

Temporary Fire Station #13 & Parking Lot**PROJECT 12509****C. Branching, Leafing, Measurements and Ball Sizes:**

1. Trees and Shrubs: Requirements for the measurement, branching character, ball diameter, depth and other standards shall follow the Code of Standards recommended by the American Association of Nursery Stock, Bulletin Z-60.1-1973 and as revised.
2. Palms: Requirements for the measurement of clear trunk, clear wood and graywood ball diameter and depth shall comply with requirements as set forth by the Florida department of Agriculture's "Grades and Standards for Nursery Plants, Part II for Palms and Trees".

D. Die-Back and Leaf-Drop: Plant material showing signs of die-back or leaf-drop will not be accepted and must be removed from the job immediately if directed by the ENGINEER. Therefore, any plant material with tendencies toward leaf-drop or die-back must be root pruned early enough to provide a sound network of hair roots prior to relocation to the job site.**E. Mechanical Destruction of Foliage:** Mechanical destruction of foliage resulting from root pruning shall not affect more than 10% of the total foliage prior to planting on the job site. Loss of foliage caused by seasonal change will be accepted.**F. Spanish Moss:** If Spanish Moss (*Tillandsia usneoides*) exists on plant material, it shall be completely removed prior to planting on the job site.**G. Palms:** Before transporting, see Delivery, Storage and Handling; for requirements related to wrapping of root balls.

1. Remove a minimum of fronds from the crown of the palms to facilitate transporting and handling.
2. Palms with burn marks, nail holes, and frond boots on trunk shall not be accepted.
3. To reduce head volume, Palm fronds may be taper trimmed by not more than one-third (1/3).
4. Palm trees showing cable or chain marks and equipment scars shall be rejected.

H. Chlorosis: The allowable level of Chlorosis in foliage shall be as set forth in the Florida Department of Agriculture's "Grades and Standards for Nursery Plants".**2.02 PLANTING SOILS****A. General Type:** All plant material shall be planted with planting soil mixed with 50% original soil, if the soil is of good quality, as determined by the ENGINEER. The planting soils shall be sandy loam (50% sand, and 50% muck) typical of the locality. The soil must be taken from ground that has never been stripped, with a slight acid reaction (5.5 to 6.5 ph) and without an excess of calcium or carbonate. Soil shall be delivered in a loose friable condition.**B. Special Type:** Planting soil for palms shall be a good grade of salt free sand, which is free of all weeds.

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Water shall be potable, from municipal water supplies or other sources which are approved by a public health department.

2.04 MULCH

Mulch shall be FloriMulch or approved Eucalyptus or Melaleuca mulch certified by the (MSC) Mulch and Soil Council. Color Dyed and native tree bark mulch will not be accepted. It must be uniformly shredded and be free from large pieces of bark, foreign matter, weed seeds and any other organic or inorganic material. Submit sample and certification for approval. CONTRACTOR shall apply one application at initial installation and a second application prior to final acceptance.

2.05 FERTILIZER

- A. New Plant Material: Trees, palms and shrubs, fertilize with Agriform planting tablets, 20-20-5 formula, 21 grams.
- B. New Ground Covers: Fertilize with an approved fertilizer of fifty percent (50%) or greater organic 6-6-6 or 8-8-8 with minor elements including, but not limited to, iron zinc and manganese.
- C. Composition of Quality: All fertilizer shall be uniform in composition and dry. Granular fertilizer shall be free flowing and delivered in manufacturers standard container with name of material, weight and guaranteed analysis printed on container. Tabletized fertilizer shall be delivered in unopened containers or boxes. All bags, containers or boxes shall be fully labeled with the manufacturer's analysis. Submit labels to ENGINEER for approval prior to placement of fertilizer.
- D. All shall comply with the State of Florida fertilizer laws.

2.06 VEGETATIVE ROOT INHIBITOR

- A. A vegetative root inhibitor shall consist of a polypropylene fabric with root control time release modules of Trifluralin with an effective life of 100 years.
- B. Vegetative root inhibitor shall be Bio-Barrier as manufactured by Reemay, Inc. or approved equal.

PART 3 - EXECUTION**3.01 INSPECTION**

Utilities: The location and existence of utilities (overhead and underground) shall be thoroughly investigated and verified by the CONTRACTOR before the WORK begins in the area of said utilities. The CONTRACTOR shall exercise care in digging and WORK so as not to damage existing utilities in said areas, such as underground pipes, cables, wires, etc. Should such overhead or underground obstructions be encountered which interfere with planting, the

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ENGINEER shall be consulted immediately in order for a decision to be made on the relocations of plant material to clear such obstruction. The CONTRACTOR shall be responsible for the immediate repair of any damage to utilities caused by his WORK.

3.02 PREPARATION

- A. **Staking Plant Locations:** Plant locations must be staked or marked prior to plant hole excavation or placing on deck, by scaling the plants from existing features found on-site and shown on the plans or by given dimensions if shown.
- B. **Spacing of Shrubs:** Shrub beds located next to another bed, walkway, structure, etc., shall have the plants along the perimeter spaced so that the plants can mature properly without growing into the other bed, walkway, structure, etc.
- C. **Excavation of Plant Holes:** Excavation of plant holes shall be roughly cylindrical in shape with the sides approximately vertical. The ENGINEER reserves the right to adjust the size and shape of the plant hole and the location of the plant in the hole to compensate for unanticipated structures or unanticipated factors. All plant holes shall be sufficiently deep to allow the rootball to set on existing soil and have root collar at grade level. Plants shall be centered in the holes with the tree trunk locations scaled from existing permanent structures as shown on the drawings. Plants shall be set straight or plumb in locations. All plant holes to accommodate plants with ball sizes less than 24" in diameter shall be at least 18" greater than the diameter of the ball. All plants holes to accommodate plants with ball sizes two feet (2') and larger in diameter shall be at least twice the diameter of the ball. The excavated material from the plant holes may not be used to back-fill around the plant material. Such material shall be disposed of either on the project site or off the site as directed by the ENGINEER. Plant holes for shrub material planted in mass shall meet all requirements listed above for plant holes. However, they shall not be individual holes but one continuous hole or excavation. Plant holes for hedge material shall also meet all requirements listed above for plant holes, however, a continuous trench shall be used in lieu of individual holes.

3.03 INSTALLATION

- A. **Setting of Plants:**
 - 1. When lowered into the hole the plant shall rest on the prepared hole bottom such that the roots after settlement are level, or slightly above the level of its previous growth condition and the final level of the ground around the plant shall conform to the surrounding grade. The plants shall be set straight or plumb or normal to the relationship of their growth prior to transplanting. The ENGINEER reserves the right to realign any plant material after it has been set.
 - 2. Plant material of the shrub category and smaller must be handled by the ball only. Plant material too large for hand handling, if moved by winch or crane, must be thoroughly protected from chain, rope or cable marks, girdling, bark slippage, limb breakage and any other damage that might occur by improper handling or negligence.
 - 3. All palm trees handled by the trunks must be wrapped with burlap and wood battens, held in place by banding strips as called for in the details.
- B. **Backfilling:**

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1. Use planting soils specified in Article 2.02, Planting Soil. Backfill to the bottom two thirds of the planting hole and firmly tamp and settle by watering as backfilling progresses. After having tamped and settled the bottom two thirds (2/3) of the hole, thoroughly puddle with water and fill remaining one third (1/3) of the hole with planting soil, tamping and watering to eliminate air pockets.

C. Application of Fertilizer:

1. Fertilize New Planting (Trees, Palms and Shrubs) as follows:

A. Specified Container Size	Application Rate
1-gallon container	1 tablet
3-gallon container	2 tablets
5-gallon container	3 tablets
7-gallon container	5 tablets

- B. Large tubs or boxes and B&B material shall receive one (1) tablet for each one-half (1/2) inch of trunk diameter (measured three (3) feet from ground). For large shrubs, one (1) tablet for each one (1) foot of height or spread.
- D. Mulch: Within 24 hours after planting, planting areas must be mulched as called for in these specifications. The mulch shall be uniformly applied to a depth of three (3) inches over all shrub, tree and groundcover areas and any areas indicated on the plans.
- E. Staking and Guying shall be installed within 24 hours; in accordance with details.
- F. Root Ball Anchoring for Palms at Baseball Area Shade Sail: Utilize Platipus Anchoring System per detail on plans.
- G. Initial Watering: Initially, water the plant material to develop uniform coverage and deep water penetration of at least six inches (6"). Avoid erosion, puddling, and washing soil away from plant roots.
- H. Hand Watering: Provide hand watering of plant material as necessary subject to weather conditions, to maintain healthy growing conditions until final acceptance. This shall be in addition to water received from irrigation system, if any.
- I. Pruning:
 1. The amount of general pruning shall be limited to the minimum necessary to remove dead or injured twigs and branches and to compensate for the loss of roots as a result of transplanting operations. Pruning shall be done in such a manner as not to change the natural habit of shape of a plant, and in accordance with ANSI A300 standards.
 2. All broken or damaged roots shall be cut off smoothly. The tops of all trees shall be pruned in a manner complying with standard horticultural practices.
- J. Weeding: In the event that weeds or undesirable vegetation becomes prevalent to such an extent that they threaten plant material, they shall be removed as directed by the ENGINEER.

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If necessary, the plant material and/or planting soil shall be replaced as needed to eliminate the weeds at the expense of the CONTRACTOR.

3.04 CLEANING AND PROTECTION

- A. Disposal of Trash: All debris and other objectionable material created through planting operations and landscape construction shall be removed completely on a daily basis from the job or as directed by the ENGINEER. Excess soil shall be disposed of as directed by the ENGINEER.
- B. Responsibility for Protection and Restoration of Property: The CONTRACTOR shall be responsible for all damage to property whether it is accidental or necessary for the completion of his contract.
- C. Protection Against Mechanical Damage: The CONTRACTOR's responsibility for protection against mechanical damage shall include providing protection from vehicles and providing warning signs and barricades as might be necessary and he/she shall repair, restore and replace any planting areas which become damaged as a result of any negligence of the CONTRACTOR or his employees in complying with these requirements. Coordination shall be with the OWNER and the ENGINEER.
- D. Responsibility Prior to Final Acceptance:
 - 1. Maintenance shall begin immediately after each plant is planted and continue until final acceptance.
 - 2. Plants shall be watered by hose, soaking thoroughly each day for the first two weeks (14 calendar days) and every other day for the following two-week period. Soaking then shall continue on a twice weekly basis for another period of three (3) weeks for material over five feet (5') height, amounting to a total of 28 days after installation of planting under five feet (5') and a total of 45 days for plants over five feet (5'). All watering is required without regard to an irrigation system.
 - 3. Plant maintenance shall include watering, pruning, weeding, cultivating, mulching, tightening and repairing of guys, stakes, braces, etc., replacement of sick or dead plants, resetting plants to proper grades or upright position and maintenance of the watering saucer, and all other care needed for proper growth of the plants. Plant material rejected during the course of the construction shall be removed within five (5) working days and replaced before the inspection for completion will be scheduled.
 - 4. During the maintenance period and up to the issuance of Certificate of Final Acceptance, the CONTRACTOR shall do all seasonal spraying and/or dusting of all planting. The materials and methods shall be in accordance with the highest standard nursery practices and as recommended by the County Agent, or Horticultural ENGINEER and approved by the ENGINEER, prior to implementation.
 - 5. Planting areas and plants shall be protected against trespassing and damage. If any plants become damaged or injured, they shall be treated or replaced, as directed and in compliance with this specification. No WORK shall be done within or over planting areas or adjacent to plants without proper safeguards and protection.

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END OF SECTION 329100

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SECTION 32 91 13

SOIL PREPARATION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. All applicable provisions of the Bidding and Contract Requirements, and Division 1 - General Requirements shall govern the work under this Section.

1.02 WORK INCLUDED

- A. Provide all labor, materials, necessary equipment and services to restore the landscape disturbed by construction, as indicated on the drawings, as specified herein or both.
- B. Including but not necessarily limited to the following:
 - 1. Topsoil Stripping.
 - 2. Topsoil Mixing and Spreading.
- C. There shall be no classification of excavation for measurement of payment regardless of materials encountered.

1.03 RELATED WORK

- A. Section 31 11 00 - Site Clearing.
- B. Section 31 20 00 – Earth Moving
- C. Section 32 92 23 - Sodding

PART 2 - PRODUCTS

2.01 TOPSOIL

- A. Topsoil shall be obtained from any previously established stockpile on site, to the extent that suitable material is available.
- B. Additional topsoil, if required, shall be obtained by mixing existing on-site sandy fill with imported muck or compost.
- C. Topsoil, whether obtained from stockpile, or mixed as described in "B" above, shall be sandy loam, and shall have the following characteristics:
 - 1. 95% of topsoil shall pass a ¼ inch sieve.
 - 2. Topsoil shall be free of stones 1 inch in longest dimensions, earth clods, plant parts, and debris.
 - 3. Organic matter content shall be 4% to 12% of total dry weight.

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4. pH and nutrient content shall be adjusted as necessary to conform with recommendations made by testing laboratory. (See 2.01 (D))

- D. Samples shall be submitted to OWNER for testing. Test shall indicate compliance with the specifications and recommendations as to the type and quantity of soil additives required to bring the nutrient content and pH to satisfactory levels for planting specified plant material. Tests shall be required at a rate of one per 500 cubic yards of material placed, for the first 5,000 cubic yards of material, and may be reduced at the ENGINEER's discretion thereafter. Sampling shall be done in the presence of the ENGINEER. The CONTRACTOR shall be responsible for the cost of testing.

PART 3 - EXECUTION**3.01 JOB CONDITIONS**

- A. Protection: Use all means necessary to protect existing objects and vegetation. In the event of damage, immediately make all repairs and replacements necessary to the acceptance of the ENGINEER.

3.02 FILLING AND GRADING:

- A. Topsoil shall be spread in a uniform 2 inches layer after compaction, over all sodded and pervious areas, and finished to existing grades shown on the plans, making allowance, where necessary, for sod. Grades shown include 2 inches for thickness of sod in all sodded areas.

END OF SECTION 329113

Temporary Fire Station #13 & Parking Lot**PROJECT 12509****SECTION 02922****SODDING****PART 1 - GENERAL****1.01 RELATED DOCUMENTS**

- A. All applicable provisions of the Bidding and Contract Requirements, and Division 1 - General Requirements shall govern the work under this Section.

1.02 WORK INCLUDED

- A. The work included in this section consists of furnishing all labor, supplies, equipment and materials necessary to complete the installation of sod and associated materials hereinafter listed and as shown on the plans.

1.03 RELATED WORK

- A. Section 31 20 00 – Earth Moving
- B. Section 32 91 13 – Soil Preparation

1.04 QUALITY ASSURANCE

- A. Sodding work shall be performed by a firm specializing in sodding.
- B. Substitutions: Do not make substitutions. If specified sod is not obtainable, submit proof of non-availability to ENGINEER, together with proposal for use of equivalent material.
- C. Analysis and Standards: Package standard products with supplier'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.

1.05 SUBMITTALS

- A. Submit the following in accordance with Conditions of Contract and Division 1 Specification Sections.
- B. Plant and Material Certifications:
 - 1. Certificate of inspection as required by governmental authorities.
 - 2. Manufacturer's or vendor's certified analysis for soil amendments or fertilizer materials.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Packaged Materials: Deliver packaged materials in containers showing weight, analysis, and name of manufacturer. Protect materials from deterioration during delivery, and while stored at site.

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- B. Sod: Time delivery so that sod will be placed within 24 hours after stripping. Protect sod against drying.
- C. Transporting:
 - 1. Sod transported to the project in open vehicles shall be covered with tarpaulin or other suitable covers securely fastened to the body of the vehicle to prevent injury to the sod material. Closed vehicles shall be adequately ventilated to prevent overheating of the sod. Evidence of inadequate protection against drying out in transit shall be cause for rejection.
 - 2. Sod shall be kept moist, fresh and protected at all times. Such protection shall encompass the entire period during which the sod is in transit, being handled, or in temporary storage.
 - 3. Upon arrival at the temporary storage location or the site of work, sod shall be inspected for proper shipping procedures. Should the roots be dried out, the ENGINEER will reject the sod. When sod has been rejected, the CONTRACTOR shall remove it at once from the area of the work and replace it.
 - 4. Unless otherwise authorized by the ENGINEER, the CONTRACTOR shall notify the ENGINEER at least 48 hours in advance of the anticipated delivery date of sod material. A legible copy of the invoice, showing species and variety of sod included for each shipment shall be submitted to the ENGINEER. Certificate of Inspection must accompany each sod shipment.

1.07 JOB CONDITIONS

- A. Begin installation of sod after preceding related work is accepted.
- B. Environmental Requirements:
 - 1. Install sod during months acceptable to the ENGINEER.
 - 2. Do not install sod on saturated soil.
- C. Protection: Erect signs and barriers to control vehicular traffic.
- D. Utilities: Determine location of underground utilities and perform work in a manner which will avoid possible damage. Hand excavate, as required. Maintain grade stakes set by others until removal is mutually agreed upon by parties concerned.

1.08 SEQUENCING AND SCHEDULING

- A. Correlate planting with specified maintenance periods to provide maintenance from date of Substantial Completion.
- B. Coordination with sodding: Plant trees, palms and shrubs after final grades are established and prior to planting of sod, unless otherwise acceptable to ENGINEER. If planting of trees, palms and shrubs occurs after sod work, protect sod areas and promptly repair damage to lawns resulting from planting operations.

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- A. Warranty sod through specified lawn maintenance period, and until Final Certification.

PART 2 - PRODUCTS**2.01 PLANTING SOIL**

- A. Provide new planting soil that is fertile, friable, natural loam, surface soil, reasonably free of subsoil, clay lumps, brush, weeds and other litter, and free of roots, stumps, stones larger than 1 inch in any dimension, and other extraneous or toxic matter harmful to plant growth.
- B. Obtain planting soil from local sources or from areas having similar soil characteristics to that found at project site.
- C. Refer to Section 162 of the "FDOT Standard Specifications for Road and Bridge Construction" dated 2010 for Topsoil Specifications.

2.02 COMMERCIAL FERTILIZER

- A. For sod, provide fertilizer with percentage of nitrogen required to provide not less than 1 pound of actual nitrogen per 1,000 sq. ft. of lawn area and not less than 4% phosphoric acid and 2% potassium. Provide nitrogen in a form that will be available to sod during initial period of growth; at least 50% of nitrogen to be organic form.

2.03 SOD

- A. Provide strongly rooted sod, not less than 2 years old, free of weeds and undesirable native grasses, and machine cut to pad thickness of 1-1/2 inch (plus or minus 1/4 inch), excluding top growth and thatch. Provide only sod capable of vigorous growth and development when planted (viable, not dormant).
- B. Provide sod uniform pad sizes with maximum 5% deviation in either length or width. Broken pads with uneven ends will not be acceptable. Sod pads incapable of supporting their own weight when suspended vertically with a firm grasp on upper 10% of pad will be rejected.
- C. Provide sod to match the existing sod and composed of the following:
1. St. Augustine Floritam
 2. Bermuda 'Celebration'
- D. Sod shall be nursery grown on cultivated mineral agricultural soils. Sod shall have been mowed regularly and carefully maintained from planting to harvest.
- E. American Sod Producers Association (ASPA) Grade: Nursery Grown or Approved. Field grown sod is not acceptable.
- F. Furnished in pads:
1. Size:

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- a. Length: 24 inches plus or minus 5%.
 - b. Width: 18 inches plus or minus 5%
 - c. Thickness: 1-1/2 inches excluding top growth and thatch.
- 2. Not stretched, broken or torn.
- G. Uniformly mowed height when harvested: 2 inches.
- H. Thatch: Maximum 1/2 inch uncompressed.
- I. Inspected and found free of disease, nematodes, pests, and pest larvae, by entomologist of State Department of Agriculture.
- J. Weeds:
 - 1. Free of Bermuda grass, nut grass or other objectionable weeds.
- K. Uniform in color, leaf texture, and density.
- 2.04 WATER
 - A. Water shall be potable, from municipal water supplies or other sources which are approved by a public health department.
- 2.05 FERTILIZER
 - A. The fertilizer shall be suitable for the type of sod and area as recommended by the State Department of Agriculture.
- 2.06 HERBICIDES
 - A. As recommended by the State Department of Agriculture.
- 2.07 STAKES
 - A. Softwood, 3/4-inch diameter, 8-inch length.

PART 3 - EXECUTION**3.01 PREPARATION OF GROUND SURFACE**

- A. Before mixing, clean planting soil of roots, plants, sods, stones, clay lumps, and other extraneous material harmful or toxic to plant growth.
- B. Mix specified fertilizers with planting soil as necessary at rates specified. Delay mixing fertilizer if planting will not allow placing of planting soil within a few days.

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- C. For sod, mix planting soil either prior to planting or apply on surface of topsoil and mix thoroughly before planting.

3.02 PREPARATION OF PLANTING BEDS

- A. Loosen subgrade of lawn areas to a minimum depth of 4 inches. Remove stones measuring over 1 1/2 inches in any dimension. Remove sticks, stones, rubbish, and other extraneous matter. Limit preparation to areas which will be planted promptly after preparation.
- B. Spread planting soil to minimum depth of 2 inches or as required to meet lines, grades, and elevations shown, after light rolling and natural settlement. Add specified fertilizer and mix thoroughly into upper 4 inches of topsoil.
- C. Place approximately 1/2 of total amount of top soil required. Work into top of loosened subgrade to create a transition layer and then place remainder of planting soil. Add specified soil amendments and mix thoroughly into upper 4 inches.
- D. Where sod is to be planted in areas that have not been altered or disturbed by excavating, grading, or stripping operations, prepare soil for lawn planting as follows: Till to a depth of not less than 6 inches. Apply fertilizers as specified. Remove high areas and fill in depressions. Till soil to a homogenous mixture of fine texture, free of lumps, clods, stones, roots and other extraneous matter.
- E. Prior to preparation of unchanged areas, remove existing grass, vegetation and turf. Dispose of such material outside of OWNER's property. Do not turn existing vegetation over into soil being prepared for lawns.
- F. Allow for sod thickness in areas to be sodded.
- G. Apply specified commercial fertilizer at rates specified and thoroughly mix into upper 2 inches of topsoil. Delay application of fertilizer if lawn planting will not follow within a few days.
- H. Fine grade sod areas to smooth, even surface with loose, uniformly fine texture. Roll, rake, and drag lawn areas, remove ridges and fill depressions, as required to meet finish grades. Limit fine grading to areas which can be planted immediately after grading.
- I. Moisten prepared sod areas before planting if soil is dry. Water thoroughly and allow surface to dry before planting lawns. Do not create a muddy soil condition.
- J. Restore sod areas to specified condition, if eroded or otherwise disturbed, after fine grading and prior to planting.

3.03 SODDING NEW LAWNS

- A. Lay sod within 24 hours from time of stripping.
- B. Lay sod to form solid mass with tightly fitted joints. Butt ends and sides of sod strips; do not overlap. Stagger strips to offset joints in adjacent courses. Work from boards to avoid damage to subgrade or sod. Tamp or roll lightly to ensure contact with subgrade. Work sifted soil into minor cracks between pieces of sod; remove excess to avoid smothering of adjacent grass.

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- C. Anchor sod on slopes with wood pegs to prevent slippage.
- D. Water sod thoroughly with a fine spray immediately after planting.

3.04 MAINTENANCE

- A. Begin maintenance immediately after planting.
- B. After sod has been installed, water 2-3 times a day for the first two weeks. Water sod to the point where sod has absorbed the water, but make sure it is not to the point where it is soggy.
- C. After first two weeks, water once a day for an additional two weeks. Water sod to the point where sod has absorbed the water, but make sure it is not to the point where it is soggy.
- D. Maintain lawns and watering for not less than 30 days after Substantial Completion Certification, and longer as required to establish an acceptable lawn.
- E. Maintain sod by watering, fertilizing, weeding, mowing, trimming, and other operations such as rolling, regrading and replanting as required to establish a smooth, acceptable lawn, free of eroded or bare areas.
- F. Mowing:
 - 1. Whenever grass reaches a height of 3 inches, it shall be cut back to 2 inches with all clippings removed.
 - 2. After two mowings, CONTRACTOR shall top-dress the sod with an application of fertilizer at the rate of 1 pound of actual nitrogen per 1,000 square feet.

3.05 CLEANUP AND PROTECTION

- A. During sodding work, keep pavements clean and work area in an orderly condition.
- B. Protect sodding work and materials from damage due to landscape operations, operations by other contractors and trades, and trespassers. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged sod work as directed.

3.06 INSPECTION AND ACCEPTANCE

- A. Sod areas will be accepted when in compliance with all the following conditions:
 - 1. The roots are thoroughly attached to the soil.
 - 2. Absence of visible joints.
 - 3. All areas show a uniform stand of specified grass in healthy condition.
 - 4. At least 30 days have elapsed since the completion of the work in this section.
- B. When inspected sod work does not comply with requirements, replace rejected work and continue specified maintenance until reinspected by ENGINEER and found to be acceptable. Remove rejected plants and materials promptly from project site.

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1. The CONTRACTOR shall submit a request for acceptance in writing to the ENGINEER. Request must be received not less than 10 days before the anticipated date for final inspection.
2. Upon completion of all repairs and/or renewals required by ENGINEER at the inspection, the ENGINEER will verify the completeness of the work and then notify the OWNER in writing that the work is accepted.
3. Upon Final Completion, the OWNER will assume maintenance of all sod areas.

END OF SECTION 329223

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TREE TRANSPLANTING****PART 1-GENERAL****1.01 SUMMARY**

- A. Tree relocation shall conform to Broward COUNTY Engineering Division, Minimum Standards Applicable to Public Rights of Way, April 1995.

1.02 WORK INCLUDED

- A. Provide all labor, materials, equipment and services necessary to complete the tree relocation work as specified herein.
- B. Prior to start of excavation, pruning, removal, or relocation of existing trees, CONTRACTOR shall:
 - 1. Notify the CITY, being the permitting and inspecting agency, at least 30 calendar days in advance.
 - 2. Notify the appropriate utility companies/agencies for marking of locations and coordination of service disconnection as necessary to complete work.
 - 3. Coordinate with work of other trades and disciplines.
- C. Tree relocation work shall be performed in compliance with the CONTRACTOR'S progress, schedule as approved by the CITY. However, relocation work shall start no sooner than the beginning of the construction contract and shall be completed by the completion date of the contract. No relocation work shall start before the date approved nor continue without the knowledge of the CITY.

1.03 DEFINITIONS

- A. Site Conditions: Prior to bidding the CONTRACTOR shall have made site inspections to become familiar with the site conditions and environment where the work is to take place and to establish work procedures that minimize disruption of the nature of the site. Failure to consider the problems, safety considerations, or other conditions unique to this project shall not entitle the CONTRACTOR to additional compensation after contract award.
- B. Toxic Substances: The CONTRACTOR shall ensure that no toxic substances or items are delivered to the site without furnishing to the CONSULTANT a Material Safety Data Sheet (MSDS).

1.04 RELATED WORK

- A. Carefully examine all of the Contract Documents for requirements that affect the work of this Section. Other specification Sections which directly relate to the work of tree removal include, but are not limited to the following:

TREE TRANSPLANTING

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1. Section 32 80 00, Irrigation
2. Section 32 91 00 Planting

1.05 REFERENCES

- A. Where referenced standards conflict with other specified requirements, the more restrictive or stringent requirements shall govern. Comply with applicable requirements of the following standards:
1. American National Standards Institute (ANSI): Z60.1 American National Standards for Nursery Stock (Sponsor: American Association of Nurserymen, Inc.).
 2. National Arborist Association, ~537 Stratford Rd., Wantagh, NY 11793 (NAA): Ref. 1 Transplanting of Trees and Shrubs in the Southeastern United States.
 3. Florida Department of Agriculture and Consumer Services: Grades and Standards for Nursery Plants.

