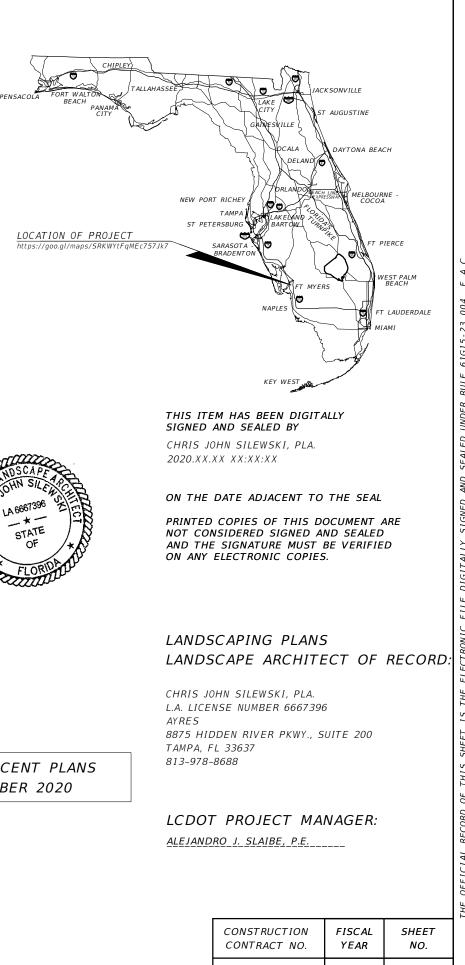
LEE COUNTY DEPARTMENT OF TRANSPORTATION

CONTRACT PLANS

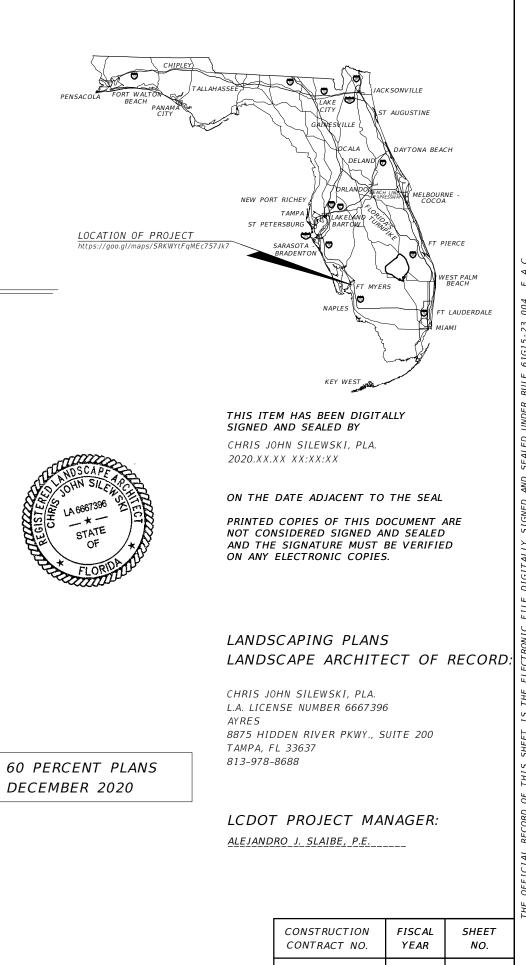


FINANCIAL PROJECT ID 442123-1-58-01

(FEDERAL FUNDS)

