

SLOVER INDUSTRIAL CENTER

PM 00000



HUNTER LANDSCAPE

711 S. Fee Ana Street
Placentia, California 92870
Ph: 714.986-2400
Fax: 714.986-2408



Project

SLOVER AVE
INDUSTRIAL CENTER

16225 Slover Ave.
Fontana, CA
APN: 0255-031-06

APPROVED
3/29/2021 @ 11:20 AM

SLOVER JUNIPER LLC

5020 Campus Drive
Newport Beach, CA 92660
949-296-7006

Submittals	
Date	Description
11.03.20	1st Submittal
03.24.21	2nd Submittal

Revisions	
Date	Remarks
01.07.21	ASI Delta #1

ABBREVIATIONS

AC	ASPHALT CONCRETE	PIP	POURED IN PLACE
CJ	COLD JOINT	R	PROPERTY LINE
CENTERLINE	R or RAD	RADIUS	
CONC	CONCRETE	RISER	
CONT	CONTINUOUS	RWD	RIDGEWOOD
DIA	DIA	RS	ROUGH SAWN
D.F.	DIA METER	RS	SCORELINE
EA	EACH	SL	SHEET
EQ	EXPANSION JOINT	SHTCS	SPECIFICATIONS
EXIST.	EXISTING	SO	SQUARE
FRH	FIRE HYDRANT	STD	STANDARD
FS	FINISH SURFACE	STRUCT	STRUCTURAL
FT	FT	S4S	SURFACE FOUR SIDES
FTG	FOOTING	THK	THICK
GA	GAUGE	TOC	TOP OF CONCRETE or CURE
GALV	GALVANIZED(D)	TYP	TOPICAL
GB	GRADE	TOW	TOP OF WALL
HP	HIGH POINT	TOP	TOP OF FOOTING
MAX	MAXIMUM	UNO	UNLESS NOTED OTHERWISE
MIN	MINIMUM	VEH	VEHICULAR
NIC	NOT IN CONTRACT	VERT	VERTICAL
NIS	NOT IN SCALE	WWM	WOVEN WIRE MESH
OC	ON CENTER	WI	WEIGHT IRON
PA	PLANTING AREA	W	NAIL PENNY SIZE

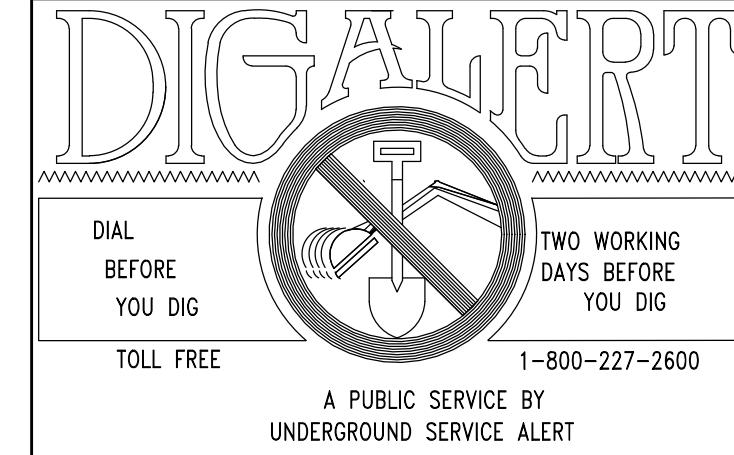
General Notes

IRRIGATION

- FINAL LOCATION OF CONTROLLER TO BE DETERMINED IN THE FIELD WITH APPROVAL OF OWNER AND LANDSCAPE ARCHITECT.
- REFER TO GENERAL IRRIGATION NOTES ON IRRIGATION PLAN.

PLANTING

- ALL BOX TREES ARE TO BE SELECTED BY THE LANDSCAPE ARCHITECT.
- CONTRACTOR IS TO SPOT ALL PLANT MATERIAL AND HAVE LANDSCAPE ARCHITECT APPROVE THE SPOTTING PRIOR TO THE EXCAVATION OF ANY PLANT PIT. ALLOW 48 HOURS LEAD TIME. ANY TREE, SHRUB, OR VINE THAT IS PLANTED WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT MAY BE MOVED AT THE CONTRACTOR'S EXPENSE.
- REMOVE STAKES FROM ALL ESPALIERS AND VINES AND ATTACH TO WALLS, POST, ETC.
- PRIOR TO PLANTING INSTALLATION, CONTRACTOR SHALL HAVE SOIL TESTED AND SEND RESULTS TO PUBLIC WORKS INSPECTOR. REFER TO SPECIFICATIONS FOR SOIL PREPARATION INFORMATION.
- CONTRACTOR TO CONTACT LANDSCAPE ARCHITECT AND CITY INSPECTOR FOR FINAL INSPECTION WHEN INSTALLATION IS COMPLETE, AND FOR A FINAL MAINTENANCE INSPECTION AT THE END OF THE MAINTENANCE PERIOD.



POTABLE WATER
TOTAL LANDSCAPE AREA:
51,084 SQ. FT.

CITY REQUIRED NOTES:

A MINIMUM 3" LAYER OF MULCH SHALL BE APPLIED ON ALL EXPOSED SOIL SURFACES OF PLANTING AREAS EXCEPT TURF AREAS, CREEPING OR ROOTED GROUNDCOVERS, OR DIRECT SEEDING APPLICATIONS WHERE MULCH IS CONTRAINDICATED.

FOR SOILS LESS THAN 6% ORGANIC MATTER IN THE TOP 6" OF SOIL, COMPOST AT A RATE OF A MINIMUM OF FOUR CUBIC YARDS PER 1,000 SQUARE FEET OF PERMEABLE AREA SHALL BE INCORPORATED TO A DEPTH OF SIX INCHES INTO THE SOIL.

RECIRCULATING WATER SYSTEMS SHALL BE USED FOR WATER FEATURES (DOES NOT APPLY).

PRESSURE REGULATING DEVICES ARE REQUIRED IF WATER PRESSURE IS BELOW OR EXCEEDS THE RECOMMENDED PRESSURE OF THE SPECIFIED IRRIGATION DEVICES.

CHECK VALVES OR ANTI-DRAIN VALVES ARE REQUIRED ON ALL SPRINKLER HEADS WHERE LOW POINT DRAINAGE COULD OCCUR.

A DIAGRAM OF THE IRRIGATION PLAN SHOWING HYDROZONES SHALL BE KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MANAGEMENT PURPOSES.

A CERTIFICATE OF COMPLETION SHALL BE FILLED OUT AND CERTIFIED BY EITHER THE DESIGNER OF THE LANDSCAPE PLANS, IRRIGATION PLANS, OR THE LICENSED LANDSCAPE CONTRACTOR FOR THE PROJECT.

COMPLY WITH SECTION 28-117 VERIFICATION OF LANDSCAPE INSTALLATION WITHIN THE CITY OF FONTANA LANDSCAPE ORDINANCE #1734.

Sheet Index

- L-T Cover Sheet
- LC-1 Hardscape Plan
- LI-1 Irrigation Plan
- LI-2 Irrigation Schedules
- LI-3 Irrigation Details
- LI-4 Irrigation Details
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- LS-1 Specifications
- LS-2 Specifications
- LS-3 Specifications

L-T



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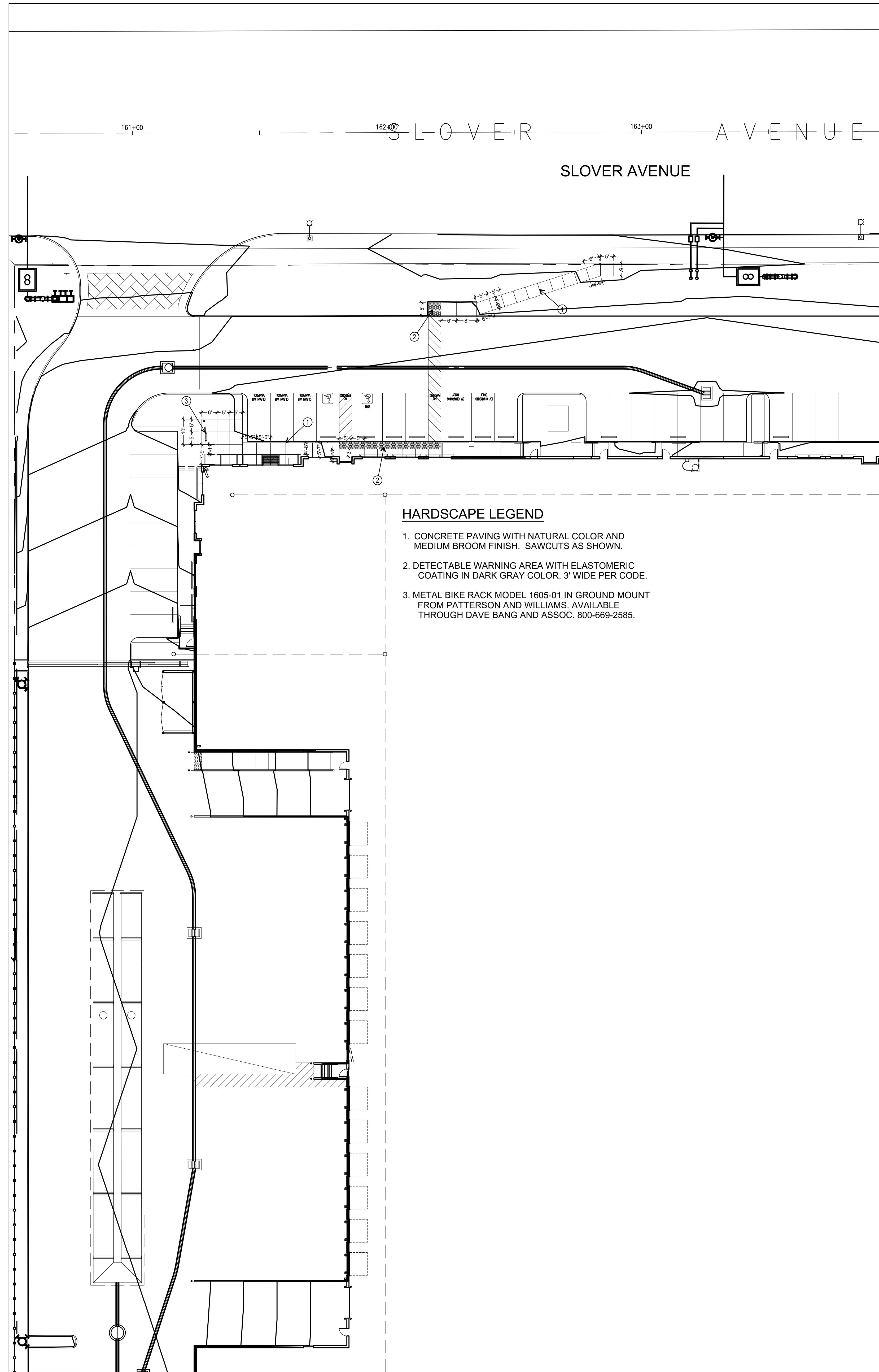
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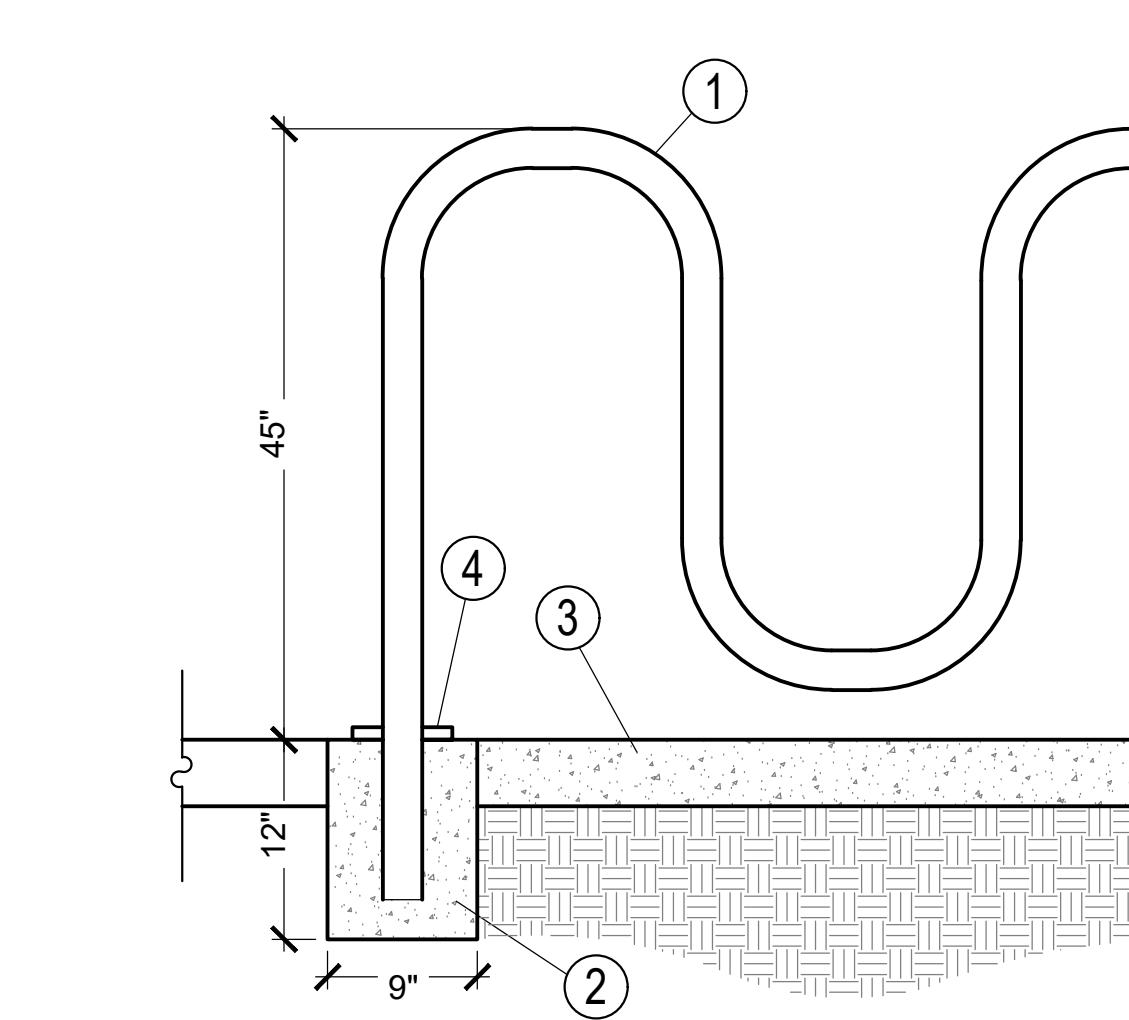
Sheet Title
Hardscape Plan

Scale 1" = 20'
Date 03/24/21
Drawn by TH
Job Number 20-010

Sheet No LC-1



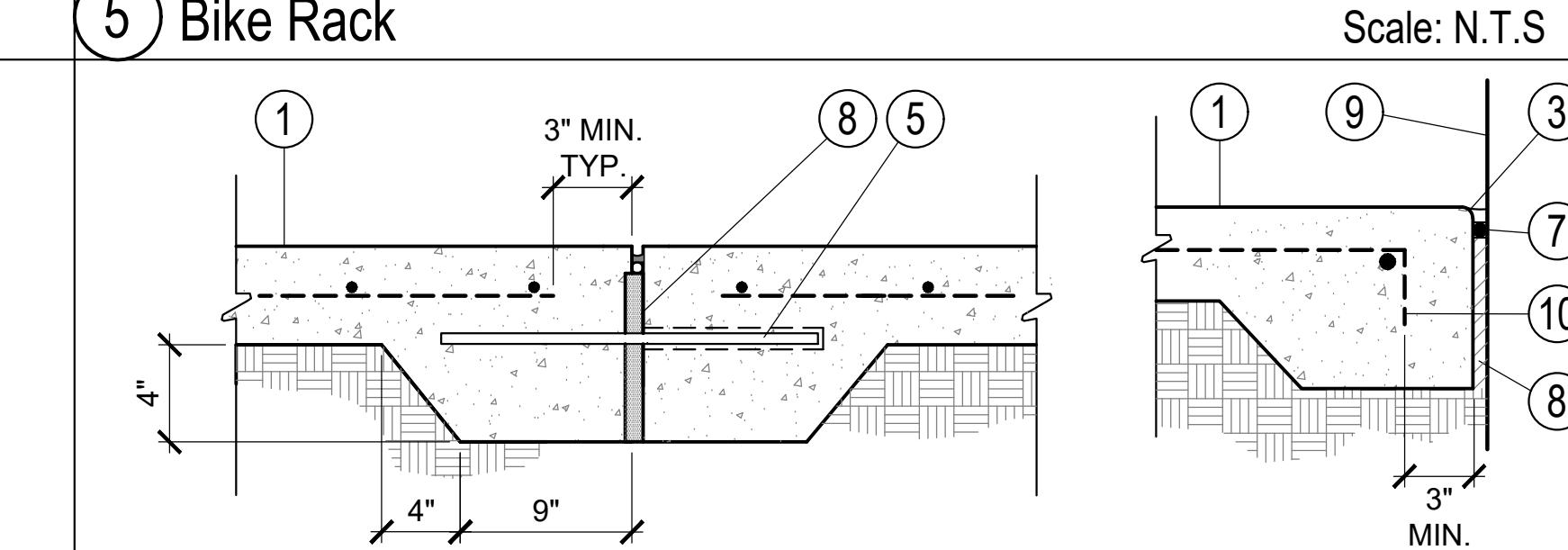
REFERENCE ONLY for water efficiency purposes. May require separate Building and Safety Division Construction permit.



LEGEND:

- Roller Coaster Bike Rack from Paterson Williams.
- 9' x 12' concrete footing.
- Concrete Paving.
- Designer Plate Cover.

5 Bike Rack



LEGEND:

- Poured in place concrete, see construction legend for finish and color.
- #4 rebar @ 18" o.c. each way, centered in slab unless otherwise noted in soils engineer's report.
- Compacted subgrade/sub-base per soil engineer's report.
- 4" pedestrian/6" vehicular unless otherwise noted in soil engineer's report.

