

LANDSCAPE STANDARD DETAILS (LSD) FOR CITY PROJECTS AND RIGHT-OF-WAY

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STAKING AND TYING TREE:



WONDER TREE-TIE MODEL# W14-46, W24-84 OR APPROVED EQUAL. SECURE EXPOSED WIRE ENDS TO OUTSIDE OF STAKE - POUND WIRE ENDS INTO STAKE. ALLOW 3 INCHES OF MOVEMENT OF TREE IN ALL DIRECTIONS.

UNTREATED LODGE POLE PINE TREE STAKES (DO NOT PIERCE ROOT BALL):
 2 INCH DIA. - 24" BOX & UNDER,
 3 INCH DIA. - 36" BOX & UP

MULCH AND WATER BASIN:

BARK MULCH: 3 INCH DEPTH, KEEP CLEAR FROM TRUNK OF TREE

FINISH GRADE

4 INCH TALL EARTH BERM FOR WATER BASIN:

- 3' DIA. FOR 15-GAL.
- 4' DIA. = 24" BOX
- 5' DIA. = 36" BOX & LARGER

PLANTING HOLE:

BACK FILL MIX (TOP 12 INCHES ONLY): 70% PULVERIZED NATIVE SOIL, 30% COMPOST

FERTILIZER: BEST PAKS (21 GRAM, 20-10-5): 15 GAL. - 9 PAKS, 24" BOX - 25 PAKS, 36" BOX - 30 PAKS

PLANTING HOLE, PULVERIZED NATIVE SOIL BELOW 12-INCHES FROM FINISH GRADE; SCARIFY WALLS

SET ROOT BALL FIRMLY ON UNDISTURBED OR WATER SETTLED NATIVE SOIL. TOP OF ROOT BALL 1 INCH ABOVE FINISH GRADE.

NOTES:

1. KEEP TURF AND PLANTS OUTSIDE CIRCULAR EARTH BERM / WATER BASIN.
2. STREET TREES (TREES WITHIN CITY RIGHT-OF-WAY) SHALL BE:
15 GALLON SIZE FOR SINGLE FAMILY RESIDENCE PERMIT REPLACEMENT TREE
24 INCH BOX SIZE FOR ALL OTHER TREES

TOP OF STAKE
6 INCHES BELOW HEAD

IRRIGATION AND TUBE NOT REQUIRED FOR PERMITTED REPLACEMENT TREES

DEEP WATERING TUBE:
4 INCH PERF. PVC PIPE WITH OPEN GRATE CAP; FILL WITH DRAIN ROCK

1/2 GPM IRRIGATION BUBBLER, OFFSET FROM TREE AS DIMENSIONED WHEN REQUIRED

STAKE HEIGHT: AS REQUIRED FOR TREE HEIGHT

STAKE DEPTH: 3 FEET

DEPTH OF ROOT BALL
+6" (15 GAL)
+12" (24" & 36")

PLANT HOLE DIAMETERS:

- 15 GAL: 3'-6"
- 24" BOX: 4'-6"
- 36" BOX: 6'-0"

WATERING BY HAND:

WATER TWICE WEEKLY DURING THE GROWING SEASON. APPLY 7 1/2 TO 10 GALLONS DURING EACH WATERING. FILL WATER BASIN SLOWLY TO ALLOW WATER TO SOAK INTO SOIL .

**CITY OF FREMONT
STANDARD DETAILS**

**CITY STANDARD
TREE PLANTING & STAKING**

DATE APPROVED BY CITY COUNCIL
12/13/11

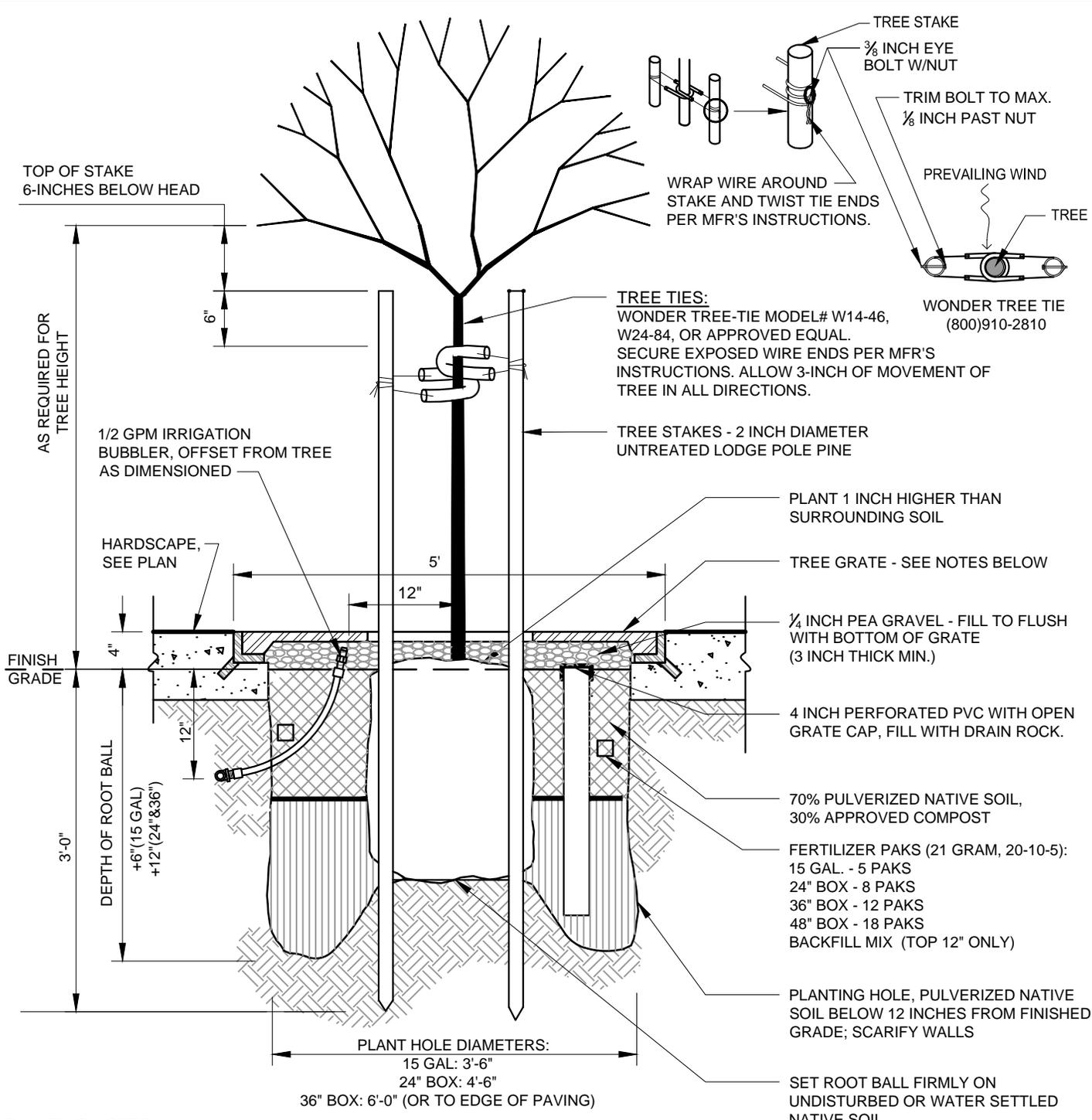
RESOLUTION NO. 2006-31

Ham Hughes

CITY ENGINEER

NO.	REVISION	DATE
	General Revision	04/15/19
	Council Revision	12/13/11
	General Revision	02/08/10
REVISIONS		

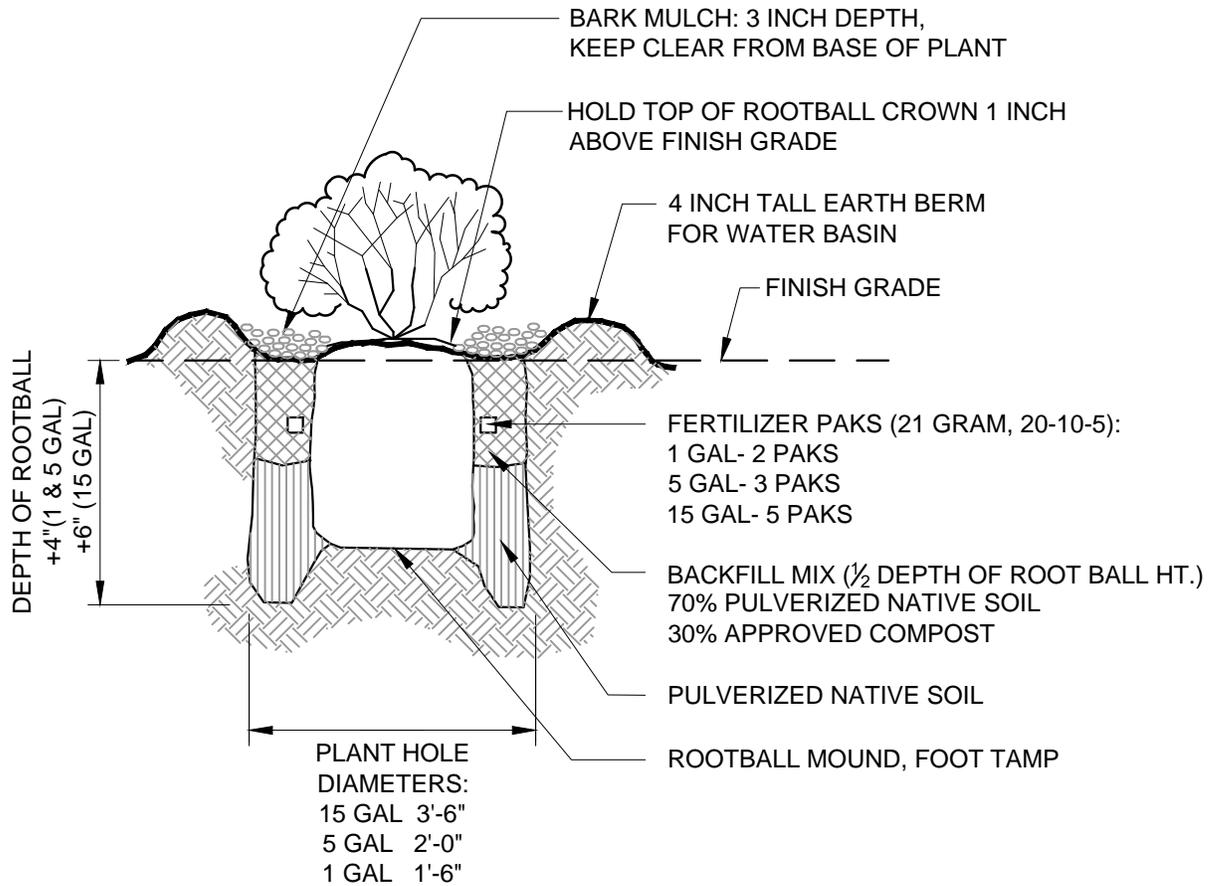
FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.	
LSD-1.DWG	3/4" = 1'-0"	PM/MM	RER	APRIL 2019	LSD - 1	1 of 1



PLANTING NOTES:

1. TREE GRATE TO BE FIVE (5) FOOT SQUARE, MAKE AND MODEL TO BE: NEENAH, R-8707, OR APPROVED EQUAL.
2. TREE GRATE TO BE UNFINISHED.
3. REFER TO DETAIL LSD-1 FOR MORE INFORMATION.
4. STREET TREES (TREES WITHIN RIGHT-OF-WAY) SHALL BE 24 INCH BOX SIZE, MINIMUM.

			CITY OF FREMONT STANDARD DETAILS			DATE APPROVED BY CITY COUNCIL 04/11/06			
						RESOLUTION NO. 2006-31			
			CITY STANDARD TREE PLANTING WITH TREE GRATE			<i>Nam Hughes</i>			
						CITY ENGINEER			
APPR	REVISED	DATE	FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.	
REVISIONS			LSD-2.DWG	3/4" = 1'-0"	PM/MM	RER	NOV. 2005	LSD-2	1 of 1

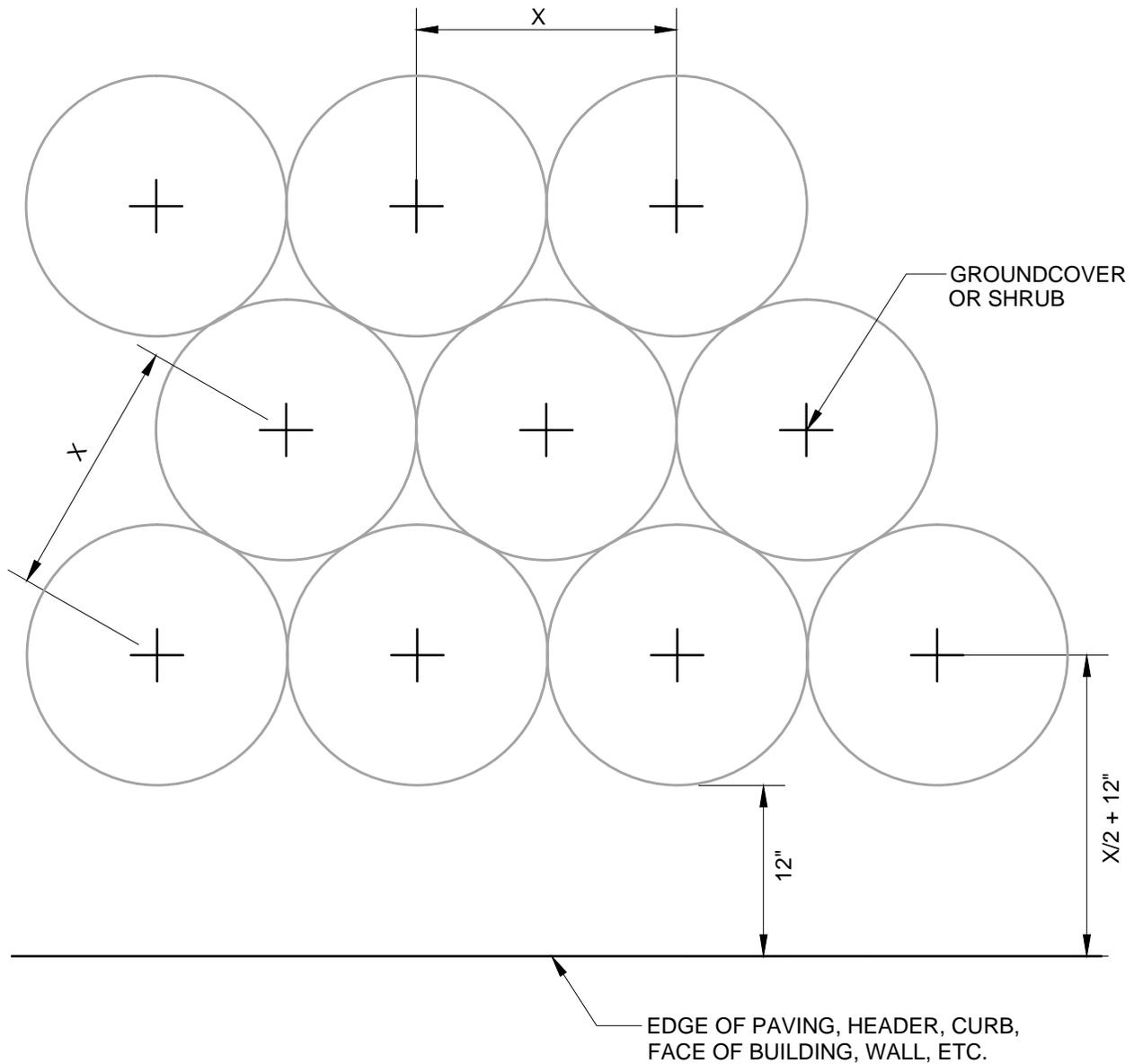


APPR	REVISED	DATE
REVISIONS		

CITY OF FREMONT
STANDARD DETAILS
CITY STANDARD
SHRUB AND GROUNDCOVER
PLANTING

DATE APPROVED BY CITY COUNCIL 04/11/06
RESOLUTION NO. 2006-31
<i>Nam Hughes</i>
CITY ENGINEER

FILE NO. LSD-3.DWG	SCALE 3/4" = 1'-0"	DRAWN PM/MM/AK	CHECKED RER	DATE NOV. 2005	DWG NO. LSD-3	1 of 1
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NOTE:

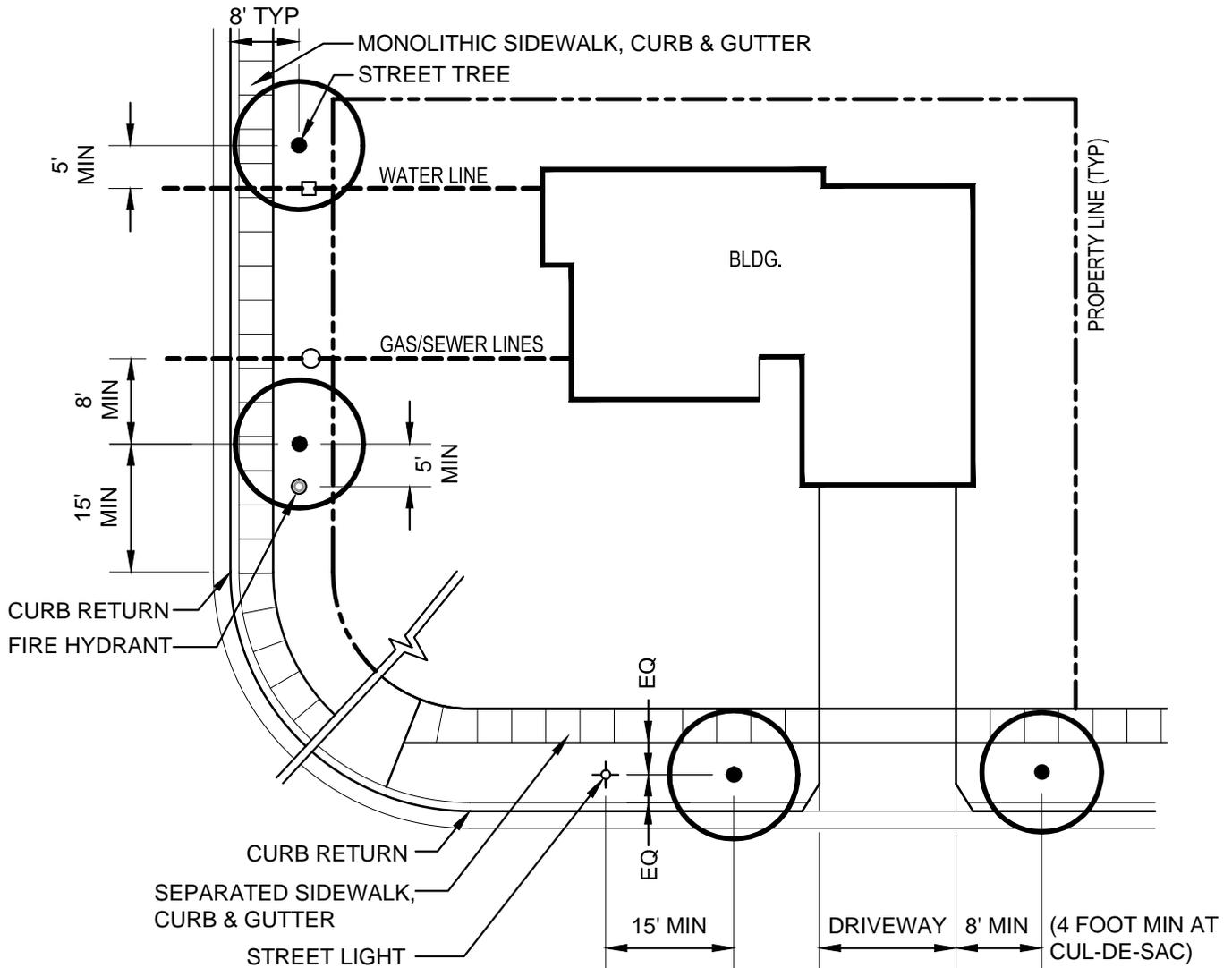
1. 'X' IS GROUNDCOVER AND SHRUB SPACING PER THE LANDSCAPE PLAN, PLANT LIST, AND LEGEND.
2. KEEP MULCH CLEAR OF PLANT BASE (SEE LSD-3 & LSD-12)

<h2 style="margin: 0;">CITY OF FREMONT</h2> <h3 style="margin: 0;">STANDARD DETAILS</h3> <h3 style="margin: 0;">CITY STANDARD</h3> <h2 style="margin: 0;">SHRUB AND GROUNDCOVER</h2> <h2 style="margin: 0;">PLANTING LAYOUT</h2>			DATE APPROVED BY CITY COUNCIL 12/13/11			
			RESOLUTION NO. 2006-31			
			CITY ENGINEER			
FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.	
LSD-4.DWG	1" = 1'-0"	PM/MM	RER	DEC. 2011	LSD-4	1 of 1

Council Revision	12/13/11	
General Revision	03/17/11	
APPR	REVISED	DATE
REVISIONS		

MINIMUM STREET TREE CLEARANCES

1. STREET TREES SHALL BE LOCATED 8 FEET (MIN) FROM SANITARY SEWER, GAS, AND STORMWATER LINES.
2. STREET TREES SHALL BE LOCATED 5 FEET (MIN) FROM WATER, TELEPHONE AND ELECTRICAL LINES.
3. STREET TREES SHALL BE LOCATED 5 FEET (MIN) FROM FIRE HYDRANTS.
4. STREET TREES SHALL BE LOCATED 15 FEET (MIN) FROM STREET LIGHTS.
5. STREET TREES SHALL BE LOCATED 8 FEET (MIN) FROM DRIVEWAYS AND 4 FEET (MIN) AT CUL-DE-SAC.
6. STREET TREES SHALL BE GENERALLY 35 FEET ON CENTER.
7. STREET TREES SHALL BE LOCATED 15 FEET (MIN) FROM CURB RETURNS.
8. MINIMUM ONE TREE PER LOT REQUIRED, AND TWO PER CORNER LOT.
9. IF LOT WIDTH EXCEEDS 60 FEET AT THE STREET, ONE TREE IS REQUIRED EVERY 35 FEET OF STREET, EXCLUDING LENGTH OF CURB RETURN.



