

#### TOWNOFMILFORD,NH OFFICEOFCOMMUNITYDEVELOPMENT

1 UNION SQUARE, MILFORD, NH 03055 TEL: (603)249-0620

WEB: WWW.MILFORD.NH.GOV

Date: February 11, 2020

To: Planning Board

From: Kellie Shamel, Town Planner

Subject: Frederick & Celia Lorden Trust (owner) and Ponemah Hills, LLC (applicant) – Review for acceptance and consideration of final approval for a major site plan to construct a 6,447 square foot, 9-unit multifamily residential building with a nine stall carport along with associated site improvements. The parcel is located at 0 Ponemah Hill Road in the Residence B District. Tax Map 43, Lot 61.

#### BACKGROUND/PROPOSAL:

The applicant is before the Board seeking approval of a site plan to construct a 6,447 square foot, 9-unit multifamily residential building with a nine stall carport, along with associated site improvements including service from municipal water and sewer. The property totals approximately 1.94 acres with 265 linear feet of frontage on Ponemah Hill Road. The property is currently undeveloped and lies within the Residential B zoning district. This will be the first public hearing for the application, however the Board will recall this property was conceptually discussed in November 2019.

#### APPLICATION STATUS:

The application is complete and ready to be accepted.

#### NOTICES:

Notices were sent to all property abutters on February 6, 2020.

#### WAIVERS:

No waivers have been requested.

#### ZONING:

The parcel is within the Residence B District. The intent of the Residence B District is to provide areas for increased residential density and other uses which are compatible with these residential densities.

The allowable density for a multi-family use in the Residential 'B' Zoning District is determined by Section 5.03.4.A which states that multi-family dwellings shall be served by both municipal sewerage and water systems and may have a maximum of five (5) units per acre. The total maximum allowable for the property pursuant to Section 5.03.4.A is 9 units (5 units x 1.91 acres).

#### TRAFFIC AND ACCESS MANAGEMENT:

Vehicular egress and access to the property will be from a single curb cut off of Ponemah Hill Road. Designated parking areas have been provided internally on site however emergency vehicle access and circulation is of concern. Please see comments from the Milford Fire Department and Ambulance Department.

The applicant should also confirm the site distance is adequate. There is concern about site distance to the west while exiting the site given the curving of the road.

Section 7.03 Sidewalks of the Development Regulations states that the Planning Board may require sidewalks for pedestrian traffic to provide a connection between the main entrances of business, housing or industrial establishments, parking areas and along public roadways. The Planning Board may also require sidewalks from the road to the main building entrance or along the road frontage if there is a reasonable expectation pedestrian patrons, residents, neighbors, children, shoppers or employees would be traveling to or from the site.

#### **PARKING:**

The proposed parking on site meets and exceeds the minimum requirements set forth in Section 6.05.4 Table of off Street Parking which requires two (2) spaces per unit: 9 units x = 18 spaces required. The plan shows a proposed 20 spaces plus 9 carport spots.

The Board may consider discussing with the applicant the possibility of reducing the amount of parking spaces given the amount of impervious surface onsite.

#### **OPEN SPACE/LANDSCAPING:**

As per Section 5.03.7 of the Zoning Ordinance, open space shall be provided for all uses, other than single-family and two-family dwellings in an amount equal not less than thirty (30) percent of the total lot area.

The property exceeds the minimum open space requirements (58,364 square feet / 1.340 acres) or 70% of the total parcel area.

The applicant has submitted a landscaping plan for the property. The plan incorporates existing vegetation and trees into the landscape plan along the front, sides and rear of the property. The plan also shows the installation of 3 maple trees and 5 lilac along Ponemah Hill Road at the front of the property.

Staff would recommend additional tree plantings along the frontage of Ponemah Hill Road in compliance with Section 6.08.7.A.2 requiring one tree per each 30 feet of landscaped strip along the access way. Staff would also recommend additional landscaping within the site in compliance with Section 6.08.6 requiring a minimum of 1 shrub for every 5 feet of building frontage and additional landscaping within the site that is compliant with Section 6.08.7.

The Board will need to determine if the existing vegetation being uses as landscape buffer on the periphery of the property is sufficient. Staff would recommend installing additional vegetation buffer in areas where there may be gaps.

#### DRAINAGE/STORMWATER MANAGEMENT

Subject to resolution of the comments cited in the engineering consultant's February 11, 2020 memorandum (See attached), the stormwater system design adequately mitigates the increase in runoff rate and volume caused by the proposed development as required by the Town's Regulations.

Staff would recommend the applicant consider ways to decrease the amount of impervious surface onsite such as reducing the number of parking spaces/carport spaces provided and/or reducing the width of the entrance roadway to 22 feet.

#### **BUILDING ELEVATIONS**

The applicant has provided the proposed building elevations for review and consideration by the Board (see attached). The proposed elevations provide the appropriate scale, massing and from when compared to the surrounding properties and buildings.

#### **INTERDEPARTMENTAL REVIEWS:**

Ambulance: No comments.

Assessing: No comments.

Building Department: No comments

Code Enforcement/ Health: No comments.

Conservation Commission: See attached comments.

Fire Department: See attached e-mail.

Heritage Commission: Comments due by 2/14/2020.

Police Department: No comments.

Public Works: See attached e-mail.

Water/Sewer Utilities: See attached e-mail.

Drainage/Stormwater: See attached letter from KV Partners.

#### **Community Development / Planning:**

- 1. Site Plan, Notes. Add a note stating sewer and driveway permits shall be obtained for this project.
- 2. General Comment. Staff would recommend the applicant consider ways to decrease the amount of impervious surface onsite such as reducing the number of parking spaces/carport spaces provided and/or reducing the width of the entrance roadway to 22 feet.
- 3. General Comment. Please confirm the site distance is adequate. There is concern about site distance to the west while exiting the site given the curving of the road.
- 4. Landscape Plan. Staff would recommend additional tree plantings along the frontage of Ponemah Hill Road in compliance with Section 6.08.7.A.2 requiring one tree per each 30 feet of landscaped strip along the access way (unless it can be shown that existing trees meet these requirements).
- 5. Landscape Plan. Staff would recommend additional landscaping within the site in compliance with Section 6.08.6 requiring a minimum of 1 shrub for every 5 feet of building frontage and additional landscaping within the site that is compliant with Section 6.08.7.

#### **STAFF RECOMMENDATIONS:**

The applicant should be prepared to address the comments raised by the Planning Board, Conservation Commission, Town Consultants, Staff, and public pertaining to the Site Plan. Staff recommends continuing the application to the next regularly scheduled meeting to allow the applicant time to address comments from municipal departments and KV Partners.



Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.

## KVPartners LLC\_

P.O. Box 432, New Boston, NH 03070

(603) 413-6650

February 11, 2020

Kellie Shamel, Town Planner Town of Milford 1 Union Square Milford, NH 03055

### Re: Ponemah Pines Site Plan, Ponemah Hill Road (Map 43, Lot 61) Drainage Review

Dear Ms. Shamel:

We reviewed the 8-sheet plan set dated January 20, 2020 and Stormwater Management Report dated January 20, 2020 both prepared by Fieldstone Land Consultants in accordance with our agreement with the Town. Based on that review, we offer the following comments:

- 1. The stormwater mitigation relies completely on infiltration at a single basin at the northeast corner of the lot. Considering the basin is located very close to the abutting property line and roadway right-of-way line and all the stormwater from the site is being directed to a single location, there is a concern that the large concentration of stormwater may overflow the stormwater basin (if infiltration efficiencies decrease over time) onto abutting properties and the roadway swales which will be problematic. It is strongly recommended that the infiltration mitigation be spread around the site (there are clear opportunities for this) to prevent a concentration of flow at one point.
- 2. A section for test pit data was included in the Stormwater Management Report but no test pit data was provided.
- 3. Considering that infiltration is the primary source of mitigation, post construction testing of the infiltration devices should be provided to the Town to verify infiltration rates proposed have been accomplished.

