# SITE PLAN

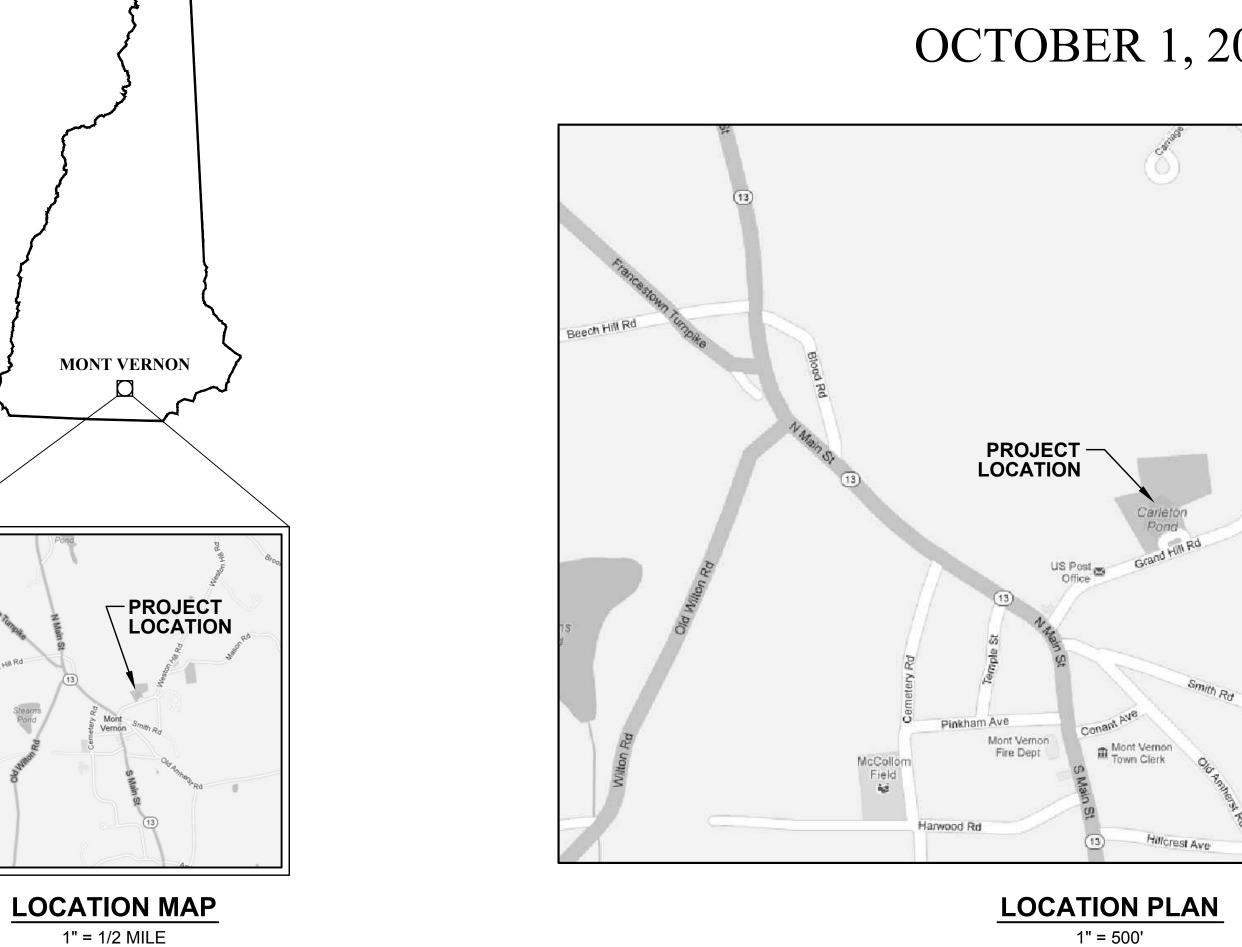
FOR THE

# CARLETON POND MAINTENANCE / RESTORATION PROJECT

# GRAND HILL ROAD

MONT VERNON, NEW HAMPSHIRE MONT VERNON CONSERVATION COMMISSION

OCTOBER 1, 2012



# **LIST OF DRAWINGS**

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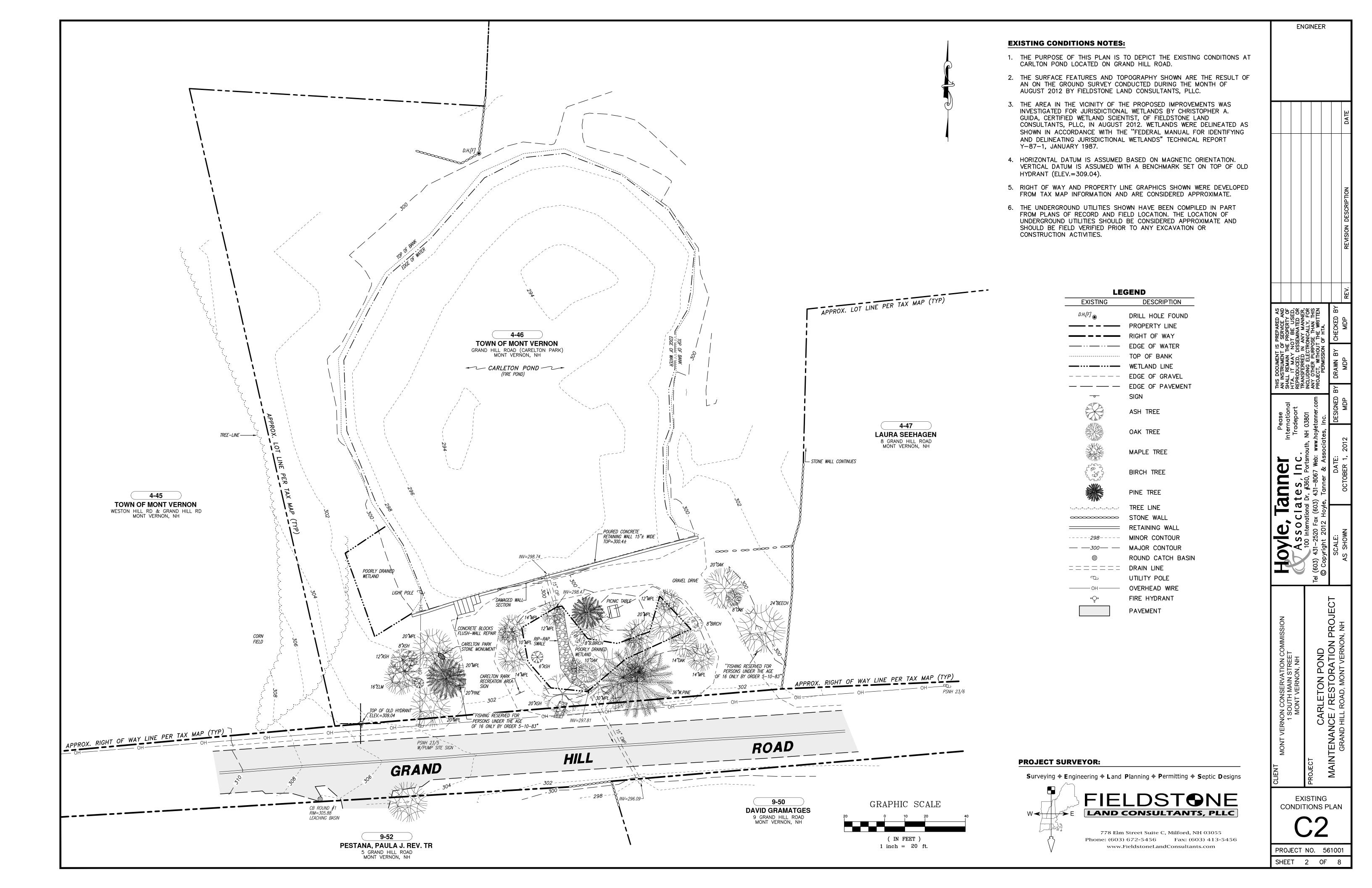
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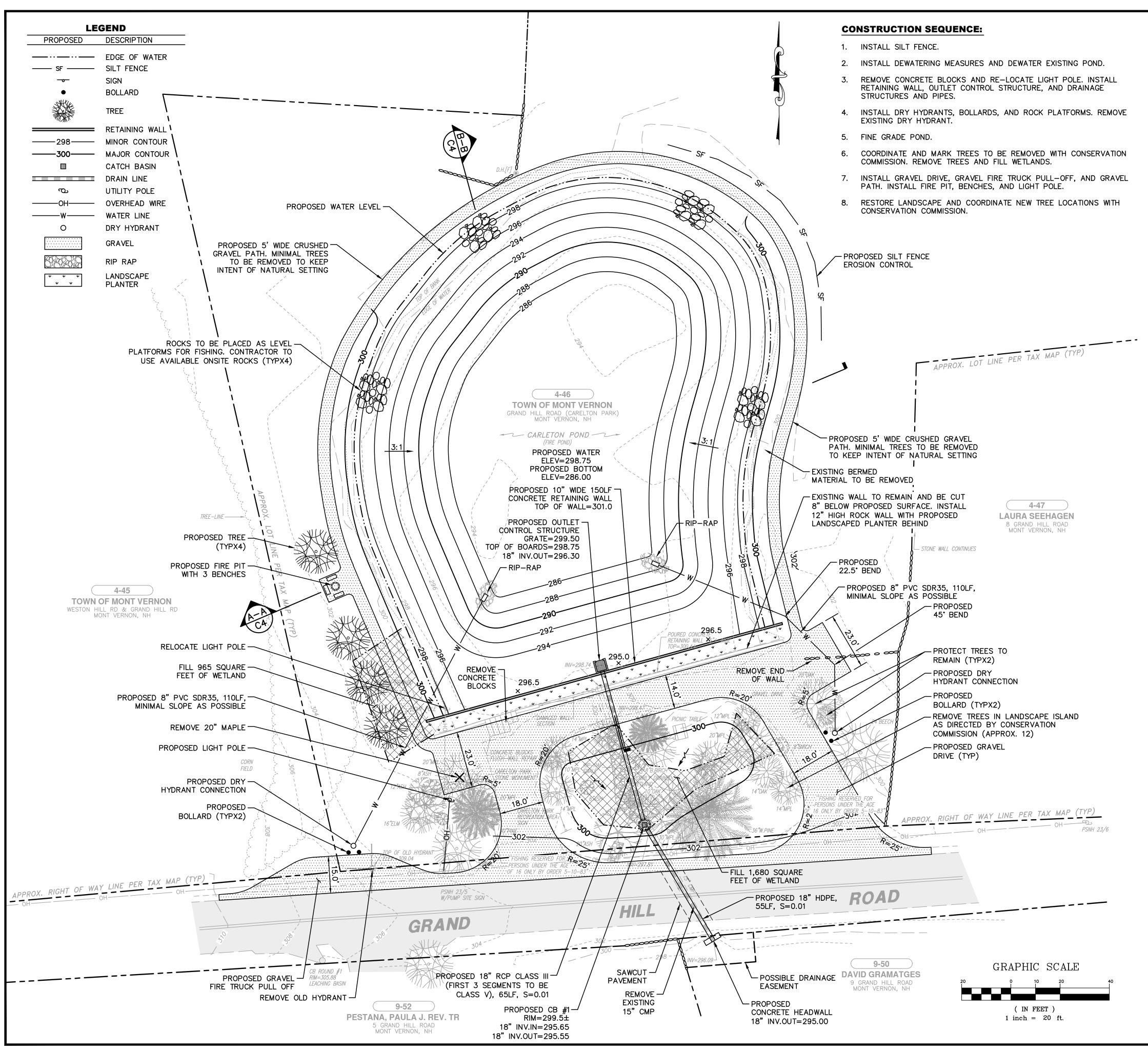
TOWN OF MONT VERNON HILLSBOROUGH COUNTY



