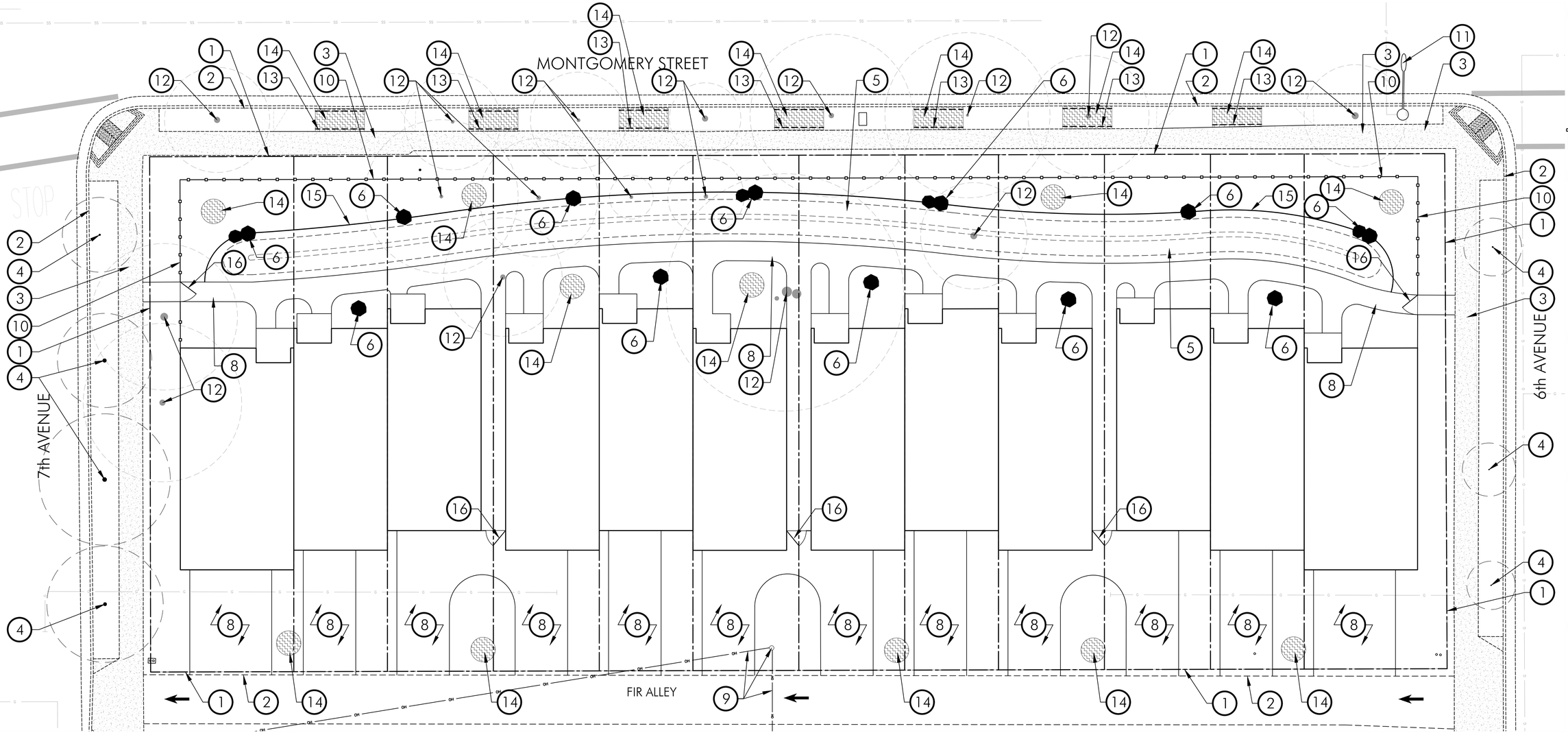


CONSTRUCTION LEGEND

SYMBOL	DESCRIPTION	REMARKS	DETAIL
1	PROPERTY LINE	SHOWN FOR REFERENCE ONLY. SEE CIVIL ENGINEER'S PLANS.	--
2	LIMIT OF WORK		--
3	CITY OF OROVILLE SIDEWALK	TO REMAIN. RETAIN AND PROTECT. SEE CIVIL ENGINEER'S PLANS FOR ADDITIONAL INFORMATION.	--
4	EXISTING TREE	TO REMAIN. RETAIN AND PROTECT. SEE TREE PROTECTION NOTES, CIVIL ENGINEER'S PLANS.	--
5	BIOSWALE	SEE CIVIL ENGINEER'S PLANS FOR GRADES AND ADDITIONAL INFORMATION.	--
6	BOULDER	2-1/2' TO 3' DIAMETER MOSS AND LICHEN COVERED FIELDSTONE BOULDERS. TYPICAL SYMBOL.	--
7	UTILITIES	SHOWN FOR REFERENCE ONLY. SEE CIVIL ENGINEER'S PLANS.	--
8	CONCRETE WALKWAY/ DRIVEWAY		--
9	EXISTING UTILITY POLE AND OVERHEAD LINE	TO REMAIN. RETAIN AND PROTECT.	--

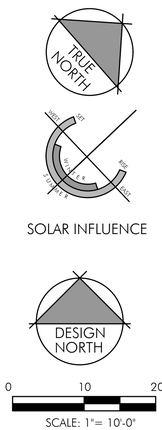
CONSTRUCTION LEGEND (CONTINUED)

SYMBOL	DESCRIPTION	REMARKS	DETAIL
10	PERIMETER FENCING	6 FOOT HIGH TUBULAR STEEL FENCING. PAINT: GLOSS BLACK. MATCH FENCING ACROSS SEVENTH AVENUE AT CAL WATER FACILITY.	--
11	EXISTING STREET LIGHT	TO REMAIN. RETAIN AND PROTECT.	--
12	EXISTING STREET TREE	TO BE REMOVED AND DISPOSED OF OFF-SITE.	--
13	ROOT BARRIER		1/ L-1.1 AND LS-1/ L-2.1
14	SOIL DECOMPACTION	SEE SITE SOIL NOTE, THIS SHEET.	LS-16/ L-1.1
15	STEEL HEADER		LS-17/ L-1.1
16	GATE	TO MATCH 6 FOOT HIGH TUBULAR STEEL FENCING. PAINT: GLOSS BLACK.KEYPAD LOCKING HARDWARE AS PER OWNER AND SHALL BE MADE ACCESSIBLE TO THE OROVILLE FIRE DEPARTMENT.	--

NOTE:
SEE SHEET L-1.1 FOR CONSTRUCTION NOTES, TREE PROTECTION NOTES, AND LANDSCAPE CONSTRUCTION DETAILS.

