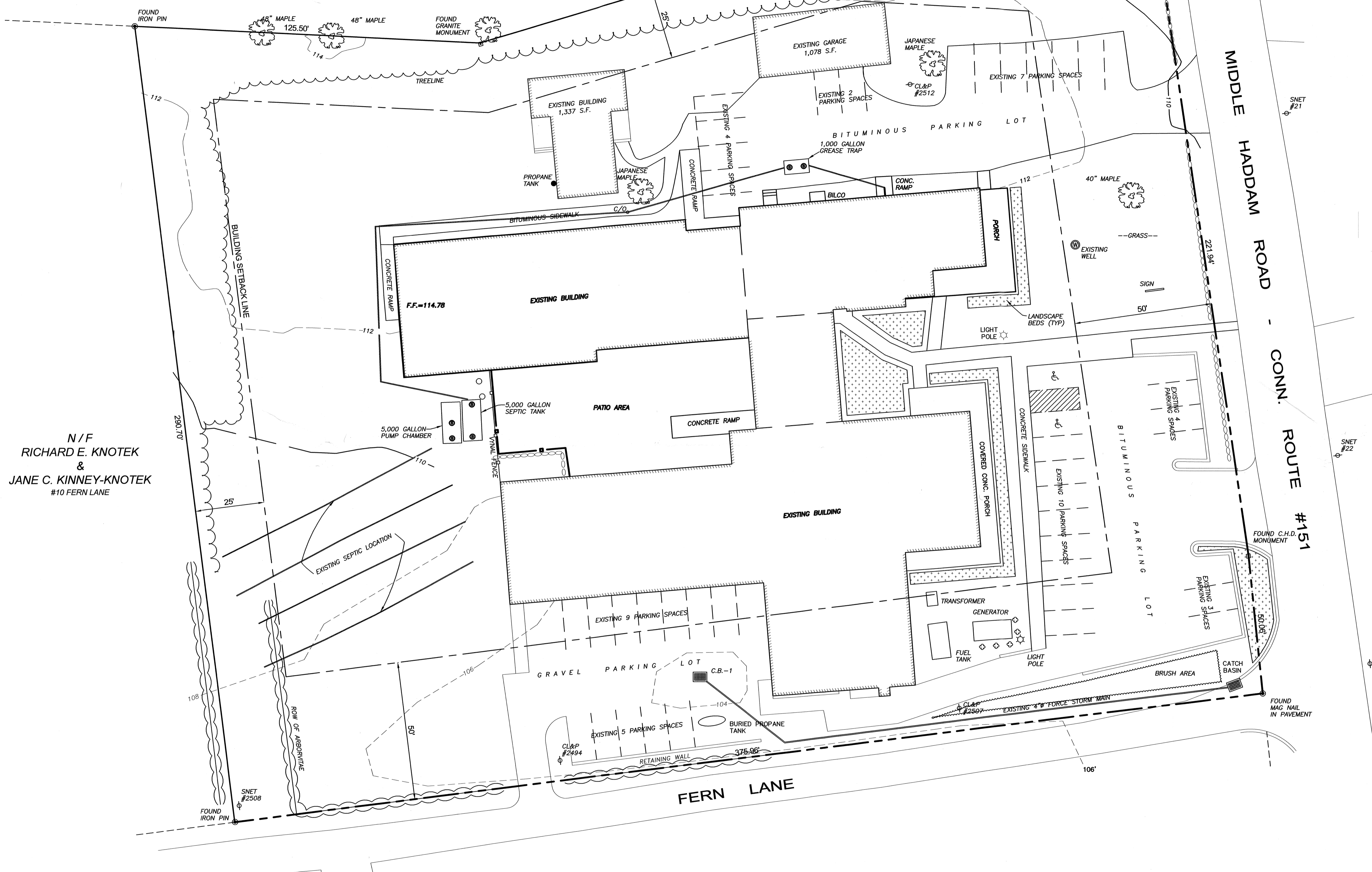


LOCATION MAP, SCALE: 1"=1,000'

N/F THE MIDDLESEX LAND TRUST, INC.

N/F DAVID W. & JOANNE G. KNEELAND #23 MIDDLE HADDAM ROAD



N/F RICHARD E. KNOTEK & JANE C. KINNEY-KNOTEK #10 FERN LANE

MIDDLE HADDAM ROAD - CONN. ROUTE #151

FERN LANE

- GENERAL SITE DEVELOPMENT NOTES**
- EXISTING TOPOGRAPHY FROM FIELD SURVEY BY BASCOM & BENJAMIN LLC.
  - THIS PROPERTY IS LOCATED IN AN R-2 ZONE. SEE ZONING DATA CHART.
  - ALL GRADES ADJACENT TO FILLS SHALL BE BLENDED SO AS TO PREVENT PONDING.
  - FOR LOCATIONS OF UNDERGROUND ELECTRIC, TELEPHONE, GAS, CABLE TELEVISION, OR OTHER UTILITIES, INQUIRE AT THE APPROPRIATE UTILITY COMPANY AND CONTACT CALL BEFORE YOU DIG AT 1-800-922-4455.
  - DRIVEWAYS AND DRAIN OUTLETS SHALL BE DESIGNED AND CONSTRUCTED TO PREVENT ICING CONDITIONS.
  - ALL WORK TO CONFORM TO TOWN OF EAST HAMPTON SPECIFICATIONS AND REGULATIONS.
  - THE CONTRACTOR IS REQUIRED TO PROVIDE DEMOLITION AND REMOVAL OF ALL ITEMS, EITHER ABOVE OR BELOW GRADE, REQUIRED TO CONSTRUCT THE PROPOSED SITE IMPROVEMENTS.
  - THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREAS, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ON THE PLANS. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO THE COMMENCEMENT OF EXCAVATION.
  - THE CONTRACTOR IS REQUIRED TO PROVIDE AND INSTALL ALL ITEMS AS SHOWN ON THE SITE DEVELOPMENT PLANS, AND AS REQUIRED BY THE OWNER.
  - THE PROPOSED PARKING AREAS SHALL BE STRIPED WITH A 4" WIDE WHITE LINE.
  - ALL MATERIALS AND METHODS SHALL CONFORM TO CT DOT FORM 816 AS REVISED.
  - ALL EXCESS MATERIAL FROM CONSTRUCTION OR DEMOLITION SHALL BE DISPOSED OF OFF SITE.
  - THE CONTRACTOR SHALL VERIFY AND REPORT ANY DISCREPANCIES BETWEEN THE DESIGN PLANS AND ACTUAL FIELD CONDITIONS TO THE OWNER, GENERAL CONTRACTOR OR DESIGN ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
  - ADJUST ALL EXISTING AND PROPOSED UTILITY FRAMES, GRATES, COVERS, VALVE BOXES ETC. TO BE FLUSH WITH THE PROPOSED GRADES.
  - THIS PARCEL IS SHOWN ON TAX MAP 01C, BLOCK 9, LOT 7.
  - THE OWNER AND APPLICANT IS Z INC. 5922 WEDDINGTON RD STE. 5, WESLET CHAPEL, NC 28104, C/O JOSEPH CITINO
  - AT CAPACITY 60 BEDS AND RESIDENTS ARE EXISTING AND PROPOSED. THERE ARE THREE EMPLOYEE SHIFTS: 18 EMP. FIRST SHIFT, 7 EMP. SECOND SHIFT, AND 4 EMP. ON THE THIRD SHIFT.
  - PARKING REQUIREMENT:
    - 1 SP/4 BEDS @ 60 BEDS = 15 SPACES
    - 1 SP/EMP @ 18 EMP = 18 SPACES
    - 33 SPACES REQUIRED
    - 44 EXISTING SPACES, 3 HANDICAP

This Survey and Map has been prepared in accordance with SECTIONS 20-300b-1 through 20-300b-20 of the REGULATIONS OF CONNECTICUT STATE AGENCIES "Minimum Standards for Surveys and Maps in the State of Connecticut" as endorsed by the Connecticut Association of Land Surveyors, Inc.

