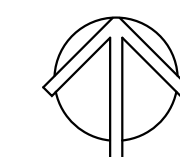


- IRRIGATION PLAN
- IR-1 IRRIGATION OVERALL PLAN
  - IR-2 IRRIGATION PLAN
  - IR-3 IRRIGATION PLAN
  - IR-4 IRRIGATION PLAN
  - IR-5 IRRIGATION PLAN
  - IR-6 IRRIGATION PLAN
  - IR-7 IRRIGATION PLAN
  - IR-8 IRRIGATION PLAN
  - IR-9 IRRIGATION PLAN
  - IR-10 IRRIGATION PLAN

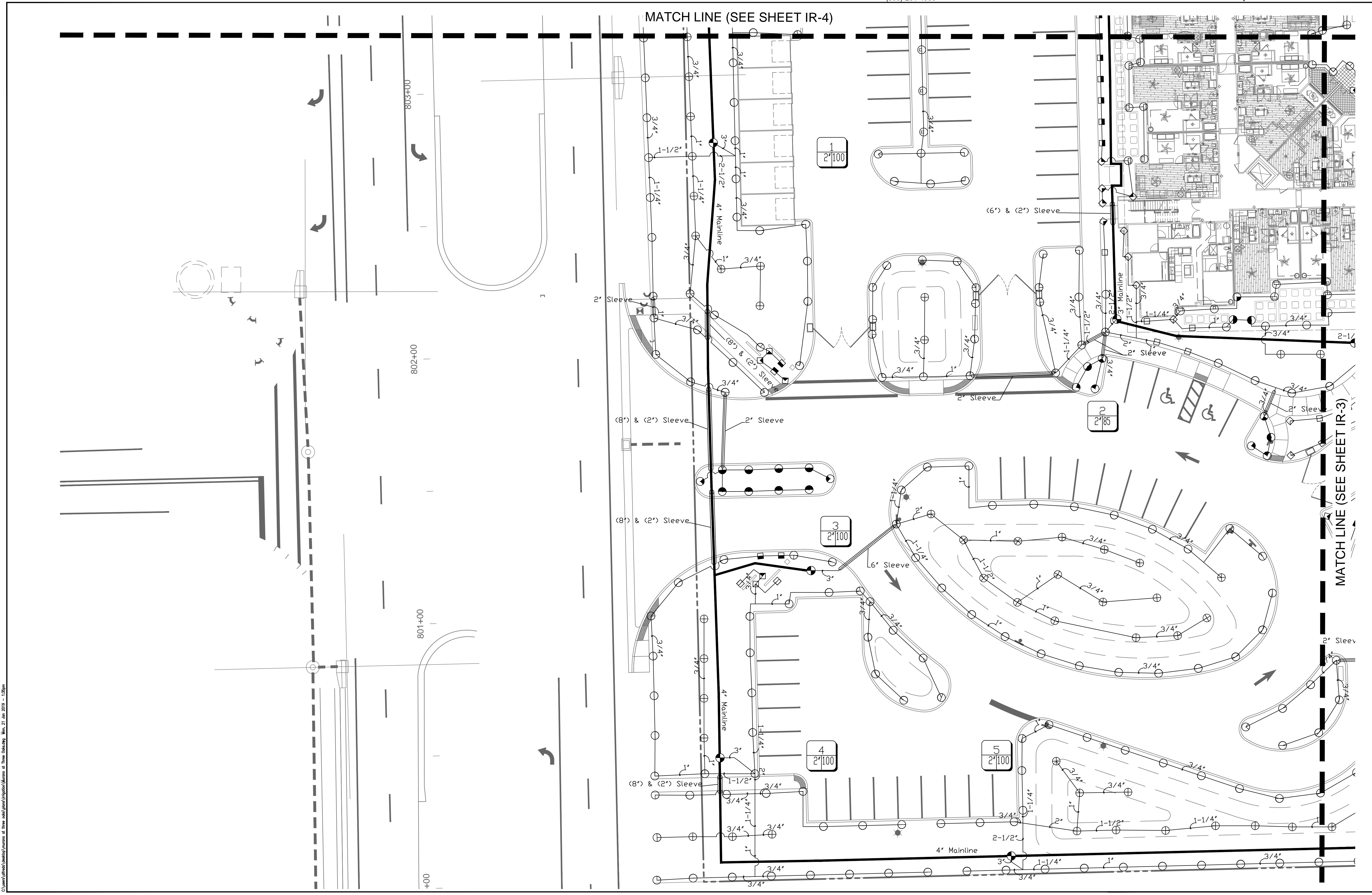
IRRIGATION PLAN

Scale: NTS



Revisions	
Revisions	
Date	1.21.2019
Job number	

C:\Users\jlfredda\Documents\Projects\Murano At Three Oaks.dwg, 21 Jan 2019, 1:52pm

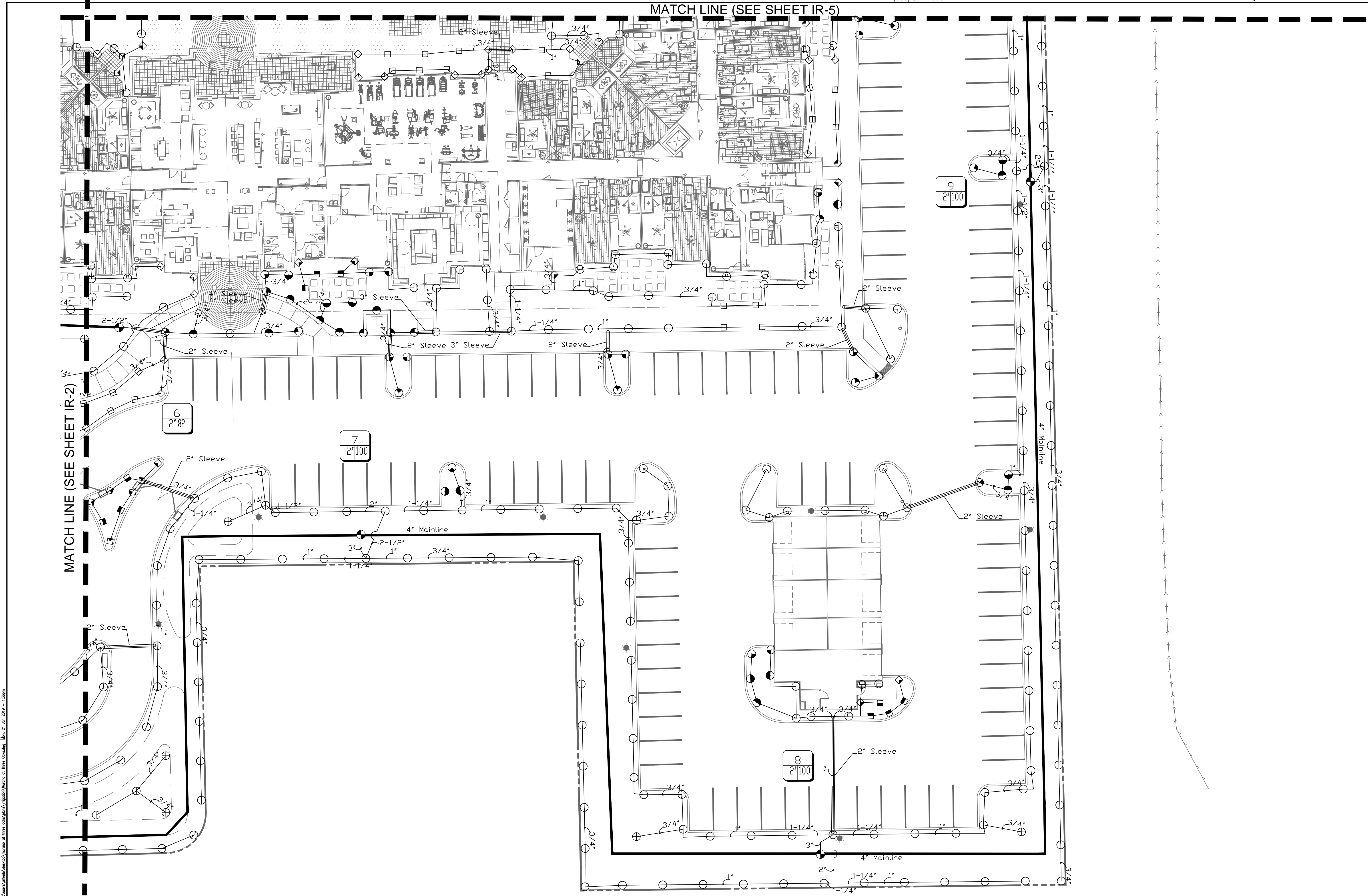


MATCH LINE (SEE SHEET IR-4)

MATCH LINE (SEE SHEET IR-3)

