Shrub & Ground Cover Planting Detail N.T.S.

## **Specifications - Exterior Plants**

## 1.4: QUALITY ASSURANCE:

SOIL ANALYSIS SHALL BE CONDUCTED BY THE LANDCAPE CONTACTOR PRIOR TO APPLICATION OF ANY SOIL AMENDMENTS, FERTILIZERS AND BACKFILL MIXTURES. THE LANDSCAPE CONTACTOR SHALL USE A QUALIFIED SOIL TESTING LABORATORY

THE RESULT OF THE SOIL TESTS SHALL BE SUBMITTED TO THE OWNER AND LANDSCAPE ARCHITECT FOR REVIEW PRIOR TO THE APPILCATION OF SAID MATERIALS. ADJUSTMENTS TO THE SOIL AMENDENTS MAY BE MADE UPON CONSULTAION WITH THE OWNER AND THE LANDSCAPE ARCHITECT.

### 1.5: DELIVERY, STORAGE AND HANDLING

PRUNING OF TREES SHALL BE DONE ON SITE AFTER PLANTING FOR DAMAGED LIMBS OR AS DIRECTED TO IMPROVE OVERALL PLANT APPEARANCE. DO NOT REMOVE MORE THAN 15% OF BRANCHES. PRUNING METHODS SHALL FOLLOW STANDARD HORTICULTURAL PRACTICES USING APPROPRIATE TOOLS. LOPPING, SHEARING OR TOPPING OF PLANT MATERIAL WILL BE GROUNDS FOR REJECTION. DAMAGED, SCARRED, FRAYED, SPLIT OR SKINNED BRANCHES, LIMBS OR ROOTS TO BE PRUNED BACK TO LIVE WOOD. THE CENTRAL LEADER OR BUD SHALL BE LEFT INTACT UNLESS SEVERELY DAMAGED.

PRUNE SHRUBS TO REMOVE DAMAGED BRANCHES, IMPROVE NATURAL SHAPE, THIN OUT STRUCTURE AND REMOVE NOT MORE THAN 15% OF BRANCHES.

### 1.6: WARRANTY:

WARRANT ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE AGAINST DEATH AND UNHEALTHY CONDITION, EXCEPT AS MAY RESULT FROM NEGLECT BY OWNER, DAMAGE BY OTHERS AND UNUSUAL PHENOMENA BEYOND CONTRACTOR'S CONTROL. REPLACEMENTS SHALL BE MADE WITH COMPATIBLE SIZE AND QUALITY OF MATERIAL AT A TIME REQUESTED OR ACCEPTABLE BY THE OWNER OR LANDSCAPE ARCHITECT. PLANT MATERIAL REJECTED DURING THE COURSE OF CONSTRUCTION SHALL BE REMOVED WITHIN FIVE (5) WORKING DAYS AND REPLACED BEFORE THE FINAL INSPECTION FOR COMPLETION WILL BE SCHEDULED. WARRANTY ON REPLACEMENT PLANTS SHALL BE 1 YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE REPLACEMENTS. ANY DAMAGE TOLANDSCAPE, SODDED OR SEEDED AREAS DURING REPLACEMENT OF PLANT MATERIAL SHALL BE CORRECTED BY THE LANDSCAPE CONTRACTOR.

### 1.7: MAINTENANCE SERVICE:

MAINTENANCE AND GENERAL CLEAN UP SHALL BE PERFORMED DAILY. MAINTENANCE SHALL INCLUDE BUT NOT BE LIMITED TO WATERING, WEEDING, CULTIVATING, RESTORATION OF GRADE, REMOVAL OF LITTER, MOWING, PRUNING, RESETTING SETTLED PLANTS, REMOVING, REPAIRING OR REPLACING STAKES AND GUYS, PROTECTION FROM INSECTS AND DISEASES, FERTILIZATION AND SIMILAR OPERATIONS AS NEEDED TO ENSURE NORMAL GROWTH AND HEALTHY PLANT MATERIAL. MAINTENANCE SHALL BEGIN AFTER EACH PLANT IS PLANTED AND SHALL CONTINUE FOR NINETY (90) DAYS FROM THE DATE OF FINAL ACCEPTANCE.

