









Bottlebrush Grass





Vegetated Roofdeck, 10"-24" Growth Medium

Pea Gravel Ballast



NOTES COMMON NAME SIZE ORNAMENTAL GRASS 15" o.c. Purple Love Grass 1qt. 275 Eragrostis spectabilis 18" o.c. Prairie Dropseed 1qt. Sporobolus heterolepis 100 Little Bluestem 1qt. 24" o.c. 115 Schizachyrium scoparium SS 20" o.c. 120 Elymus hystrix Bottlebrush Grass 1qt. eh





TREES TO BE REMOVED					
SPECIES	DBH (in)	COMMENTS			
Japanese Yew	21 (multiple trunks	Good Condition,			
	cumulative sum)	Within proposed			
		construction site			

LATIN NAME	COMMON NAME	SIZE	NOTES
Amelanchier laevis	Allegheny Serviceberry	2.5-3" cal.	B+B single stem
Carex vulpinoidea	Fox Sedge	1gal.	Pot
Carex pensylvanica	Pennsylvania sedge	1gal.	Pot
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PLANT LIST: ROOFDECK			
	Amelanchier laevis	Amelanchier laevis Allegheny Serviceberry  Carex vulpinoidea Fox Sedge  Carex pensylvanica Pennsylvania sedge	Amelanchier laevis  Carex vulpinoidea  Carex pensylvanica  Allegheny Serviceberry  2.5-3" cal.  Fox Sedge  Pennsylvania sedge  1 gal.  1 gal.

PROF	POSED P	LANT LIST: ROOFDECK			
SYMI	B QTY.	LATIN NAME	COMMON NAME	SIZE	NOTES
ORN	IAMENTA	AL GRASS			
es	275	Eragrostis spectabilis	Purple Love Grass	1 qt.	15" o.c.
sh	100	Sporobolus heterolepis	Prairie Dropseed	1 qt.	18" o.c.
SS	115	Schizachyrium scoparium	Little Bluestem	1qt.	24" o.c.
eh	120	Elymus hystrix	Bottlebrush Grass	1qt.	20" o.c.

# Somerville Green Score: 53 Chester Revised 8/27/24

3,375

		Sq Ft Credit	Multiplier	Weighted Area	Score Value	% of Score
Soils						
Landscaped area with a soil depth less than 24 inches	0	actual sq ft	0.3	0	0.000	0%
Landscaped area with a soil depth equal to or greater than 24 inches	97	actual sq ft	0.6	58.2	0.017	6%
Pervious Paving with 6 to 24 inches of subsurface soil or gravel	25	actual sq ft	0.2	5	0.001	1%
Pervious Paving with more than 24 inches of subsurface soil or gravel	151	actual sq ft	0.5	75.5	0.022	8%
Groundcovers						
Turf grass, mulch, and inorganic surfacing materials	0	actual sq ft	0.1	0	0.000	0%
Plants						
Vegetation less than two (2) feet tall at maturity	97	actual sq ft	0.2	19.4	0.006	2%
Vegetation at least two (2) feet tall at maturity	0	12	0.3	0	0.000	0%
Trees						
Small Tree	0	50	0.6	0	0.000	0%
Large Tree	0	450	0.6	0	0.000	0%
Preserved Tree	0	65	0.8	0	0.000	0%
Engineered Landscape						
Vegetated Wall	0	actual sq ft	0.1	0	0.000	0%
Rain gardens, bioswales, and stormwater planters	0	actual sq ft	1.0	0	0.000	0%
Green Roof with up to 6" of growth medium	0	actual sq ft	0.1	0	0.000	0%
Green Roof with 6"-10" of growth medium	0	actual sq ft	0.4	0	0.000	0%
Green Roof of 10"-24" growth medium	1390	actual sq ft	0.6	834	0.247	84%
Green Roof of over 24" growth medium	0	Calculate as if soils, groundcovers, plants, and trees				N/A