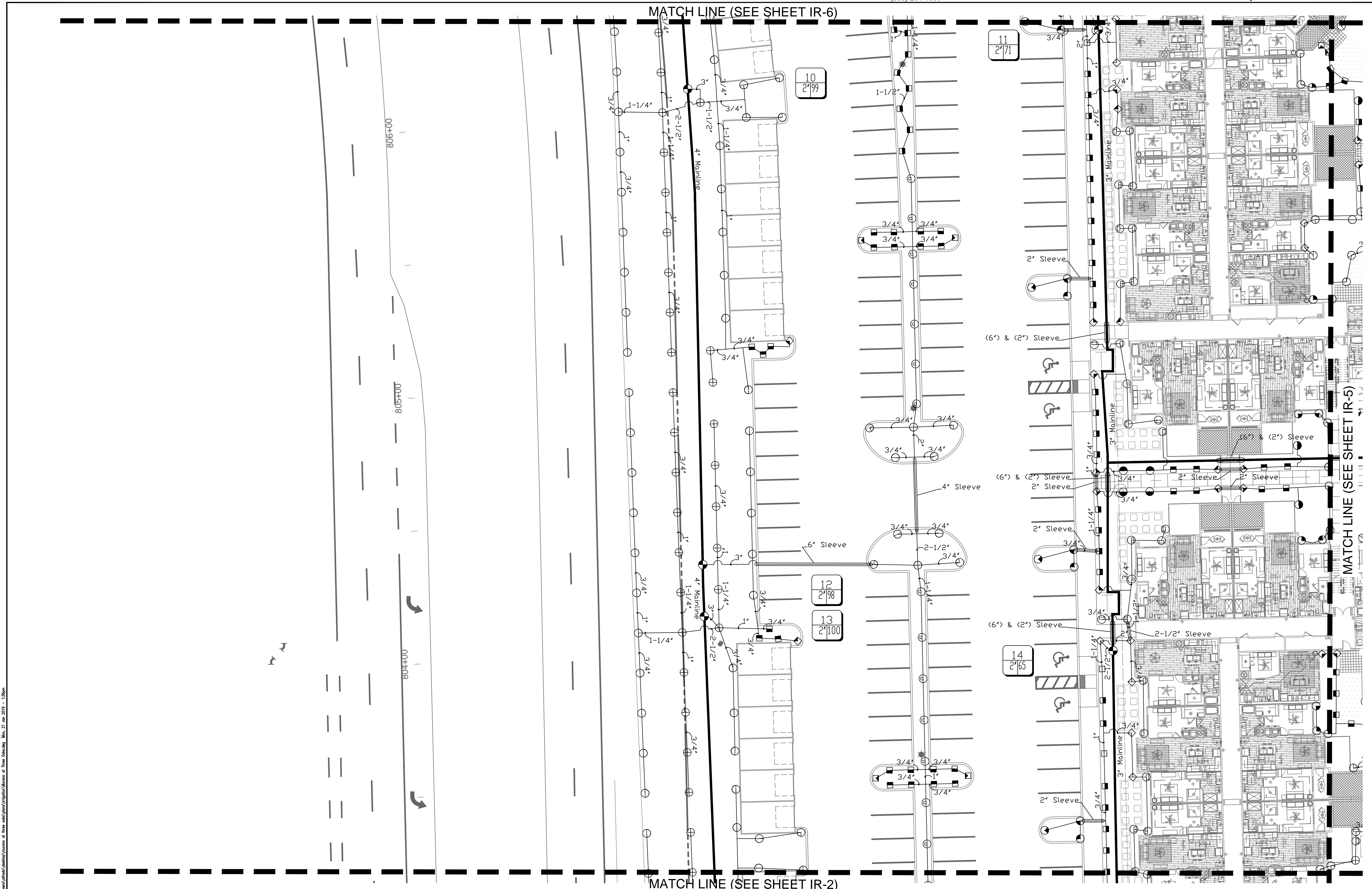
Revisions
Date: 1.21.2019
Job number:

Client's Approval/Signature/Seal of these individuals/organization/Member of these categories/State, 21 Jan 2019 - 1:05pm



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Revisions



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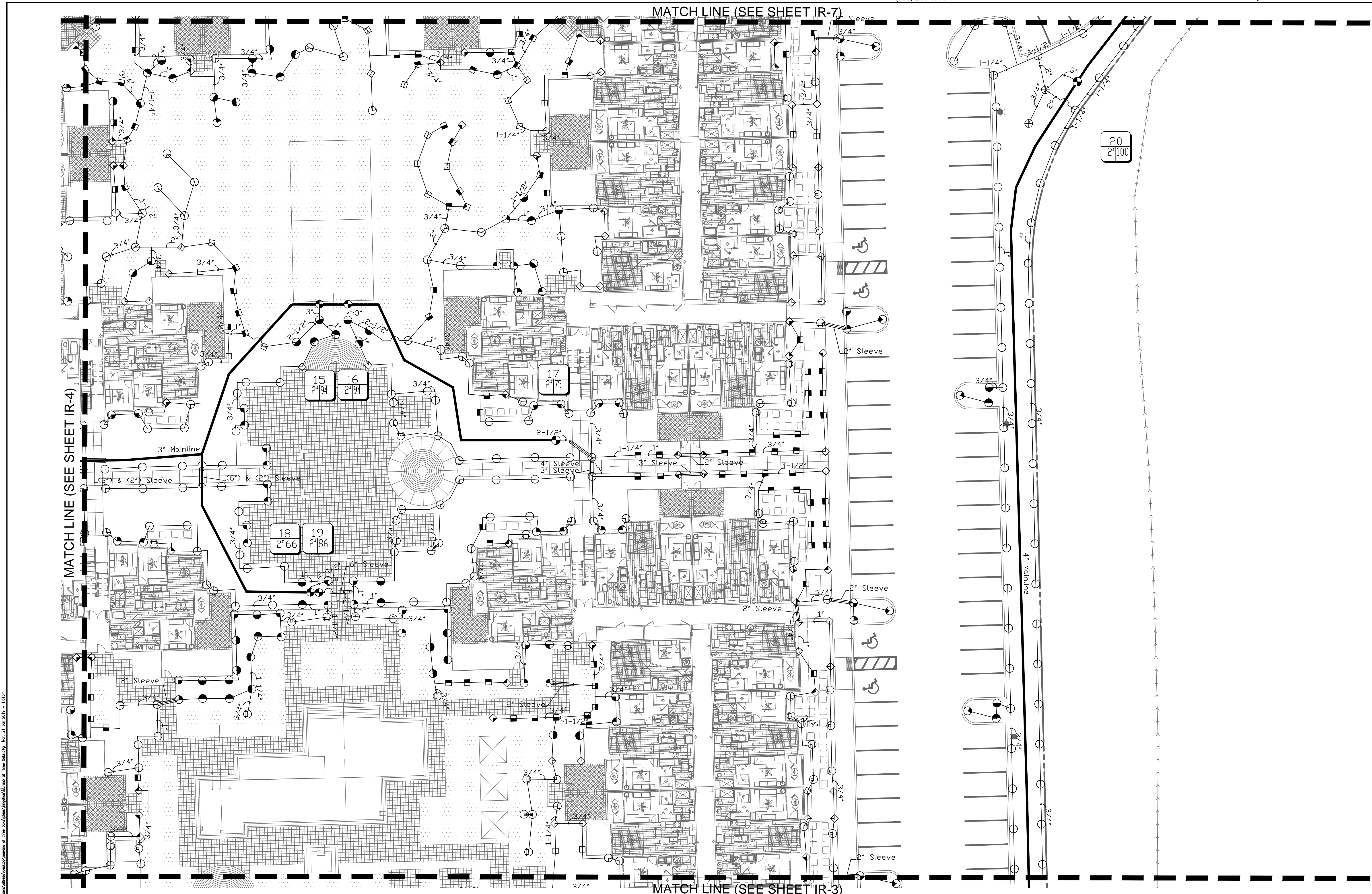
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MATCH LINE (SEE SHEET IR-6)

MATCH LINE (SEE SHEET IR-2)