TITLE SHEET

PROJECT NO. 561001





#### **GENERAL NOTES:**

- 1. THE CONTRACTOR SHALL VERIFY AND DETERMINE THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (888) 344-7233 AT LEAST 72 HOURS BEFORE DIGGING.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES, TEMPORARY UTILITIES AND COORDINATION WITH ALL AGENCIES IN OBTAINING ACCESS TO THE SITE AND PERFORMING ALL WORK REQUIRED FOR THIS PROJECT.
- WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
- CONTRACTOR SHALL PROTECT AND MAINTAIN EXISTING BENCHMARKS AND BOUNDS. ALL BENCHMARKS AND BOUNDS DISTURBED BY THE CONTRACTOR SHALL BE RE-ESTABLISHED BY A NEW HAMPSHIRE REGISTERED LAND SURVEYOR AT NO EXPENSE TO THE OWNER.
- 5. THE CONTRACTOR SHALL PERFORM ALL THE CLEARING AND GRUBBING NECESSARY WITHIN THE CONSTRUCTION AREA, LIMITING THE AMOUNT OF CLEARING AND GRUBBING TO THE EXTENT POSSIBLE. NO TREES SHALL BE CUT UNLESS AUTHORIZED BY A REPRESENTATIVE OF THE TOWN.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ANY EXCAVATION SAFEGUARDS, NECESSARY BARRICADES, POLICE DETAILS, ETC., FOR TRAFFIC CONTROL AND SITE SAFETY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ALL WORK IS DONE IN ACCORDANCE WITH OSHA REQUIREMENTS.
- 7. ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS THAT DO NOT HAVE A SURFACE TREATMENT SPECIFICALLY SPECIFIED SHALL BE RESTORED TO A MINIMUM OF 6—INCHES OF SEEDED TOPSOIL, FERTILIZER, AND MULCH.
- ALL DEWATERING MUST BE EXECUTED IN ACCORDANCE WITH THE PLANS AND NH DOT STANDARD SPECIFICATIONS DIVISION 600. REGULATIONS PROHIBIT DISCHARGING GROUNDWATER TO A SANITARY OR COMBINED SEWER WITHOUT PERMISSION.
- 9. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF EXCAVATED SOILS IN ACCORDANCE WITH THE NH DOT STANDARD SPECIFICATIONS DIVISION 200 EARTHWORK. ALL DREDGED MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY BY THE CONTRACTOR.
- 10. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS OF THE SITE.
- 11. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS WITHIN THE LIMIT OF WORK.
- 12. THE STORM DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. ALL PIPE MATERIALS SHALL BE AS SPECIFIED ON THE PLANS. CONSTRUCTIONS METHODS SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN GRATES SHALL BE TYPE B AND CONFORM TO NHDOT STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED.
- 13. PROPOSED RIM ELEVATIONS OF DRAINAGE MANHOLES AND CATCH BASINS ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH WITH FINISH GRADES.
- 14. THE CONTRACTOR SHALL STABILIZE ANY AND ALL DITCHES, SWALES AND PONDS PRIOR TO DIRECTING STORM WATER RUN-OFF TO THEM.
- 15. PROVIDE UNIFORM SLOPE BETWEEN CONTOURS AND/OR SPOT ELEVATIONS.
- 16. EARTH SLOPES SHALL BE NO STEEPER THAN 3:1 (HORIZONTAL: VERTICAL) AND SHALL BE FLATTER WHERE SHOWN.
- 17. GENERAL FILL BEYOND PAVED AREAS SHALL BE FREE OF BRUSH RUBBISH, STUMPS, AND STONES LARGER THAN 8". FILL SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 8" IN THICKNESS. THE DRY DENSITY AFTER COMPACTION SHALL NOT BE LESS THAN 95% OF THE STANDARD PROCTOR TEST AND DONE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM D698.
- 18. AFTER THE TOPSOIL AREAS HAVE BEEN BROUGHT TO GRADE, THE SUBGRADE SHALL BE LOOSENED BY SCARIFYING TO A DEPTH OF AT LEAST 2" TO ENSURE BONDING OF THE TOPSOIL AND SUBSOIL.
- 19. FILL OR TOPSOIL SHALL NOT BE PLACED OR COMPACTED WHILE IN A FROZEN OR MUDDY CONDITION OR WHILE SUBGRADE IS FROZEN.
- 20. FINISH SURFACES AND LAWN AREAS SHALL BE FREE OF LOW SPOTS AND PONDING AREAS.
- 21. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE WITH THE UTILITY COMPANIES FOR RELOCATING AND/OR SUPPORTING THEIR UTILITIES IN ACCORDANCE WITH THE SPECIFICATIONS.
- 22. THE CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO EXISTING FACILITIES AT ALL TIMES. IF ANY DISRUPTION MUST OCCUR, CONTRACTOR SHALL NOTIFY AND COORDINATE WITH FACILITY AT LEAST 72 HOURS IN ADVANCE.
- 23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OF EXISTING UTILITIES AND STRUCTURES DAMAGED OR REMOVED BY THE CONTRACTOR DURING THEIR OPERATIONS.
- 24. THE CONTRACTOR SHALL REVIEW THE LOCATION OF ALL OVERHEAD WIRES WITHIN THE PROJECT AREA IN THE FIELD TO DETERMINE THEIR IMPACT ON CONSTRUCTION MEANS AND METHODS.
- 25. DREDGING OF EXISTING FIRE POND IS EXEMPT FROM WETLANDS PERMITTING AS PER RSA 482—A: 3, IV(b).

