



INSTALL ALL THE IRRIGATION EQUIPMENT TO AVOID CONFLICTS WITH INSTALLED UTILITIES, TREE INSTALLATION AND EXISTING TREES TO REMAIN. THE IRRIGATION MAINLINE, LATERAL LINE, AND IRRIGATION SPRINKLER LOCATIONS ARE SHOWN SCHEMATICALLY AND SHALL BE ADJUSTED BASED ON FIELD CONDITIONS. ALL LANDSCAPED AREAS ARE TO RECEIVE 100% COVERAGE BY THE IRRIGATION SYSTEM (TYP.)

SLEEVE LEGEND

LATERAL/MAINLINE SIZE	SLEEVE SIZE
1"	2"
1.5"	3"
2"	4"
2.5"	4"
3"	6"
4"	8"
CONTROL WIRE CONDUIT	2"

B5
1 1/2" 32.7

B6
1 1/2" 39.4

B3
1" 11

B4
1 1/2" 38.5

B1
1 1/2" 37.6

B2
1 1/2" 31.2

IRRIGATION WATER POINT OF CONNECTION

CONNECT DOWNSTREAM OF THE 1.5" RECLAIMED WATER METER ASSEMBLY IN THIS AREA PROVIDED BY OTHERS. THE WATER METER IS TO SUPPLY A MINIMUM OF 40GPM AT 65PSI FOR THE EFFICIENT OPERATION OF THIS SYSTEM. VERIFY LOCATION IN THE FIELD PRIOR TO INSTALLATION. THE IRRIGATION CONTRACTOR IS TO NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION IF THE REQUIRED PRESSURE IS NOT AVAILABLE ON THE RECLAIMED WATER LINE. FOLLOW ALL LOCAL CODES.

IRRIGATION CONTROLLER

TO BE PEDESTAL MOUNTED ON A CONCRETE PAD IN THIS AREA. SEE DETAIL. VERIFY MOUNT LOCATIONS IN THE FIELD PRIOR TO INSTALLATION. 120VAC, 1.0 AMP, ELECTRIC POWER SUPPLY PROVIDED BY THE SITE ELECTRICAL CONTRACTOR. ROUTE A 1.5" ELECTRICAL CONDUIT WITH CONTROL WIRES FROM THE CONTROLLER TO THE MAINLINE TRENCH. MOUNT THE RAIN SENSOR ON A STATIONARY STRUCTURE ABOVE ALL OVERHEAD OBSTRUCTIONS.

THE IRRIGATION CONTRACTOR IS TO SET THE RUN TIMES FOR EACH ZONE TO MATCH THE PLANT WATER REQUIREMENTS, SITE CONDITIONS AND MICRO-CLIMATE FACTORS. SEE THE LANDSCAPE PLANS FOR PLANT SPECIFICATIONS.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

MAGUED HANNA, R.L.A.
LICENSE NO. LA6667254
315 E. ROBINSON ST.
SUITE 400
ORLANDO, FL 32801
PHONE 407.420.4200
FAX 407.420.4242



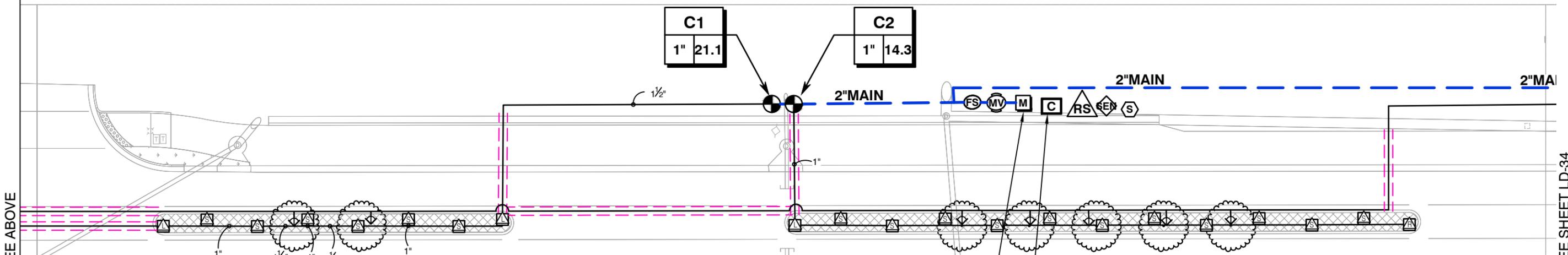
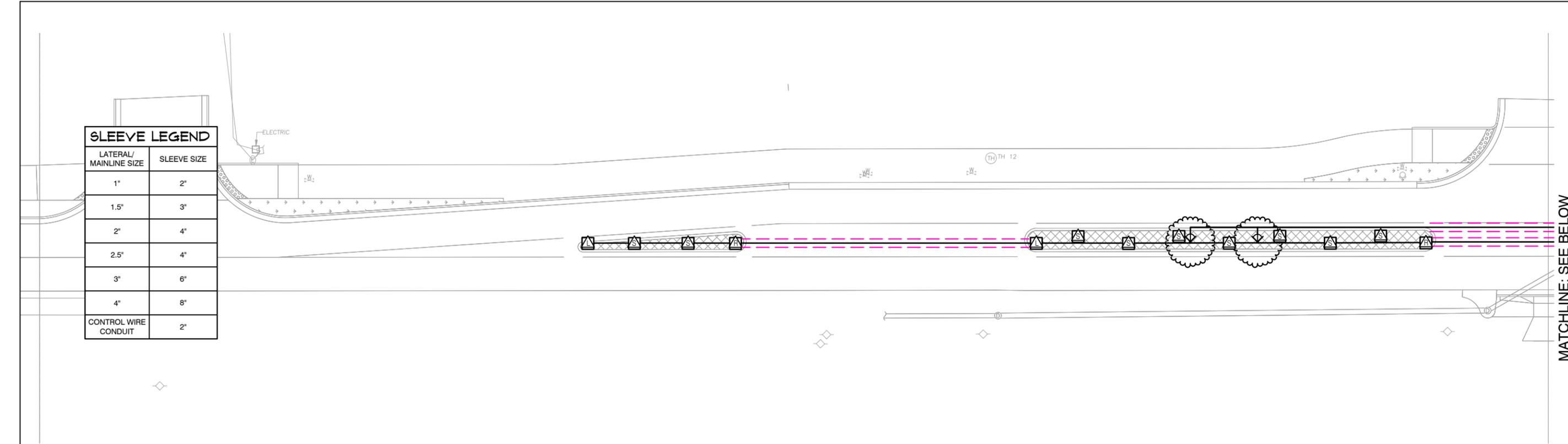
SEMINOLE COUNTY
ENGINEERING DIVISION
ROLLING HILLS AREA ROADWAYS PHASE 1
ROAD COUNTY CIP No.
RAYMOND AVE., NORTH
ST., PALM SPRINGS DR.
01907084

**IRRIGATION PLAN
NORTH STREET (1)**

SHEET NO.
LD-33

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G10-11.011, F.A.C.

SLEEVE LEGEND	
LATERAL/MAINLINE SIZE	SLEEVE SIZE
1"	2"
1.5"	3"
2"	4"
2.5"	4"
3"	6"
4"	8"
CONTROL WIRE CONDUIT	2"



IRRIGATION WATER POINT OF CONNECTION
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THE IRRIGATION CONTRACTOR IS TO SET THE RUN TIMES FOR EACH ZONE TO MATCH THE PLANT WATER REQUIREMENTS, SITE CONDITIONS AND MICRO-CLIMATE FACTORS. SEE THE LANDSCAPE PLANS FOR PLANT SPECIFICATIONS.



INSTALL ALL THE IRRIGATION EQUIPMENT TO AVOID CONFLICTS WITH INSTALLED UTILITIES. TREE INSTALLATION AND EXISTING TREES TO REMAIN. THE IRRIGATION MAINLINE, LATERAL LINE, AND IRRIGATION SPRINKLER LOCATIONS ARE SHOWN SCHEMATICALLY AND SHALL BE ADJUSTED BASED ON FIELD CONDITIONS. ALL LANDSCAPED AREAS ARE TO RECEIVE 100% COVERAGE BY THE IRRIGATION SYSTEM (TYP.)

MATCHLINE: SEE ABOVE

MATCHLINE: SEE BELOW

MATCHLINE: SEE SHEET LD-34

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G10-11.001, F.A.C.