It is a TOPOGRAPHIC SURVEY based on the DEPENDENT RESURVEY METHOD conforming to Vertical Accuracy Class T-2 and Horizontal Accuracy Class A-2, and is intended to be used for the design of a Site Development Plan for this property.

This map is substantially correct to the best of my knowledge and belief.

*Robert A. Bascom*

Robert A. Bascom, L.S. Conn. License #14,199

NOTES  
 1. INFORMATION PROVIDED BY: KENNETH J. PICARD, L.S. AS SHOWN ON MAP FILED IN THE EAST HAMPTON LAND RECORDS "IMPROVEMENT LOCATION SURVEY - PROPOSED, DEPICTING THE PROPOSED NEW PARKING AREAS AND ACCESS IMPROVEMENTS FOR PARCEL KNOWN AS 29 MIDDLE HADDAM ROAD, ASSESSORS MAP 01C/BLOCK 9/LOT 7, EAST HAMPTON, CONNECTICUT SCALE: 1"=20'; DATE: MAY 1, 2017.  
 2. EXISTING CONDITIONS VERIFIED BY BASCOM & BENJAMIN, LLC IN AREAS OF PROPOSED DEVELOPMENT.

APPROVED BY THE EAST HAMPTON PLANNING & ZONING COMMISSION

FINAL APPROVAL: \_\_\_\_\_ CHAIRMAN

DATE: \_\_\_\_\_

EXPIRATION DATE: \_\_\_\_\_



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REVISIONS		
NO.	DESCRIPTION	BY DATE

#29 MIDDLE HADDAM ROAD  
EAST HAMPTON, CT.

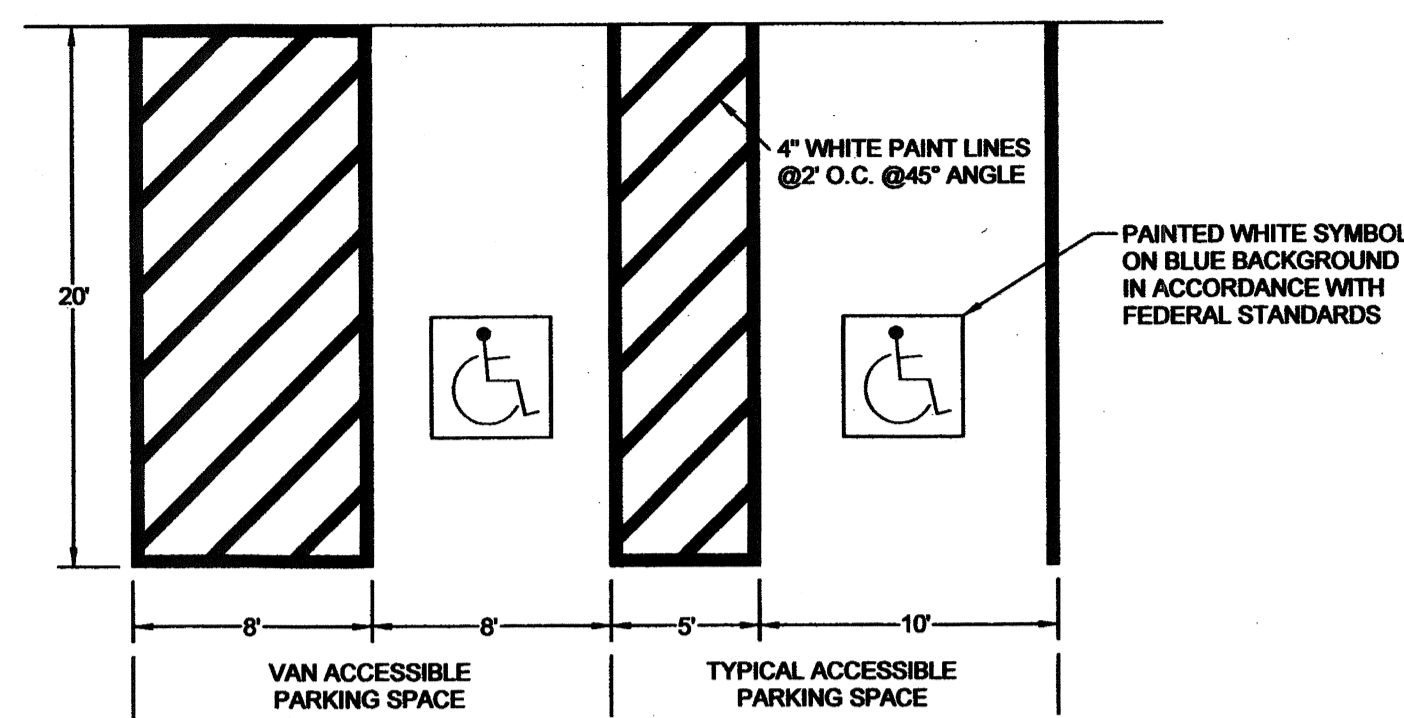
PROPERTY OF:  
**Z, INCORPORATED**

DESIGNED BY: P.M.B.  
DRAWN BY: S.M.S.  
CHECKED BY: P.M.B.  
APPROVED BY: \_\_\_\_\_

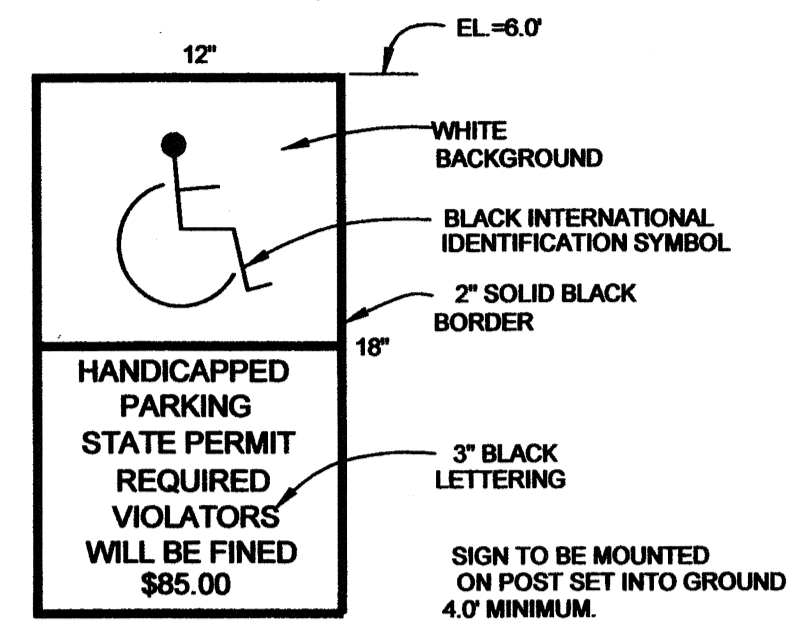
PROJECT NO. 1131-01  
SHEET NO. 1 OF 4  
SCALE: 1"=20'  
DATE: 07 OCT. 2020

