RGE 24 E RGE 25 E RGE 26 E FORT **END PROJECT** STA. 315+47.30 THREE OAKS PKWY. - PH. 2 BEGIN PROJECT STA. 288+36.50 THREE OAKS PKWY. - PH. 1 (UNDER CONSTRUCTION) STA 156100,00 TO 288136.50 THREE OAKS PKWY. - PH. 2 RGE 24 E RGE 26 E

PROJECT LOCATION MAP

LEE COUNTY DEPARTMENT OF TRANSPORTATION PLANS

THREE OAKS PARKWAY EXTENSION FIDDLESTICKS CANAL TO DANIELS PARKWAY

LEE COUNTY PROJECT NO. CN160642/ANB

BOARD OF LEE COUNTY COMMISSIONERS

District ONE District TWO District THREE District FOUR District FIVE Kevin Ruane Cecil Pendergrass Rav Sandelli Brian Hamman Mike Greenwell

LEE COUNTY MANAGER

Dave Harner

LEE COUNTY DEPARTMENT OF TRANSPORTATION

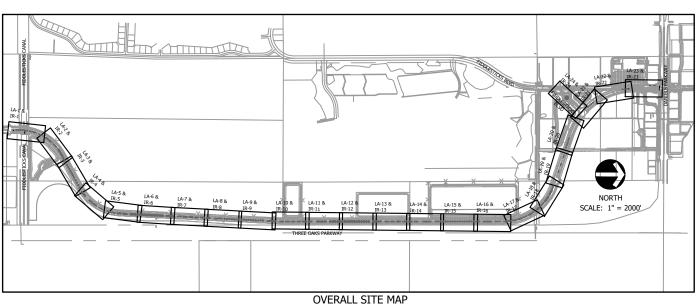
Randy Cerchie, Director Vincent Miller, Project Manager

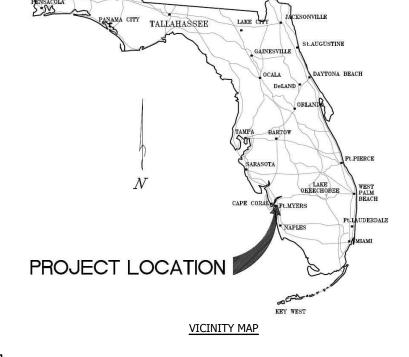
LANDSCAPE AND IRRIGATION PLANS

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LA-24	LANDSCAPE PLAN (FIDDLESTICKS BLVD)							
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UTILITY PROVIDERS:

LEE COUNTY UTILITIES (WATER AND SEWER) 1500 MONROE STREET FORT MYERS, FL 33901 239.533.8160

SOUTH TRAIL FIRE PROTECTION & RESCUE SERVICE DISTRICT (FIRE RESCUE) 5531 HALIFAX AVENUE FORT MYERS, FL 33912 239.433.0080

(ELECTRIC) 15834 WINKLER ROAD FORT MYERS, FL 33908 239.267.0974

CENTURYLINK (TELEPHONE)
2820 CARGO STREET
FORT MYERS, FL 33916
239.332.0841

COMCAST (CABLE) 26100 BONITA GRANDE DRIVE BONITA SPRINGS, FL 34135 855.616.9200

WATER PRO (REFUSE) 13110 RICKENBACKER PARKWAY FORT MYERS, FL 33913 239.337.0800

100% SUBMITTAL SET

IN COORDINATION WITH:

AVALON ENGINEERING, INC. 2503 DEL PRADO BLVD. # 200 CAPE CORAL, FL 33904

PREPARED FOR: LEE COUNTY DEPARTMENT OF TRANSPORTATION

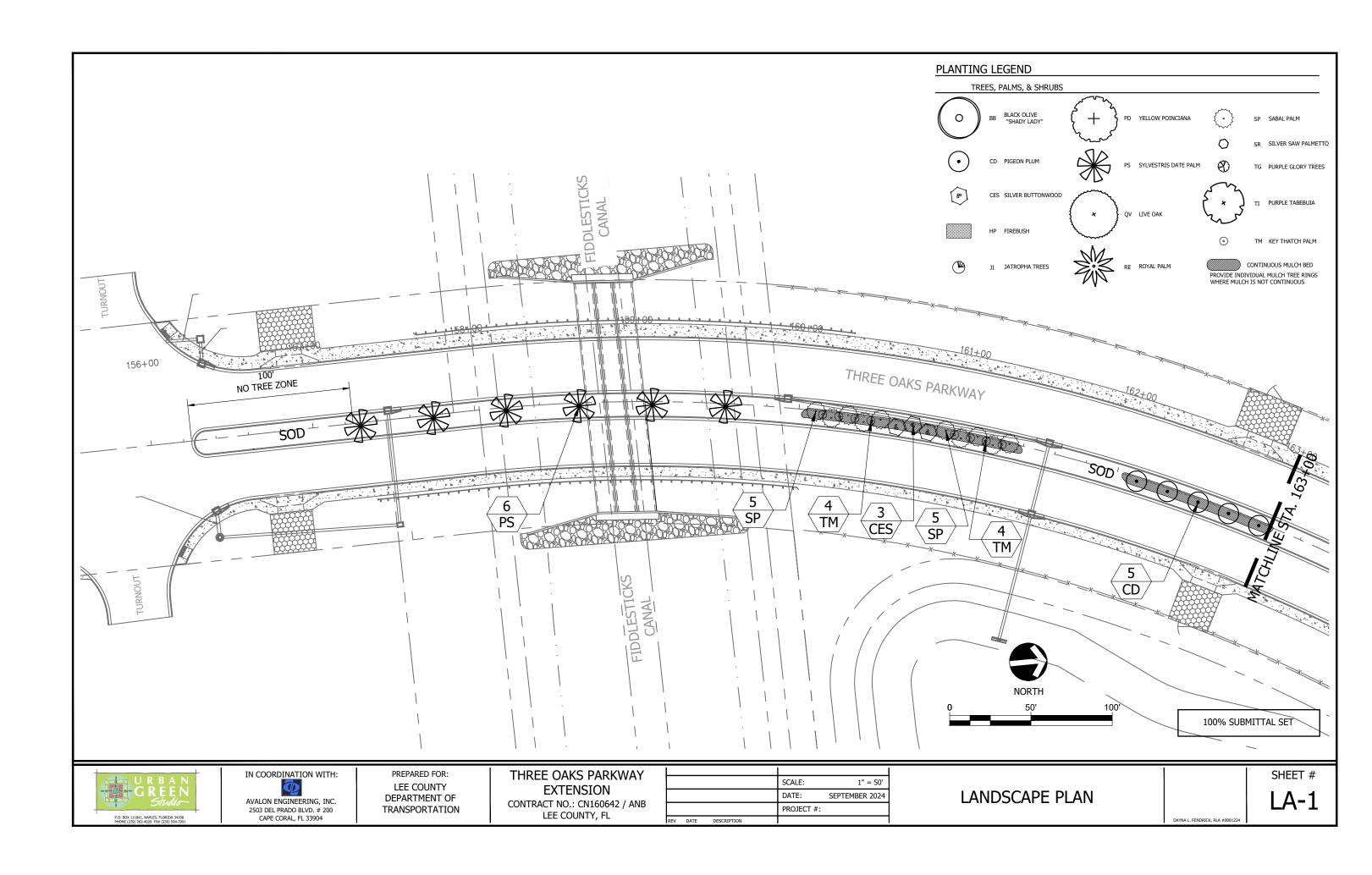
THREE OAKS PARKWAY **EXTENSION** CONTRACT NO.: CN160642 / ANB

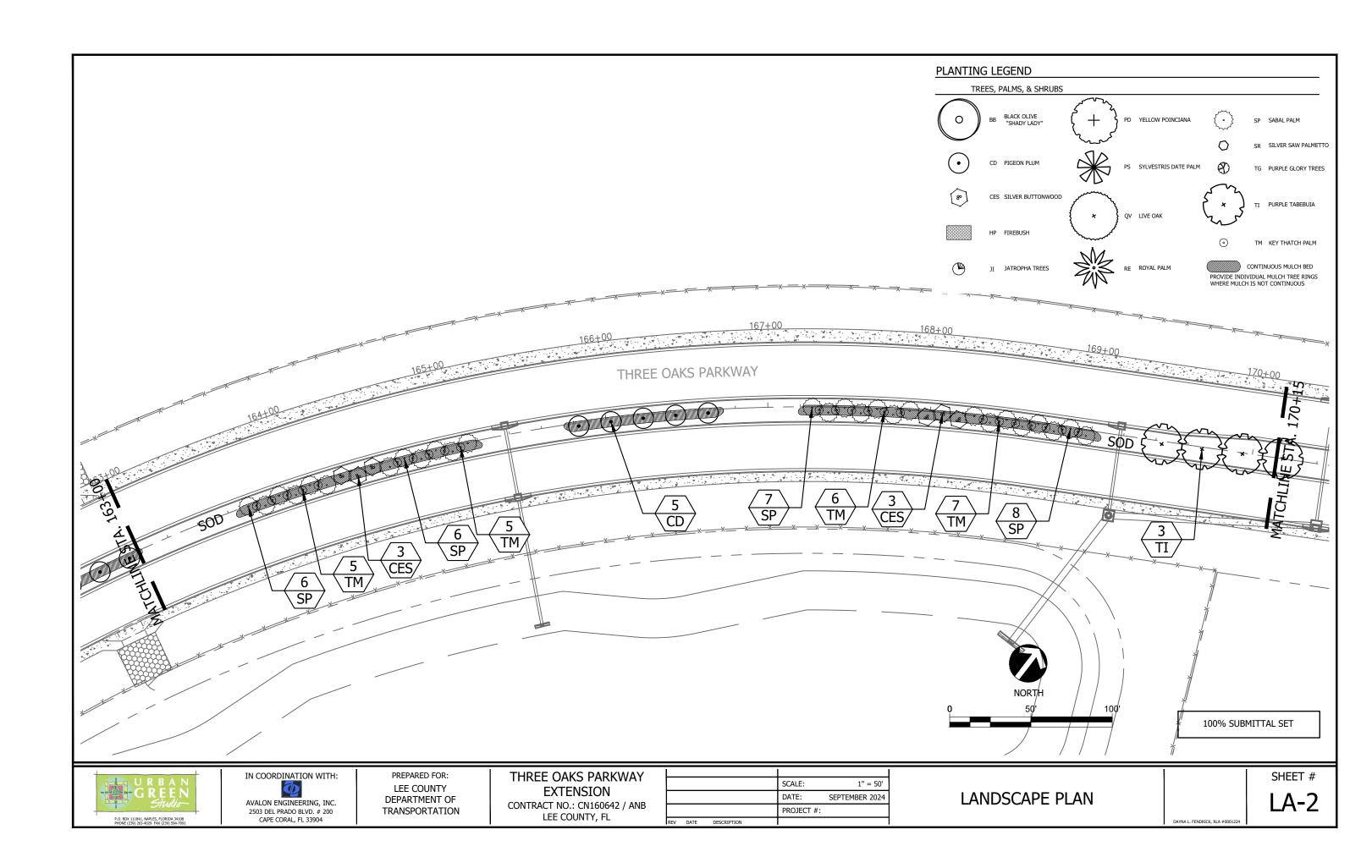
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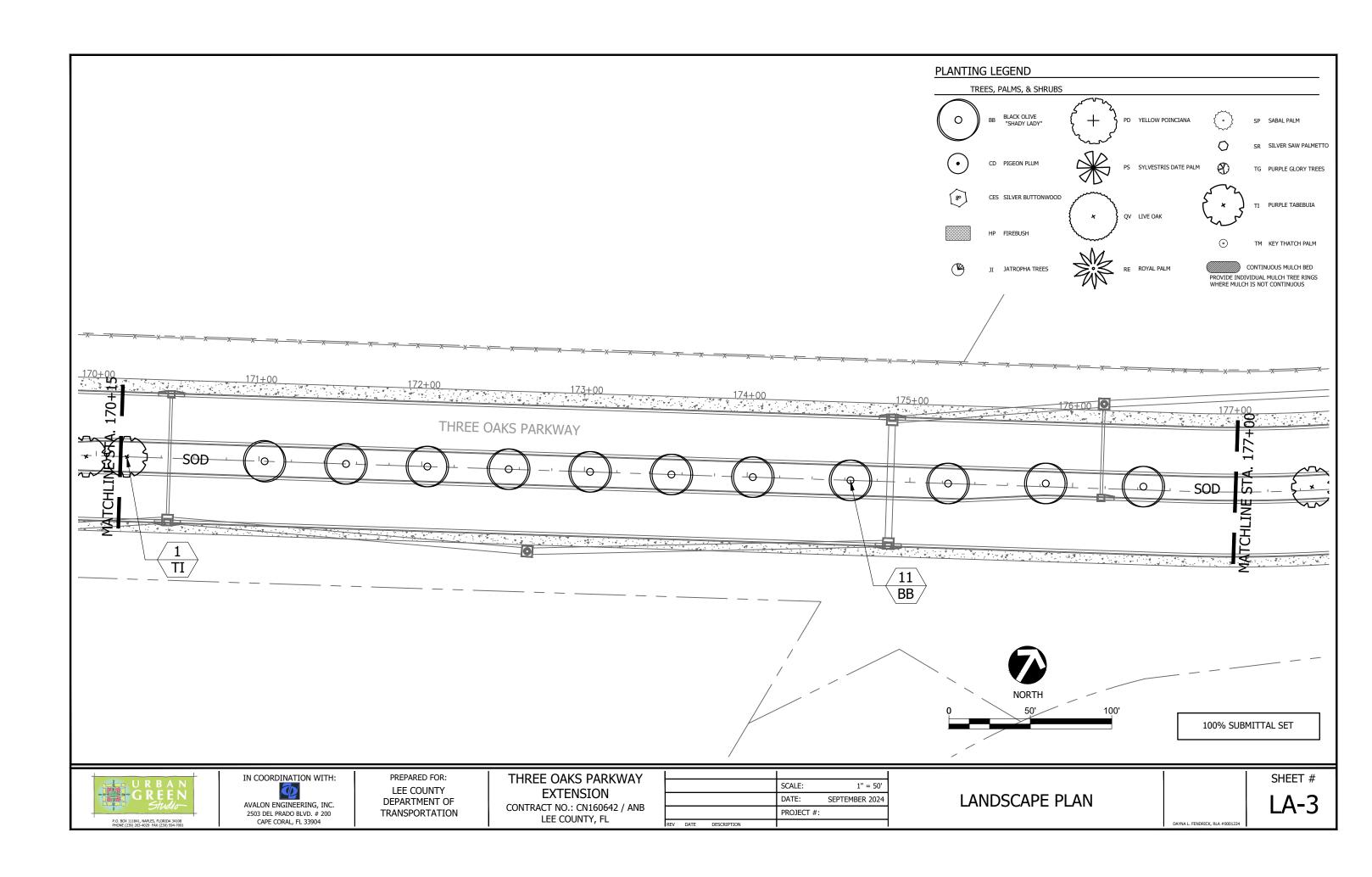
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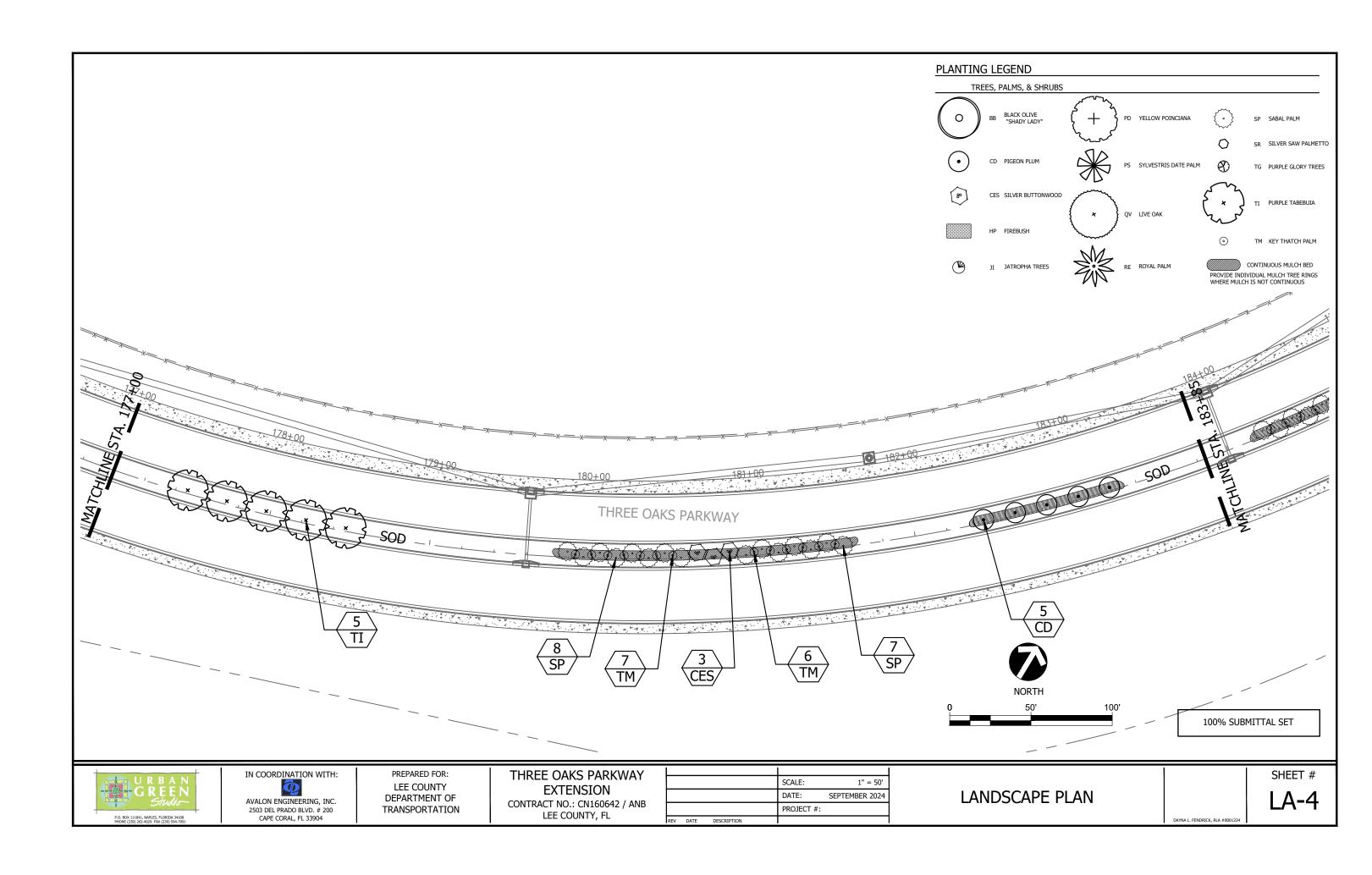
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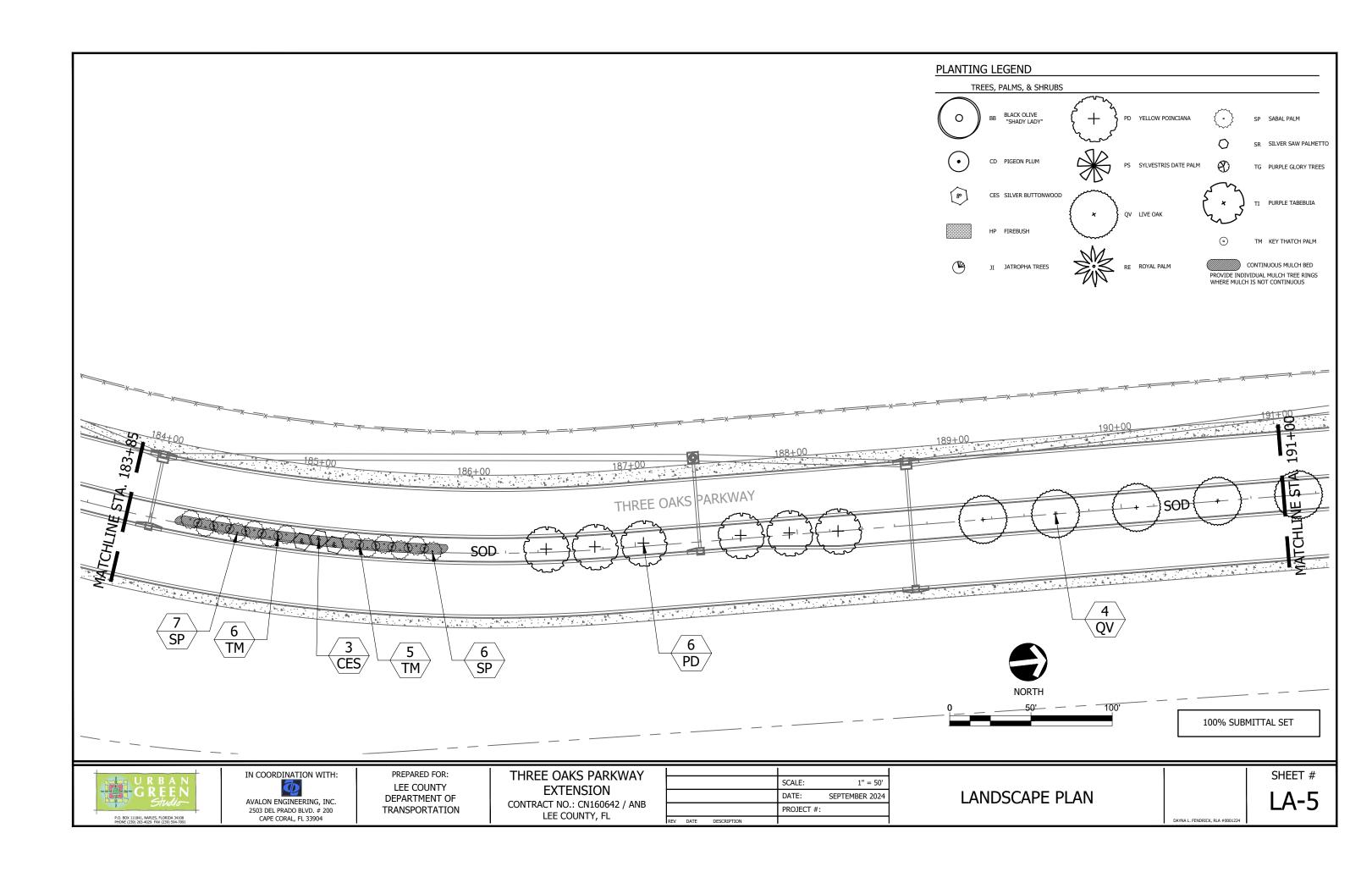
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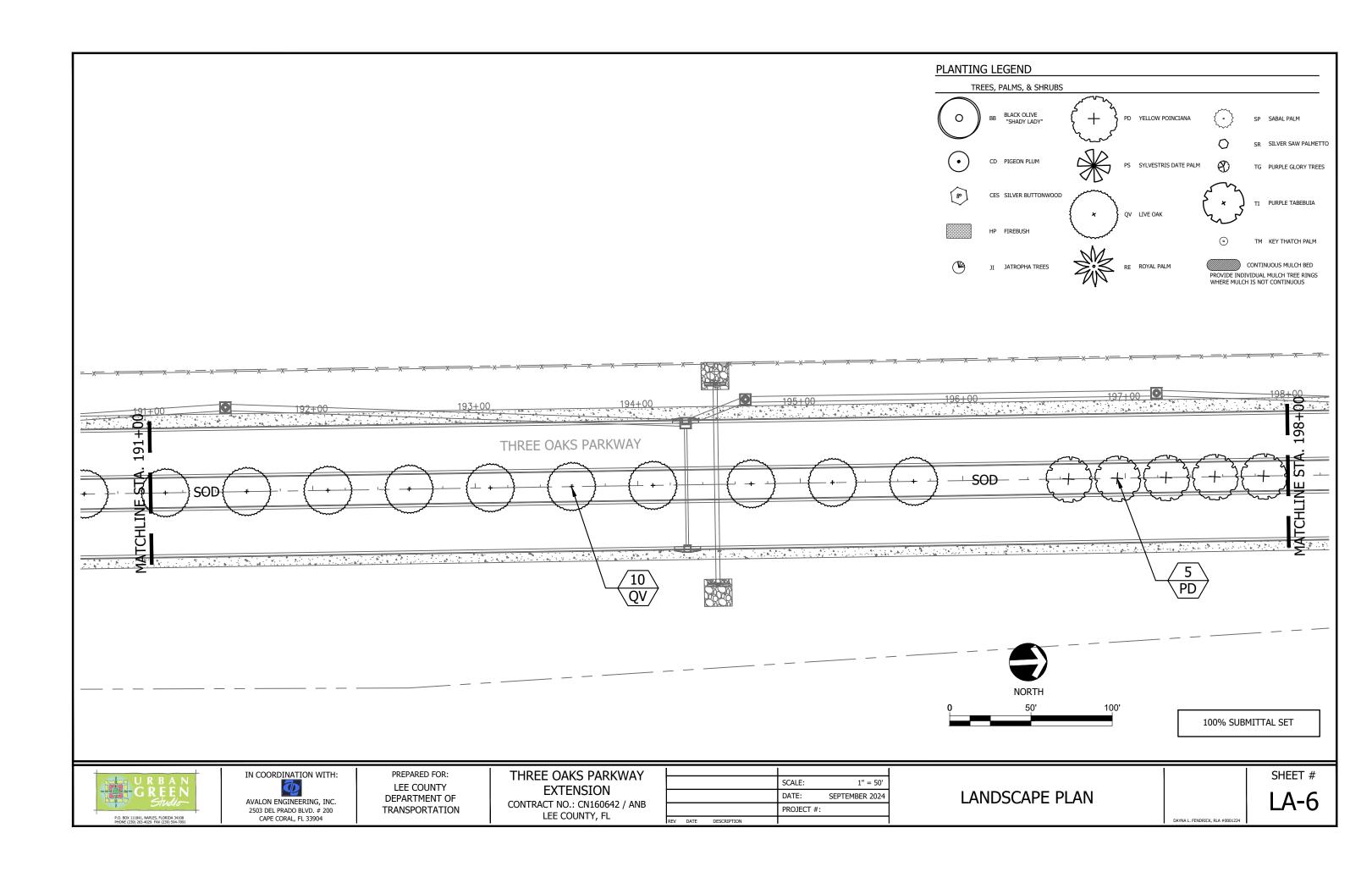