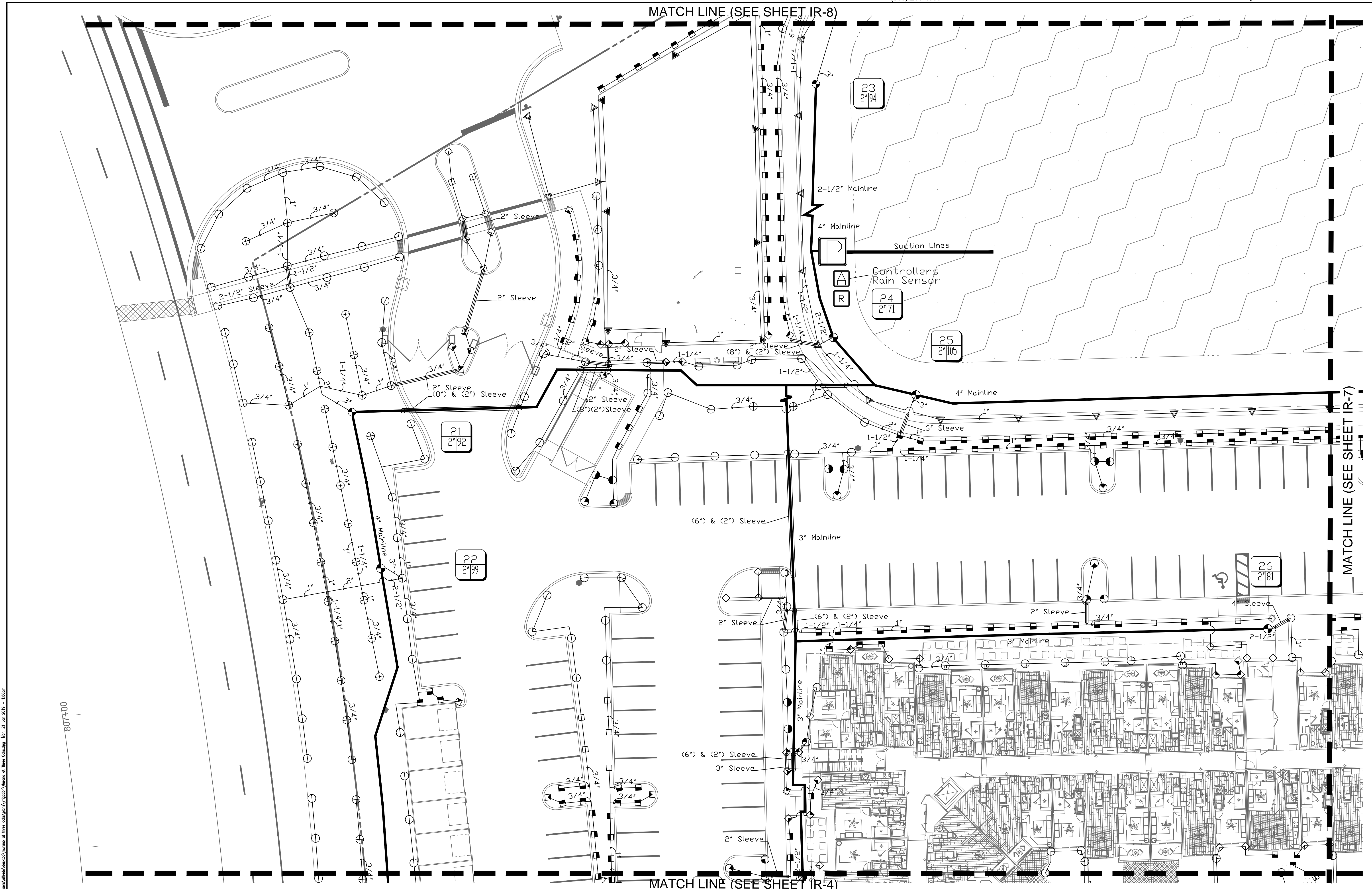
Revisions	
Revisions	
Date	1.21.2019
Job number	

Sheet number  
**IR-4**



Client: Murano At Three Oaks, LLC  
 Project: Murano At Three Oaks  
 Date: 21 Jan 2019 - 1:51pm

Revisions	Date	Job number
	1.21.2019	



MATCH LINE (SEE SHEET IR-8)

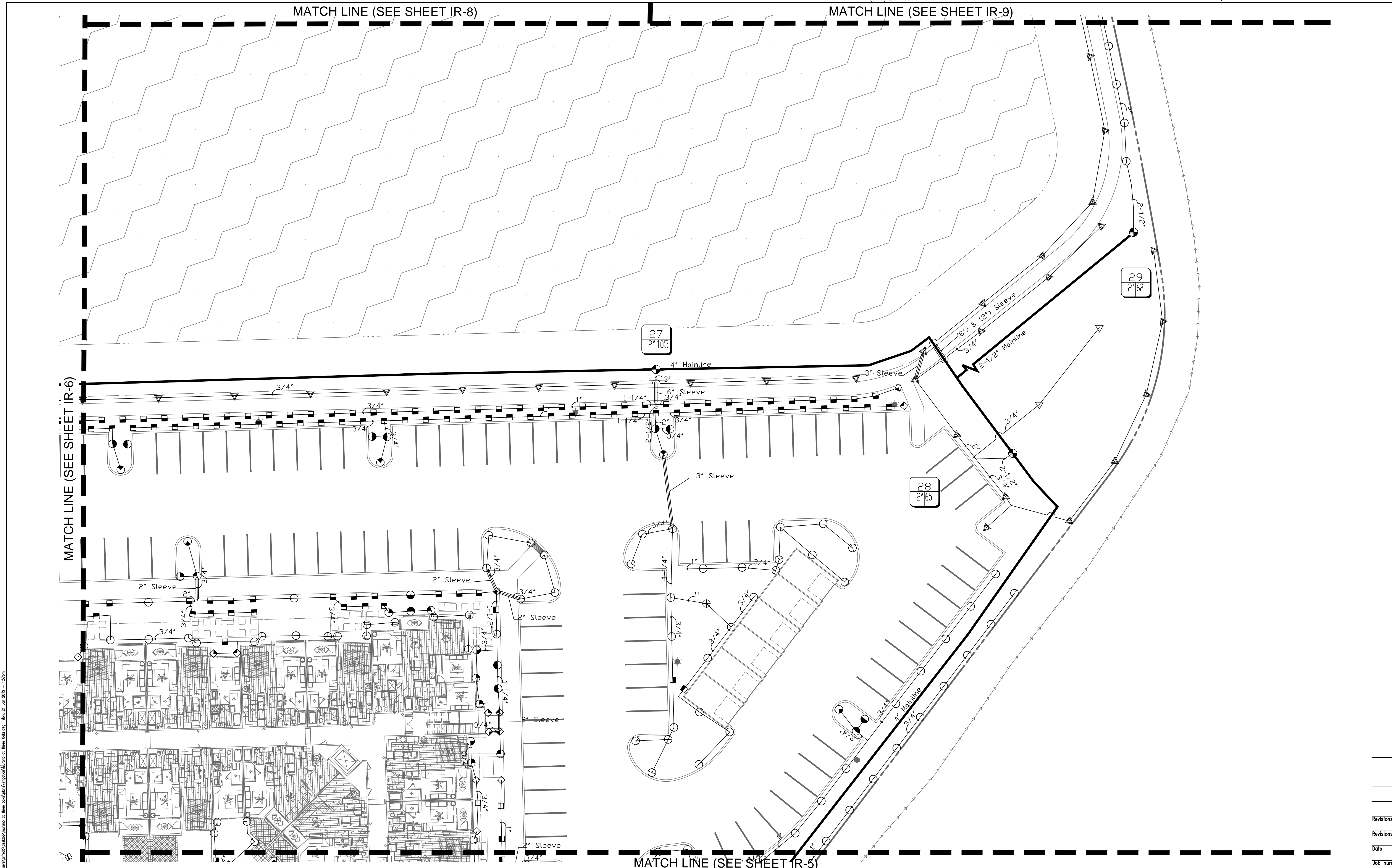
MATCH LINE (SEE SHEET IR-7)

MATCH LINE (SEE SHEET IR-4)

Client: Murano At Three Oaks, LLC  
 Date: 21 Jan 2019 - 1:00pm  
 Scale: 807/400

