# PERMIT #30-1242

# PROPOSED GRAVEL EXCAVATION

SNAKE MEADOW ROAD & HUBBARD ROAD KILLINGLY, CONNECTICUT

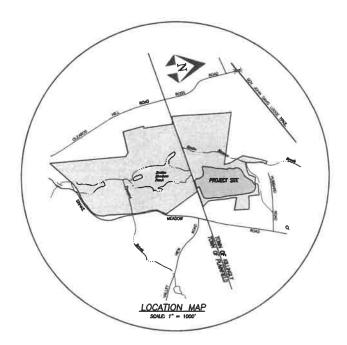
# Snake Meadow Club, incorporated

**APPLICANT:** 

# SNAKE MEADOW CLUB, INCORPORATED

### **LEGEND**

0	IRON PIN OR PIPE FOUND
0	DRILL HOLE FOUND
•	DRILL HOLE SET
•	STONE PILE
*	WIRE FENCE REMAINS
*	WETLAND FLAG
	TEST PIT
uuuuuuuu	EXISTING TREELINE
-000000000000	STONE WALL
000000	STONE WALL REMAINS
100	EXISTING INDEX CONTOUR
	EXISTING CONTOUR
	PROPOSED CONTOUR
PERREPRESESSE	PHASE LINE
·······	PROPOSED CLEARING LIMIT
	PROPOSED SILT FENCE
(**************************************	PROPOSED STAKED HAYBA



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PREPARED BY:

# Provost & Rovero, Inc.

Civil Engineering • Surveying • Site Planning Structural • Mechanical • Architectural Engineering

57 East Main Street, P.O. Box 191 Plainfield, Connecticut 06374 (860) 230-0856 - FAX: (860) 230-0860

	REVISIONS	
DATE	DESCRIPTION	

MARCH 20, 2020





	3/23/2020
4GINEER	DATE:

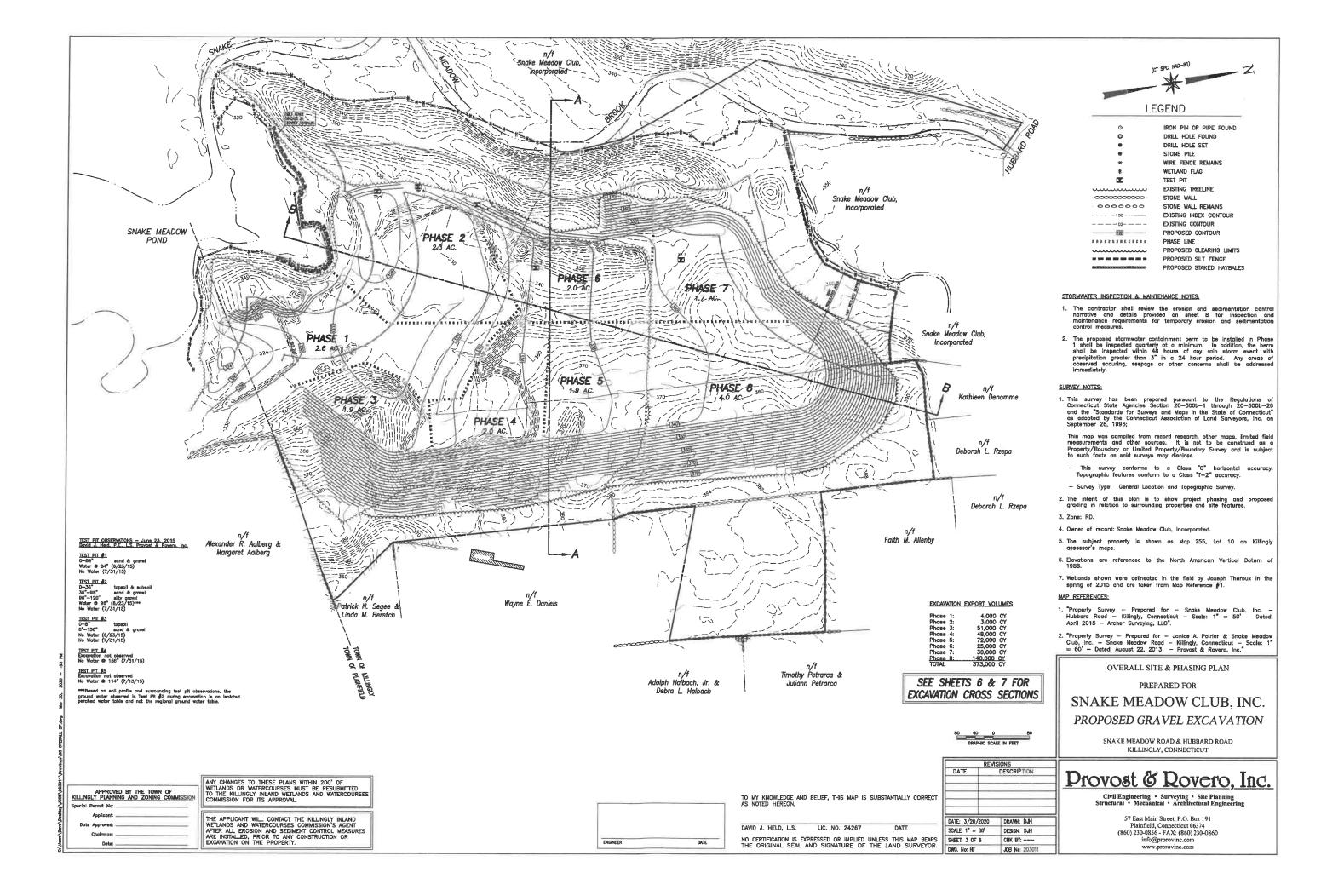
APPROVED BY THE TOWN OF KILLINGLY PLANNING AND ZONING COMMISSION

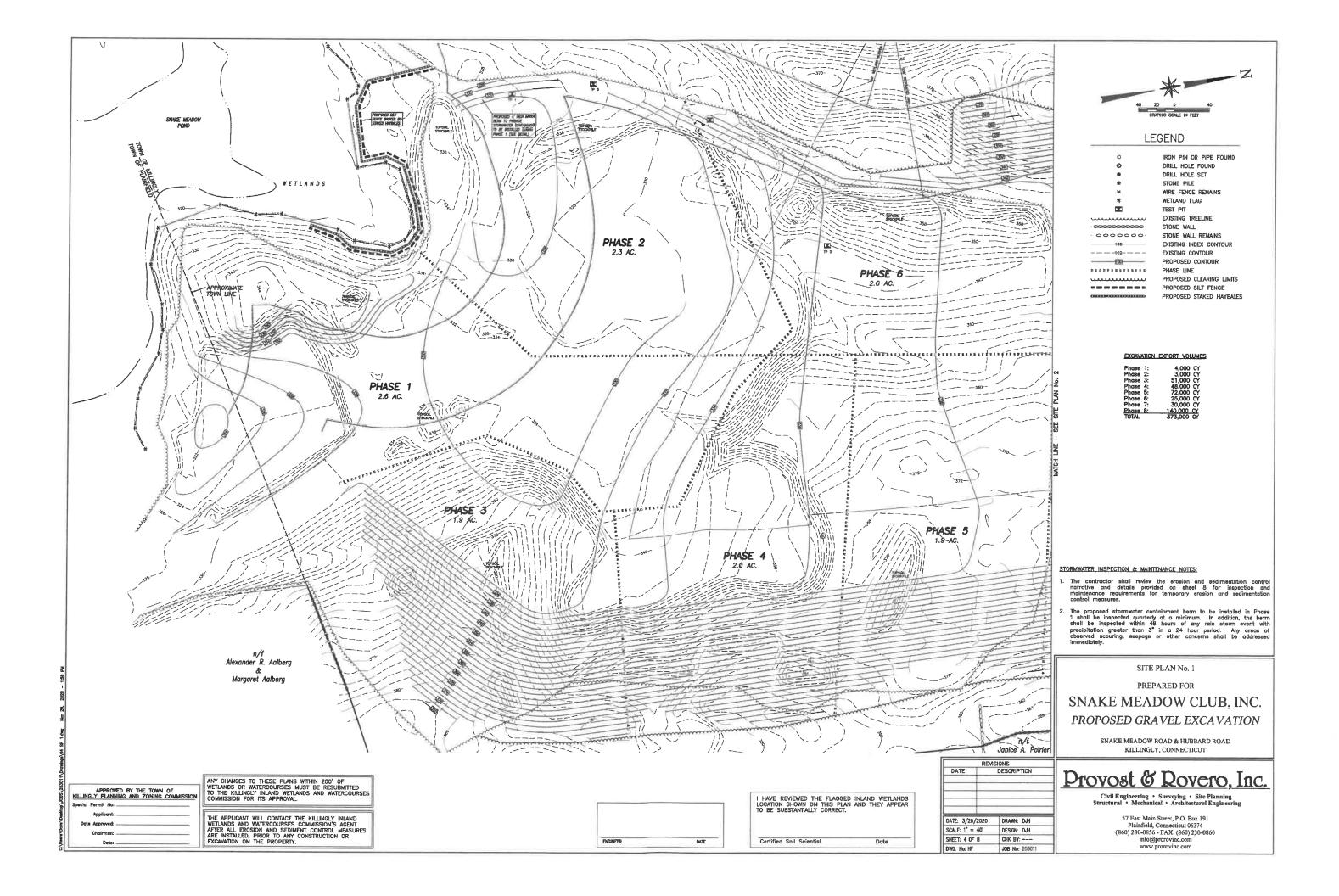
APPROVED BY THE TOWN OF