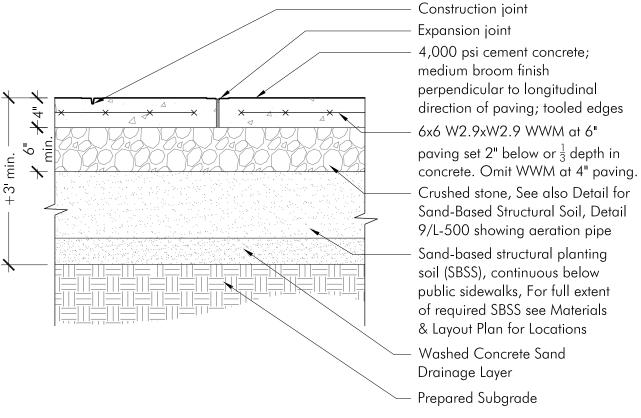
Green Score = 0.294

Required Scor Target Scor Actual Green Scor

	Green Score District Requirements							
	NR & UR	MR3 & MR4	1R5, MR6, & HR	FAB, CC, CB, C				
ore:	0.35	0.25	0.20	0.20				
ore:	0.40	0.3	0.25	-				
ore:	0.294	0.294	0.294	0.294				

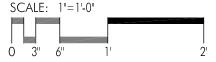


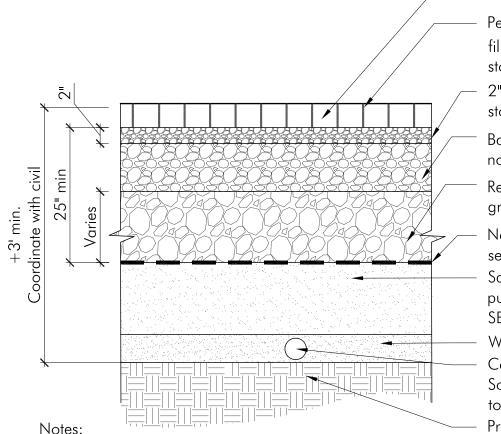




### Notes:

- See Civil Engineer Plans + Details for additional information.
   Provide expansion joint between concrete paving & <u>all</u> structures unless specifically directed by owner or Landscape Architect.
- 2. Provide 6" depth concrete at bike racks, benches and other site furnishings as noted on details.
- 3. All construction joints shall be 5' o.c. typical unless otherwise noted.
- 4. Expansion joints every 30' o.c. both ways and as noted.





Permeable Pavers, see specifications

Permeable joint opening aggregate; filled with  $\frac{3}{8}$ " open graded crushed, angular stone; (ASTM #9)

2" Leveling Course open graded stone (ASTM #8)

Base Course  $\frac{3}{4}$ "-1" open graded stone no fines (ASTM #57)

Reservoir Course 1  $\frac{1}{2}$ "-3" open graded stone no fines (ASTM #2)

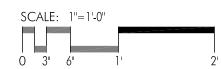
Non-woven Geotextile soil separation, see specification

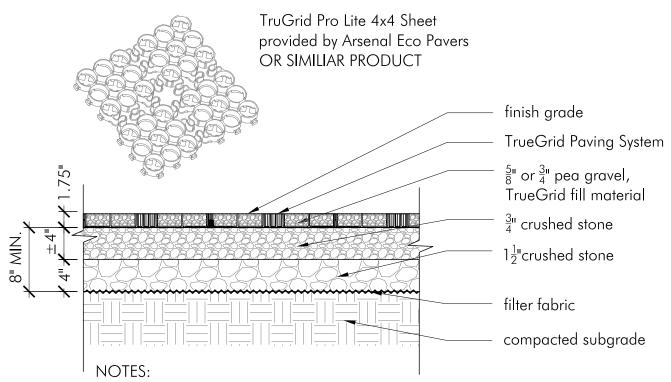
Sand-based structural planting soil (SBSS), public sidewalk, For full extent of required SBSS see Materials & Layout Plan for Locations

Washed Concrete Sand Drainage Layer Continuous 4" ADS Perf. Pipe, covered w Drain Sock, below all permeable unit pavers, connected to stormdrain system, see Civil Eng. Plans Prepared Subgrade

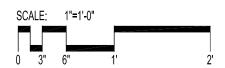
Edge restraints may vary.