1.06 DESCRIPTION

- A. Plant materials to be relocated on site are indicated on the Drawings. Those not shown will be relocated as directed by the CITY.
- B. The person (foreman or superintendent) in charge of and responsible for the CONTRACTOR'S tree relocation crews shall have a minimum 10 years experience in transplanting of plant materials and shall be recognized by the American Association of Nurserymen.
- C. Existing trees to remain shall be protected during all construction phases. Protective barriers shall be provided for those existing trees adjacent to construction operations. Replacement of any trees that are damaged or destroyed due to the CONTRACTOR'S operations shall be the CONTRACTOR'S responsibility and shall be replaced at the CONTRACTOR'S expense. Any existing tree that dies within one year after final acceptance shall be replaced with a number of trees of the same species to equal the caliper DBH of the existing tree lost. Replacement trees shall be Florida No. 1 and have a caliper DBH of no smaller than 3".
- D. Remove other vegetation as necessary and as directed by the CONSULTANT to accommodate new plantings. Prepare areas to be planted in accordance with the provisions of Section 32 91 00.
- E. Tree pits or holes remaining after relocation of plant material shall be backfilled with clean fill and brought back flush with surrounding grade, unless the pits are to be immediately replanted. Pits that are to be quickly replanted shall be surrounded by safety barricades to prevent accidental falls into pits. In areas where new plant material will replace relocated plant material, appropriate soil mix shall be used as backfill.

1.07 QUALITY ASSURANCE

- A. Unless otherwise specified herein, tree transplanting shall conform to NAA Ref. 1.

TREE TRANSPLANTING

32 96 43

Temporary Fire Station #13 & Parking Lot**PROJECT 12509**

- B. CONTRACTOR shall comply with NAA standards for pruning and shall remove branches from trees that are to remain as necessary to clear new construction.
- C. CONTRACTOR shall recommend procedures to compensate for loss of roots (if any) and shall perform initial pruning of branches and stimulation of root growth where removed to accommodate new construction.
- D. Tree repair work shall be performed for damage incurred by construction.
- E. Routine progress evaluation reports shall be provided on relocated trees until the end of the maintenance period.
- F. Evaluate existing trees prior to transplanting and verify that trees are free from disease and sufficiently strong to survive relocation from the site to their new location. Notify the CONSULTANT in writing of any trees that the CONTRACTOR considers insufficiently strong to survive relocation.

1.08 SUBMITTAL

- A. CONTRACTOR shall submit for approval by OWNER a list of equipment, procedures, and labor force anticipated for use in tree relocation. CONTRACTOR shall include start date, completion date, and schedule of relocation as part of the approved progress schedule and, in addition, shall submit a more detailed daily schedule for the transplanting period, showing the schedule for root pruning and the number of units to be dug and relocated to specified areas.

For those materials that require root pruning, the relocation schedule will begin at the end of the specified root pruning period.

- C. CONTRACTOR shall apply for and pay all costs associated with tree removal/relocation permits. The permit shall be obtained from the CITY.
- D. Prior to start of relocation work, the CONTRACTOR shall submit for approval details of the tree protection system to be utilized. All trees indicated to remain during construction shall be protected in accordance with recognized standards of the industry and protection shall be removed once construction is complete. CONTRACTOR shall also certify that where damage occurred, trees were promptly and properly treated, and shall indicate which damaged trees (if any) are incapable of retaining full growth potential and are recommended to be replaced.
- E. The CONTRACTOR, in order to guarantee his work, may use methods, sequence and schedule for effecting tree relocations and plant protection methods different from what is described in these specifications. However, if different, the CONTRACTOR must submit for approval a full description of all proposed methods, sequence of events and schedule for effecting tree relocations and plant protection.
- F. CONTRACTOR shall coordinate tree relocation with road construction and other related operations and such coordination shall be clearly evidenced in the schedule submittal.
- G. CONTRACTOR must submit procedures to be utilized for maintenance of all relocated trees.

1.09 GUARANTEE

- A. Relocated plant material shall fall under the standard 12-month guarantee.

TREE TRANSPLANTING

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Temporary Fire Station #13 & Parking Lot**PROJECT 12509**

- B. Damage to other plants, lawn or construction work occurring within the work area during tree relocation shall be repaired at no cost to the COUNTY. This also includes, but is not limited to, damage of curbs, walks, roads, fences, site furnishings, etc. Replacing and replanting of damaged trees, shrubs or turf shall be performed in accordance with this specification.
- C. Existing tree canopy shall not have more than 25% loss after relocation procedures are completed. CONTRACTOR shall be responsible for replacing any canopy loss due to lack of care and/or inadequate methods of transplanting the trees and palms that would cause the death of said plant material. Any transplanted tree that dies within one year after final acceptance shall be replaced with a number of trees of the same species to equal the caliper DBH of the transplanted tree lost. Replacement trees shall be Florida No. 1 having a caliper DBH no smaller than 3". Replacement shall be the CONTRACTOR'S responsibility.

PART 2 - PRODUCTS**2.01 MATERIALS**

- A. Bone meal, consisting of steamed bone meal shall be readily available and used as a natural organic nitrogen fertilizer.
- B. Peat moss, topsoil, planting soil, mulch, staking and guying, shall be as specified in Section 32 91 00.
- C. Fill and planting materials shall be as specified in Section 32 91 00.

PART 3 - EXECUTION**3.01 TRANSPLANTING - GENERAL**

- A. Transplanting shall consist of on-site transplanting of existing trees. Trees shall be transplanted only once from existing location to permanent positions as shown on Drawings.
- B. Digging, Wrapping and Handling: Plants shall be dug and prepared for moving in a manner that will not cause damage to branches, shape, root system, and development.
- C. Balled and Burlapped Plants: Balls shall be firmly wrapped with burlap or approved cloth substitute. No balled plant will be acceptable if the ball is cracked and broken, or if the stem or trunk is loose in the ball, either before or during transplanting. Balled plants shall be lifted and handled from the bottom of the ball, properly protected and delivered to the replanting site, to be planted immediately and watered thoroughly. Ball sizes shall be as recommended in ANSI Z60.1

3.02 TAGGING

- A. Trees within the designated areas for relocation shall be clearly marked by means of yellow plastic surveyors' ribbons and coordinated with the LANDSCAPE ARCHITECT and CITY prior to root pruning and/or digging.

3.03 ROOT PREPARATION

- A. Trees to be relocated shall be root pruned at least 45 days prior to digging with clean, sharp equipment. The specific requirements for root ball size shall be in accordance with the table

TREE TRANSPLANTING

32 96 43

Temporary Fire Station #13 & Parking Lot**PROJECT 12509**

below. CONTRACTOR shall maintain root pruned materials by watering, weeding, mowing, spraying, fertilizing, and other horticulture practices. After root pruning, backfill with good rooting medium, fertilize with organic fertilizer to promote root growth, mulch to reduce weeds, discourage foot traffic and its compacting effect, conserve moisture and minimize temperature fluctuation.

- B. Root Ball Size Chart: Root ball sizes shall be in accordance with minimum standards set forth in Grades and Standards for Nursery Plants Part 11, Palms and Trees, Florida Department of Agriculture, as follows:

1.	Caliper	Minimum Ball Diameter
	3 1/2 - 4:	28"
	4 - 4 1/2"	30"
	4 1/2 - 5"	32"
	5 - 5 1/2"	34"
	Larger Sizes	Increase proportionally
2.	Ball Diameter	Medium Ball Diameter
	Less than 20"	Not less than 75% of diameter
	20" to 30"	Not less than 65% of diameter
	30" to 48"	Not less than 60% of diameter

3.04 CROWN PREPARATION

A. Shade Trees:

1. Shade Trees: Selectively prune and thin crown to remove approximately one third of the branches. In so doing, preserve the basic shape and form of the tree, eliminate cross branching and dead or diseased branches.
2. Hand strip selected species of all leaves following pruning and prior to moving.

3.05 HAND DIGGING

- A. Burlapping will be required. Trees that are burlapped for relocation shall comply with and be handled in same manner as new plant material specified in Section 32 91 00.

Temporary Fire Station #13 & Parking Lot**PROJECT 12509****3.06 HANDLING AND TRANSPORTATION**

- A. Trees shall be properly handled during moving so trunks will not be scarred or damaged and to avoid broken limbs. Broken limbs which do not cause the tree to be rejected shall be repaired under the following guidelines:
1. Properly prune dead, dying, or damaged branches with clean, sharp equipment.
 2. Remove injured bark and wood of a tree with a clean, sharp knife to a point where healthy bark and wood make contact at their margins.
 3. Inspect and treat wound for insect and disease.
 4. Seal wounds with bituminous base wound paint for all limbs greater than 3" diameter.
- B. Transport trees on vehicles of adequate size to prevent overcrowding, broken limbs, foliage damage or root ball damage.
- C. Root ball should be kept moist during all phases of relocation.
- D. Tree crowns shall be protected with shade cloth to prevent desiccation and wind burn. Crowns shall be periodically sprayed with water to help ensure against desiccation.
- E. Plant material shall be handled only in ways and means accepted by the industry and acceptable to the CONSULTANT.
- F. Plant material shall be planted the same day it is dug. Preparation of planting pits or beds shall be coordinated to ensure this schedule.

3.07 PLANTING

- A. Relocated Material
- 1 Relocated trees shall be planted according to procedures described for new material, Section 32 91 13. Verify that final grades have been established prior to planting operations. Ensure that proposed planting pits drain by test filling with water prior to transplantation.
 2. CONTRACTOR shall continue watering and caring for relocated material as described in paragraph 3.09.
 3. Mulch tree pit areas to reduce weeds, discourage foot traffic and its compacting effect, conserve moisture and minimize temperature fluctuations.
 4. Brace trunk and leave in place until trees are wind firm. (1± year)
 5. Wrap trunks and structural branches of thin barked trees to protect against sun scald and dehydration. Retain through at least one growing season, and through cold season.
 6. Feed with a diluted solution of N-P-K in solution form with a soil needle, providing water, air, and nutrients.

TREE TRANSPLANTING

32 96 43

Temporary Fire Station #13 & Parking Lot**PROJECT 12509**

7. Where foliage is retarded, spray with one of the soluble types of foliage feeders.
8. At time of planting, use soil needles for watering new transplant to fill air pockets and to keep roots (especially feeder roots) moist, live, and healthy. Direct fine spray at foliage to help harden-off new leaves.

3.08 STAKING AND GUYING

- A. Designated material shall be staked and guyed according to procedures described for new plant materials, Section 32 91 13.

3.09 WATERING

- A. CONTRACTOR shall be responsible for the manual watering of relocated plant materials for 90 days. If utilized, all temporary watering system installations shall be completely removed by the CONTRACTOR after the watering period.
- B. Following transplanting, CONTRACTOR shall water trees daily for the first two weeks, every other day for the next three weeks, and every third day for the balance of the watering/maintenance period. Such watering shall thoroughly saturate the root ball to its full depth.

3.10 MAINTENANCE

- A. All relocated plant materials shall be maintained immediately after each item is planted and continued until 90 day watering period is completed or until final acceptance whichever is latest, at which time the CITY, will assume responsibility for maintenance of the landscaping materials, following the procedures and recommendations of the CONTRACTOR.
- B. During this maintenance period, all relocated plant materials shall be maintained in accordance with the procedures described in Section 32 91 00.

3.11 CLEAN UP AND JOB CLOSEOUT

- A. Upon completion of the work, the CONTRACTOR shall thoroughly clean the landscaped area, removing all equipment, unused materials, rubbish and surplus excavated material, and shall fine grade all disturbed areas, including areas adjacent to the transplanted materials, to provide a neat and uniform site. All damaged or altered existing structures, as a result of the landscape work, shall be corrected.

3.12 PRICE FOR ON-SITE RELOCATION

- A. The price for on-site relocation of trees shall include root pruning, canopy pruning, transportation, hauling and dumping of debris and 90 day maintenance and be included within the lump sum bid. If the tree should die within the 90 day maintenance period the tree shall be removed and the site restored at no additional cost to the CITY.

END OF SECTION 329643

TREE TRANSPLANTING

32 96 43

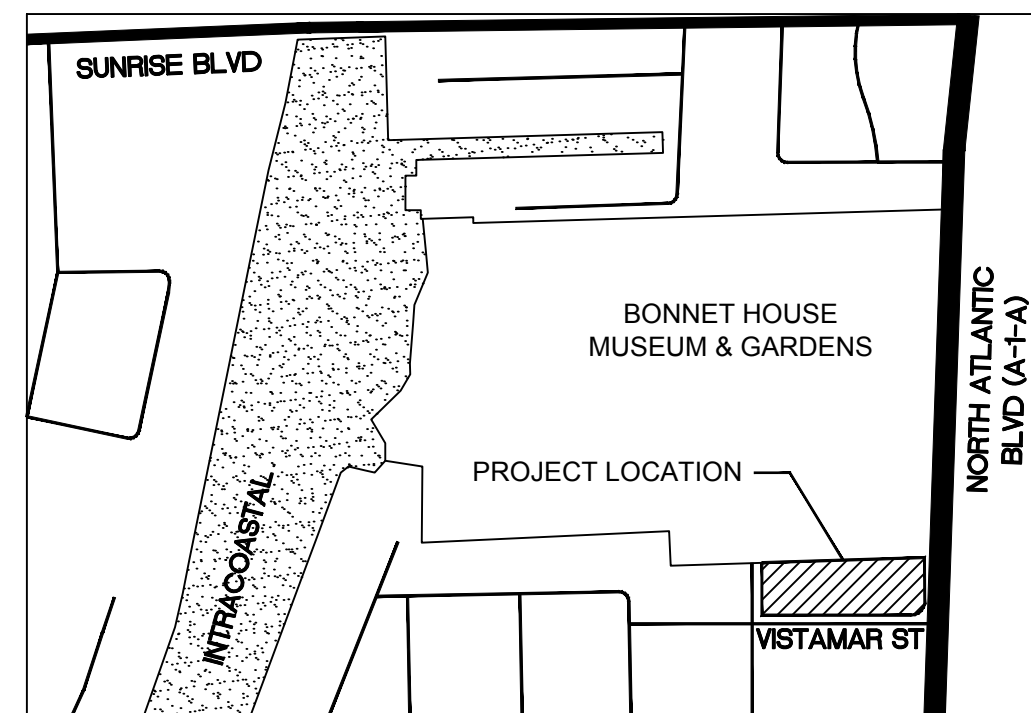
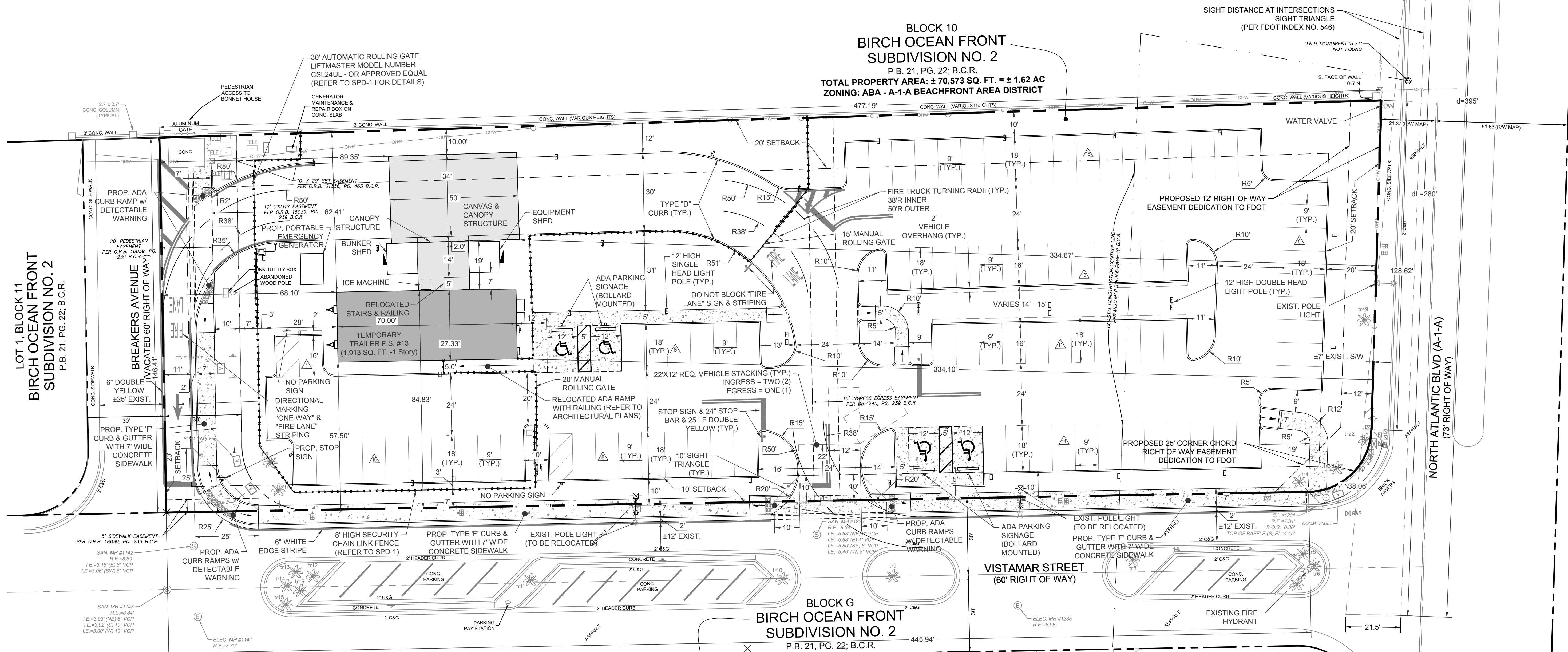
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CTA PROJECT NO. 19-0054-001-01





N.T.S.

SITE PLAN DATA CALCULATIONS			
JURISDICTION:	CITY OF FORT LAUDERDALE, FL		
CURRENT USE:	VACANT		
LAND USE:	CENTRAL BEACH REGIONAL ACTIVITY CENTER		
ZONING DISTRICT:	ABA: A-1-A BEACHFRONT AREA DISTRICT		
WATER/ WASTE WATER PROVIDER:	CITY OF FORT LAUDERDALE, FL		
SITE AREA:	AREA:	% OF SITE:	
GROSS SITE AREA:	1.62 AC.		
OPEN SPACE	68,660 sf		
TOTAL BLDG. COVERAGE:	1,913 sf		2.7%
LANDSCAPE:	22,746 sf		32.30%
VEHICULAR USE:	42,210 sf		59.8%
SIDEWALK/ PLAZA:	3,704 sf		5.2%
NET SITE AREA:	70,573 SF (1.62 AC.)		100%
ARCHITECTURAL DATA:	REQUIRED	PROVIDED	
FLOOR AREA RATIO (FAR)	4 MAX.		0.03
BUILDING HEIGHT	200' MAX.		13.3'
BUILDING LENGTH	NA		70' x 27.3'
ACCESSORY STRUCTURE HEIGHT	NA		15'
ACCESSORY STRUCTURE LENGTH	NA		50' x 34'
STORIES	NA		1
PARKING DATA:	REQUIRED	PROVIDED	
TYP. SPACE (9'X18'):	N/A		88 SPACES
ADA VAN ACCESSIBLE SPACE (12'X18'):	4 SPACES		4 SPACES
	TOTAL		92 SPACES TOTAL
FIRE STATION SPACE (9'X18'):	12 SPACES		11 SPACES

BUILDING SETBACKS:		REQUIRED	PROVIDED
BACK (NORTH):		20'	62.41'
FRONT (SOUTH):		10'	57.50'
SIDE (EAST):		20'	334.10'
SIDE (WEST):		10'	68.10'
ACCESSORY STRUCTURE SETBACKS:		REQUIRED	PROVIDED
BACK (NORTH):		5'	10.00'
FRONT (SOUTH):		5'	84.83'
SIDE (EAST):		5'	334.67'
SIDE (WEST):		5'	89.35'
ZONING OF ADJACENT PROPERTIES			
BACK (NORTH):	P		Parks, Recreation & Open Space
FRONT (SOUTH):	ABA		A-1-A Beachfront Area District
SIDE (EAST):	P		Parks, Recreation & Open Space
SIDE (WEST):	NBRA		North Beach Residential Area District
SEC. 47-21.12 VUA AREA		REQUIRED	PROVIDED
1. 20% of Gross VUA area	VUA area=	42,548 sf	8,510 sf
			42,548 sf
2. Interior Landscape area	30 sf per parking space (92 spaces)=	2,760 sf	16,503 sf
3. 1 Tree and 6 Shrubs per 1,000 sf VUA area	VUA area=	42,548 sf	43 Trees
			255 Shrubs
			1,710 Shrubs

Alexander D. Scheffer, State of Florida
Professional Engineer, License No. 73802.This item has been electronically signed and
sealed by Alexander D. Scheffer, P.E. on
April 28, 2021 using SHA Authentication
code.Printed copies of this document are not
considered signed and sealed on the SHA
authentication code must be verified on any
electronic copies.

Craven • Thompson and Associates, Inc.
ENGINEERS • PLANNERS • SURVEYORS
3563 N.W. 53RD STREET, FORT LAUDERDALE, FLORIDA 33309
FAX: (954) 739-6409 TEL: (954) 739-6400
FLORIDA LICENSED ENGINEERING, SURVEYING & MAPPING BUSINESS NO. 271
FLORIDA LICENSED LANDSCAPE ARCHITECTURE BUSINESS NO. C000114

DATE:	02/11/2021
DESIGNED BY:	MR
CHECKED BY:	MR
ADJ:	ADJ
FIELD BOOK:	FIELD BOOK

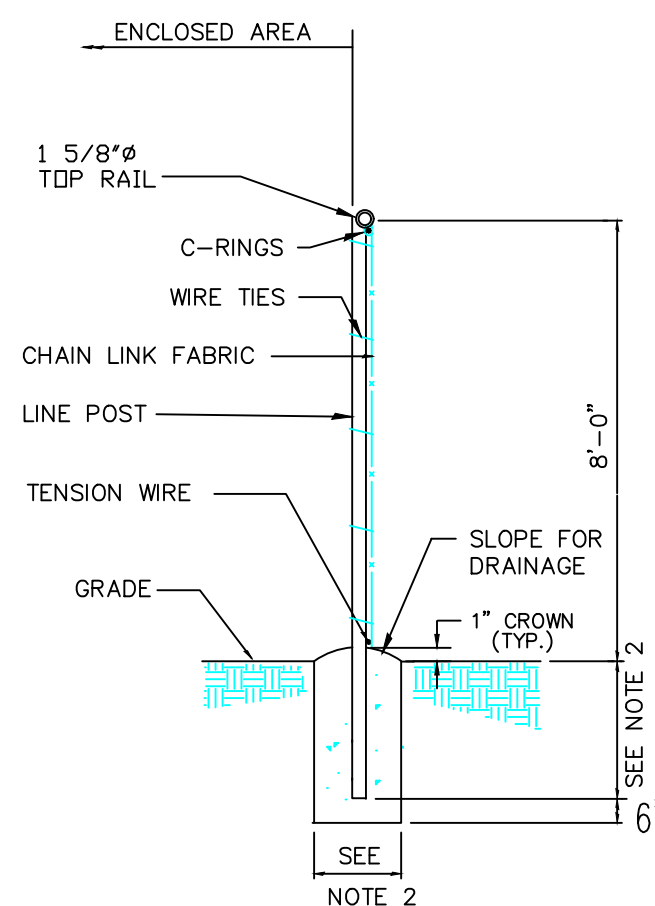
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # P12509
TEMP. FIRE STATION #13 & PARKING LOT
FIRE STATION & PARKING FACILITY
SITE PLAN
3109 VISTAMAR ST., FORT LAUDERDALE

SHEET NO.	SP-1
TOTAL:	12509-SITE
CAD FILE:	12509-SITE
DRAWING FILE NO.	4-XXX-XX

BID



N.T.S.

N.T.S.



1. ALL MATERIALS, FENCE POSTS, FABRIC AND HARDWARE SHALL BE GALVANIZED STEEL.
2. ALL FOOTINGS FOR FENCE POSTS SHALL BE 3,500 PSI CONCRETE. FOOTINGS SHALL BE OF DIAMETER 4 TIMES THE LARGEST CROSS-SECTION OF THE POST AND THE DEPTH SHALL BE A MINIMUM OF 24" PLUS AN ADDITIONAL 3" FOR EACH 1 FOOT INCREASE IN FENCE HEIGHT OVER 4'.
3. INSTALLATION OF FENCE SYSTEMS SHALL FOLLOW ASTM F-567 "STANDARD PRACTICE FOR INSTALLATION OF CHAIN-LINK FENCE".
4. FENCE, ALL POST & HARDWARE SHALL HAVE BLACK POLYVINYL COATING FINISH.
5. GATE OPERATOR TO INCLUDE KEYPAD FOR ENTRY & INTERNET GATEWAY.
6. CONTRACTOR SHALL REFER TO MEP PLANS FOR WIRING & POWERING OF GATE OPERATOR.

