

RAIN MASTER EAGLE PLUS IRRIGATION CONTROLLER

(11) 3" CONDUIT AND SWEEP ELL FOR LEAD WIRES.

(14) 1" CONDUIT AND SWEEP ELL FOR GROUND WIRE.

10" ROUND VALVE BOX AROUND GROUND ROD.

CLAMP. LOCATE 8'-12' FROM ENCLOSURE.

5/8" X 8' GROUND ROD WITH #6 GROUND WIRE AND

#6 GROUND WIRE SECURED TO BACKBOARD

(15) FILL WITH 3/4" CRUSHED ROCK.

GROUNDING TERMINAL.

(12) 1" CONDUIT AND SWEEP ELL FOR MASTER VALVE WIRES.

(13) 1" CONDUIT AND SWEEP ELL FOR 110 VAC POWER LINE.

ENCLOSURE (UL LISTED) MOUNTED TO WALL

\ SATELLITE ASSEMBLY. ASSEMBLED ON BACKBOARD

- BY JOHN DEERE GREEN TECH.
- (3) TERMINAL STRIP FOR VALVE WIRES.
- (4) POWER SWITCH / GFCI RECEPTACLE.
- (5) ELECTRICAL FLEX CONDUIT FOR POWER. 6 COORDINATE ALL CONDUIT RUNS THROUGH FOUNDATION FLOOR BEFORE CONCRETE POUR.

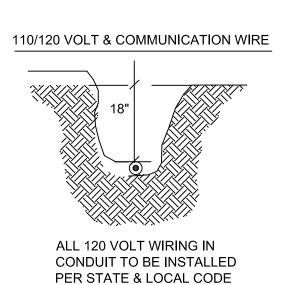
NOT TO SCALE

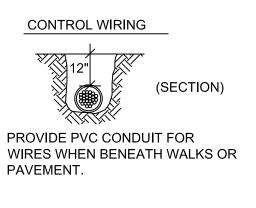
- (7) FINISHED GRADE. (8) FLOW SENSOR TERMINAL BOARD.
- 9 BUILDING WALL. ENSURE WALL AND ANCHORING ARE RATED FOR ENCLOSURE WEIGHT.

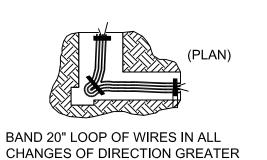
## LATERAL ONLY (TURF ZONES) MAINLINE AND WIRING . WIRING AND PIPING SHALL BE INSTALLED IN SEPARATE SLEEVES AT LOCATIONS NOTED ON DRAWINGS. 2. SLEEVE MINIMUM SIZING SHALL BE DOUBLE THE BUNDLE OR PIPE DIAMETER OR AS INDICATED ON THE WIRING MAINLINE -

1. NO PIPING SHALL BE INSTALLED WITH LESS THAN 12" LATERAL CLEARANCE (NO SHARED TRENCHES). 2. INSTALL ALL MAINLINE AND LATERAL LINE PIPING PER SPECIFICATIONS AND IN FULL ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS 3. DEPTHS INDICATED ARE MINIMUM DEPTHS TO TOP OF PIPELINE AND NOT TRENCH DEPTH. 4. COMMON YELLOW WIRE SHALL BE PRESENT IN ALL MAINLINE TRENCHES (TO BE USED AS 'TRACER' BY MAINTENANCE).