REVISIONS				MAGUED HANNA, R.L.A.  LICENSE NO. LA6667254 315 E. ROBINSON ST. SUITE 400 ORLANDO, FL 32801 PHONE 407.420.4200 FAX 407.420.4242	SEMINOLE COUNTY ENGINEERING DIVISION ROLLING HILLS AREA ROADWAYS PHASE 1		IRRIIGATION PLAN NORTH STREET (2)	SHEET NO. LD-34
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD	COUNTY CIP No.		
					RAYMOND AVE., NORTH ST., PALM SPRINGS DR.	01907084		

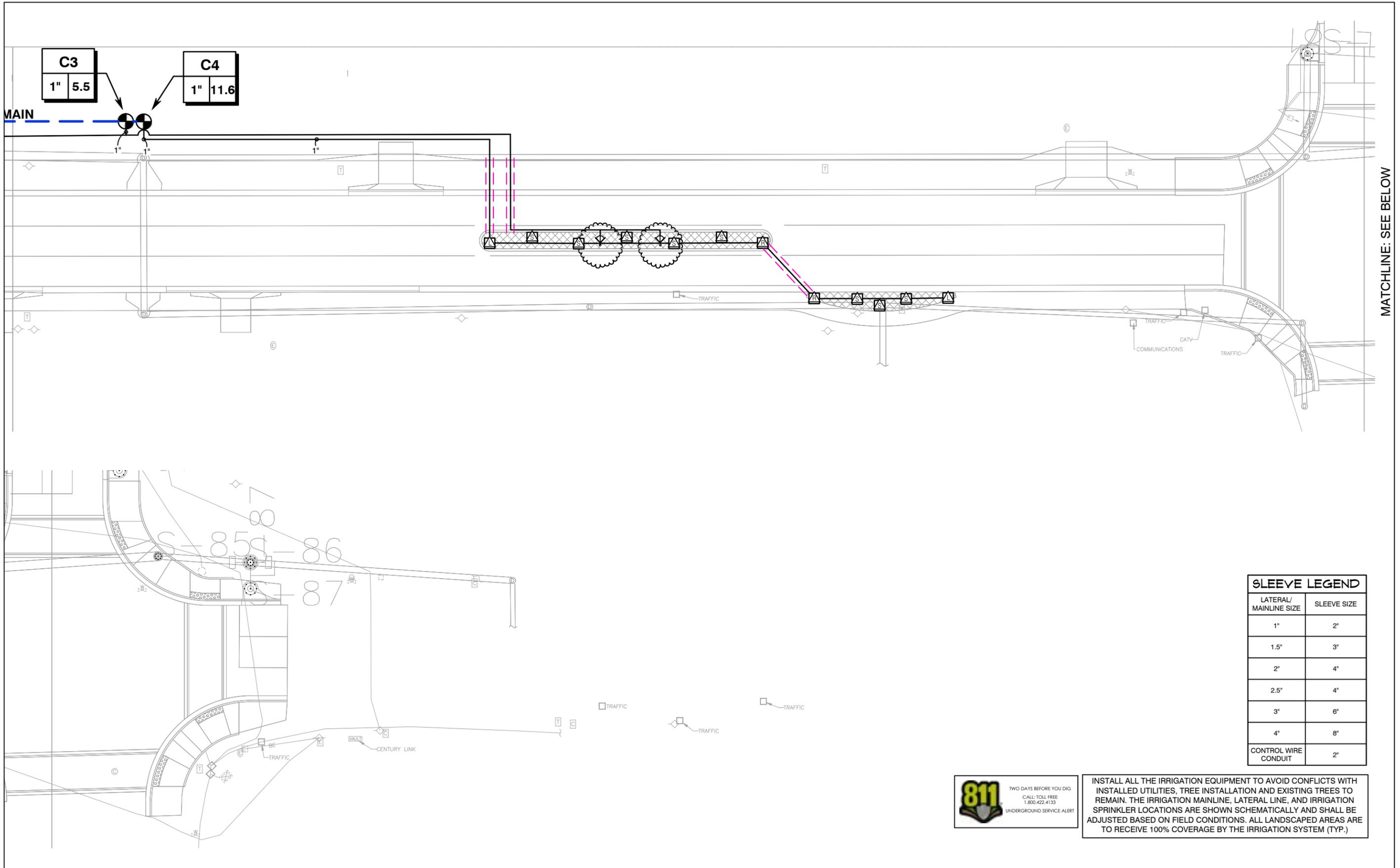
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MATCHLINE: SEE SHEET LD-33

MATCHLINE: SEE ABOVE

MATCHLINE: SEE BELOW

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SLEEVE LEGEND	
LATERAL/MAINLINE SIZE	SLEEVE SIZE
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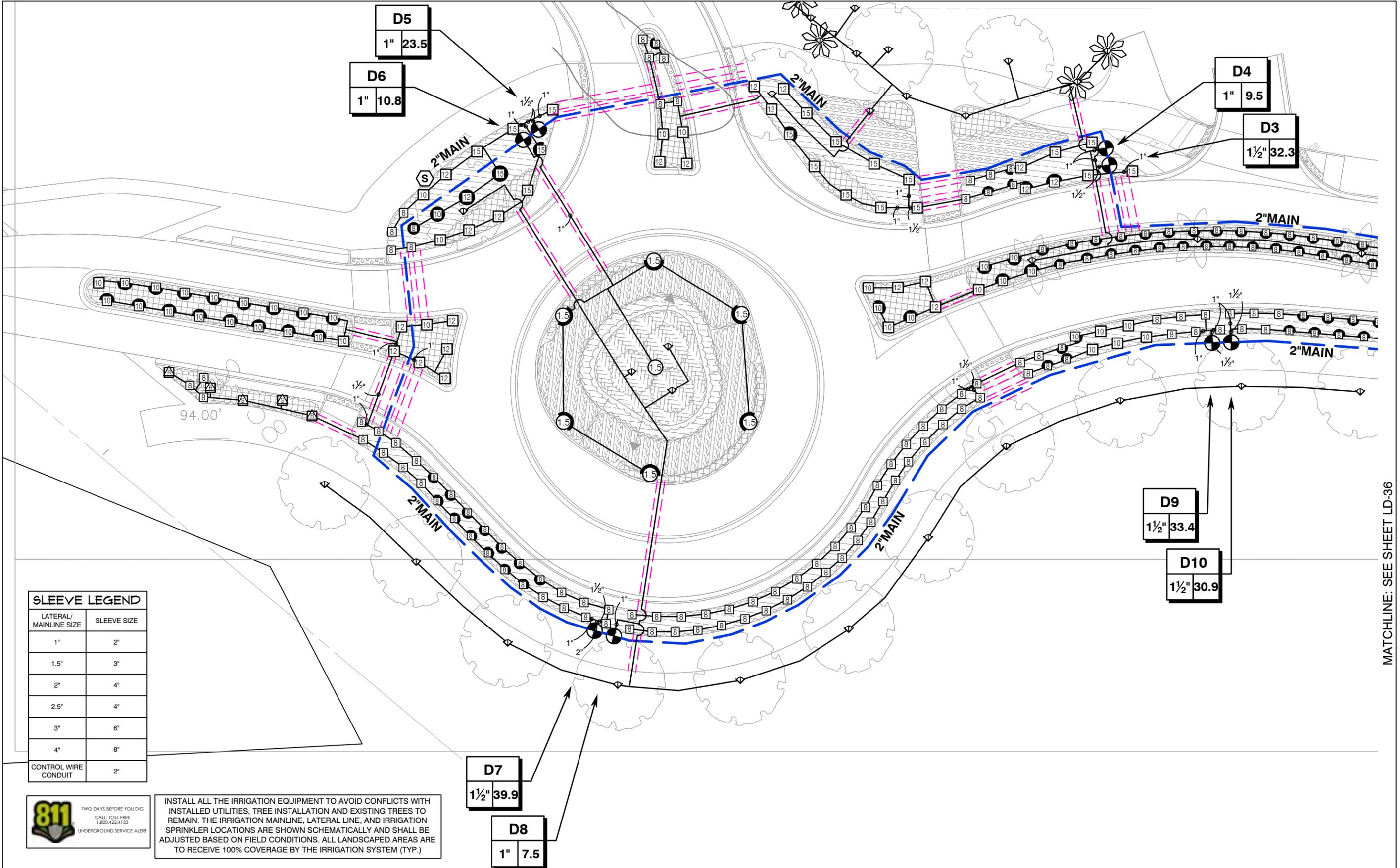


SEMINOLE COUNTY
 ENGINEERING DIVISION
 ROLLING HILLS AREA ROADWAYS PHASE 1

ROAD	COUNTY CIP No.
RAYMOND AVE., NORTH ST., PALM SPRINGS DR.	01907084

IRRIGATION PLAN
 NORTH STREET (3)

SHEET NO.
 LD-35



SLEEVE LEGEND

LATERAL/ MAINLINE SIZE	SLEEVE SIZE
1"	2"
1.5"	3"
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SEMINOLE COUNTY
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 ROLLING HILLS AREA ROADWAYS PHASE 1
 ROAD COUNTY CIP No.
 RAYMOND AVE., NORTH ST., PALM SPRINGS DR.
 01907084

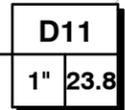
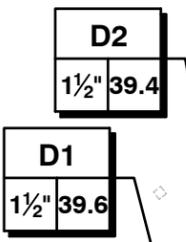
IRRIGATION PLAN
 PALM SPRINGS DRIVE (1)

SHEET NO.
 LD-36

MATCHLINE: SEE SHEET LD-36
 THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G10-11.01, F.A.C.

IRRIGATION CONTROLLER
 TO BE PEDESTAL MOUNTED ON A CONCRETE PAD IN THIS AREA. SEE DETAIL.
 VERIFY MOUNT LOCATIONS IN THE FIELD PRIOR TO INSTALLATION. 120VAC, 1.0
 AMP, ELECTRIC POWER SUPPLY PROVIDED BY THE SITE ELECTRICAL CONTRACTOR.
 ROUTE A 1.5" ELECTRICAL CONDUIT WITH CONTROL WIRES FROM THE CONTROLLER
 TO THE MAINLINE TRENCH. MOUNT THE RAIN SENSOR ON A STATIONARY
 STRUCTURE ABOVE ALL OVERHEAD OBSTRUCTIONS.