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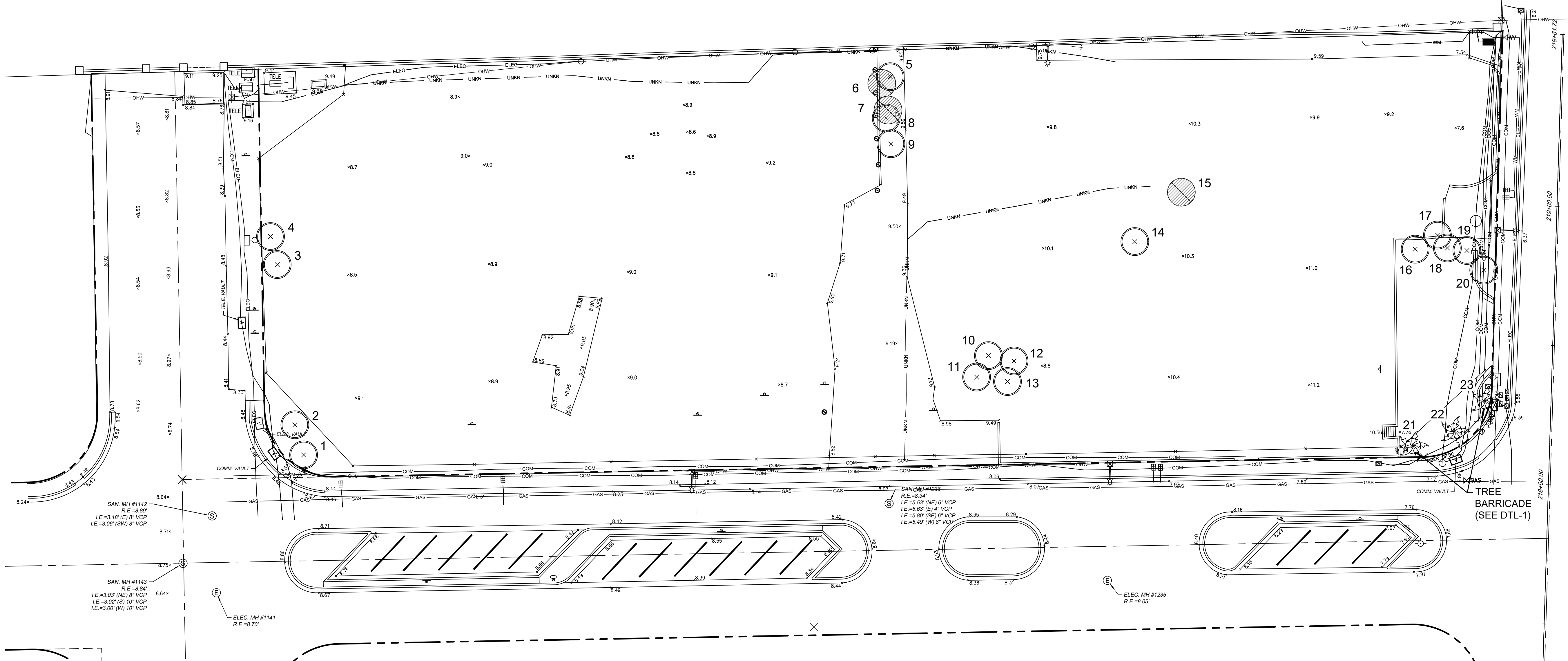
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

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TOTAL:	
CAD FILE:	12509-SITE
DRAWING FILE NO.	4-XXX-XX

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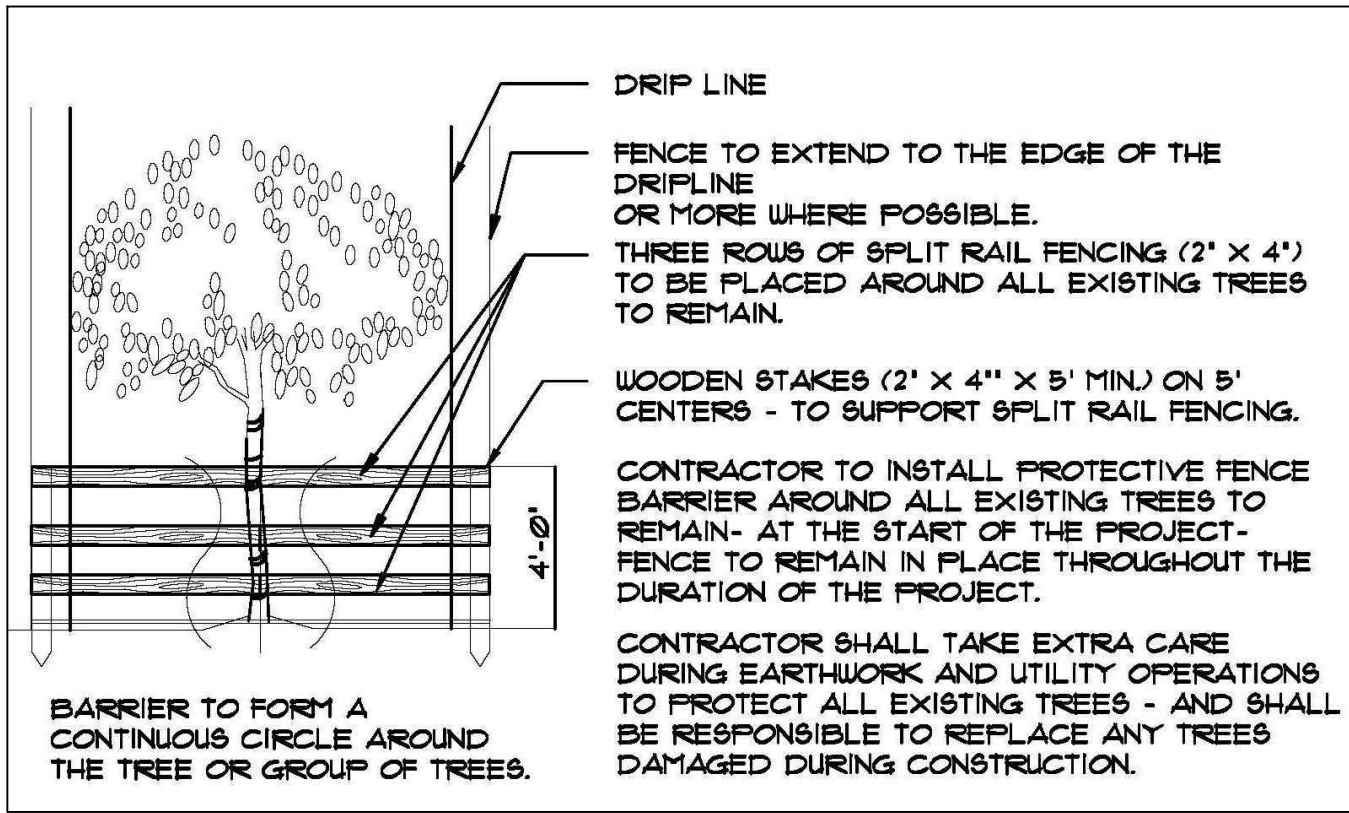


TREE DISPOSITION LIST:

No.	Botanical Name	Common Name	Caliper (in.)	Canopy (Dia.)	Canopy (SF)	Height O.A. (ft.)	Condition	Disposition
1	Sabal palmetto	Sabal Palm	10	10	79	17	90	Relocate
2	Sabal palmetto	Sabal Palm	10	10	79	19	90	Relocate
3	Sabal palmetto	Sabal Palm	10	10	79	16	90	Relocate
4	Bursera simaruba	Gumbo limbo	10	9	64	8	90	Relocate
5	Bursera simaruba	Gumbo limbo	10	8	50	10	90	Relocate
6	Veitchia montgomeryana	Montgomery Palm	10	10	79	16	70	Remove
7	Cluisa rosea	Clusia	10	26	531	22	70	Remove
8	Bursera simaruba	Gumbo limbo	10	16	201	16	90	Relocate
9	Bursera simaruba	Gumbo limbo	10	17	227	20	90	Relocate
10	Sabal palmetto	Sabal Palm	10	10	79	13	90	Relocate
11	Sabal palmetto	Sabal Palm	10	10	79	13	90	Relocate
12	Sabal palmetto	Sabal Palm	10	10	79	14	90	Relocate
13	Sabal palmetto	Sabal Palm	10	10	79	17	90	Relocate
14	Sabal palmetto	Sabal Palm	10	10	79	23	90	Relocate
15	Royal Palm	Royal Palm	12	15	177	28	90	Remove
16	Sabal palmetto	Sabal Palm	10	10	79	15	90	Relocate
17	Sabal palmetto	Sabal Palm	10	10	79	17	90	Relocate
18	Sabal palmetto	Sabal Palm	10	10	79	15	90	Relocate
19	Sabal palmetto	Sabal Palm	10	10	79	17	90	Relocate
20	Sabal palmetto	Sabal Palm	10	10	79	17	90	Relocate
21	Sabal palmetto	Sabal Palm	10	10	79	17	90	Relocate
22	Sabal palmetto	Sabal Palm	10	10	79	16	90	Relocate
23	Sabal palmetto	Sabal Palm	10	10	79	14	90	Relocate

TREE MITIGATION:

Tree Caliper Removed =	10"
Tree Caliper Replaced =	14"
Palms Removed =	2 Palms
Palms Replaced =	2 Palms



1 TREE BARRICADE

PLAN/ ELEVATION

NTS

NOTES:

- 1) PERFORMANCE BONDS ARE REQUIRED ON ALL TREES TO BE RELOCATED AS PER CITY CODES.
- 2) ALL PROPOSED TREES TO BE REMOVED MUST BE MITIGATED FOR AS PER CITY CODES; TREE MITIGATION WILL BE ABOVE AND BEYOND CODE REQUIRED TREES ON THE PROPERTY.
- 3) CITY STAFF WILL VERIFY ALL TREES PROPOSED TO BE REMOVED.

NOTE:

1. CONTRACTOR TO COORDINATE WITH CITY GAS DEPARTMENT TO HAVE A GAS PERSONNEL STANDBY ONSITE DURING ANY EXCAVATION WITHIN THE VICINITY OF GAS LINES.
2. STUMPS OF ANY EXISTING TREES THAT HAVE BEEN REMOVED SHALL BE GROUND DOWN TO 2" BELOW GRADE AND BACKFILLED. STUMP AND ROOT BALLS MUST NOT BE REMOVED DUE TO THE POTENTIAL OF DAMAGING EXISTING UTILITY LINES.
3. CONTRACTOR TO PROVIDE TREE PROTECTION BARRICADE FOR ANY TREE WITHIN CONSTRUCTION AREA. SEE DETAIL.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY EXISTING TREES WITHIN WORK SITE BOUNDARIES AND WILL NEED TO REPLACE WITH LIKE OR BETTER CONDITION FOR ANY DAMAGED TREES.

LEGEND		
⊗	####	TREE/PALM TO BE RELOCTAED
⊗	####	TREE/PALM TO BE REMOVED
⊗	####	EXISTING TREE/PALMS O BE PROTECTED IN PLACE
⊗	####	TREE PROTECTION BARRICADE -See detail below

NOES:

- 1) PERFORMANCE BONDS ARE REQUIRED ON ALL TREES TO BE RELOCATED AS PER CITY CODES.
- 2) ALL PROPOSED TREES TO BE REMOVED MUST BE MITIGATED FOR AS PER CITY CODES; TREE MITIGATION WILL BE ABOVE AND BEYOND CODE REQUIRED TREES ON THE PROPERTY.
- 3) CITY STAFF WILL VERIFY ALL TREES PROPOSED TO BE REMOVED.



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BID

PROJECT # P12509

TEMP. FIRE STATION #13 & PARKING LOT

FIRE STATION & PARKING FACILITY

TREE DISPOSITION PLAN

3109 VISTAMAR ST., FORT LAUDERDALE

SHEET NO.

TD-1

TOTAL:

CAD FILE:

12509-001-SITE

DRAWING FILE NO.

4-XXX-XX

DRAWN BY:

DATE:

MR

DESIGNED BY:

SCALE:

1"=20'

MR

CHECKED BY:

MR

ADJ

FIELD BOOK:

CITY OF FORT LAUDERDALE

PUBLIC WORKS DEPARTMENT

ENGINEERING & ARCHITECTURE



100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION
1	3/3/21	BW	JH	REVISED MITIGATION TABLE

GENERAL

Tree relocation work shall be performed in compliance with the CONTRACTOR'S progress, schedule as approved by the CITY. However, relocation work shall start no sooner than the beginning of the construction contract and shall be completed by the completion date of the contract. No relocation work shall start before the date approved nor continue without the knowledge of the CITY.

REFERENCES

- A. Where referenced standards conflict with other specified requirements, the more restrictive or stringent requirements shall govern. Comply with applicable requirements of the following standards:
- American National Standards Institute (ANSI): Z60.1 American National Standards for Nursery Stock (Sponsor: American Association of Nurserymen, Inc.).
 - National Arborist Association, ~537 Stratford Rd., Wantagh, NY 11793 (NAA): Ref. 1 Transplanting of Trees and Shrubs in the Southeastern United States.
 - Florida Department of Agriculture and Consumer Services: Grades and Standards for Nursery Plants.

DESCRIPTION

- A. Plant materials to be relocated on site are indicated on the Drawings. Those not shown will be relocated as directed by the CITY.
- B. The person (foreman or superintendent) in charge of and responsible for the CONTRACTOR'S tree relocation crews shall have a minimum 10 years experience in transplanting of plant materials, shall be recognized by the American Association of Nurserymen, be an ISA Certified Arborist, and be a licensed "Tree Trimmer" in Broward County.
- C. Existing trees to remain shall be protected during all construction phases. Protective barriers shall be provided and built to FDOT #544 specifications for those existing trees adjacent to construction operations. Replacement of any trees that are damaged or destroyed due to the CONTRACTOR'S operations shall be the CONTRACTOR'S responsibility and shall be replaced at the CONTRACTOR'S expense. Any existing tree that dies within one year after final acceptance shall be replaced with a number of trees of the same species to equal the caliper DBH of the existing tree lost. Replacement trees shall be Florida No. 1 and have a caliper DBH of no smaller than 3".
- D. Remove other vegetation as necessary and as directed by the LANDSCAPE ARCHITECT to accommodate new plantings.
- E. Tree pits or holes remaining after relocation of plant material shall be backfilled with clean fill and brought back flush with surrounding grade, unless the pits are to be immediately replanted. Pits that are to be quickly replanted shall be surrounded by safety barricades to prevent accidental falls into pits. In areas where new plant material will replace relocated plant material, appropriate soil mix shall be used as backfill.

QUALITY ASSURANCE

- A. Unless otherwise specified herein, tree transplanting shall conform to National Arborist Association, Ref. 1.
- B. CONTRACTOR shall comply with National Arborist Association standards for pruning and shall remove branches from trees that are to remain as necessary to clear new construction.
- C. CONTRACTOR shall recommend procedures to compensate for loss of roots (if any) and shall perform initial pruning of branches and stimulation of root growth where removed to accommodate new construction.
- D. Tree repair work shall be performed for damage incurred by construction by an ISA Certified Arborist.
- E. Routine progress evaluation reports shall be provided on relocated trees until the end of the maintenance period.
- F. Evaluate existing trees prior to transplanting and verify that trees are free from disease and sufficiently strong to survive relocation from the site to their new location. Notify the LANDSCAPE ARCHITECT in writing of any trees that the CONTRACTOR considers insufficiently strong to survive relocation.

SUBMITTAL

- A. CONTRACTOR shall submit for approval by OWNER a list of equipment, procedures, and labor force anticipated for use in tree relocation. CONTRACTOR shall include start date, completion date, and schedule of relocation as part of the approved progress schedule and, in addition, shall submit a more detailed daily schedule for the transplanting period, showing the schedule for root pruning and the number of units to be dug and relocated to specified areas.

For those materials that require root pruning, the relocation schedule will begin at the end of the specified root pruning period.

- C. CONTRACTOR shall apply for and pay all costs associated with tree removal/relocation permits. The permit shall be obtained from the CITY. In addition to CITY permits, a "Tree Removal License" shall be required by BC EP&GMD for all trees to be removed or relocated within the County R/W.
- D. Prior to start of relocation work, the CONTRACTOR shall submit for approval details of the tree protection system to be utilized. All trees indicated to remain during construction shall be protected in accordance with recognized standards of the industry and protection shall be removed once construction is complete. CONTRACTOR shall also certify that where damage occurred, trees were promptly and properly treated, and shall indicate which damaged trees (if any) are incapable of retaining full growth potential and are recommended to be replaced.
- E. The CONTRACTOR, in order to guarantee his work, may use methods, sequence and schedule for effecting tree relocations and plant protection methods different from what is described in these specifications. However, if different, the CONTRACTOR must submit for approval a full description of all proposed methods, sequence of events and schedule for effecting tree relocations and plant protection.
- F. CONTRACTOR shall coordinate tree relocation with road construction and other related operations and such coordination shall be clearly evidenced in the schedule submittal.
- G. CONTRACTOR must submit procedures to be utilized for maintenance of all relocated trees.

GUARANTEE

- A. Relocated plant material shall fall under the standard 12 month guarantee.
- B. Damage to other plants, lawn or construction work occurring within the work area during tree relocation shall be repaired at no cost to the CITY. This also includes, but is not limited to, damage of curbs, walks, roads, fences, site furnishings, etc. Replacing and replanting of damaged trees, shrubs or turf shall be performed in accordance with this specification.
- C. Existing tree canopy shall not have more than 25% loss after relocation procedures are completed. CONTRACTOR shall be responsible for replacing any canopy loss due to lack of care and/or inadequate methods of transplanting the trees and palms that would cause the death of said plant material. Any transplanted tree that dies within one year after final acceptance shall be replaced with a number of trees of the same species to equal the caliper DBH of the transplanted tree lost. Replacement trees shall be Florida No. 1 having a caliper DBH no smaller than 3". Replacement shall be the CONTRACTOR'S responsibility.

TRANSPLANTING _ GENERAL

- A. Transplanting shall consist of on_site transplanting of existing trees. Trees shall be transplanted only once from existing location to permanent positions as shown on Drawings.
- B. Digging, Wrapping and Handling: Plants shall be dug and prepared for moving in a manner that will not cause damage to branches, shape, root system, and development.
- C. Balled and Burlapped Plants: Balls shall be firmly wrapped with burlap or approved cloth substitute. No balled plant will be acceptable if the ball is cracked and broken, or if the stem or trunk is loose in the ball, either before or during transplanting. Balled plants shall be lifted and handled from the bottom of the ball, properly protected and delivered to the replanting site, to be planted immediately and watered thoroughly. Ball sizes shall be as recommended in ANSI Z60.1

TAGGING

- A. Trees within the designated areas for relocation shall be clearly marked by means of yellow plastic surveyors' ribbons and coordinated with the LANDSCAPE ARCHITECT and CITY prior to root pruning and/or digging.

ROOT PREPARATION

- A. Trees to be relocated shall be root pruned at least 60 days prior to digging with clean, sharp equipment. The specific requirements for root ball size shall be in accordance with the table below. CONTRACTOR shall maintain root pruned materials by watering, weeding, mowing, spraying, fertilizing, and other horticulture practices. After root pruning, backfill with good rooting medium, fertilize with organic fertilizer to promote root growth, mulch to reduce weeds, discourage foot traffic and its compacting effect, conserve moisture and minimize temperature fluctuation.
- B. Root Ball Size Chart: Root ball sizes shall be in accordance with minimum standards set forth in Grades and Standards for Nursery Plants Part 11, Palms and Trees, Florida Department of Agriculture, as follows:

1. Caliper	Minimum Ball Diameter
3 1/2 - 4:	28"
4 - 4 1/2"	30"
4 1/2 - 5"	32"
5 - 5 1/2"	34"
Larger Sizes	Increase proportionally
2. Ball Diameter	Medium Ball Diameter
Less than 20"	Not less than 75% of diameter
20" to 30"	Not less than 65% of diameter
30" to 48"	Not less than 60% of diameter

CROWN PREPARATION

- A. Shade Trees:
- Shade Trees: Selectively prune and thin crown to remove approximately one third of the branches. In so doing, preserve the basic shape and form of the tree, eliminate cross branching and dead or diseased branches.
 - Hand strip selected species of all leaves following pruning and prior to moving.

HAND DIGGING

- A. Burlapping will be required. Trees that are burlapped for relocation shall comply with and be handled in same manner as new plant material specified in Section 02900- Landscape Work.

HANDLING AND TRANSPORTATION

- A. Trees shall be properly handled during moving so trunks will not be scarred or damaged and to avoid broken limbs. Broken limbs which do not cause the tree to be rejected shall be repaired under the following guidelines:
- Properly prune dead, dying, or damaged branches with clean, sharp equipment.
 - Remove injured bark and wood of a tree with a clean, sharp knife to a point where healthy bark and wood make contact at their margins.
 - Inspect and treat wound for insect and disease.
 - Seal wounds with bituminous base wound paint for all limbs greater than 3" diameter.
- B. Transport trees on vehicles of adequate size to prevent overcrowding, broken limbs, foliage damage or root ball damage.
- C. Root ball should be kept moist during all phases of relocation.
- D. Tree crowns shall be protected with shade cloth to prevent desiccation and wind burn. Crowns shall be periodically sprayed with water to help

ensure against desiccation.

- E. Plant material shall be handled only in ways and means accepted by the industry and acceptable to the LANDSCAPE ARCHITECT.
- F. Plant material shall be planted the same day it is dug. Preparation of planting pits or beds shall be coordinated to ensure this schedule.

PLANTING

- A. Relocated Material
- Relocated trees shall be planted according to procedures described for new material, Section 02900-Landscape Work. Verify that final grades have been established prior to planting operations. Ensure that proposed planting pits drain by test filling with water prior to transplantation.
 - CONTRACTOR shall continue watering and caring for relocated material as described in paragraph 3.09.
 - Mulch tree pit areas to reduce weeds, discourage foot traffic and its compacting effect, conserve moisture and minimize temperature fluctuations.
 - Brace trunk and leave in place until trees/ palms are wind firm. (1± year)
 - Wrap trunks and structural branches of thin barked trees to protect against sun scald and dehydration. Retain through at least one growing season, and through cold season.
 - Feed with a diluted solution of N_P_K in solution form with a soil needle, providing water, air, and nutrients.
 - Where foliage is retarded, spray with one of the soluble types of foliage feeders.
 - At time of planting, use soil needles for watering new transplant to fill air pockets and to keep roots (especially feeder roots) moist, live, and healthy. Direct fine spray at foliage to help harden_off new leaves.

STAKING AND GUYING

Designated material shall be staked and guyed according to planting details.

WATERING

- A. CONTRACTOR shall be responsible for the manual watering of relocated plant materials for 90 days. If utilized, all temporary watering system installations shall be completely removed by the CONTRACTOR after the watering period.
- B. Following transplanting, CONTRACTOR shall water trees daily for the first two weeks, every other day for the next two weeks. Soaking then shall continue on a twice weekly basis for another period of eight (8) weeks. Such watering shall thoroughly saturate the root ball to its full depth and is in addition to the underground irrigation system.

MAINTENANCE

- A. All relocated plant materials shall be maintained immediately after each item is planted and continued until 90 day watering period is completed or until final acceptance whichever is latest, at which time the Property Owner, will assume responsibility for maintenance of the landscaping materials, following the procedures and recommendations of the CONTRACTOR.
- B. During this maintenance period, all relocated plant materials shall be maintained in accordance with the procedures described in Section 02900-Landscape Work.

CLEAN UP

- A. Upon completion of the work, the CONTRACTOR shall thoroughly clean the landscaped area, removing all equipment, unused materials, rubbish and surplus excavated material, and shall fine grade all disturbed areas, including areas adjacent to the transplanted materials, to provide a neat and uniform site. All damaged or altered existing structures, as a result of the landscape work, shall be corrected.

Joseph D. Handley
Florida R.L.A. No. 0001368
February 7, 2020

DRAWN BY: DATE: 04/12/2021
MR
DESIGNED BY: SCALE: 1"=20'
MR
CHECKED BY: AOS
FIELD BOOK:

CITY of FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

NO.	DATE	REVISIONS		BY	CHK'D	DISCRPTION
		DATE	DESCRIPTION			
1	3/3/21	BW	JH			REVISED MITIGATION TABLE

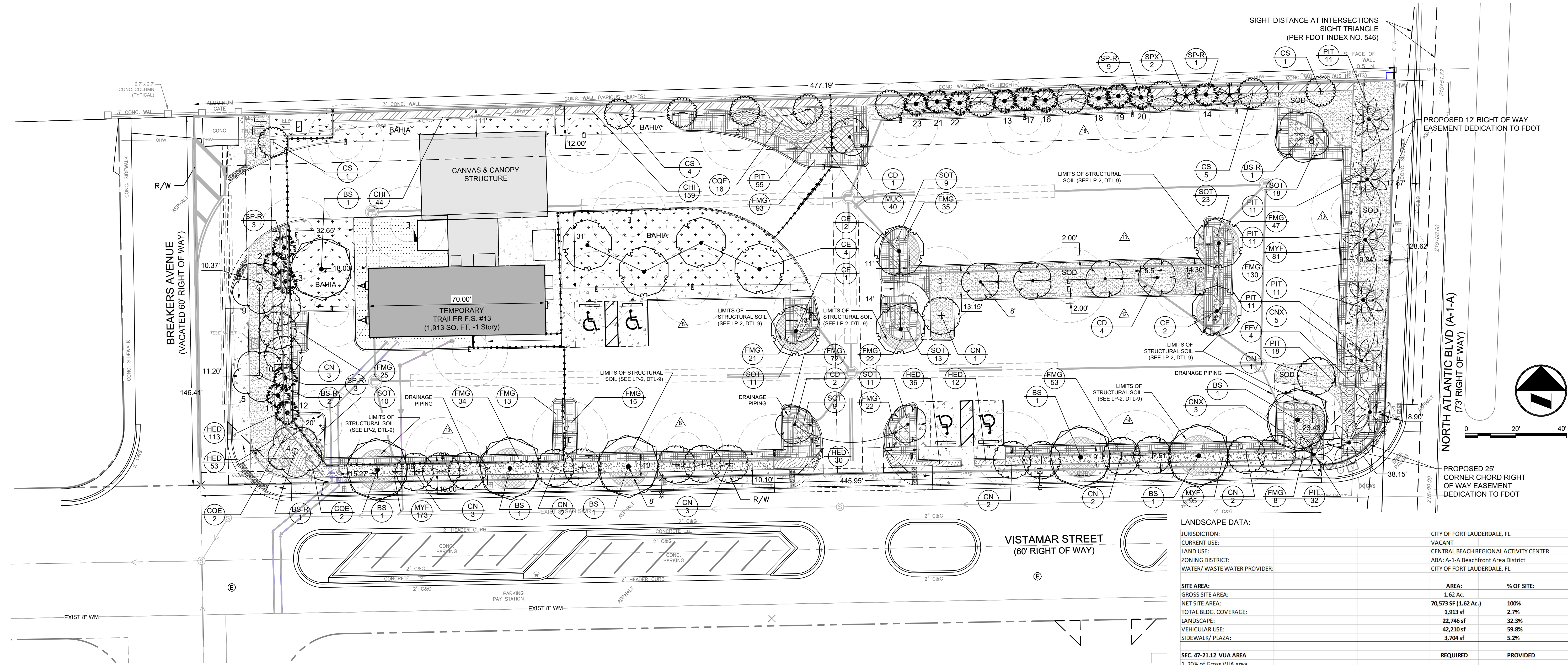
PROJECT # P12509
TEMP. FIRE STATION #13 & PARKING LOT
FIRE STATION & PARKING FACILITY
TREE DISPOSITION NOTES
3109 VISTAMAR ST., FORT LAUDERDALE

SHEET NO.
TD-2
TOTAL:
CAD FILE:
12509-001-SITE
DRAWING FILE NO.
4-XXX-XX

 CRAVEN • THOMPSON AND ASSOCIATES, INC.
ENGINEERS • PLANNERS • SURVEYORS
3563 N.W. 53RD STREET, FORT LAUDERDALE, FLORIDA 33309
FAX: (954) 739-6409 TEL.: (954) 739-6400
FLORIDA LICENSED ENGINEERING, SURVEYING & MAPPING BUSINESS No. 271
FLORIDA LICENSED LANDSCAPE ARCHITECTURE BUSINESS No. C000114

BID

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PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS	HYDRO ZONE
	BS	7	Bursera simaruba	Gumbo Limbo	3.5" Cal., 12' Ht. 6' Sprd.	ZONE: A NATIVE: YES
	CD	7	Coccoloba diversifolia	Pigeon Plum	2.5" Cal., 10' Ht. x 5' Sprd.	ZONE: A NATIVE: YES
	CE	9	Conocarpus erectus	Buttonwood	3.5" Cal., 12' Ht. 6' Sprd.	ZONE: A NATIVE: YES
	CN	19	Conocarpus erectus 'Sericeus'	Silver Buttonwood	2.5" Cal., 10' Ht. x 5' Sprd.	ZONE: A NATIVE: YES
	CS	11	Cordia sebestena	Orange Geiger Tree	2" Cal., 10' Ht. x 5' Sprd.	ZONE: A NATIVE: YES
RELOCATED TREES/PALMS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS	HYDRO ZONE
	BS-R	4	Bursera simaruba	Gumbo Limbo	Relocation	ZONE: A NATIVE: YES
	SP-R	16	Sabal palmetto	Cabbage Palm	RELOCATED PALM	ZONE: A NATIVE: YES
PALM TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS	HYDRO ZONE
	CNX	8	Cocos nucifera 'Green Malayan'	Coconut Palm	12' G.W., MATCHED	ZONE: A NATIVE: NO
	SPX	2	Sabal palmetto	Cabbage Palmetto	14' CT, MATCHED	ZONE: A NATIVE: YES

SHRUB AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS	SPACING	HYDRO ZONE
	CHI	203	Chrysobalanus icaco 'Redtip'	Red Tip Cocoplum	24" HT x 24" SPRD	30" o.c.	ZONE: A NATIVE: YES
	CQE	20	Crinum augustum 'Queen Emma'	'Queen Emma' Crinum	30" Ht. x 30" Sprd.	36" o.c.	ZONE: A NATIVE: NO
	FMG	591	Ficus microcarpa 'Green Island'	Green Island Ficus	24" HT X 24" SPRD.	30" o.c.	ZONE: A NATIVE: NO
	FFV	4	Furcraea foetida 'Variegata'	Variegated False Agave	30" HT x 30" SPRD	60" o.c.	ZONE: A NATIVE: NO
	HED	244	Helianthus debilis	Cucumberleaf Sunflower	12" Ht. x 12" Sprd.	18" o.c.	ZONE: A NATIVE: YES
	MUC	40	Muhlenbergia capillaris	Pink Muhly	18X18X18"	24" o.c.	ZONE: A NATIVE: YES
	MYF	344	Myrcianthes fragrans	Simpson Stopper	24" HT X 24" SPRD.	30" o.c.	ZONE: A NATIVE: YES
	PIT	160	Pittosporum tobira 'Variegata'	Variegated Mock Orange	24" Ht. x 24" Sprd.	30" o.c.	ZONE: A NATIVE: NO
	SOT	104	Sophora tomentosa truncata	Yellow Necklacepod	24" Ht. x 24" Sprd.	30" o.c.	ZONE: A NATIVE: YES
SOD/SEED	CODE	QTY	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS	SPACING	HYDRO ZONE
	PAN	500,8.6 sf	Paspalum notatum	Bahia Grass	SOD		ZONE: B NATIVE: NO
	SOD	550,6.3 sf	Stenotaphrum secundatum 'Floritam'	Floritam St. Augustine Sod	SOD		ZONE: C NATIVE: NO

HYDROZONES
ZONE: A
Total Area = 9,195 sq. ft.
ZONE: B
Total Area = 4,945 sq. ft.
ZONE: C
Total Area = 2,255 sq. ft.