(2) Concrete Paving

(1) Concrete Paving Joints

Scale: N.T.S.

Scale: 1 1/2"=1'-0"

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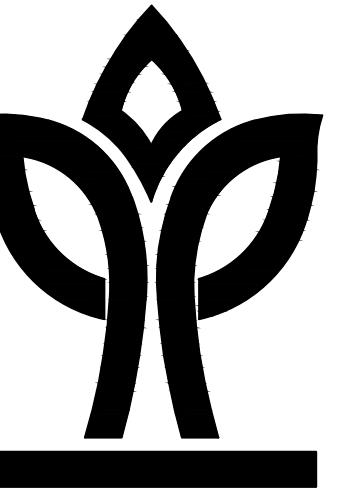
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IRRIGATION SCHEDULE

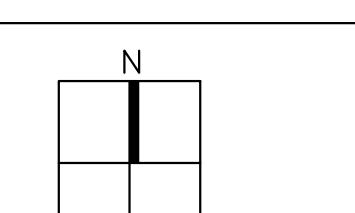
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
R	Rain Bird 1806-5 Series Stream Rain Bird 5HB Stream bubbler with Rain Bird 1806 6.0" pop up and PCS-260 pressure compensating screen.	130	15
S	Rain Bird 1806-5 Series Stream Rain Bird 5HB Stream bubbler with Rain Bird 1806 6.0" pop up and PCS-260 pressure compensating screen.	7	
F	GPH Irrigation GPH Combination Drip Flush Valve Install GPH Irrigation GPH Combination Drip Flush Valve Nozzle with Rain Bird 1812 pop up sprinkler body. This nozzle serves as flush valve and also as visual drip indicator. See detail for more information.	13	
A	Rain Bird ARV1020 1/2" Air Relief Valve, made of quality rust-proof materials, with a 6.0" drip valve box (SEE TXB emitter box). Use with installation below soil. The valve will allow air to escape the pipeline, thus preventing water hammer or blockage.	7	
D	Area to Receive Pipe Rain Bird XFD-06-18 (18' Mod Water Use) XFD On-Surface Pressure Compensating Landscape Dripine. 0.6 GPH emitters at 18° O.C. Dripine laterals spaced at 18° apart, with emitters offset for triangular pattern. UV Resistant. Specify XF insert fittings.	9,816 s.f.	
E	Area to Receive Pipe Rain Bird XFD-06-18 (24' Low Water Use) XFD On-Surface Pressure Compensating Landscape Dripine. 0.6 GPH emitters at 18° O.C. Dripine laterals spaced at 24° apart, with emitters offset for triangular pattern. UV Resistant. Specify XF insert fittings.	5,457 s.f.	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	
P	Rain Bird PEB 1"-1 1/2"-2" Plastic industrial Valves. Low Flow Operating Capability, Globe Configuration.	6	
Q	Rain Bird BS-DLRC 3/4" Brass Quick-Coupling Valve, with Corrosion-Resistant Stainless Steel Spring, Locking Thermoplastic Rubber Cover, Double Track Key Lug, and 2-Piece Body.	6	
V	Nico T-113 Class 125 bronze gate shut off valve with wheel handle, same size as mainline pipe diameter at valve location.	4	
MV	Rain Bird PEB 2" Plastic Industrial Valves. Low Flow Operating Capability, Globe Configuration.	1	
BF	Fabco B25Y 1" Reduced Pressure Backflow Preventer	1	
C	Rain Bird ESP12LXMEF-LXMM with (O) ESP1XMSM12 24 Station Commercial Controller. Place Controller in Powder-coated Metal Cabinet inside Controller room. Include a (Q) Communication Card, (1) Power Input and (1) 12 Month service plan. Please use Part Number C01401 when ordering one year 3G Cellular Service for 10 Cloud Controller to Coordinate with Rain Bird GEP (1-866-GEP-XPRT) and Property Manager on annual Cellular Contract transfer between Landscape Maintenance contractors after contract service is completed.	1	
T	Rain Bird RSD-BEx Rain Sensor, with metal latching bracket, extension wire.	1	
FS	Creative Sensor Technology FS-TIO-001 1" PVC tee type flow sensor w/socket ends, custom mounting tee and ultra-lightweight impeller enhances low flow measurement. Flow range: 86-82 GPM.	1	
EN	All Spec VB 4230 All Spec Vandal Buster backflow metal enclosure; Model# VB-4230. Foliage Green Color. Install locks on all backflow enclosures.	1	
WM	Water Meter 1" 1" Portable Water Meter- to be used exclusively for landscape irrigation.	1	
Irrigation Lateral Line:	PVC Schedule 40 PVC Schedule 40 Irrigation pipe. Only lateral transition pipe sizes 1" and above are indicated on the plan with all others being 3/4" in size.	3,462 ft.	
Irrigation Mainline:	PVC Sch 40 and Class 215 2" and smaller use PVC Schedule 40 Irrigation pipe. 2 1/2" and larger use PVC Class 35 irrigation pipe.	707.2 ft.	
Pipe Sleeve:	PVC Schedule 40 Sleeve to be 2 times the size of pipe being sleeved.	104.4 ft.	
Valve Callout	# Valve Number # Valve Flow # Valve Size # Valve Hydrozne (see legend to right)		
Valve Hydrozne Legend	H1 Hydrozne #1 Bubbles H2 Hydrozne #2 Bubbles		

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Sheet Title

Irrigation Plan



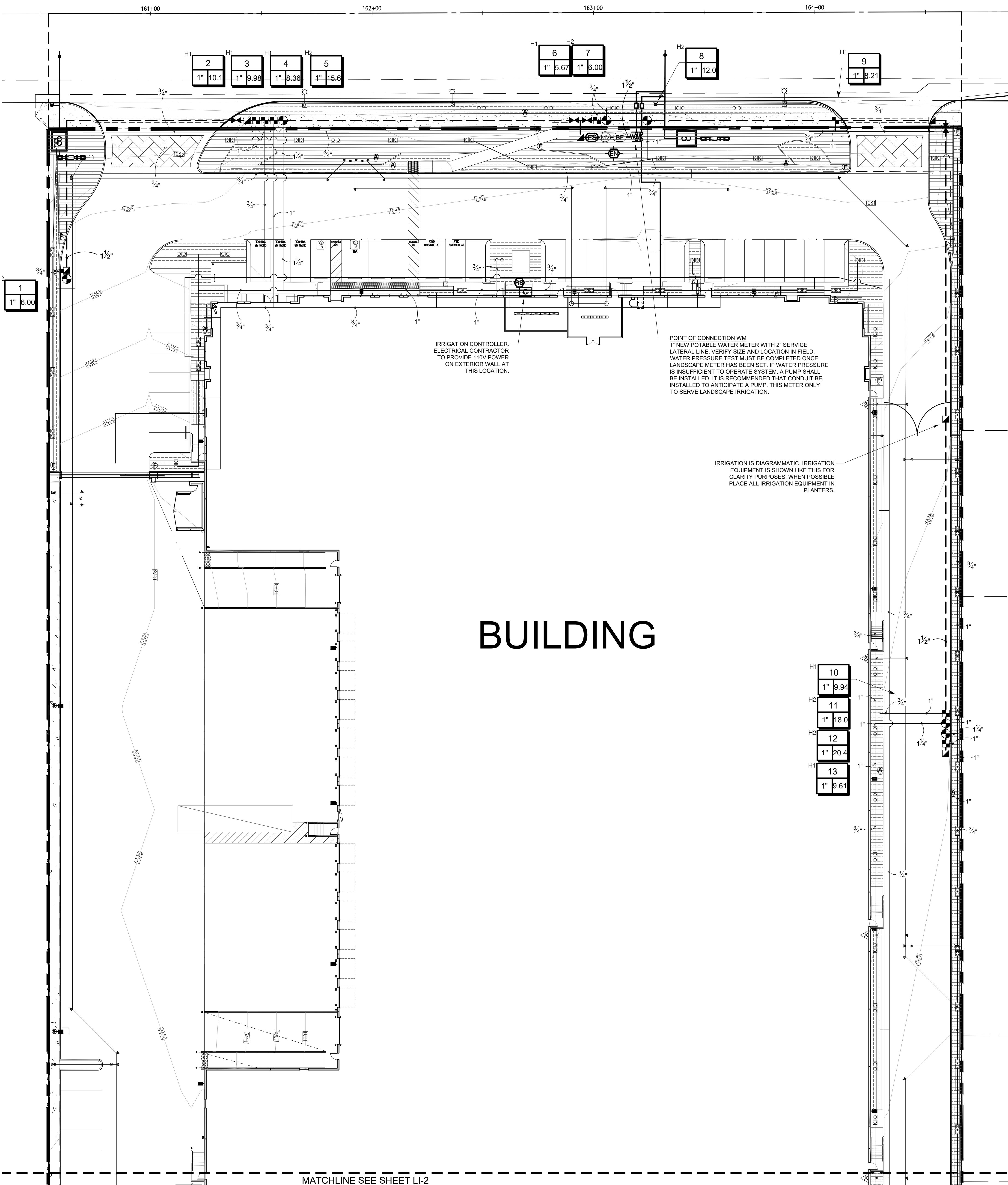
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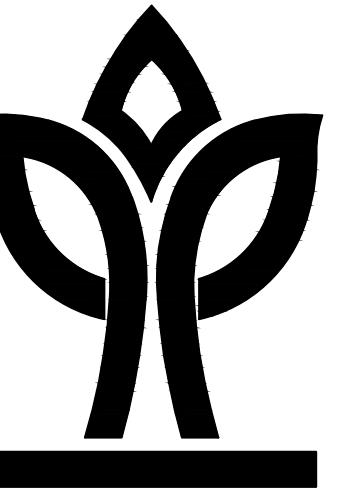
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Drawn by TH

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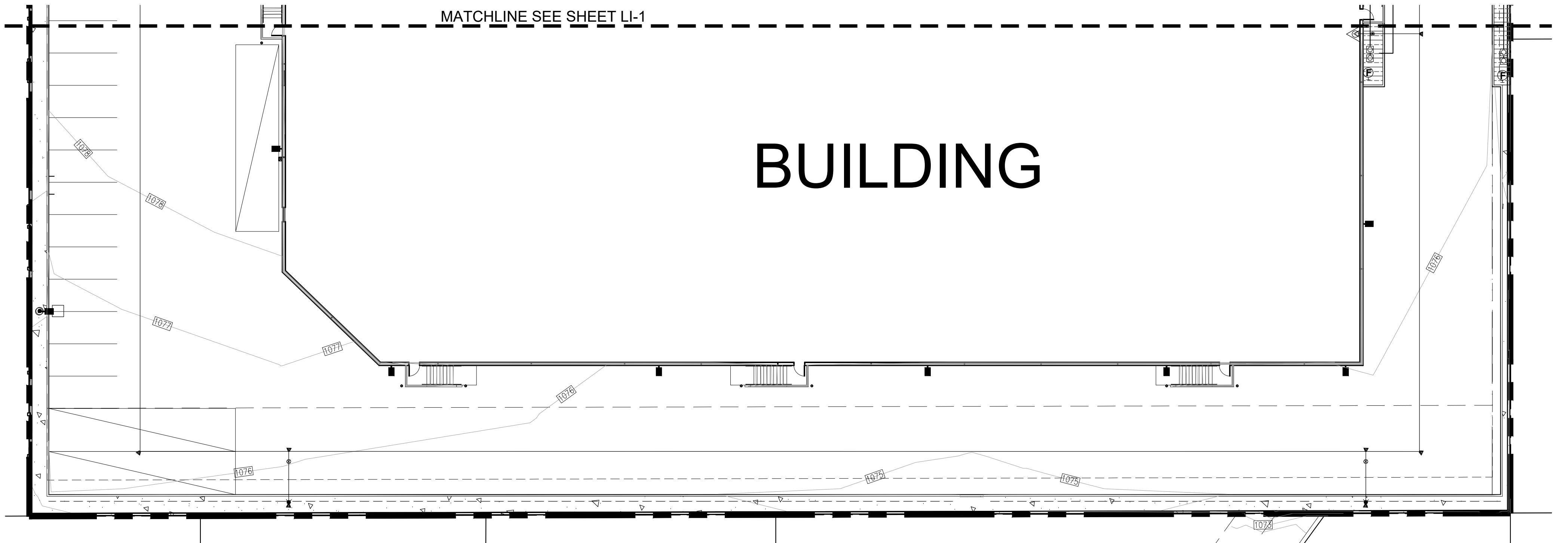


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BUILDING

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	FRICITION LOSS	PSI	FRECIPI
1	Rain Bird PEB	1"	Bubbler	6.00	0.65	17.37	1.86 in/h
2	Rain Bird XCZ-100-PRE-MC	1"	Area for Dripine	10.05	0.35	44.42	0.43 in/h
3	Rain Bird XCZ-100-PRE-MC	1"	Area for Dripine	4.00	1.67	50.62	0.43 in/h
4	Rain Bird XCZ-100-PRE-MC	1"	Area for Dripine	8.00	0.47	34.83	0.43 in/h
5	Rain Bird PEB	1"	Bubbler	15.60	0.14	25.56	1.86 in/h
6	Rain Bird XCZ-100-PRE-MC	1"	Area for Dripine	5.67	0.13	33.00	0.43 in/h
7	Rain Bird PEB	1"	Bubbler	6.00	0.55	17.27	1.86 in/h
8	Rain Bird PEB	1"	Bubbler	12.00	5.19	22.21	1.86 in/h
9	Rain Bird XCZ-100-PRE-MC	1"	Area for Dripine	8.02	0.61	36.82	0.32 in/h
10	Rain Bird XCZ-100-PRE-MC	1"	Area for Dripine	4.04	3.64	41.40	0.43 in/h
11	Rain Bird PEB	1"	Bubbler	18.00	5.51	23.19	1.86 in/h
12	Rain Bird PEB	1"	Bubbler	20.40	5.48	23.49	1.86 in/h
13	Rain Bird XCZ-100-PRE-MC	1"	Area for Dripine	9.61	0.10	37.71	0.43 in/h

CRITICAL ANALYSIS

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P.O.C. NUMBER: 0
Water Source Information: 1" Potable Water Meter- to be used exclusively for landscape irrigation.

FLOW AVAILABLE

Water Meter Size: 1"

Flow Available: 37.50 gpm

PRESSURE AVAILABLE

Static Pressure at POC: 0.00 psi

Elevation Change: 5.00 ft

Service Line Size: 2"

Length of Service Line: 20.00 ft

Pressure Available: 0.00 psi

DESIGN ANALYSIS

Maximum Station Flow: 20.40 gpm

Flow Available at POC: 37.50 gpm

Residual Flow Available: 17.10 gpm

Critical Station: 2

Design Pressure: 30.00 psi

Friction Loss: 5.77 psi

Fittings Loss: 0.58 psi

Elevation Loss: 0.00 psi

Loss through Valve: 8.08 psi

Pressure Loss at Critical Station: 44.42 psi

Loss for Fittings: 0.06 psi

Loss for Main Line: 0.57 psi

Loss for POC to Valve Elevation: 0.00 psi

Loss for Backflow: 1.24 psi

Loss for Vandal: 4.20 psi

Loss for Water Meter: 0.13 psi

Critical Station Pressure at POC: 62.95 psi

Pressure Available: 0.00 psi

Residual Pressure Available: -62.45 psi

WATER EFFICIENT LANDSCAPE WORKSHEET (WELO)

Reference Evapotranspiration Rate (Eto): 55.6

Hydrozone # / Planting Description	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	ETAF (PF/IE)	Landscape Area (LA)	ETAF x Area	Estimated Annual Water Use (EAUW) Gallons per Year	Estimated Annual Water Use (EAUW) Acre Feet per Year
Regular Landscape Areas								
Low Groundcover & Shrubs	0.1	Drip	0.81	0.12	5,457	674	-	0.00
Mod Groundcover & Shrubs	0.4	Drip	0.81	0.49	9,816	4,847	167,100	0.51
Low/Mod Trees	0.4	Bubbler	0.81	0.49	130	64	2,213	0.01
Totals	9.946		4,912					
Estimated Annual Water Use (EAUW) Total					169,313	0.52		
Maximum Allowed Water Allowance (MAWA)					240,001	0.74		
Special Landscape Areas								
Hydrozone 1				1	-	-	-	0.00
Hydrozone 2				1	-	-	-	0.00
Hydrozone 3				1	-	-	-	0.00
Totals	-	-	-					
EAWU Total				-	0.00			
Maximum Allowed Water Allowance (MAWA)				-	0.00			
ETAF Calculations								
Regular Landscape Areas								
Total ETAF x Area	4.912							
Total Area	9,946							
Average ETAF	0.49382							
All Landscape Areas								
Total ETAF x Area	4,912							
Total Area	9,946							
Sitewide ETAF	0.49382							

MATCHLINE SEE SHEET LI-1

Watering Schedule

based on State Recommendations

Established Landscape

DRIP VALVES												
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Maximum Minutes per start time	44	44	44	44	44	44	44	44	44	44	44	44
Start times per week*	2	2	3	4	5	6	6	6	4	4	2	2
Total minutes per week*	88	88	132	176	220	264	264	264	176	176	88	88

*Start times per week may not equal days per week. Multiple start times per day may be needed to avoid runoff.

BUBBLER VALVES												
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Maximum Minutes per start time	1	1	1	1	1	1	1	1	1	1	1	1
Start times per week*	2	2	3	4	5	6	6	6	4	4	2	2
Total minutes per week*	2	2	3	4	5	6	6	6	4	4	2	2

*Start times per week may not equal days per week. Multiple start times per day may be needed to avoid runoff.

ROTOR VALVES												
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Maximum Minutes per start time	18	18	18	18	18	18	18	18	18	18	18	18
Start times per week*	1	2	2	3	3	4	4	4	3	3	2	2
Total minutes per week*	18	36	36	54	54	72	72	72	54	54	36	36

*Start times per week may not equal days per week. Multiple start times per day may be needed to avoid runoff.

