

PLANTING SPECIFICATIONS

SCOPE : Consists of supplying the planting trees, shrubs and herbaceous materials (groundcovers) including the staking of trees as specified herein and the supplying of materials, labor, equipment and work related services necessary for same as specified herein.

The work of this section includes, but is not limited to:

- mulching
- watering
- soil preparation
- planting
- maintenance
- fertilizing
- wrapping
- staking
- plant materials
- replacement

MATERIALS: Wherever the following items appear in the specifications, they shall be as follows:

Topsoil The Contractor shall provide required natural, friable, fertile, fine sandy loam possessing the characteristics of representative topsoil in the vicinity which produce heavy growths of vegetation. The topsoil shall be free from subsoil, noxious weeds, stones, lime, cement, ashes, slag or other deleterious matter. Topsoil shall be well drained in its original condition and free of toxic quantities of acid or alkaline elements. It shall contain sand and clay in approximately equal proportions, and shall have an organic content by weight of not less than 2% nor more than 20% as determined by laboratory tests. The pH shall be between 6 and 7.

Water Shall be furnished by the Contractor for the execution of all work specified in this contract. The Contractor shall verify that the water available is suitable for irrigation and free from ingredients harmful to plant life.

Peat Shall be only moss (sphagnum) peat; brown acid reaction approximately 4 to 5 pH; of standard commercial quality delivered to the site in bags or other convenient containers, in air dry condition. Peat shall be fully warranted by the producer.

Brace Stakes: Wood brace stakes shall be common lumber or the sizes in the following table:

| Tree Size | Brace Stakes |
|---------------------|-----------------------------------|
| 1"-12" or < 8' tall | 2"x2"x96" |
| 12"-3" or > 8' tall | 2"x2"x24", 2"x2"x30" for conifers |

Wire shall be good commercial quality of galvanized wire. Wire used to stake trees shall be No. 11 gauge minimum.

Hose Collars: Hose collars shall be new two ply fabric bearing garden hose not less than 2 inch inside diameter.

PLANT MATERIAL STANDARDS :

Association of Nurserymen, Inc., as published in the "American Standard for Nursery Stocks", latest edition. No substitutions of size or grade shall be permitted without written permission from the Landscape Designer. Each bundle of plants and all separate plants shall be properly identified with the legible waterproof tags securely fastened to each plant or bundle of plants. They shall remain on the plants until final inspection.

Health All plants including their roots shall be free from disease, insects, or other injurious qualities. All local, state, and federal laws pertaining to the inspection, sale, and shipment of plant materials shall be complied with. The trunk bark of all trees shall be sound, trees shall have no large wounds, and any small wounds shall have a satisfactory callus roll formed or forming over them. Plants shall show good annual growth. Buds shall be plump and well filled for the species. Evergreen foliage shall be of good intense color.

Quality: All plants shall be true to type; they shall have normal, well-developed branch systems, and a vigorous fibrous root system; they shall be sound, healthy, vigorous plants free from defects, disfiguring knots, sunscald injuries, abrasions of the bark, plant diseases, insect eggs, borers, and all forms of infestation. All new plants shall be nursery grown.

Ball and Burlap: All balled and burlapped plants shall conform to the "American Standard for Nursery Stock", latest edition. All balls shall be of natural earth in which the plant has been growing. No manufactured or artificially produced or mudded-balls shall be accepted. Balls shall be firm and unbroken, and of large enough size to adequately enclose the plant's fibrous root system.

Plant List The list of plants furnished with the specifications is for the information of the Contractor. The height and caliper of trees, the height or spread of shrubs, the diameter of the balls of roots are the minimum dimensions required. Plants indicated "B&B" are to be dug with a ball of earth and wrapped in burlap.

Measurements : Shall conform to those specified on the plant list except as follows:

Oversize plants may be used only after approval by the designer.

Use of such plants shall not increase the contract price.

Height and spread dimensions indicated refer to the main body of the plant and not from branch tip to branch tip. All trees and shrubs shall be measured when their branches are in normal position. Trees shall have straight trunks with the leader intact, undamaged and uncut.

Inspection The Planting Contractor shall be responsible for all inspection and approval of the plant material that may be required by state, federal and other authorities, and he shall secure any permits and certificates that may be required.