- 2. All aggregate material shall be crushed, angular stone and free of fines.
- 3. Compact subsoil with a California bearing ratio (cbr) of less than 5% as directed by a professional engineer.
- 4. Surface slope shall be a minimum of 1% and a maximum of 5%.
- 5. Install pvc underdrain pipe where infiltration rate of subsoil is less than 0.5 in./hr. size as directed by a professional engineer.
- 6. Never build permeable pavements on organic clay soils of high plasticity and/or peat, mulch, soils with high organic content.
- 7. Maintain a minimum distance of 2' between bottom of permeable base and water table.
- 8. The minimum aggregate thicknesses are after compaction.

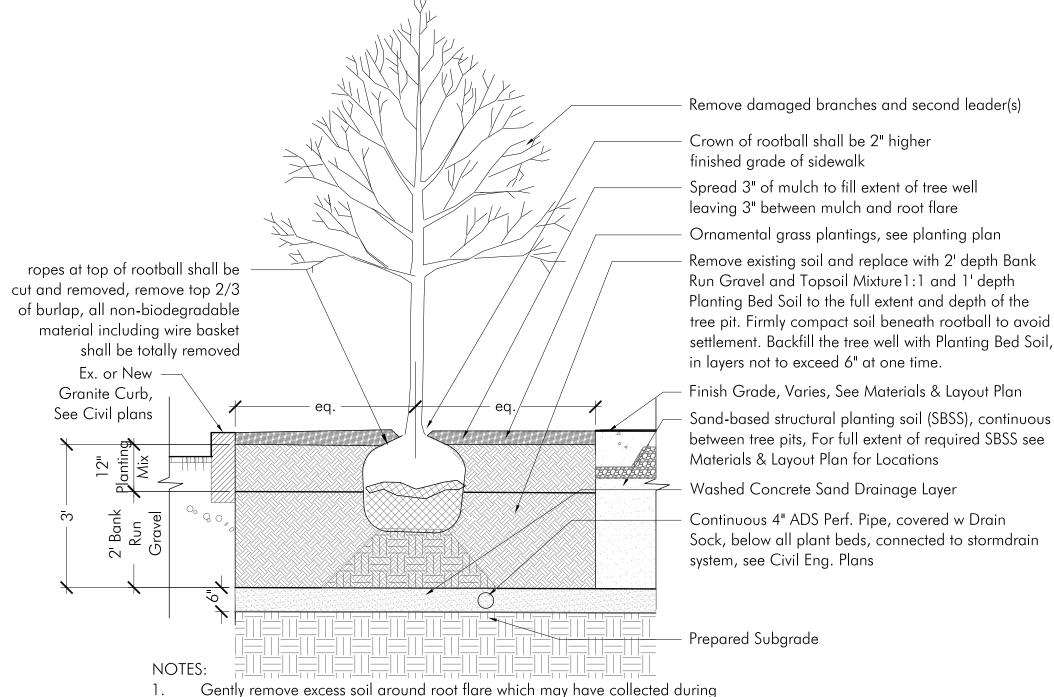


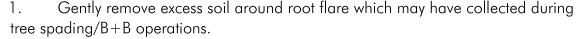


- 1. TruGrid Pro Plus by TrueGrid Paver provided by Arsenal Eco Pavers OR SIMILAR PRODUCT
- 1.1. arsenalecopavers.com
- 1.2. See manufacturer's specifications
- 1.3. Preassembled & delivered in 4'x4' sheet. Reconfigured as needed. No extra tooling or accessories required.
- 2. Geogrid mesh or geofabric may be required between subgrade and subbase for certain soils and site specific requirements.
- 3. No staking necessary when slope is  $<10^{\circ}$ .
- 4. Final engineered cross section aggregates and depth should allow for expected infiltration rates, storage capacities, outlet flow rates, and other site specific conditions and load requirements.