Establishment Period

DRIP VALVES												
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

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HUNTER LANDSCAPE

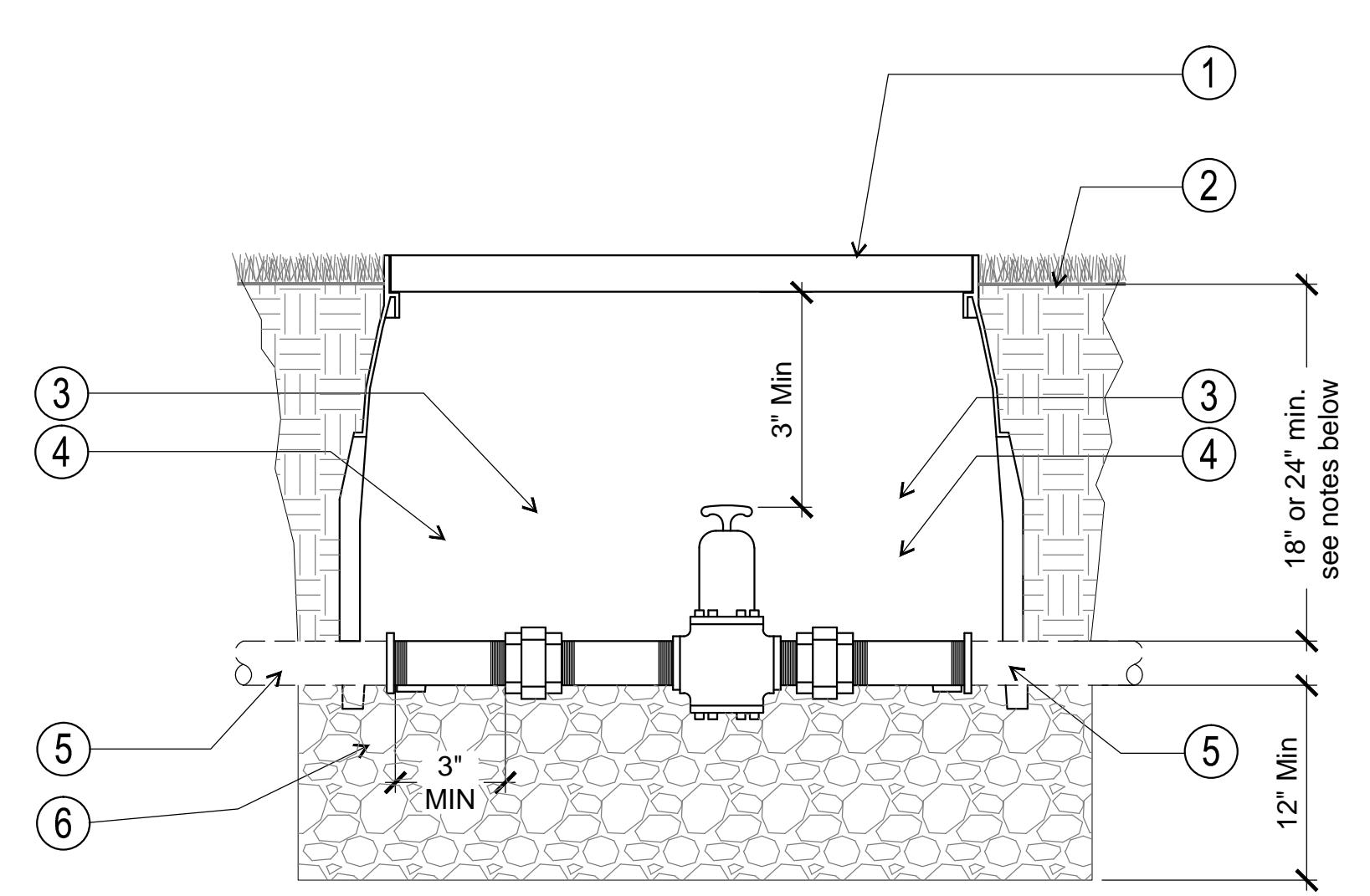
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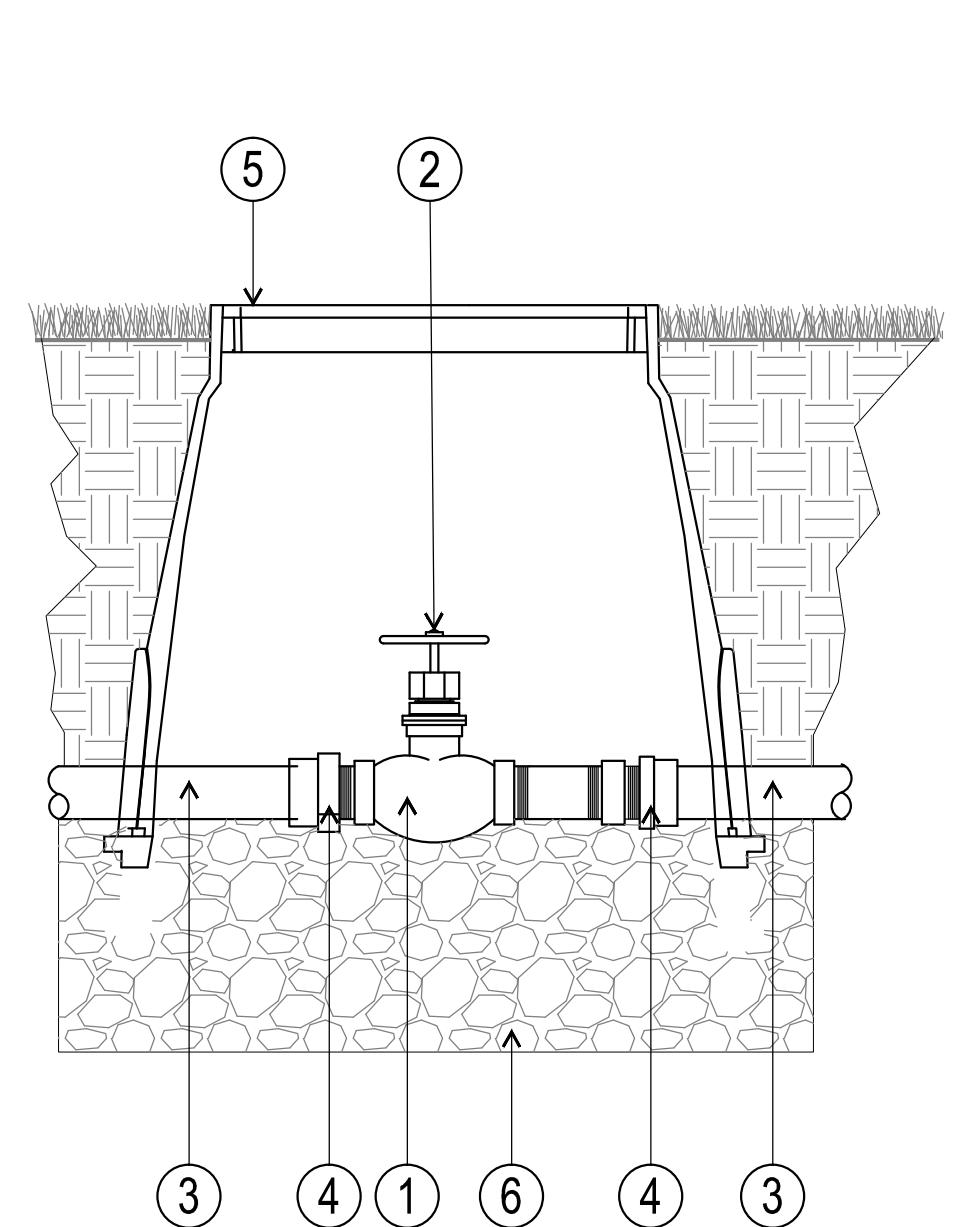


LEGEND:

1. Approved 14" x 19" plastic valve box with locking cover.
2. Finish grade
3. Brass union
4. Brass nipple
5. PVC main line
6. 3/4" crushed rock
7. Pressure regulator

NOTES:

- A. Pressure setting shall be as specified on plans.
- B. Valve box shall be of sufficient size to accommodate Pressure Regulator Assembly.
- C. Pressure Regulator shall be installed horizontally so adjustment nut, and main cap on Pressure Regulator are accessible.
- D. All piping and fittings shall be brass unless noted otherwise.
- E. Close nipples shall not be used.
- F. Wrap below grade brass piping w/UPC 10 mil. black pipe wrap (as req'd).



LEGEND:

1. Gate or ball valve
2. Hand wheel
3. Mainline
4. PVC male adaptor
5. 10" Round plastic box and locking cover.
6. 3/4" crushed rock

NOTES:

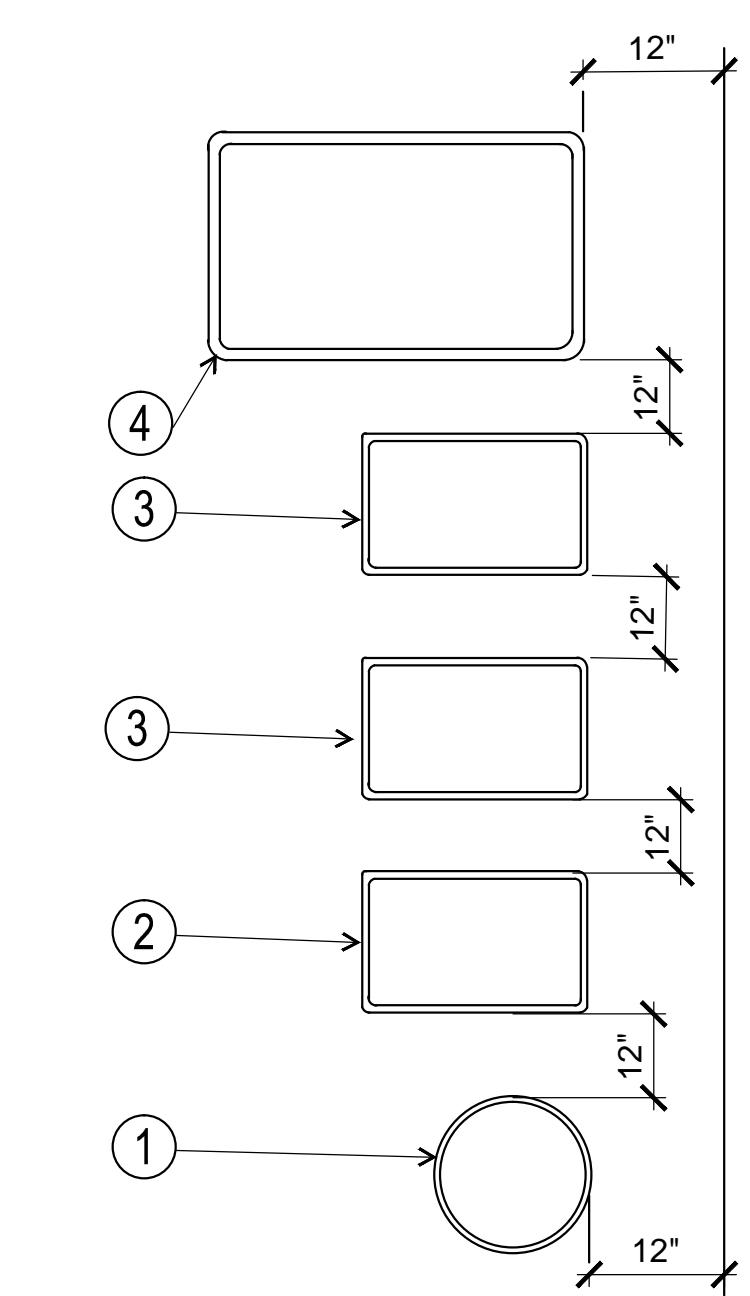
- A. Center valve box over valve to facilitate servicing of valve.
- B. Set valve boxes 2" maximum above grade in mulch cover or ground areas. Set flush with finish grade in turf areas.
- C. Set valve box and valve assembly in ground-cover/shrub area where possible - install in turf only if there is no adjacent ground cover.
- D. Set valve boxes parallel to one another and perpendicular to edge.
- E. Avoid heavy compaction of soil around valve boxes to prevent their deformation/collapse.
- F. Provide heat branding to all valve boxes.

④ Pressure regulator

Scale: N.T.S

③ Ball / Gate Valve

Scale: N.T.S



LEGEND:

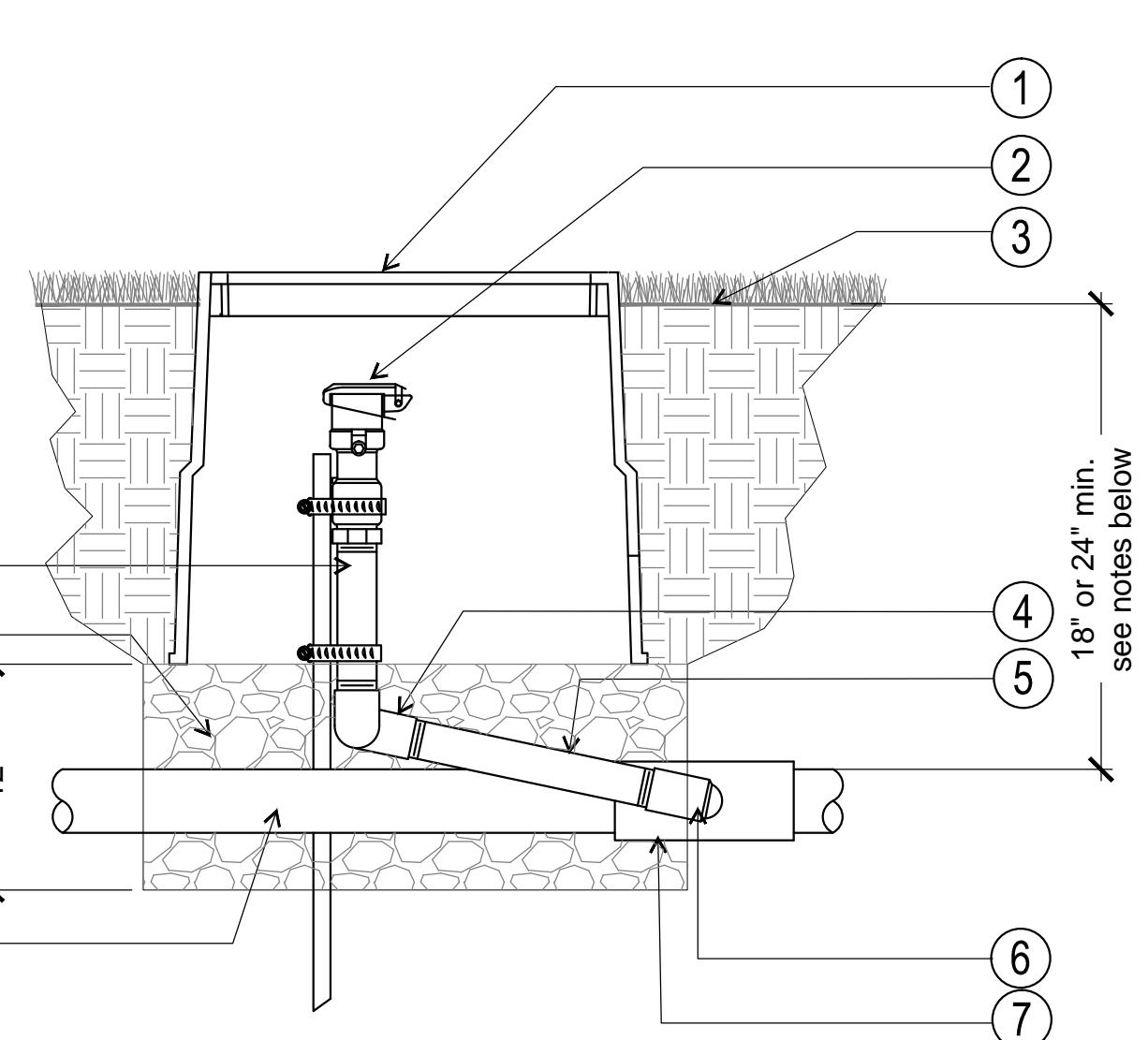
1. 10" diameter circular valve box.
2. Edge of lawn, walk, fence, curb, etc.
3. 14" X 19" rectangular valve box.
4. 20" X 30" rectangular valve box.

NOTE:

- A. Center valve box over valve to facilitate servicing of valve.
- B. Set valve boxes 2" maximum above grade in mulch cover or ground areas. Set flush with finish grade in turf areas.
- C. Set valve box and valve assembly in ground-cover/shrub area where possible - install in turf only if there is no adjacent ground cover.
- D. Set valve boxes parallel to one another and perpendicular to edge.
- E. Avoid heavy compaction of soil around valve boxes to prevent their deformation/collapse.
- F. Provide heat branding to all valve boxes.

LEGEND:

1. 10" Round plastic box and locking cover.
2. Quick coupling valve w/locking cover.
3. Finish grade.
4. PVC SCH. 80.
5. PVC SCH. 80 nipple.
6. PVC SCH. 40 elbow.
7. PVC tee.
8. 1 cu. ft. pea gravel.
9. PVC SCH. 80 riser
10. PVC main line.



LEGEND:

1. Bronze wye strainer w/ full size blow off valve (80 mesh).
2. Reduced pressure backflow preventer w/ 2 shut off valves.
3. Brass pipes, nipples and fittings, typ.
4. Brass unions line sized both sides.
5. Sch 80 PVC male adaptor brass coupling and brass brass nipple, typ both sides.
6. 12" sq. concrete thrust block.
7. Backflow enclosure V.I.T. SBBC-4CR, on concrete pad.
8. Finish grade.