## PVC PIPE TRENCHING DETAIL



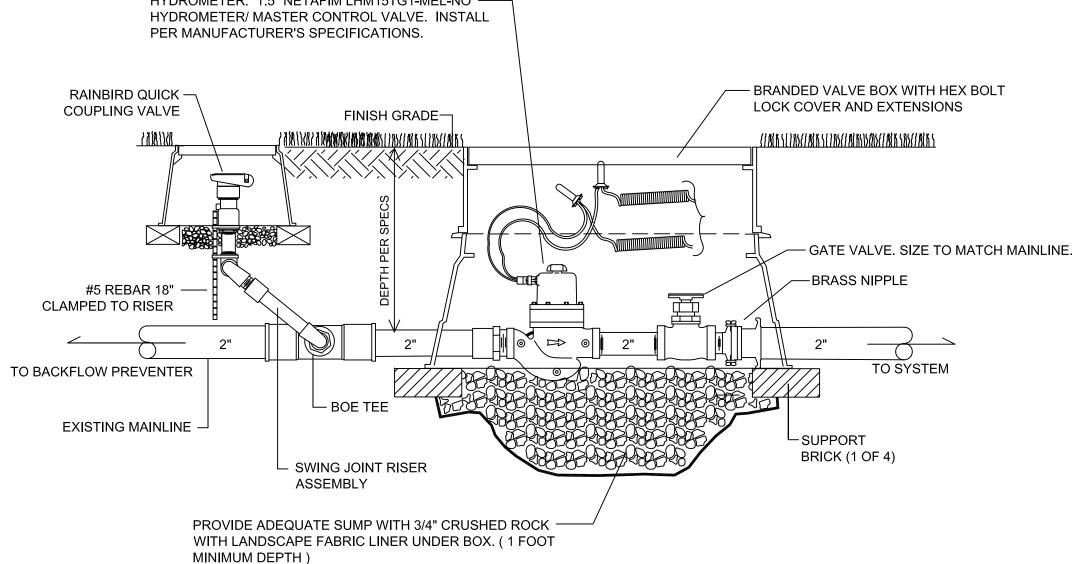




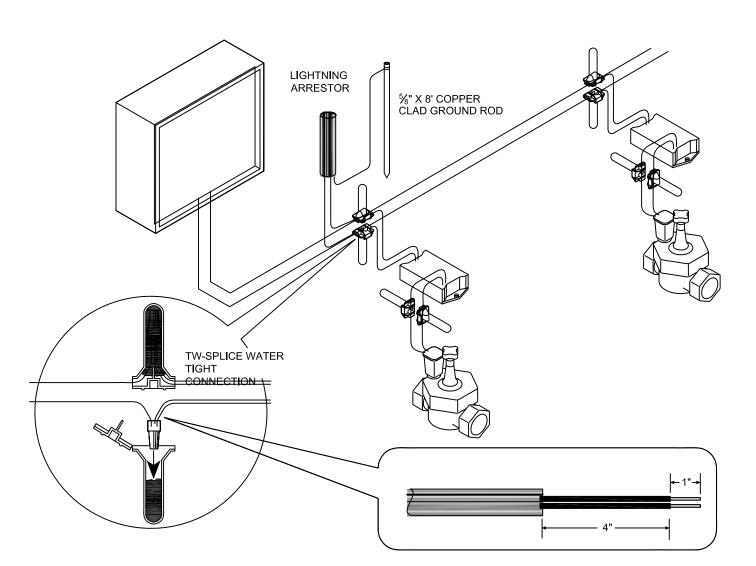
CONNECTIONS ARE MADE UNTIL LOOPS

THAN 30 DEGREES. AFTER





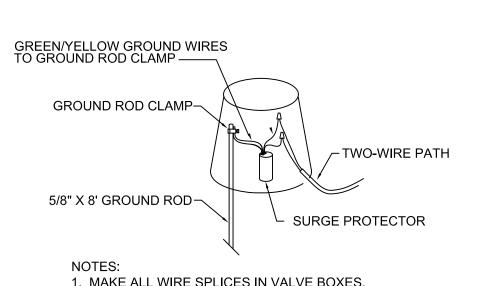




1. INSTALLED PER MANUFACTURER'S SPECIFICATIONS. 2. MAXIMUM 1 SOLENOID (VALVE) PER FIELD DECODER. 3. ALL WIRE CONNECTION SHALL BE MADE WITH APPROVED CONNECTORS. 4. LEAVE A MINIMUM OF 30" EXTRA WIRE AT ALL SPLICE POINTS.

TW-D-1 RAIN MASTER LINE DECODER NOT TO SCALE

5. MAXIMUM DISTANCE FROM DECODER TO VALVE = 100 FEET



1. MAKE ALL WIRE SPLICES IN VALVE BOXES. 2. LEAVE A MINIMUM OF 30" EXTRA WIRE AT ALL SPLICE POINTS. 3. TEST EARTH TO GROUND RESISTANCE AT ALL GROUND POINTS. 4. EARTH TO GROUND RESISTANCE MUST BE LESS THAN 50 OHMS. 5. 500 FOOT MAX BETWEEN GROUND POINTS.

SYSTEM GROUNDING DETAIL NOT TO SCALE

' '	20.10	0.73	''	1.5	]						
12	32.76	0.75	12	2.0"	33	Rotor / Turf					
13	10.95	1.14	13	1.0"	22	Spray / Turf					
14	48.99	0.73	14	2.0"	34	Rotor / Turf					
15	49.20	0.82	15	2.0"	31	Rotor / Turf					
16	51.84	0.56	16	2.0"	44	Rotor / Turf					
17	49.66	0.55	17	2.0"	46	Rotor / Turf					
18	37.88	1.79	18	2.0"	14	Spray / Turf					
19	29.55	1.31	19	1.5"	19	Spray / Turf					
20	27.57	1.31	20	1.5"	19	Spray / Turf					
21	47.97	0.78	21	2.0"	32	Rotor / Turf					
22	43.52	0.80	22	2.0"	31	Rotor / Turf					
23	34.07	1.02	23	2.0"	25	Rotor / Turf					
24	44.05	0.74	24	2.0"	34	Rotor / Turf					
25	49.35	0.76	25	2.0"	33	Rotor / Turf					
26	38.86	1.75	26	2.0"	14	Spray / Turf					
27	30.07	1.91	27	1.5"	13	Spray / Turf					
28	25.57	1.76	28	1.5"	14	Spray / Turf					
29	36.07	1.53	29	2.0"	16	Spray / Turf					
30	20.27	1.13	30	1.5"	22	Spray / Turf					
31	17.24	0.57	31	1.5"	44	Rotor / Turf					
Controller 'A' Drip Valve Schedule:											
ALVE NO.	FLOW DEMAND (GPM)	PRECIPITATION RATE (IN/HR)	ZONE NO.	VALVE SIZE	RUN TIME (MIN.)	ZONE TYPE					
D01	1.87	N/A	32	1.0"	60	Drip Zone					
D02	1.75	N/A	33	1.0"	60	Drip Zone					
D03	4.84	N/A	34	1.0"	60	Drip Zone					
D04	1.12	N/A	35	1.0"	60	Drip Zone					
D05	0.46	N/A	36	1.0"	60	Drip Zone					
D06	0.86	N/A	37	1.0"	60	Drip Zone					
D07	4.13	N/A	38	1.0"	60	Drip Zone					
D08	7.05	N/A	39	1.0"	60	Drip Zone					
D09	0.56	N/A	40	1.0"	60	Drip Zone					
D10	6.05	N/A	41	1.0"	60	Drip Zone					
D11	5.61	N/A	42	1.0"	60	Drip Zone					