SITE SOIL NOTE

THE SOILS AT THIS SITE ARE KNOWN TO CONTAIN 'REGRADED MINE TAILING AND RIVER DEPOSITS' (COMPRISED OF LARGE AND SMALL COBBLE). CONTRACTOR SHALL TAKE INTO ACCOUNT THESE CONDITIONS WITH REGARDS TO GRADING, TRENCHING, AND EXCAVATION ACTIVITIES. COBBLE MAY ONLY BE STOCKPILED REUSED UPON WRITTEN APPROVAL BY THE CITY'S REPRESENTATIVE. ALL REJECTED COBBLE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY OFF-SITE. IMPORT SOIL WILL BE REQUIRED TO FILL VOIDS LEFT BY THE REMOVAL OF TREE TRUNKS AND OF COBBLE FROM TRENCHES AND PLANTING PITS. REFER TO BOOK FORM SPECIFICATIONS FOR ADDITIONAL INFORMATION REGARDING SOIL PREPARATION AND TRENCH BACKFILL.



SOLAR INFLUENCE

0 10 20
SCALE: 1"= 10'-0"

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LICENSE

REGISTERED LANDSCAPE ARCHITECT
BRIAN D. FIRTH #5762
EXP. 08-21
STATE OF CALIFORNIA

PRELIMINARY NOT FOR CONSTRUCTION

PROJECT ARCHITECT:

RUSSELL GALLAWAY ASSOCIATES INC.
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PHONE: (530) 342-0302

OWNER AND APPLICANT DEVELOPER:

VETERANS HOUSING DEVELOPMENT CORPORATION (VHDC)
153 HARTNELL AVE SUITE 200
REDDING CA 96002

PROJECT
OROVILLE VETERANS' HOUSING

711 MONTGOMERY STREET
OROVILLE, CALIFORNIA

SHEET TITLE
LANDSCAPE CONSTRUCTION PLAN

DATES

NO.	DESCRIPTION	DATE
	CD SUBMITTAL	12-1-20

Plot Date: November 30, 2020 - 11:55 am

PROJECT NUMBERS
BFLA PROJECT #: 2204
RGA PROJECT #: 20 600

SHEET NUMBER
L-1.0

File Name: Z:\BFLA (2200-2299)\2204 Oroville Veterans Housing\2204 CAD\2204 CDs\2204 Construction 11-24-20.dwg

UB 18-2 Specifications
18" DeepRoot® Tree Root Barrier

Specified tree root barrier is a mechanical barrier and root deflector used to prevent tree roots from damaging hardscapes and landscapes. Assembled in 24" (609 mm) long modules to create varying lengths for linear applications, or perimeter surround applications in varying sizes.

A. Materials

1. The contractor shall furnish and install tree root barrier as specified. The tree root barrier shall be either product #UB 18-2 as manufactured by DeepRoot® Green Infrastructure, LLC, 530 Washington Street, San Francisco, CA, www.deeproot.com (800.458.7668).

2. Root barrier shall be recyclable, black, injection molded panels with 0.75" (1.90 mm) wall thickness in modules 24" (609 mm) long and 18" (460 mm) deep.

3. Root barrier shall be manufactured with 75% reprocessed polypropylene with added ultraviolet inhibitors.

4. Root barrier shall be comprised of 24" (609 mm) panels. Each panel shall have no less than four (4) Molded Integral Vertical Root Directing Ribs of a minimum 0.060" (1.52 mm) thickness, protruding 1/2" (12.7 mm) at 90° from interior of the barrier panel, spaced 6" (152.4 mm) apart. (See Details A & D)

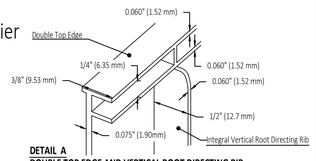
5. Root barrier shall have a Double Top Edge consisting of two parallel, integral, horizontal ribs at the top of the panel at 0.060" (1.52 mm) thickness, 3/8" (9.53 mm) wide and 1/4" (6.35 mm) apart with the lower rib attached to the vertical Root Directing Ribs (See Detail A).

6. Root barrier shall have a minimum of nine (9) Anti-Lift Ground Lock Tabs consisting of integral horizontal ridges of minimum 0.060" (1.52 mm) thickness in the shape of a segment of a circle, the 2-1/4" (57.15 mm) chord of the segment joining the panel wall and the segment, protruding 3/8" (9.53 mm) from the panel. The ground locks on each panel shall be about equally spaced between each of the vertical root directing ribs (See Details B & D).

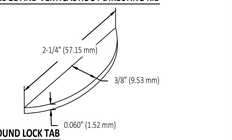
7. Root barrier shall have an integrated Zipper Joining System for assembly by sliding one panel into another (See Detail C).

U.S. Patents: 5,305,549; and 5,528,857. Other Patents Pending.