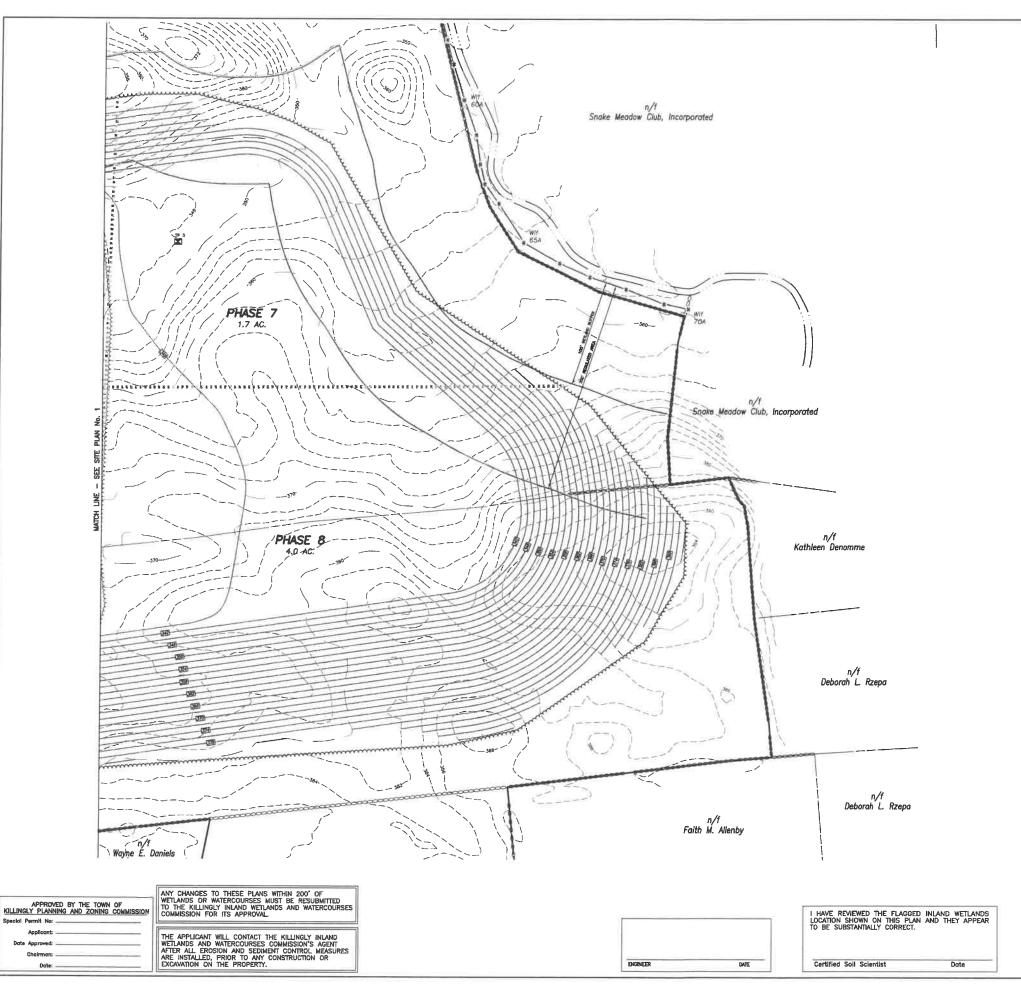
ANY CHANGES TO THESE PLANS WITHIN 200' OF WETLANDS OR WATERCOURSES MUST BE RESUBMITTED TO THE KILLINGLY INLAND WETLANDS AND WATERCOURS COMMISSION FOR ITS APPROVAL.