THE IRRIGATION CONTRACTOR IS TO SET THE RUN TIMES FOR EACH ZONE TO
 MATCH THE PLANT WATER REQUIREMENTS, SITE CONDITIONS AND MICRO-CLIMATE
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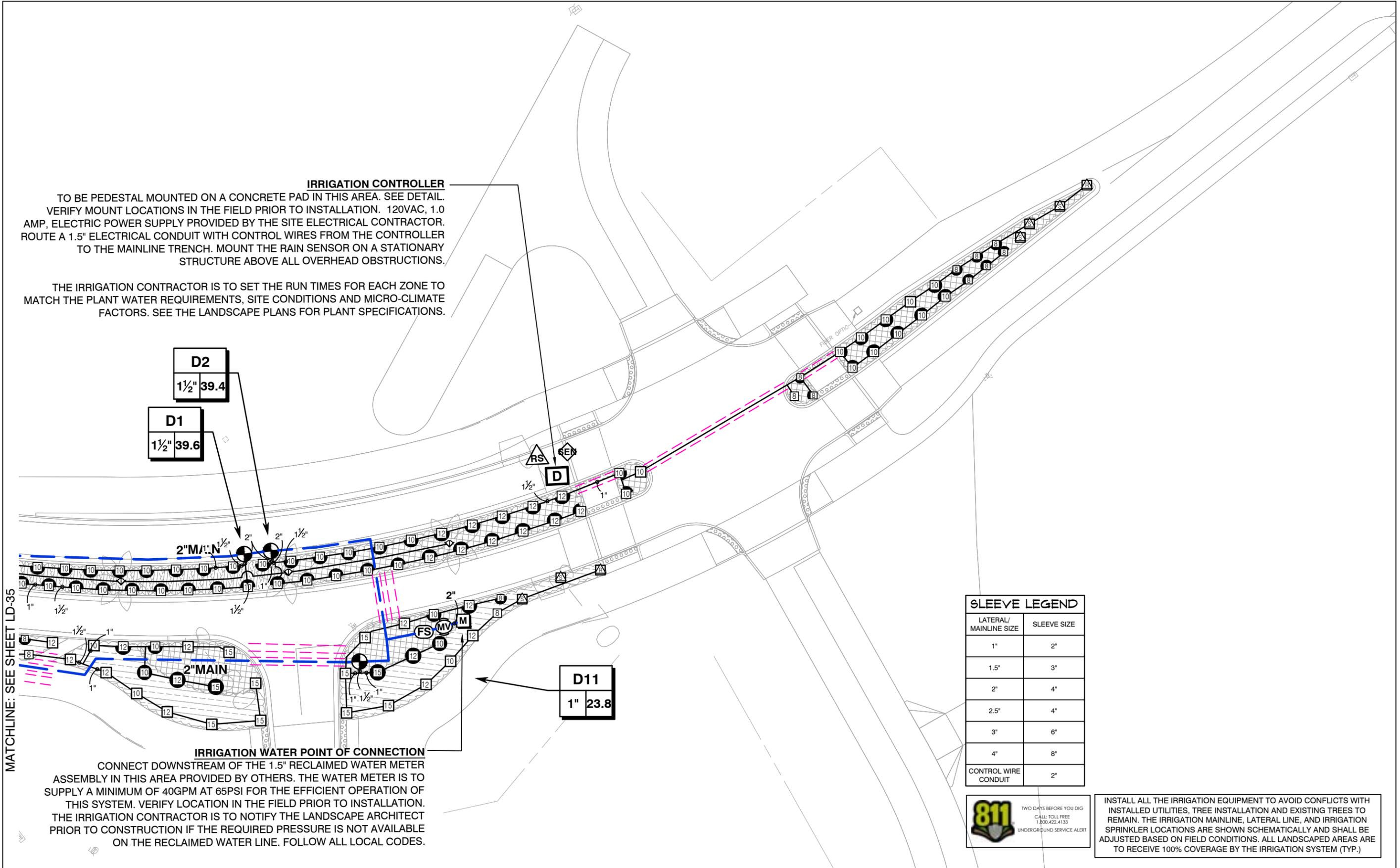


LATERAL/ MAINLINE SIZE	SLEEVE SIZE
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INSTALL ALL THE IRRIGATION EQUIPMENT TO AVOID CONFLICTS WITH
 INSTALLED UTILITIES, TREE INSTALLATION AND EXISTING TREES TO
 REMAIN. THE IRRIGATION MAINLINE, LATERAL LINE, AND IRRIGATION
 SPRINKLER LOCATIONS ARE SHOWN SCHEMATICALLY AND SHALL BE
 ADJUSTED BASED ON FIELD CONDITIONS. ALL LANDSCAPED AREAS ARE
 TO RECEIVE 100% COVERAGE BY THE IRRIGATION SYSTEM (TYP.)

MATCHLINE: SEE SHEET LD-35



IRRIGATION WATER POINT OF CONNECTION
 CONNECT DOWNSTREAM OF THE 1.5" RECLAIMED WATER METER
 ASSEMBLY IN THIS AREA PROVIDED BY OTHERS. THE WATER METER IS TO
 SUPPLY A MINIMUM OF 40GPM AT 65PSI FOR THE EFFICIENT OPERATION OF
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 THE IRRIGATION CONTRACTOR IS TO NOTIFY THE LANDSCAPE ARCHITECT
 PRIOR TO CONSTRUCTION IF THE REQUIRED PRESSURE IS NOT AVAILABLE
 ON THE RECLAIMED WATER LINE. FOLLOW ALL LOCAL CODES.

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SEMINOLE COUNTY
 ENGINEERING DIVISION
 ROLLING HILLS AREA ROADWAYS PHASE 1
 ROAD COUNTY CIP No.
 RAYMOND AVE., NORTH
 ST., PALM SPRINGS DR. 01907084

IRRIGATION PLAN
 PALM SPRINGS DRIVE (2)

SHEET
 NO.
 LD-37

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G10-11.001, F.A.C.

IRRIGATION NOTES

- THE PLANS AND DRAWINGS ARE DIAGRAMMATIC OF THE WORK TO BE PERFORMED. SOME COMPONENTS MAY BE SHOWN OUTSIDE THE WORK AREA FOR CLARITY. THE WORK SHALL BE EXECUTED IN A MANNER TO AVOID CONFLICTS WITH UTILITIES AND OTHER ELEMENTS OF CONSTRUCTION, INCLUDING LANDSCAPE MATERIALS. ALL DEVIATIONS FROM THE PLANS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE BEFORE BEING INSTALLED.
- THE IRRIGATION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS, IRRIGATION SYSTEM SPECIFICATIONS AND ALL CONTRACT DOCUMENTS. THE CONTRACTOR SHALL COMPLY WITH ALL CURRENT LOCAL CODES, ORDINANCES, AND REGULATIONS.
- ALL IRRIGATION MAINLINE AND LATERAL LINES ARE TO NOT EXCEED A VELOCITY OF 5FPS.
- THE CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY ASPECT OF THE IRRIGATION SYSTEM AS SHOWN ON THE PLANS AND DRAWINGS, WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES, OR DISCREPANCIES EXIST THAT MIGHT NOT HAVE BEEN KNOWN DURING THE DESIGN OF THE IRRIGATION SYSTEM. IN THE EVENT THAT NOTIFICATION OF THE CONFLICT IS NOT APPROVED BY THE OWNER'S REPRESENTATIVE, THE CONTRACTOR WILL ASSUME FULL RESPONSIBILITY FOR ALL REVISIONS.
- REFER TO THE LANDSCAPE PLANS WHEN TRENCHING TO AVOID TREE ROOT BALLS WHEN INSTALLING IRRIGATION EQUIPMENT. CALL 811 AND REFER TO UTILITY PLANS PRIOR TO TRENCHING.
- IRRIGATION CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS, INCLUDING UTILITY LOCATIONS BEFORE INSTALLATION OF THE IRRIGATION SYSTEM. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSTALLATION WITH ALL OTHER CONSTRUCTION ON SITE, ESPECIALLY LANDSCAPE INSTALLATION. THE IRRIGATION SYSTEM SHALL BE RELOCATED AT NO ADDITIONAL COST FOR ANY CONFLICT WITH LANDSCAPE INSTALLATION OR ANY OTHER SITE CONSTRUCTION OR EXISTING CONDITIONS.
- VERIFY THE REQUIRED MINIMUM STATIC WATER PRESSURE IS AVAILABLE AT THE PROJECT SITE PRIOR TO BEGINNING THE IRRIGATION INSTALLATION. NOTIFY THE IRRIGATION DESIGN CONSULTANT AND LANDSCAPE ARCHITECT IN WRITING IF THE MINIMUM STATIC WATER PRESSURE OR WATER VOLUME IS NOT AVAILABLE. SEE PLAN SHEET FOR REQUIREMENTS.
- WHERE EXISTING OR NEW TREES, LIGHT FIXTURES, SIGNS, ELECTRONIC CONTROLLERS AND/OR OTHER OBJECTS ARE AN OBSTRUCTION TO AN IRRIGATION SPRINKLER'S PATTERN, THE COMPONENT AND PIPING SHALL BE RELOCATED AS NECESSARY TO OBTAIN PROPER COVERAGE OF AN IRRIGATION SPRINKLER'S PATTERN. THE COMPONENT AND PIPING SHALL BE RELOCATED AS NECESSARY TO OBTAIN THE PROPER COVERAGE WITHOUT DAMAGING THE OBSTRUCTION.
- 100% HEAD TO HEAD COVERAGE IS REQUIRED. ASSURE THAT ANY MODIFIED SPACING DOES NOT EXCEED THE SPACING SHOWN IN THE PLANS.
- IRRIGATION CONTRACTOR SHALL ADJUST ALL SPRINKLERS TO AVOID OVER SPRAY ONTO IMPERVIOUS AREAS.
- ALL MATERIALS AND EQUIPMENT SHOWN SHALL BE NEW AND INSTALLED AS SHOWN ON THE PLANS. IF THE DRAWINGS DO NOT THOROUGHLY DESCRIBE THE TECHNIQUES TO BE USED, THE INSTALLER SHALL FOLLOW THE INSTALLATION METHODS AND INSTRUCTIONS RECOMMENDED BY THE PRODUCT MANUFACTURER.
- THE LOCATION OF THE IRRIGATION MAINLINE SHALL BE IDENTIFIED IN THE FIELD AND APPROVED BY THE OWNER'S REPRESENTATIVE BEFORE INSTALLATION.
- CONTRACTOR IS TO SUBMIT PRODUCT SPECIFICATION SHEETS FOR ALL IRRIGATION EQUIPMENT TO BE USED FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- THE QUANTITIES SHOWN IN THE LEGEND SHEETS SHALL NOT BE USED FOR BIDDING PURPOSES. THE CONTRACTOR WILL BE RESPONSIBLE FOR CONDUCTING A COMPREHENSIVE MATERIALS TAKEOFF TO DETERMINE THE ACTUAL QUANTITIES OF MATERIAL NECESSARY TO EXECUTE THE WORK DESCRIBED IN THE DOCUMENTS.
- ALL TRENCHES SHALL BE BACKFILLED WITH CLEAN DEBRIS-FREE MATERIALS.
- IRRIGATION CONTRACTOR IS TO INSTALL CHRISTY ZONE TAGS WITH THE CORRESPONDING CONTROLLER ZONE NUMBER AT EACH CONTROL VALVE.
- AS BUILT DOCUMENTS ARE TO BE PROVIDED TO THE OWNER UPON COMPLETION OF THE PROJECT. THE MAINLINE, CONTROL VALVES, ISOLATION VALVES, GROUND RODS AND SPLICE BOXES SHALL BE LOCATED WITH A MEASUREMENT FROM TWO FIXED POINTS.
- IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS FOR THE WORK PRIOR TO COMMENCEMENT OF ON-SITE OPERATIONS.
- A MAINLINE PRESSURE TEST IS TO BE CONDUCTED BEFORE BACKFILLING. ALL FINDINGS ARE TO BE REPORTED TO THE LANDSCAPE ARCHITECT WITHIN TWENTY FOUR HOURS POST TEST.
- ALL SLEEVES ARE TO BE TWO TIMES THE SIZE OF THE PIPE.
- ROUTE AN ELECTRICAL CONDUIT FROM THE CONTROLLER TO THE MAINLINE TRENCH FOR THE CONTROL WIRES. RUN THE CONDUIT AND CONTROL WIRES PARALLEL TO THE MAINLINE.
- THE IRRIGATION SYSTEM IS TO BE INSPECTED AND APPROVED BY THE PROJECT OWNER PRIOR TO RECEIVING CERTIFICATION.
- ANY PRODUCT SUBSTITUTIONS MADE BY THE IRRIGATION CONTRACTOR ARE TO BE REVIEWED AND APPROVED BY THE OWNER PRIOR TO INSTALLATION.