BUCKINGHAM RD AND GUNNERY RD ROUNDABOUT - LAP

LANDSCAPE PLANS



DECEMBER 2020

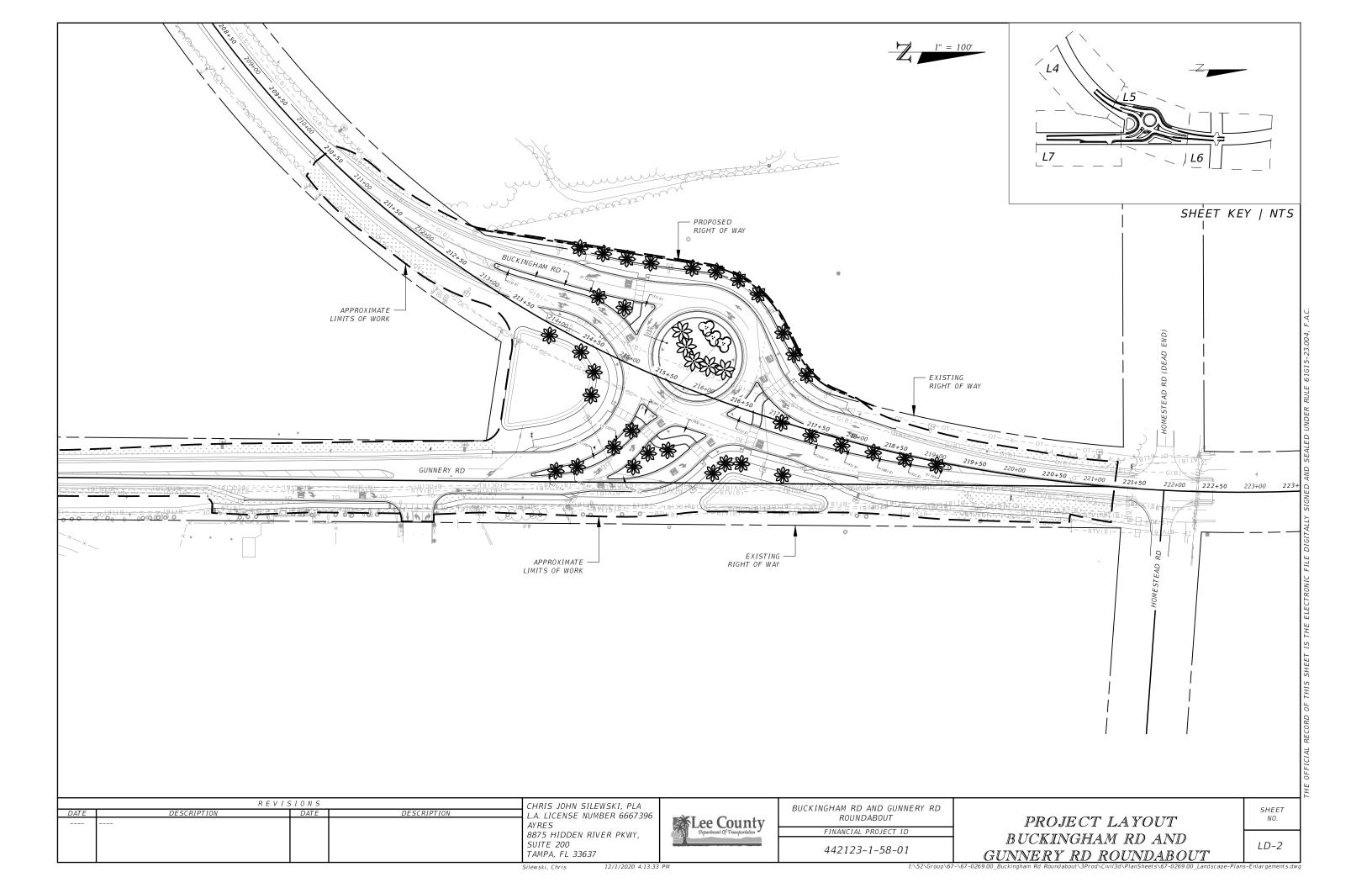
INDEX OF LANDSCAPING PLANS

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LD-3	GENERAL NOTES & MAINTENANCE NOTES
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LD-5	LANDSCAPE PLAN
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LD-7	LANDSCAPE PLAN
LD-8	LANDSCAPE DETAILS
LD-9	LANDSCAPE DETAILS
LD-10	TABULATION OF QUANTITIES AND PLANT SCHEDULE

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LD-1



GENERAL LANDSCAPE NOTES

- 1. Roadway design speed planting limits are based on existing project design speed and required setbacks as found in FDOT Design Manual and FDOT Standard
- 2. FDOT Standard index numbers 506, 544, 600, 613, and 616 will be used for the earthwork, setbacks, clear zones, and maintenance of traffic for landscaping work, as well as the FDOT STANDARD PLANS 2020-2021
- Criteria based on the FDOT 2020-2021 design manual in the 2011 AASHTO "Green Book".
- 4. No vegetation shall be placed in a manner where by official departmental traffic control signing would be discerned as being screened.
- 5. Prior to submission of bid, the contractor shall visit the site and fully inform themselves of the conditions, under which the work is to be accomplished.
- start of work. Start of work will indicate acceptance of conditions and full responsibility for completing work.
- 7. Verify underground and above ground utility locations prior to any excavation. If underground utilities or obstructions maybe and/or are encountered during excavation of planting areas or pits, immediately inform Lee County. Alternate locations will be selected by Lee County. Such changes in location should be made by the contractor without additional compensation.
- 8. The contractor will bear sole responsibility for any and all damages that results from activities or work due to improper verification of utilities and/or operator error.
- No plant material substitution should be made on this project without explicit written approval from FDOT, followed by the approval of Lee County.
- 10. Installation of palms and plants must not screen the vision of drivers and pedestrians, see FDOT 2020-2021 Standard Plans and 2020 Design Manual for Clear Site Limits or site visibility triangles at intersections. Coordinate so as not to obstruct the visibility of directional, informational, or traffic control signs as well as traffic signals. Field adjust Palms and Palm locations with Lee County construction representative as required to avoid conflict with light poles, sign supports, utility poles, walls and fences, etc.
- 11. Lee County construction representatives reserve the right to make minor adjustments, in the field, to the locations of palms and shrubs in ground covers. All areas with in the drip line of a protected tree should maintain their original grade and soil compaction.
- 12. The contractor shall be responsible for providing proper drainage for all palms and plant materials. Palms set too high or too low may be rejected. Verify proposed finish grades with Lee County and set palms accordingly. See FDOT palm planting details for planting, staking, and guving,
- 13. The contractor shall be responsible for properly securing all palms and large shrubs immediately after planting. All guy wires shall be flagged, and all stakes shall be driven flush with surrounding grade for Public Safety.
- of installation to the date of final warranty.
- 15. Bed lines shall have well-defined trench edges to contain mulch. Bed lines shall be laid out with string line for straight lines, curved bed edges are to be smooth and continues per plan layout. Palms or shrubs shown in a line on the plans shall have the trunks/canopies in proper alignment upon visual inspection until the plantings are established. after installation
- 16. At the time of substantial approval the contractor shall provide Lee County, with a maintenance manual containing instructions for the proper care of all material specified to the job, and any pertinent manufactures literature to Lee County.
- 17. All landscape materials must be installed and maintained in accordance with FDOT Standard Plans, FDOT Design Manual and all other applicable 2020-2021 department standards, plans and regulations.
- 18. Application of herbicides shall be performed by a person possessing a current Florida Restricted Use Pesticide License in the Core Curriculum, right of way and aquatic categories.
- 19. Pursuant to section 2.10 of the departments "Roadway in roadside maintenance" procedure (topic number 850-0 00-015-1 of 01/01/2014). all contractors who contract the application of fertilizer shall ensure that they are licensed commercial applicator's who have been trained through the green industry BMP program, and have obtained a limited certification for Urban commercial fertilizer application under section 482. 1562. The contractor shall furnish the FDOT current copies of license/certifications belonging to the personnel that will be involved in the application or fertilizer on the FDOT right of way prior to start of work.