All plants shall be subject to inspection, and approval at place of growth before digging, or upon delivery, for quality, size and variety; such approval shall not impair the right of rejection at the project site during progress of the work, for size, condition of balls, roots, latent defects or injuries. Rejected plants shall be removed immediately from the project site

DIGGING AND HANDLING :

Protection from extremes in exposure and rough handling shall be provided all plant materials during transport and storage.

All plant materials shall be assembled in one location on the job site to permit inspection and approval by the designer. The Contractor shall notify the designer five (5) working days prior to planting so that a mutually agreeable time may be arranged for inspection. Stock with broken root balls or loose containers, and stock which shows evidence of being root-bound, over-grown, or recently canned, or in the opinion of the designer is damaged or improperly cared for, shall be removed from the site immediately and replaced at the Contractor's expense with another plant meeting the original specifications. Plants shall not be pruned prior to approval by the designer.

PROCEDURE :

Tree Planting

Layout All trees shall be located as designated in the field by the planting plan. Where below ground or overhead obstructions are encountered, the trees shall be relocated by the designer.

Planting Pits : Shall be a diameter two (2) feet greater than the diameter of the ball of the tree. The depth of the pit shall be enough to accommodate the ball or roots of the tree when the tree is set to finish grade, allowing for six inches of compacted topsoil below the roots of the plant. Prior to installing the 6" of topsoil to the pit, 3" of existing soil shall be mixed with the topsoil at a 1:1 ratio to reduce puddling beneath plantings. Planting islands within the parking lot shall be brought to final grade with 6" of planting soil.

Planting Soil Preparation: Mix then one part peat moss with five parts topsoil. Mix all components thoroughly before backfilling.

Setting of Trees : Before setting the trees, pits shall be backfilled with topsoil to a depth of 6", thoroughly tamped and watered. All plants shall be placed at such a level that, after settlement, the natural relationship between the original grade at which the plant grew, the ball shall be 1/8" higher than the finish grading. Trees shall be planted plumb, oriented for desired effect as directed by the designer. Topsoil shall be tamped under and around the base of each ball to fill all voids and shall be placed in 6 to 8 inch layers, each thoroughly tamped and puddled. Burlap shall be removed from the sides and top of balls and from under the balls. When planting bare root trees, care shall be taken to work topsoil in around the roots and to spread them in a natural position before backfilling. Shallow basin or saucers a little larger than the diameter of the ball shall be formed around all trees to hold additional water.

Mulch Shall be applied to all tree pits to a depth of 2-3".

Pruning: All trees shall be neatly pruned after planting in accordance with the best standard practices and as directed by the designer. The tree shall be pruned to preserve its natural form and character and in a manner appropriate to its particular requirements. In general, at least one third of the deciduous trees shall be removed by thinning or shortening of branches but no leaders shall be cut. All pruning shall be done with clean, sharp tools.

Shrub and Herbaceous Materials: (groundcover)

Layout Herbaceous planting beds and shrub pit locations shall be designated by the designer in accordance with the plant list and the tentative locations shown on the planting plan. The general form of the planting bed shall be staked out and excavations performed within the stakes.

Preparation of Herbaceous Planting Beds The ground shall be thoroughly broken to a depth of 12 inches. The top 4 inches shall be worked by the contractor until the soil is completely fined and in a mellow condition to finish grade. All organic material shall either be worked into the soil or removed from the site. Clumps shall be removed from the site. All shall be performed perpendicular to the direction of surface drainage. All holes, depressions and rivulets shall be filled and brought to a smooth grade.

Shrub Planting Pits : Shall have vertical sides. The diameter of the pits shall be two times greater than the diameter of the ball of the shrub. The depth of the pit shall be enough to accommodate the ball or roots of the shrub when the shrub is set to finish grade compacted allowing for six inches topsoil below the roots of the plant. Prior to installing the 6" of topsoil to the pit, 3" of existing soil shall be mixed with the topsoil at a 1:1 ratio to reduce puddling beneath plantings.

Shrub Planting Soil: Mix one part peat moss with five parts topsoil. Mix all components thoroughly before backfilling.

Setting of Shrubs: All materials shall be planted 2" higher in relation to the finish grade as they had before transplanting. The depth of the holes, as hereafter specified, shall be understood to be the depth below finish grade. Balled and burlapped plants shall have topsoil tamped under the balls. All burlap, ropes, stakes, etc., shall be taken off the tops of the balls and removed from the ball before backfilling. Roots of bare root plants shall not be left matted together, but shall be arranged in natural positions and shall have topsoil worked in among them. All broken and frayed roots shall be properly removed by trimming.

