(TS) TEMPORARY SEEDING

DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A PERIOD OF MORE THAN 30 DAYS SHALL BE STABILIZED WITH TEMPORARY SEEDING MEASURES AS SHOWN HEREON, AND AS FURTHER DETAILED AS "STANDARD AND SPECIFICATION 3.31 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK", LATEST EDITION, IN ADDITION TO AREAS OF GENERAL GRADING THAT WILL NOT BE FINE-GRADED FOR GREATER THAN 30 DAYS, THE FOLLOWING SPECIFIC E&S MEASURES SHALL BE STABILIZED WITH TEMPORARY SEEDING IMMEDIATELY UPON COMPLETION OF CONSTRUCTION OF THE TEMPORARY MEASURE: - SOIL STOCKPILES

- DIKES, DAMS, AND SIDES OF SEDIMENT BASINS - TEMPORARY ROADWAY EMBANKMENTS

PRIOR TO SEEDING, INSTALL NECESSARY EROSION CONTROL PRACTICES SUCH AS DIKES, WATERWAYS, AND BASINS. PROVIDE PLANTS AS SPECIFIED HEREIN, OR ENGINEER-APPROVED EQUAL. SEEDBED PREPARATION:

LIME SHALL BE APPLIED IF DISTURBED AREAS WILL REMAIN DORMANT BETWEEN 30 DAYS AND 120 DAYS. IF REQUIRED,
LIME SHALL BE APPLIED AS SHOWN, BASED ON SOIL ACIDITY.

PH APPLICATION OF AGRICULTURAL LIMESTONE

BELOW 4.2 5.2 TO 6.0

2 TONS PER ACRE 1 TON PER ACRE LIME NOT REQUIRED

FERTILIZER SHALL BE APPLIED AS 600 LBS/ACRE OF 10-20-10 OR EQUIVALENT NUTRIENTS. LIME (AS APPLICABLE) AND FERTILIZER SHALL BE INCORPORATED INTO THE TOP 2 TO 4 INCHES OF SOIL, IF POSSIBLE.

SURFACE ROUGHENING SHALL BE REQUIRED WHERE AREAS TO BE SEEDED HAVE BEEN COMPACTED, CRUSTED, OR HARDENED BY CONSTRUCTION TRAFFIC. AS REQUIRED, SEEDBEDS SHALL BE ROUGHENED IN ACCORDANCE WITH STANDARD AND SPECIFICATION 3.29 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. (TRACKING WITH BULLDOZER CLEATS SHALL BE USED IN SANDY SOILS)

SEED SHALL BE EVENLY APPLIED WITH THE SAME MEANS SPECIFIED HEREIN FOR PERMANENT SEEDING. SMALL GRAINS SHALL BE PLANTED NO MORE THAN ONE INCH DEEP. GRASSES AND LEGUMES SHALL BE PLANTED WITH NO LESS THAN 1/4" OF SOIL COVER.

MULCHING:
SEEDINGS MADE IN FALL FOR WINTER COVER AND DURING HOT AND DRY SUMMER MONTHS SHALL BE MULCHED ACCORDING TO STANDARD AND SPECIFICATION 3.35 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, EXCEPT THAT FIBER MULCH MAY NOT BE USED. STRAW MULCH SHALL BE USED DURING THESE PERIODS.

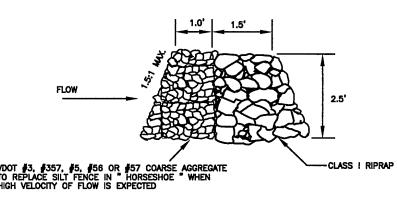
TEMPORARY SEEDINGS MADE UNDER FAVORABLE SOIL AND SITE CONDITIONS DURING OPTIMUM SPRING AND FALL SEEDING DATES MAY NOT REQUIRE MULCH.

RE—SEEDING: AREAS WHICH FAIL TO ESTABLISH VEGETATIVE COVER ADEQUATE TO PREVENT RILL EROSION SHALL BE RE—SEEDED AS SOON AS SUCH AREAS ARE IDENTIFIED. ACCEPTABLE TEMPORARY SEEDING PLANT MATERIALS BY RANGE OF PLANTING DATES:

> 09/01 TO 02/15 ANNUAL RYEGRASS • 50 LB / ACRE WINTER RYE • 50 LB / ACRE 02/16 TO 04/30 ANNUAL RYEGRASS • 100 LB / ACRE 05/01 TO 08/31 GERMAN MILLET • 50 LB / ACRE