**BASCOM & BENJAMIN, LLC**  
SURVEYING AND ENGINEERING CONSULTANTS  
360 MAIN STREET DURHAM, CONN.  
TEL. (860) 349-1676

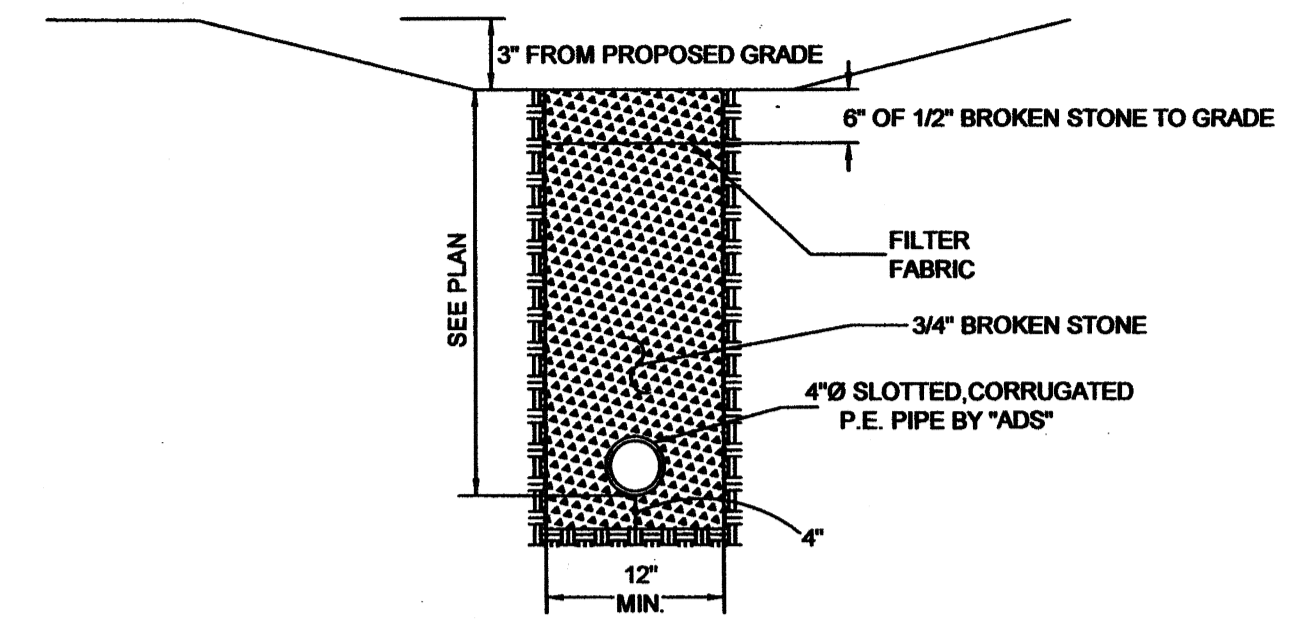




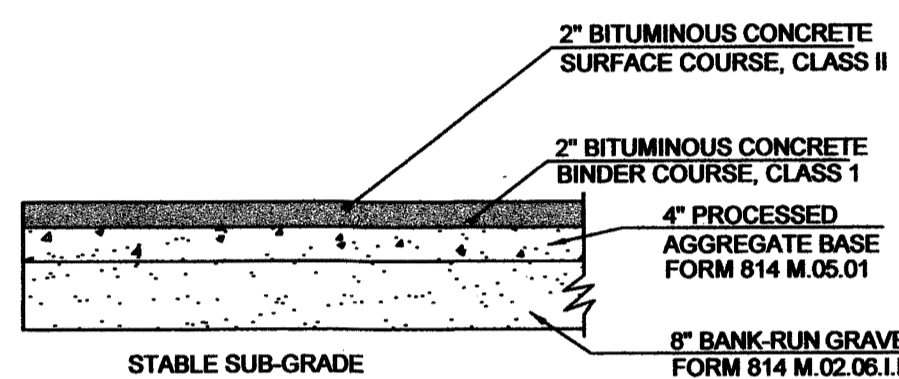
**PARKING SPACE DETAIL**  
N.T.S.



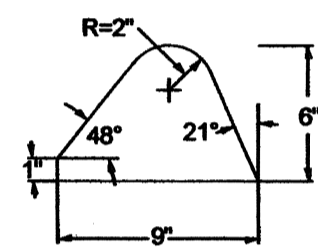
**HANDICAPPED SIGNAGE**  
N.T.S.



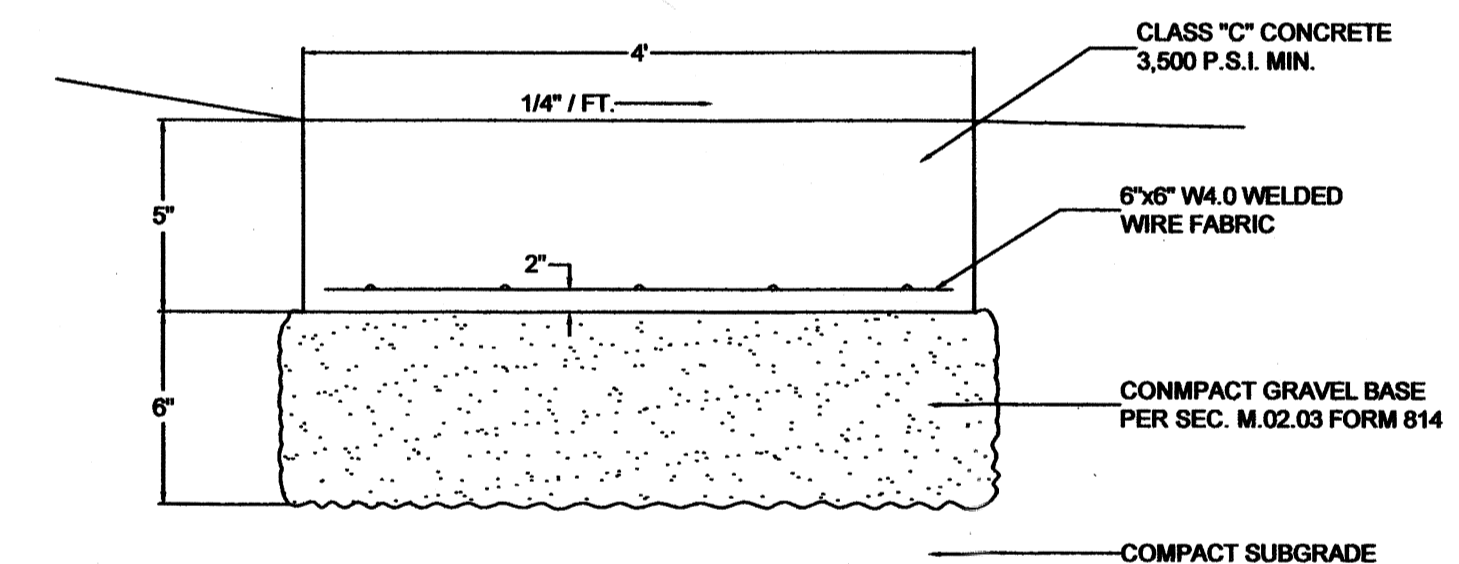
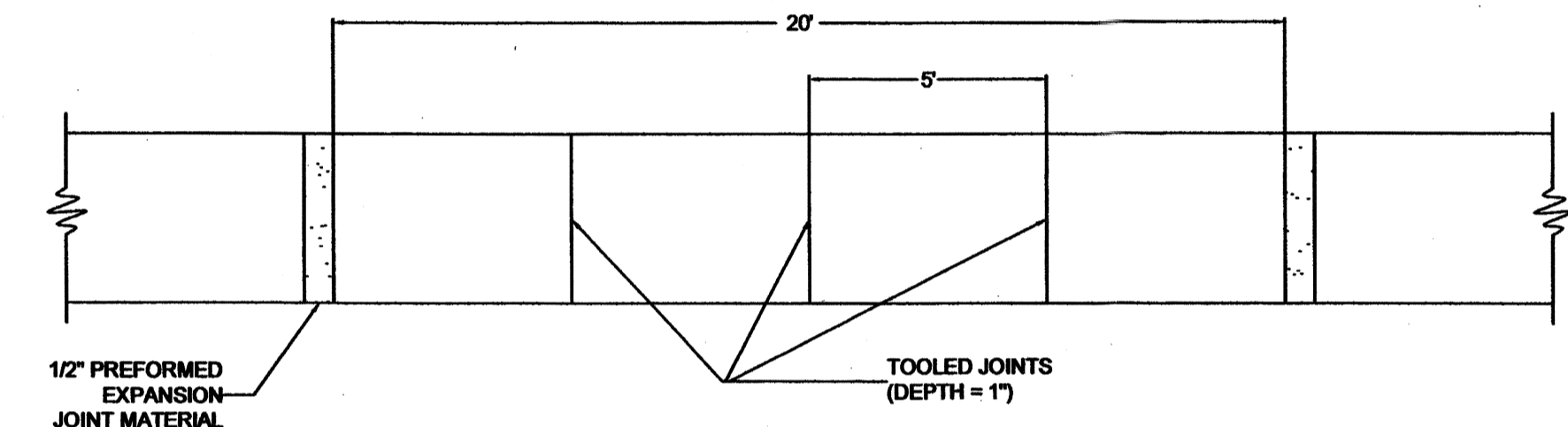
**INFILTRATION CURTAIN DRAIN SECTION**  
N.T.S.