Revisions	Date	Job number
	1.21.2019	

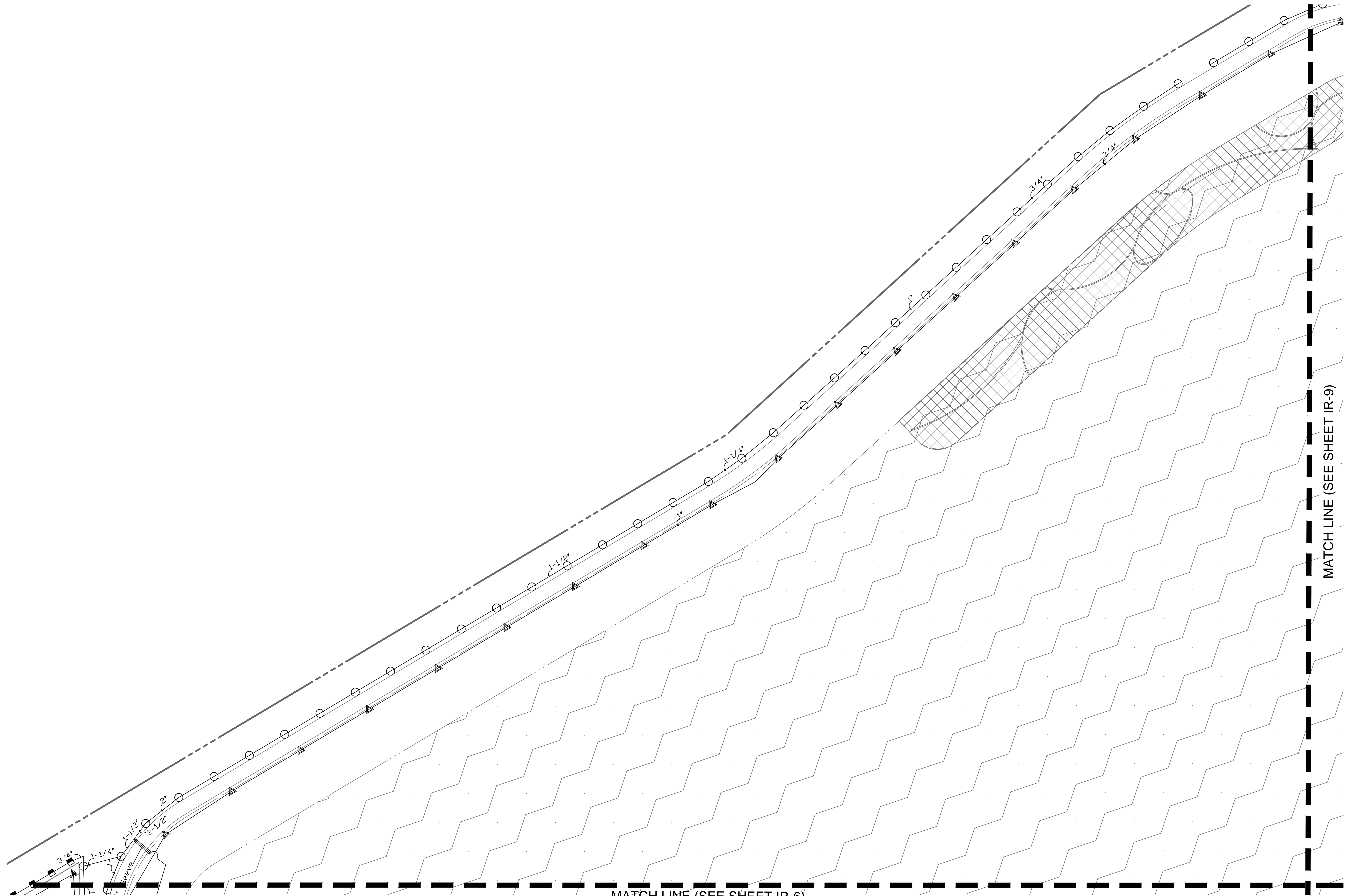
Sheet number



Client's approval is required for all changes to this plan. All dimensions are in feet unless otherwise noted. Date: 1/21/2019

Revisions	Date	Job number
	1.21.2019	

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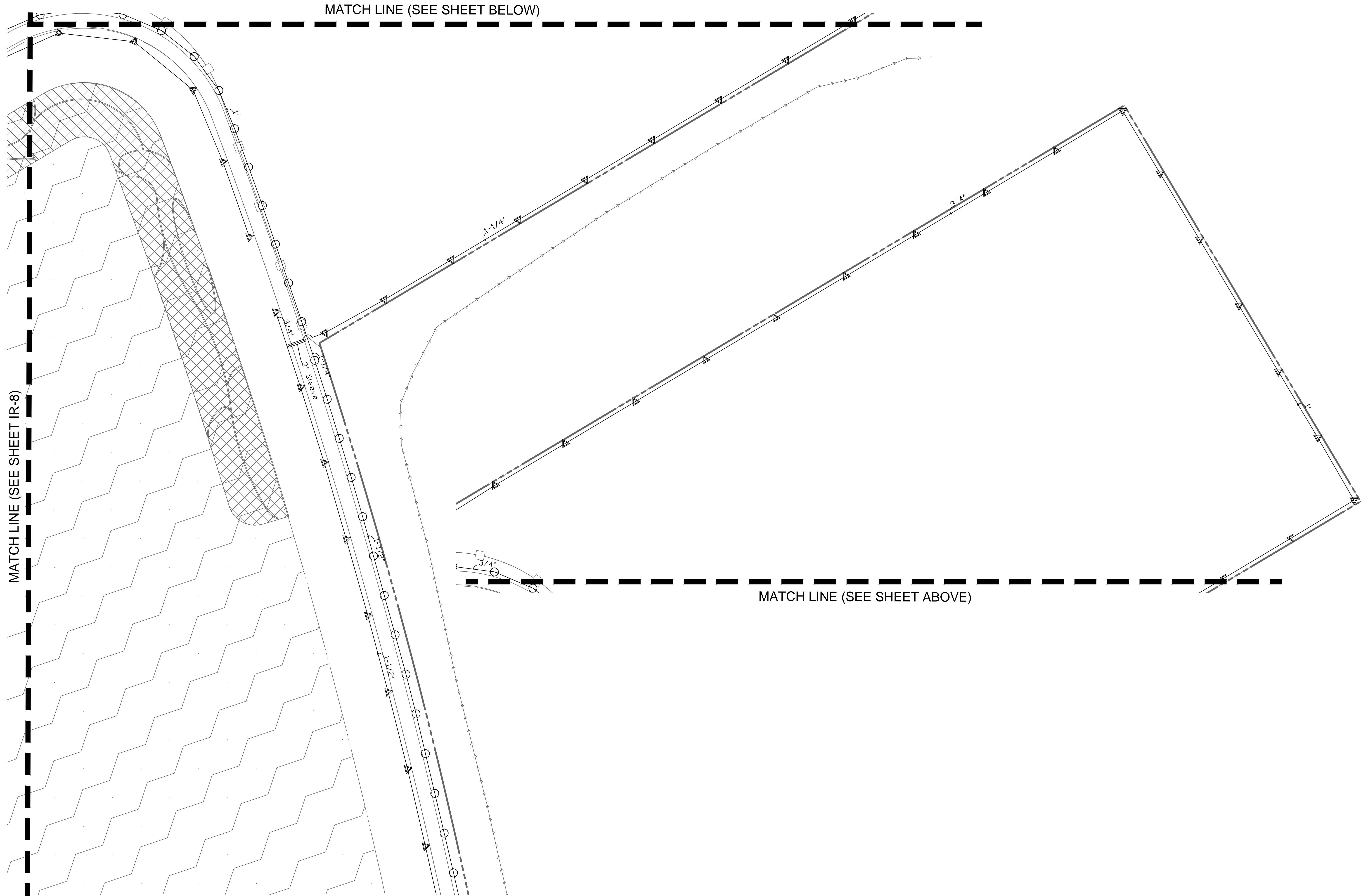


Revisions

Date: 1.21.2019  
Job number:  

Sheet number  
**IR-8**





MATCH LINE (SEE SHEET BELOW)

MATCH LINE (SEE SHEET IR-8)

MATCH LINE (SEE SHEET ABOVE)

Client: Murano At Three Oaks, LLC; Project: Landscape Architecture; Date: 1/21/2019; Sheet: IR-9 of 10

Revisions
Date: 1.21.2019
Job number:

Sheet number  
**IR-9**

### Irrigation Notes

#### LAYOUT

LAYOUT IRRIGATION SYSTEM MAINLINES AND LATERAL LINES. MAKE ALL NECESSARY ADJUSTMENTS AS REQUIRED TO TAKE INTO ACCOUNT ALL SITE OBSTRUCTIONS AND LIMITATIONS PRIOR TO EXCAVATING TRENCHES.

FLAG ALL SPRINKLER HEAD LOCATIONS. ADJUST LOCATION AND MAKE THE NECESSARY MODIFICATIONS TO NOZZLE TYPES ETC. AS REQUIRED TO INSURE 100% COVERAGE AND 50% OVERLAP.

LOW ANGLE TRAJECTORY NOZZLES SHALL BE USED WHEN ALL SPRINKLERS AND ROTORS ARE LOCATED WITHIN 100' OF POOLS OR PUBLIC GATHERING AREAS.

#### PIPE

PIPE LOCATIONS SHOWN ON PLAN ARE SCHEMATIC ONLY AND SHALL BE ADJUSTED IN THE FIELD. WHEN LAYING-OUT MAINS AND LATERALS, LOCATE PIPE NEAR EDGES OF PAVEMENT OR AGAINST BUILDINGS WHEREVER POSSIBLE TO ALLOW SPACE FOR PLANT ROOT BALLS.

PIPING UNDER HARDSCAPES SUCH AS ROADS, WALKS, AND PATIOS ARE TO BE SLEEVED USING SCH. 40 PIPE.

PIPES 4" AND UNDER TO BE SOLVENT WELD. LARGER PIPES TO BE GASKETED 'O' RING PIPES AND USE THRUST BLOCKS OR MEGA LUGS AND DUCTILE IRON FITTINGS AT TURNING LOCATIONS.

\*SIZE ALL PIPE SO NOT TO EXCEED 5' PER SECOND  
\*INSTALL RAIN SENSOR AS PER LOCAL CODE

PIPES CONVEYING RECLAIM WATER SHALL HAVE A 3' HORIZONTAL DISTANCE SEPARATION FROM OTHER PIPING OR UTILITY SERVICES. AN 18" VERTICAL SEPARATION SHALL BE MAINTAINED WHEN APPLICABLE.

AIR RELEASE VALVES TO BE USED AT THE END OF ALL MAINLINE RUNS.

#### WIRES

LOW VOLTAGE WIRE TO BE INSTALLED ALONG MAINLINE INSTALLATION. USE 2" SCH. 40 PVC WITH SWEEP ELBOWS AT TURNING LOCATIONS WHEN SLEEVING IS REQUIRED. ALL SPLICES SHALL BE ENCLOSED WITHIN A VALVE/SPLICE BOX.

