

Plotted By: Yong, Alex Sheet: S&T-K&A - LANDSCAPE DETAILS - September 10, 2019 - 03:30:33pm K:\NVA-LA\LA\110613000\_770 M ST\CAD\PlanSheets\L100\_Landscape Plan.dwg  
 This document, together with the concepts and designs presented herein, is an instrument of service, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

**GENERAL NOTES**

- Plants shall be healthy, vigorous material, free of pests and diseases and are subject to approval/rejection of the Landscape Architect prior to, during and after installation.
- Contractor shall identify all materials at growing location prior to purchase and submit digital photographs, and source list to the Landscape Architect for approval at a minimum of six (6) calendar weeks prior to installation. Plants not approved shall be resourced and resubmitted.
- Planting beds and individual tree plantings shall be mulched continuously as specified.
- Prior to construction the contractor shall be responsible for locating underground utilities and execute work in a manner that avoids damage to utilities during the course of work. Contractor shall be responsible or remedy of any damage to utilities, structures, site appurtenances that occur as a result of landscape related work.
- Contractor is responsible for verifying quantities shown on documents. Field adjustments shall be approved by Landscape Architect prior to installation. Quantities indicated on drawings are for reference-it is the Contractor's responsibility to ensure full coverage of plants at the indicated spacing.
- Contractor is responsible for maintenance of all plantings including, but not limited to watering, mowing, edging, spraying, mulching, fertilizing, of plantings and turf areas for one (1) calendar year from date of certificate of occupancy. Contractor is responsible for warranty of all plant material for a period of one (1) calendar year from date of certificate of occupancy. Warranty replacement planting shall meet or exceed the original specification identified on drawings. Replacement planting shall extend the same warranty as originally installed materials. Plantings and grass areas shall be flourishing and fully thriving at end of warranty period.
- Plants identified for replacement by Owner, Landscape Architect shall be replaced immediately by the Contractor unless otherwise agreed upon. Plantings (trees, shrubs, groundcover) subject to replacement by warranty shall exhibit characteristics of 30% dead-per individual plant, non-contributing or disease compromised. Grass areas suitable for acceptance shall demonstrate 85% sustained/consistent and continuous, densely established coverage. Contractor shall perform a site review at end of warranty period and provide the Owner with written documentation of the site, including plant health, warranty replacement items, and conditions that may be influencing plant health. Contractor shall remove from plants and site, all staking and guying material at end of warranty period.
- Contractor shall comply with all local, state and federal requirements, codes and regulations related to the work undertaken.
- All material including planting operation appurtenances shall be of domestic origin manufacture and sourced within 100 miles of the project site.
- Contractor is responsible for coordination among trades operating on site. Coordination and if necessary resulting modifications to schedules are responsibility of the Contractor.

**PERFORMANCE SPECIFICATION**

- I. PLANTS**
- A. General**
- Live healthy plants free of dead branches and parts
  - Free of disease, insect, injury and damage
  - Unbroken, intact, dense and solid rootballs and containers, without cracks, flat sides or previously repaired damage.
  - Free of girdling roots or rootbound/circling container conditions
  - Plants of consistent in growth habit and healthy character
  - Free of compromising growth conditions such as weak crotch connections, crossed branches, snags and scars
  - Point of origin growing location within 100 miles of project site
  - Graded, standards, caliper, sizes and stock consistent with ANSI Z60.1, American Standard for Nursery Stock most current edition
  - Species identified consistent with Hortus, Third, Concise Dictionary of Plants Cultivated in the United States and Canada, most current edition and Manual of Woody Plants: Their Identification, Ornamental Characteristics, Culture, Propagation and Uses, most current edition
  - All disturbed areas shall be grass seed unless otherwise identified on landscape plans

- B. Trees:**
- Deciduous Single Trunk
    - Full, straight and upright with consistent symmetrical natural branching pattern throughout
    - Branching Height-seven (7) feet to lowest branch in two years unless otherwise required by local jurisdiction
  - Deciduous Multi-Trunk
    - Full and upright with straight consistent symmetrical natural branching pattern throughout
    - Canes evenly spaced and of similar growth habit
    - Free of suckers and extraneous branching
  - Evergreen Single-Trunk
    - Full and upright with continuous symmetrical dense natural habit
    - Clear branching height twelve (12) inches above top of rootball
    - Free of suckers and extraneous branching
    - Do not shear or otherwise prune to shape plantings