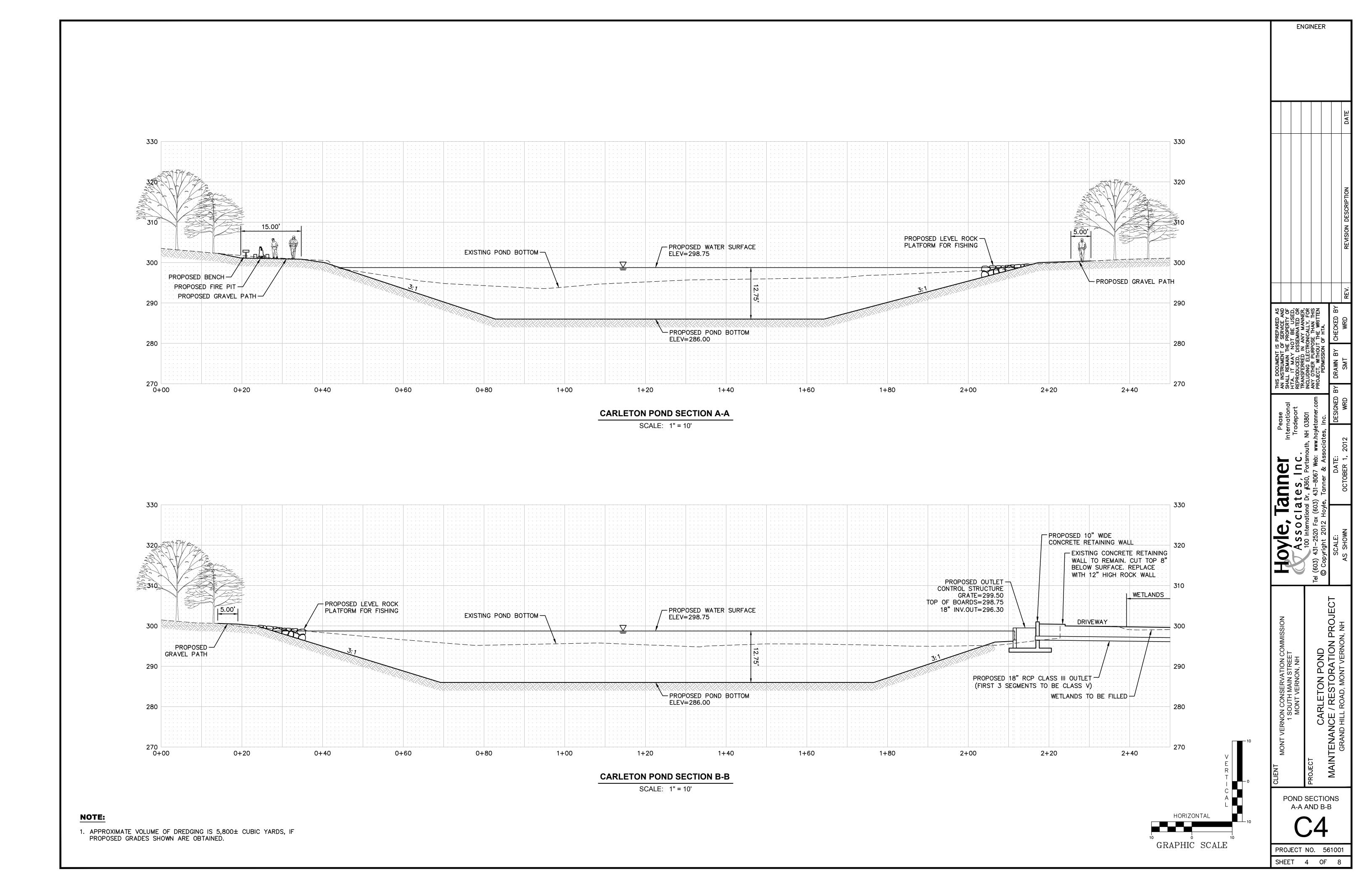
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**ENGINEER** 

SITE GRADING & DRAINAGE PLAN

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PROJECT NO. 561001 SHEET 3 OF 8



#### **EROSION CONTROL NOTES:**

# A. GENERAL NOTES

- 1. DURING CONSTRUCTION, AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND (5 ACRES MAXIMUM) SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS EXPOSED DURING DEVELOPMENT THE EXPOSURE SHOULD BE KEPT TO A MAXIMUM OF 72 HOURS BEFORE APPLYING TEMPORARY OR PERMANENT EROSION CONTROL MEASURES. CONFINE PERIOD OF DISTURBED AND UNSTABILIZED SOILS TO A MAXIMUM OF FORTY-FIVE DAYS. ALL DITCHES AND SWALES ARE REQUIRED TO BE STABILIZED PRIOR TO DIRECT RECEIPT OF ANY FLOW.
- 2. INSTALL SILT FENCE WHERE SHOWN PRIOR TO CONSTRUCTION START. INSTALL AROUND ALL EXISTING DRAINAGE STRUCTURES ADJACENT TO PROJECT. DO NOT REMOVE SILT BARRIERS UNTIL DISTURBED AREAS ARE FULLY COVERED WITH TURF OR OTHER APPLICABLE SURFACE MATERIAL. ALL PONDS ARE TO BE CONSTRUCTED AND STABILIZED PRIOR TO ANY OTHER DRAINAGE SYSTEM WORK, INCLUDING DITCH AND SWALE EXCAVATION.
- 3. EROSION AND SEDIMENT CONTROL PRACTICES INCLUDE THE USE OF THE FOLLOWING SILT FENCE BARRIERS, PERMANENT DETENTION/SEDIMENTATION POND BASIN, GRASS AND/OR ROCK LINED SWALES, DIVERSIONS WITH LEVEL SPREADERS. ALL EROSION CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS CONTAINED IN THE "NH STORMWATER MANUAL", VOLUME 3, DECEMBER 2008.
- 4. SEE PLANS FOR ADDITIONAL EROSION CONTROL MEASURES WHICH MAY BE REQUIRED.
- 5. CONSTRUCTION AREA SHALL BE CONSIDERED STABLE IF:
- a. AREAS TO RECEIVE PAVEMENT, COMPACTED BASE COURSE GRAVELS HAVE BEEN INSTALLED
- b. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED; c. CUT AND FILL SLOPE HAVE A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP OR EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

# B. <u>VEGETATIVE MEASURES</u>

1. TOPSOIL STOCKPILING: TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR LATER USE ON CRITICAL AREAS AND ALL OTHER AREAS TO BE SEEDED. THE STOCKPILE WILL NOT BE COMPACTED AND SHALL BE STABILIZED AGAINST EROSION WITH TEMPORARY SEEDING.

### 2. TEMPORARY SEEDING:

- a. BEDDING REMOVE STONES AND TRASH THAT WILL INTERFERE WITH SEEDING THE AREA. WHERE FEASIBLE, TILL THE SOIL TO A DEPTH OF ABOUT 3" TO PREPARE SEED BED AND MIX THE FERTILIZER INTO THE
- b. FERTILIZER FERTILIZER SHOULD BE UNIFORMLY SPREAD OVER THE AREA PRIOR TO BEING TILLED INTO THE SOIL. A 10-10-10 MIX OF FERTILIZER SHOULD BE APPLIED AT A RATE OF 300 POUNDS PER ACRE (OR 7 POUNDS PER 1,000 S.F.).
- c. SEED MIXTURE USE ANY OF THE FOLLOWING IN UPLAND AREAS:

# d. SEEDING RATE:

			PER ACRE	
SPECIES	ACRE	1,000 S.F	RATES	<u>DEPTH</u>
WINTER RYE	112 LBS	2.5 LBS.	8/15-9/5	1 IN.
OATS	80 LBS.	2.0 LBS.	SPRING-5/15	1 IN.
ANNUAL RYE GRASS	40 LBS.	1.0 LBS.	4/15-9/15	0.25IN.
				W/MULCH

e. MULCHING - WHERE IT IS IMPRACTICAL TO INCORPORATE FERTILIZER AND SEED INTO MOIST SOIL, THE SEEDED AREA SHALL BE MULCHED TO FACILITATE GERMINATION. MULCH IN THE FORM OF STRAW SHOULD BE APPLIED AT A RATE OF 70 TO 90 LBS. PER 1,000 S.F.

# 3. PERMANENT SEEDING:

- BEDDING STONES LARGER THAN 4", TRASH, ROOTS, AND OTHER DEBRIS THAT WILL INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA SHOULD BE REMOVED. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF 4" TO PREPARE A SEEDBED AND MIX FERTILIZER INTO THE SOIL.
- g. FERTILIZER LIME AND FERTILIZER SHOULD BE APPLIED EVENLY OVER THE AREA PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:

AGRICULTURAL LIMESTONE @ 100 LBS. PER 1,000 S.F. 10-20-20 FERTILIZER @ 12 LBS. PER 1,000 S.F.

# h. SEEDING MIXTURE (RECOMMENDED)

# SLOPE WORK

USE
WORK
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# TREATMENT SWALES

	PFR	PFR	
	PER	PER	
SPECIES	ACRE	1,000 S.F.	<u>USE</u>
TALL FESCUE	35	0.80	
SWITCH GRASS	35	0.80 TREATM	MENT SWALES
JAPANESE MILLET	90	2.00	
TOTAL	160	3.60	

i. MULCHING - MULCH SHOULD BE USED ON HIGHLY ERODIBLE SOILS, ON CRITICALLY ERODING AREAS, AND ON AREAS WHERE CONSERVATION OF MOISTURE WILL FACILITATE PLANT ESTABLISHMENT.

TYPE	RATE PER 1,000 S.F.	USE AND COMMENTS
STRAW	70 TO 90 LBS.	MUST BE DRY AND FREE FROM MOLD. MAY BE USED WITH PLANTINGS
WOOD CHIPS OR BARK MULCH	460 TO 920 LBS.	USED MOSTLY WITH TREES AND SHRUB PLANTINGS
JUTE AND FIBROUS MATTING	AS PER MANUFACTURER SPECIFICATIONS	USED IN SLOPE AREAS, WATER COURSES AND OTHER AREAS
CRUSHED STONE		SPREAD MORE ¼" TO 1½" DIA THAN ½" THICK. EFFECTIVE IN CONTROLLING WIND AND WATER EROSION.

SODDING - SODDING IS DONE WHERE IT IS DESIRABLE TO RAPIDLY ESTABLISH COVER ON A DISTURBED AREA. SODDING AN AREA MAY BE SUBSTITUTED FOR PERMANENT SEEDING PROCEDURES ANYWHERE ON SITE. BED PREPARATION, FERTILIZING, AND PLACEMENT OF SOD SHALL BE PERFORMED ACCORDING TO THE S.C.S. HANDBOOK.