WIRE SIZED AND COLORED AS FOLLOWS:

- #12 WHITE FOR COMMON
- #12 SPARE BLACK COMMON (1 SPARE NEEDED PER 10 HOT WIRES)
- #14 RED HOT WIRES
- #14 SPARE YELLOW HOT WIRE (1 SPARES NEEDED PER 10 HOT WIRES, 3 SPARE MINIMUM)

WHEN WIRE RUNS EXCEEDS 3,500 LINEAR FEET, USE #10 FOR COMMON WIRES AND #12 FOR HOT/SPARE WIRES.

ALL IRRIGATION CONTROLLERS TO BE PROPERLY GROUNDED IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS.

#### FLUSHING

PRIOR TO PLACEMENT OF HEADS FLUSH ALL LINES UNTIL LINES ARE COMPLETELY CLEAN OF DEBRIS.

#### TRENCHING

TRENCH BOTTOM TO BE UNIFORM AND FREE OF DEBRIS. NATIVE EXCAVATED MATERIAL USED TO BACKFILL TRENCH SHALL BE FREE FROM ROCKS OR STONES LARGER THAN 1" IN DIAMETER.

#### MISC.

PRESSURE TEST MAINLINE AS PER FLORIDA BUILDING CODE. INSTALL IRRIGATION SYSTEM AS PER LATEST EDITION OF THE FLORIDA BUILDING CODE, APPENDIX F., AND ALL PERTINENT LOCAL CODES.

SPRAY HEADS INSTALLED IN SHRUB AREAS TO BE 12 INCH POP-UPS OR INSTALLED ON RISERS.

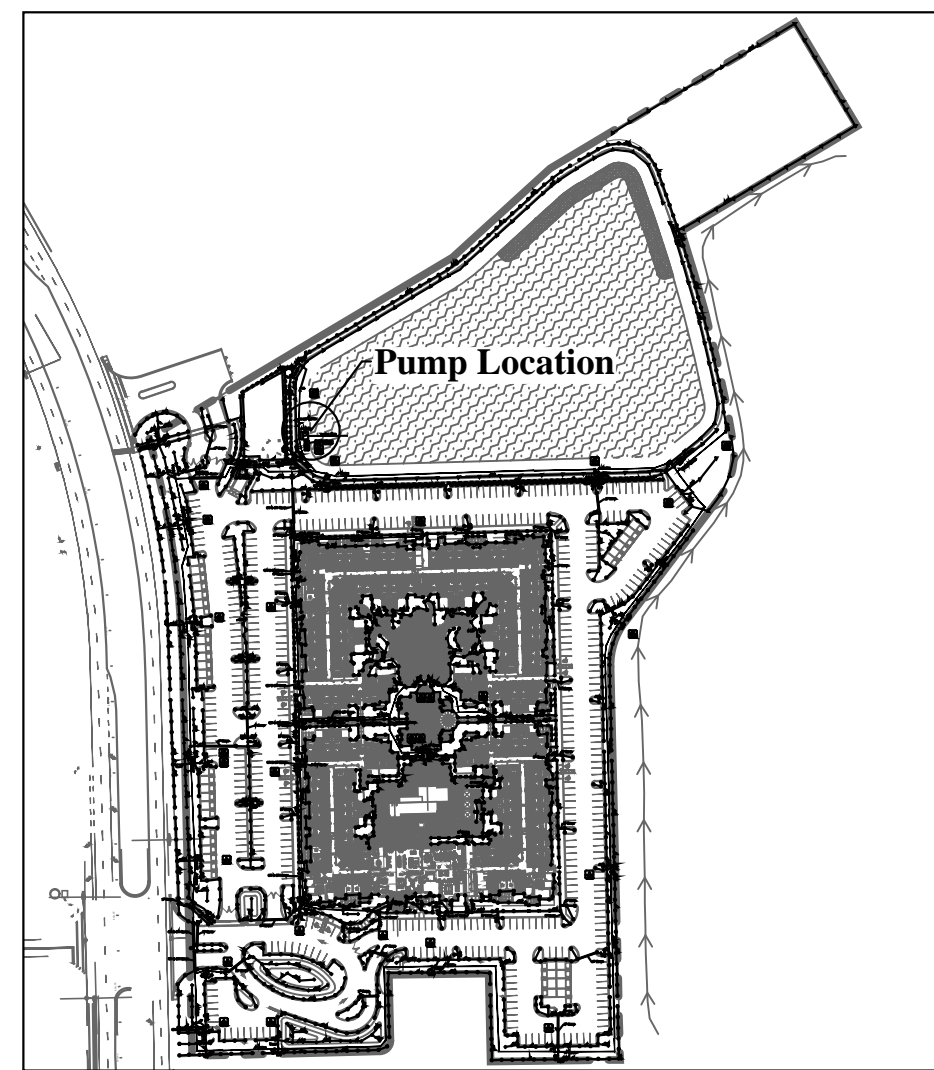
#### DESIGN

THIS DESIGN IS DIAGRAMMATIC. ALL IRRIGATION EQUIPMENT SUCH AS PIPES, VALVES, ETC., SHOWN WITHIN PERVIOUS AREAS ARE FOR DESIGN CLARIFICATION ONLY. THE IRRIGATION CONTRACTOR SHALL INSTALL IRRIGATION EQUIPMENT IN PLANTING AREAS WHEREVER POSSIBLE.

THE IRRIGATION CONTRACTOR IS RESPONSIBLE TO FAMILIARIZE THEMSELVES WITH THE SCOPE OF WORK, INCLUDING BUT NOT LIMITED TO GRADE DIFFERENCES, LOCATION OF WALLS, STRUCTURES, UTILITIES AND EXISTING IRRIGATION EQUIPMENT. THE IRRIGATION CONTRACTOR IS RESPONSIBLE SHALL REPAIR AND/OR REPLACE ANY DAMAGE CREATED BY THEIR WORK. THEY SHALL COORDINATE HIS WORK WITH OTHER CONTRACTOR OR MUNICIPAL AUTHORITIES FOR THE LOCATION AND INSTALLATION OF IRRIGATION EQUIPMENT UNDER ROADWAYS AND PAVING, SLEEVES THROUGH WALLS AND FLOORS, ETC.