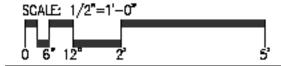


ANDSCAPE



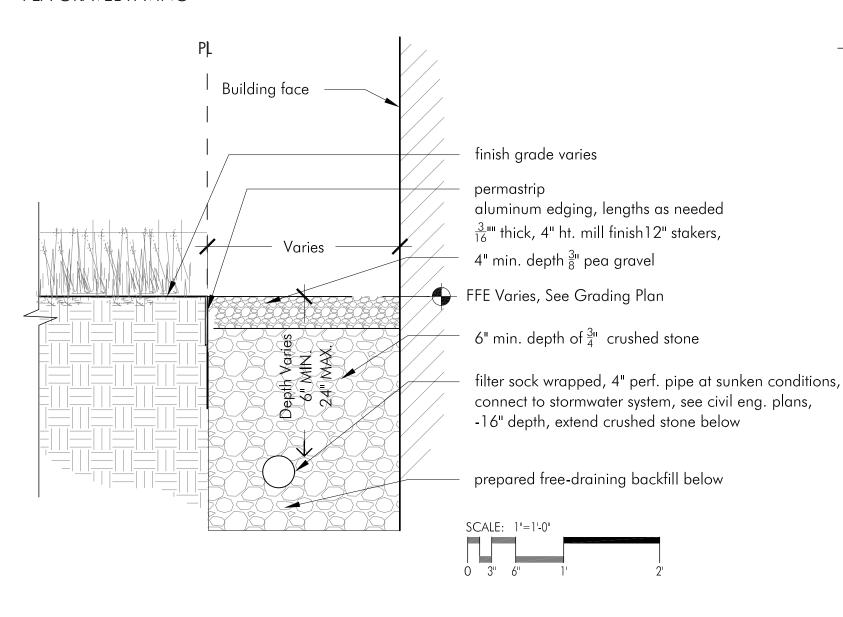


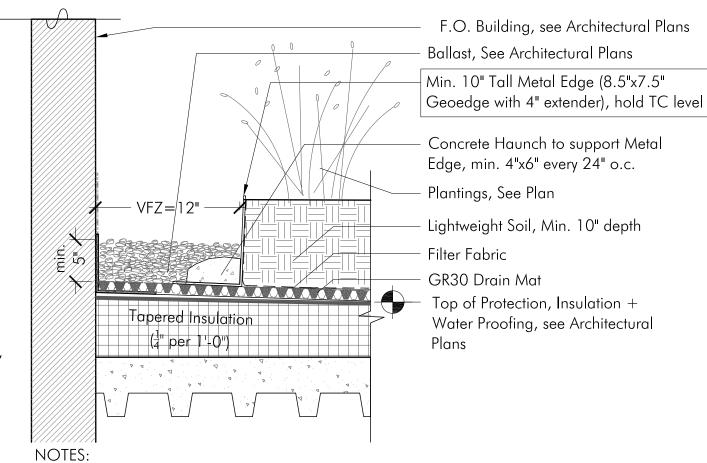
- 2. Provide wooden stakes (2 per tree) and guy wire (rubber hose cover at trunk) in windy locations and as site conditions require, as directed by Landscape Architect.
- 3. See Soil Specifications for Planting Mix, Bank Run Gravel, Concrete Sand, and Sand-Based Structural Soil.



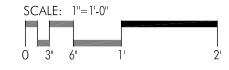








- 1. Follow manufacturer's installation recommendations
- 2. Metal Edge: GeoEdge by Permaloc, finish shall be anodized Silver