The Backfill of Topsoil Shall be tamped in successive 8" layers. When the hole has been 2/3 backfilled, water shall be poured in filling the hole, and allowed to soak away so that all voids or air pockets under or around the roots are eliminated. After the water has soaked away, the hole shall be completely backfilled with "topsoil". After the backfill settles, additional soil shall be filled in, to the level of the finish grade. A shallow saucer of soil shall be formed around the edge of each hole to hold additional water.

Pruning: All shrubs shall be neatly pruned or thinned immediately after planting in accordance with best standard practices and as directed by the designer. Broken or bruised branches shall be removed with a clean cut. Each shrub shall be pruned to preserve its natural form or character and in a manner appropriate to its particular requirements. All pruning and thinning shall be done with sharp, clean tools.

Mulch: Shall be applied to all shrub beds and pits to a depth of 3" and to all herbaceous planting beds to a depth of 2" & evenly around the sides of the tree, outside of the ball. All stakes shall be oriented to a line parallel with the normal prevailing winds, or as directed by the designer. See planting details for staking locations.

TEMPORARY STORAGE AND HEELING-IN:

No heel-in plant material will be accepted, nor will any temporary heeling-in storage be permitted. Plant material unloaded and accepted by the inspector shall be immediately transported to the planting site and planted. Material left out of ground overnight or left with its roots bare to the sun, or otherwise unprotected during transit, unloading or storage shall be rejected by the designer, if in his judgment such lack of protection has caused damage to the roots of the plant or in any other way injured the plant material.

MAINTENANCE :

The planting contractor shall be required to make periodic checks on the total project to make certain that the materials are properly cared for and that the sum of all conditions are contributing to the satisfactory progress of the materials, until such time as the work is approved by the designer.

INSPECTION AND ACCEPTANCE :

Inspection of this work will be made by the designer at the conclusion of the planting period upon written notice by the Contractor at least five (5) days prior to anticipated date. Condition of all plant materials will be noted and recorded for reference.

After inspection, the planting contractor will be notified in writing by the designer if there are any deficiencies of the requirements for acceptance of the work.

GUARANTEE AND REPLACEMENT:

Trees and shrubs shall be guaranteed for a maximum of one full year of growing seasons after installation and shall be alive and in satisfactory condition at the end of the guarantee period. Such guarantee excludes vandalism.

DEFINITION FOR FURNISHED AND INSTALLING PLANT MATERIAL

The unit price contained in the bid proposal for furnished and installing plant and shrub material shall be defined to include furnishing and installing material, all planting soils (if applicable), staking and a guarantee for two years or growing seasons (excluding vandalism).

PUBLIC UTILITIES:

- Care shall be exercised in excavation near utilities. If at any time Contractor damages the utilities in place through negligence or carelessness, Contractor shall pay for the full cost of repairing such damages. Contractor shall notify the appropriate person in the office of any utility whose lines may be affected.
- The locations of utilities shown on the plans are approximates only and do not necessarily indicate all the utilities that may be encountered during construction. The failure of a utility to be shown on the plans does not relieve Contractor of the responsibility for any injuries he may inflict on the utility, and in case of injury, it shall be repaired at the expense of the Contractor.
- Whenever other utilities are encountered whose present grade would conflict with the new construction, Contractor shall notify landscape architect, who shall arrange revisions without unreasonable delay. Trenching or tunneling under existing utilities, culverts, etc., and providing temporary support shall be done at no additional expense to Owner.

GUARANTEE AND REPLACEMENT: The Contractor will guarantee survival of plants (each species) after one year. If at this time the total number of plants has fallen below this threshold, the Contractor will make a one-time replacement to bring plant numbers to the 100% levels for each species. Care shall be taken such that the activities involved in replacement planting do not cause damage or detrimental effect to the surviving flora. Any plants damaged by these activities will also be replaced by the Contractor to the 100% threshold.