# C. STRUCTURAL MEASURES

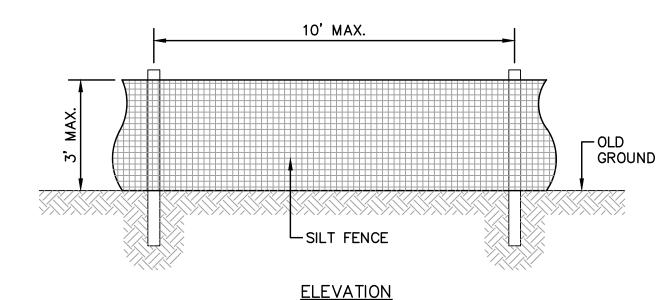
- STRAW BALE BARRIERS/SILT SCREEN FENCES: STRAW BALE BARRIERS AND/OR SILT SCREEN FENCES ARE TO BE INSTALLED IN THE AREAS SHOWN ON THE PLAN. THEY ARE INTENDED PRIMARILY TO INTERCEPT AND FILTER SMALL VOLUMES OF "SHEET FLOWING" RUNOFF, OR AS SEDIMENT TRAPS IN SMALL SWALES. STRAW BALES HAVE A USEFUL LIFE OF 3 MONTHS WHEN WET, AND THEREFORE, MUST BE INSPECTED AND REPAIRED OR REPLACED PERIODICALLY. SILT SCREEN FENCES WILL FUNCTION 6 MONTHS OR LONGER IF KEPT FREE OF SEDIMENT ACCUMULATIONS (SEE DETAILS FOR ADDITIONAL INFORMATION).
- 2. SWALES: TEMPORARY AND/OR PERMANENT SWALES ARE TO BE INSTALLED AS SHOWN ON THE PLAN. SWALES ARE USED TO CONVERT SHEET FLOW TO CHANNEL FLOW AND CONVEY THE RUNOFF TO A PERMANENT CHANNEL, STORM DRAIN, OR DETENTION/SEDIMENT STRUCTURE. SWALES ARE INTENDED TO INTERCEPT RUNOFF AND DIVERT IT FROM AN EXPOSED NEWLY SEEDED SLOPE TOWARD AN ACCEPTABLE OUTLET OR TO REDUCE THE VELOCITY OF RUNOFF FLOWING DOWN FROM A DRAINAGE AREA.
- 3. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED OF 1.5 INCH STONE ACROSS THE FULL WIDTH OF THE VEHICLE INGRESS EGRESS AREA. THE STONE PAD SHOULD BE AT LEAST 50 FEET LONG, 25 FEET WIDE AND AT LEAST 6 INCHES THICK. ADDITIONAL STONE MAY HAVE TO BE ADDED PERIODICALLY TO MAINTAIN THE PROPER FUNCTIONING OF THE PAD.
- 4. CATCH BASIN SEDIMENT FILTER: STONE CATCH BASIN SEDIMENT FILTERS ARE TO BE INSTALLED IN THE AREAS SHOWN ON THE PLAN. THEY ARE INTENDED PRIMARILY FILTER SMALL VOLUMES OF "SHEET FLOWING" RUNOFF. CATCH BASIN SEDIMENT FILTERS SHALL BE CONSTRUCTED OF FILTER FABRIC BEING INSTALLED OVER INLET GRATE. AND 3/4" WASHED CRUSHED STONE, 12 INCHES THICK. CATCH BASIN SEDIMENT FILTERS WILL LAST LONGER IF KEPT FREE OF SEDIMENT ACCUMULATIONS (SEE DETAILS FOR ADDITIONAL INFORMATION).

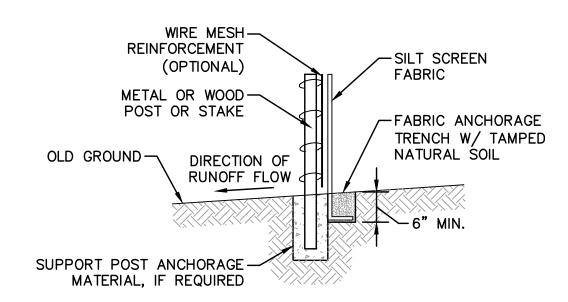
# D. MAINTENANCE

- 1. DURING THE PERIOD OF CONSTRUCTION AND/OR UNTIL LONG TERM **VEGETATION IS ESTABLISHED:**
- a. SEEDED AREAS WILL BE FERTILIZED AND WILL BE SEEDED AS NECESSARY TO INSURE VEGETATIVE ESTABLISHMENT.
- b. ADDITIONAL STONE MAY HAVE TO BE ADDED TO THE CONSTRUCTION ENTRANCE, ROCK LINED SWALES, ETC. PERIODICALLY TO MAINTAIN THE PROPER FUNCTIONING OF THE EROSION CONTROL STRUCTURE.
- c. ALL DIVERSION CHANNELS AND SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY UNTIL ADEQUATE VEGETATION IS ESTABLISHED.
- d. ALL SILT SCREEN FENCES WILL BE CHECKED WEEKLY. NECESSARY REPAIRS WILL BE MADE TO CORRECT UNDERMINING OR DETERIORATION OF THE BARRIER.
- e. EROSION CONTROL MEASURES TO BE INSPECTED WEEKLY AND AFTER EVERY 0.5" OF RAINFALL.

# E. WINTER CONSTRUCTION

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





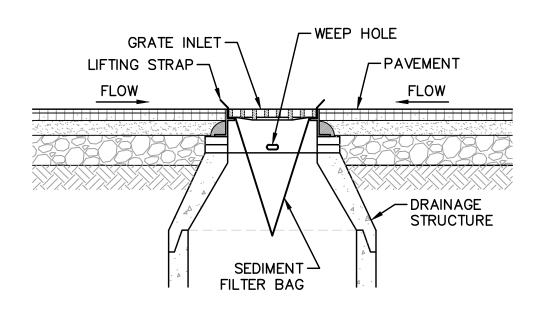
END VIEW

# SILT FENCE NOTES:

- 1. SPACING OF FENCE POSTS NOT TO EXCEED 10-0".
- 2. SILT FENCE SHALL BE INSTALLED BEFORE ANY EARTH REMOVAL OR EXCAVATION TAKES PLACE.
- 3. FILTER FABRIC TO BE FASTENED SECURELY TO POSTS WITH WIRE TIES OR STAPLES AT TOP, MIDPOINT AND BOTTOM.
- 4. OVERLAP BY 6". FOLD AND STAPLE ADJOINING SECTIONS OF FILTER
- 5. MAINTENANCE SHALL BE PERFORMED AS NEEDED, AND THE MATERIAL REMOVED WHEN "BULGES" DEVELOP. DO NOT DEPOSIT THE MATERIAL NEAR WETLANDS OR WATERCOURSES.
- 6. FILTER FABRIC SHALL BE ENTRENCHED 6" MINIMUM BELOW EXISTING OR FINISHED GRADE.

# **SILT FENCE DETAIL**

# C5 SCALE: NONE

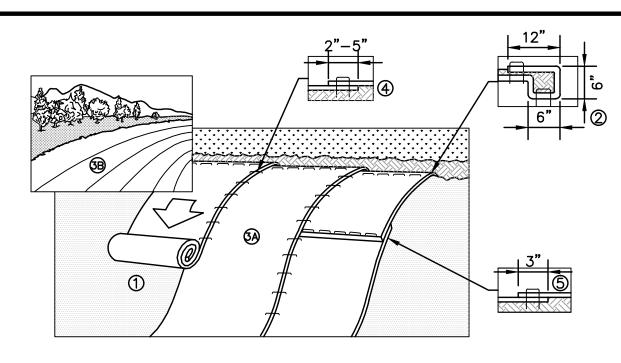


# **INLET PROTECTION NOTES:**

- REMOVE DRAINAGE INLET GRATE AND PLACE SEDIMENT FILTER BAG AROUND THE FRAME, REPLACE GRATE AND SEDIMENT FILTER BAG IN POSITION OR FOLLOW MANUFACTURER'S RECOMMENDATIONS. LIFTING STRAPS SHALL BE EXPOSED AND READY FOR MAINTENANCE PROCEDURES.
- 2. INSPECT SEDIMENT FILTER BAG WEEKLY AND AFTER EVERY RAINFALL
- 3. REPLACE, CLEAN OR REMOVE SEDIMENT FILTER BAG AS DIRECTED.

# **INLET PROTECTION DETAIL**

SCALE: NONE



### **SLOPE PROTECTION INSTALLATION NOTES:**

- 1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
- 3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- 4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
- 5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12"APART ACROSS ENTIRE BLANKET WIDTH.
- 6. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
- 7. INSTALL PRODUCT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

50' MIN.



# **SLOPE PROTECTION EROSION CONTROL MATTING DETAIL**

EXISTING -

EXIST.

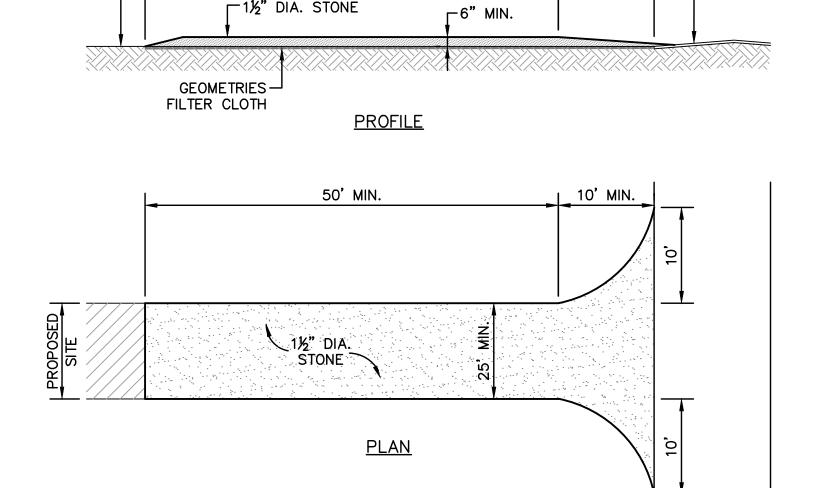
PAVEMENT

**PAVEMENT** 

10' MIN. ı

-EXISTING

GROUND



TO BE CONSTRUCTED AT STAGING OR STOCKPILE AREAS AS REQUIRED.