If you have any questions or need any additional information, please feel free to contact me at 603-413-6650 or on my cell phone at 603-731-1562 or by email at <u>MVignale@kvpllc.com</u>.

Sincerely, **KV** *Partners LLC* 

Michael S. Vignale, P.E. Principal Engineer

### Town of Milford CONSERVATION COMMISSION

Town Hall 1 Union Square Milford, NH 03055-4240 (603) 249-0628 Fax (603) 673-2273 www.milford.nh.gov conservation@milford.nh.gov



### MEMORANDUM

February 14, 2020

To: Milford Planning Board

#### Re: Interdepartmental Review Map 43 Lot 61 Ponemah Pines LLC Site Development Plans 19 Ponemah Hill Rd

To the Board,

The Conservation Commission reviewed this plan at their February 13, 2020 meeting. The MCC has a few comments.

- 1. The members would like to attend a site visit to view the lot in context of the landscape impact. This seems to be a bit of an oasis for wildlife movement. We would like to see the development acknowledge and reasonably accommodate such uses, if present.
- 2. Has there been an invasives inventory taken? If invasives are present, what measures will be taken to prevent the spread of the invasives?
- 3. How much vegetation will be removed? Would the applicant consider replacing this vegetation with a comparable density to maintain the existing air quality, water retention, cooling and other benefits offered by the existing wooded lot?
- 4. Would the applicant consider the nesting season for wildlife using this lot when planning their alterations and vegetation removal?

The Commission appreciates the opportunity to review this application. We look forward to seeing a well-designed project that improves the natural resource functionality of the site.

Very Respectfully,

Chris Costantino Milford Conservation Commission

From:	Jason Smedick
То:	Kellie Shamel
Subject:	RE: Planning Dept. IDR - Ponemah Hill Site Plan
Date:	Friday, January 31, 2020 1:55:42 PM

Regarding FD access for the site. We have generally required access on at least three side of multifamily dwellings. That being said we are looking to have a 20' wide fire dept. access road around the back of the building, terminating at the end of the Ponemah Hill Rd. side of the building.

We would prefer the engineered grass paver system, however pavement or a hard, all weather maintainable surface will be acceptable as well.

Should you have any further questions, please do not hesitate to contact me.

Thank you.

Captain Jason A Smedick Milford Fire Department Bureau of Fire Prevention & Investigation Deputy Health Officer 39 School Street Milford NH 03055 603-249-0680

#### Hi Kellie,

Thank you for the update this morning regarding this IDR and my concerns regarding ambulance maneuvering in the driveway. Based on what you relayed regarding the fire department concerns – a need for vehicle access around the back of the building via a continuation of the driveway, this combined with moving the snow removal area further back (for plowed snow accumulation) or to an alternative location, would provide sufficient space for an ambulance to pull into the access way to the rear of the building, then back up into the snow removal area. This modification of the plan is acceptable to Ambulance for department operations.

I look forward to reviewing the building plans when they are submitted for review.

Please do not hesitate to contact me with questions.

Have a good day,

Eric

Kellie,

The trench patch detail is not per town of Milford, trenches are base paved flush full thickness, then milled  $1 \frac{12}{7}$ , to a minimum distance of 2' each side of trench.

Rick Riendeau Director of Public Works Milford, NH rriendeau@milford.nh.gov W 603-673-1662 F 603-673-2206 *"Public Works makes it happen"* 

From:	Brad Whitfield
To:	Kellie Shamel
Cc:	Kevin Stetson
Subject:	Ponemah Pines - Ponemah Hill Rd.
Date:	Wednesday, January 29, 2020 11:05:54 AM

Good morning Kellie, I have reviewed the sewer portion of these plans and it looks good. The only issue I have is the clean-out outside the building. Due to all of the units being on the same interior plumbing exiting the building, I recommend a manhole for access both ways. Spoke with Chad Branon today about this, he agreed and said he would make that change. Other than that sewer is good to go. Have a good day, Brad

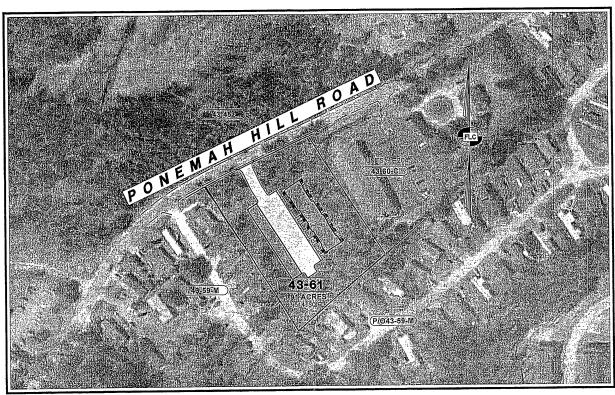
From:	Kevin Stetson
То:	Kellie Shamel
Subject:	RE: Planning Dept. IDR - Ponemah Hill Site Plan
Date:	Tuesday, January 28, 2020 2:27:15 PM

#### Hi Kellie,

For Water and Sewer the location of the service lines are ok but we should get more details on the Building's details for water and sewer connection to the building and the mains in the street.

# SITE DEVELOPMENT PLANS PONEMAH PINES - TAX MAP 43, LOT 61 -

PONEMAH HILL ROAD MILFORD, NEW HAMPSHIRE JANUARY 20, 2020



SCALE: 1"=100'

PREPARED FOR PONEMAH PINES, LLC 476 ROUTE 13 SOUTH, MILFORD NH 03055

LAND OF: FREDERICK & CELIA LORDEN TRUST

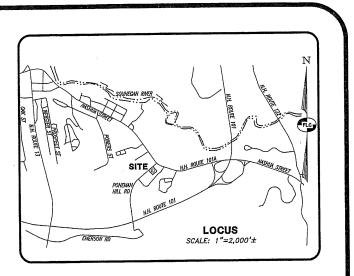
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4	GR—1	GRADING AND UTILITY PLAN
5	LT—1	LIGHTING AND LANDSCAPING PLAN
6	DT—1	CONSTRUCTION DETAILS
,	DT-2	CONSTRUCTION DETAILS
	DT-3	EROSION CONTROL DETAILS

	TOWN OF MILFORD RECEIVED					
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PB_	ZBAOffice					

REFERENCE PLAN:

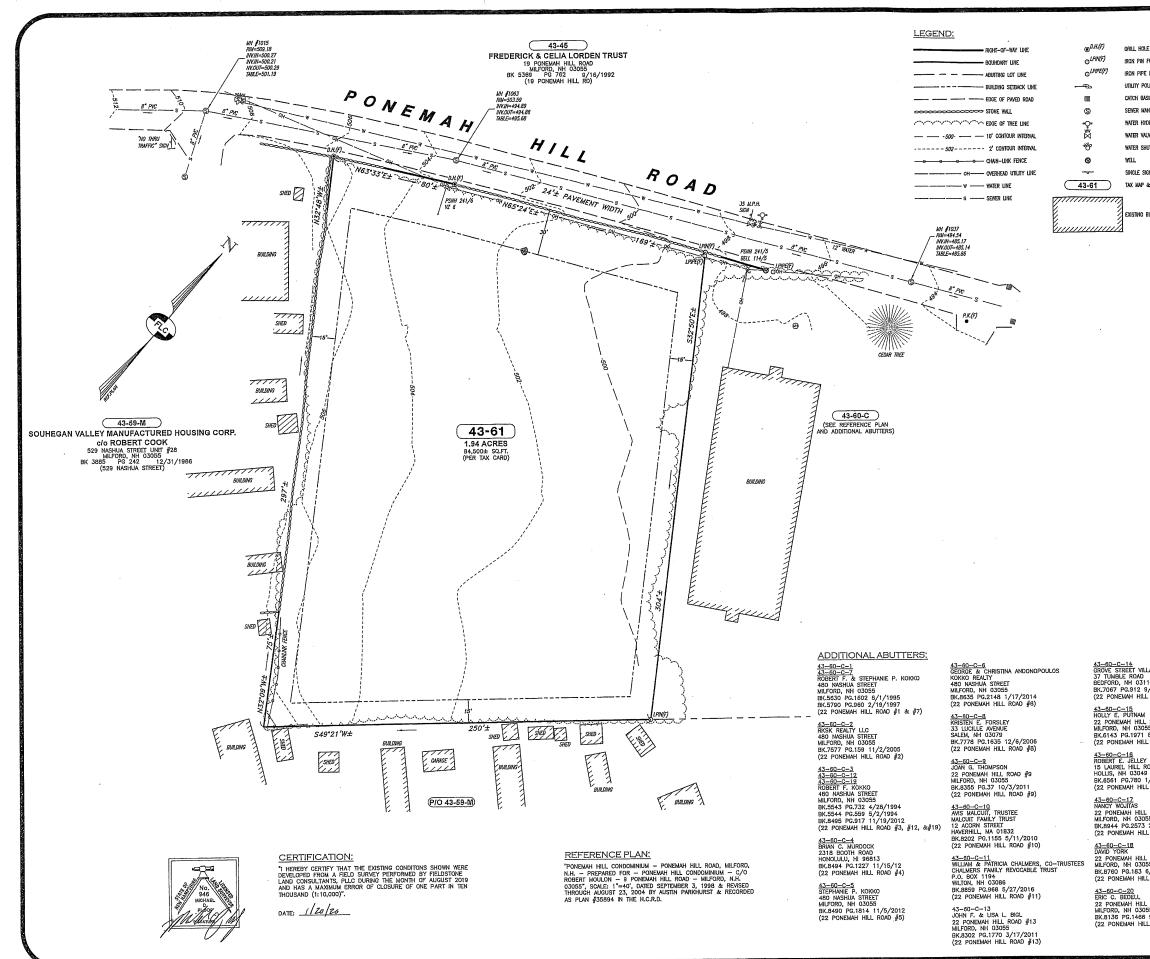
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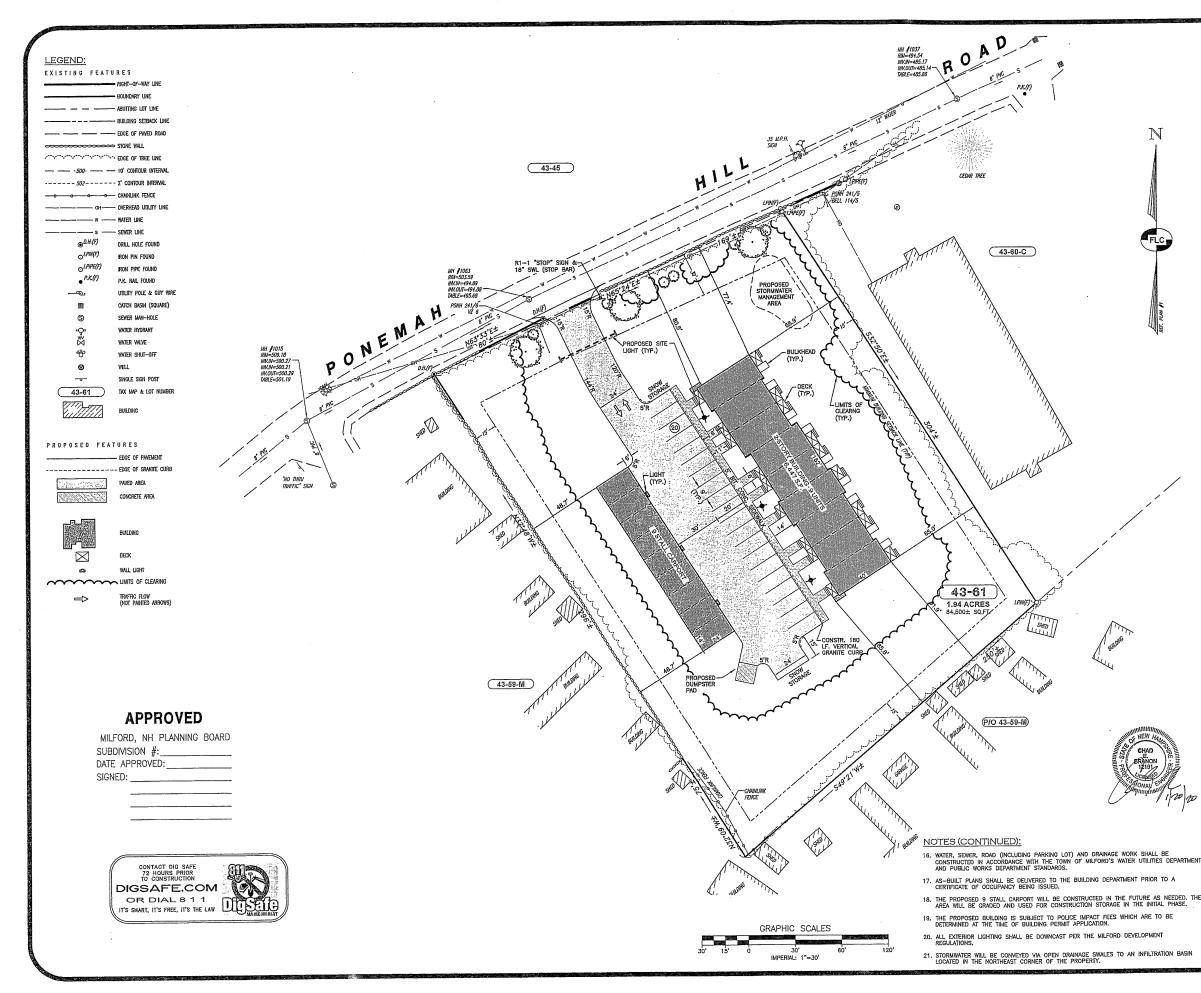
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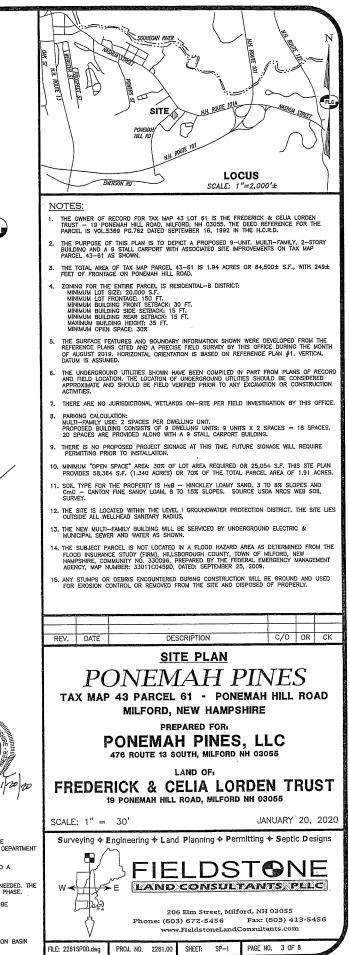
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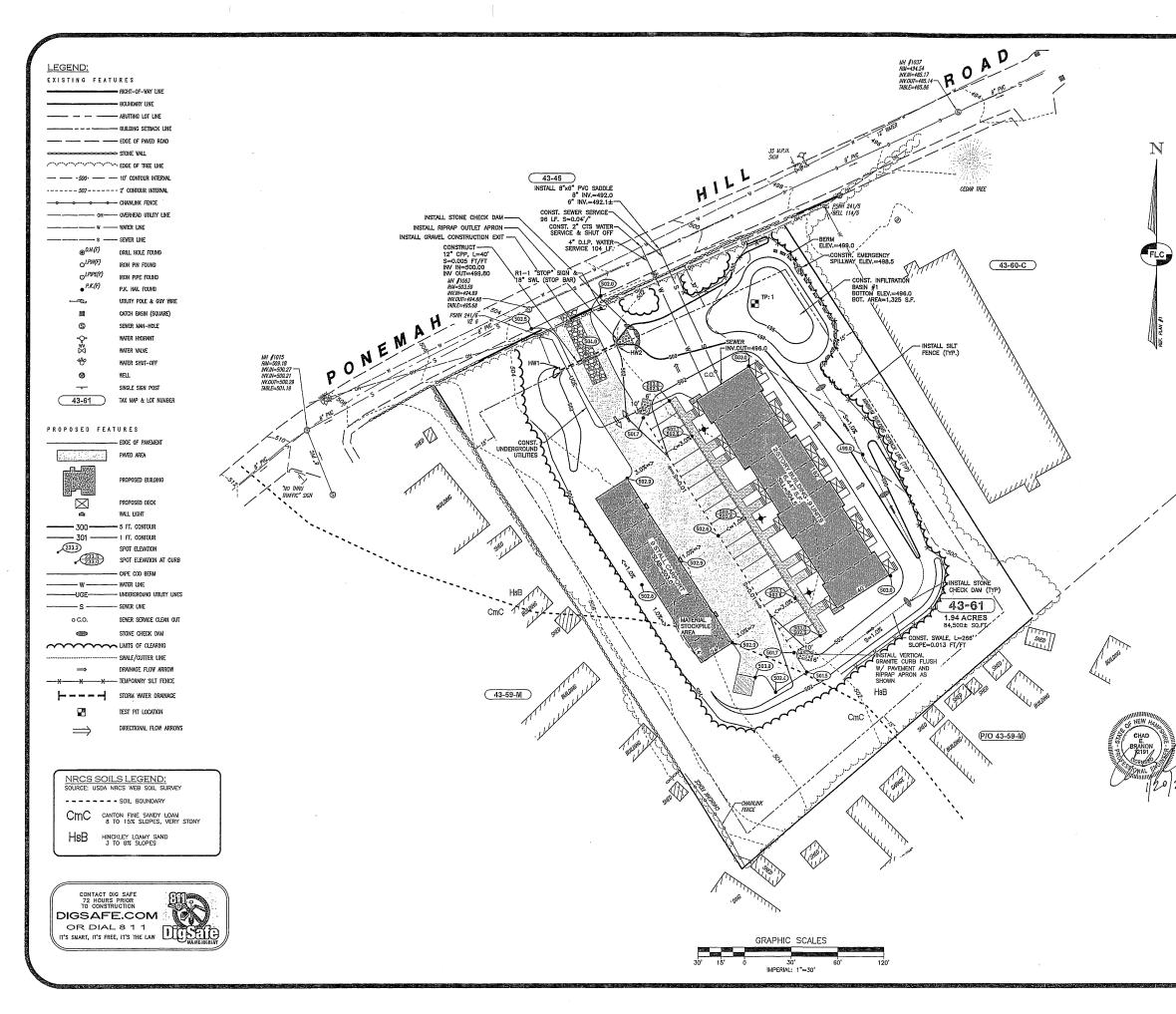
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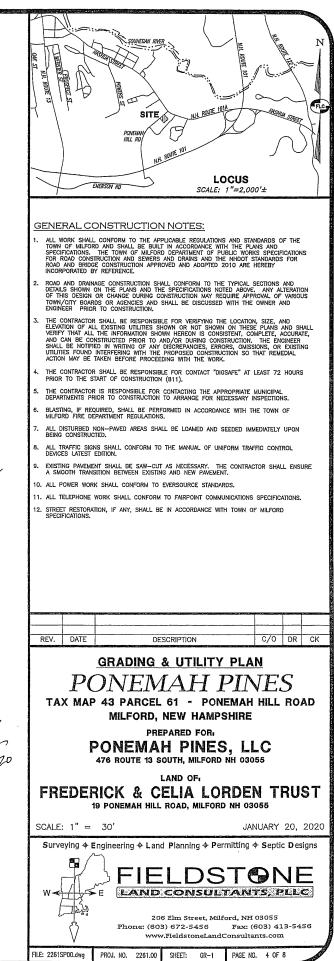