NOTE:
CURRENT STANDARD DETAIL AT CITY ENGINEERING DIVISION SHALL PREVAIL

APPR	REVISED	DATE
REVISIONS		

CITY OF FREMONT
STANDARD DETAILS
CITY STANDARD
STREET TREE CLEARANCES

DATE APPROVED BY CITY COUNCIL
04/11/06

RESOLUTION NO. 2006-31

Nam Hughes

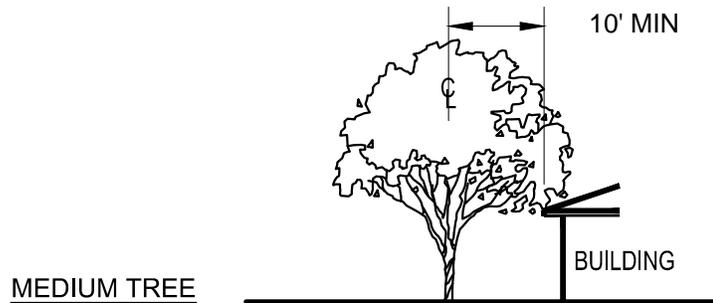
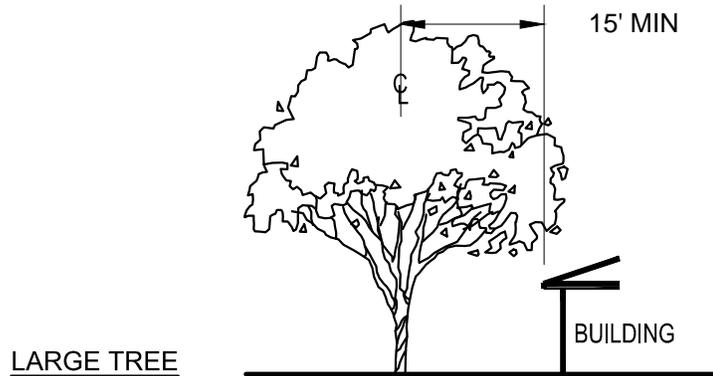
CITY ENGINEER

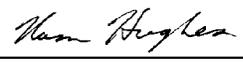
FILE NO. LSD-05.DWG	SCALE 1" = 20'-0"	DRAWN PM/MM	CHECKED RER	DATE OCT. 2005	DWG NO. LSD-5	1 of 1
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MINIMUM TREE CLEARANCES FROM BUILDINGS

BRANCHES FROM MATURE TREES MAY NOT OVERHANG BUILDINGS AND ROOFS. ADEQUATE SPACE TO PLANT TREES ADJACENT TO BUILDINGS OR OTHER BUILT FEATURES MUST BE PROVIDED IN THE FOLLOWING MINIMUM WAYS:

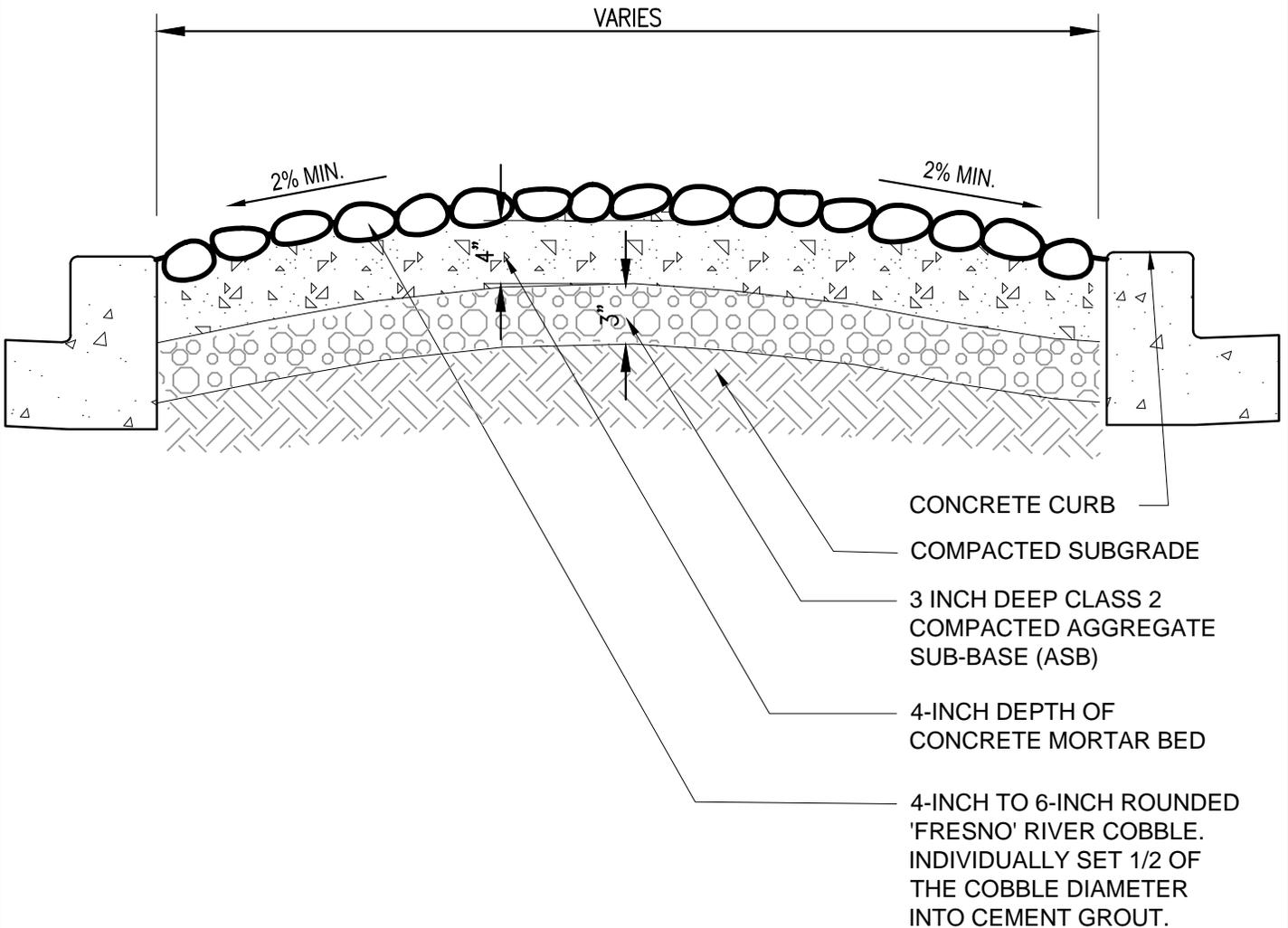
1. SMALL TREES (TO 15 FEET TALL AT MATURITY) NO CLOSER THAN 6 FEET FROM BUILDING OR 2 FEET* FROM PAVING, CURBS, OR WALLS WITH A MINIMUM PLANTING AREA 5 FEET WIDE.
 2. MEDIUM TREES (TO 35 FEET TALL AT MATURITY) NO CLOSER THAN 10 FEET FROM BUILDING OR 3 FEET* FROM PAVING, CURBS, OR WALLS WITH A MINIMUM PLANTING AREA 6 FEET WIDE.
 3. LARGE TREES (ABOVE 35 FEET TALL AT MATURITY) NO CLOSER THAN 15 FEET FROM BUILDING OR 3 FEET* FROM PAVING, CURBS, OR WALLS WITH A MINIMUM PLANTING AREA 6 FEET WIDE, PREFERABLY 8 FEET WIDE.
 4. WHEN ROOF EAVES OR BUILDING PROJECTIONS EXTEND BEYOND FACE OF BUILDING, CLEARANCE SHALL BE MEASURED FROM EDGE OF PROJECTION TO CENTERLINE OF TREE.
 5. UPPER STORY OVERHANGS AND BUILDING FEATURES MAY NOT EXTEND WITHIN MINIMUM CLEARANCE EXCEPT FOR MINOR ROOF EAVES.
- * REFER TO CITY STANDARD DETAIL LSD-05 FOR REQUIRED SPACING FROM UTILITIES.



			CITY OF FREMONT STANDARD DETAILS			DATE APPROVED BY CITY COUNCIL 04/11/06	
						RESOLUTION NO. 2006-31	
			CITY STANDARD TREE CLEARANCES			 CITY ENGINEER	
APPR	REVISED	DATE				REVISIONS	
FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.		
LSD-6.DWG	1"=20'-0"	MQ/MM	RER	NOV. 2005	LSD-6	1 of 1	

NOTES:

1. CURRENT STANDARD DETAIL AT CITY ENGINEERING DIVISION SHALL PREVAIL.
2. CROWN TO BE ROUNDED WITH NO SHARP GRADE BREAKS.
3. MINIMIZE VISIBLE EXPOSED GROUT AT COBBLE JOINTS.
4. SURFACE OF COBBLE FIELD TO BE SMOOTH AND FLAT TO GRADE WITHOUT VARIATION IN HEIGHT OF INDIVIDUAL COBBLES.
5. COBBLES WITH BREAKS OR FRACTURES ARE NOT ALLOWED.
6. ROCK SHALL BE 'SATURATED SURFACE MOIST' (SSM) PRIOR TO PLACEMENT.
7. CONCRETE MORTAR BED SHALL HAVE A CEMENT RATIO PER CUBIC YARD OF CONCRETE OF NOT LESS THAN 564 POUNDS; SLUMP MAX. OF 3"; AGGREGATE SIZE 1/4" MAXIMUM.
8. INTEGRAL COLOR ADMIXTURE: CHROMIX, ADOBE TAN, #C-21 BY L.M. SCOFIELD.

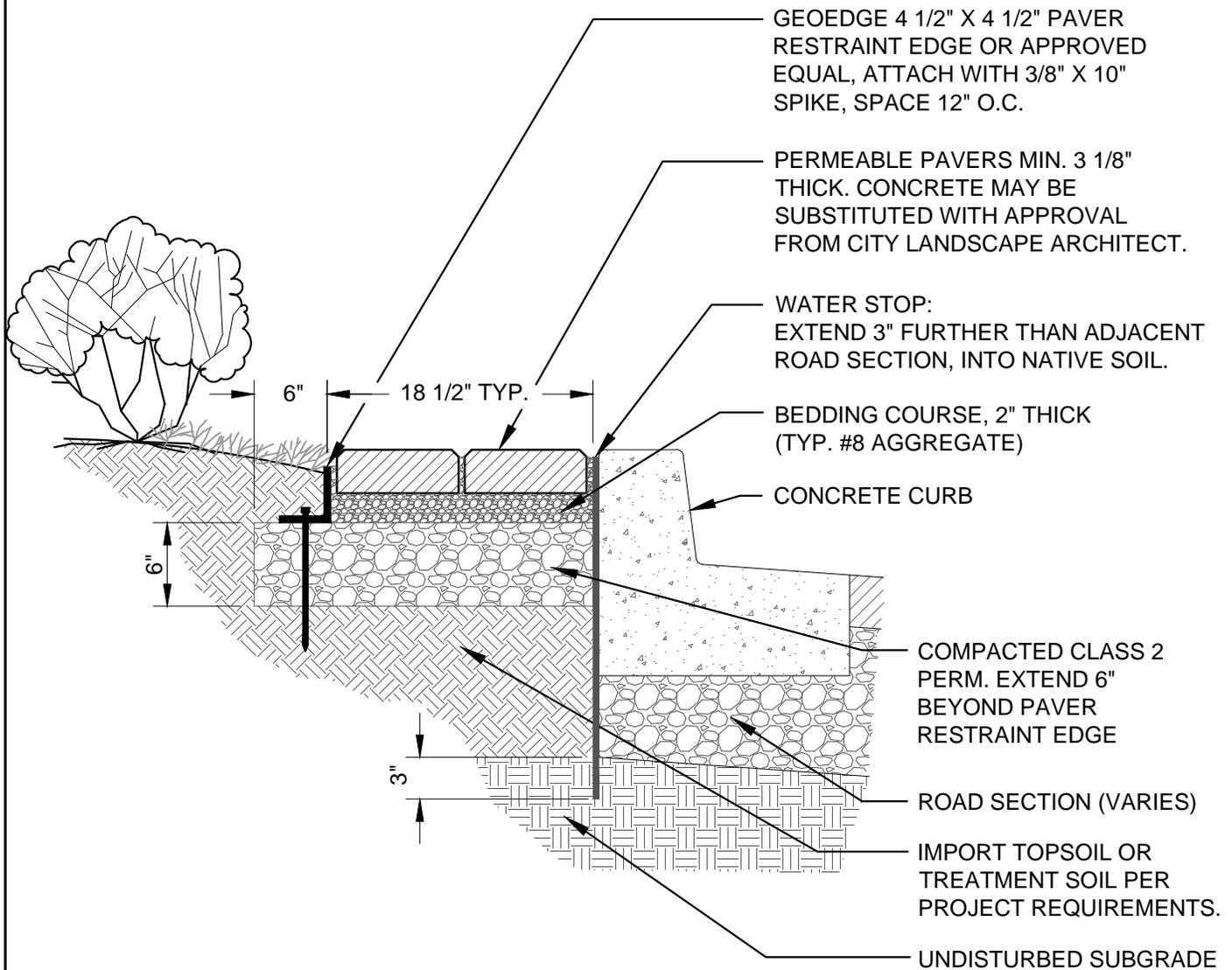


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REVISIONS		

CITY OF FREMONT
 STANDARD DETAILS
 CITY STANDARD
 MEDIAN PAVING COBBLE

DATE APPROVED BY CITY COUNCIL 04/11/06
RESOLUTION NO. 2006-31
<i>Ham Hughes</i>
CITY ENGINEER

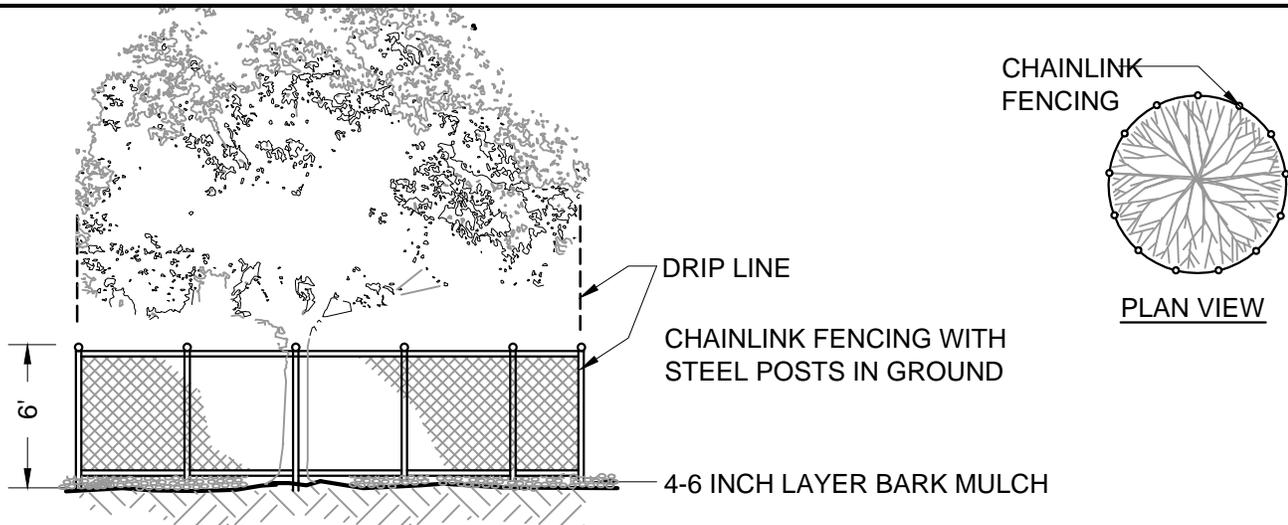
FILE NO. LSD-7.DWG	SCALE 1" = 1'-0"	DRAWN PM/MM	CHECKED RER	DATE NOV. 2005	DWG NO. LSD-7	1 of 1
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NOTES:

1. ON MEDIANS LESS THAN 14 FEET WIDE, REPLACE MAINTENANCE BAND WITH 18 INCH MINIMUM WIDTH PLANTING OF WALKABLE GROUNDCOVER.
2. IF CONCRETE, INSTALL DEEP JOINTS TO MATCH CURB & GUTTER DEEP JOINTS. SEE ENGINEERING STANDARD DETAIL 8 FOR DEFINITION OF DEEP JOINT.
3. FOR PAVERS WITHIN THE DRIPLINE OF AN EXISTING TREE, HAND EXCAVATE ALL AREAS. 6" CLASS 2 PERM LAYER MAY BE REDUCED OR ELIMINATED IF NECESSARY. SEE LSD-9 FOR TREE PRESERVATION NOTES.
4. PAVERS TO BE: 6 X 9 X 3 1/8 CALSTONE PERMEABLE PAVING UNITS, COLOR: RUSTIC YELLOW STONE, UNLESS APPROVED BY THE CITY LANDSCAPE ARCHITECT.

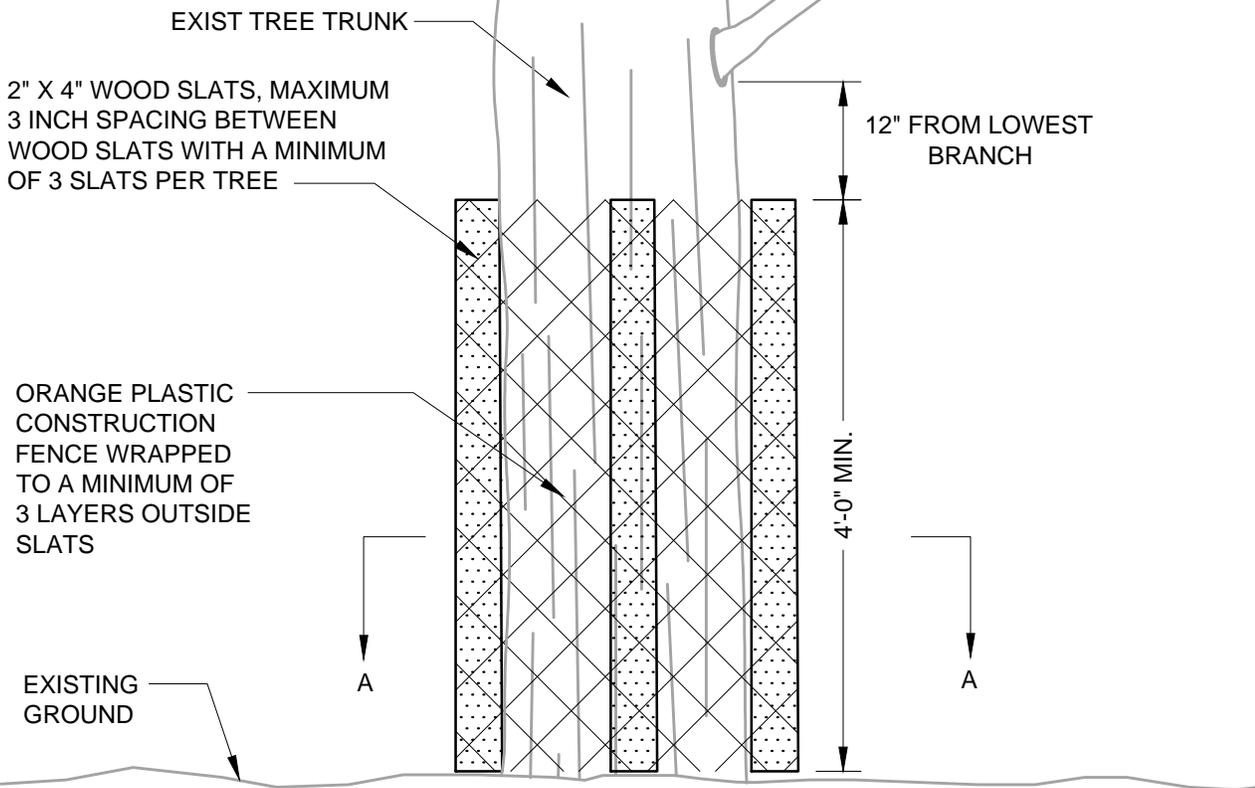
			CITY OF FREMONT STANDARD DETAILS			DATE APPROVED BY CITY COUNCIL 12/13/11										
						RESOLUTION NO. 2006-31										
<table border="1"> <tr> <td><i>[Signature]</i></td> <td>General Revision</td> <td>09/05/12</td> </tr> <tr> <td></td> <td>Council Revision</td> <td>12/13/11</td> </tr> <tr> <td>APPR</td> <td>REVISED</td> <td>DATE</td> </tr> </table>			<i>[Signature]</i>	General Revision	09/05/12		Council Revision	12/13/11	APPR	REVISED	DATE	CITY STANDARD MAINTENANCE BAND			<i>[Signature]</i> CITY ENGINEER	
<i>[Signature]</i>	General Revision	09/05/12														
	Council Revision	12/13/11														
APPR	REVISED	DATE														
FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.											
LSD-8.DWG	1" = 1'-0"	PM/MM	RER	DEC. 2011	LSD-8	1 of 1										