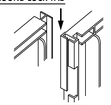
Properties	Typical Value	ASTM Test Method
Tensile strength @ yield - Wall	2.354 PSI	D638
Tensile strength @ yield - Hinge	2.846 PSI	D638
Yield Elongation - Wall	7.44%	D638
Yield Elongation - Hinge	7.01%	D638
Flexural Modulus	119.625 PSI	D790B
Notched Izod Impact - Wall	3.84 (ft-lbs)	D256A
Rockwell Hardness r. scale - Wall	84.4	D785A



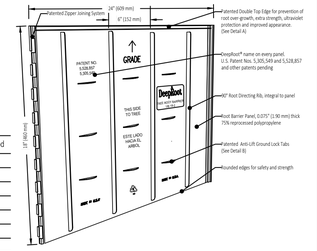
DETAIL A
DOUBLE TOP EDGE AND VERTICAL ROOT DIRECTING RIB



DETAIL B -
ANTI-LIFT GROUND LOCK TAB

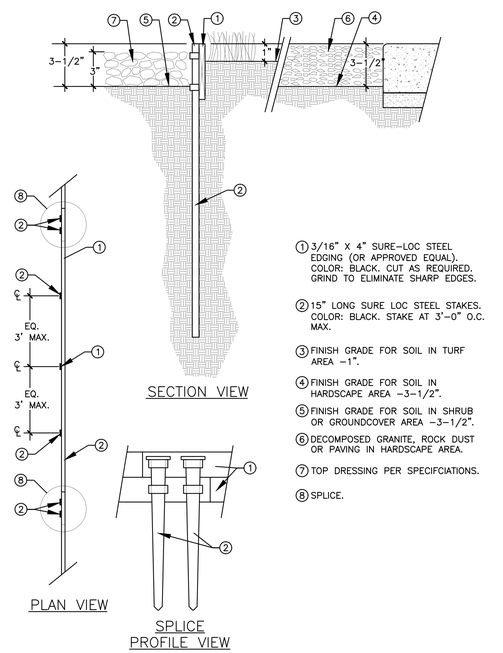


DETAIL C - ZIPPER JOINING SYSTEM



DETAIL D - TREE ROOT BARRIER PANEL

ROOT BARRIER | 1

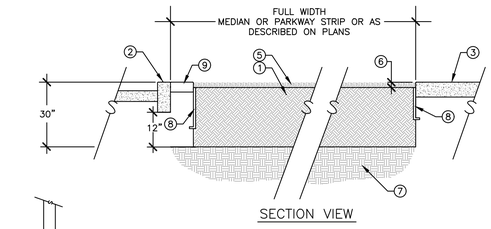


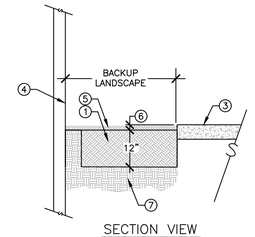
1. 3/16" X 4" SURE-LOC STEEL EDGING (OR APPROVED EQUAL). COLOR: BLACK. CUT AS REQUIRED. GRIND TO ELIMINATE SHARP EDGES.
2. 15" LONG SURE LOC STEEL STAKES. COLOR: BLACK. STAKE AT 3'-0" O.C. MAX.
3. FINISH GRADE FOR SOIL IN TURF AREA -1".
4. FINISH GRADE FOR SOIL IN HARDSCAPE AREA -3-1/2".
5. FINISH GRADE FOR SOIL IN SHRUB OR GROUNDCOVER AREA -3-1/2".
6. DECOMPOSED GRANITE, ROCK DUST OR PAVING IN HARDSCAPE AREA.
7. TOP DRESSING PER SPECIFICATIONS.
8. SPLICE.

STEEL HEADER DETAIL | NO. LS-17

CONSTRUCTION NOTES

1. CONFIRM ALL LOCATIONS OF EXISTING UTILITIES WITHIN PROJECT SITE PRIOR TO EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION AND REPAIR OF DAMAGE TO ALL EXISTING UTILITIES.
2. INSTALL ALL ELEMENTS PER MANUFACTURERS' SPECIFICATIONS.
3. CONTRACTOR IS RESPONSIBLE TO COORDINATE HIS WORK WITH THE WORK OF OTHERS.
4. MAINTAIN ENGINEER'S DESIGNED GRADES. IF DURING THE COURSE OF LANDSCAPE CONSTRUCTION THE ROUGH GRADE DESIGNED AND ESTABLISHED BY OTHERS IS DISTURBED, IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO REESTABLISH THIS GRADE PER INTENT OF CIVIL ENGINEER. REFER TO CIVIL ENGINEER'S PLANS.
5. CONTRACTOR SHALL OBSERVE ALL SAFETY REGULATIONS PERTAINING TO THIS PROJECT.
6. ANY CHANGES SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR IS RESPONSIBLE TO ALLOW FOR ADEQUATE LEADTIME FOR PRODUCT DELIVERY SO AS NOT TO IMPEDE THE PROJECT SCHEDULE.
8. SEE DETAILS AND SHEET FORM SPECIFICATIONS WHEN APPLICABLE FOR ADDITIONAL INFORMATION.





1. RIP PLANTER SOIL IN PLACE TO DECOMPACT. 30" MINIMUM DEPTH AT MEDIAN, 12 MINIMUM DEPTH AT BACKUP LANDSCAPE). LEAVE IN PLACE. COMPACT TO 85% RELATIVE DENSITY.
2. CONCRETE MEDIAN CURB (WHERE APPLICABLE)
3. ADJACENT HARDSCAPE (WHERE APPLICABLE)
4. FENCE OR SOUNDWALL (WHERE APPLICABLE)
5. TOP DRESSING. SEE PLANS AND SPECIFICATIONS.
6. FINISH GRADE. HOLD DOWN: 1/2" IN SEED, 1-1/2" IN SOD, 3-1/2" IN PLANTER OR DECOMPOSED GRANITE.
7. UNDISTURBED SUBGRADE.
8. TREE ROOT CONTROL BARRIER (WHERE APPLICABLE). "DEEP ROOT CORP." OR APPROVED EQUAL.
9. MAINTENANCE STRIP(WHERE APPLICABLE).