Controller 'A' Zone Valve Schedule:

03

04

07

10

13

15

35

14

15

32

Rotor / Turf

Rotor / Turf

Spray / Turf

Spray / Turf

Rotor / Turf

Rotor / Turf

Rotor / Turf

1.5"

2.0"

1.5"

2.0"

2.0"

2.0"

2.0"

2.0"

2.0"

1.5"

1.5"

VALVE NO. | FLOW DEMAND (GPM) | PRECIPITATION RATE (IN/HR) | ZONE NO. | VALVE SIZE | RUN TIME (MIN.) | ZONE TYPE

1.92

1.73

1.68

0.71

0.64

1.72

1.62

1.65

0.79

0.73

29.68

33.71

17.67

50.85

51.28

41.70

44.71

20.44

03

04

05

06

07

80

10

11

VALVE NO.	FLOW DEMAND (GPM)	PRECIPITATION RATE (IN/HR)	ZONE NO.	VALVE SIZE	RUN TIME (MIN.)	ZONE TYP
D01	1.87	N/A	32	1.0"	60	Drip Zone
D02	1.75	N/A	33	1.0"	60	Drip Zone
D03	4.84	N/A	34	1.0"	60	Drip Zone
D04	1.12	N/A	35	1.0"	60	Drip Zone
D05	0.46	N/A	36	1.0"	60	Drip Zone
D06	0.86	N/A	37	1.0"	60	Drip Zone
D07	4.13	N/A	38	1.0"	60	Drip Zone
D08	7.05	N/A	39	1.0"	60	Drip Zone
D09	0.56	N/A	40	1.0"	60	Drip Zone
D10	6.05	N/A	41	1.0"	60	Drip Zone
D11	5.61	N/A	42	1.0"	60	Drip Zone
D12	2.31	N/A	43	1.0"	60	Drip Zone
D13	1.01	N/A	44	1.0"	60	Drip Zone
D14	6.45	N/A	45	1.0"	60	Drip Zone
D15	1.30	N/A	46	1.0"	60	Drip Zone
D16	1.22	N/A	47	1.0"	60	Drip Zone
D17	4.70	N/A	48	1.0"	60	Drip Zone
D18	1.81	N/A	49	1.0"	60	Drip Zone
D19	1.45	N/A	50	1.0"	60	Drip Zone
D20	0.65	N/A	51	1.0"	60	Drip Zone
D21	0.56	N/A	52	1.0"	60	Drip Zone
D22	0.56	N/A	53	1.0"	60	Drip Zone
D23	6.66	N/A	54	1.0"	60	Drip Zone
D24	7.33	N/A	55	1.0"	60	Drip Zone
D25	0.65	N/A	56	1.0"	60	Drip Zone
D26	0.69	N/A	57	1.0"	60	Drip Zone
D27	0.37	N/A	58	1.0"	60	Drip Zone
D28	1.00	N/A	59	1.0"	60	Drip Zone
D29	6.45	N/A	60	1.0"	60	Drip Zone
D30	9.16	N/A	61	1.0"	60	Drip Zone
D31	1.19	N/A	62	1.0"	60	Drip Zone
D32	2.37	N/A	63	1.0"	60	Drip Zone
D33	1.00	N/A	64	1.0"	60	Drip Zone
D34	0.73	N/A	65	1.0"	60	Drip Zone
D35	2.21	N/A	66	1.0"	60	Drip Zone
D36	1.49	N/A	67	1.0"	60	Drip Zone
D37	0.81	N/A	68	1.0"	60	Drip Zone

RAINBIRD COUPLING —

VALVE

FINISHED GRADE———

ADEQUATE —

(3) BRICKS——

SWING JOINT RISER -

ASSEMBLY

-10" RAINBIRD ROUND

#5 REBAR 18"