THE APPLICANT WILL CONTACT THE KILLINGLY INLAND WETLANDS AND WATERCOURSES COMMISSION'S AGENT AFTER ALL EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED, PRIOR TO ANY CONSTRUCTION OR EXCAVATION ON THE PROPERTY.

SHEET 1 OF 8 JOB NO: 203011

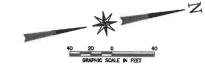






Special Permit No: \_

Date: \_\_\_



### LEGEND

IRON PIN OR PIPE FOUND DRILL HOLE FOUND DRILL HOLE SET STONE PILE WIRE FENCE REMAINS WETLAND FLAG TEST PIT × EXISTING TREELINE -STONE WALL 0000000 STONE WALL REMAINS EXISTING INDEX CONTOUR ----EXISTING CONTOUR PROPOSED CONTOUR \*\*\*\*\*\*\*\*\*\* PHASE LINE PROPOSED CLEARING LIMITS ------PROPOSED SILT FENCE PROPOSED STAKED HAYBALES

### EXCAVATION EXPORT VOLUMES

4,000 CY 3,000 CY 51,000 CY 48,000 CY 72,000 CY 25,000 CY 30,000 CY

### STORMWATER INSPECTION & MAINTENANCE NOTES:

- 2. The proposed stormwater containment berm to be installed in Phase 1 shall be inspected quarterly at a minimum. In addition, the berm shall be inspected within 43 hours of any rain storm event with precipitation greater than 3" in a 24 hour period. Any areas of observed scouring, seepage or other concerns shall be addressed immediately.

SITE PLAN No. 2

PREPARED FOR

# SNAKE MEADOW CLUB, INC. PROPOSED GRAVEL EXCAVATION

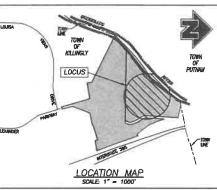
SNAKE MEADOW ROAD & HUBBARD ROAD KILLINGLY, CONNECTICUT

REVI	SIONS
DATE	DESCRIPTION
	-
DATE: 3/20/2020	DRAWN: DJH
SCALE: 1" = 40"	DESIGN: DJH
SHEET: 5 OF 8	CHK BY:
DWG. No: HF	JOB No: 203011

# Provost & Rovero, Inc.

Civil Engineering • Surveying • Site Planning Structural • Mechanical • Architectural Engineering

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! ATTENTION !
AQUIFER ZONE
IN THE EVENT OF A
PILL, MEET THE VALVE CALL DIS

I SPILL KIT MEEDE

SIGN DETAIL

- This survey has been prepared pursuant to the Regulations of Connecticut State Agencies Sections 20-300b-1 through 20-300b-20 and the "Standards for Surveys and Maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996;
- This survey conforms to a Class "C" horizontal accuracy.

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- Topographic features conform to a Class "T-2", "V-2" vertical accuracy.
- Survey Type: Topographic Survey.

This map was prepared from record research, other maps, ilmited field measurements and other sources, it is not to be construed as a Property/Boundary or Limited Property/Boundary Survey and is subject to such facts as said surveys may disclose.

