THE STANDARD SPECIFICATIONS, SERIES 2012, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

A. This work includes all labor, materials, tools, equipment, transportation, protection, and supervision necessary and required to furnish, install and establish ornamental grasses as specified in the contract documents, as well as their protection, guarantee and replacement.

B. This section includes the specifications necessary for and incidental to the execution and completion of planting; planting procedures; initial maintenance of ornamental grasses; and establishment.

C. Protection of existing features. During construction, protect all existing trees, shrubs and other vegetation, site features and improvements, structures, and utilities on and adjacent to project site. Removal or destruction of existing plantings are prohibited unless specifically authorized by the Engineer.

1.2 DEFINITIONS

A. Backfill: The earth used to replace or the act of replacing earth in an excavation.

B. Container-Grown Stock: Healthy, vigorous, well-rooted plants grown in a container, with a well-established root system reaching sides of container and maintaining a firm ball when removed from container. Container shall be rigid enough to hold ball shape and protect root mass during shipping and be sized according to ANSI Z60.1 for type and size of plant required.
C. Establishment Period: The establishment period begins when the last plant of the initial installation is planted and incidental work related to the plantings is complete, as determined by Engineer. The establishment period is for 12 months.

D. Finish Grade: Elevation of finished surface of planting soil.

E. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. Pesticides include insecticides, miticides, herbicides, fungicides, rodenticides, and mollusccides. They also include substances or mixtures intended for use as a plant regulator, defoliant, or desiccant. Some sources classify herbicides separately from pesticides.

F. Pests: Living organisms that occur where they are not desired or that cause damage to plants, animals, or people. Pests include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.

G. Planting Area: Areas to be planted.

H. Planting Soil: Existing, on-site soil or imported soil that has been modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.

I. Subgrade: The surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.

1.3 COORDINATION

A. Coordination: Contractor shall be responsible for coordinating work under this section with other trades and disciplines impacting this work.

1. Plant ornamental grasses after finish grades are established and adjacent work has been completed and will not be adversely impacted by planting operations.

1.4 QUALITY ASSURANCE

A. Subcontract landscape work to a single firm specializing in landscape work.

1. Landscape Installer Qualifications: A qualified landscape installer whose work has resulted in the successful establishment of ornamental grasses.
   a. Experience: Successfully completed a minimum of ten successful projects utilizing ornamental grasses.

2. Installer's Field Supervisor: Installer to maintain an experienced and knowledgeable full-time supervisor on Project site when work is in progress.

   a. Shall be a Certified Pesticide Applicator – Category 6 (Right of Way)

B. Source Quality Control:

1. General: Ship landscape materials with certificates of inspection required by governing authorities. Comply with regulations applicable to landscape materials. Obtain any necessary permits for this work and pay any fees required for permits.
2. Do not make substitutions. If specified landscape materials are not obtainable, submit proof of non-availability, together with proposal for use of equivalent material. Availability shall be determined prior to bid submittal as described in Part 2 - Products of this section.

3. Analysis and Standards: Package standard products with manufacturer’s certified analysis. For other materials, provide analysis by recognized laboratory made in accordance with methods established by the Association of Official Agriculture Chemists, wherever applicable.

C. Plants: Provide plants of quantity, quality, size, genus, species, and variety shown and scheduled in the contract documents and complying with applicable requirements in ANSI Z60.1 and the following:

1. Provide healthy, vigorous stock, grown in recognized nursery in accordance with good horticultural practice and free of disease, pests, and defects.

2. Provide stock true to name and legibly tagged.

D. Botanical (scientific) plant names shall comply with the “Standard Plant Names” as adopted by the American Joint Committee on Horticultural Nomenclature, latest edition at time of bidding. Names not listed in the aforementioned shall conform to those most generally accepted by the Perennial Plan Association (PPA) and the production trade at the time of bidding.