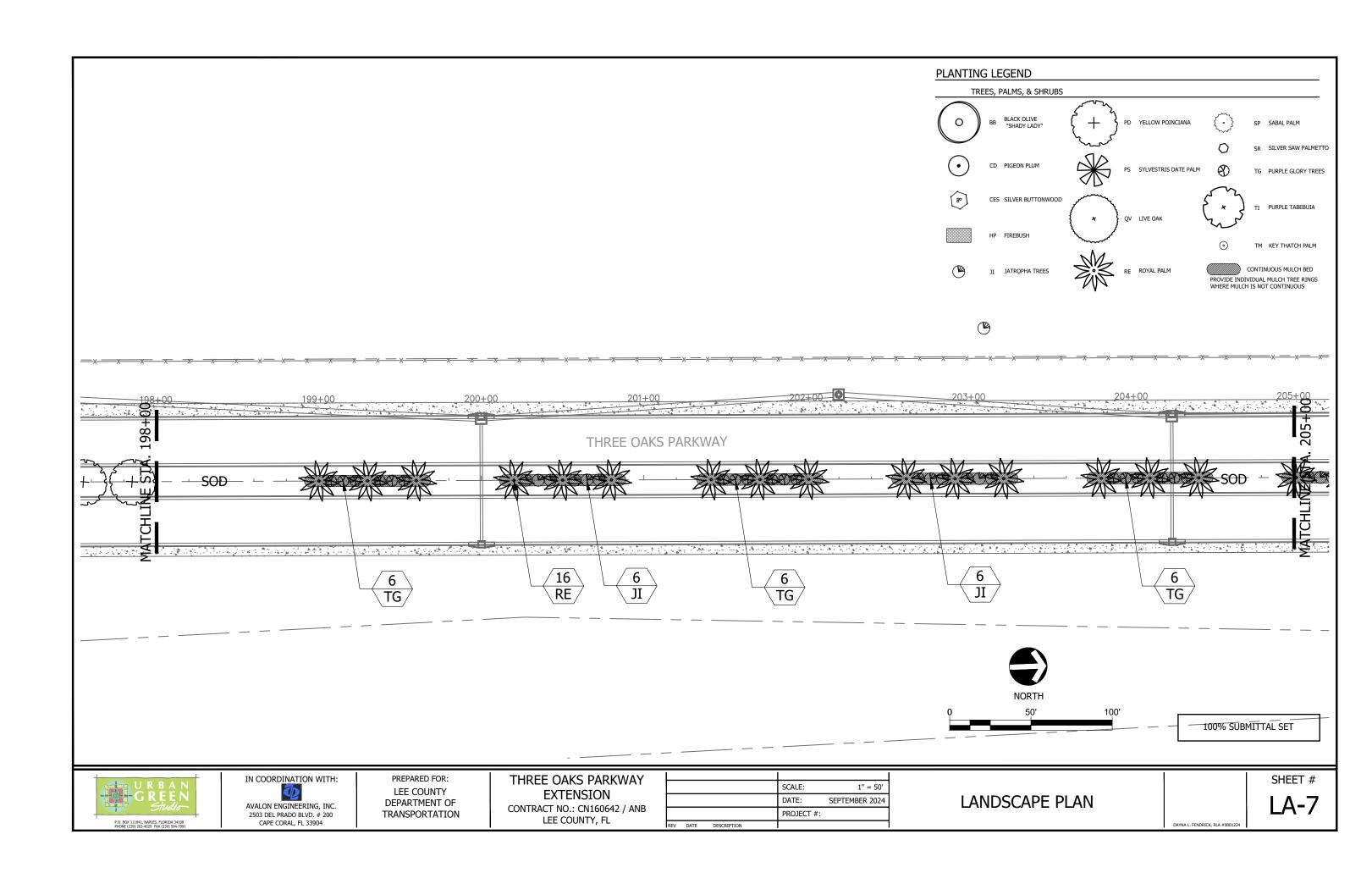


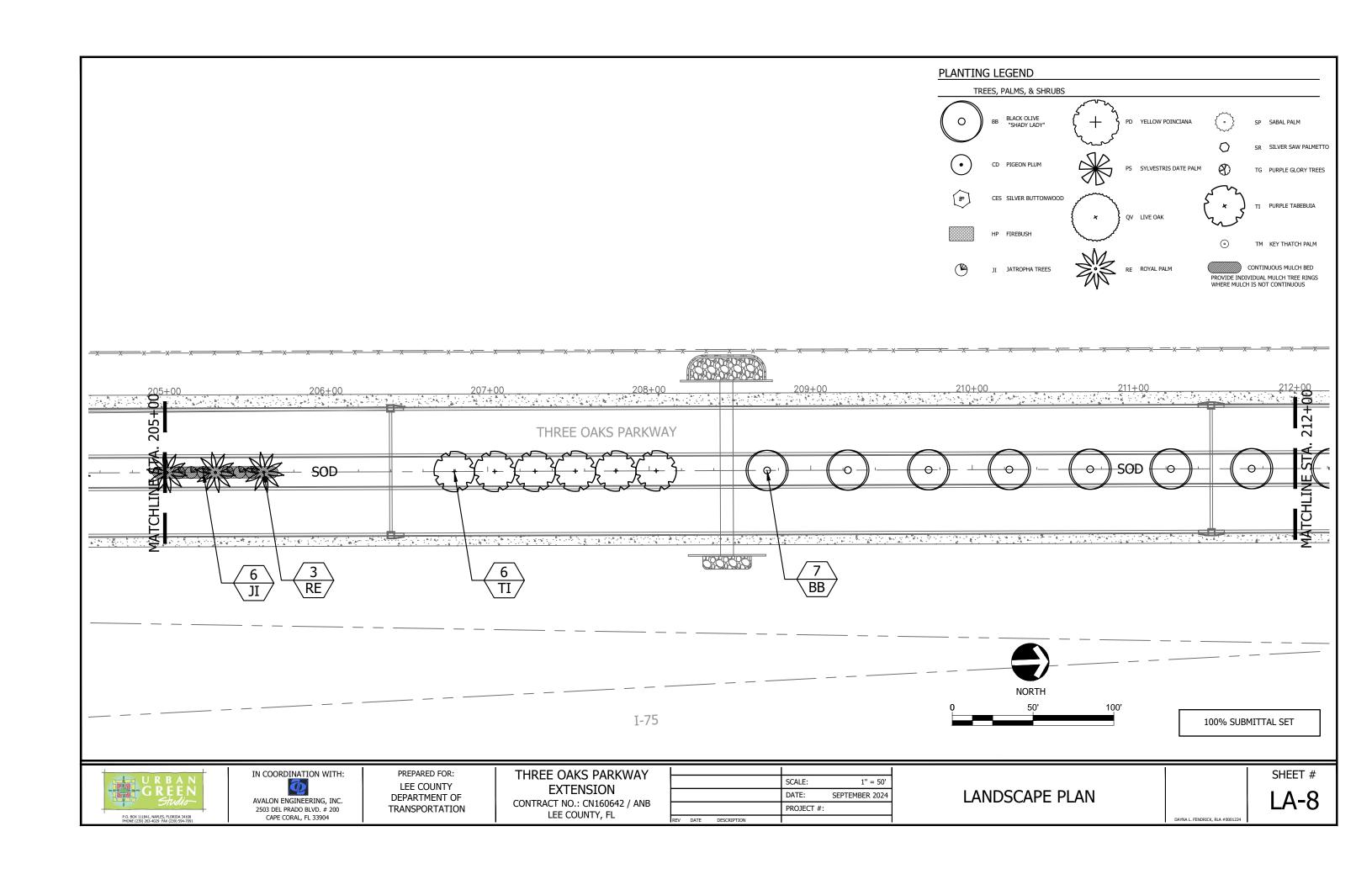


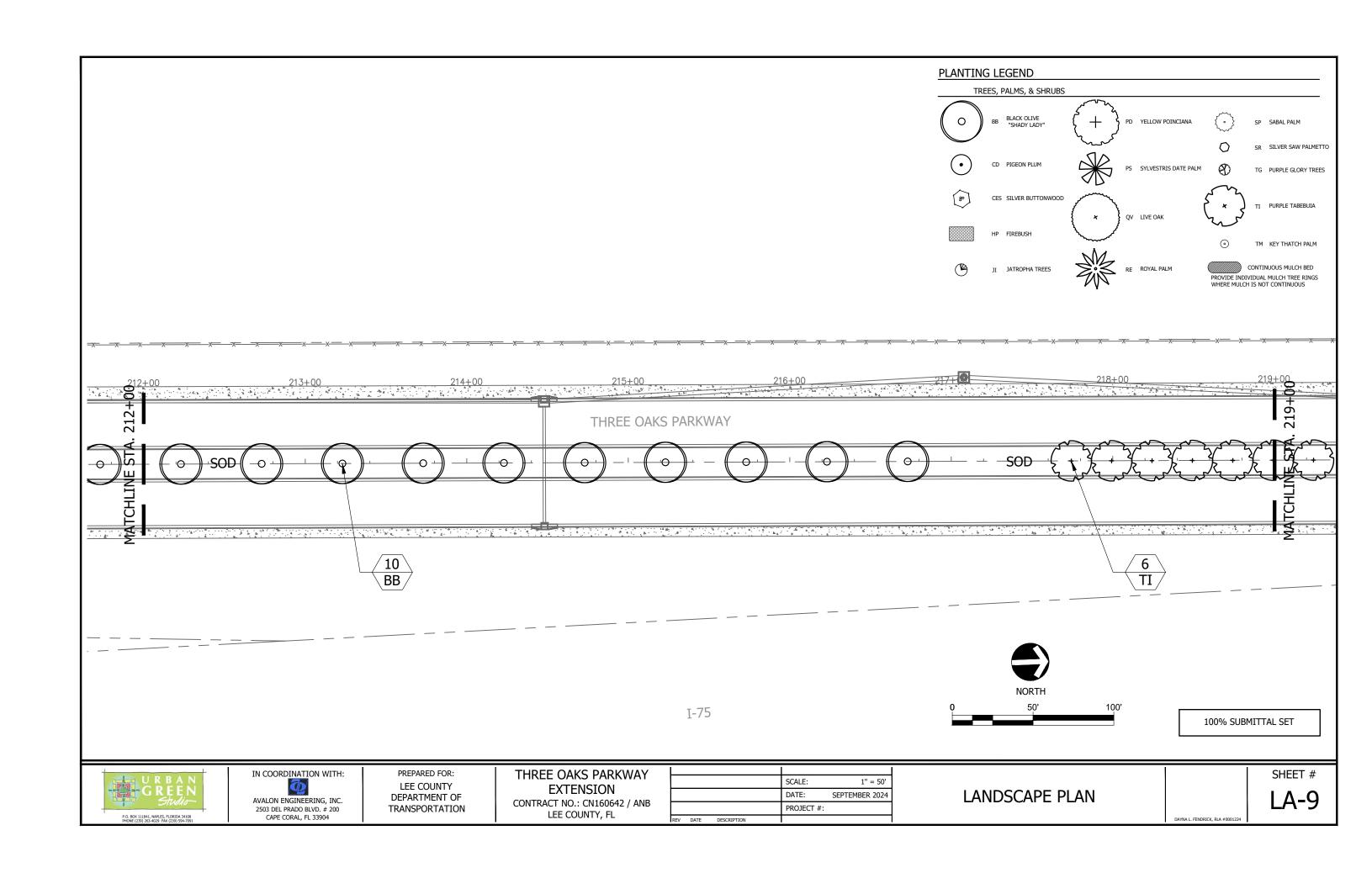


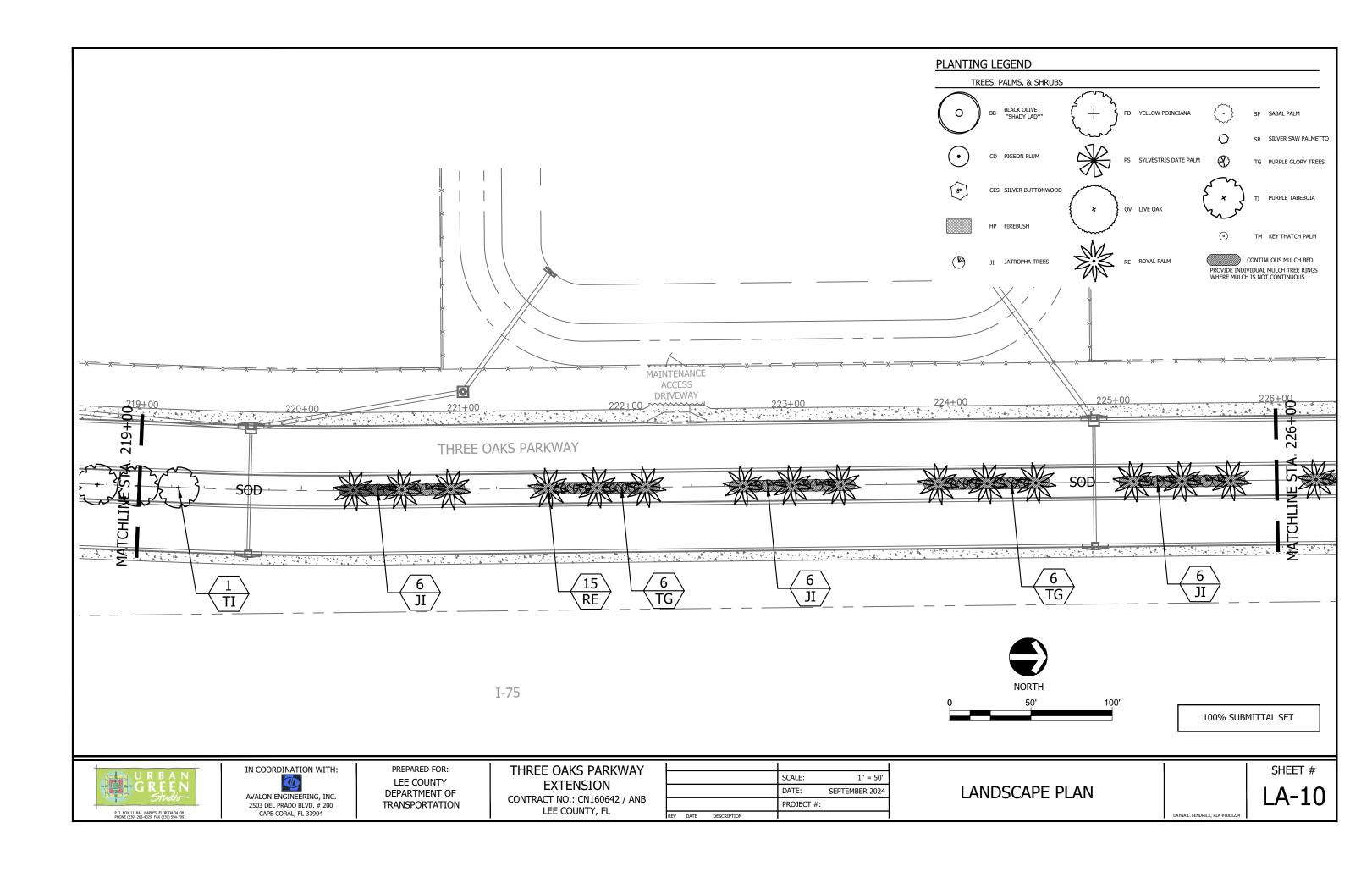


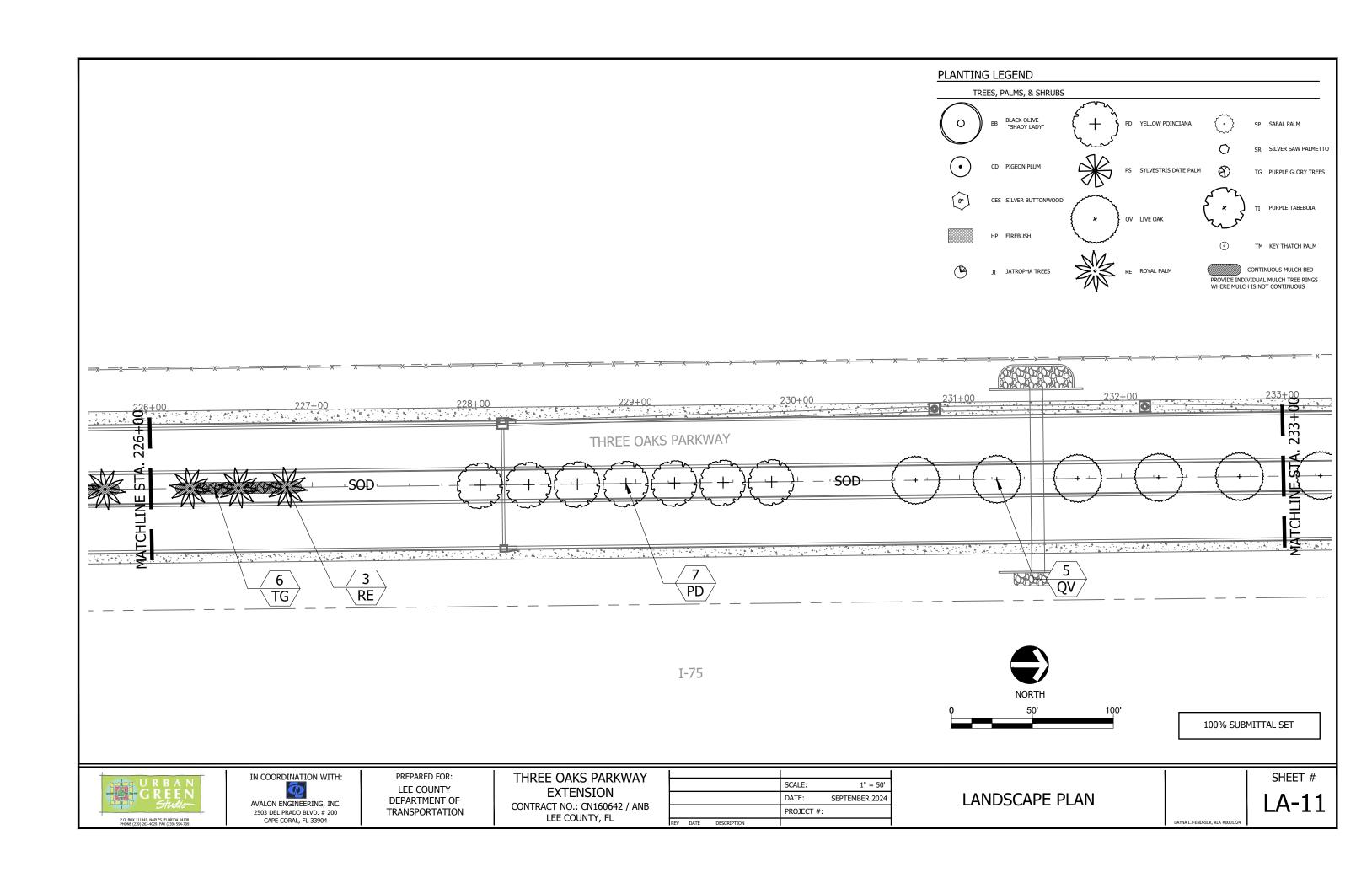


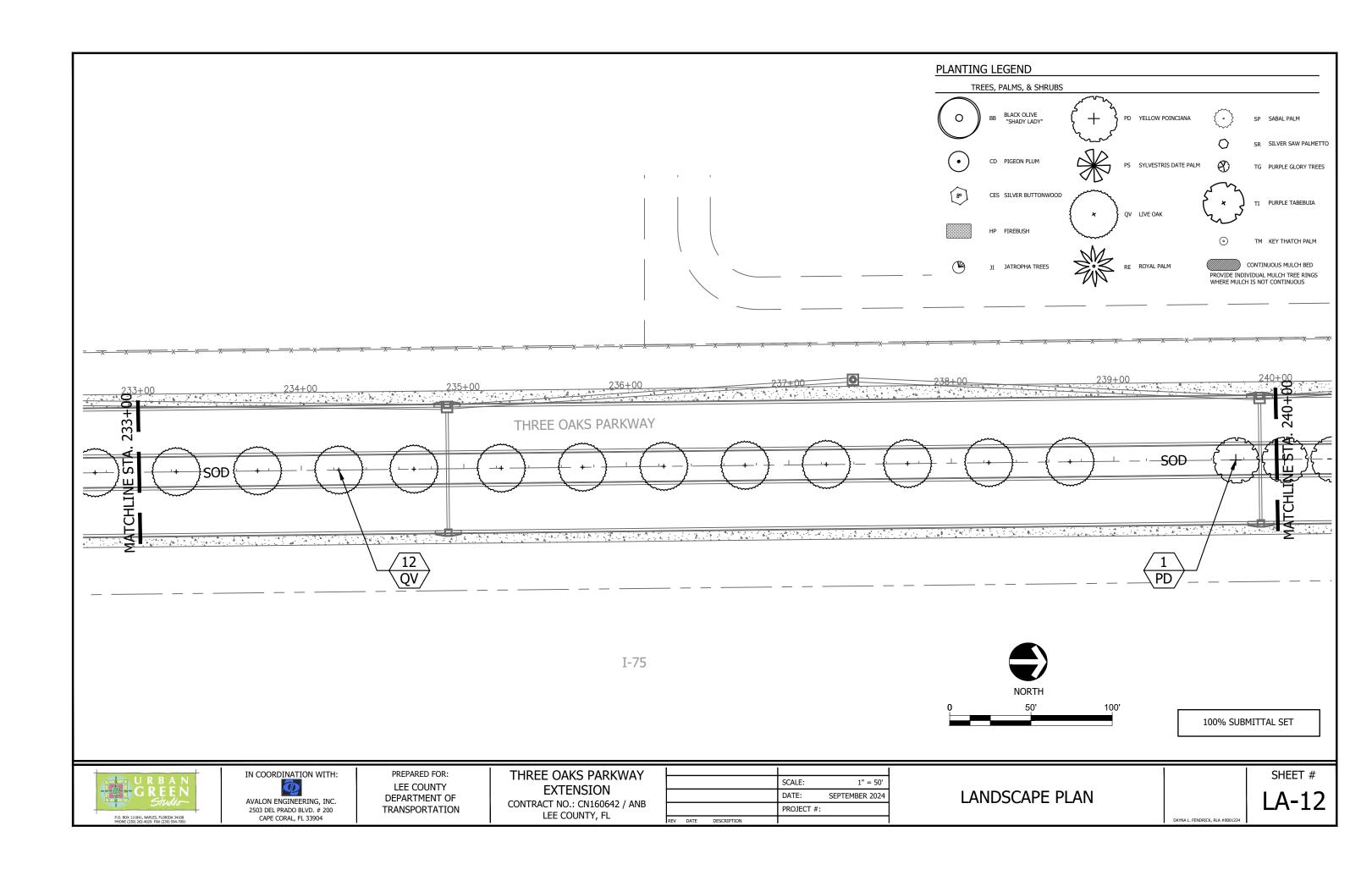


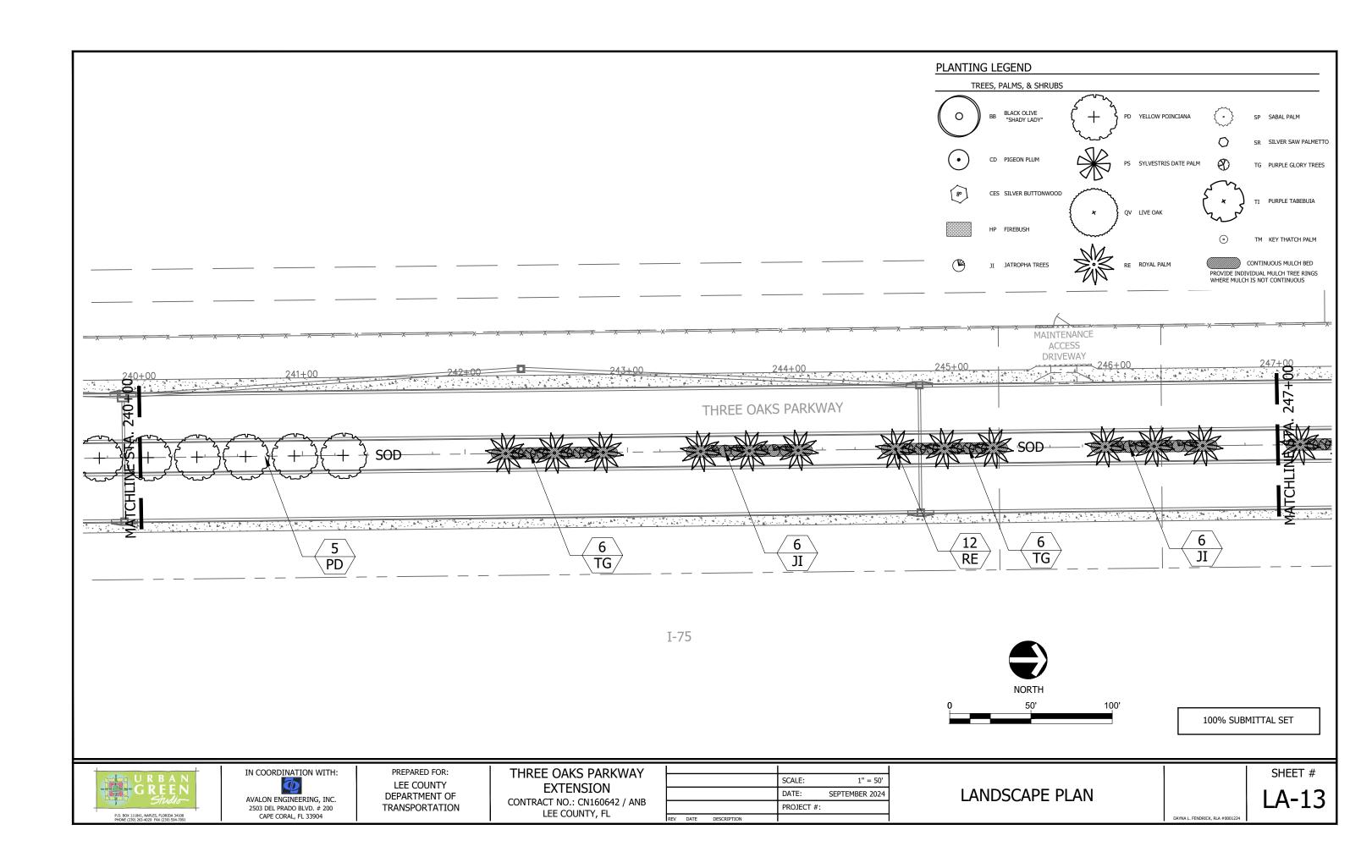


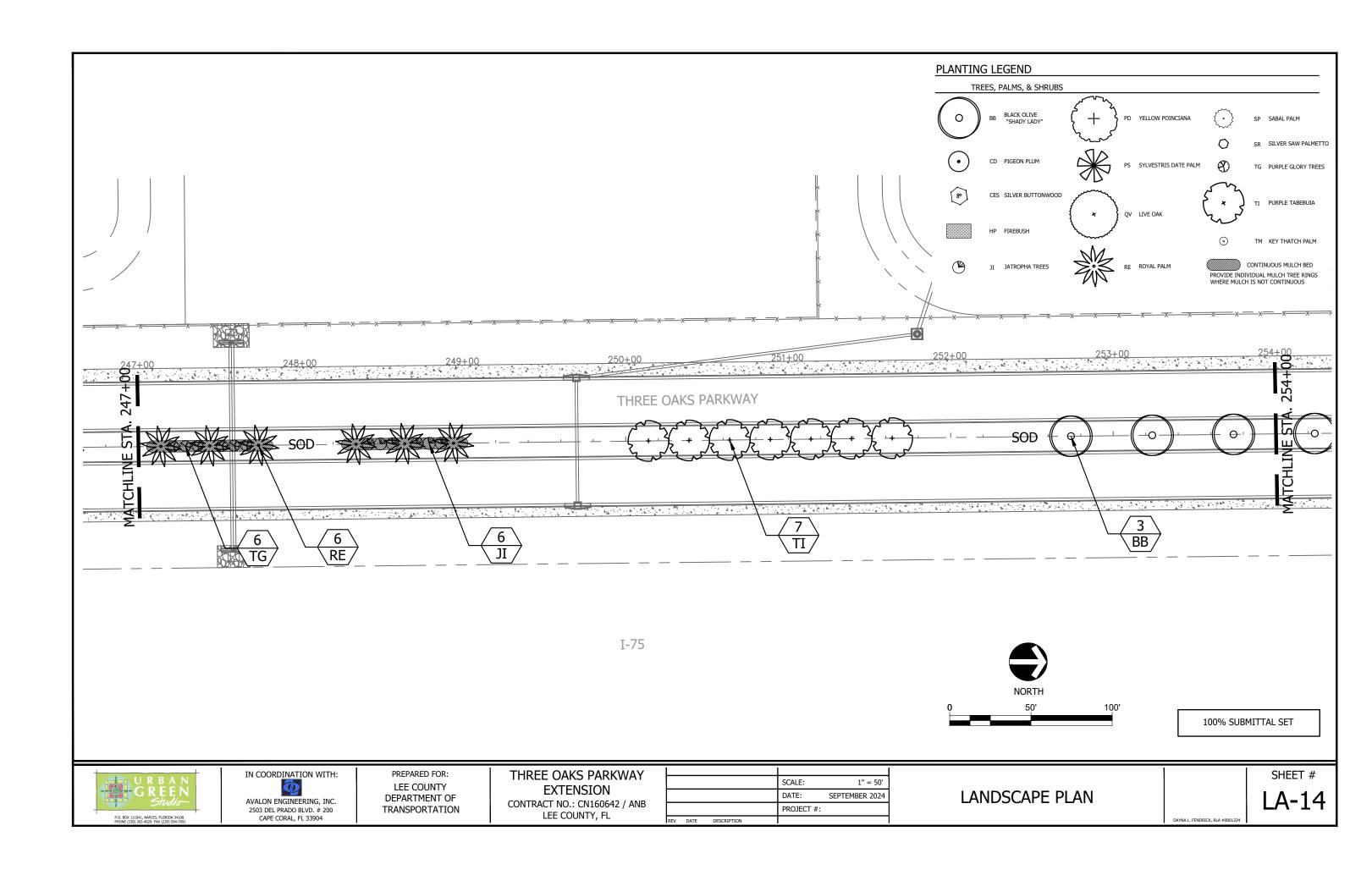


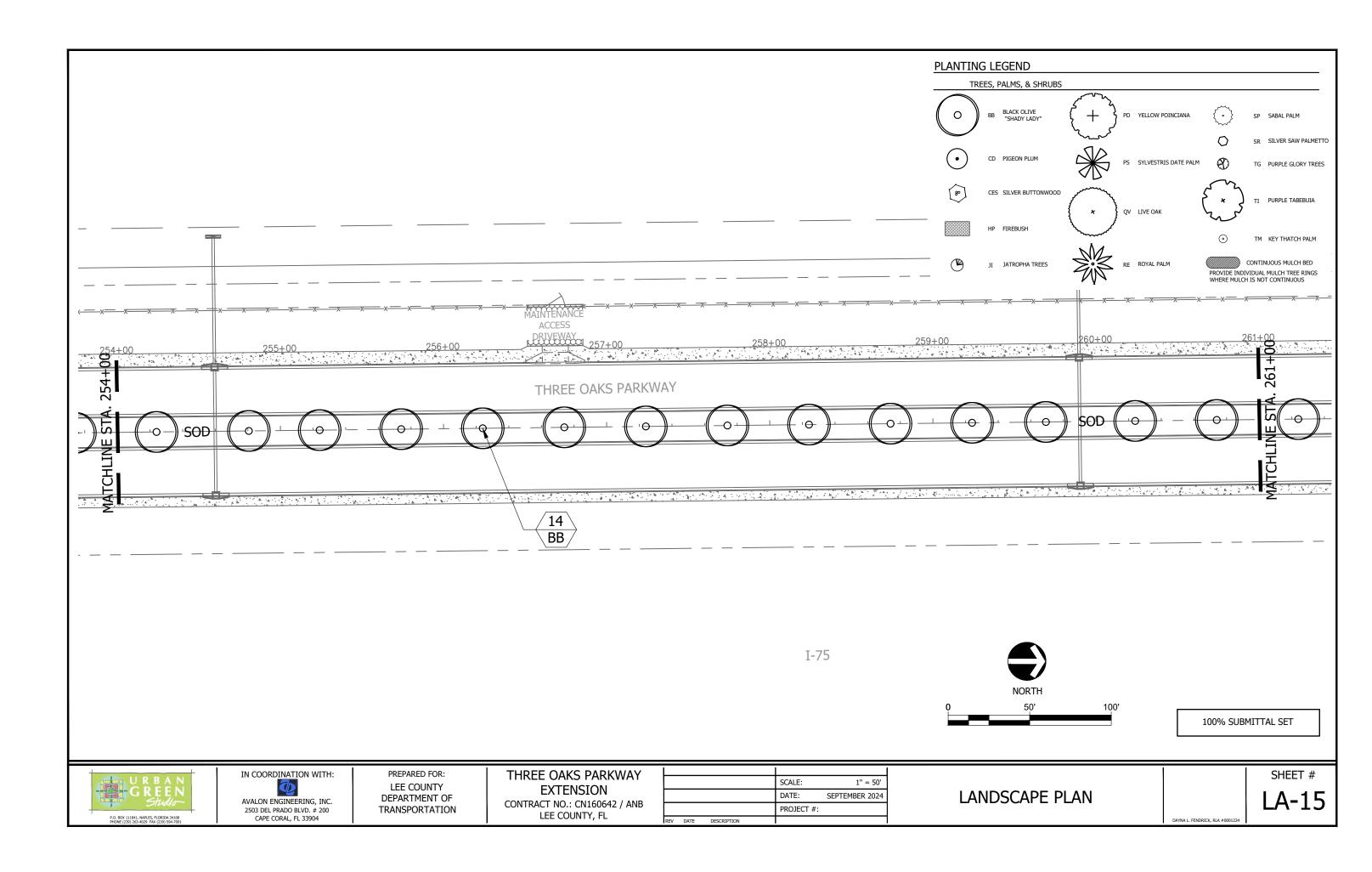


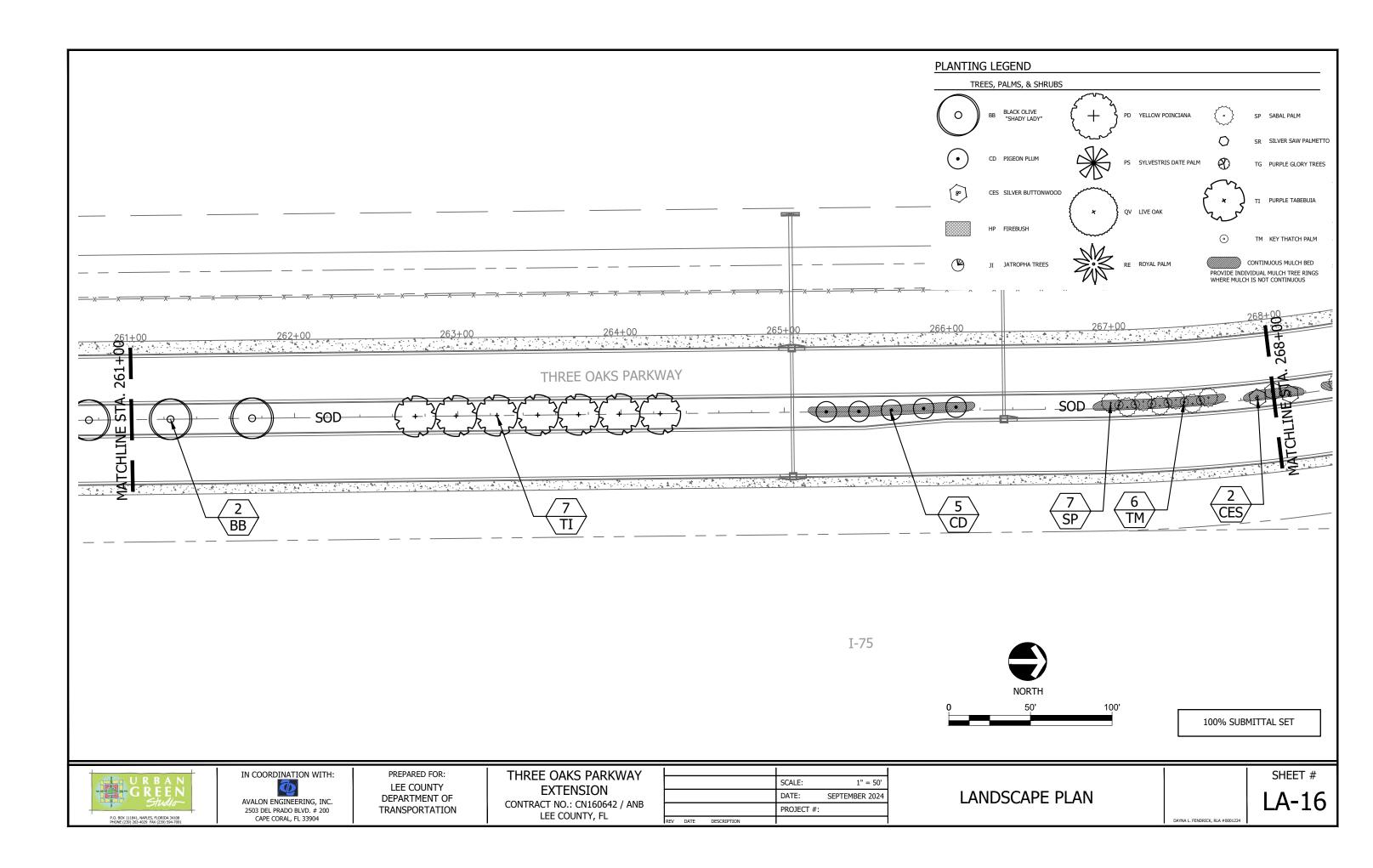


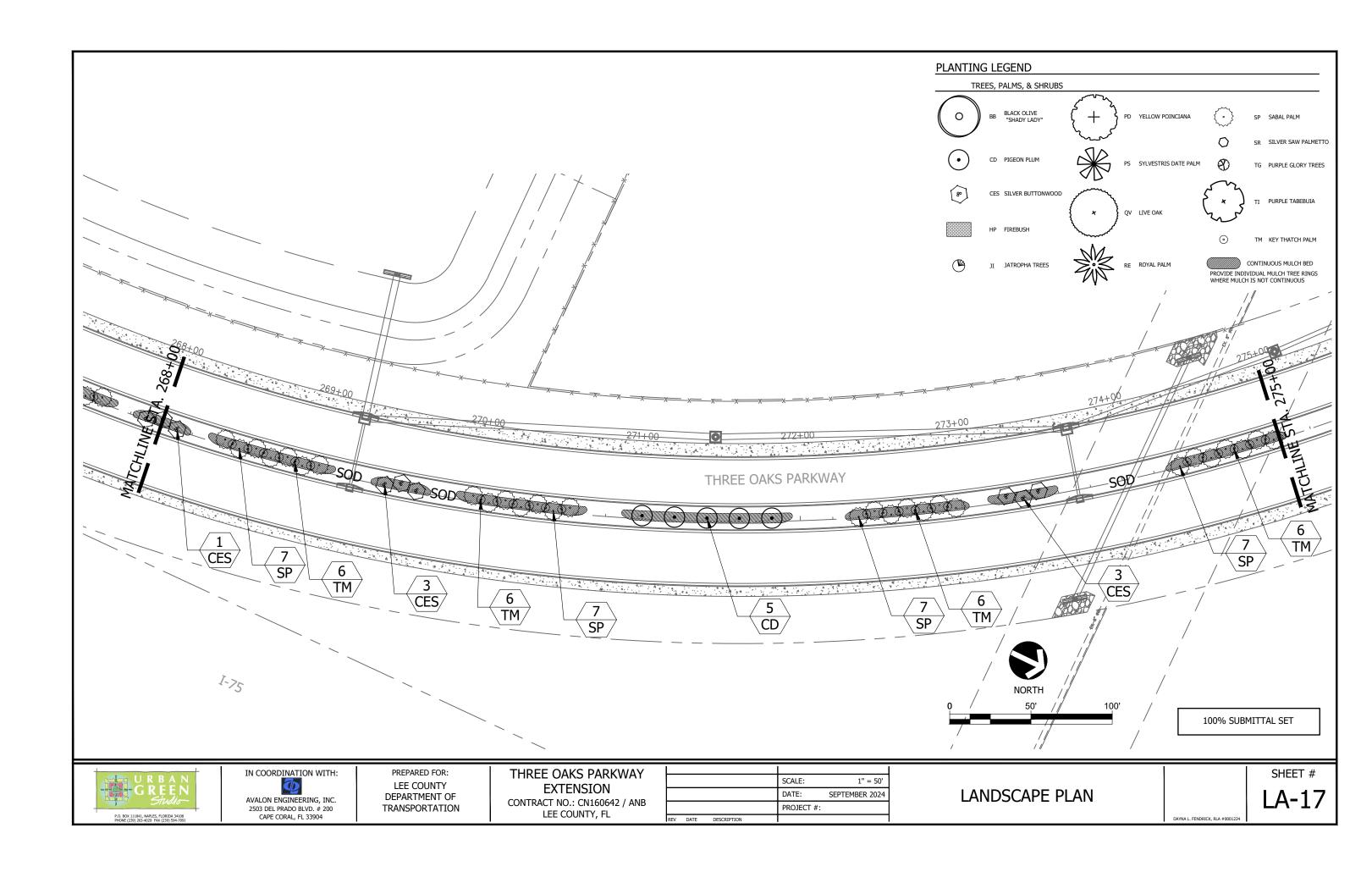


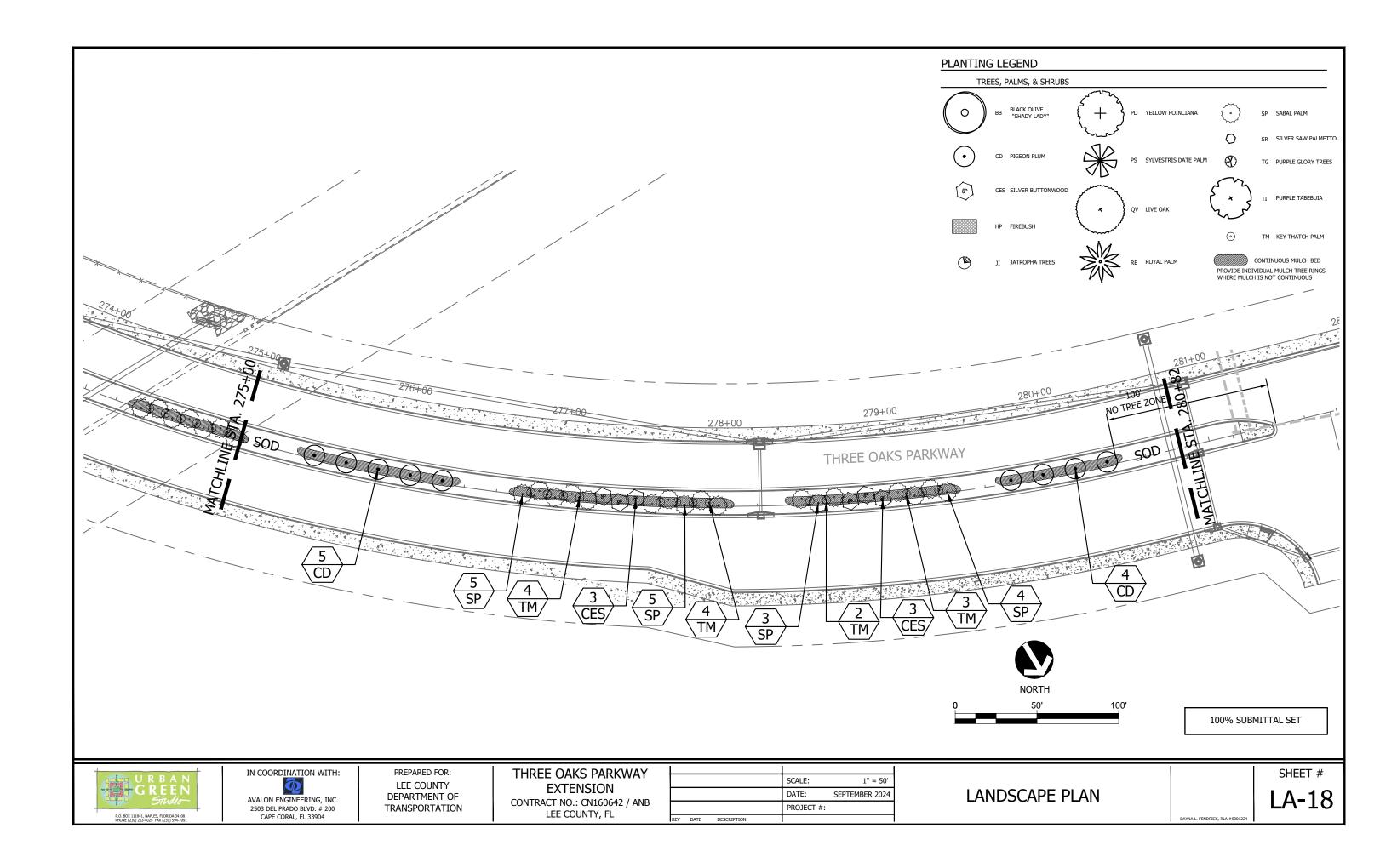


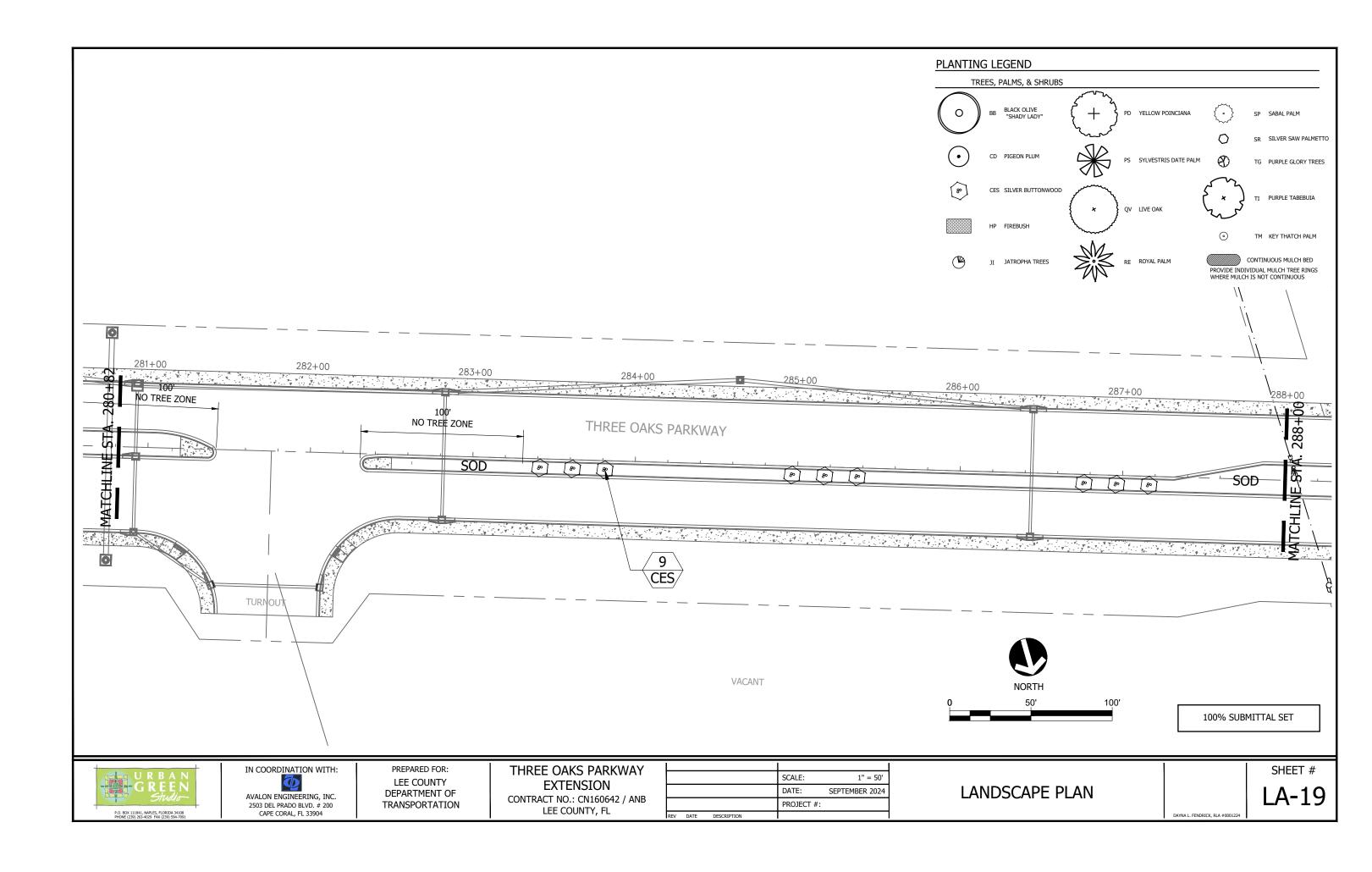


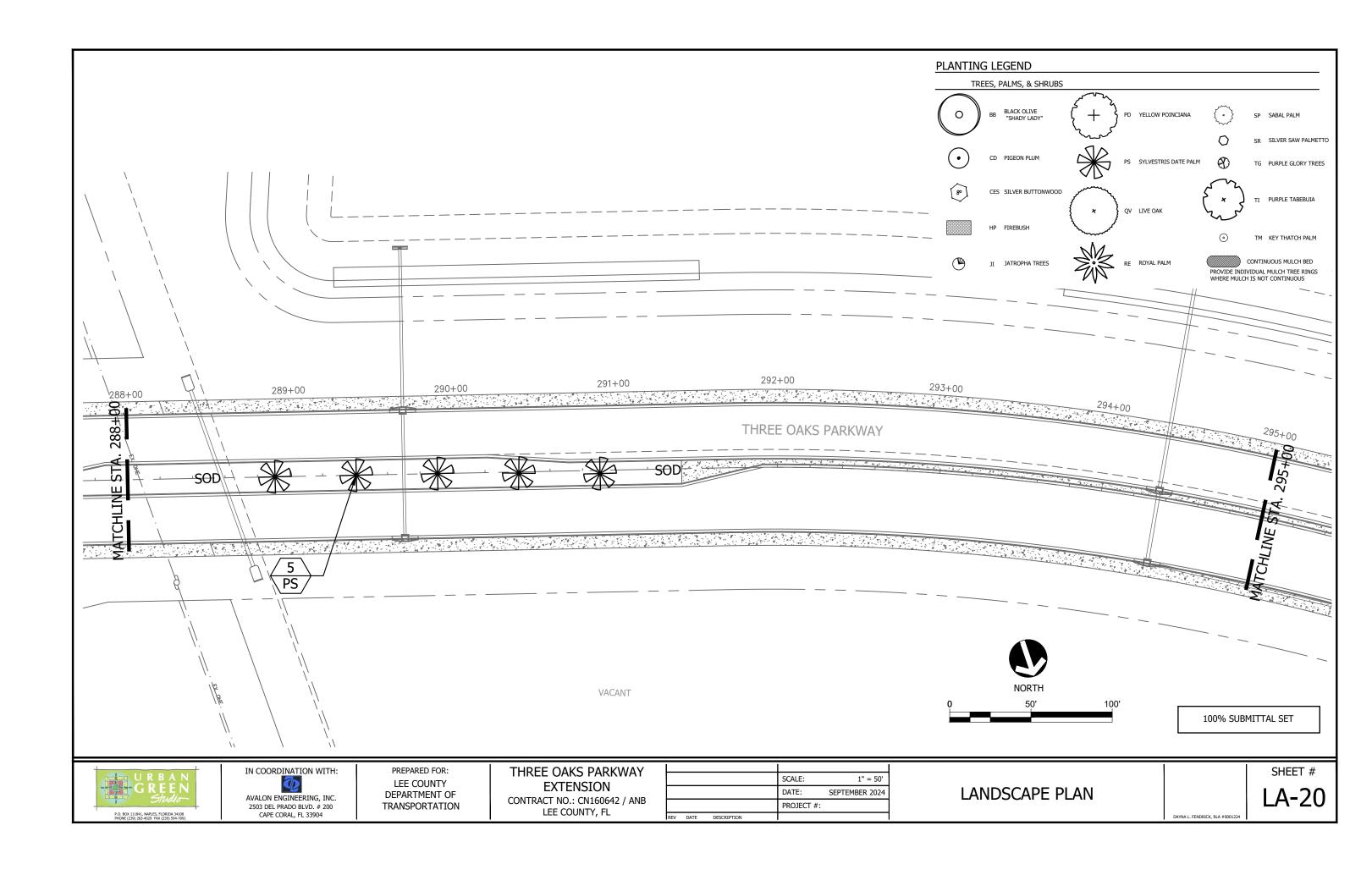


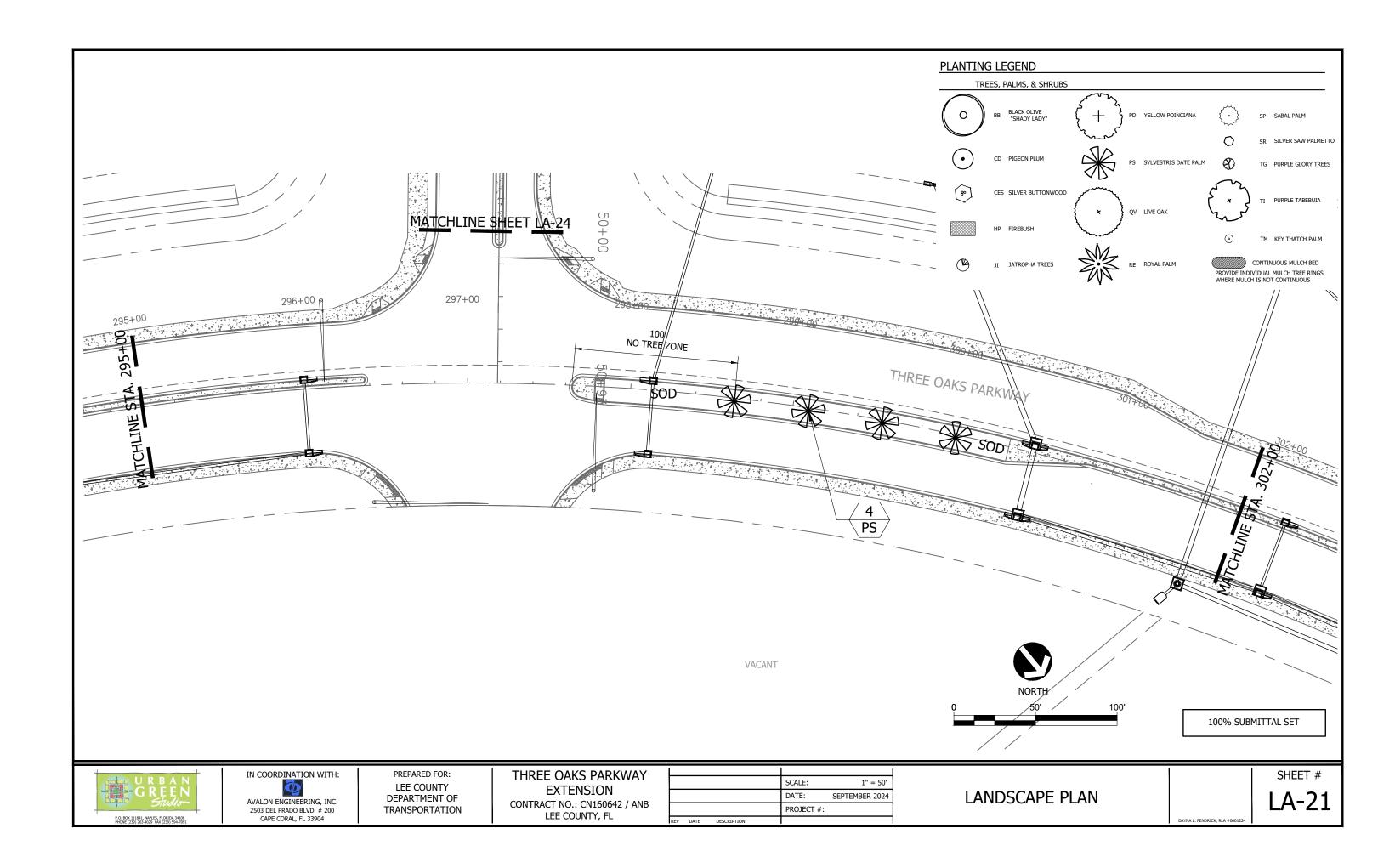


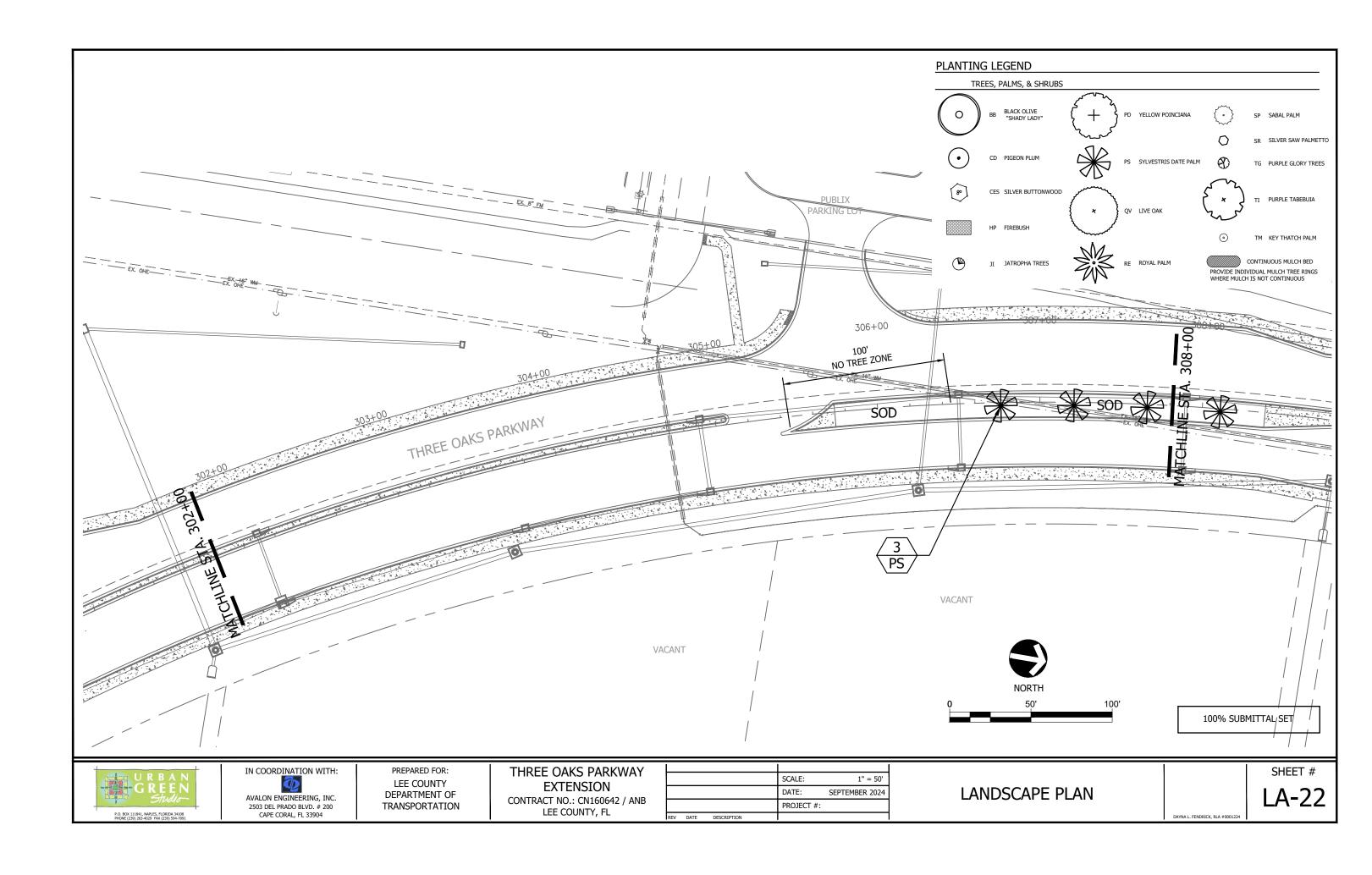


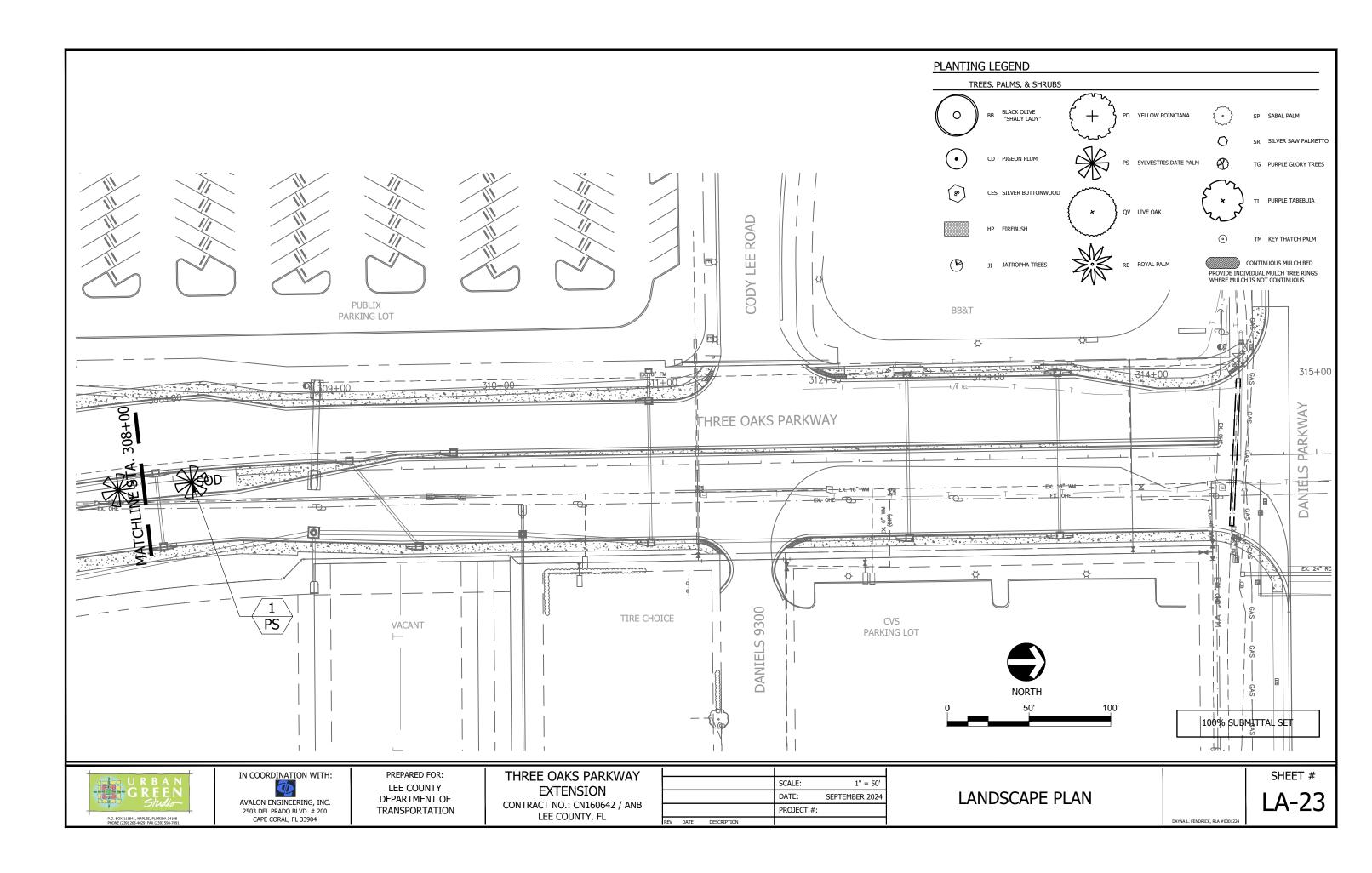


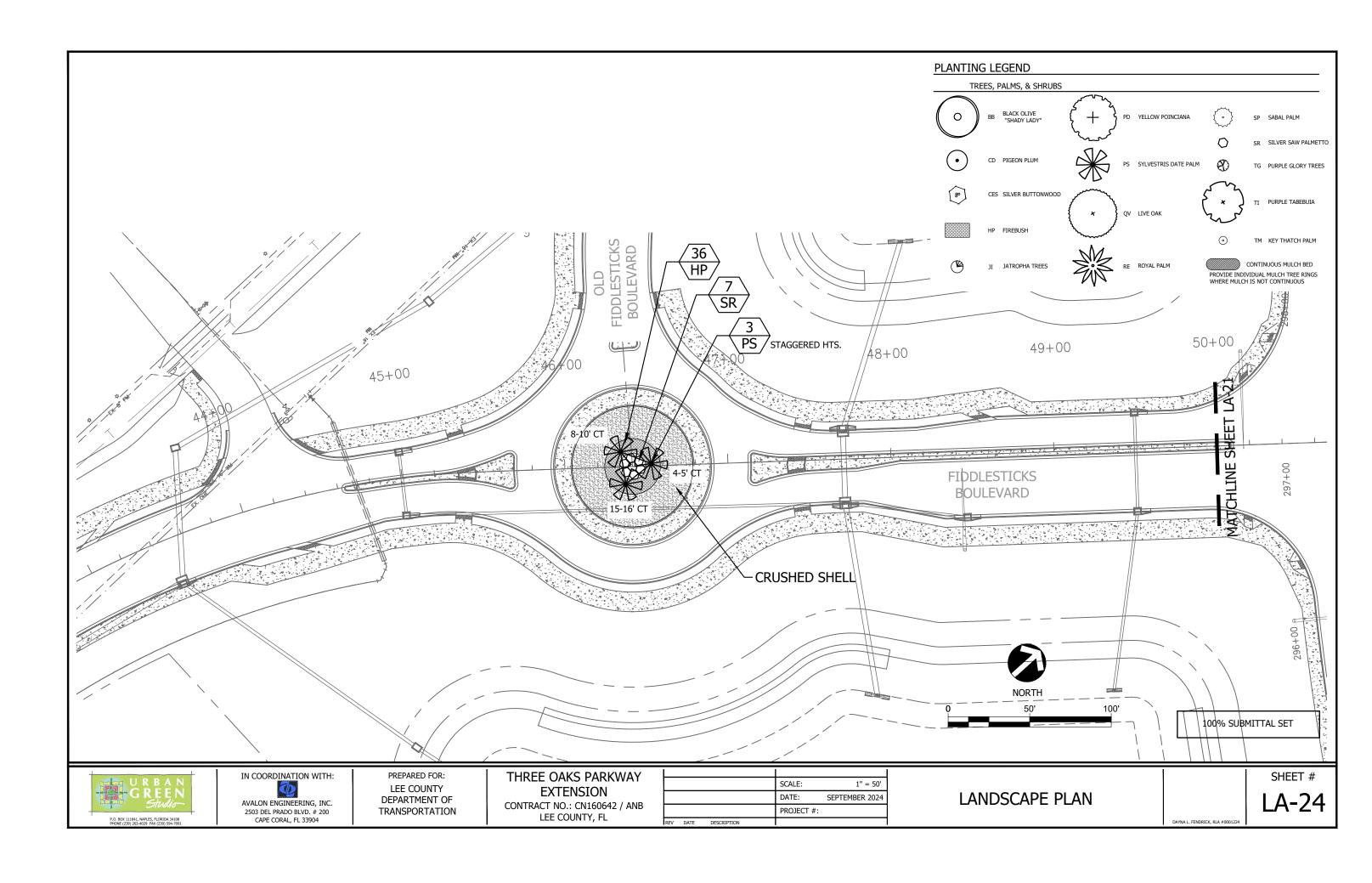


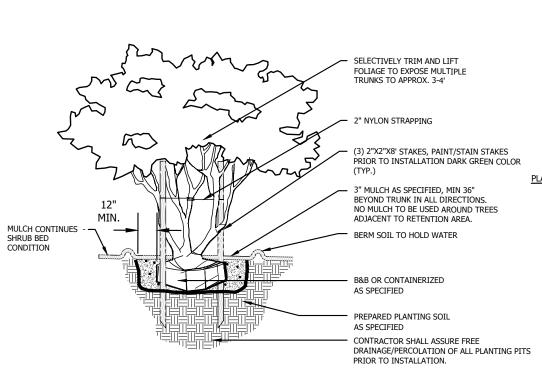












NOTES: 1. SABAL PALMS W/ BOOTS REMOVED HURRICANE CUT 2. FINAL TREE STAKING SABAL PALM DETAILS AND PLACEMENT TO BE APPROVED BY TWO LAYERS OF BURLAP LANDSCAPE ARCHITECT TO PROTECT TRUNK. 3. CONTRACTOR SHALL ASSURE TWO STEEL BANDS TO PERCOLATION OF ALL PLANTING PITS PRIOR TO SIX 2" X 4" X 18" WOOD INSTALLATION. BATTONS PAINTED BROWN THREE 2" X 4" LUMBER POLE BRACE @ 120 deg. - NAIL (DRILL AND NAIL IF NECESSARY) TO BATTONS AND 2" X 4" STAKES. FLAG AT PLAN MIDPOINT. MULCH AS SPECIFIED MIN. 36" FROM TRUNK BERM SOIL TO HOLD WATER 2" X 4" WOOD STAKES. FINISH GRADE PREPARED PLANTING SOIL AS SPECIFIED.