- Parcel is shown as Lot #1 on Assessors Map #36.
- 4. Owner of record: 145 Alexander Parkway LLC 145 Country Club Road Killingly, CT 06241
- Elevations shown are based on approximate National Geodetic Vertical Datum of 1929 (NGVD 29). Contours shown are taken from map reference and supplemented with actual field survey. Contour interval  $=\,2^{\circ}.$
- Wetlands shown were taken from map referecne.
- Before any construction is to commence contact "CALL BEFORE YOU DIG" at 1-800-922-4455 or 811.

"Subdivision Plan — Prepared for — Town of Killingly Industrial Park Expansion — Louisa Viens Drive & Alexander Park Way — Killingly, connecticut — Scale: 1" = 100" — Date: 10/9/2012 — Sheet 1 of 1 — Prepared by: KWP Associates." On file as Map #6633 in the Town of Killingly Land Records.

DESCRIPTION REVISIONS

TOPOGRAPHIC SURVEY SHOWING PROPOSED PROCESSING AREA PREPARED FOR

# DESMARAIS & SONS, INC.

LOUISA VIENS DRIVE & ALEXANDER PARKWAY KILLINGLY, CONNECTICUT

Killingly Engineering Associates Civil Engineering & Surveying

114 Westcott Road P.O. Box 421 Killingly, Connection 06241 (860) 779-7299 www.hillinglyengineering.com

DRAWN: AMR DESIGN: NET CHK BY: GG DWG. No: CLIENT FILE JOB No: 17088 I. USDA-NRCS Web Soil Surve

2 Soil Survey of New London County Connecticut, U.S.D.A. Soil Conservation Service 1983. SOILS:

The proposed site is comprised mainly of three soil types; Hinckley "380", Mentmac "34A" and Ninignet Tiebury "21A"

- . Install and mointain erosion and sedimentation control devices as shown on these plans. All erosion control devices shall be inspected by an agent of the Town. Any additional erosion control devices required by the Town's Agent shall be installed and inspected prior to any construction on site. (See all fence installation notes.)
- 3. install and maintain erosion and sedimentation controls throughout operations.
- Dust control will be accomplished by spraying with water and if necessary, the application of calcium chloride.

### SPILL PREVENTION

The Owner shall prevent city and other hazardous substances from spilling on the ground, leaching into the soil or migrating into wetlands or water bodies.

- I. All fueling shall take place within the designated fueling area as shown on the plans, adjacent to the sits entrance and within the construction staging area. All fueling and minor maintenance shall be confined to the area. Major equipment regains shall be conducted off sits.
- If required, temporary fuel tanks shall be located at the designated fueling area. Manufactured double walled storage tanks shall be installed, operated and maintained per the manufacturer's written recommendations. Single woulded temporary tanks shall only be utilized if 100X spiliage containment is provided. In the event of fuel spiliage, the operator shall immediately remove the tank, contain the spiliage and contact the CTDP 24—hour Emergency Spili Response in ed. 1–868–337–7745.
- . Fuel trucks entering the elle shall shall proceed directly to the designated fueling area prior to dispersing any fuel products.
- i. An emergency splil kit shall be located at the designated fueling area and shall consist of absorbent and bags or earth endarial for use in controlling splils or leaks. Splilad materials and/or contaminated soils and be exceeded, stared in lask-proof containers and from the site for disposal in occordance with all applicable local, state and federal hazardous wester regulations.

### DEVELOPMENT CONTROL PLAN-

- . Development of the site will be performed by the applicant, who will be responsible for the installation and maintenance of erosion and sediment control measures required throughout operations.
- Final stabilization of the site is to follow the procedures outlined in "Permanent Vegetative Cover". If necessary a temporary vegetative cover is to be provided until a permanent cover can be applied.

