEAR	1.82/0.210	1.08/0.225	-0.74/0.015
10-YEAR	4.42/0.468	2.90/0.502	-1.52/0.034
50-YEAR	8.97/0.927	6.61/1.005	-2.36/0.078



To: Chad Branon, PE
Fieldstone Land Consultants, PLLC
206 Elm Street
Milford, NH 03055

Date: October 15, 2024

Project #: 52905.00

From: Jason R. Plourde, PE, PTP

Re: Traffic Assessment
Proposed Timberlane Drive Townhouses
Keen, New Hampshire

Introduction

Vanasse Hangen Brustlin, Inc. (VHB) has prepared this memorandum to summarize the anticipated traffic impacts associated with a proposed residential development to be located off Timberlane Drive north of Elm Street in Keene, New Hampshire. VHB had prepared a May 12, 2022 Traffic Assessment for the construction of 26 residential townhouse units on the subject site with access provided along Timberlane Drive. Subsequently, the development program has changed to consist of 36 residential townhouse units. The site location in relation to the surrounding roadway network is shown on Figure 1.

Timberlane Drive and Elm Street are legislatively categorized as Class V: Local Roads. Therefore, review and approval are expected to be required with respect to traffic through the City of Keene permitting process. In accordance with Article 21.9.1.A of the City of Keene's Land Development Code, a traffic study is required for a residential development with 10 or more dwelling units. This evaluation has been conducted to summarize the anticipated traffic impacts associated with the proposed residential development.

Existing Traffic Volumes

Existing traffic volumes in the area were researched from historical data provided within New Hampshire Department of Transportation's (NHDOT's) Transportation Data Management System (TDMS) database. NHDOT conducts a three-year traffic count program along Court Street north of Elm Street and along Court Street north of North Street.^{1, 2} The most recent traffic counts collected and uploaded to the NHDOT traffic-volume database for Court Street north of Elm Street were from June 2023 with the next counts planned for 2026. For the Court Street location north of North Street, the most recent traffic counts collected provided within the NHDOT database were from June 2024 with the next counts planned for 2027. The NHDOT historical data are summarized in Table 1 and are provided in the Appendix.

¹ NHDOT TDMS. Court Street north of Elm Street, Keene. (Location ID: 82237181).

² NHDOT TDMS. Court Street north of North Street, Keene. (Location ID: 82237159).

Table 1 Existing Traffic Volume Summary

Location/Time Period	Daily Traffic Volume (vpd) ^a	Peak Hour Traffic Volume (vph) ^b	K-Factor (percent) ^c
Court Street north of Elm Street ^d			
Weekday Daily	11,885		
Weekday AM Peak		944	7.9
Weekday PM Peak		1,057	8.9
Saturday Daily	7,521		
Saturday Peak		697	9.3
Court Street north of North Street ^e			
Weekday Daily	12,776		
Weekday AM Peak		1,090	8.5
Weekday PM Peak		1,146	9.0
Saturday Daily	8,278		
Saturday Peak		715	8.6

a In vehicles per day (highest counted values).

b In vehicles per hour (highest counted values).

c Percent of average daily traffic occurring during the peak hour.

d Traffic counts collected between Saturday, June 10, 2023, and Thursday, June 15, 2023 (Count Station 82237181).

e Traffic counts collected between Monday, June 3, 2024, and Sunday, June 9, 2024 (Count Station 82237159).

The traffic volumes along Court Street north of Elm Street experienced the highest peak hour demands between 8:00-9:00 AM during the weekday AM, between 3:00-4:00 PM during the weekday PM, and between 10:00-11:00 AM during the Saturday. In addition, traffic volumes along Court Street north of North Street were the highest between 7:00-8:00 AM during the weekday AM, between 4:00-5:00 PM during the weekday PM, and between 11:00 AM-12:00 PM during the Saturday. Many rural and urban roadways experience a K-factor that falls between 9.0 and 10.0 percent. The K-factor may exceed 10.0 percent for roadways with heavy peak traffic demand.³ As shown in Table 1, the K-factors for both locations along Court Street are generally within or below the typical range (9.0-10.0), which suggests that traffic volumes along the Court Street corridor may have a relatively even distribution of traffic throughout the day or throughout a peak period that last more than 1 hour.

