

IRRIGATION NOTES:

- UPPER ROOF, AUTOMATIC DRIP IRRIGATION FOR PLANT ESTABLISHMENT.
METHOD A OR B TO BE DETERMINED BY DESIGN-BUILD CONTRACTOR.
METHOD A: RECYCLED BLENDER HOSER HOSES, 8" ON CENTER, REQUIRED PRESSURE UNDER 10 PSI. LAY LEVEL. EACH VALVE CAN SUPPORT UP TO 300 FT OF TUBING WITH A FLOW RATE OF 160 GPH AT 10 PSI. PLACE LINES 18" O.C.
METHOD B: IN-LINE PRESSURE COMPENSATING EMITTERS, 1/2 GPH EMITTERS AT 12" APART ALONG THE PIPES. EACH VALVE CAN SUPPORT UP TO 326 LF WITH A FLOW RATE OF 165 GPH AT 28 PSI. PLACE LINES 18" O.C.
FOR BOTH METHODS A & B, ATTACH TO SPIGOTS OR OTHER CONNECTIONS (COORDINATE WITH PLUMBING ENGINEER). MAIN ASSEMBLY REQUIRES BACKFLOW PREVENTER, PRESSURE REGULATOR, FILTER WITH BALL VALVE FOR FLUSHING TO PLANTS. INCLUDE TIMER AND 4 SOIL MOISTURE SENSORS. PROVIDE & INSTALL COMPONENTS REQUIRED FOR A COMPLETE IRRIGATION SYSTEM.
- LOWER ROOF IRRIGATION, PERMANENT AUTOMATIC DRIP IRRIGATION WITH SOIL MOISTURE SENSORS (INCLUDE COMPONENTS AND CONNECTIONS REQUIRED FOR AUTOMATIC IRRIGATION - ARCHITECT TO COORDINATE PLUMBING & ELECTRICAL NEEDS).
IN-LINE PRESSURE COMPENSATING EMITTERS, 120PH EMITTERS AT 12" APART ALONG THE PIPES. SUPPORTS UP TO 326 LF WITH A FLOW RATE OF 165 GPH AT 28 PSI. PLACE LINES 12" O.C.
PROVIDE & INSTALL MAIN ASSEMBLY IN THE BUILDING PER ARCHITECT, PLUMBING ENGINEER & ELECTRICAL ENGINEER.
PROVIDE & INSTALL COMPONENTS FOR A COMPLETE IRRIGATION SYSTEM, INCLUDING ELECTRICAL AND PLUMBING, INCLUDING BACKFLOW PREVENTER (INDOORS), PRESSURE REGULATOR (INDOORS), TIMER (INDOORS), AUTOMATIC VALVES, AND 2 SOIL MOISTURE SENSORS
- DESIGN-BUILD, SUBMIT SHOP DRAWINGS SPECIFICATION SHEETS. DESIGNER SHALL BE A DESIGNER CERTIFIED BY THE MANUFACTURER OF THE MAJOR COMPONENTS. PLUMBING & ELECTRICAL HOODUPS. DESIGN/BUILD THE CONNECTIONS AND COMPONENTS NOT OTHERWISE SHOWN ON PROJECT ELECTRICAL / PLUMBING DRAWINGS.
- GIVE OWNER MAINTENANCE MANUALS. GIVE OWNER DEMONSTRATION ON USE OF SYSTEMS.
- IRRIGATION COMPONENTS MANUFACTURED BY RAINEIRO, TORO, HANTER, HINCKLEY OR APPROVED EQUAL.
- CONFIRM TECHNICAL DATA NOTED ABOVE WITH MANUFACTURER.
- COORDINATE IRRIGATION SYSTEM WITH AVAILABLE WATER LINE SIZE, PRESSURE & FLOW. COORDINATE WITH PLUMBING ENGINEER.

GENERAL PLANTING NOTES:

- SEE D-L5.2 FOR MORE INFORMATION.
- SEE D-L5.2 FOR ABBREVIATIONS & GENERAL NOTES.
- COORDINATE WITH SOIL TESTING COORDINATOR TO CONFIRM THAT VARIOUS SOIL DEPTHS ARE ACCEPTABLE GIVEN THE HEIGHT LIMITS.