NOTES: REMOVE ALL FRONDS HANGING BELOW 1. FINAL TREE STAKING HORIZONTAL. DETAILS AND PLACEMENT TO BE APPROVED BY LANDSCAPE FIVE LAYERS OF ARCHITECT. BURLAP TO PROTECT TRUNK. 2. CONTRACTOR SHALL TWO STEEL ASSURE PERCOLATION OF BANDS TO SECURE ALL PLANTING PITS PRIOR TO INSTALLATION. BATTONS. SIX - 2" x 4" x 8"L WOOD BATTONS @ - 4" x 4" WOOD BRACES. NAIL TO BATTONS AND FLAG AT MIDPOINT USE - 3" MULCH AS SPECIFIED MIN. 3'-0" FROM TRUNK - BERM SOIL TO HOLD WATER 2" x 4" x 18"L WOOD FINISH GRADE -SEE GRADING PLANS PREPARED PLANTING SOIL AS SPECIFIED.

MULTI-TRUNK TREE PLANTING DETAIL

SABAL PALM PLANTING DETAIL

N.T.S.

ROYAL PALM PLANTING DETAIL

100% SUBMITTAL SET

IN COORDINATION WITH:

AVALON ENGINEERING, INC.

2503 DEL PRADO BLVD. # 200

CAPE CORAL, FL 33904

PREPARED FOR: LEE COUNTY DEPARTMENT OF TRANSPORTATION THREE OAKS PARKWAY
EXTENSION
CONTRACT NO.: CN160642 / ANB

LEE COUNTY, FL

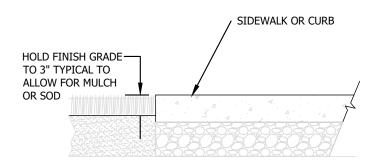
N.T.S.

			·	SCALE:	
				DATE:	SEPTEMBER 2024
				PROJECT #	#:
REV	DATE	DESCRIPTION			

LANDSCAPE DETAILS

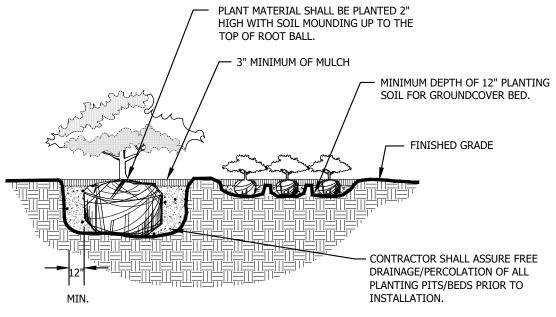
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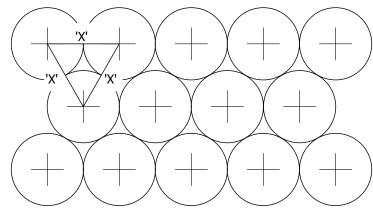


SOD / MULCH AT PAVEMENT EDGE

N.T.S.