# STABILIZED CONSTRUCTION ENTRY DETAIL C5

SCALE: NONE

NOTE:

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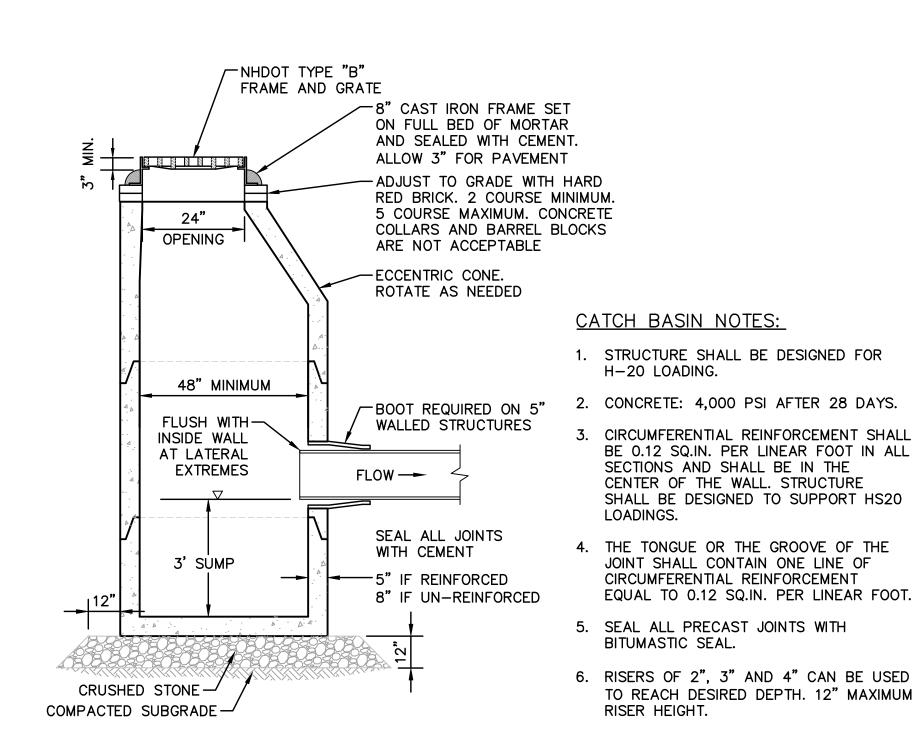
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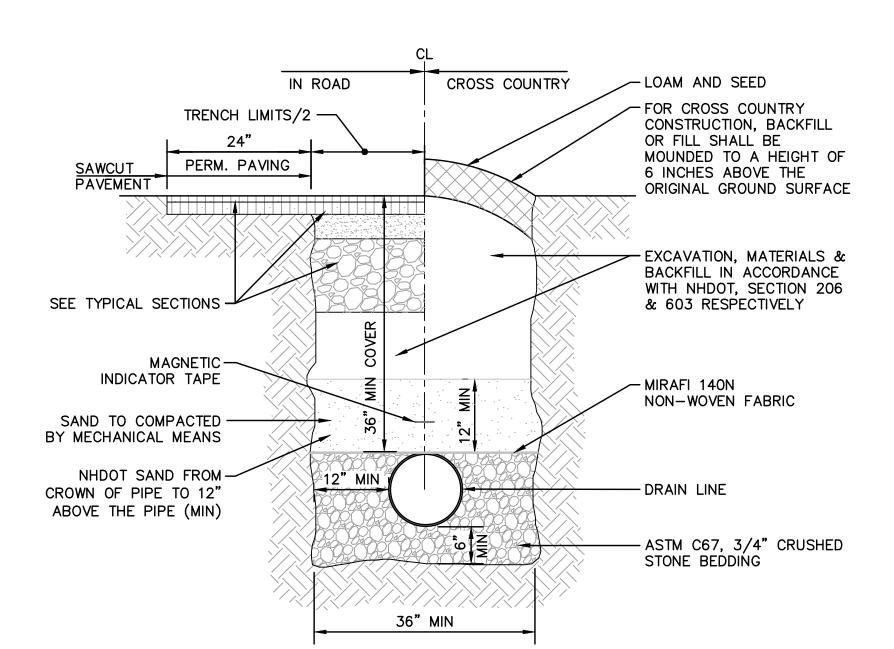
PROJECT NO. 561001 SHEET 5 OF 8