NOTE:

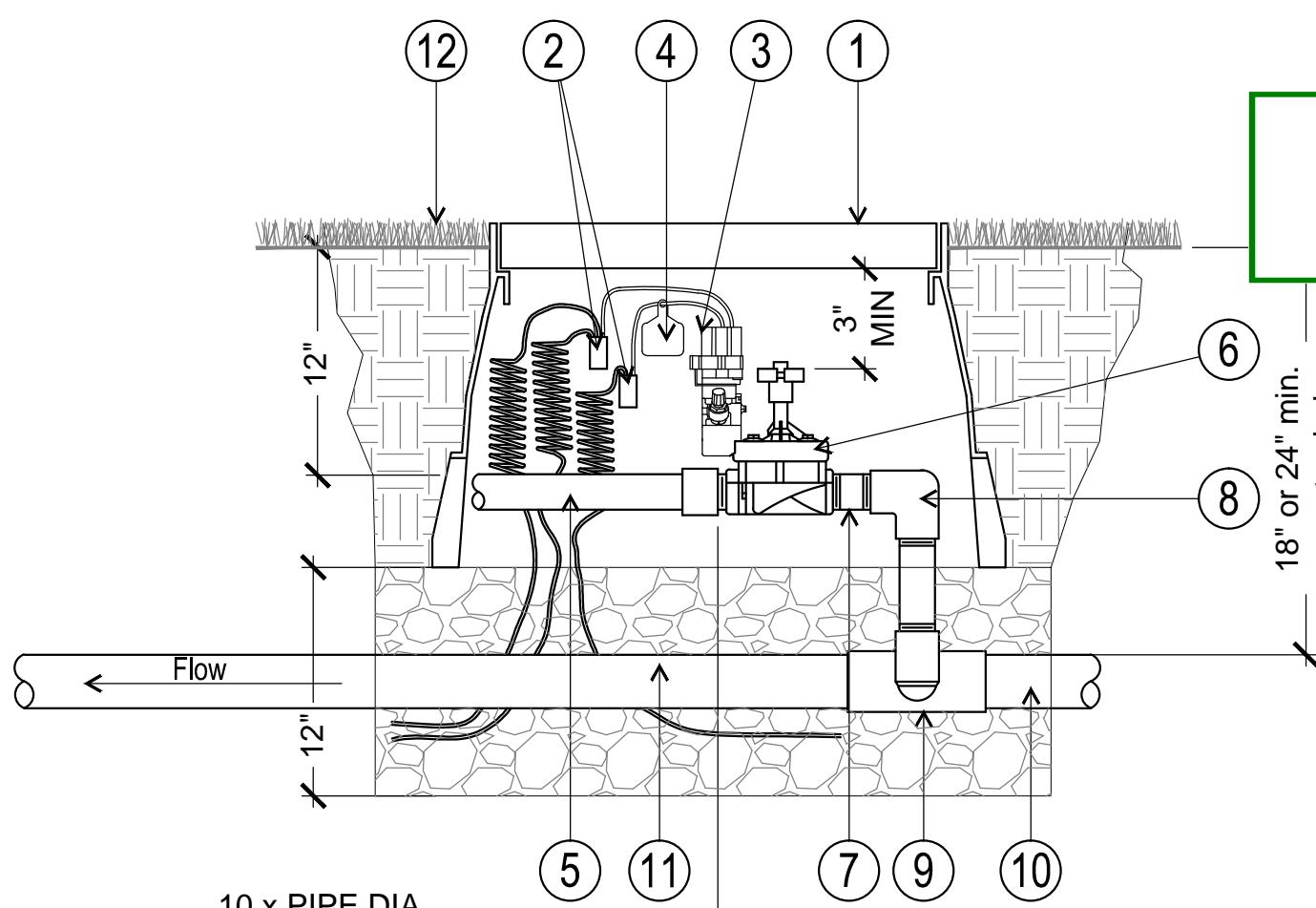
- A. Brass is required on all irrigation reduced pressure.

② Backflow Prevention Device

Scale: N.T.S

① Wall Mounted Controller

Scale: N.T.S



LEGEND:

1. Wall mounted controller with weather proof cabinet and locking cover. (per irrigation legend)
2. Antenna
3. 1 1/2" PVC Schd 40 conduit for UF direct burial control wires, size as required.
4. Wires to remote control valves
5. Junction Box
6. 1" PVC Schd 40 conduit to power supply.
7. Ground rod 5/8" x 6'

NOTE:

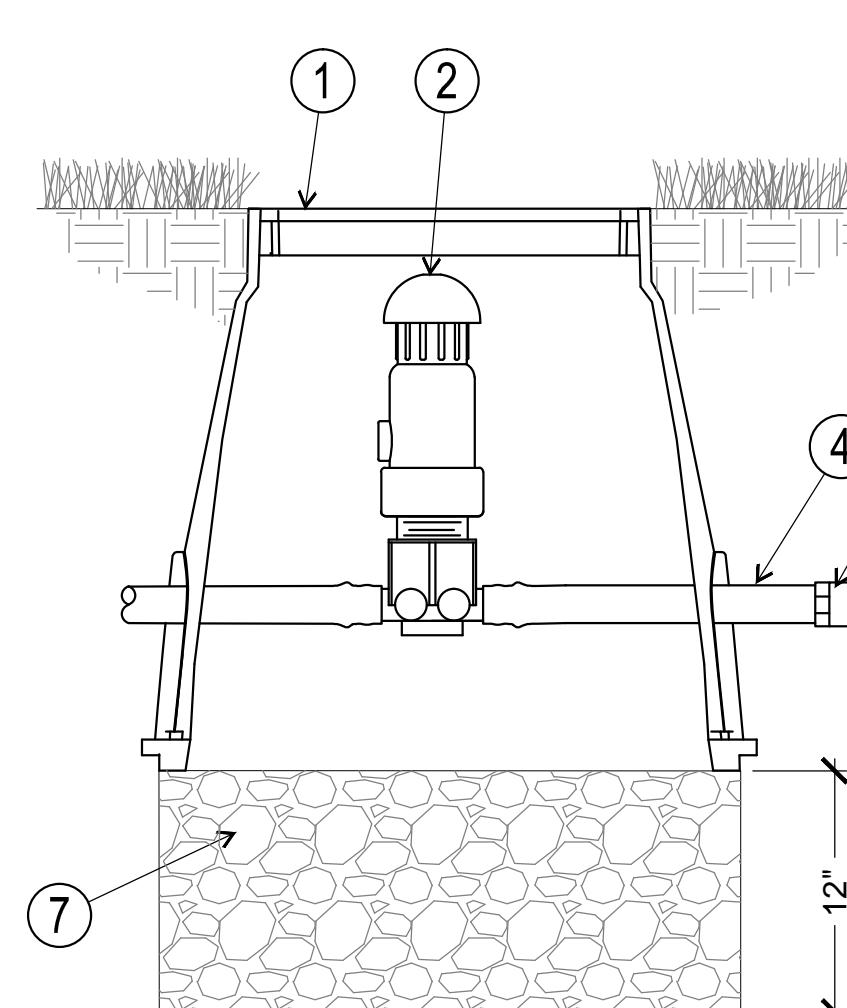
- A. Installation to comply with all national and local electrical and building codes.
- B. Power required 110VAC @ 1.2 amp or less.
- C. Mount controller 4' above finish grade from bottom of controller.
- D. Provide on/off switch.

⑧ Valve Box Layout

Scale: N.T.S

⑦ Quick Coupler Valve

Scale: N.T.S

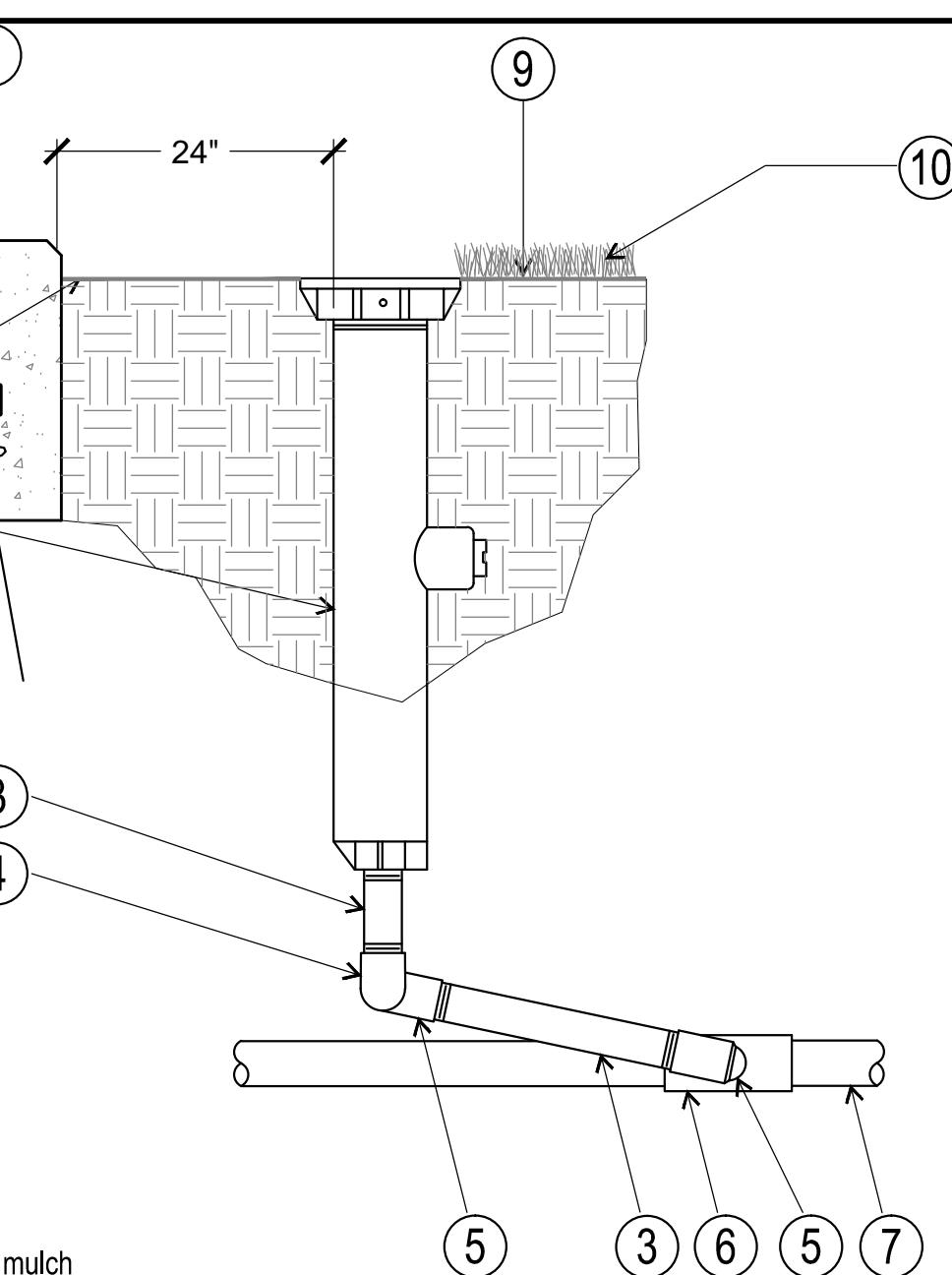


LEGEND:

1. Subterranean emitter box with locking cover.
2. Air/vacuum relief valve kit.
3. Finish grade.
4. 1/2" blank drip tubing.
5. Barb x male thread connector.
6. PVC tee connected to PVC header pipe.
7. 12" depth 3/4" washed gravel.

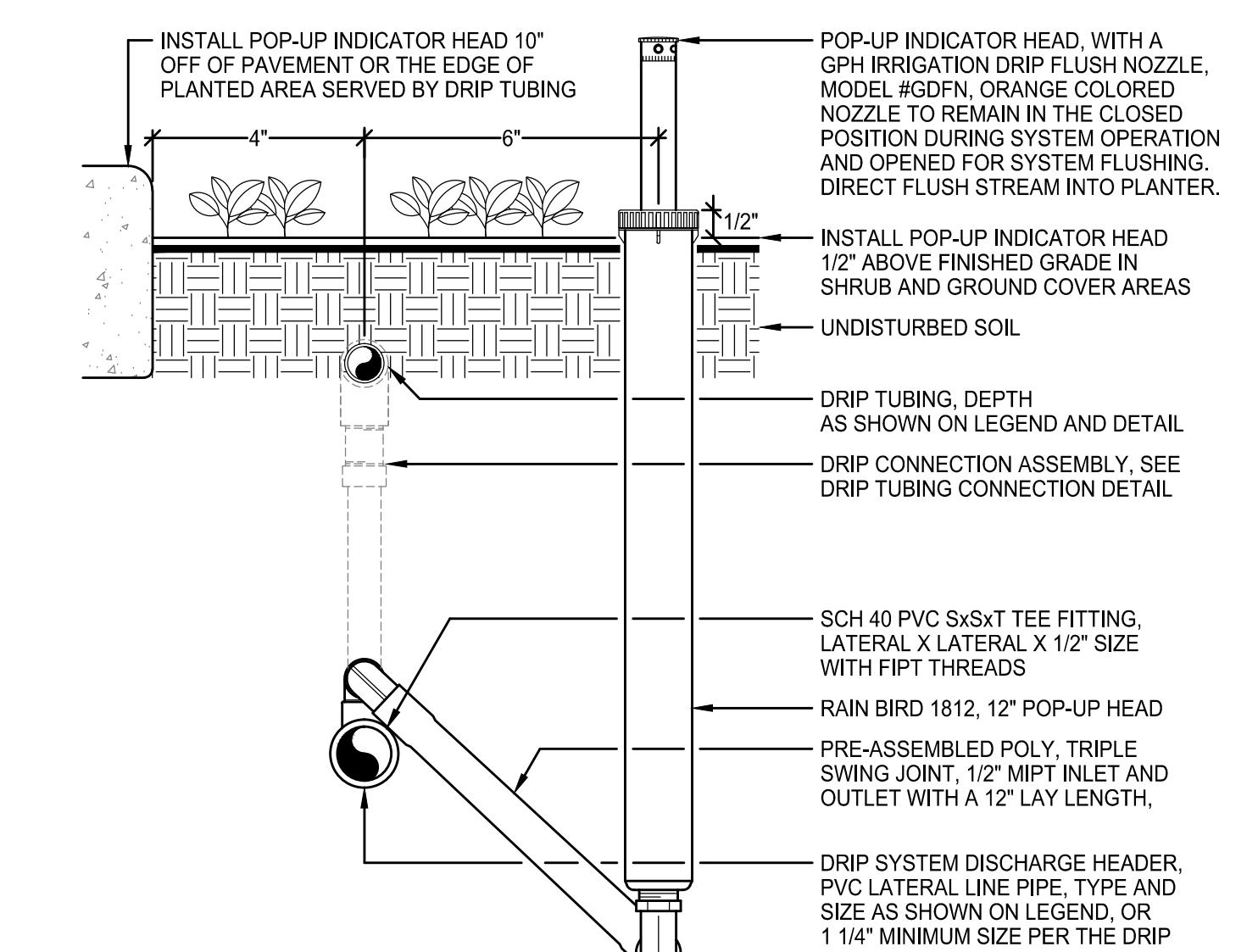
LEGEND:

1. Finish grade/ top of mulch
2. Pop-up spray head
3. PVC Sch 80 nipple (length as required)
4. PVC sch 40 ell
5. PVC sch 40 street ell
6. PVC sch 40 tee or ell
7. PVC lateral pipe.
8. Walk, curb, wall, etc.
9. Finish Grade
10. Shrub or groundcover behind sprayhead per planting plan.



⑥ Flow Sensor

Scale: N.T.S

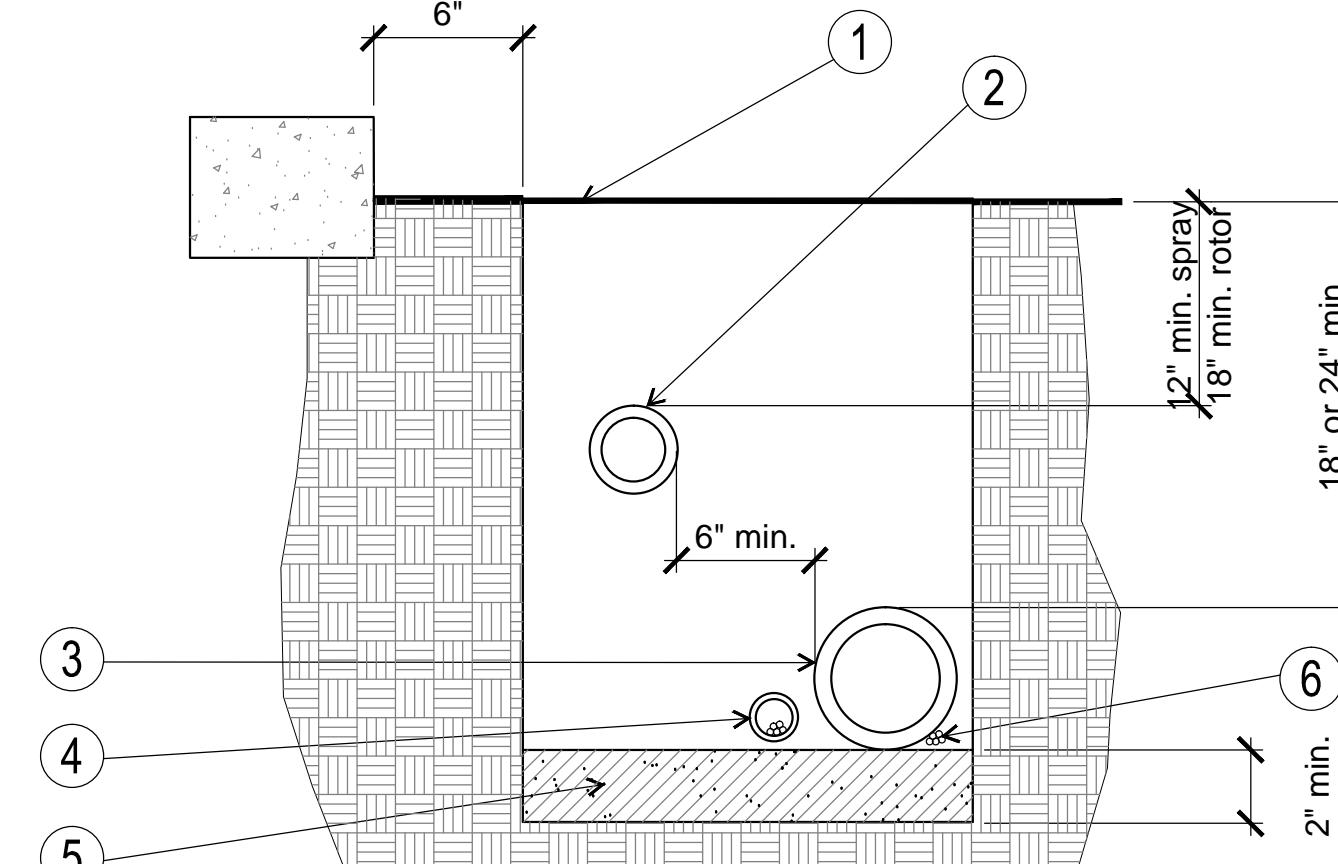


LEGEND:

1. Approved 14" x 19" plastic valve box with locking cover.
2. Finish grade
3. Flow sensor
4. P.E. cable to controller
5. PVC main line
6. 3/4" crushed rock

⑤ Master / Remote Control Valve

Scale: N.T.S



NOTES:

1. All plastic piping to be snaked in trenches
2. Bundle & tape wiring at 10' intervals
3. Tie a loose 24" loop in wiring every 100 feet and at changes of direction greater than 30°. Untie all loops after all connections have been made.
4. In stall all control wire on the underside of the main line pipe.
5. See irrigation specifications for backfill & compaction requirements.
6. Pipe cover for CL 315 - 2" dia. and larger shall be 24".
7. Pipe cover for 1-1/2" sch 40 and smaller shall be 18".
8. Pipe cover for non-pressure lateral lines shall be 18" for spray heads.
9. Pipe cover for non-pressure lateral lines shall be 18" for rotor heads.
10. Common trench with other utilities is prohibited

ALL IMPROVEMENTS TO BE MAINTAINED BY THE PROPERTY OWNER.