SHRUBS AND GROUND COVER N.T.S.



ALL SHRUBS AND GROUNDCOVER MASSES TO USE TRIANGULAR SPACING EXCEPT WHERE NOTED REFER TO PLANT LIST FOR INDIVIDUAL PLANT SPACING 'X'.

TYPICAL PLANT SPACING

100% SUBMITTAL SET



IN COORDINATION WITH:

PREPARED FOR: LEE COUNTY DEPARTMENT OF AVALON ENGINEERING, INC. 2503 DEL PRADO BLVD. # 200 CAPE CORAL, FL 33904 TRANSPORTATION THREE OAKS PARKWAY **EXTENSION**

CONTRACT NO.: CN160642 / ANB LEE COUNTY, FL

			SCALE:	
			DATE:	SEPTEMBER 2024
			PROJECT #:	
REV	DATE	DESCRIPTION		

LANDSCAPE DETAILS

SHEET # LA-26

SPECIFICATIONS

- PRIOR TO CONSTRUCTION, THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR CONTACTING SUNSHINE ONE (CALL 811, OR TOLL FREE 800-432-4770), LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING CONSTRUCTION. SHOULD THE LANDSCAPE CONTRACTOR CAUSE DAMAGE TO ANY UTILITIES, NECESSARY REPAIRS SHALL BE MADE AS QUICKLY AS PRACTICABLE, AT LANDSCAPE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS NOT PROVIDED FOR BY THE OWNER PRIOR TO COMMENCING ANY WORK
- THE CONTRACTOR IS RESPONSIBLE FOR TESTING THE pH OF THE WELL WATER PRIOR
- THE CONTRACTOR IS RESPONSIBLE FOR KEEPING A FULL SIGNED AND SEALED PLAN SET ON SITE AT ALL TIMES. THE CONTRACTOR SHALL MAINTAIN A REDLINED COPY OF ALL FIELD ADJUSTMENTS MADE, AND PROVIDE A COPY OF THE REDLINED PLANS TO THE LANDSCAPE ARCHITECT FOR PREPARING THE AS-BUILT PLANS AT THE COMPLETION OF THE 10B
- THE CONSTRUCTION BID PRICES FOR ITEMS THAT REQUIRE DEMOLITION AND/OR REMOVAL OF EXISTING MATERIALS SHALL INCLUDE THE COST OF DEMOLITION AND PROPER DISPOSAL OF THE EXISTING MATERIALS, SUCH AS PLANTINGS, ASPHALT, LIMESTONE, FILL DIRT, AND CONCRETE.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING, IN FULL ALL PLANTING AREAS (INCLUDING WATERING, SPRAYING, MULCHING, MOWING, FERTILIZING, ETC.) UNTIL HE JOB IS ACCEPTED BY THE OWNER AND LANDSCAPE ARCHITECT
- ALL PLANT MATERIAL SHALL BE OF FLORIDA NO. 1 OR BETTER QUALITY AT TIME OF INSTALLATION AND SHALL BE MAINTAINED IN THIS SAME CONDITION UNTIL FINAL ACCEPTANCE. DECLINE IN CONDITION OF PLANT MATERIAL DURING THE MAINTENANCE PERIOD SHALL BE GROUNDS FOR REJECTION AND REPLACEMENT.
- PRIOR TO PURCHASE AND/OR DELIVERY TO THE SITE. THE LANDSCAPE ARCHITECT AND AN OWNER'S REPRESENTATIVE WILL ACCOMPANY THE CONTRACTOR TO FIELD TAG GUMBO LIMBO TREES AND BUCCANEER PALMS. THE CONTRACTOR SHALL PREVIEW THE POTENTIAL NURSERY SOURCES AND NARROW DOWN THE SELECTION TO THE TWO OR THREE BEST QUALITY SOURCES
- SAMPLES OF ALL PLANT AND HARDSCAPE MATERIAL TO BE SUBMITTED FOR OWNER AND/OR LANDSCAPE ARCHITECT APPROVAL PRIOR TO INSTALLATION.
- 10. SAMPLES OF ALL PLANT AND HARDSCAPE MATERIAL TO BE SUBMITTED FOR OWNER AND/OR LANDSCAPE ARCHITECT APPROVAL PRIOR TO INSTALLATION.
- 11. ALL OUANTITIES INDICATED ON THE PLANS ARE INTENDED AS A GUIDE FOR THE BIDDER AND DOES NOT RELIEVE THE BIDDER OF HIS RESPONSIBILITY TO DO A COMPREHENSIVE PLANT QUANTITY TAKE OFF. IN THE CASE OF A CONFLICT BETWEEN THE DRAWINGS AND THE BID FORM, THE DRAWINGS SHALL GOVERN.
- 12. AFTER RECEIPT OF BIDS, PRICES FOR ANY QUANTITIES ADDED TO OR DELETED FROM THE BID SCHEDULE BY THE LANDSCAPE ARCHITECT WILL BE BASED ON THE UNIT PRICE SCHEDULE SUBMITTED BY CONTRACTOR.

MAINTENANCE OF TRAFFIC CONTROL NOTES:

- THE PREPARATION OF THE TRAFFIC CONTROL PLAN FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE 2003 EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD PART VI. TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION), AS REVISED TO DATE. FOR GENERAL TRAFFIC CONTROL ZONE REQUIREMENTS AND ADDITIONAL INFORMATION, REFER TO THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) BOOKLET "DESIGN STANDARDS" DATED JANUARY 2006 INDEX NOS. 600 THROUGH 660, AS APPLICABLE AND PER COLLIER COUNTY M.O.T. POLICY.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PREPARATION OF THE TRAFFIC CONTROL PLAN (T.C.P.), THE COST OF WHICH SHALL BE INCLUDED IN PAY ITEM-MAINTENANCE OF TRAFFIC. THE T.C.P. SHALL BE PREPARED BY AN INDIVIDUAL WITH THE ADVANCED FDOT "WORK ZONE TRAFFIC CONTROL" CERTIFICATION. THIS PLAN SHALL BE SUBMITTED TO THE PROJECT MANAGER FOR APPROVAL WITH THE APPLICATION FOR THE RIGHT-OF-WAY PERMIT.

MEDIAN GRADING AND SOIL PREPARATION SPECIFICATIONS:

- (16) SOIL BORINGS HAVE BEEN PERFORMED ON SITE. THE SOILS REPORT. WHICH INDICATES pH, SOIL COMPOSITION AND PERCOLATION RATES, WILL BE MADE
- 2. IF ANY LIMEROCK BASE MATERIAL, ROCK, OR OTHER DELETERIOUS MATERIALS ARE ENCOUNTERED DURING GRADING, IRRIGATION, OR PLANTING, THOSE MATERIALS MUST BE REMOVED AND DISPOSED OF OFF-SITE. ANY COMPACTED FILL OR SUBGRADE MUST BE PIERCED THROUGH COMPLETELY TO ALLOW FOR PERCOLATION
- INSTALL IRRIGATION MAIN LINES, WIRING, AND STUB UP VALVE LOCATIONS TO WITHIN EIGHT INCHES OF EXISTING SURFACE GRADE
- SPRAY EXISTING MEDIANS WITH CONTACT HERBICIDE FOR 100% KILL OF EXISTING GRASS AS APPROVED BY LANDSCAPE ARCHITECT AND MAINTAIN MEDIANS WEED-FREE DURING INSTALLATION UNTIL FINAL ACCEPTANCE.
- CUT EXISTING SOIL BEHIND BACK OF CURBING IF REQUIRED TO PROPOSED 2" DEPTH AND SPREAD CUT INWARD TOWARD THE CENTER OF THE MEDIAN AND ROUGH GRADE
- ROTOR TILL MEDIAN TO AN 8-10" DEPTH TO WITHIN 18 INCHES OF THE BACK OF CURBING. ROTOR TILLING MEANS 6 TOTAL PASSES OF THE AREA TILLED WITH REVERSE ROTOR TYPE TILLER OR DISC PLOW.
- FINE GRADE MEDIANS TO PROPOSED PROFILES AND REMOVE ALL DEBRIS LARGER THAN 1 INCH IN DIAMETER FROM WITHIN THE TOP 4 INCHES OF THE FINISHED
- 8. ADD FINISHED SOIL LAYER MATERIAL AS REQUIRED TO PROVIDE FOR PROPOSED GRADES/PROFILES. MAKE ONE MORE PASS WITH ROTOR TILLER/DISC TO MIX ADDITIONAL TOPSOIL INTO EXISTING SOIL.
- TOPSOIL SHALL NOT BE EXTREMELY ACIDIC OR ALKALINE, NOR CONTAIN TOXIC SUBSTANCES WHICH MAY BE HARMFUL TO PLANT GROWTH. THE pH SHALL BE IN THE RANGE OF 6.5 TO 7.5. IF NECESSARY, THE CONTRACTOR TOPSOIL DH SHALL APPLY THE APPROPRIATE SOIL AMENDMENTS ADJUSTING SOIL pH TO ASSURE A pH RANGE
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING TOPSOIL TESTED. REPRESENTATIVE SAMPLES ARE TO BE TESTED FOR ACIDITY, FERTILITY, AND GENERAL COMPOSITION BY A RECOGNIZED COMMERCIAL OR GOVERNMENT AGENCY THE CONTRACTOR SHALL FURNISH ONE (1) COPY OF THE SOIL ANALYSIS AND RECOMMENDED AMENDMENTS (TO MEET THE DESIRED pH, NUTRITIONAL AND ORGANIC LEVELS DETERMINED TO BE ADEQUATE FOR THE AREA) PREPARED BY THE TESTING AGENCY, TO THE LANDSCAPE ARCHITECT PRIOR TO APPLICATION OF ANY AMENDMENTS OR FERTILIZER.
- 11. TOPSOIL SHALL BE NATURAL, FERTILE, AGRICULTURAL SOIL CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH. IT SHALL BE OF UNIFORM COMPOSITION THROUGHOUT, WITHOUT ADMIXTURE OF SUBSOIL, CLAY, STONES, LUMPS, LIVE PLANTS AND THEIR ROOTS, STICKS, AND OTHER EXTRANEOUS MATTER. REMOVE ALL ROCKS AND OTHER OBJECTS OVER 1 INCH IN DIAMETER.
- 12. INSTALLATION OF SHELL TO TAKE PLACE AFTER IRRIGATION TRENCHING, GRADING & PLANTING AND MULCHING OPERATIONS. TAKE CARE TO KEEP A CLEAN SHELL SURFACE AND AVOID DIRT AND DEBRIS FROM CONTAMINATING SHELL AREA.
- 13. INSTALL EDGING PRIOR TO MULCHING AND SHELL PLACEMENT.

PLANTING

- 1. ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS AND DISEASES. ALL PLANT MATERIAL SHALL BE IN FULL AND STRICT ACCORDANCE TO FLORIDA NO. 1 GRADE, ACCORDING TO THE "GRADES AND STANDARD FOR NURSERY PLANTS", 1998 2ND EDITION, PUBLISHED BY FLORIDA DEPARMENT OF AGRICULTURE AND CONSUMER SERVICES. PLANT MATERIALS IN SOME INSTANCES EXCEED NO. 1 GRADE IN ORDER TO MEET THE MINIMUM REQUIREMENTS OF THIS PROJECT.
- ALL PLANTS NOT LISTED IN GRADES AND STANDARDS FOR NURSERY PLANTS, 1998, 2ND EDITION, SHALL CONFORM TO A FLORIDA NO. 1 AS TO: 1, HEALTH AND VITALITY; 2. CONDITION OF FOLIAGE; 3. ROOT SYSTEM; 4. FREEDOM FROM PEST OF MECHANICAL DAMAGE: 5. HEAVILY BRANCHED AND DENSELY FOLIATED ACCORDING TO THE ACCEPTED NORMAL SHAPE OF THE SPECIES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTS MEETING SPECIFICATION AS NOTED PRIOR TO INSTALLATION. CONTRACTOR SHALL IMMEDIATELY REMOVE ALL PLANT MATERIAL THAT DOES NOT CONFORM TO SPECIFICATIONS.
- ALL ROOTBALLS SHALL CONFORM TO THE SIZE STANDARDS SET FORTH IN "AMERICAN STANDARDS FOR NURSERY STOCK".
- ALL PLANT MATERIAL SHALL BE PROTECTED DURING TRANSPORT AND DELIVERY TO JOB SITE WITH SHADE CLOTH OR OTHER ACCEPTABLE MEANS OF WINDBURN PREVENTION.
- CONTRACTOR SHALL FIELD VERIFY ALL INFORMATION PRIOR TO INITIATING PLANTING INSTALLATION. ALL EXISTING PLANTING SHALL REMAIN INTACT AND LINDISTURBED LINESS OTHERWISE NOTED ON THE PLANS
- ALL TREES MUST BE STRAIGHT TRUNKED, FULL HEADED, AND MEET ALL
- ANY SUBSTITUTIONS IN SIZE AND/OR PLANT MATERIAL MUST BE APPROVED BY THE LANDSCAPE ARCHITECT AND OWNER. ALL PLANTS WILL BE SUBJECT TO APPROVAL BY LANDSCAPE ARCHITECT BEFORE PLANTING CAN BEGIN.
- THE CONTRACTOR SHALL FIELD STAKE THE LOCATION OF ALL PLANT MATERIAL AND BEDLINES PRIOR TO INITIATING INSTALLATION FOR THE REVIEW AND APPROVAL OF THE LANDSCAPE ARCHITECT.
- TYPICALLY, SHRUB AND GROUNDCOVER PLANTINGS ARE SHOWN AS MASS PLANTING BEDS. PLANTS SHALL BE PLACED ON A TRIANGULAR SPACING CONFIGURATION (STAGGERED SPACING) AS SHOWN IN THE PLANTING DETAILS. PLANT CENTER TO CENTER DIMENSIONS (O.C.) ARE LISTED ON THE PLANT LIST
- INSTALLATION ALL PLANT MATERIAL SHALL BE INSTALLED IN A SOUND. WORKMANLIKE MANNER AND ACCORDING TO ACCEPTED 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
- 12. CONTRACTOR SHALL ASSURE DRAINAGE AND PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION OF PLANT MATERIAL. CONTRACTOR SHALL FILL ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE THAT PROPER DRAINAGE AND PERCOLATION IS AVAILABLE. CORRECT IF REQUIRED TO ASSURE PERCOLATION. CONTRACTOR IS RESPONSIBLE FOR REPLACEMENT OF ALL PLANTS LOST DUE TO INADEQUATE DRAINAGE CONDITIONS
- 13. TREES GROWN IN GROW BAGS OR GROW BAG TYPE MATERIAL MUST HAVE THE GROW BAG REMOVED ENTIRELY PRIOR TO PLANTING
- 14. BALLED AND BURLAPPED MATERIAL SHALL HAVE THE TOP ONE HALF (1/2) OF THE BURLAP AROUND THE BASE OF THE TRUNK CUT AND PULLED BACK. DO NOT REMOVE BURLAP. WIRE CAGES, STRAPS, ETC. MUST BE CUT AND REMOVED PRIOR TO INSTALLATION. ALL PLASTIC WRAPPING SHALL BE REMOVED PRIOR TO INSTALLATION.
- 15. CONTRACTOR TO REPLACE REJECTED PLANT MATERIAL WITHIN ONE (1) WEEK OF NOTICE FROM THE OWNER OR LANDSCAPE ARCHITECT
- CONTRACTOR SHALL REFER TO THE LANDSCAPE PLANTING DETAILS. PLANTS LIST. GENERAL NOTES AND THE PLANTING SPECIFICATIONS FOR COMPLETE LANDSCAPE PLANTING INSTRUCTIONS.
- 17. FERTILIZATION

PALMS 8-2-12 PLUS MINOR ELEMENTS - SLOW RELEASE 1/2 LB FERTILIZER PER 1/2 INCH CALIPER. SUPPLEMENT WITH SOPO-MAG MICRONUTRIENTS. APPLY GRANULAR SULPHUR AT THE RECOMMENDED APPLICATION RATES.

SHRUBS AND GROUNDCOVERS 8-10-10 PLUS MINOR ELEMENTS - SLOW RELEASE 1/2 LB FERTILIZER PER 100 FT2

TREES 8-6-6 PLUS MINOR ELEMENTS - SLOW RELEASE 1/2 LB FERTILIZER PER 1/2 INCH CALIPER

TURF 16-4-8 PLUS MINOR ELEMENTS - SLOW RELEASE 1 LB FERTILIZER PER 1000 FT2

* THE COST FOR LANDSCAPE FERTILIZER AS DESCRIBED ABOVE SHALL BE INCLUDED IN THE PER PLANT PRICE.

- 18. GUYING / STAKING PRACTICES SHALL NOT PERMIT NAILS, SCREWS, WIRES ETC., TO PENETRATE OUTER SURFACE OF TREE OR PALM. TREES OR PALMS REJECTED DUE TO THIS PRACTICE SHALL BE REPLACED.
- 19. CONTRACTOR SHALL MULCH ALL PLANT MATERIAL THROUGHOUT AND COMPLETELY TO A THREE (3) INCH WATERED-IN DEPTH WITH CLEAN, WEED FREE MULCH AS SPECIFIED

SOIL AMENDMENTS / BACKFILL MIX

- 1. CONTRACTOR TO APPLY "RONSTAR" OR APPROVED PRE-EMERGENT HERBICIDE IN ACCORDANCE WITH MANUFACTURER'S RATE AND SPECIFICATIONS.
- PLANTING SOIL MIX FOR TREES, SHRUBS, AND GROUNDCOVERS SHALL CONSIST OF A THOROUGHLY BLENDED MIXTURE OF:

50% TOPSOIL / EXISTING SOIL IF ACCEPTABLE 50% COMPOSTED SOIL AMENDMENTS, WHICH SHALL CONSIST OF PEAT, COMPOSTED PINE BARK AND HARDWOOD FINES.

PROVIDE THE FOLLOWING AMOUNT OF COMPOSTED SOIL AMENDMENTS PER PLANT:

-13 CF / LARGE TREE (>16')

-9 CF / MEDIUM TREE OR PALM (10-16') -6 CF / SMALL TREE OR PALM (<10')

-1 CF / 3 GAL SHRUB OR LARGER

- 5 CE / 1 GAL GROUNDCOVER -6" DEPTH ALL ANNUAL BEDS

COMPOST MIX SHALL BE FREE OF DELETERIOUS MATERIALS THAT WOULD BE HARMFUL TO PLANT GROWTH, SHALL BE FREE OF NEMATODES, SHALL BE OF UNIFORM QUALITY AND SHALL HAVE A PH VALUE BETWEEN 6.5 AND 7.0 (AS DETERMINED IN ACCORDANCE WITH ASTM F70). FLORIDA PEAT SHALL BE STERILIZED TO MAKE FREE OF ALL VIABLE NUT GRASS AND OTHER UNDESIRABLE WEEDS.

PROJECT COMPLETION AND WARRANTY

- COMPLETION OF THE WORK SHALL MEAN THE FULL AND EXACT COMPLIANCE AND CONFORMITY WITH THE PROVISIONS EXPRESSED OR IMPLIED IN THE DRAWINGS AND
- SUBSTANTIAL COMPLETION: UPON NOTIFICATION BY THE CONTRACTOR THAT THE INSTALLATION IS COMPLETE, THE LANDSCAPE ARCHITECT WILL PERFORM A SUBSTANTIAL COMPLETION SITE OBSERVATION TO DETERMINE IF THE CONTRACTOR HAS COMPLETED THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. IF FINAL ACCEPTANCE IS NOT GIVEN. THE LANDSCAPE ARCHITECT WILL PREPARE A "PUNCH LIST." THE NOTIFICATION BY THE CONTRACTOR MUST BE MADE AT LEAST THREE (3) WORKING DAYS BEFORE THE ANTICIPATED SUBSTANTIAL COMPLETION
- FINAL ACCEPTANCE: UPON NOTIFICATION BY THE CONTRACTOR THAT ALL DEFECTS HAVE BEEN CORRECTED, THE LANDSCAPE ARCHITECT WILL PERFORM A FINAL SITE OBSERVATION. FINAL ACCEPTANCE WILL BE GIVEN UPON SATISFACTORY COMPLETION OF ALL WORK, INCLUDING "PUNCH LIST" ITEMS. THE NOTIFICATION BY CONTRACTOR MUST BE MADE AT LEAST THREE (3) WORKING DAYS BEFORE THE ANTICIPATED FINAL SITE OBSERVATION.
- CONTRACTOR TO GUARANTEE PLANT MATERIAL FOR A 12 MONTH PERIOD. THE CONTRACTOR SHALL VISIT THE SITE ONCE A MONTH TO REVIEW THE STATUS OF MAINTENANCE BY THE OWNER AND ADVISE IN WRITING ANY ACTIVITIES OR DISCREPENCIES THAT ARE POTENTIALLY DETRIMENTAL TO THE LANDSCAPE INSTALLATION OR MAY VOID WARRANTY
- LANDSCAPE WHICH WAS INSTALLED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS AND IS DAMAGED OR DESTROYED THROUGH VANDALISM. THEFT, OR TRAFFIC, SHALL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE THROUGH THE CONSTRUCTION PERIOD AND UNTIL FINAL ACCEPTANCE.
- AFTER FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT, THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE LANDSCAPING. IT SHALL BE UNDERSTOOD THAT IN ACCORDANCE WITH THE TERMS OF THE WARRANTY THAT THE CONTRACTOR MUST PROMPTLY INFORM THE OWNER IF PROPER MAINTENANCE IS NOT BEING GIVEN TO THE INSTALLATION. INSPECTIONS BY CONTRACTOR OF THE JOB SHALL BE MADE DURING THE WARRANTY PERIOD TO DETERMINE IF PROPER MAINTENANCE IS BEING GIVEN.
- AT THE END OF THE ONE YEAR WARRANTY PERIOD, INSPECTIONS SHALL BE MADE JOINTLY BY THE OWNER, LANDSCAPE ARCHTIECT AND CONTRACTOR. ALL PLANTS NOT IN A HEALTHY GROWING CONDITION SHALL BE REMOVED AND REPLACED WITH PLANTS OF A LIKE KIND AND SIZE, EXCEPT FOR DEFECTS RESULTING FROM NEGLECT BY OWNER, ABUSE OR DAMAGE BY OTHERS, OR UNUSUAL PHENOMENA OR INCIDENTS WHICH ARE BEYOND CONTRACTOR'S CONTROL.
- ALL REPLACEMENT STOCK SHALL BE SUBJECT TO THE SAME WARRANTY REOUIREMENTS AS THE ORIGINAL STOCK, PERIOD TO BEGIN UPON ACCEPTANCE OF THE REPLACEMENT BY THE LANDSCAPE ARCHITECT. ANY DAMAGE DUE TO REPLACEMENT OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR.

100% SUBMITTAL SET



IN COORDINATION WITH:

AVALON ENGINEERING, INC. 2503 DEL PRADO BLVD. # 200 CAPE CORAL, FL 33904

PREPARED FOR: LEE COUNTY DEPARTMENT OF TRANSPORTATION THREE OAKS PARKWAY **EXTENSION** CONTRACT NO.: CN160642 / ANB

LEE COUNTY, FL

SCALE: DATE: SEPTEMBER 2024 PROJECT #: REV DATE DESCRIPTION

LANDSCAPE SPECIFICATIONS SHEET #

PLANT & MATERIALS SCHEDULE / TABULATION OF QUANTITIES

FINAL DESIGN - 100%

KEY	BOTANICAL NAME	COMMON NAME	SIZE/SPECIFICATION	NATIVE	UNIT	TOTAL QUANTITY										QUANT	ITIES BY	SHEET	NUMBE	R										
							KEY	LA-1	LA-2	LA-3 LA-4	LA-5	LA-6	LA-7	LA-8	LA-9	LA-10	LA-11 LA	-12 L/	4-13 L/	\-14 I	_A-15	LA-16	LA-17	LA-18	LA-19 l	LA-20 L	A-21 L/	A-22 LA	-23 L	·-24
		CANOPY TREES & LARGE PALMS	·																											
ВВ	Bucida buceras "Shady Lady"	Black Olive "Shady Lady"	8-10' ht, 4' spr, 1-1/2" cal, 4' ct	Yes *	EA	49	ВВ			13				7	10					3	14	2								
QV	Quercus virginiana	Live Oak	8-10' ht, 4' spr, 1-1/2" cal, 4' ct	Yes *	EA	32	QV				5	10					5	.2												
PS	Phoenix sylvestris	Sylvester Date Palm	4-5' ct, full head, heavy trunk, diamond cut, certified pest-free	No *	EA	1	PS																							1
PS	Phoenix sylvestris	Sylvester Date Palm	8-10' ct, full head, heavy trunk, diamond cut, certified pest-free	No *	EA	23	PS	6																		7	4	4	1	1
PS	Phoenix sylvestris	Sylvester Date Palm	15-16' ct, full head, heavy trunk, diamond cut, certified pest-free	No *	EA	1	PS																							1
RE	Roystonea elata	Royal Palm	5-6' gw, full head, heavy trunk	Yes *	EA	54	RE						16	2		15	3		12	6										
SP	Sabal palmetto	Cabbage Palm	15'-25' oa ht, staggered heights, clean trunks	Yes *	EA	149	SP	18	28	22	12											9	39	21						
		<u> </u>	TOTAL CANOPY TREES & LARGE PALM	<u> </u>		309		24	28	13 22	17	10	16	9	10	15	8	2	12	9	14	11	39	21	0	7	4	4	1	3
						•	•	'		,							235		'											
		FLOWERING TREES & UNDERSTO	RY ACCENTS																											
CES	Conocarpus erectus "sericeus"	Silver Buttonwood	25 gal, 6-8' ht, multi-stem treeform, full	Yes *	EA	42	CES	3	6	3	3											1	11	6	9					
CD	Coccoloba diversifolia	Pigeon Plum	25 gal, 8-10' ht, 1-1/2" cal, 4' ct, full	Yes *	EA	36	CD	3	7	5												7	5	9						
JI	Jatropha integerrima	Jatropha	25 gal, 6-8' ht, multi-stem, full	No	EA	54	JI						14	4		18			12	6										
PD	Peltophorum dubium	Yellow Poinciana	8-10' ht, 4' spr, 1-1/2" cal, 4' ct	No *	EA	25	PD				7	5					7	1	5											
TI	Tabebuia impetiginosa	Purple Tabebuia	8-10' ht, 4' spr, 1-1/2" cal, 4' ct	No *	EA	38	TI		4	1 5				7	6	1				7		7								
TG	Tibouchina granulosa	Purple Glory Tree	25 gal, 6-7' ht, standard, full	No	EA	54	TG						18			12	6		12	6										
TM	Thrinax morrisii	Key Thatch Palm (silver)	25 gal, 4-5' ht, 3' spr, dbl trunk, full	Yes	EA	130	TM	16	24	19	11											8	34	18						
			TOTAL FLOWERING TREES & UNDERSTORY ACCENT	s		379		22	41	1 32	21	5	32	11	6	31	13	1	29	19	0	23	50	33	9	0	0	0	0	0
			* TOTAL COUNTED AS CANOPY TREE	s		450																								
			NATIVE TREES/PALM	s 80%		362																								
		SHRUBS																												
HP	Hamelia patens "compacta"	Compact Firebush	3 gal, 18" ht x 18" spr, full, 4' o.c.	No	EA	36	НР																							36
SR	Serenoa repens "Cinerea"	Silver Saw Palmetto	7 gal, 30" ht x 30" spr, full, 5' o.c.	Yes	EA	7	SR																	\Box	\perp				\perp	7
			TOTAL SHRUB	s		43		0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43
		MISCELLANEOUS																												
SOD	Paspalum notatum	Bahia Sod	Solid sod, free of weeds & pests, sand-grown, laid & rolled.	N/A	SQ FT	200,200	SOD																							
SOIL	Soil Amendments	OrganicLee Soil Amendment	Provide soil amendments at the rate of 6 cu. Ft. per tree when backfilling.	N/A	CU YD	155	SOIL																							
SHELL	Crushed Shell	Crushed Shell, 1/2" minus, washed	Provide 4" compacted depth, over grey Mirafi weed filter cloth 3,518 sf	N/A	CU YD	65	SHELL																							
MULCH	Pine Bark Nuggets	Pine Bark Nuggets	3" depth, all planting bed areas and tree rings. 2 CF bags. 26,250 sf beds, 9,210 sf tree rings	N/A	BAGS	4432	MULCH																							

100% SUBMITTAL SET



IN COORDINATION WITH:

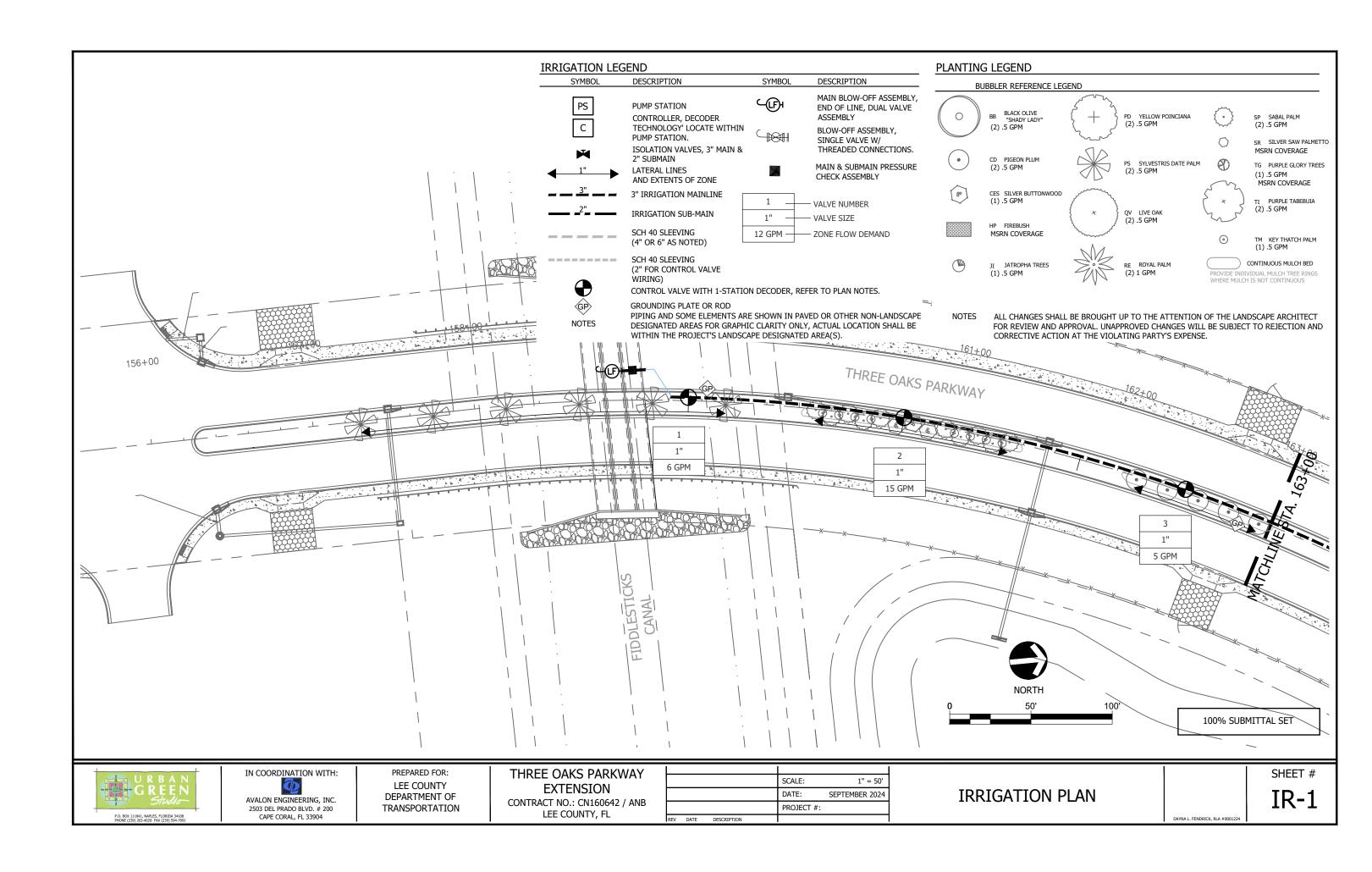
AVALON ENGINEERING, INC.
2503 DEL PRADO BLVD. # 200
CAPE CORAL, FL 33904