1 DINING HALL - ROOF PLANTING

ROOF PLANT LIST

Key	Quantity	Botanical Name	Common Name	Spacing	Root	Remarks
EVERGREEN GROUND COVER MIX - UPPER ROOF						
WITH ROOF SOIL MIX "A" AND 1" DEEP SHREDDED CEDAR BARK MULCH						
575		<i>Arctostaphylos uva-ursi</i>	Bearberry	6" on center	3" plug	15.0% of mix; 4 leaves min (6 max)
650		<i>Dioscorea oppositifolia</i>	Shootingstar	12" on center	potted	12.0% of mix; 4 year plant
800		<i>Geum triflorum</i>	Prairie smoke	12" on center	3" plug	12.5% of mix
275		<i>Juniperus horizontalis</i>	Creeping Juniper	18" on center	1 quart (4')	12.0% of mix
350		<i>Carex acutata</i>	Ebony sedge	6" on center	3" plug	15% of mix
EVERGREEN GROUND COVER MIX - LOWER ROOF						
WITH ROOF SOIL MIX "A" AND 1/2" DEEP SHREDDED CEDAR BARK MULCH						
8500		<i>Arctostaphylos uva-ursi</i>	Bearberry	6" on center	3" plug	17.0% of mix; 4-6 leaves min.
175		<i>Juniperus horizontalis</i>	Creeping Juniper	18" on center	1 quart (4')	15.0% of mix
TALL COVER MIX WITH SOIL MIX "B"						
850		<i>Asclepias syriaca</i>	Common milkweed	12" on center	3" plug	12.5% of mix
850		<i>Helianthus mollis</i>	Dwarf sunflower	12" on center	3" plug	12.5% of mix
		Alt: <i>Ratibida pinnata</i> , <i>Yellow Coneflower</i> or <i>Helianthus occidentalis</i> , <i>Western Sunflower</i>				
850		<i>Solidago rigida</i>	Stiff goldenrod	12" on center	3" plug	12.5% of mix
850		<i>Solidago speciosa</i>	Snowy goldenrod	12" on center	3" plug	12.5% of mix
		Alt: <i>Epitobium angustifolium</i>	Fireweed			Seed at specified rate, then again 6 weeks later
		Alt: <i>Phlox pilosa</i>	Prairie Phlox			
SHORT COVER MIX WITH ROOF SOIL MIX "B"						
400		<i>Aster ericoides</i> 'Blue Star'	Blue Heath Aster	12" on center	3" plug	10.0% of mix; all white flowered variety
800		<i>Aster ptarmicoides</i>	Upland White Aster	12" on center	3" plug	12.0% of mix
400		<i>Geum triflorum</i>	Prairie smoke	12" on center	3" plug	10.0% of mix
600		<i>Liatris borealis</i>	North Blazing Star	12" on center	3" plug	15.0% of mix
		Alt: <i>Liatris aspera</i> , <i>Rough Blazing Star</i>				
200		<i>Campanula rotundifolia</i>	Harbell	12" on center	3" plug	15% of mix
3650		<i>Carex acutata</i>	Ebony sedge	6" on center	3" plug	14.0% of mix

NOTES FOR ROOF PLANT LIST:

- CONTRACTOR'S OPTION AT EVERGREEN MIX IN UPPER ROOF, 240 BEARBERRY (6 BRANCHES MIN) IN APPROX 6" DIAM X 4" DEEP 'AZALEA' POTS (GROWN IN THESE POTS FOR 5 MONTHS GROWING SEASON MIN), 12" DIAM PLANTS MIN, 24" O.C. IN LIEU OF 3" PLUGS NOTED ABOVE.
- REVIEW PLANTING PATTERN AND SPECIES PATTERN WITH LANDSCAPE ARCHITECT AND/OR ARCHITECT AT BEGINNING OF PLANTING ACTIVITIES.
- CERTAIN SPECIES SUCH AS BEARBERRY CAN ONLY BE PLANTED IN SPRING. REVIEW SPRING/FALL HAZARDS BEFORE PLANTING.

