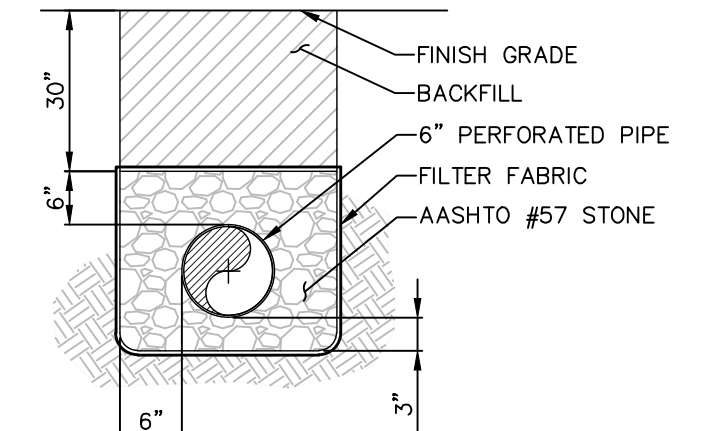


**GRADING LEGEND**

DESCRIPTION	PROPOSED
STORM SEWER	
INLET (TYPE W)	
INLET (TYPE C)	
MANHOLE	
ENDWALL	
RIPRAP	
INDEX CONTOUR	
CONTOUR	
SPOT ELEVATION	
DRAINAGE FLOW ARROW	
SLOPE GRADE	



- NOTES:**
- UNDERDRAIN PIPE SHALL BE CONTINUOUSLY PERFORATED WITH A SMOOTH INTERIOR WITH A MINIMUM INSIDE DIAMETER OF 4-INCHES. PIPE SHALL BE HIGH DENSITY POLYETHYLENE MEETING SPECIFICATIONS OF AASHTO M252, TYPE 3, OR AASHTO M254, TYPE 3.
  - GEOTEXTILE FABRIC SHALL BE NEEDLE NON-WOVEN POLYPROPYLENE FIBERS AND MEET THE FOLLOWING PROPERTIES:
    - GRAB TENSILE STRENGTH (ASTM D4632) ≥ 120 LBS
    - MULLEN BURST STRENGTH (ASTM D3786) ≥ 225 LBS
    - FLOW RATE (ASTM D4491) ≥ 95 GAL/MIN/FT<sup>2</sup>
    - UV RESISTANCE AFTER 500 HRS (ASTM D4355) ≥ 70%
    - HEAT-SET OR HEAT-CALCENDARED FABRICS ARE NOT PERMITTED
- UNDERDRAIN**  
NOT TO SCALE

**BIORETENTION/INFILTRATION REMEDIATION NOTES**

- EXCAVATE AND STOCKPILE EXISTING PLANTING SOIL BASE FOR RE-USE WITH ADDITIONAL AMENDMENTS
- EXCAVATE BASIN FLOORS TO CORRECT FINAL DEPTH TO RECEIVE THE TOTAL GROWING MEDIUM DEPTH THAT IS SPECIFIED. USE ONLY TRACK TYPE EXCAVATORS.
- EXCAVATE AND INSTALL UNDERDRAIN SYSTEM AS SPECIFIED HEREIN.
- SCAFFRY BASIN FLOORS AND REMOVE ALL EVIDENCE OF EQUIPMENT USED DURING EXCAVATIONS.
- ADD 1 PART (VOLUME) COMPOST FOR 9 PARTS (VOLUME) RE-USED GROWING MEDIUM AND ADD THOROUGHLY BLEND MATERIALS. ALSO ADD 1/4 PART (VOLUME) SAND (KS) PER 9 PARTS (VOLUME) RE-USED GROWING MEDIUM AND THOROUGHLY BLENDED.
- COMPACTION OF REPLACED GROWING MEDIUM SHALL BE LIMITED TO LIGHT LANDSCAPE EQUIPMENT DURING SPREADING AND BACKHOE BUCKET TAMPING.
- UPON INSTALLATION OF REMEDIATED GROWING MEDIUM, BEFORE PLANTING, DOUBLE RING INFILTRATION TESTING OF THE REMEDIATED SOIL SHALL BE CONDUCTED AT 6 TEST LOCATIONS WITH HALF THE TESTING CONDUCTED AT 12" TO 18" DEPTH AND HALF THE TESTING CONDUCTED AT OR NEAR THE SURFACE.
- PLANTING SHALL NOT PROCEED UNTIL SOIL TESTS CONFIRM A RATE OF 0.5" PER HOUR OR GREATER.
- AFTER BASIN FLOORS ARE PLANTED, A 2" DEPTH OF COMPOSTED LEAF MATTER SHALL BE APPLIED THROUGHOUT THE BASINS.

NO.	DATE	DESCRIPTION	BY	CHKD.
12	04/20/2011	REV PER 4/13/13 PWD REV. LETTER		
11	04/17/2011	REV BOT & R/OZ		
10	04/17/2011	PHASED BLS PLAN		
9	04/20/2011	PHASED BLS PLAN		
8	04/20/2011	PHASED BLS PLAN		
7	04/20/2011	PHASED BLS PLAN		
6	04/20/2011	PHASED BLS PLAN		
5	04/20/2011	PHASED BLS PLAN		
4	04/20/2011	PHASED BLS PLAN		
3	04/20/2011	PHASED BLS PLAN		
2	04/20/2011	PHASED BLS PLAN		
1	04/20/2011	PHASED BLS PLAN		

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SEE GENERAL INFORMATION SHEET FOR ALL REMEDIATION NOTES AND LEGAL INFORMATION.