**PARKING LOT SECTION**  
N.T.S.

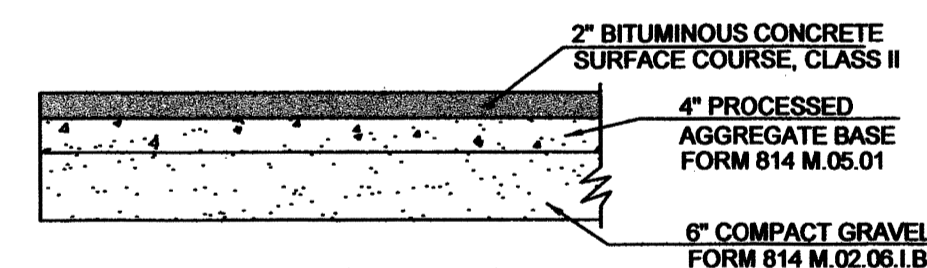
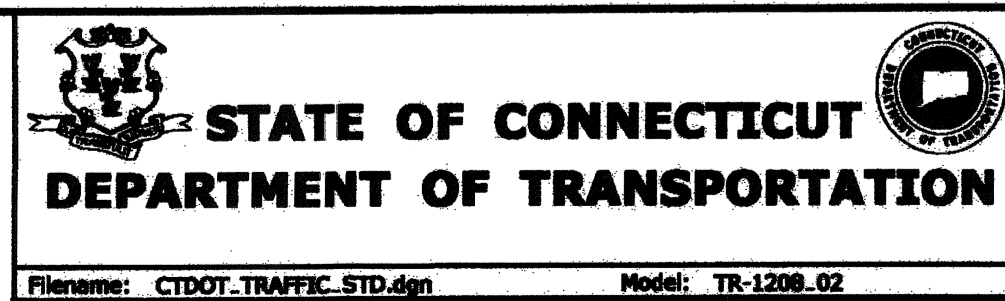
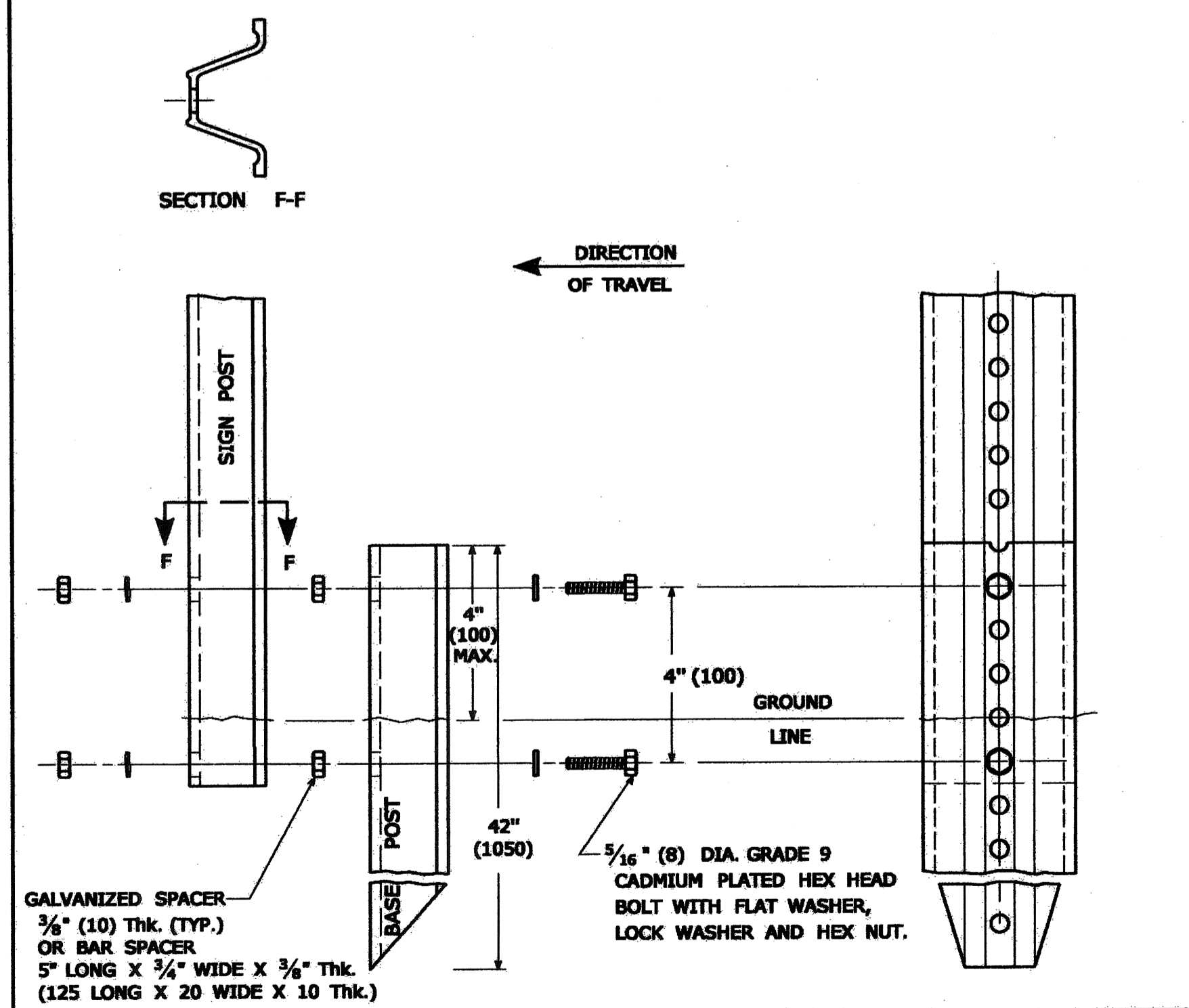


**BITUMINOUS CONCRETE LIP CURB**  
N.T.S.



**TYPICAL CONCRETE SIDEWALK DETAIL**  
N.T.S.

**BREAKAWAY TYPE II INSTALLATION**  
FOR 3 & 4 LB. POSTS  
(FOR 4.5 & 6.0 kg/m POSTS)



**BITUMINOUS SIDEWALK SECTION**  
N.T.S.

APPROVED BY THE EAST HAMPTON PLANNING & ZONING COMMISSION

FINAL APPROVAL: \_\_\_\_\_ CHAIRMAN

DATE: \_\_\_\_\_

EXPIRATION DATE: \_\_\_\_\_

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REVISIONS			
NO.	DESCRIPTION	BY	DATE
1	SIDEWALK DETAIL	P.B.	11-20-20

#29 MIDDLE HADDAM ROAD  
EAST HAMPTON, CT.