PRE-CONSTRUCTION MEETING

PRIOR TO INSTALLATION OF TWO-WIRE IRRIGATION SYSTEM, A PRE-CONSTRUCTION MEETING SHALL BE CONDUCTED WITH PROJECT OWNER'S REPRESENTATIVE, INSTALLING CONTRACTOR, AND IRRIGATION TWO-WIRE MANUFACTURER AT NO ADDITIONAL COST FROM MANUFACTURER.

*CONTACT THE PRODUCT MANUFACTURER FOR TECHNICAL SUPPORT.

TWO-WIRE NOTES

- EACH REMOTE CONTROL VALVE FOR EACH CONTROLLER SHALL BE INSTALLED WITH A LXIVMSOL INTEGRATED VALVE MODULE WITH 2-WIRE DECODER/SOLENOID. SYSTEM WIRE TO BE PAIGE ELECTRIC CABLE P7072D 14-2 AWG 2-CONDUCTOR CABLE DIRECT BURIAL WIRE. LXIVMSD SURGE PROTECTION DEVICE SHALL BE INSTALLED AT THE END OF EACH 2-WIRE PATH AND ALONG THE THE 2-WIRE PATH AT AN ON CENTER SPACING NOT TO EXCEED 500 FEET OR EVERY 15 DEVICES; WHICHEVER IS SMALLER. INSTALL THE LXIVMSD SURGE PROTECTION DEVICE AND GROUNDING ROD IN A RAIN BIRD VB ROUND VALVE BOX. INSTALL ONE LXIVMSD SURGE DEVICE MINIMUM 8' FROM CONTROLLER. INSTALL PER RAIN BIRD MANUFACTURERS RECOMMENDATIONS.
- PAIGE ELECTRIC - THE CONTROLLER SHALL BE GROUNDED USING A #182000 5/8" X 8" COPPER CLAD GROUND ROD, A #182005 CAST BRONZE ROD CLAMP AND THE REQUIRED LENGTH OF #6AWG BARE, SINGLE STRAND COPPER GROUND WIRE. INSTALL INSIDE A RAIN BIRD VB 10" ROUND VALVE BOX. NO SYMBOL N/A/ 120 VOLTS ELECTRICAL POWER FOR CONTROLLER, PROVIDED BY ELECTRICIAN VERIFY ACTUAL LOCATION IN THE FIELD.

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	PRECIP
A1	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	32.21	1.65 in/h
A2	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	37.82	1.69 in/h
A3	RAIN BIRD PESB-IVM-R	1"	BUBBLER	5.5	1.7 in/h
A4	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	26.54	1.48 in/h
A5	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	31.19	1.59 in/h
A6	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	30.28	1.98 in/h
A7	RAIN BIRD PESB-IVM-R	1"	SHRUB ROTOR	23.1	0.53 in/h
A8	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB ROTOR	32.39	0.49 in/h
A9	RAIN BIRD PESB-IVM-R	1"	BUBBLER	13	1.7 in/h
A10	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	37.39	1.36 in/h
A11	RAIN BIRD PESB-IVM-R	1"	BUBBLER	6.5	1.7 in/h
A12	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	37.21	1.59 in/h
A13	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	28.75	1.43 in/h
A14	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	33.94	1.79 in/h
A15	RAIN BIRD PESB-IVM-R	1"	BUBBLER	3.5	1.7 in/h
A16	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	39.01	1.65 in/h
B1	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	37.62	1.6 in/h
B2	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	31.19	1.61 in/h
B3	RAIN BIRD PESB-IVM-R	1"	BUBBLER	11	1.7 in/h
B4	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB ROTOR	38.5	0.49 in/h
B5	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	32.72	1.64 in/h
B6	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	39.41	1.48 in/h
C1	RAIN BIRD PESB-IVM-R	1"	SHRUB SPRAY	21.09	1.31 in/h
C2	RAIN BIRD PESB-IVM-R	1"	SHRUB SPRAY	14.29	1.26 in/h
C3	RAIN BIRD PESB-IVM-R	1"	BUBBLER	5.5	1.7 in/h
C4	RAIN BIRD PESB-IVM-R	1"	SHRUB SPRAY	11.64	1.38 in/h
D1	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	39.64	1.52 in/h
D2	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	39.39	1.64 in/h
D3	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	32.34	1.59 in/h
D4	RAIN BIRD PESB-IVM-R	1"	BUBBLER	9.5	1.7 in/h
D5	RAIN BIRD PESB-IVM-R	1"	SHRUB SPRAY	23.47	1.62 in/h
D6	RAIN BIRD PESB-IVM-R	1"	SHRUB ROTOR	10.78	0.3 in/h
D7	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	39.9	1.44 in/h
D8	RAIN BIRD PESB-IVM-R	1"	BUBBLER	7.5	1.7 in/h
D9	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	33.39	1.69 in/h
D10	RAIN BIRD PESB-IVM-R	1-1/2"	SHRUB SPRAY	30.88	1.49 in/h
D11	RAIN BIRD PESB-IVM-R	1"	SHRUB SPRAY	23.82	1.57 in/h

REVISIONS				MAGUED HANNA, R.L.A. LICENSE NO. LA6667254 315 E. ROBINSON ST. SUITE 400 ORLANDO, FL 32801 PHONE 407.420.4200 FAX 407.420.4242	SEMINOLE COUNTY ENGINEERING DIVISION ROLLING HILLS AREA ROADWAYS PHASE 1		IRRIGATION NOTES & SCHEDULE	SHEET NO. LD-38
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD	COUNTY CIP No.		
					RAYMOND AVE., NORTH ST., PALM SPRINGS DR.	01907084		