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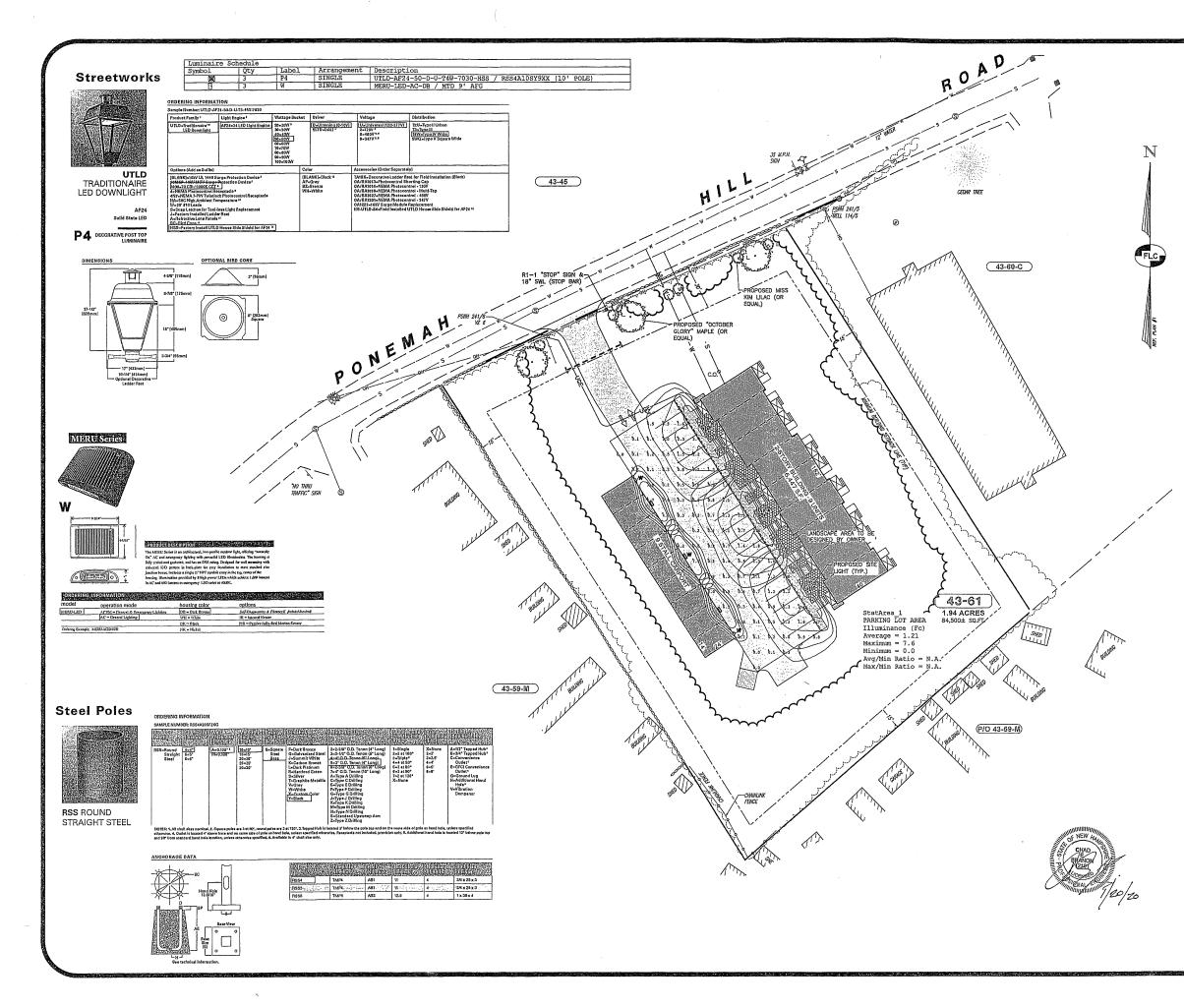