LANDSCAPE DATA:			CITY OF FORT LAUDERDALE, FL	
JURISDICTION:			VACANT	
CURRENT USE:			CENTRAL BEACH REGIONAL ACTIVITY CENTER	
LAND USE:			ABA: A-1-A Beachfront Area District	
ZONING DISTRICT:			CITY OF FORT LAUDERDALE, FL	
WATER/ WASTE WATER PROVIDER:				
SITE AREA:			AREA:	% OF SITE:
GROSS SITE AREA:			1.62 Ac.	
NET SITE AREA:			70,573 SF (1.62 Ac.)	100%
TOTAL BLDG. COVERAGE:			1,913 sf	2.7%
LANDSCAPE:			22,746 sf	32.3%
VEHICULAR USE:			42,210 sf	59.8%
SIDEWALK/ PLAZA:			3,704 sf	5.2%
SEC. 47-21.12 VUA AREA			REQUIRED	PROVIDED
1. 20% of Gross VUA area	VUA area= 42,548 sf		7,954 sf	42,548 sf
2. Interior Landscape area	30 sf per parking space (92 spaces)=		2,760 sf	16,503 sf
3. 1 Tree and 6 Shrubs per 1,000 sf of VUA area	VUA area= 42,548 sf		43 Trees 255 Shrubs	45 Trees 1,710 Shrubs
SEC. 47-21.8 NATIVE			REQUIRED	PROVIDED
1. 50% of Required Vegetation				
Trees =			31	57
Palms =			11	18
Shrubs =			841	955
*. Existing trees and Proposed trees used to meet requirement				
SEC. 47-21.13 LANDSCAPE			REQUIRED	PROVIDED
1. 1 Tree per 1,000 sf of net lot area	Net Lot area= 16,165 sf		9 Trees	9 Trees
Less Req'd. VUA Landscapes=	7,954 sf 8,211 sf			
2. Street Trees- 1 Tree per 40 LF, or 1 per 20 LF for OHW				
Vistamar St. (OHW) =	120 LF		6 Trees	6 Trees
Vistamar St. =	279 LF		7 Trees	7 Trees
N. FTL Beach Blvd. (OHW) =	151 LF		4 Trees	4 Trees
TOTALS =			19 Trees	19 Trees
Sec. 47-21.12 -C.VUA PLANTING REQUIREMENTS			REQUIRED	PROVIDED
C.1.a. 25% = 3.5" Cal.	Bursera simaruba Conocarpus erectus	Gumbo Limbo Buttonwood	6 4	6 4
C.1.b. 25% = 2.5" Cal.	Coccoloba diversifolia Conocarpus erectus 'Sericeus'	Pigeon Plum Silver Buttonwood	7 5	7 5
C.1.c. 20% = Flowering Trees	Cordia sebestena	Orange Geiger Tree	12	12
C.1.d. 20% = Palms	Sabal palmetto Coconut Palm	Cabbage Palm (3:1 value, relocated) Cocos nucifera	9 2	9 2
C.1.e. 10% = Optional	Conocarpus erectus 'Sericeus' Cordia sebestena	Silver Buttonwood Orange Geiger Tree	8 3	8 3
TOTAL			43	43

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FLORIDA LICENSED ENGINEERING, SURVEYING & MAPPING BUSINESS NO. 271
FLORIDA LICENSED LANDSCAPE ARCHITECTURE BUSINESS NO. C000114

PROJECT # P12509
TEMP. FIRE STATION #13 & PARKING LOT
FIRE STATION & PARKING FACILITY
LANDSCAPE PLAN
3109 VISTAMAR ST., FORT LAUDERDALE

SHEET NO.
LP-1

TOTAL:
CAD FILE:
12509-001-SITE
DRAWING FILE NO.
4-XXX-XX

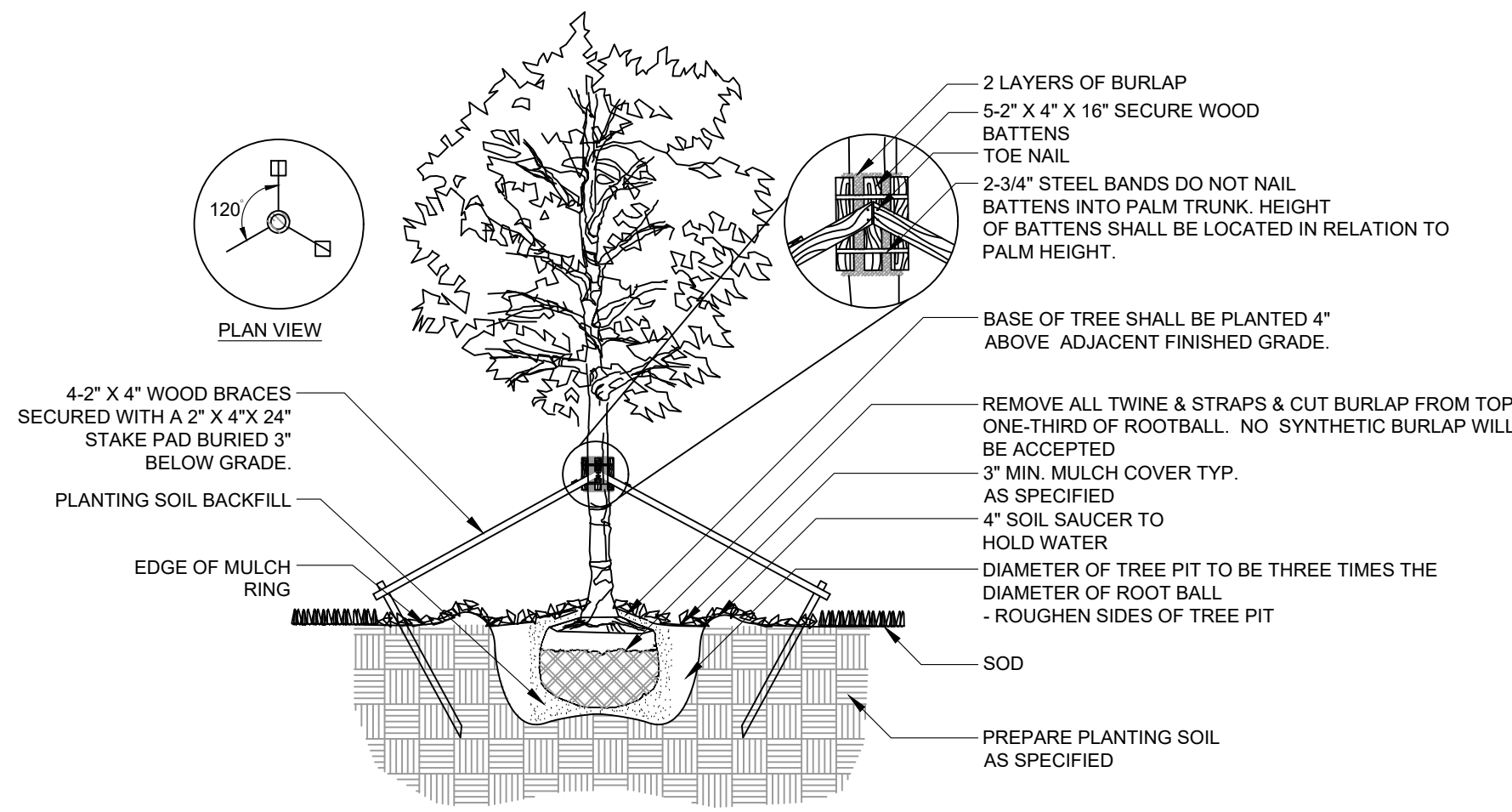
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS
NO. DATE BY CH'D DESCRIPTION

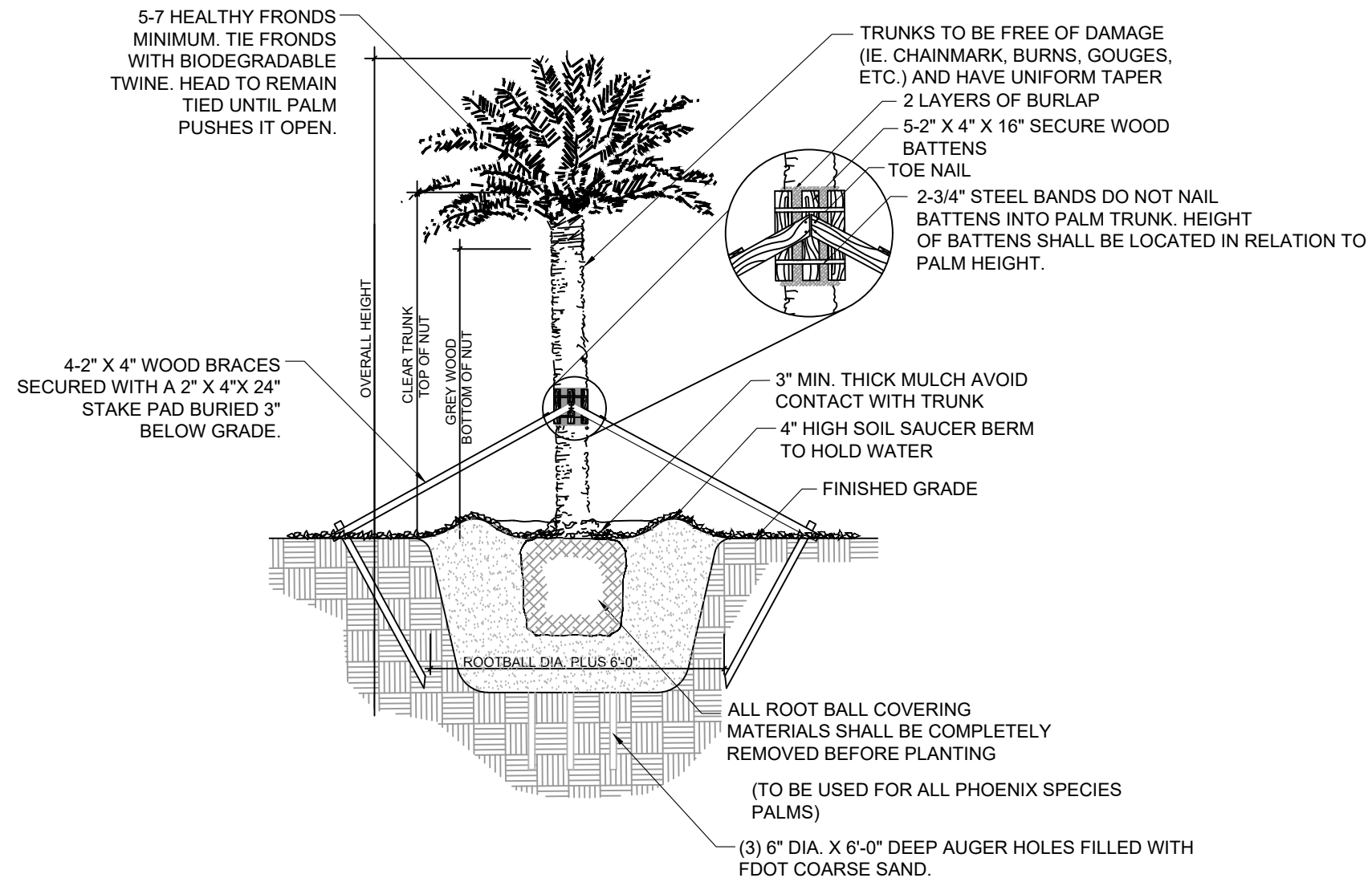
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DESIGNED BY: SCALE: 1"=20'
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CHECKED BY: AOS
FIELD BOOK: 33301

Joseph D. Handley
Florida R.L.A. No. 0001368
February 7, 2020

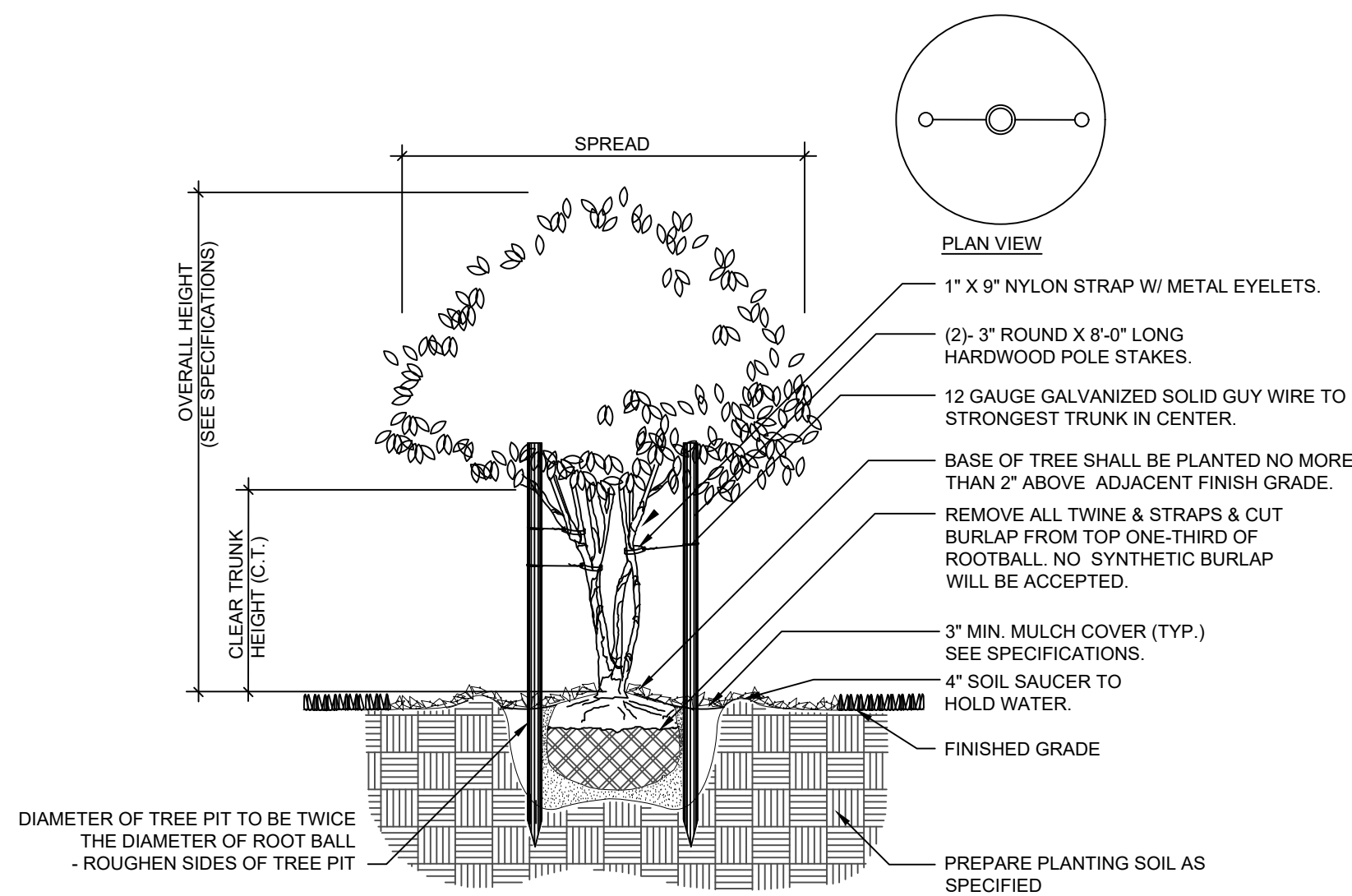
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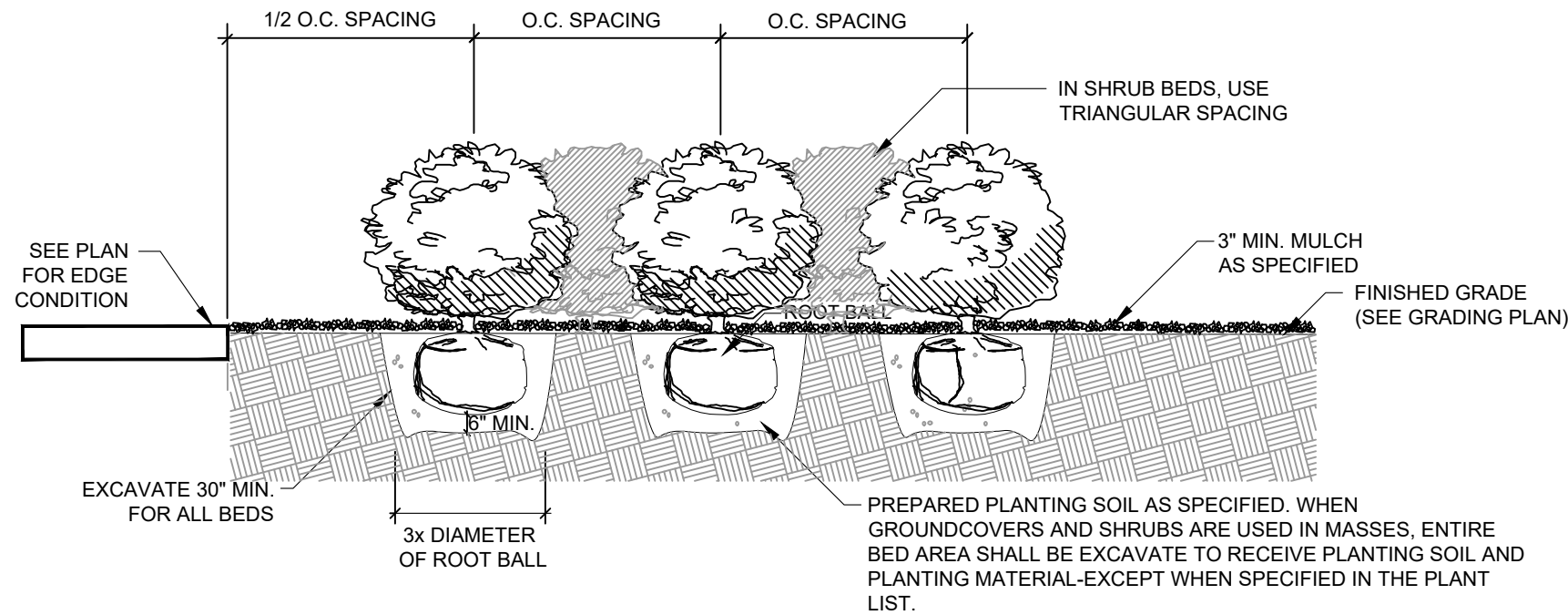
1 CANOPY TREE SECTION NTS



2 PALM (TYPICAL) SECTION NTS

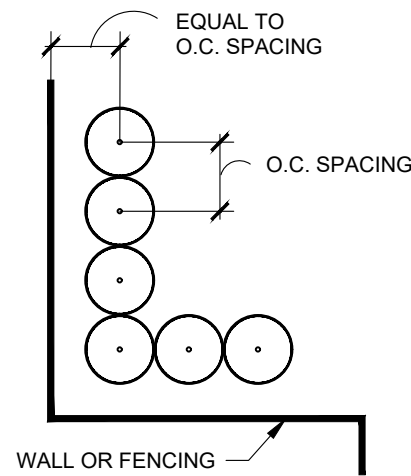


3 MULTI-TRUNK TREE SECTION NTS

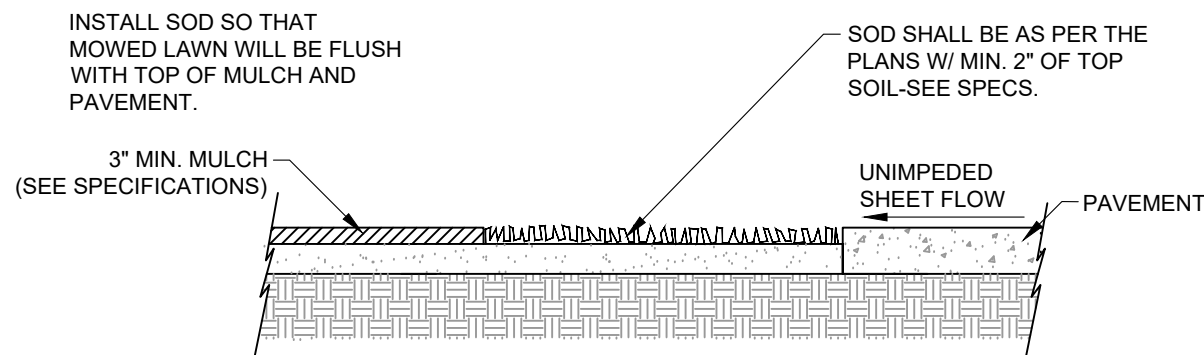


4 SHRUB PLANTING SECTION NTS

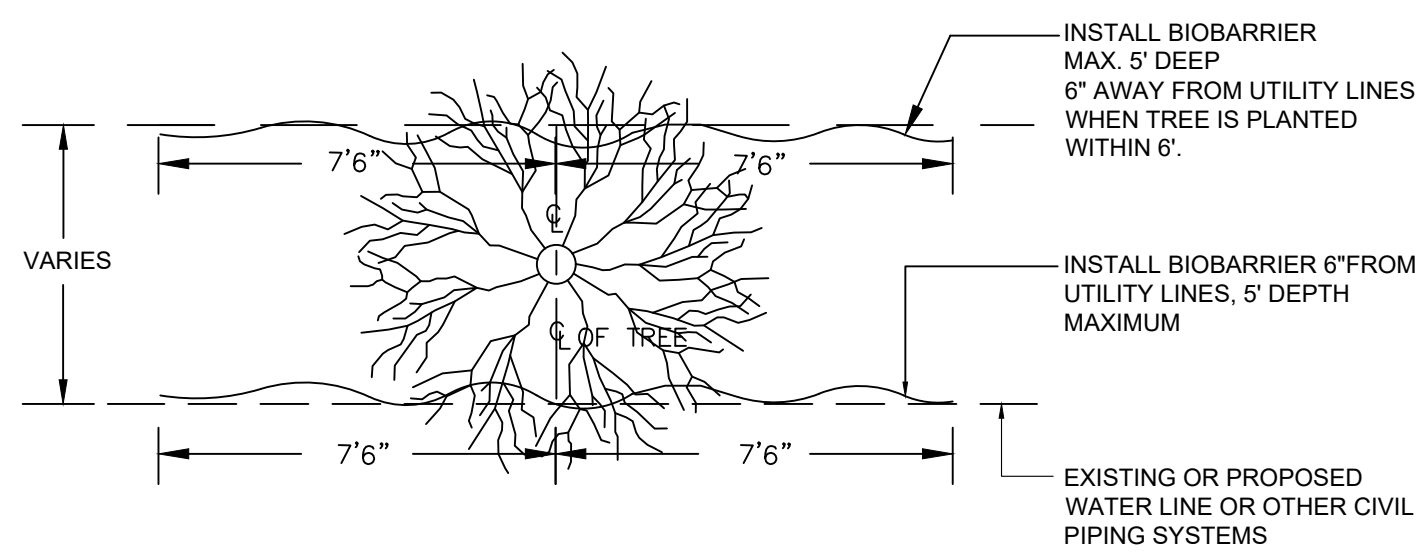
NOTE: PLANTS ADJACENT TO WALLS OR FENCING SHOULD BE PLANTED WITH CENTERS AT THE SAME DISTANCE FROM THE WALL/FENCE AS THE O.C. (ON CENTER) SPACING.



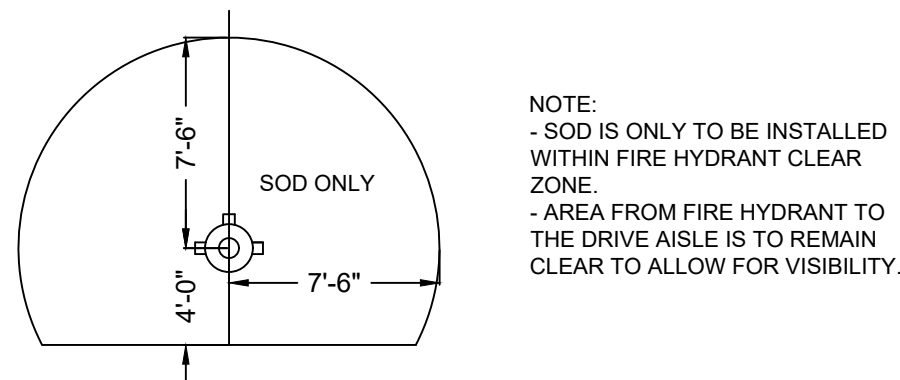
5 PLANTING ADJACENT TO WALL/FENCE SECTION NTS



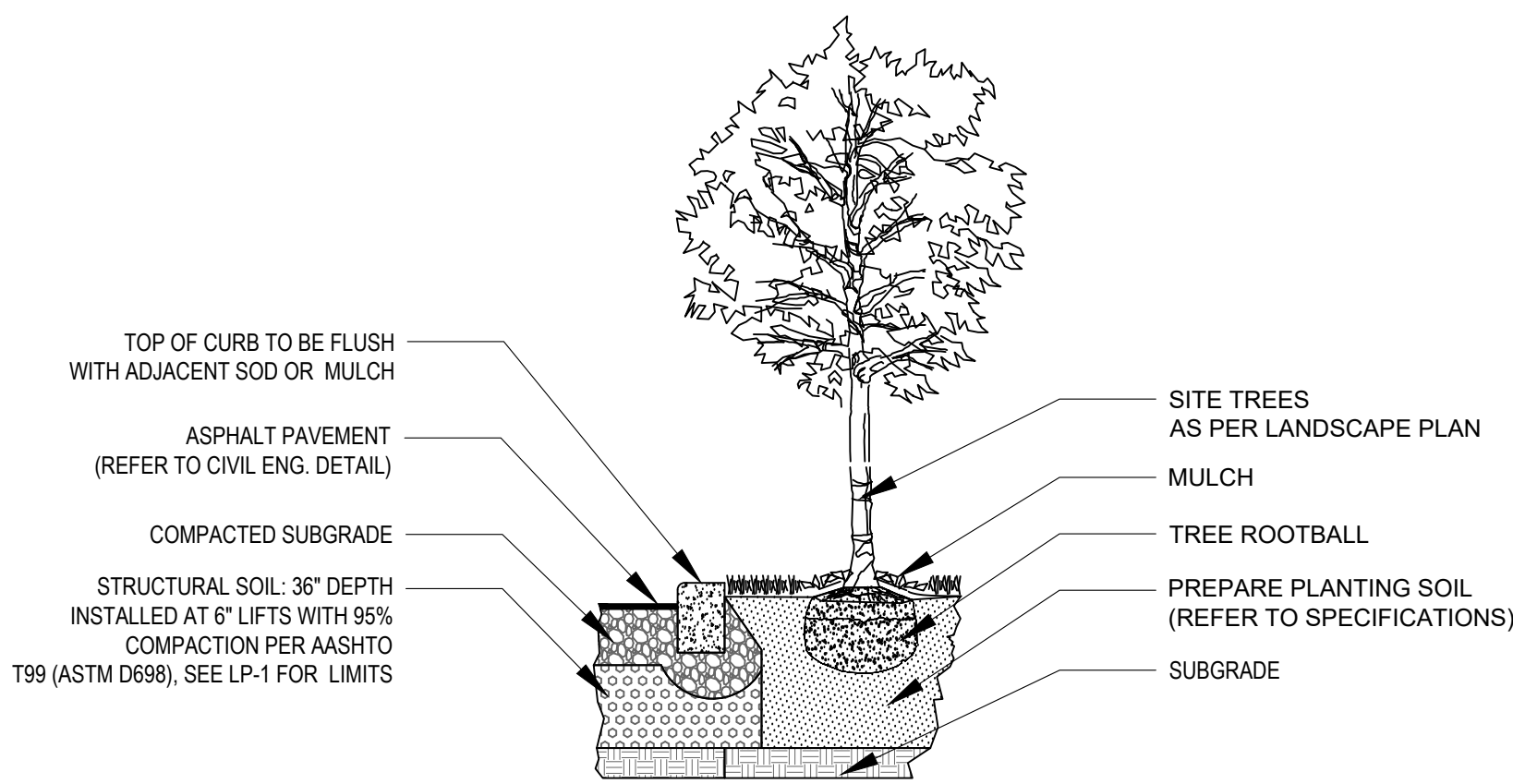
6 SOD INSTALLATION SECTION NTS



7 ROOT BARRIER SECTION NTS



8 FIRE HYDRANT CLEAR ZONE SECTION NTS



- NOTES:
1. 12\"
 2. STRUCTURAL SOIL IS A MIXTURE MADE OF UNIFORMLY GRADED ANGULAR CRUSHED STONE, CLAY LOAM SOIL, AND A HYDROGEL TO BIND MIXTURE. REFER TO SPECS PROVIDED BY SUPPLIER FOR INSTALLATION AND MAINTENANCE PROCEDURES. STRUCTURAL SOIL IS TO BE PROVIDED BY A LICENSED PRODUCER. MIXING OF SOIL ON SITE IS NOT PERMITTED
 3. STRUCTURAL SOIL TO BE USED AT ALL TREE AND PALM PLANTING AREAS DESIGNATED ON PLANS, REFER TO LP-1
 4. STRUCTURAL SOIL TO BE INSTALLED 8\"
 5. PLANTING SOIL TO BE USED WITHIN PLANTING ISLANDS WITH STRUCTURAL SOIL APPLIED BENEATH CURBS AND HARDSCAPE SURFACES.