SUSERS

SDATES

STIMES

SFILES

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IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
	RAIN BIRD RD-12-P30-F-NP-U SQ SERIES 12" POP-UP, WITH 30 PSI IN-STEM PRESSURE REGULATION, FLOW-SHIELD TECHNOLOGY, AND NON-POTABLE COVER (PURPLE CAP). 1/2" NPT FEMALE THREADED INLET.	2	30
	RAIN BIRD RD-12-P30-F-NP-U 15 STRIP SERIES 12" POP-UP, WITH 30 PSI IN-STEM PRESSURE REGULATION, FLOW-SHIELD TECHNOLOGY, AND NON-POTABLE COVER (PURPLE CAP). 1/2" NPT FEMALE THREADED INLET.	203	30
	RAIN BIRD RD-12-P30-F-NP-U U8 SERIES 12" POP-UP, WITH 30 PSI IN-STEM PRESSURE REGULATION, FLOW-SHIELD TECHNOLOGY, AND NON-POTABLE COVER (PURPLE CAP). 1/2" NPT FEMALE THREADED INLET.	87	30
	RAIN BIRD RD-12-P30-F-NP-U U10 SERIES 12" POP-UP, WITH 30 PSI IN-STEM PRESSURE REGULATION, FLOW-SHIELD TECHNOLOGY, AND NON-POTABLE COVER (PURPLE CAP). 1/2" NPT FEMALE THREADED INLET.	199	30
	RAIN BIRD RD-12-P30-F-NP-U U12 SERIES 12" POP-UP, WITH 30 PSI IN-STEM PRESSURE REGULATION, FLOW-SHIELD TECHNOLOGY, AND NON-POTABLE COVER (PURPLE CAP). 1/2" NPT FEMALE THREADED INLET.	31	30
	RAIN BIRD RD-12-P30-F-NP-U U15 SERIES 12" POP-UP, WITH 30 PSI IN-STEM PRESSURE REGULATION, FLOW-SHIELD TECHNOLOGY, AND NON-POTABLE COVER (PURPLE CAP). 1/2" NPT FEMALE THREADED INLET.	9	30
	RAIN BIRD RD-12-P30-F-NP-U HE-VAN SERIES 12" POP-UP, WITH 30 PSI IN-STEM PRESSURE REGULATION, FLOW-SHIELD TECHNOLOGY, AND NON-POTABLE COVER (PURPLE CAP). 1/2" NPT FEMALE THREADED INLET.	362	30
	RAIN BIRD 1804-NP-1400 FLOOD FLOOD BUBBLER 4" POPUP WITH NON-POTABLE PURPLE CAP.	124	30

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	RADIUS
	RAIN BIRD 5012-PL-PC-SAM-R-NP 1.5 SHRUB ROTOR, 12" POP-UP WITH PLASTIC RISER, ADJUSTABLE TO FULL CIRCLE. STANDARD ANGLE NOZZLE, IN-STEM PRESSURE REGULATOR, AND FLOW SHUT-OFF DEVICE. WITH SEAL-A-MATIC CHECK VALVE, AND NON-POTABLE PURPLE COVER.	64	45	35'
	RAIN BIRD 5012-PL-PC-SAM-R-NP 2.0 SHRUB ROTOR, 12" POP-UP WITH PLASTIC RISER, ADJUSTABLE TO FULL CIRCLE. STANDARD ANGLE NOZZLE, IN-STEM PRESSURE REGULATOR, AND FLOW SHUT-OFF DEVICE. WITH SEAL-A-MATIC CHECK VALVE, AND NON-POTABLE PURPLE COVER.	3	45	37'

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	RAIN BIRD PESB-IVM-R 1", 1-1/2", 2" PLASTIC INDUSTRIAL SMART VALVES W/ FACTORY INSTALLED IVM-SOL. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION. WITH SCRUBBER TECHNOLOGY FOR RELIABLE PERFORMANCE IN DIRTY WATER IRRIGATION APPLICATIONS.	37
	RAIN BIRD PESB-IVM - MASTER VALVE 1-1/2" 1", 1-1/2", 2" PLASTIC INDUSTRIAL SMART VALVES W/ FACTORY INSTALLED IVM-SOL. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION. WITH SCRUBBER TECHNOLOGY FOR RELIABLE PERFORMANCE IN DIRTY WATER IRRIGATION APPLICATIONS.	1
	RAIN BIRD PESB-IVM - MASTER VALVE 2" 1", 1-1/2", 2" PLASTIC INDUSTRIAL SMART VALVES W/ FACTORY INSTALLED IVM-SOL. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION. WITH SCRUBBER TECHNOLOGY FOR RELIABLE PERFORMANCE IN DIRTY WATER IRRIGATION APPLICATIONS.	3

A
RAIN BIRD ESPLXIVM-LXMM-LXMMPED
60 STATION, 2-WIRE CONTROLLER W/ SMART VALVE TECHNOLOGY. (1) ESPLXIVM 60-STATION, INDOOR/OUTDOOR, PLASTIC WALL MOUNT ENCLOSURE. INSTALL IN RAIN BIRD LXMM-LXMMPED POWDER COATED METAL CABINET W/ PEDESTAL. SYSTEM REQUIREMENTS: RAIN BIRD LXIVM-XXX INTEGRATED VALVE MODULES & 2-WIRE DEVICES. USE PAIGE ELECTRIC CABLE P7072D & RAIN BIRD WC20 DRY SPLICES ONLY. GROUND SYSTEM W/ (X) LXIVMSD SURGE DEVICE IN RAIN BIRD ROUND VALVE BOXES. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

B
RAIN BIRD ESPLXIVM-LXMM-LXMMPED
60 STATION, 2-WIRE CONTROLLER W/ SMART VALVE TECHNOLOGY. (1) ESPLXIVM 60-STATION, INDOOR/OUTDOOR, PLASTIC WALL MOUNT ENCLOSURE. INSTALL IN RAIN BIRD LXMM-LXMMPED POWDER COATED METAL CABINET W/ PEDESTAL. SYSTEM REQUIREMENTS: RAIN BIRD LXIVM-XXX INTEGRATED VALVE MODULES & 2-WIRE DEVICES. USE PAIGE ELECTRIC CABLE P7072D & RAIN BIRD WC20 DRY SPLICES ONLY. GROUND SYSTEM W/ (X) LXIVMSD SURGE DEVICE IN RAIN BIRD ROUND VALVE BOXES. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

C
RAIN BIRD ESPLXIVM-LXMM-LXMMPED
60 STATION, 2-WIRE CONTROLLER W/ SMART VALVE TECHNOLOGY. (1) ESPLXIVM 60-STATION, INDOOR/OUTDOOR, PLASTIC WALL MOUNT ENCLOSURE. INSTALL IN RAIN BIRD LXMM-LXMMPED POWDER COATED METAL CABINET W/ PEDESTAL. SYSTEM REQUIREMENTS: RAIN BIRD LXIVM-XXX INTEGRATED VALVE MODULES & 2-WIRE DEVICES. USE PAIGE ELECTRIC CABLE P7072D & RAIN BIRD WC20 DRY SPLICES ONLY. GROUND SYSTEM W/ (X) LXIVMSD SURGE DEVICE IN RAIN BIRD ROUND VALVE BOXES. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

D
RAIN BIRD ESPLXIVM-LXMM-LXMMPED
60 STATION, 2-WIRE CONTROLLER W/ SMART VALVE TECHNOLOGY. (1) ESPLXIVM 60-STATION, INDOOR/OUTDOOR, PLASTIC WALL MOUNT ENCLOSURE. INSTALL IN RAIN BIRD LXMM-LXMMPED POWDER COATED METAL CABINET W/ PEDESTAL. SYSTEM REQUIREMENTS: RAIN BIRD LXIVM-XXX INTEGRATED VALVE MODULES & 2-WIRE DEVICES. USE PAIGE ELECTRIC CABLE P7072D & RAIN BIRD WC20 DRY SPLICES ONLY. GROUND SYSTEM W/ (X) LXIVMSD SURGE DEVICE IN RAIN BIRD ROUND VALVE BOXES. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

RAIN BIRD LXIVMSD
SURGE DEVICE PROVIDES NECESSARY PROTECTION ON THE ESPLXIVM(P) CONTROLLER, 2 WIRE PATH. INSTALL (1) LXIVMSD EVERY 500FT OR 15 FIELD DEVICES (WHICHEVER IS SMALLER).

RAIN BIRD LXIVMSEN
SENSOR DEVICE INTERFACES W/ FLOW OR WEATHER SENSOR AND ESP-LX-IVM(P) CONTROLLER. FLOW SENSOR CAN BE INSTALLED ANYWHERE ON THE 2-WIRE PATH.

RAIN BIRD WR2-RC
WIRELESS RAIN SENSOR COMBO, INCLUDES 1 RECEIVER AND 1 RAIN SENSOR TRANSMITTER.

RAIN BIRD FS-100-P
1" FLOW SENSOR, PLASTIC PVC MODEL. SUGGESTED OPERATING RANGE 5.4 GPM TO 54 GPM. SIZE FOR FLOW NOT ACCORDING TO PIPE SIZE. RAIN BIRD COMPATIBLE CONTROLLERS: ESP-LXIVM(P) | LXDI | LXME2(P) | ME3, OR CONTROLLERS ACCEPTING CUSTOM K-FACTOR AND OFFSET. INSTALL IN RAIN BIRD VALVE BOX

RAIN BIRD FS-150-P
1-1/2" FLOW SENSOR, PLASTIC PVC MODEL. SUGGESTED OPERATING RANGE 5.0 GPM TO 100.0 GPM. SIZE FOR FLOW NOT ACCORDING TO PIPE SIZE. RAIN BIRD COMPATIBLE CONTROLLERS: ESP-LXIVM(P) | LXDI | LXME2(P) | ME3, OR CONTROLLERS ACCEPTING CUSTOM K-FACTOR AND OFFSET. INSTALL IN RAIN BIRD VALVE BOX.