SILT FENCE CULVERT INLET **PROTECTION** SILT FENCE ---DISTANCE IS 6' MINIMUM IF FLOW IS TOWARD EMBANKMENT

OPTIONAL STONE COMBINATION



SOURCE: ADAPTED from VDOT Standard Sheets and Va. DSWC

PLATE. 3.08-1

GENERAL EROSION AND SEDIMENT CONTROL NOTES

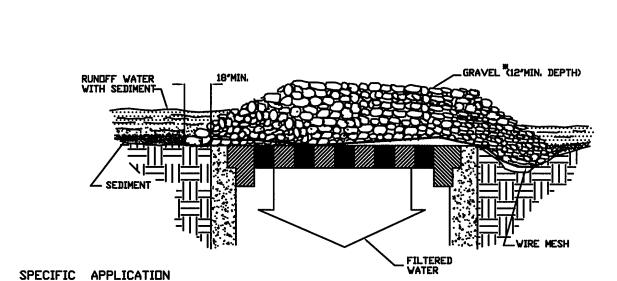
- . ALL SOIL EROSION & SEDIMENT CONTROL MEASURES SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS CONTAINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
- THE APPROVING AUTHORITY MAY ADD TO, DELETE, RELOCATE, CHANGE, OR OTHERWISE MODIFY CERTAIN EROSION AND SEDIMENT CONTROL MEASURES WHERE FIELD CONDITIONS ARE ENCOUNTERED THAT WARRANT SUCH MODIFICATIONS.
- . ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE PLAN SHALL BE PLACED IN ADVANCE OF THE WORK BEING PERFORMED, AS FAR AS
- 4. IN NO CASE DURING CONSTRUCTION SHALL WATER RUNOFF BE DIVERTED OR ALLOWED TO FLOW TO LOCATIONS WHERE ADEQUATE PROTECTION HAS NOT BEEN
- 5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LEAVE THE SITE ADEQUATELY PROTECTED AGAINST EROSION, SEDIMENTATION, OR ANY DAMAGE TO ANY ADJACENT PROPERTY AT THE END OF EACH DAY'S WORK.
- 6. FOR THE EROSION CONTROL KEY SYMBOLS SHOWN ON THE PLANS, REFER TO THE VIRGINIA UNIFORM CODING SYSTEM FOR EROSION AND SEDIMENT CONTROL PRACTICES CONTAINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION. THESE SYMBOLS AND KEYS ARE TO BE UTILIZED ON ALL EROSION CONTROL PLANS SUBMITTED TO ROANOKE COUNTY.
- THE LOCATION OF ALL OFF-SITE FILL OR BORROW AREAS ASSOCIATED WITH THE CONSTRUCTION PROJECT WILL BE PROVIDED TO ROANOKE COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT. AN EROSION CONTROL PLAN OR MEASURES MAY BE REQUIRED FOR THIS AREA.

TOTAL DISTURBED AREA = 2.77 AC.= 120,714 SQ. FT.

TOPSOILING

NO APPLICABLE DETAILS APPLY. REFER TO SPECIFICATION 3.30 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION FOR SPECIFIC REQUIREMENTS.

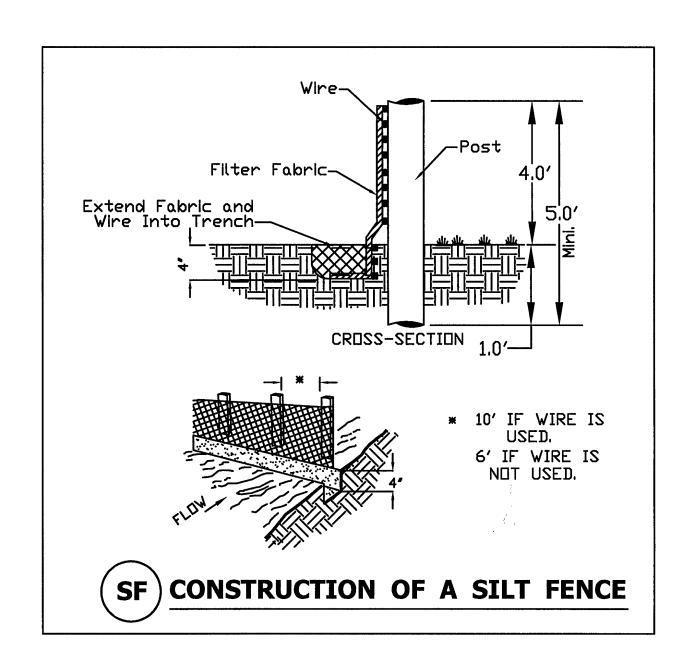
NO APPLICABLE DETAILS APPLY. REFER TO SPECIFICATION 3.35 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION FOR SPECIFIC REQUIREMENTS.