### SILT FENCE INSTALLATION AND MAINTENANCE:

- 1. Dig a 6" deep trench on the uphill elde of the barrier location.
- 2. Position the posts on the downhill side of the barrier and drive the posts 1.5 feet into the around
- 3. Lay the bottom 6" of the tabric in the trench to prevent undermining and backfill.
- 4. Inspect and repair barrier after heavy rainfall.
- Inspections will be made at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater to determine maintenance needs.
- Sediment deposits are to be removed when they reach a height of 1 foot behind the barrier or hal the height of the barrier and are to be deposited in an area which is not regulated by the inland
- 7. Replace or repair the fence within 24 hours of observed failure. Failure of the fence has occurred when sediment falls to be retained by the fence because:
  the fence has been overfopped, underout or bypassed by runoff water,
  the fence has been moved out of position (knocked over), or
  the grotactife has decomposed or been domogad.

### HAY BALE INSTALLATION AND MAINTENANCE:

- 1. Bales shall be placed as shown on the plans with the ends of the bales tightly abutting each other Each bale shall be securely anchored with at least 2 stakes and gaps between bales shall be wedged with straw to prevent water from passing between the bales.
- . Inspect bales at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inches or greater to determine maintenance needs.
- 5. Replace or repair the barrier within 24 hours of observed failure. Failure of the barrier has occurred when sadiment fails to be retained by the barrier because; the barrier has been overtapped, undercut or bypassed by runoff water, the barrier has been moved out of position, or the hoty bothe have debenforated or been dimaged.

### TEMPORARY VEGETATIVE COVER:

### SEED SELECTION

Grass species shall be appropriate for the season and site conditions. Appropriate species are outlined in Figure TS-2 in the 2002 Guidelines. TIMING CONSIDERATIONS

Seed with a temporary seed mixture within 7 days after the suspension of grading work in disturbed areas where the suspension of work is expected to be more than 30 days but less than 1 year.

### RECOMMENDED SEED MIXTURES:

1904	- DANG MINIMUM (SCHOOL)	LDB/ OCI 8	109/30, 71
426	Switchgrass (Blackwell, Shelter, Cave-in-rock)	4.0	0.10
	Big Bluestern (Ningro, Kow)	4.0	0.10
	Little Bluestern (Blaze, Aldous, Camper)	2.0	0.05
	Sand Lovegrass (NE-27, Bend)	1.5	0.03
	Bird's-foot Trefoil (Empire, Viking)	2.0	0.05
+27	Flatpea (Lathco)	10	0.20
	Perennial Pea (Lancer)	2.0	0.05
	Crown Vetch (Chemung, Penngtit)	10	0.20
	Tall Feecue (Kentucky 31)	2.0	0.05
-28	Orchardgrass (Pennisite, Kay, Potomac)	5.0	0.10
	Tall Fescue (Kentucky 31)	10	0.20
	Redtop (Streeker, Common)	2.0	0.05
	Bird's-fapt Trefoil (Empire, Viking)	5.0	0.10

\* Considered to be a cool season mix
\*\* Considered to be a warm season mix

# APPROVED BY THE TOWN OF KILLINGLY PLANNING AND ZONING COMMISSION Special Permit No: 18-1197 Applicant: DESMARUS & SONS, INC. Date Approved: JULY 16, 2018

Locaen the soil to a depth of 3-4 inches with a slightly raughened surface. If the many has been recently locaemed or disturbed, no further roughening is require the many and the second of the secon

Apply seed uniformly by hand ayelone seeder, drill, cultipactor type seeder or hydroseeder at a minimum rate for the selected species. Increase seeding rates by 10% when hydroseeding

Temporary seedings made during optimum seeding dates shall be multihed according to the recommendations in the 2002 Guidelines. When seeding outside of the recommended dates, increase the consideration of multiple to seeding 0.0%—0.0%

happect seeded area at least once a week and within 24 hours of the end of a storm with a robifoli amount of 0.5 inch or greater for seed and mulch movement and rill crash.

Where seed has moved or where soil erasion has occurred, determine the cause the fallure. Repair eraded great and install additional controls it required to

# Continue Inspections until the grosses are firmly established. Grosses shall ne considered established until a ground cover is achieved which is marture energy control sell crision and to survive severe weather conditions (approximately Bi vegistative cover).

### PERMANENT VEGETATIVE COVER:

Seed mix for slope restoration shall be <u>seed mixtures \$28, \$27 or \$28,</u> on described in the 2002, Guidelines for Soil Ecotion and Sediment Control and as described on this sheet, applied at the recommended rotes. In general, the following sequence of operations shall apply.