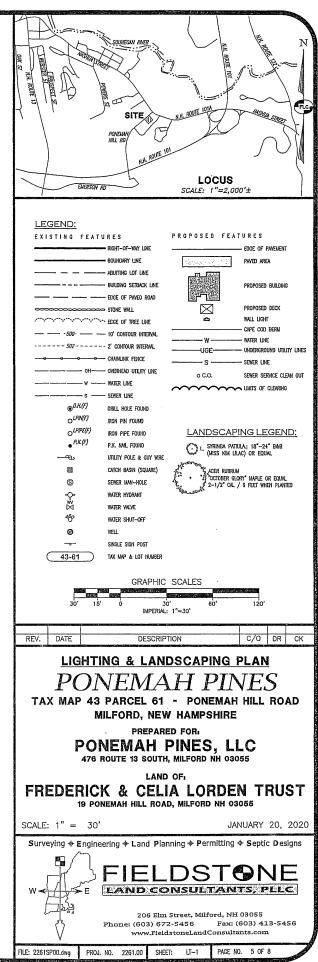


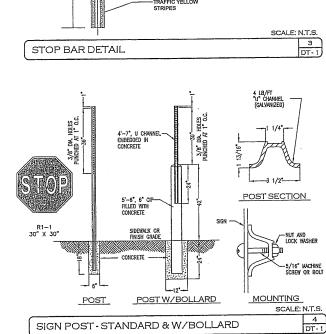


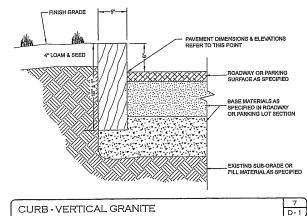


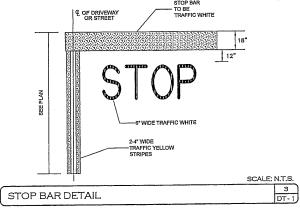
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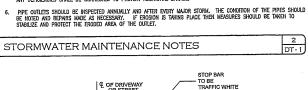


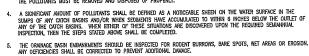


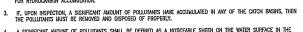


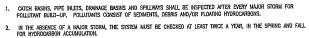








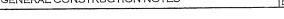


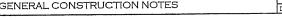


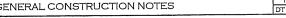




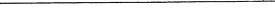


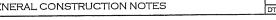




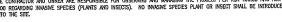


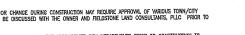


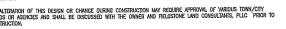




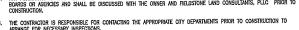




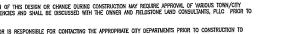


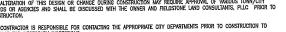


ANY ALTERATION OF THIS DESIGN OR CHANGE DURING CONSTRUCTION MAY REQUIRE APPROVAL OF VARIOUS TOWN/CITY EDARDS OR AGENCIES AND SHALL BE DISCUSSED WITH THE OWNER AND FIELDSTONE LAND CONSULTANTS, PLLC PRIOR TO CONSTRUCTION.

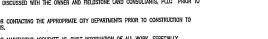


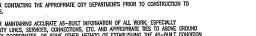




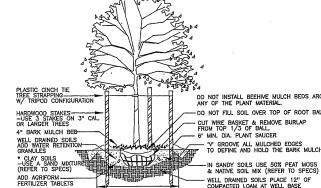


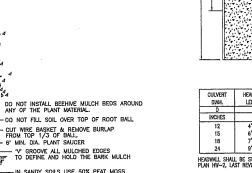




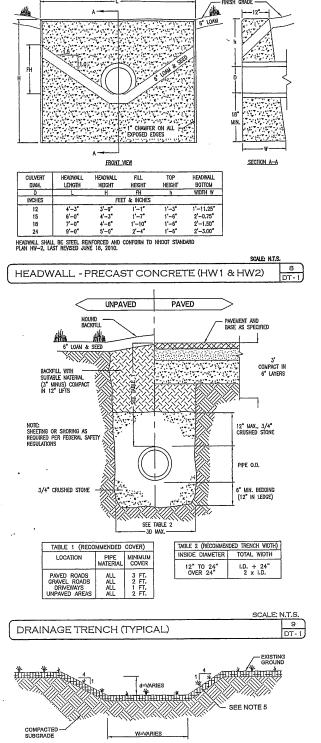








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\*\* SEE DESIGN PLANS FOR DIMENSIONS

- REMOVE ALL ORGANIC MATERIAL FROM AREA BELOW PROPOSED INFILTRATION BASINS AND TO EXPOSE UNDERLYING SOILS.
- CARE SHALL BE TAKEN TO PROTECT THE UNDERLYING SOILS FROM CONSTRUCTION TRAFFIC AND THE DISCHARGE OF SEDIMENT LADEN RUNOFF.
- ONCE EXCAVATED AND PRIOR TO FILLING, THE UNDERLYING SOILS SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH LEVELING DRAG.
- FILL BELOW THE BASIN AND/OR LEACHING TRENCHES SHALL CONFORM TO THE SPECIFICATIONS FOR NHDOT ITEM 209 "GRANULAR BACKFILL".
- THE BASIN FLOOR OF THE INFILTRATION BASINS SHALL BE PREPARED USING ONE OF THE FOLLOWING METHODS: 6' LAYER OF COURSE SAND OR 3IP FEA GRAVEL; GRASS TURW WITH A HIGH INFILTRATION RATE (HIGH SAND CONTENT) THAT CAN BE INUNATED FOR OVER 72 HOURS; COARSE ORGANIC MATERIAL SUCH ASAN EROSION CONTROL MIX OR COMPOSTED MULCH THAT IS TILLED INTO THE SOIL,
- SOAKED, AND ALLOWED TO DRY.

DT-1

6. DO NOT PLACE INFILTRATION BASINS/TRENCHES INTO SERVICE UNTIL ALL CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED. 10

INFILTRATION BASIN SECTION

# INFILTRATION BASIN CONSTRUCTION NOTES



* * *	
	d=VARIES







2 TO 3 TIMES ROOT BALL	ADD WYCOR TREE W/ ' (1/2 PKG, PER UP TO 1 PKG, PER 3' + S
	SCALE: N.
B&BSHRUB PLANTING DETAIL	ים

DY SOILS USE 507 PEAT MOSS & NATIVE SOIL MIX CLAY SOILS -USE & SAND MIXTURE - 'V' GROOVE ALL MULCHED EDGES andan HOLD THE BARK MULCH PEEL & CUT BURLAP



- NOTE: ALL PYRAMIDAL EVERGREENS & DECIDUOUS TREES SHALL BE PLANTED W/ ROOTS HORMONE ENHANCER. SCALE: N.T.S. DECIDUOUS TREE PLANTING DETAIL

2 TO 3 TIMES ROOT BALL

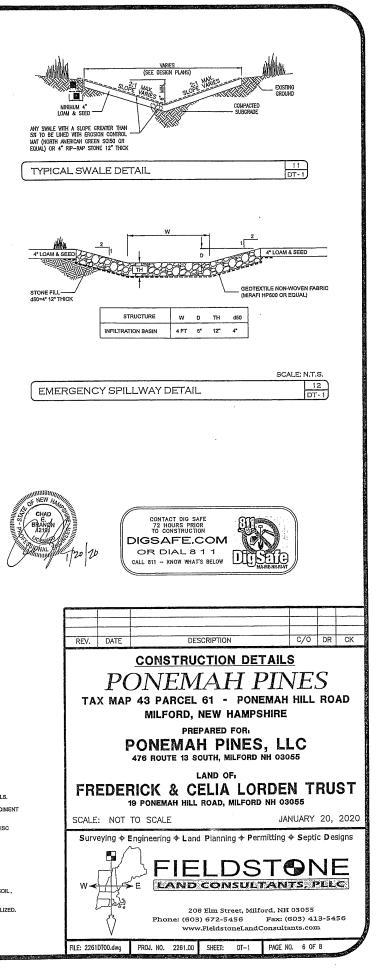
- THE CONTRACTOR SHALL CONTACT "DIGSAFE" 72 HOURS PRIOR TO THE START OF CONSTRUCTION (1-800-255-4977 IN NH, 1-888-344-7233 IN MA).
- COMPLIANCE WITH ALL APPLICABLE REGULATIONS AND SPECIAL CONDITIONS OF TOWN/CITY ABENCIES, SUCH AS THE PLANING BOARD, ZONING BOARD, CONSERVATION COMMISSION, AND OTHERS, IS MANDATORY AND IS THE RESPONSIBILITY OF THE OWNER.