PROPERTY OF:  
**Z, INCORPORATED**

DESIGNED BY: P.M.B.	DETAIL SHEET	PROJECT NO. 1131-01
DRAWN BY: S.M.S.		SHEET NO. 3 OF 4
CHECKED BY: P.M.B.		SCALE: —
APPROVED BY:		DATE: 07 OCT. 2020

BASCOM & BENJAMIN, LLC  
SURVEYING and ENGINEERING CONSULTANTS  
300 MAIN STREET DURHAM, CONN  
TEL. (860) 349 - 1678

**TIMBER CUTTING PLAN**

TREE CUTTING AND REMOVAL ACTIVITIES WILL BE LIMITED TO THAT NECESSARY FOR CONSTRUCTION OF THE ROADWAYS, STORM DRAINAGE IMPROVEMENTS, STORMWATER DETENTION AREAS, PONDS, DRIVEWAYS, SUBSURFACE SEWAGE DISPOSAL SYSTEMS, WELLS, PARKING LOTS, BURIED AND ABOVE-GROUND UTILITIES, STRUCTURES, AND SURROUNDING AREAS SO AS TO PREVENT POTENTIAL DAMAGE FROM FALLING TREES AND LIMBS.

**PURPOSE - EROSION CONTROL**

ALL CONSTRUCTION ACTIVITIES INVOLVING THE REMOVAL OR DEPOSITION OF SOIL ARE TO BE PROVIDED WITH APPROPRIATE PROTECTIVE MEASURES IMMEDIATELY FOLLOWING THE SOIL DISTURBANCE TO MINIMIZE EROSION OF, AND CONTAIN SEDIMENT DEPOSITION WITHIN, THE AREA UNDER DEVELOPMENT. THOSE METHODS DEEMED MOST EFFECTIVE ARE DESCRIBED HEREIN. ALL METHODS USED SHALL BE IN ACCORDANCE WITH THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL DATED 2002 OR AS AMENDED.

**GENERAL GUIDELINES - EROSION CONTROL**

- OTHER THAN THAT CONSTRUCTION SPECIFICALLY SHOWN ON THESE APPROVED PLANS, NO ACTIVITIES SHALL BE CONDUCTED WITHIN DESIGNATED WETLAND AREAS, WATERCOURSES, FLOOD PLAINS, OR WITHIN CHANNEL ENCROACHMENT LINES WITHOUT THE PRIOR APPROVAL OF THE TOWN OF PORTLAND PLANNING AND ZONING COMMISSION AND/OR INLAND WETLANDS COMMISSION.
- WHEREVER FEASIBLE AND WHERE INDICATED ON THESE DRAWINGS, NATURAL VEGETATION AND SOIL CONDITIONS SHALL BE RETAINED FROM DAMAGE OR REMOVAL AND PROTECTED.
- ONLY THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME DURING CONSTRUCTION AND SHALL UTILIZE TEMPORARY EROSION CONTROL METHODS UNTIL FINAL GRADING AND PLANTINGS ARE IN PLACE.
- PRIOR TO THE START OF CONSTRUCTION, TEMPORARY BALED HAY EROSION CHECKS, SEDIMENTATION FENCES AND OTHER APPROVED SEDIMENT CONTROL MEASURES SHALL BE IN PLACE WHERE SHOWN ON THESE PLANS AND AT OTHER LOCATIONS WHERE DEEMED NECESSARY BY THE PROJECT ENGINEER OR TOWN OFFICIAL.
- WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE PERIOD OF EXPOSURE SHALL BE KEPT TO A MINIMUM. INSTALLING PERMANENT AND FINAL VEGETATION, STRUCTURES, ETC., AT THE EARLIEST POSSIBLE OPPORTUNITY WITHIN 48 HOURS OF BEING GRADED.
- CONSTRUCTION EQUIPMENT SHALL NOT UNNECESSARILY CROSS LIVE STREAMS EXCEPT BY MEANS OF BRIDGES, CULVERTS OR OTHER APPROVED MEANS NOR SHALL EQUIPMENT CROSS AREAS NOTED AS TO BE UNDISTURBED OR LEACHING SYSTEM AREAS.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL REMAIN IN PLACE AND MAINTAINED REGULARLY IN PROPERLY FUNCTIONING CONDITION, UNTIL ALL AREAS EXPOSED DURING SITE CONSTRUCTION HAVE BEEN FULLY STABILIZED WITH PERMANENT OR TEMPORARY STRUCTURES AND/OR FINAL VEGETATIVE COVER.
- CUT AND FILL SLOPES SHALL NOT BE STEEPER THAN 2:1 UNLESS STABILIZED BY A RETAINING WALL, CRIBBING OR OTHER APPROVED METHOD.
- ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATER FROM DAMAGING THE CUT FACE OF EXCAVATION OR THE SLOPING SURFACES OF FILLS USING SWALES OR SILT FENCE/HAYBALE DIVERSIONS AWAY FROM CUT SLOPES.
- FILL SHALL BE PLACED AND COMPACTED SO AS TO MINIMIZE SLIDING OR EROSION OF THE SOIL.

**SEDIMENT BARRIERS**

TO INTERCEPT AND RETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED OR UNPROTECTED AREAS OF LIMITED EXTENT.

- PURPOSE**  
TO INTERCEPT AND RETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED OR UNPROTECTED AREAS OF LIMITED EXTENT.
- INSTALLATION REQUIREMENTS**

SEDIMENT BARRIERS MAY CONSIST OF FILTER FENCE, STRAW OR HAYBALES, STONE BERMS, OR OTHER FILTER MATERIALS. PLANNED LIFE SPAN OR SEDIMENT BARRIERS VARIES. STRAW OR HAYBALES SHOULD ONLY BE USED AS A TEMPORARY BARRIER FOR NO LONGER THAN 90 DAYS. SYNTHETIC FILTER FENCES CAN BE USED FOR 90 DAYS OR LONGER DEPENDING ON ULTRAVIOLET STABILITY AND MANUFACTURER'S RECOMMENDATIONS. STONE BARRIERS CAN BE USED FOR LONGER PERIODS OF TIME.

**A. STRAW/HAYBALES**

- SHEET FLOW APPLICATIONS**
  - BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE ON THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ADJUTING ONE ANOTHER.
  - ALL BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED. BALES SHALL BE INSTALLED SO THAT BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES TO PREVENT DETERIORATION OF THE BINDINGS.