NOTES:

1. COMPACT TO 85% RELATIVE DENSITY AND ALLOW FOR SETTLING.
2. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A SOILS ANALYSIS OF SITE SOIL FROM AN ANALYTICAL LABORATORY AND SHALL AMEND THE SOIL PER THE LABORATORY RECOMMENDATIONS. SOIL SAMPLING SHALL BE CONDUCTED IN ACCORDANCE WITH LABORATORY PROTOCOL, INCLUDING PROTOCOLS REGARDING ADEQUATE SAMPLING DEPTH FOR THE INTENDED PLANTS. THE SOIL ANALYSIS SHALL INCLUDE:
   - A. SOIL TEXTURE
   - B. INFILTRATION RATE DETERMINED BY LABORATORY TEST OR SOIL TEXTURE INFILTRATION RATE TABLE
   - C. PH
   - D. TOTAL SOLUBLE SALTS
   - E. SODIUM
   - F. ORGANIC MATTER
   - G. WATER PENETRATION OF SOIL DUE TO CHEMICAL CHARACTERISTICS
   - H. SOIL MACRONUTRIENTS
   - I. SOIL MICRONUTRIENTS
   - J. RECOMMENDATIONS FOR LANDSCAPES STATED IN RATES OF COMMONLY AVAILABLE AMENDMENTS (CUBIC YARDS OR WEIGHT PER 1,000 SF)
   - K. TEST LPT 4 FROM SUNLAND ANALYTICAL LAB OR EQUAL
3. REMOVE ALL DEBRIS, CONCRETE POUR-OVER, ASPHALT, ROAD BASE, AND ROCKS OVER 2" IN DIAMETER. REMOVE ANY SOIL CONTAMINATED BY BUILDING CONSTRUCTION DEBRIS SUCH AS PAINT, CONCRETE, STUCCO, ETC. AND DISPOSE OF OFF-SITE.
4. CONFIRM EXACT LOCATIONS OF ALL UTILITIES PRIOR TO THE START OF WORK.

SOIL DECOMPACTION DETAIL | NO. LS-16

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LICENSE

REGISTERED LANDSCAPE ARCHITECT
BRIAN D. FIRTH #5152
EXP. 08-21
STATE OF CALIFORNIA
PRELIMINARY NOT FOR CONSTRUCTION

PROJECT ARCHITECT:

RUSSELL GALLAWAY ASSOCIATES INC.

115 MEYERS ST #110,
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PHONE: (530) 342-0302

OWNER AND APPLICANT DEVELOPER:

VETERANS HOUSING DEVELOPMENT CORPORATION (VHDC)
153 HARTNELL AVE SUITE 200
REDDING CA 96002

PROJECT
OROVILLE VETERANS' HOUSING

711 MONTGOMERY STREET
OROVILLE,
CALIFORNIA

SHEET TITLE
LANDSCAPE CONSTRUCTION DETAILS

DATES

NO.	DESCRIPTION	DATE
	CD SUBMITTAL	12-1-20

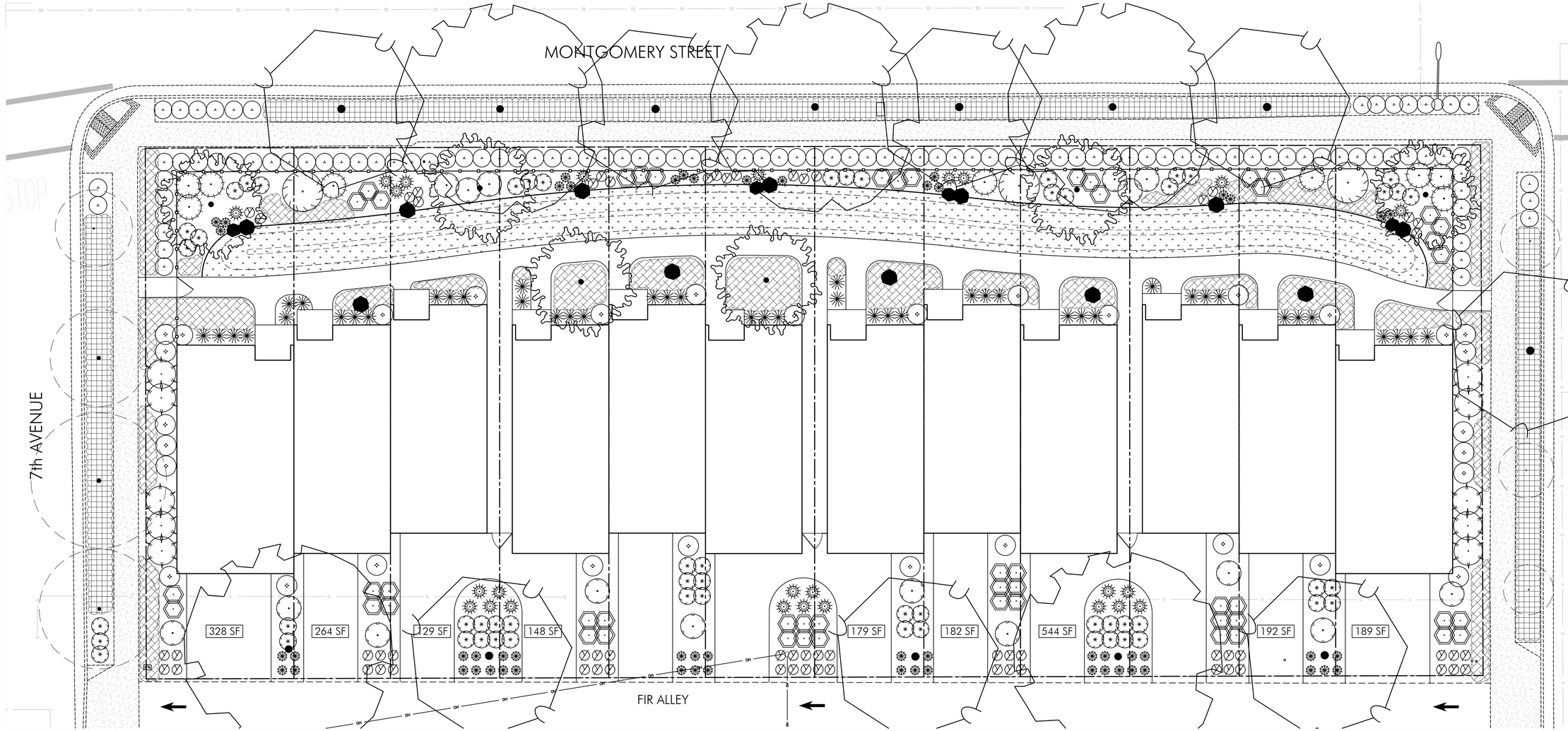
Plot Date: November 30, 2020 - 11:55 am

PROJECT NUMBERS
BFLA PROJECT #: 2204
RGA PROJECT #: 20 600

SHEET NUMBER

L-1.1

File Name: Z:\BFLA (2200-2299)\2204 Oroville Veterans Housing\2204 CAD\2204 CDs\2204 Construction 11-24-20.dwg