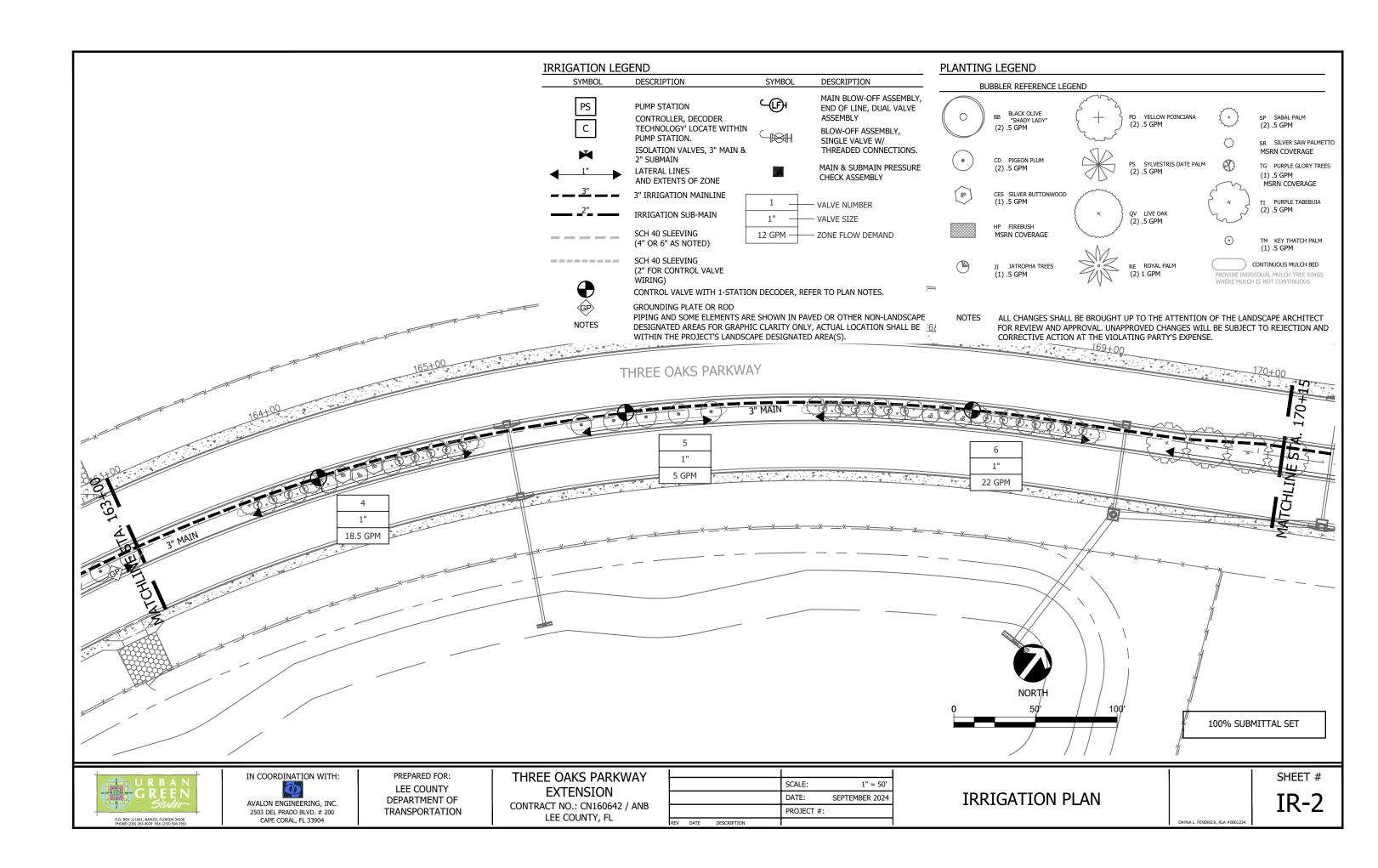
PREPARED FOR: LEE COUNTY DEPARTMENT OF TRANSPORTATION THREE OAKS PARKWAY
EXTENSION
CONTRACT NO.: CN160642 / ANB
LEE COUNTY, FL

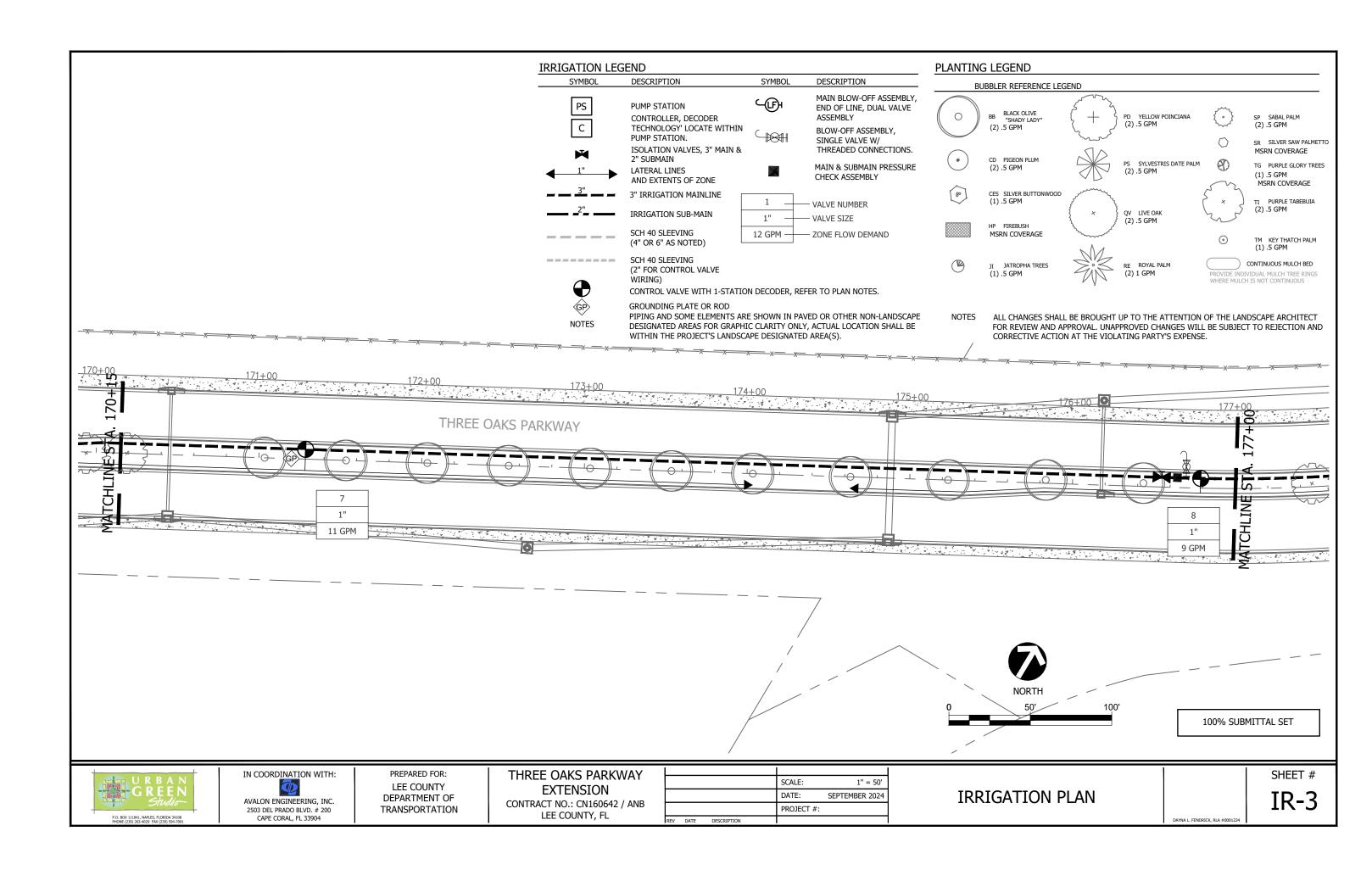
			SCALE:	·
	•		DATE:	SEPTEMBER 2024
			PROJECT #:	
REV	DATE	DESCRIPTION		