### 1.8: QUANTITIES, LOCATION AND SUBSTITUTIONS:

THE QUANTITIES OF PLANT MATERIALS SHOWN ON PLANS SHALL TAKE PRECEDENCE OVER THE PLANT QUANTITIES ON THE PLANT LIST. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO ADJUST THE NUMBER AND LOCATIONS OF THE DESIGNATED TYPES AND SPECIES OF PLANTS TO BE USED AT ANY OF THE LOCATIONS SHOWN. THE OWNER SHALL RECEIVE A CREDIT OR DEBIT FOR THE UNIT PRICE OF THE PLANT MATERIAL. NO SUBSTITUTION OF PLANT MATERIAL TYPES, SPECIFICATIONS OR SIZES WILL BE PERMITTED WITHOUT WRITTEN AUTHORIZATION FROM THE LANDSCAPE ARCHITECT. THE OWNER AND/OR LANDSCAPE ARCHITECT RESERVES THE RIGHT TO NOT ACCEPT PLANT MATERIAL THAT DOES NOT, IN THE OPINION OF THE OWNER AND/OR LANDSCAPE ARCHITECT, MEET THE SPECIFICATIONS HEREIN.

#### PLANT MATERIA

PROVIDE SIZES AND SPECIFICATIONS OF PLANTS AS SHOWN ON PLANS OR LISTED ON PLANT LIST. ALL TREES, PALMS, SHRUBS, GROUND COVERS AND OTHER PLANTS SHALL CONFORM TO THE STANDARD OF FLORIDA NO. 1 OR BETTER AS GIVEN IN THE LATEST EDITION OF GRADES AND STANDARDS FOR NURSERY PLANTS BY FLORIDA DEPARTMENT OF AGRICULTURE, PART I AND II. PLANT MATERIAL SHALL ALSO CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. (ANSI) BULLETIN Z 60.1 - 1990 AND AS REVISED.

SPECIMEN PLANTS SHALL BE FLORIDA FANCY OR BETTER AND SHALL CONFORM TO THE LITERATURE STANDARDS LISTED ABOVE.

OPSOIL SHALL BE FRIABLE FERTILE SOIL WITH REPRESENTATIVE CHARACTERISTICS OF AREA SOILS. IT SHOULD BE FREE OF HEAVY CLAY, SILT, STONE, EXCESS LIME, SHELL ROCK, PLANT ROOTS, WEEDS, DEBRIS OR OTHER FOREIGN MATTER. IT SHALL NOT CONTAIN NOXIOUS PLANT GROWTH (SUCH AS BERMUDA, TORPEDO OR NUT GRASS). IT SHALL TEST BETWEEN THE PH RANGE OF 5.0 TO 7.0 UNLESS OTHERWISE SPECIFIED AND CONTAIN NO TOXIC RESIDUE OR SUBSTANCES THAT WOULD ENDANGER PLANT 3.2: SODDING: GROWTH. IF TOPSOIL IS NOT AVAILABLE ON SITE, IT SHALL BE IMPORTED FROM LOCAL SOURCES WITH SIMILAR SOIL CHARACTERISTICS TO THAT FOUND AT PROJECT SITE. OBTAIN TOPSOIL ONLY FROM NATURALLY, WELL-DRAINED SITES WHERE TOPSOIL OCCURS IN A DEPTH NOT LESS THAN 4".

# 2.5: INORGANIC SOIL AMENDMENTS:

SAND SHALL BE CLEAN, SALT-FREE AND CONTAINING NO EXTRANEOUS MATTER.

MYCORRHIZAL AMENDMENT SHALL BE DIEHARD™ TRANSPLANT AS MANUFACTURED BY HORTICULTURAL ALLIANCE OR EQUAL TO WITH THE FOLLOWING INGREDIENTS:

ENDOMYCORRHIZAL FUNGI ECTOMYCORRHIZAL FUNGI BENEFICIAL BACTERIA **HUMIC ACID** SOLUBLE SEA KELP **AMINO ACIDS** 

HORTA-SORB WATER MANAGEMENT GEL TRICHODERMA YUCCA PLANT EXTRACTS VITAMIN B COMPLEX

## 2.6: ORGANIC SOIL AMENDMENTS

PEAT HUMUS SHALL BE DECOMPOSED PEAT WITH NO IDENTIFIABLE FIBERS OR IF AVAILABLE, MUCK MAY BE SUBSTITUTED AND SHALL BE FREE FROM STONES, EXCESSIVE PLANT ROOTS, DEBRIS OR OTHER FOREIGN MATTER. MUCK SHALL NOT BE OVERLY SATURATED WITH WATER.