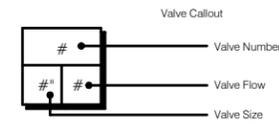
WATER METER 1-1/2"

WATER METER 1"

<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>DATE</th> <th>DESCRIPTION</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		DATE	DESCRIPTION	DATE	DESCRIPTION					<p>MAGUED HANNA, R.L.A. LICENSE NO. LA6667254 315 E. ROBINSON ST. SUITE 400 ORLANDO, FL 32801 PHONE 407.420.4200 FAX 407.420.4242</p>	<p>SEMINOLE COUNTY ENGINEERING DIVISION ROLLING HILLS AREA ROADWAYS PHASE 1</p> <table border="1"> <tr> <td>ROAD</td> <td>COUNTY CIP No.</td> </tr> <tr> <td>RAYMOND AVE., NORTH ST., PALM SPRINGS DR.</td> <td>01907084</td> </tr> </table>	ROAD	COUNTY CIP No.	RAYMOND AVE., NORTH ST., PALM SPRINGS DR.	01907084	<p>SHEET NO. LD-39</p>
DATE	DESCRIPTION	DATE	DESCRIPTION													
ROAD	COUNTY CIP No.															
RAYMOND AVE., NORTH ST., PALM SPRINGS DR.	01907084															

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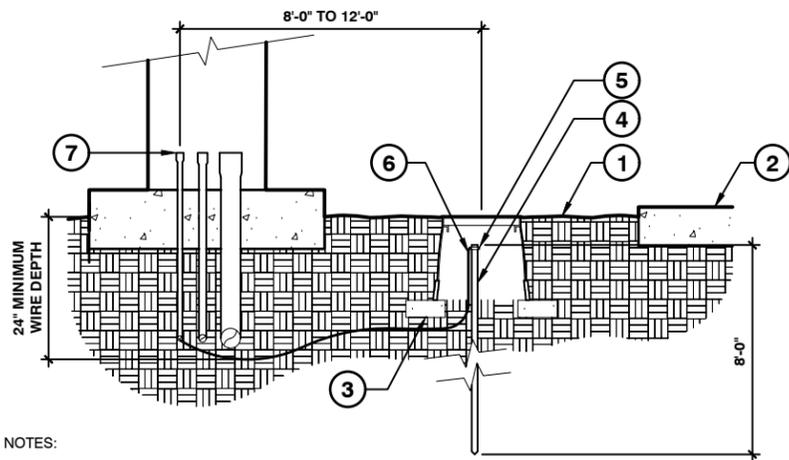
_____ IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21-NP 18,583 L.F.
 - - - - - IRRIGATION MAINLINE: PVC CLASS 200 SDR 21-NP 3,492 L.F.
 - - - - - PIPE SLEEVE: PVC SCHEDULE 40 3,963 L.F.



REVISIONS				MAGUED HANNA, R.L.A. LICENSE NO. LA6667254 315 E. ROBINSON ST. SUITE 400 ORLANDO, FL 32801 PHONE 407.420.4200 FAX 407.420.4242	SEMINOLE COUNTY ENGINEERING DIVISION ROLLING HILLS AREA ROADWAYS PHASE 1		IRRIGATION SCHEDULE	SHEET NO. LD-40
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD	COUNTY CIP No.		
					RAYMOND AVE.,NORTH ST.,PALM SPRINGS DR.	01907084		

\$USERS \$DATES \$TIMES \$FILES

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NOTES:

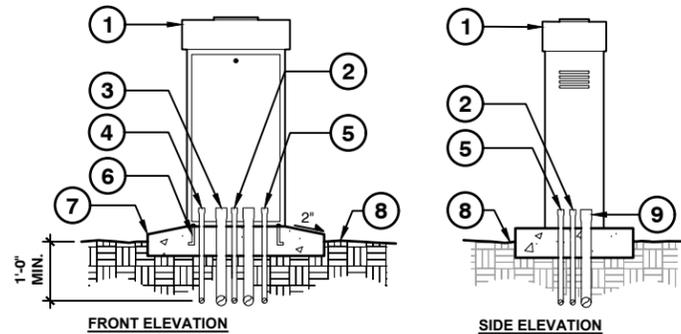
1. ALL GROUNDING REQUIREMENTS FOR CONTROLLERS SHALL CONFORM TO LOCAL ELECTRIC CODES.
2. GROUNDING ROD SHALL NOT BE LOCATED IN THE SAME TRENCH AS IRRIGATION MAINLINES OR LATERAL LINES.
3. VALVE BOX SHALL BE WRAPPED WITH A MINIMUM 3 MIL THICK PLASTIC AND SECURED TO THE VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
4. INSTALL GROUNDING ROD PER THE CONTROLLER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

- 1 FINISH GRADE
- 2 PAVEMENT
- 3 THREE (3) 4" x 8" BRICKS
- 4 5/8" x 8'-0" COPPER GROUNDING ROD
- 5 GROUNDING ROD CLAMP
- 6 #6 AWG BARE COPPER WIRE
- 7 1/2" PVC ELECTRICAL CONDUIT AND SWEEP FOR EARTH GROUND

1 GROUNDING ROD

1" = 1'-0"

FX-IR-FX-AUXEQ-01



NOTES:

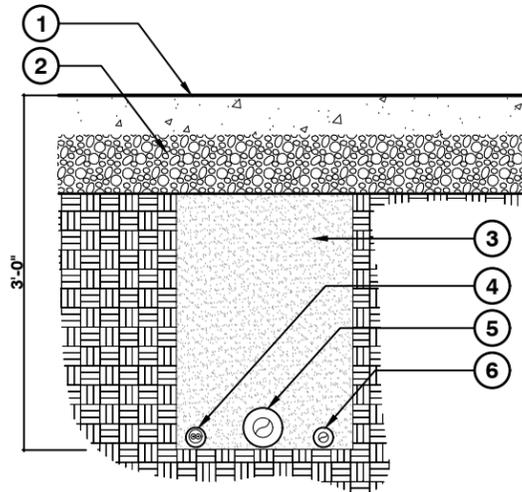
1. COMMON AND CONTROLLER WIRE TO BE BUNDLED USING ELECTRICAL TAPE AT 10'-0" ON CENTER.
2. GROUNDING RODS SHALL BE LOCATED BETWEEN 8'-0" AND 12'-0" AWAY FROM THE CONTROLLER. GROUNDING RODS SHALL BE 3/8" IN DIAMETER X 8' IN LENGTH. CONNECT THE GROUNDING ROD TO THE CONTROLLER USING 6 GAUGE BARE COPPER WIRE OR PER THE MANUFACTURER'S SPECIFICATIONS. SEE GROUNDING ROD DETAIL.
3. ET STATION TO BE INSTALLED NO FURTHER THAN 90' AWAY FROM THE CONTROLLER AND A MINIMUM OF 15' OFF OF THE GROUND, OUT FROM UNDER ANY OVERHEAD OBSTRUCTIONS SUCH AS, BUT NOT LIMITED TO BUILDING OVERHANGS, TREES, OR UTILITIES.

2 PEDESTAL MOUNTED CONTROLLER

1/2" = 1'-0"

FX-IR-FX-CONT-04

- 1 PEDESTAL MOUNTED CONTROLLER (SEE IRRIGATION LEGEND FOR MAKE AND MODEL. INSTALL CONTROLLER PER MANUFACTURER SPECIFICATIONS)
- 2 1" PVC ELECTRICAL CONDUIT FOR GROUNDING WIRE
- 3 2" PVC ELECTRICAL CONDUIT FOR REMOTE CONTROL WIRES (TRADITIONAL & 2-WIRE)
- 4 1" PVC ELECTRICAL CONDUIT FOR INPUT POWER PER LOCAL AND NATIONAL CODES
- 5 1" PVC ELECTRICAL CONDUIT FOR SENSOR WIRES
- 6 1/2" x 4" CADMIUM PLATED 'J' ANCHOR BOLTS AT FOUR LOCATIONS
- 7 CONCRETE FOOTING (INSTALL PER MANUFACTURER'S SPECIFICATION)
- 8 FINISHED GRADE
- 9 OPTIONAL 2" PVC ELECTRICAL CONDUIT FOR AN ADDITIONAL WIRES



NOTES:

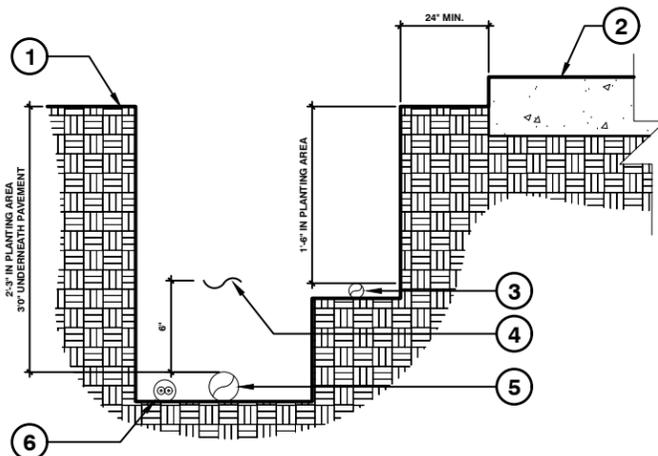
1. SEE IRRIGATION LEGEND FOR MAINLINE SIZE AND TYPE.
2. ALL SLEEVES SHALL BE SCH. 40 PVC PIPE.
3. ALL SLEEVES SHALL EXTEND 12" BEYOND THE EDGE OF PAVEMENT.
4. END OF SLEEVES SHALL BE LOCATED WITH A WOODEN STAKE OR PVC PIPE. LOCATORS SHALL RUN CONTINUOUSLY FROM THE END OF THE SLEEVE TO FINISHED GRADE.

