

STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION

CONTRACT PLANS

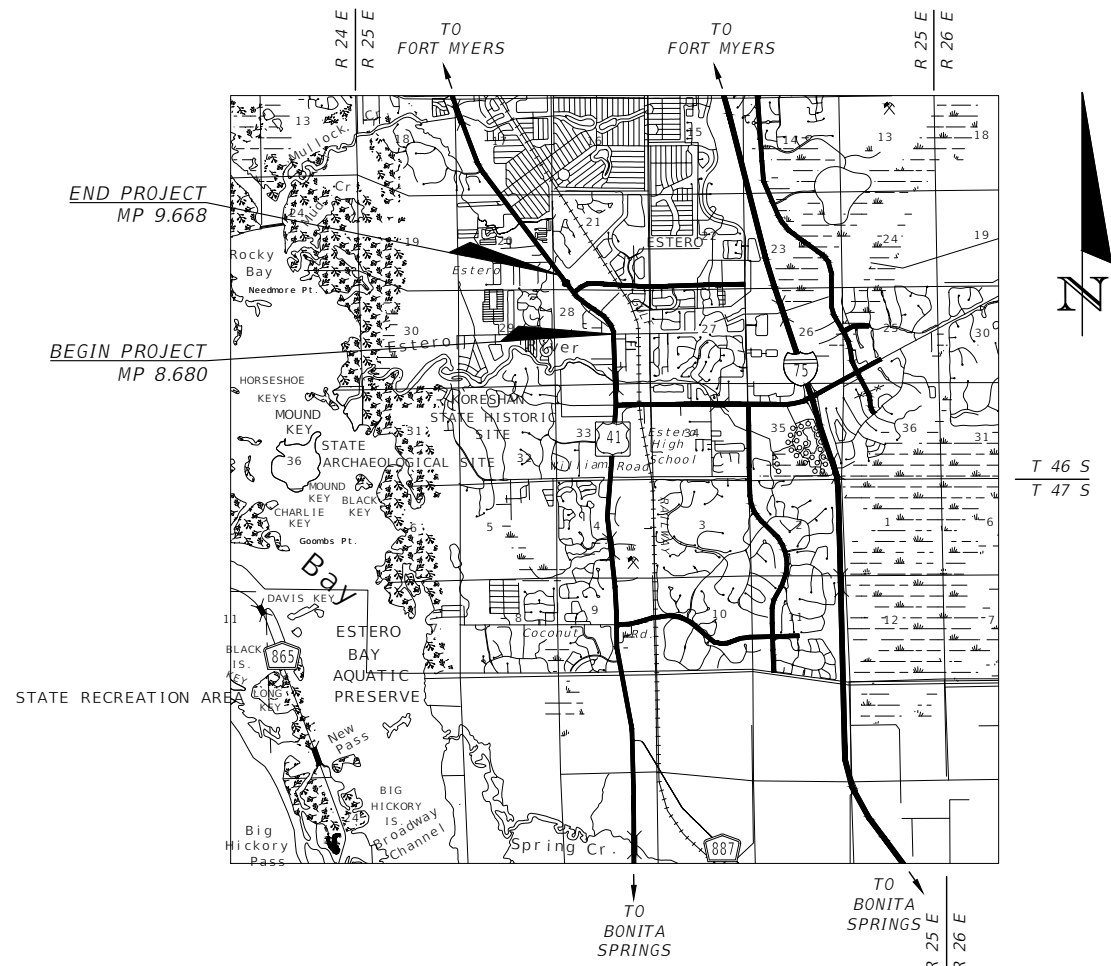
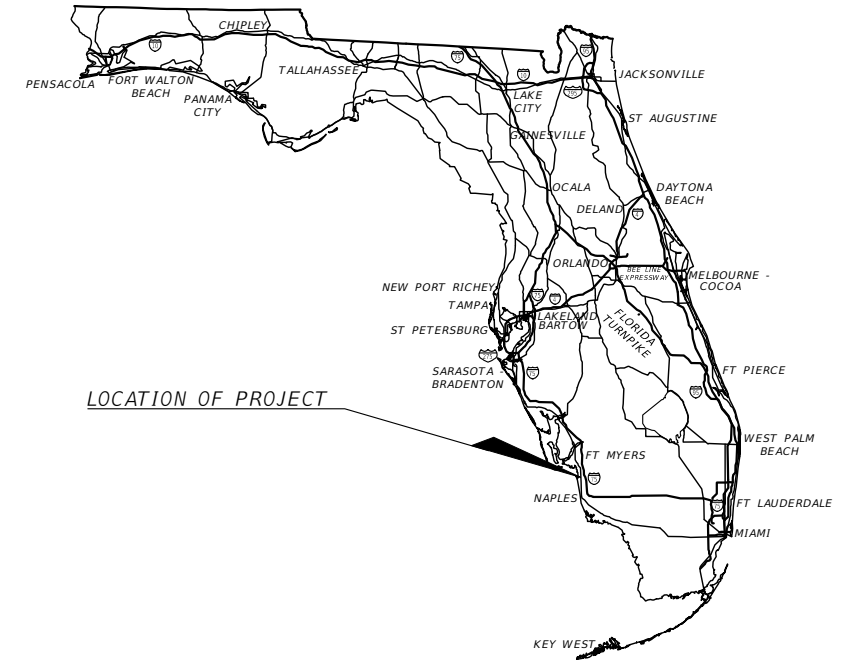
FINANCIAL PROJECT ID 446968-1-74-01  
LEE COUNTY (12010)

US41 (SR45) FROM BROADWAY EAST TO  
VINTAGE PARKWAY

LANDSCAPE PLANS

INDEX OF LANDSCAPE PLANS

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SQ-1 TO SQ-2	SUMMARY OF QUANTITIES



NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

PLANS PREPARED BY:

**Kimley»Horn**

LANDSCAPE PLANS  
PROFESSIONAL OF RECORD:

EDWARD M. DEAN, P.L.A.  
P.L.A. NO.: 6667269  
KIMLEY-HORN AND ASSOCIATES  
1777 MAIN STREET, SUITE 200  
SARASOTA, FLORIDA 34236  
PHONE NO.: 941-379-7600  
CONTRACT NO.:  
VENDOR NO.: F560885615-001  
CERTIFICATE OF AUTHORIZATION NO.: 00000696

VILLAGE OF ESTERO PROJECT MANAGER:

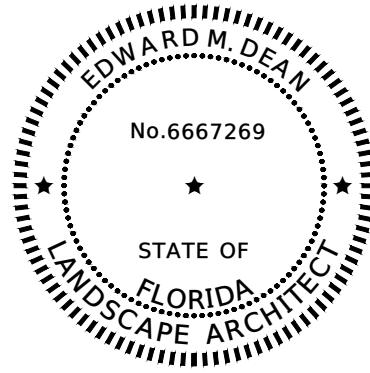
DAVID WILLEMS, P.E.

NOTE:  
DESIGN SPEED WITHIN PROJECT LIMITS IS 50 M.P.H.  
<http://www.fdot.gov/design/Standardplans.shtm>

GOVERNING STANDARD PLANS:  
Florida Department of Transportation, FY2020-21 Standard plans for Road and Bridge Construction and applicable Interim Revisions (Irs).

Standard Plans for Road Construction and associated Irs are available at the following website:

CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
TBD	21	LD-1



THIS ITEM HAS BEEN DIGITALLY SIGNED  
AND SEALED BY:

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE  
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THE SIGNATURE MUST BE VERIFIED ON ANY  
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EDWARD M. DEAN, P.L.A., NO.: 6667269  
KIMLEY-HORN AND ASSOCIATES, INC.  
CERTIFICATE OF AUTHORIZATION NO. 00000696  
VENDOR NO. F560885615-001  
1777 MAIN STREET, SUITE 200  
SARASOTA, FL 34236

THE ABOVE NAMED LANDSCAPE ARCHITECT SHALL BE RESPONSIBLE FOR  
THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G10-11.011, F.A.C.