- No topsoil or subsoil shall be removed from the alts. All topsoil and subsoil shall be stockpiled and risbilitzed in accordance with measures outlined in "Temporary Vegetative Cover".
- A minimum of 6° of aubsoil and 4° of topsoil shall be spread and compactor on final slopes. Once the topsoil has been spread, all stones 3° or larger in any dimension will be removed as well as debris.
- Apply agricultural ground limestone at a rate of 2 tons per acre or 100 be, per 1000 a.t. Apply 10-10-10 fortilizer or equivalent at a rate of 300 be.; acre or 7.5 lbs. per 1000 s.f. Work lime and fertilizer into the soil to a minimum soil depth of 4
- 4. Inspect seedled before seeding. If truffic has compacted the soil, retill
- Apply the recommended gross seed mb. The recommended seeding dries are: April 1 to June 15 & August 15 October 1.
- Following seeding, firm seedbed. Seeded elopes shall be stabilized with turf
  miniforcement motiting, factual in place per recommendations of the
  manufacturer and as shown on the detail, this sheet.
- If a permanent vegetative atond cannot be established by September 30, apply a temporary cover on the topsoff such as netting or organic mulch.

# Slopes shall be inspected weekly and after all rain events of 0.5" or greater. Disturbed or damaged slopes shall be repaired immediately.

### EROSION AND SEDIMENT CONTROL NARRATIVE: PRINCIPLES OF EROSION AND SEDIMENT CONTROL

The primary function of ercelon and sediment controls is to obsorb ercelonal energies and reduce runoff velocities that force the detachment and transport of soil and/or encourage the deposition of eroded soil particles before they reach any sensitive area.

### KEEP LAND DISTURBANCE TO A MINIMUM

The more land that is in vegetables cover, the more surface water will infiltrate into the soil, thus minimizing etarmenter rannel and potential infiltrate into the soil, thus minimizing etarmenter rannel and potential erection. Keeping land elitrophenes to a minimum not only involves minimizing the extent of exposure at any one time, but does the duration of exposure. Phasing, exquencing and construction scheduling are interrelated. Phasing divides a large project into distinct sections where construction work over a specific area occurs over distinct periods of time and each phase is not dependent upon a subsequent phase in order to be functional. A sequence is the order in which construction of the control of the

- Limit areas of clearing and grading. Protect natural vegetation from construction equipment with fencing, tree armoning, and retaining walls or tree walls.
- Route traffic patterns within the site to avoid existing or newly
- Phose construction so that areas which are actively being developed at any one time are minimized and only that area under construction is exposed. Clear only those areas essential for construction.
- Schedule construction so that find grading and stabilization is

### SLOW THE FLOW

Detachment and transport of eracled soil must be kept to a minimum by absorbing and reducing the eracive energy of water. The eracive energy of water increases as the volume and velocity or runoff increases. The volume ond velocity or runoff increases and the volume and velocity or runoff increases during development as a result of reduced infiltration rates caused by the removal of existing vegetation, amount of topself, compaction of soil and the construction of impervious

- Lise diversions, stone dikes, slit fences and similar measures to break flow lines and dissipate storm water energy.
- Avoid diverting one drainage system into snother without calculating the potential for downstream flooding or engine. KEEP CLEAN RUNOFF SEPARATED

- Segregate construction waters from clean water.
- Divert sits runoff to keep it isolated from wetlands, watercourses and drainage ways that flow through or near the developm until the sediment in that runoff is trapped or detained.

REDUCE ON SITE POTENTIAL INTERNALLY AND INSTALL PERIMETER CONTROLS

- Direct runoff from small disturbed areas to adjaining undisturbed vegetated areas to reduce the potential for concentrated flow and increase settlement and filtering of sediments.

### EXCAVATION/PROCESSING NOTES:

HOURS OF OPERATION: 7:00 cm - 6:00 pm Monday - Friday

<u>DEST CONTROL:</u> Dust control shall be accomplished with periodic watering. Other recourses, if desired should be reviewed and approved by the Town of Killingly. GENERAL NOTES:

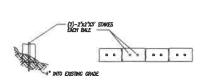
There shall be no storage of fuel on eite nor shall there be vehicle or machinery washing or major repairs done on sits.