ROOF SOIL NOTES:

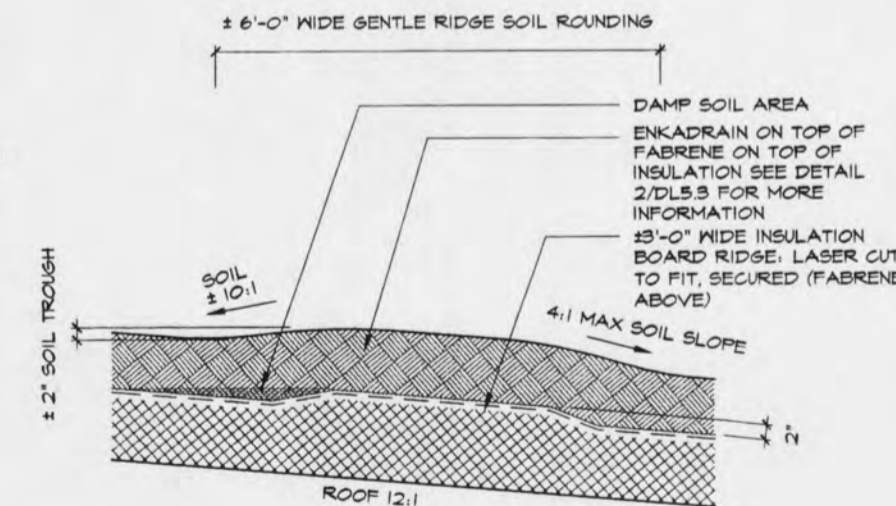
- CONSTRUCT SAMPLE PANEL (ON GROUND) ON SLOPED 4x8 PLYWOOD, INSULATION BOARD, FABRENE, ENKADRAIN WITH GEOTEXTILE, AND PLASTIC SOIL/BALLAST DIVIDER FOR REVIEW PRIOR TO PURCHASING REMAINDER OF THESE MATERIALS.
- WRAP ENKADRAIN AND TOP GEOTEXTILE UP SIDES OF BUILDING STRUCTURES, UP TO SOIL SURFACE, AND FASTEN TO BUILDING STRUCTURES PER ARCHITECTS REVIEW



2 TYPICAL ROOF SOIL SECTION
DL5.3 NOT TO SCALE

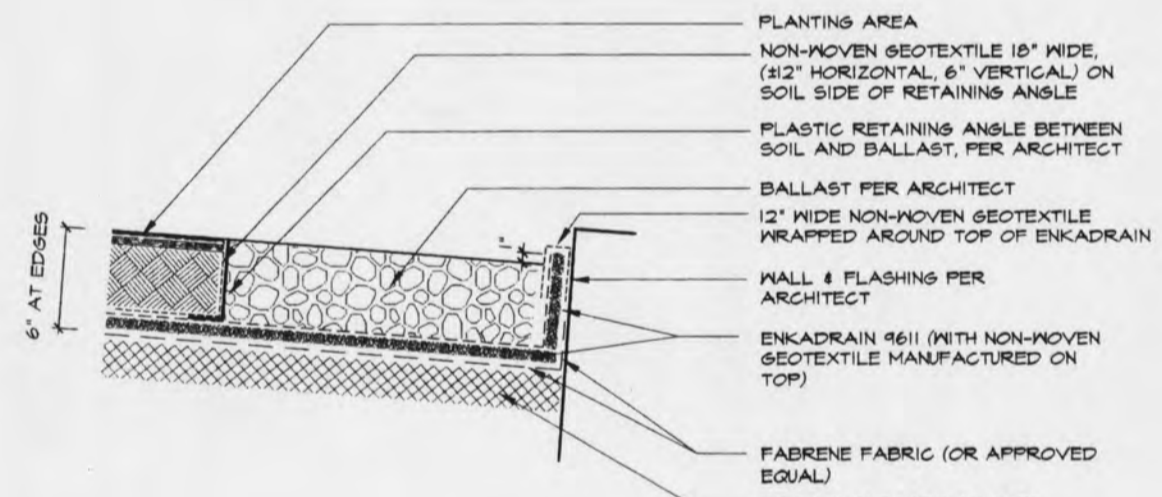
- 1" MULCH ON JUTE AT EVERGREEN MIX; JUTE AT "TALL & SHORT COVER" AREAS WITH SEEDINGS; NO JUTE AT LOWER ROOF
- ROOF PLANTING SOIL MIX A, B, OR C (SEE PLAN FOR AREAS)
- ENKADRAIN #611 OR APPROVED EQUAL (1/8" THICK HDPE MATRIX, MANUFACTURED WITH NON-MOVEN GEOTEXTILE FILTER FABRIC ON TOP ONLY) FASTEN ADJACENT ENKADRAIN 12" O.C. WITH PERMANENT FASTENERS
- FABRENE V.11, FABRIC (OR APPROVED EQUAL) TEL. (705) 476-7057; SECURED TO INSULATION BOARD WITH GALV. ROOF NAILS; OVERLAP EDGES 3"; REVIEW WITH ARCHITECT
- INSULATION BOARD (CLOSED CELL) PER ARCHITECT