SHEET NO.	SHEET DESCRIPTION
LD-1	KEY SHEET
LD-2	SIGNATURE SHEET
LD-3	TABULATION OF QUANTITIES
LD-4	GENERAL NOTES
LD-5	LANDSCAPE PLAN SHEET
LD-6	LANDSCAPE TECHNICAL MAINTENANCE PLAN
LD-7	IRRIGATION TABULATION OF QUANTITIES
LD-8	IRRIGATION PLAN SHEET
LD-9 - LD-10	IRRIGATION DETAILS
LD-11	TEMPORARY TRAFFIC CONTROL PLAN
SQ-1	SUMMARY OF QUANTITIES (1)
SQ-2	SUMMARY OF QUANTITIES (2)

R E V I S I O N S				STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SIGNATURE SHEET	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		LD-2
				SR 45	LEE	446968-1-74-01		

EDWARD M. DEAN, PLA  
P.L.A. LICENSE NUMBER 6667269  
KIMLEY-HORN AND ASSOCIATES  
1777 MAIN STREET, SUITE 200  
SARASOTA, FL 34236  
CERTIFICATE OF AUTHORIZATION 00000696

**TABULATION OF QUANTITIES / PLANT SCHEDULE**

PAY ITEM NO.	PAY SIZE	SYM	BOTANICAL NAME	COMMON NAME	INSTALLED SIZE	MAXIMUM MAINTAINED SIZE	SPACING	REMARKS	UNIT	SHEET NUMBERS		TOTAL THIS SHEET		GRAND TOTAL	
										LD-5		PLAN	FINAL	PLAN	FINAL
										PLAN	FINAL				
580-1-1	SMALL	MC	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	1 GAL., 18" HT.	36" HT.	36" O.C.		EA	461		461		461	
580-1-1	SMALL	NF	NEOREGELIA 'FIREBALL'	FIREBALL BROMELIAD	1 GAL., 8" HT.	18" HT.	24" O.C.		EA	188		188		188	
580-1-1	SMALL	PN	PASPALUM NOTATUM	BAHIA GRASS	SOD		SOD		SF	1293		1293		1293	
580-1-2	LARGE	BN	BISMARCKIA NOBILIS 'SILVER'	SILVER BISMARCK PALM	20' OA, 10' CT MIN.		50' O.C.	HARDENED OFF	EA	6		6		6	
580-1-2	LARGE	CA	CRINUM AUGUSTUM 'QUEEN EMMA'	QUEEN EMMA CRINUM LILY	15 GAL., 36" HT., 36" SPR.	5' HT., 5' SPR.	60" O.C.		EA	6		6		6	
580-1-2	LARGE	IC	ILEX CASSINE	DAHOON HOLLY	45 GAL., 12' HT, 2.5" CAL	25' HT.	12' O.C.	FULL TO GROUND	EA	11		11		11	
580-1-2	LARGE	SP	SABAL PALMETTO	CABBAGE PALM	14' TO 18' CT (VARIED HT.)	N/A	SEE PLAN	REGENERATED, SLICK TRUNK	EA	4		4		4	
580-1-2	LARGE	SR	SERENOA REPENS 'CINEREA'	SILVER SAW PALMETTO	15 GAL., 24" HT., 24" SPR.	8' HT. MAX	48" O.C.		EA	19		19		19	
580-1-2	LARGE	ZP	ZAMIA PUMILA	COONTIE	7 GAL., 24" HT., 24" SPR.	36" HT.	30" O.C.		EA	97		97		97	

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REVISIONS				EDWARD M. DEAN, PLA P.L.A. LICENSE NUMBER 6667269 KIMLEY-HORN AND ASSOCIATES 1777 MAIN STREET, SUITE 200 SARASOTA, FL 34236 CERTIFICATE OF AUTHORIZATION 00000696	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			<b>TABULATION OF QUANTITIES</b>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		LD-3
					SR 45	LEE	446968-1-74-01		

1. BENCHMARK ELEVATIONS SHOWN ON THE PLANS ARE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. THE LOCATION(S) OF THE UTILITIES SHOWN IN THE PLANS (INCLUDING THOSE DESIGNATED Vv, Vh, AND Vvh) ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE VERIFIED LOCATIONS/ELEVATIONS APPLY ONLY AT THE POINTS SHOWN. INTERPOLATIONS BETWEEN THESE POINTS HAVE NOT BEEN VERIFIED.
3. UTILITY/AGENCY OWNERS:

	COMPANY	CONTACT	TELEPHONE NUMBER	EMAIL
	BONITA SPRINGS UTILITIES, INC.	ANDREW KOEBEL	(239) 390-4820	ANDY@BSU.US
	COMCAST	LEONARD MAXWELL-NEWBOLD	(954) 447-8405	LEONARD_MAXWELL-NEWBOLD@CABLE.COMCAST.COM
	CROWN CASTLE FIBER	DANNY HASKETT	(786) 610-7073	DANNY.HASKETT@CROWNCastle.COM
	FLORIDA POWER AND LIGHT--LEE	JOEL BRAY	(386) 586-6403	JOEL.BRAY@FPL.COM
	HOTWIRE COMMUNICATIONS	WALTER DAVILA	(954) 699-0900	WALTER.SANCHO-DAVILA@HOTWIRECOMMUNICATION.COM
	SUMMIT BROADBAND INC.	MIKE REBER	(239) 325-4105 EXT. 261	MREBER@SUMMIT-BROADBAND.COM
	LEE COUNTY SIGNAL DEPARTMENT	TOM WATTS	(239) 964-7600 EXT. 4126	TWATTS@LEEGOV.COM
	LEE COUNTY IRRIGATION	JOE SULAK	(239) 533-9400	JSULAK@LEEGOV.COM
	LEE COUNTY UTILITIES	TERRY KELLEY	(239) 479-8181	TKELLEY2@LEEGOV.COM
	TECO PEOPLES GAS - FT MYERS	JOAN DOMNING	(813) 275-3783	REALESTATESERVICES@TECOENERGY.COM
	RESOURCE CONSERVATION SYSTEMS	RYAN WILLOUGHBY	(239) 495-5805	
	CENTURYLINK FT MYERS	CRAIG CLARK	(239) 336-2003	CRAIG.D.CLARK@CENTURYLINK.COM
	CENTURYLINK NAPLES	JIGS SILANG	(239) 263-6234	NOEL.SILANG@CENTURYLINK.COM
4. SPECIAL EVENT DAYS FOR THIS PROJECT INCLUDE:  
NONE
5. EXISTING SIGN POST LOCATIONS OUTSIDE OF MEDIANS / PLANTING AREAS HAVE NOT BEEN SHOWN IN THESE PLANS. ALL PRESENT TRAFFIC SIGNS AND DELINEATOR POSTS ARE TO REMAIN IN PLACE AND ARE NOT TO BE REMOVED NOR IMPACTED, INCLUDING TEMPORARILY, IN ANY WAY AS A RESULT OF THE CONSTRUCTION ACTIVITIES BY THE CONTRACTOR.
6. THE TAMiami TRAIL CORRIDOR, KORESHAN STATE HISTORIC SITE, AND GREAT CALUSA BLUEWAY STATE PADDLING TRAILS ARE LOCATED ADJACENT TO THE PROJECT LIMITS. THESE ARE A SECTION 4(F) RESOURCE, REGULATED BY OEM. NO IMPROVEMENTS OR STAGING AREAS CAN BE LOCATED WITHIN THE LIMITS OF THESE LOCATIONS.
7. EXISTING DRAINAGE SWALES LOCATED ALONG ROADSIDE TO BE PROTECTED BY SILT FENCING AS SHOWN ON LANDSCAPE PLAN SHEETS.
8. ALL MULCH TO BE PINE STRAW.
9. PROVIDE 2' MULCH STRIP BETWEEN PAVEMENT AND EDGE OF PLANT SPACING FOR ALL SHRUBS AND ORNAMENTAL GRASSES TO PREVENT OVERGROWTH OVER PAVEMENT. PROVIDE 1' MULCH ACCESS STRIP BETWEEN PAVEMENT AND EDGE OF GROUNDCOVERS.
10. COMPLIANCE WITH FEDERAL ENDANGERED SPECIES ACT AND OTHER WILDLIFE REGULATIONS OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION MANUAL SHOULD BE ADHERED TO FOR WILDLIFE INVOLVEMENT DURING CONSTRUCTION. NOTIFY FDOT A MINIMUM OF 30 DAYS IN ADVANCE OF USING AN OFF-SITE AREA FOR ANCILLARY CONSTRUCTION NEEDS (E.G. STAGING).