MAINTENANCE NOTES

- 1. As per 2020-2021 FD0T design manual chapter 212
- 10.1 When vegitation extends over a travel lane a minimum vertical clearance of 14.5 feet to the bottom of the tree canony from the finish grade of the travel lane, this shall be maintained at all times
- 1.0.2. A minimum vertical clearance of 8.5 feet between the bottom canopy of all foliage in the finish grade of sidewalks and medians shall be maintained at all times
- 1.0.3. All Ground covers and shrubs shall be at all times maintained in a manner where by they do not grow within the outside or inside edges of the curb. All shrubs shall be maintained so they are never taller than 2'-0" measured from surface of travel lane to the center portions of the median
- 2. The project falls within the USDA Zone 10a, with minimum temps between 30-35 degrees F. It would be prudent to recommend plants that will be able to endure low temperatures such as 9b (25-30 degrees). Summers are typically very hot and humid with frequent rainfalls. Intense temperatures in the man-made environment of the the Buckingham rd and Gunnery Rd medians will be excessive, as it is surrounded by concrete. The evening temps will have the tendency to be very warm for late into the evenings. This will have the result of the soils drying out and being much drier than the surrounding soils in a more cohesive greenspace. Supplemental truck watering irrigation will be required to establish the plantings and during the dry spring months, as well as dry fall months. This shall be provided on an annual basis by Lee County, if plantings are to thrive.
- 3. Litter Pickup:

Litter shall be removed before mowing any Perennial Peanut area. This shall be the responsibility of Lee County. The landscape has the ability to capture trash from blowing winds and it will accumulate trash more regularly than short mowed sod. Litter will be removed weekly or semi-weekly as required to keep the landscape tidy and trash free.

4 Mowina

Bahia sod is only used outside of the shoulders within the approximate limits of work and in the drainage ponds. These areas should still be mowed to assist in minimizing large weed growth. This shall be done at least five times a year, twice in summer (July and September), once in mid-winter (December) and once in spring (March) and again in early summer (May). The mowing shall be to a height of 3". This is to remove the seed heads from weeds and help control invasive weeds

5. Edging:

Perennial Peanut shall be edged off the back of curbs and around the edges of the internal plant beds. This shall coincide with the mowing schedule

6. Perennial Peanut Weed Control:

For control of weeds in the Perennial Peanut bed areas only: proper applications of "Impose" herbicide, (Makhteshim Agan of North America, Inc., (MANA), based in Raleigh, N.C.) seems to work well to reduce weeds, but not harm the peanut. It is used as an agricultural herbicide on edible peanut crops. Follow manufacturer's directions with this product. Edging should also take place during the mowing cycle, to keep the runners out of the planting beds, and

	REVI	5 I O N S		CHRIS JOHN SILEWSKI, PLA		BUCKINGHAM RD AND GUNNERY RD	G
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				AYRES	Lee County	FINANCIAL PROJECT ID	MA.
				8875 HIDDEN RIVER PKWY, SUITE 200	Separation of Transportation		BUc
				TAMPA, FL 33637		442123-1-58-01	GUNN
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off the edge of curbs. Jasmine will not take this same herbicide. Please follow manufacturers' directions Weeding:

Use of herbicides is encouraged only within plant beds, to minimize hand pulling of weeds in the medians of the busy roadway. Read manufacturer's directions before applying herbicide to any of the Jasmine or Perennial Peanut beds. Care should be taken not to over spray onto the leaves of the desired landscape plantings Weeding shall be every other week for the first 6 months then monthly in Summer (June-September) and then bi-monthly from October through Mav.

8. Mulch

Frequent observation and replacement of Pine Bark Mulch as required, to maintain a minimum 3" cover will help reduce invasive weeds. This should be 6. The contractor to verify all utility locations, paving, and elevations, prior to start of work. Notify Lee County, in writing, of unsatisfactory conditions prior to considered at least once a year for a full mulching and spot mulch, semi-annually as needed. Mulch has proven to be effective at reestablishing soil fungus and helping plantings thrive. Perennial Peanut and Jasmine will not need to be mulched once established.