- C. Evergreen and Deciduous Shrubs**
- Full, dense and naturally symmetrical
  - Consistent with container and/or balled and burlapped size
  - Free of suckers and extraneous branching
  - Do not shear or otherwise prune or shape plantings

- D. Evergreen and Deciduous Groundcover**
- Full and dense in pots or flats

- E. Perennials and Seasonal Color**
- Full and dense in pots or flats

- F. Turf Grass**
- 1. Subgrade**
- Soil Mix-10% Compost, 90% topsoil by volume
  - Preparation-loosen subgrade to a minimum depth of four (4) inches. Remove all non-natural materials including litter, stones, sticks and all items greater than ¼ inch in any dimension
  - Preparation-spread soil mix at a depth of four (4) inches continuously to meet grade elevations shown on drawings. Allow for thickness of sod when applicable
- 2. Grass Sod**
- Install not longer than twenty-four (24) hours from harvest
  - Grass bed not less than two (2) inches in continuous thickness
  - 100% continuous live sod coverage after first growing season and at end of warranty period.
  - Of uniform non-varying density and continuous texture quality capable of growth and development immediately upon installation. Weed and noxious plant free
  - Stagger installation rows and place aligned parallel to contours
  - Fill joints solidly with planting bed preparation soil
  - Provide anchor pins at twenty-four (24) inches on center for slopes greater than 4:1
- 3. Grass Seed**
- Mix approved by the Landscape Architect
  - Provide first and new of year seed crops in mix free of weed seeds and deleterious matter
  - Provide seed mix not greater than 15% annual or perennial rye
  - Coverage 85% continuous coverage live stand after first growing season and at end of warranty
  - Replacement or overseeding mixes consistent with original application/installation
  - Provide erosion blankets or other slope retention methods as noted on drawings

- II. Materials and Appurtenances**
- A. Testing**
- Materials testing information/certificates/dated labels shall be current to the project and performed/certified not greater than 120 calendar previous days from current date of submittal for review
- B. Top Soil**
- Neutral Ph balance 5.5 -7.5. Friable and containing 2.0-5.0% organic matter by dry weight. Continuously free of non-soil items such as stones, debris, sticks, trash, and deleterious matter greater than ¼ inch in any direction. Clay content shall not exceed 25%. Gravel content shall not exceed 10%. Silt shall not exceed 25%
- C. Use of Existing Topsoil**
- Existing topsoil on-site may be repurposed with prior Owner approval. Contractor shall provide soil testing and additive program that demonstrates consistent performance and characteristics and composition as identified herein. Owner shall approve soil testing and soil amendment/additive methods and procedures

- D. Shredded Hardwood Mulch**
- 100% organic shredded first year hardwood free of deleterious matter, rock, gravel and weed seed. Neutral Ph balance 5.5-7.5

- E. Composted Pine Bark Fines**
- 100% organic ground pine bark with no particle dimension greater than ¾-inch and no greater than 10% wood content

- F. Compost Ph**
- Balanced 5.0-8.5 mature, stable and weed free produced by natural aerobic decomposition. Free of visible contaminants and toxic substances. Not greater than 5% sand, silt, clay or rock by dry weight. Consistent with US-EPA CFR Title 40 Part 503 Standards for Class A biosolids

- G. Compost Testing**
- Prior to delivery on-site, the following items are required for approval by Owner: Feedstock percentage in final compost product; statement that the products meets federal, state and local health safety requirements
  - Provide copy of lab analysis less than 120 calendar days old verifying that the product meets described physical requirements; chemical contaminants; Ph; physical contaminants; biological contaminants (including a statement that fecal coliform and salmonella testing and results comply with requirements of the US Composting Council Seal of Testing approval programs

- H. Planting Mix**
- 85% topsoil and 15% Compost

- I. Fertilizer**
- Granular 10% nitrogen, 6% Phosphorous, 4% Potassium granular form with 50% Nitrogen in organic form. Product and Material Safety Data as approved by Owner