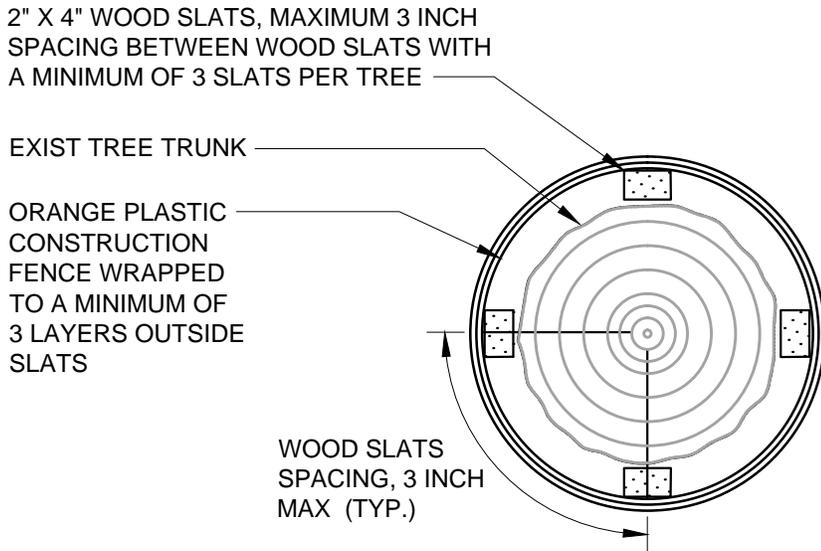
TREE PROTECTION NOTES

1. CURRENT STANDARD DETAIL AT CITY ENGINEERING DIVISION SHALL PREVAIL.
2. TREE PROTECTION MEASURES MUST BE IN PLACE BEFORE CONSTRUCTION, DEMOLITION AND/OR GRADING ACTIVITIES COMMENCE. CITY OF FREMONT WILL STOP CONSTRUCTION IF TREE PROTECTION MEASURES ARE NOT IN PLACE AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
3. TREES CALLED OUT FOR PRESERVATION SHALL BE FENCED AT THE DRIPLINE. FENCING MAY OCCUR AT THE COMBINED DRIPLINES OF GROVES OF TREES. PLACE 4-6 INCH BARK MULCH BENEATH DRIPLINES OF TREES TO BE PRESERVED. KEEP BARK 2-3 FEET FROM TREE TRUNK.
4. FENCING SHALL BE 6 FEET TALL CHAIN LINK FENCING WITH STEEL POSTS EMBEDDED IN THE GROUND.
5. NO GRADING SHALL OCCUR WITHIN THE DRIPLINES/FENCED AREA OF EXISTING TREES.
6. NO CONSTRUCTION MATERIALS OR CONSTRUCTION VEHICLES MAY BE STORED WITHIN THE DRIPLINES/FENCED AREA OF EXISTING TREES.
7. CONSTRUCTION VEHICLES OR MACHINERY MAY NOT PASS BETWEEN TWO OR MORE EXISTING TREES IDENTIFIED FOR PRESERVATION IF THEIR CANOPIES ARE WITHIN 10 FEET OF TOUCHING. ADDITIONAL FENCING MAY BE REQUIRED BY THE CITY AS NEEDED.
8. THE CONTRACTOR IS REQUIRED TO HAVE AN ARBORIST CERTIFIED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA), APPROVED BY THE CITY, ON SITE IF SITE CONSTRUCTION EFFORTS REQUIRE REMOVAL OF EXISTING ROOTS OR BRANCH PRUNING. ROOTS APPROVED FOR CUTTING MUST BE CUT CLEANLY WITH A SAW. RIPPING OR SHREADING ROOTS SUBJECT TO FINE/PENALTY.
9. UNAUTHORIZED TREE REMOVAL IS SUBJECT TO REPLACEMENT EQUAL TO THE APPRAISED VALUE OF THE TREE LOST PER FMC 4-5108.
10. THE CONTRACTOR IS REQUIRED TO WATER, FERTILIZE AND ATTEND TO OTHER MAINTENANCE NEEDS OF EXISTING TREES TO MAINTAIN HEALTHY GROWTH THROUGHOUT THE CONSTRUCTION PERIOD. AN EARTH BERM MEASURING MINIMUM 6 FEET IN DIAMETER, AND 6 INCHES IN HEIGHT SHALL BE CONSTRUCTED AT THE BASE OF EACH TREE TO FUNCTION AS A TEMPORARY WATERING BASIN DURING THE CONSTRUCTION PERIOD. TREES SHALL BE WATERED ACCORDING TO WEATHER AND TREE SPECIES REQUIREMENTS.
11. IF TREES ARE BEING RELOCATED: RELOCATION OF EXISTING TREES SHALL OCCUR UNDER THE OBSERVATION AND DIRECTION OF A CERTIFIED ARBORIST APPROVED BY THE CITY OF FREMONT.
12. TRUNK WRAP PROTECTION SHALL OCCUR FOR TREES SITUATED IN SMALL TREE WELLS OR SIDEWALK PLANTERS. THIS FORM OF PROTECTION WILL BE ALLOWED BY APPROVAL FROM SENIOR LANDSCAPE ARCHITECT ONLY. REFER TO LSD-10.

			<p>CITY OF FREMONT STANDARD DETAILS <u>CITY STANDARD</u> TREE PROTECTION FENCING</p>			DATE APPROVED BY CITY COUNCIL 12/13/11	
						RESOLUTION NO. 2006-31	
						 CITY ENGINEER	
		Council Revision 12/13/11					
APPR	REVISED	DATE					
REVISIONS							
FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.		
LSD-9.DWG	1/8" = 1'-0"	PM/MM	RER	DEC. 2011	LSD-9	1 of 1	



ELEVATION



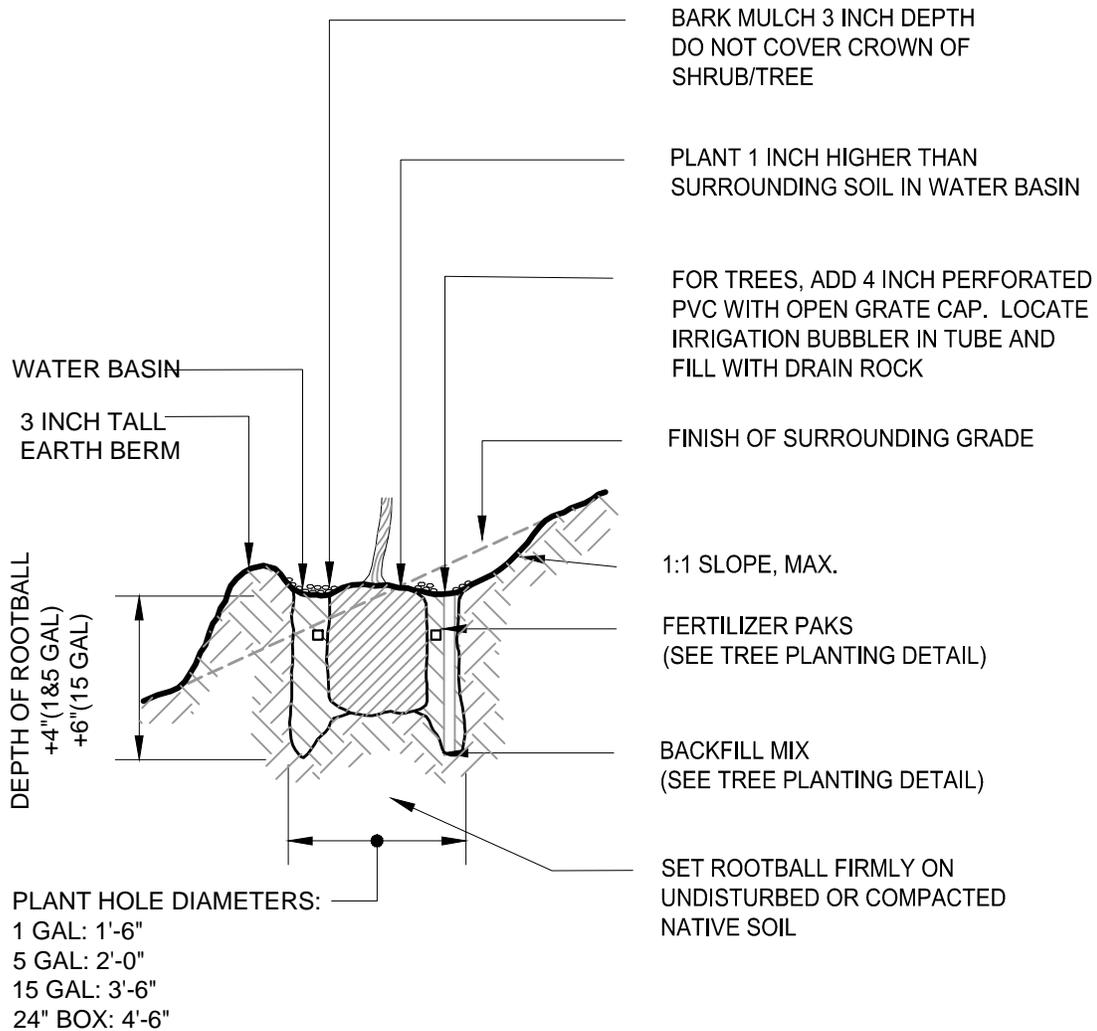
SECTION A-A

NOTE:

1. WRAP ORANGE PLASTIC CONSTRUCTION FENCE ON TOP OF WOOD SLATS WITH AN OVERLAP OF 12 INCHES AND TIE WITH WIRE. SEE SECTION BELOW.
2. TEMPORARY TRUNK WRAP PROTECTION WILL BE ALLOWED ONLY BY APPROVAL FROM THE SENIOR LANDSCAPE ARCHITECT
3. DAMAGE TO BRANCHES & ROOTS SUBJECT TO FINE UP TO APPRAISED VALUE OF THE TREE, PER CITY TREE PRESERVATION ORDINANCE (FMC 4-5100).
4. REFER TO LSD-9 FOR ADDITIONAL TREE PROTECTION REQUIREMENTS APPLICABLE TO THIS DETAIL.
5. TRUNK WRAP SHALL BE IN PLACE NO MORE THAN 5 WORKING DAYS BEFORE WORK ADJACENT TO TREE, AND REMOVED NO MORE THAN 5 WORKING DAYS AFTER WORK ADJACENT TO THE TREE, UNLESS OTHERWISE APPROVED BY THE CITY.

<p>CITY OF FREMONT STANDARD DETAILS CITY STANDARD TEMPORARY TRUNK WRAP PROTECTION</p>			DATE APPROVED BY CITY COUNCIL 12/13/11			
			RESOLUTION NO. 2006-31			
						
			CITY ENGINEER			
FILE NO. LSD-10.DWG	SCALE 3/4"=1'-0"	DRAWN PN/MM	CHECKED RER	DATE DEC. 2011	DWG NO. LSD-10	1 of 1

	Council Revision	12/13/11
APPR	REVISED	DATE
REVISIONS		



NOTES:

1. KEEP TURF AND PLANTS OUTSIDE THE EARTH BERM/WATER BASIN
2. SEE TREE PLANTING DETAIL FOR STAKING INFO.
3. THIS DETAIL TO BE REFERENCED, PER CITY STANDARD DETAIL LSD-11, FOR TREE PLANTING IN A VEGETATED BIOSWALE.

<h2 style="margin: 0;">CITY OF FREMONT</h2> <h3 style="margin: 0;">STANDARD DETAILS</h3> <h3 style="margin: 0;">CITY STANDARD TREE AND SHRUB PLANTING AT SLOPE</h3>			DATE APPROVED BY CITY COUNCIL 12/13/11			
			RESOLUTION NO. 2006-31			
						
			CITY ENGINEER			
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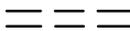
Botanical Name: Common Name	TREE CHARACTERISTICS										ENVIRONMENTAL TOLERANCES		PLANTING SPACE REQ'S					
	TYPE	SHAPE	HEIGHT	SPREAD	GROWTH	ROOTING	LEAF SIZE	SHADE	FALL COLOR	FLOWER	DEBRIS	USEFUL LIFE	SOIL	WATER USE	5+	6+	10+	
																		Cont'd
Acacia melanoxylo: Black Acacia	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Acacia saligna: Black Wattle	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Acer palmatum: Japanese Maple	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Acer rubrum: Scarlet Red Maple	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Aesculus californica: California Buckeye	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Aesculus x carnea: Red Horse Chestnut	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Albizia julibrissin: Silk Tree	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Alnus cordata: Italian Alder	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Arbutus 'Marina': Strawberry Tree	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Betula pendula: European White Birch	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Brachycthon populneus: Bottle Tree	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Casuarina stricta: Beefwood	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Cedrus deodard: Deodar Cedar	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Celtis sinensis: Chinese Hackberry	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Cercis canadensis: Eastern Redbud	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Cinnamomum camphora	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Crataegus phaenopynum: Washington Thorn	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Eriobotrya deflexa: Bronze Loquat	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Eucalyptus camaldulensis: River Red Gum	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Eucalyptus kucuvon: White Ironbark	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Eucalyptus meliodora	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Eucalyptus rudis: Desert Gum	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Fraxinus americana: 'Autumn Purple'	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Fraxinus velutina 'Re Grande': Fan Tex Ash	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Geijera parviflora: Australian Willow	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Ginkgo biloba: Maidenhair Tree	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Jacaranda minosifolia: Jacaranda	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Lagerstroemia cultivars: Crepe Myrtle	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Laurus nobilis 'Sarotoga': Grecian Laurel	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Magnolia grandiflora: Southern Magnolia	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Magnolia soulangeana: Southern Magnolia	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Melaleuca ericifolia: Heath Melaleuca	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Melaleuca linariifolia: Flaxbark Paperbark	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Melaleuca quinquenervia: Cajuput Tree	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Melaleuca stylphoides: Melaleuca	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Morus alba: Fruitless Mulberry	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Olea europaea 'Swan Hill': Fruitless Olive	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Pinus canariensis: Canary Island Pine	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Pinus pinca: Italian Stone Pine	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Pistacia chinensis: Pistache	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Platanus acerifolia 'Columbia': Sycamore	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Platanus acerifolia 'Bloodgood'	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Prunus cerasifera: Purple Leaf Plum	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Pyrus calleryana 'Aristocrat': Flowering Pear	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Pyrus calleryana 'Chanticleer': Flowering Pear	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Pyrus calleryana 'Red Spire': Flowering Pear	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Quercus agrifolia: Coast Live Oak	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Quercus coccinea: Scarlet Oak	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Quercus flex: Holly Oak	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Quercus lobata: Valley Oak	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Quercus rubra: Red Oak	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Rhus lancea: African Sumac	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Robinia ambigua 'Idahoensis': Idaho Locust	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Schinus molle: California Pepper Tree	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Sequoia sempervirens: Coast Redwood	Evergreen	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Sapum schiferum: Chinese Tallow	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Sophora japonica 'Reigan': Japanese Pagoda	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Zelkova serrata: Japanese Zelkova	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	
Tristania laurina: Swamp Myrtle	Deciduous	Columnar	1-5 (small)	0-20	Slow	Moderate	Fast	Large Vigorous	Shallow Surface	Deep	Root Suckers	Large	Medium	Small	Filtered	Yes	No	

Note: The following trees are not recommended: Fraxinus oxycarpa (Raywood Ash), Liquidambar styraciflua (Sweet Gum), Populus spp. (Poplar Tree)

TREE CHOICES ARE NOT LIMITED TO THIS LIST.
THIS LIST IS ONLY A GUIDE.

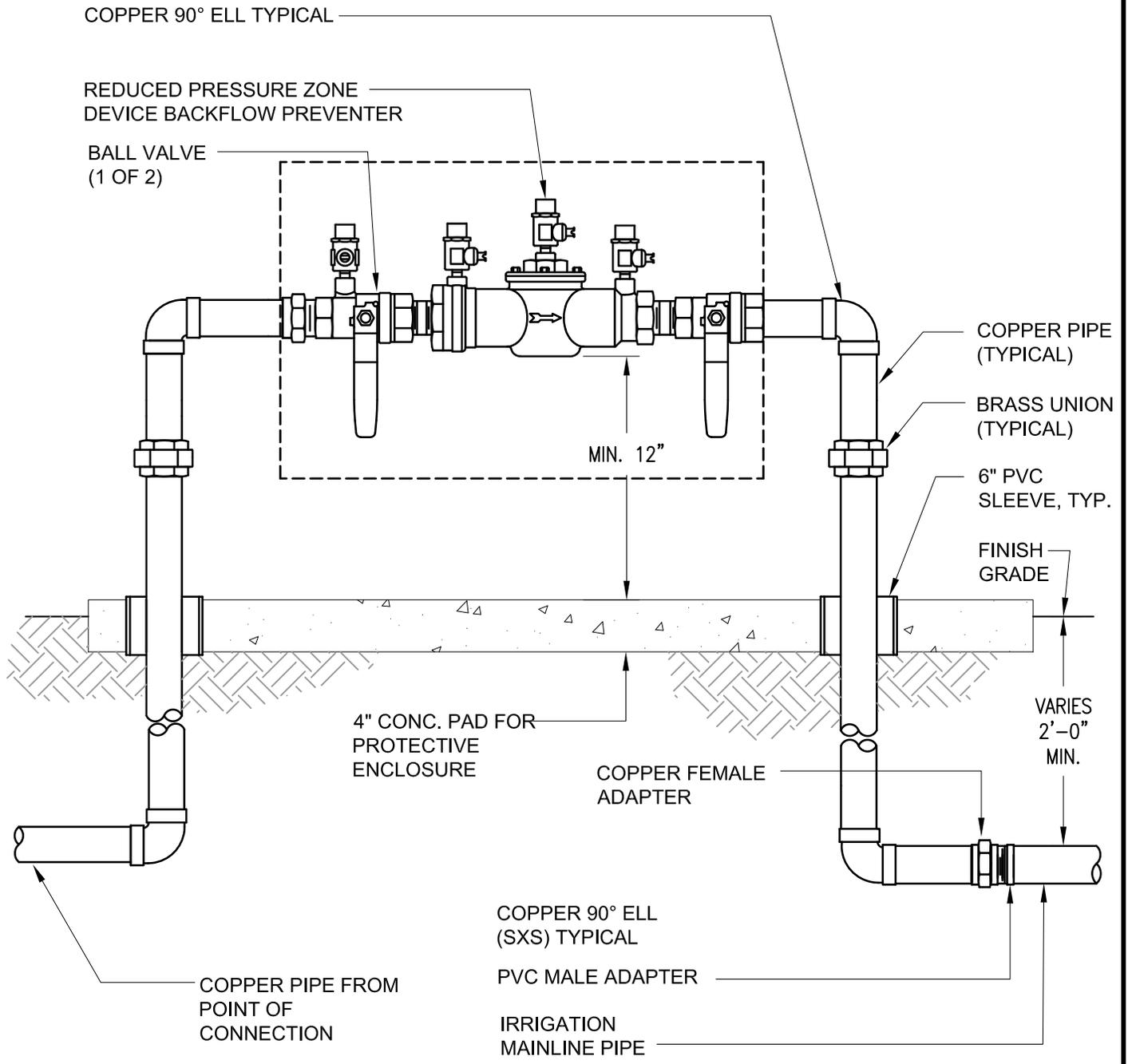
<p>CITY OF FREMONT STANDARD DETAILS CITY STANDARD TREE PLANTING GUIDE LIST</p>			DATE APPROVED BY CITY COUNCIL 12/13/11					
			RESOLUTION NO. 2006-31					
<p>APPR REVISIONS</p> <table border="1"> <tr> <td>Council Revision</td> <td>12/13/11</td> </tr> <tr> <td>REVISION</td> <td>DATE</td> </tr> </table>			Council Revision	12/13/11	REVISION	DATE	<p>CITY ENGINEER <i>Nam Hughes</i></p>	
Council Revision	12/13/11							
REVISION	DATE							
FILE NO. LSD-13.DWG	SCALE NONE	DRAWN MM	CHECKED RER	DATE DEC. 2011				
			DWG NO. LSD-13	1 of 1				

CITY OF FREMONT IRRIGATION STANDARD MATERIALS

STANDARD SYMBOL	DESCRIPTION	MANUFACTURER	MODEL # (if applicable)	COMMENTS	LANDSCAPE STANDARD DETAIL
	Irrigation Controller w/ Enclosure	Calsense	ET 2000e	w/ all applicable software as required by the city, and dome antenna	LSD-15
	Irrigation Controller Enclosure	Calsense Enclosure	SSE-R	Heavy-Duty Stainless Steel	LSD-15
	Reduced Pressure-Principle Backflow Preventer with cage and concrete pad	Febco	825-Y		LSD-16
	Backflow Assembly Cage	Guardshack	GS Series	Powdercoat Black	LSD-17
	Irrigation Trench - Mainline		Sch. 40 PVC for 2" & less Class 315 PVC for 2-1/2" & larger	24" below fin. grade	LSD-18
	Irrigation Trench - Lateral line		Class 200 PVC for 1 1/4" and greater Sch. 40 PVC for line 1" & smaller	18" below fin. grade	LSD-18
	Sleeves		Class 315 PVC	Refer to LSD-18 for depth and size	LSD-18
	Quick-Coupling Valve (in box)	Hunter	HQ-44LRC-AW HR-44A	Winged body w/ 1" key, locking cover, and key	LSD-19
	Quick-Coupling Valve Box	Carson Pentek	910 Lockable Superflexon	10" Round box w/ lid	LSD-19
	Wire Splice	Scotchlok	Y-spring connector	Install per detail LSD-20	LSD-20
	Turf Sprinklers	Toro Hunter	Super 700C Series I-40 OR I-20 365-XX, 360 d, ADJ	Large Turf Areas	LSD-21
	Turf Sprinklers	Toro	640 Series	Large Turf Areas	LSD-21
	Turf Sprinklers	Toro	570Z-6P/12P-O-T Precision Series	Small Turf Areas	LSD-21
	Shrub/Groundcover	Toro	570Z-6P/12P-O-T Precision Series	Shrub/Groundcover Areas	LSD-21
	Shrub Bubblers	Toro	PC-FB-25	Shrubs	
	Tree Bubblers	Toro	PC-FB-50	Trees	LSD-01
	Gate Valve (in box)	Nibco	T-113		LSD-22
	Gate Valve Box	Carson Pentek	910 Lockable Superflexon	10" Round box w/ lid	LSD-22
	Remote Control Valve (in box)	Griswold	2000 Series NC - Solenoid Valve 2230 Series NC - Pressure Reducing	NC = Normally Closed	LSD-23
	Remote Control Valve Box	Carson Pentek	1324 Lockable Superflexon	13" X 18" box w/ lid	LSD-23
	'Y' Strainer	Febco	650A 1/2"-2"		LSD-26
	Pressure Reducing Valve	Febco/Wilkins/Watts	XXX		LSD-25
	Flow Sensor	Calsense	FM-1B		LSD-24
	Master Valve	Griswold	2160 Series NO - Solenoid Valve	NO = Normally Open	LSD-24