9 Prunina

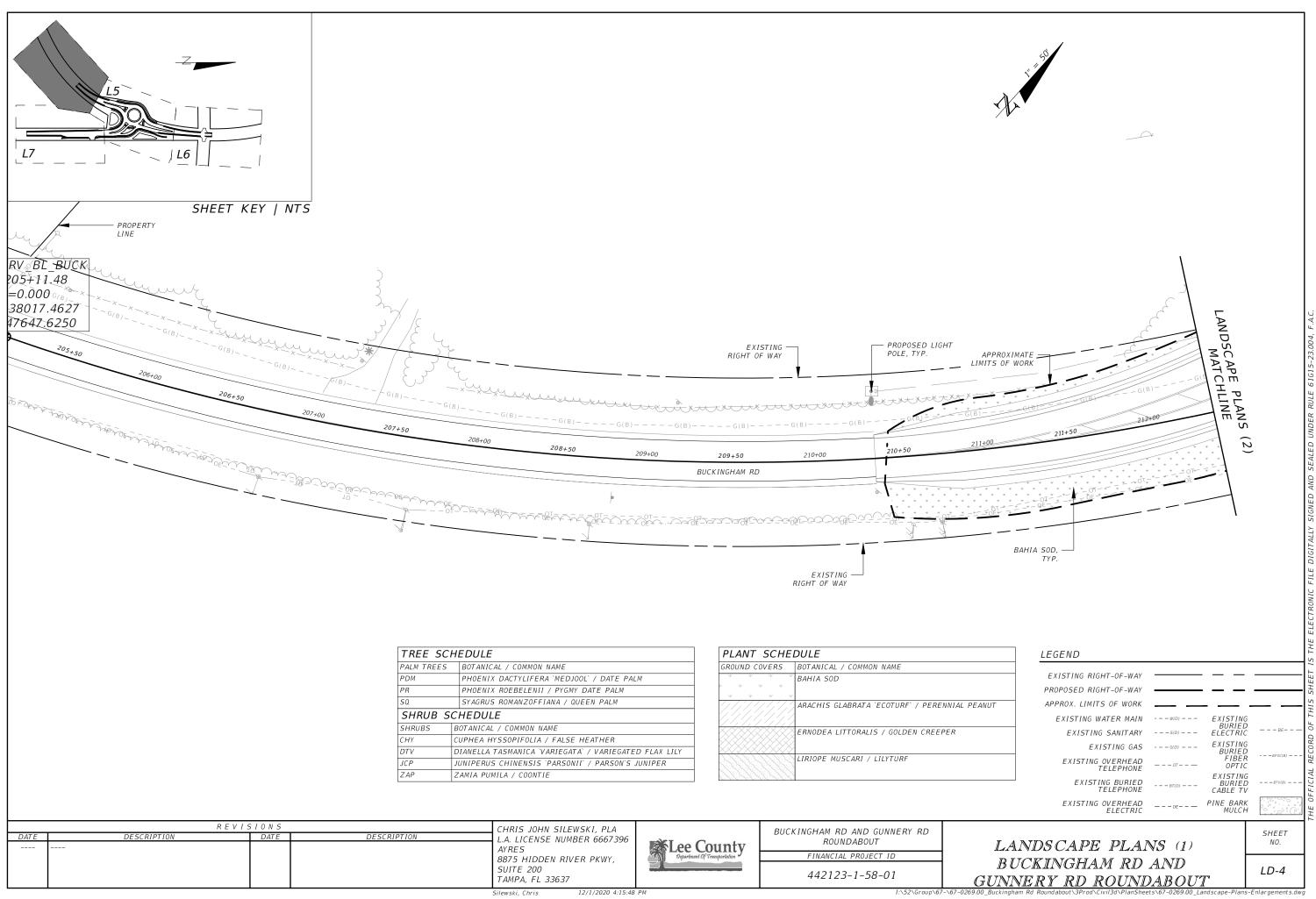
The plant selections are chosen for their habit of maintaining a small size and pruning should not be required other than an annual trimming of overhanging or dead fronds. Dead palm fronds need to be removed as soon as they are seen. Frond and date (flower) removal should take place in early Spring (March) when the Palms first show signs of setting flowers. Pruning should take place again in late summer before the palm dates are set, if any got missed in spring which is after the growing season (November) (See Maintenance Calendar)

Maintain all shrubs to a height of 18" or less. Maintain all Queen Palms and Medjool Palms to a single trunk. 10 Fertilization

The Palms, shrubs and groundcovers shall be fertilized annually in March. Use a Time-release Osmocote™ or equal, and according to manufacturer's recommendations for the plant material. No fertilization will be allowed in Summer as per local water regulations. Boron deficiency is common in the landscape with Palms, Heavy watering during establishment, high pH water, soil conditions or the genetics of the trees provided by the grower are among possible causes. Another important issue with all palms is quality, frequency and amount of fertilizer used. An 8-2-12-4 product with a coated Boron which is a 3-4-month mix is recommended. Contractor to provide a submittal with the fertilizer information for approval. 11. Watering:

The watering will be by use of truck watering, after the 12-month warranty period is completed by the contractor. This will need to be accompanied by a MOT plan for the trucks during the watering period. Watering shall be planned to be daily if needed after the contractor warranty period has expired. After one 14. Landscape contractor shall be responsible for maintaining and watering required for the establishment and proper maintenance of plant materials from the date year the watering shall be more frequent in the dry spring months, from March through middle of June. Monitor watering in summer for periods of low rainfall and high temps, and water as needed upon any signs of wilt in the more tender plantings. October will probably require supplemental watering as it is still warm and with little natural rainfall. Little watering will be needed from November through February. Spring months of March through June will require almost weekly watering