TREE LIST

SYMBOL	LATIN NAME/ COMMON NAME	CONTAINER SIZE	WATER USE	QUANTITY	DETAIL
TREES					
	ARBUTUS 'MARINA' MARINA STRAWBERRY TREE	15 GAL	LOW	8	LS-1/ L-2.1 (ON SITE TREES ONLY- STREET TREES PER OROVILLE)
	PISTACHIA CHINENSIS 'KEITH DAVIES' KEITH DAVIES CHINESE PISTACHE	15 GAL	LOW	5	LS-1/ L-2.1 (ON SITE TREES ONLY- STREET TREES PER OROVILLE)
	LAGERSTROEMIA INDICA X FAURIEI 'DYNAMITE' RED FLOWERING CRAPE MYRTLE	15 GAL	LOW	6	LS-1/ L-2.1

NOTE: TREES IN PARKWAY STRIPS SHALL BE PLANTED PER CITY OF OROVILLE STANDARD FOR STREET TREE DETAILS (MS-06), SHEET L-2.1.

SHRUB LIST

SYMBOL	LATIN NAME/ COMMON NAME	CONTAINER SIZE	WATER USE	QUANTITY	DETAIL
SHRUBS					
	CISTUS PULVERULENTUS 'SUNSET' SUNSET ROCKROSE	5 GAL	LOW	16	LS-6/ L-2.1
A	ROSA 'MEIDILAND' RED MEIDILAND ROSE	5 GAL.	MED	106	LS-6/ L-2.1
	DIETES BICOLOR FORTNIGHT LILY	5 GAL.	LOW	46	LS-6/ L-2.1
	PYRACANTHA COCCINEA 'LOWBOY' LOWBOY PYRACANTHA	5 GAL.	LOW	10	LS-6/ L-2.1
	BERBERIS THUNBERGII 'MONOMB' CHERRY BOMB® JAPANESE BARBERRY	5 GAL.	LOW	9	LS-6/ L-2.1
	NANDINA DOMESTICA HEAVENLY BAMBOO	5 GAL.	LOW	32	LS-6/ L-2.1
	ARCTOSTAPHYLOS 'HOWARD MCMINN' MCMINN MANZANITA	5 GAL	LOW	3	LS-6/ L-2.1
	RHAPHIOLEPIS UMBELLATA 'MINOR' DWARF YEDDA HAWTHORN	5 GAL.	LOW	51	LS-6/ L-2.1
	SALVIA GREGGII 'FURMAN'S RED' FURMAN'S RED AUTUMN SAGE	5 GAL.	LOW	57	LS-6/ L-2.1

SHRUB LIST

SYMBOL	LATIN NAME/ COMMON NAME	CONTAINER SIZE	WATER USE	QUANTITY	DETAIL
SHRUBS					
	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' FOERSTER'S FEATHER REED GRASS	1 GAL.	LOW	25	LS-6/ L-2.1
	ACHILLEA X 'MOONSHINE' MOONSHINE YARROW	1 GAL.	LOW	64	LS-6/ L-2.1
	PENNISETUM ALOPECUROIDES 'LITTLE BUNNY' LITTLE BUNNY DWARF FOUNTAIN GRASS	1 GAL.	LOW	56	LS-6/ L-2.1
	ARCTOSTAPHYLOS UVA URSI 'WOOD'S COMPACT' WOOD'S COMPACT MANZANITA	1 GAL.	LOW	1,657 SF (@ 110)	LS-6/ L-2.1. PLANT @ 49" OC.
	JUNIPERUS CONFERTA SHORE JUNIPER	1 GAL.	LOW	1,716 SF (@75)	LS-6/ L-2.1. PLANT @ 60" OC.
GROUNDCOVER					
	BIOFILTRATION SOD PURPLE NEEDLEGRASS (NASELLA PULCHRA), MOLATE FESCUE (FESTUCA RUBRA), CALIFORNIA BARLEY (HORDEUM CALIFORNICUM), MEADOW BARLEY (HORDEUM BRACHYANTHERUM)	SOD	MEDIUM	2,408 SF	SEE L-2.1

NOTE:
SEE SHEET L-2.1 FOR PLANTING SPECIFICATIONS, PLANTING NOTES, MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO) SOILS MANAGEMENT REPORT NOTE, SOIL REPORT NOTE, LANDSCAPE AND SHADE CALCULATIONS AND LANDSCAPE PLANTING DETAILS.

TRUE NORTH

SOLAR INFLUENCE

DESIGN NORTH

0 10 20

SCALE: 1"= 10'-0"

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LICENSE

REGISTERED LANDSCAPE ARCHITECT
BRIAN D. FIRTH #2752
EXP. 08-21
STATE OF CALIFORNIA

PRELIMINARY NOT FOR CONSTRUCTION

PROJECT ARCHITECT:

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PHONE: (530) 342-0302

OWNER AND APPLICANT DEVELOPER:

VETERANS HOUSING DEVELOPMENT CORPORATION (VHDC)
153 HARTNELL AVE SUITE 200
REDDING CA 96002

PROJECT
OROVILLE VETERANS' HOUSING

711 MONTGOMERY STREET
OROVILLE,
CALIFORNIA

SHEET TITLE
LANDSCAPE PLANTING PLAN

DATES

NO.	DESCRIPTION	DATE
	CD SUBMITTAL	12-1-20

Plot Date: November 30, 2020 - 11:56 am

PROJECT NUMBERS
BFLA PROJECT #: 2204
RGA PROJECT #: 20 600

SHEET NUMBER
L-2.0

File Name: Z:\BFLA (2200-2299)\2204 Oroville Veterans Housing\2204 CAD\2204 CDs\2204 Planting 11-24-20.dwg

