

NEW YORK STATE ROUTE NO. 443 (A.K.A. STATE HIGHWAY NO. 41) (A.K.A. DELAWARE AVENUE) (VARIABLE WIDTH)

GENERAL NOTES AND SPECIFICATIONS

- I. GENERAL INFORMATION
 - A. UPON COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY, THE SITE SHALL BE IMMEDIATELY SEED, MULCHED OR OTHERWISE PROTECTED FROM ACCELERATED EROSION.
 - B. AREAS THAT FAIL TO GERMINATE MUST BE RESEED.
 - C. WHERE DISTURBED AREAS ARE DIFFICULT TO STABILIZE, NETTING SHOULD BE USED TO HOLD SEED AND MULCH IN PLACE; THIS IS ESPECIALLY IMPORTANT AROUND WATERCOURSES, IN SWALES AND AREAS OF CONCENTRATED FLOW, AND ON STEEP SLOPES.
 - D. ALL EROSION AND SEDIMENTATION POLLUTION (ES&P) CONTROLS MUST BE PROPERLY MAINTAINED AND CLEANED OR REDEMOLISHED WHEN NECESSARY, UNTIL THE SITE IS STABILIZED.
 - E. IF AT ANY TIME PRIOR TO SITE STABILIZATION ANY ES&P PROBLEMS OCCUR WHICH REQUIRE ADDITIONAL CONTROLS, IMMEDIATE ACTION MUST BE TAKEN TO CORRECT THE PROBLEMS.
 - F. NO SEDIMENT OR SEDIMENT LADEN WATER MUST BE ALLOWED TO LEAVE THE SITE WITHOUT FIRST BEING PROPERLY FILTERED.
 - G. ANY SEDIMENT THAT IS TRACKED ONTO THE ROAD MUST BE CLEANED OFF BEFORE THE END OF THE DAY.
 - H. CONTRACTOR SHALL NOTIFY ALBANY COUNTY OF DISPOSAL METHOD AND LOCATION OF EXISTING PAVING TO BE REMOVED FROM SITE.
- II. STANDARD FOR STABILIZATION WITH MULCH
 - A. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE.
 - B. GRADE AS NEEDED AND FEASIBLE. SEE STANDARD FOR LAND GRADING.
 - C. PROTECTIVE MATERIALS TO BE USED:
 1. UNROTTED SMALL-CRAN STRAW OR HAY AT 3.0 TONS PER ACRE SPREAD UNIFORMLY AT 137 POUNDS PER 1000 SQUARE FEET AND ANCHORED WITH 1500 MULCH BINDER OR
 2. WOOD-FIBER OR PAPER-FIBER MULCH AT A RATE OF 1500 POUNDS PER ACRE MAY BE APPLIED BY A HYDROSEEDER OR HYDROMULCHER. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.
 - D. LIQUID MULCH BINDERS:
 1. APPLY IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. IF EMULSION ASPHALT (ES-1, CS-1, CR-2, WS-2, RS-1, RS-2, CS-1 AND CR-2), APPLY 0.04 GAL/SQ. YD. OR 194 GAL/ACRE ON FLAT SLOPES LESS THAN 8% HIGH, ON SLOPES 8% OR MORE HIGH USE 0.075 GAL/SQ. YD. OR 363 GAL/ACRE.
- III. STANDARD FOR LAND GRADING
 - A. DEFINITION: RESHAPING THE GROUND SURFACE BY GRADING TO PLANNED GRADES WHICH ARE DETERMINED BY TOPOGRAPHIC SURVEY AND LAYOUT.
 1. PROVISIONS SHALL BE MADE TO SAFELY CONDUCT SURFACE WATER TO STORM DRAINS OR SATISFACTORY WATER COURSES AND TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FULL SLOPES.
 2. ADJACENT PROPERTY SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS.
 - B. INSTALLATION REQUIREMENTS
 1. TIMBER, LOGS, BRUSH, RUBBISH, ROCKS, STUMPS AND VEGETABLE MATTER WHICH WILL INTERFERE WITH THE GRADING OPERATION OR AFFECT THE PLANNED STABILITY OF FULL AREAS SHALL BE REMOVED AND DISPOSED.
 2. FILL MATERIAL IS TO BE FREE OF BRUSH, RUBBISH, TIMBER, LOGS, VEGETABLE MATTER AND STUMPS IN ANY MANNER THAT WILL BE DETERMINED BY THE ENGINEER FOR THE PROJECT.
 3. ALL FILLS SHALL BE COMPACTED SUFFICIENTLY FOR THEIR INTENDED PURPOSE AND AS REQUIRED TO REDUCE SLIPPING, EROSION OR EXCESS SATURATION.
 4. ALL DISTURBED AREAS SHALL BE LEFT WITH A NEAT AND FINISHED APPEARANCE AND SHALL BE PROTECTED FROM EROSION.
 5. SEE I.A.
- IV. STANDARD FOR PERMANENT STABILIZATION WITH SOD
 - A. METHODS AND MATERIALS
 1. CULTIVATED SOD IS PREFERRED OVER NATIVE OR PASTURE SOD. SPECIFY "CULTIVATED SOD" OR OTHER HIGH QUALITY CULTIVATED SOD.
 2. SOD SHOULD BE FREE OF WEEDS AND UNDERGROWTH. COARSE WEEDY GRASSES, STRAW SHOULD BE OF UNIFORM THICKNESS, APPROXIMATELY 5/8" HIGH, PANS OR MINUS 1/4" INCH, AT TIME OF CUTTING. (EXCLUDES TOP GROWTH).
 3. SOD SHOULD BE VIGOROUS AND DENSE AND BE ABLE TO RETAIN ITS OWN SHAPE AND WEIGHT WHEN SUSPENDED VERTICALLY WITH A FIRM GRASS FROM THE UPPER 10% OF THE STRIP. BROKEN PADS OR TORN AND UNEVEN ENDS WILL NOT BE ACCEPTABLE.