TO RISER

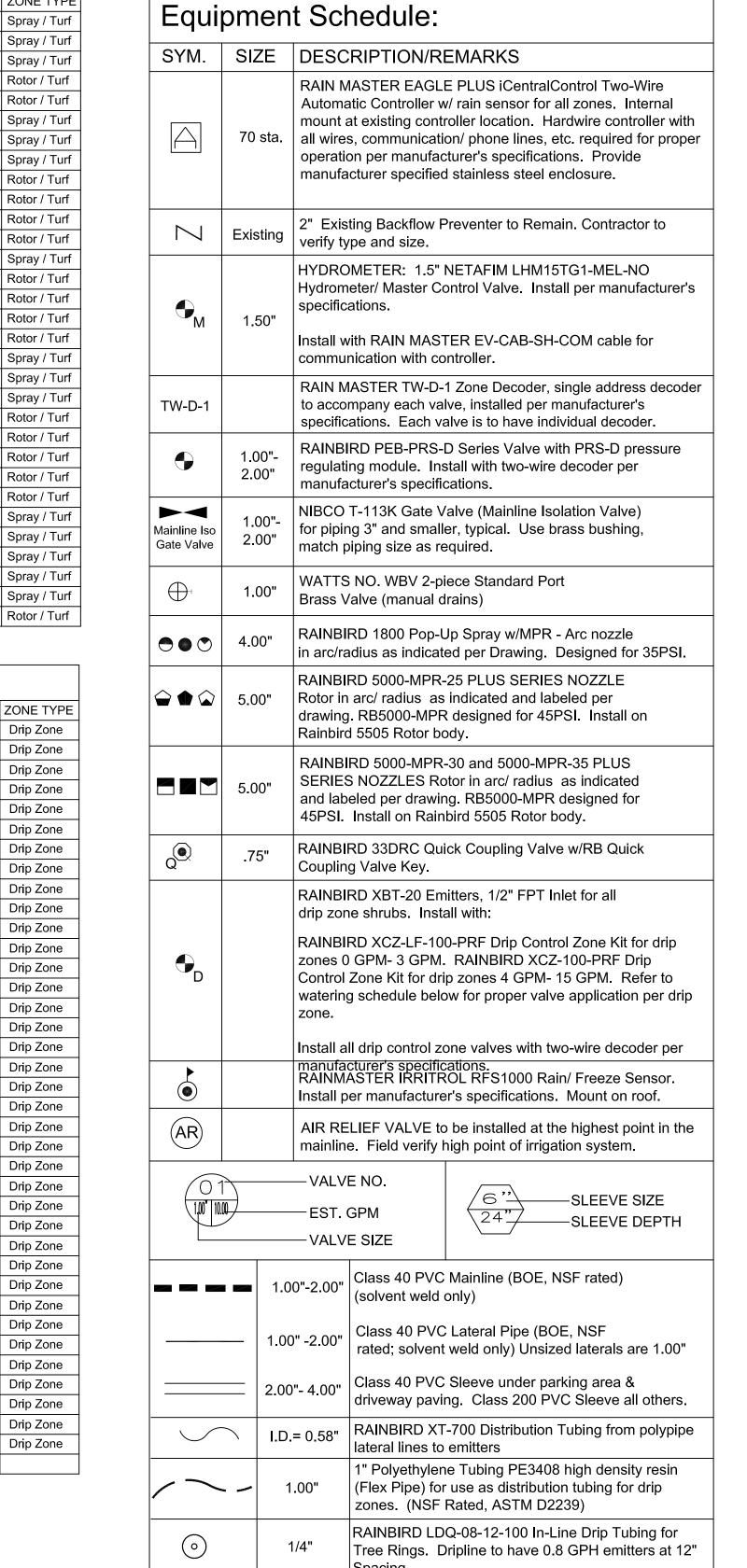
PVC MAINLINE

STAKED QCV DETAIL

NOT TO SCALE

LONG CLAMPED

**BOX COVER** 



IRRIGATION SCHEDULE:

## **Construction Notes:**

1. This irrigation system is designed as a RAIN MASTER 2-Wire Decoder irrigation system. Installation of system and its components to be per manufacturer's specifications, including wiring, surge protection,

1/4" RAINBIRD LDQ-08-06-100 LANDSCAPE

DRIPLINE for perennial beds per plan.

2. All valves to be installed with a field decoder per the 2-wire system requirements. Contractor to install field decoders per manufacturer's specifications. 3. All new mainline locations to be marked with tracer wire. 4. Precipitation Rate is the average precipitation for this zone expressed in inches per hour.

5. Run Time (i.e. R.T.) is the required operating time needed to apply 1.25 inch of water per week for sod 6. Drawing is diagrammatic; precise placement of equipment may not be possible as indicated. Field changes which do not alter design intent may be performed by installer.