SOME SILT FENCES DO NOT REQUIRE A WIRE BACKING. CONSULT MANUFACTURER'S INSTRUCTIONS FOR PROPER INSTALLATION REQUIREMENTS.

**2. INSTALLATION REQUIREMENTS**

THIS SEDIMENT BARRIER UTILIZES BURLAP OR STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS. IT IS DESIGNED FOR SITUATIONS IN WHICH ONLY SHEET OR OVERLAND FLOWS ARE EXPECTED. IN SPECIAL CASES BURLAP MAY BE USED IN DRAINAGEWAY.

- THE HEIGHT OF THE BARRIER SHALL NOT EXCEED 36 INCHES (HIGHER BARRIERS MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE). THE FILTER FENCE SHALL BE PLACED 10 FEET AWAY FROM THE TOE OF SLOPE, OR AS SHOWN ON THE PLANS.
- WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6 INCH OVERLAP, AND SECURELY SECURED. SEE MANUFACTURER'S RECOMMENDATIONS.
- POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL BE AS MANUFACTURER RECOMMENDS.
- A TRENCH SHALL BE EXCAVATED APPROXIMATELY 6 INCHES WIDE AND 6 INCHES ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG. THE WIRES OR HOG RINGS, THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

c. THE BARRIER SHALL BE TRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED THE WIDTH OF A BALE AND THE LENGTH OF THE PROPOSED BARRIER TO A MINIMUM DEPTH OF 4 INCHES. AFTER THE BALES ARE STAPLED AND CHINKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AGAINST THE BARRIER. BACKFILL SOIL SHALL CONFORM TO THE GROUND LEVEL ON THE DOWNHILL SIDE AND SHALL BE BUILT UP TO 4 INCHES AGAINST THE UPHILL SIDE OF THE BARRIER. BALES SHOULD BE PLACED 10 FEET AWAY FROM TOE OF SLOPE OR AS SHOWN ON THE PLANS.

d. EACH BALE SHALL BE SECURELY ANCHORED BY AT LEAST TWO STAKES OR BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY Laid BALE TO FORCE THE BALES TOGETHER. STAKES OR BARS SHALL BE DRIVEN DEEP ENOUGH INTO THE GROUND TO SECURELY ANCHOR THE BALES.

e. THE GAPS BETWEEN BALES SHALL BE CHINKED (FILLED BY WEDGING) WITH STRAW TO PREVENT WATER FROM ESCAPING BETWEEN THE BALES. (LOOSE STRAW SCATTERED OVER THE AREA IMMEDIATELY UPHILL FROM A STRAW BALE BARRIER TENDS TO INCREASE BARRIER EFFICIENCY).

**2. CHANNEL FLOW APPLICATIONS**

- BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE, ORIENTED PERPENDICULAR TO THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ADJUTING ONE ANOTHER.
- THE REMAINING STEPS FOR INSTALLING A BALE BARRIER FOR SHEET FLOW APPLICATIONS APPLY HERE, WITH THE FOLLOWING ADDITION.
- THE BARRIER SHALL BE EXTENDED TO SUCH A LENGTH THAT THE BOTTOMS OF THE END BALES ARE HIGHER IN ELEVATION THAN THE TOP OF THE LOWEST MIDDLE BALE. TO ASSURE THAT SEDIMENT LADEN RUNOFF WILL FLOW EITHER THROUGH OR OVER THE BARRIER BUT NOT AROUND IT.

**3. MAINTENANCE**

- INSPECTION SHALL BE MADE AFTER EACH STORM EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- CLEAN OUT OF ACCUMULATED SEDIMENT BEHIND THE BALES IS NECESSARY IF 1/2 OF THE ORIGINAL HEIGHT OF THE BALES BECOMES FILLED IN WITH SEDIMENT.
- BALE BARRIERS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.

**B. FILTER FENCES**

- MATERIALS**
  - SYNTHETIC FILTER FABRIC

SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE FILAMENTS AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE FOLLOWING REQUIREMENTS:

PHYSICAL PROPERTY	REQUIREMENTS
FILTERING EFFICIENCY	75% (MIN.)
TENSILE STRENGTH AT 20% (MAX) ELONGATION	EXTRA STRENGTH 50 LBS./LIN. IN. (MIN.) STANDARD STRENGTH 30 LBS./LIN. IN. (MIN.)
FLOW RATE (MIN)	0.3 GAL./SQ. FT./MIN.

- SYNTHETIC FILTER FABRIC REQUIREMENTS  
BURLAP SHALL BE 10 OUNCE PER SQUARE YARD FABRIC.

POSTS FOR FILTER FENCES SHALL BE EITHER 2X3 OR 2X4 INCH STUDS OR 0.5 POUNDS (MINIMUM) PER LINEAR FOOT STEEL WITH A MINIMUM LENGTH OF 5 FEET. STEEL POSTS SHALL HAVE PROJECTIONS FOR FASTENING WIRE TO THEM.

STAKES FOR FILTER FENCES SHALL BE 1" X 2" WOOD OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 4 FEET.

WIRE FABRIC REINFORCEMENT FOR SILT FENCES USING STANDARD STRENGTH FILTER CLOTH SHALL BE A MINIMUM OF 42 INCHES IN HEIGHT, A MINIMUM OF 14 GAUGE AND SHALL HAVE A MAXIMUM MESH SPACING OF 6 INCHES.

SOME SILT FENCES DO NOT REQUIRE A WIRE BACKING. CONSULT MANUFACTURER'S INSTRUCTIONS FOR PROPER INSTALLATION REQUIREMENTS.

- PURPOSE**  
TO PROVIDE A SUITABLE GROWTH MEDIUM FOR FINAL SITE STABILIZATION WITH VEGETATION. TOPSOIL FOR FINAL SITE GRADING SHALL BE TO A 4" MINIMUM DEPTH AFTER COMPACTON.

f. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED, WIRED OR TIED TO THE WIRE FENCE, AND 8 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.

g. WHEN EXTRA STRENGTH FILTER FABRIC OR BURLAP AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED, WIRED, OR TIED DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF ITEMS NO. 1 APPLYING.

h. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER.

**3. MAINTENANCE**

- FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
- SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE REMOVED BEFORE THEY REACH ONE-HALF THE HEIGHT OF THE BARRIER.
- FILTER BARRIERS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
- ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

**C. WOODCHIP BERM**

WHERE READILY AVAILABLE COARSE WOOD OR BARK CHIPS CAN BE USED TO CREATE EROSION BARRIERS AND SMALL SURFACE RUNOFF DETENTION AREAS. A BERM 1-2 FEET HIGH AND 3-4 FEET WIDE AT ITS BASE PLACED ALONG THE CONTOUR WILL FUNCTION SIMILAR TO THE HAY BALES AND FILTER FENCES.

A BERM OF THIS MATERIAL PLACED AGAINST THE DOWNHILL SIDE OF A ROW OF HAYBALES OR FILTER FENCE WILL GREATLY STRENGTHEN THESE BARRIERS AND PROVIDE ADDITIONAL FILTERING OF SEDIMENTS.

**D. STONE CHECK DAMS**

THE STONE SHALL BE 2-3 INCHES IN DIAMETER.

**1. INSTALLATION REQUIREMENTS**

THE STONE SHALL BE PILED TO A NATURAL ANGLE OF REPOSE WITH A HEIGHT OF AT LEAST 2 FEET AND SHALL BE CONSTRUCTED SO WATER CANNOT BYPASS THE BARRIER AROUND THE ENDS.