E. Provide stock true to name and legibly tagged.

F. Specified container sizes and plant grades should comply with the American Standard for Nursery Stock (ANSI Z60.1).

G. Measurements: Measure according to ANSI Z60.1. Do not prune to obtain required sizes.

H. Plant Labels: Each separately containerized plant brought to the site shall be labeled. Flats of the same plants may have one label per flat. These labels must show the botanical name of the plant(s).

I. Inspection: The Engineer may inspect plants either at place of growth or at the site before planting, for compliance with requirements for genus, species, variety, size, and quality. The Engineer retains the right to further inspect plants for size and condition of root systems, insects, injuries and latent defects, and to reject unsatisfactory or defective material at any time during progress of work. Remove rejected plants immediately from project site.

1. Notify Engineer 7 calendar days in advance of plant material delivery to site.

1.5 SUBMITTALS

A. General: Submit the following in accordance with conditions of contract and requirements stated in the Standard Specifications.

1. Supplier Certification: Submit copy of current certification for each supplier of plants that supplier is an Iowa Department of Agriculture and Land Stewardship Certified Nursery Dealer or Grower prior to starting work.

2. Nursery Source: Submit a list of all nurseries that will supply plants, along with a list of the plants they will provide and the address of the nursery.
   a. List shall include botanical name and common name of plant, quantities, and sizes.
3. Planting Schedule: Proposed planting schedule, indicating dates for each type of landscape work during normal seasons for such work in area of Project site. Correlate with specified maintenance periods to provide maintenance from date of substantial completion. Once accepted, revise dates only as approved in writing, after documentation of reason for delays.
   a. Normal seasons for this work as follows:
      1) Field Potted or Container Grown Ornamental Grasses: April 15 to Oct. 15.

4. Plant and Material Certifications:
   a. Certificates of inspection as required by governmental authorities.
   b. Manufacturer's or vendor's certified analysis for fertilizer materials and other standard products.
   c. Label data substantiating that planting materials comply with specified requirements.

5. Pesticides and Herbicides: Product label and manufacturer's application instructions specific to Project.

6. Maintenance Instructions: Typewritten instructions recommending procedures to be established by Contracting Authority for maintenance of landscape work during the one year warranty period. Submit prior to expiration of required contractor maintenance period.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of compliance with state and Federal laws if applicable.

B. Bulk Materials:
   1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
   2. Provide erosion-control measures to prevent erosion or displacement of bulk materials; discharge of soil-bearing water runoff; and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
   3. Accompany each delivery of bulk materials with appropriate certificates.

C. Pre-planting: Plants shall be brought to the site the day they are to be installed: deliver plants after preparations for planting have been completed, and install immediately. If planting is delayed more than 6 hours after delivery, set plants in their appropriate aspect (sun, filtered sun, or shade), and store where they can be properly watered, sheltered from direct sunlight and wind, and protected from mechanical damage by construction equipment, animals, etc. If storage needs to be more than 2 days, the plants shall be separated far enough from each other to provide good air circulation to their tops, reducing the risk of fungus. Keep roots moist.
   1. Provide protective covering of plants during shipping and delivery.
   2. Do not drop plants during delivery and handling.
   3. Handle planting stock by container.
4. All plants shall be watered thoroughly and allowed to drain prior to planting.

5. Containerized plants must be left in their containers until each is planted. They shall not be removed from the containers to be laid out on the bed where sun and wind will damage the roots prior to planting.

6. Any dead or damaged plant parts shall be removed from the plants upon planting.

1.7 FIELD CONDITIONS

A. Field Measurements: Verify actual grade elevations, service and utility locations, and dimensions of plantings and construction contiguous with new plantings by field measurements before proceeding with planting work.

B. Planting Restrictions: Plant during the following period.

1. Field Potted or Container Grown Perennials: April 15 to Oct. 15

Variance: If special conditions exist that warrant a variance in the above planting dates, a written request shall be submitted to the Engineer stating the special conditions and the proposed variance. Permission for the variance will be given if warranted in the opinion of the Engineer. Any variance in the planting season shall not affect the warranty period.

C. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions and warranty requirements.

1.8 UTILITY VERIFICATION

A. The Contractor shall contact the local utility companies for verification for the location of all underground utility lines in the area of the work. The Contractor shall be responsible for all damage resulting from neglect or failure to comply with this requirement.

PART 2 - PRODUCTS

2.1 PLANT MATERIALS

A. General: Comply with Section 4170 of the Standard Specifications and the following:

1. Ensure plant material meets the minimum requirements of size and grade as stated in the latest edition of the American Standard for Nursery Stock, ANSI Z60.1.

2. Provide nursery-grown plants true to genus, species, variety, cultivar, and tagged legibly as to name according to nursery standard of practice as recommended by the American Nursery and Landscape Association.

3. Plants of a larger size may be used if acceptable to Engineer, with a proportionate increase in size of roots. Use of larger plants shall not increase the contract price.
4. Tagging: Labels shall be a waterproof tag bearing legible designation of common name and full scientific name, including genus and species, size, and caliper. Include nomenclature for hybrid, variety, or cultivar, if applicable for the plant.
   a. Labels shall be securely attached to the plant.

5. If formal arrangements or consecutive order of plants is indicated on Drawings, select stock for uniform height and spread, and number the labels to assure symmetry in planting.

B. Plant Material Quality:

1. Provide a uniform, well-shaped, healthy, vigorous stock, densely foliated and free of disease, pests, eggs, larvae, and defects such as sun scald, injuries, abrasions, and disfigurement. All plants shall be of specimen quality.

2. Provide nursery gown plants grown in the same climatic zone as the project.

3. Collected Stock: Do not use plants harvested from the wild, from native stands, from an established landscape planting, or not grown in a nursery unless otherwise indicated.

C. Container Grown Plants:

1. Grow plants in sufficiently sized container for a minimum of 1 year, with a root system developed to hold its soil together, firm, whole, and moist when taken from the container.

2. No loose root systems in the container, root-bound, or circling of the root system will be accepted.

2.2 FERTILIZERS

A. General: All fertilizers shall comply with Article 4169.03 of the Standard Specifications.

B. Planting Tablets: Tightly compressed chip-type, long-lasting, slow-release, commercial-grade planting fertilizer in tablet form. Tablets shall break down with soil bacteria, converting nutrients into a form that can be absorbed by plant roots.

1. Size: 5-gram tablets
   a. Nutrient Composition: 20% nitrogen, 10% phosphorous, an 5% potassium, by weight plus micronutrients

2.3 BACKFILL MATERIAL

A. Backfill material for ornamental grass plantings shall be the soil that is excavated from the planting pit.

2.4 WATER

A. The Contractor shall furnish all equipment and labor required to obtain and apply water. Water shall be potable and free of substances harmful to plant growth.

B. The use of water obtained directly from the Mississippi River or other water bodies is not allowed.
2.5 PESTICIDES

A. Pesticide: Pesticide registered and approved by the EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.

B. Pre-Emergent Herbicide (Selective and Nonselective): Effective for controlling the germination or growth of weeds within planted areas at the soil level directly below the mulch layer.

C. Post-Emergent Herbicide (Selective and Nonselective): Effective for controlling weed growth that has already germinated.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas to receive plants, with Installer present, for compliance with requirements and conditions affecting installation and performance of the Work.

1. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.

2. Verify that plants and vehicles loaded with plants can travel to planting locations with adequate overhead clearance.

3. Suspend planting operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.

4. Uniformly moisten excessively dry soil that is not workable or which is dusty.

5. Verify that the planting bed areas have received the amended soil and been brought up to the correct grades and are in accordance with the drawings and ready to be final graded and receive plantings.

B. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Engineer and replace with new planting soil and re-grade to final grade.