**ABBREVIATIONS**

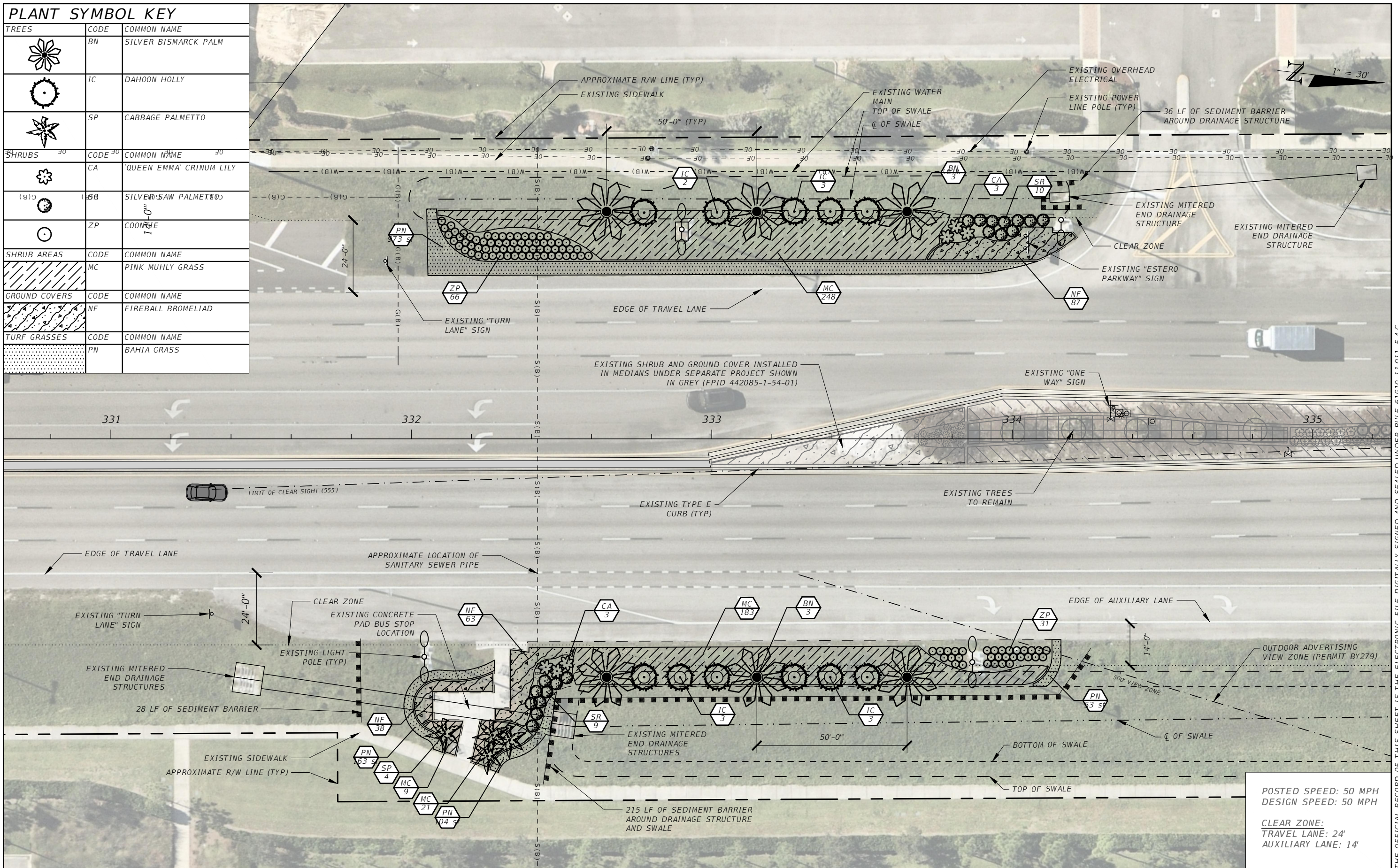
B&B	BALLED AND BURLAPPED
B.R.	BARE ROOT
CAL.	CALIPER
C.T.	CLEAR TRUNK
D.B.H.	DIAMETER AT BREST HEIGHT
F.G.	FIELD GROWN
F.T.G.	FULL TO GROUND
G.W.	GREY WOOD
H.O.	HARDENED OFF
N.W.L.	NORMAL WATER LEVEL
SPR.	SPREAD
CT.	CLEAR TRUNK
H.T.	HEIGHT
O.A.	OVERALL HEIGHT
O.C.	ON CENTER
R.P.G.	ROOTS PLUS GROWER
GAL.	GALLON

REQUIRED LANDSCAPE SETBACKS								
TYPE	BACK OF GUARDRAIL ASPHALT PAD	RIGHT OF WAY / FENCE	LIGHT POLES	ITS POLES	DRAINAGE STRUCTURES	UNDERGROUND UTILITIES	OVERHEAD UTILITIES	BOTTOM OF SWALE
TREE	15' - 0"	15' - 0"	25' - 0"	30' - 0"	15' - 0"	15' - 0"	25' - 0"	8' - 0"
PALM	15' - 0"	15' - 0"	15' - 0"	30' - 0"	15' - 0"	15' - 0"	25' - 0"	8' - 0"
SHRUBS	15' - 0"	15' - 0"	15' - 0"	30' - 0"	15' - 0"	N/A	15' - 0"	8' - 0"

REVISIONS				EDWARD M. DEAN, PLA P.L.A. LICENSE NUMBER 6667269 KIMLEY-HORN AND ASSOCIATES 1777 MAIN STREET, SUITE 200 SARASOTA, FL 34236 CERTIFICATE OF AUTHORIZATION 00000696	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			GENERAL NOTES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		LD-4
					SR 45	LEE	446968-1-74-01		

**PLANT SYMBOL KEY**

TREES	CODE	COMMON NAME
	BN	SILVER BISMARCK PALM
	IC	DAHON HOLLY
	SP	CABBAGE PALMETTO
SHRUBS	CODE	COMMON NAME
	CA	QUEEN EMMA CRINUM LILY
	SB	SILVER SAW PALMETTO
	ZP	COONJOE
SHRUB AREAS	CODE	COMMON NAME
	MC	PINK MUHLY GRASS
GROUND COVERS	CODE	COMMON NAME
	NF	FIREBALL BROMELIAD
TURF GRASSES	CODE	COMMON NAME
	PN	BAHIA GRASS



POSTED SPEED: 50 MPH  
 DESIGN SPEED: 50 MPH  
 CLEAR ZONE:  
 TRAVEL LANE: 24'  
 AUXILIARY LANE: 14'

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

EDWARD M. DEAN, PLA  
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 1777 MAIN STREET, SUITE 200  
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 45	LEE	446968-1-74-01

**LANDSCAPE PLAN SHEET**

SHEET NO.  
LD-5

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# LANDSCAPE TECHNICAL MAINTENANCE PLAN






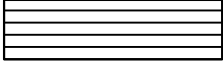
CONSTRUCTION AND ESTABLISHMENT PERIOD AND FOR SUBSEQUENT YEARS IF CONTRACTED. THE ACTIVITIES AND FREQUENCIES SHOWN REPRESENT THE MINIMUM REQUIREMENTS.