 4. FOR DROUGHTY SITES A SOD OF KENTUCKY 31 PERSUE AND BLUEGRASS IS PREFERRED OVER A STRAIGHT BLUEGRASS SOD.
 5. ONLY MOST FRESH UNKILLED SOD SHOULD BE USED. SOD SHOULD BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS, OTHERWISE IT SHALL BE REJECTED.
 - B. SITE PREPARATION: SEE STANDARD FOR LAND GRADING
 - C. SOIL PREPARATION: SEE SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER
 - D. SOD PLACEMENT
 1. SOD STRIPS SHOULD BE LAID ON THE CONTOUR, NEVER UP AND DOWN THE SLOPE, STARTING AT THE BOTTOM OF THE SLOPE AND WORKING UP. ON STEEP SLOPES, THE USE OF LADDERS WILL FACILITATE THE WORK AND PREVENT DAMAGE TO THE SOD. DURING PERIODS OF HIGH TEMPERATURE, LIGHTLY IRRIGATE THE SOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
 2. PLACE SOD STRIPS WITH SING JOINTS THAT ARE STAGGERED. OPEN SPACES:
 - a. RW/VEGETATION:
 1. SOD STRIPS SHOULD BE PLACED TO INSURE SOLID CONTACT OF ROOT MAT AND SOIL SURFACE. DO NOT OVERLAP SOD. ALL JOINTS SHOULD BE BUTTED TIGHTLY IN ORDER TO PREVENT VOID WHICH WOULD CAUSE DRYING OF THE ROOTS.
 2. ON SLOPES GREATER THAN 3 TO 1, SECURE SOD TO SURFACE SOIL WITH WOOD PEGS, WIRE STAPLES, OR SPLIT SHANKS (8 TO 10 INCHES LONG BY 3/8 INCH WOOD).
 - b. FLAT:
 1. SECURE SOD TO SURFACE SOIL WITH WIRE STAPLES OR SPLIT SHANKS, PROPERLY SECURED ALONG THE CROWN OF THE SOD AND EDGES WILL PROVIDE EXTRA PROTECTION AGAINST LIFTING AND UNDERROUTING OF SOD. THE SAME TECHNIQUE CAN BE USED TO ANCHOR SOD IN WATER-CROSSING CHANNELS AND OTHER CRITICAL AREAS. WIRE STAPLES MUST BE USED TO ANCHOR NETTING IN CHANNEL WORK.
 3. IMMEDIATELY FOLLOWING INSTALLATION, SOD SHOULD BE WATERED UNTIL MOISTURE PENETRATES THE SOIL LAYER BENEATH SOD TO A DEPTH OF 4 INCHES. MAINTAIN OPTIMUM MOISTURE FOR AT LEAST TWO WEEKS.
 - E. TOPDRESSING
 1. IF SLOW RELEASE NITROGEN (300 POUNDS 38-0-0 PER ACRE OR EQUIVALENT) IS USED IN ADDITION TO SUGGESTED FERTILIZER, THEN A FOLLOW-UP OF TOPDRESSING IS NOT MANDATORY.
 2. SPRING INSTALLATION OF SOD WILL REQUIRE AN APPLICATION OF FERTILIZER SUCH AS 15-10-20 OR EQUIVALENT AT 400 POUNDS PER ACRE OR 10 POUNDS PER 1000 SQUARE FEET BETWEEN MARCH 15 AND MAY 1.
 3. FALL INSTALLATION OF SOD WILL REQUIRE THE ABOVE BETWEEN SEPTEMBER 1 AND OCTOBER 15.
 - V. SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER
 - A. SITE PREPARATION
 1. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDING PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE.
 2. SURFACE SHOULD BE TESTED BY A REPUTABLE LABORATORY FOR LIME REQUIREMENT AND LIMESTONE. IF NEEDED IT SHOULD BE APPLIED TO BRING SOIL PH TO 6.5 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.
 3. IMMEDIATELY PRIOR TO TOPSOIL DISTRIBUTION, THE SURFACE SHOULD BE SCARIFIED TO PROVIDE A GOOD BOND WITH THE TOPSOIL.
 - B. APPLYING TOPSOIL
 1. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE.
 2. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS RECOMMENDED. SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING HIGH SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A PH OF 6.0 OR MORE.
 - C. SEEDING PREPARATION
 1. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE.
 2. APPLY 10-20-20 OR EQUIVALENT RATIO FERTILIZER AT A RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1000 SQUARE FEET.
 3. APPLY 300 POUNDS 38-0-0 PER ACRE OR EQUIVALENT OF SLOW RELEASE NITROGEN.
 4. APPLY FRACTIONATED ORGANIC LIMESTONE AT A RATE OF 1 TON PER ACRE OR 46 POUNDS PER 1000 SQUARE FEET.
 5. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM FINE SEEDBED IS PREPARED.
 6. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION, REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.
 7. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AND FIRMED AS ABOVE.
 - D. SEEDING