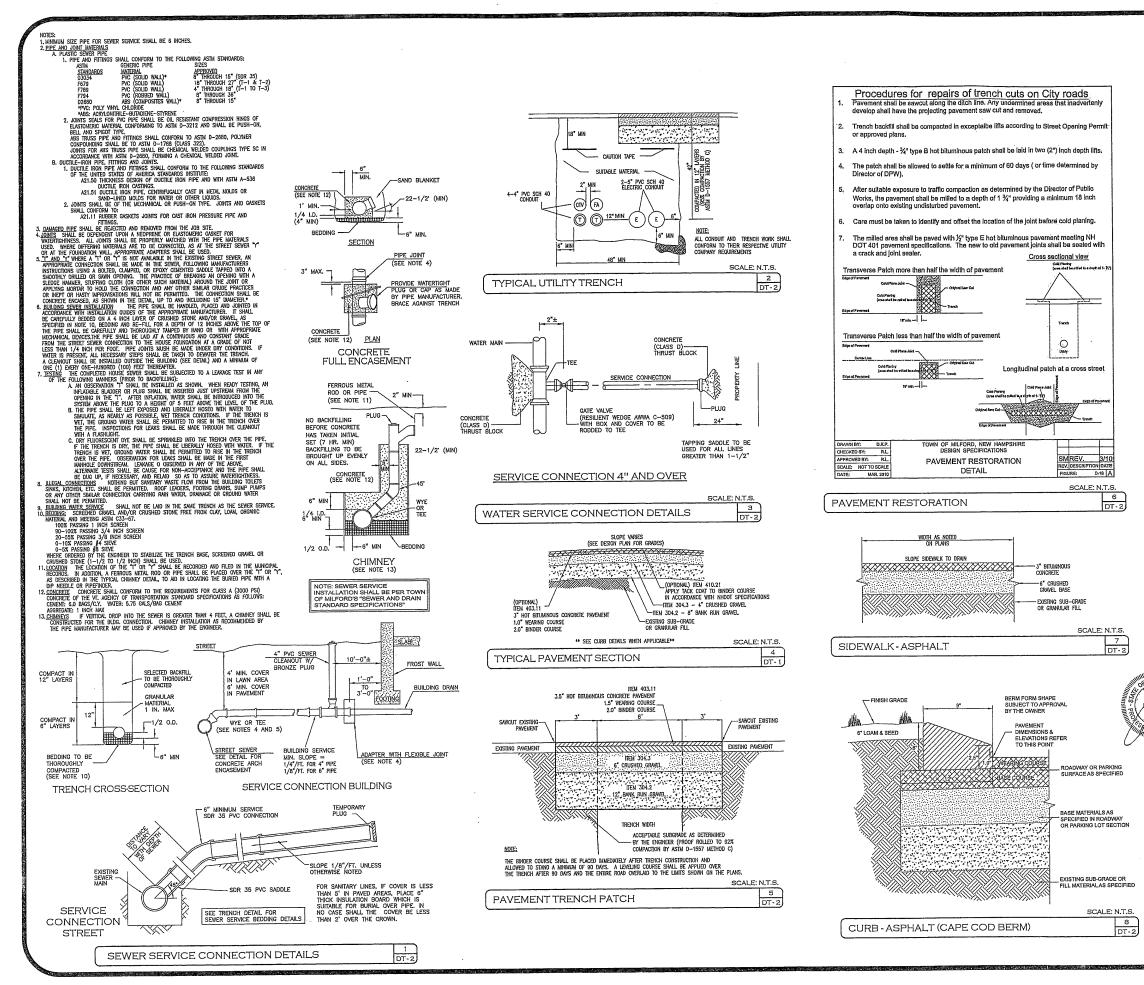
1. ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REQUIREMENTS AND SPECIFICATIONS OF THE TOWN OF MILFORD.

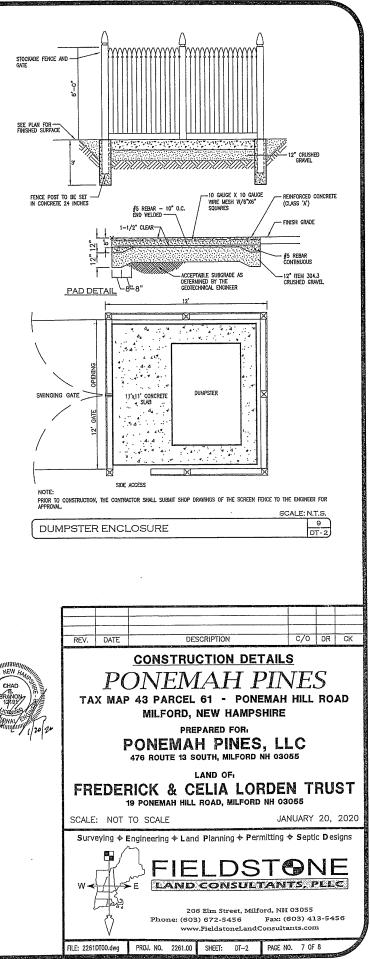
THE CONTINUCTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, SZE, MD ELEVATION OF ALL EXISTING UNLITES SHOWN GE NOT SHOWN ON THESE FLANS AND SHALL VERIFY THAT ALL THE INFORMATION SHOWN HEREON IS CONSISTENT, CONCULTING, AND ON THE CONSTRUCTOR PRIOR TO ANY/ADO RUBRIC CONSTRUCTION. PELEJSTONE LAND CONCULTING, PLLC, AS THE DESON EXAMPLER, SHALL BE MOTIFIED IN WRITING OF ANY DISCREPANCIES, ERRORE, OUNSIGNES, OF COSTING UNLITES FOUND INTEREMENT WITH THE PROPOSED CONSTRUCTION SO THAT REMEDIAL ACTION MAY BE TAKEN BEFORE PROCEEDING WITH THE WORK.

- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ACCURATE AS-BUILT INFORMATION OF ALL WORK, ESPECIALLY UNDERBROWND CONSTRUCTION OF CITUTY UNES, SERVICES, CONNECTIONS, EIC, AND APPROPRIATE THES TO ABOVE PREMIMENTE TRUTTINES, FILLD SURVEY CORDINATES, OR SOME CHTER METHOD ESTABLISHING THE MS-BUILT CONDITION
- 8. The contractor and owner are responsible for observing and managing the project per RSA A30.53 and AGR 3800 regarding invasive species (plants and insects). No invasive species plant or insect shall be introduced onto the Site.









1. PRIOR TO STARTING ANY WORK ON THE SITE THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES.

All Soil Erosion and Sediment control measures shall be in accordance with standards and specifications thereof in New Hampshire department of Environmental Service Storm Water Manals, Volume 1-3, Litest Edition.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PER PLANS AND DETAILS. PERIMETER CONTROLS SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF EARTH DISTURBING ACTIVITIES.

4. INSTALL INLET PROTECTION AROUND ALL STORM DRAW STRUCTURES. INLET PROTECTION BMP'S SHALL RELAWN UNTIL THE STEE IS STRAILZED. CONSTRUCTION OF DETENTION BASINS AND TREATMENT SWALES SHALL OCCUR PROR TO AND EXPERT MONNG DEPENTION THAT WILL INCLURECE STORM WATER RUNDF.

5. THE WORK AREA SHALL BE GRADED, SHAPED AND OTHERWISE DRANED IN SUCH A MANNER AS TO MINIMIZE SOIL ENCOSION, SILTATION OF DRAMAGE CHANNELS, DAVAGE TO EXISTING VEGETATION, AND DAVAGE TO PROPERTY OUTSIDE THE LUMITS OF THE WORK AREA.

6. EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEN POSSIBLE.

7. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE KEPT CLEAN DURING CONSTRUCTION. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE A WEEX AND AFTER EVERY 0.25-WCH OR GREATER MANALL SEDIMENTS SHALL BE DESOSED OF IN AN UPLAND AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT OFF-STE AND BE PERMANENTLY STABILIZED.

8. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION. AT NO TIME SHALL THE TOTAL UNSTABILIZED DISTURBED AREA, INCLUDING LOT DISTURBANCES, BE GREATER THAN FIVE (5) ACRES.

9. THE LAND AREA EXPOSED SHALL BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME. ALL NON-ACTIVE DISTURBED AREAS SHALL BE STABILIZED WITHIN 30 CARS OF THE DISTURBANCE. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF FINAL GROUND.

DITCHES, SWALES AND DRAINAGE BASINS SHALL BE CONSTRUCTED DURING THE INITIAL PHASE OF CONSTRUCTION AND STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.

D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

12. EROSION CONTROL BLANKETS SHALL BE INSTALLED ON ALL SLOPES THAT ARE STEEPER THAN 3.1 (HORIZONTAL / VERTICAL). UNLESS OTHERWISE SPECIFIED THE CONTRACTOR SHALL USE NORTH AMERICAN GREEN SCI50, OR APPROVED EQUAL.

13. ALL AREAS RECEIVING EROSION CONTROL STONE OR RIPRAP SHALL HAVE A GEOTEXTILE MATERIAL INSTALLED BELOW THE STONE (SEE APPROPRIATE DETAILS).

14. ALL DISTURBED AREAS TO TURF FINISHED SHALL BE COVERED WITH A MINIMUM THICKNESS OF 6 INCHES OF COMPACTED LOAM. LOAM SHALL BE COVERED WITH THE APPROPRIATE SEED MIXTURE AS INDICATED BELOW:

PERMANENT SEED (LAWN AREAS)	LBS / 1,000 SQ, FT,	PERMANENT SLOPE SEED MIX	LBS / 1.000 SQ. FT.
CREEPING RED FESCUE PERENNIAL RYEGRASS KENTUCKY BLUEGRASS REDTOP	0.92 LBS 1.15 LBS 0.58 LBS 0.12 LBS	CREEPING RED FESCUE PERENNIAL RYEGRASS REDTOP ALSIKE CLOVER BIRDSFOOT TREFOIL	0.80 LBS 0.69 LBS 0.12 LBS 0.12 LBS
**APPLICATION RATE TO 2.8 LBS PER 1,000		**APPLICATION *1.85 LBS PER	RATE TOTALS 7 1,000 SF**
5. TEMPORARY STABILIZATION OF DIS STRIPPED SOIL SHALL BE STOCKPILED EED BED PREPARATION: 10-10-10 IGRICULTURAL LIMESTONE AT A RATE	UNCOMPACTED, AND ST FERTILIZATION TO BE SPI	READ AT THE RATE OF 7 LBS P	FR 100 SE AND

FERTILIZER AND LINESTONE SHALL BE TILLED TO PREPARE FOR SEEDING.

A. SEED MIXTURE: USE ANY OF THE FOLLOWING:

SPECIES	RATE PER 1.000 SF	DEPTH	SEEDING DATES
WINTER RYE	2.5 LBS	1 INCH	8/15 TO 9/15
ANNUAL RYEGRASS	2.5 LBS 1.0 LBS	1 INCH 0.25 INCH	8/15 TO 9/15 4/15 TO 10/15 8/15 TO 9/15

B. MULCHING: MULCH SHOULD BE USED ON HIGHLY ERODIBLE AREAS, AND WHERE CONSERVATION OF MOISTURE WILL FACILITATE PLANT ESTABLISHMENT AS FOLLOWS:

LIAIE PLANT ESTABLISHMENT AS FO	LLOWS:	
IMPE	RATE PER 1.000 SF	USE AND COMMENTS
STRAW	70 TO 90 LBS	MAY BE USED WITH PLANTINGS, MUST BE ANCHORED TO BE USED ALONE
WOOD CHIPS OR BARK MULCH	460 TO 920 LBS	USED WITH TREE AND SHRUB PLANTINGS
FIBROUS MATTING	AS RECOMMENDED BY MANUFACTURER	MUST BE BIODEGRADABLE, USE IN SLOPE AREAS AND AREAS DIFFICULT TO VEGETATE
CRUSHED STONE 1/4" TO 1-1/2" DIA.	SPREAD TO GREATER THAN 1/2" THICKNESS	USE IN SPECIFIC AREAS AS SHOWN ON PLAN OR AS NEEDED
ICONV LINEOTONIE INC		

16. APPLY LINESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. IF SOIL TESTING IS NOT FRASIBLE (CONTICAL TIME FRAMES OR VARNALE SITES) THEN APPLY FERTILIZER AT A PATE OF 11 POUNOS PER 1,000 SF AND LIMESTONE AT A RATE OF 50 POUNDS PER 1,000 SF. FERTILIZER SMALL BE LOW PHOSPHATE (LESS THAN 20 PHOSPHORUS).

17. CAUTION SHOULD BE TAKE WHEN THE PROPERTY IS LOCALED WITHIN 250 FEET OF A WATER BODY. IN THIS CASE ALL FERTILIZERS SHALL BE RESTRICTED TO A LOW FHOSPHATE, SLOW RELEASE TRIMENED HERTILIZER. SLOW RELEASE FERTILIZERS WUST BE AT LEAST 50X SLOW RELEASE TRIDENE COMPONENT. IN O FERTILIZER COEPT LIMESTORE SHALL BE APPLIED WITHIN 25 FEET OF THE SURFACE WATER. THESE ARE REGULATED LUMITATIONS.

18. PERMANENT OR TEMPORARY COMER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS (SEE WINTER CONSTRUCTION NOTES). NO DISTURBED AREAS SHALL BE LEFT EXPOSED DURING THE WINTER MONTHS.

19. A VIGOROUS DUST CONTROL PROGRAM SHALL BE APPLIED BY THE SITE CONTRACTOR. DUST SHALL BE MANAGED THROUGH THE USE OF WATER AND/OR CALCIUM CHLORIDE.

20, IN NO WAY ARE THE MEASURES INDICATED ON THE PLANS OR IN THESE NOTES TO BE CONSIDERED ALL INCLUSIVE. THE CONTINUTOR SHALL USE JUDGUENT TO INSTALL ADDITIONAL EROSIDN CONTROL MEASURES AS SITE CONTIDION, REVIEWED OR CONSTRUCTION METHODS WARRAWT.

21. FOLLOWING PERMANENT STABILIZATION, TEUPORARY ERGISION CONTROL NEASURES SHALL BE REMOVED AND ACCUMULATED SEDIMENTATION IS TO BE DISPOSED OF N AN APPROVED LOCATION, CUTSIDE OF JURISOICITIONAL WEITANDS.

22. LOT DISTURBANCE OTHER THAN SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE. 23. THE CONTRACTOR NAD GINNER ARE RESPONSIBLE FOR OBSERVING AND MANAGING THE PROJECT PER RSA 430:53 AND AGR 3800 RECONDING INVASIVE SPECIES (PLANTS AND INSECTS). NO INVASIVE SPECIES PLANT OR INSECT SHALL BE INTRODUCED ONTO THE SITE.





1. ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF BSX VEGETATED GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, STAUL BE STABILIZED. STABILIZATION MIETHODS SHALL INCLUDE SEEDING AND INSTALLING ROSIONIC CONTINUE LIAWRETS ON SLOPES GREATER THAN 3-T, MOD SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER AREE, SECURED WITH ANCHORED NETING, ELSEMMERE. THE INSTALLANDN OF BROSION CONTROL BLAVKERTS OR MULCH AND RETING SHALL NOT COLER VERH ACCUMULATED SNOW OR FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SFRING MELT EVENTS. All Ditches or swales which do not exhibit a minuum of B5% vecetated growth by october 15th, or Which are disturbed after october 15th, small be stabilized with stone or erosion control blankets Appropriate for the deson fund conditions.