<b>MAINTENANCE AREA LIMITS:</b>	MAINTAIN ALL LANDSCAPED MEDIANS LOCATED WITHIN THE PROJECT LIMITS IN ACCORDANCE WITH THE ACTIVITIES BELOW. EXISTING ROADSIDE LANDSCAPE IS NOT INCLUDED WITHIN THE MAINTENANCE AREA.
<b>WATERING:</b>	AS PART OF THE ESTABLISHMENT PLAN REQUIRED PER SUPPLEMENTAL SPECIFICATION 580, SUBMIT A DETAILED WATERING SCHEDULE INCLUDING A PLAN TO REDUCE WATERING AMOUNTS AND CYCLES AS PLANTS ARE ESTABLISHED. SUBMIT DOCUMENTATION, QUARTERLY, TO THE ENGINEER FOR EACH WATERING APPLICATION IN AN EXCEL SPREADSHEET OR COMPATIBLE VERSION TO INCLUDE DATE OF APPLICATION, COVERAGE, NUMBER OF GALLONS, AND HOW APPLIED (WATER TRUCK OR IRRIGATION SYSTEM).
<b>LITTER REMOVAL:</b>	PERFORM LITTER REMOVAL WITHIN THE ENTIRE PROJECT LIMITS. PERFORM LITTER REMOVAL TO ENSURE THE VOLUME OF LITTER DOES NOT EXCEED 2 CUBIC FEET PER ACRE. PROVIDE THE LANDFILL RECEIPTS AND/OR THE ESTIMATED LITTER AMOUNT COLLECTED FOR THE INVOICE PERIOD WITH SUBMISSION OF THE INVOICE.
<b>EDGING:</b>	MECHANICAL EDGING SHALL BE USED FOR TURF ADJACENT TO PAVEMENT. CHEMICAL HERBICIDE EDGING CAN BE USED ON TREE RINGS AND PLANTING BEDS.
<b>WEEDING:</b>	MAINTAIN TREE RINGS AND BEDS 99% WEED FREE AT ALL TIMES. HAND-REMOVE ANY WEEDS ABOVE TWELVE (12) INCH HEIGHT PRIOR TO APPLYING HERBICIDE SPRAY. PERFORM FINAL WEEDING WITHIN TEN (10) DAYS PRIOR TO FINAL INSPECTION. COMPLETE HERBICIDE REPORTS ON THE FORMS PROVIDED BY THE DEPARTMENT FOR EACH LOCATION WHERE WEED AND GRASS CONTROL IS TAKING PLACE. SUBMIT COMPLETED FORMS TO THE ENGINEER WITH EACH INVOICE OR AS DIRECTED BY THE ENGINEER.  ERADICATE FLORIDA EXOTIC PEST PLANT COUNCIL CATEGORY ONE INVASIVE PLANT SPECIES AND THEIR SEEDS, AND VINES. DOCUMENT AND MAINTAIN IN WRITING THE LOCATION OF COGRASS AND TROPICAL SODA APPLE SITES, THE AMOUNT OF THE AREA INFESTED AT EACH SITE, DATE, AND TYPE (PERCENTAGE OF PRODUCT/METHOD USED) AND LAST TREATMENT, AND SUBMIT TO THE ENGINEER WITH THE MONTHLY INVOICE.
<b>CHEMICAL APPLICATIONS:</b>	INSPECT ALL PALMS AND TREES FOR PEST INFESTATION AND DISEASE ON A MONTHLY BASIS, CHECKING FOR THE PRESENCE FOR INSECTS, GRUBS, MITES, FUNGUS, MOLD, ETC. APPLY FUNGICIDE AND PESTICIDES PER MANUFACTURER'S RECOMMENDATIONS FOR APPLICATION METHODS AND RATES AS REQUIRED. SUBMIT DOCUMENTATION IN WRITING TO THE ENGINEER FOR EACH CHEMICAL TYPE APPLIED, RATES OF APPLICATIONS, LOCATIONS DATES OF APPLICATION AND TARGET PEST OR DISEASE WITH EACH INVOICE OR AS DIRECTED BY THE ENGINEER.
<b>WATER SAUCERS, STAKES AND GUYS:</b>	CONTINUOUSLY MONITOR AND REPAIR WATER SAUCERS. MAINTAIN TREES AND PALMS UPRIGHT, WITH STAKES/GUYS. INSPECT AND ADJUST STAKES AND GUYS TO ENSURE STABILITY AND PLUMB CONDITION OF TREES AND PALMS.
<b>FERTILIZATION OF TREES, PALMS, AND OTHER PLANTS AND VEGETATION:</b>	FERTILIZE TREES AND PALMS AS NEEDED TO PREVENT NUTRITIONAL DEFICIENCIES, TO PROMOTE GROWTH, AND MAINTAIN A HEALTHY APPEARANCE. FERTILIZER SHOULD CONTAIN MACRONUTRIENTS AND MICRONUTRIENTS IN A CONTROLLED RELEASED FORM APPLIED AS PER MANUFACTURER'S RECOMMENDATIONS FOR APPLICATION METHODS AND RATES. FERTILIZE ALL PLANTS A MINIMUM OF TWO (2) TIMES PER YEAR. AFTER FERTILIZATION, PROVIDE FERTILIZER TYPE APPLIED PER PLANT SPECIES, RATE OF APPLICATION, MSDS SHEET, LABEL INFORMATION, AND DATE OF APPLICATION. SUBMIT INFORMATION TO THE ENGINEER WITH EACH INVOICE OR AS DIRECTED BY THE ENGINEER.
<b>MULCH:</b>	MAINTAIN A MINIMUM OF THREE (3) INCHES DEPTH OF MULCH MATERIAL FOR ALL PLANT AREAS AS SHOW IN THE PLANS. MULCH THREE (3) FEET AROUND THE TRUNK OF ALL TREES AND PALMS. INSPECT SLOPES AFTER MAJOR RAIN EVENTS AND CORRECT MULCH DEFICIENCIES. DEPTH WILL BE VERIFIED BY THE ENGINEER THROUGHOUT PROJECT LIMITS. SEE LANDSCAPE PLANS FOR LOCATIONS OF APPLICATIONS.
<b>PRUNING:</b>	PRUNE AS REQUIRED TO MAINTAIN CLEARANCE FOR CLEAR SIGHT WINDOWS (FDOT DESIGN MANUAL, SECTION 212) AND TO MAINTAIN STRUCTURAL INTEGRITY.  MAINTAIN CLEARANCE SO THERE IS NO ENCROACHMENT OF TREES, PALMS. TREE LIMBS, PALM FRONDS OR VEGETATION IN OR OVER THE TRAVEL WAY, GUARDRAIL OR CLEAR ZONE, LOWER THAN 14.5 FEET OR LOWER THAN 10 FEET OVER SIDEWALKS, BIKE, OR MULTIUSE PATHS. NO VEGETATION SHALL VIOLATE THE CLEARANCE REQUIREMENT.  TREES: REMOVE ALL SUCKERS, DEAD, DISEASED OR BROKEN BRANCHES.  PALMS: PRUNE AS REQUIRED TO REMOVE BROKEN OR DEAD FRONDS AND ALL FLOWER/SEED STALKS. FLOWER/SEED STALKS SHALL BE REMOVED PRIOR TO DROPPING OF SEEDS, NUTS, OR PRODUCTION OF FRUIT.  ALL LANDSCAPE MATERIAL SHALL BE INSTALLED AND MAINTAINED IN A MANNER WHEREBY TRAFFIC CONTROL SIGNAGE, CAMERAS AND DEVICES ARE VISIBLE TO MOTORISTS AND PEDESTRIANS AT ALL TIMES.