Quantities which can be determined graphically from the drawings prevail over scheduled quantities. 8. Run Times are for a three (3) day watering schedule. For a seven (7) day watering schedule divide run times by two. 9. Seasonal application rates are as follows: Spring 70%, Summer 100%, Fall 60%.

11. Drip Line extends to all trees and shrubs, 60 minute run time 3 days a week. Adjust as necessary. 12. All mainline stub-outs that service only Drip Irrigation Valves shall be 1" mainline. 13. All irrigation zone laterals not labeled shall be 1" in size. 14. All valve box covers and round box lids to be stamped/ branded with the appropriate function (i.e. QC for

Quick Coupler) or with the appropriate controller and zone number as programmed (i.e. 01). 15. Pipe routing is diagrammatic; changes in pipe routing which facilitate installation may be done at contractor's discretion. All significant changes in pipe routing shall be accurately documented on the

contractor's Filed Drawings/As-Built Plan. 16. Pipelines may be combined in common trenches whenever practical.

10. Contractor to adjust nozzle sizes as needed to ensure adequate coverage.

## Demo Notes:

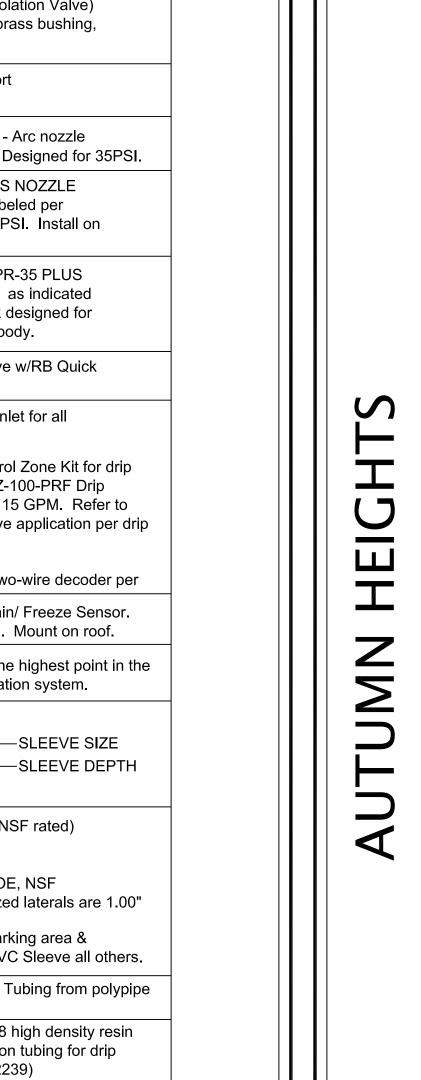
1. All existing irrigation mainline piping, laterals, and heads may remain in the ground except that impacted by new construction.

All existing valves and valves boxes shall be removed and properly filled in.

3. No existing irrigation parts shall be used in the new construction.

4. All removed irrigation parts shall be given to the Owner. 5. Contractor shall remove all existing controllers and be given to the Owner. Properly cap and bury wires to a safe depth.