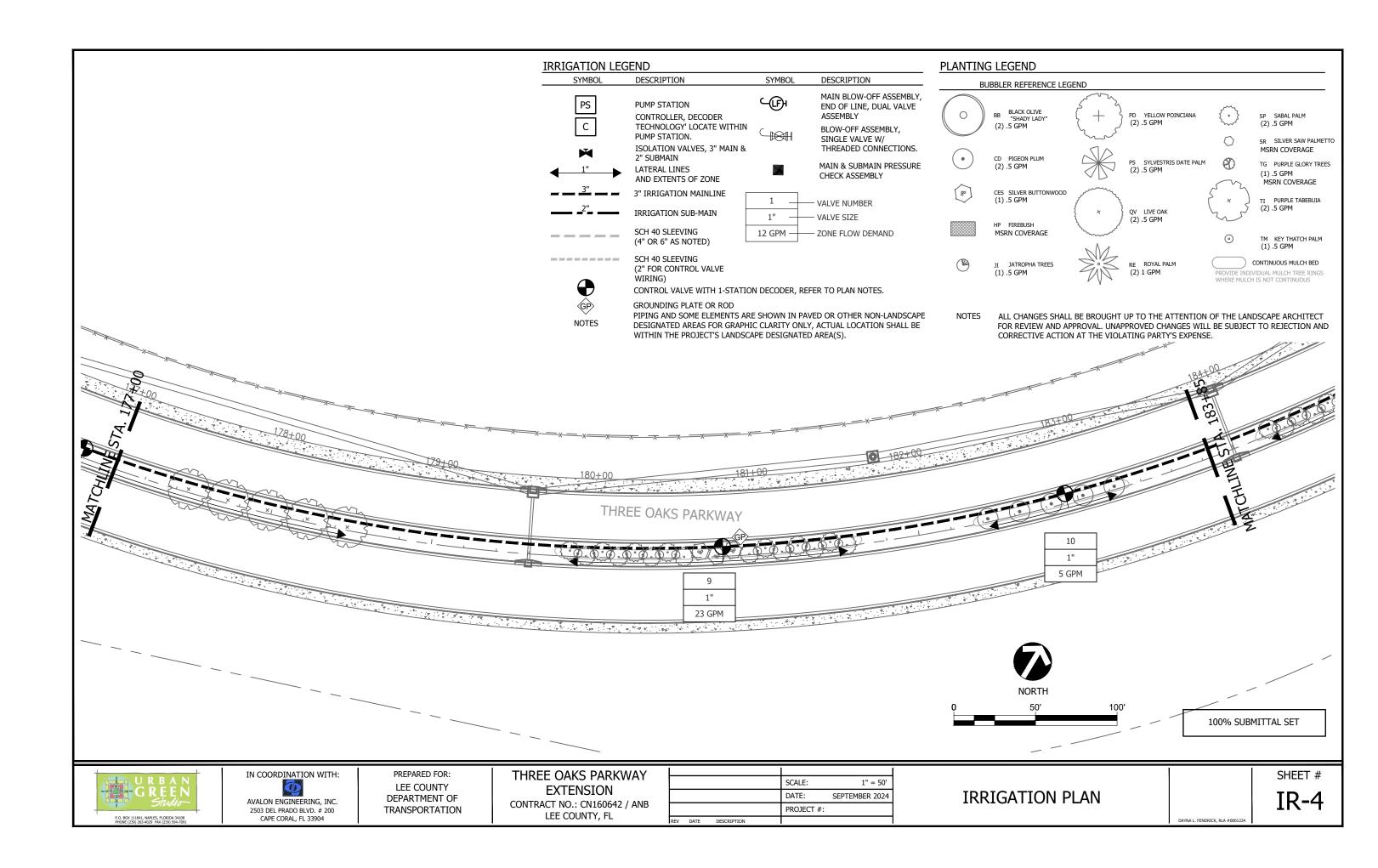
PLANT SCHEDULE

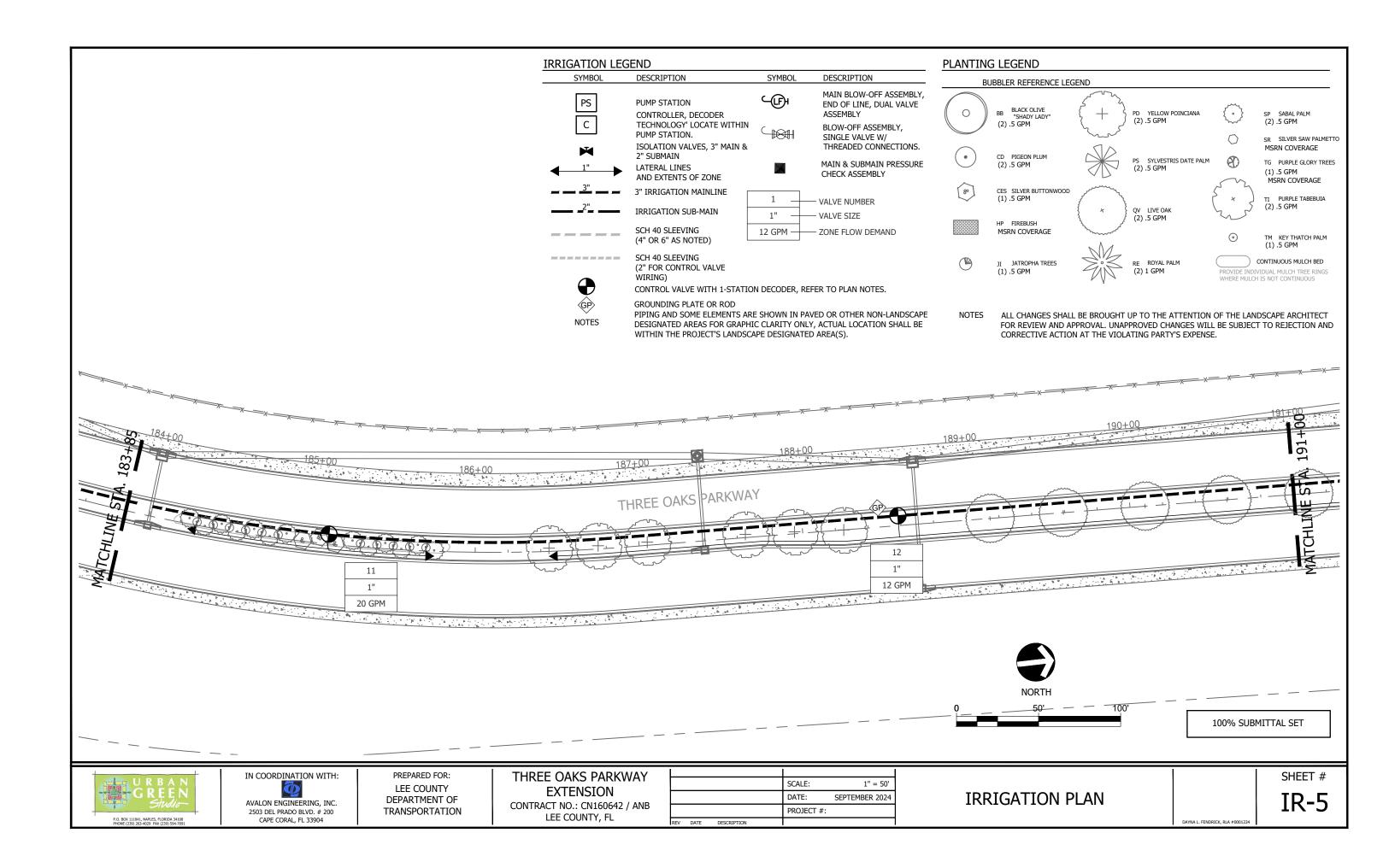
SHEET # **LA-28**

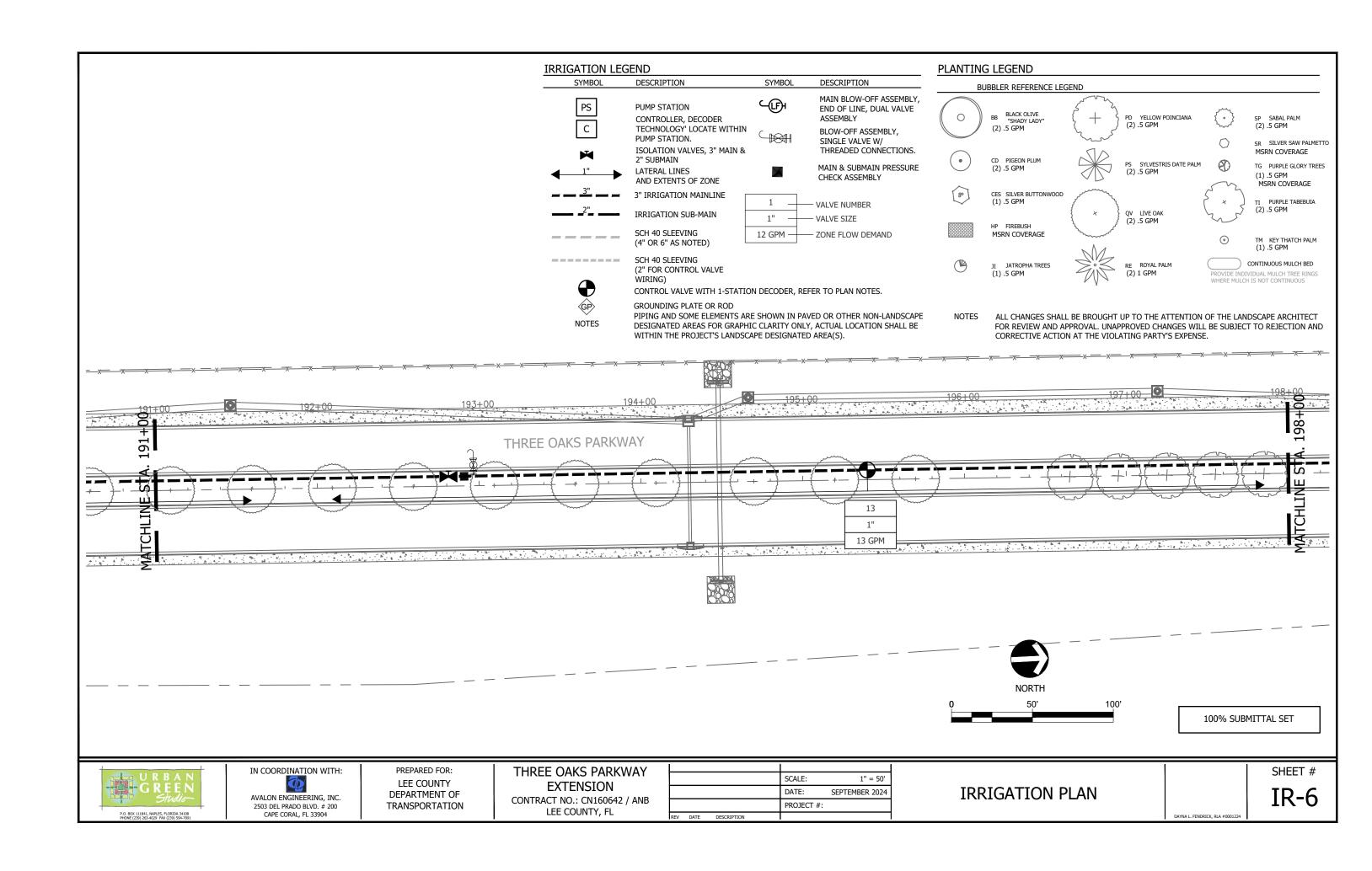


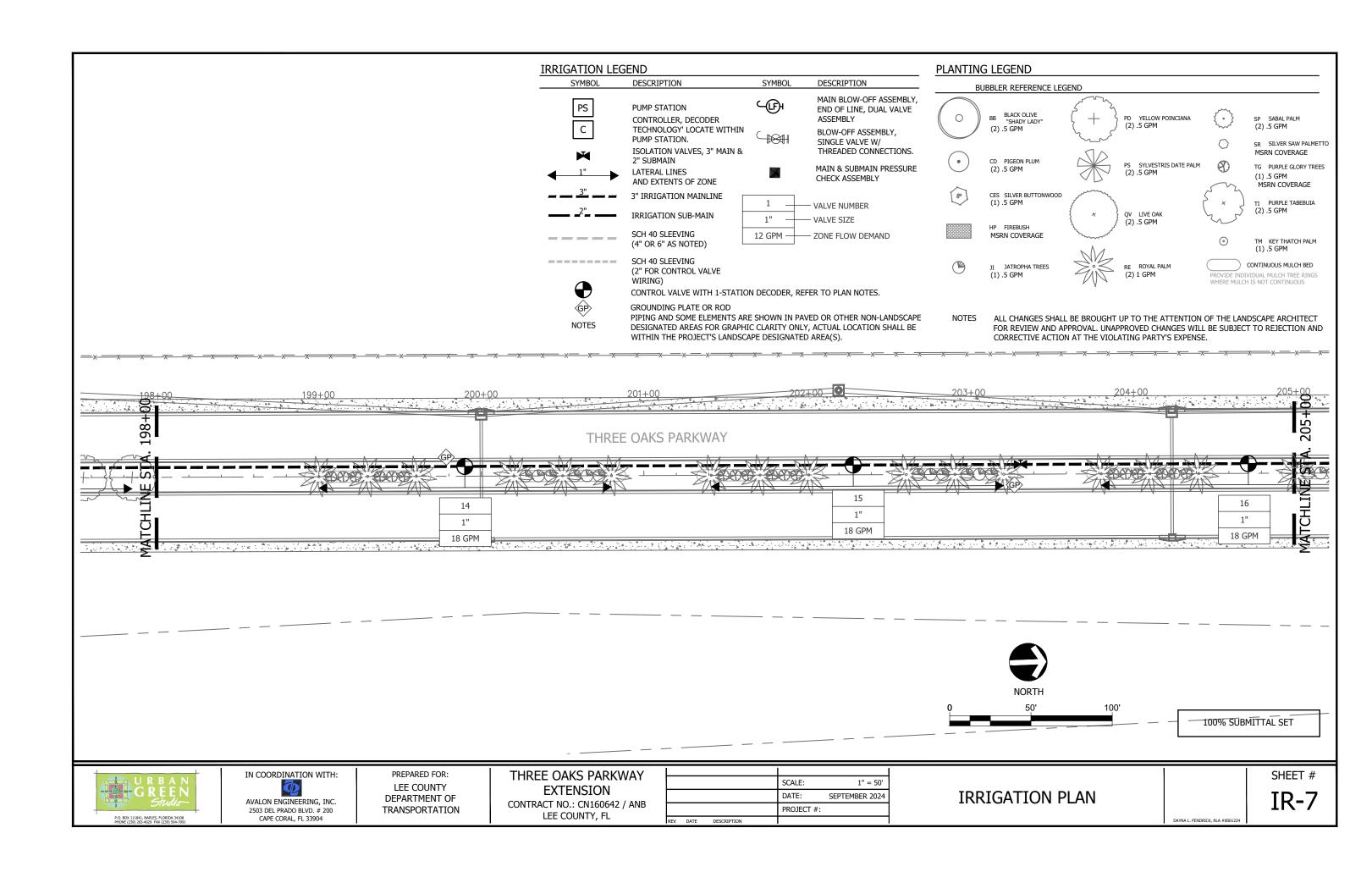


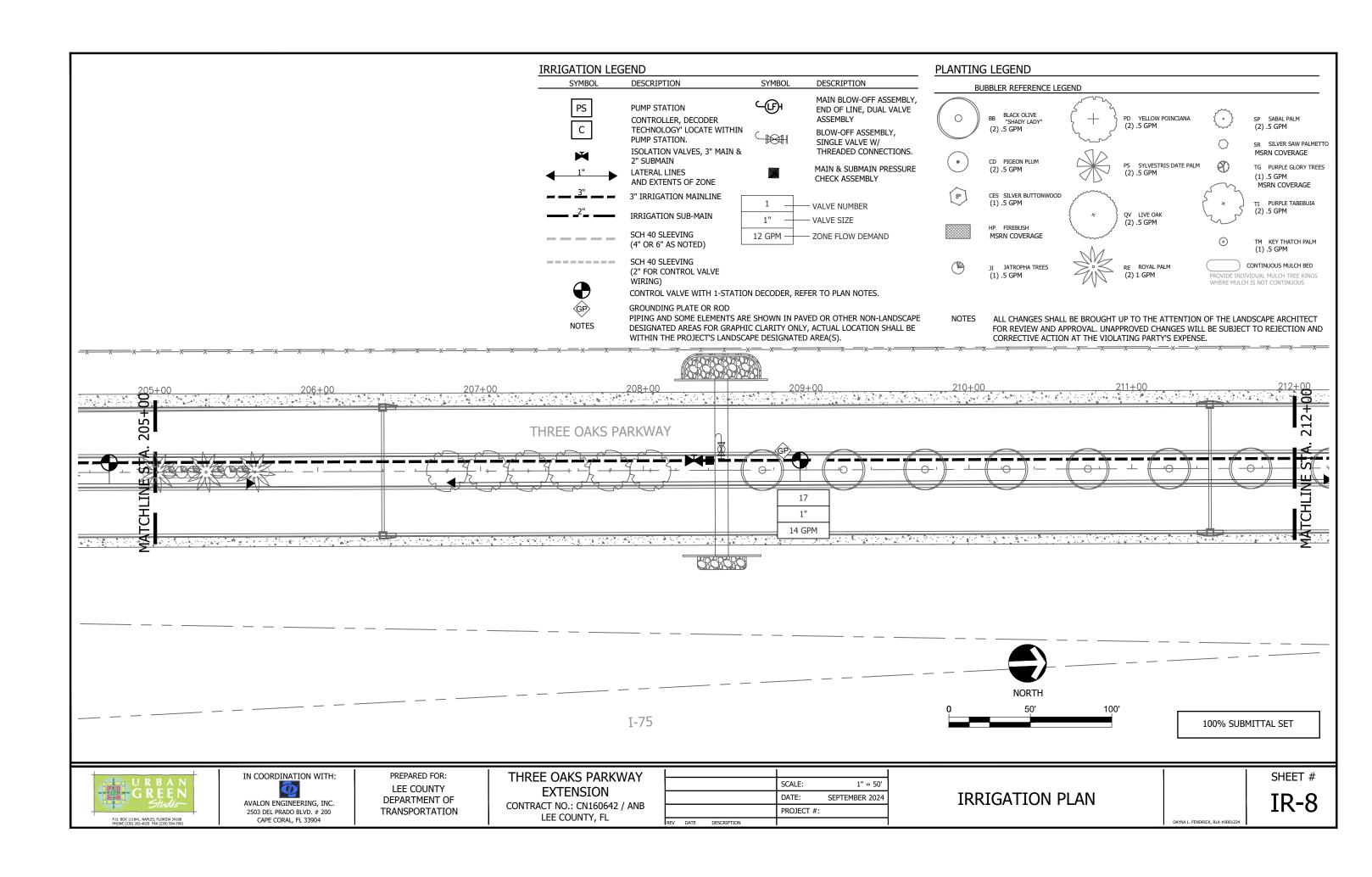


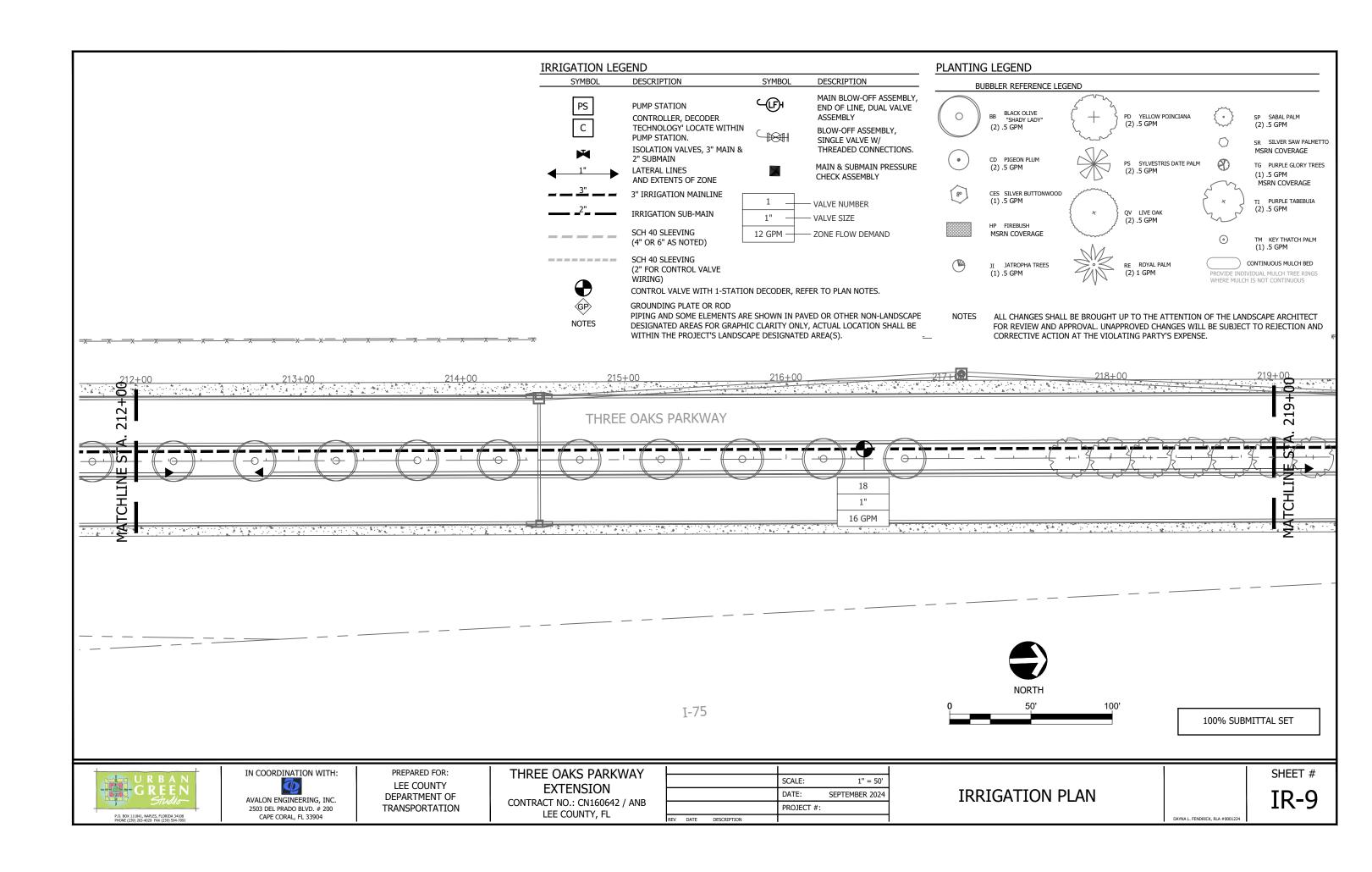


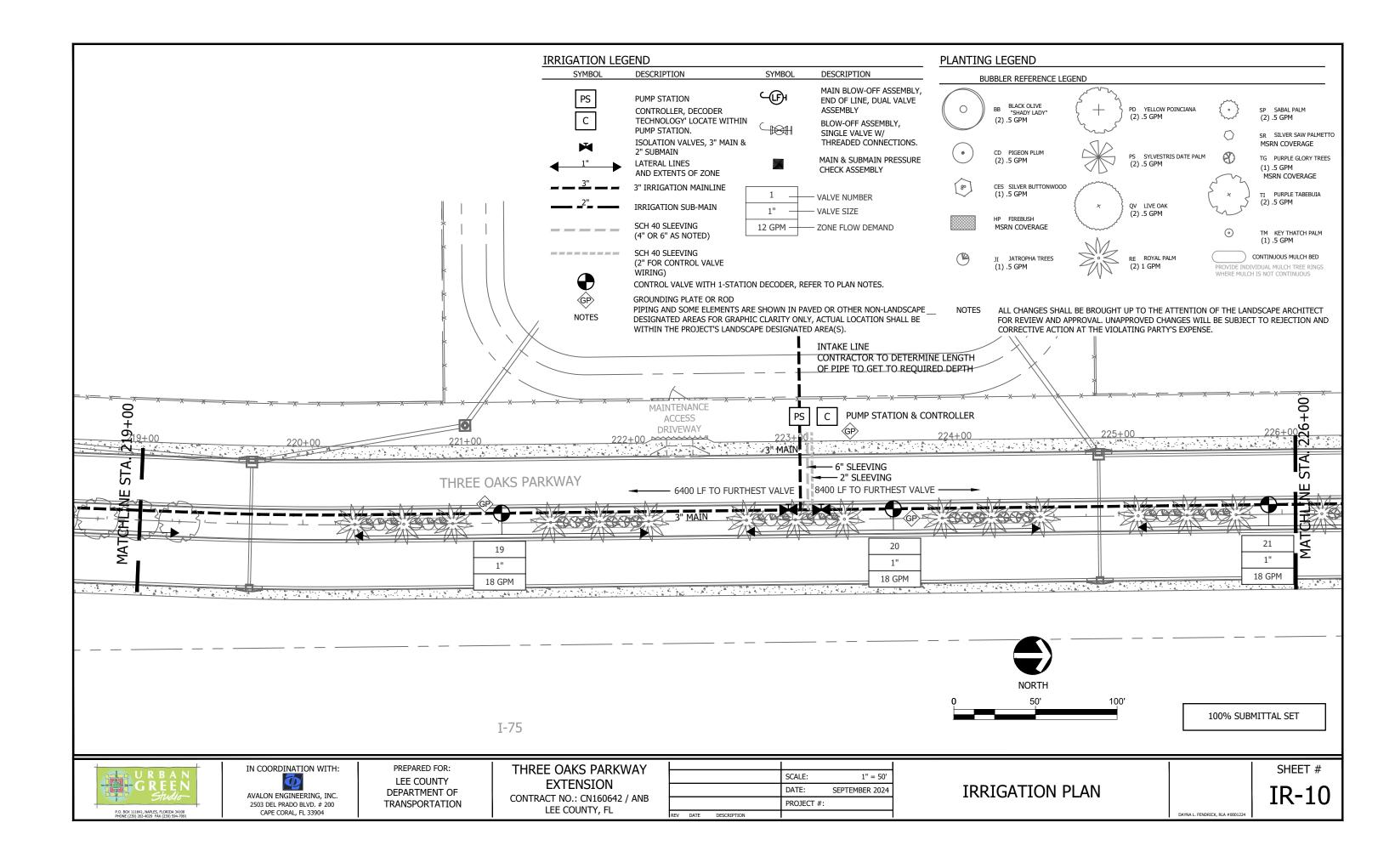


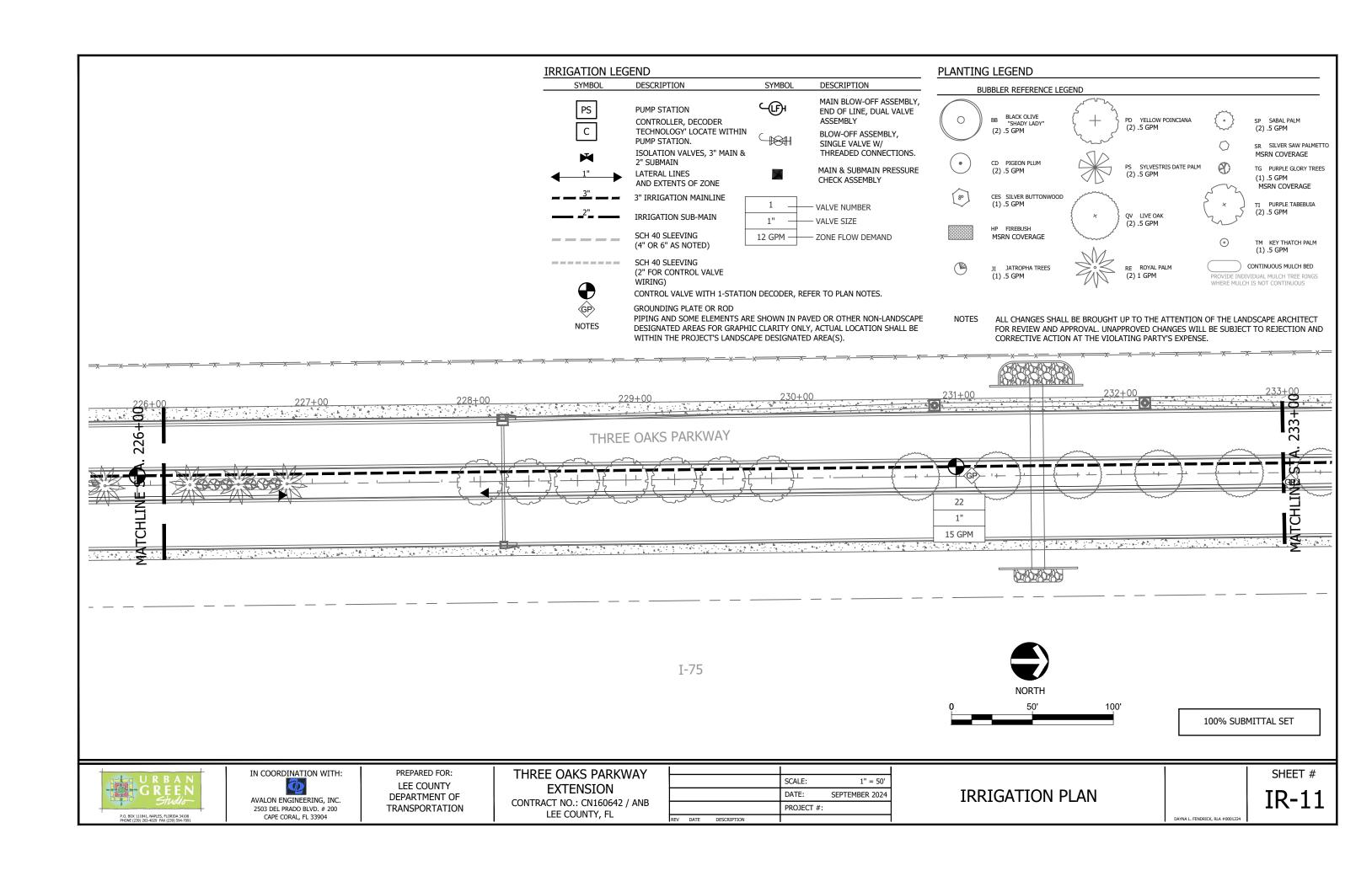


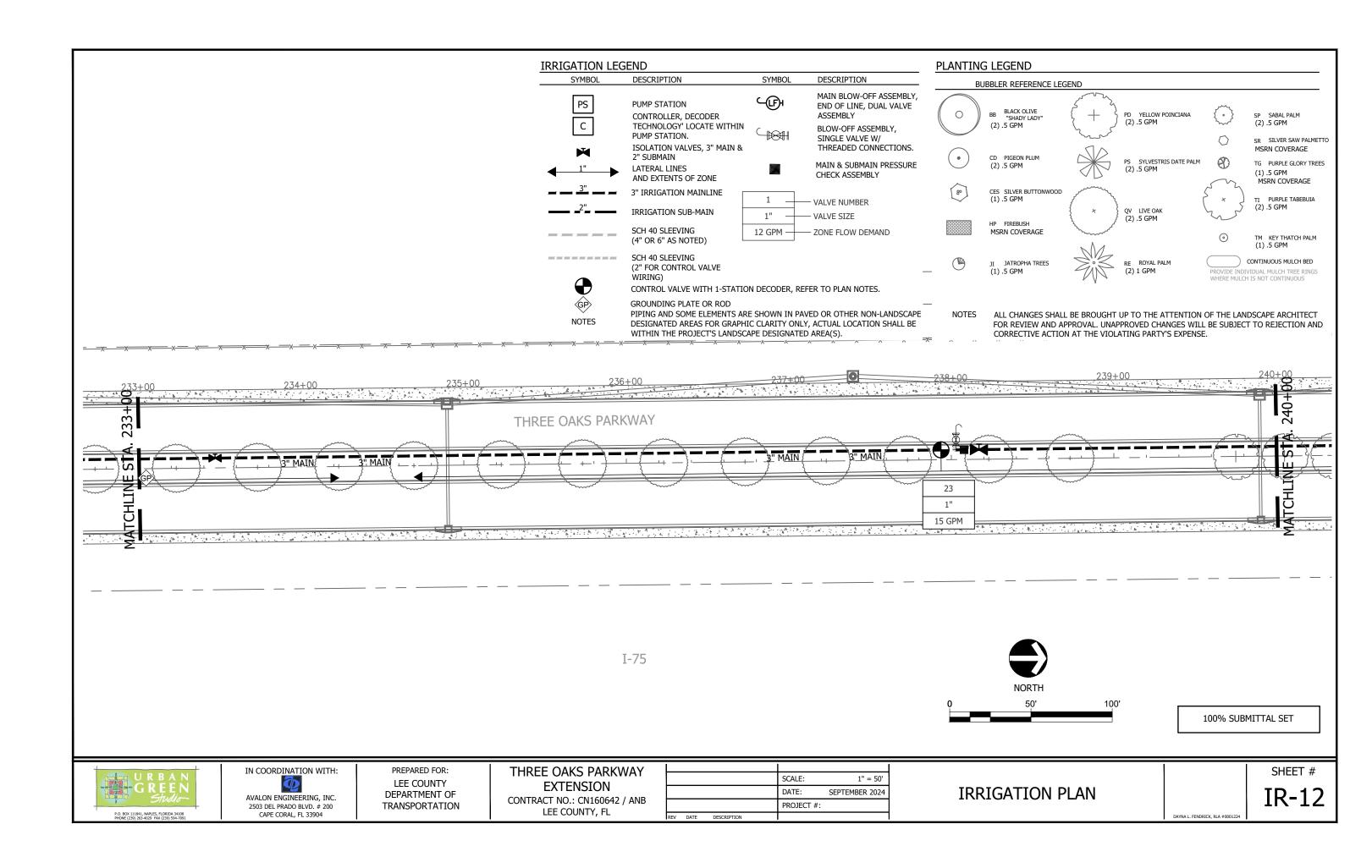


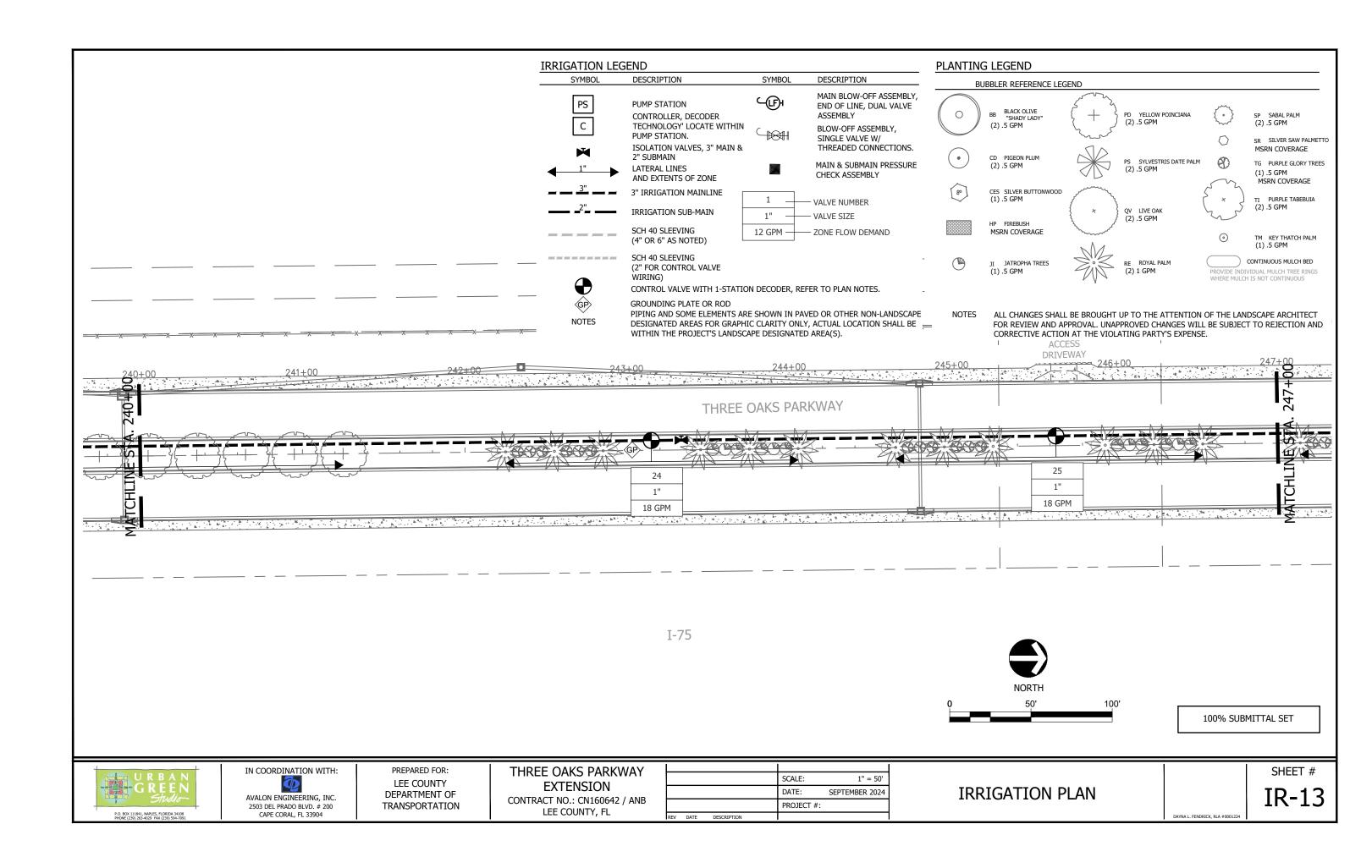


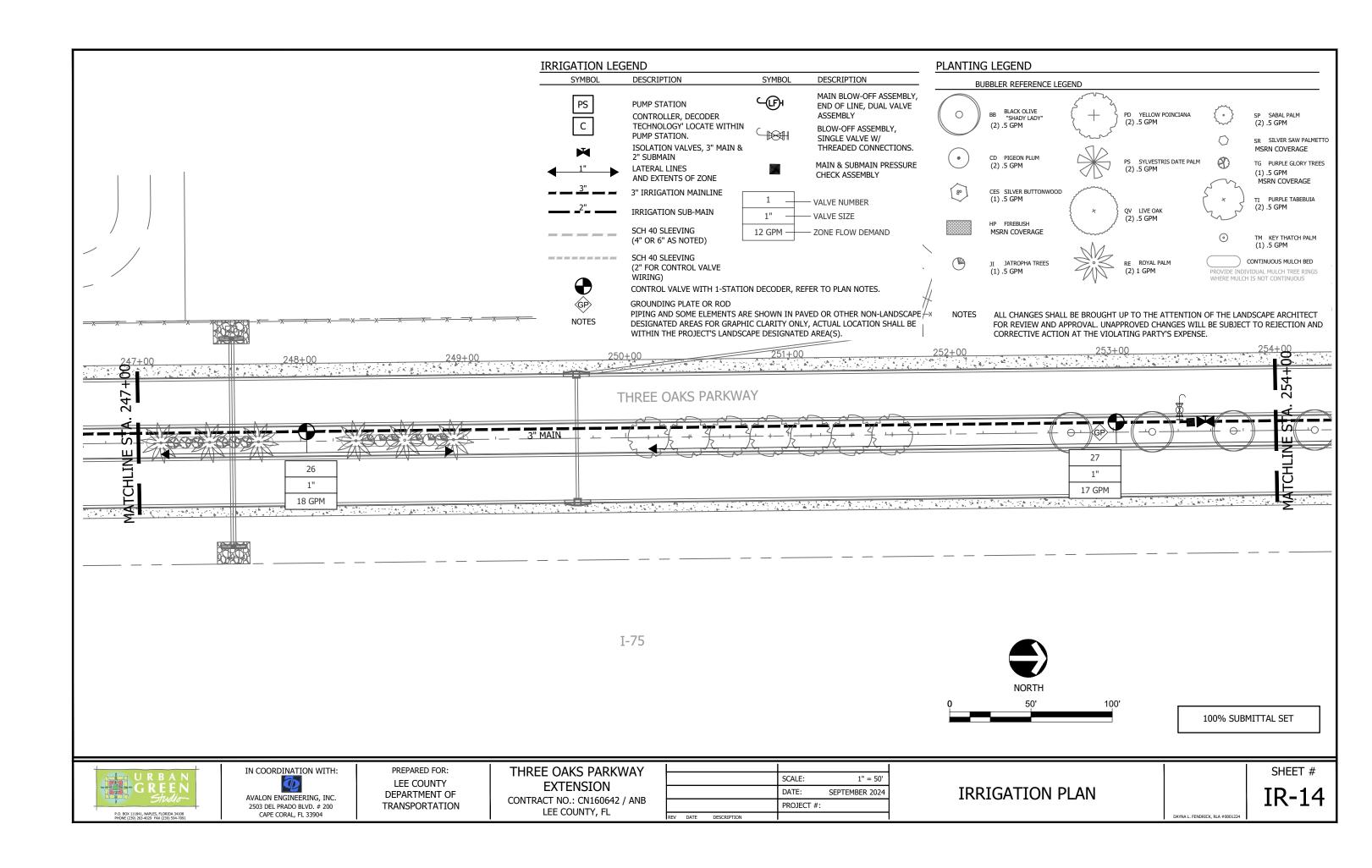


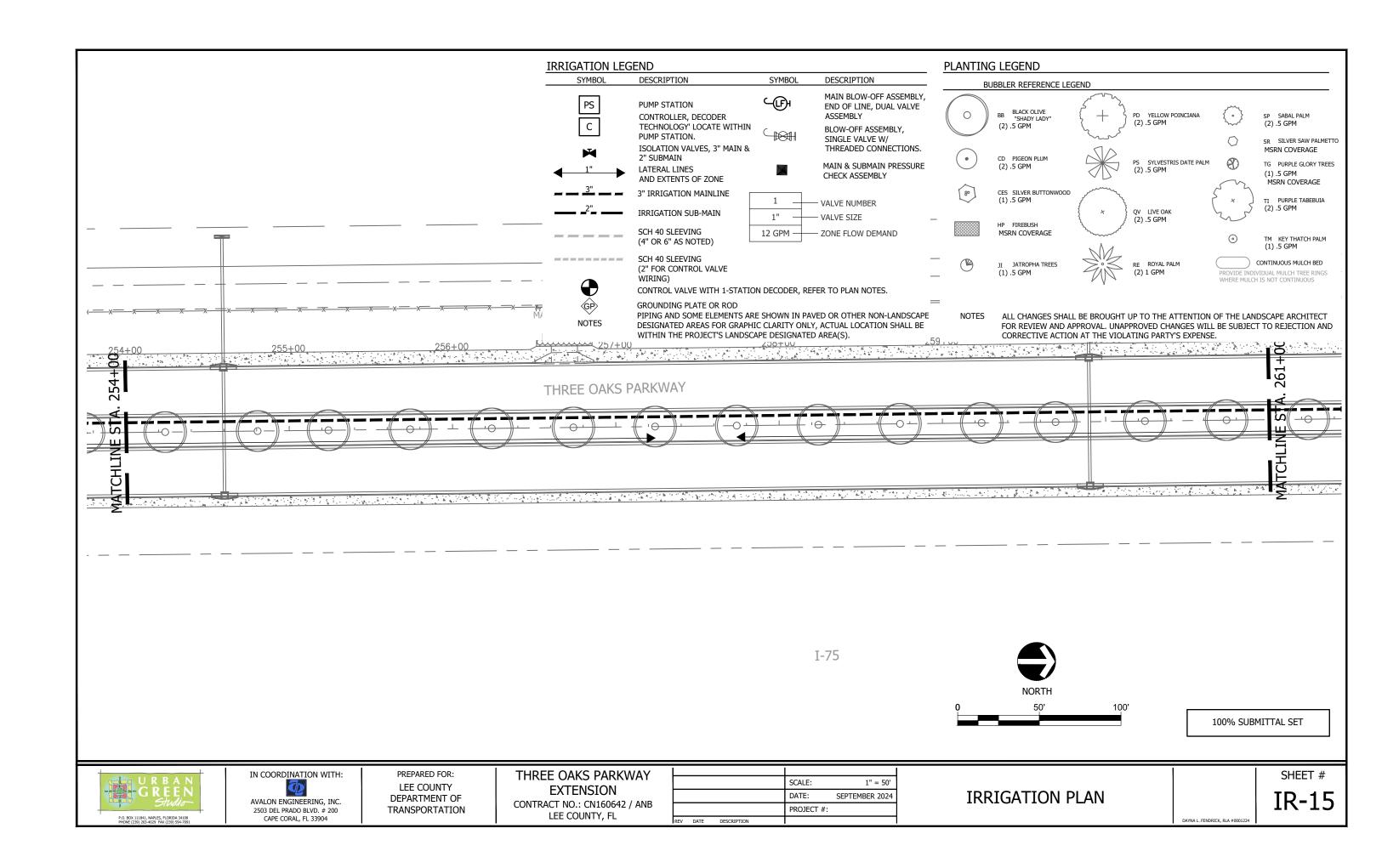


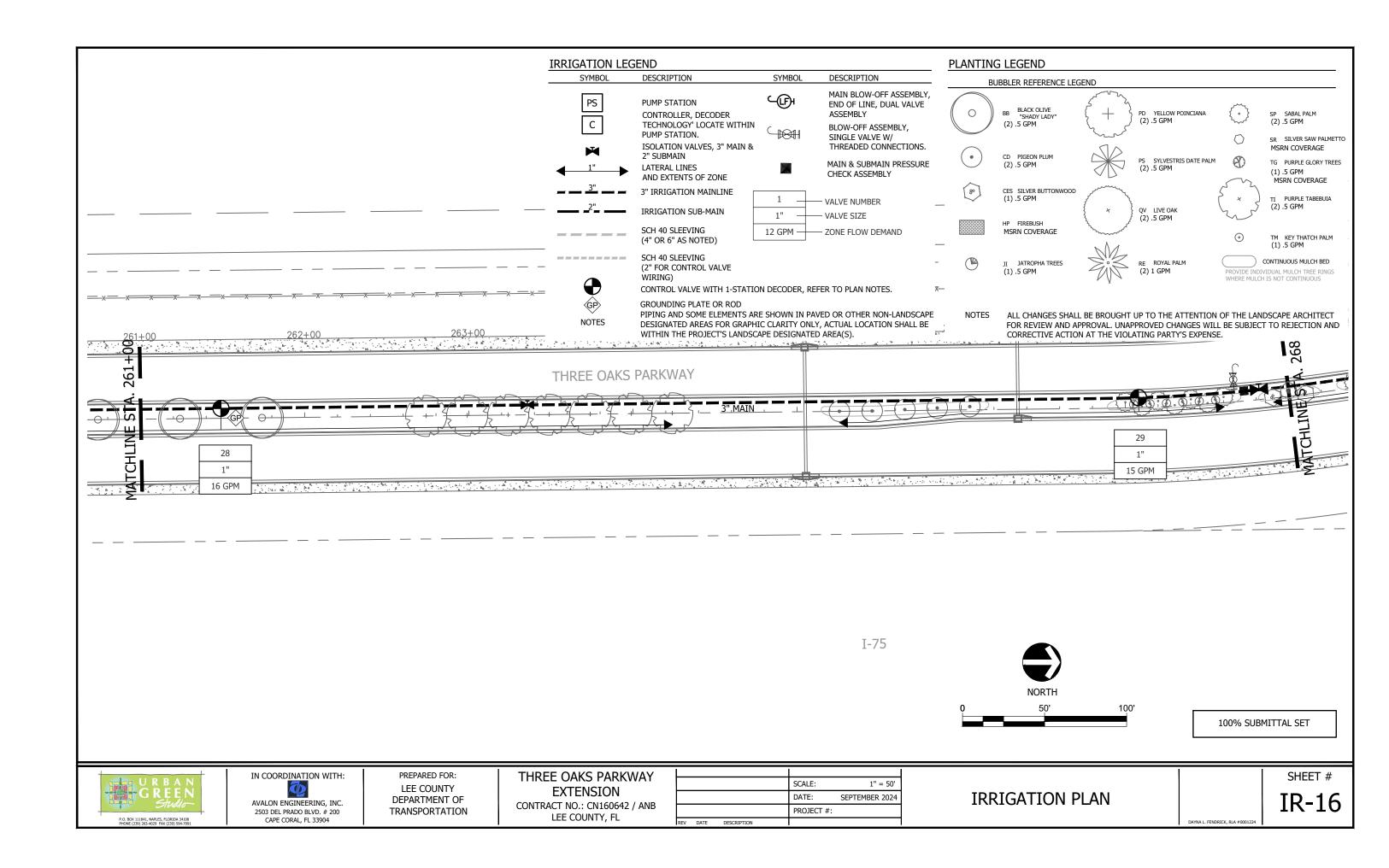


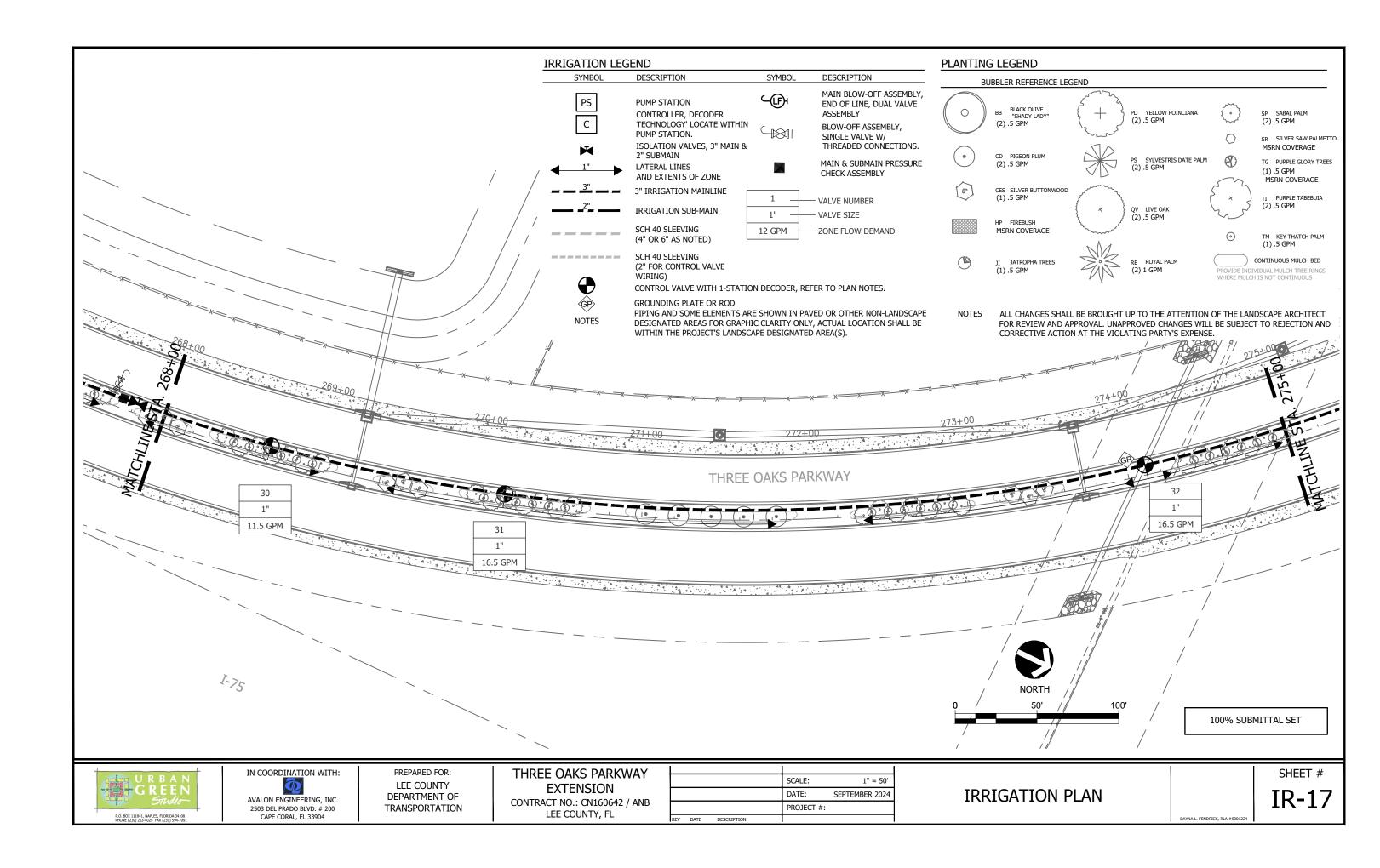


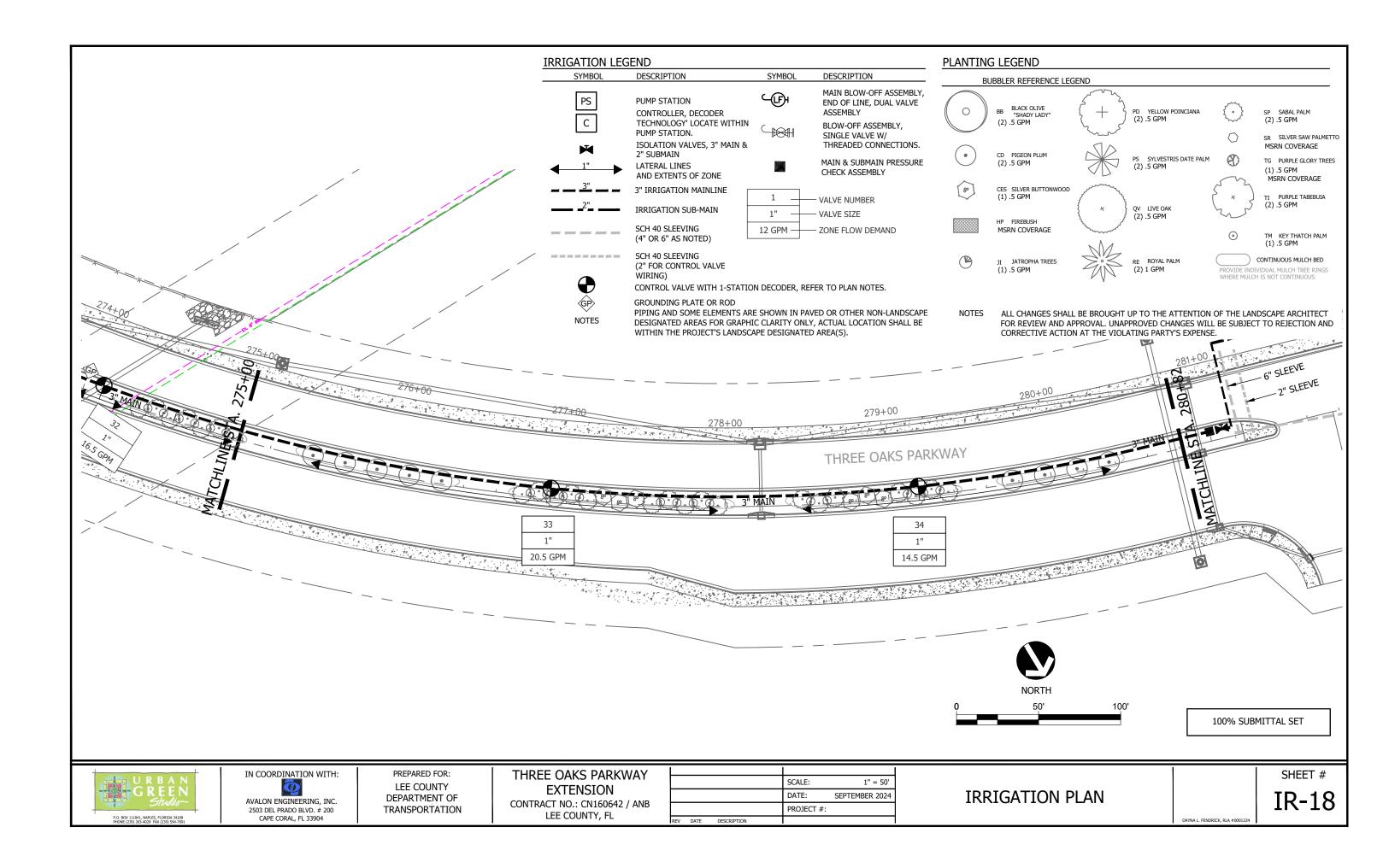


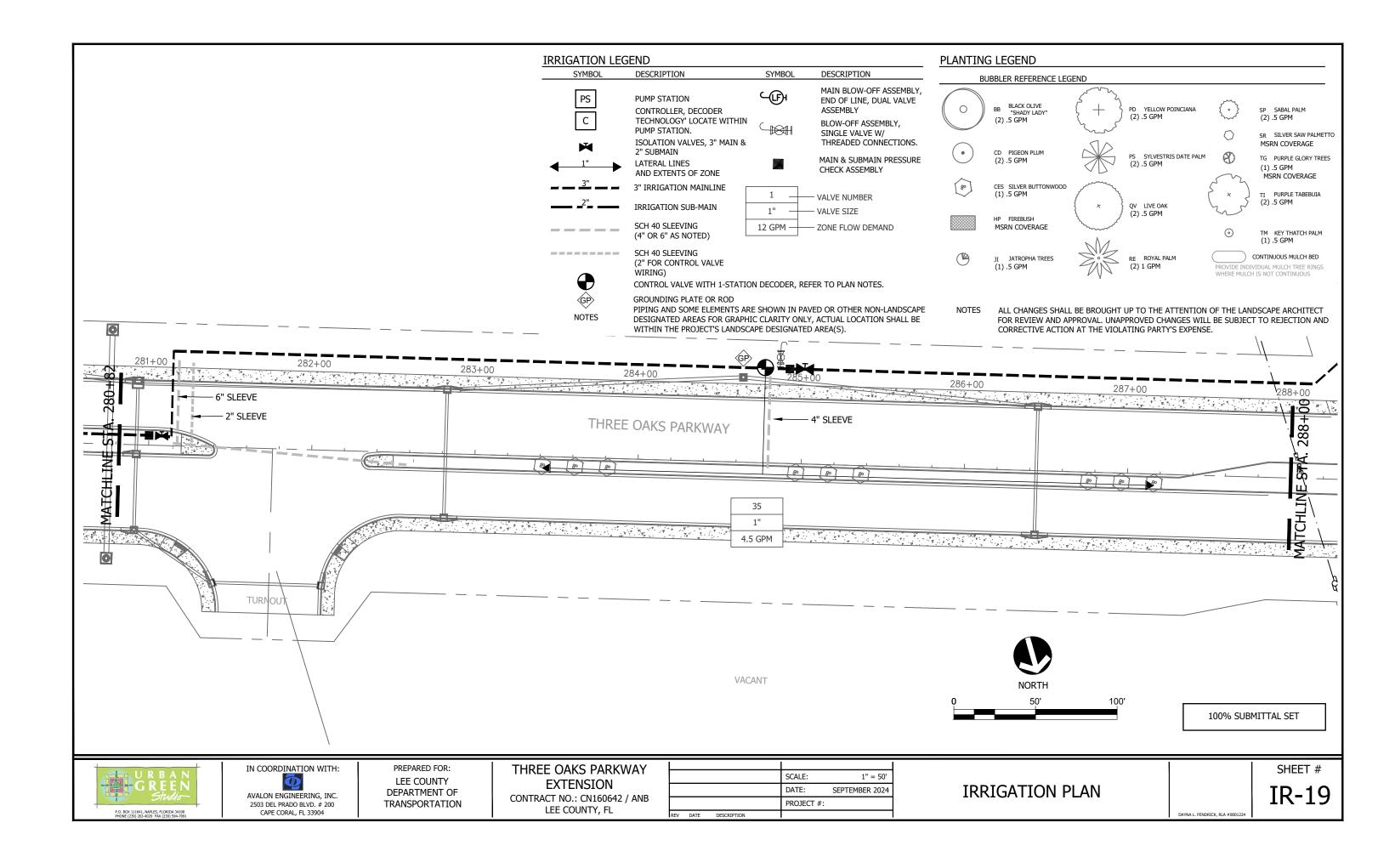


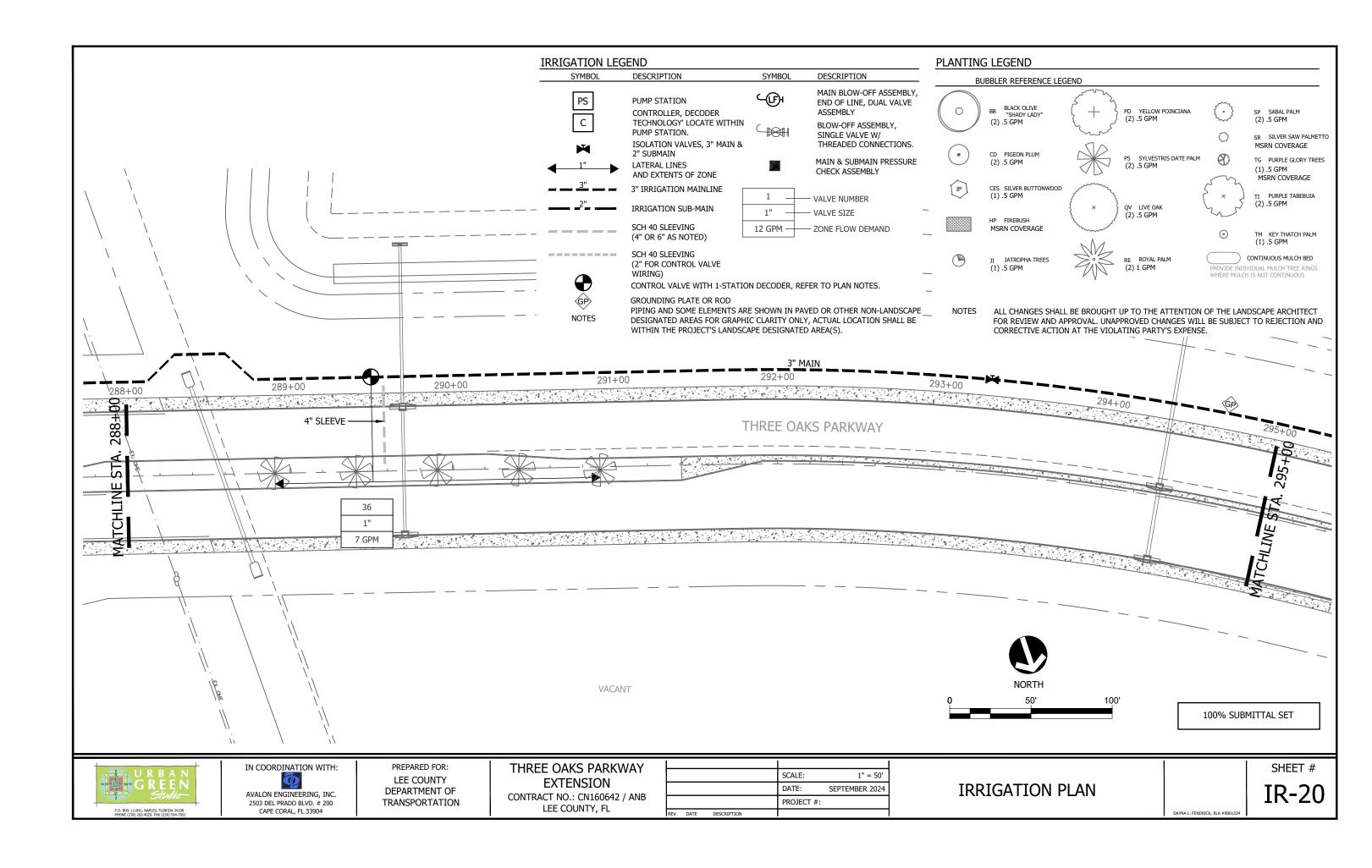


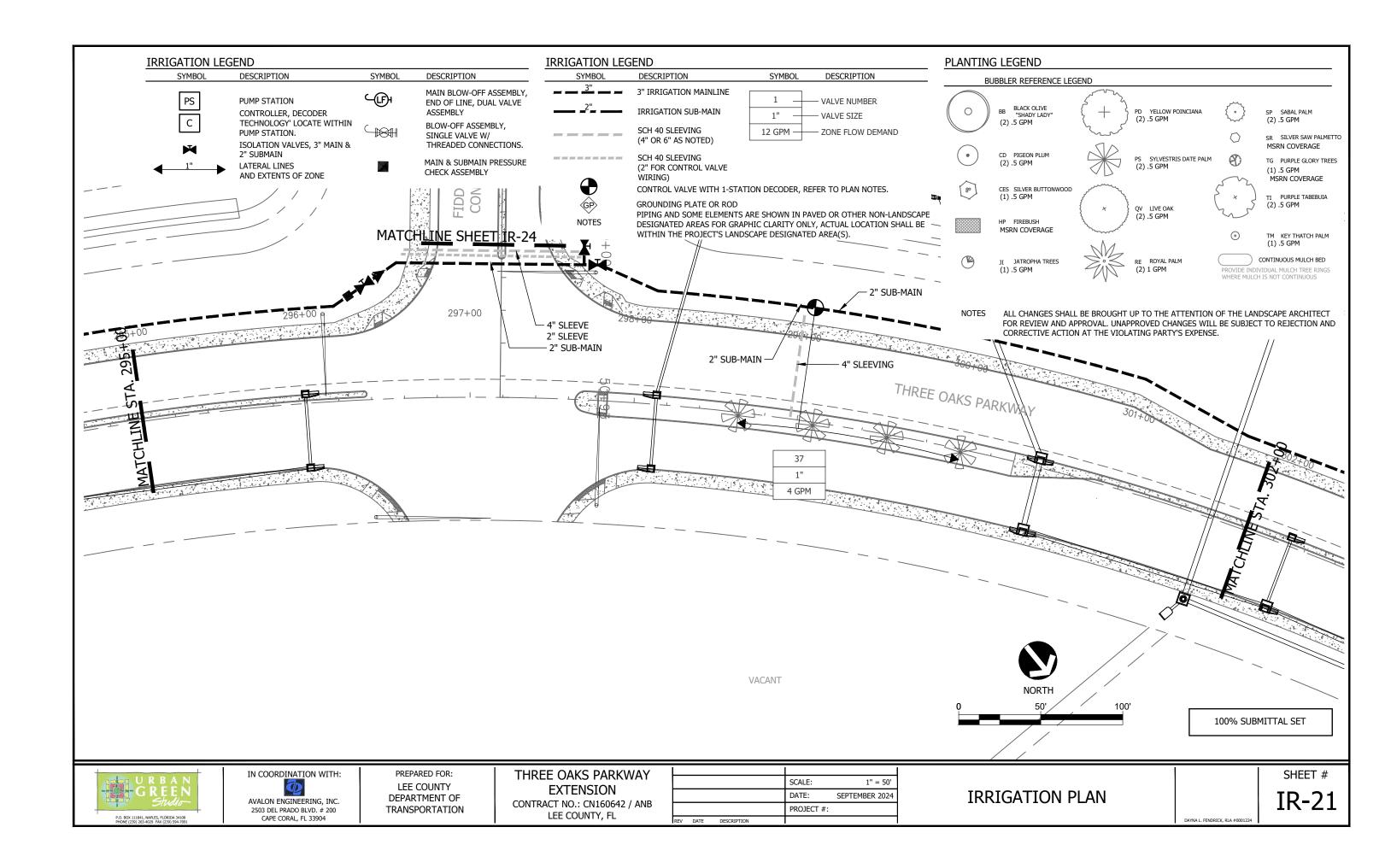


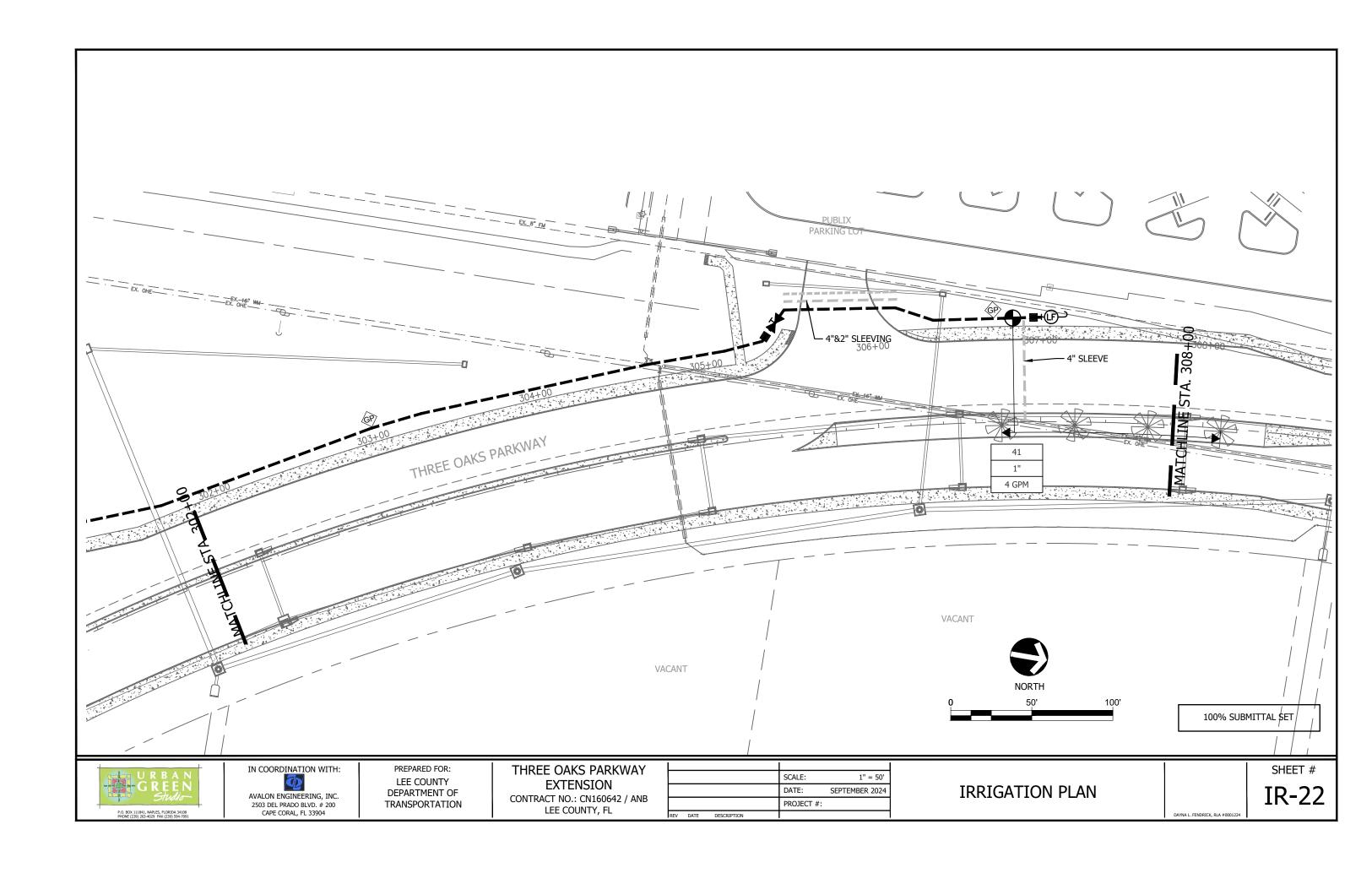


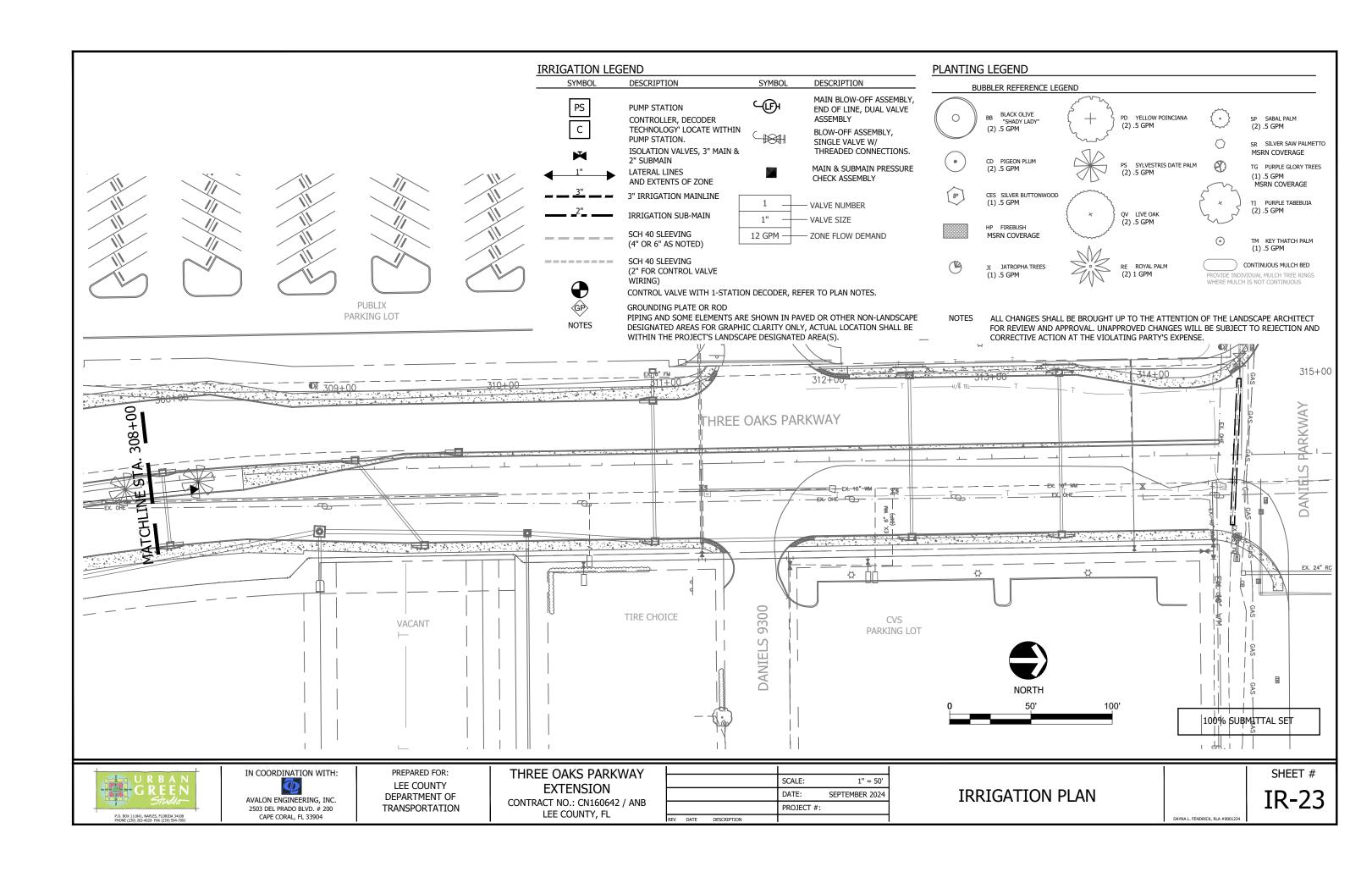


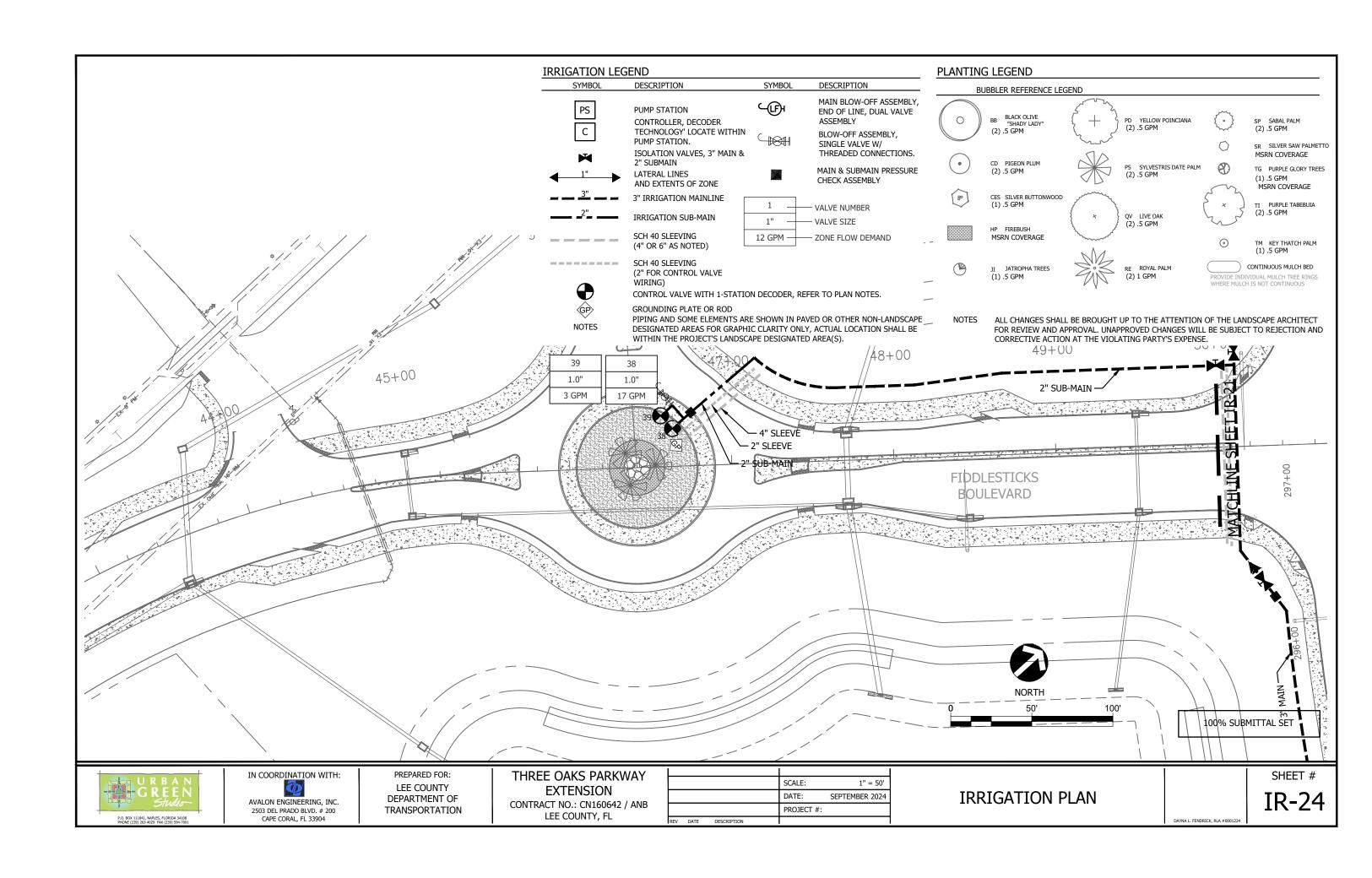


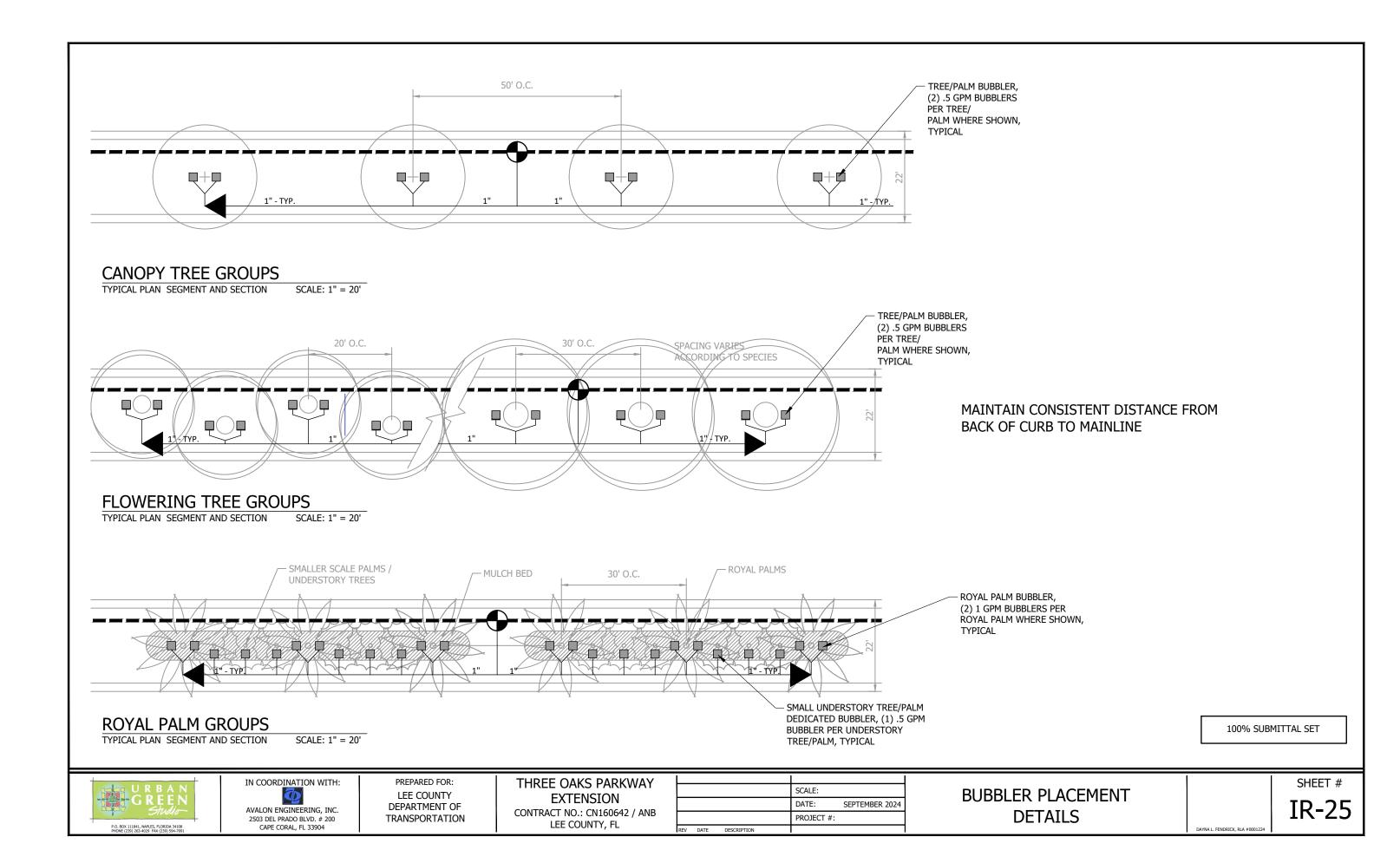


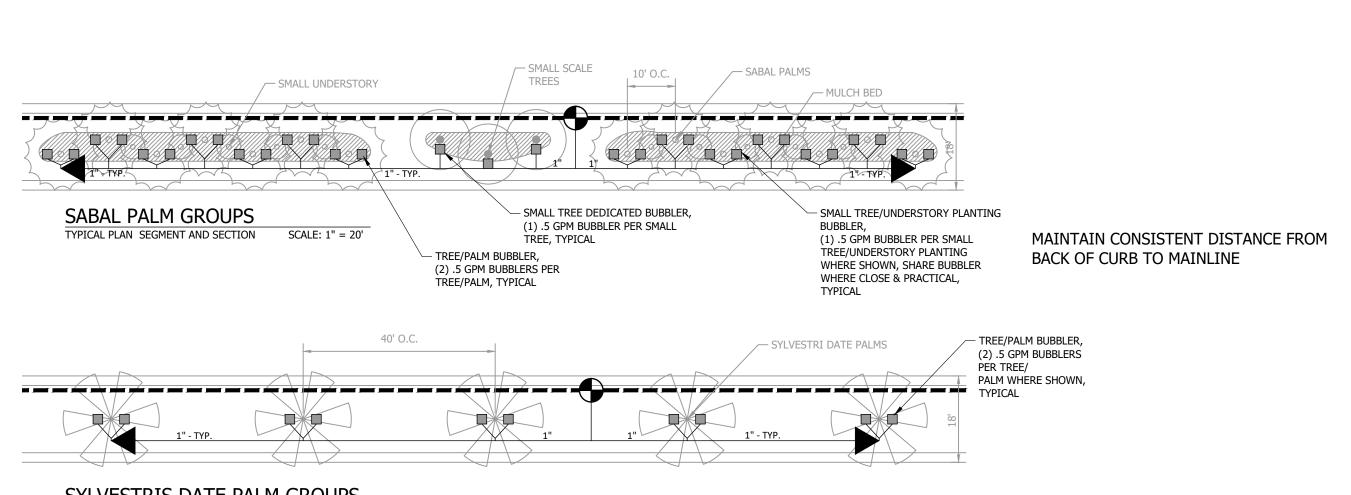












SYLVESTRIS DATE PALM GROUPS TYPICAL PLAN SEGMENT AND SECTION

100% SUBMITTAL SET



IN COORDINATION WITH: AVALON ENGINEERING, INC. 2503 DEL PRADO BLVD. # 200

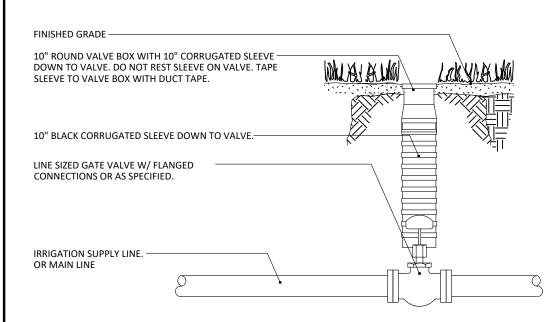
CAPE CORAL, FL 33904

PREPARED FOR: LEE COUNTY DEPARTMENT OF TRANSPORTATION THREE OAKS PARKWAY **EXTENSION** CONTRACT NO.: CN160642 / ANB LEE COUNTY, FL

			SCALE:	
			DATE:	SEPTEMBER 2024
			PROJECT	#:
REV	DATE	DESCRIPTION		

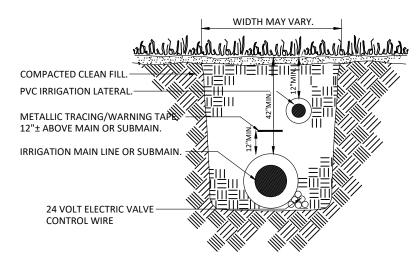
BUBBLER PLACEMENT DETAILS

SHEET # IR-26



MAIN LINE ISOLATION MANUAL GATE VALVE INSTALLATION DETAIL

N.T.S.