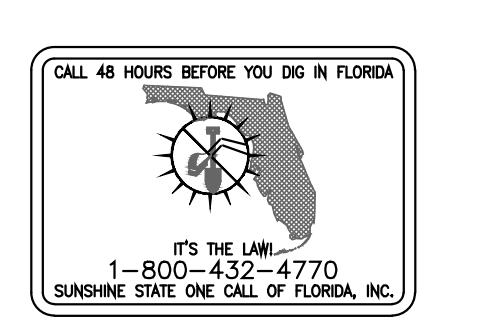
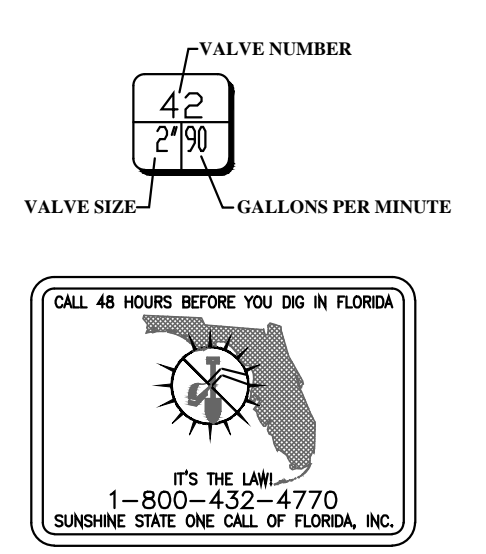
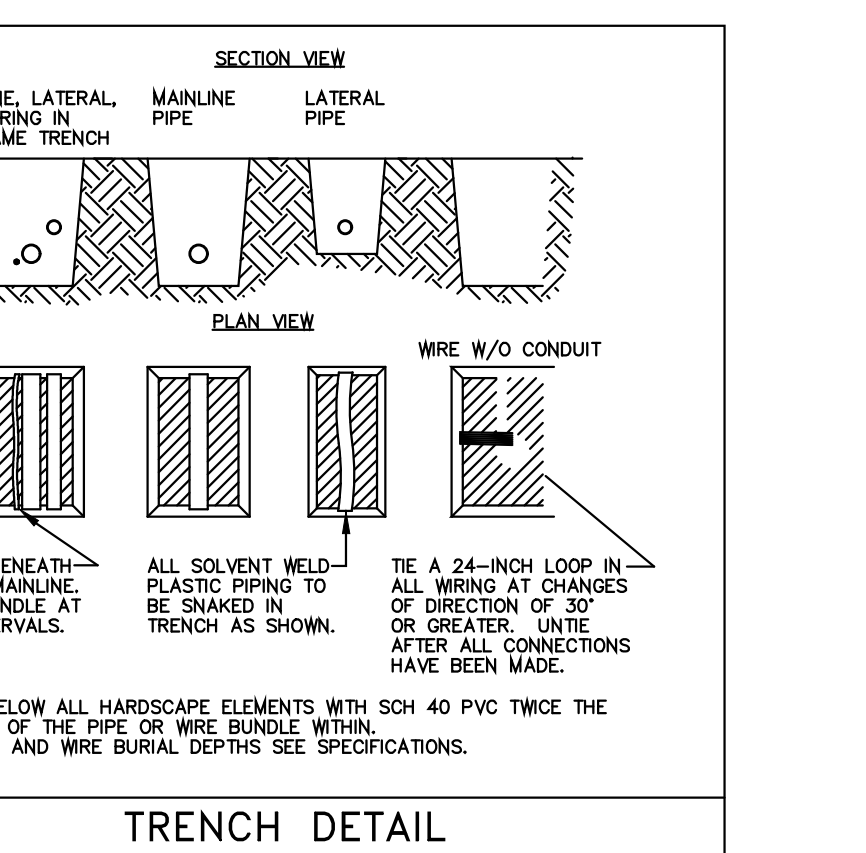
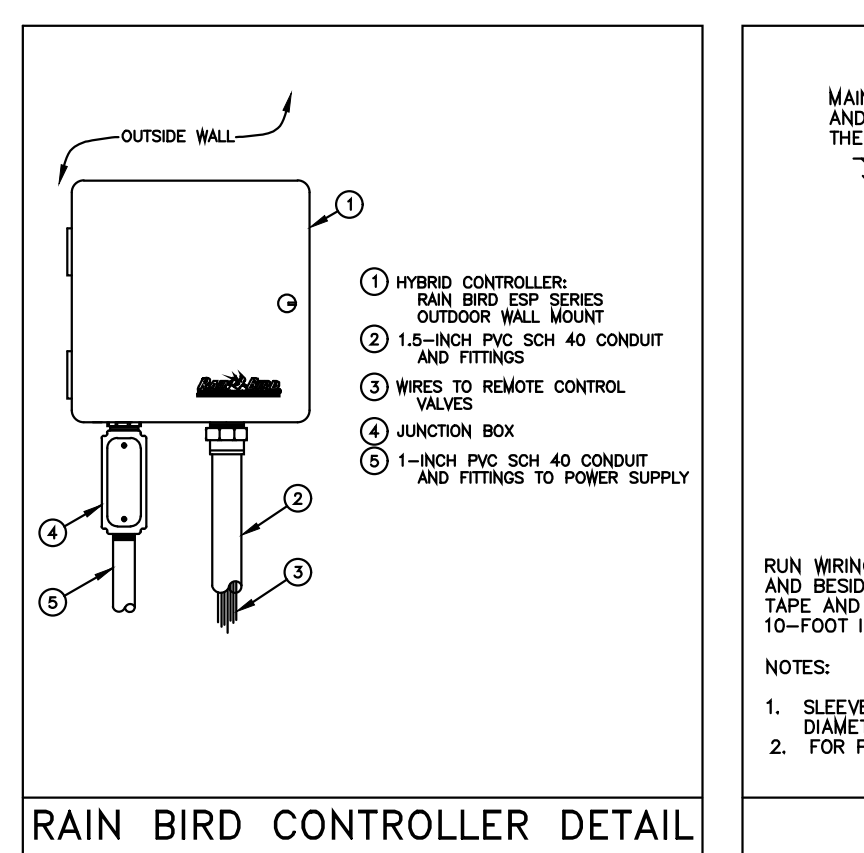
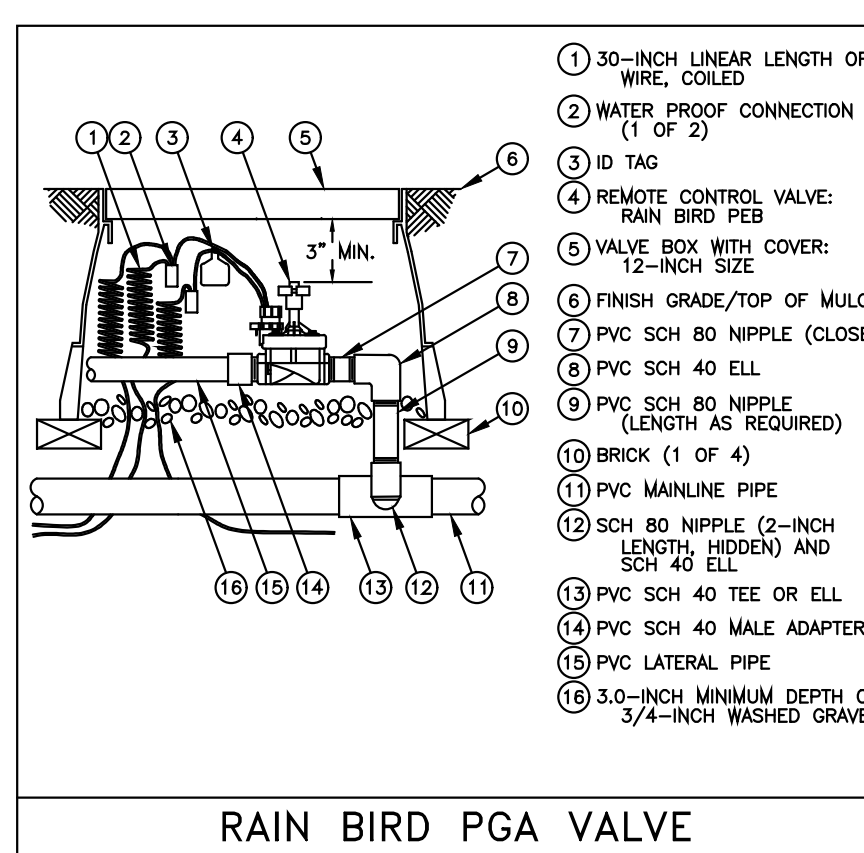
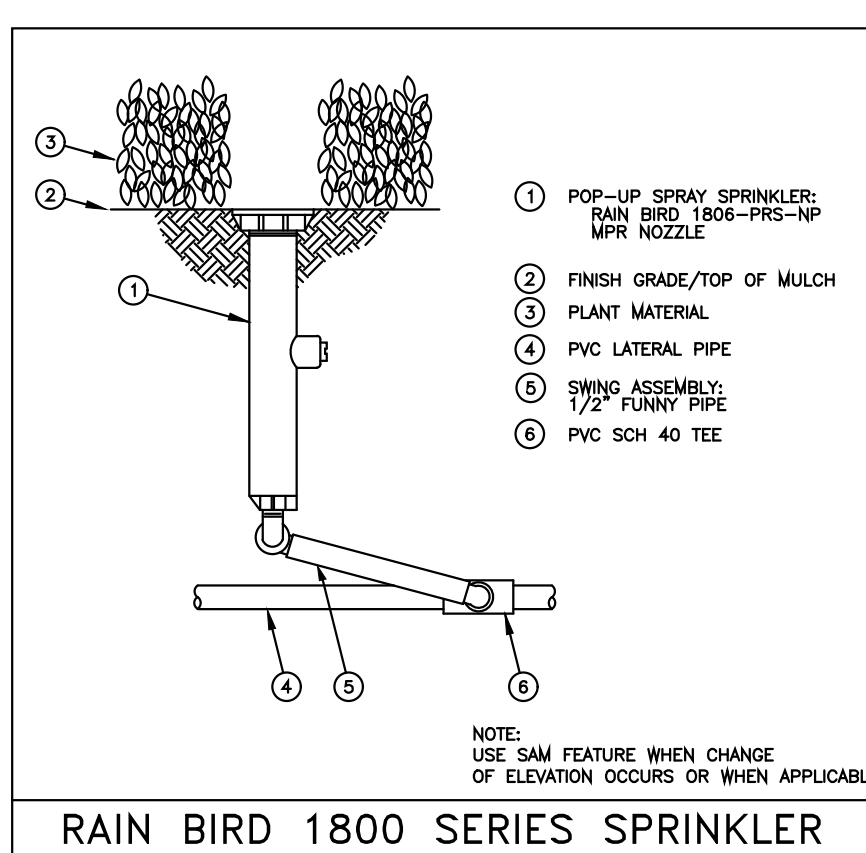
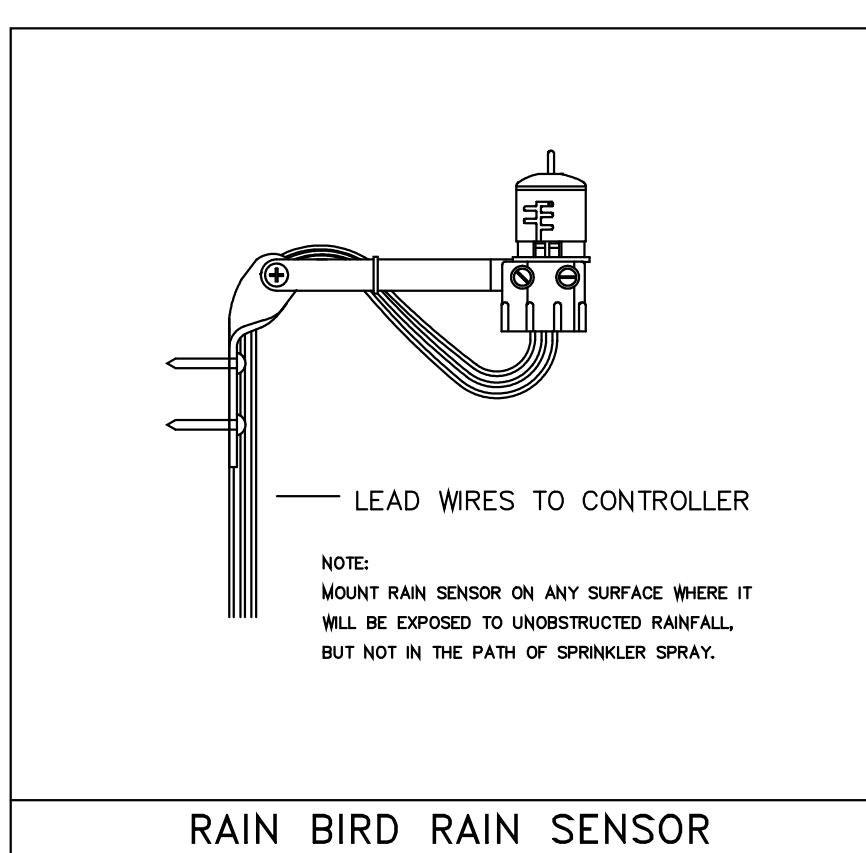
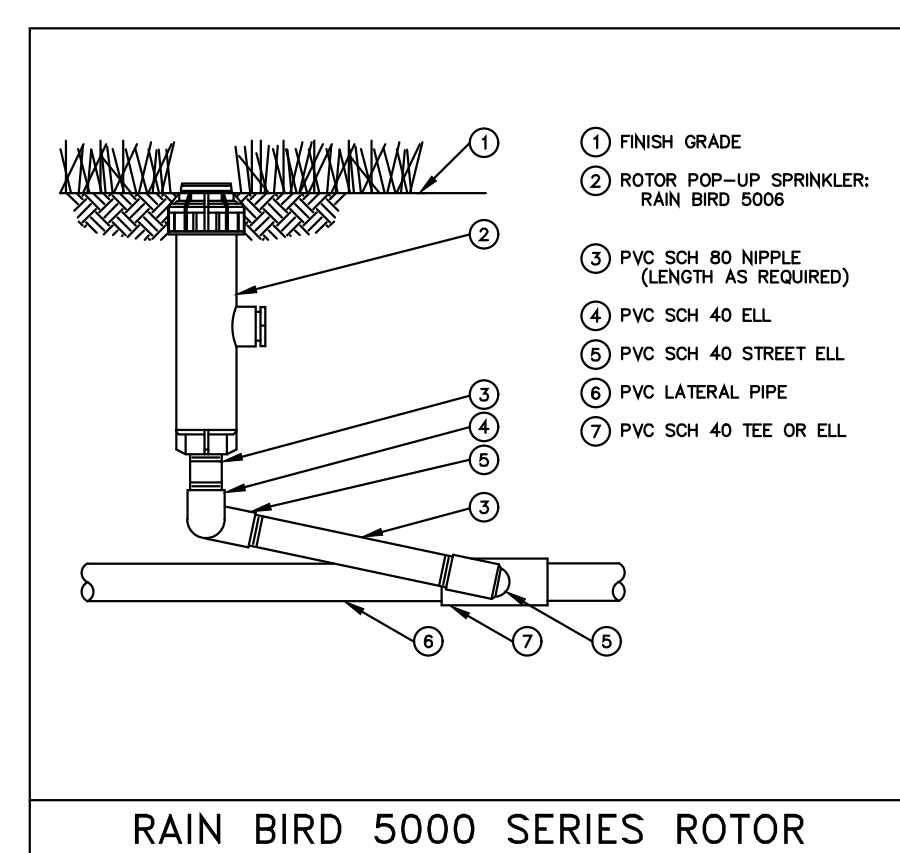
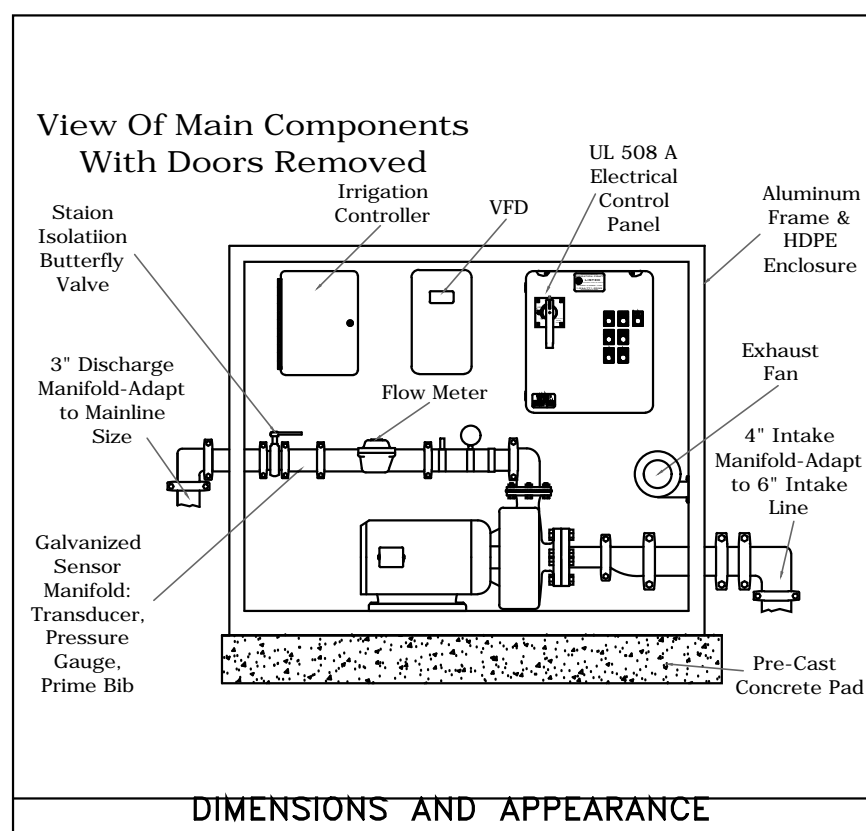