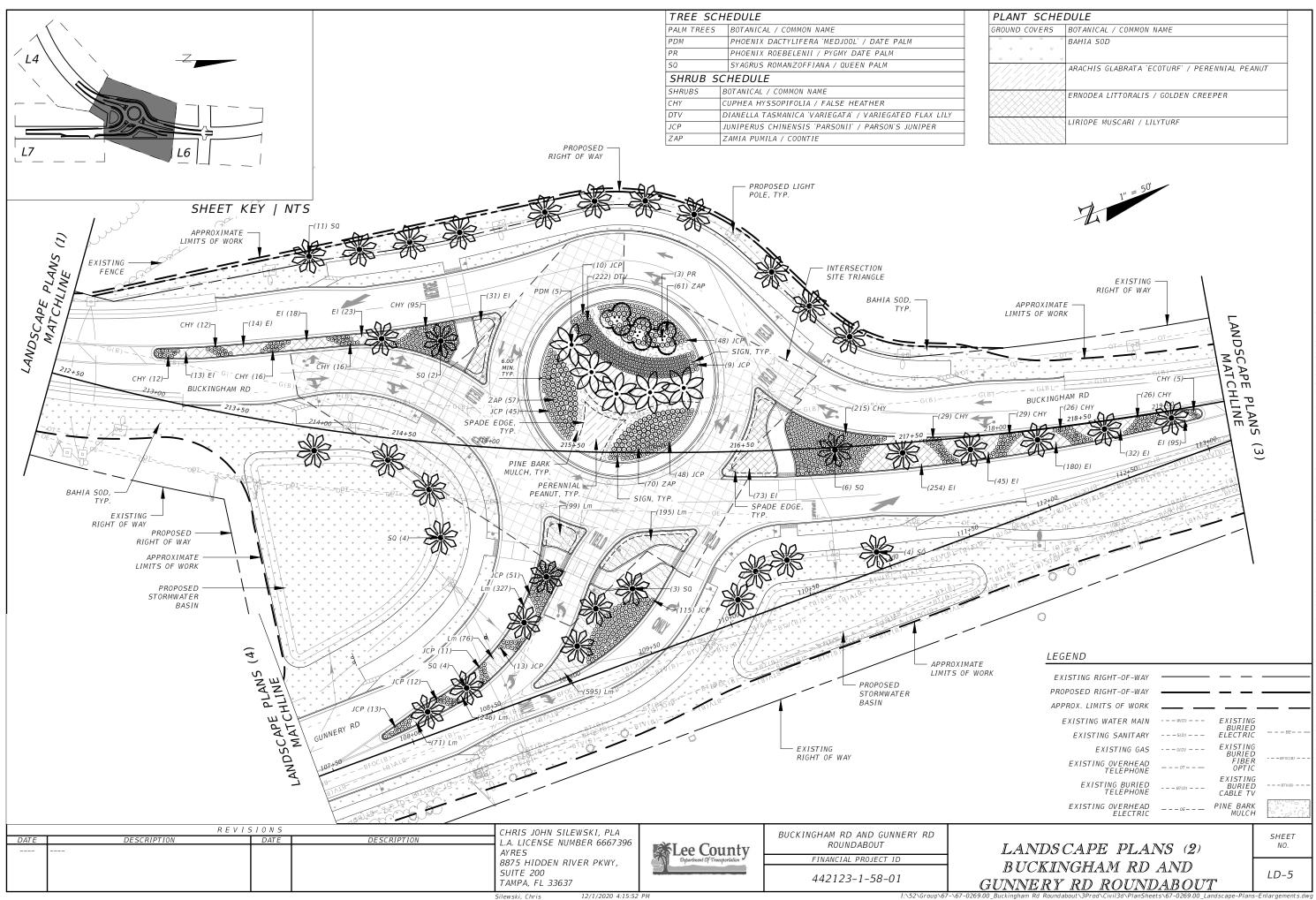
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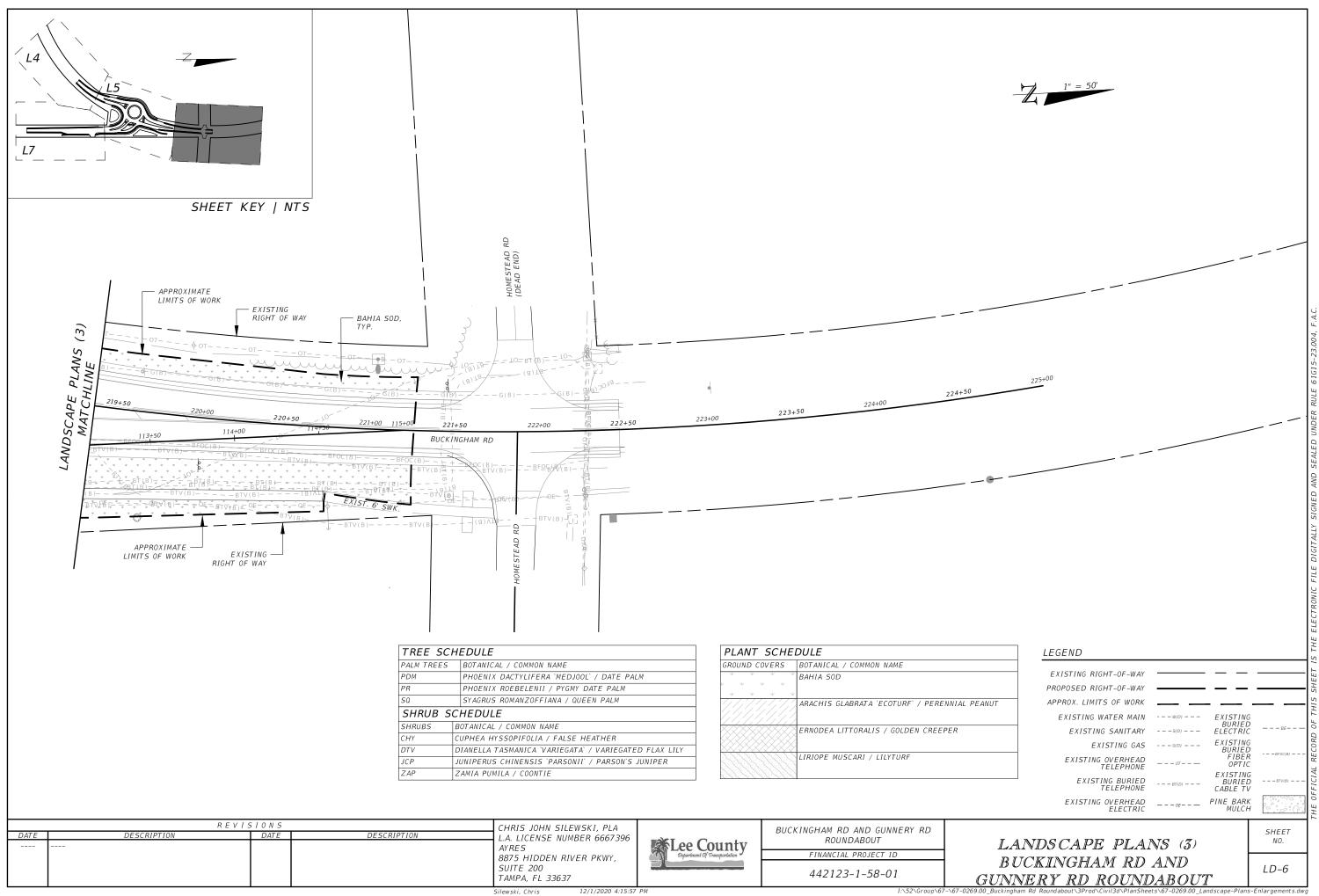