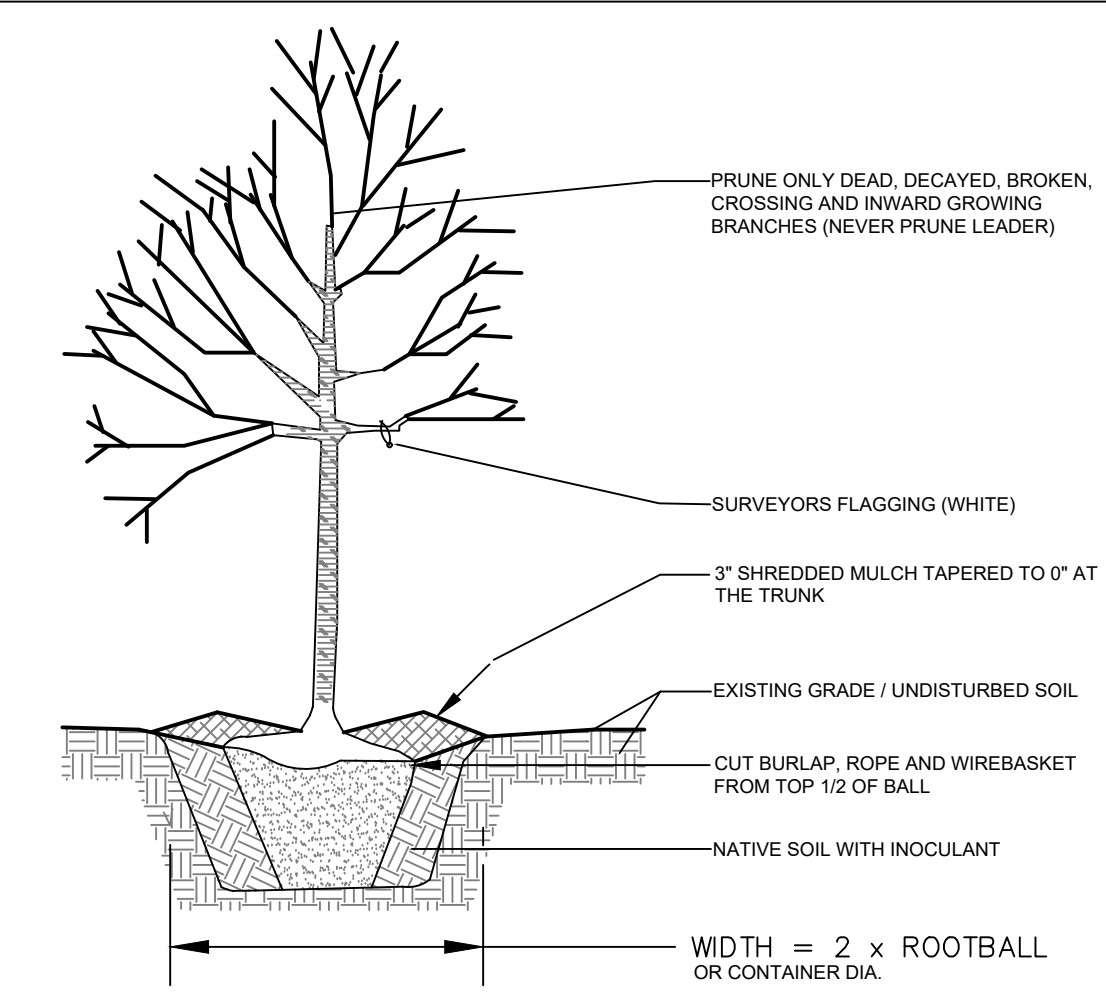
Trees, shrubs and ground covers shall be guaranteed for 1 year after installation and shall be alive and in satisfactory condition at the end of the guarantee period. Such guarantee excludes vandalism.

DEFINITION FOR FURNISHED AND INSTALLING PLANT MATERIAL: The unit price contained in the bid proposal for furnished and installing plant and shrub material shall be defined to include furnishing and installing material, all planting soils (if applicable), staking and a guarantee for 18 months (excluding vandalism).

PROTECTION OF PRIVATE PROPERTY: Contractor shall repair or replace all fences, concrete walls, concrete curbs, gravel and asphalt driveways, signs, culverts, and all other miscellaneous improvements, at no additional expense to owner, damaged by Contractor due to his operations on the project, to a condition equal to or better than their condition before construction.