⑫ Air Relief Valve

Scale: N.T.S

⑪ Pop-up Spray Head

Scale: N.T.S

⑩ Flush Valve Kit

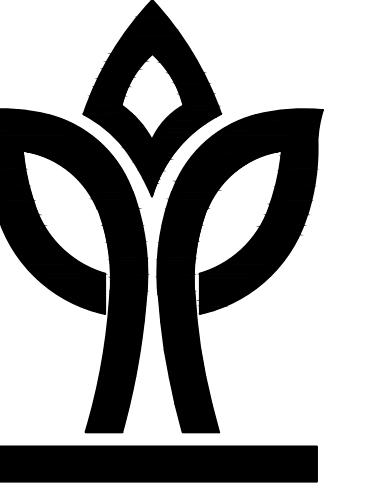
Scale: N.T.S

⑨ Trenching Detail

Scale: N.T.S

LI-3

Submittals	Date	Description
	11.03.20	1st Submittal
	03.24.21	2nd Submittal
Revisions	Date	Remarks
	01.07.21	ASI Delta #1
Sheet Title		
		Irrigation Details
Scale		
Date		
		03/24/21
Drawn by		
		TH
Job Number		
		20-010
Sheet No		



HUNTER LANDSCAPE

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Fax: 714.986-2408



Project

SLOVER AVE INDUSTRIAL CENTER

COVER JUNIPER LLC

5020 Campus Drive
Newport Beach, CA 92660
949-296-7006

Date	Remarks
01.07.21	ASI Delta #1

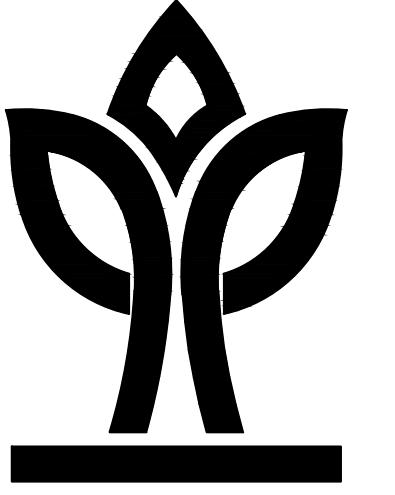
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ALL IMPROVEMENTS TO BE MAINTAINED BY THE PROPERTY OWNER.

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PLANTING LEGEND

TREES						
SYMBOL	BOTANICAL/COMMON NAME	SIZE	QTY	WUCOLS	REMARKS	
	<u>Chilopsis linearis</u> Desert Willow	24" Box	7	L	Multi	
	<u>Chitalpa tashkentensis</u> Chitalpa	24" Box	4	L	Standard	
	<u>Cupressus sempervirens</u> Italian Cypress	24" Box	6	M	Standard	
	<u>Lagerstroemia i 'Muskogee'</u> Crape Myrtle	24" Box	5	M	Standard	
	<u>Platanus acerifolia</u> London Plane	24" Box	3	M	Standard	
	<u>Rhus lancea</u> African Sumac	36" Box	4	L	Standard	
	<u>Tristania conferta</u> Brisbane Box	15 Gal	36	M	Standard	

SHRUBS					
SYMBOL	BOTANICAL/COMMON NAME	SIZE	QTY	WUCOLS	REMARKS
(Cj)	<u>Callistemon 'Little John'</u> Dwarf Bottle Brush	5 Gal	260	M	
*	<u>Dietes bicolor</u> Fortnight Lily	5 Gal	127	M	
(L)	<u>Ligustrum j. Texanum</u> Texas Privet	5 Gal	395	M	
(wgb)	<u>Westringia f. 'Grey Box'</u> Dwarf Coast Rosemary	5 Gal	27	L	

Groundcover					
Symbol	Botanical/Common Name	Size	Spacing	WUCOLS	Remarks
	<u>Carissa m. 'Green Carpet'</u> Prostrate Natal Plum	1 Gal	36" O.C.	M	
	<u>Hemerocallis hybridus-Yellow</u> Yellow Day Lily	1 Gal	24" O.C.	M	
	<u>Trachelospermum jasminoides</u> Star Jasmine	1 Gal	24" O.C.	M	

NOTES:

1. ALL TREES WITHIN 5' OF HARDSCAPE SHALL BE IN A LINEAR ROOT BARRIER. ROOTBARRIER.
 2. CONTRACTOR TO INSTALL CONCRETE MOW CURB BETWEEN PLANTERS AND GRAVEL AREAS. SEE PLANTING DETAIL SHEET.
 3. A MINIMUM 3-INCH LAYER OF MULCH SHALL BE APPLIED ON ALL EXPOSED SOIL SURFACES OF PLANTING AREAS EXCEPT TURF AREAS, CREEPING OR ROOTING GROUNDCOVERS, OR DIRECT SEEDING APPLICATIONS WHERE MULCH IS CONTRAINDICATED

SLOVER JUNIPER LLC

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949-296-7006

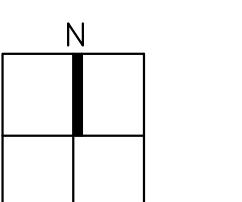
Submittals	
Date	Description
1.03.20	1st Submittal
3.24.21	2nd Submittal

Revisions	
Date	Remarks
01.07.21	ASI Delta #1

heet Title

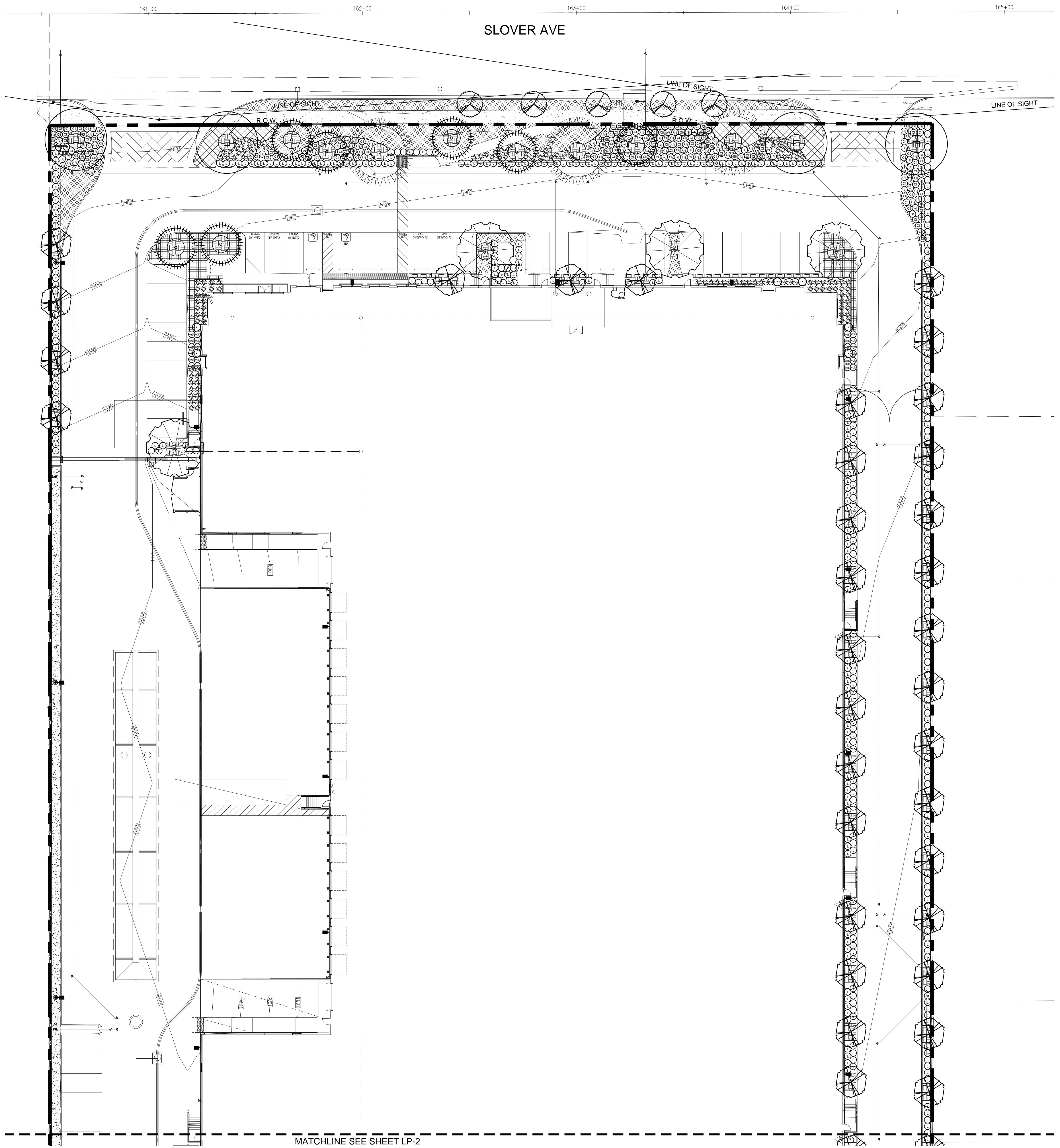
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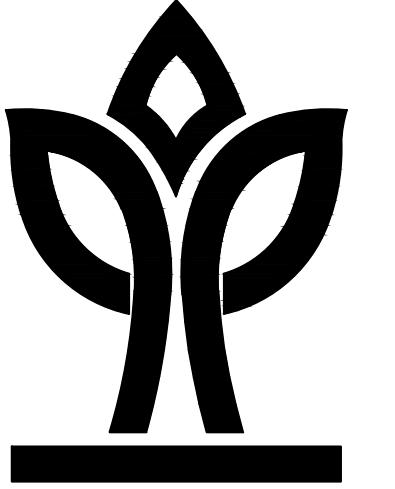
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ate	03/24/21
rawn by	TH
ob Number	20-010
heet No	

LP-1





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Placentia, California 92870
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PLANTING LEGEND

TREES					
SYMBOL	BOTANICAL/COMMON NAME	SIZE	QTY	WUCOLS	REMARKS
	<u><i>Chilopsis linearis</i></u> Desert Willow	24" Box	7	L	Multi
	<u><i>Chitalpa tashkentensis</i></u> Chitalpa	24" Box	4	L	Standard
	<u><i>Cupressus sempervirens</i></u> Italian Cypress	24" Box	6	M	Standard
	<u><i>Lagerstroemia</i> i 'Muskogee'</u> Crape Myrtle	24" Box	5	M	Standard
	<u><i>Platanus acerifolia</i></u> London Plane	24" Box	3	M	Standard
	<u><i>Rhus lancea</i></u> African Sumac	36" Box	4	L	Standard
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*	<u>Dietes bicolor</u> Fortnight Lily	5 Gal	127	M	
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	<u>Carissa m. 'Green Carpet'</u> Prostrate Natal Plum	1 Gal	36" O.C.	M	
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NOTES:

1. ALL TREES WITHIN 5' OF HARDSCAPE SHALL BE IN A LINEAR ROOT BARRIER. ROOTBARRIER.
 2. CONTRACTOR TO INSTALL CONCRETE MOW CURB BETWEEN PLANTERS AND GRAVEL AREAS. SEE PLANTING DETAIL SHEET.
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Project

SLOVER AVE INDUSTRIAL CENTER

16225 Slover Ave.
Fontana, CA
APN: 0255-031-06

SLOVER JUNIPER LLC

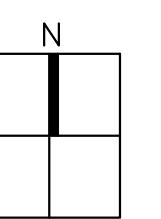
5020 Campus Drive
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949-296-7006

Submittals	
Date	Description
11.03.20	1st Submittal
03.24.21	2nd Submittal

Revisions		
	Date	Remarks
↑	01.07.21	ASI Deltaq #1

Sheet Title

Planting Plan



Scale 1" = 20'

Date 03/24/21

Drawn by TH

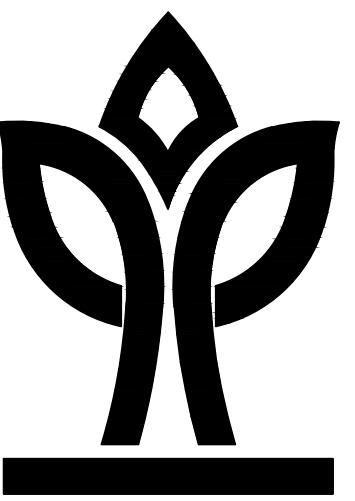
Job Number 20-010

No
LP-2

This technical drawing shows a detailed architectural cross-section of a building's interior and exterior. The structure features multiple levels, including a ground floor with a thick concrete slab supported by columns, and upper floors with various rooms and openings. A central vertical shaft or elevator core is visible. Numerous labels, such as H078, H077, H076, H075, and H074, are placed near specific structural elements like beams, columns, and walls. A horizontal dashed line at the top is labeled "MATCHLINE SEE SHEET LP-1". The drawing uses a combination of solid lines for primary structures and dashed lines for secondary or reference elements.

MATCHLINE SEE S

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HUNTER LANDSCAPE

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INDUSTRIAL CENTER

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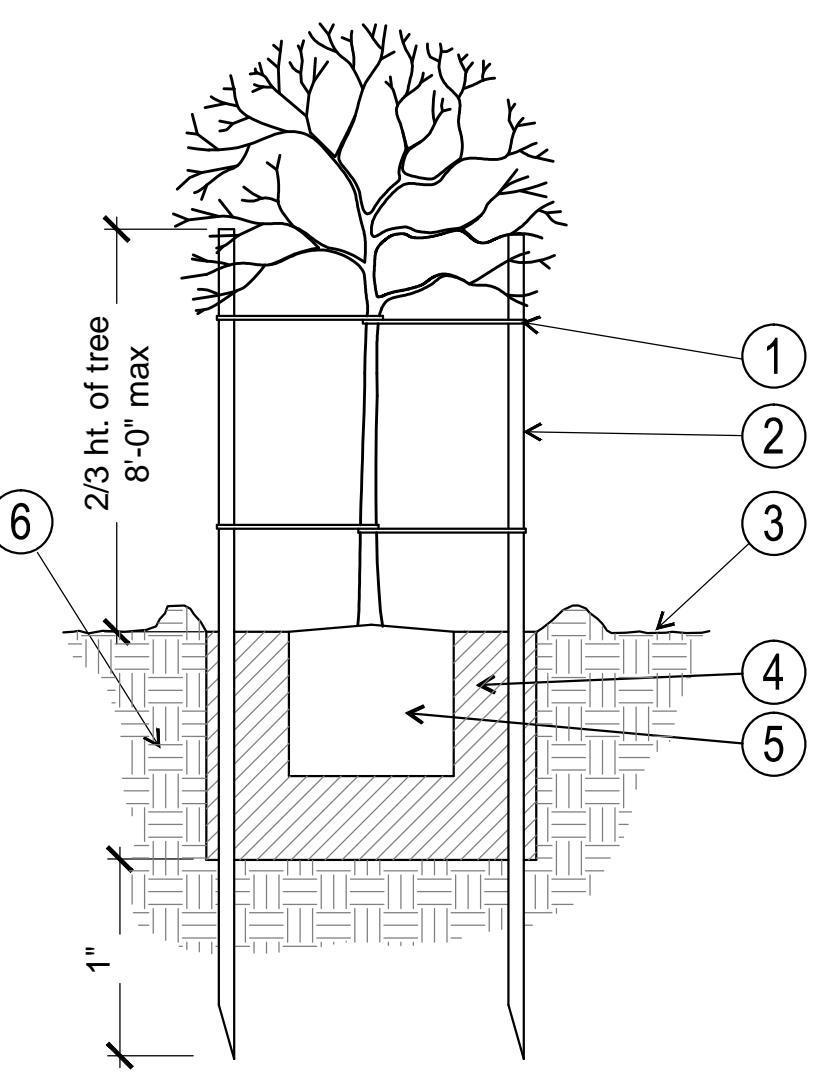
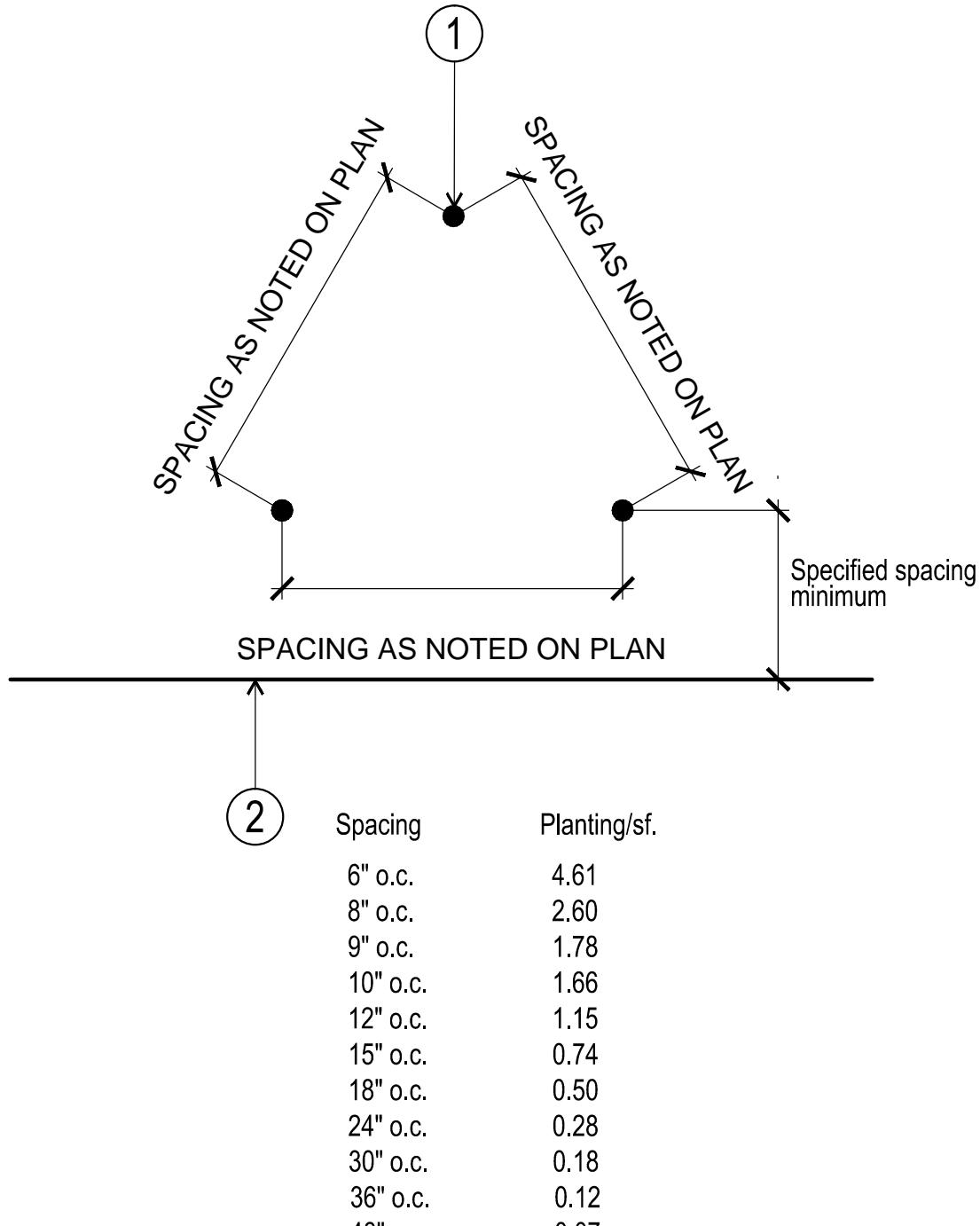
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Date	Description
11.03.20	1st Submittal
03.24.21	2nd Submittal