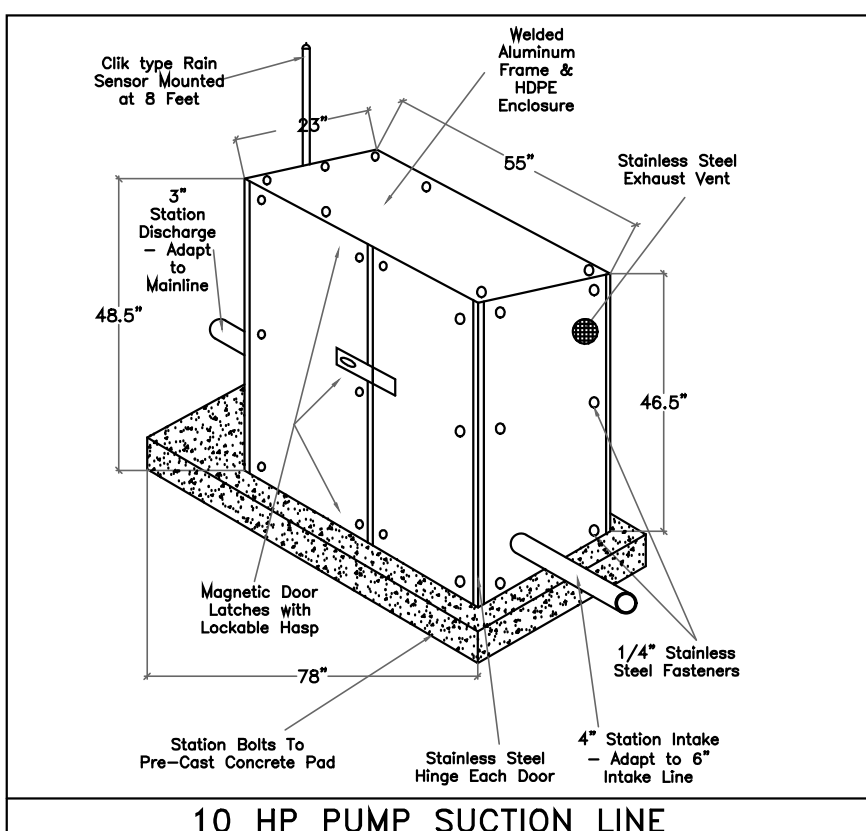
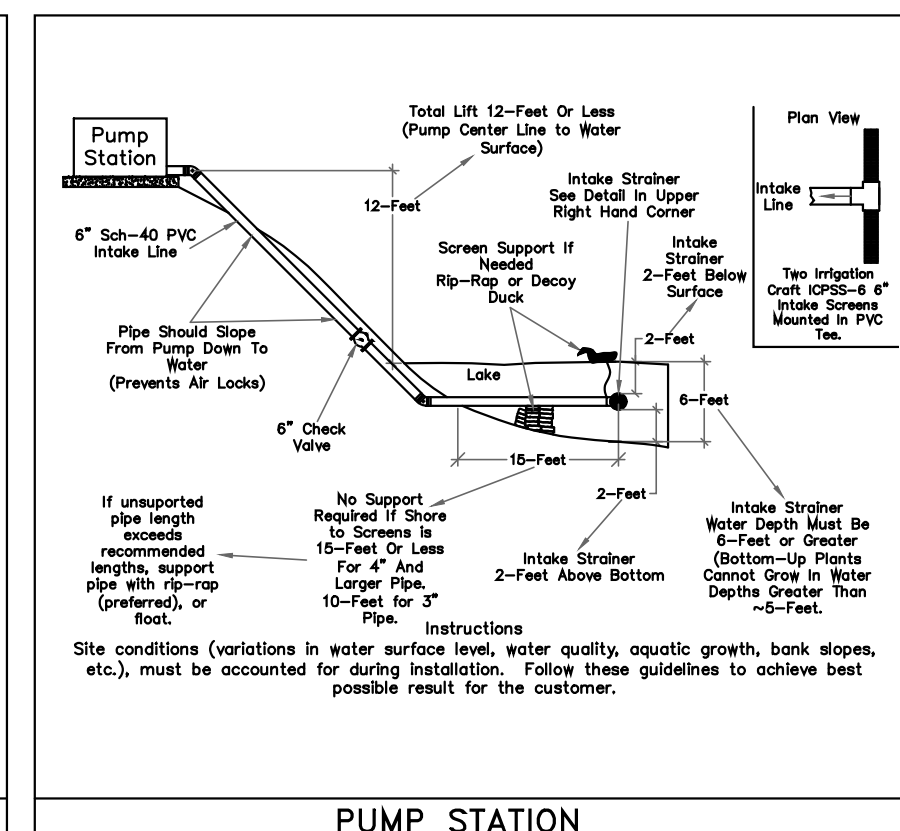
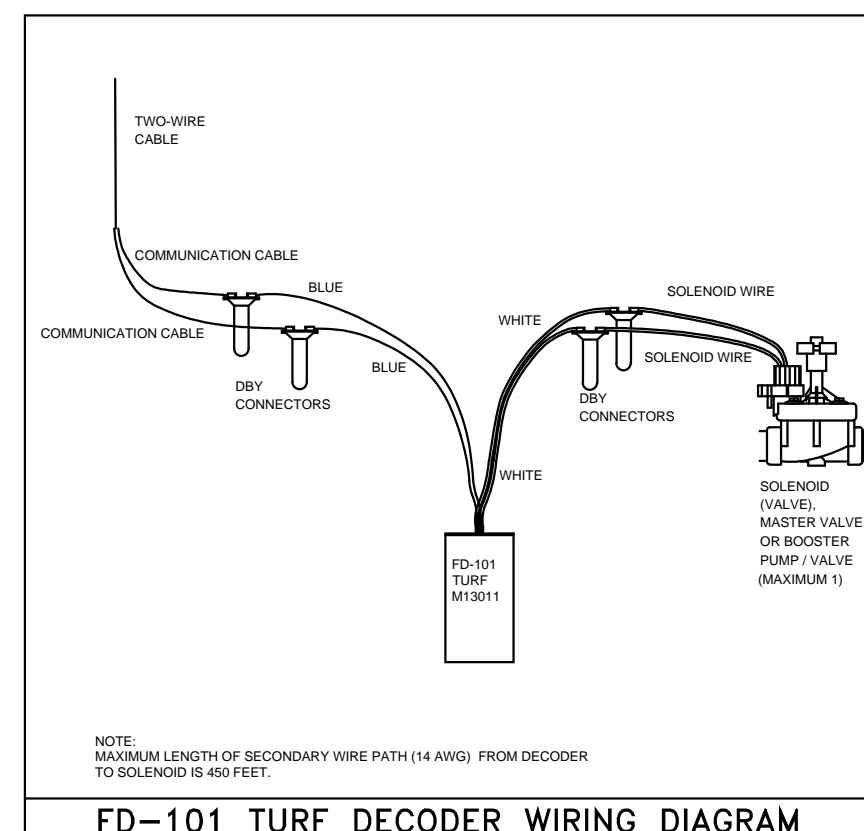
INSTALL ALL IRRIGATION EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS. SUBSTITUTIONS FOR IRRIGATION EQUIPMENT TO BE APPROVED BY THE IRRIGATION DESIGNER. EQUIPMENT CHANGES TO INCLUDE BUT NOT LIMITED TO PUMP, CONTROLLER, SPRAY HEADS, ROTORS, AND VALVES.