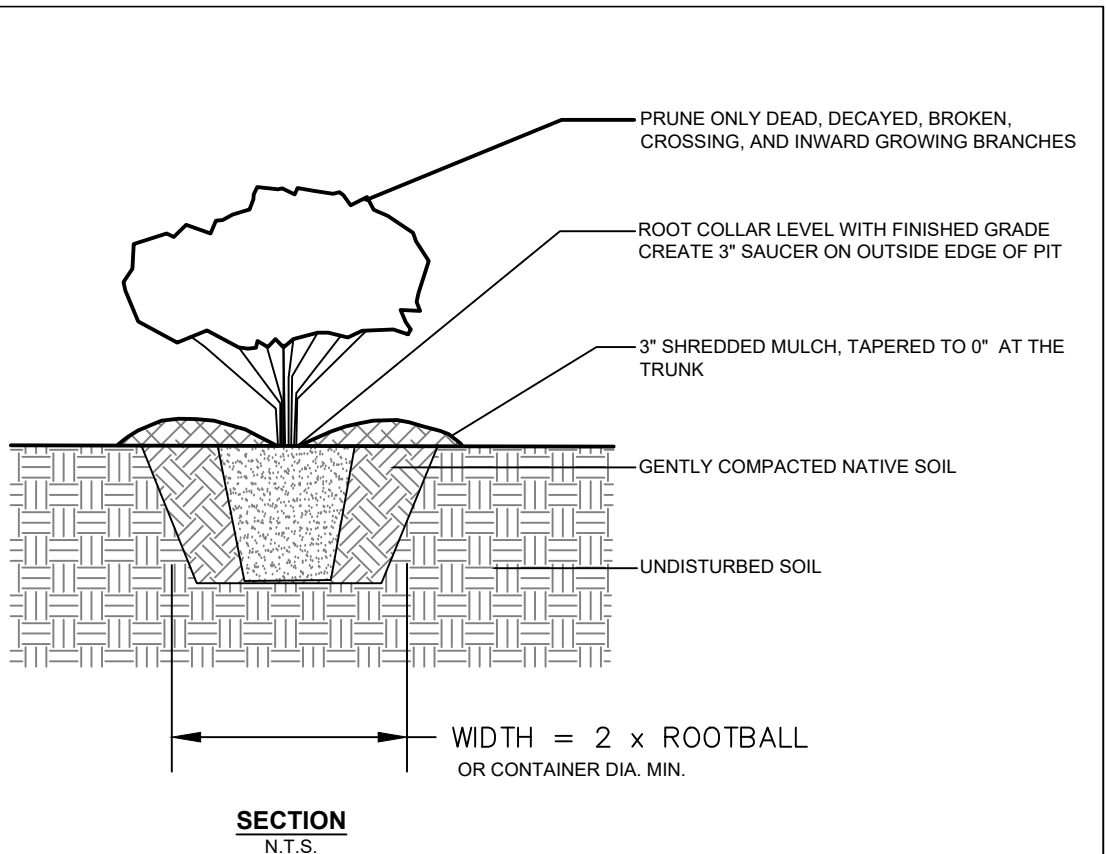
JOB CONDITIONS:

- Examine and evaluate grades, soils and water levels, observe the conditions under which work is to be performed, and notify the Landscape Architect of unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.
- Utilities: Review underground utilities location maps and plans provided by owner; demonstrate an awareness of utility locations, and certify acceptance of liability for the protection of utilities during course of work. Contractor shall be responsible for any damage to utilities or property.
- Excavation: When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions, or obstructions, notify Landscape Architect before planting.