Build Traffic Volumes

For purposes of this Traffic Assessment, the proposed development program evaluated consists of constructing 36 residential townhouse units. A full access driveway would be constructed on Timberlane Drive.

³ Dowling, Richard, et al. Planning and Preliminary Engineering Applications Guide to the Highway Capacity Manual. National Cooperative Highway Research Program Report 825, Washington, DC: National Academy of Sciences, 2016.

Trip Generation

To estimate the volume of traffic to be generated by the proposed project, Institute of Transportation Engineers (ITE) trip rates were reviewed.⁴ Table 2 summarizes the ITE trip-generation estimates for the proposed 36 multifamily dwelling unit development. The trip-generation calculations are provided in the Appendix.

Table 2 Trip-Generation Summary

Peak Hour/Direction	Site Trips ^a
Weekday AM Peak Hour	
Enter	3
Exit	11
Total	14
Weekday PM Peak Hour	
Enter	12
Exit	7
Total	19
Saturday Midday	
Enter	8
Exit	7
Total	15

^a ITE Land Use Code 220: Multifamily Housing (Low-Rise) for 36 dwelling units.

As shown, the proposed residential development is estimated to generate 14 vehicle trips (3 entering and 11 exiting) during the weekday AM peak hour, 19 vehicle trips (12 entering and 7 exiting) during the weekday PM peak hour, and 15 vehicle trips (8 entering and 7 exiting) during the Saturday midday peak hour.

In accordance with ITE methodologies⁵ and NHDOT general guidance,⁶ a development may result in a noticeable change in vehicular operations if the addition of site trips would increase peak hour traffic volumes at an intersection by 100 vehicles or more. Traffic increases less than this threshold could be attributed to the fluctuation of vehicles due to driver patterns that occur during a day, on different days of a week, or different months of a year. Based on standard traffic engineering practice and methodologies, the proposed development is not projected to meet this threshold during the weekday AM, weekday PM, and Saturday midday peak hours. Therefore, standard traffic engineering practice suggests that the proposed development would not be expected to result in noticeable impacts to the adjacent roadway system.

⁴ Institute of Transportation Engineers. Trip Generation Manual, 11th ed. Washington, DC, Sept. 2021.

⁵ Institute of Transportation Engineers. Transportation Impact Analyses for Site Development: An ITE Proposed Recommended Practice. Washington, DC. 2010.

⁶ Bollinger, Robert E. Inter-Department Communication. New Hampshire Department of Transportation, Bureau of Traffic. 17 Feb. 2010.

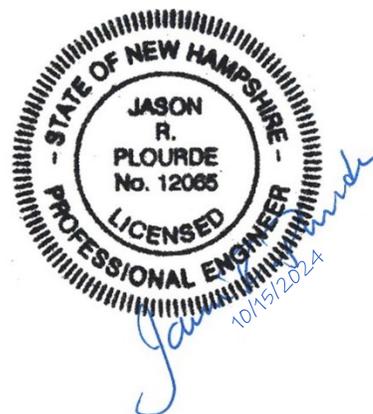
Site Trip Impacts

With the proposed residential development to be located along Timberlane Drive, motorists would access the site along Timberlane Drive via Court Street to the north and south, Elm Street to the south, and Old Gilsum Road to the north. For planning purposes, all site trips were distributed through the Court Street and Elm Street intersection to provide a conservative (worse-case) scenario. At this intersection, the site trips were then evenly distributed with 50 percent to/from the north and 50 percent to/from the south.