2289.ROOFSOIL.DWG



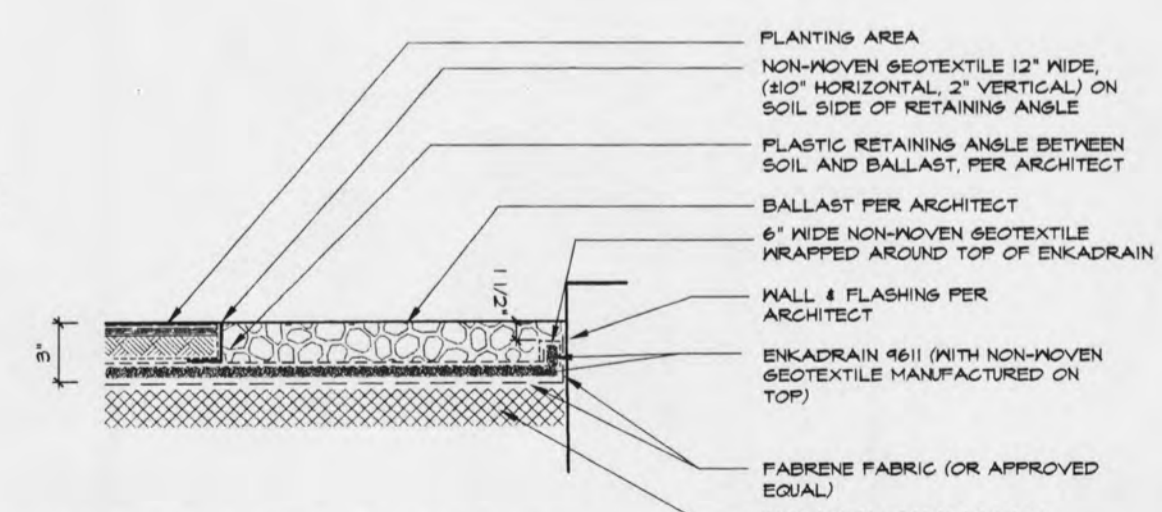
3 SOIL & INSULATION RIDGE
DL5.3 NOT TO SCALE

2289.ROOFSOIL.DWG



4 SECTION AT UPPER ROOF EDGE
DL5.3 NOT TO SCALE

2289.ROOFSOIL.DWG



5 SECTION AT LOWER ROOF EDGE
DL5.3 NOT TO SCALE

2289.ROOFSOIL.DWG

ARCHITECT
KIERAN TIMBERLAKE ASSOCIATES LLP
30 NORTH THIRD STREET
PHILADELPHIA, PA 19106
PHONE: 215-922-6600
FAX: 215-922-6680
kt@kierantimberlake.com

STRUCTURAL ENGINEER
CVM ENGINEERS
85 OLD EAGLE SCHOOL ROAD
WAYNE, PA 19088
PHONE: 215-989-2800
FAX: 215-989-3477

M/E/P ENGINEER
LUNDOQUIST, KILLEEN, POTVIN & BENDER, INC.
1935 WEST COUNTY ROAD #2, SUITE 300
ST. PAUL, MN 55115-2722
PHONE: 651-433-1223
FAX: 651-433-1335

CIVIL ENGINEER
PHELPS ENGINEERING, INC.
3 MILL STREET
MIDDLEBURY, VT 05753
PHONE: 802-388-7800
FAX: 802-388-6442

ECOLOGICAL PLANNING & DESIGN
ANDROPOGON ASSOCIATES, LTD
10 SHURS LANE
PHILADELPHIA, PA 19137
PHONE: 215-483-0700
FAX: 215-483-7520

ATWATER COMMONS DINING HALL

MIDDLEBURY COLLEGE
MIDDLEBURY, VERMONT

ITA PROJECT NO. 627
AA PROJECT NO. 2289

ROOF PLANTING PLAN

SCALE: 1" = 20'
DRAWN BY: JBN
CHECKED BY: CAD FILE
DATE: 16 OCTOBER 02

REVISIONS	DATE	DESCRIPTION

D-L5.3