- J. Herbicide**
- Product and Material Safety Data as approved by Owner

- K. Water**
- Potable only unless otherwise approved by Owner

- L. Hardwood Stakes**
- 2 x 2 x 48 inch square of sound hardwood, painted flat black on all sides

- M. Tree Ties**
- Villa Non-Abrasive Rubber Tree Ties or approved equal

- N. Filter Fabric**
- Mirafi 140-N or approved equal

- O. Steel Edging**
- 1/8-inch x 4-inch in full sections. Ryerson, Timec or approved equal with integral stakes. No open corners. Corners shall be formed and trued to compliant angle or welded closed

- P. River Stone**
- Locally sourced, river rounded, unfaceted river stone/cobbles.
  - Size shall not exceed 3 total inches in any dimension.
  - Color and texture approved by Owner
  - When placed in concrete or mortar setting bed, tamp to secure and brush clear joints.
  - Concrete or mortar as approved by owner.

**III. Execution**

- A. Site Conditions**
- Inspect site and notify Owner in writing of acceptance with indication that project conditions are acceptable are suitable to proceed with work. Notify Owner of any existing damage and/or other conflicting conditions.
  - Do not proceed with work until unsatisfactory conditions have been satisfactorily remedied. Notify Owner of acceptance prior to commencement of work.
  - Notify Owner in writing of any conditions that may preclude successful completion of work including items such as coordination with other trades, incomplete work, drainage, soil temperature and/or composition, access to storage/work areas, damage to conditions, etc.
  - Notify Owner in writing immediately of any items that may influence work schedule, timing of tasks, materials delivery and/or installation and warranty responsibilities.
  - Coordinate and cooperate with other trades working in and adjacent to work areas. Examine drawings of other trades which show development of the entire project and become familiar with the scope of required work by others.

- B. Planting Seasons**
- Recommended seasons are a general guide based on historical climatic data and typical performance of plantings, and which vary dependent on project-specific environmental conditions. Due to construction schedules, recommended planting seasons may/may not coincide with request(s) for certificate of occupancy for projects. Coordination of planting installation and seasons shall be reviewed with Owner on an individual project basis.

- 1. Deciduous and Evergreen Trees**
- Do not install/plant the following trees between September 15 and March 15
    - Oaks (Quercus Sp., Such as Q. rubra, Q. alba, Q. phellos, Q. coccinea)
    - Dogwood (Cornus Sp.)
    - Sweetgum (Liquidambar Sp.)
    - All Conifers and Evergreens except White Pine (Pinus strobus Sp.)

- 2. Deciduous and Evergreen Shrubs**
- Install/plant between March 15 and June 15 and/or September 15 and November 30

- 3. Perennials**
- Install/plant between March 15 and June 15 and/or September 15 and November 30

- 4. Spring Flowering Bulbs**
- Install/plant between September 15 and December 15

- 5. Seasonal Annuals**
- Install/plant in season per approved schedule

- 6. Turf Grass**
- Install/plant between March 15 and May 15 and/or September 15 and November 30
  - Do not install/plant seed or sod turf grass areas when ambient air temperature is below forty (40) degrees Fahrenheit, or forecast for a twelve (12) hour period after completion of work

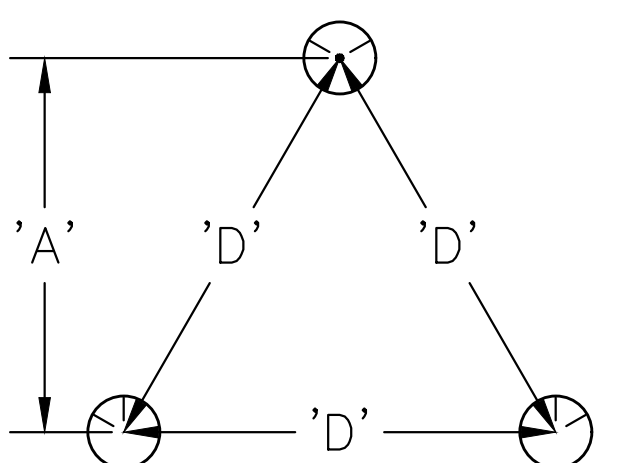
- 7. No Plant Installation**
- Do not install plantings or turf grass between June 15 and September 15, without approval by Owner