Revisions	
Date	Remarks
01.07.21	ASI Delta #1

Sheet Title

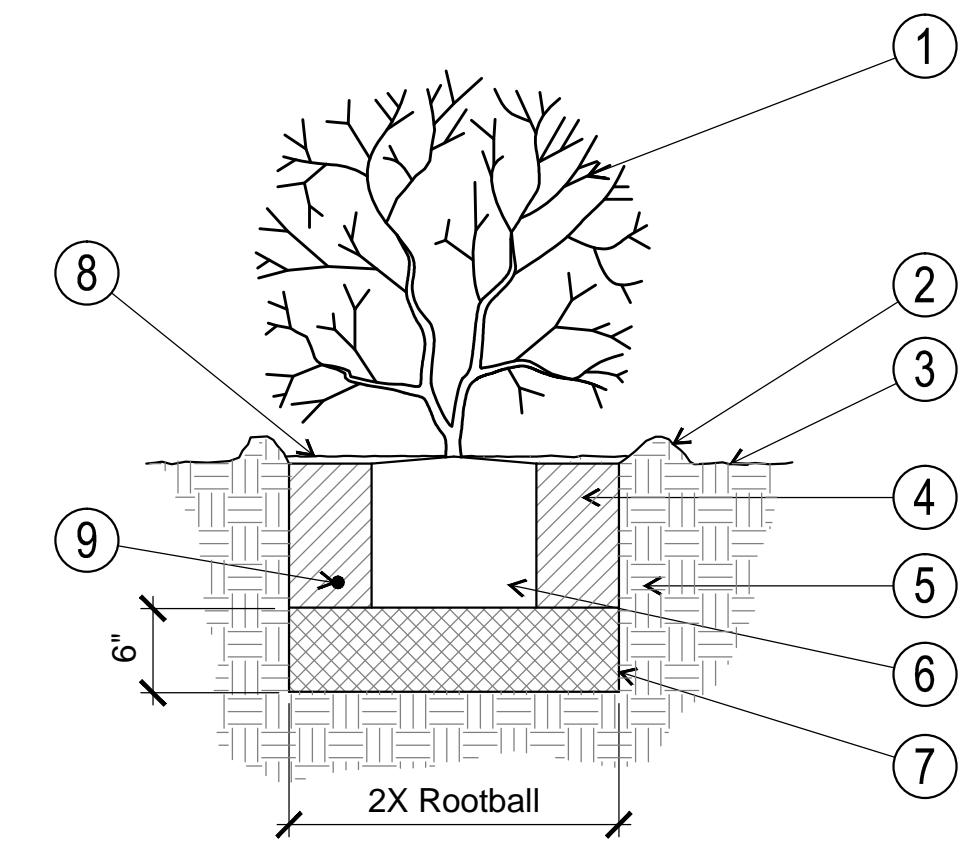
Planting Details

Scale
Date 03/24/21
Drawn by TH
Job Number 20-010
Sheet No LP-3



LEGEND:

1. 1/2" I.D. reinforced rubber hose Cinch Tie (V.I.T.)
2. 2" dia. x 10' long lodgepole pine stakes. Place stakes at outer edge of rootball.
3. Finish grade.
4. Backfill mix, see specifications.
5. Undisturbed soil.
6. Rootball, size varies. Set 1" above grade.
7. 6" deep compacted backfill below rootball unless stated otherwise in the specs or a agronomic report.
8. 1" approved mulch, see specifications.
9. Plant tablets, see specifications.

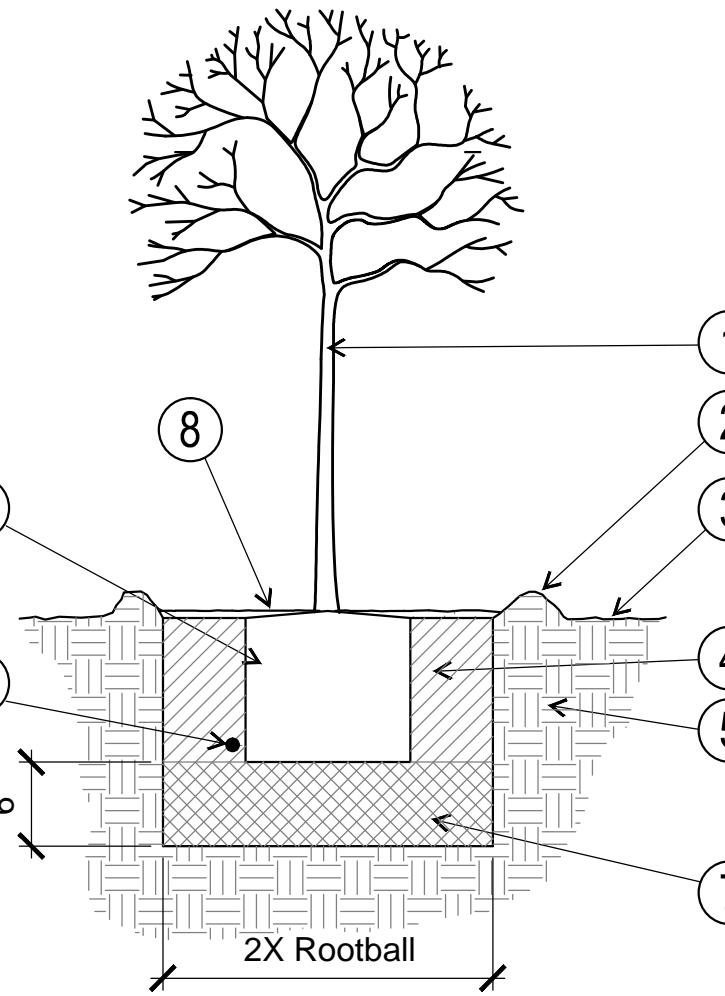


LEGEND:

1. Tree
2. 4" deep temporary water basin.
3. Finish grade.
4. Backfill mix, per specifications.
5. Undisturbed soil.
6. Planting tablets, per specifications.
7. 6" compacted backfill below rootball unless stated otherwise in the specs or a agronomic report.
8. 1" approved mulch per specs.
9. Rootball, size varies. Set 1" above grade.

NOTES:

1. Scarify the sides and bottom of planting pit.
2. Prior to plant placement, fill all backfill pits with water and allow to percolate into subsoil.
3. Plant rootball and backfill mix must be thoroughly watered indirectly after planting.



LEGEND:

1. Tree
2. 4" deep temporary water basin.
3. Finish grade.
4. Backfill mix, per specifications.
5. Undisturbed soil.
6. Planting tablets, per specifications.
7. 6" compacted backfill below rootball unless stated otherwise in the specs or a agronomic report.
8. 1" approved mulch per specs.
9. Rootball, size varies. Set 1" above grade.

NOTES:

1. Scarify the sides and bottom of planting pit.
2. Prior to plant placement, fill all backfill pits with water and allow to percolate into subsoil.
3. Plant rootball and backfill mix must be thoroughly watered indirectly after planting.

⑤ Triangular Spacing Diagram

Scale: N.T.S

③ Tree Staking Detail

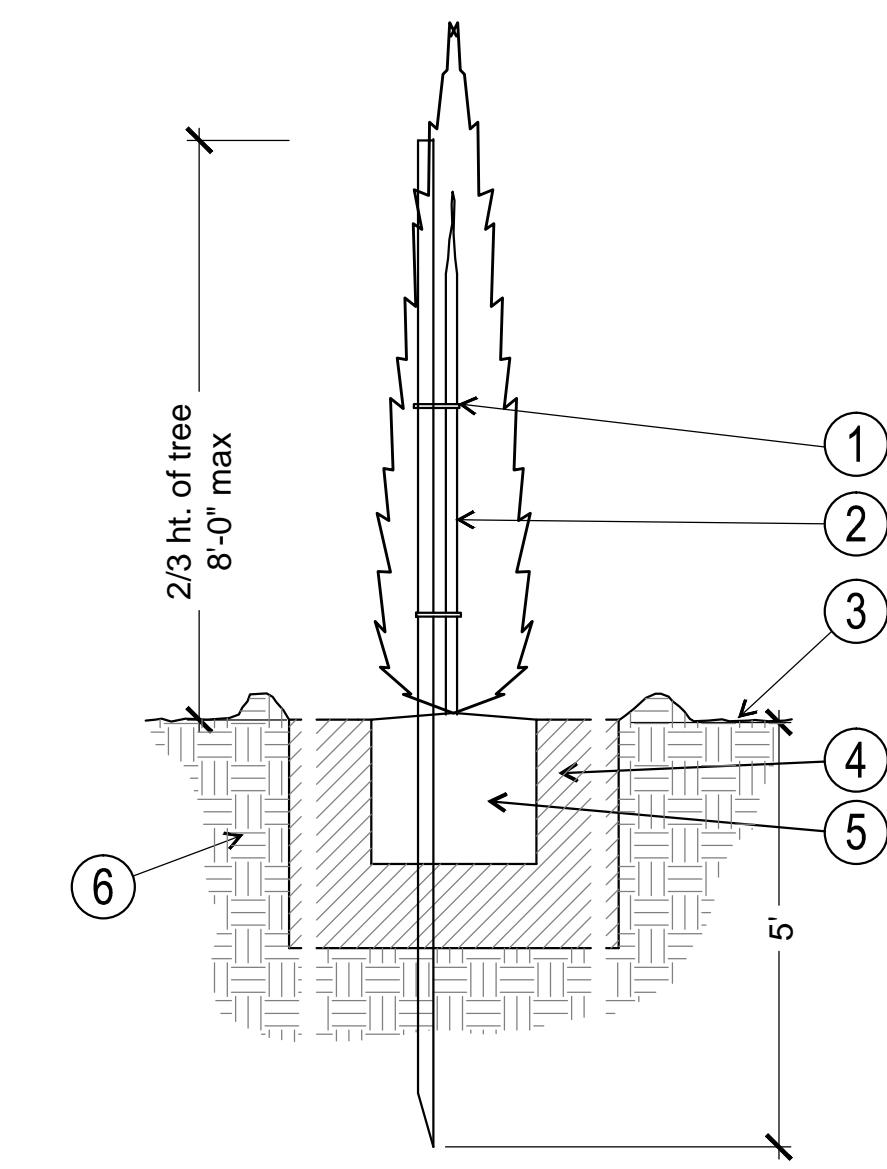
Scale: N.T.S

② Shrub Planting Detail

Scale: N.T.S

① Tree Planting Detail

Scale: N.T.S



LEGEND:

1. (V.I.T.) Twist Brace.
2. 2" dia. 10' long galvanized pipe painted green.
3. Finish grade.
4. Plant pit.
5. Rootball.
6. Undisturbed soil.

⑦ Cypress Staking Detail

Scale: N.T.S

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CONCRETE SPECIFICATIONS

- SCOPE**

Furnish and install all concrete work complete as indicated on the drawings and specified, including:

 - Furnish and set all reinforcing steel, bolts and anchors.
 - Install all items required by other trades, which are to be cast into concrete.
 - Concrete mow strips, footing for: walls, fencing, benches, etc., where applicable.

GENERAL

All requirements of subsection 3.31, standard specifications for Public Works construction, shall apply except as specified herein.

MATERIALS

 - Portland cement shall conform to ASTM-C150, Type I or Type II.
 - Concrete aggregate shall conform to ASTM-C33.
 - Water shall be clean, free from strong acids, alkali, oil or organic matter.
 - Admixture for all formed concrete shall be SIKA Chemical Corp's "Plastiment", or approved equal, applied in strict accordance with manufacturer's directions.
 - Reinforcement:** reinforcing steel ASTM-A15 and ASTM-A305.
Wire fabric: ASTM-A185.
 - Forms**
 - Lumber shall be "construction grade" Douglas fir.
 - Plywood for forming of concrete which is exposed shall be Plyform. All plywood used for forming shall be at least 5/8" thick, and edge sealed.
 - Expansion joint filler shall conform with ASTM-D1751 (pre-molded).

CONCRETE

 - Quality**
 - Contractor assumes responsibility for the design mix and guarantees the specified ultimate strength as indicated or specified herein.
 - Concrete, minimum 28-day ultimate strength shall be 2,000 psi.
 - Ready-mixed concrete shall conform to ASTM-C94.
 - Proportions and Consistency**
 - The proportions of aggregate to cement shall provide a dense mixture, which will readily work into all corners of the forms and around all reinforcements without any segregation of the materials, cause excess free water to collect on the surface or cause excessive bleeding of the forms.

Control

The concrete quality, proportions, consistency, etc., is subject to the approval of Owner, and no changes shall be made without his prior written approval.

FORMWORK

 - Forms for concrete work shall be either metal or wood. Forms that are warped or that do not have a smooth straight upper edge shall not be used. Forms shall be set with the upper edge of the board true to line and grade and shall be staked rigidly in place with stakes set not more than four feet (4') apart so as to remain immovable throughout the construction. All forms shall be approved by Owner within a tolerance of one percent (1%). All materials shall be accurately and separately weighed and mixing shall continue until the distribution of material is uniform and the mass of concrete is homogeneous.
 - Two and one-half (2½) gallons of water per cubic yard, shall be withheld from the mix at the plant, and all or a portion may be added to the mix at the job site as directed by the Inspector. The concrete shall be mixed at least 5 minutes after such water is added and not less than 3 minutes of this time shall be immediately prior to the discharge of the batch. Total mixing time after adding original water shall be at least 15 minutes.
 - Concrete which is not placed within 90 minutes after the introduction of cement and water, and concrete which has stood for 30 minutes after leaving the mixer, shall not be used.

CONVEYING AND PLACING

 - Before pouring, all forms shall be thoroughly cleaned and made tight. The bottoms of trenches shall be wet down before pouring footings; earth shall not be muddy at the time of pouring. Concrete shall not be placed until reinforcements, rough hardware, and forms are approved by the Owner.
 - Before depositing new concrete against old concrete, all laitance shall be removed, and the surfaces roughened to expose the embedded aggregate. The surfaces shall then be covered with cement grout, using the specified mix with ½ of the coarse aggregate omitted, 1½ inches thick.
 - Conveying and placing of concrete shall be done so as to prevent separation of ingredients, and in no case shall the free fall exceed 6 feet (6'). Tremies shall be used as required. Surfaces of concrete shall be kept reasonably level, with a minimum amount of concrete being allowed to flow after being placed. Placing shall be performed as a continuous operation until each section is completed.
 - Concrete shall be spaded and vibrated with mechanical vibrators to a maximum subsidence, without separation of ingredients. The moving of concrete by vibration will not be permitted.

GROUT

 - Grout shall be composed of one part Portland Cement and two parts of fine aggregate by volume. Materials shall be mixed dry and water added just sufficient to make the mixture flow under its own weight.

For dry tamp cement grout, a minimum of water shall be added to the mix so that when wet sample is squeezed hard in the hand, surface moisture, but no free water, shall appear on the sample. Do not mix more than can be used in 30 minutes.

CURING AND PROTECTION

 - All exposed surfaces of concrete shall be protected from damage due to temperature, elements, and construction operations.
 - Curing**
 - All exposed surfaces of concrete shall be protected from premature drying and freshly placed concrete shall be kept wet for a period of ten days (10) after placing. In order that curing water may reach both surfaces of walls, the forms shall be loosened and water shall be poured over the tops of the walls and allowed to run down between the concrete and the forms.
 - All liquid curing compounds shall be used in accordance with the manufacturer's recommendations and shall not be used on surfaces receiving concrete hardener.