PROVIDE FERTILIZER UNIFORM IN COMPOSITION, DRY, AND IN A FREE FLOWING CONDITION FOR APPLICATION BY SUITABLE EQUIPMENT, AND DELIVER IN UNOPENED BAGS OR CONTAINERS, EACH FULLY LABELED.

FERTILIZE TREES, SHRUBS AND GROUND COVERS WITH "MILORGANITE" OR AN APPROVED COMPLETE FERTILIZER. APPLY "MILORGANITE" IN A CIRCLE AROUND THE PLANT BEFORE MULCHING. DO NOT TOUCH THE PLANT WITH THE FERTILIZER. WATER IN FERTILIZER AFTER MULCHING. APPLY MILORGANITE"

FERTILIZER AT THE FOLLOWING RATE: 5.00 LBS. OR 14.5 CUPS / PALMS 3.00 LBS. OR 8.70 CUPS / 12-16' MATERIAL

2.00 LBS. OR 5.80 CUPS / 8-12- MATERIAL 0.69 LBS OR 2.00 CUPS / 6-8' MATERIAL 0.19 LBS OR 1/2 CUP / 3 GAL. MATERIAL

0.10 LBS. OR 1/4 CUP / 1 GAL MATERIAL

## 2.8: MULCHES

Typical Cabbage Palm Layout N.T.S.

MULCH TO BE APPLIED TO ALL PLANTING BEDS, 3" THICK MIN. PINE STRAW MULCH SHALL BE APPLIED ONLY TO THOSE AREAS AS INDICATED ON THE PLAN. APPLY 6" FLUFFED, 2-3" THICK AFTER COMPACTION.

## 2.10:PLANTING SOIL MIX

BACKFILL MIXTURE: 1/2 PARENT SOIL, 1/2 MIXTURE (1/3 SAND, 1/3 TOPSOIL, 1/3 PEAT HUMUS).

## 3.1: PLANTING BED ESTABLISHMENT

PREPARATION: PRIOR TO THE INSTALLATION OF PLANTS, THE SITE SHALL BE FREE OF WEEDS, GRASS, SOD, DEBRIS, ROCKS OR OTHER MATERIAL MAKING THE SITE UNPLANTABLE. FOR FINAL ACCEPTANCE ALL PLANTED AREAS SHALL BE WEED FREE.

FINISH GRADING: THE LANDSCAPE CONTRACTOR SHALL COORDINATE THE INSTALLATION AND GRADING OF TOPSOIL, IF NECESSARY, WITH THE GENERAL CONTRACTOR, TO INSURE THE SITE IS AT FINISH GRADE PRIOR TO INSTALLING PLANTS.

#### 3.2: PLANTING TREES:

LAYOUT PLANTS ACCORDING TO LANDSCAPE PLANS. IF A CONFLICT ARISES AS TO THE LOCATION, SPACING OR OTHER CONFLICT, CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY.

EXCAVATE PIT TO TWO AND ONE-HALF (2 1/2) TIMES THE DIAMETER OF TREE BALL AND NOT LESS THAN 6 DEEPER. COMPACT A LAYER OF BACKFILL MIXTURE IN PIT TO LOCATE COLLAR OF PLANT PROPERLY IN A SLIGHTLY DISHED FINISH GRADE. BACKFILL AROUND BALL WITH BACKFILL MIXTURE, COMPACTED TO ELIMINATE VOIDS AND AIR POCKETS, WATERING THOROUGHLY AS LAYERS ARE PLACED. BUILD 3" HIGH BERM OF SOIL BEYOND EDGE OF EXCAVATION. APPLY FERTILIZER AS SPECIFIED AND THEN MULCH WITH THE TYPE AND THICKNESS SPECIFIED ON PLANT LIST.