> CALL 8-1-1 KNOW WHAT'S BELOW. CALL BEFORE YOU DIG



CHECKED: WFG

DATE: 11/12/13

DRAWN: WFG, JRA

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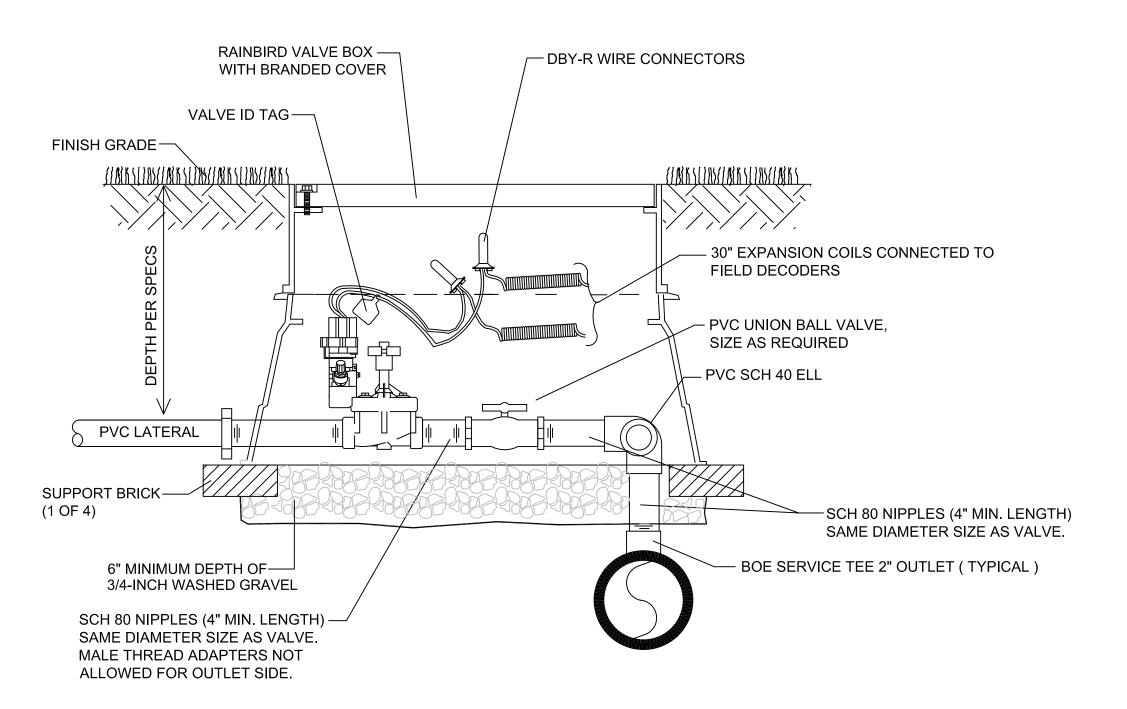
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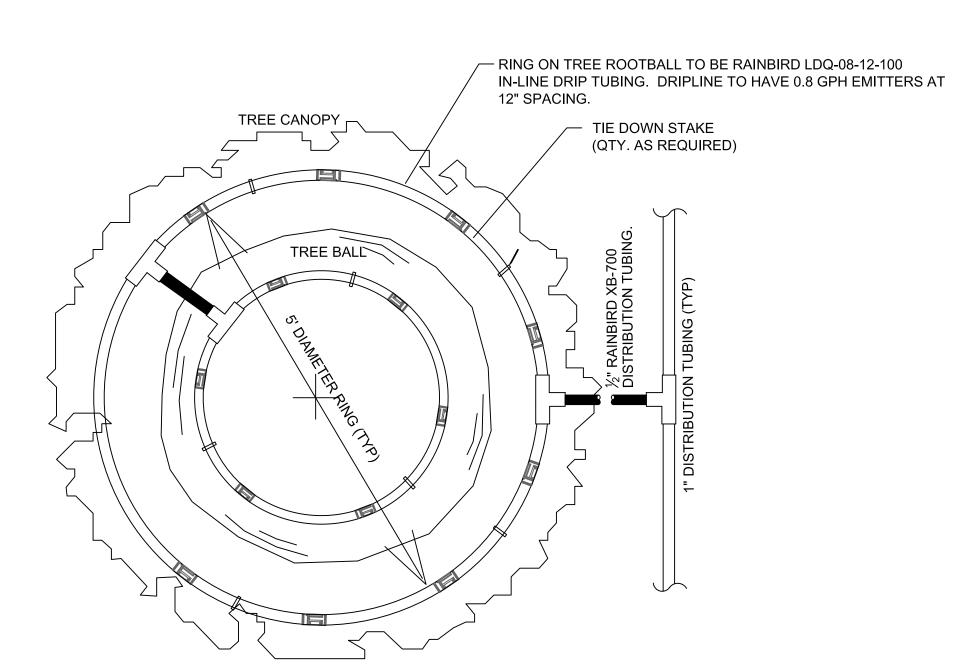
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DATE:	BY:	COMMENTS:				
01/20/14	wfg	plan check				
02/07/14	wfg	for distribution				
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IRRIGATION PLAN



- VALVE BOXES ARE TO BE INSTALLED PARALLEL AND PERPENDICULAR TO ALL SIDEWALKS, CURBS, WALLS, AND PAVEMENTS.
- CONSTRUCT VALVE BOX PITS PRIOR TO CONSTRUCTING VALVE ASSEMBLIES.
- C. A MINIMUM OF 2-3" CLEARANCE SHALL BE PROVIDED BETWEEN TOP OF GRAVEL SUMP AND BOTTOM OF VALVE ASSEMBLY.
- D. PROVIDE FILTER FABRIC TO SEPARATE GRAVEL SUMP FROM ADJACENT SOIL.