Note: Symbols shown are city standard for those items

			<h1 style="margin: 0;">CITY OF FREMONT</h1> <h2 style="margin: 0;">STANDARD DETAILS</h2> <h3 style="margin: 0;">CITY STANDARD IRRIGATION MATERIALS</h3>			DATE APPROVED BY CITY COUNCIL 12/13/11 <hr/> RESOLUTION NO. 2006-31 <hr/>  CITY ENGINEER		
	Council Revision	12/13/11						
	General Revision	6/07/10						
APPR	REVISED	DATE						
REVISIONS								
FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.			
LSD-14.DWG	NONE	MAM/CC	RER	DEC. 2011	LSD-14		1 of 1	



NOTES:

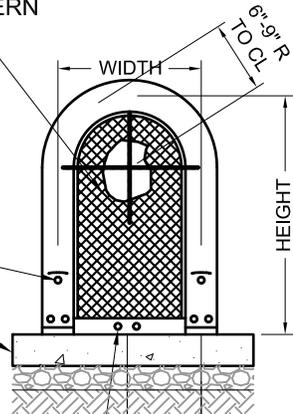
1. INSTALL BACKFLOW PREVENTER AS REQUIRED BY LOCAL CODES AND HEALTH DEPARTMENT. VERIFY LOCAL REQUIREMENTS PRIOR TO INSTALLATION.
2. INSTALL FREEZE PROTECTION JACKET AND CAGE. SEE CITY STANDARD DETAIL LSD-17 FOR CAGE DETAIL.
3. REFER TO CITY STANDARD DETAIL LSD-14 FOR ALL MATERIALS

			CITY OF FREMONT			DATE APPROVED BY CITY COUNCIL	
			STANDARD DETAILS			12/13/11	
			CITY STANDARD IRRIGATION			RESOLUTION NO. 2006-31	
			BACKFLOW PREVENTER UNIT			<i>Norm Hughes</i>	
REVISIONS						CITY ENGINEER	
1	MISC REVISIONS	9/09					
APPR	REVISED	DATE					
FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.		
LSD-16.DWG	1" = 1'-0"	PM/MM	RER	NOV. 2005	LSD-16	16 of 27	

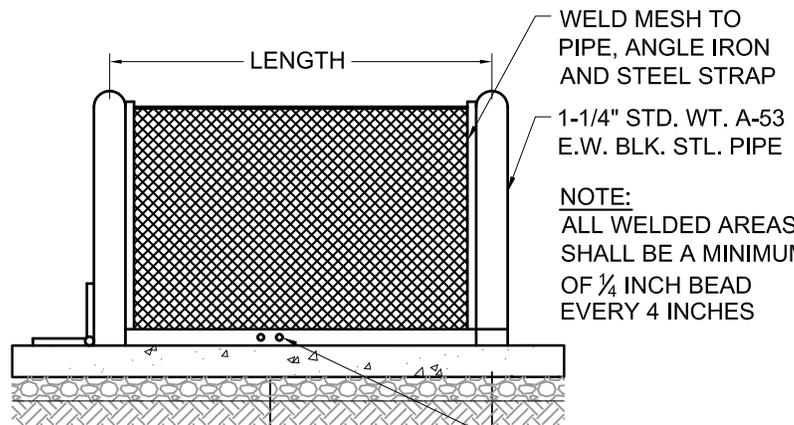
1/2-INCH NO. 13 FLATTED
DIAMOND PATTERN
STEEL MESH

WELD 4-INCH
STL. HINGES (2)
ON GS-3 AND
GS-4

4-INCH
CONCRETE
PAD



- DRILL 2 HOLES AS NOTED
- GS-1 EACH END
 - GS-2 EACH END
 - GS-3 ONE END ONLY
OPPOSITE HINGED END
 - GS-3.5 SAME AS GS-2H
 - GS-4 SAME AS GS-2H



NOTE:
ALL WELDED AREAS
SHALL BE A MINIMUM
OF 1/4 INCH BEAD
EVERY 4 INCHES

DRILL 2 - 5/16 INCH
HOLES EACH SIDE.
BRACKETS CAN BE
LOCATED ON
SIDES OR ENDS
AND SECURED
WITH TAMPER
PROOF BOLTS

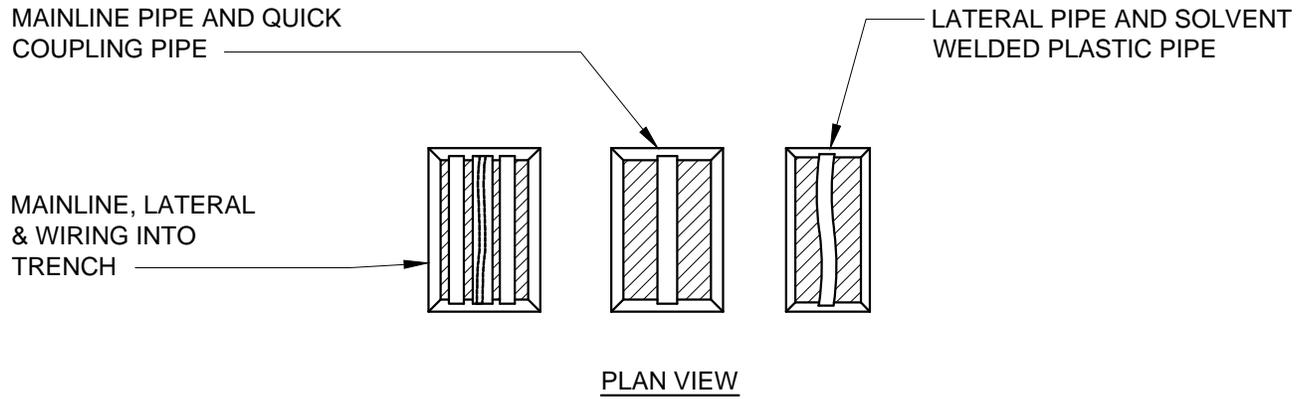
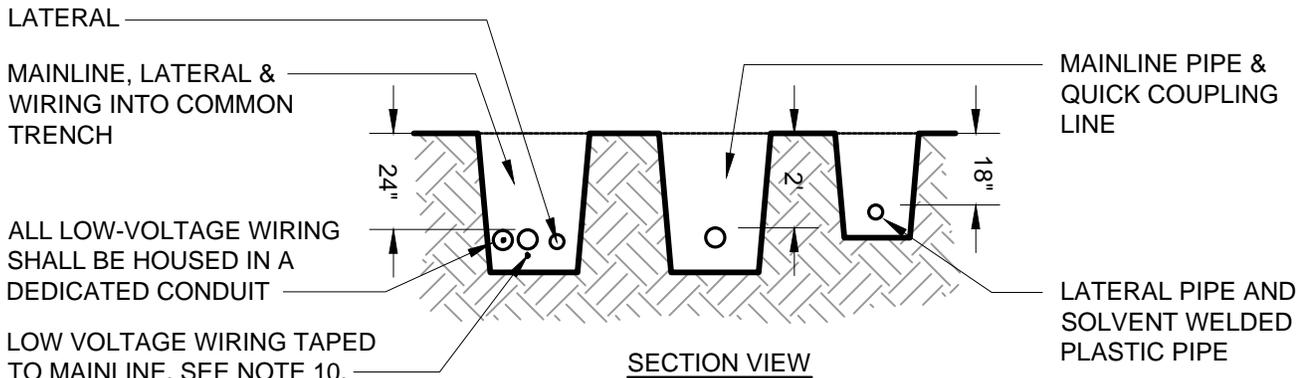
STD. SIZES	CENTERLINE DIMENSIONS		WEIGHT
GS-5	12"W x 18"H x 12"L	LIFT OFF UNIT	35
GS-1	12"W x 24"H x 24"L	LIFT OFF UNIT	40
GS-2	12"W x 24"H x 32"L	LIFT OFF UNIT	45
GS-3	12"W x 24"H x 42"L	HINGED UNIT	51
GS-4	18"W x 30"H x 48"L	HINGED UNIT	67

NOTE:
GS = POWDER-COATED STEEL GUARDSHACK OR APPROVED EQUAL

NOTES:

1. AFTER ALL WELDING, ENTIRE UNIT SHALL BE PROCESSED WITH IRON PHOSPHATE PRE-TREATMENT. ELECTROSTATIC APPLICATION OF POWDER SHALL BE FUSION BONDED. POWDERCOAT COLOR SHALL BE BLACK.
2. ALL BOLTS FOR HINGES AND HASPS SHALL BE ZINC-PLATED TAMPER PROOF, EXCEPTION - USE SS HARDWARE FOR SS UNITS.
SS = STAINLESS STEEL
3. REFER TO SPECIFICATIONS FOR MODEL NUMBER
4. REFER TO CITY STANDARD DETAIL LSD-14 FOR ALL MATERIALS

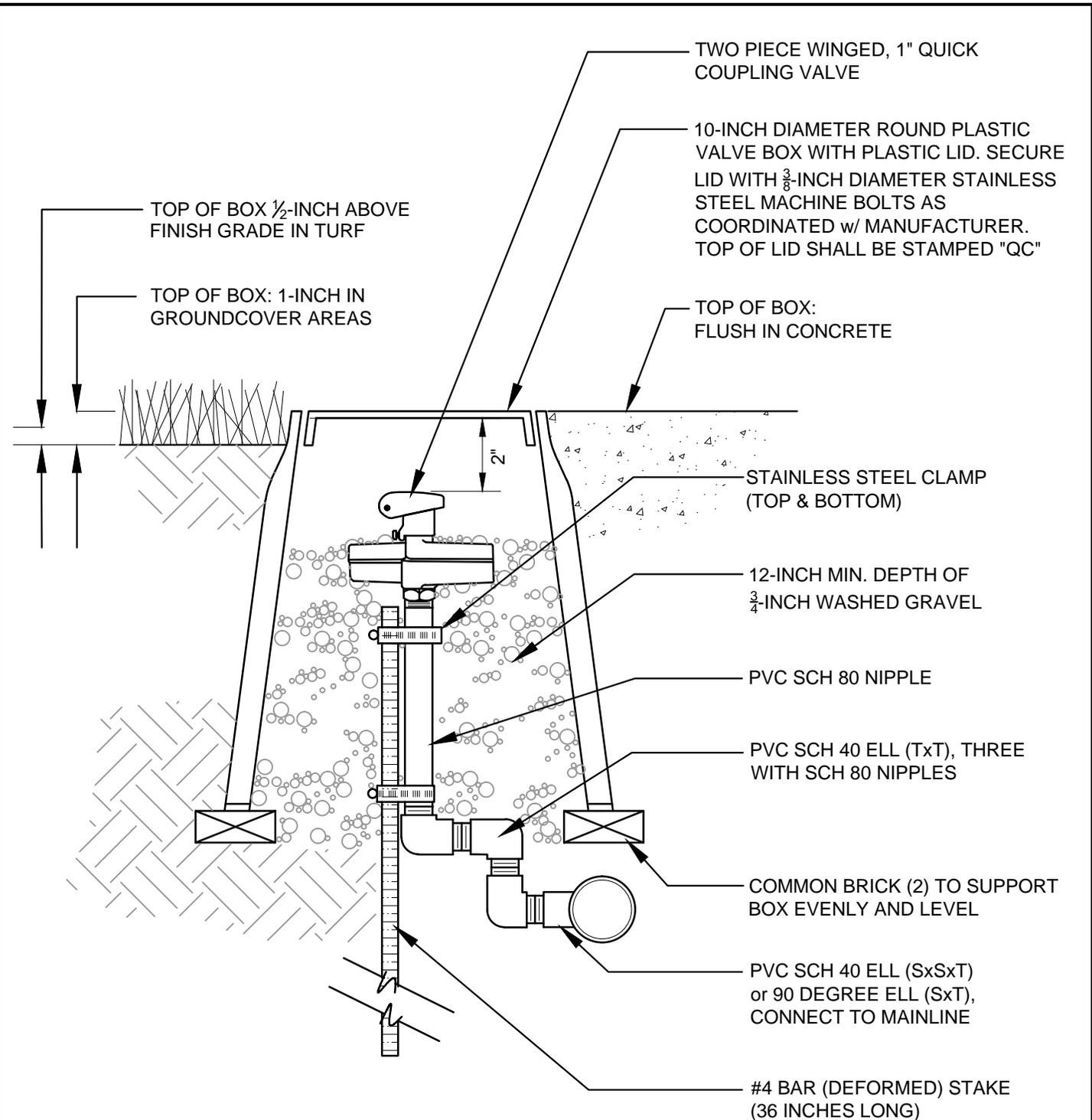
<h2 style="margin: 0;">CITY OF FREMONT</h2> <h3 style="margin: 0;">STANDARD DETAILS</h3> <h3 style="margin: 0;">CITY STANDARD</h3> <h2 style="margin: 0;">BACKFLOW PREVENTER</h2> <h2 style="margin: 0;">UNIT ENCLOSURE</h2>			DATE APPROVED BY CITY COUNCIL 12/13/11																
			RESOLUTION NO. 2006-31																
			CITY ENGINEER																
APPR	REVISED	DATE	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">FILE NO.</td> <td style="width: 15%;">SCALE</td> <td style="width: 15%;">DRAWN</td> <td style="width: 15%;">CHECKED</td> <td style="width: 15%;">DATE</td> <td style="width: 15%;">DWG NO.</td> <td style="width: 15%;"></td> </tr> <tr> <td>LSD-17.DWG</td> <td>1/2" = 1'-0"</td> <td>AK/MM/PN</td> <td>RER</td> <td>NOV. 2005</td> <td>LSD-17</td> <td>1 of 1</td> </tr> </table>			FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.		LSD-17.DWG	1/2" = 1'-0"	AK/MM/PN	RER	NOV. 2005	LSD-17	1 of 1
FILE NO.	SCALE	DRAWN				CHECKED	DATE	DWG NO.											
LSD-17.DWG	1/2" = 1'-0"	AK/MM/PN	RER	NOV. 2005	LSD-17	1 of 1													
REVISIONS																			



NOTES:

1. SLEEVE BELOW ALL HARDSCAPE ELEMENTS WITH CLASS 315 PVC TWICE THE DIAMETER OF THE PIPE OR WIRE CONDUIT WITHIN; BURIAL DEPTH FOR SLEEVES BELOW FINISHED GRADE ARE AS FOLLOWS:
 42 INCH MINIMUM UNDER THOROUGHFARE AND STREETS
 24 INCH MINIMUM UNDER PLANTER AREA
 24 INCH MINIMUM UNDER PARKING LOT
 18 INCH MINIMUM UNDER SIDEWALK
 36 INCH MINIMUM UNDER TRAFFIC CIRCLES (RESIDENTIAL AREAS)
2. ALL SLEEVE BELOW HARDSCAPE SHALL EXTEND 24 INCHES BEYOND HARD SURFACE EDGES.
3. FOR PIPE AND WIRE BURIAL DEPTHS, SEE SPECIFICATIONS, MAINLINE SHALL HAVE MINIMUM COVER OF 24 INCHES, LATERAL SHALL HAVE MINIMUM COVER OF 18 INCHES.
4. SCH 40 PVC FOR MAINLINE 2 INCHES OR SMALLER.
5. CLASS 315 PVC FOR MAINLINE 2 1/2 INCHES AND LARGER.
6. CLASS 200 PVC FOR 2 INCH LATERAL LINES AND SMALLER.
7. SCH 40 PVC FOR QUICK COUPLING LINE 1 INCH MIN. TO 2 INCH MAXIMUM
8. TRENCH BACKFILL SHALL BE NATIVE MATERIAL, COMPACT TO 90% MINIMUM, RELATIVE COMPACTION UNLESS UNDER CONCRETE OR ASPHALT. USE TRENCH BACKFILL PER CITY SPECIFICATION 11A AND 11B UNDER CONCRETE OR ASPHALT.
9. REFER TO DETAIL LSD-14 FOR IRRIGATION MATERIALS LIST.
10. IF APPROVED IN WRITING FROM THE CITY'S LANDSCAPE ARCHITECT, CONTROL WIRE MAY BE INSTALLED WITHOUT CONDUIT. INSTEAD, RUN WIRING BENEATH MAINLINE. TAPE AND BUNDLE AT 10 FOOT INTERVALS. TIE A 24 INCH LOOP IN ALL WIRING AT CHANGES OF DIRECTION OF 30 INCHES OR GREATER. UNTIE AFTER ALL CONNECTIONS HAVE BEEN MADE.

<h2 style="margin: 0;">CITY OF FREMONT</h2> <h3 style="margin: 0;">STANDARD DETAILS</h3> <h3 style="margin: 0;">CITY STANDARD</h3> <h3 style="margin: 0;">IRRIGATION TRENCH</h3>			DATE APPROVED BY CITY COUNCIL 12/13/11		
			RESOLUTION NO. 2006-31		
			CITY ENGINEER		
FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.
LSD-18.DWG	1/4" = 1'-0"	AK/MM/PM	RER	DEC. 2011	LSD-18
REVISIONS			1 of 1		

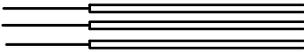


NOTE:

- CONTRACTOR SHALL PROVIDE:
 - (2) VALVE KEYS
 - (2) SWIVEL HOSE-ELLS
- ALL BOXES SHALL BE OFFSET 12-INCHES FROM ANY SIDEWALK, CURB &/or HEADER

			CITY OF FREMONT STANDARD DETAILS			DATE APPROVED BY CITY COUNCIL 12/13/11										
						RESOLUTION NO. 2006-31										
			CITY STANDARD IRRIGATION QUICK COUPLING VALVE IN BOX			 CITY ENGINEER										
<table border="1" style="width: 100%;"> <tr> <td>Council Revision</td> <td>12/13/11</td> </tr> <tr> <td>General Revision</td> <td>06/07/10</td> </tr> <tr> <td>APPR</td> <td>REVISED</td> <td>DATE</td> </tr> <tr> <td colspan="3" style="text-align: center;">REVISIONS</td> </tr> </table>						Council Revision	12/13/11	General Revision	06/07/10	APPR	REVISED	DATE	REVISIONS			
Council Revision	12/13/11															
General Revision	06/07/10															
APPR	REVISED	DATE														
REVISIONS																
FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.											
LSD-19.DWG	3" = 1'-0"	AK/MM/PM	RER	DEC. 2011	LSD-19	1 of 1										

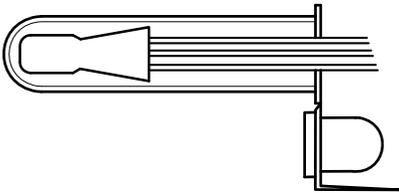
STEP 1: STRIP WIRES ½ INCH FROM ENDS.



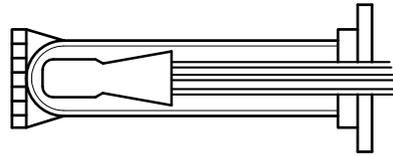
STEP 2: APPLY SCOTCHLOK Y SPRING CONNECTOR IN A CLOCKWISE DIRECTION.



STEP 3: INSERT SPLICE FILLED TO BOTTOM OF GEL-FILLED TUBE, CHECK TO MAKE SURE CONNECTOR HAS BEEN PUSHED PAST LOCKING FINGERS AND IS SEATED AT BOTTOM OF TUBE.



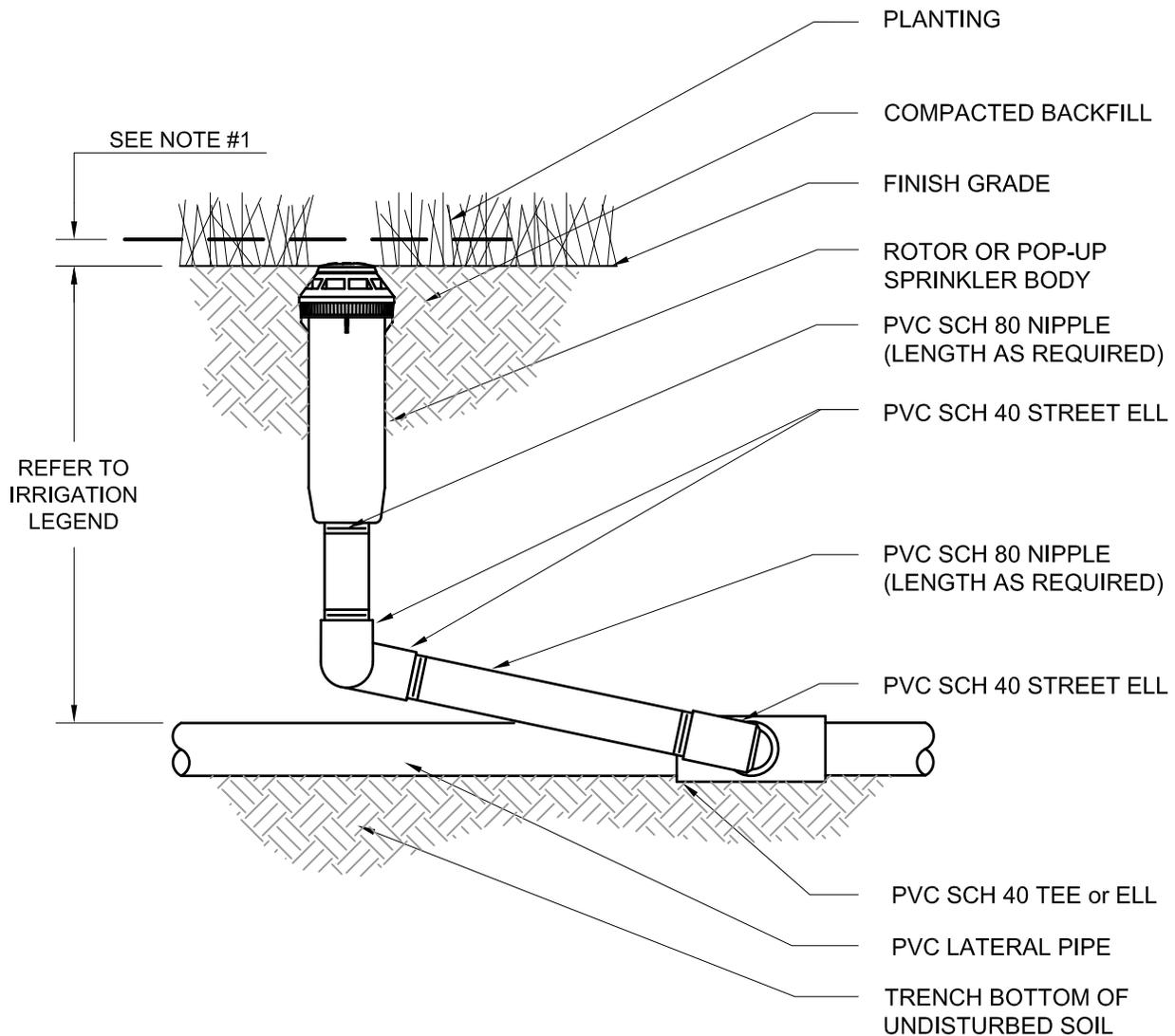
STEP 4: POSITION WIRES IN WIRE CHANNELS AND CLOSE INSULATOR TUBE COVER.