3.2 PREPARATION

A. Provide notice to the Engineer 3 days prior to planting.

B. All plants may be inspected by the Engineer prior to planting. Plants may be inspected and approved at the place of growth or at the project site by the Engineer for compliance with the specifications for quality, size, and variety. Such approval does not waive the right to inspect and reject any plant after it has been delivered to the project site and/or installed.
C. Protect structures, utilities, sidewalks, pavements, and other facilities and turf areas and existing plants from damage caused by planting operations. Provide barriers or fencing as approved by Engineer to protect the public from injury when planting installation is within the right-of-way.

D. Install erosion-control measures as needed to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

E. Rake plant beds and planting areas smooth, shape contour to drainage and prepare surface for planting. Obtain Engineer's acceptance prior to planting. Any unsatisfactory conditions shall be corrected prior to planting. No weeds shall be present in the beds at planting time.

3.3 PLANTING

A. Prior to planting, the Engineer will inspect the site. Any unsatisfactory conditions shall be corrected prior to planting. No weeds shall be present in the beds at planting time.

1. Set out and space plants as indicated on Drawings; maintaining in even rows with triangular spacing; make minor adjustments as required. Obtain approval of Engineer prior to excavation.
   a. Make field adjustments in plant locations where underground or overhead obstruction is encountered, or where changes have been made as approved by the Engineer.

2. Plant according to specified schedule.

3. Planting shall be done by experienced employees under the supervision of a qualified supervisor.

3.4 ORNAMENTAL GRASS PLANTING

A. Container-Grown Stock shall be left in its container until the soil has been prepared and approved by the Engineer.

1. Dig holes large enough to allow spreading of roots.
   a. Maintain supervision of excavations during working hours.
   b. Keep excavations covered or otherwise protected after working hours and when unattended by Installer's personnel.
   c. When plants are in a straight line, then a planting trench is to be excavated rather than individual holes. The trench shall be a minimum of 1.50 foot wide for the ornamental grasses
   d. Fill excavations with water and allow to percolate away before positioning plants.
   e. Obstructions: Notify Engineer if unexpected rock or obstructions detrimental to plants are encountered in excavations.
   f. Drainage: Notify Engineer if subsoil conditions evidence unexpected water seepage or retention in planting holes.

2. Carefully remove root ball from container without damaging root ball or plant. Upon removal from its container, the root system of each plant shall be inspected by the Contractor for any sign of root decay or harmful soil insects. Affected plants shall be brought to the attention of the Engineer and the installation stopped until healthy plants can be procured. If the roots appear healthy, the root ball shall be scored from top to bottom on four sides and across the bottom in an "X". These cuts shall then be pulled open, the plant set into the planting hole. Set plants at the same depth they occupied in
their containers; they shall be set plumb and in the center of the excavated hole or trench.
a. Field-grown and potted stock shall be set into the planting bed at the same depth as it has been growing in the field.

3. Use excavated soil for backfill. Note: excavated soil will be the amended soil placed in the planting bed areas.

4. Place soil firmly around root ball; work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water.

5. Protect plants from hot sun and wind; remove protection if plants show evidence of recovery from transplanting shock.

3.5 WATERING

A. Water each plant as planted to settle and prevent wilting.

B. After a bed or section of a large bed has been planted, the soil immediately surrounding each plant shall be watered to its saturation point to ensure the collapse of any air pockets which would be harmful to the plants. When the entire bed has been planted, it shall be watered with the equivalent of a 1 inch rainfall to prevent dry soil from soaking water away from the newly set plants.

C. Watering is incidental to ornamental grass plant item price.

3.6 MULCHING

A. Mulching shall be in accordance with details and notes shown on the L sheets.

3.7 PESTICIDE APPLICATION

A. Apply pesticides and other chemical products and biological control agents according to authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with City of Riverdale's operations and others in proximity to the Work. Notify City of Riverdale before each application is performed.