ALL TRENCHING DEPTHS SHOWN ARE MINIMUM. IN THE EVENT THAT MINIMUM TRENCHING DEPTHS ARE NOT MET, THE TRENCHES SHALL BE RE-EXCAVATED.

DEPTH MEASUREMENTS ARE TO BE DONE FROM FLUSH GRADE TO TOP OF PIPE.

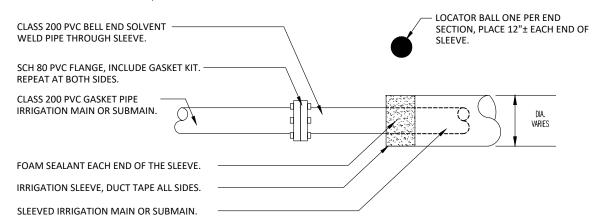
PROVIDE A 30" MINIMUM VERTICAL SEPARATION BETWEEN MAIN/SUBMAIN LINE(S) AND LATERAL LINE(S).

ALL TRENCHES SHALL BE BACKFILLED WITH CLEAN SOIL FREE OF DEBRIS & NOXIOUS WEEDS. TRENCHES SHALL BE COMPACTED TO A 90% STANDARD PROCTOR DENSITY, ASTMD698-78.

TYPICAL IRRIGATION MAIN TRENCHING DETAIL

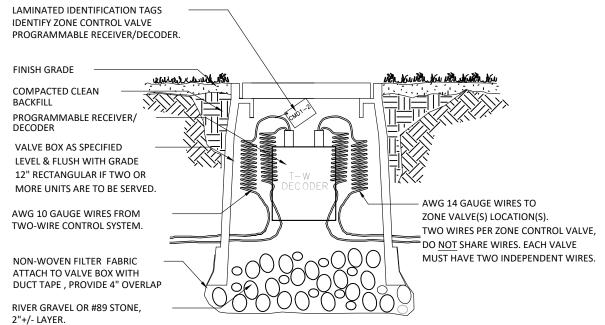
N.T.S.





IRRIGATION SLEEVE SEALING DETAIL

N.T.S.



NOTE

EACH ZONE CONTROL VALVE NOT CONNECTED DIRECTLY TO THE TWO-WIRE SYSTEM AWG 10 GAUGE WIRES MUST HAVE ITS OWN TWO WIRES. DO NOT SHARE AWG 14 GAUGE WIRES WITH OTHER ZONE CONTROL VALVES.

TWO WIRE SPLICE BOX

100% SUBMITTAL SET

N.T.S.

DAYNA L. FENDRICK, RLA #000122



IN COORDINATION WITH:

AVALON ENGINEERING, INC. 2503 DEL PRADO BLVD. # 200 CAPE CORAL, FL 33904 PREPARED FOR: LEE COUNTY DEPARTMENT OF TRANSPORTATION THREE OAKS PARKWAY
EXTENSION
CONTRACT NO.: CN160642 / ANB

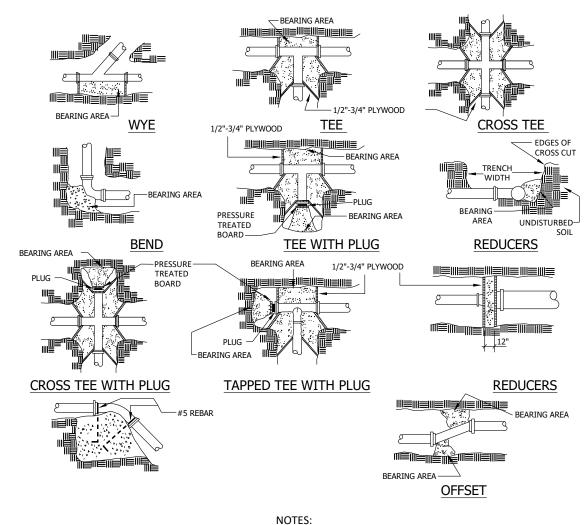
LEE COUNTY, FL

			SCALE:	
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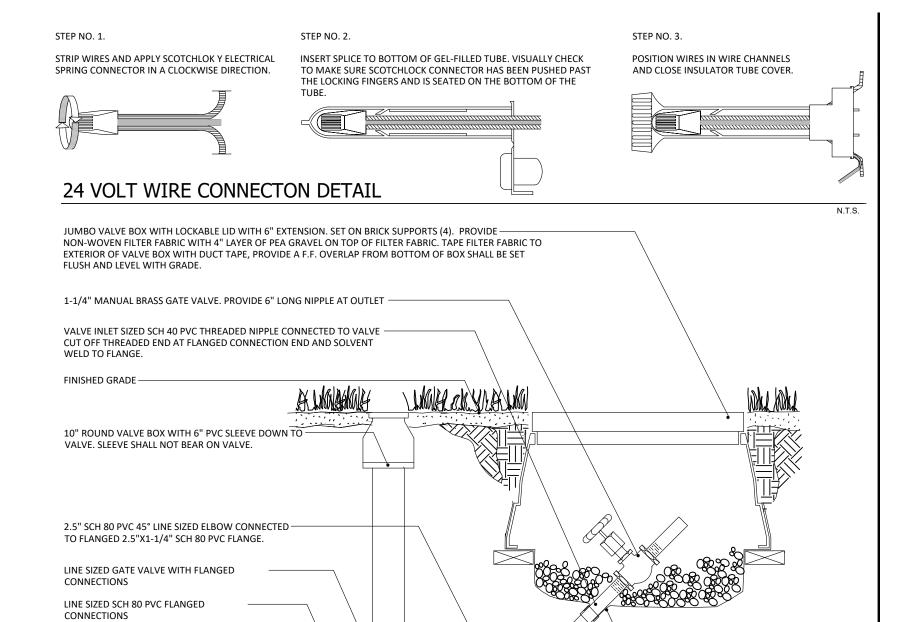
IRRIGATION DETAILS

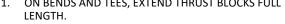
SHEET #

IR-27



- ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL
- PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS.
- WHERE SOIL HAS BEEN DISTURBED, EXCAVATE LOOSE SOIL
- BACKFILL MATERIAL SHALL NOT INCLUDE ROCK OR
- THRUST BLOCK AREAS BASED ON SOIL BEARING LOAD OF







IN BACKFILLING, ANY MUCK ENCOUNTERED SHALL BE REMOVED & REPLACED WITH ACCEPTABLE MATERIAL.