CONTACT:
CAROL MARRERO
CU-STRUCTURAL SOIL,
ATLAS PEAT & SOIL, INC.
BOYNTON BEACH, FL
561-734-7300
OR APPROVED EQUAL

9 STRUCTURAL SOIL DETAIL NTS

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FAX: (954) 739-6409 TEL: (954) 739-6400
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BID

PROJECT # P12509

TEMP. FIRE STATION #13 & PARKING LOT
FIRE STATION & PARKING FACILITY
LANDSCAPE DETAILS
3109 VISTAMAR ST., FORT LAUDERDALE

SHEET NO.

LP-2

TOTAL:
CAD FILE:
12509-001-SITE
DRAWING FILE NO.
4-XXX-XX

DRAWN BY:	DATE:
MR	04/12/2021
DESIGNED BY:	SCALE:
MR	1"=20'
CHECKED BY:	
ADS	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS		DESCRIPTION				
NO.	DATE					

GENERAL NOTES

- A PRE-CONSTRUCTION MEETING WITH THE CITY OF FORT LAUDERDALE AND LANDSCAPE ARCHITECT IS REQUIRED PRIOR TO LANDSCAPING ACTIVITIES INCLUDING REMOVAL OF TREES AND/OR INSTALLATION OF PLANT MATERIAL. CALL A MINIMUM OF 5 DAYS PRIOR TO DESIRED START DATE TO SCHEDULE PRE-CONSTRUCTION MEETING.
1. ALL EXISTING TREES PROPOSED TO REMAIN ARE TO BE SEPARATED FROM THE LIMITS OF DISTURBANCE OF THE CONSTRUCTION AREA BY TREE PROTECTION FENCING AND SIGNAGE. THE TREE PROTECTION FENCING SHALL BE LOCATED AT THE EDGE OF THE TREE PROTECTION ZONE AS DEPICTED ON THE PLAN OR AT THE EDGE OF THE DRIPLINE(S) IF A TREE PROTECTION ZONE IS NOT DESIGNATED. NO MATERIAL STORAGE OR CONSTRUCTION ACCESS IS PERMITTED WITHIN THE TREE PROTECTION ZONE.
2. ALL EXISTING TREES SHALL BE PRUNED TO ANSI A-300 STANDARDS TO CORRECT POTENTIAL HAZARDS.
3. A TREE REMOVAL PERMIT IS REQUIRED PRIOR TO REMOVAL OR RELOCATION OF ANY TREE OR PALM. CONTACT THE CITY OF FORT LAUDERDALE TO OBTAIN PERMIT INFORMATION.
4. LANDSCAPE CONTRACTOR SHALL NOTIFY SUNSHINE ONE CALL OF FLORIDA, INC. AT 1-800-432-4770 A MINIMUM OF 2 FULL BUSINESS DAYS PRIOR TO DIGGING. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR AVOIDING DAMAGE TO UTILITIES FROM PLANT INSTALLATION.
5. TREE RELOCATIONS:
A. EXISTING TREES TO BE RELOCATED SHALL BE ROOT PRUNED A MINIMUM OF 120 DAYS PRIOR TO RELOCATION
B. MINIMUM ROOT BALL SIZES SHALL BE IN ACCORDANCE WITH ANSI STANDARDS AS FOLLOWS:

CALIPER	MINIMUM ROOT BALL DIAMETER
1	16
2	24
3	32
4	42
5	54
6	60
7	70
8	80
>8	12 INCHES PER INCH OF TRUNK DIAMETER

TRANSPLANTED TREES WITH UNDERSIZED ROOT BALLS MAY BE REJECTED BY THE TOWN ARBORIST AND REPLACEMENT TREES MAY BE REQUIRED.
C. A TEMPORARY IRRIGATION SYSTEM SHALL BE PROVIDED DURING AND FOR THE FIRST 40 DAYS AFTER ROOT PRUNING.
7. ALL PLANTING MUST FOLLOW PLANTING SPECIFICATIONS AND DETAILS SHOWN ON THE PLAN.
8. SUBSTITUTIONS OF PLANT SPECIES OR SPECIFICATIONS MUST BE APPROVED IN WRITING BY THE CITY OF FORT LAUDERDALE AND THE LANDSCAPE ARCHITECT PRIOR TO USE.
9. ALL PLANT MATERIAL PLANTED PER THIS LANDSCAPE PLAN SHALL BE FLORIDA GRADE #1 OR BETTER, AS SPECIFIED IN THE CURRENT EDITION OF THE FLORIDA DEPARTMENT OF AGRICULTURE'S GRADES AND STANDARDS FOR NURSERY PLANTS. DAMAGED PLANT MATERIAL SHALL BE REJECTED AND REPLACED PRIOR TO INSTALLATION.
10. ALL SIZES SHOWN FOR PLANT MATERIAL ARE TO BE CONSIDERED MINIMUMS.
11. WHERE QUANTITIES AND/OR SPECIES DIFFER BETWEEN THE PLANTING PLANS AND PLANT LISTS, THE PLANS SHALL TAKE PRECEDENCE.
12. ALL NEW PLANT MATERIAL SHALL BE WARRANTED BY THE LANDSCAPE CONTRACTOR FOR A MINIMUM PERIOD OF ONE YEAR. THE WARRANTY PERIOD SHALL BEGIN AFTER FINAL ACCEPTANCE OF PROJECT BY THE CITY .
13. PLANT BEDS TO BE TREATED WITH PRE-EMERGENT HERBICIDE PRIOR TO PLANTING
14. ALL TREE AND PALM STAKING AND SUPPORT SHALL BE REMOVED ONE YEAR AFTER INSTALLATION.
15. NO FERTILIZER SHALL BE APPLIED TO NEWLY PLANTED TREES AND PALMS.
16. ALL LANDSCAPE MATERIAL SHALL BE THOROUGHLY WATERED AT THE TIME OF PLANTING, NO DRY PLANTING PERMITTED.
17. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY WATER PROVISIONS UNTIL SUCH TIME AS THE IRRIGATION SYSTEM IS OPERATIONAL.
18. ALL WIRE GUYS AND/OR FABRIC STRAPS SHALL BE FLAGGED WITH FLORESCENT COLORED TAPE.
19. MULCHING:
A. ALL LANDSCAPE AREAS NOT COVERED BY SOD SHALL BE COVERED BY A MINIMUM 3-INCH LAYER OF CLEAN FLORA MULCH.
B. A MULCH RING WITH A MINIMUM RADIUS OF 24 INCHES (48 INCH DIAMETER), IS REQUIRED AROUND ALL NEWLY INSTALLED TREES AND PALMS.
C. RED MULCH COLOR IS NOT ALLOWED.
D. NO MULCH SHALL BE PLACED TOUCHING OR WITHIN THREE INCHES OF THE TRUNK OF A TREE OR PALM.
20. ALL NEWLY LANDSCAPED AREAS SHALL BE EXCAVATED DOWN TO A DEPTH OF 24 INCHES BELOW FINAL GRADE AND BACK FILLED WITH CLEAN DEBRIS-FREE SOIL. EXISTING SOIL MAY BE RE-USED FOR BACKFILLING IF DEBRIS IS REMOVED AND ORGANIC CONTENT IS SUFFICIENT OR SOIL IS AUGMENTED WITH TOPSOIL. CONSTRUCTION ACCESS SHALL BE RESTRICTED FROM THE LANDSCAPE AREA AFTER EXCAVATION AND BACKFILL IS COMPLETE.
21. ALL LANDSCAPE AREAS SHALL BE FINISH GRADED SUCH THAT THEY ARE A MINIMUM OF 3.5 INCHES BELOW SURROUNDING PAVED SURFACES SO AS NOT TO IMPEDE THE FLOW OF DRAINAGE INTO LANDSCAPED AREAS AND TO ALLOW FOR A 3-INCH MULCH LAYER OR SOD .
22. THE LOCATION OF PLANT MATERIAL AS SHOWN ON THESE PLANS IS FINAL. THE FINAL LOCATIONS CAN BE ADJUSTED ON SITE TO ACCOMMODATE UNFORESEEN FIELD CONDITIONS. THESE CHANGES MUST COMPLY WITH ALL SAFETY SETBACK CRITERIA AND BE DIRECTED OR APPROVED BY THE LANDSCAPE ARCHITECT AND THE CITY OF OAKLAND PARK.
23. REPORT ANY AND ALL DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND FIELD CONDITIONS TO THE LANDSCAPE ARCHITECT IMMEDIATELY.
24. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT COUNTS AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
25. BEFORE CONSTRUCTION BEGINS THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING CONSTRUCTION. IF SUCH DAMAGE OCCURS THE CONTRACTOR IS RESPONSIBLE FOR ANY NECESSARY REPAIRS AND THEY SHOULD BE MADE IMMEDIATELY AT THE CONTRACTORS EXPENSE WITH SUPERVISION OF THE LANDSCAPE ARCHITECT.
26. ALL WORK MUST COMPLY WITH THE FLORIDA STATE STATUTE 553.81- "PROTECTION OF UNDERGROUND PIPELINES."
27. THE CONTRACTOR MUST COMPLY WITH ALL STATE AND LOCAL WATER QUALITY STANDARDS.

LANDSCAPE NOTES

1. ALL PLANT MATERIAL FURNISHED BY THE LANDSCAPE CONTRACTOR UNLESS OTHERWISE SPECIFIED SHALL BE FLORIDA NO. 1 GRADE OR BETTER, AND SHALL BE INSTALLED AS SPECIFIED IN "GRADES AND STANDARDS FOR NURSERY PLANTS," PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANT MATERIAL MUST BE HEALTHY, VIGOROUS MATERIALS, FREE OF PESTS AND DISEASES.
2. ALL SIZES SHOWN FOR PLANT MATERIAL ON THE PLAN ARE TO BE CONSIDERED AS MINIMUMS. ALL PLANT MATERIAL MUST MEET OR EXCEED THESE MINIMUM REQUIREMENTS FOR BOTH HEIGHT AND SPREAD. ANY OTHER REQUIREMENTS FOR SPECIFIC SHAPE OR EFFECT AS NOTED ON THE PLAN OR SPECIFICATIONS WILL ALSO BE REQUIRED FOR ACCEPTANCE. ANY SUBSTITUTIONS MUST BE APPROVED BY LANDSCAPE ARCHITECT BEFORE PLANTING.
3. THE CONTRACTOR IS RESPONSIBLE FOR ALL PLANTING MEETING SPECIFICATIONS AS NOTED BEFORE INSTALLATION. CONTRACTOR SHALL IMMEDIATELY REMOVE ALL PLANTING THAT DOES NOT MEET SPECIFICATIONS AND BE HELD RESPONSIBLE TO REPLACE IT WITH APPROPRIATE PLANTING.
4. IN THE EVENT OF A VARIATION BETWEEN THE PLANT LISTS AND THE ACTUAL QUANTITY OF PLANTS SHOWN, THE PLANS HOLD TRUE.
5. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL PLANT QUANTITIES AS INDICATED ON THE PLANT LIST, AS WELL AS ALL SOD AREAS. IF DISCREPANCIES ARE FOUND, THE LANDSCAPE ARCHITECT IS TO BE NOTIFIED IMMEDIATELY.
6. ALL ROOT BALLS SHALL CONFORM TO THE SIZE STANDARDS SET FORTH
7. CONTRACTOR TO SUBMIT TO THE LANDSCAPE ARCHITECT THE GROWERS AND/OR SITE INSPECTION CERTIFICATE FOR PLANT MATERIALS TWO (2) WEEKS PRIOR TO COMMENCEMENT OF WORK.
8. ALL PLANT MATERIALS MUST BE PROTECTED DURING TRANSPORT AND DELIVERY TO THE JOB SITE WITH SHADE CLOTH OR OTHER ACCEPTABLE MEANS OF WINDBURN PREVENTION.
9. CONTRACTORS SHALL FIELD VERIFY ALL INFORMATION PRIOR TO INITIATING PLANTING INSTALLATION. ALL EXISTING PLANTING SHALL REMAIN INTACT AND UNDISTURBED UNLESS OTHERWISE NOTED ON THE PLANS.
10. LANDSCAPE CONTRACTOR SHALL FIELD STAKE THE LOCATION OF ALL PLANT MATERIAL PRIOR TO INSTALLATION FOR THE REVIEW AND APPROVAL OF THE LANDSCAPE ARCHITECT.
11. ALL TREES MUST BE FLORIDA #1, STRAIGHT TRUNKED, FULL HEADED, AND MEET ALL REQUIREMENTS SPECIFIED.
12. CONTRACTOR TO GUARANTEE PLANT MATERIAL FOR A FULL YEAR ESTABLISHMENT PERIOD FOLLOWING DATE OF SUBSTANTIAL COMPLETION.
13. CONTRACTOR TO REPLACE REJECTED PLANT MATERIAL WITHIN ONE WEEK OF NOTICE.
14. CONTRACTOR TO REQUEST INSPECTION OF PROJECT IN WRITING. IF ALL WORK IS SATISFACTORY AND COMPLETE IN ACCORDANCE WITH CONDITIONS OF CONTRACT DOCUMENTS, THEN THE CITY AND LANDSCAPE ARCHITECT SHALL DECLARE COMPLETE.
15. INSTALLATION- ALL PLANT MATERIAL SHALL BE INSTALLED IN A SOUND WORKMANLIKE MANNER AND ACCORDING TO GOOD PLANTING PROCEDURES WITH THE QUALITY OF PLANT MATERIALS AS HEREINAFTER DESCRIBED. ALL ELEMENTS OF LANDSCAPING SHALL BE INSTALLED SO AS TO MEET ALL APPLICABLE ORDINANCES AND CODE REQUIREMENTS.
16. CONTRACTOR IS RESPONSIBLE FOR WATERING AND MAINTAINING ALL TREES AND LANDSCAPE UNTIL FINAL ACCEPTANCE BY THE CITY . CONTRACTOR SHALL INSURE THAT ALL DRAINAGE AND PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION OF PLANT MATERIAL. CONTRACTOR IS RESPONSIBLE FOR REPLACEMENT OF PLANTS IF DEAD OR DYING PRIOR TO FINAL ACCEPTANCE.
17. TYPICALLY, SHRUB AND GROUNDCOVER PLANTINGS ARE SHOWN AS MASS PLANTING BEDS. PLANTS SHOULD BE PLACED ON A TRIANGULAR SPACING SHOWN IN THE PLANTING DETAILS. PLANT CENTER TO CENTER DIMENSIONS (O.C.) ARE LISTED ON THE PLANT LIST.
18. TREES GROWN IN GROW BAGS OR GROW BAG TYPE MATERIAL MUST HAVE THE GROW BAG REMOVED ENTIRELY BEFORE PLANTING.
19. BALLED AND BURLAPPED MATERIAL SHALL HAVE THE TOP ONE HALF (½) OF THE BURLAP AROUND THE BASE OF THE TRUNK CUT AND PULLED BACK. DO NOT REMOVE THE BURLAP BUT WIRE CAGES, STRAPS, ETC. MUST BE CUT AND REMOVED COMPLETELY BEFORE INSTALLATION.
20. CONTRACTOR SHALL REFER TO THE LANDSCAPE PLANTING DETAILS, PLANT LIST, GENERAL NOTES, AND ANY OTHER MATERIALS FROM THE LANDSCAPE ARCHITECT FOR COMPLETE LANDSCAPE PLANTING INSTRUCTIONS.
21. "BRANCH TOUCHING BRANCH" PROVIDED AT TIME OF INSTALLATION FOR ALL HEDGES.
22. THE FOLLOWING GUIDELINES SHALL BE FOLLOWED TO ENSURE SUCCESSFUL TRANSPLANTING OF TREES:
a. ANY TREE BEING RELOCATED SHALL NOT BE UNNECESSARILY DAMAGED DURING REMOVAL, TRANSPORT, OR REPLANTING OF THAT TREE.
b. TREES MUST BE ROOT PRUNED APPROPRIATELY PRIOR TO REMOVAL.
c. DURING AND FOLLOWING TRANSPLANTING THE ROOT BALL MUST BE KEPT MOIST AT ALL TIMES.
d. TRANSPLANTED TREES SHALL BE BRACED AT LEAST ONE FULL YEAR.
e. TRANSPLANTED TREES SHALL NOT BE FERTILIZED AT PLANTING TIME BUT SHALL BE WATERED SUFFICIENTLY UNTIL THE TREE GROWTH IS REESTABLISHED.
f. RELOCATED TREES/PALMS WILL BE MOVED IN ACCORDANCE WITH MINIMUM STANDARDS SET FORTH IN ANSI A-300
g. ALL CROWN PRUNING SHALL BE DONE IN ACCORDANCE WITH NATIONAL ARBORIST ASSOCIATION STANDARDS OR PALM PRUNING IN ACCORDANCE WITH CITY STANDARDS.
23. LANDSCAPE CONTRACTOR SHALL REGRADE ALL AREAS DISTURBED BY PLANT REMOVAL, RELOCATION, AND/OR INSTALLATION WORK. LANDSCAPE CONTRACTOR SHALL REPLACE (BY EQUAL SIZE AND QUALITY) ANY AND ALL EXISTING PLANT MATERIAL DISTURBED OR DAMAGED BY PLANT REMOVAL, RELOCATION OR INSTALLATION.
24. CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ALL PORTIONS OF EXISTING LAWN AREAS DAMAGED DURING CONSTRUCTION AND WHILE COMPLETING PLANTING INSTALLATION WITH SAME GRASS SPECIES TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT. NO LANDSCAPE AREAS ARE TO BE LEFT UNSODED UNLESS SHRUB MATERIAL IS TO BE PLANTED.
25. GENERAL GRADING TO APPROXIMATELY 1 INCH SHALL BE PROVIDED BY THE CONTRACTOR. ALL FINISHED SITE GRADING AND FINAL DECORATIVE BERM SHAPING SHALL BE PROVIDED BY THE LANDSCAPE CONTRACTOR.
26. ALL LANDSCAPE MATERIALS SHALL BE MAINTAINED TO PROVIDE CONTINUOUS CLEAR ZONES FOR SIGHT VISIBILITY FOR PEDESTRIANS AND VEHICULAR TRAFFIC AND LANDSCAPE MAINTENANCE SHALL CONFORM TO STANDARD INDEX 546 CRITERIA SET FORTH IN F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS.

SOIL PREPARATION, SOIL MIX, FERTILIZER, & MULCH NOTES:

1. ENSURE THAT ALL PLANTING SOIL IS FERTILE, FRIABLE, NATURAL LOAM SURFACE SOIL, REASONABLY FREE OF SUBSOIL, CLAY LUMPS, WEEDS AND OTHER LITTER, AND FREE OF ROOTS, STUMPS AND STONES LARGER THAN ONE INCH IN ANY DIMENSION. AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. SHOULD ANY SOIL AMENDMENT BE NECESSARY, THE CONTRACTOR SHALL BRING THIS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.
2. APPLY APPROVED HERBICIDE- ACCORDING TO MANUFACTURERS RATE AND SPECS WITHIN LIMITS OF ALL AREAS TO BE PLANTED. PROTECT EXISTING PLANTS TO REMAIN FROM OVERSPRAY OR SPRAY WITHIN ROOT ZONE. CONTRACTOR TO ENSURE TOTAL WEED ERADICATION.
3. SCARIFY SUBSOIL TO A DEPTH OF 3 INCHES.
4. PLANTING MIX FOR TREES, SHRUBS, AND GROUNDCOVERS SHALL CONSIST OF A THOROUGHLY BLENDED MIXTURE OF:
A. 70% SAND
B. 30% TOPSOIL
5. PLANTING MIX FOR BACKFILL AROUND ROOT BALLS OF PALMS SHALL CONSIST OF A THOROUGHLY BLENDED MIXTURE OF:
A. 90% NATIVE SAND
B. 10% TOPSOIL
6. FERTILIZE ALL TREES, SHRUBS AND GROUNDCOVER WITH PLANTING TABLETS 20-20-5 FORMULA, 21 GRAM.
7. ALL SHRUB BEDS SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 24" AND BACK FILLED WITH THE SPECIFIED MIXTURE.
8. SMOOTH ALL PREPARED TOPSOIL TO 3" EXCEPT WITHIN DRIP LINES OF EXISTING TREES AND 4" BELOW TOP OF SURROUNDING PAVING EDGES. REMOVE ALL ROCKS AND OTHER OBJECTS OVER 1" IN DIAMETER.
9. FINISH GRADE ALL PREPARED TOPSOIL AREAS TO A SMOOTH, EVEN SURFACE ASSURING POSITIVE DRAINAGE AWAY FROM THE STRUCTURES AND ELIMINATE ANY LOW AREAS WHICH MAY COLLECT WATER.
10. TOPSOIL SHALL NOT BE EXTREMELY ACIDIC OR ALKALINE, NOR CONTAIN ANY TOXIC SUBSTANCE WHICH MAY BE HARMFUL TO PLANT GROWTH. THE PH SHALL BE IN THE RANGE OF 6.5-7.0.
11. CONTRACTOR SHALL MULCH ALL PLANTING MATERIAL THROUGHOUT AND COMPLETELY TO A 3 INCH DEPTH WITH CLEAN, WEED FREE FLORAMULCH
12. MINIMUM OF 2" TOPSOIL MUST BE ADDED UNDER ALL SODDED AREAS.

HAND WATERING NOTES:

1. APPLICATION/ SCHEDULE: WATER NEW AND RELOCATED TREES AND PALMS EVERY DAY FOR THE FIRST TWO WEEKS, THREE TIMES A WEEK FOR THE SECOND TWO WEEKS, AND THEN TWICE A WEEK FOR THE NEXT EIGHT WEEKS FOR A TOTAL OF A 90 DAY WATERING PERIOD. NO FURTHER WATERING WILL BE REQUIRED.
2. EARTH BERM 6" HIGH OUTSIDE THE PROPOSED ROOT BALL PRIOR TO WATERING. APPLY A MINIMUM OF 4" OF WATER WITHIN THE SAUCER, OR 1-3 GALLONS PER INCH OF TRUNK DIAMETER, WHICH EVER IS MORE AT EACH WATERING. WATER APPLICATION SHOULD SATURATE THE ROOT BALL TO ITS ENTIRE DEPTH. DO NOT WATER IF ROOT BALL IS ALREADY SATURATED.
3. HANDWATERING IS IN ADDITION TO THE UNDERGROUND IRRIGATION SYSTEM.

IRRIGATION NOTES:

1. FLORIDA FRIENDLY PRINCIPALS HAVE BEEN UTILIZED IN THE DESIGN OF THIS PROJECT AND SHALL BE APPLIED ALL THROUGHOUT LANDSCAPE INSTALLATION AND MAINTENANCE.
2. THE CONTRACTOR SHALL MAINTAIN TEMPORARY IRRIGATION OR PROVIDE HAND WATERING FOR ALL RELOCATED TREES AND PALMS FROM NOTICE TO PROCEED UNTIL PERMANENT IRRIGATION SYSTEM IS OPERABLE.
3. ALL LANDSCAPED AREAS MUST BE IRRIGATED IN ACCORDANCE WITH ALL LOCAL/ COUNTY REQUIREMENTS AND MUST MAINTAIN 100% COVERAGE WITH 50% OVERLAP FOR EXISTING AND PROPOSED LANDSCAPE AREAS.
4. REMOVE EXISTING IRRIGATION EQUIPMENT WHICH INTERFERES WITH ANY CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, CONTROLLERS, SPRINKLER HEADS, PIPE, QUICK COUPLERS, BACKFLOW PREVENTERS, CONTROL WIRE AND CONDUITS. ADDITIONALLY THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE EXISTING SYSTEM THROUGHOUT THE CONSTRUCTION PROCESS.
5. LANDSCAPE CONTRACTOR SHALL COORDINATE ALL PLANTING WORK WITH IRRIGATION WORK. INSPECT IRRIGATION SYSTEM AND INSURE THAT ADEQUATE WATER IS AVAILABLE BEFORE BEGINNING PLANTING OPERATIONS. IRRIGATION SYSTEMS WILL NOT PROVIDE SUFFICIENT QUANTITIES OF WATER FOR NEWLY PLANTED MATERIALS. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR DEEP ROOT HAND WATERING.
6. SEE IRRIGATION PLANS FOR ADDITIONAL INFORMATION.