- C. Positioning & Location of Plantings**
- Position plants to show the most-prominent and well-formed face to most-public view
  - Field locate plants and location/spacing/dimension of planting beds on project site prior to beginning installation
  - Verify location of individual plants and plant beds prior to beginning installation. Do not proceed without Owner approval

- D. Implementation**
- Pursue work continuously without delay or interruption until completion unless notified otherwise by Owner
  - Provide project submittals ahead of commencement of work. Landscape Architect requires a minimum of ten (10) working days from date of receipt for review of submittals and response to Owner and Contractor. Plan accordingly for procurement of materials
  - Continuously update implementation schedule and notify Owner of progress. Delays related to material availability are not cause for non-completion of scheduled delivery of work
  - Report delays due to weather or site conditions immediately upon finding. Provide recommendation for remedy of schedule delays. Do not work, place or modify frozen soil
  - Report delays due to extraordinary natural or other conditions beyond control of Contractor

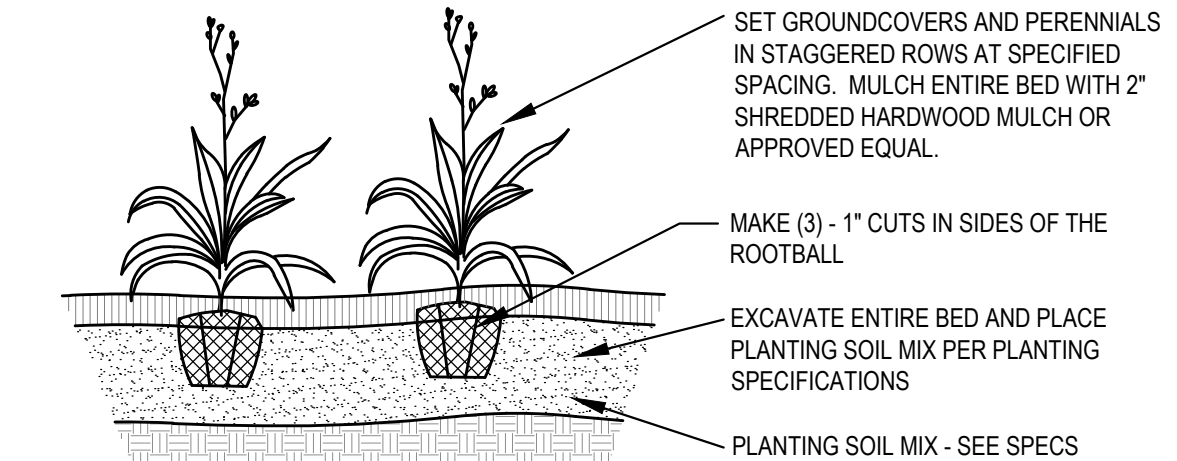
- E. Clean Up**
- Remove trash, debris and work materials from site prior to request for substantial completion. Thoroughly clean surfaces impacted by work including building, parking areas, roadways, sidewalks, signs, lights, site furnishings, etc.
  - Repair any damage to existing conditions that occurred during execution of work.
  - All clean-up and demobilization procedures shall be performed to satisfaction of the Owner and Landscape Architect.