NOTE:

1. MAXIMUM WIRE SIZES PER CONNECTOR ARE 3-#14'S OR 2-#12'S
2. REFER TO CITY STANDARD DETAIL LSD-14 FOR MATERIALS

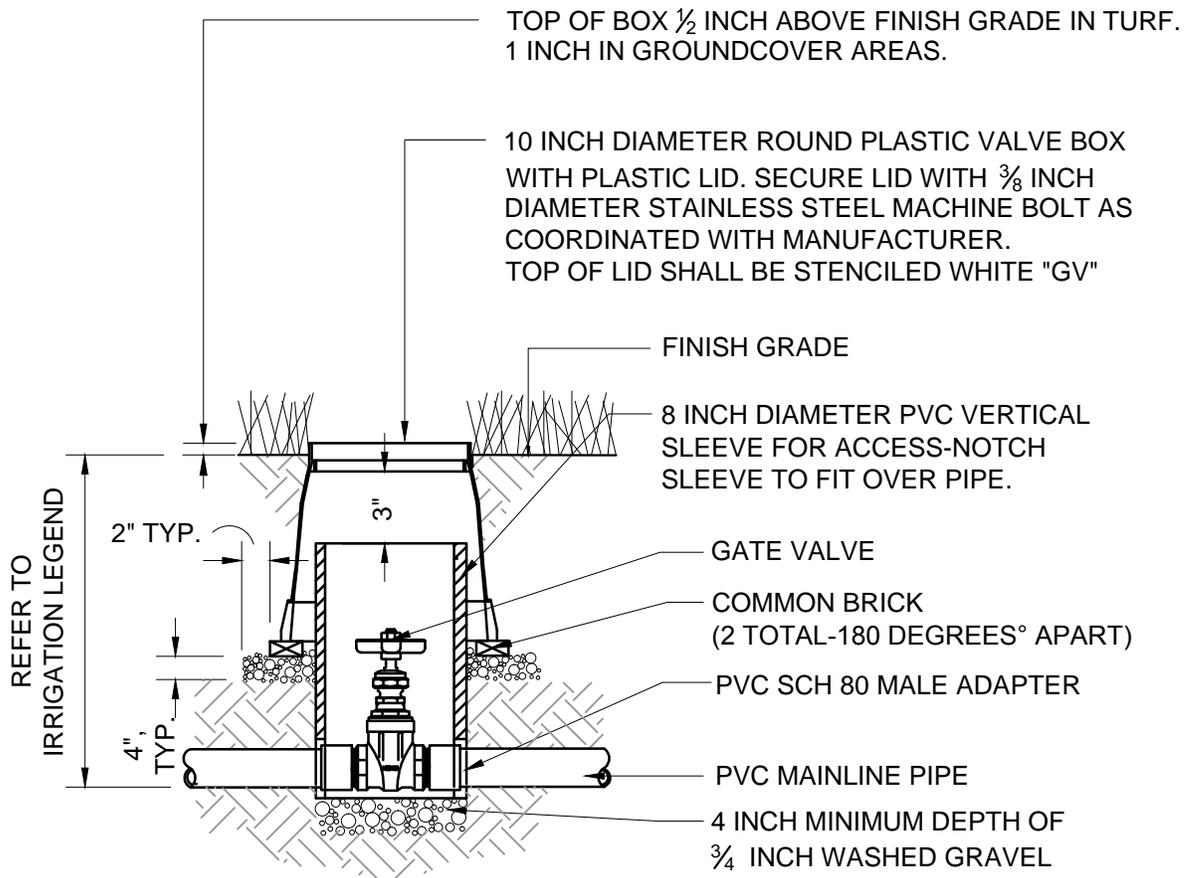
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						RESOLUTION NO. 2006-31	
						 CITY ENGINEER	
APPR	REVISED	DATE					
REVISIONS							
FILE NO. LSD-20.DWG	SCALE NONE	DRAWN AK/MM/PM	CHECKED RER	DATE NOV. 2005	DWG NO. LSD-20	1 of 1	



NOTE:

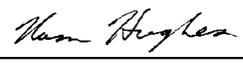
1. INSTALL TOP OF POP-UP SPRINKLER 1 INCH ABOVE FINISHED GRADE IN SHRUB AREAS AND FLUSH WITH GRADE IN TURF AREAS.
2. ROTORS SHALL BE INSTALLED FLUSH IN TURF AREAS.
3. REFER TO CITY STANDARD DETAIL LSD-14 FOR MATERIALS
4. INSTALL A MINIMUM OF 9" FROM EDGE OF PAVEMENT IN SHRUB AREAS AND 2" IN TURF AREAS.

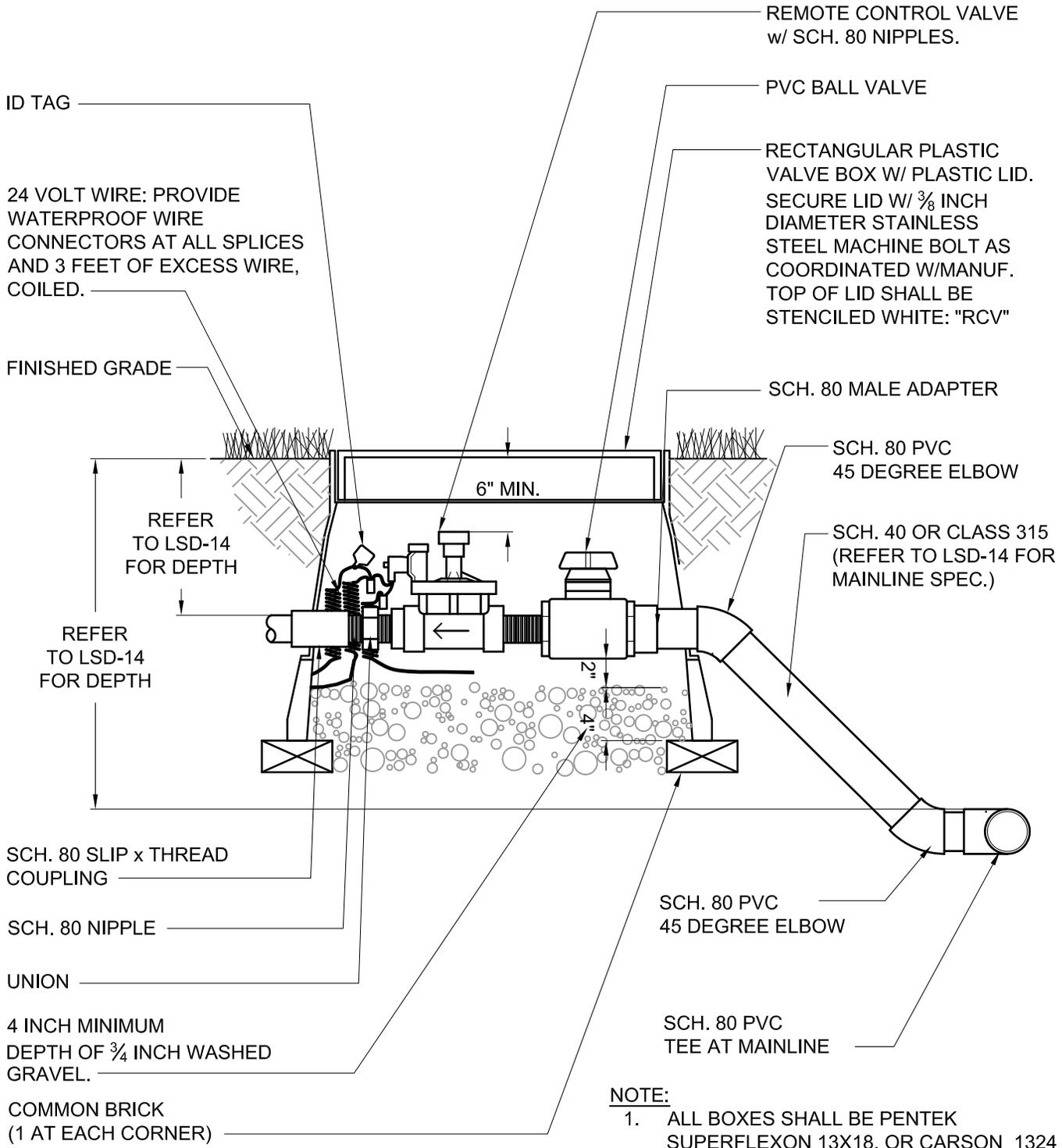
			CITY OF FREMONT			DATE APPROVED BY CITY COUNCIL	
			STANDARD DETAILS			12/13/11	
			CITY STANDARD			RESOLUTION NO. 2006-31	
			IRRIGATION ROTOR OR POP-UP			<i>Norm Hughes</i>	
APPR	REVISED	DATE				CITY ENGINEER	
REVISIONS							
FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.		
LSD-21.DWG	NONE	AK/MM/PM	RER	NOV. 2005	LSD-21	1 of 1	



NOTE:

1. REFER TO CITY STANDARD DETAIL LSD-14 FOR ALL MATERIALS

			<h1 style="text-align: center;">CITY OF FREMONT</h1> <h2 style="text-align: center;">STANDARD DETAILS</h2>			DATE APPROVED BY CITY COUNCIL 04/11/06	
						RESOLUTION NO. 2006-31	
			<h3 style="text-align: center;">CITY STANDARD</h3> <h3 style="text-align: center;">IRRIGATION GATE VALVE</h3>			 CITY ENGINEER	
APPR	REVISED	DATE				REVISIONS	
FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.		
LSD-22.DWG	1-1/2" = 1'-0"	AK/MM/PM	RER	NOV. 2005	LSD-22	1 of 1	



ID TAG

24 VOLT WIRE: PROVIDE WATERPROOF WIRE CONNECTORS AT ALL SPLICES AND 3 FEET OF EXCESS WIRE, COILED.

FINISHED GRADE

REFER TO LSD-14 FOR DEPTH

REFER TO LSD-14 FOR DEPTH

SCH. 80 SLIP x THREAD COUPLING

SCH. 80 NIPPLE

UNION

4 INCH MINIMUM DEPTH OF 3/4 INCH WASHED GRAVEL.

COMMON BRICK (1 AT EACH CORNER)

REMOTE CONTROL VALVE w/ SCH. 80 NIPPLES.

PVC BALL VALVE

RECTANGULAR PLASTIC VALVE BOX W/ PLASTIC LID. SECURE LID W/ 3/8 INCH DIAMETER STAINLESS STEEL MACHINE BOLT AS COORDINATED W/MANUF. TOP OF LID SHALL BE STENCILED WHITE: "RCV"

SCH. 80 MALE ADAPTER

SCH. 80 PVC 45 DEGREE ELBOW

SCH. 40 OR CLASS 315 (REFER TO LSD-14 FOR MAINLINE SPEC.)

6" MIN.

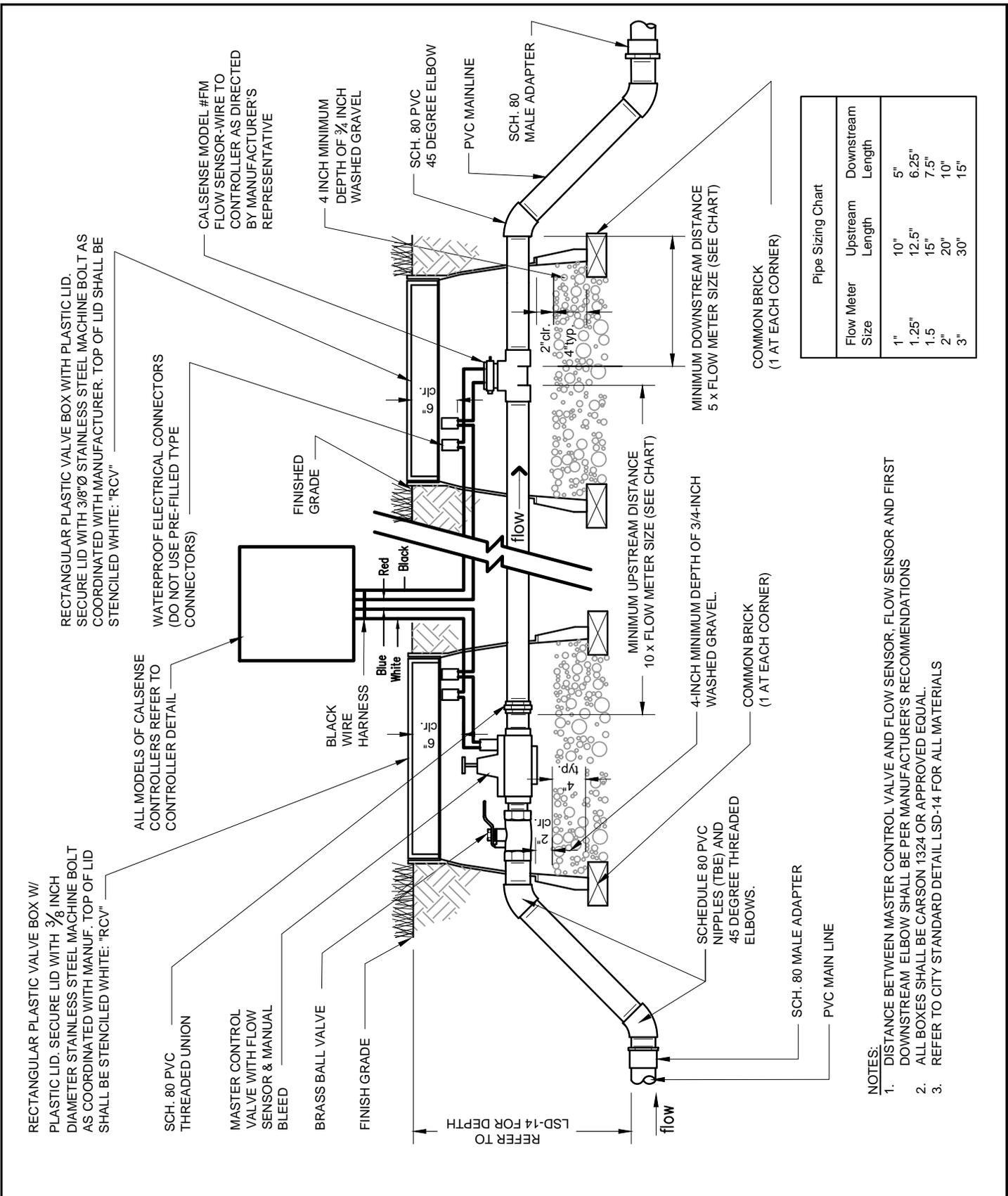
SCH. 80 PVC 45 DEGREE ELBOW

SCH. 80 PVC TEE AT MAINLINE

NOTE:

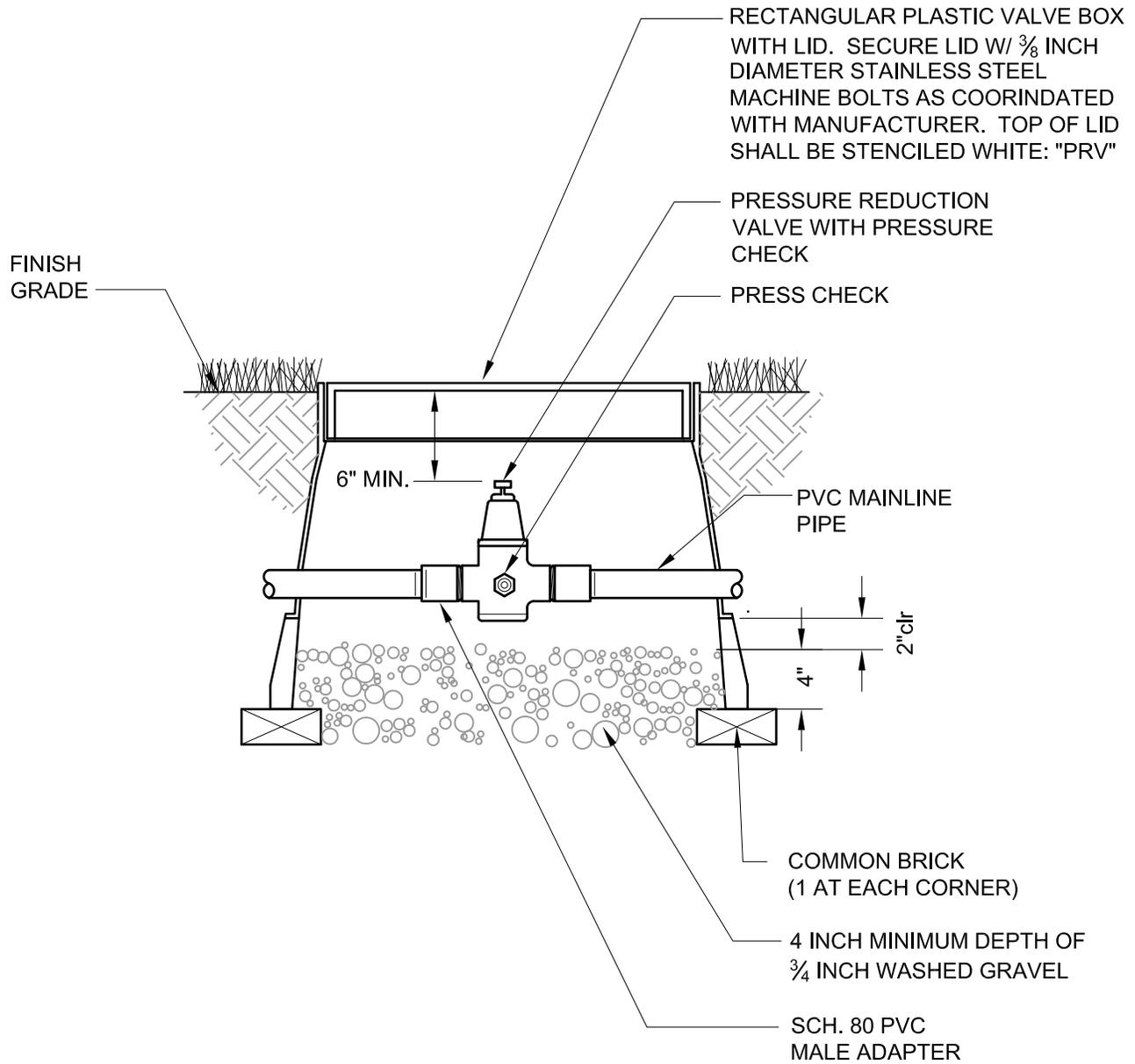
1. ALL BOXES SHALL BE PENTEK SUPERFLEXON 13X18, OR CARSON 1324 OR APPROVED EQUAL.
2. REFER TO CITY STANDARD DETAIL LSD-14 FOR ALL MATERIALS.