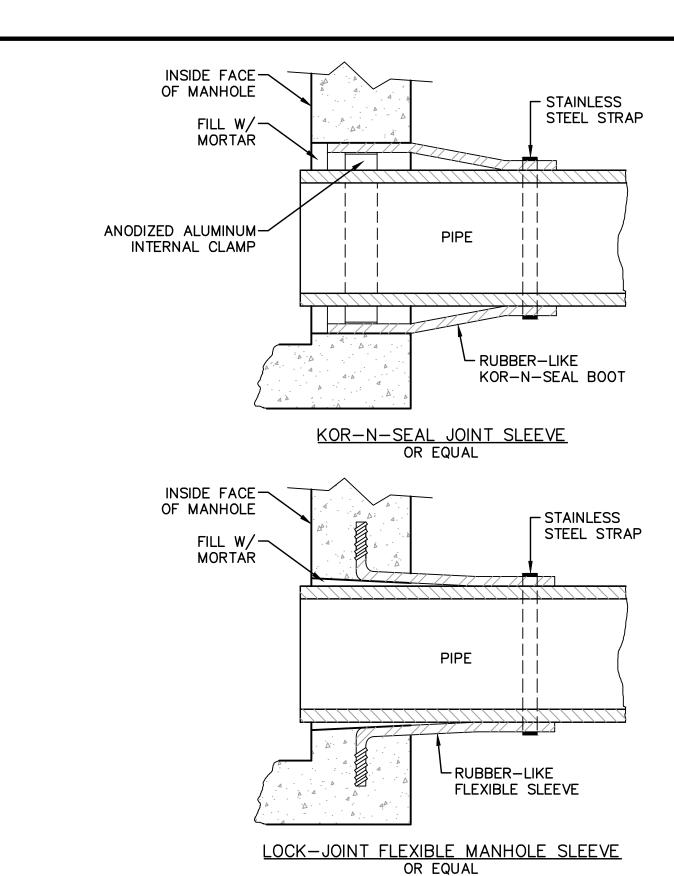
CONSTRUCTION

**DETAILS 1** 

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**ENGINEER** 

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CARLETON POND MAINTENANCE / RESTORATION GRAND HILL ROAD, MONT VERNO

CONSTRUCTION **DETAILS 2** 

PROJECT NO. 561001

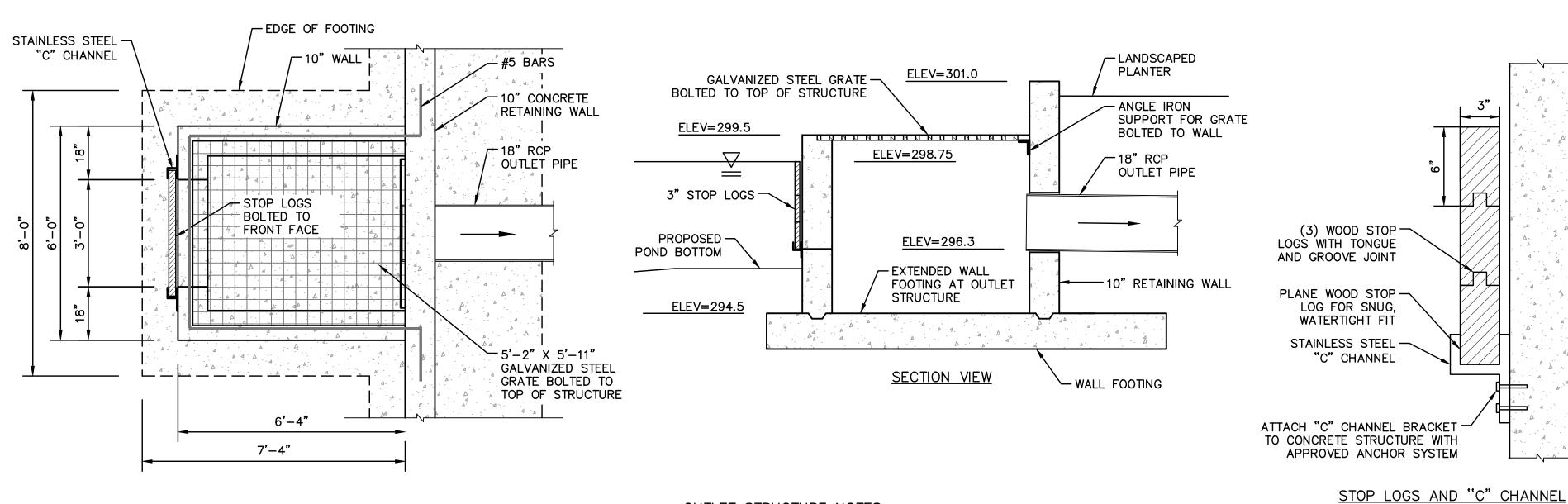
SHEET 6 OF 8

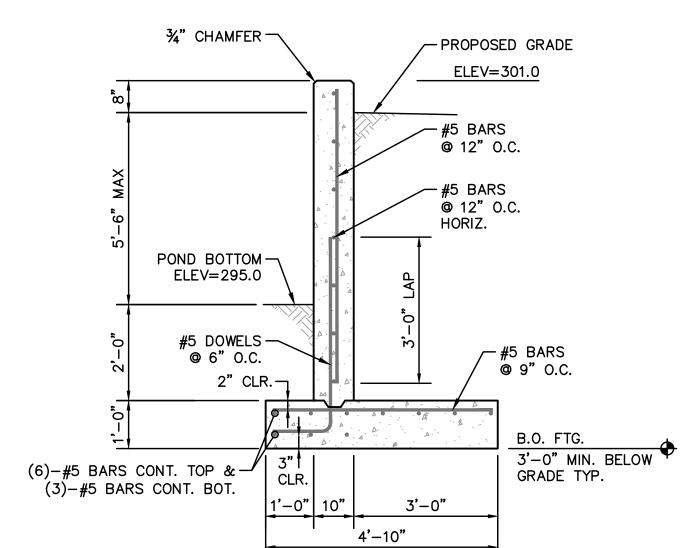
TYPICAL CATCH BASIN DETAIL

SCALE: NONE

**DRAIN TRENCH DETAIL** SCALE: NONE

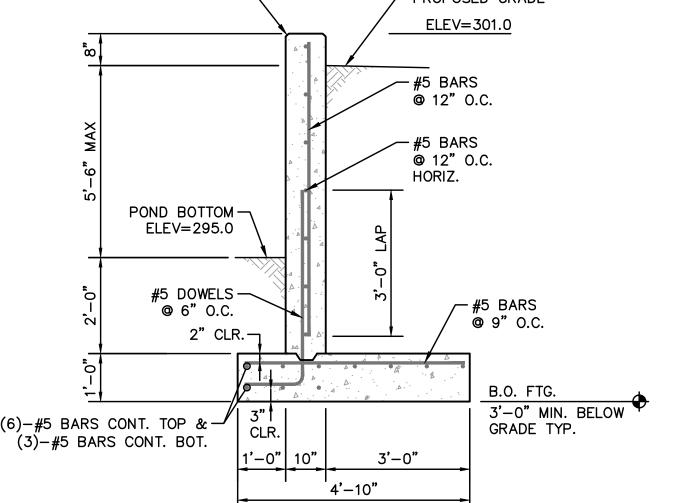
**TYPICAL PIPE TO MANHOLE DETAILS** C6 SCALE: NONE





**OUTLET STRUCTURE NOTES:** 

- 1. ALL CEMENT CONCRETE TO BE 4000 PSI (MIN.).
- 2. ALL OPENINGS SHALL BE CAST IN AS REQUIRED.
- 3. PRECAST REINFORCED CONCRETE STRUCTURE TO MEET ASTM C-478 DESIGNATION AND H-20 LOADING.



**OUTLET CONTROL STRUCTURE DETAIL** 

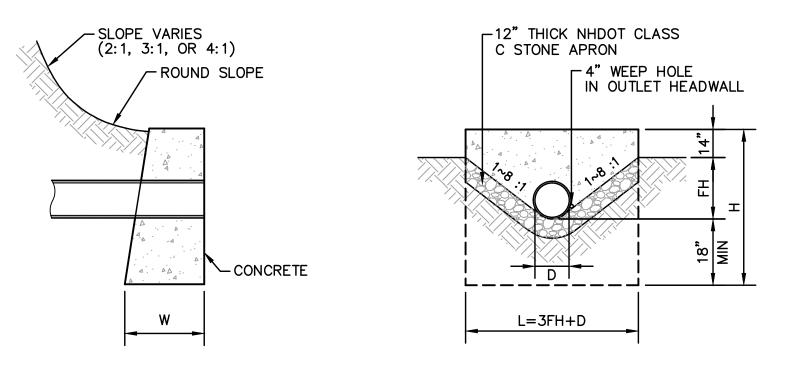
PLAN VIEW

<u>C6</u>

TYPICAL RETAINING WALL AND OUTLET STRUCTURE DETAIL

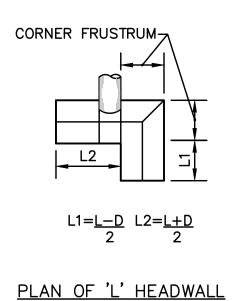
SCALE: NONE

SCALE: NONE

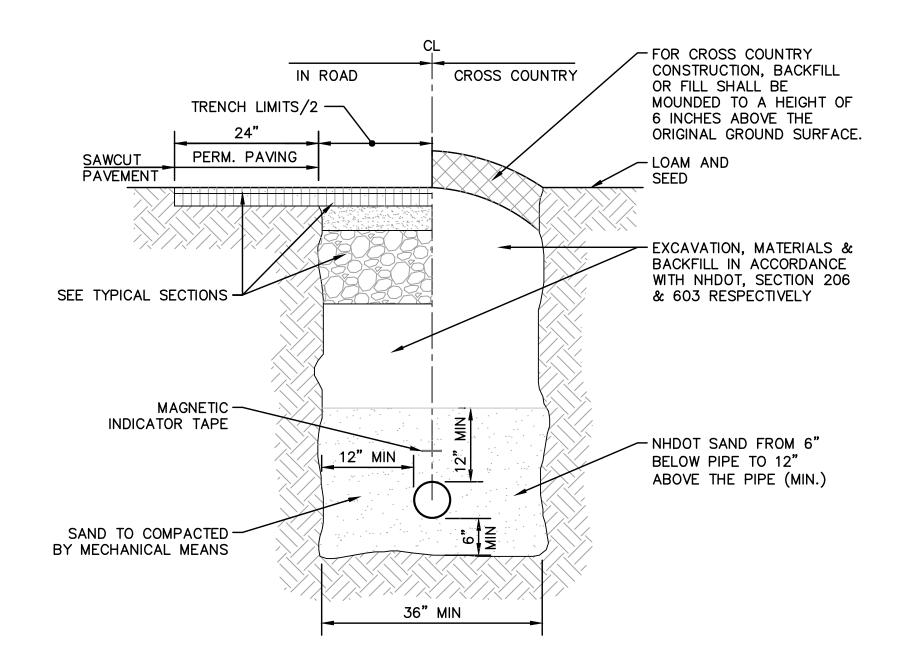


DIAM. D INCHES	AREA OF PIPE SQ. FT.	HDR. LENGTH L	HDR. HEIGHT H	FILL HEIGHT FH	h	WIDTH AT BOTTOM OF HDR. W
12	0.79	4' - 3"	3' - 9"	1' - 1"	1' - 3"	1' - 11 <sup>1</sup> / <sub>4</sub> "
15	1.23	6' - 0"	4' - 3"	1' - 7"	1' - 6"	$2' - 0^{3}/_{4}"$
18	1.77	7' - 0"	4' - 6"	1' - 10"	1' - 6"	$2' - 1\frac{1}{2}$ "
24	3.14	9' - 0"	5' - 0"	2' - 4"	1' - 6"	2' - 3"
30	4.91	11' - 0"	5' - 6"	2' - 10"	1' - 6"	$2' - 4^{1/2}$
36	7.07	13' - 0"	6' - 0"	3' - 4"	1' - 8"	2' - 6"

SECTION ON CENTERLINE



**ELEVATION** 



NOTE:

1. ALL WATER LINES ARE TO HAVE A MINIMUM OF 5 FEET COVER TO TOP OF PIPE.

CONCRETE HEADWALL DETAILS

SCALE: NONE

WATER TRENCH DETAIL FOR DRY HYDRANT

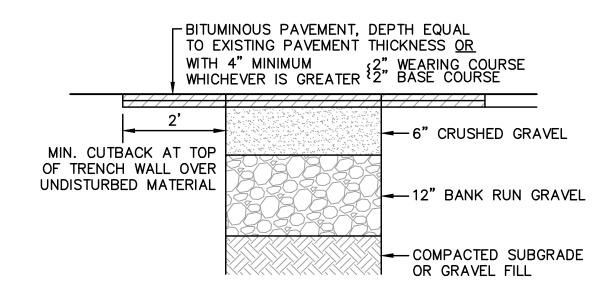
SCALE: NONE

DRY HYDRANT NOTES:

- 1. ALL PIPING MATERIAL SHALL BE NON-COROSIVE PIPE AND FITTINGS.
- 2. ALL PIPE SHALL BE A MINIMUM OF 8" DIAMETER (NOMINAL).
- 3. ALL PVC PIPING SHALL BE SCHEDULE 40 (MIN.)
- 4. ALL ABOVE GRADE PORTIONS OF THE HYDRANT SHALL BE PAINTED RED.
- 5. NO MORE THAN TWO 90 DEGREE ELBOWS SHALL BE USED IN THE HYDRANT SYSTEM.
- 6. THE HYDRANT SHALL BE LOCATED AT LEAST 10 FEET FROM THE ROADWAY. THE AREA BETWEEN THE ROADWAY SURFACE AND THE DRY HYDRANT SHALL BE CONSTRUCTED TO PROVIDE ALL WEATHER ACCESS TO THE HYDRANT AREA.
- 7. TWO 6" DIAMETER STEEL CONCRETE FILLED BOLLARDS SHALL BE SET ADJACENT TO HYDRANT.
- 8. THE VERTICAL LIFT DISTANCE BETWEEN THE INTAKE SCREEN AND THE PUMPER CONNECTION SHALL NOT EXCEED 14 FEET.
- 9. ALL HORIZONTAL PIPING SHALL HAVE A MINIMUM OF 5 FEET OF GROUND COVER, COMPACTED AND FREE OF VOIDS.
- 10. A CONCRETE THRUST BLOCK SHALL BE CONSTRUCTED AT THE ELBOW.
- 11. CONCRETE BLOCKS SHALL ALSO BE CONSTRUCTED AT THE SUPPORTING LEGS UNDER THE SECTION OF PIPE UNSUPPORTED IN THE WATER.
- 12. THE STAINLESS STEEL INTAKE SCREEN SHALL BE A MINIMUM OF TWO FEET FROM THE BOTTOM OF THE WATER SOURCE AND SHALL HAVE A MINIMUM OF TWO FEET OF WATER ABOVE THE INTAKE SCREEN AT ALL TIMES OF THE YEAR.
- 13. THE DESIGN OF THE INTAKE SCREEN SHALL BE APPROVED BY THE FIRE CHIEF PRIOR TO CONSTRUCTION. THE STRAINER SHALL HAVE A MINIMUM FLOW CAPACITY OF 1000 GPM.
- 14. THE CONTRACTOR SHALL BE REQUIRED TO GIVE THE DEPARTMENT OF PUBLIC WORKS AND THE FIRE DEPARTMENT A 48 HOUR NOTICE PRIOR TO ANY FIRE HYDRANT / POND CONSTRUCTION OR TESTING.
- 15. THE HYDRANT AND POND SHALL BE INSPECTED AND TESTED BY THE MONT VERNON FIRE CHIEF PRIOR TO ACCEPTANCE.

-3" TEMPORARY HOT PATCH OR COLD EXISTING-PAVEMENT PATCH, TO BE DETERMINED BY D.H.D 6" CRUSHED GRAVEL—→ 12" BANK RUN GRAVEL ---COMPACTED SUBGRADE ---OR GRAVEL FILL

# TEMPORARY PAVEMENT REPAIR



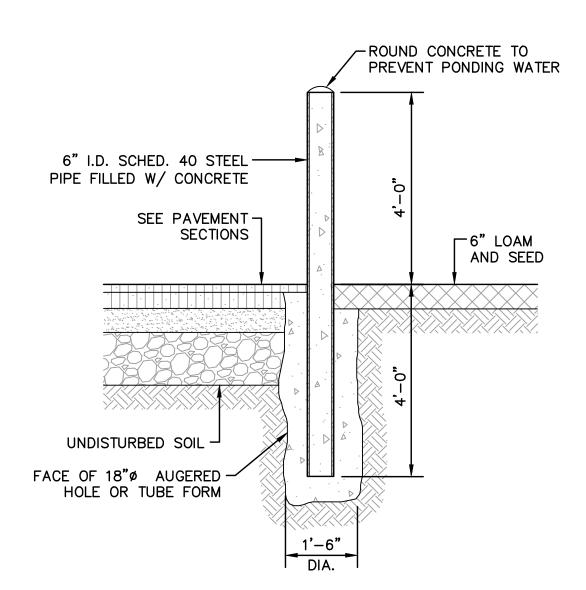
# PERMANENT PAVEMENT REPAIR

## PAVEMENT REPAIR NOTES:

- 1. MATERIALS SHOULD BE REPLACED IN-KIND, WITH MINIMUM THICKNESS AS
- 2. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REQUIREMENTS.
- 3. ROADWAY CONSTRUCTION SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS.
- 4. NOT FOR WINTER CONSTRUCTION.



PAVEMENT REPAIR DETAILS



# **BOLLARD NOTES:**

- 1. BOLLARDS SHALL BE LOCATED TO PROTECT THE DRY HYDRANT CONNECTIONS.
- 2. FINISHED BOLLARDS SHALL BE PAINTED RED.



STEEL PIPE BOLLARD DETAIL

**DRY HYDRANT CONNECTION DETAIL** SCALE: NONE

-CONCRETE BLOCK

WITH ANCHOR STRAP

SCALE: NONE

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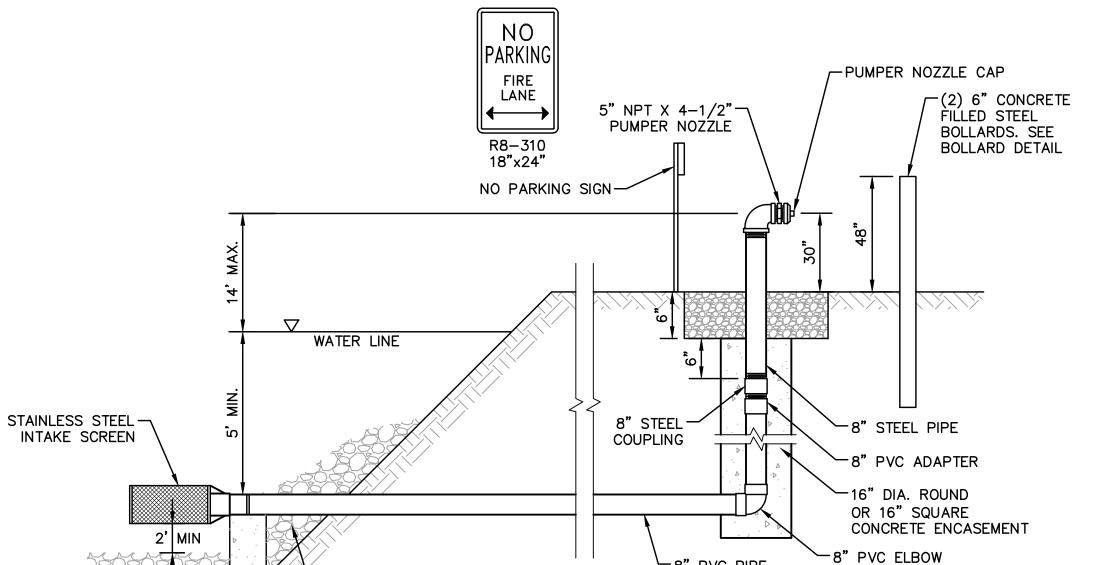
CONSTRUCTION

**DETAILS 3** 

ITENAN

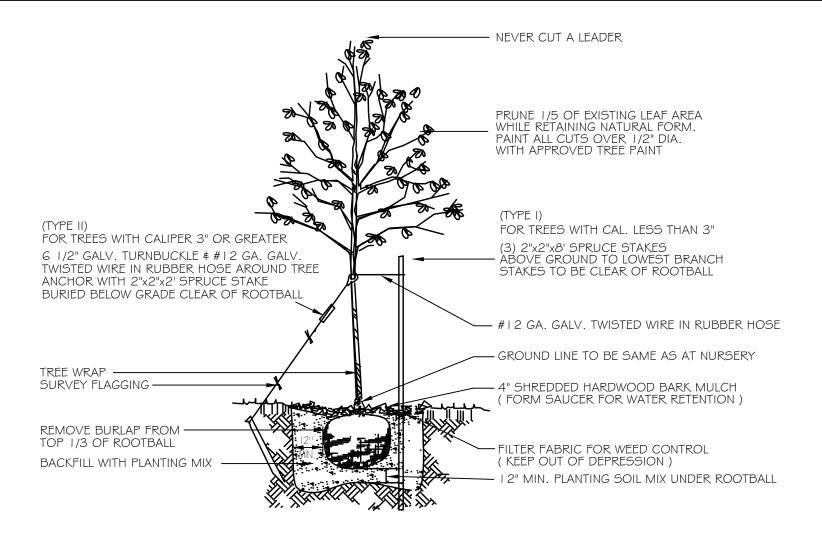
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**ENGINEER** 