9. DEFECTIVE CONCRETE

 - Concrete which is not in accordance with these specifications, out of line, level or plumb: showing structural cracks, rock pockets, voids, spalls, honeycombing, exposed reinforcing or other damaged surfaces shall be considered as defective.
 - All fins and irregularities shall be removed from exposed concrete surfaces while the concrete is still green. Where patching is required, all loose and uniform concrete shall be removed prior to patching. Minor rock pockets and honeycombing shall be patched with dry pack concrete.

10. CONCRETE FINISHES

 - Flat surfaces shall be screeded to the required levels and slopes and then any excess water and laitance removed. Concrete shall be compacted with a grid tamper and then floated to a true and level surface within the tolerance of 1/8 inch along a 10 inch straight edge. See plans for concrete finish in landscape areas.

11. EXPANSION JOINTS

 - Placement of expansion joints shall be as directed and determined by layouts of slab markings noted e.g. on Drawings. Expansion joint materials shall be Quick Joint, or approved equal, or as noted in Plans.

12. PROTECTION

 - All finished concrete work shall be barricaded to pedestrian traffic for three (3) days. Barricades shall be placed immediately after concrete finishing. The Contractor shall furnish, place and remove all of his own barricades. The Contractor shall be responsible for any damage to new construction and replacement or repair of the work shall be made without added cost to the Owner.

13. PATCHING

If patching is necessary or permissible, a bonding agent such as Weld-Crete, or equal, shall be used.

14. CONCRETE CURBS

Construct concrete curbs at locations shown on Plans as detailed, true to line and grade, as approved by the local County or City. Use natural gray Portland Cement Concrete, 2,000 psi compressive strength. Locate expansion joints as detailed or shown, and as directed, at intervals not to exceed fifteen feet (15'). Finish with steel trowel, then brush with bristle brush parallel to face or edge.

15. CLEAN UP

Upon completion of all concrete work and before final acceptance, the contractor shall remove all tools, surplus materials, apparatus, debris, etc., from the site and the site shall be left in a clean, neat condition acceptable to the Owner.

REFERENCE ONLY for water efficiency purposes. May require separate Building and Safety Division Construction permit.

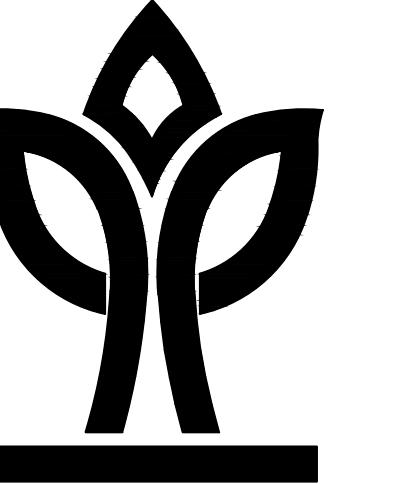
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Submittals	
Date	Description
11.03.20	1st Submittal
03.24.21	2nd Submittal

Specifications

Specifications

Scale	
Date	03/24/21
Drawn by	TH
Job Number	20-010
Sheet No	S-1



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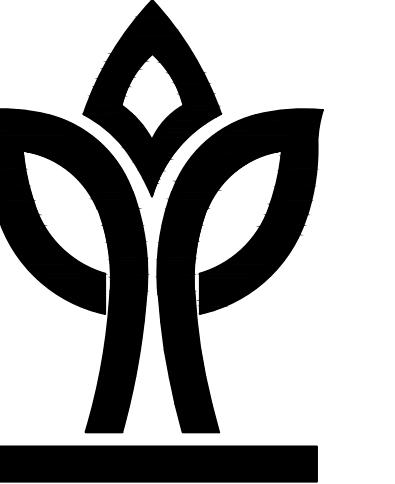
711 S. Fee Ana Street
Placentcia, California 92870
Ph: 714.986-2400
Fax: 714.986-2408



Project

SLOVER AVE INDUSTRIAL CENTER

SLOVER JUNIPER LLC



HUNTER LANDSCAPE

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Project
SLOVER AVE
INDUSTRIAL CENTER
16225 Slover Ave.
Fontana, CA
APN: 0255-031-06

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LANDSCAPE CONSTRUCTION

1. SCOPE

The scope of this section includes all labor, materials and equipment required to complete work indicated on the drawings. The work shall be performed in accordance with the best standards practiced relating to the various trades and under the continuous supervision of a competent foreman, capable of interpreting the drawings and these specifications. The work included in this section is as follows: Finish Grading for Planting; Soil Preparation; Fertilization; Planting, including Lawn; Maintenance; Inspection and Certifications; Guarantees; Cleanup; Staking; Guying; Espaliering; and Miscellaneous Allowance.

2. APPROVALS

- A. All sprinkler work shall be inspected and approved prior to the start of any work.
- B. Prior to excavation for planting or placement of stakes, locate all utilities, electric cables, conduits, sprinklers lines, heads, valves and control wires, and all utility lines so that proper precautions may be taken not to damage such improvements. In the event of a conflict between survey and plant locations, promptly notify Landscape Architect (LA) who shall advise and relocate for one or the other. Failure to follow this procedure places upon Contractor the responsibility for, at his own expense, making any and all repairs for damages resulting from work hereunder.

3. QUANTITIES AND TYPES

Plant materials shall be furnished in the quantities and /or spacing as shown noted for each location, and shall be of the species, kinds, sizes, etc. as symbolized and/or described in the "Plant Materials Legend", as indicated on the drawings. The LA has prepared this list only as a convenience to Contractor and assumes no responsibility for its accuracy. The Landscape Contractor is to verify all sizes and quantities.

4. VERIFICATION OF DIMENSIONS AND QUANTITIES

Dimensions are approximate before proceeding with any work. Contractor shall verify all dimensions and quantities and shall immediately inform LA and Owner of any discrepancies between the drawings and/or specifications and actual conditions. No work shall be done in any area where there is such a discrepancy until approval for same has been given by LA and owner.

5. INSPECTION

- A. All inspections shall be made by LA and Owner. Contractor shall request inspection at least two (2) days in advance of the time inspection is required.
- B. Inspection will be required for the following parts of the work:
 - (1) During finish grading and soil preparation.
 - (2) Plants, after delivery to site and prior to planting.
 - (3) When vines, shrubs and trees are spotted for planting. But planting holes are not excavated.
 - (4) Specimen trees at source before delivery.
 - (5) Lawn areas prior to planting.
 - (6) Planting areas prior to planting.
 - (7) All landscape construction items, prior to the start of the calendar day maintenance period ("Initial Inspection")
 - (8) At completion of calendar day maintenance period ("Final Maintenance Inspection").
 - (9) Inspection reports shall be made for each inspection by the LA and one copy shall be submitted to Owner and Contractor.

6. CERTIFICATION

Prior to job acceptance written certifications shall be submitted to the LA for the following:

- A. Quantity and Quality for Commercial Fertilizer and Organic Fertilizer.
- B. Quantity and Quality of all Soil Amendments called for by Plans and Specifications

7. MATERIALS

Plant materials indicated on the drawings and herein specified shall conform to the following:

- A. Nomenclature - Plant names indicated on the drawings conform to "Standard Plant Names" established by the American Joint Committee on Horticulture. Except for names covered therein, the established custom of the nursery followed.
- B. Condition - Plants shall be symmetrical, typical for variety and species, sound, healthy, vigorous, free from plant diseases, insects pests, or their eggs, and shall have healthy, normal root systems, well filling their containers, but not the point of being root bound. Plants shall not be pruned prior to delivery, except as authorized by the LA or his representative. In no case shall trees be topped before delivery.
- C. Dimensions - The height and spread of all plant material shall be measured with branches in their normal position, and shall as indicated on the drawings. The caliper of all trees shall be measured 4"-0" above the surface of the ground. Where caliper other dimensions of any plant material are omitted from the "Plant Legend", it shall be understood that these plant material shall be checked for type listed.
- D. Inspection - All plant materials must have been previously inspected at the nursery by the County Horticultural Department shall be subject to the inspection and approval of the LA before planting.
- E. Plant List - is indicated on drawings.
- F. Size of Plants - Shall be as stated on the plan. Container stock (1 - gallon, 5 gallon and 15 - gallon), shall have been grown in containers for at least one (1) year, but not over two years.
- G. Substitutions - Substitutions for the indicated plant materials will be permitted provided the substituted materials are approved in advance by the LA, and the substitutions are made at no additional cost to Owner. Except for authorized variations, all substitute plant materials shall conform to the requirements of these specifications. If the accepted substitute plant materials are of a less value than those indicated or specified, the Contract price will be adjusted in accordance with the provisions of the Contract.
- H. Plants Not Approved - Plants not approved are to be removed from site immediately and replaced with suitable plants. The LA and/or Owner reserves the right to reject entire lots of plant represented by defective samples.

8. FERTILIZERS AND SOIL CONDITIONERS

Samples of all soil amendments, sod and plants shall be submitted for inspection and stored on the site until furnishing of materials is completed. Delivery may begin upon approval of samples or as directed by LA and the Owner.

- A. Organic fertilizer shall be processed sewage sludge with a minimum content of 1% Nitrogen and 2% Phosphoric Acid similar to "Nitromhumus". Method of processing shall not destroy normal bacterial content.
- B. Nitrogen stabilized sawdust shall be bulk, with the following nitrogen content based on dry weight:
0.5% for redwood Sawdust
0.7% for Fir Sawdust
1.0% for Bark or Pine Bark or mixture
Salinity - the saturation extract conductivity shall not exceed 3.5 millimhos/cm at 25
- C. Commercial fertilizer shall be delivered in sacks with manufacturer's label showing weight and analysis attached to each sack.

9. STAKING MATERIALS

- A. Tree staking shall be as per plan.
- B. Ties for holding trees shall be as per plan.

10. GRADING AND SOIL PREPARATION

- A. Contractor is to finish grade to 1/10th of a foot or 1" below paving where paving exists.
- B. Moisture Content - the soils shall not be worked when the moisture content is so great that excessive soil will be lost, and not when it is so dry that dust will form in the air or that clods will not break readily. Water shall be applied if necessary to provide initial moisture content for tilling and for planting.
- C. Preliminary Grading - Preliminary grading shall be done in such manner as to anticipate the finish grading. Excess soils to be replaced by plants and mulch, allowance shall be made so that when finish grading has begun, there shall be no deficiency in the specified depth of mulched planting beds.
- D. Weeding - Before and during preliminary and finish grading, all weed and grass shall be dug out by hand and discarded out of site except those weeds and grasses of the perennial type, less than 2-1/2" high and not bearing seeds, which may be turned under. One more than 21/2" high and not bearing seeds may be turned under. Perennial weeds and grasses to be removed include, but are not limited to, the following: Nut Grass, Puncture Vine, Dallas Grass, Mustard Plant, St. Augustine, Alfalfa, Johnson Grass, Wire Weed, Morning Glory.

11. SOIL CONDITIONERS

- A. Turf, Ground Cover and Shrub Area With the exception of the slopes the areas to be landscaped should be cross-raked or otherwise raked to a depth of 9-12 inches. For turf and ground cover planting, the following amendments should be performed by broadcast application incorporating 6 cu. yds. of rockwool or equivalent. AMT 1-1000 Square Feet 6 cu. yds., nitrogen stabilized organic amendment denim form redwood sawdust, fir sawdust or cedar sawdust 12 lb. 16-20-0 ammonium phosphate (to be incorporated to the 6" depth following leaching). Following amending and prior to planting, including trees and shrubs, leaving irrigation shall be applied to a rate of 12 gpm/1000 square feet, pass the minimum of 12 inches of water through the soil and sand zone. When the leaching program has been completed, additional samples should be collected for soil fertility analysis only.

12. FINISH GRADING

When preliminary grading, including weeding and fertilizing, has been completed and the soil has dried sufficiently to be readily worked, all lawn and planting areas shall be graded to the elevation indicated on the drawings. Grades not otherwise specified shall be uniform slopes or levels between points where elevations are given. Minor adjustments of finish grades shall be made at the direction of the LA, if required.

- F. Finish grade shall be a smooth, even and uniform plane without abrupt change of surface. Soil areas adjacent to buildings to allow a natural run-off of water, and surface drainage shall be directed as indicated on the drawings by remodeling surfaces to facilitate the natural run-off of water. Low spots and potholes shall be one inch below grade of adjacent pavement of any kind. Grading shall be done when soil is at optimum moisture content for working.
- G. The prepared soil shall be uniformly blended in an area adjacent to the plant work and shall be accurately proportioned using a suitable measuring container. Excavation soil shall be removed from site. Protect the mix from water until has been placed in backfill around plants.

13. METHOD OF PLANT AND WORK PROCEDURE

- A. No planting shall be done until all operations in conjunction with the installation of the irrigation system have been completed, final grades have been established, the planting areas have been properly graded and prepared as specified, and the work approved by the LA.
- B. The relative position of all trees and plants is subject to approval by LA and Owner, and they shall, if necessary, be relocated as directed of the contract.
- C. All plants shall be removed from their container and set so that, when settled, they bear the same relation to the required grade that they bore to the natural grade before being transplanted. Each plant shall be planted in the center of the pit and backfilled unless otherwise specified, with the prepared soil. No soil in muddy condition shall be used for backfilling. No fillers shall be permitted around trunks or stems. All broken or frayed roots shall be properly cut off.
- D. LA and/or Owner shall supervised the placing and planting of all plants.
- E. In the event the underground construction work or obstructions are encountered in the planting operation, alternative locations for plant material will be selected by LA and Owner; operation will be done at no extra cost to Owner.

14. PLANTING OF TREES

- A. Position plants in plant location as indicated on drawings and secure approval before excavating pits, making necessary adjustments as indicated.
- B. All pits for trees shall be dug square with bottom level, the length of sides equal to 2 1/2 times the diameter of the tree ball. Compacted soil at sides and bottom shall be loosened by scarring or other approved method. Pits shall be backfilled with "prepared soil" to the required grade, and the balance of the pit filled with "prepared soil" thoroughly settled by water application.
- C. Set plant in center of pit, in a vertical position, so that crown of ball will be level with finish grade after allowing for watering and settling and shall bear the same relationship to the finish grade that it did to the soil surface in the container.

Prepare depressed water basin as wide as plant balls at each plant. Water thoroughly, backfilling any voids with additional prepared plant mix.

15. PLANTING VINES SHRUBS AND GROUND COVERS

- A. Vines and shrubs shall be planted in pits at least 18" greater than their ball of earth and at least 12" deeper than the original ground level. Prepared soil at bottom of pit shall be loosely packed and filled with "prepared soil" to the bottom of the ball. When the plant has been properly set, the pit shall be filled to the required grade with "prepared soil" and thoroughly fastened in an approved manner to the wall, fence or other surface next to which they are planted.
- B. Prepare a depressed water basin as wide as plant balls at each plant. Water thoroughly, backfilling any voids with additional prepared planting mix.
- C. Ground Covers
 - (1) Pits for flat seeded plants to be at least 6"x6"x6". Ground cover areas shall be moistened prior to planting. No flat plants shall be planted in dry soil.
 - (2) Set plants in center of pits so that crown of plant will be level with finished grade after settling of soil, then backfill and water
 - (3) Flatted plants shall be well-rooted with runners at least 4" but not more than 6" in length.

16. TREES AND VINES OCCURRING IN LAWNS

Trees and vines occurring in lawn shall be planted before final preparation of those areas.

17. CARE OF PLANTS BEFORE AND DURING PLANTING

- E. All planting areas shall be scarified to a depth of 12 inches below grade with the spacing of the ripper teeth no greater than 12 inches on center prior to placing conditioners and fertilizers. All rock and debris more than 2" in diameter shall be removed from the site.
- F. Trenches - If irrigation system is installed after grading and fertilizing is completed, the upper portion of the backfill shall be retilled and fertilized to the depth specified for the area required, to conform to the specifications.

18. SOIL CONDITIONERS

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19. SOILS

- A. Turf, Ground Cover and Shrub Area With the exception of the slopes the areas to be landscaped should be cross-raked or otherwise raked to a depth of 9-12 inches. For turf and ground cover planting, the following amendments should be performed by broadcast application incorporating 6 cu. yds. of rockwool or equivalent. AMT 1-1000 Square Feet 6 cu. yds., nitrogen stabilized organic amendment denim form redwood sawdust, fir sawdust or cedar sawdust 12 lb. 16-20-0 ammonium phosphate (to be incorporated to the 6" depth following leaching). Following amending and prior to planting, including trees and shrubs, leaving irrigation shall be applied to a rate of 12 gpm/1000 square feet, pass the minimum of 12 inches of water through the soil and sand zone. When the leaching program has been completed, additional samples should be collected for soil fertility analysis only.

20. WATERING BASINS

- A. Cultivate all lawn areas to a depth of 8". Rocks and debris larger than 1" in diameter which are brought to the surface by cultivation shall be removed from the site. If cultivation does not break lumps, a spike tooth harrow shall be pulled behind a mechanical seeder or tractor.

21. SODDED LAWNS

- A. Areas to be planted in lawn shall be finished smooth to present a neat and uniform grade prior to installation of sod. The lawn bed shall be inspected by the LA to determine suitability for planting prior to sodding. Contractor shall obtain such approval before sodding

22. HYDROSEED

- A. Construct a firmly compacted mound of soil around each tree and plant to form a watering basin at the edge and following the shape of the planting pit area. Mounds of trees and for vines or plants not otherwise specified shall be at least 2" high. Excavated earth if capable of retaining water, may be used. Any settlement within the basins retaining water shall be repaired to the required grade with prepared soil, and additional nitrogen stabilized sawdust worked into the soil as required to restore the mud condition.

23. CLEAN-UP

- A. Upon completion of the work in this section, Contractor shall remove all rubbish, trash and debris resulting from the operations; remove disused equipment and implements of service; leave entire area involved in a neat and acceptable condition such as to meet the approval of the Landscape Architect (LA).