Based on the trip-generation and distribution estimates for the proposed residential development, the site trips were assigned to the adjacent roadway network. The project-generated traffic volumes are reflected on Figure 2 for the weekday AM, weekday PM, and Saturday peak hours. As shown, the proposed development would increase traffic volumes along Court Street north of Elm Street in the range of 7 to 10 vehicles per hour (1 additional vehicle/6 to 8.6 minutes) and along Court Street south of Elm Street in the range of 7 to 9 vehicles per hour (1 additional vehicle/6.7 to 8.6 minutes). As shown in Table 2 and on Figure 2, standard traffic engineering practice suggests that the proposed residential development would be expected to result in negligible impacts to the adjacent roadway system.

Summary of Findings

In summary, common traffic engineering practice suggests that the vehicular trips associated with the proposed 36 townhouse units would have negligible impacts to the adjacent roadway system during the weekday AM, weekday PM, and Saturday peak hours. The total site trips estimated for the proposed development do not meet the ITE and NHDOT 100 vehicle per hour increase threshold for which developments may have a noticeable impact.



SPECIFICATIONS

Certifications/Qualifications

ADA Compliant	No
Prop65	No
Dark Sky Compliant	No
Location Rating	Wet
	kichler.com/warranty

Dimensions

Height	12"
Width	4.75"
Height From Center Of Wall	6"
Opening (Spec Sheet)	
Extension	5.5"
Weight	5.5 LBS
Canopy Height	12"
Canopy Width	4.75"
Canopy Depth	1"

Electrical

Input Voltage	120 V
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Light Source

Light Source	Integrated LED
Lamp Included	Integrated
# Of Bulbs/LED Modules	1
Max Or Nominal Watt	9 W
Max Wattage/Range	9
Dimmable	Yes

Photometrics

Color Rendering Index	90
Color Temperature Range	3000 K
Delivered Lumens	250
Delivered Efficacy (Lumens/Watt)	28

Mounting/Installation

Interior/Exterior	Exterior Product
Mounting Style	WALL MOUNT
Mounting Weight	5.5 LBS
Modular	Yes
Lead Wire Length	6

FIXTURE ATTRIBUTES

Housing/Glass

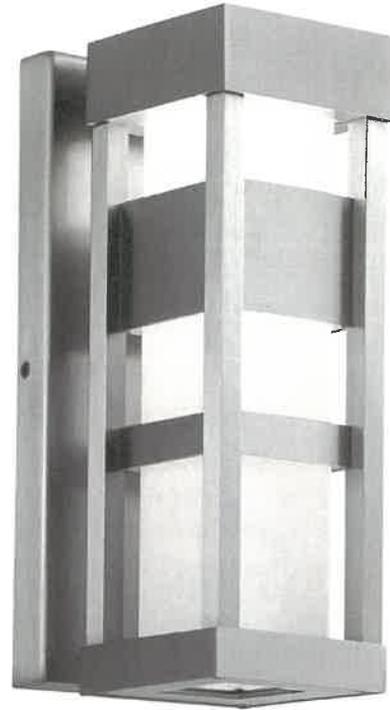
Primary Material	Aluminum
Shade Included	No
Shade Dimensions	4.00 SQ X 12

Product/Ordering Information

SKU	59035BALED
Finish	Brushed Aluminum
UPC	783927603188

Finishes

-  Black
-  Brushed Aluminum



ALSO IN THIS FAMILY



59036BALED



59036BKLED



59037BALED



59037BKLED



PB-2024-14



Catalog # : _____ Project : _____ Type : _____

Prepared By : _____ Date : _____

Opulence Small Side Arm Mount (OPS SA)

Outdoor Area Light



IP66



OVERVIEW

Lumen Package (lm)	3,000 - 14,000
Wattage Range (W)	20 - 100
Efficacy Range (LPW)	134 - 173
Weight lbs (kg)	17 (7.7)
Control Options	IMSBT, ALBCS, 7-Pin

QUICK LINKS

[Ordering Guide](#)

[Performance](#)

[Photometrics](#)

[Dimensions](#)

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.