# **LANDSCAPING NOTES:**

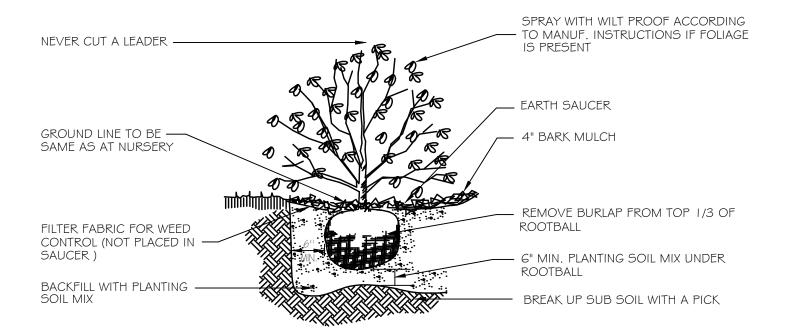
- 1. LANDSCAPING TO BE COORDINATED WITH THE CONSERVATION COMMISSION. CONTRACTOR TO PROVIDE AND INSTALL 10 TREES (3" CALIPER MIN.) AT LOCATIONS DIRECTED BY CONSERVATION COMMISSION.
- 2. WHEREVER POSSIBLE EXISTING TREES SHALL BE PRESERVED AND PROTECTED DURING CONSTRUCTION. DISTURBED SIDE SLOPES SHALL BE ALLOWED TO NATURALLY VEGETATE TO SUSTAIN EXISTING WILDLIFE AND PLANT LIFE.
- 3. THE PROPOSED TREES SHALL BE A MIN. 3" CALIPER
- 4. ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED WITH A MINIMUM OF 4" SUITABLE LOAM, EXCEPT UNDER THE MULCH BEDS. SLOPES GREATER THAN 3:1 SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET.
- 5. PLANTS SHALL NOT BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED WITHIN THE IMMEDIATE AREA OF THE PLANTING.
- 6. ALL TREES SHALL BE BALLED AND BURLAPPED UNLESS OTHERWISE NOTED.
- 7. ANY PROPOSED PLANT MATERIAL SUBSTITUTIONS SHALL BE APPROVED BY THE THE TOWN OF MONT VERNON.
- 8. WHERE APPLICABLE THE CONTRACTOR SHALL HAVE ALL FALL TRANSPLANTING HAZARD PLANTS DUG IN THE SPRING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT CORRECT GRADES AND ALIGNMENT. LAYOUT TO BE APPROVED BY OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.
- 9. PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY; HAVE NORMAL GROWTH HABITS; WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE FROM DEFECTS AND INJURIES.
- 10. CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL.
- 11. ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN VIGOROUS GROWING CONDITION. PROVISION SHALL BE MADE FOR A GROWTH GUARANTEE OF AT LEAST ONE YEAR FROM THE DATE OF ACCEPTANCE FOR TREES AND SHRUBS. REPLACEMENTS SHALL BE MADE AT THE BEGINNING OF THE FIRST SUCCEEDING PLANTING SEASON. ALL REPLACEMENTS SHALL HAVE A GUARANTEE EQUAL TO THAT STATED ABOVE.
- 12. INSOFAR AS IT IS PRACTICABLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT STOCK NOT PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. ANY PLANTS NOT INSTALLED DURING THIS PERIOD WILL BE REJECTED.
- 13. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH ANSI 260 (REV. 1996)
  "AMERICAN STANDARD FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
- 14. ALL PLANTS SHALL BE PLANTED IN AMENDED TOP SOIL THAT IS THOROUGHLY WATERED AND TAMPED AS BACK FILLING PROGRESSES. PLANTING MIX TO BE AS SHOWN ON PLANTING DETAILS. LARGE PLANTING AREAS TO INCORPORATE FERTILIZER AND SOIL CONDITIONERS AS STATED IN PLANTING SPECIFICATIONS.
- 15. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES. PLANTS SHALL BE HANDLED FROM THE BOTTOM OF THE BALL ONLY.
- 16. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION. ALL PLANT MATERIAL SHALL BE SPRAYED WITH 'WILT-PRUF' OR EQUAL AS PER MANUFACTURER'S INSTRUCTIONS.
- 17. NO PLANT, EXCEPT GROUND COVERS, SHALL BE PLANTED LESS THAN TWO FEET FROM EXISTING STRUCTURES AND SIDEWALKS.
- 18. SET ALL PLANTS PLUMB AND STRAIGHT. SET AT SUCH LEVEL THAT, A NORMAL OR NATURAL RELATIONSHIP TO THE CROWN OF THE PLANT WITH THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE PLANT IN THE CENTER OF THE PIT.
- 19. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES AS A RESULT OF CONSTRUCTION OPERATIONS. ALL EXISTING TREES SHALL BE FERTILIZED WITH A REGULAR GARDEN FERTILIZER (5–10–5) UPON COMPLETION OF WORK. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE TRUNK. CONTRACTOR TO ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH SHARP TOOLS AND FILLED AROUND WITH TOPSOIL. COMPLETELY SATURATE THESE AREAS WITH WATER. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR IS TO PROTECT ALL EXISTING TREES TO REMAIN BY ERECTING TREE PROTECTION FENCE AT THE DRIP LINE. THIS WILL ENSURE NO COMPACTION OF THE ROOT MASS.
- 20. ALL PLANTING BEDS SHALL BE MULCHED WITH 4" LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH.
- 21. NEW PLANTING AREAS, TREES AND SOD SHALL BE ADEQUATELY IRRIGATED OR WATERED TO ESTABLISH THE PROPOSED PLANTS AND LAWN.





#### **DECIDUOUS TREE PLANTING DETAIL**

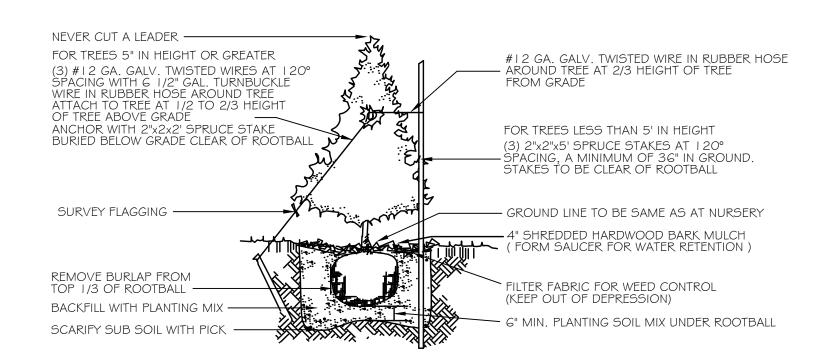
SCALE: NONE





# SHRUB PLANTING DETAIL

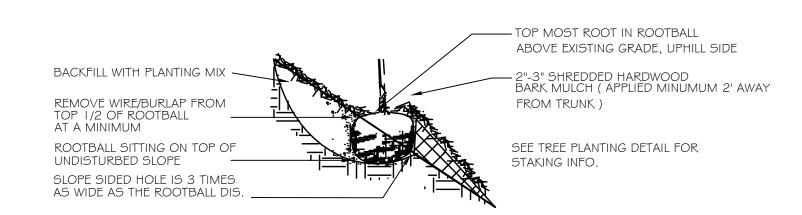
SCALE: NONE





# **EVERGREEN PLANTING DETAIL**

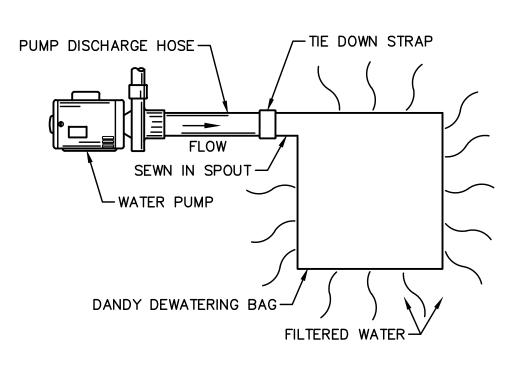
SCALE: NONE



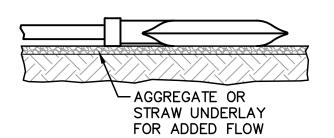


# SLOPE PLANTING DETAIL

SCALE: NONE



### PLAN VIEW



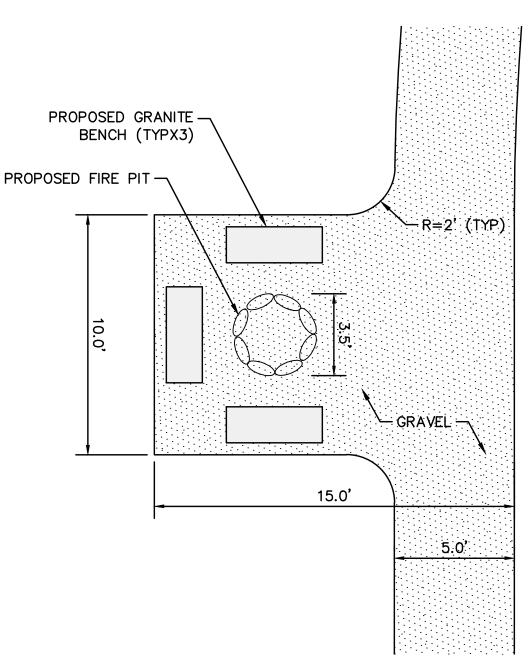
SIDE VIEW

MECHANICAL PROPERTY	TEST METHOD	UNITS	MARV
GRAB TENSILE STRENGTH	ASTM D4632	KN (LBS)	0.9 (205) X 0.9 (205)
GRAB TENSILE ELONGATION	ASTM D4632	%	50 X 50
PUNCTURE STRENGTH	ASTM D4833	KN (LBS)	0.58 (130)
MULLEN BURST STRENGTH	ASTM D3786	KPA (PSI)	2618 (380)
TRAPEZOID TEAR STRENGTH	ASTM D4533	KN (LBS)	0.36 (80) X 0.36 (80)
UV RESISTANCE	ASTM D4355	%	70
APPARENT OPENING SIZE	ASTM D4751	MM (US STD SIEVE)	0.180 (80)
FLOW RATE	ASTM D4491	1/MIN/M (GAL/MIN/FT)	3866 (95)
PERMITTIVITY	ASTM D4491	KN (LBS)	1.2



# DANDY DEWATERING BAG DETAIL

SCALE: NONE



# FIRE PIT NOTES:

- 1. COORDINATE FINAL FIRE PIT AREA DESIGN AND LAYOUT WITH THE TOWN.
- 2. GRANITE BENCHES SHALL BE CHOSEN BY THE TOWN.
- 3. SEE DRAWING C3 FOR FIRE PIT LOCATION.



FIRE PIT AREA DETAIL

SCALE: 1" = 4'

CLIENT MONT VERNON CONSERVATION COMMISSION

1 SOUTH MAIN STREET

MONT VERNON, NH

PROJECT

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MAINTENANCE / RESTORATION PROJECT

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