<h2 style="margin: 0;">CITY OF FREMONT</h2> <h3 style="margin: 0;">STANDARD DETAILS</h3> <h3 style="margin: 0;">CITY STANDARD</h3> <h2 style="margin: 0;">IRRIGATION REMOTE CONTROL VALVE W/ GATE VALVE</h2>			DATE APPROVED BY CITY COUNCIL 12/13/11			
			RESOLUTION NO. 2006-31			
			CITY ENGINEER			
APPR	REVISED	DATE				
REVISIONS						
FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.	
LSD-23.DWG	1" = 1'-0"	AK/MM/PM	RER	NOV. 2005	LSD-23	1 of 1



- NOTES:
- DISTANCE BETWEEN MASTER CONTROL VALVE AND FLOW SENSOR, FLOW SENSOR AND FIRST DOWNSTREAM ELBOW SHALL BE PER MANUFACTURER'S RECOMMENDATIONS
 - ALL BOXES SHALL BE CARSON 1324 OR APPROVED EQUAL.
 - REFER TO CITY STANDARD DETAIL LSD-14 FOR ALL MATERIALS

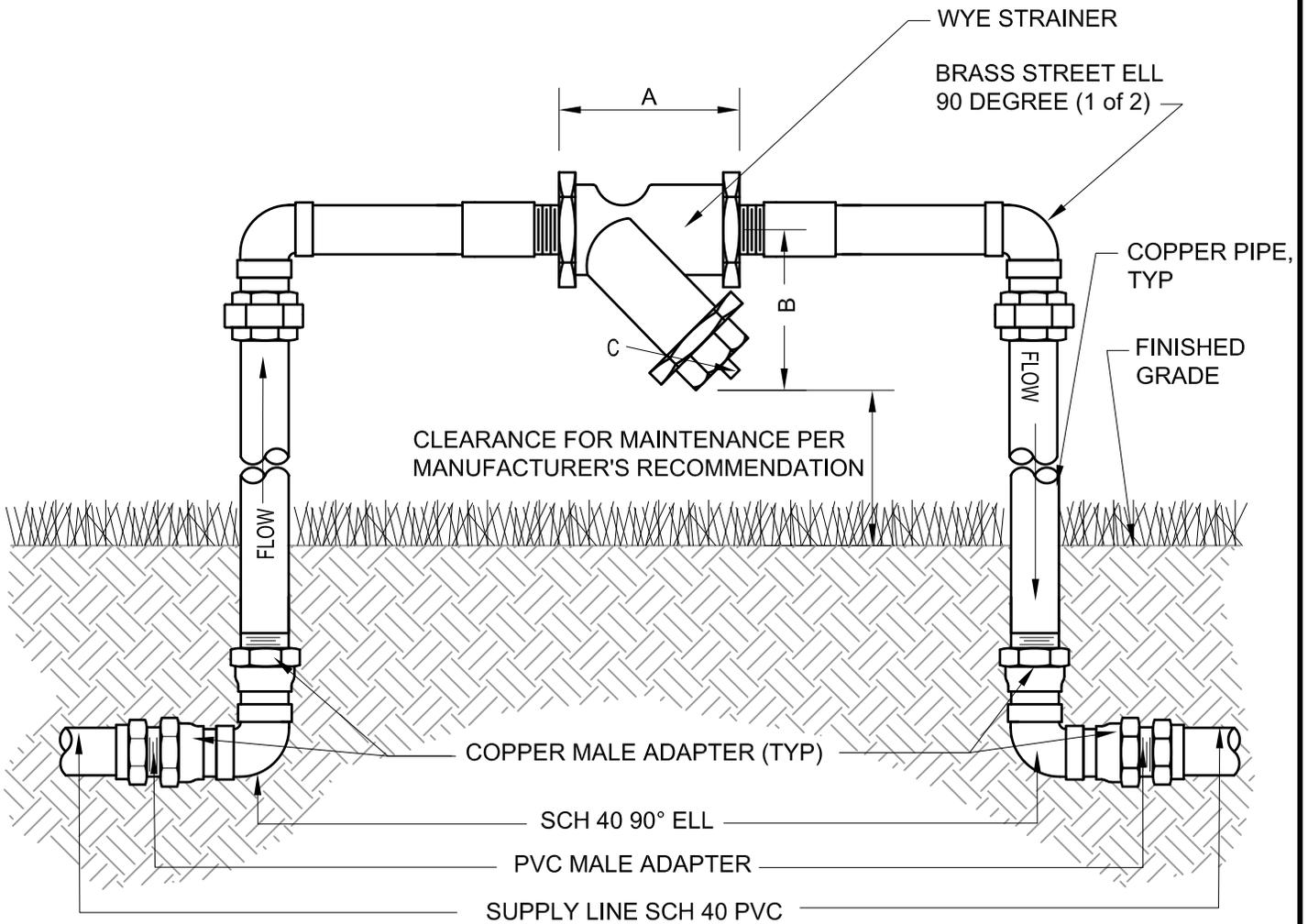
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			RESOLUTION NO. 2006-31							
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">APPR</th> <th style="width: 45%;">REVISED</th> <th style="width: 40%;">DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>			APPR	REVISED	DATE				CITY ENGINEER	
APPR	REVISED	DATE								
FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.					
LSD-24.DWG	3/4" = 1'-0"	AK/MM	RER	NOV. 2005	LSD-24					
					1 of 1					



NOTES:

1. PRESSURE REDUCING VALVE BODY SHALL BE IRON; SEAT SHALL BE STAINLESS STEEL; INTEGRAL STRAINER SHALL BE STAINLESS STEEL; STEM SHALL BE BRASS; AND, DISK SHALL BE BRASS.
2. ALL BOXES SHALL BE PENTEK SUPERFLEXON 13X18, CARSON 1324 OR APPROVED EQUAL.
3. REFER TO CITY STANDARD DETAIL LSD-14 FOR ALL MATERIALS

			<p>CITY OF FREMONT STANDARD DETAILS CITY STANDARD <u>IRRIGATION PRESSURE</u> <u>REDUCTION VALVE</u></p>			<p>DATE APPROVED BY CITY COUNCIL 12/13/11</p> <p>RESOLUTION NO. 2006-31</p> <p style="text-align: center;"><i>Nam Hughes</i></p> <p>CITY ENGINEER</p>
APPR	REVISED	DATE	REVISIONS			
FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.	
LSD-25.DWG	1" = 1'-0"	AK/MM/PM	RER	NOV. 2005	LSD-25	1 of 1

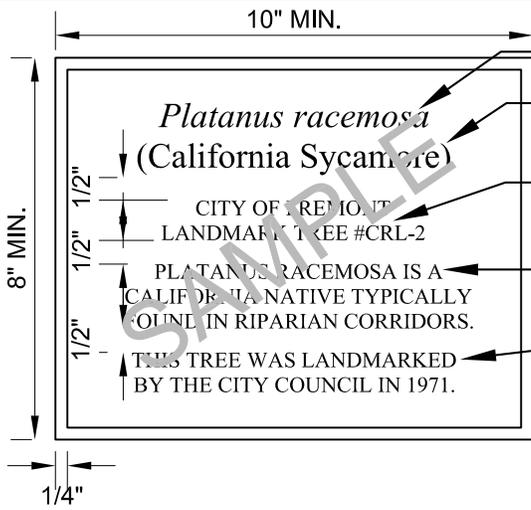


Size	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	2 3/4"	3"	3 3/4"	4 7/16"	4 15/16"	6 7/8"
B	2 1/4"	2 9/16"	2 3/4"	3 5/8"	3 7/8"	5 1/8"
C	1/4"	3/8"	3/8"	3/4"	3/4"	1"
Wt	.75	1.38	2.13	3.13	4.5	7

NOTES:

1. BODY AND CAP SHALL BE BRONZE ASTM B62; SCREEN SHALL BE 20 MESH STAINLESS STEEL; GASKET SHALL BE NON-ASBESTOS; ENDS SHALL BE THREADED ANSI/ASME B1.20.1
2. WORKING PRESSURE SHALL BE NON-SHOCK, 200 PSI @ 150 DEGREES
3. REFER TO CITY STANDARD DETAIL LSD-14 FOR ALL MATERIALS

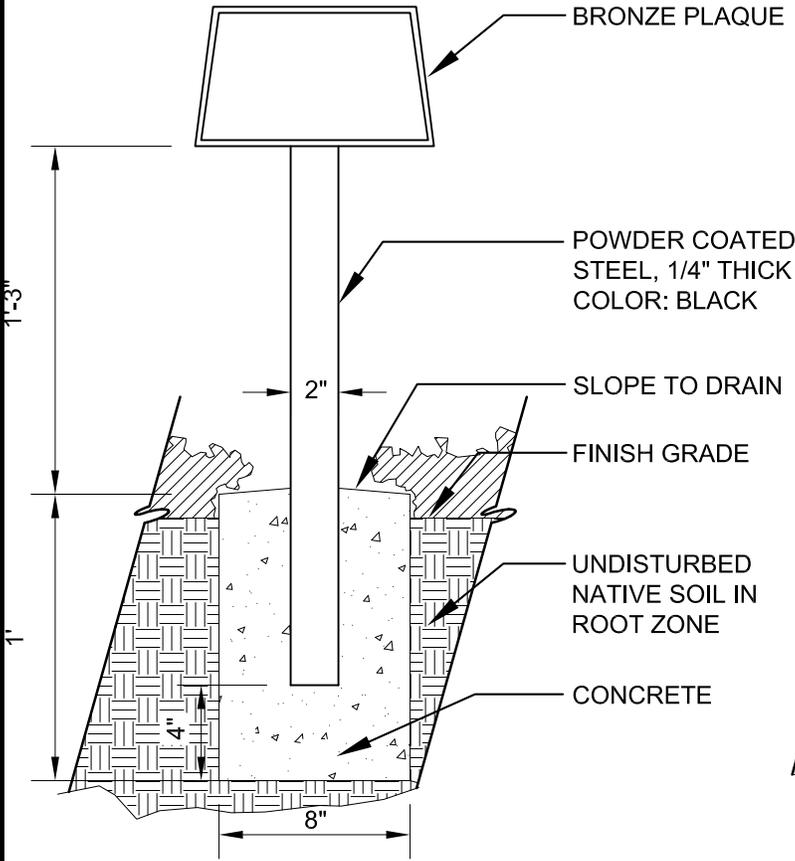
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			RESOLUTION NO. 2006-31			
			CITY ENGINEER			
APPR	REVISED	DATE	REVISIONS			
FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.	
LSD-26.DWG	1" = 1'-0"	AK/MM/PM	RER	NOV. 2005	LSD-26	1 of 1



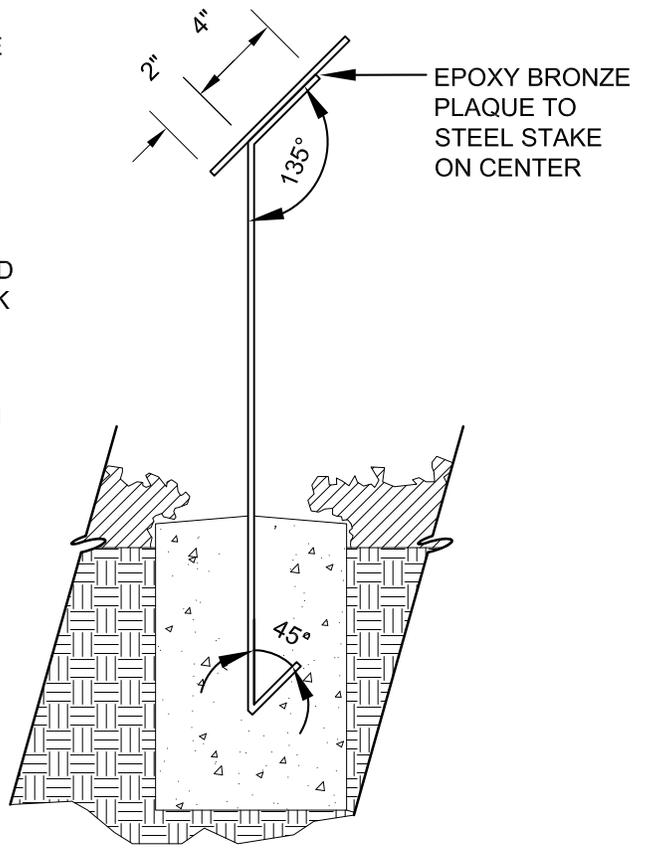
- SCIENTIFIC NAME OF TREE, 1/2" LETTERS, ITALICIZED
- COMMON NAME OF TREE IN PARENTHESES, 1/2" LETTERS
- CITY OF FREMONT LANDMARK TREE NUMBER, 5/16" LETTERS, CAPITALIZED
- TREE DESCRIPTION, 5/16" LETTERS, CAPITALIZED. DESCRIPTION TO BE APPROVED BY CITY LANDSCAPE ARCHITECT
- STANDARD TEXT, 5/16" LETTERS, CAPITALIZED

- NOTES:**
1. ALL TEXT TO BE TIMES NEW ROMAN, CENTERED ON PLAQUE.
 2. BACKGROUND COLOR SHALL BE DARK OXIDE (DARK BROWN).
 3. BACKGROUND TEXTURE SHALL BE LEATHERETTE.
 4. BORDER SHALL BE SINGLE LINE WITH NO BEVEL.
 5. LETTER AND WORD SPACING AS SHOWN.
 6. SIZE OF PLAQUE MAY VARY ACCORDING TO VARYING WIDTH OF SPECIES NAME.
 7. ANY DEVIATIONS SHALL BE APPROVED BY THE CITY LANDSCAPE ARCHITECT PRIOR TO FABRICATION.

BRONZE PLAQUE
SCALE: 3"=1'-0"



FRONT VIEW
SCALE: 1 1/2"=1'-0"



SIDE VIEW
SCALE: 1 1/2"=1'-0"

CITY OF FREMONT
STANDARD DETAILS
CITY STANDARD
LANDMARK TREE PLAQUE

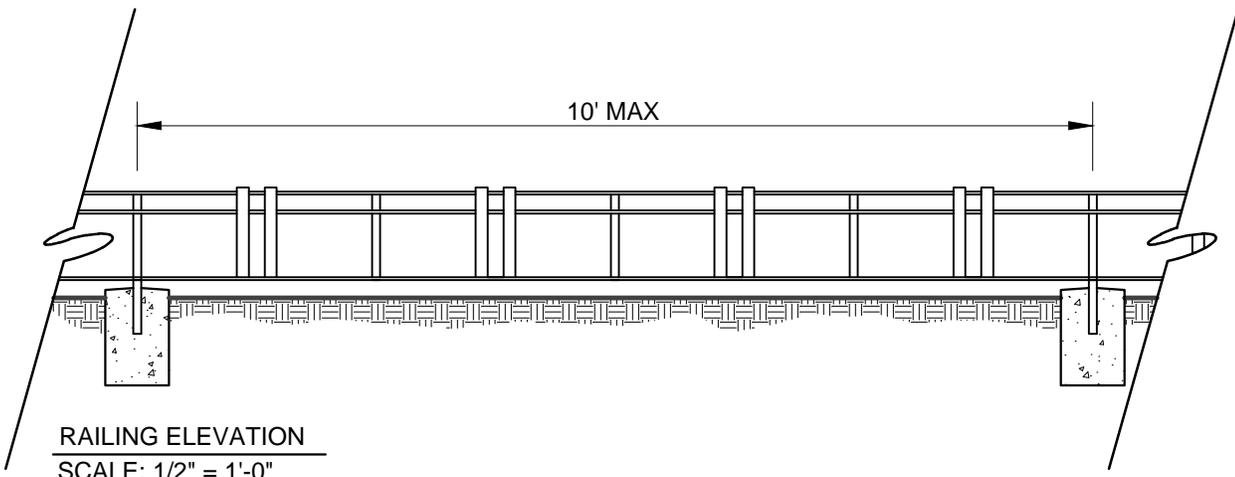
DATE APPROVED BY CITY COUNCIL
12/13/11

RESOLUTION NO. 2006-31

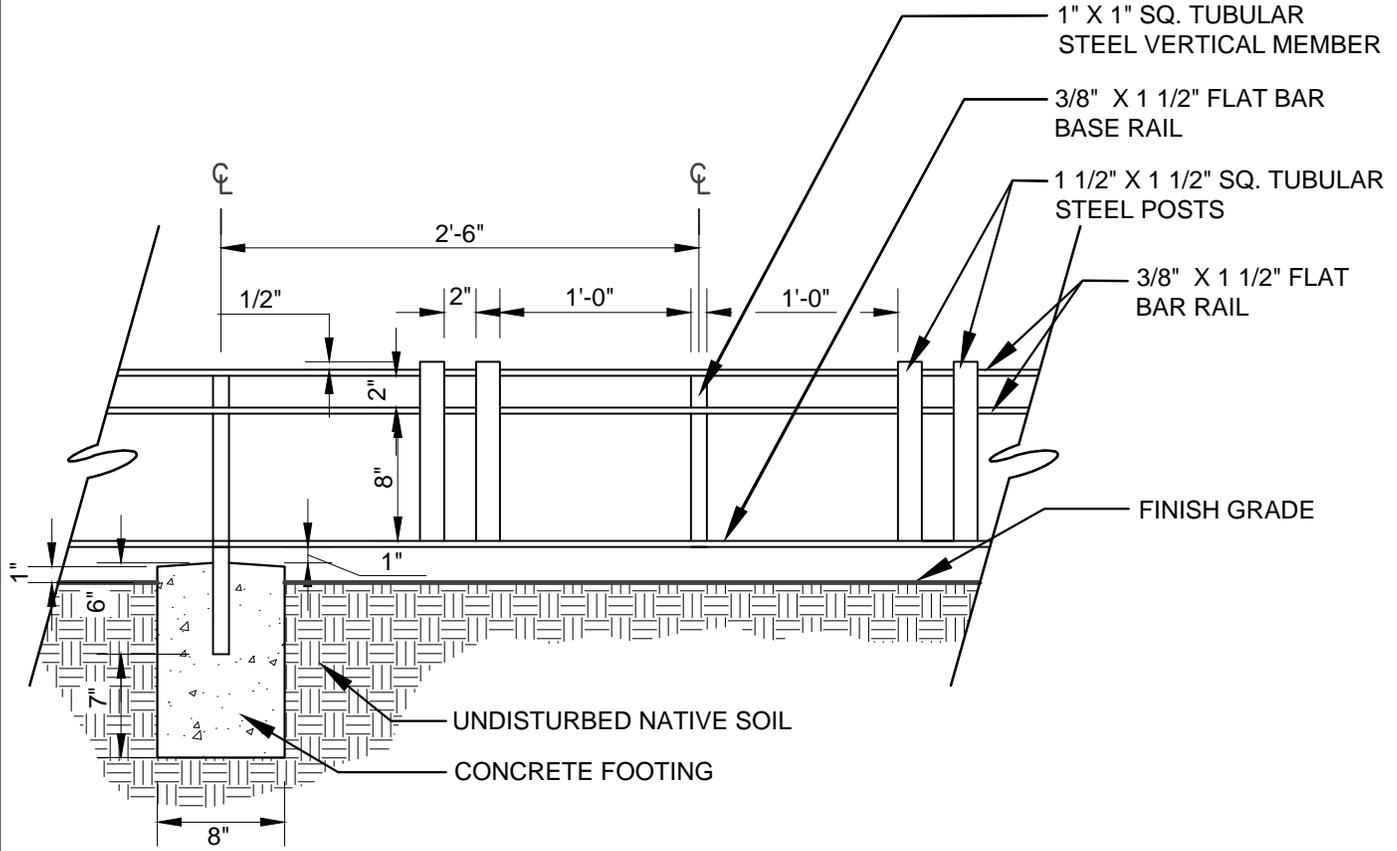
Norm Hughes
CITY ENGINEER

FILE NO. LSD-27.DWG	SCALE AS SHOWN	DRAWN TB	CHECKED RER	DATE DEC. 2011	DWG NO. LSD-27	1 OF 1
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APPR	REVISION	DATE
	Council Revision	12/13/11
REVISIONS		



RAILING ELEVATION
SCALE: 1/2" = 1'-0"



LOW METAL RAILING
SCALE: 1" = 1'-0"

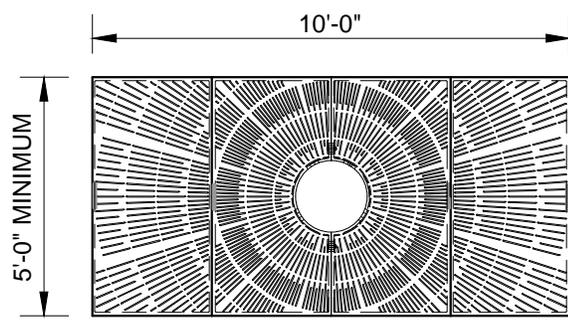
NOTE:
ALL MEMBERS SOLID STEEL RAILING AND TUBULAR STEEL

	Council Revision	12/13/11
APPR	REVISED	DATE
REVISIONS		

CITY OF FREMONT
STANDARD DETAILS
CITY STANDARD
LANDMARK TREE RAILING

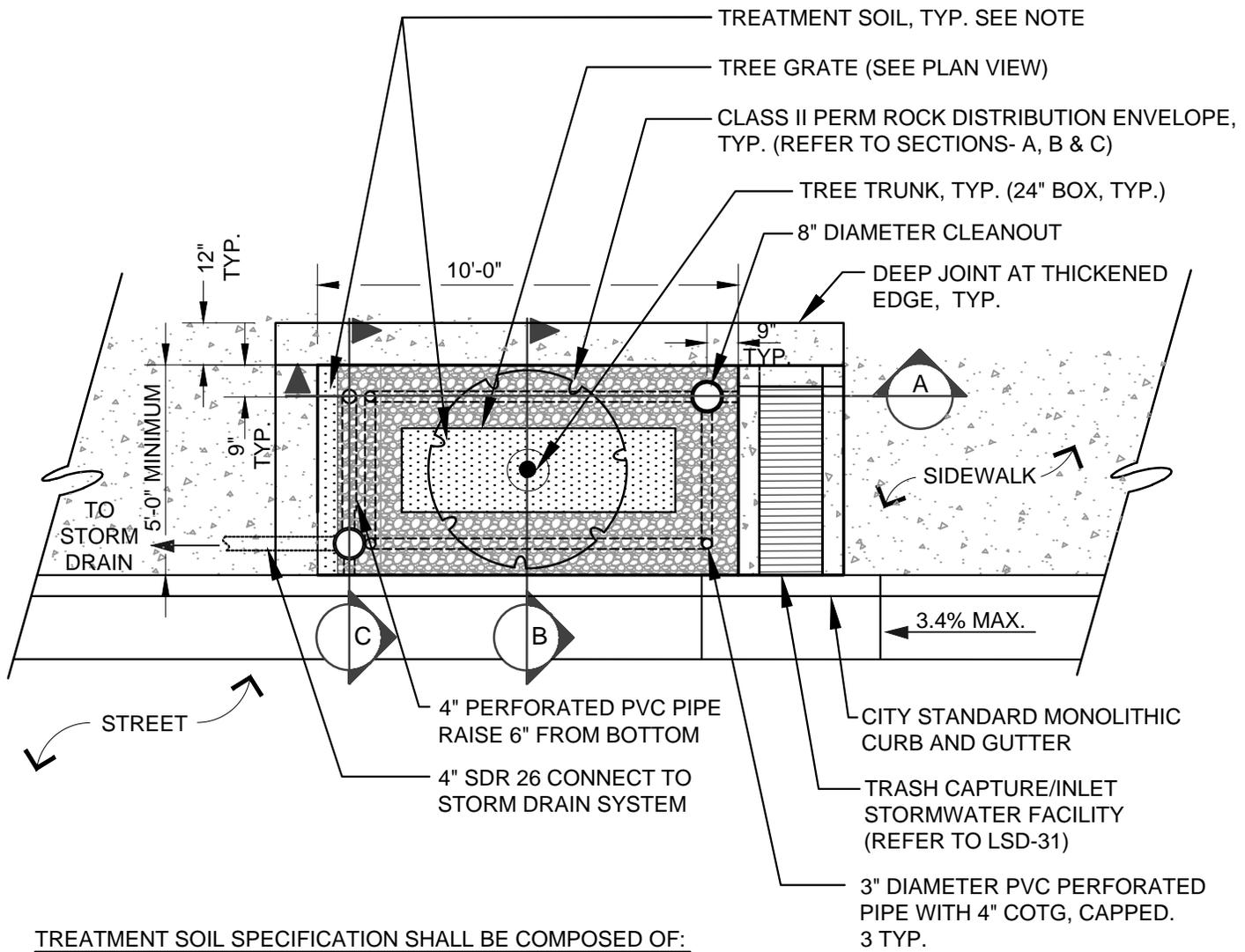
DATE APPROVED BY CITY COUNCIL
12/13/11
RESOLUTION NO. 2006-31
Ham Hughes
CITY ENGINEER