GUY AND STAKE TREES. LESS THAN 3.5" IN CALIPER. IN FOUR DIRECTIONS WITH "ARBORBRACE" NYLON TREE GUYING KIT WITH HARDENED NYLON ANCHOR AND 3/4" 800 LB. POLYPROP UV WEBBING, MODEL (ATG-R) OR APPROVED EQUAL. STAKE TREES IMMEDIATELY AFTER PLANTING. FOR MULTI-TRUNK PLANT MATERIAL. ATTACH GUYS TO FOUR (4) LARGEST LIMBS, CARE MUST BE TAKEN NOT TO MAKE GUYS TOO TIGHT. FOR TREES 3.5" IN CALIPER AND OVER, TREES MUST BE STAKED WITH WOOD 2X4 METHOD. FOLLOW PALM STAKING DETAIL FOR REQUIREMENTS. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO ELIMINATE GUYING OR STAKING. THE OWNER SHALL RECEIVE A CREDIT OR DEBIT FOR THE UNIT PRICE OF THE GUYING OR STAKING. THE LANDSCAPE CONTRACTOR SHALL REMOVE BRACING IN ONE YEAR.

#### 3.2: PLANTING SHRUBS:

EXCAVATE PITS OR TRENCH TWO (2) TIMES DIAMETER OF BALLS OR CONTAINERS, AND 3" DEEPER THAN REQUIRED FOR POSITIONING AT PROPER HEIGHT. COMPACT A LAYER OF BACKFILL MIXTURE IN BOTTOM BEFORE PLACING PLANTS. CONTAINER GROWN MATERIALS SHALL BE PLANTED WITH 48 HOURS AFTER DELIVERY TO SITE. PLACE PLANT IN PIT AND BACKFILL AROUND PLANTS WITH BACKFILL MIXTURE. COMPACTED TO ELIMINATE VOIDS AND AIR POCKETS. WATER THOROUGHLY AS LAYERS ARE PLACED. FORM A 3" HIGH BERM OF SOIL BEYOND THE EDGES OF EXCAVATION. APPLY FERTILIZER AS SPECIFIED AND THEN MULCH WITH THE TYPE AND THICKNESS SPECIFIED ON PLANT LIST.

### 3.4: PLANTING GROUNDCOVERS:

LOOSEN SUBGRADE TO DEPTH OF 4" IN AREAS WHERE TOPSOIL HAS BEEN STRIPPED, AND SPREAD BACKFILL MIXTURE.

SPACE PLANTS AS OTHERWISE INDICATED. DIG HOLES LARGE ENOUGH TO ALLOW FOR SPREADING OF ROOTS. COMPACT BACKFILL TO ELIMINATE VOIDS, AND LEAVE GRADE SLIGHTLY DISHED AT EACH PLANT. WATER THOROUGHLY. APPLY FERTILIZER AS SPECIFIED AND THEN MULCH WITH THE TYPE AND THICKNESS SPECIFIED ON PLANT LIST, LIFTING PLANT FOLIAGE ABOVE MULCH. MULCH SHALL BE SPREAD BEFORE PLANTING PLANTS IN POTS LESS THAN 1 GALLON SIZE (4", LINERS, ETC.).

## Specifications - Lawns and Grasses

SOD SHALL MEET AMERICAN SOD PRODUCES ASSOCIATION STANDARDS FOR NURSERY GROWN SOD FOR THICKNESS OF CUT, PAD SIZE, STRENGTH OF SECTIONS, MOISTURE CONTENT AND THATCH. SOD SHALL BE GUARANTEED TO BE UNIFORM IN COLOR, LEAF TEXTURE, AND SHOOT DENSITY AND FREE OF WEEDS, DISEASE, FUNGUS, INSECTS OR OTHER IMPERFECTIONS AND SUFFICIENTLY KNITTED TO SUSTAIN GROWTH. SOD SHALL BE MOWED FOR FINAL ACCEPTANCE.

#### 2.3: FERTILIZER:

FERTILIZE TURF AREAS WITH TYPE 1 FERTILIZER, COMPLYING WITH THE STATE FERTILIZER LAWS. THE FERTILIZER SHALL BE CHEMICALLY DESIGNATED WITH 12-8-8. PROVIDE AT LEAST 50% OF THE PHOSPHORIC ACID FROM NORMAL SUPER PHOSPHATE OR AN EQUIVALENT SOURCE PROVIDING A MINIMUM OF TWO UNITS OF SULFUR. THE AMOUNTS OF SULFUR AND ALL OTHER CHEMICAL SHALL BE INDICATED ON THE QUANTITATIVE ANALYSIS CARD ATTACHED TO THE UNOPENED BAG.