- BOULDERS.
- 2000 PSF AND LINE PRESSURE OF 150 PSI.
- ALL IRRIGATION LINES LARGER THAN 2" ARE TO BE THRUST

IRRIGATION MAIN/SUB-MAIN DOUBLE VALVE BLOW-OFF INSTALLATION DETAIL



MINIMUM BEARING AREAS IN Sq.Ft. FOR THRUST BLOCKS.

12

17

24

10

13

24

16

20

20

34

24

34

IN COORDINATION WITH: AVAI ON ENGINEERING, INC. 2503 DEL PRADO BLVD. # 200

CAPE CORAL, FL 33904

TYPICAL THRUST BLOCKS INSTALLATION DETAIL

PREPARED FOR: LEE COUNTY **DEPARTMENT OF** TRANSPORTATION

THREE OAKS PARKWAY **EXTENSION** CONTRACT NO.: CN160642 / ANB LEE COUNTY, FL

			SCALE:	
			DATE:	SEPTEMBER 2024
			PROJECT #:	N.1.S.
REV	DATE	DESCRIPTION		

ALL THREADED RODS, NUTS AND WASHERS SHALL BE

OR CLOSING EACH VALVE UNDER PRESSURE

OPEN AND CLOSE SLOWLY THE VALVES DURING FLUSHING.

OPEN THE SMALLER VALVE FIRST, THEN OPEN THE LARGER

VALVE. USE A MINIMUM TIME OF 30 SECONDS FOR OPENING

IRRIGATION MAIN, REFER

TO PLAN FOR SIZE(S).

STAINLESS STEEL.

NOTES:

IRRIGATION DETAILS

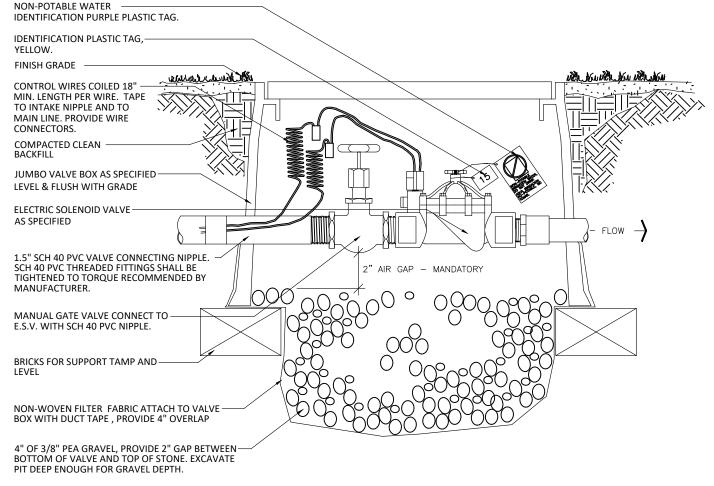
SHEET #

100% SUBMITTAL SET

TAPE FILTER FABRIC TO

NIPPLE SURFACE WITH

DUCT TAPE.

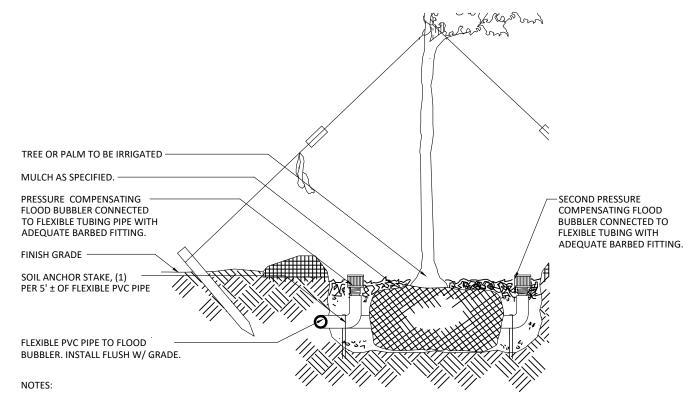


IRRIGATION CONTRACTOR SHALL FIELD DETERMINE NIPPLE LENGTHS.

MAINLINE OUTLET TEE, INTERCONNECTING NIPPLES AND ALL OTHER INTERCONNECTING
FITTINGS SHALL BE SIZED TO THE VALVES INLET OPENINGS.

ELECTRIC SOLENOID VALVE WITH MANUAL GATE VALVE INSTALLATION DETAIL

N.T.S.



REFER TO PLAN OR BUBBLER LEGEND FOR BUBBLER QUANTITIES & NOZZLE SIZE PER TREE/PALM.

BUBBLER(S) IS/ARE TO BE INSTALLED ADJACENT TO ROOTBALL PERIMETER. DO NOT INSTALL BUBBLER ON TOP OF ROOTBALL, NEXT TO TRUNK, INSTALL AT EDGE OF ROOTBALL.

ON SLOPING GROUNDS, INSTALL BUBBLER(S) DIRECTLY UPHILL FROM THE TREE/PALM.

IF MORE THAN ONE BUBBLER IS SPECIFIED, LOCATE BUBBLERS EQUIDISTANT AROUND ROOT BALL.

IRRIGATION FLOOD BUBBLER FOR TREE OR PALMS INSTALLATION DETAIL

100% SUBMITTAL SET



IN COORDINATION WITH:

AVALON ENGINEERING, INC. 2503 DEL PRADO BLVD. # 200 CAPE CORAL, FL 33904 PREPARED FOR: LEE COUNTY DEPARTMENT OF TRANSPORTATION THREE OAKS PARKWAY
EXTENSION

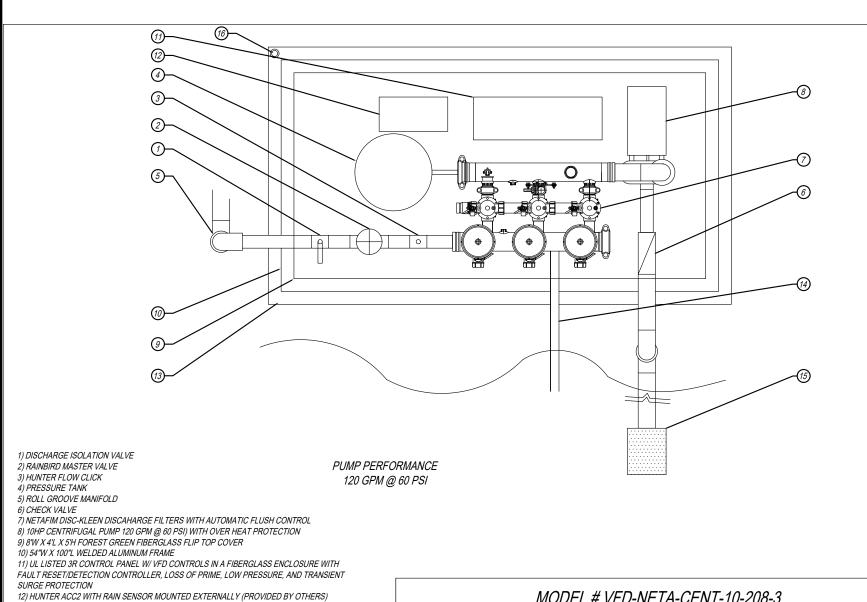
CONTRACT NO.: CN160642 / ANB LEE COUNTY, FL

			SCALE:	
			DATE:	SEPTEMBER 2024
			PROJECT #:	
REV	DATE	DESCRIPTION		

IRRIGATION DETAILS

SHEET #

IR-29

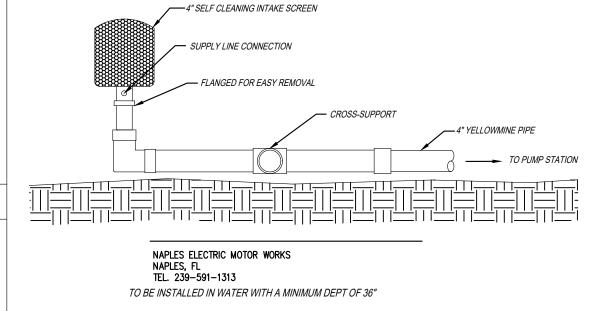


MODEL # VFD-NETA-CENT-10-208-3

NAPLES ELECTRIC MOTOR WORKS, INC.

2088 J&C BLVD. NAPLES, FL 34109

N.T.S.



SELF-CLEANING INTAKE SKID FOR CENTRIFUGAL PUMPS

N.T.S.

100% SUBMITTAL SET

P.O. BOX 111841, NAPLES, FLORIDA 34108 PHONE (239) 263-4029 FAX (239) 594-709

13) 60"W X 106"L X 4"T CONCRETE SLAB 14) 2" FILTER BACK WASH LINE

CLEAR OF THE SHELL ACCESS HATCH.

15) SELFCLEANING LAKE INTAKE SCREEN ASSEMBLY

16) 1" SCH 80 PVC SXS COUPLING CAST IN PLACE FOR RAIN SENSOR MOUNTING POLE

PROVIDE A 1" SCH 80 PVC COUPLING CAST INTO THE CONCRETE PAD FOR THE RAIN SENSOR MOUNTING POLE. THE RAIN SENSOR SHALL BE A WIRELESS MODEL. THE RAIN SENSOR

MOUNTING POLE SHALL BE A 1"X10" TALL SCH 80 PVC SECTION. SET COUPLING IN AN AREA

LAKESIDE PUMP STATION SCHEMATIC DETAIL

IN COORDINATION WITH:

AVALON ENGINEERING, INC. 2503 DEL PRADO BLVD. # 200 CAPE CORAL, FL 33904

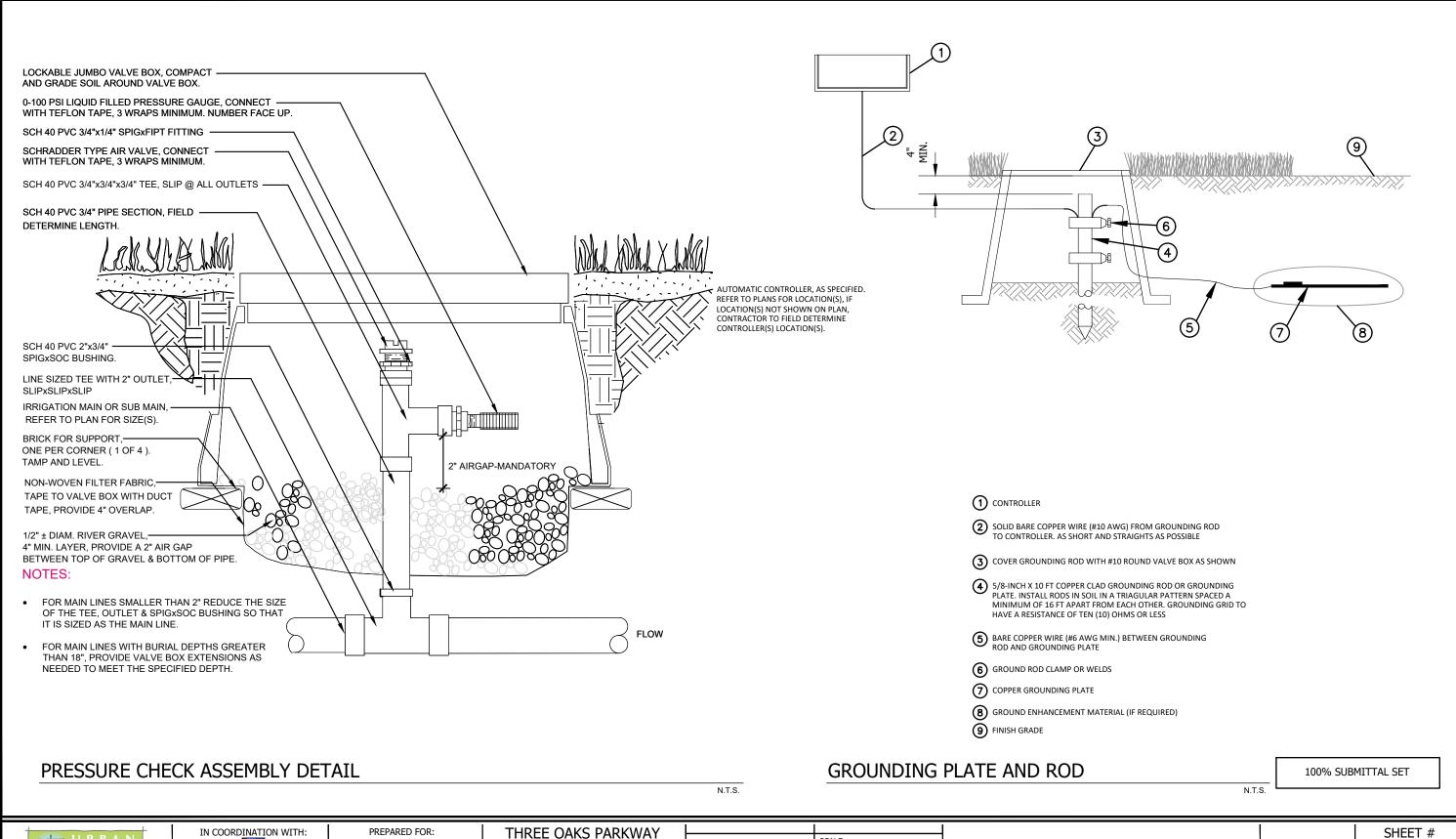
PREPARED FOR: LEE COUNTY DEPARTMENT OF TRANSPORTATION THREE OAKS PARKWAY **EXTENSION**

CONTRACT NO.: CN160642 / ANB LEE COUNTY, FL

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IRRIGATION DETAILS

SHEET # **IR-30**



P.O. BOX 111841, NAPLES, FLORIDA 34108

AVALON ENGINEERING, INC. 2503 DEL PRADO BLVD. # 200 CAPE CORAL, FL 33904

LEE COUNTY DEPARTMENT OF TRANSPORTATION **EXTENSION**

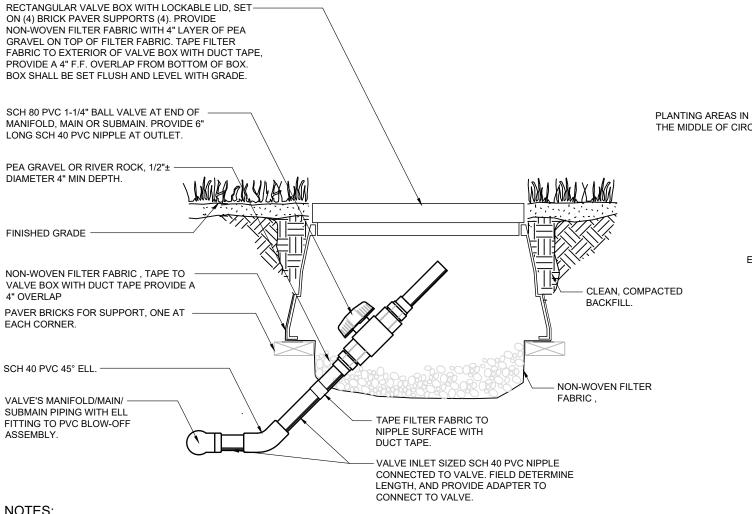
CONTRACT NO.: CN160642 / ANB LEE COUNTY, FL

			SCALE:	
			DATE:	SEPTEMBER 2024
			PROJECT #:	
REV	DATE	DESCRIPTION		

IRRIGATION DETAILS

IR-31

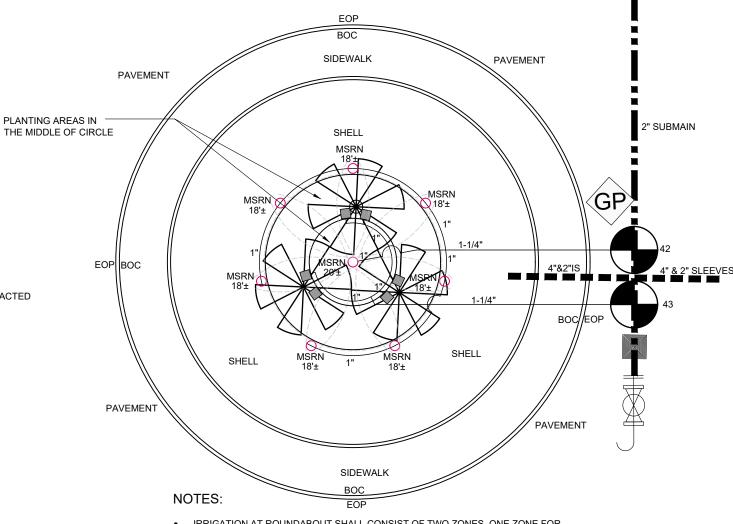
SPECIFICATIONS



NOTES:

- IRRIGATION CONTRACTOR SHALL FIELD DETERMINE THE TYPE OF VALVES' ASSEMBLY MANIFOLD/MAIN/SUBMAIN FITTING SUITABLE FOR PROVIDING A P.O.C. TO THE BLOW-OFF ASSEMBLY.ASSEMBLY.
- ALL BACKFILL SOIL SHALL BE CLEAN AND COMPACTED, FREE OF ROCKS AND DEBRIS.
- LOCATE & ALIGN THE VALVE SO THAT THE OUTLET & ITS NIPPLE ARE NOT CROWDING THE VALVE BOX'S WALL FOR DISCHARGE/FLUSHING EASE.
- TOP OF VALVE BOX SHALL BE INSTALLED ABOUT .5"± ABOVE FINISH GRADE SO THAT BOX'S TOP OF LID IS FLUSH W/ SOD.

PVC BLOW-OFF ASSEMBLY DETAIL



- IRRIGATION AT ROUNDABOUT SHALL CONSIST OF TWO ZONES, ONE ZONE FOR PLANTING AREAS, AND ANOTHER ZONE FOR PALMS' BUBBLERS.
- 2" IRRIGATION SUBMAIN.ZONE CONTROL VALVES, GROUNDING EQUIPMENT, PRESSURE CHECK & BLOW-OFF ASSEMBLIES SHALL REMAIN ACROSS THE STREET FROM CIRCLE.
- PAVED SURFACES CROSSING SLEEVE SHALL BE A 4" SCH 80 PVCV.
- MSRN = 6" POP-UP SPRAY BODY WITH MULTI-STREAM ROTATING NOZZLE. NOZZLE RANGE AS SHOWN, ADJUST PATTERN AS NEEDED.
- REFER TO SHEET IR-24 FOR RIGHT OF WAY LAYOUT.
- FIELD ADJUST AS NEEDED.

ROUNDABOUT IRRIGATION ENLARGEMENT

100% SUBMITTAL SET

DAYNA L. FENDRICK, RLA #000122



IN COORDINATION WITH:

AVALON ENGINEERING, INC. 2503 DEL PRADO BLVD. # 200 CAPE CORAL, FL 33904

PREPARED FOR: LEE COUNTY DEPARTMENT OF TRANSPORTATION

THREE OAKS PARKWAY **EXTENSION** CONTRACT NO.: CN160642 / ANB

LEE COUNTY, FL

			SCALE:	
			DATE:	SEPTEMBER 2024
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IRRIGATION SPECIFICATIONS & SCHEDULE

SHEET #

IR-32

IRRIGATION CONTROLLER PHASE I RESTRICTIONS (THREE NIGTHS PER WEEK, TWO HOURS, TWENTY MINUTES PER NIGHT) RECOMMENDED SCHEDULE TABLE

CYCLE	PROGRAM "A"	PROGRAM "B"	PROGRAM "C"	PROGRAM "D"	PROGRAM "E"	PROGRAM "F"	EST. PEAK FLOW DEMAND
1	1 (20 MIN.) 12:00	8 (20 MIN.) 12:00	15 (20 MIN.) 12:00	22 (20 MIN.) 12:00	29 (20 MIN.) 12:00	36 (20 MIN.) 12:00	70+/- GPM
2	2 (20 MIN.) 12:20	9 (20 MIN.) 12:20	16 (20 MIN.) 12:20	23 (20 MIN.) 12:20	30 (20 MIN.) 12:20	37 (20 MIN.) 12:20	86.5+/- GPM
3	3 (20 MIN.) 12:40	10 (20 MIN.) 12:40	17 (20 MIN.) 12:40	24 (20 MIN.) 12:40	31 (20 MIN.) 12:40	38 (40 MIN.) 12:40	75.5+/- GPM
2	4 (20 MIN.) 1:00	11 (20 MIN.) 1:00	18 (20 MIN.) 1:00	25 (20 MIN.) 1:00	32 (20 MIN.) 1:00	38 CONTINUE 1:00	106+/- GPM
5	5 (20 MIN.) 1:20	12 (20 MIN.) 1:20	19 (20 MIN.) 1:20	26 (20 MIN.) 1:20	33 (20 MIN.) 1:20	39 (20 MIN.) 1:20	76.5+/- GPM
6	6 (20 MIN.) 1:40	13 (20 MIN.) 1:40	20 (20 MIN.) 1:40	27 (20 MIN.) 1:40	34 (20 MIN.) 1:40	OPEN 1:40	84.5+/- GPM
7	7 (20 MIN.) 2:00	14 (20 MIN.) 2:00	21 (20 MIN.) 2:00	28 (20 MIN.) 2:00	35 (20 MIN.) 2:00		67.5+/- GPM
8	OPEN 2:20	OPEN 2:20	OPEN 2:20	OPEN 2:20	OPEN 220	OPEN 1:40	0+/- GPM
EST. RUN TIME	140+/- MIN.	140+/- MIN.	140+/- MIN.	140+/- MIN.	140+/- MIN.	100+/- MIN.*	
	2 HOURS, 20+/- MIN.	2 HOURS, 0+/- MIN.	1 HOUR, 40+/- MIN.				

ESTIMATED MAXIMUM RUN TIME FOR ALL PROGRAMS: 140+/- MINUTES; 2 HOURS, 20 MINUTES.

ESTIMATED PEAK FLOW DEMAND: 106+/- GPM. ESTIMATED AVERAGE FLOW DEMAND: 76+/- GPM.

* = PROVIDE DELAY START TIME AS NEEDED IN ORDER TO MEET PROPOSED OPERATING SCHEDULE.

AT THE TIME OF DESIGN DEDICATED BUBBLERS IRRIGATION ZONES WERE EXEMPT FROM IRRIGATION RESTRICTIONS. A THREE NIGHTS PER WEEK WATERING SCHEDULE IS RECOMMENDED FOR ESTABLISHMENT PURPOSES (THREE YEARS) WHILE THE TREES AND PALMS BECOME ESTABLISHED.

DUE TO THE LENGTH OF THE MAIN LINE LENGTHS IT IS RECOMMENDED TO NOT EXCEED FLOWS OF $17\pm$ GPM FOR ZONES AT THE FARTHEST MAIN/SUBMAIN SECTIONS FROM THE IRRIGATION PUMP STATION.

IT IS RECOMMENDED TO USE THE CONTROLLER'S MULTIPLE PROGRAMMING CAPABILITY TO CREATE FLOW DEMANDS THAT CAN BE WITHIN THE PUMP STATION'S PEAK OPERATING RANGE AS MUCH AS POSSIBLE, AND REDUCE THE PUMP STATION'S OPERATING TIME FOR TO REDUCE ELECTRIC SERVICE CONSUMPTION, AND REDUCE WEAR AND TEAR FOR THE PUMP STATION.

100% SUBMITTAL SET



IN COORDINATION WITH:

AVALON ENGINEERING, INC.
2503 DEL PRADO BLVD. # 200

CAPE CORAL, FL 33904

PREPARED FOR: LEE COUNTY DEPARTMENT OF TRANSPORTATION THREE OAKS PARKWAY
EXTENSION
CONTRACT NO.: CN160642 / ANB
LEE COUNTY, FL

			SCALE:	
			DATE:	SEPTEMBER 2024
			PROJECT #:	
REV	DATE	DESCRIPTION		

IRRIGATION
SPECIFICATIONS &
SCHEDULE

SHEET # IR-33

IRRIGATION SCHEDULE SYMBOL DESCRIPTION EST. QTY. IRRIGATION WATER SOURCE: LAKESIDE DRAW WITH A PUMP STATION CAPABLE OF PROVIDING FLOW CAPACITY OF +/- 120 GPM WITH REQUIRED MINIMUM PRESSURE OF +/- 65 PSI. THE PUMP STATION SHALL INCORPORATE AUTOMATED FILTRATION & PS PROTECTIVE, LOCKABLE FIBERGLASS ENCLOSURE. OWNER & PROJECT ENGINEER SHALL SELECT PUMP STATION MANUFACTURER & MODEL BASED ON OWNER'S PREFERENCE, FEATURES, & OPERATING CHARACTERISTICS, BY NAPLES ELECTRIC MOTORWORKS, OR EQUAL. ELECTRIC SERVICE REQUIREMENTS: THREE PHASE 208V. IRRIGATION CONTROLLER & RAIN SENSOR: HUNTER ACC2 DECODER 75-STATION CONTROLLER MOUNTED INSIDE PUMP STATION, WITH A WIRELESS RAIN-CLIK RAIN SENSOR. POUTSIDE PUMP STATION SHELL/ENCLOSURE.FINAL LOCATION SHALL BE FIELD DETERMINED С BY PROJECT MANAGER, AT A LOCATION ACCESSIBLE TO MAINTENANCE PERSONNEL. PROVIDE DEDICATED THREE PHASE POWER, AS AVAILABLE. GROUND SYSTEM PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE WITH PUMP STATION MANUFACTURER. LATERAL LINES: 1120-1220 CLASS 200 PVC SOLVENT WELD PIPE WITH SCH 40 PVC FITTINGS, 1,120± LF PANTONE PURPLE 522C, 12"± DEPTH. 1" - 2" IRRIGATION MAIN: 1120-1220 3" CLASS 200 PVC GASKETED BELL PIPE WITH SCH 80 PVC 14,560± LF INTERCONNECTING FITTINGS, PANTONE PURPLE 522C. INSTALLATION DEPTH, 30"±. IRRIGATION SUB-MAIN: 2" 1120-1220 CLASS 200 PVC SOLVENT WELD PIPE WITH SCH 40 PVC 1560± LF FITTINGS, PANTONE PURPLE 522C, 24"± DEPTH. SCH 40 SLEEVING, 4" OR 6" AS NOTED TBD LF TBD LF SCH 40 SLEEVING, 2" FOR CONTROL VALVE WIRING -----ZONE CONTROL VALVES: HUNTER ICV-101G-FS, 1" ELECTRIC SOLENOID VALVE. 39 INSTALL HUNTER SINGLE STATION DECODER IN EACH VALVE BOX NO SYMBOL TREE/PALM BUBBLER HYDRANT: HUNTER PCB UMBRELLA BUBBLER NOZZLE. PROVIDE QUANTITY 43 PER DESIGNATED TREE/PALM AS SHOWN ON BUBBLER REFERENCE TABLE TWO - .5 GPM BUBBLERS PER TREE/PALM - LARGE CANOPY TREES FLOWERING TREES AND PALMS. ONE - .5 GPM BUBBLER PER SMALL TREE & UNDERSTORY PALMS IRRIGATION CONTROL WIRING: ID1, 14-2, 14AWG DECODER TWO-WIRE JACKETED CABLE 17,750 LF NO SYMBOL SUITABLE FOR DIRECT BURIAL APPLICATIONS AND TWO-WIRE SYSTEMS. PROVIDE DBR WIRE CONNECTORS IN ACCORDANCE W/ MANUFACTURER'S SPECIFICATIONS. MAIN ISOLATION VALVE: 12 NIBCO P-619RW 3" CAST IRON GATE VALVE, SAME SIZE AS MAINLINE PIPE WHERE LOCATED. RESILIENT WEDGE NON-RISING STEM FLOW CONTROL WITH IPS PUSH-ON ENDS. MAIN ISOLATION VALVE: 12 NIBCO P-619RW 2" CAST IRON GATE VALVE, SAME SIZE AS MAINLINE/SUBMAIN PIPE WHERE LOCATED. RESILIENT WEDGE NON-RISING STEM FLOW CONTROL WITH IPS PUSH-ON ENDS. GROUNDING PLATE OR ROD: 15 INSTALL 10' AWAY FROM WIRE PATH USE ROD IN AREAS THAT ARE TOO NARROW FOR THE PLATE

IRRIGATION SCHEDULE

DESCRIPTION **SYMBOL** EST. QTY.

PROPOSED 2-1/2" IRRIGATION MAIN DOUBLE VALVE BLOW-OFF ASSEMBLY: 2-1/2" FLANGED **←**(F)+

CONNECTION VALVE WITH SQUARE NUT, WITH 1-1/4" SCH 80 PVC INTERCONNECTING FITTINGS, 1-1/4" MATCO 514 SERIES ISOLATION VALVE, VALVE BOXES, 10" CORRUGATED PLASTIC ACCESS SLEEVE. USE AT FARTHES LOCATIONS FROM THE PUMP STATION. REFER TO

PROPOSED IRRIGATION MAIN/SUBMAIN SINGLE VALVE BLOW-OFF ASSEMBLY: 1-1/4" MATCO MATCO 514 SERIES ISOLATION VALVE W/ SCH 80 PVC INTERCONNECTING FITTINGS, JUMBO

VALVE BOX, REFER TO INSTALLATION DETAIL.

MAIN & SUBMAIN PRESSURE CHECK ASSEMBLY, REFER TO INSTALLATION DETAIL 11

MSRN HYDRANT: 6" POP-UP SPRAY BODY WITH HUNTER MP ROTATOR MULTI-STREAM ROTATING NOZZLE (MP 2000 SERIES), REFER TO SCHEMATIC MSRN ENLARGEMENT DETAIL FOR AREA ENLARGEMENT, INSTALLATION STANDARD IN ACCORDANCE TO HUNTER INDUSTRIES APPLICABLE SPECIFICATIONS.

> TREES/PALMS & UNDERSTORY PLANTINGS BUBBLER HYDRANTS: HUNTER PCN SERIES PRESSURE COMPENSATING FLOOD BUBBLER NOZZLES. REFER TO SCHEMATIC LAYOUT DETAIL FOR APPLICABLE INSTALLATION ASSEMBIES, AND BUBBLER NOZZLE DISCHARGE RATES, INSTALLATION STANDARD IN ACCORDANCE

DUAL BUBBLER ASSEMBLIES - TBD SINGLE BUBBLER ASSEMBLIES - TBD

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TO HUNTER INDUSTRIES APPLICABLE SPECIFICATIONS.

1 —	VALVE NUMBER
1.0" —	VALVE SIZE
20 GPM —	ZONE FLOW DEMAND

TO BE DETERMINED BY IRRIGATION CONTRACTOR PRIOR TO SUBMITTING BIDS. TBD

> BIDDING CONTRACTORS SHALL PREPARE BIDS BASED ON ACTUAL COUNTS PERFORMED BY THEIR STAFF. PROVIDE QUANTITY ADJUSTMENTS AS NEEDED.

> IRRIGATION CONTRACTOR SHALL THE IRRIGATION CONTROLLER TO BE INCORPORATED INTO THE PUMP STATION. COORDINATE WITH PUMP STATION MANUFACTURER.

> IRRIGATION CONTRACTOR SHALL INCLUDE IN BID ELECTRIC SERVICE COST(S) FOR PUMP STATION AND CONTROLLER. COORDINATE WITH GENERAL AND ELECTRIC SERVICE CONTRACTORS.

> > 100% SUBMITTAL SET



IN COORDINATION WITH: AVALON ENGINEERING, INC. 2503 DEL PRADO BLVD. # 200

CAPE CORAL, FL 33904

PREPARED FOR: LEE COUNTY DEPARTMENT OF TRANSPORTATION

THREE OAKS PARKWAY CONTRAC

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EXTENSION				DATE:	SEPTEMBER 2024
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IRRIGATION SPECIFICATIONS & SCHEDULE

SHEET #