Optical System

- High density LED optical system delivers industry leading optical performance and visual comfort.
- 7 distribution types 3W, 4F, 5Q, 5C, 5R, 5D, AD
- Diffused lens version provides maximum visual comfort with reduced brightness and LED pixelization
- Zero uplight.
- Available in 5000K, 4000K, 3500K, 3000K and 2700K color temperatures per ANSI C78.377. Also available in Phosphor Converted Amber with Peak intensity at 610nm.
- Minimum CRI of 80

Electrical

- High-performance driver features overvoltage, under-voltage, short-circuit and over temperature protection (6kV surge standard).
- 0-10V dimming (10% - 100%) standard.

- Standard Universal Voltage (120-277 VAC) Input 50/60 Hz or optional High Voltage (347-480 VAC).
- Total harmonic distortion (THD): <20%
- Operating temperature: -40°C to +40°C (-40°F to +104°F).
- Power factor (PF): >.90
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- Driver is fully encased in potting material for moisture resistance and complies with FCC standards. Driver and key electronic components can easily be accessed.

Controls

- Integral passive infrared Bluetooth™ motion and photocell sensor options. Fixtures operate independently and can be commissioned via an iOS or Android configuration app.
- LSI's AirLink™ Blue lighting control system is a simple feature rich wireless Bluetooth mesh network. The integrated fixture sensor module provides wireless control of grouped fixtures based on motion sensors, daylight or a fully customizable schedule. Updates and modifications to the control strategy are easily implemented via an intuitive iOS app.

Installation

- Designed to mount to square or round poles.
- Utilizes LSI's B2 drill pattern.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to <https://www.lsicorp.com/resources/terms-conditions-warranty/> for more information.

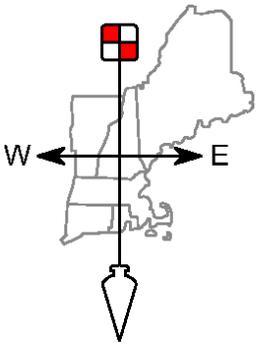
Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- IDA compliant; with 3000K and warmer color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet locations.
- IP66 rated Luminaire per IEC 60598-1.
- 3G rated for ANSI C136.31 high vibration applications.
- DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.



By PB-2024-14





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LAND CONSULTANTS, PLLC

206 Elm Street, Milford, NH 03055 - Phone: 603-672-5456 - Fax: 603-413-5456
www.FieldstoneLandConsultants.com

Cottage Court Development - Conceptual Review / Comment

Guitard Homes, LLC
Tax Map Parcel 228, Lot 16
Court Street, Keene, New Hampshire

October 18, 2024

Project Narrative:

Fieldstone Land Consultants, on behalf of Guitard Homes, LLC, is submitting a Cottage Court Overlay development concept for review and comment. The proposal consists of developing Tax Map Lot 228-16 located on Court Street, in a Cottage Court single-family residential development with 31 dwelling units. The applicant has decided to utilize the recently adopted Cottage Court Overlay regulations with a private driveway. This layout will provide condominium style ownership for future homeowners with a goal of providing much needed affordable, owner-occupied housing.

The existing Tax Map Lot 228-16 has 9.7+/- acres with 303.59 feet of frontage along Court Street. The lot is located in the Low Density District and is currently undeveloped. The property is primarily wooded with young forest with some forested wetland areas in the lower elevations.

The proposed buildings will have access from Court Street via a central driveway that has two small spurs to utilize the dry areas on site. There is a longer spur proposed to access the buildable area along the rear of the lot. We anticipate two wetland crossings for this development and there will be buffer impacts in the wetland crossing areas as well as in some backyard areas to provide for a nice residential setting with proper spacing around the units. A homeowner's association will be formed to provide maintenance of the access road and common facilities and amenities.

The sizes of the units will vary, as there is a mix of two-bedroom and three-bedroom designs. The buildings will be 1-2 stories, and include either an optional garage or shed. The building designs contemplate a modern New England style architecture and will meet the Cottage Court standards. The plans for these units have been provided for review and comment.