R:\LANDSCAPE\2019\19-0054-001-01 FTL TEMP FS 13\DRAWINGS\19-0054 LP.DWG

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Craven • Thompson and Associates, Inc.
ENGINEERS • PLANNERS • SURVEYORS
3563 N.W. 53RD STREET, FORT LAUDERDALE, FLORIDA 33309
FAX: (954) 739-6409 TEL.: (954) 739-6400
FLORIDA LICENSED ENGINEERING, SURVEYING & MAPPING BUSINESS No. 271
FLORIDA LICENSED LANDSCAPE ARCHITECTURE BUSINESS No. C000114

Joseph D. Handley
Florida R.L.A. No. 0001368
February 7, 2020

DRAWN BY:	DATE:	DESIGNED BY:	SCALE:	CHECKED BY:	FIELD BOOK:
MR	04/12/2021				
MR		MR	1"=20'	ADS	

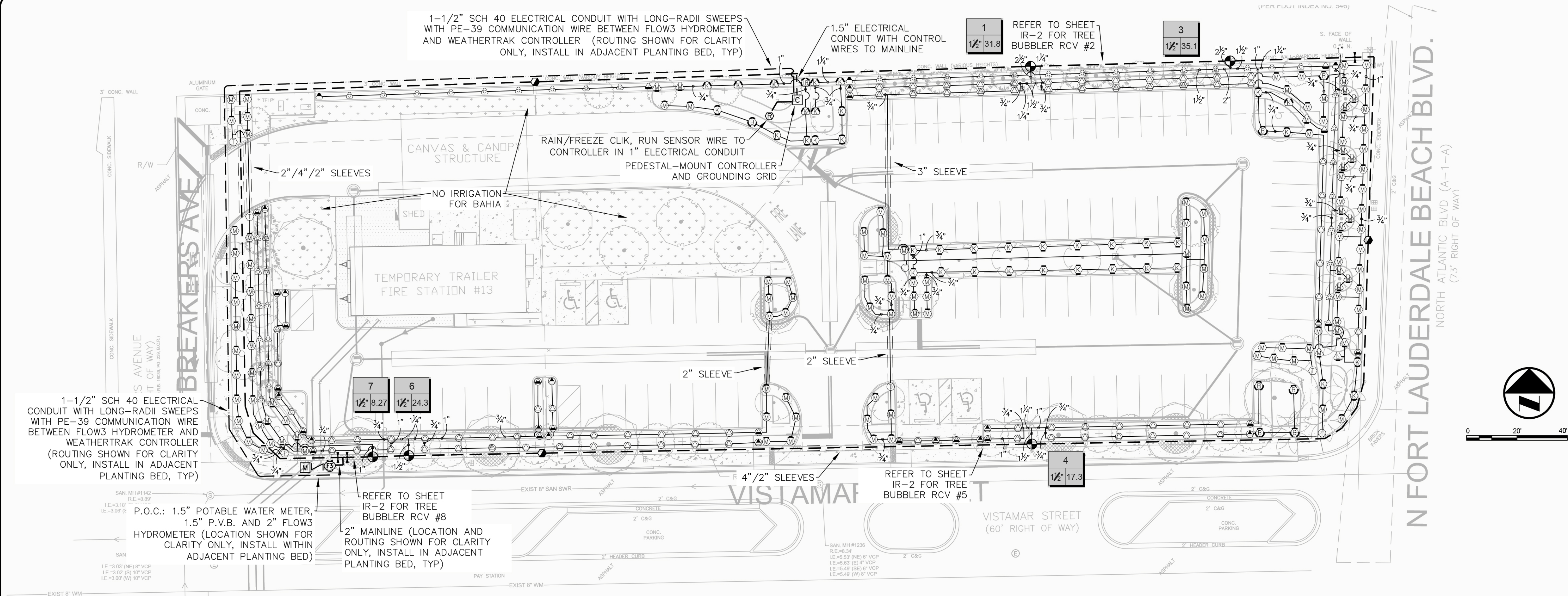
CITY of FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE

100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISITONS		DESCRIPTION	
NO.	DATE	BY	CHK'D

PROJECT # P12509
TEMP. FIRE STATION #13 & PARKING LOT
FIRE STATION & PARKING FACILITY
LANDSCAPE NOTES
3109 VISTAMAR ST., FORT LAUDERDALE

SHEET NO.
LP-3
TOTAL:
CAD FILE:
12509-001-SITE
DRAWING FILE NO.
4-XXX-XX



MAINLINE LOCATION, WHERE SHOWN, IS FOR GRAPHIC CLARITY PURPOSES ONLY. INSTALL AT THE BACK OF CURB, FRONT OF WALK, BACK OF WALK, OR ADJACENT TO OTHER HARDSCAPES TO FACILITATE FUTURE LOCATION AND TO PROTECT FROM DAMAGE. ENSURE MAINLINE IS INSTALLED ACCORDING TO THE IRRIGATION SPECIFICATIONS AND DETAILS.

REFER TO SHEETS IR-1 AND IR-2 FOR ALL PLAN SLEEVE QUANTITIES, SIZES AND LOCATIONS

NON-VEHICULAR SLEEVING SCHEDULE	
PIPE SIZE	SLEEVING PIPE SIZE
3/4"	2"
1"	2"
1-1/4"	3"
1-1/2"	3"
2"	4"
3"	6"
4"	8"
6"	12"
8"	16"

SLEEVING NOTES:

- VEHICULAR CROSSINGS ARE SHOWN AND SIZED ON THE PLANS.
- NON-VEHICULAR SLEEVES ARE SHOWN BUT NOT SIZED.
- SIZE ALL NON-VEHICULAR SLEEVES ACCORDING TO THE ABOVE CHART.
- MAINLINE CROSSINGS MUST ALSO INCLUDE A 2" CONDUIT SLEEVE FOR CONTROL WIRE.
- CONTRACTOR TO DUCT TAPE END OF SLEEVES TO KEEP SLEEVE CLEAN AND CLEAR.
- CONTRACTOR TO STAKE END OF EACH SLEEVE ABOVE GROUND AND PAINT FLUORESCENT ORANGE. LABEL EACH STAKE WITH THE WORD 'SLEEVE' AND ITS SIZE.
- CONTRACTOR TO PROVIDE A 3 FT MINIMUM DEPTH OF COVERAGE OVER ALL SLEEVES.

SLEEVE LABEL:
12"/6"/2" SLEEVES MEANS TO INSTALL ONE 12", ONE 6" AND ONE 2" SLEEVE.

IRRIGATION HEAD LEGEND

SYMBOL QUANTITY	SYMBOL	DESCRIPTION	DETAIL	DESIGN PSI	DESIGN GPM PER	SYMBOL
83	□	EACH SYMBOL DENOTES TWO (2) RAIN BIRD 1804-SAM-1401 FLOOD BUBBLERS	D	30	0.50	
4	⊕	RAIN BIRD 1806-SAM-PRS-30 W/ HUNTER MPCORNER NOZZLE ADJ ARC 0-90	R	30	VAR	
3	⊕	RAIN BIRD 1812-SAM-PRS-30 W/ HUNTER MPCORNER NOZZLE ADJ ARC 0-90	S	30	VAR	
65	⊕	RAIN BIRD 1806-SAM-PRS-30 W/ HUNTER MP1000 NOZZLE MAROON ADJ ARC 90-210	R	30	VAR	
1	⊕	RAIN BIRD 1806-SAM-PRS-30 W/ HUNTER MP1000 NOZZLE LIGHT BLUE ADJ ARC 210-270	R	30	VAR	
43	⊕	RAIN BIRD 1812-SAM-PRS-30 W/ HUNTER MP1000 NOZZLE MAROON ADJ ARC 90-210	S	30	VAR	
24	⊕	RAIN BIRD 1812-SAM-PRS-30 W/ HUNTER MP1000 NOZZLE MAROON ADJ ARC 90-210 ON SCH 40 RISER	T	30	VAR	
1	⊕	RAIN BIRD 1812-SAM-PRS-30 W/ HUNTER MP1000 NOZZLE LIGHT BLUE ADJ ARC 210-270 ON SCH 40 RISER	T	30	VAR	
17	⊕	RAIN BIRD 1806-SAM-PRS-30 W/ HUNTER MP2000 NOZZLE BLACK ADJ ARC 90-210	R	30	VAR	
11	⊕	RAIN BIRD 1812-SAM-PRS-30 W/ HUNTER MP2000 NOZZLE BLACK ADJ ARC 90-210	S	30	VAR	
8	⊕	RAIN BIRD 1812-SAM-PRS-30 W/ HUNTER MP2000 NOZZLE BLACK ADJ ARC 90-210 ON SCH 40 RISER	T	30	VAR	
1	⊕	RAIN BIRD 1806-SAM-PRS-30 W/ HUNTER MP3000 NOZZLE BLUE ADJ ARC 90-210	R	30	VAR	
6	⊕	RAIN BIRD 1812-SAM-PRS-30 W/ HUNTER MP3000 NOZZLE BLUE ADJ ARC 90-210	S	30	VAR	
1	⊕	RAIN BIRD 1812-SAM-PRS-30 W/ HUNTER MP3500 NOZZLE LT. BROWN ADJ ARC 90-210 ON SCH 40 RISER	T	30	VAR	
1	⊕	RAIN BIRD 1806-SAM-PRS-30 W/ HUNTER MPCORNER NOZZLE RST	R	30	VAR	
1	⊕	RAIN BIRD 1806-SAM-PRS-30 W/ HUNTER MPCORNER NOZZLE LST	R	30	VAR	
24	⊕	RAIN BIRD 1806-SAM-PRS-30 W/ HUNTER MPCORNER NOZZLE SST	R	30	VAR	
13	⊕	RAIN BIRD 1812-SAM-PRS-30 W/ HUNTER MPCORNER NOZZLE RST	S	30	VAR	
15	⊕	RAIN BIRD 1812-SAM-PRS-30 W/ HUNTER MPCORNER NOZZLE LST	S	30	VAR	
51	⊕	RAIN BIRD 1812-SAM-PRS-30 W/ HUNTER MPSTRIP NOZZLE SST	S	30	VAR	
4	⊕	RAIN BIRD 1812-SAM-PRS-30 W/ HUNTER MPCORNER NOZZLE LST ON SCH 40 RISER	T	30	VAR	
3	⊕	RAIN BIRD 1812-SAM-PRS-30 W/ HUNTER MPCORNER NOZZLE RST ON SCH 40 RISER	T	30	VAR	
43	⊕	RAIN BIRD 1812-SAM-PRS-30 W/ HUNTER MPSTRIP NOZZLE SST ON SCH 40 RISER	T	30	VAR	

IRRIGATION LEGEND

QTY	SYM	DESCRIPTION	DET.
4	1" 17.3	STATION NUMBER	
		GALLONS PER MINUTE-CATALOG FLOW	
		VALVE SIZE	
1	M	LINE SIZE BY 2" TAP, MAXIMUM 10' OF 2" POLYETHYLENE SERVICE LINE AND A PROPOSED 1.5" POTABLE WATER METER (ALL BY OTHERS)	A
1	⌋	1.5" FEBCO 765 PRESSURE VACUUM BREAKER BACKFLOW ASSEMBLY	A
5	⊕	RAIN BIRD PEB SERIES RCV (SIZED PER PLAN) WITH A NIBCO T-113 GATE VALVE IN A CARSON 1220 JUMBO VALVE BOX WITH BOLT DOWN LID	B
1	C	HYDROPOINT WEATHERTRAK LC+ PEDESTAL MOUNTED, 12-STATION CONTROLLER WITH GROUNDING GRID	C1
1	R	POLE MOUNTED HUNTER RAIN FREEZE CLIK SENSOR MODEL RFC, WIRE TO BE CONNECTED TO CONTROLLER VIA 1" CONDUIT	C2
3	⌋	NIBCO T-113 BRONZE MAINLINE ISOLATION VALVE (LINE SIZE) IN A CARSON 1419 VALVE BOX.	D
3	⊕	RAIN BIRD 44-LRC 1" QUICK COUPLING VALVE WITH SCH 40 PVC BALL VALVE, EACH IN A SEPARATE OLDCASTLE (CHRISTY) B09 UTILITY BOX WITH B09-61D LID	E
1	F3	HYDROPOINT FLOW3 2" NORMALLY OPEN HYDROMETER WITH PHOTO DIODE REGISTER (MASTER VALVE AND FLOW SENSOR)	F
		SCHEDULE 40 PVC LATERAL LINE W/ SCH 40 SOLVENT WELD PVC FITTINGS (SIZE PER PLAN, MINIMUM PIPE SIZE SHALL BE 3/4", NO 1/2" PIPES PERMITTED)	L
		2" SCHEDULE 40 SOLVENT-WELD PVC MAINLINE WITH SCH 40 SOLVENT-WELD PVC FITTINGS	L
		SCH 40 GRAY PVC ELECTRICAL CONDUIT, WITH SCH 40 PVC FITTINGS (SIZE PER PLAN)	L
		SCHEDULE 40 PVC SLEEVES W/SCH 40 SOLVENT-WELD PVC FITTINGS (SIZE PER PLAN)	O
		NOTE: EACH MAINLINE SLEEVE SHALL BE ACCOMPANIED BY AN ADDITIONAL 2" SLEEVE FOR CONTROL WIRES AS SHOWN PER PLANS	
QUANTITIES GIVEN ARE FOR CONTRACTOR CONVENIENCE ONLY. THE ACCURACY IS NOT GUARANTEED. ALL QUANTITIES SHALL BE VERIFIED.			
*DET (ON THE LEGEND) - THE LETTER IN THIS COLUMN DENOTES THE CORRESPONDING DETAIL SHOWN ON THE DETAIL SHEET.			

Masuen Consulting LLC
Water Management Consultants

301 S. Washington, Suite F
Newport, WA 99156
Telephone (866) 928-1533
Fax (800) 928-1534

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3563 N.W. 53RD STREET, FORT LAUDERDALE, FLORIDA 33309
FAX: (954) 739-6408 TEL: (954) 739-6400
FLORIDA LICENSED ENGINEERING, SURVEYING & MAPPING BUSINESS NO. 271
FLORIDA LICENSED LANDSCAPE ARCHITECTURE BUSINESS NO. 0000114

BID

Joseph D. Handley
Florida P.L.A. No. 0001368
February 7, 2020

DRAWN BY:	DATE:
TFP	04/12/2021
DESIGNED BY:	SCALE:
TFP	1"=20'
CHECKED BY:	
JJ	
FIELD BOOK	

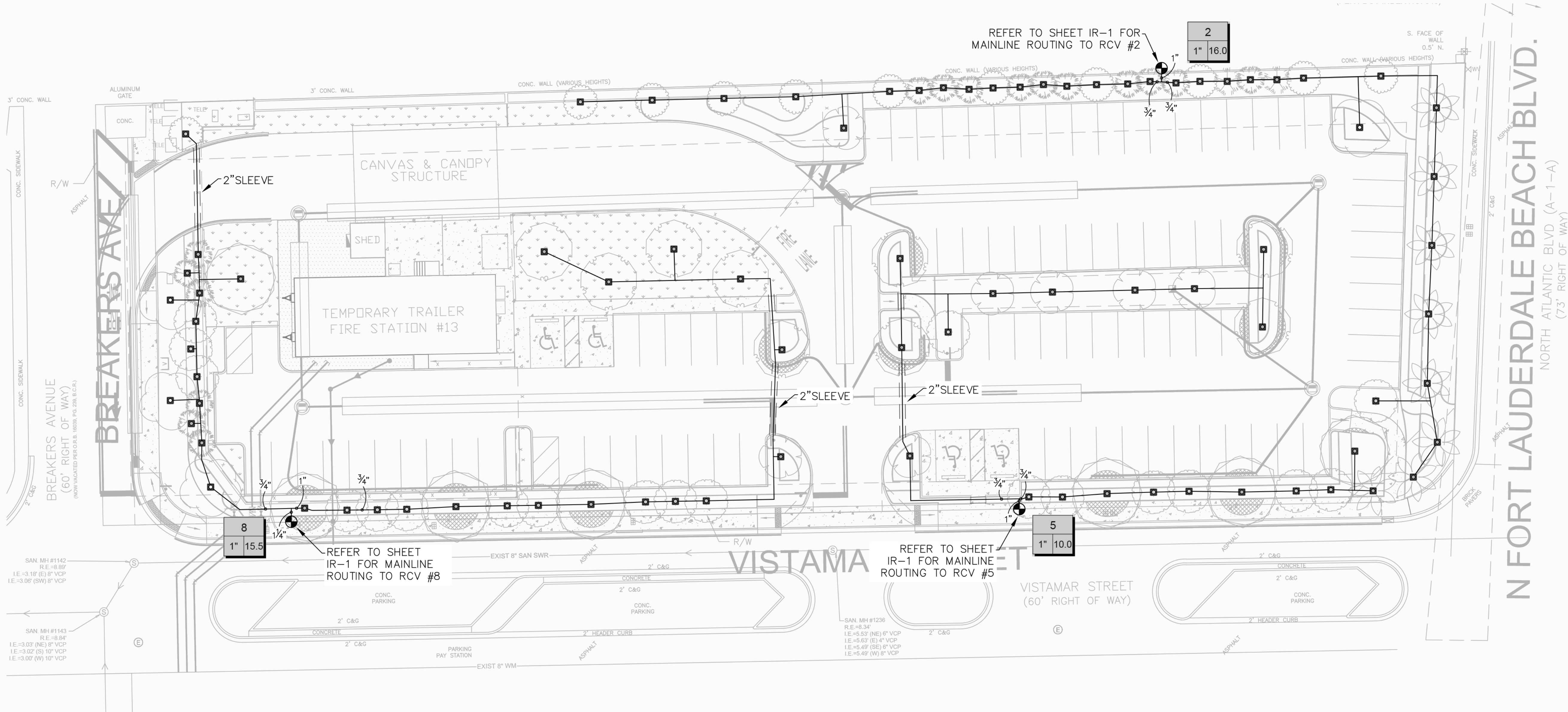
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS		DESCRIPTION	
NO.	DATE	BY	DET.

PROJECT # P12509
TEMP. FIRE STATION #13 & PARKING LOT
FIRE STATION & PARKING FACILITY
IRRIGATION PLAN AND LEGENDS
3109 VISTAMAR ST., FORT LAUDERDALE

SHEET NO.	
TOTAL: 1 of 4	
CAD FILE:	
19-0054_IRR.dwg	
DRAWING FILE NO.	
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NON-VEHICULAR SLEEVING SCHEDULE	
PIPE SIZE	SLEEVING PIPE SIZE
3/4"	2"
1"	2"
1-1/4"	3"
1-1/2"	3"
2"	4"
3"	6"
4"	8"
6"	12"
8"	16"

SLEEVING NOTES:

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3. SIZE ALL NON-VEHICULAR SLEEVES ACCORDING TO THE ABOVE CHART.
4. MAINLINE CROSSINGS MUST ALSO INCLUDE A 2" CONDUIT SLEEVE FOR CONTROL WIRE.
5. CONTRACTOR TO DUCT TAPE END OF SLEEVES TO KEEP SLEEVE CLEAN AND CLEAR.
6. CONTRACTOR TO STAKE END OF EACH SLEEVE ABOVE GROUND AND PAINT FLUORESCENT ORANGE. LABEL EACH STAKE WITH THE WORD "SLEEVE" AND ITS SIZE.
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ENGINEERS • PLANNERS • SURVEYORS
3563 N.W. 53RD STREET, FORT LAUDERDALE, FLORIDA 33309
FAX: (954) 739-8408 TEL: (954) 739-8400
FLORIDA LICENSED ENGINEERING, SURVEYING & MAPPING BUSINESS NO. 271
FLORIDA LICENSED LANDSCAPE ARCHITECTURE BUSINESS NO. 0000114

BID

Joseph D. Handley
Florida R.L.A. No. 0001368
February 7, 2020

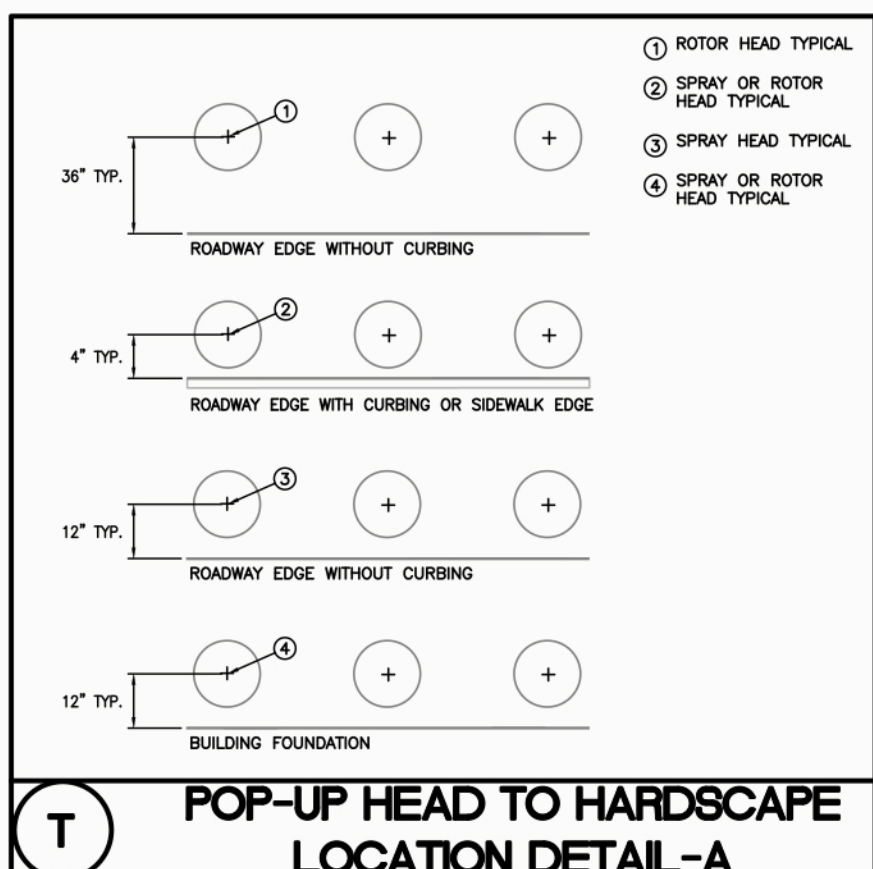
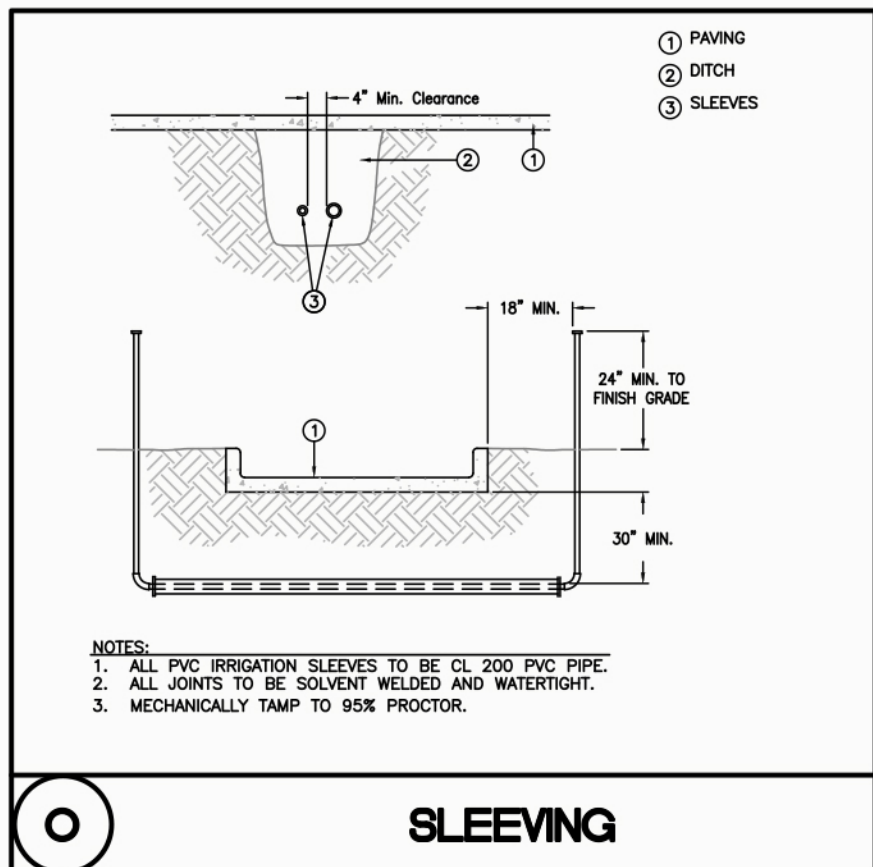
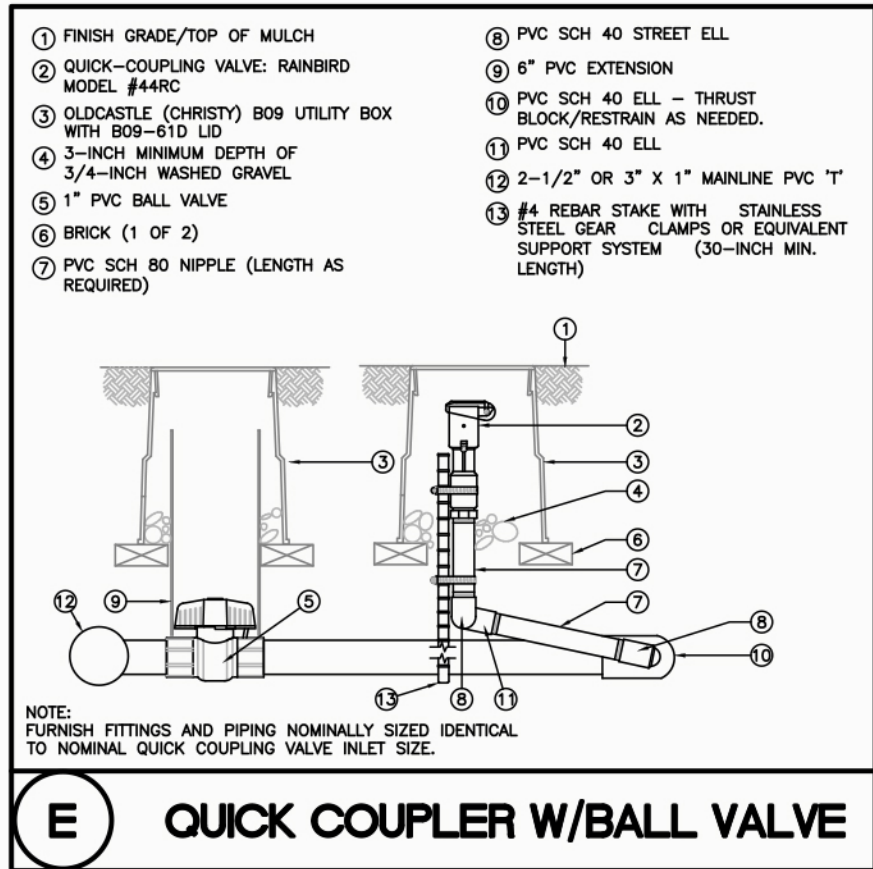
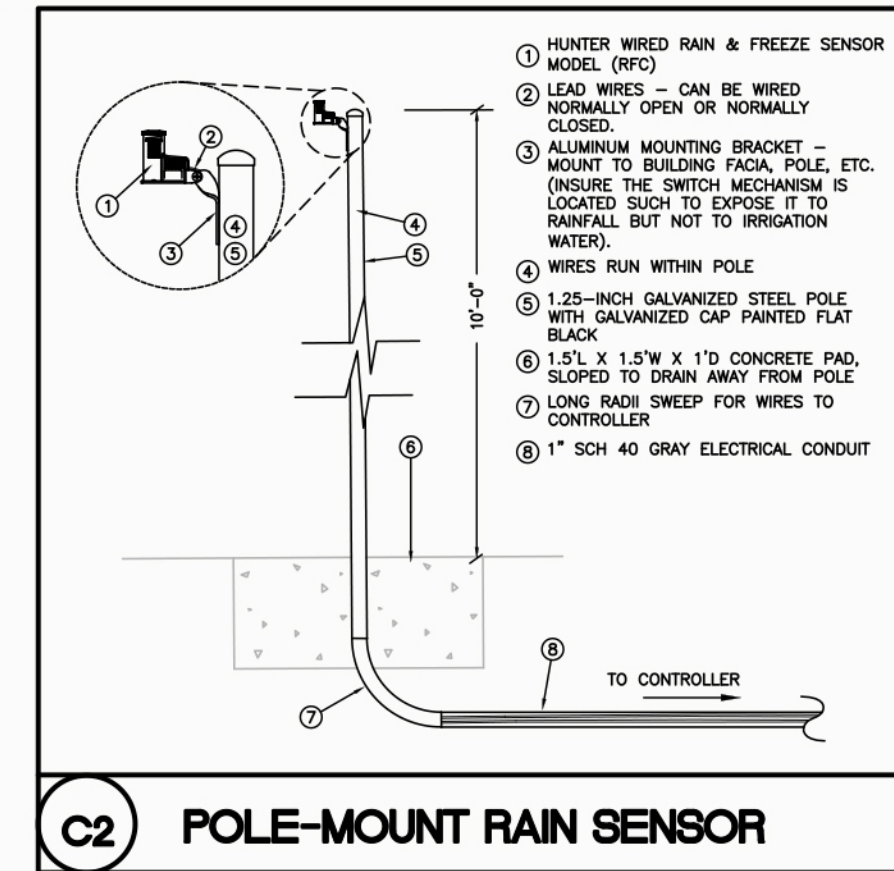
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TFP	04/11/2021
DESIGNED BY:	SCALE:
TFP	1"=20'
CHECKED BY:	
JJ	
FIELD BOOK	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS		DESCRIPTION
NO.	DATE	

PROJECT # P12509
TEMP. FIRE STATION #13 & PARKING LOT
FIRE STATION & PARKING FACILITY
IRRIGATION PLAN - TREE BUBBLERS
3109 VISTAMAR ST., FORT LAUDERDALE

SHEET NO.	
IR-2	
TOTAL: 2 of 4	
CAD FILE:	19-0054_IRR.dwg
DRAWING FILE NO.	4-XXX-XX



B/D

SHEET NO.