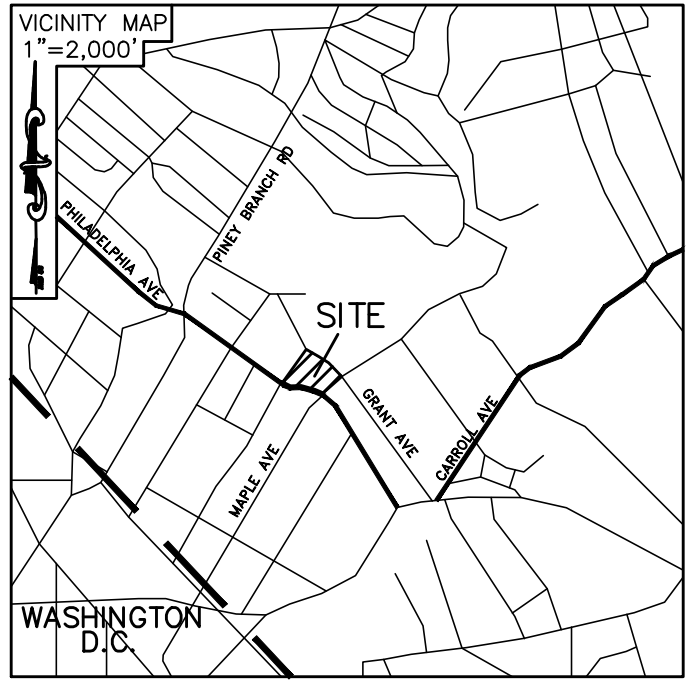
- NOTES:**
- PLANTING HOLE SHALL BE DUG BY A BACKHOE OR OTHER MACHINE AND FINISHED BY HAND.
 - IF SURROUNDING SOIL IS COMPACTED AS DETERMINED BY M&C/P/C PLANNING DEPT INSPECTOR OR PARKS DEPT FOREST ECOLOGIST, AN AREA UP TO 5 TIMES THE DIA. OF THE ROOT MASS SHALL BE EXCAVATED OR ROTOTILLED TO A 1' DEPTH AND THE SOIL SHALL BE AMENDED.
 - DO NOT DAMAGE OR CUT LEADER.
 - ROOT FLAIR EVEN WITH LEVEL OF UNDISTURBED GROUND.

DECIDUOUS PLANTS - (2" Caliper or Larger) Detail No. SEPTEMBER 2008



- NOTES:**
- REMOVE ALL POTS AND WIRE AND CUT CONTAINER CLEANLY WAY FROM ROOTS.
 - REMOVE BURLAP FROM TOP HALF OF ROOT BALL.
 - CONTAINER PLANTINGS MAKE 4 TO 5 VERTICAL CUTS TO THE ROOT BALL BEFORE SETTING IN PLACE.
 - PRUNE ALL DAMAGED, DISEASED, OR WEAK LIMBS AND ROOTS.
 - CLEANLY PRUNE ALL DAMAGED ROOT ENDS TEASE ROOTS OF CONTAINER GROWN STOCK.
 - DO NOT ALLOW ROOTS TO DRY OUT DURING INSTALLATION PROCESS.
 - DEEP WATER AFTER PLANTING.

LANDSCAPE SHRUB Detail No. SEPTEMBER 2008



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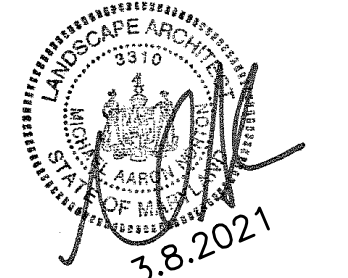
| NO. | DATE | DESCRIPTION | ISSUE |
|-----|----------|-------------|-------|
| 1 | 08/14/20 | PRELIMINARY | |

| DATE | PROJECT NUMBER | DRAWING NUMBER | SHEET OF |
|----------------|----------------|----------------|----------|
| MARCH 16, 2021 | MIN | | 2 |

TAKOMA PARK LIBRARY RENOVATION
 101 PHILADELPHIA AVE
 TAKOMA PARK, MARYLAND
 MONTGOMERY COUNTY

LANDSCAPE PLANTING PLAN - NOTES

SCALE: 1"=30'
 DRAWN BY: BP
 CHECKED BY: MN
 DATE: MARCH 16, 2021
 SHEET 2 OF 2
 DRAWING NUMBER: L-2.2



NORTON LAND DESIGN
 LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING
 5146 DORSEY HILL DRIVE, 2ND FLOOR
 BALTIMORE, MD 21242
 WWW.NORTONLANDDESIGN.COM

| | | |
|-------------|-------------------|-----------------------------|
| WATER CLASS | WATERSHED | FEMA FLOODPLAIN MAP PANEL # |
| TRIBUTARY | SLIGO CREEK | 24031C0460D |
| TAX MAP | ADC MAP | ADC MAP |
| JN342 | 200 SHEET 209NW01 | PAGE 37 GRID D-12 |
| SCALE | DATE | PROJ. NO. |
| AS SHOWN | MARCH 2021 | 16-127 |
| | | SHEET NO. |
| | | L-2.2 |