LANDSCAPE AREA

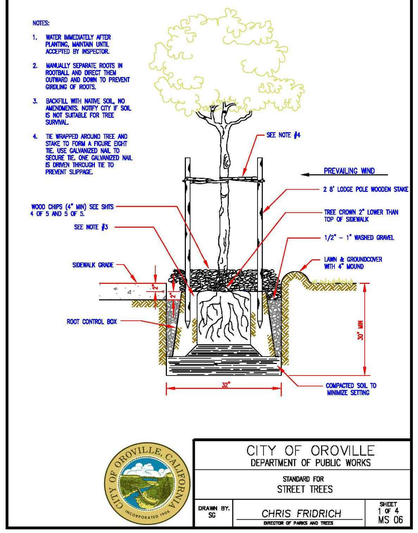
DESCRIPTION	AREA	PERCENT
GROSS PARCEL AREA	28,619 SF	
TOTAL LANDSCAPE AREA	11,336 SF	39.6%

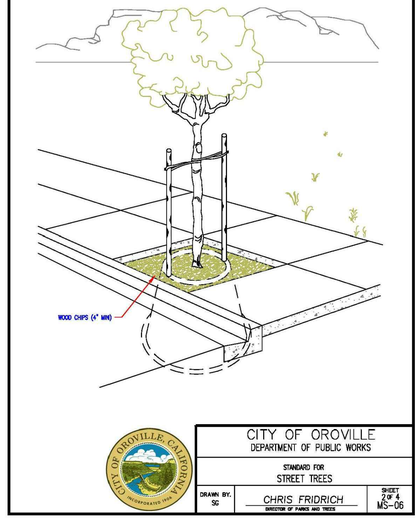
SHADE CALCULATIONS

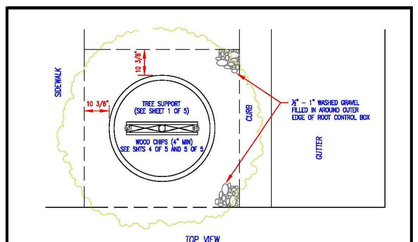
DESCRIPTION	TOTAL	PERCENT
TOTAL DRIVEWAY AREA	3,960 SF	
TREE SHADE AREA PROVIDED OVER DRIVEWAYS	2,155 SF	54.4%
SYMBOL		
124 SF — SHADE AREA PROVIDED (SEE SHEET 2)		

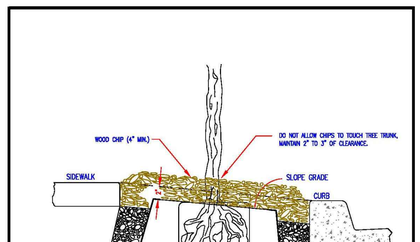
DRIVEWAY LANDSCAPE

DESCRIPTION	AREA	PERCENT
TOTAL DRIVEWAY AREA	3,960 SF	
LANDSCAPE ADJACENT TO DRIVEWAYS	2,347 SF	59%









PLANT SPECIFICATIONS

1. GENERAL — CONTRACTOR SHALL BID AND INSTALL LANDSCAPE PER THESE PLANS AND SPECIFICATIONS, UNLESS GIVEN FURTHER WRITTEN INSTRUCTIONS OR REVISED PLANS PER OWNER OR LANDSCAPE ARCHITECT. WORK INCLUDES BUT IS NOT LIMITED TO ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE WORK.

2. PLANT MATERIAL — ALL PLANT MATERIAL SHALL BE OF THE SPECIES, VARIETY, SIZE AND CONDITION SPECIFIED ON THE PLANS. ALL PLANT MATERIAL SHALL BE HEALTHY, FREE OF DISEASE AND PESTS, AND NOT ROOT BOUND. ALL PLANT MATERIAL SHALL CONFORM TO AMERICAN NURSERY STANDARDS ANSI Z60.1-1990. ALL PLANT MATERIAL SHALL BE SUBJECT TO THE APPROVAL OF THE PROJECT REPRESENTATIVE. IN THE EVENT THAT ANY PLANT MATERIAL IS REJECTED IT SHALL BE REMOVED FROM SITE AND REPLACED WITH SUITABLE PLANT MATERIAL. WHERE PLANTING SPACINGS ARE INDICATED ON THE PLAN THE CONTRACTOR WILL BE REQUIRED TO PROVIDE AS MANY PLANTS ON THE PLAN AS ARE REQUIRED BY THE SPACING INDICATED ON THE PLANS. CONTRACTOR TO VERIFY ALL PLANT QUANTITIES.

3. FINISH GRADING — ELIMINATE ALL UNEVEN AREAS AND LOW SPOTS. REMOVE ALL DEBRIS, ROOTS, STONES, SOIL CLODS, ETC. REMOVE ANY SOIL CONTAMINATED BY BUILDING CONSTRUCTION DEBRIS SUCH AS PAINT, CONCRETE, STUCCO, ETC. THE FINISH GRADE OF ALL SHRUB AND GROUND COVER AREAS SHALL BE 3-1/2 INCHES BELOW ADJACENT WALKS, CURBS, HARDSCAPE. ALL TURF AREAS SHALL BE 1 INCH BELOW.
MAINTAIN ENGINEER'S DESIGNED GRADES AND AND EXTENTS OF MOUNDING. IF DURING THE COURSE OF LANDSCAPE CONSTRUCTION THE ROUGH GRADE DESIGNED AND ESTABLISHED BY OTHERS IS DISTURBED, IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO REESTABLISH THIS GRADE PER INTENT OF CIVIL ENGINEER. REFER TO CIVIL ENGINEER'S PLANS.