TREE SC	HEDULE	PLA
PALM TREES	BOTANICAL / COMMON NAME	GROUI
PDM	PHOENIX DACTYLIFERA `MEDJOOL` / DATE PALM	Ý
PR	PHOENIX ROEBELENII / PYGMY DATE PALM	
50	SYAGRUS ROMANZOFFIANA / QUEEN PALM	11/1
SHRUB S	CHEDULE	
SHRUBS	BOTANICAL / COMMON NAME	
СНҮ	CUPHEA HYSSOPIFOLIA / FALSE HEATHER	
DTV	DIANELLA TASMANICA `VARIEGATA` / VARIEGATED FLAX LILY	
JCP	JUNIPERUS CHINENSIS `PARSONII` / PARSON`S JUNIPER	
ZAP	ZAMIA PUMILA / COONTIE	

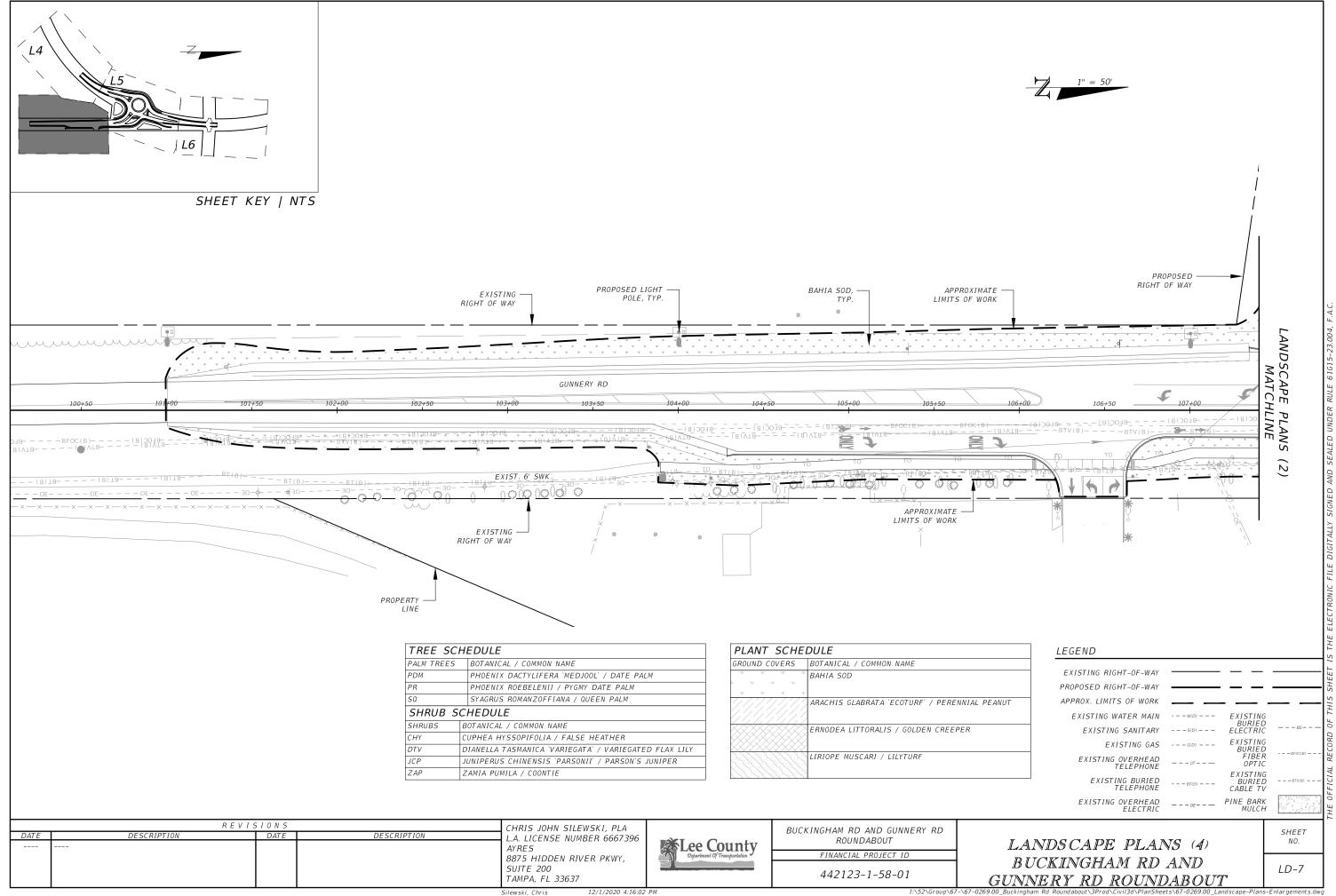
PLANT SCHE	DULE
GROUND COVERS	BOTANICAL / COMMON NAME
* * * *	BAHIA SOD
ψ ψ ψ ψ	
	ARACHIS GLABRATA `ECOTURF` / PERENNIAL PEANUT
	ERNODEA LITTORALIS / GOLDEN CREEPER
	LIRIOPE MUSCARI / LILYTURF