### LAWN PREPARATION:

LOOSEN SUBGRADE TO DEPTH OF 4" AND GRADE WITH TOPSOIL PROVIDED ON SITE OR IMPORTED TO FINISH DESIGN ELEVATIONS. ROLL PREPARED LAWN SURFACE. WATER THOROUGHLY, BUT DO NOT CREATE MUDDY SOIL CONDITION.

FERTILIZE SOIL AT THE RATE OF APPROXIMATELY 10 LBS. PER 1000 S.F. SPREAD FERTILIZER OVER THE AREA TO RECEIVE GRASS BY USING AN APPROVED DISTRIBUTION DEVICE CALIBRATED TO DISTRIBUTE THE APPROPRIATE QUANTITY. DO NOT FERTILIZE WHEN WIND VELOCITY EXCEEDS 15 M.P.H. THOROUGHLY MIX FERTILIZER INTO THE TOP 2" OF TOPSOIL.

SOD TYPE SPECIFIED ON PLANT LIST SHALL BE MACHINE STRIPPED NOT MORE THAN 24 HOURS PRIOR TO

LAY SOD STRIPS WITH TIGHT JOINTS, DO NOT OVERLAP. STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES. WORK SIFTED SOIL MIX INTO MINOR CRACKS BETWEEN PIECES OF SOD AND REMOVE EXCESS SOIL DEPOSITS FROM SODDED AREAS. SOD ON SLOPES GREATER THAN 3:1 SHALL BE STAKED IN PLACE. ROLL OR TAMP LIGHTLY AND WATER THOROUGHLY WITH A FINE SPRAY IMMEDIATELY AFTER PLANTING.

## Landscape Certification

LANDSCAPE CERTIFICATION: THE LANDSCAPE ARCHITECT SHALL PROVIDE FINAL CERTIFICATION TO THE OWNER AND MUNICIPALITY THAT PLANTS ARE INSTALLED PER THE DESIGN PLAN, DETAILS AND SPECIFICATIONS. ANY CHANGES TO THE PLAN WILL NEED TO HAVE THE LANDSCAPE ARCHITECT APPROVAL PRIOR TO INSTALLATION. CONFORMITY TO FLORIDA GRADE #1 IN THE ROOT BALL REQUIRES THE LANDSCAPE ARCHITECT TO INSPECT TREES PRIOR TO INSTALLATION AT THE SITE. IT IS THE RESPONSIBILITY OF THE OWNER/GENERAL CONTRACTOR/LANDSCAPE CONTRACTOR FOR ORGANIZING INSPECTIONS OF PLANT MATERIAL PRIOR TO INSTALLATION.

## General Notes:

SOD TO BE ST. AUGUSTINE UNLESS OTHERWISE NOTED ON PLANS

ALL PLANTING AREAS SHALL RECEIVE 100% COVERAGE FROM A FULLY AUTOMATIC IRRIGATION SYSTEM EQUIPPED WITH A RAIN SENSOR.

ALL CONSTRUCTION DEBRIS & HARDPAN TO BE REMOVED FROM PLANTING BEDS TO A DEPTH OF 30"

ABOVE AND BELOW GROUND UTILITIES SHALL BE VERIFIED AND LOCATED BY THE LANDSCAPE CONTRACTOR PRIOR TO COMMENCING WORK IN THE PROJECT AREA. IF UTILITY PLANS ARE AVAILABLE, THE CONTRACTOR SHALL EXAMINE THEM AND BRING ANY AND ALL CONFLICTS TO THE ATTENTION OF THE OWNER AND/OR LANDSCAPE ARCHITECT. WHEN WORKING IN AN AREA WHERE KNOWN UTILITIES EXIST, UTILITY LOCATIONS MAY NEED TO BE STAKED BY A SURVEYOR OR THE UTILITY COMPANIES. THE CONTRACTOR HAS THE OPTION TO CONTACT 811TO SCHEDULE LOCATION OF THE UTILITIES WHICH SUBSCRIBE TO THEIR SERVICE.

# Amendment Stamps

Zoning Stamps

LA 0000530

Designed:

Approved: .

Revisions: \_

GGG/EOM/MTI

20-0808

Drawn:

Date:

Job no.

Environmental

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Preliminary Specifications & Details

Scale: 1"=20'

Sheet No.