This method of inlet protection is applicable where heavy concentrated flows are expected, but not where ponding around the structure might cause excessive inconvenience or damage to adjacent structures and unprotected areas.

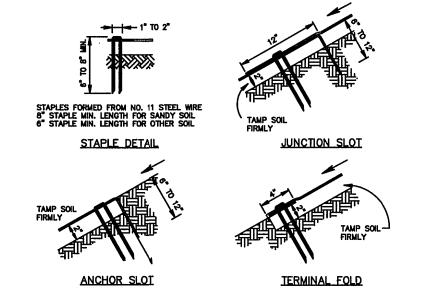
- * Gravel shall be VDOT #3, #357 or #5 coarse aggregate.
- (IP) GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER

TYPE A TYPE B (SLOPES 3:1 OR STEEPER) 15 OCTOBER TO 1 FEBRUARY 15 MARCH TO 1 MAY K-31 FESCUE • 5 LB / 1000 SF CROWN VETCH • 1/2 LB / 1000 SF BORZY WINTER RYE • 1/2 LB / 1000 SF PERENNIAL RYEGRASS • 1/2 LB / 1000 SF RED TOP • 1/8 LB / 1000 SF 1 FEBRUARY TO 1 JUNE K-31 FESCUE • 5 LB / 1000 SF CROWN VETCH • 1/2 LB / 1000 SF ANNUAL RYE • 1/2 LB / 1000 SF PERENNIAL RYEGRASS • 1/2 LB / 1000 SF RED TOP • 1/8 LB / 1000 SF 1 JUNE TO 1 SEPTEMBER K-31 FESCUE • 5 LB / 1000 SF GERMAN MILLET • 1/2 LB / 1000 SF 1 SEPTEMBER TO 15 OCTOBER K-31 FESCUE • 5 LB / 1000 SF ANNUAL RYE • 1/2 LB / 1000 SF 140 LB / 1000 SF PULVERIZED AGRICULTURAL LIMESTONE 5-20-10 • 25 LB / 1000 SF FERTILIZER: 38-0-0 ● 7 LB / 1000 SF IF REQUIRED, SHALL BE USED OVER ALL SEEDED AREAS AND SHALL BE MULCH: APPLIED IN ACCORDANCE WITH SECTION 1.75 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION. SOIL CONDITIONING: INCORPORATION OF LIME AND FERTILIZER, SELECTION OF CERTIFIED SEED, MULCHING, MAINTENANCE OF NEW SEEDLINGS, AND RESEEDING SHALL BE IN ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE VIRGINIA SOIL EROSION AND SEDIMENT CONTROL HANDBOOK LATEST EDITION. ADDITIONAL SEEDING TO BE PERFORMED AS REQUIRED SEED APPLICATION: APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER ON A FIRM, FRIABLE, SEEDBED. MAXIMUM SEEDING DEPTH SHALL BE 1/4 INCH. PERMANENT SEEDING MIXTURE



(B/M) SOIL STABILIZATION BLANKET

NOTE: BLANKET MATTING (B/M) TO BE USED ON ALL SLOPES 34 OR STEEPER. 12" MAX. 4:1 OR FLATTER 6" MAX. STEEPER THAN 4:1 CENTER ROW MAY BE ELIMINATED WHEN SLOPE IS LESS THAN 4:1 5' MAX. 4:1 OR FLATTER 3' MAX. STEEPER THAN 4:1 EDGE AND END JOINTS TO BE OVERLAPPED, 3" MINIMUM VARIABLE VARIABLE PLAN VIEW



CONSTRUCTION SEQUENCING NOTES:

PHASE 1:

1. THE PHASE 1 CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS A FIRST STEP.

- 2. SILT FENCE TO BE INSTALLED AS SHOWN. SPECIAL ATTENTION SHALL BE GIVEN TO THE EXISTING DRAINAGEWAY ONSITE.
- 3. CULVERT INLET PROTECTION SHALL BE PROVIDED FOR THE PROPOSED CULVERT PIPES.

4. THE TOPSOIL FROM THE SITE SHALL BE STRIPPED AND STOCKPILED FOR LATER USE AS SHOWN ON THE PLANS. THE SITE SHALL BE CLEARED AND GRUBBED WITHIN THE DISTURBED AREA INDICATED.