NOTE: GROUNDCOVERS AND PERENNIALS TO BE INSTALLED WITH TRIANGULAR SPACING

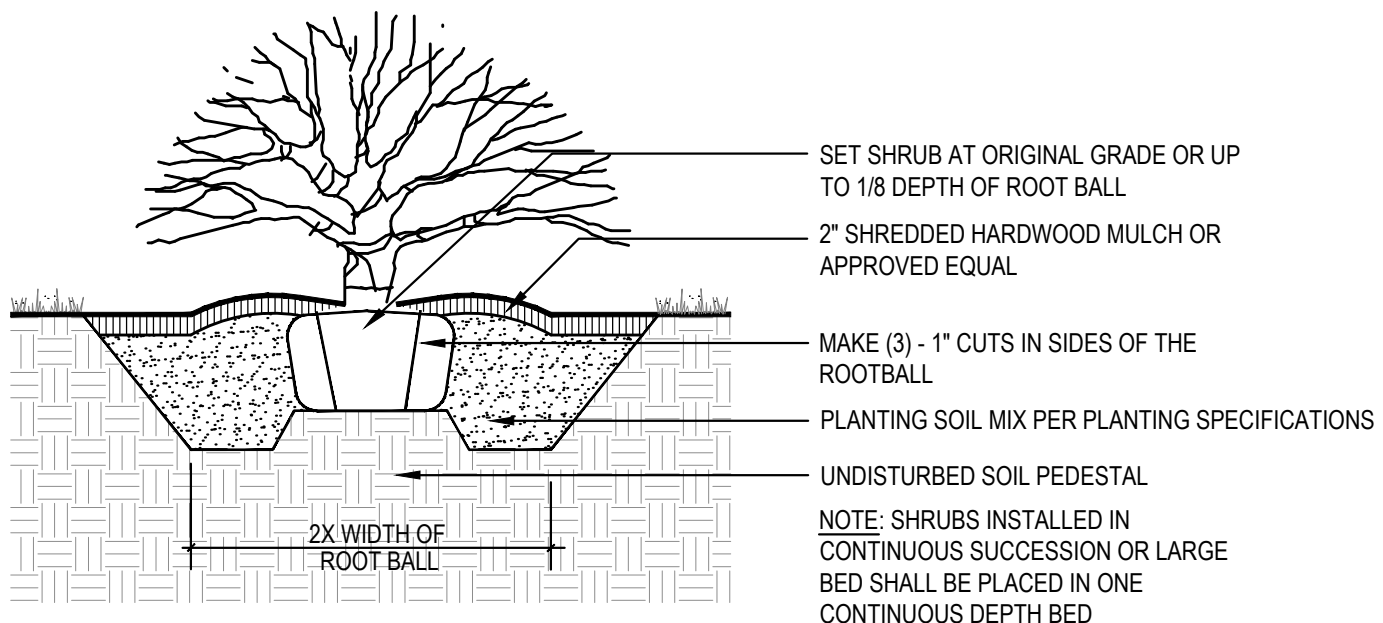


PLANT SPACING 'D'	ROW 'A'
8" O.C.	6.93" O.C.
10" O.C.	8.66" O.C.
12" O.C.	10.4" O.C.
18" O.C.	15.6" O.C.
24" O.C.	20.8" O.C.
36" O.C.	30.0" O.C.
48" O.C.	31.5" O.C.