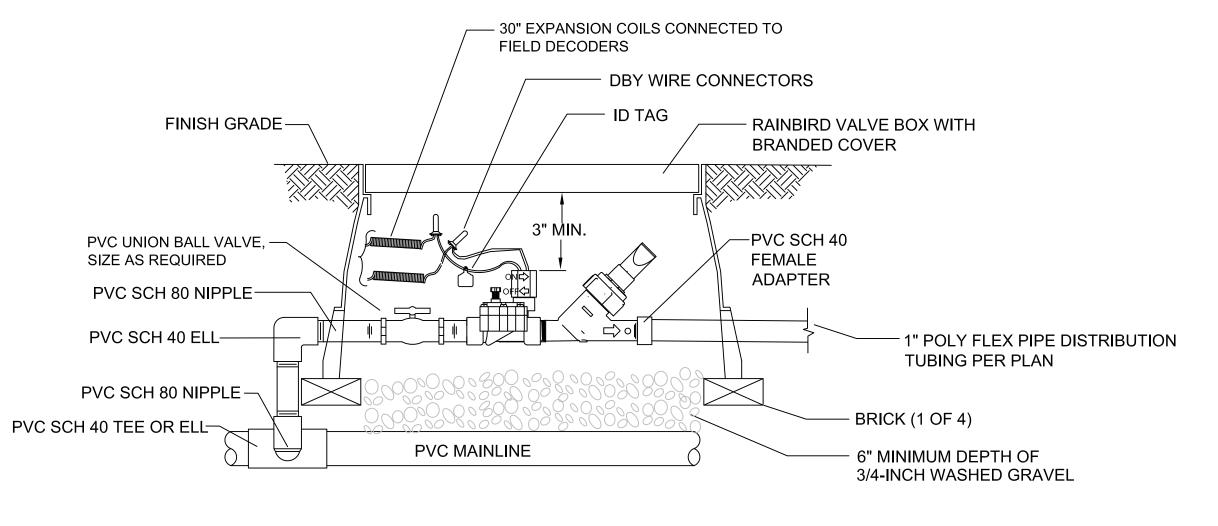




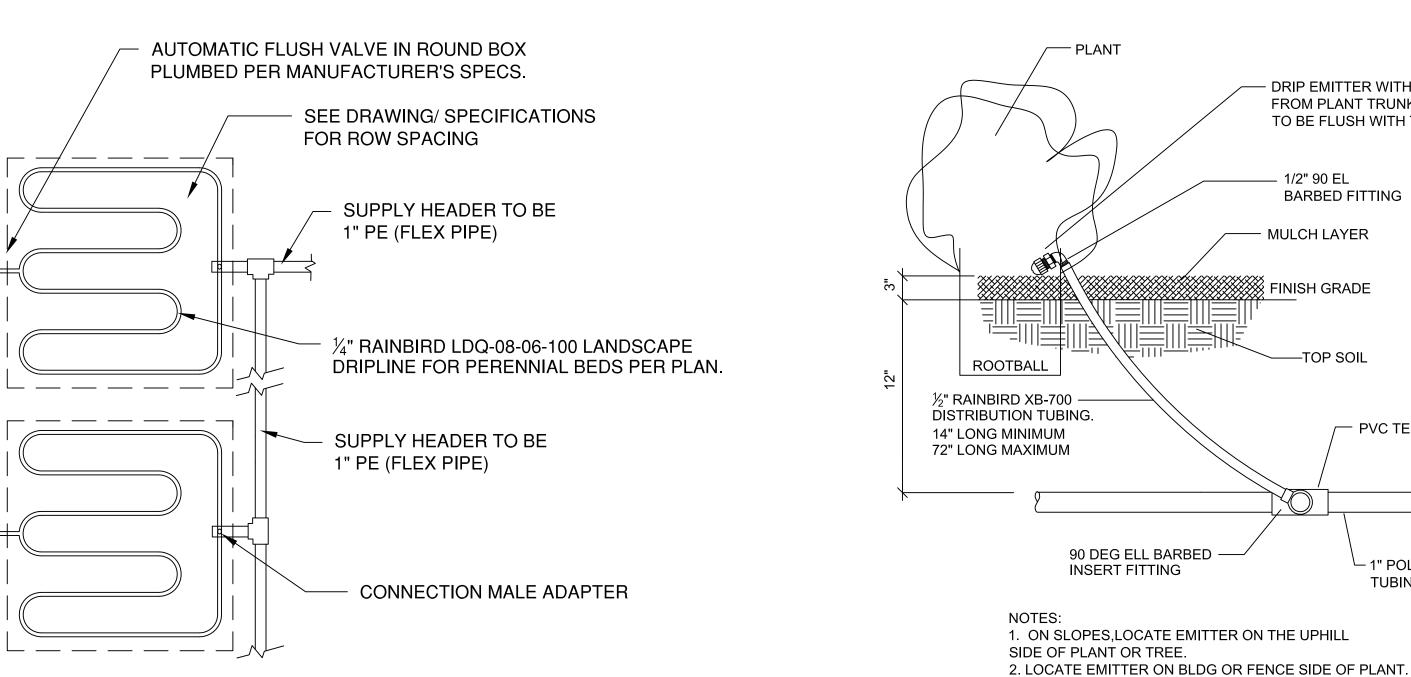
1. 3" CALIPER TREES & LARGER REQUIRE DOUBLE LOOP, ALL SMALLER TREES REQUIRE ONLY 5' DIAMETER LOOP.