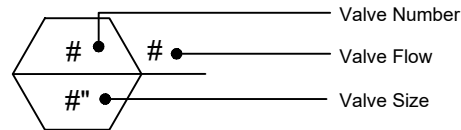
NOTE: THE LANDSCAPE TECHNICAL MAINTENANCE PLAN APPLIES TO BOTH THE CONSTRUCTION PERIOD AND 1 YR. ESTABLISHMENT PERIOD.

R E V I S I O N S				EDWARD M. DEAN, PLA P.L.A. LICENSE NUMBER 6667269 KIMLEY-HORN AND ASSOCIATES 1777 MAIN STREET, SUITE 200 SARASOTA, FL 34236 CERTIFICATE OF AUTHORIZATION 00000696	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			<b>LANDSCAPE TECHNICAL MAINTENANCE PLAN</b>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		LD-6
					SR 45	LEE	446968-1-74-01		

### IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	DRIP ZONE VALVE KIT HIGH FLOW CONTROL DRIP-ZONE KIT, 1-1/2" GLOBE VALVE WITH SINGLE 1-1/2" PRESSURE REGULATING (40PSI) QUICK-CHECK BASKET FILTER.	2
	FLUSH VALVE DRIPLINE FLUSH VALVE CAP IN COMPRESSION FITTING COUPLER.	2
	AIR RELIEF VALVE 1/2" THREADED AIR/VACUUM RELIEF VALVE	2
	LARGE TREE DRIP RING EMITTERS CONTRACTOR TO PROVIDE FOUR (4) PRESSURE COMPENSATING DRIP EMITTERS IN DRIPLINE AROUND TREE WITH SELF-PIERCING BARB INLET AND DIFFUSER CAP. FLOW RATE: 24GPH.	11
	SMALL TREE/ PALM DRIP EMITTERS CONTRACTOR TO PROVIDE TWO (2) PRESSURE COMPENSATING DRIP EMITTERS IN DRIPLINE AROUND TREE WITH SELF-PIERCING BARB INLET AND DIFFUSER CAP. FLOW RATE: 24GPH.	6
	AREA TO RECEIVE DRIPLINE ON-SURFACE DRIPLINE ON-SURFACE PRESSURE COMPENSATING DRIPLINE, 0.9 GPH EMITTERS AT 18" O.C. LATERALS SPACED AT 18" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. PURPLE TUBING.	4,254 L.F.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21. PIPE TO BE PURPLE FOR RECLAIMED USE.	213.4 L.F.
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21	120.2 L.F.
	PIPE SLEEVE: EXISTING TO REMAIN Valve Callout	65.8 L.F.



### VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	PSI	PSI @ POC
N1	DRIP ZONE VALVE KIT	1-1/2"	AREA FOR DRIPLINE	19.47	15.61	17.55
N2	DRIP ZONE VALVE KIT	1-1/2"	AREA FOR DRIPLINE	21.54	15.86	16.36

#### REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

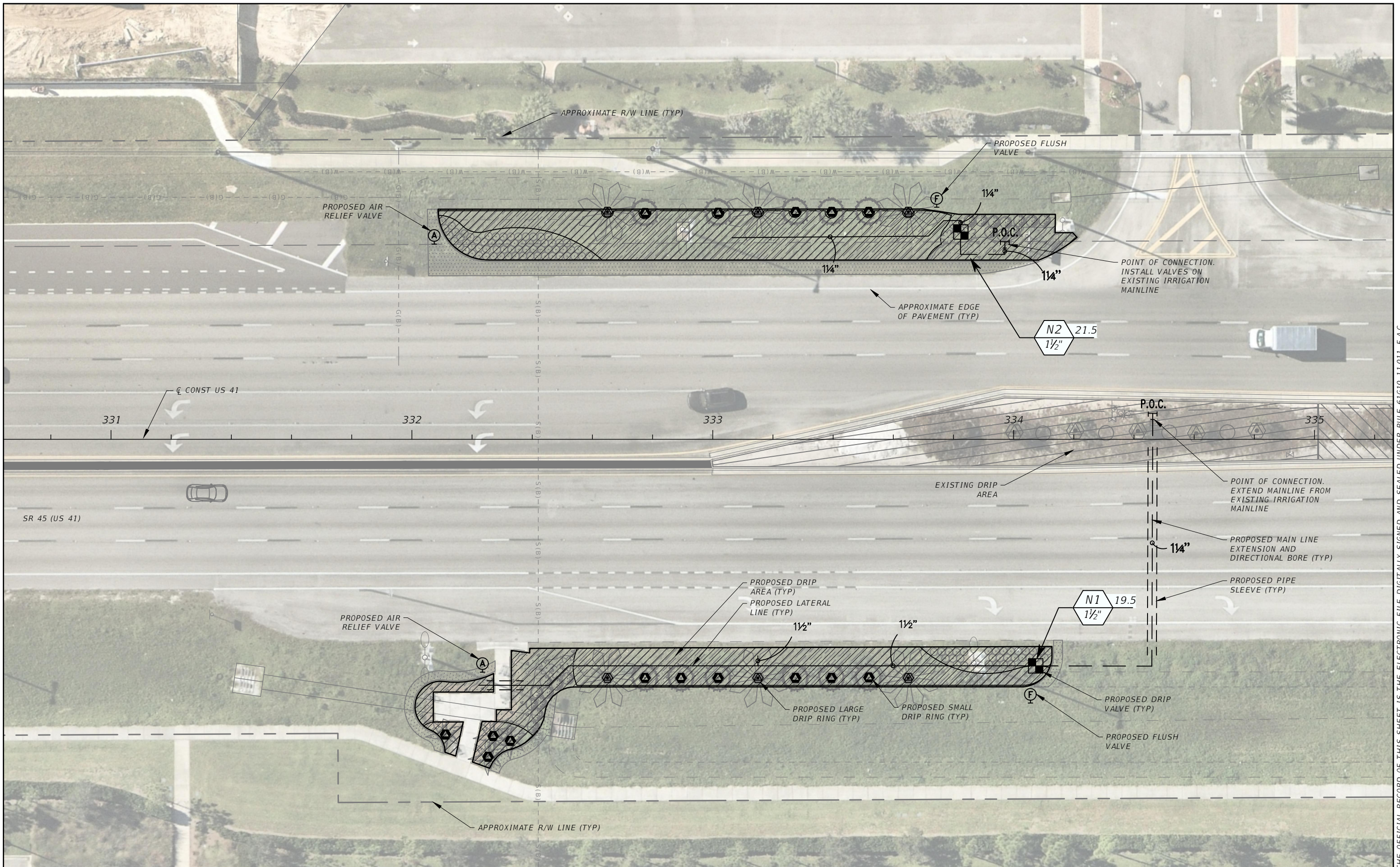
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### IRRIGATION TABULATION OF QUANTITIES

SHEET  
NO.