5. NO DEVIATIONS TO THE PLANS SHALL TAKE PLACE UNLESS PRIOR APPROVAL FROM THE OWNER, PROJECT ENGINEER, AND THE APPROPRIATE REVIEW AGENCIES.

1. MAJOR GRADING OPERATIONS SHALL BE PERFORMED AT THIS TIME. IMMEDIATELY AFTER OVERLOT GRADING, TEMPORARY SEEDING SHALL BE APPLIED TO THE

PHASE 2:

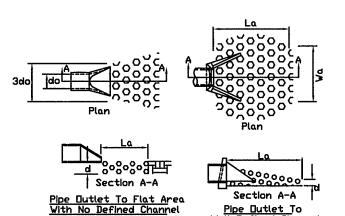
SITE. THE STORMWATER MANGEMENT FACILITY SHALL BE GRADED AND STORMWATER PIPES INSTALLED WITH OUTLET PROTECTION AS REQUIRED. THE S.W.M. ORIFICE SHALL BE PLUGGED DURING GRADING OPERATIONS AND THEN INLET PROTECTION SHALL BE PROVIDED AFTER THE ORIFICE HAS BEEN UN-PLUGGED AND UPSTREAM DRAINAGE AREAS HAVE BEEN STABILIZED.

2. FILL MATERIAL FOR THE HOUSE SITES IS BEING OBTAINED FROM THE ON-SITE BORROW AREA. G.C. SHALL MAINTAIN ALL REQUIRED E.S.C. MEASURES RELATED TO THE TEMPORARY CREEK CROSSING AND BORROW AREA. G.C. SHALL ONLY EXCAVATE AND GRADE THE AREAS SHOWN ON THE PLAN. ANY ADDITIONAL AREAS OF GRADING WILL REQUIRE A FIELD REVISION OR SEPARATE PLAN SET. NO FILL MATERIAL SHALL BE PLACED WITHIN THE FLOODWAY OF THE EXISTING CREEK UNDER ANY CIRCUMSTANCES.

3. CULVERT INLET PROTECTION SHALL BE PROVIDED FOR ALL INSTALLED CULVERTS. THE DITCHLINE ALONG ALLEGHENY DRIVE SHALL BE CONSTRUCTED AND MATTED. WITH EC-2 LINING.

4. TEMPORARY SEEDING MUST BE PROVIDED FOR ALL DISTURBED AREAS THAT WILL REMAIN DORMANT FOR MORE THAN 30 DAYS. PERMANENT SEEDING, MULCHING AND BLANKET MATTING TO BE PROVIDED FOR ALL APPLICABLE AREAS AS SOON AS POSSIBLE AFTER FINAL GRADE IS ACHIEVED.

- 5. ALL UTILITIES FOR THE SITE SHALL BE INSTALLED AT THIS TIME AND AREAS SEEDED AFTER COMPLETION OF INSTALLATION.
- 6. PAVEMENT, ETC. SHALL BE INSTALLED AT THIS TIME. TOPSOIL AND SEEDING SHALL BE APPLIED TO LANDSCAPE AREAS.
- 7. AFTER FINAL SITE STABLIZATION AND ROANOKE COUNTY APPROVAL. INLET PROTECTION, SILT FENCE, AND THE CONSTRUCTION ENTRANCE CAN BE REMOVED. *NOTE: ROANOKE COUNTY INSPECTION AND APPROVAL IS REQUIRED PRIOR TO THE REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES.