B. Pre-Emergent Herbicides (Selective and Nonselective): Apply to planting bed areas according to manufacturer's written recommendations.

C. Post-Emergent Herbicides (Selective and Nonselective): Apply only as necessary to treat already-germinated weeds and according to manufacturer's written recommendations.

3.8 MAINTENANCE

A. The Contractor is responsible for the maintenance and watering of the ornamental grass plants from the time they are brought onto the job site until they are planted and accepted. Contractor is responsible as follows:
1. Plants shall be watered often enough to prevent wilting prior to planting. After planting they shall be watered initially to settle the soil, then to prevent wilting and to allow them to become established on the site.

2. The beds shall be free of weeds at planting time and shall be maintained weed free by the Contractor until the planting is accepted.

3. Contractor shall make periodic visits to the project site to review plant conditions and maintenance operations being performed by the Contracting Authority. Contractor to notify Contracting Authority in writing of any observed deficiencies affecting the health of the plants.

4. Should insects or diseases attack the plants after installation and prior to acceptance of the planting, appropriate pesticides shall be properly applied by Contractor to correct the situation.

5. The beds shall be checked regularly for soil settling which may expose the rootballs or otherwise endanger the health of the planting. Should this occur, the Contractor shall correct the settling problems.

6. Newly planted plants may be heaved out of the ground by alternate freeze and thaws. Should this occur prior to acceptance of the planting, the Contractor shall re-set those affected plants.

7. Any noted defects, such as reversions, errant growth, or color not typical for the species or cultivar, shall be brought to the attention of the Engineer. The recommendations of the Engineer shall be followed to correct the situation. Recommendations may include removal of the entire plant and replacing it with a healthy one.

B. The Contracting Authority becomes responsible for the maintenance of the plants after the planting has been initially accepted by the Engineer. Contracting Authority will take over the maintenance and watering requirements based on the following, including the Contractor’s detailed, month by month written maintenance instructions. Failure to properly maintain the planting in accordance with the written maintenance instructions provided to them by the Contractor, and the following, shall void any warranty.

1. The Contracting Authority shall water the plants to prevent wilting. The schedule will vary with the growth of the plants and prevailing climate. Generally, new plantings will need to receive 1 inch of water per week. A rain gauge should be placed in the planting to catch rainfall to verify the amount of application.

2. The Contracting Authority shall properly prune the plants as needed and as required to meet the aesthetic goal of the planting.

3. The Contracting Authority shall maintain the planting free from competing weeds.

4. The Contracting Authority shall regularly inspect the planting for insects and diseases, notifying the Engineer of any noted occurrences. If pesticides are deemed necessary, they shall be applied according to the manufacturer’s recommendations.

5. After the acceptance of the planting, the Contracting Authority is responsible for maintaining plantings by pruning, cultivating, watering, weeding, fertilizing, mulching, restoring planting saucers, resetting to proper grades or vertical position, and performing other operations as required to establish healthy, viable plantings.

   a. Fill in, as necessary, soil subsidence that may occur because of settling or other processes. Replace mulch materials damaged or lost in areas of subsidence.
6. Unsatisfactory performance of the ornamental grass plants noted by the Contracting Authority after acceptance of the planting shall immediately be brought to the attention of the Engineer.

3.9 INITIAL INSPECTION AND ACCEPTANCE

A. Initial inspection of the planting to determine completion of the contract work, exclusive of possible replacement of the plants will be made by the Engineer.

1. Initial inspection will not be conducted unless all items of work as outlined in Part 3-Execution have been completed.
   a. All plants in the planting beds, including the shrubs, shall be planted before an initial inspection will be conducted.
   b. All ornamental grass plants shall be in a live and healthy condition at the time of initial acceptance.
   c. Verify correct species have been planted. Also verify compliance with ANSI Z60.1, American Standard for Nursery Stock.