LD-7



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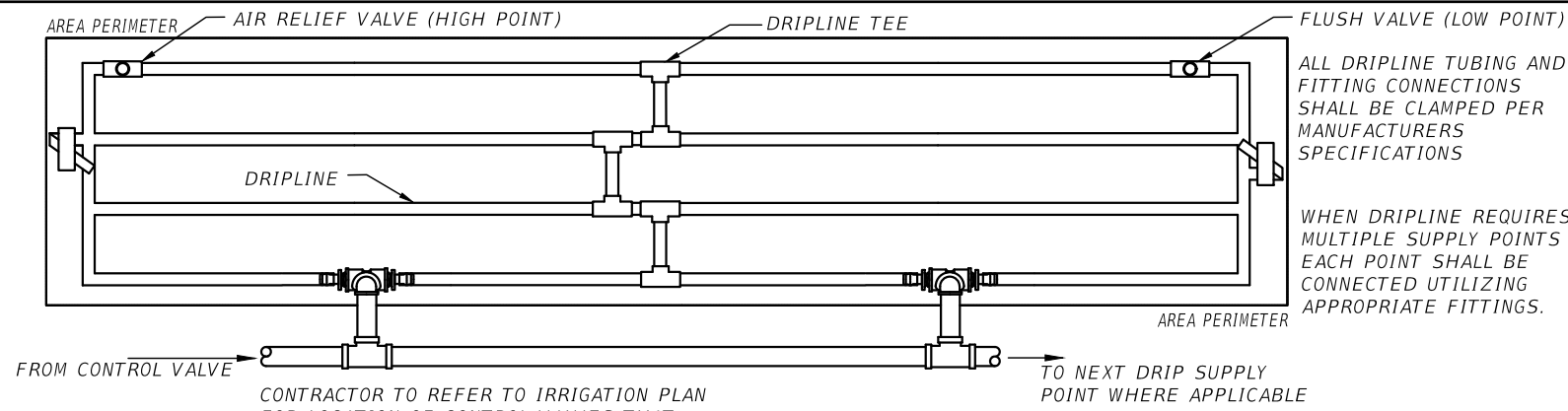
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**IRRIGATION PLAN SHEET**

SHEET NO.
LD-8





ALL DRIPLINE TUBING AND FITTING CONNECTIONS SHALL BE CLAMPED PER MANUFACTURERS SPECIFICATIONS

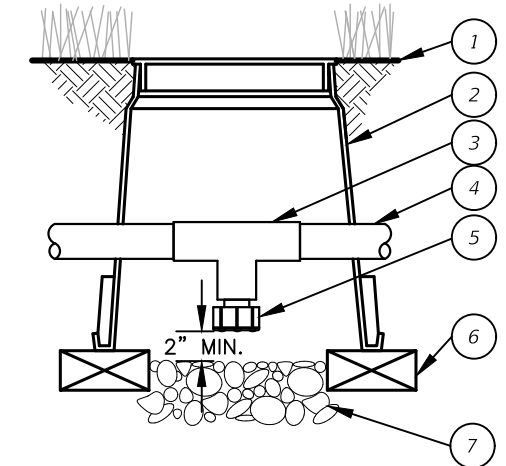
WHEN DRIPLINE REQUIRES MULTIPLE SUPPLY POINTS EACH POINT SHALL BE CONNECTED UTILIZING APPROPRIATE FITTINGS.

CONTRACTOR TO REFER TO IRRIGATION PLAN FOR LOCATION OF CONTROL VALVES THAT UTILIZE MULTIPLE DRIPLINE SUPPLY CONNECTIONS.

NOTE:  
 1. DRIP TUBING TO BE ROUTED IN THE PLANT MATERIAL BED WITH MAXIMUM LATERAL SPACING AS SPECIFIED.  
 2. DRIP TUBING TO BE INSTALLED IN A GRID PATTERN. DRIP TUBING SHALL NOT BE INSTALLED IN A LONG CONTINUOUS RUN.

TYPICAL DRIPLINE SECTION

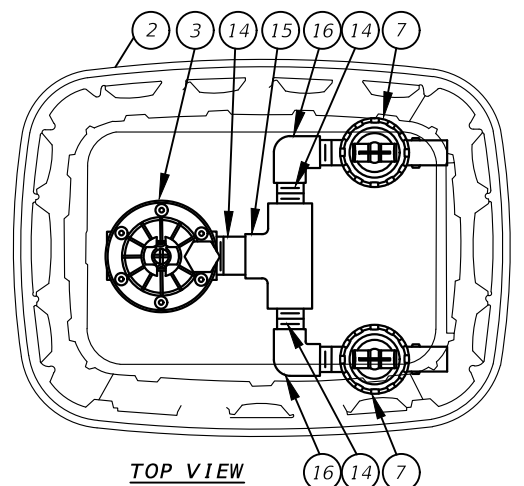
NTS



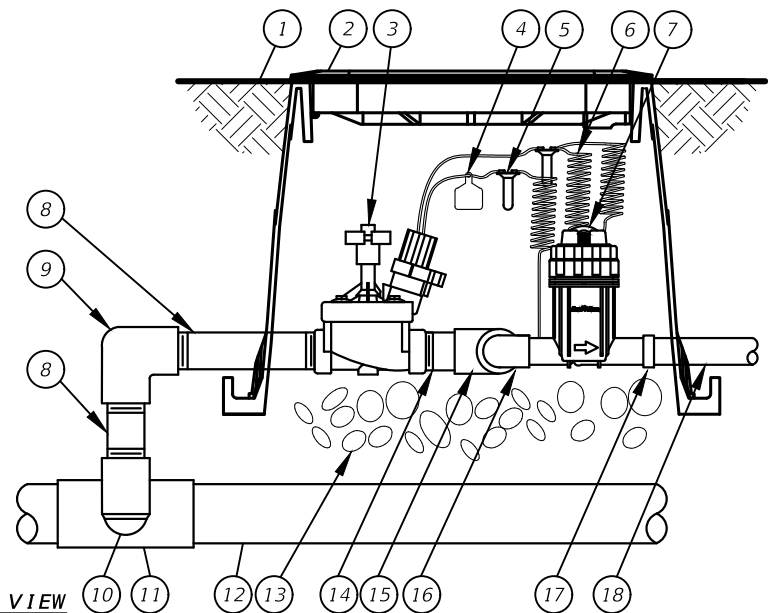
- 1 FINISHED GRADE/TOP OF MULCH
- 2 VALVE BOX WITH COVER
- 3 PVC SCH 40 TEE
- 4 PVC LATERAL PIPE
- 5 FILTERED DRAIN VALVE
- 6 BRICK (1 OF 2)
- 7 6-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

TYPICAL DRAIN VALVE SECTION

NTS

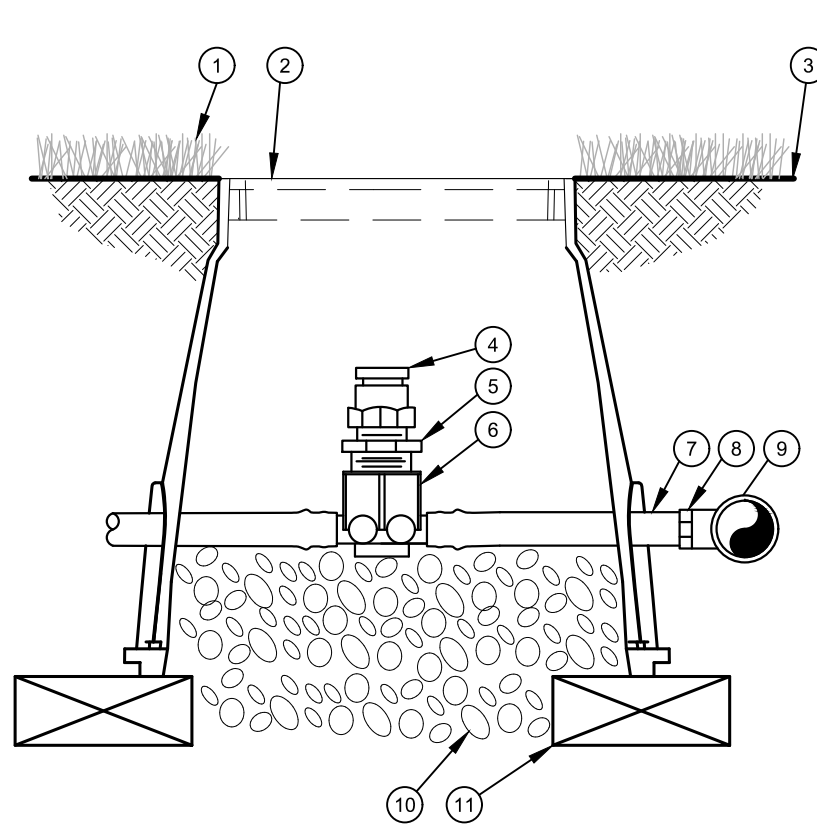


- 1 FINISHED GRADE/TOP OF MULCH
- 2 VALVE BOX WITH COVER
- 3 REMOTE CONTROL VALVE
- 4 ID TAG
- 5 WATERPROOF CONNECTION
- 6 30-INCH LINEAR LENGTH OF WIRE, COILED
- 7 PRESSURE REGULATING QUICK CHECK BASKET FILTER
- 8 PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
- 9 PVC SCH 40 ELL
- 10 PVC SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND PVC SCH 40 ELL
- 11 PVC SCH 40 TEE OR ELL
- 12 MAINLINE PIPE
- 13 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
- 14 PVC SCH 80 NIPPLE, CLOSE
- 15 PVC SCH 40 TEE
- 16 PVC SCH 40 ELL
- 17 PVC SCH 40 FEMALE ADAPTOR
- 18 LATERAL PIPE