SEED MIXTURE	RATE
TAIL FESCUE	75 LBS (PLS)/ACRE
KENTUCKY BLUEGRASS	30 LBS (PLS)/ACRE
PERENNIAL RYEGRASS	20 LBS (PLS)/ACRE

SEEDING DATES: 7/15 TO 9/1

 1. APPLY SEED UNIFORMLY. NORMAL SEEDING DEPTH IS FROM 1/4" TO 1/2". HYDROSEEDING (INCLUDING FERTILIZER AND SEED IN A SLURRY FORM) AT A RATE OF 1000 GALLONS/ACRE WHICH ARE MULCHED MAY BE LEFT ON THE SOIL SURFACE. SOIL CONSERVATION DISTRICT CAN RECOMMEND SPECIFIC TECHNIQUES FOR HYDROSEEDING AND/OR HYDROMULCHING IN AREAS WITH DROUGHTY CONDITIONS. FOR MULCHING REQUIREMENTS SEE STANDARD FOR STABILIZATION WITH MULCH. PROTECTIVE MATERIALS TO BE USED.
 - E. IRRIGATION - (WHERE FEASIBLE)
 1. IF SOIL MOISTURE IS DEFICIENT AND MULCH IS NOT USED, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER. A MINIMUM OF 1/4" TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED, ESPECIALLY WHEN SEEDING IS PERFORMED IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES.
 - VI. SOIL SPECIFICATIONS

SUBJECT SITE AREA IS ENTIRELY UNDERLAIN BY FILL AND URBAN LAND SOILS. EROSION HAZARD IS SLIGHT, AND THROUGH HAZARD IS SLIGHT. SEEDING MORTALITY IS SLIGHT, PLANT COMPETITION IS SEVERE, EQUIPMENT LIMITATIONS ARE SLIGHT, LOW TO MEDIUM SUSCEPTIBILITY TO FROST HEAVING.

SOIL REGULATIONS: AREAS OF GRADING ARE TO BE PROTECTED BY SILT FENCE AND ROCK FILTER OUTLETS. STORM INLETS TO BE PROTECTED BY INLET FILTERS.

SOIL EROSION & SEDIMENT CONTROL NOTES:

1. THIS PLAN REPRESENTS THE MINIMUM LEVEL OF IMPLEMENTATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROL STRUCTURES. ADDITIONAL FACILITIES OF MEASURES SHALL BE INSTALLED WHERE NECESSARY TO PREVENT DAMAGE TO EITHER THE TOWN OF BETHLEHEM COUNTY OF ALBANY CONSERVATION DISTRICT AS CONSTRUCTION PROGRESSES.
2. THE EQUITABLE OWNER/CONTRACTOR MANAGER IS RESPONSIBLE FOR ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROLS AND SITE STABILIZATION. THE EQUITABLE OWNER/CONTRACTOR MANAGER SHALL ASSIGN ONE INDIVIDUAL TO BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL FACILITIES AND MEASURES.
3. THE PERMITTEE AND/OR THE CONTRACTOR SHALL NOTIFY THE TOWN OF BETHLEHEM THREE (3) DAYS PRIOR TO THE START OF EARTHMOVING ACTIVITY AND WHEN EARTHMOVING ACTIVITIES CEASE.
4. AFTER EACH RAIN STORM EVENT, ALL TEMPORARY SEDIMENTATION CONTROL FACILITIES SHALL BE INSPECTED, CLEANED AND REPAIRED AS NECESSARY. SILT FENCING SHALL BE CLEANED AND REPAIRED WHEN SEDIMENT REACHES ONE-HALF THE TOTAL HEIGHT OF THE SILT FENCE.
5. SHOULD UNFORESEEN EROSION CONDITIONS DEVELOP DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF INCREASED RUNOFF AND/OR SEDIMENT DISPLACEMENT. STOCKPILES OF WOOD CHIPS, HAY OR CRUSHED STONES AND OTHER CHIPS SHALL BE HELD IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION.
6. PROTECTION TO THE EXISTING TREES AND SHRUBS SHALL BE TAKEN BY THE CONTRACTOR TO ELIMINATE UNNECESSARY DAMAGE.
7. IN ADDITION TO RUNOFF EVENT MAINTENANCE OF EROSION CONTROL STRUCTURES, CONTRACTOR SHALL DEVELOP AND MAINTAIN A BIWEEKLY INSPECTION OF ALL EROSION AND SEDIMENT CONTROL FACILITIES AND REPAIR AS NECESSARY.
8. ANY SOFT AREAS OR UNEXPLAINED DEPRESSIONS ENCOUNTERED DURING CONSTRUCTION SHOULD BE INVESTIGATED BY THE GEOTECHNICAL ENGINEER FOR THE POSSIBILITY OF SPRAWLS, ACTIVITY, EARLY FORMATION OF SPRAWLS CAN BE DETECTED BY DEPRESSIONS IN THE BEDROCK OR GROUND SURFACE AND OVERLYING SOILS OR SUBSURFACE SOIL LOSS. IF SUSPICIOUS AREAS DEVELOP DURING CONSTRUCTION, THE LOCATIONS SHOULD BE PROBED. ANY EXCAVATION IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER TO DETERMINE IF ADDITIONAL MITIGATION SUCH AS GROUTING OR BONDED CONCRETE PILES, IS REQUIRED.

LIMIT OF DISTURBANCE (TOTAL AREA= 35,235 ± s.f.)

MS4 NOTE:
SITE IS WITHIN MS4 BOUNDARIES

REV	DATE	DESCRIPTION	ISSUE REF
1	2/15/07	REVISED PROPOSED SIGNAGE	RRT
2	4/6/07	REVISED PER PLANNING BOARD COMMENTS	SC
3	8/20/07	REVISED PER TOWN COMMENTS	RRT
4	8/27/07	REVISED PER TOWN COMMENTS	SC
5	9/26/07	REVISED PER TOWN COMMENTS	SC
6	10/17/07	REVISED PER TOWN COMMENTS	RRT
7	12/9/07	REVISED PER IN HOUSE CHECK	ECR

FINAL PLAN SIGNATURES	
P.M.	
G.C.	
O/O	

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF MCDONALD'S CORPORATION AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.

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PLANNING BOARD
TOWN OF BETHLEHEM
ALBANY COUNTY, NEW YORK

This Site Plan Approved.

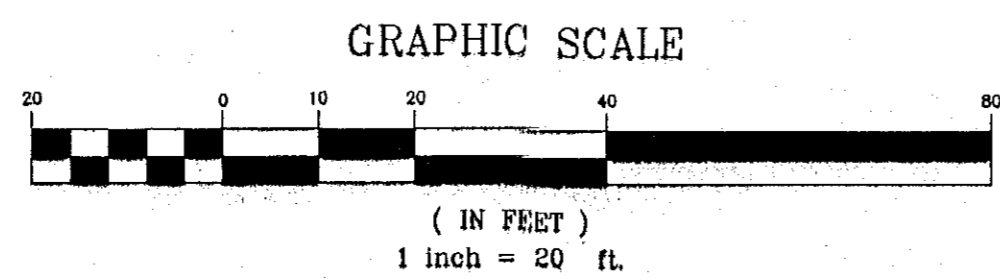
Paul J. Molloy
Title: Chairman
Date: 4/1/08

TOWN OF BETHLEHEM APPROVAL AREA

PLAN SCALE: 1"=20'	
STREET ADDRESS 132 DELAWARE AVENUE	
TOWN BETHLEHEM	STATE NEW YORK
COUNTY ALBANY	
REGIONAL DWG. NO.	PLAN DESCRIPTION EROSION & SEDIMENT CONTROL PLAN
CAD FILE:	

PLAN APPROVALS	DATE	STATUS	DATE	BY
SIGNATURE (2 REQUIRED)		PRELIMINARY	6/19/06	SMV
REGIONAL MGR.		AS-BUILT		
CONST. MGR.		AS-BUILT		
OPERATIONS DEPT.				
REAL ESTATE DEPT.				
CONTRACTOR				
OWNER				

**THIS PLAN TO BE UTILIZED FOR
SOIL EROSION & SEDIMENT
CONTROL PLAN PURPOSES ONLY**



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