3. The maximum disturbed area (not yet stabilized with topsoil, seed and mulch) at any time shall be finited to 5 screen.

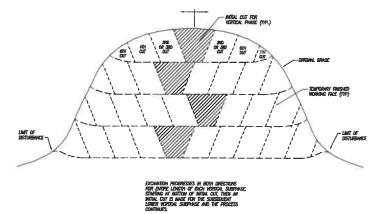
6. Prior to any excevation, contact CALL BEFORE YOU DIG at 1-800-922-4455 to detarmine the location of any underground utilities.

### SEQUENCE OF OPERATIONS:

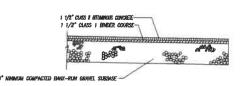
- Prior to any activity on sits, the contractor shall flog the limit of Phase 1 clearing and schedule a pre-construction meeting with the Town of Killingty Zeelen. Diskute.
- Cut trees within phase limit and remove wood from the sits. Install perimeter ensalon and addimentation controls; branches/brush may be chipped and utilized as berms for E&S.
- Excepts all stumps located in the phase and an errors to a disposal site or stockpile to be chipped for use on eth. The state of Connecticut does not allow for harden of states on the chipped for the chipped for the chipped of the
- 4. Grade access drive as shown on the plans.
- 5. Excevote/grade areas of proposed sedimentation basis
- Strip and stookpile topsoil and subsoil. Excess subsoil may be utilized in existing over-waterwished ones to useful to echieving compilers side slopes. Note: sufficient subsoil and topsoil shall be reserved to provide a minimum of of all subsoil and 4" of topsoil to establish registation for frietinal grades.
- 7. Begin excavation to remove soil materials; complete regrading of over excavated
- inspect perimeter erosion and sedimentation controls weekly and other ratio events greater than 1/2°. Repoir crossion controls as required offer inspections. Additional erosion and sedimentation controls such as divisions may be installed per direction of the Owner's angines if sits conditions regime.
- When Phose 1 excovation and grading have been completed, apply authors, topeosi and send to re-vagetate slopes. Complete perimeter landaugpe
- When afte has been stabilized, remove of perimeter erosion and addimentation controls. Wood only berrys may be left in place permanently if desired. 11. Repeat sequence for phone 2 operations.
- 12. Processing shall be far be for materials exceeded on site and for materials brought to the site by the Owner from other Owner operated projects. No materials shall be brought to the site for processing from contractors other than the Owner.



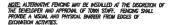
HAYBALE BARRIER

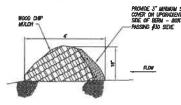


DETAIL SHOWING "DOWNCUTTING" EXCAVATION METHOD

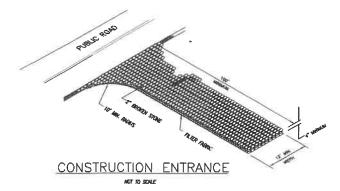


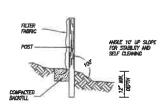
BITUMINOUS CONCRETE PAVEMENT (FUELING PAD) NOT TO SCALE





WOOD CHIP FILTER BERM NOTE: MAY BE UTILIZED IN LIEU OF SILT FENCE ON LESSER SLOPES





SILT FENCE

NORMAND E. THIBEAULT, JR., P.E.

B.477	
DATE	DESCRIPTION

DETAIL SHEET PROPOSED EARTH MATERIALS PROCESSING PREPARED FOR

DESMARAIS & SONS, INC

LOUISA VIENS DRIVE & ALEXANDER PARKWAY KILLINGLY, CONNECTICUT

Killingly Engineering Associates gineering Associated Civil Engineering & Surveying 98 Westcott Road P.O. Box 421 Dayville, Connecticut 06241 (860) 779-7299 - FAX: (860) 774-3703

DATE: 04/11/2020 SCALE: NOT TO SCALE DESIGN: NET SHEET: 3 OF 3 CHK BY: ---DWG. No: CUENT FILE JOB No: 17088