FILE NO. LSD-28.DWG	SCALE VARIES	DRAWN TB	CHECKED RER	DATE DEC. 2011	DWG NO. LSD - 28	1 of 1
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NOTE:
NEENAH TREE GRATE (WITH EXTENSIONS) PER LSD-2 OR APPROVED EQUAL

PLAN VIEW - TREE GRATE



TREATMENT SOIL SPECIFICATION SHALL BE COMPOSED OF:
 60% ASTM C-33 SAND
 30% USCC STA CERTIFIED COMPOST
 10% SMALL WOOD CHIPS

	Council Revision	12/13/11
APPR	REVISED	DATE
REVISIONS		

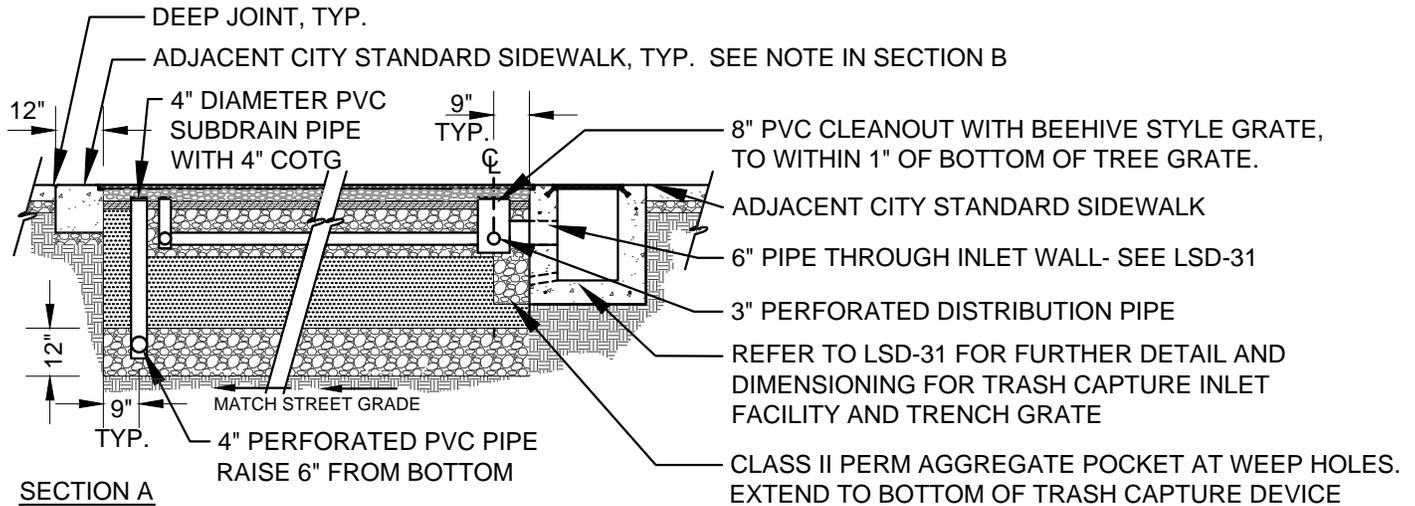
CITY OF FREMONT
STANDARD DETAILS
CITY STANDARD
STORMWATER TREETWELL
PLAN VIEW

DATE APPROVED BY CITY COUNCIL	12/13/11
RESOLUTION NO.	2006-31
<i>Ham Hughes</i>	
CITY ENGINEER	

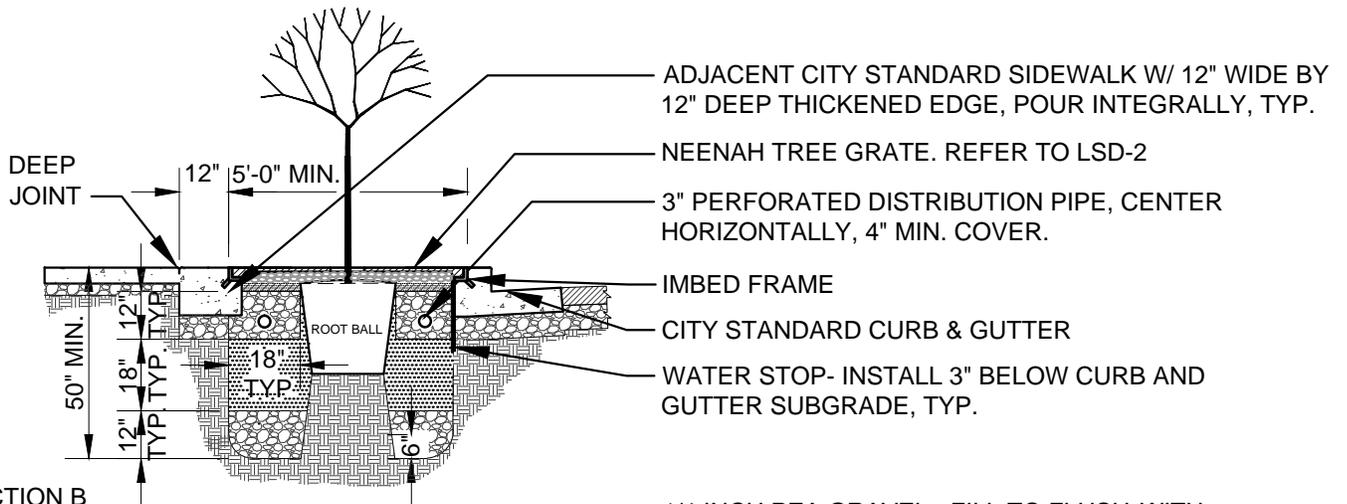
FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.	
LSD-29.DWG	1/4" = 1'-0"	EL/TB/CC	RER	DEC. 2011	LSD-29	1 OF 2

SIZING INFORMATION:

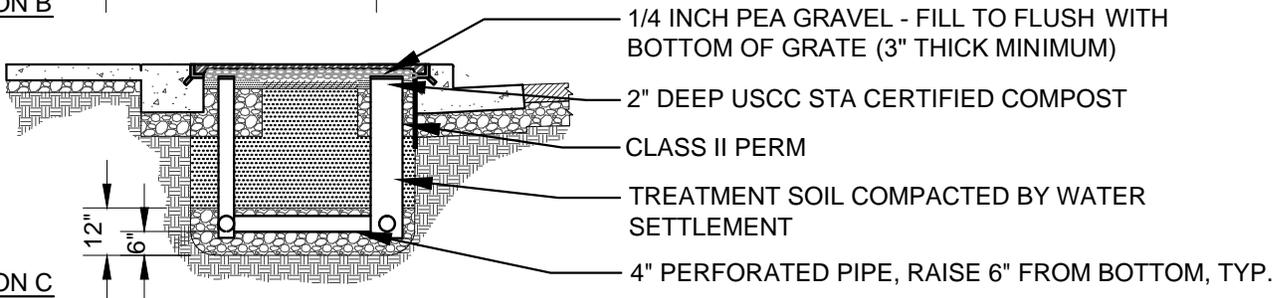
1. THE MAXIMUM ALLOWABLE DRAINAGE AREA FOR THIS TREETWELL AS SHOWN (10' x 5') SHALL BE 1,250 SQ. FT. TREETWELL HAS BEEN SIZED USING THE COMBINED FLOW AND VOLUME METHODOLOGY AS DETAILED IN THE ACCWP C.3 STORMWATER TECHNICAL MANUAL. ANY DEVIATION FROM THIS SIZE (10' x 5') WOULD REQUIRE FLOW-VOLUME CALCULATIONS. SUBSURFACE TREETWELL TREATMENT DEVICES WILL NOT BE ACCEPTED USING SIMPLIFIED SIZING CRITERIA OF 4%.
2. THE CURB INLET OPENING OF 15" AS SHOWN IS SUFFICIENT TO CAPTURE 100% OF THE TREATMENT RUNOFF FROM THE MAXIMUM DRAINAGE AREA (1,250 SQ.FT. OF IMPERVIOUS AREA) PERTINENT TO THIS TREETWELL SIZE. THE LENGTH OF CURB OPENING REQUIRED FOR 100% CAPTURE IS DEPENDENT ON THE GUTTER SLOPE (FOR TREETWELLS INSTALLED AT GRADE). STREETS GREATER THAN 3.4% SHALL REQUIRE LONGER OR MULTIPLE CURB OPENINGS BASED ON INLET CAPTURE CALCULATIONS.
3. FOR ADDITIONAL PLANTING AND IRRIGATION REFER TO LSD-2 REQUIREMENTS. TREES MUST BE IRRIGATED.



SECTION A



SECTION B



SECTION C

**CITY OF FREMONT
STANDARD DETAILS
CITY STANDARD
STORMWATER TREETWELL
SECTIONS**

DATE APPROVED BY CITY COUNCIL
12/13/11

RESOLUTION NO. 2006-31

Ham Hughes

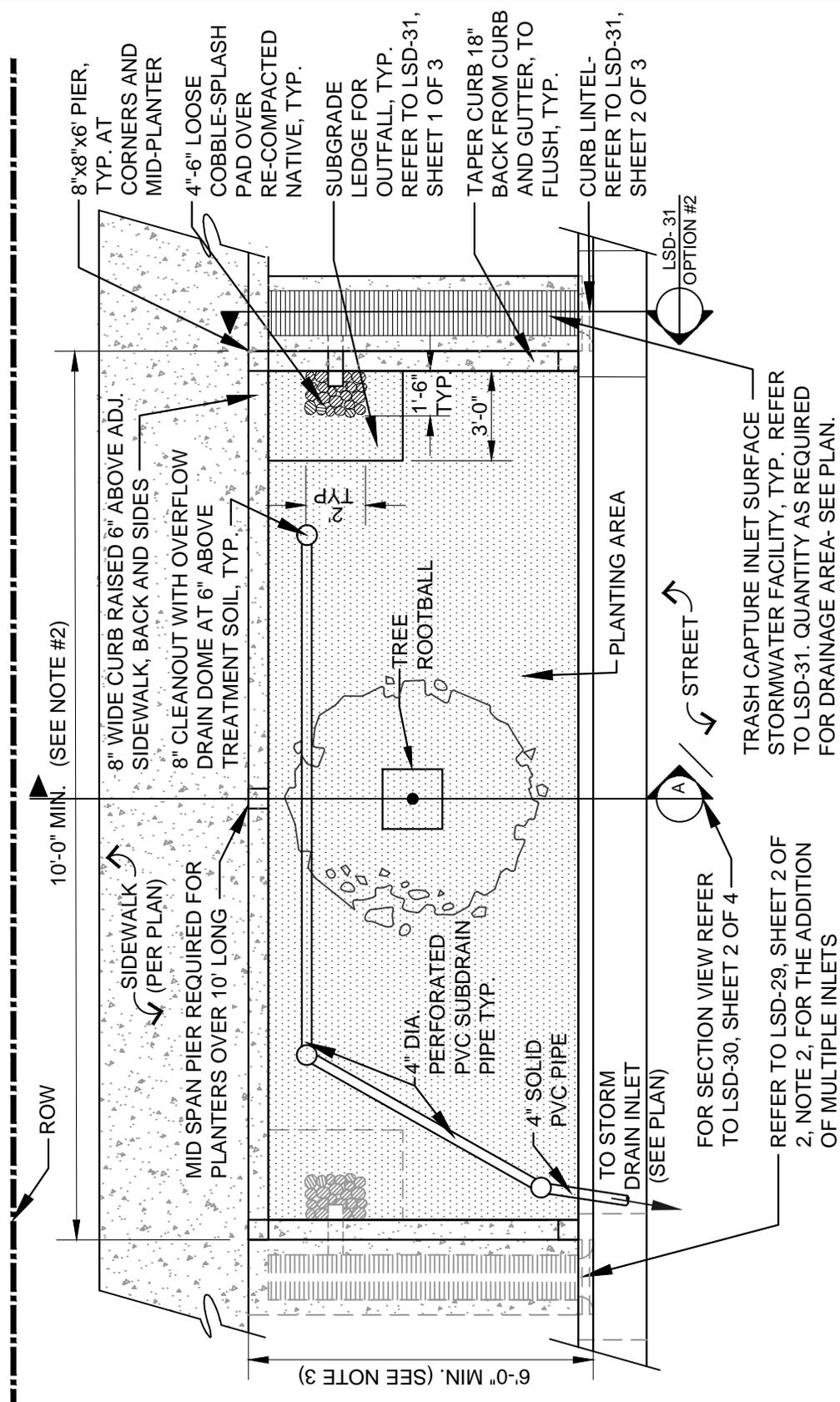
CITY ENGINEER

	Council Revision	12/13/11
APPR	REVISED	DATE
REVISIONS		

FILE NO. LSD-29.DWG	SCALE 1/4=1'-0"	DRAWN MAM/TB/CC	CHECKED RER	DATE DEC. 2011	DWG NO. LSD-29	2 OF 2
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SIZING INFORMATION:

- A. SIZE TREEWELL FILTER TO EQUAL 4% OF THE DRAINAGE AREA ENTERING PLANTER. REFER TO ACCWP C.3 STORMWATER TECHNICAL MANUAL.
- B. FOR ADDITIONAL PLANTING AND IRRIGATION REFER TO LSD-2 REQUIREMENTS. TREES MUST BE IRRIGATED.



NOTES:

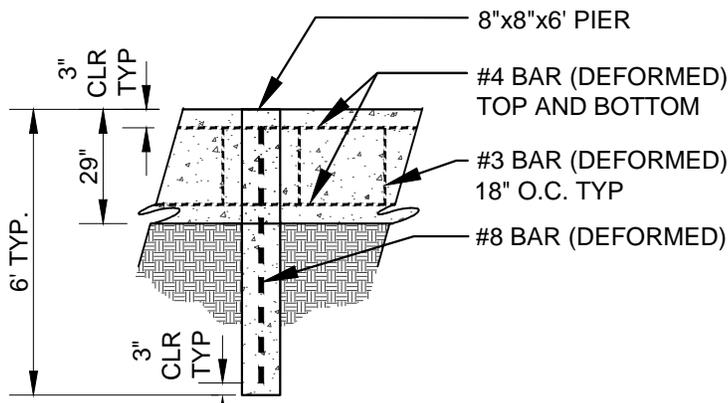
- 1. USE NDS DOME ATRIUM GRATE FOR OVERFLOW DRAINS, OR APPROVED EQUAL. COLOR: BLACK
- 2. DIMENSIONS VARY DEPENDING ON SIZE OF DRAINAGE AREA, BUT NOT LESS THAN 5'-0" BY 10'-0"
- 3. SEE SHEET 3 OF 4 FOR ALTERNATE MONOLITHIC SIDEWALK DESIGN

APPR	REVISIONS	DATE
	Council Revision	12/13/11
	REVISED	
FILE NO.	SCALE	DRAWN
LSD-30.DWG	3/16" = 1'-0"	MM

**CITY OF FREMONT
STANDARD DETAILS
CITY STANDARD
STORMWATER PLANTER
PLAN VIEW**

DATE APPROVED BY CITY COUNCIL	12/13/11
RESOLUTION NO.	2006-31
CITY ENGINEER	<i>Ham Hughes</i>
DWG NO.	LSD-30
	1 OF 4

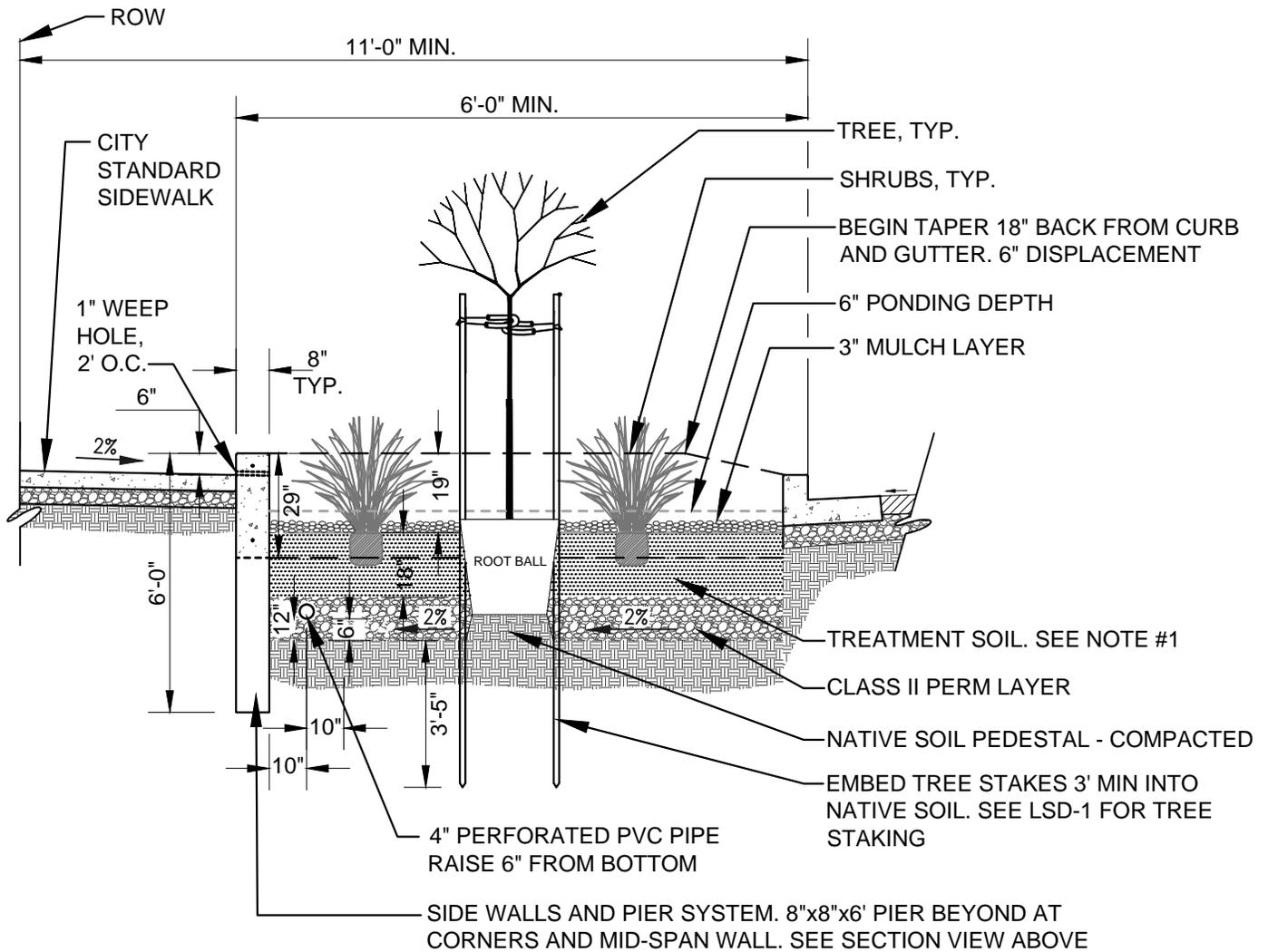
CHECKED	DATE
RER	DEC. 2011



SECTION VIEW
8" SIDE WALLS AND PIER INTERFACE

NOTES:

1. TREATMENT SOIL SHALL BE COMPOSED OF:
60% ASTM C-33 SAND
30% USCC STA CERTIFIED COMPOST
10% SMALL WOOD CHIPS
2. CONTRACTOR MUST SUBMIT TEST RESULTS FROM COMPOST FACILITY.
3. PLANTS MUST BE IRRIGATED.



SECTION A

	Council Revision	12/13/11
APPR	REVISED	DATE
REVISIONS		

CITY OF FREMONT
STANDARD DETAILS
CITY STANDARD
STORMWATER PLANTER
SECTIONS

DATE APPROVED BY CITY COUNCIL
12/13/11

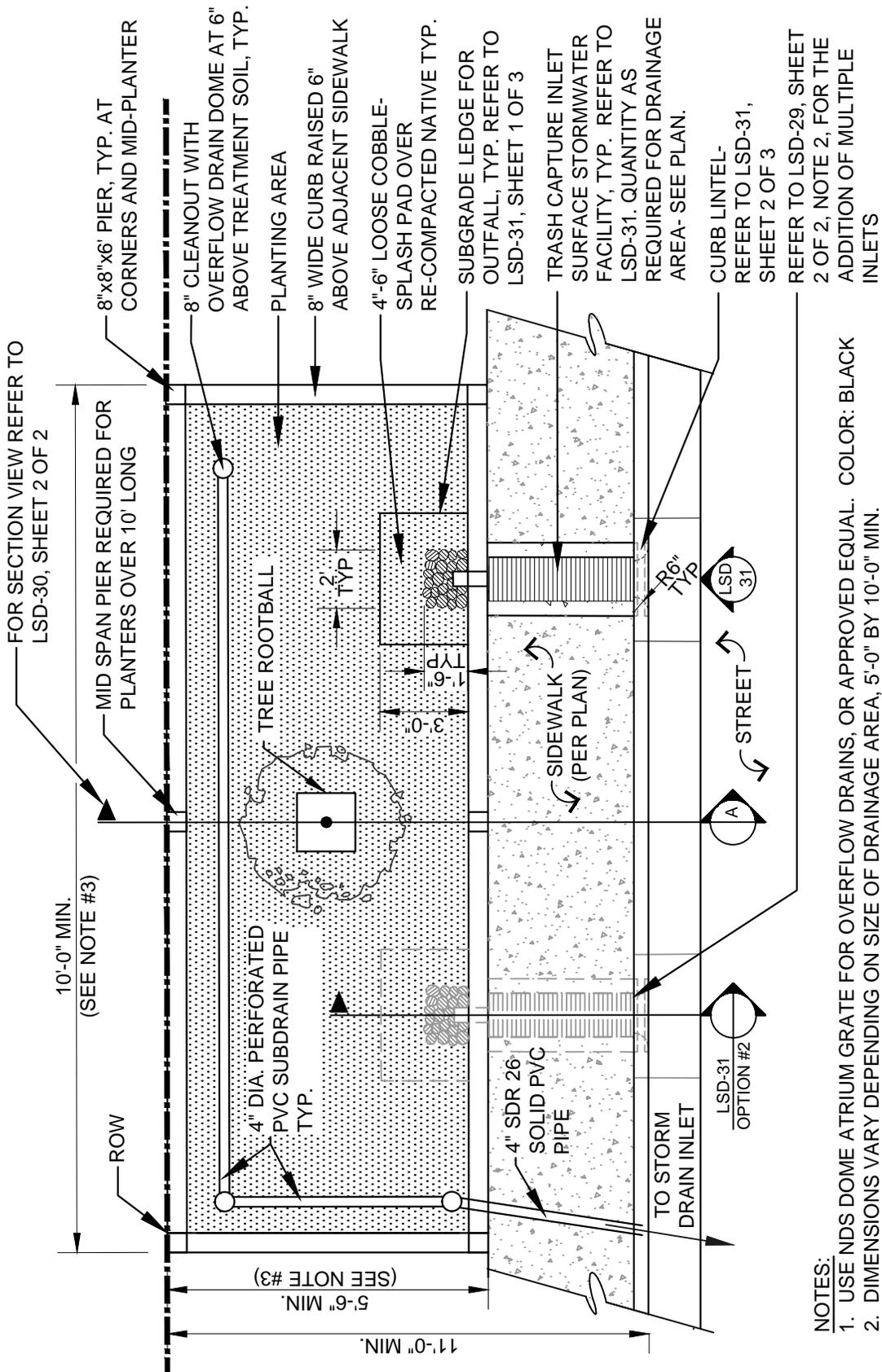
RESOLUTION NO. 2006-31

Ham Hughes

CITY ENGINEER

FILE NO. LSD-30.DWG	SCALE N.T.S.	DRAWN MM/CC	CHECKED RER	DATE DEC. 2011	DWG NO. LSD-30	2 OF 4
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SIZING INFORMATION:
 A. SIZE TREEWELL FILTER TO EQUAL 4% OF THE DRAINAGE AREA ENTERING PLANTER. REFER TO ACCWP C.3 STORMWATER TECHNICAL MANUAL.
 B. FOR ADDITIONAL PLANTING AND IRRIGATION REFER TO LSD-2 REQUIREMENTS. TREES MUST BE IRRIGATED.