TYPICAL DRIP ZONE VALVE KIT

NTS



- 1 TURF GRASS
- 2 VALVE BOX WITH COVER
- 3 FINISHED GRADE
- 4 1/2" AIR RELIEF VALVE: TO BE INSTALLED AT HIGH POINTS IN DRIP ZONE
- 5 1/2" X 3/4" PVC REDUCER BUSHING
- 6 BARB X FEMALE THREAD CONNECTOR
- 7 1/2" BLANK DRIPLINE TUBING
- 8 BARB X MALE THREAD CONNECTOR
- 9 PVC TEE CONNECTED TO PVC HEADER PIPE
- 10 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL
- 11 BRICK (1 OF 2)

TYPICAL AIR RELIEF VALVE IN DRIPLINE SECTION

NTS

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

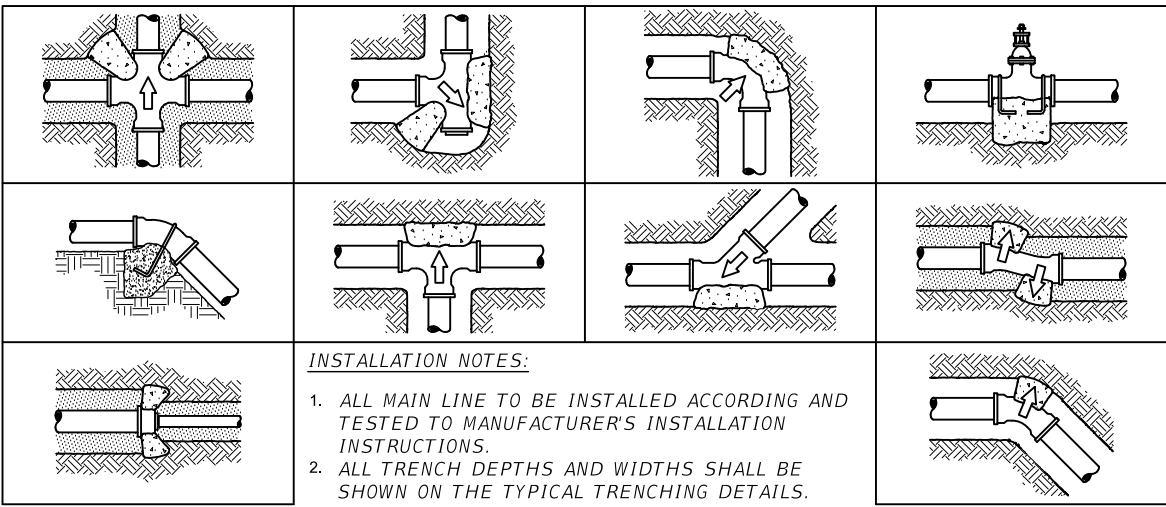
EDWARD M. DEAN, PLA  
 P.L.A. LICENSE NUMBER 6667269  
 KIMLEY-HORN AND ASSOCIATES  
 1777 MAIN STREET, SUITE 200  
 SARASOTA, FL 34236  
 CERTIFICATE OF AUTHORIZATION 00000696

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 45	LEE	446968-1-74-01

IRRIGATION DETAILS (1)

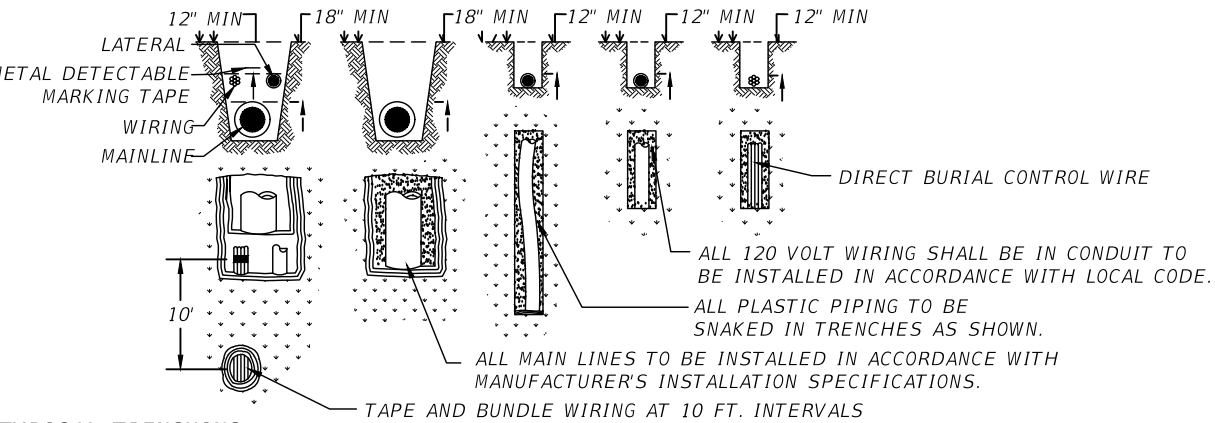
SHEET NO.  
LD-9

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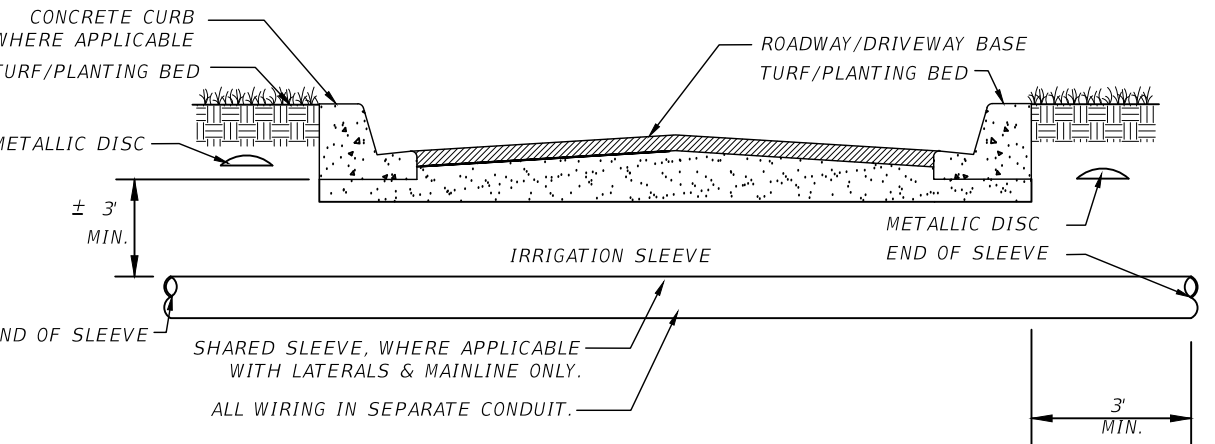
**TYPICAL THRUST BLOCK**  
SECTION