**2. MAINTENANCE**

INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED. THE BARRIER SHALL BE REMOVED WHEN IT HAS SERVED ITS USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

**LAND GRADING**

**1. PURPOSE**

TO PREPARE SUITABLE SITES FOR AGRICULTURAL USES, COMMERCIAL, INDUSTRIAL, RESIDENTIAL AND RECREATIONAL DEVELOPMENTS. LAND GRADING IS ALSO USED TO IMPROVE SURFACE DRAINAGE AND TO CONTROL EROSION.

**2. INSTALLATION REQUIREMENTS**

- ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THIS SEDIMENT CONTROL PLAN UNTIL THEY ARE PERMANENTLY STABILIZED.
- ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THIS SEDIMENT CONTROL PLAN.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AN AMOUNT NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS.
- AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL.
- AREAS ARE TO BE TOPSOILED IN ACCORDANCE WITH SECTION H OR AS OTHERWISE SPECIFIED.
- ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SEDIMENTATION OR OTHER RELATED PROBLEMS.
- ALL FILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED EIGHT INCHES IN THICKNESS.
- FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, LOGS, STUMPS, BUILDING DEBRIS AND OTHER OBJECTIONABLE MATERIAL THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION.
- WHERE SEEPS OR SPRINGS ARE ENCOUNTERED DURING CONSTRUCTION SUBSURFACE DRAINAGE SHALL BE PROVIDED AND THE ENGINEER SHALL BE CONTACTED.
- ALL ROUGH GRADED AREAS SHALL BE TEMPORARILY MULCHED OR VEGETATED AND STABILIZED WITHIN 15 DAYS OF BEING GRADED AND THEN PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.

**3. MAINTENANCE**

ALL STRUCTURAL, NON STRUCTURAL AND VEGETATIVE SEDIMENT AND EROSION CONTROL PRACTICES IMPLEMENTED DURING LAND GRADING OPERATIONS SHALL BE MAINTAINED ACCORDING TO REQUIREMENT OUTLINED ON THIS PLAN AND IN ACCORDANCE WITH THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.

**TOPSOILING**

TO PROVIDE A SUITABLE GROWTH MEDIUM FOR FINAL SITE STABILIZATION WITH VEGETATION. TOPSOIL FOR FINAL SITE GRADING SHALL BE TO A 4" MINIMUM DEPTH AFTER COMPACTON.

- PURPOSE**  
TO PROVIDE A SUITABLE GROWTH MEDIUM FOR FINAL SITE STABILIZATION WITH VEGETATION. TOPSOIL FOR FINAL SITE GRADING SHALL BE TO A 4" MINIMUM DEPTH AFTER COMPACTON.

REFER TO COUNTY SOIL SURVEY REPORT FOR SOIL TEXTURES AT THE SITE.

**2. INSTALLATION REQUIREMENTS**

**A. MATERIALS**

SITE INVESTIGATIONS SHALL BE MADE TO DETERMINE IF THERE IS SUFFICIENT TOPSOIL OF GOOD QUALITY TO JUSTIFY STRIPPING. HIGH QUALITY TOPSOIL SHALL BE FRAGILE, ORGANIC, AND LOAMY (LOAM, SANDY LOAM, SILT LOAM, SANDY CLAY LOAM, CLAY LOAM). OTHER SOIL TYPES WITH HIGH ORGANIC CONTENT MAY BE FOUND SUITABLE AFTER TESTING. IT SHALL BE FREE OF DEBRIS, TRASH, STUMPS, ROCKS, ROOTS, AND NOXIOUS WEEDS. IT SHALL GIVE EVIDENCE OF BEING ABLE TO SUPPORT HEALTHY VEGETATION. IT SHALL CONTAIN NO SUBSTANCE THAT IS POTENTIALLY TOXIC TO PLANT GROWTH.

**B. STRIPPING**

STRIPPING SHALL BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA OR AS SHOWN ON THESE DRAWINGS. A 4 TO 6 INCH STRIPPING DEPTH IS COMMON, BUT DEPTH MAY VARY DEPENDING ON THE PARTICULAR SOIL. ALL PERMETER DIKES, BASINS, AND OTHER SEDIMENTS CONTROLS SHALL BE IN PLACE PRIOR TO STRIPPING.

**C. STOCKPILING**

TOPSOIL SHALL BE STOCKPILED IN SUCH A MANNER THAT NATURAL DRAINAGE IS NOT OBSTRUCTED AND NO OFF-SITE SEDIMENT DAMAGE SHALL RESULT.

**D. SIDE SLOPES**

SIDE SLOPES OF THE STOCKPILE SHALL NOT EXCEED 2 TO 1 (2 HORIZONTALLY TO 1 VERTICALLY).

**E. SEDIMENT BARRIER**

SEDIMENT BARRIER SHALL SURROUND ALL TOPSOIL STOCKPILES.

**F. TEMPORARY SEEDING**

TEMPORARY SEEDING OF STOCKPILES SHALL BE COMPLETED WITHIN 15 DAYS OF THE FORMATION OF THE STOCKPILE IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE COVER REQUIREMENTS IN THIS EROSION CONTROL PLAN.

**G. SITE PREPARATION**

BEFORE TOPSOILING, ESTABLISH NEEDED EROSION AND SEDIMENT CONTROL MEASURES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, WATERWAYS, SEDIMENT BASINS, ETC. THESE MEASURES MUST BE MAINTAINED DURING TOPSOILING.

**H. GRADING**

PREVIOUSLY ESTABLISHED GRADES ON THE AREAS TO BE TOPSOILED SHALL BE MAINTAINED ACCORDING TO THE APPROVED PLANS.

**I. BONDING**

AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, AND IMMEDIATELY PRIOR TO SPREADING THE TOPSOIL, THE SUBGRADE SHALL BE LOOSENEED BY DISCING OR SCARIFYING TO A DEPTH OF AT LEAST 2 INCHES TO ENSURE BONDING OF THE TOPSOIL AND SUBSOIL.

**J. APPLYING TOPSOIL**

TOPSOIL SHALL NOT BE PLACED DURING FROZEN OR MUDDY CONDITIONS, WHEN THE SUBGRADE IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING OR PROPOSED SOODING OR SEEDING. THE TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED TO A MINIMUM COMPACTED DEPTH OF 4 INCHES. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.

IT IS NECESSARY TO COMPACT THE TOPSOIL ENOUGH TO ENSURE GOOD CONTACT WITH THE UNDERLYING SOIL AND TO OBTAIN A UNIFORM FIRM SEEDBED FOR THE ESTABLISHMENT OF A HIGH MAINTENANCE TURF. HOWEVER, UNDER COMPACTON IS TO BE AVOIDED AS IT INCREASES RUNOFF VELOCITY AND VOLUME, AND PREVENTS SEED GERMINATION.

**K. LIMING & FERTILIZING**

WHERE THE PH OF THE SUBSOIL IS 6.0 OR LESS, GROUND AGRICULTURAL LIMESTONE SHALL BE SPREAD IN ACCORDANCE WITH THE SOIL TEST OR THE VEGETATIVE ESTABLISHMENT PRACTICE BEING USED. A COMMERCIAL FERTILIZER FORMULATED FOR NEW SEED GROWTH SHALL BE APPLIED.