- 29. HYDROSEED

1. GENERAL

- A. Equipment must have minimum capacity of 1500 gallons and a positive displacement pump with the ability to agitate and properly mix the specified materials. Pump must be capable of creating 100 pounds psi pressure with sufficient volume to distribute above slurry evenly over 12,000 sq. ft. within a 15 minute period.
- B. Vendor furnished label: Vendor agrees to furnish not less than two (2) employees during all hydroseeding applications.
- C. The vendor shall fully guarantee his work and services and shall be fully insured and be prepared to furnish satisfactory evidence of such insurance upon demand.

2. SLOPE & PLANTING AREA PREPARATION

- A. Scarification - Prior to installation of the irrigation system, the surface of all slopes shall be cleaned and grubbed to prepare the slope surface for weeding.
- B. Mulch - shall be Silva Fiber Plus (at 2,000 pounds per acre), a green colored, fibrous mulch, no growth or germination inhibiting factors. Silva Fiber Plus is manufactured in such a manner that after seed germination, the mulch becomes uniform mixed to form a homogeneous slurry; and using the green color to facilitate proper distribution, the slurry shall be hydraulically sprayed onto the ground forming a blotter-like ground cover which after application will allow the absorption and retention of moisture. Suppliers shall be prepared to certify the laboratory and field testing of the mulch to ensure that it has been accomplished, and meets all applicable requirements based on testing. When supplies of these materials from suppliers, and for all application, shall refer only to air dry weight of the fiber material. Absolute dry weight based on the normal standards of the Technical Association of the Pulp Industry for Silva Fiber Plus is considered equivalent to 10% moisture. Each package of Silva Fiber Plus shall be marked by the manufacturer to show the air dry weight content.

3. SEED MIXES FOR TURF

- Turf Seed Mix: "Rebel"
45,000 sq ft - 1 cu yd
250.00 #/cu yd cellulose fiber
550.00 #/cu yd tall fescue blend
400.00 #/cu yd 12-15-15 commercial fertilizer

4. WEED ABATEMENT PROGRAM

- Upon completion of the irrigation system and after all existing weeds have been removed from the planting areas, the following weed preservation shall be used:

5. TREE STAKING

- A. Stake all non-guyed trees at time of planting by placing stake in the prepared hole and driving it 18" into solid ground. Plant the tree as close to the stake as possible without crowding the roots. Fasten the tree to the upper end of stake in at least two places using "V.I.T. Cinch-Tie". (see drawings)

6. TREE STAKING

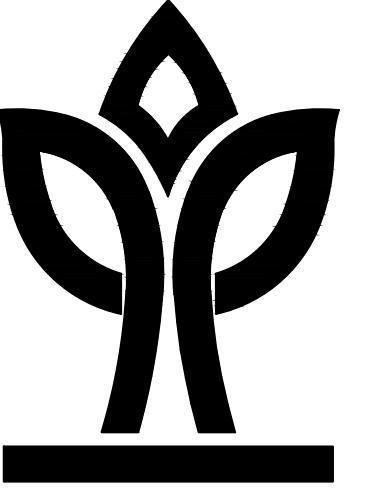
- B. Tree 48" box size or larger, shall be immediately guyed after planting with not less than three guys per tree, or as directed by the LA

7. ESPALIER OF VINES

- All trellises and stakes are to be removed from plants and the plants shall be fastened and trained against fences or walls as directed by the LA

8. CERTIFICATES

- In addition to any other certificates specified, Contractor shall furnish a certificate with each delivery of hulk material, stating the source, quantity and type of material and that the material conforms to the specification requirements. For bulk delivered organic fertilizer, the certificate shall also state the



HUNTER LANDSCAPE

711 S. Fee Ana Street
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Project

SLOVER AVE
INDUSTRIAL CENTER

16225 Slover Ave,
Fontana, CA
APN: 0255-031-06

APPROVED
3/29/2021 @ 11:20 AM

SLOVER JUNIPER LLC

5020 Campus Drive
Newport Beach, CA 92660
949-296-7006

Submittals		
Date	Description	
11.03.20	1st Submittal	

Revisions		
Date	Remarks	
01.07.21	ASI Delta #1	

Sheet Title

Specifications

Scale

Date 03/24/21

Drawn by TH

Job Number 20-010

Sheet No LS-3

IRRIGATION

1. SCOPE

Furnish all materials, tools, equipment and labor required to install a complete operable irrigation system as indicated on the drawings, as specified and as necessary to complete the contract, including, but not limited to, these major items:

- A. Irrigation system and related appurtenances.
- B. Connections to water and electrical utilities.
- C. Excavation and backfill of pipe trenches.
- D. Record drawings and guarantees.
- E. Permits and licenses.
- F. Testing of completed systems.
- G. Cleanup.

2. QUALITY ASSURANCE

- A. Qualifications of Installers - Provide at least one person who shall be present at all times during execution of this portion of the work and who shall be thoroughly familiar with the type of materials being installed and the material manufacturers' recommended methods of installation and who shall direct all work performed under this section.
- B. Codes and Standards - In addition to complying with all pertinent codes and regulation, comply with the latest rules of the National Electrical Code and the Electrical Safety Orders of the State of California, Division of Industrial Safety Orders of the State of California, Division of Industrial Safety, for all electrical work and materials.

3. SUBMITTALS

- A. Materials List - Within thirty-five (35) calendar days after award of contract, and before any irrigation system materials are delivered to the job site, submit to the Owner a complete list of all irrigation system materials proposed to be furnished and installed.
 - (1) Show manufacturer's name and catalog number for each item; furnish the manufacturer's recommendations as to method of installation.
 - (2) Upon approval by the Owner, the manufacturer's recommendations shall become the basis for acceptance or rejection of actual methods of installation used in the work.
 - (3) Do not permit any irrigation system component to be brought onto the job site until it has been approved by the Owner or his representative.
 - (4) Approval of any item or alternate item indicates only that it apparently meets the requirements of the drawings on the basis of the information submitted, and does not relieve Contractor of any responsibility.
- B. As-Built Drawings
 - (1) During the course of installation, carefully show in red line on a print of the irrigation system drawings all changes made to the irrigation system during installation.
 - (2) Dimension from easily identifiable permanent features (buildings, monuments, sidewalks, pavement, etc.) points of connection (water and electrical), wire routing, sprinkler main routing, valve locations and other related equipment as directed by Owner.
 - (3) Upon completion of the irrigation system installation, carefully transfer the as-built data to reproduces as specified in the General Conditions and submit one legible copy as described under "As-Builds" below, to the Owner.
- C. Submittals of "As-Builds" - Upon completion of the irrigation system installation, and as a condition of its acceptance, deliver to the Owner the As-Built drawings referred to above. The delivery of the As-Built Drawings shall not relieve the Contractor of the responsibility of furnishing required information that may have been omitted.

4. Product Handling

- A. Protection - Use all means necessary to protect irrigation system materials before, during, and after installation and to protect the installed work and materials of all other trades.
- B. Replacements - In the event of damage, immediately make all repairs and replacements necessary to the approval of the Owner and at no additional cost to the Owner.
 - (1) Exercise care in handling, loading, unloading, and storing plastic pipe and fittings under cover until ready to install; transport plastic pipe only on a vehicle with a bed long enough to allow the pipe to lay flat to avoid undue bending and concentrated external load.
 - (2) Repair all dented or damaged pipe by cutting out the dented or damaged section and rejoining with a coupling.
- C. Connection to Utilities
 - (1) Source of water and power supply: Verify and be familiar with the location, size and detail of stubouts provided as the source of water and electrical supply to the irrigation system, as shown on the plans. Source of supply and point of connection shall be existing stub-outs at approximate locations as shown on plans (unless otherwise noted).
 - (2) Existing utilities and conditions: Prior to cutting into the soil, locate all cables, conduits, sewer septic tanks, and other utilities as are commonly encountered underground and take proper steps not to damage or disturb such improvements. If it becomes necessary to move such utilities, promptly advise the Owner and notify the Owner who will arrange for relocation. Proceed in the same manner if rock layer or any other conditions encountered underground make changes advisable.
 - a. Where investigation of subsurface conditions has been made by a qualified body in areas in which local materials may be obtained, the Contractor may request the use of such information but will be directly responsible for its verification and accuracy.
- D. Inspection
 - (1) At all times permit the Owner or his authorized agents to visit and observe the work or any part thereof. Maintain proper facilities and provide safe access for such observations to all parts of the work. Where the specifications require work to be tested, it shall not be covered up until tested or approved by the Owner and governing agencies. The Contractor shall furnish the results of the test to the Owner and required agency (48 hours notice minimum required), where and when such work is in readiness for testing. Should any such work be covered without such test or approval, it shall, if so ordered, be uncovered at the Contractor's expense.
 - (2) Observations Required
 - a. Prestant Meeting
 - b. Layout of control equipment and heads.
 - c. Main line pressure test and trench depth check.
 - d. Lateral trench depth check.
 - e. Coverage test and prefinal observation.
 - f. Final observation.

- E. Standard of Installation - Material and workmanship shall be in accordance with local codes and ordinances of legally constituted authorities, except that where provisions of these specifications exceed such requirements, these specifications shall govern.

- F. Preservation and Cleaning - Clean-up all work as it progresses. At frequent intervals, and at all times when directed by the Owner, remove and dispose of accumulations of rubbish and debris of all kinds. At the time of completion, the entire site shall be cleared of tools, equipment, rubbish, etc., all of which shall be left in proper, clean condition ready for acceptance.

- G. Completion - The work shall be accepted in writing when the entire scope of work has been completed satisfactorily to the Owner. In judging the work, no allowance for deviation from the original plans and specifications will be made unless previously approved by the Owner.

- (1) When any item appears on the plan and not in the specifications, or in the specifications and not on the plan, it shall be considered in both.
- (2) The Owner or his authorized representative shall have the final authority on all items of the project.

- H. Equipment to the Furnished - Irrigation equipment, operating keys and spare parts shall be furnished to the Owner as shown on the plans.

- I. Service by the Contractor - The Contractor shall service the system at the Owner's request during the guarantee period and shall be paid for work performed which is not covered by the guarantee. If requested by the Owner, the Contractor shall furnish the Owner with a schedule of service fees.

- J. Final Acceptance - Within 10 days of the Contractor's notification that the installation is complete, the Owner and required agencies will observe the installation and, if final acceptance is not given, will prepare a "punch list" which, upon completion by the Contractor, and approved by the Owner, will signify final acceptance by the Owner.

K. Irrigation Guarantee

- (1) The entire irrigation system shall be unconditionally guaranteed by the Contractor as to material and workmanship, including setting of backfilled areas below grade for a period of one year following the date of final acceptance of the work.
- (2) If, within one year from the date of completion, settlement occurs and adjustments in pipe, valves, and irrigation heads, and/or paving to the proper level of the permanent grades, the Contractor as part of the work under this Contract, shall make all adjustments without extra cost to the Owner, including complete restoration of all damage, planning, paving or other improvements.
- (3) Should any operational difficulties in connection with the irrigation system develop within the specified guarantee period, which in the opinion of the Owner may be due to inferior material or workmanship, said difficulties shall be immediately repaired at no additional cost to the Owner, including any and all other damage caused by such defects.

- L. Permits and Licenses - Unless otherwise stated, secure the required licenses and permits including payments of charges and fees, give required notices to public authorities, and verify permits secured or arrangements made by others affecting the work of this section.

5. MATERIALS

Materials listed in this section encompass the general items encountered. If products listed below are not used for the project being installed, they are to be omitted.

6. PIPE

A. PVC

- (1) PVC Pressure Rated Pipe - Type 1220 (PVC Class 200 and 315 and PVC Schedule 40-1120).

- a. Type I Grade II pressure rated pipe.
- b. Materials shall meet requirements set forth in the ASTM current standards.
- c. Outside diameter of pipe shall be the same size as iron pipe.
- d. Pipe shall be marked at intervals not to exceed 5 feet with the following information:
Manufacturer's name, nominal pipe size, PVC type and grade (i.e. PVC 1220), S.D.R. rating class, NSF approval and commercial standard designation CS 256-63.
- e. PVC pipe shall comply with standards set forth in CS 256-63.
- f. PVC fittings shall be Schedule 40 or 80, PVC Type II.
- g. PVC fittings shall be Schedule 40 or 80, PVC Type II.
- h. Solvent shall be #715 Gray NSF approved as manufactured by Industrial Polymers Service, Gardena, California, or approved equal.
- i. Caution shall be used when cutting PVC pipe due to the possibility of cracking or splitting when dropped or handled carelessly.
- j. Where called for on drawings, pipe shall be bell end, conforming to ASTM-2672. Install concrete thrust blocks as recommended in Johns-Manville installation guide No. TR-624, where conditions dictate.

- (2) PVC High Impact Pipe - Type 2110 (PVC Schedule 40 and 80)

- a. Type II Grade I High Impact Pipe.
- b. Outside diameter of pipe shall be the same size as iron pipe.
- c. Pipe shall be marked at intervals not to exceed 5 feet with the following information:
Manufacturer's name, nominal pipe size, PVC type and grade (i.e. PVC 2110), schedule, NSF approval and commercial standard designation CS 207-60.
- d. PVC pipe shall comply with standards set forth in CS 207-60.
- e. PVC schedule 40 shall not be threaded.
- f. Fittings shall be PVC Schedule 40 or 80, Type II, NSF approved, as required.
- g. All threaded PVC pipe shall be Schedule 80, Type 2110.
- h. Solvent shall be #175 #715 Gray, NSF approved as manufactured by Industrial Polymers Service, Gardena, California, or approved equal.

- (3) UVR - PVC - "Brownline" pipe.
Where called for - on grade pipe shall be UVR - PVC pipe anchored at 10' intervals with re-bar. All UVR - PVC pipe shall be installed per manufacturer's recommendations.

- (4) When connection is plastic to metal, male adapters shall be used. The male adapter shall be hand tightened, plus one turn with a strap wrench. Joint compound shall be nonhardening sealing compound compatible to plastics. Compound must not lubricate the joint.

B. Brass Pipe

- (1) Where indicated on the drawings, brass pipe shall be red brass screwed pipe conforming to Federal Specification #WW-P-351.

- (2) Fittings shall be red brass conforming to federal specification WW-P-460.

C. Galvanized Pipe

- (1) Where indicated on the drawings, galvanized steel pipe shall be ASA Schedule 40, mild steel screwed pipe.

- (2) Fittings shall be medium galvanized screwed beaded malleable iron. Galvanized couplings may be merchant coupling.

- (3) All galvanized pipe and fittings installed below grade shall be painted with two (2) coats of Koppers #50 Bitumastic and wrapped with 20 mil tape.
- (4) All nondomestic galvanized pipe installed on grade shall be stenciled or identified with green tape at all connections and continuously along its length.

- D. Copper Pipe and Fittings - Where indicated on the drawings, copper pipe shall be type "K" sold soldered pipe.

7. Risers

All sprinkler heads shall have risers as shown in the detail drawings.

8. Valves

A. Gate Valves

- (1) Gate valves 3" and smaller shall be 125 lb. SWP bronze gate valve with screw-in bonnet, nonrising stem and solid wedge disc.
- (2) Gate valves 3" and smaller shall have threaded ends and shall be equipped with a bronze hand wheel or operating nuts.
- (3) Gate valves 3" and smaller shall be similar to those manufactured by Kennedy or approved equal.
- (4) All gate valves shall be installed per detailed drawings.

- B. Quick Coupling Valves - Quick coupling valves shall be of manufacturer shown on the drawings or approved equal. Each quick coupler shall have a molded vinyl locking cover. Upon completion of the contract and prior to final acceptance, supply the Owner with quick coupler keys and hose ends of the quantity called for on the plans. The quick coupler keys and hose ends shall be of the same manufacturer as the coupling valve. All Quick coupling valves shall be installed per detailed drawings.

- C. Remote Control Valves

- (1) The electric remote control valves shall be of the type and manufacturer shown on the drawings, or approved equal, and installed per detailed drawings and manufacturer's recommendations.

- (2) Valves shall be installed minimum 6' from all fixed objects and 12' apart.

- D. Pressure Regulating Valves - Pressure regulating valves shall be of the type and manufacturer shown on the drawings, or approved equal, and installed per detailed drawings and manufacturer's recommendations.

- E. Check Valves - Anti-drain valves shall be of heavy duty virgin PVC or brass construction with F.P.I. thread inlet and outlet. Internal parts shall be stainless steel and neoprene. Anti-drain valves shall be field adjustable against drain out to 5 to 40 feet of head. The anti-drain valve, where indicated on the plans, shall have an excess flow feature which will automatically stop the flow of water when it exceeds the GPM preset by the manufacturer. The anti-drain and excess flow valve shall be similar to the Valcon ADV-XS, Rain Bird SM-1 or approved equal. Sprinkler heads having check valves in heads will not require additional check valves.

- F. PVC Pipe

- (1) PVC pipe shall be installed in a manner which will provide for expansion and contraction as recommended by the pipe manufacturer. Routing is diagrammatic and shall be installed in such a manner as to conform with the details per the drawings.
- (2) Where cutting or breaking of existing pavement is necessary, secure permission from the Owner before cutting or breaking the pavement and then make all necessary repairs and replacements to the approval of the Owner and at no additional cost to the Owner.

- C. Inspection of Pipe and Fittings - Carefully inspect all pipe and fittings before installation, removing all dirt, scale, and burrs and reaming as required; install all pipe with all markings up for visual inspection and verification.

- D. PVC Pipe

- (1) PVC pipe shall be installed in a manner which will provide for expansion and contraction as recommended by the pipe manufacturer. Routing is diagrammatic and shall be installed in such a manner as to conform with the details per the drawings.
- (2) In joining, use only the specified or manufacturer's recommended solvent and make all joints in strict accordance with the manufacturer's recommended methods; give solvent welds at least 15 minutes set up time before moving or handling and 24 hours curing time before filling with water.

- E. Installation of Equipment

- A. Automatic Controller Location and Installation

- (1) Automatic controller(s) shall be installed at the location(s) shown on the drawings.

- (2) The controller location is essentially diagrammatic and shall be specifically located by the Owner or his representative.

- (3) All local and applicable codes shall take precedence in the furnishing and/or connecting of 110V electrical service to the controller.

- F. Installation of Equipment

- A. Equipment - Irrigation equipment, operating keys and spare parts shall be furnished to the Owner as shown on the plans.

- B. Service by the Contractor - The contractor shall service the system as the Owner's request during the guarantee period and shall be