DO NOT INSTALL IRRIGATION EQUIPMENT AS SHOWN ON THE DRAWINGS WHEN FIELD CONDITIONS DIFFER. OBSTRUCTIONS OR DIFFERENCES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR TO ASSUME FULL RESPONSIBILITY.



EQUIPMENT TABLE	
Controllers	
Symbol	Description
	Rainbird ESP-LXD Teo Wire
	Rain Sensor
Irrigation Heads	
Symbol	Description
	RAINBIRD 1800 SERIES 8 Series 6" above finish grade trajectory 5 deg 90°
	RAINBIRD 1800 SERIES 8 Series 6" above finish grade trajectory 5 deg 180°
	RAINBIRD 1800 SERIES 10 Series trajectory 15 deg 90°
	RAINBIRD 1800 SERIES 10 Series trajectory 15 deg 180°
	RAINBIRD 1800 SERIES 12 Series trajectory 30 deg 90°
	RAINBIRD 1800 SERIES 12 Series trajectory 30 deg 180°
	RAINBIRD 1800 SERIES 15 Series trajectory 30 deg 90°
	RAINBIRD 1800 SERIES 15 Series trajectory 30 deg 180°
	RAINBIRD 1800 SERIES 15 Series trajectory 30 deg 360°
	RAINBIRD 1800 SERIES 15 Strip Series trajectory 30 deg EST*
	RAINBIRD 1800 SERIES 15 Strip Series trajectory 30 deg SST*
	RAINBIRD 5000 Series L A Nozzle 1 ADJ*
Pipes	
Symbol	Description
	Class 160 PVC (Lateral)
	SCH 40 PVC (Mainline)
	SCH 40 PVC (Sleeve)
Pumps	
Symbol	Description
	10HP Irrigation Pump or Approve Equal
Valves	
Symbol	Description
	Rainbird PGA Valve

Pump Performance Datasheet			
Customer	:		Quote number
Customer reference	:		Size
Item number	:	Default	Stages
Service	:		Based on curve number
Quantity	:	1	Date last saved
Operating Conditions		Liquid	
Flow, rated	: 141.9 USgpm	Liquid type	: --Water
Differential head / pressure, rated (requested)	: 183.4 ft	Additional liquid description	:
Differential head / pressure, rated (actual)	: 183.6 ft	Solids diameter, max	: 0.00 in
Suction pressure, rated / max	: 0.00 / 0.00 psi.g	Solids concentration, by volume	: 0.00 %
NPSH available, rated	: Ample	Temperature, max	: 68.00 deg F
Frequency	: 60 Hz	Fluid density, rated / max	: 1.000 / 1.000 SG
		Viscosity, rated	: 1.00 cP
		Vapor pressure, rated	: 0.00 psi.a
Performance		Material	
Speed, rated	: 3450 rpm	Material selected	: Not specified
Impeller diameter, rated	: 6.56 in	Pressure Data	
Impeller diameter, maximum	: 6.56 in	Maximum working pressure	: 87.90 psi.g
Impeller diameter, minimum	: 5.50 in	Maximum allowable working pressure	: 150.00 psi.g
Efficiency	: 74.99 %	Maximum allowable suction pressure	: N/A
NPSH required / margin required	: 15.34 / 0.00 ft	Hydrostatic test pressure	: N/A
nq (imp. eye flow) / S (imp. eye flow)	: 16 / 103 Metric units	Driver & Power Data (@Max density)	
MCSF	: 58.07 USgpm	Driver sizing specification	: Rated power
Head, maximum, rated diameter	: 203.0 ft	Margin over specification	: 0.00 %
Head rise to shutoff	: 9.14 %	Service factor	: 1.00
Flow, best eff. point	: 141.9 USgpm	Power, hydraulic	: 6.57 hp
Flow ratio, rated / BEP	: 99.99 %	Power, rated	: 8.76 hp
Diameter ratio (rated / max)	: 100.00 %	Power, maximum, rated diameter	: 12.23 hp
Head ratio (rated dia / max dia)	: 99.89 %	Minimum recommended motor rating	: 10.00 hp / 7.46 kW
Cq/Ce/Cn (ANSI/HI 9.6.7-2010)	: 1.00 / 1.00 / 1.00		
Selection status	: Acceptable		



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