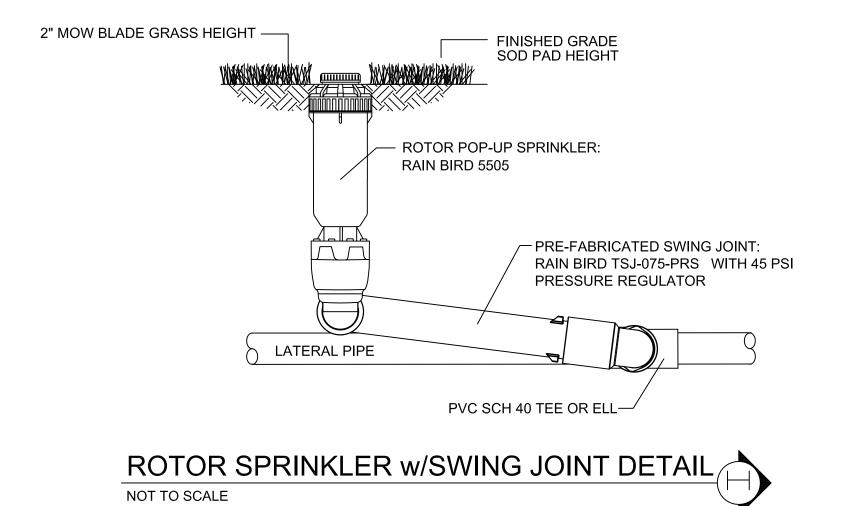
2. BURY ALL TUBING w/ MINIMUM 3-4" MULCH.

TREE DRIP RING DETAIL NOT TO SCALE



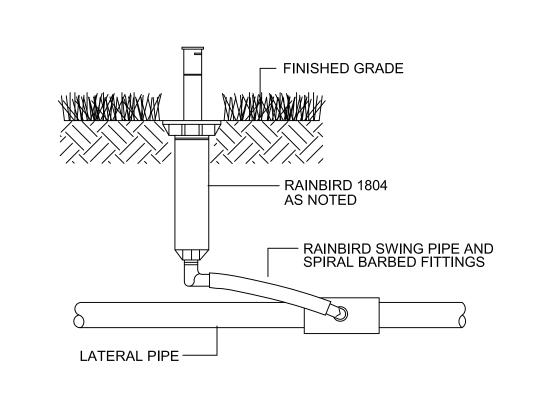






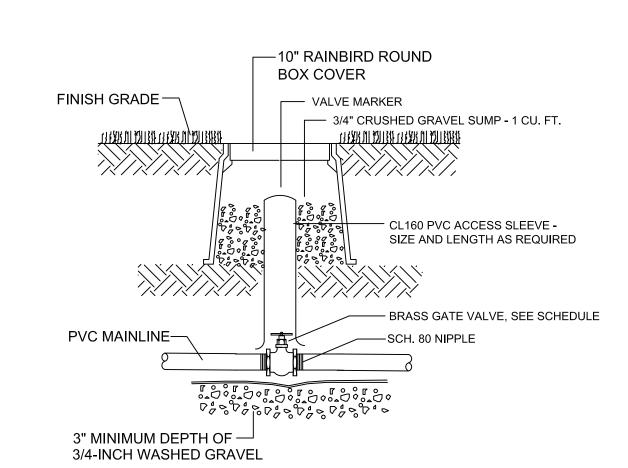
RAINBIRD LANDSCAPE DRIPLINE

NOT TO SCALE

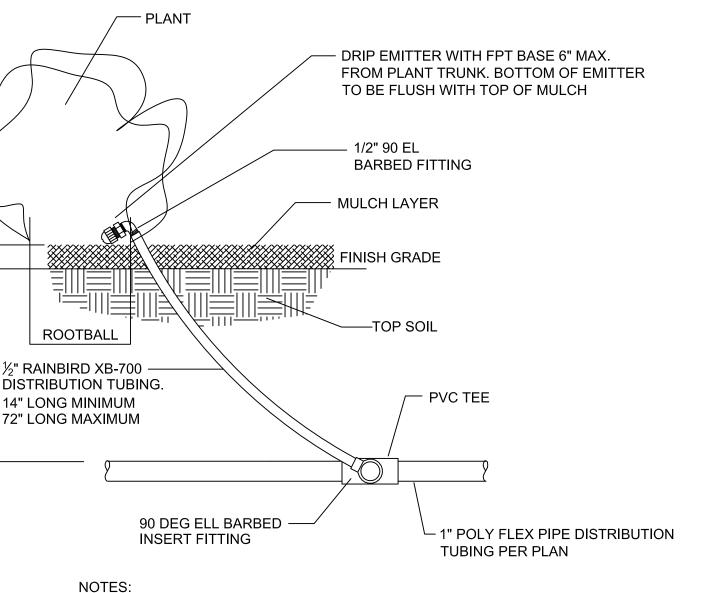




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MAINLINE ISOLATION VALVE NOT TO SCALE

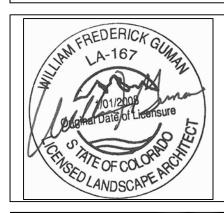


DRIP EMITTER NOT TO SCALE

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DATE: BY: COMMENTS: 01/20/14 wfg 02/07/14 wfg

> IRRIGATION PLAN

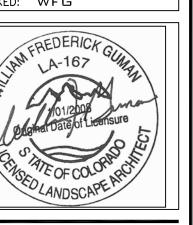






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IRRIGATION PLAN