2. Submit written notice requesting such inspection at least 5 days prior to the anticipated date.

3. The Engineer will inspect the plant materials and mulch after initial installation or on May 16, whichever comes first. This includes inspection for:
   a. Size, number, location, alignment, and viability of plant materials.
   b. Correct depth and area of mulch.

4. After inspection, the Contractor will be notified in writing by the Engineer of initial acceptance of the work inspected, exclusive of the possible replacement of plants subject to guarantee and warranty, or if there are any deficiencies of the requirements for completion of the work.

B. Replacement of dead or rejected plants before initial acceptance shall not be considered a part of the warranty and replacement requirement of the section.

3.10 WARRANTY, REPLACEMENT, AND FINAL INSPECTION

A. All plants will be guaranteed to be true to name as labeled and free from insects, diseases, and mechanical damages when delivered to the site. All plants will be guaranteed to resume active growth in the appropriate season and to survive for the duration of 1 full year after initial acceptance by the Engineer, provided the recommended maintenance procedures are followed by the Contracting Authority.

1. At the end of the warranty period, final inspection will be made by the Engineer upon written notice requesting such inspection; submit notice to the Engineer at least 10 days before the anticipated date of inspection.

2. Any plant required under this Contract that is dead or not in a vigorous, thriving condition, as determined by the Engineer at the time of final inspection, shall be removed from the site. These and any missing plants, not due to negligence, shall be replaced as soon as conditions permit, but during the normal planting season.

B. Replace plants that are observed to be dead or in a badly injured condition after initial acceptance at no cost to the Contracting Authority once during or at the end of the warranty period.
period.

1. One replacement after initial acceptance shall constitute fulfillment of the warranty for the particular plant replaced.

2. All replacements shall be plants of the same kind and size as specified in the Plant Schedule. They shall be furnished and planted as specified herein.

3. Plant shall be replaced, mulched, and fertilized at no cost to Contracting Authority.

C. Make all necessary repairs to grades, lawns, and paving required because of plant replacements. Such repairs shall be done at no extra cost to the Contracting Authority.

D. Plant replacement cost shall be borne by Contractor except for possible replacements resulting from removal, loss, or damage due to occupancy of project in any part, vandalism, civil disobedience, or acts of neglect on the part of others, physical damage by animals, vehicles, fire, etc., or losses due to curtailment of water by local authority, or the “Acts of God”. Floods, tornadoes, wind of hurricane force, and hail are not normal and the damage they do cannot be calculated in a bid.

3.11 CLEANING AND PROTECTION

A. During planting, keep adjacent paving and construction clean and work area in an orderly condition. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.

B. Remove surplus soil and waste material including excess subsoil, unsuitable soil, trash, and debris and legally dispose of them off-site.

C. Protect plants from damage due to landscape operations and operations of other contractors and trades. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged plantings.

D. After installation and before initial acceptance, remove ties, and other debris from plant material, planting areas, and project site. Do not remove plant labels.

E. After initial acceptance, remove plant labels.

PART 4 - METHOD OF MEASUREMENT

4.1 MEASUREMENT

A. The Engineer will count EACH installed live and healthy ORNAMENTAL GRASS.

1. Pesticide is incidental to Ornamental Grass.

2. The mulch is measured separately and calculated based on the area of the planting beds. Herbicide is incidental to mulch.
PART 5 - BASIS OF PAYMENT

5.1 PAYMENT

A. Payment will be at the contract unit price bid for each ORNAMENTAL GRASS, FURN & INSTALL (WITH WARRANTY), according to the contract documents. This payment shall be full compensation for all transportation, materials, tools, equipment, supervision and labor to furnish and install the specified ornamental grasses in accordance with the contract documents. Payment includes initial maintenance of landscape materials and warranty. The mulch will be paid for separately.

B. Unit Price for each ORNAMENTAL GRASS, FURN & INSTALL (WITH WARRANTY) will include all work, materials, maintenance and warranty as specified to complete the installation of each specified plant.