**TEMPORARY SEEDING**

1. TEMPORARY SEED MIXTURE	
ANNUAL/PERENNIAL RYEGRASS	40 LBS/AC, 1.0 LBS/1000 SF
WINTER RYE	40 LBS/AC, 1.0 LBS/1000 SF
SEEDING DATES:	3/1-4/15, 8/1-10/1
OPTIMUM SEEDBED DEPTH	0.5 INCHES

**PERMANENT VEGETATIVE COVER**

- PURPOSE**  
TO PERMANENTLY STABILIZE THE SOIL, TO REDUCE DAMAGES FROM SEDIMENT AND RUNOFF AND TO ENHANCE THE ENVIRONMENT.

**2. INSTALLATION REQUIREMENTS**

**A. SITE PREPARATION**

GRADE AS NEEDED AND WHERE FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH THESE PLANS.

**B. SEEDBED PREPARATION**

- APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS SUCH AS THOSE OFFERED BY THE UNIVERSITY OF CONNECTICUT SOIL TESTING LABORATORY. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 300 POUNDS PER ACRE OR 1.5 POUNDS PER 1,000 SQUARE FEET USING 10-10-10 OR EQUIVALENT. IN ADDITION, 300 POUNDS OF 38-0-0 PER ACRES OR EQUIVALENT OF SLOW RELEASE NITROGEN MAY BE USED FOR TOP DRESSING. APPLY GROUND LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AS FOLLOWS:

SOIL TEXTURE	PERMANENT TONS/AC	TEMPORARY TONS/AC
CLAY, CLAY LOAM AND HIGH ORGANIC SOIL	4	180
SANDY LOAM, LOAM, SILT LOAM	3	135
LOAMY SAND, SAND	2	90

REFER TO COUNTY SOIL SURVEY REPORT FOR SOIL TEXTURES AT THE SITE.

- WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
- REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, TRASH, STUMPS, ROCKS, ROOTS, AND NOXIOUS WEEDS. SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLOS, LUMPS OR OTHER UNSUITABLE MATERIAL.
- INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AND FIRMED AS ABOVE.

**C. SEEDING DATES**

SPRING SEEDINGS USUALLY GIVE THE BEST RESULTS. SPRING SEEDINGS OF ALL SEED MIXES WITH LEGUMES IS RECOMMENDED, HOWEVER, LATE SUMMER SEEDINGS PRIOR TO SEPTEMBER 1 CAN BE MADE. WHEN CROWN VETCH IS SEEDING IN LATE SUMMER AT LEAST 34 PERCENT OF THE SEED SHOULD BE HARD SEED (UNSCARIFIED). THE RECOMMENDED SEEDING DATES ARE:

APRIL 1 THROUGH JUNE 1  
SEPTEMBER 15 THROUGH SEPTEMBER 1

**D. SEEDING PERMANENT GRASS**

- FOR GENERAL LAND APPLICATIONS THE FOLLOWING PERMANENT SEED MIXTURES SHALL BE USED AT A TOTAL OF 5.0 LBS/1000 SF. REFER TO FIGURES 6-2 AND 6-3 IN THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL".

CREeping RED FESCUE	43.6 LBS/ACRE	1.3 LBS/1000 SF
RED TOP	4.4 LBS/ACRE	0.2 LBS/1000 SF
TALL FESCUE OR SMOOTH	43.6 LBS/ACRE	1.0 LBS/1000 SF
BROMEGRASS	87 LBS/ACRE	2.5 LBS/1000 SF
TOTAL	5.0 LBS/1000 SF	

- APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OF HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM 1/4 TO 1/2 INCH. HYDROSEEDINGS WHICH ARE MULCHED MAY BE LEFT ON SOIL SURFACE.
- WHERE FEASIBLE, EXCEPT WHERE EITHER A CULTIPACKER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG. SEEDING OPERATIONS SHOULD BE ON THE CONTOUR.
- FROST CRACK SEEDING CAN BE USED. FROST CRACK SEEDING MUST BE DONE IN LATE WINTER OR EARLY SPRING. SUITABLE WEATHER CONDITIONS ARE FREEZING NIGHTS AND THAWING DAYS WITH LITTLE OR NO SNOW COVER. SEEDING RATE MUST BE INCREASED 10 PERCENT WHEN USING THIS METHOD.
- HYDRAULIC APPLICATION (HYDROSEEDING), IS A SUITABLE METHOD FOR USE ON CRITICAL AREAS. WHEN HYDROSEEDING, A SEEDBED IS PREPARED IN THE CONVENTIONAL WAY OR BY HAND RAINING TO LOOSEN AND SMOOTH THE SOIL AND TO REMOVE SURFACE STONES LARGER THAN SIX INCHES IN DIAMETER. SLOPES MUST BE NO STEEPER THAN 2 TO 1 (2 FEET HORIZONTALLY TO 1 FOOT VERTICALLY). LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF FIBER MULCH ON CRITICAL AREAS IS NOT RECOMMENDED UNLESS IT IS USED TO HOLD STRAW OR HAY). FIBER MULCH DOES NOT PROVIDE ADEQUATE SEEDBED PROTECTION. BETTER PROTECTION IS GAINED BY USING STRAW MULCH AND HOLDING IT WITH ADHESIVE MATERIALS OR 500 POUNDS PER ACRE OF WOOD FIBER MULCH. SEEDING RATES MUST BE INCREASED 10 PERCENT WHEN HYDROSEEDING.

6. APPLY MULCH ACCORDING TO THE TEMPORARY MULCHING MEASURES.

- IF SEEDING CANNOT BE DONE WITH THE SEEDING DATES, USE THE TEMPORARY MULCHING MEASURE TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.

**E. MAINTENANCE**

- LIME ACCORDING TO SOIL TEST OR AT A MINIMUM OF EVERY FIVE YEARS USING A RATE OF TWO TONS PER ACRE (100 POUNDS PER 1,000 SQUARE FEET).
- WHERE GRASSES PREDOMINATE, FERTILIZE ACCORDING TO A SOIL TEST OR BROADCAST BIENNIALY, 300 POUNDS OF 10-10-10 OR EQUIVALENT PER ACRE (7.5 POUNDS PER 1,000 SQUARE FEET).
- WHERE LEGUMES PREDOMINATE, FERTILIZE ACCORDING TO A SOIL TEST OR BROADCAST EVERY THREE YEARS 300 POUNDS OF 0-20-20 OR EQUIVALENT PER ACRE (7.5 POUNDS PER 1,000 SQUARE FEET).

**TEMPORARY MULCHING**

- PURPOSE**  
TO PREVENT EROSION OF ROUGH GRADED AREAS BY PROTECTING THE EXPOSED SOIL SURFACE AND TO AID IN THE GROWTH OF VEGETATION BY CONSERVING AVAILABLE MOISTURE, CONTROLLING WEEDS, AND PROVIDING PROTECTION AGAINST EXTREME HEAT AND COLD.

**ORGANIC MULCHES, AND NETSMATTING ARE CHOICES FOR THESE MATERIALS.**

**2. INSTALLATION REQUIREMENTS**

**A. ORGANIC MULCHES**

ORGANIC MULCHES MAY BE USED IN ANY AREA WHERE MULCH IS REQUIRED, SUBJECT TO SPACE THE RESTRICTIONS NOTED IN THE TABLE BELOW.

**ORGANIC MULCH MATERIALS AND APPLICATION RATES**

MULCHES	PER ACRE	PER 1000 FT	NOTES
STRAW OR HAY	1.5-2 TONS	75-90 LBS	FREE FROM WEEDS AND COARSE HAY MATTER. MUST BE ANCHORED BY TRACKING. SPREAD WITH MULCH BLOWER OR BY HAND.
WOOD FIBER	1000		