- 1 PAVEMENT
- 2 BASE ROCK
- 3 CLEAN BACKFILL, 95% RELATIVE COMPACTION UNDER PAVING OR PER CIVIL ENGINEER'S PLANS
- 4 TWO-WIRE CONTROL WIRES IN CONDUIT. SLEEVE UNDER PAVING. INSTALL ADJACENT TO PRESSURIZED MAINLINE. BUNDLE SHALL BE NO MORE THAN 50% OF PIPE DIAMETER
- 5 MAINLINE, SLEEVE UNDER PAVING TO BE TWO TIMES THE DIAMETER OF THE PRESSURIZED MAINLINE PIPE
- 6 NON-PRESSURIZED LINE, SLEEVE UNDER PAVING TO BE TWO TIMES THE DIAMETER OF THE LATERAL LINE

3 PIPE BENEATH PAVEMENT - TWO WIRE

N.T.S

I-04



NOTES:

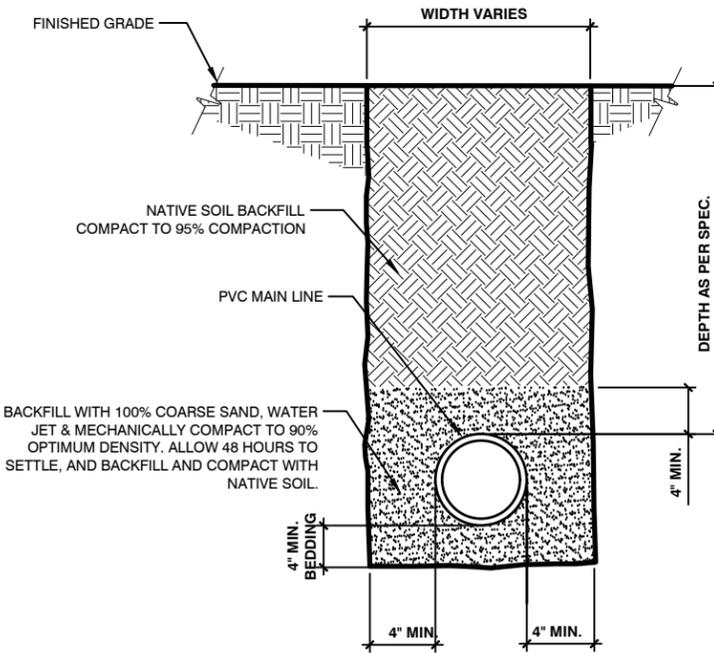
1. SEE IRRIGATION LEGEND FOR MAINLINE AND LATERAL LINE PIPE SIZE AND TYPE.
2. 2-WIRE IRRIGATION WIRE SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT.
3. DETECTABLE LOCATOR TAPE SHALL BE LOCATED SIX INCHES (6") ABOVE THE ENTIRE MAINLINE RUN.

- 1 FINISHED GRADE
- 2 PAVEMENT
- 3 NON-PRESSURIZED LINE (LATERAL LINE)
- 4 DETECTABLE LOCATOR TAPE
- 5 PRESSURIZED LINE (MAINLINE)
- 6 TWO WIRE CONTROL WIRES IN CONDUIT

4 IRRIGATION TRENCHING - TWO WIRE

N.T.S

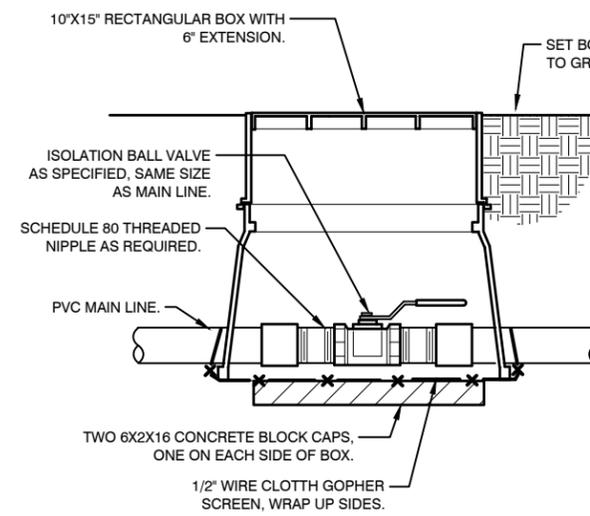
I-05



5 SLEEVE AT ROAD

1 1/2" = 1'-0"

FX-IR-FX-AUXEQ-15



6 BRASS BALL ISOLATION VALVE

1 1/2" = 1'-0"

FX-IR-FX-ISOV-02

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

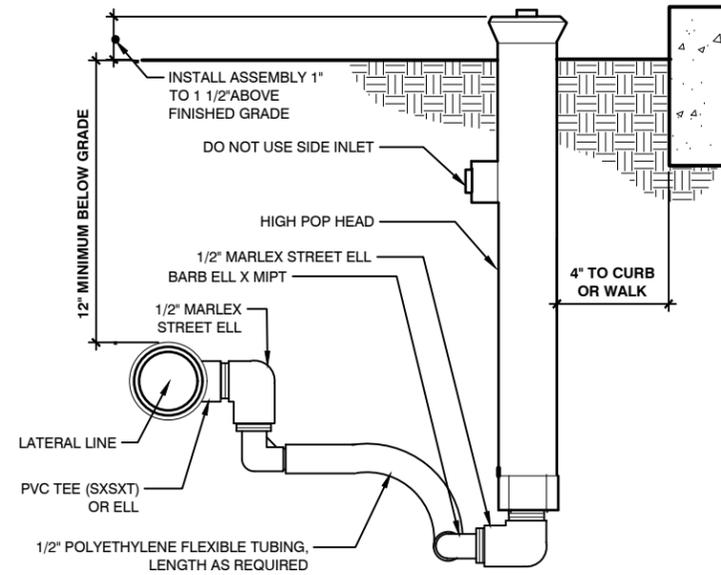
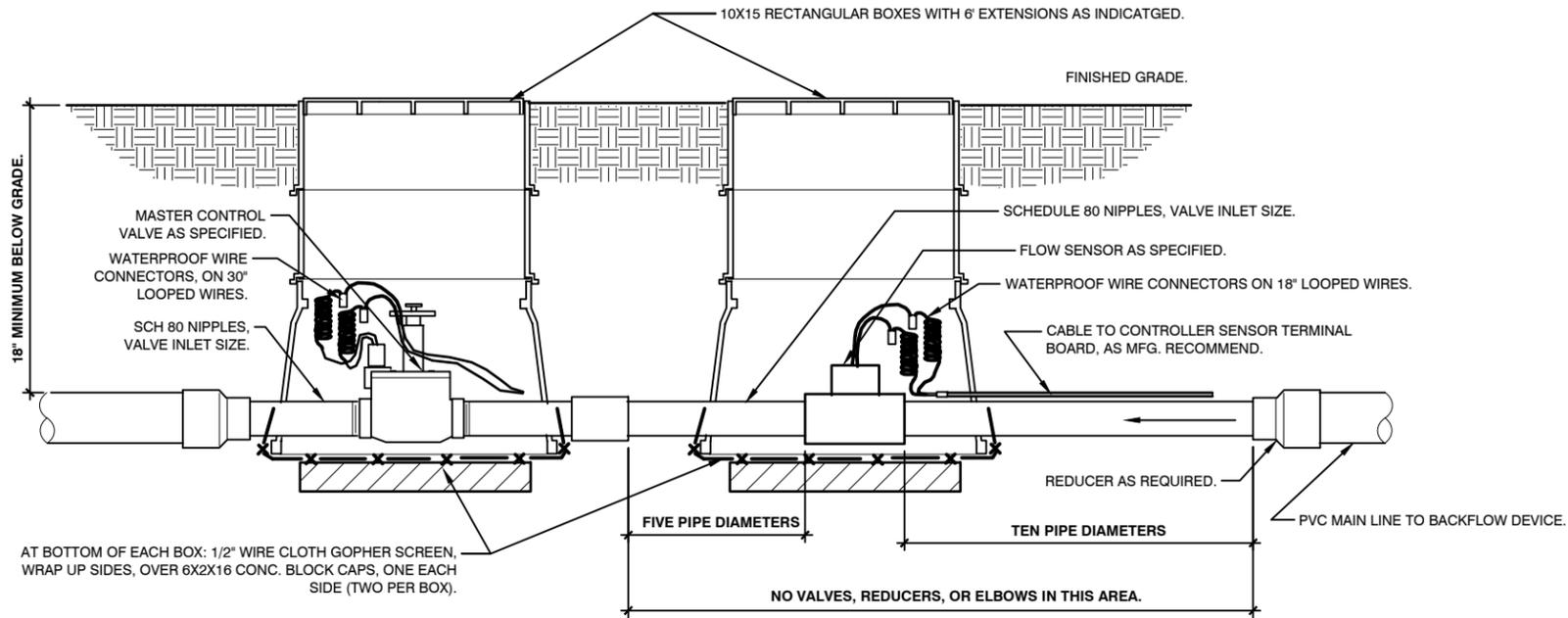
MAGUED HANNA, R.L.A.
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 PHONE 407.420.4200
 FAX 407.420.4242