## **NOTES**

- I. Green roof modules are to be delivered in good condition. Green roof modules are to be handled carefully to prevent damage to the plants. Modules shall have plastic unwrapped (if shipped on pallets) the same day as delivery to avoid plant damage caused by overheating.
- 2. Conduct roof top staging of green roof system components after verifying roof loads and acceptable staging areas. Stage green roof modules over plywood panels or protective sheeting.
- 3. Green roof modules are to be conveyed to the roof surface with equipment that is designed and certified to hoist the associated weights safely and in accordance with equipment capacity, and local codes and regulations.
- 4. Protect the roof deck and waterproofing membranes using appropriate materials such as plywood sheeting. Avoid using sharp tools and keep the roof surfaces clean and free of soil, grit, or debris.
- 5. The vegetated green roof system Installer shall maintain the modules for at least 30 days following installation.
- 6. Maintenance during the initial 30-days shall follow industry accepted horticultural practices. Watering: two watering events per week to sufficiently saturate the growing medium. Provide spot weeding (by hand), as needed, to maintain plant health and prevent weed to flower and set seed, and to prevent woody plants to establish. Do not use any pesticides which include herbicides. Repair, rework and replant, if necessary, areas where wash out caused erosion, and replace dead plants.
- 7. Maintenance protocols: Provide the GreenGrid® maintenance guide and protocols to the Owner for extended maintenance of the green roof system. Provide a report(s) to the Owner outlining post-installation green roof conditions and observations about plant care and the initial maintenance period.
- 8. Irrigation: Irrigation lines to be inserted through an integrated irrigation channel in the module during

- installation. Water shall be delivered directly and evenly to plants for uniform plant growth. Pop-up sprinklers and spray systems are commercially available. Consult a qualified irrigation specialist to determine appropriate design, system details and configuration, materials and maintenance requirements.
- 9. Edge Treatment: Provide decorative edge treatment from Permaloc, or equivalent suppliers, in multiple sizes, and color for use as landscape edging around the perimeter of the vegetated green roof system in all depths.
- 10. Stone Ballast: Clean stone or 'river rock', nominal I-1/2" diameter minimum (#4) rounded stone can be used to infill around roof drains or along irregular-shaped areas.
- 11. Drain Covers: Stainless steel drain enclosure and cover to enclose roof drains. Provide standard 24-inch by 24-inch or custom sizes as necessary to fit roof drains and fit within modular green roof system. Drain covers shall have L-shaped tabs at the bottom edges to anchor beneath the modules.
- 12. Qualified Installers including General Contractors, Roofing Contractors and Landscape Contractors can install the GreenGrid® system by following the Installation Guide. A pre-installation conference call/meeting may be appropriate for new Installers. Install the vegetated green roof system according to specifications, applicable codes and regulations.
- 13. Safety: Installers are solely responsible to comply with all applicable safety and fall protection codes, laws and regulations as required by federal, state and local codes and regulations.
- 14. When plants are properly adapted and acclimated to the local weather conditions. In northern climates and unless otherwise permitted, modules shall be installed between April 15th and October 1st, except when temperatures are below 35° F. In more southern climates, the installation season will depend on seasonal weather conditions.
- 15. Handle the modules with care. Do not drop, kick or

- point-load the modules during installation. Place modules above the slip sheet or protective layer in accordance with the landscape design or layout Drawing. Modules shall be placed in straight rows, positioned tight beside each module and in proper orientation according to the landscape design.
- 16. After installation, modules shall be immediately watered so as to thoroughly moisten growing media throughout. Water shall be free of substances harmful to plant growth.
- 17. Do not install modules directly in low sections of roof where water ponds or where modules will block flow of drainage, or on saturated roof surface or during freezing weather conditions.
- 18. If required, install an irrigation system according to the manufacturer specifications and instructions. If an irrigation system is not required, provide hoses/sprayers for temporary irrigation, as needed, to conduct initial watering for plant maintenance.
- 19. Cut modules, only if necessary, to offset structures or roof edges, or around obstructions. Install partial or cut planter modules with the cut edge facing another module or edging.

## **IRRIGATION NOTES**

- I. The Contractor shall provide a complete irrigation plan as described in the specifications.
- 2. The Contractor shall provide water supply through a second meter for the rooftop Greenroof within the Sprinkler room or mechanical room. A backflow preventer and hose-bib (or faucet) shall be provided to drain out the water supply line to the roof.
- 3. At the rooftop, the Contractor shall provide winterization/blowout configuration, including any additional back flow value as may be required by code. Beyond the winterization appurtenances, the Contractor shall provide a valvebox for the irrigation spray zones as may be needed depending on the water pressure at the roof.



GREEN ROOF NOTES 53 CHESTER STREET SOMERVILLE, MA