3. AFTER NOWENEER 15TH, INCOMPLETE ROAD OR PARKING SUBFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SMUL BE PROTECTED WITH A MOMINUM OF 3 INCHES OF CRUSHED GRAVEL OR PROFERLY INSTALLED FORSING CONTINUE, LENARGES COVERED WITH HAV. OTHER STALLIZATION OFFICIAR DET DE PROFENDE DY THE APPROPEND ADDITIONE SAND THE DESIGN EXCHEER. IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER MONTHS THEN THE ROAD SHOULD BE CLEMED OF ACCUMULATED SAND AFTER EACH STORM VENT.

INSTALL SILTATION CONTROL FENCES IN LOCATIONS SHOWN HEREON. <u>EROSION AND SEDIMENTATION CONTROL</u> MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATION.

3. CUT AND CLEAR TREES: DISPOSE OF DEBRIS. STUMPS ARE TO BE GROUND AND USED FOR EROSION CONTROL O REMOVED AND DISPOSED OF PROPERLY. STUMPS SHALL BE COMPACTED AND ALL VOIDS FILLED WITH SUTABLE MATERIAL. COVER WITH 4" OF LOAM AND SEED PER THE EROSION CONTROL NOTES.

ROVAH GRADE SITE - CONSTRUCT DRAWAGE BASINS AND DRAWAGE SWALES DURING INITIAL PORTION OF CONSTRUCTION, STABILIZE INMEDIATELY FOR THE CONSTRUCTION AND EROSION CONTROL DETAILS. DO NOT DIRECT STORM WATER RUNOFF TO THESE STRUCTURES UNTIL A HEALTHY VEGETATIVE COVER IS ESTABLISHED,

CONSTRUCT GRAVEL PARKING AREA (PAVENENT OPTIONAL) AND BUILDING PAD. INSTALL UTILITIES AND STRUCTURES, ALL OUT AND FILL SLOPES SHALL BE STABILIZED UPON COMPLETION OF ROUGH GRADING PER THE THE EROSION CONTROL NOTES.

INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS AND AFTER EVERY 0.25" OR GREATER RAINFALL.

DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, CULVERTS, DITCHES, SILTATION FENCES, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED.

10. FINISH GRADING TO PREPARE FOR PANING (IF MY) AND LOANING. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING. 11. FINISH PANING (IF ANY). PERMANENT SEEDING SHALL BE PERFORMED UPON COMPLETION OF PARKING AREA (SEE EROSION CONTROL NOTES).

REMOVE TOPSOIL AND STOCKPILE AWAY FROM MY WETLAND. STABILIZE STOCKPILE IMMEDIATELY BY SEEDING. PLACE SILT FENCE AROUND THE DOWN SLOPE SIDE OF EARTH STOCKPILES.

2 DT-3

WINTER CONSTRUCTION NOTES

2. INSTALL STABILIZED CONSTRUCTION EXIT(S).

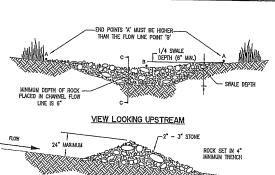
6. BEGIN BUILDING CONSTRUCTION.

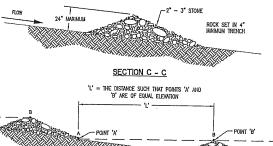
12. COMPLETE PERMANENT SEEDING AND LANDSCAPING

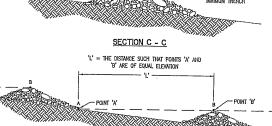
EXTRA STRENGTH FILTER FABRIC NEEDED WITHOUT WIRE MESH SUPPORT STEEL OR WOOD POR ATTACH FILTER FABRIC --SECURELY TO UPSTREAM SIDE OF POST 6' MAXIMUM SPACING WITHOUT WIRE SUPPORT FENCE 10' MAXIMUM SPACING WITH WIRE SUPPORT FENCE PERSPECTIVE VIEW STEEL OR WOOD POST 36" HIGH MAXIMUM ATTACHING TWO SILT FENCES · m · -m-PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE FLOW ROTATE BOTH POSTS least 180 degrees in A clockwise direction To create a tight seal DRIVE BOTH POSTS ABOUT 10 INCHES INTO THE GROUND AND BURY FLAP 6" X 8" TRENCH WITH COMPACTED BACKFILL SECTION VIEW ATTACHING TWO SILT FENCES NOTES; 1. SILT FENCES SHOULD NOT BE USED ACROSS STREAMS, CHANNELS, SWALES, DITCHES OR OTHER DRAWAGE WAYS. SILT FENCE SHOULD BE INSTALLED FOLLOWING THE CONTOUR OF THE LAND AS CLOSELY AS POSSIBLE AND THE ENDS OF THE SILT FENCE SHOULD BE FLARED UPSLOPE. J. IF THE SITE CONDITIONS INCLUDE FROZEN GROUND, LEDGE OR THE PRESENCE OF HEAVY ROOTS THE BASE OF THE FABRIC SHOULD BE EMBEDDED WITH A MINIMUM THICKNESS OF 8 INCHES OF 3/4-INCH STORE. SILT FENCES PLACED AT THE TOE OF SLOPES SHOULD BE INSTALLED AT LEAST 6 FEET FROM THE TOE TO ALLOW SPACE FOR SHALLOW PONDING AND ACCESS FOR MAINTENANCE. THE MAXIMUM SLOPE ABOVE THE FENCE SHOULD BE 2:1 AND THE MAXIMUM LENGTH OF SLOPE ABOVE THE FENCE SHOULD BE 100 FEET. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED. SILT FENCES SHOULD BE REMOVED WHEN THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED. SILT FENCE 6 DT-3

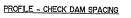
14. ALL STRUCTURES SHALL BE CLEANED OF SEDIMENTS ONCE CONSTRUCTION IS COMPLETE. CONSTRUCTION SEQUENCE

13. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WHEN ALL DISTURBED AREAS HAVE BEEN STABILIZED.



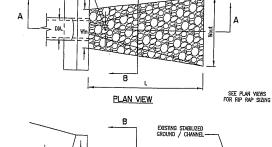






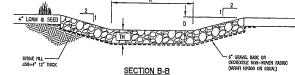
- STONE CHECK DAMS SHOULD BE INSTALLED BEFORE RUNOFF IS DIRECTED TO THE SWALE OR DRAIMAGE DITCH.
- 2. THE MAXIMUM CONTRIBUTING DRAMAGE AREA TO THE CHECK DAM SHOULD BE LESS THAN ONE ACRE.
- 3. STONE CHECK DAMS SHOULD NOT BE USED IN A FLOWING STREAM.
- 4. STONE CHECK DAMS SHOULD BE CONSTRUCTED OF WELL-GRADED ANDULAR 2 TO 3 INCH STONE. THE INSTALLATION OF 3/4-INCH STONE ON THE UPGRADENT FACE IS RECOMMENDED FOR BETTER FILTERING.
- WHEN INSTALLING STONE CHECK DAWS THE CONTRACTOR SHALL KEY THE STONE INTO THE CHANNEL BANKS AND EXTEND THE STANE BEYOND THE ABUTMENTS A MINIMUM OF 18-INCHES TO PREVENT FLOW AROUND THE DAM.
- STONE CHECK DAMS SHOULD BE REMOVED ONCE THE SWALE OR DITCH HAS BEEN STABILIZED UNLESS OTHERWISE SPECIFIED.

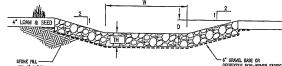
STONE CHECK DAM



1/2 OF PIPE DIA. \_\_\_\_\_B











4 DT-3