GRAPHIC SCALE IN FEET

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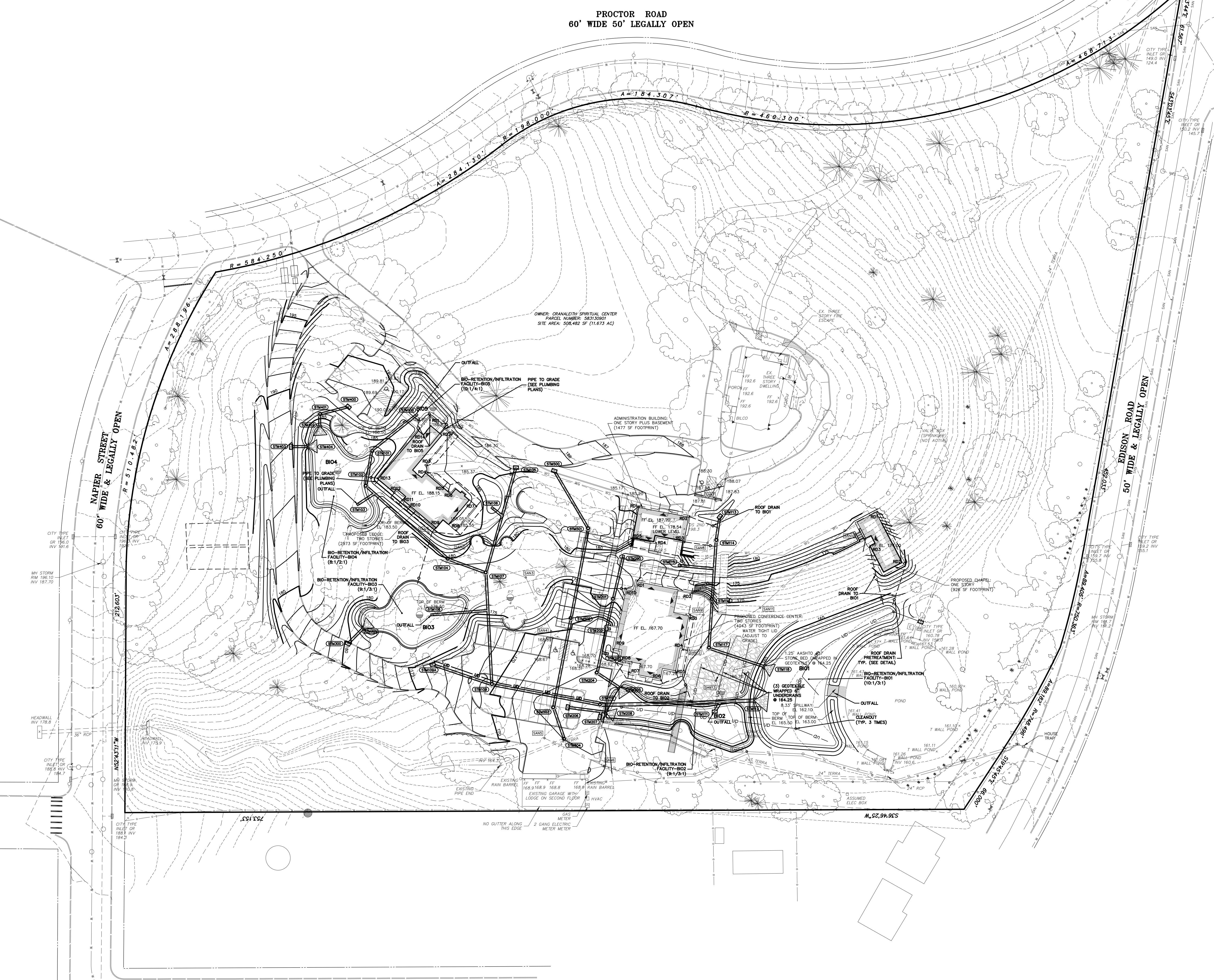
**GRADING & DRAINAGE PLAN**  
NEW: LODGE CONFERENCE CENTER, AND CHAPEL CRANALEITH SPIRITUAL CENTER, CITY OF PHILADELPHIA, PHILADELPHIA COUNTY, PA

PROJECT NUMBER: 10020  
SCALE: 1" = 40'  
DRAWN BY: CAMJACBMB  
DESIGNED BY: SALGQH/CAM  
DATE: 12/17/2010  
SHEET NO. 6 OF 23



ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 289 OF 1974 AS AMENDED BY ACT 121 OF 2008, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK. SERIAL NO. 20101732338

**MICHAEL F. COLLEGE**  
PROFESSIONAL ENGINEER, PA. LIC. NO. PE076422



**PROCTOR ROAD**  
60' WIDE 50' LEGALLY OPEN

**NAPIER STREET**  
60' WIDE & LEGALLY OPEN

**LINDSAY STREET**  
46' WIDE & LEGALLY OPEN

**EDISON ROAD**  
60' WIDE & LEGALLY OPEN

OWNER: CRANALEITH SPIRITUAL CENTER  
PARCEL NUMBER: 841-23001  
SITE AREA: 508,482 SF (11,673 AC)

NO GUTTER ALONG THIS EDGE  
2 GANG ELECTRIC METER METER

NO. 02.04.9CS