NOTES:
 1. USE NDS DOME ATRIUM GRATE FOR OVERFLOW DRAINS, OR APPROVED EQUAL. COLOR: BLACK
 2. DIMENSIONS VARY DEPENDING ON SIZE OF DRAINAGE AREA, 5'-0" BY 10'-0" MIN.
 3. THIS IS AN ALTERNATE DESIGN FROM THE RESIDENTIAL STANDARD AND IS FOR RETROFIT OR MONOLITHIC SITUATIONS ONLY, AS APPROVED BY THE CITY ENGINEER.

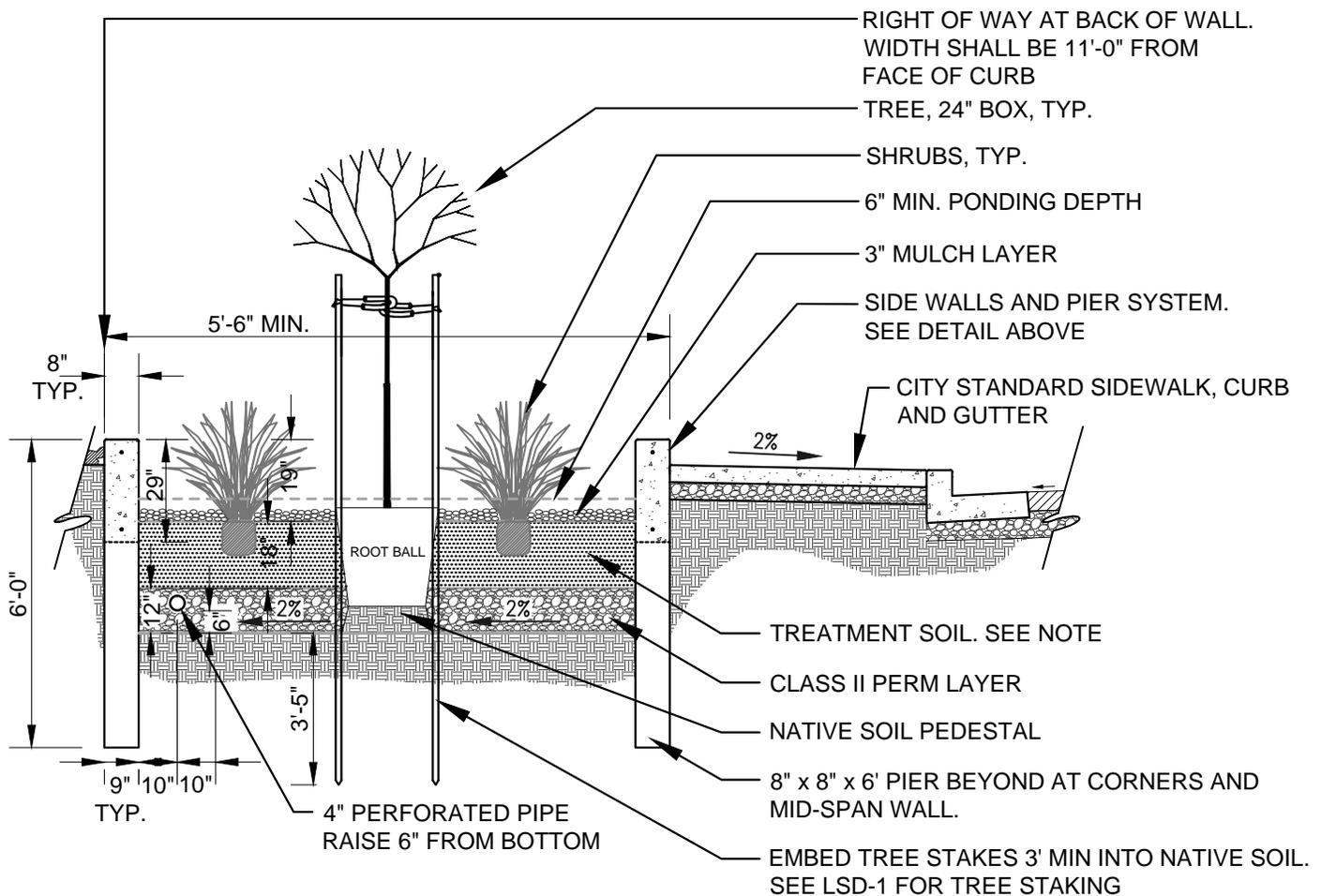
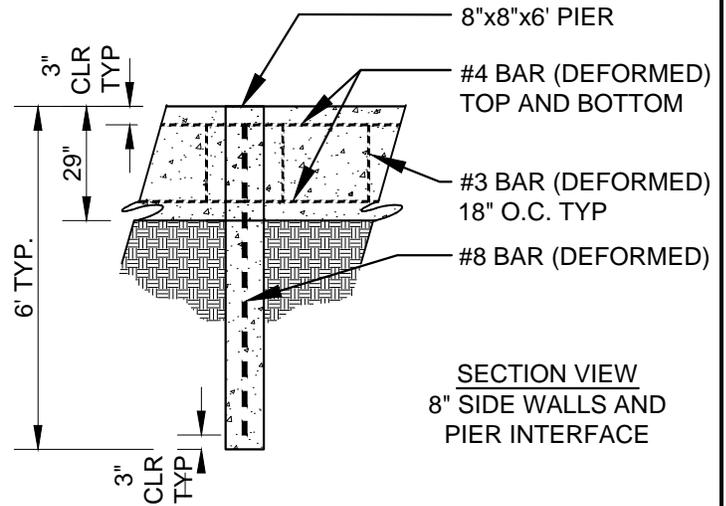
APPR	REVISION	DATE
	Council Revision	12/13/11
REVISIONS		
FILE NO.	SCALE	DRAWN
LSD-30.DWG	3/16" = 1'-0"	MM/TB/CC

CITY OF FREMONT
 STANDARD DETAILS
 CITY STANDARD
STORMWATER PLANTER
 PLAN VIEW - ALTERNATE

DATE APPROVED BY CITY COUNCIL	12/13/11
RESOLUTION NO.	2006-31
CITY ENGINEER	<i>Ham Hughes</i>
DWG NO.	LSD-30
	3 OF 4

NOTES:

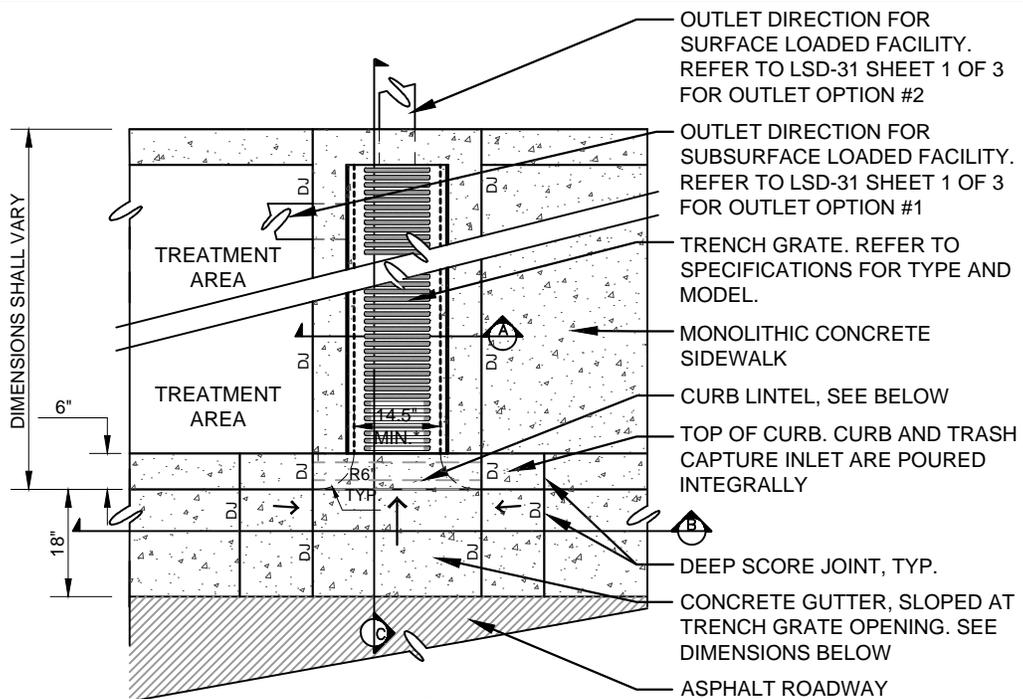
1. TREATMENT SOIL SHALL BE COMPOSED OF:
 60% ASTM C-33 SAND
 30% USCC STA CERTIFIED COMPOST (SEE NOTE 2)
 10% SMALL WOOD CHIPS
2. CONTRACTOR SHALL SUBMIT TEST RESULTS FROM COMPOST FACILITY.
3. PLANTS MUST BE IRRIGATED.
4. THIS IS AN ALTERNATE DESIGN FROM THE RESIDENTIAL STANDARD AND IS FOR RETROFIT OR MONOLITHIC SITUATIONS ONLY, AS APPROVED BY THE CITY ENGINEER.



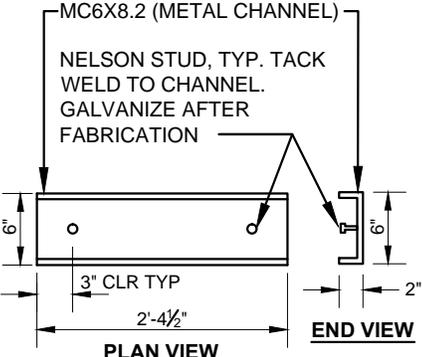
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			RESOLUTION NO. 2006-31			
			CITY ENGINEER			
FILE NO. LSD-30.DWG	SCALE N.T.S.	DRAWN PN/TB/CC	CHECKED RER	DATE DEC. 2011	DWG NO. LSD-30	4 OF 4

NOTES:

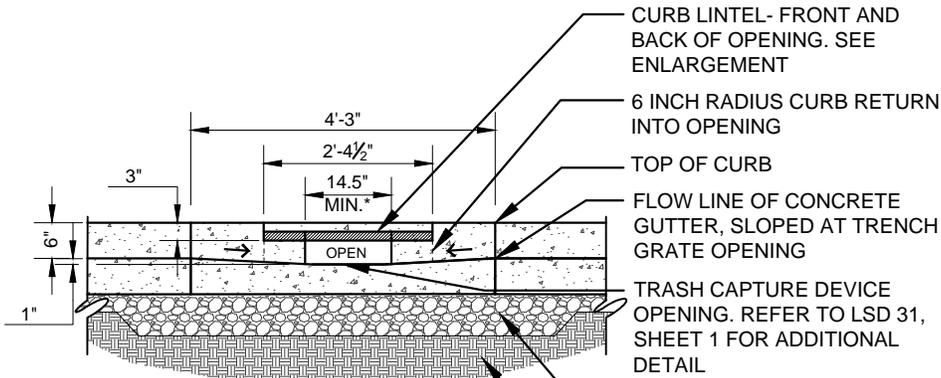
- * REFER TO PLANS FOR MINIMUM OPENING WIDTH. VARIABILITY OF MINIMUM OPENING WIDTH IS SUBJECT TO REQUIREMENTS OF DRAINAGE AREA. REFER TO NOTES 1 AND 2 ON LSD-29, SHEET 2 OF 2.
- DURING CONSTRUCTION RAIN EVENTS, TRASH CAPTURE DEVICE OPENING SHALL BE PROTECTED TO PREVENT WATER ENTRY UNTIL DEVICE IS APPROVED FOR USE BY PROJECT LANDSCAPE ARCHITECT.
- REFER TO LSD 31, SHEET 1 OF 3 FOR WEEP HOLES QUANTITY AND DETAIL



**PLAN VIEW
TRASH CAPTURE INLET AND GRATE**

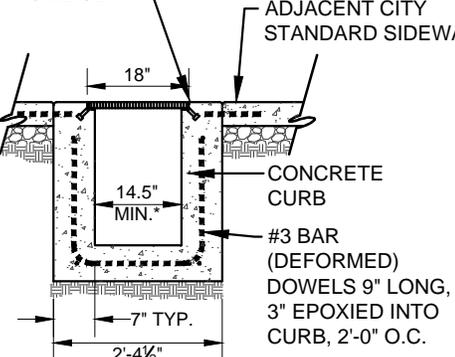


**CURB LINTEL ENLARGEMENT
SCALE: 3/4" = 1'-0"**

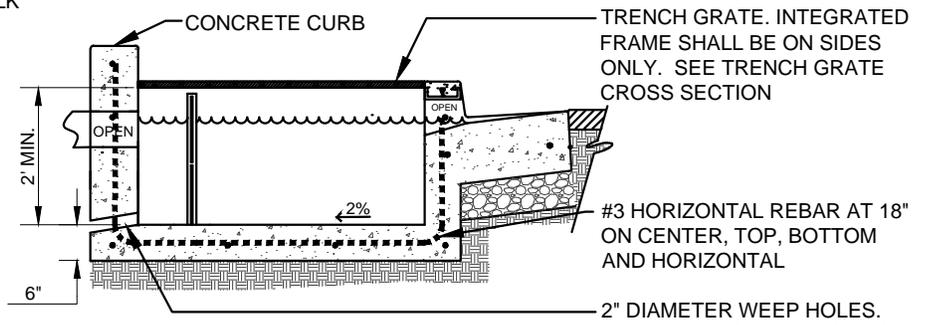


**SECTION B
TRENCH GRATE INLET ENLARGEMENT**

TRENCH GRATE AND INTEGRATED FRAME. FRAME SHALL BE 1/2" TO 1 3/4" ANGLE IRON EMBEDDED INTO TRASH CAPTURE CURB, AND DIMENSIONED FROM OUTSIDE EDGE TO EDGE



**SECTION A
TRENCH GRATE AND CURB CONNECTION**



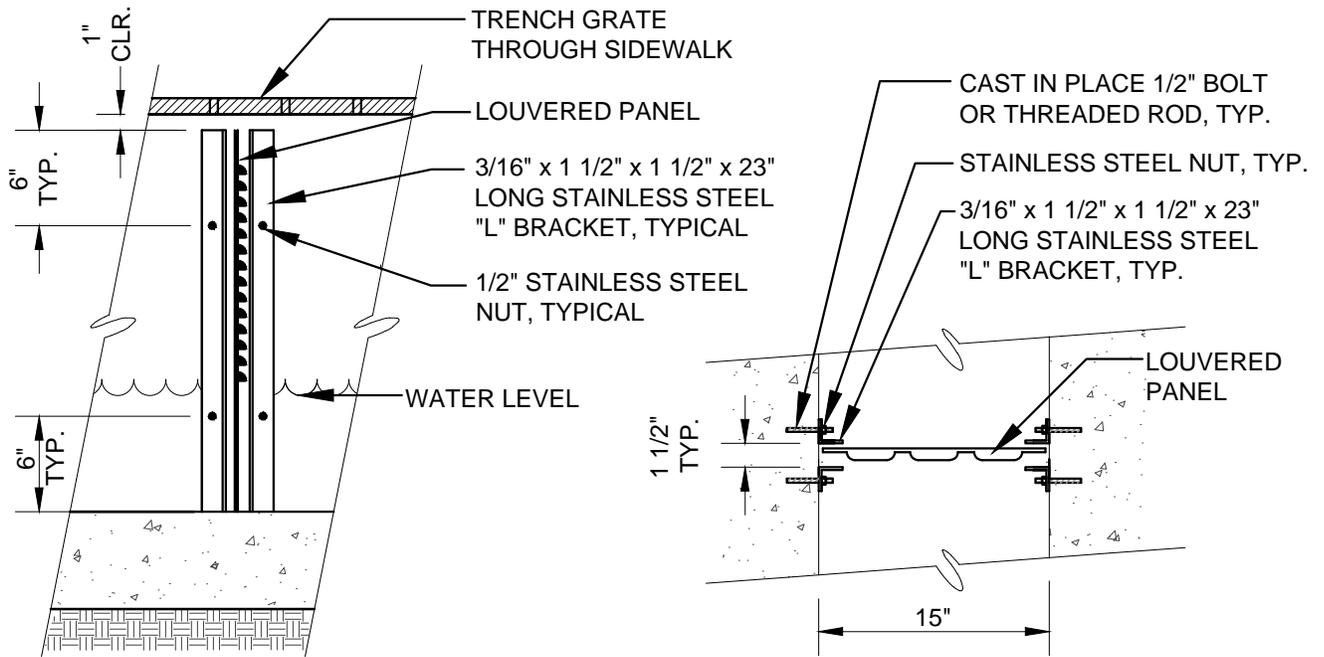
**SECTION C- SIDE VIEW
SURFACE LOADED TRASH CAPTURE INLET**

**CITY OF FREMONT
STANDARD DETAILS
CITY STANDARD
STORMWATER TRASH
CAPTURE INLET**

DATE APPROVED BY CITY COUNCIL
12/13/11
RESOLUTION NO. 2006-31
Ham Hughes
CITY ENGINEER

APPR	REVISION	DATE
	Council Revision	12/13/11
REVISIONS		

FILE NO. LSD-31.DWG	SCALE 3/8" = 1'-0"	DRAWN PN/TB/CC	CHECKED RER	DATE DEC. 2011	DWG NO. LSD-31	2 OF 3
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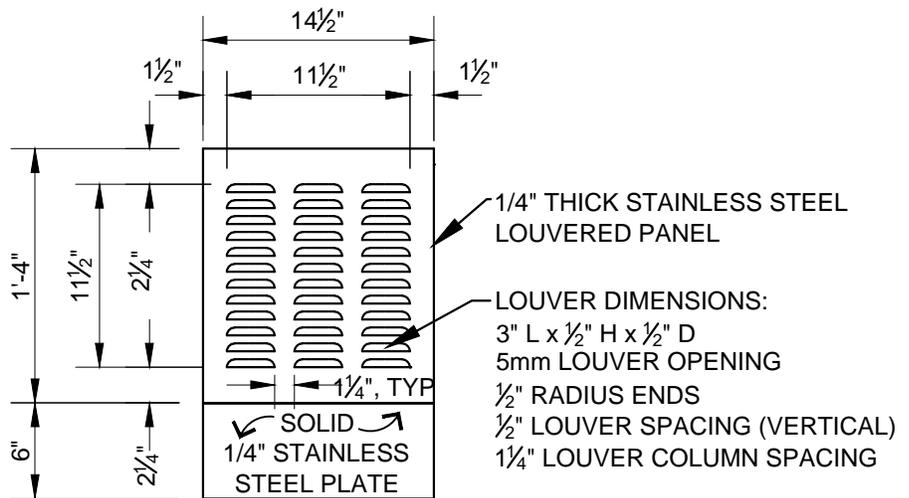


SIDE VIEW
N.T.S.

PLAN VIEW OF INLET CHANNEL

ACCEPTABLE LOUVERED PLATE AND BRACKET SUPPLIER, OR APPROVED EQUAL:

ROSCOE MOSS COMPANY
TYPE 304 STAINLESS STEEL
4360 WORTH STREET
LOS ANGELES, CA 90063
WWW.ROSCOEMOSS.COM



FRONT VIEW

NOTE:

- LOUVERED PANEL MINIMUM DIMENSION: 22"H x 14 1/2"W x 1/4". PANEL SIZES SHALL VARY DEPENDING UPON FACILITY REQUIREMENTS.
- FIELD VERIFY AND MAINTAIN 1" CLEAR FROM BOTTOM OF TRENCH GRATE.

			CITY OF FREMONT STANDARD DETAILS CITY STANDARD STORMWATER TRASH CAPTURE INLET			DATE APPROVED BY CITY COUNCIL 12/13/11	
						RESOLUTION NO. 2006-31	
Council Revision 12/13/11						<i>Ham Hughes</i> CITY ENGINEER	
APPR	REVISED	DATE					
REVISIONS							
FILE NO.	SCALE	DRAWN	CHECKED	DATE	DWG NO.		
LSD-31.DWG	1" = 1'-0"	MAM/CC	RER/MM	NOV. 2011	LSD-31	3 OF 3	