IR-3

TOTAL: 3 of 4

CAD FILE:
19-0054 IRR.dwg

DRAWING FILE NO.
4 XXX XX

IRRIGATION NOTES & SPECIFICATIONS

Irrigation design based on the Craven Thompson & Associates Landscape Plan dated 12/01/2020. Contractor shall refer to these plans to coordinate sprinkler and pipe locations.

The system has been designed to conform with the requirements of all applicable codes, laws, ordinances, rules, regulations and conventions. Should any conflict exist, the requirements of the codes shall prevail. It is the responsibility of the owner/installation contractor to ensure the entire system is installed as designed. Irrigation contractor responsible for obtaining all required permits according to federal, state and local laws.

The scope of work is shown on the plans, notes and details. The Irrigation Contractor shall be certified as a CERTIFIED IRRIGATION CONTRACTOR by the Irrigation Association. The certification shall be current and in good standing.

THE WORK

The work specified in this section consists of furnishing all components necessary for the installation, testing, and delivery of a complete, fully functional automatic landscape irrigation system that complies with the Irrigation plans, specifications, notes, and details. This work shall include, but not be limited to, the providing of all required material if applicable (pump(s), backflows, pipes, valves, fittings, controllers, wire, primer, glue, etc.), layout, protection to the public, excavation, assembly, installation, backfilling, compacting, repair of road surfaces, controller and low voltage feeds to valves, cleanup, maintenance, guarantee and as-built plans.

All irrigated areas shall provide 100% head-to-head coverage from a fully automatic irrigation system with a rain sensor shut off device. The rain sensor shall be installed to prevent activation by adjacent heads and in a visually un-obtrusive location approved by owner. Zones are prioritized first by public safety and then by hydraulic concerns. This sequencing will be a mandatory punch list item.

These plans have been designed to satisfy/exceed the Florida Building Code (FBC) Appendix F and the Florida Irrigation Society Standards and Specifications for Turf and Landscape Irrigation Systems, fourth edition. All products should be installed per manufacturer's recommendation. Contractor shall verify all underground utilities 72 hours prior to commencement of work.

It is the responsibility of the irrigation contractor to familiarize themselves with all grade differences, location of walls, retaining walls, structures and utilities. Do not willfully install the sprinkler system as shown on the drawings when it is obvious in the field that unknown obstruction, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. Such obstructions or differences, should be brought to the attention of the owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.

Irrigation contractor shall repair or replace all items damaged by their work. Irrigation contractor shall coordinate their work with other contractors for the location and installation of pipe sleeves and laterals through walls, under roadways and paving, etc.

The contractor shall take immediate steps to repair, replace, or restore all services to any utilities which are disrupted due to their operations. All costs involved in disruption of service and repairs due to negligence on the part of the contractor shall be their responsibility.

POINT OF CONNECTION (P.O.C.)

The P.O.C. is a new line size X 2" tap, maximum of 10' of 2" polyethylene service line, a new 1.5" potable meter and a 1.5" pressure vacuum breaker. The P.O.C. must be capable of delivering a minimum of 50 GPM at 50 PSI downstream of the water meter.

Contractor to verify these minimum conditions can be met prior to ordering of materials and the beginning of installation. If the conditions can not be met, the contractor must notify the designer prior to proceeding with the work. If the contractor does not do so, the contractor proceeds at their own risk and becomes responsible for any future work required to make the system perform as required.

THE PIPE

Pipe locations shown on the plan are schematic and shall be adjusted in the field. When laying out mainlines place a minimum of 18" away from either the back of curb, front of walk, back of walk, or other hardscape to allow for ease in locating and protection from physical damage. Install all lateral pipe near edges of pavement or against buildings whenever possible to allow space for plant root balls. Always install piping inside project's property boundary.

All pipes are to be placed in planting beds. If it is necessary to have piping under hardscapes, such as roads, walks, and patios, the pipes must be sleeved using Sch. 40 PVC with the sleeve diameter being twice the size of the pipe it is carrying with a minimum sleeve size of 2". No sleeve shall have turns or fittings that prevent a pipe from being manually pushed/pulled through after it is installed.

Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes shall be permitted, but substitutions of larger sizes may be approved. All damaged and rejected pipe shall be removed from the site at the time of said rejection.

Mainline shall be 2" Sch 40 solvent-weld PVC with Sch 40 PVC solvent-weld fittings.

Contractor to ensure all mainline piping is properly restrained using mechanical joint fittings, restraining collars, threaded rods, trust blocks, etc., as and where required. Contractor shall refer to pipe manufacturers recommended installation practices for further direction.

PVC pipe joint compound and primer: The PVC cement shall be Weld-On 711 (grey, slow-drying, heavy duty) and the primer shall be Weld-On P70 (purple tinted, compatible with cement), or approved equals.

ELECTRICAL POWER SUPPLY

Electrical supply for irrigation controllers and sensors to be provided by irrigation contractor. Contractor to coordinate with local utilities for the installation of, and connection to, site available power supplies for required electrical components as set forth in the irrigation plans.

All electrical work is to comply with the National Electrical Code and any, and all, other applicable electrical codes, laws and regulations. A licensed electrician shall perform all electrical hook-ups. Power for each controller shall be a dedicated 120 volt, 20 amp circuit unless otherwise specified in the plans.

WIRING

Irrigation control wire shall be thermoplastic solid copper, single conductor, low voltage irrigation controller wire; suitable for direct burial and continuous operation at rated voltages.

Tape and bundle control wires every 10' and run alongside the mainline. At all turns in direction make a 2" coil of wire. At all valve boxes coil wire around a 1" piece of PVC pipe to make a coil using 30 linear inches of wire. Make electrical connections with 3M DBR/Y-6 connectors.

Number all wires, using an electrical book of numbers, according to the plans. Number wires in all valve boxes, junction boxes and at the controller.

Wire sized, numbered and colored as follows:

- #14 white for common
- #14 spare black common
- #14 individual color coded hot wire
- #14 spare yellow hot wire

SPARE WIRES

Leaving the controller run three spare wires, install as one common spare and two hot wires.

Loop these wires into each RCV along their path and terminate in the last valve box controlled by the wires respective controller. The loop into each valve box shall extend up into the valve box a minimum of 8" and be readily accessible by opening the valve box lid. These wires must be all numbered and color coded as required in these plans.

CONTROLLER GROUNDING

Contractor to utilize 4"x96"x0.0625" copper grounding plates, 5/8"x10" copper clad grounding rods, Cadweld "One-Shot" at all connection points, #6 insulated copper wire, and earth contact material. Install these and other required components as outlined in the details. Contractor to verify that the earth to ground resistance does not exceed 10 ohms. Contractor shall provide a written certification, on a licensed electrical contractors letter head, showing the date of the test, controller location, and test results.

LAYOUT

Lay out irrigation system mainlines and lateral lines. Make the necessary adjustments as required to take into account all site obstructions and limitations prior to excavating trenches.

Stake all sprinkler head locations. Adjust location and make the necessary modifications to nozzle types, etc. required to ensure 100% head to head coverage. Refer to the Edge of Pavement Detail on the Irrigation Detail Sheet.

Spray heads shall be installed 4" from sidewalks or curbed roadways and 12" from uncurbed roadways and building foundations.

Shrub heads shall be installed on 3/4" Sch 40 PVC risers. The risers shall be set at a minimum of 18" off sidewalks, roadway curbing, building foundations, and/or any other hardscaped areas. Shrub heads shall be installed to a standard height of 4" below maintained height of plants and shall be installed a minimum of 6" within planted masses to be less visible and offer protection. Paint all shrub risers with flat black or forest green paint, unless irrigation system will utilize reuse water; in this case the risers shall be purple PVC and shall not be painted.

Locate valves prior to excavation. Ensure that their location provides for easy access and that there is no interference with physical structures, plants, trees, poles, etc. Valve boxes must be placed a minimum of 12" and a maximum of 15" from the edge of pavement, curbs, etc. and the top of the box must be 2" above finish grade. No valve boxes shall be installed in turf areas without approval by the irrigation designer – only in shrub beds. Never install in sport field areas.

VALVES

Sequence all valves so that the farthest valve from the P.O.C. operates first and the closest to the P.O.C. operates last. The closest valve to the P.O.C. should be the last valve in the programmed sequence.

Adjust the flow control on each RCV to ensure shut off in 10 seconds after deactivation by the irrigation controller.

Using an electric branding iron, brand the valve I.D. letter/number on the lid of each valve box. This brand must be 2"-3" tall and easily legible.

EQUIPMENT

All pop-up heads and shrub risers shall be pressure compensating. All pop-up heads shall be mounted on flex-type swing joints.

All sprinkler equipment, not otherwise detailed or specified on these plans, shall be installed as per manufacturer's recommendations and specifications, and according to local and state laws.

TRENCHING

Excavate straight and vertical trenches with smooth, flat or sloping bottoms. Trench width and depth should be sufficient to allow for the proper vertical and horizontal separation between piping as shown in the pipe installation detail on the detail sheet.

Protect existing landscaped areas. Remove and replant any damaged plant material upon job completion. The replacement material shall be of the same genus and species, and of the same size as the material it is replacing. The final determination as to what needs to be replaced and the acceptability of the replacement material shall be solely up to the owner or owner's representative.

INSTALLATION

Solvent-Weld Pipe: Cut all pipe square and deburr. Clean pipe and fittings of foreign material; then apply a small amount of primer while ensuring that any excess is wiped off immediately. Primer should not puddle or drip from pipe or fittings. Next apply a thin coat of PVC cement; first apply a thin layer to the pipe, next a thin layer inside the fitting, and finally another very thin layer on the pipe. Insert the pipe into the fitting. Insure that the pipe is inserted to the bottom of the fitting, then turn the pipe a 1/4 turn and hold for 10 seconds. Make sure that the pipe doesn't recede from the fitting. If the pipe isn't at the bottom of the fitting upon completion, the glue joint is unacceptable and must be discarded.

Pipes must cure a minimum of 30 minutes prior to handling and placing into trenches. A longer curing time may be required; refer to the manufacturer's specifications. The pipe must cure a minimum of 24 hours prior to filling with water.

BACKFILL

The Backfill 6" below, 6" above, and around all piping shall be of clean sand and anything beyond that in the trench can be of native material but nothing larger than 2" in diameter. In all planting beds backfill all trenches to 85% Proctor and all trenches under hardscapes to be backfilled and compacted to 95% Proctor.

Mainline pipe depth measured to the top of pipe shall be:

- 24" minimum for 3/4"-2 1/2" PVC with a 30" minimum at vehicular crossings;

Lateral line depths measured to top of pipe shall be:

- 18" minimum for 3/4"-3" PVC with a 30" minimum at vehicular crossings.

Contractor shall backfill all piping, both mainline and laterals, prior to performing any pressure tests. The pipe shall be backfilled with the exception of 2' on each side of every joint (bell fittings, 90's, tees, 45's, etc.). These joints shall not be backfilled until all piping has satisfactorily passed its appropriate pressure test as outlined below.

FLUSHING

Prior to the placement of valves, flush all mainlines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Prior to the placement of heads, flush all lateral lines for a minimum of 10 minutes or until lines are completely clean of debris, whichever is longer.

Use screens in heads and adjust heads for proper coverage avoiding excess water on walks, walks and paving.

TESTING

Soil: At a minimum of 2 locations on the site, soil tests for infiltration and texture shall be performed according to the USDA Soil Quality Test Kit Guide. The tests shall be documented in a USDA Soil Worksheet. (All of the above is available at: https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/health/assessment/?cid=nrcs142p2_053873) The completed worksheet shall be submitted to the owners representative for review/approval. Do not proceed without written direction from the owner/owner's representative.

Schedule testing with Owner's Representative a minimum of three (3) days in advance of testing.

Contractor to utilize soil test data to inform the irrigation scheduling at the project, using BMP's issued by the Irrigation Association which can be download on line at: <https://irrigation.org/IA/Advocacy/Standards-Best-Practices/Landscape-Irrigation-BMPs/IA/Advocacy/Landscape-Irrigation-BMPs.aspx?hkey=93b546ad-c87a-41b8-b70-8c4fd2c9f931> (link at bottom of the webpage).

Read pages 47-52 in Appendix C for how to create irrigation schedules.

Mainline: Remove all remote control valves and cap using a threaded cap on SCH 80 nipple. Hose bibs and gate valves shall not be tested against during a pressure test unless authorized by written permission from the owner. Fill mainline with water and pressurize the system to 125 PSI using a hydrostatic pump. Monitor the system pressure at two gauge locations; the gauge locations must be at opposite ends of the mainline. With the same respective pressures, monitor the gauges for two hours. There can be no loss in pressure at either gauge for solvent-welded pipe.

If these parameters are exceeded, locate the problem; repair it; wait 24 hours and retry the test. This procedure must be followed until the mainline passes the test.

Lateral Lines: The lateral lines must be fully filled to operational pressure and visually checked for leaks. Any leaks detected must be repaired.

Operational Testing –Once the mainline and lateral lines have passed their respective tests, and the system is completely operational, a coverage test and demonstration of the system is required. The irrigation contractor must demonstrate to the owner, or his/her representative, that proper coverage is obtained and the system works automatically from the controller. This demonstration requires each zone to be turned on, in the proper sequence as shown on the plans, from the controller. Each zone will be inspected for proper coverage and function. The determination of proper coverage and function is at the sole discretion of the owner or owner's representative.

Upon completion of the operational test, run each zone until water begins to puddle or run off. This will allow you to determine the number of irrigation start times necessary to meet the weekly evapotranspiration requirements of the planting material in each zone. In fine sandy soils, it is possible no puddling will occur. If this is experienced, then theoretical calculations for run times will be required for controller programming.

SUBMITTALS

Pre-Construction: Deliver five (5) copies of submittals to Owner's Representative within ten (10) working days from date of Notice to Proceed. Furnish information in 3-ring binder with table of contents and index sheet. Index sections for different components and label with specification section number and name of component. Furnish submittals for components on material list. Indicate which items are being supplied on catalog cut sheets when multiple items are shown on one sheet. Incomplete submittals will be returned without review. In lieu of hardscapes, an electronic package in PDF format can be submitted.

After project completion:

As a condition of final acceptance, the irrigation contractor shall provide the owner with:

1. Irrigations As-builts – shall be provided utilizing a sub-foot Global Navigation Satellite System (GNSS) to accurately locate all mainlines, sleeves, remote control valves, gate valves, independent wire runs, wire splice boxes, controllers, high voltage supply sources/conduit path, control mechanisms, sensors, wells and water source connections in Florida East State Plane, NAD 83, and CORS 96 format. The data collected shall be in POINT format and include an ID for each data point with Manufacturer, Type, Size, and Depth. All mainline and independent runs of wire shall be located every 30' for straight runs and at every change of direction. Sleeves will be located at end points and every 20' of length. All underground items shall include depth in inch format. These POINTS once collected shall be imported into an AutoCAD DWG geo-referenced base file to be labeled accordingly. The completed AS-Built shall be a Geo-Referenced DWF file and delivered to the owner on a compact disk (CD).
2. Controller charts – Upon completion of "as-built" prepare controller charts; one per controller. Indicate on each chart the area controlled by a remote control valve (using a different color for each zone). This chart shall be reduced to a size that will fit inside of the controller door. The reduction shall be hermetically sealed inside two 2mi pieces of clear plastic.
3. Grounding Certification – Provide ground certification results for each controller and pump panel grounding grid installed. This must be on a licensed electrician letter head indicating location tested (using IR plan symbols), date, time, test method, and testing results.

INSPECTIONS AND COORDINATION MEETINGS REQUIRED – Contractor is required to schedule, perform, and attend the following, and demonstrate to the owner and/or owners representative to their satisfaction, as follows:

1. Pre-construction meeting – Designer and contractor to review entire install process and schedule with owner/general contractor.
2. Mainline installation inspection(s) – all mainline must be inspected for proper pipe, fittings, depth of coverage, backfill, and installation method
3. Mainline pressure test – All mainline shall be pressure tested according to this design's requirements
4. Backflow Device Testing – all newly installed back flow devices must be tested and the test results provided (in writing) to the owner/owners representative verifying that State of Florida requirements have been met.
5. USDA Soil Quality Tests for infiltration/texture
6. Coverage and operational test
7. Final inspection
8. Punch list inspection

FINAL ACCEPTANCE

Final acceptance of the irrigation system will be given after the following documents and conditions have been completed and approved. Final payment will not be released until these conditions are satisfied.

1. All above inspections are completed, documented, and approved by owner.
2. Completion and acceptance of 'as-built' drawings.
3. Acceptance of required controller charts and placement inside of controllers.
4. All other submittals have been made to the satisfaction of the owner.

GUARANTEE

The irrigation system shall be guaranteed for a minimum of one calendar year from the time of final acceptance.

MINIMUM RECOMMENDED IRRIGATION MAINTENANCE PROCEDURES

1. Every irrigation zone should be checked monthly and written reports generated describing the date(s) each zone was inspected, problems identified, date problems repaired, and a list of materials used in the repair. At minimum, these inspections should include the following tasks:
 - A. Turn on each zone from the controller to verify automatic operation.
 - B. Check schedules to ensure they are appropriate for the season, plant and soil type, and irrigation method. Consult an I.A. certified auditor for methods used in determining proper irrigation scheduling requirements.
 - C. Check remote control valve to ensure proper operation.
 - D. Check setting on pressure regulator to verify proper setting, if present.
 - E. Check flow control and adjust as needed; ensure valve closure within 10-15 seconds after deactivation by controller.
 - F. Check for leaks – mainline, lateral lines, valves, heads, etc.
 - G. Check all heads as follows:
 - a. Proper set height (top of sprinkler is 1" below mow height)
 - b. Verify head pop-up height – 6" in turf, 12" in ground cover, and pop-up on riser in shrub beds.
 - c. Check wiper seal for leaks – if leaking, clean head and re-inspect.
 - d. If still leaking, replace head with the appropriate head with pressure regulator and built-in check valve.
 - e. All nozzles checked for proper pattern, clogging, leaks, correct make & model, etc. – replace as needed
 - f. Check for proper alignment – perfectly vertical; coverage area is correct; minimize over spray onto hardscapes.
 - g. Riser height raised/lowered to accommodate plant growth patterns and ensure proper coverage.
 - h. Verify the pop-up riser retracts after operation. If not, repair/replace as needed.
2. Check controller grounds for resistance (10 ohms or less) once per year. Submit written reports.
3. Check rain shut-off device monthly to ensure it functions properly.
4. Inspect all filters monthly and clean/repair/replace as needed.
5. Inspect backflow devices by utilizing a properly licensed backflow inspector. This should be done annually, at minimum.
6. Inspect all valve boxes to ensure they are in good condition, lids are in place and locked.
7. Exercise all mainline and RCV gate valves per manufacturer guidelines, recommendations and schedule to ensure proper operation and prevent valves seizing.
8. Winterize, if applicable, as weather in your area dictates. Follow manufacturer recommendations and blow out all lines and equipment using compressed air. Perform seasonal startup of system as per manufacturer recommendations.
9. Conduct additional inspections, maintenance tasks, etc. that are particular for your site.

DATE: 04/12/2021	DESIGNED BY: N.T.S.	CHECKED BY: JJ	FIELD BOOK
CITY OF FORT LAUDERDALE PUBLIC WORKS DEPARTMENT ENGINEERING & ARCHITECTURE 100 North Andrews Avenue, Fort Lauderdale, Florida 33301			

PROJECT # P12509	TEMP. FIRE STATION #13 & PARKING LOT	FIRE STATION & PARKING FACILITY	IRRIGATION NOTES	3109 VISTAMAR ST., FORT LAUDERDALE
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REVISIONS				
NO.	DATE	BY	CHKD	DESCRIPTION

Masuen Consulting LLC
Water Management Consultants

301 S. Washington, Suite F
Newport, WA 99156

Telephone (866) 928-1533

Fax (800) 928-1534

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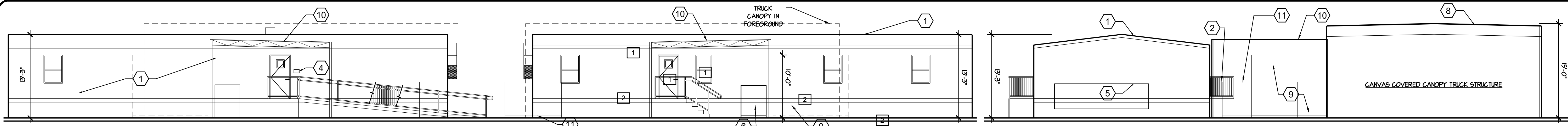
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FLORIDA LICENSED ENGINEERING, SURVEYING & MAPPING BUSINESS No. 271

FLORIDA LICENSED LANDSCAPE ARCHITECTURE BUSINESS No. 0000114

BID

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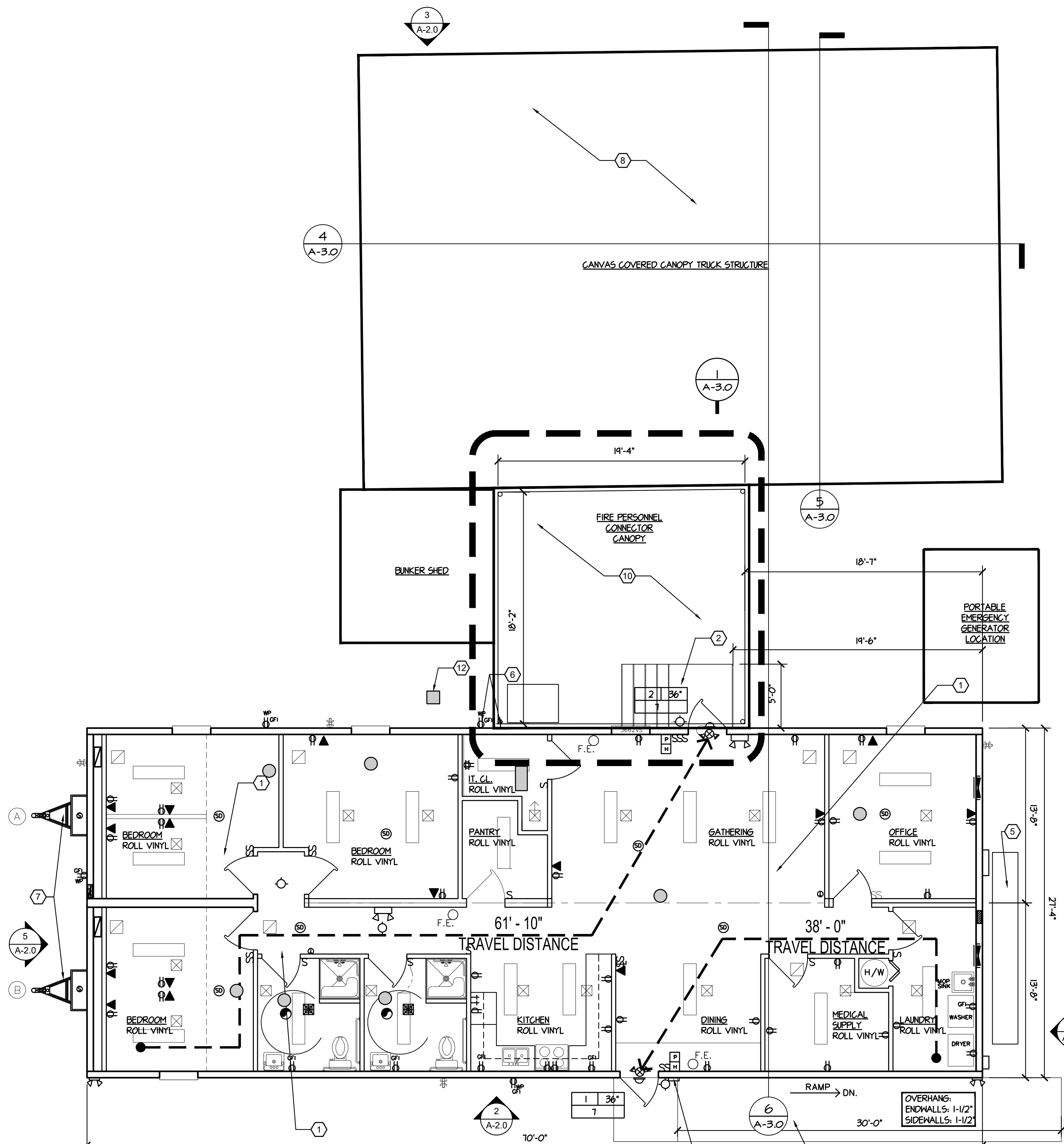


2 SOUTH ELEVATION
A-2.0 SCALE: 1/8" = 1'-0"

3 NORTH ELEVATION
A-2.0 SCALE: 1/8" = 1'-0"

4 EAST ELEVATION
A-2.0 SCALE: 1/8" = 1'-0"

5 WEST ELEVATION
A-2.0 SCALE: 1/8" = 1'-0"



1 FLOOR PLAN
A-2.0 SCALE: 3/16" = 1'-0"

(REUSE EXISTING TRAILER FROM TEMPORARY FIRE STATION #54 SITE. THIS PLAN IS USED FOR REFERENCE FOR THE G.C. TO SHOW FINAL COORDINATION AND LAYOUT)

THE EQUIPMENT USED FOR THIS PROJECT WAS PREVIOUSLY PERMITTED AND APPROVED BY CITY OF FORT LAUDERDALE UNDER PERMIT NUMBER 14010175 IN 2014 (TEMPORARY FIRE STATION #54) THIS TEMPORARY "MODULAR BUILDING TRAILER" IS BEING RELOCATED WITH NO OCCUPANCY CHANGES.