4. PLANTING — - PLANT HOLES SHALL BE EXCAVATED TO DIMENSIONS SHOWN ON PLAN. PLACE PLANT IN CENTER OF HOLE AND SLIGHTLY ABOVE FINISH GRADE. BACKFILL PLANT WITH ONE PART 0 TO 1/4 INCH FIR BARK MULCH, THREE PARTS NATIVE SOIL, SINGLE SUPERPHOSPHATE, GROW POWER AND AGRIFORM FERTILIZER TABLETS ALL AS PER MANUFACTURER'S RECOMMENDATIONS. WATER THOROUGHLY TO SETTLE BACKFILL AROUND SOIL BALL. ALL HEDGEROW PLANTINGS SHALL BE PLANTED IN A STRAIGHT ROW. GROUND COVERS SHALL BE PLANTED BASED ON TRIANGULAR SPACING UNLESS OTHERWISE SHOWN ON PLAN. STAKE ALL STANDARD TREES AS PER DETAIL WITH 2 INCH DIAMETER POLES.

6. POST PLANTING WEED CONTROL — - THE CONTRACTOR SHALL APPLY PRE-EMERGENT FERTILIZER TO ALL SHRUB AREAS WITHIN 4 DAYS AFTER COMPLETION OF PLANTING OF GIVEN AREA AND PRIOR TO THE PLACEMENT OF MULCH TOP DRESSING, THE PLANTING AREAS SHALL BE FREE FROM EXISTING WEED GROWTH. APPLY AS PER MANUFACTURER'S RECOMMENDATIONS. DO NOT APPLY PRE-EMERGENT TO HYDROSEEDED AREAS

7. TOP DRESSING — - APPLY A UNIFORM 3 INCH LAYER OF 3/4" BROWN LAVA ROCK TO ALL SHRUB AREAS. ALLOW FOR SETTLING.

8. CLEAN-UP — - AFTER ALL PLANTING OPERATIONS HAVE BEEN COMPLETED REMOVE ALL TRASH, EXCESS SOIL AND RUBBISH FROM SITE. THE CONTRACTOR SHALL LEAVE THE SITE BROOM CLEAN AND SHALL WASH DOWN ALL PAVED AREAS LEAVING THE SITE IN A CLEAN CONDITION ACCEPTABLE TO THE OWNER.

9. PLANT GUARANTEE — - THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF 120 DAYS COMMENCING FROM PROJECT COMPLETION. ALL PLANTS THAT DIE OR ARE IN A DECLINING CONDITION SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER. ALL PLANT REPLACEMENTS SHALL BE MADE WITHIN 15 DAYS OF WRITTEN NOTIFICATION. PROVIDE 60 DAY MAINTENANCE PERIOD AT OPTION OF THE OWNER.

PLANTING NOTES

1. VERIFY EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
2. PLANT QUANTITIES ARE FOR CONVENIENCE OF THE CONTRACTOR. CONTRACTOR TO CONFIRM EXACT NUMBER.
3. PLANT MATERIALS SHALL BE BID ON THE BASIS OF SPECIES AND CONTAINER SIZE, NOT ON CONTAINER SIZE ALONE.
4. REFER TO PLANS, DETAILS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

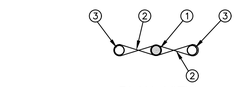
MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO) SOILS MANAGEMENT REPORT NOTE

IN ORDER TO REDUCE RUNOFF AND ENCOURAGE HEALTHY PLANT GROWTH, A SOIL MANAGEMENT REPORT SHALL BE COMPLETED BY THE PROJECT APPLICANT, OR HIS/HER DESIGNEE, AS FOLLOWS:
SUBMIT SOIL SAMPLES TO A LABORATORY FOR ANALYSIS AND RECOMMENDATIONS (SUNLAND ANALYTICS OR EQUAL- PHONE: 916-852-8557).
SOIL SAMPLING SHALL BE CONDUCTED IN ACCORDANCE WITH LABORATORY PROTOCOL, INCLUDING PROTOCOLS REGARDING ADEQUATE SAMPLING DEPTH FOR THE INTENDED PLANTS.
THE SOIL ANALYSIS SHALL INCLUDE:
SOIL TEXTURE;
INFILTRATION RATE DETERMINED BY LABORATORY TEST OR SOIL TEXTURE INFILTRATION RATE TABLE;
PH;
TOTAL SOLUBLE SALTS;
SODIUM;
PERCENT ORGANIC MATTER; AND
RECOMMENDATIONS.
IN PROJECTS WITH MULTIPLE LANDSCAPE INSTALLATIONS (I.E. PRODUCTION HOME DEVELOPMENTS) A SOIL SAMPLING RATE OF 1 IN 7 LOTS OR APPROXIMATELY 15% WILL SATISFY THIS REQUIREMENT. LARGE LANDSCAPE PROJECTS SHALL SAMPLE AT A RATE EQUIVALENT TO 1 IN 7 LOTS.

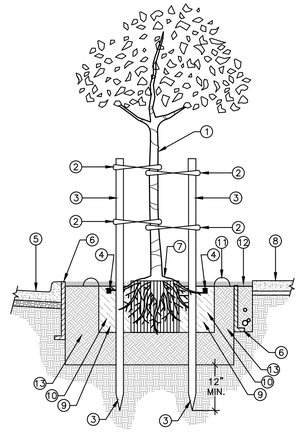
THE PROJECT APPLICANT, OR HIS/HER DESIGNEE, SHALL COMPLY WITH ONE OF THE FOLLOWING:
IF SIGNIFICANT MASS GRADING IS NOT PLANNED, THE SOIL ANALYSIS REPORT SHALL BE SUBMITTED TO THE LOCAL AGENCY AS PART OF THE LANDSCAPE DOCUMENTATION PACKAGE; OR
IF SIGNIFICANT MASS GRADING IS PLANNED, THE SOIL ANALYSIS REPORT SHALL BE SUBMITTED TO THE LOCAL AGENCY AS PART OF THE CERTIFICATE OF COMPLETION.
THE SOIL ANALYSIS REPORT SHALL BE MADE AVAILABLE, IN A TIMELY MANNER, TO THE PROFESSIONALS PREPARING THE LANDSCAPE DESIGN PLANS AND IRRIGATION DESIGN PLANS TO MAKE ANY NECESSARY ADJUSTMENTS TO THE DESIGN PLANS.
THE PROJECT APPLICANT, OR HIS/HER DESIGNEE, SHALL SUBMIT DOCUMENTATION VERIFYING IMPLEMENTATION OF SOIL ANALYSIS REPORT RECOMMENDATIONS TO THE LOCAL AGENCY WITH CERTIFICATE OF COMPLETION.