NTS



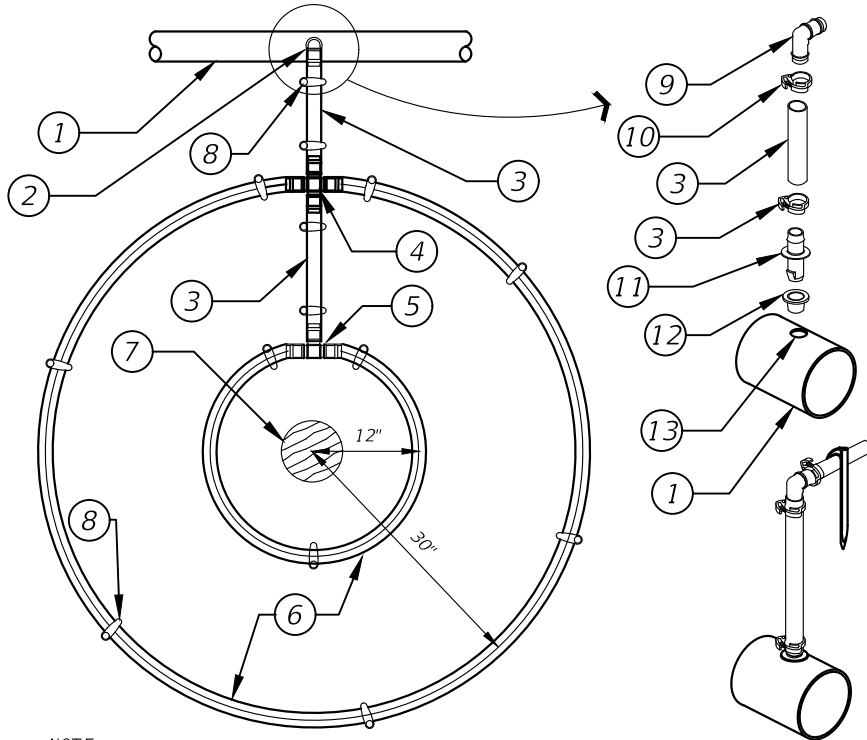
**TYPICAL TRENCHING**  
SECTION

NTS



**TYPICAL SLEEVING**  
SECTION

NTS



NOTE:  
PLACE TIE DOWN STAKES EVERY 3 FT. IN SAND, 4 FT. IN LOAM, AND 5 FT. IN CLAY, AS WELL AS AT ALL CHANGE OF DIRECTION SUCH AS AT TEES OR ELLS.

DRIPLINE TO LATERAL "XPANDO" ADAPTER CONNECTION DETAIL

- ① PVC LATERAL SUPPLY PIPE, SIZE AS PER PLAN WITH MINIMUM SIZE 1 1/2" DIAMETER.
- ② DRIPLINE CONNECTION TO BELOW GRADE LATERAL PIPE, SEE DRIPLINE TO LATERAL "XPANDO" ADAPTER CONNECTION DETAIL.
- ③ 1/2" PLOYETHYLENE BLANK TUBING, AS REQUIRED.
- ④ BARB CROSS INSERT FITTING.
- ⑤ BARB TEE INSERT FITTING.
- ⑥ AT-GRADE DRIPLINE, INNER RING 12" FROM PLANT, OUTER RING 30" FROM PLANT. DRIPLINE TO BE 0.9GPH EMITTERS AT 12" O.C.
- ⑦ PLANT TRUNK.
- ⑧ TYPICAL ANTELCO ASTA TIE-DOWN STAKE, SEE NOTES.
- ⑨ DRIPLINE BARBED INSERT ELL.
- ⑩ RATCHET CLAMP AT ALL BARBED CONNECTIONS, ANTELCO PART NO. 44345.
- ⑪ INSERT ADAPTER, ANTELCO "XPANDO" 13MM X 14MM, PART NO. 45595.
- ⑫ 13MM ANTELCO "CAPO: RUBBER GROMMET, NO. 45735.
- ⑬ DRILL 5/8" HOLE IN PVC LATERAL PIPE WHERE REQUIRED. YOU MUST USE A "FORSTNER" DRILL BIT FOR DRILLING INTO PVC. REMOVE ANY EXCESS BURRS OR ROUGH EDGES.

**DRIP EMITTER**  
SECTION / PLAN

NTS

REVISIONS		EDWARD M. DEAN, PLA P.L.A. LICENSE NUMBER 6667269 KIMLEY-HORN AND ASSOCIATES 1777 MAIN STREET, SUITE 200 SARASOTA, FL 34236 CERTIFICATE OF AUTHORIZATION 00000696		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.  LD-10
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
				SR 45	LEE	446968-1-74-01	

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TEMPORARY TRAFFIC CONTROL NOTES

1. MAINTAIN POSTED SPEEDS AT ALL TIMES.  
NORTHBOUND: 50 MPH  
SOUTHBOUND: 50 MPH
2. MAINTAIN EXISTING LANE WIDTH AT ALL TIMES.
3. LANDSCAPE OPERATIONS ARE TO UTILIZE THE FOLLOWING STANDARD PLAN INDEX NUMBERS:  
102-601, 102-602.
4. NO LANE CLOSURES WITHIN 500 FEET OF A SIGNALIZED INTERSECTION BETWEEN THE HOURS OF 7:00 AM TO 8:00 PM. ONLY ONE (1) LANE MAY BE CLOSED DURING ACTIVE WORK ZONES.
5. INSTALL ONE (1) PORTABLE-CHANGEABLE MESSAGE SIGN (PCMS) AT EACH END OF PROJECT LIMITS TWO (2) WEEKS PRIOR TO CONSTRUCTION BEGINNING. THE PCMS SHALL READ:

PCMS MESSAGE 1:  
2 WEEKS PRIOR TO CONSTRUCTION

PCMS MESSAGE 2:  
DURING CONSTRUCTION

ROAD WORK
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BEGINS MM/DD
-----------------

ROAD WORK AHEAD
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USE CAUTION
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TEMPORARY TRAFFIC CONTROL PHASING NOTES

1. PLACE ADVANCED WARNING SIGNAGE AND CHANNELIZING DEVICES IN ACCORDANCE WITH INDEX 102-602.
2. CONSTRUCT LANDSCAPE IMPROVEMENTS AS SHOWN IN THE PLANS.
3. DO NOT BLOCK SIDEWALKS WITH STAGING OR CONSTRUCTION OPERATIONS.
4. ONCE CONSTRUCTION IS COMPLETE, REMOVE SIGNS AND BARRICADES AND OPEN SHOULDER AREAS.

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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		LD-11
					SR 45	LEE	446968-1-74-01		

SUMMARY OF LUMP SUM ITEMS					
PAY ITEM NO.	PAY ITEM DESCRIPTION	QUANTITY		DESIGN NOTES	CONSTRUCTION REMARKS
		P	F		
0101-1	MOBILIZATION	1			

SUMMARY OF TEMPORARY TRAFFIC CONTROL PLAN ITEMS							
PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	PHASE I			DESIGN NOTES	CONSTRUCTION REMARKS
			DURATION	QUANTITY	TOTAL		
			DAYS	P	P		
0102-1	MAINTENANCE OF TRAFFIC	LS			1	INCLUDES PAY ITEMS 0102-60 AND 0102-74-1.	

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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		SQ-1
					SR 45	LEE	446968-1-74-01		

**SUMMARY OF EROSION AND SEDIMENT CONTROL DEVICES**

LOCATION	SIDE	AREA ID	SEDIMENT BARRIER		INLET PROTECTION SYSTEM		DESIGN NOTES	CONSTRUCTION REMARKS
			0104 10 3		0104 18			
STA. TO STA.			EA		EA			
			P	F	P	F		
331+84.00 TO 331+84.00	RT		28					
333+45.00 TO 334+38.00	RT		215					
334+10.00 TO 334+34.00	LT		36					
		SUB-TOTAL:	279					
		TOTAL:	279					

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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 45	LEE	446968-1-74-01		SQ-2