SEMINOLE COUNTY
 ENGINEERING DIVISION
 ROLLING HILLS AREA ROADWAYS PHASE 1
 ROAD COUNTY CIP No.
 RAYMOND AVE., NORTH
 ST., PALM SPRINGS DR.
 01907084

IRRIGATION DETAILS

SHEET NO.
 LD-41

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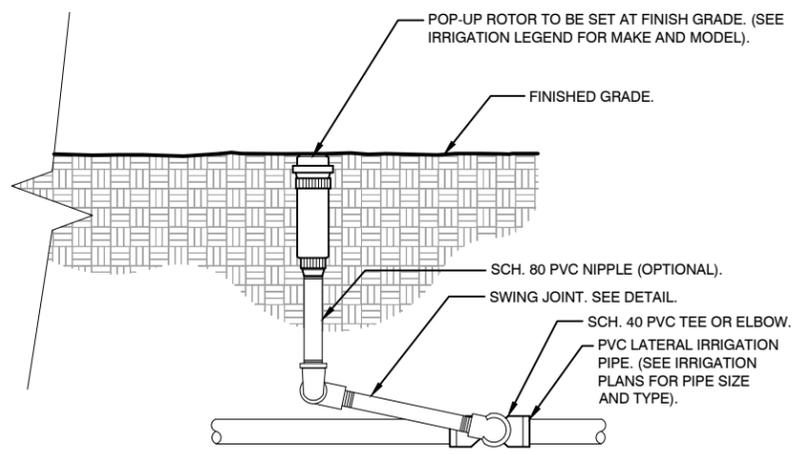


1 MASTER VALVE/FLOW SENSOR ASSEMBLY
1 1/2" = 1'-0"

FX-IR-FX-MAST-04

2 SHRUB SPRAY HIGHPOP W/FLEX ASSEMBLY
3" = 1'-0"

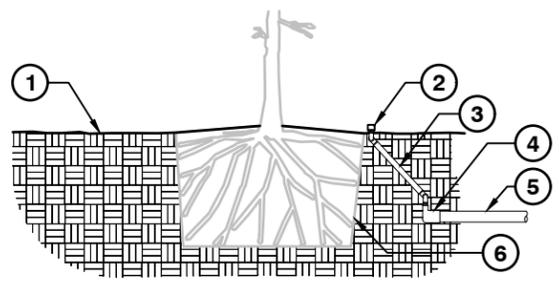
FX-IR-FX-HEAD-08



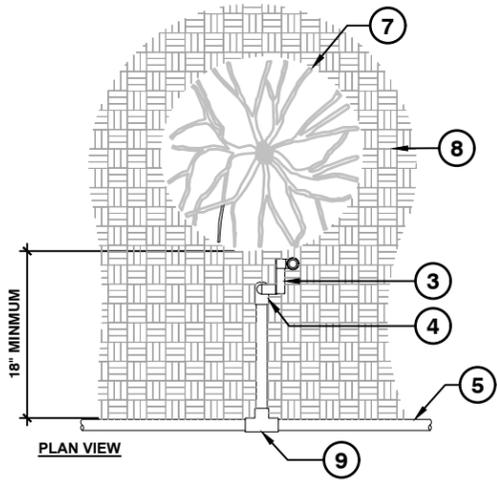
NOTES:
1- ALL THREADED CONNECTION POINTS BETWEEN SCH. 40 PVC AND SCH. 80 PVC FITTING SHALL BE INSTALLED USING TEFLON TAPE.
2- CONTRACTOR SHALL COMPACT SOIL AROUND ROTOR AND RISER PRIOR TO PLANTING, PLUGGING, SEEDING, OR LAYING OF SOD.

3 ROTOR SPRAYHEAD
1 1/2" = 1'-0"

FX-IR-FX-HEAD-01



- SECTION VIEW**
- ① FINISHED GRADE
 - ② PRESSURE COMPENSATING BUBBLER SHALL BE SET 1" ABOVE FINISHED GRADE (SEE IRRIGATION SCHEDULE FOR MAKE AND MODEL)
 - ③ SWING JOINT, SEE DETAIL
 - ④ SCH. 40 PVC 90° ELBOW SLIP TO THREAD
 - ⑤ LATERAL LINE IRRIGATION (SEE IRRIGATION PLANS FOR SIZING)
 - ⑥ EDGE OF ROOT BALL. SETTLE BACKFILL SO IRRIGATION FLOWS THROUGH ROOT BALL
 - ⑦ EDGE OF ROOT BALL
 - ⑧ EXISTING OR MODIFIED SOIL (SEE SPECIFICATIONS FOR SOIL MODIFICATION)
 - ⑨ SCH. 40 PVC TEE OR 90° ELBOW



- PLAN VIEW**
- NOTES:
- 1. ALL IRRIGATION FITTINGS SHALL BE SCH. 40 PVC UNLESS SPECIFIED OTHERWISE.
 - 2. ALL THREADED CONNECTIONS FROM SCH. 40 TO SCH. 80 PVC SHALL BE MADE USING TEFLON TAPE.
 - 3. CONTRACTOR SHALL SETTLE THE AREA AROUND THE BUBBLER AND EDGE OF THE ROOT BALL SO THAT ALL IRRIGATION FLOWS THROUGH THE ROOT BALL.

4 IRRIGATION BUBBLER W/ LAYOUT
3/4" = 1'-0"

FX-IR-FX-BUBB-04

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

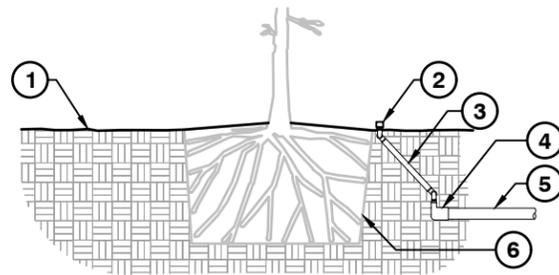
MAGUED HANNA, R.L.A.
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ORLANDO, FL 32801
PHONE 407.420.4200
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SEMINOLE COUNTY
ENGINEERING DIVISION
ROLLING HILLS AREA ROADWAYS PHASE 1
ROAD COUNTY CIP No.
RAYMOND AVE., NORTH ST., PALM SPRINGS DR.
01907084

IRRIGATION DETAILS

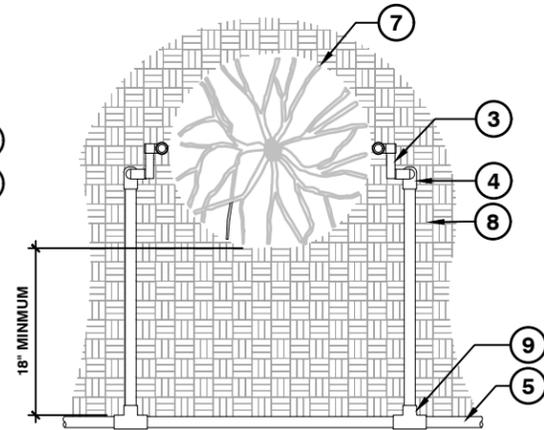
SHEET NO.
LD-42

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SECTION VIEW

- ① FINISHED GRADE
- ② PRESSURE COMPENSATING BUBBLER SHALL BE SET 1" ABOVE FINISHED GRADE (SEE IRRIGATION SCHEDULE FOR MAKE AND MODEL)
- ③ SWING JOINT, SEE DETAIL
- ④ SCH. 40 PVC 90° ELBOW SLIP TO THREAD
- ⑤ LATERAL LINE IRRIGATION (SEE IRRIGATION PLANS FOR SIZING)
- ⑥ EDGE OF ROOT BALL. SETTLE BACKFILL SO IRRIGATION FLOWS THROUGH ROOT BALL
- ⑦ EDGE OF ROOT BALL
- ⑧ EXISTING OR MODIFIED SOIL (SEE SPECIFICATIONS FOR SOIL MODIFICATION)
- ⑨ SCH. 40 PVC TEE OR 90° ELBOW



PLAN VIEW

NOTES:

1. ALL IRRIGATION FITTINGS SHALL BE SCH. 40 PVC UNLESS SPECIFIED OTHERWISE.
2. ALL THREADED CONNECTIONS FROM SCH. 40 TO SCH. 80 PVC SHALL BE MADE USING TEFLON TAPE.
3. CONTRACTOR SHALL SETTLE THE AREA AROUND THE BUBBLER AND EDGE OF THE ROOT BALL SO THAT ALL IRRIGATION FLOWS THROUGH THE ROOT BALL.

1 IRRIGATION BUBBLER (2) W/ LAYOUT
3/4" = 1'-0"

FX-IR-FX-BUBB-01

REVISIONS				MAGUED HANNA, R.L.A. LICENSE NO. LA6667254 315 E. ROBINSON ST. SUITE 400 ORLANDO, FL 32801 PHONE 407.420.4200 FAX 407.420.4242	SEMINOLE COUNTY ENGINEERING DIVISION ROLLING HILLS AREA ROADWAYS PHASE 1		IRRIGATION DETAILS	SHEET NO. LD-43
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD	COUNTY CIP No.		
					RAYMOND AVE., NORTH	01907084		
					ST., PALM SPRINGS DR.			

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