BUILDING SIGNAGE: PROVIDE AS FOLLOWS 1. "FIRE EXTINGUISHER INSIDE" AT THE MAIN ENTRY DOORS WHERE FIRE EXTINGUISHERS ARE LOCATED (EXISTING) 2. "STORAGE NOT PERMITTED" AT MECHANICAL AND ELECTRICAL ROOMS. 3. "FIRE ALARM PULL STATION INSIDE", WHERE APPLICABLE.		PROJECT DATA (NO CHANCE ON OCCUPANCY) PROJECT LOCATION: 3109 VISTAMAR ST FORT LAUDERDALE BUILDING SQ. FT = 1,898 APPLICABLE CODES: FLORIDA BUILDING CODE - 6th EDITION (2017). FLORIDA FIRE PREVENTION CODE (FFPC) 6TH EDITION 2018 WHICH INCLUDES NFPA 101 (LIFE SAFETY EDITION) 2015, NFPA 1 (UNIFORM FIRE CODE) 2015 EDITION AND STATE STATUTES - 2012 EDITION. NFPA 13-10 - INSTALLATION OF FIRE SPRINKLERS. FLORIDA ACCESSIBILITY CODE 6th EDITION (2017). CONSTRUCTION TYPE - FBC TABLE 601: (FULLY SPRINKLERED MODULAR BUILDING) OCCUPANCY - RESIDENTIAL R-2 TRAVEL DISTANCE - AS PER TABLE 1016.2 FBC RESIDENTIAL AREA: SPRINKLER SYSTEM FROM ANY POINT - 125' MAX STORAGE AREA: SPRINKLER SYSTEM FROM ANY POINT - 125' MAX COMMON PATH OF TRAVEL - 125' MAX DEAD END LIMIT - 50' MAX.	
LIFE SAFETY NOTES (EXISTING MODULAR TEMPORARY TRAILER): 1. PROVIDE ONE FIRE EXTINGUISHER FOR 3,000 SF 1,898 SF / 3,000 SF = 1 REQUIRED = 3 PROVIDED 2. ALL PENETRATIONS IN RATED PARTITIONS SHALL BE PROTECTED PER F.B.C. SECTION 710.6 3. EMERGENCY AND EXIT LIGHT SHALL COMPLY WITH NFPA 101 CHAPTER 26 LODGING OR ROOMING.		OCCUPANT LOAD - FBC TABLE 1004.1. 1,898 GROSS BUILDING AREA* *THIS TEMPORARY MODULAR FACILITY WILL HOUSE 6 PEOPLE ON A ROTATING SHIFT EVERY 24 HOURS (3 ROTATING SHIFTS)	
		OCCUPANCY RESIDENTIAL R-2 TOTAL	2017 FBC TABLE 1004.1.2 1,898/ 200 = 10 OCC. 10 OCC.
		2018 LSC NFPA 101 TABLE 7.3.1.2 1,898/ 200 = 10 OCC. 10 OCC.	
		MEANS OF EGRESS 37 X 0.2' = 7.4" REQUIRED 2 DOORS @ 36" = 72" PROVIDED MINIMUM # OF EXITS REQUIRED = 2 EXITS PROVIDED = 2 TEMP TRAILER MODULAR BLDG	
		FLAME SPREAD CLASS "C" MINIMUM FOR ALL INTERIOR FINISHES - F.B.C. 803.1.1 CLASS II MINIMUM FOR FLOOR FINISH - F.B.C. 804.4.1	

CLASSIFICATION OF HAZARDOUS CONTENTS
 THE CONTENTS OF BUSINESS OCCUPANCIES SHALL BE CLASSIFIED AS ORDINARY HAZARD IN ACCORDANCE WITH SECTION 6.2 OF THE FLORIDA FIRE PREVENTION CODE, 2014 EDITION AND NFPA 101 CHAPTER 38 - NEW BUSINESS OCCUPANCIES, 2014 EDITION. THERE ARE NO AREAS WITHIN THIS BUILDING HAVING A DEGREE OF HAZARD GREATER THAN ORDINARY FOR A BUSINESS OCCUPANCY.

APPLICABLE CODES:
 FLORIDA BUILDING CODE - 6th EDITION (2017). FLORIDA FIRE PREVENTION CODE (FFPC) 6th EDITION WHICH INCLUDES NFPA 101 (LIFE SAFETY CODE) 15 EDITION, AND NFPA 1 (UNIFORM FIRE 2015 EDITION, AND STATE STATUTES - 2012 EDITION. NFPA 13-13 - INSTALLATION OF FIRE SPRINKLERS. FLORIDA ACCESSIBILITY CODE 6th EDITION (2017). 101 CHAPTER 26 LODGING OR ROOMING HOUSES, 26.3.5 SEPARATION OF SLEEPING ROOMS.

FIRE EXTINGUISHER NOTES:
 1. FIRE EXTINGUISHERS SHALL BE A MINIMUM OF 2A:20B:C, EXTINGUISHERS WHERE SHOWN ON DRAWING MINIMUM REQUIRED 1/3,000 SF. 4 15 FOOT TRAVEL DISTANCE. MOUNT THE FIRE EXTINGUISHERS AT 4'-0" A.F.F., AND SHALL BE CURRENTLY TAGGED BY A LICENSED FIRE EQUIPMENT COMPANY.
 2. THE SUITABILITY, DISTRIBUTION, AND MAINTENANCE OF EXTINGUISHERS SHALL BE IN ACCORDANCE WITH NFPA 1 2015 EDITION. PERSONNEL NORMALLY ON THE CONSTRUCTION SITE SHALL BE INSTRUCTED IN USE OF THE 2015 EDITION. PERSONNEL NORMALLY ON THE CONSTRUCTION SITE SHALL BE INSTRUCTED IN USE OF THE EXTINGUISHERS PROVIDED.

FLOOR PLAN LEGEND (FOR REFERENCE)	
<input checked="" type="checkbox"/>	CEILING DIFFUSER - RETURN AIR DUCT
<input checked="" type="checkbox"/>	CEILING DIFFUSER - SUPPLY AIR DUCT
	EMERGENCY LIGHT
	EXTERIOR FLOOD LIGHT
	EXTERIOR CAMERA
	EXIT SIGN WITH EMERGENCY LIGHTS
	FIRE DEVICE
	WALL SWITCH
	SMOKE DETECTOR
	ELECTRICAL DEVICE
	ELECTRICAL OUTLET
	FLOOR DRAIN
	PATH OF TRAVEL
	FIRE EXTINGUISHER TYPE 2A-10BC FIRE EXTINGUISHER

- KEY NOTES**
- EXISTING TEMPORARY FIRE STATION TRAILER SHALL BE REUSED AND RELOCATED TO NEW SITE. G.C. SHALL INSTALL PER MANUFACTURER LATEST F.B.C., H.V.M.Z., AND ALL FLORIDA / NOA PRODUCT APPROVALS. NO CHANGE IN OCCUPANCY.
 - G.C. SHALL RELOCATE AND REINSTALL PRE-FABRICATED STAIRS, LANDINGS, AND RAILINGS PER MANUFACTURER REQUIREMENTS. SEE SHEET A-3.0
 - G.C. SHALL RELOCATE AND REINSTALL PRE-FABRICATED, PRE-ENGINEERED A.D.A. ACCESS RAMP AND HANDRAILS PER MANUFACTURER REQUIREMENTS.
 - MAIL BOX PROVIDED BY CITY, INSTALLED BY G.C.
 - G.C. SHALL PROVIDE ALL EXTERIOR ELECTRICAL PANELS, TRANSFER SWITCHES, AND INFRASTRUCTURE FOR TEMPORARY FIRE STATION OPERATIONS (REFER TO CIVIL AND M.E.P. DRAWINGS FOR MORE INFORMATION)
 - G.C. SHALL PROVIDE AND COORDINATE PLUMBING AND ELECTRICAL FOR NEW CITY PROVIDED ICE MAKER MACHINE
 - G.C. SHALL PROVIDE AND REMOVE HITCHES FOR TRAILER RELOCATION PER MANUFACTURER REQUIREMENTS
 - G.C. SHALL REUSE EXISTING CANOPY TRUSS AND REINSTALL AT SITE ON NEW G.C. PROVIDED COLUMNS / SUPPORTS / FOOTERS
 - G.C. SHALL RELOCATE AND INSTALL EXISTING BUNKER SHED WITH ELECTRICAL
 - G.C. SHALL PROVIDE PRE-ENGINEERED "CONNECTOR" CANVAS COVERED CANOPY, COLUMNS, AND FOOTERS. G.C. SHALL PROVIDE ALL WORK BY A FLORIDA LICENSED STRUCTURAL ENGINEER.
 - PORTABLE EMERGENCY GENERATOR LOCATION SHOWN FOR COORDINATION
 - G.C. SHALL PROVIDE NEW 40' (EXPOSED) CONCRETE POLE FOR NEW ANTENNAS. G.C. SHALL SUPPLY AND INSTALL INCLUDING PROVIDING ALL SHOP DRAWINGS SIGNED/SEALED BY A LICENSED FLORIDA STRUCTURAL ENGINEER

- GENERAL INSTALLATION GUIDELINES NOTES**
- G.C. SHALL HAVE ALL WORK PERFORMED IN THE RELOCATION AND RECONSTRUCTION OF THE "TEMPORARY" TRAILER BY APPROVED INSTALLERS UNDER FLORIDA STATE RULES SECTION 14C-2.0013 AND DEFINED IN SECTION 320.822 (14), F.S.
 - IN ADDITION, TO MEETINGS ALL REQUIREMENTS IN THE LATEST FLORIDA BUILDING CODE, NOA, FLORIDA PRODUCT APPROVALS, H.V.M.Z., AND ALL LOCAL CODES.
 - ALL WORK PERFORMED UNDER THIS CONTACT SHALL HAVE THE FOLLOWING PROVIDED BY THE G.C.: A FLORIDA LICENSED STRUCTURAL ENGINEER SHALL PROVIDE SIGNED / SEALED SHOP DRAWINGS, STRUCTURAL CALCULATIONS IN SUPPORT OF ALL WORK.

- GENERAL NOTES (EXISTING TEMPORARY TRAILER)**
- FIRE STATION #54 EXISTING TRAILER SHALL BE REUSED FOR TEMPORARY FIRE STATION #13.
 - G.C. SHALL PROVIDE ALL REQUIRED TIE-DOWNS AND SKIRTING FOR TRAILER INSTALLATION. THIS SHALL INCLUDE ALL ELECTRICAL, PLUMBING, MECHANICAL, AND I.T. COMMUNICATIONS INFRASTRUCTURE.
 - G.C. SHALL PROVIDE ALL ENGINEERING BY A FLORIDA LICENSED ENGINEER FOR ALL SHOP DRAWINGS FOR BOTH THE TRAILER INSTALLATION, TRUCK CANOPY, STORAGE SHED, AND TRAILER ACCESS.
 - ALL WORK SHALL BE DONE PER THE LATEST FLORIDA BUILDING CODE INCLUDING MEETING ALL H.V.M.Z. REQUIREMENTS.
 - G.C. SHALL REVISE AND REINSTALL ALL APPLIANCES.
 - ALL DIMENSION ARE TO BE FIELD VERIFIED AND COORDINATED WITH NEW SITE LAYOUT.
 - PER FLORIDA ACCESSIBILITY CODE 6th EDITION (2017), AREAS OF RESCUE ARE NOT REQUIRED IN A BUILDING WITH AUTOMATED SPRINKLER SYSTEMS.
 - INTERIOR FINISH REQUIREMENTS CLASS "C" MINIMUM FOR ALL INTERIOR ROOMS/SPACES - F.B.C. 803.9 4 NFPA 101 (LSC) INTERIOR FLOOR COVERINGS SHALL COMPLY WITH THE REQUIREMENTS OF THE DOC-FF-1 "PILL TEST" IN ALL OCCUPANCIES AND CLASS II MINIMUM CRITICAL RADIANT FLUX FOR FLOOR FINISHES IN STAIR ENCLOSURES, EXIT PASSAGeways AND CORRIDORS - F.B.C. 804.4.
 - CONTRACTORS SHALL SUBMIT SHOP DRAWINGS FOR REVIEW (REINSTALLATION / CORRECTION)
 - FIRE ALARM SYSTEM (EXISTING RECONNECT)
 - FIRE SPRINKLER SYSTEM (EXISTING RECONNECT)
 - ACCESS CONTROL SYSTEM (EXISTING RECONNECT)

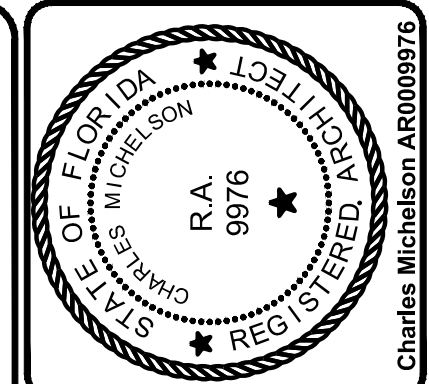
- LIFE SAFETY NOTES**
- ALL INTERIOR FINISHES SHALL COMPLY WITH THE APPLICABLE
 - ALL PENETRATIONS IN RATED PARTITIONS SHALL BE PROTECTED PER F.B.C. 6th EDITION 2017 SECTION 714. PENETRATIONS FOR CABLES, CABLE TRAYS, CONDUITS, PIPES, TUBES, COMBUSTION VENTS AND EXHAUST VENTS, WIRES, AND SIMILAR ITEMS TO ACCOMMODATE ELECTRICAL, MECHANICAL, PLUMBING, AND COMMUNICATIONS SYSTEMS THAT PASS THROUGH A WALL, FLOOR, OR FLOOR/CEILING ASSEMBLY CONSTRUCTED AS A FIRE BARRIER SHALL BE PROTECTED BY A FIRE STOP SYSTEM OR
 - FIRE ALARM SYSTEM IS REQUIRED THROUGHOUT. (EXISTING SHALL BE CORRECTED)
 - EMERGENCY GENERATOR SHALL PROVIDE 100% POWER TO THE TEMPORARY FIRE STATION TRAILER

EXISTING TRAILER EXTERIOR COLOR LEGEND (PREVIOUSLY APPROVED)

1	SW 3009 (PINENEEDLE) MANSARD COLOR, DOOR/WINDOW TRIM COLOR (ACCENT COLOR)	2	SW 1571 (CASA BLANCA) EXTERIOR DOOR COLOR, SKIRTING COLOR, EXTERIOR SIDING BODY COLOR
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ALTERNATE EXTERIOR REPAINTING OF TRAILER
 G.C. SHALL PROVIDE EXTERIOR REPAINTING OF THE TRAILER USING 1) ACCENT COLOR 2) FIELD COLOR ALL COLORS TO BE SELECTED BY OWNER AT LATER DATE. G.C. SHALL DO ALL REQUIRED PREP. FOR NEW EXTERIOR PAINTING AS SPECIFIED BY MANUFACTURER.

SALTZ MICHELSON
 ARCHITECTS
 3501 Griffin Road
 Ft. Lauderdale, FL 33312
 (954) 266-2700 Fx: (954) 266-2701
 sma@saltzmichelson.com
 AA-0002897



DRAWN BY: VM
 DESIGNED BY: VM
 CHECKED BY: CAM
 FIELD BOOK: VM

DATE: 04/12/2021
 SCALE: -

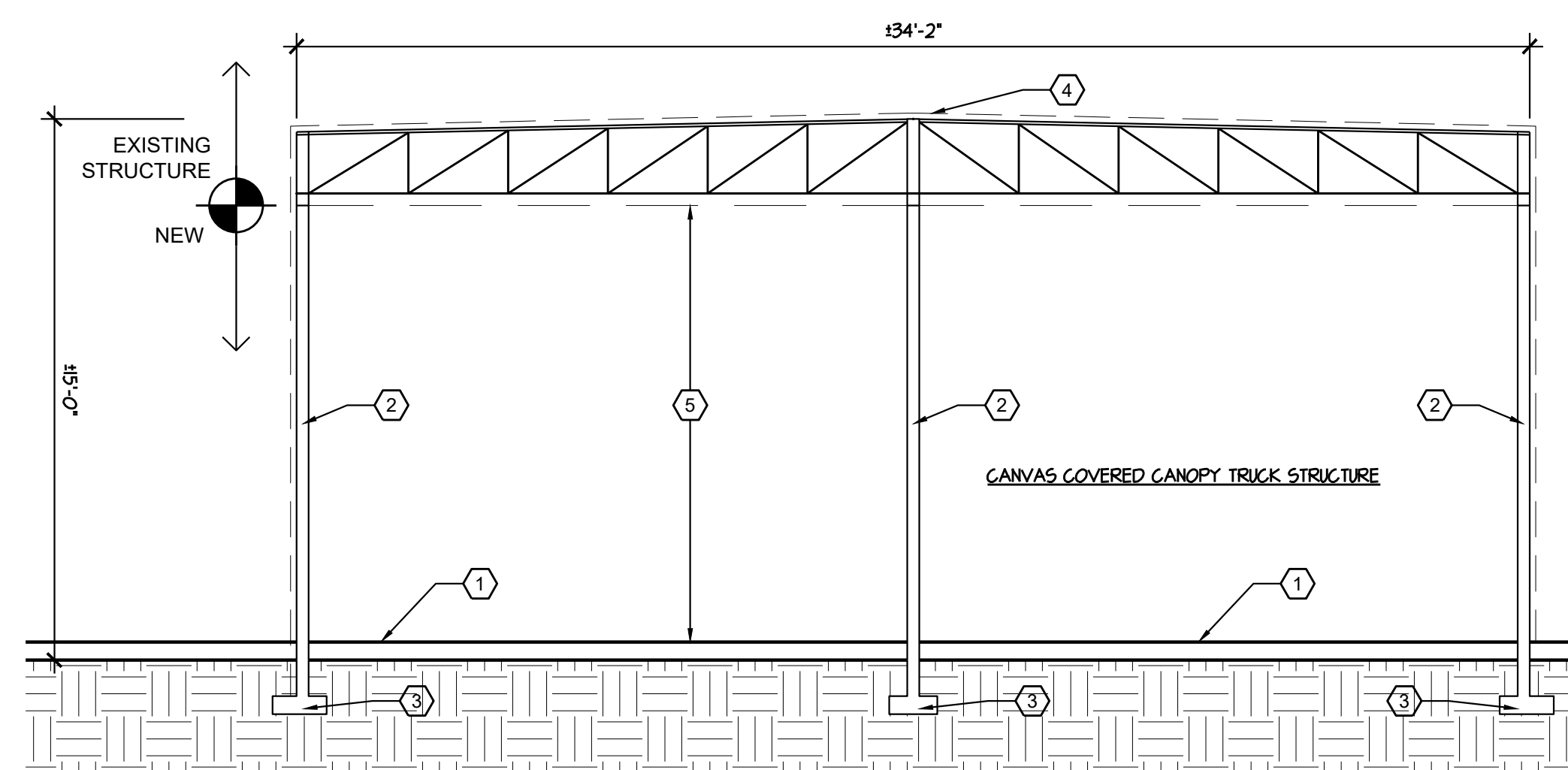
CITY OF FORT LAUDERDALE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING & ARCHITECTURE
 100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS		DESCRIPTION	
NO.	DATE	BY	CHK'D

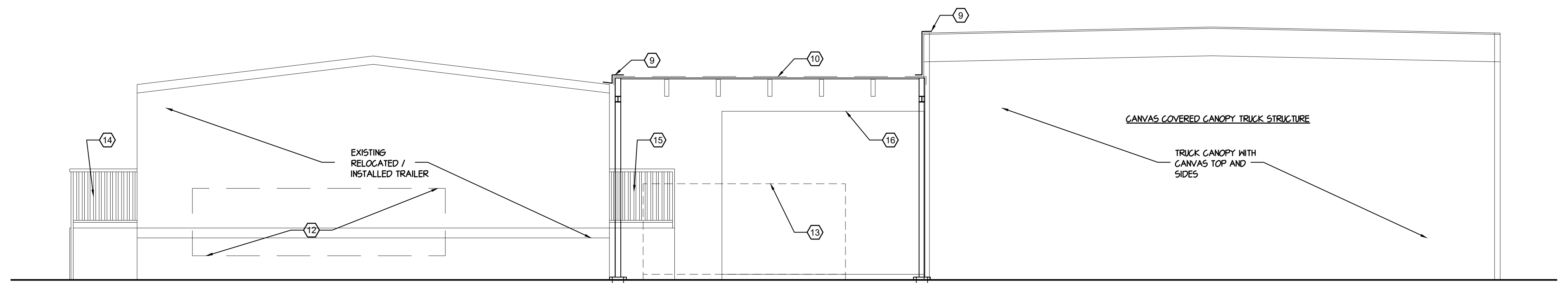
PROJECT # P12509
 TEMP. FIRE STATION #13 & PARKING LOT
 FIRE STATION & PARKING FACILITY
 FLOOR PLAN AND ELEVATIONS
 3109 VISTAMAR ST., FORT LAUDERDALE

SHEET NO.
A-2.0
 TOTAL:
 CAD FILE:
 DRAWING FILE NO.

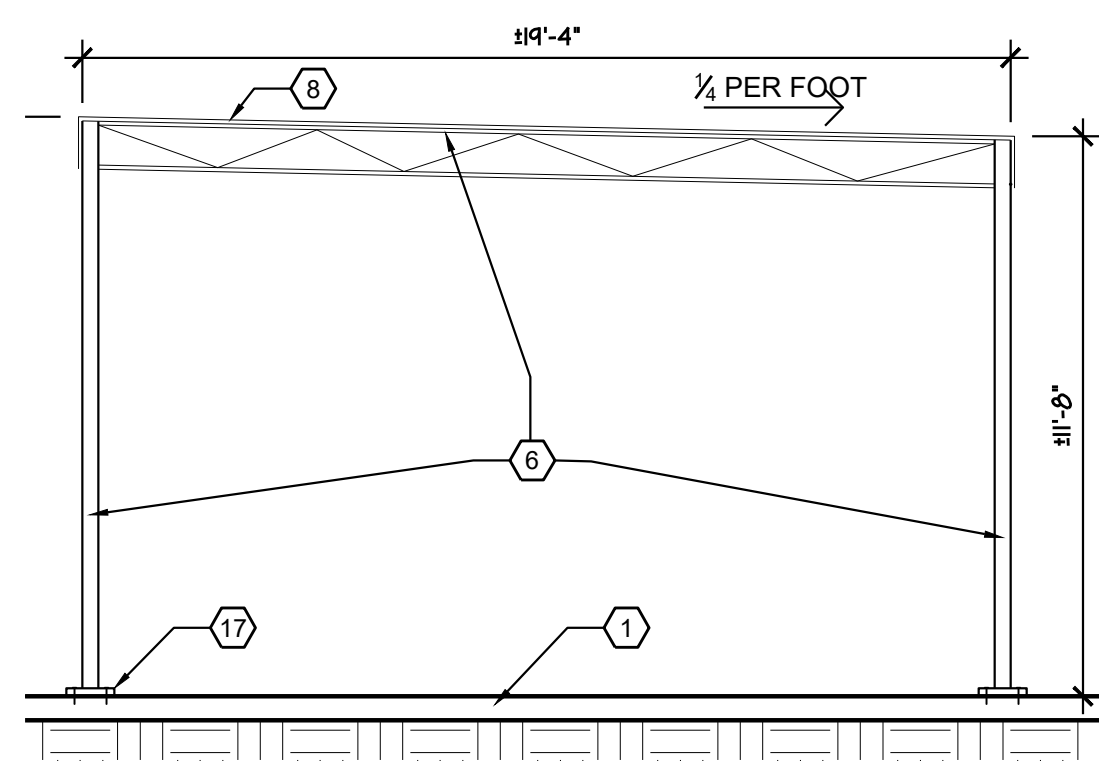
BID SET



5 TRUCK CANOPY TRANSVERSAL SECTION
A-3.0 SCALE: 1/4" = 1'-0"



6 SECTION
A-3.0 SCALE: 1/4" = 1'-0"



Technical drawing of a rectangular structure, likely a container or enclosure. The drawing shows the front and side views. The front view is a rectangle with a horizontal base and a vertical back wall. The side view is a rectangle with a horizontal base and a vertical back wall. The drawing includes several dimension lines and labels:

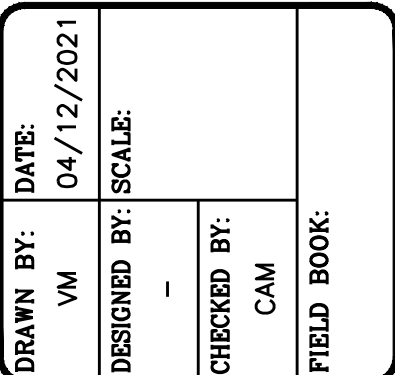
- A horizontal dimension line at the bottom is labeled **1**.
- A vertical dimension line on the right side is labeled **5**.
- A diagonal dimension line from the bottom-left corner to the top-right corner is labeled **17**.
- A horizontal dimension line at the top is labeled **17**.
- A vertical dimension line on the left side is labeled **17**.


NEW TRAILER CONNECTOR
CANOPY SECTION

KEY NOTES		GENERAL NOTES	
①	SEE CIVIL FOR NEW DRIVEWAY / APPROX	1.	G.C. SHALL REUSE EXISTING CANOPY TRUSSES SECTION.
②	G.C. SHALL PROVIDE NEW STRUCTURAL COLUMNS	2.	G.C. SHALL PROVIDE NEW PRE-ENGINEERED COLUMNS AND FOOTERS FOR CANOPY STRUCTURE. G.C. SHALL HAVE A FLORIDA LICENSED ENGINEER. PROVIDE ALL NEW WORK ATTACHMENTS / CONNECTIONS REQUIRED FOR EXISTING CANOPY TRUSSES SECTION.
③	G.C. SHALL PROVIDE NEW STRUCTURAL FOOTERS	3.	G.C. SHALL PROVIDE ALL ELECTRICAL, PLUMBING, AND DATA/TELECOM INFRASTRUCTURE FOR FULLY OPERATING SYSTEMS.
④	G.C. SHALL REUSE EXISTING TRUCK CANOPY TRUSS SECTION AND INSTALL/ATTACH TO NEW STRUCTURE	4.	G.C. SHALL RELOCATE AND REINSTALL SHED G.C. SHALL PROVIDE TIE-DOWNS TO MEET THE F.B.C. AND MANUFACTURER'S REQUIREMENTS ALL WORK PROVIDED SHALL BE BY A FLORIDA LICENSED STRUCTURAL ENGINEER.
⑤	RELOCATED TRUCK CANOPY HEIGHT SHALL MATCH EXISTING TEMPORARY FIRE STATION 54		
⑥	G.C. SHALL PROVIDE PRE-ENGINEERED "CONNECTOR" CANOPY. ALL WORK SHALL BE BY A FLORIDA LICENSED STRUCTURAL ENGINEER. WORK SHALL INCLUDE NEW CANOPY STRUCTURE, CANVAS COVERING, STRUCTURAL COLUMNS AND FOOTERS.		
⑦	ICE MAKER LOCATION		
⑧	CANVAS CANOPY COVERING		
⑨	G.C. SHALL PROVIDE CANVAS FLASHING AT CANOPY EDGES		
⑩	CONNECTOR CANOPY WITH CANVAS COVER		
⑪	EXISTING RELOCATED / INSTALLED TRAILER		
⑫	G.C. SHALL PROVIDE ALL EXTERIOR ELECTRICAL PANELS, TRANSFER SWITCHES, AND INFRASTRUCTURE FOR TEMPORARY FIRE STATION OPERATIONS (REFER TO CIVIL AND M.E.P. DRAWINGS FOR MORE INFORMATION)		
⑬	LOCATION OF EMERGENCY GENERATOR		
⑭	G.C. SHALL RELOCATE AND REINSTALL PRE-FABRICATED, PRE-ENGINEERED A.D.A. ACCESS RAMP AND HANDRAILS PER MANUFACTURER REQUIREMENTS.		
⑮	G.C. SHALL RELOCATE AND REINSTALL PRE-FABRICATED STAIRS, LANDINGS, AND RAILINGS PER MANUFACTURER REQUIREMENTS.		
⑯	EXISTING RELOCATED / REINSTALLED SHED (G.C. SHALL PROVIDE TIE-DOWNS)		
⑰	ALL CANOPY MOUNTING AND INSTALLATION SHALL BE PROVIDED BY G.C. (G.C. SHALL PROVIDE ALL STRUCTURAL ENGINEERING BY A FLORIDA LICENSED STRUCTURAL ENGINEER)		

3501 Griffin Road
Ft. Lauderdale, FL 33312
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sma@saltzmichelson.com
AA-0002897

BID SET




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PROJECT # P12509
TEMP. FIRE STATION #13 & PARKING LOT
FIRE STATION & PARKING FACILITY
CANOPY AND SHED
3109 VISTAMAR ST., FORT LAUDERDALE

SHEET NO.	A-3.0
TOTAL:	
CAD FILE:	-
DRAWING FILE NO.	