The residential development will be serviced by the municipal water and sanitary sewer infrastructure that is located along Court Street. Easements will be provided to the City of Keene where necessary for the infrastructure. The stormwater management will be constructed on site and maintained by the homeowner's association. The project will disturb more than 100,000 S.F. of land, requiring an Alteration of Terrain permit with NHDES.

We would appreciate your comments and feedback on our proposed concept so we can address them in our formal design and submittal.

Respectfully,
Fieldstone Land Consultants, PLLC



- NOTES:**
1. THE OWNER OF RECORD FOR EXISTING TAX MAP 228 LOT 16 IS GUITARD HOMES LLC - P.O. BOX 604 JAFFREY, NH 03452. THE DEED REFERENCE FOR THE LOT IS CCRD BK.3290 PG.1192 DATED OCTOBER 11, 2024.
 2. THE PURPOSE OF THIS PLAN IS TO DEPICT A COTTAGE COURT STYLE DEVELOPMENT OVER TAX MAP PARCEL LOT 228-16 WITH ASSOCIATED SITE IMPROVEMENTS.
 3. ZONING FOR THE LOT IS THE LOW DENSITY (LD) DISTRICT. MINIMUM LOT REQUIREMENTS ARE 10,000 SQ.FT. OF AREA AND 60 FEET OF FRONTAGE. BUILDING SETBACKS ARE 15 FT. FRONT, 10 FT. SIDE AND 20 FT. REAR.
 4. IMPROVEMENTS SHOWN HEREON ARE PER NH GRANIT AND TOWN OF KEENE GIS. WETLANDS SHOWN HEREON WAS DELINEATED BY CHRISTOPHER A. GUIDA, CWS, IN AUGUST, 2024.
 5. THE BOUNDARY INFORMATION SHOWN FOR EXISTING LOT 228-16 IS BASED ENTIRELY ON NH GRANIT SHAPE FILES AND THE REFERENCE PLAN CITED HEREON.
 6. LOT 228-16 MAY BE SUBJECT TO A PRIVATE RIGHT-OF-WAY AS SHOWN ON THE REFERENCE PLAN. LOT 228-16 BENEFITS FROM A RIGHT-OF-WAY OVER ABUTTING LOT 228-15 PER THE REFERENCE PLAN.

REFERENCE PLAN:
 "SUBDIVISION OF LAND OF - S.B.D. TRUST", SCALE: 1"=50', DATED: JULY 18, 1977, REVISED THROUGH: SEPTEMBER 27, 1977, PREPARED BY: DUFRESNE-HENRY ENGINEERING CORPORATION, AND RECORDED IN PLAN CABINET 1, DRAWER 00, NUMBER 71 IN THE C.C.R.D.

REV.	DATE	DESCRIPTION	C/O	DR	CK

**COTTAGE COURT
 SUBDIVISION CONCEPT
 TAX MAP 228 LOT 16
 (COURT STREET)
 KEENE, NEW HAMPSHIRE
 PREPARED FOR:
 GUITARD HOMES, LLC**

SCALE: 1" = 60' OCTOBER 21, 2024

Surveying ♦ Engineering ♦ Land Planning ♦ Permitting ♦ Septic Designs

FIELDSTONE
LAND CONSULTANTS, PLLC

206 Elm Street, Milford, NH 03055
 45 Roxbury Street, Keene, NH 03431
 Phone: (603) 672-5456 Fax: (603) 413-5456
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Oct 21, 2024 - 11:39am flc-01
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REV.	DATE	DESCRIPTION	C/O	DR	CK

**COTTAGE COURT
 SUBDIVISION CONCEPT
 TAX MAP 228 LOT 16
 (COURT STREET)
 KEEHE, NEW HAMPSHIRE
 PREPARED FOR:
GUITARD HOMES, LLC**

SCALE: 1" = 60' OCTOBER 21, 2024

Surveying ♦ Engineering ♦ Land Planning ♦ Permitting ♦ Septic Designs

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Oct 21, 2024 - 11:44am
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