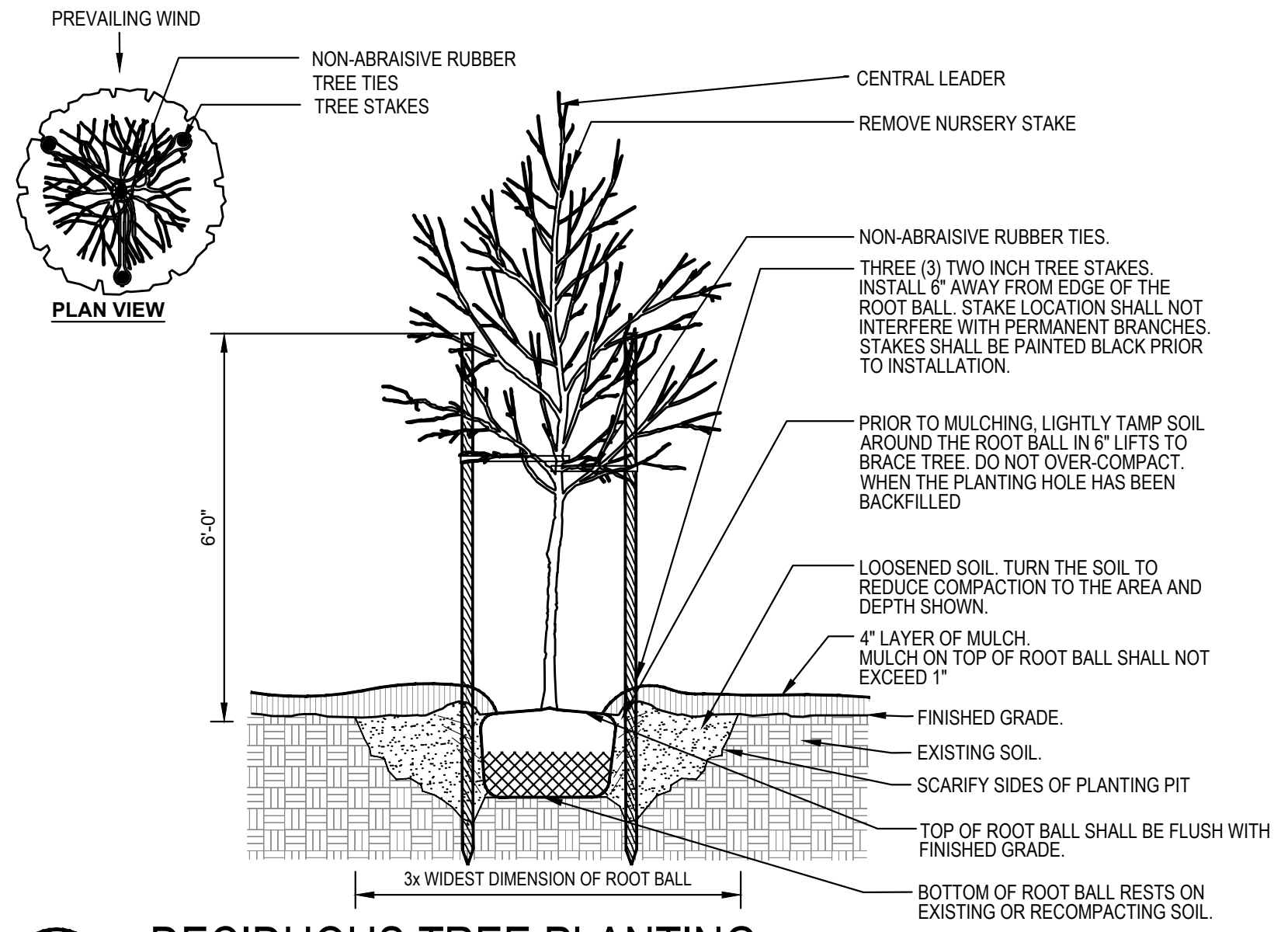
**1 GROUNDCOVER SPACING**  
NOT TO SCALE



**2 GROUNDCOVER PLANTING**  
NOT TO SCALE



**3 SHRUB PLANTING**  
NOT TO SCALE



**4 DECIDUOUS TREE PLANTING**  
NOT TO SCALE

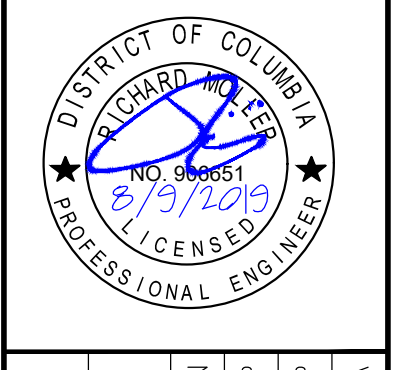
SUPPLIER:  
GREEN LINE  
16460 SOUTHPARK DRIVE  
WESTFIELD, IN 46074  
P: 1.877.687.2318  
  
WEB: WWW.GREENLINEMFG.COM  
WIDE DIVIDER PLANTER  
SIZE: LARGE | 48" L x 16" W x 32" H | 63 lbs | 101 gal  
MATERIAL: ALUMINUM  
COLOR: CHARCOAL



**5 MOVABLE PLANTERS**  
N.T.S

NO.	REVISIONS	DATE	BY

**Kimley»Horn**  
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11460 COMMERCE CENTER DRIVE, SUITE 400  
RESTON, VA 20191



KHA PROJECT	110613000
DATE	8/9/19
SCALE	AS SHOWN
DESIGNED BY	CMP
DRAWN BY	CMP
CHECKED BY	K.A.

**LANDSCAPE NOTES AND DETAILS**

**770 M STREET SE**  
PREPARED FOR  
**NCC**  
DISTRICT OF COLUMBIA

SHEET NUMBER  
**L200**