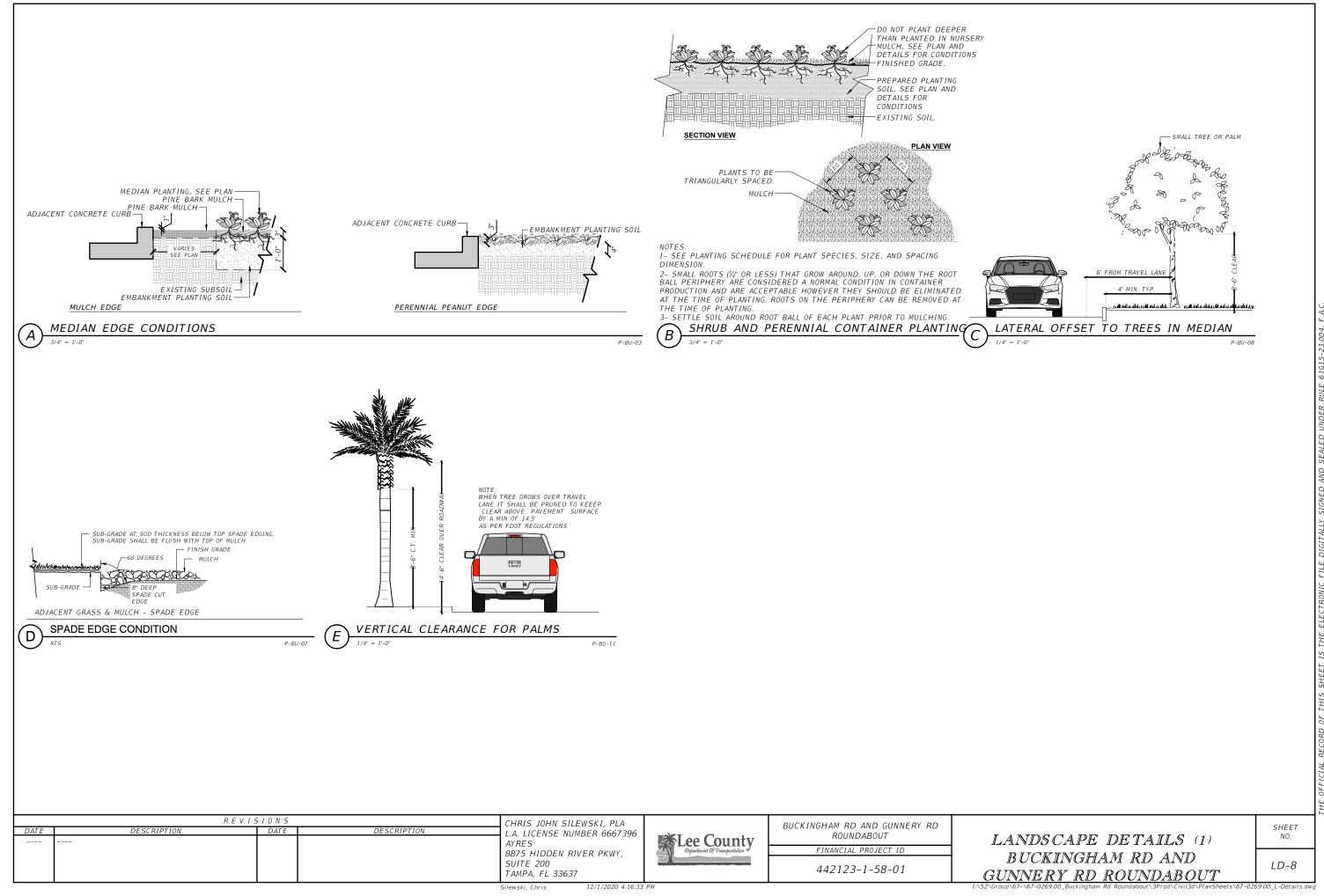
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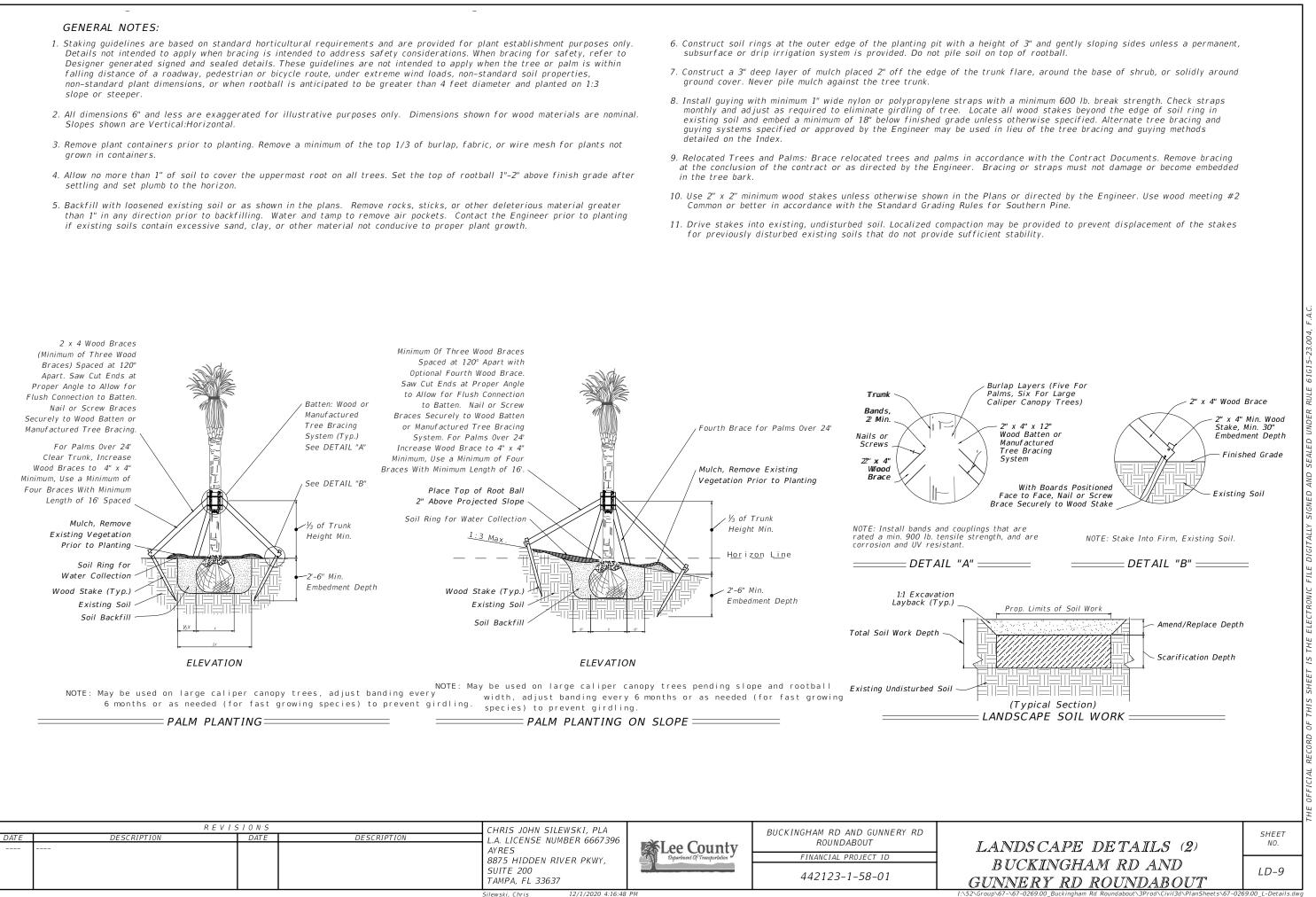
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				TAMPA, FL 33637		442123-1-38-01	GUN