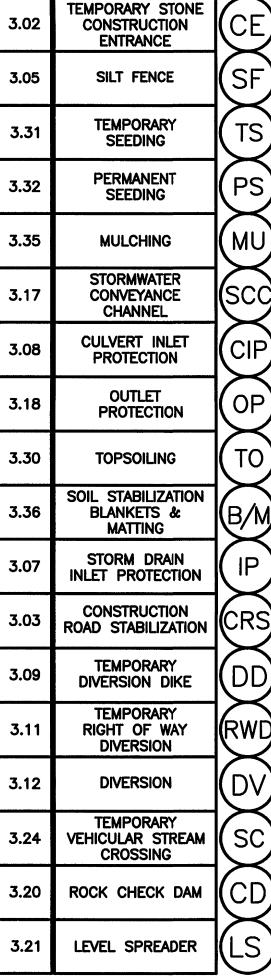


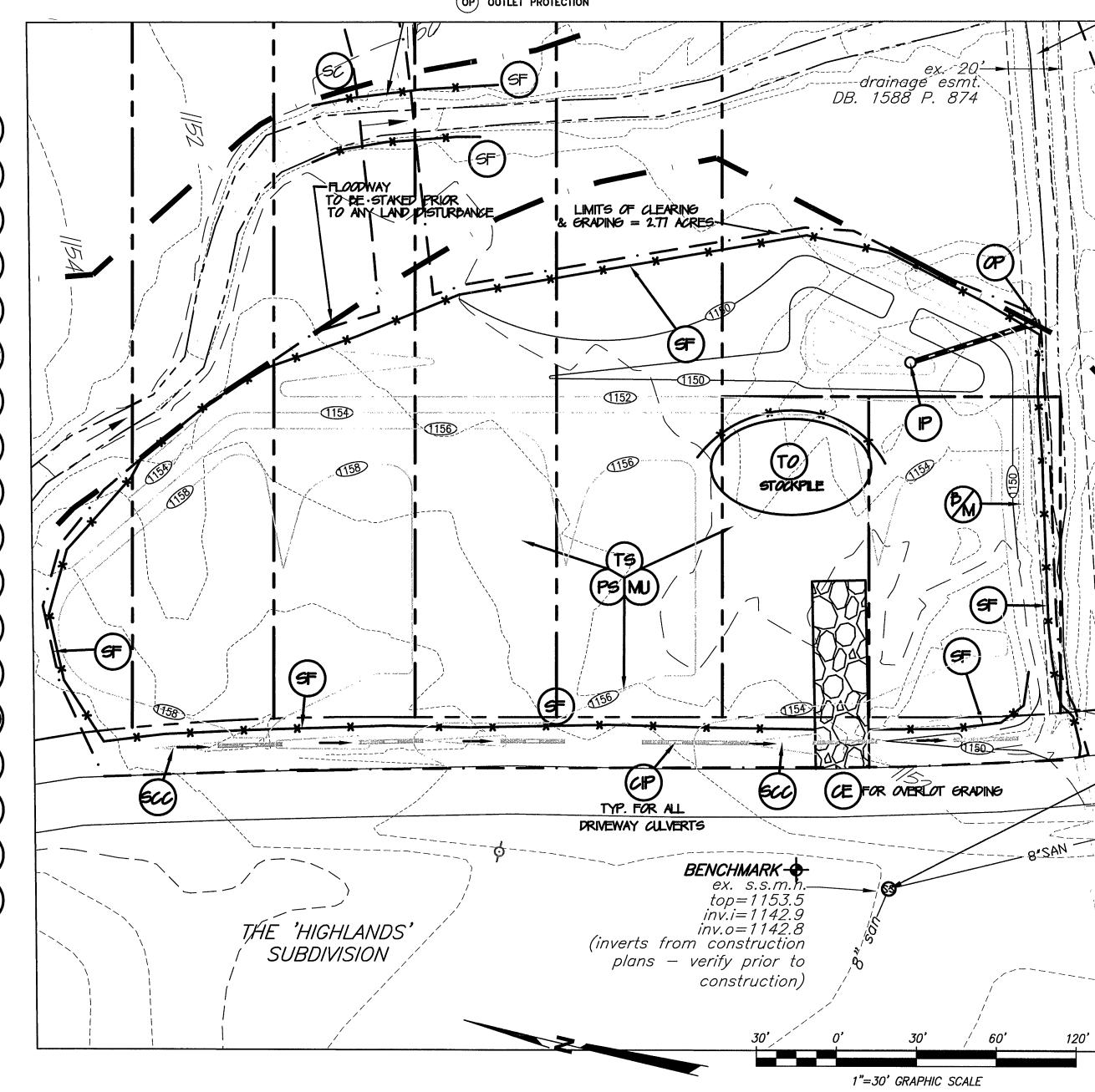
. Apron lining may be rip-rap, grouted rip-rap, or concrete. 2. La is the length of the rip-rap apron as calculated using plates 1.36d and 1.36e. 3. d = 1.5 times the maximum stone diameter, but not less than 6'.

OUTLET PROTECTION DATA: OUTLET PROTECTION #1 EC-1 CLASS 1 RIP RAP LENGTH OF APRON=9' WIDTH OF APRON=6' MIN. STONE SIZE=6'

(OP) OUTLET PROTECTION

E.S.C. MEASURES:





min CHRISTOPHER P. BURNS Lic. No.047338 5/7/13



REFLECTING TOMORROW www.balzer.cc PLANNERS • ARCHITECTS ENGINEERS • SURVEYORS

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DRAWN BY: DESIGNED BY: BTC CHECKED BY: SMH 4/5/2013

REVISIONS: 5/7/2013

SCALE: 1" = 30'SHEET NO.

R0700180.02