- Details not intended to apply when bracing is intended to address safety considerations. When bracing for safety, refer to Designer generated signed and sealed details. These guidelines are not intended to apply when the tree or palm is within falling distance of a roadway, pedestrian or bicycle route, under extreme wind loads, non-standard soil properties, non-standard plant dimensions, or when rootball is anticipated to be greater than 4 feet diameter and planted on 1:3 slope or steeper.
- Slopes shown are Vertical:Horizontal.
- grown in containers.
- settling and set plumb to the horizon.
- if existing soils contain excessive sand, clay, or other material not conducive to proper plant growth.

- detailed on the Index.
- in the tree bark.



					MAX.								SHEET N	UMBERS			
PAY ITEM NO.	SYM.	BOTANICAL NAME	COMMON NAME	INSTALLED SIZE		SPACING	REMARKS	UNIT	TOTAL	LD-	001	LD-	002	LD-	003	LC	D-004
					SIZE					PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINA
057012	PLAN	ARACHIS GLABRATA `ECOTURF`	PERENNIAL PEANUT	SOD	N/A	SOD	SOD	SF	2229		-	2229	-	-	-	-	-
057012	PLAN	ARGENTINE BAHIA	BAHIA SOD	SOD	N/A	SOD	SOD	SF	71782	4322	-	49632	-	6034	-	1179	4 -
	CHY	CUPHEA HYSSOPIFOLIA	FALSE HEATHER	12" HT MIN.	N/A	30" O.C	7 GAL.	EA	481		-	481	-	-	-	-	-
0580 1 1	DTV	DIANELLA TASMANICA `VARIEGATA`	FLAX LILLY	12" HT MIN.	N/A	18" O.C.	1 GAL.	EA	222		-	222	-	-	-	-	-
	PLAN	ERNODEA LITTORALIS	GOLDEN CREEPER	12" HT MIN.	N/A	36" O.C.	1 GAL.	EA	778		-	778	-	-	-	-	
0580 1 1	JCP	JUNIPERUS CHINENSIS `PARSONII`	PARSON'S JUNIPER	18" HT MIN.	N/A	2.5' O.C.	7 GAL.	EA	375		-	375	-	-	-	-	-
	PLAN	LIRIOPE MUSCARI	LILYTURF	12" HT MIN.	N/A	18" O.C.	1 GAL.	EA	1609	-	-	1609	-	-	-	-	
0580 1 2	ZAP	ZAMIA PUMILA	COONTIE PALM	18" HT MIN.	N/A	2.5' O.C.	7 GAL.	EA	188		-	188	-	-	-	-	-
0580 4223	PR	PHOENIX ROEBELENII	PYGMY DATE PALM	6'-8' CT., 4' SPRD MIN.	4" CALIPER MAX.	SEE PLAN	B&B, Multi- stem	EA	3		-	3	-	-	-	-	-
0580 4215	PDM	PHOENIX DACTYLIFERA 'MEDJOOL'	DATE PALM	28' CT., 12' SPREAD MIN.	50' H.T. 25' SPRD	SEE PLAN	16" CAL. MIN., FG, Maintain to single trunk	EA	5		-	5	-	_	-	_	-
)580 4473	SR	SYAGRUS ROMANZOFFIANA	QUEEN PALM	28' CT., 12' SPREAD MIN.	50' H.T. 25' SPRD	SEE PLAN	16" CAL. MIN., FG, Maintain to single trunk	EA	34		-	34	-	-	-	_	_

GENERAL BID ITEMS

PAY ITEM NO.	Description	NOTES	UNIT	TOTAL
580-2.5	Prepared Planting Soils	SEE PLANS, DETAILS AND SPECIFICATIONS	CY	332
580-2.4	3" Pine Bark Mini Nuggest (3" Depth)	SEE PLANS, DETAILS AND SPECIFICATIONS	CY	166
100	Spade Edge	SEE PLANS, DETAILS AND SPECIFICATIONS	LF	195

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ULATION OF QUANTITIES	SHEET NO.
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NNERY RD ROUNDABOUT	
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