SOIL REPORT NOTE

THE PROJECT LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR OBTAINING SOILS ANALYSIS OF LANSCAPE SOIL FOR PLANTING AREAS FROM AN ANALYTICAL LABORATORY AND AMENDING THE LANDSCAPE SOIL AS PER THE ANALYTICAL LABORATORY'S RECOMMENDATIONS FOR LANDSCAPES STATED IN RATES OF COMMONLY AVAILABLE AMENDMENTS (CUBIC YARDS OR WEIGHT PER 1,000 SF). SOILS TEST SHALL BE SUNLAND ANALYICAL (916-852-8557)LANDSCAPE PACKAGE LTP.4 OR APPROVED EQUAL.



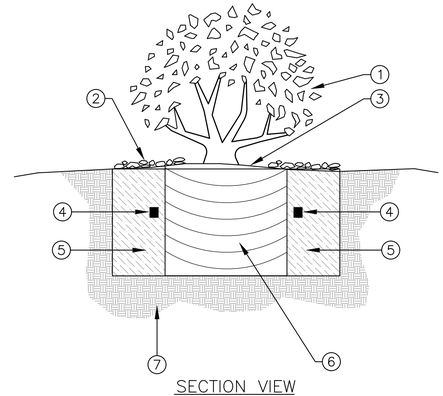
PLAN VIEW



SECTION VIEW

1. TREE NURSERY STOCK PER SPECIFICATIONS AND ANSI Z 60.1. ALL TREES SHALL HAVE A STRONG CENTRAL LEADER.
2. DEEP ROOT ARBOR TIE (OR APPROVED EQUAL). STAPLE OR SCREW TO TREE STAKES.
3. 10'L X 2" DIAM. UNTREATED LODGEPOLE STAKE. CUT OFF BELOW LOWEST LIMB. PLACE POSTS PERPENDICULAR TO PREVAILING WINDS AND OUTSIDE ROOTBALL.
4. PLANTING FERTILIZER TABLETS PER SPECIFICATIONS.
5. CURB AND GUTTER OR OTHER PAVING.
6. ROOT CONTROL BARRIER BY "DEEP ROOT CORP." OR APPROVED EQUAL. SET AT LEVEL OF SURROUNDING PAVING OR SOIL. 10" LONG CENTERED ON TREE, 12" DEPTH (UB 12-2) NEXT TO SIDEWALKS AND 18" DEPTH (UB 18-2) NEXT TO CURBING. OFFSET ROOT BARRIER AS REQUIRED FOR LANDSCAPE IRRIGATION UTILITIES.
7. REMOVE NURSERY SOIL IF NEEDED SO THAT FIRST ROOTS ARE VISIBLE AT TOP OF ROOTBALL. SET TOP OF ROOTBALL 1" ABOVE FINISH GRADE TO ALLOW FOR SETTLEMENT. BREAK UP SIDES OF BALL AND SPREAD OUT ROOTS. NO CIRCLING ROOTS SHALL REMAIN WITHIN 12" OF THE TREE TRUNK.
8. SIDEWALK.
9. BACKFILL MIX PER SPECIFICATIONS.
10. PLANTING HOLE SHALL BE TWICE THE DIAMETER OF THE ROOTBALL AND NO DEEPER THAN THE TREE ROOTBALL.
11. OPTIONAL/ TEMPORARY WATER RETENTION BERM.
12. TOP DRESSING. SEE SPECIFCIATIONS. HOLD BACK 4" FROM TRUNK OF TREE.
13. SOIL DECOMPACTION. SEE PLANS AND DETAIL LS-16, SHEET L-1.1.

FIFTEEN GALLON TREE PLANTING DETAIL — NO. LS-1



SECTION VIEW

1. SHRUB NURSERY STOCK PER ANSI Z-60.1.
2. TOP DRESSING. SEE SPECIFCIATIONS. HOLD BACK 2" FROM BASE OF SHRUB.
3. SET TOP OF ROOTBALL 1" ABOVE FINISH GRADE SOIL TO ALLOW FOR SETTLEMENT.
4. FERTILIZER TABLET(S) PER SPECIFICATIONS.
5. BACKFILL MIXTURE PER SPECIFICATIONS.
6. SHRUB ROOTBALL.
7. PLANTING HOLE SHALL BE TWICE DIAMETER OF ROOTBALL & NO DEEPER THAN THE SHRUB ROOTBALL.

CONTAINERIZED SHRUB PLANTING DETAIL — NO. LS-6

BRIAN FIRTH LANDSCAPE ARCHITECT, INC.
627 BROADWAY, SUITE 220,
CHICO, CALIFORNIA 95928
PHONE: (530) 899-1130
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www.facebook.com/BFLAdesign

LICENSE

REGISTERED LANDSCAPE ARCHITECT — BRIAN D. FIRTH #2762 — EXP. 06-21 — STATE OF CALIFORNIA

PROJECT ARCHITECT:

RUSSELL GALLAWAY ASSOCIATES INC.

115 MEYERS ST #110,
CHICO, CA 95928
PHONE: (530) 342-0302

OWNER AND APPLICANT DEVELOPER:

VETERANS HOUSING DEVELOPMENT CORPORATION (VHDC)
153 HARTNELL AVE SUITE 200
REDDING CA 96002

PROJECT
OROVILLE VETERANS' HOUSING

711 MONTGOMERY STREET
OROVILLE,
CALIFORNIA

SHEET TITLE
LANDSCAPE PLANTING DETAILS

DATES

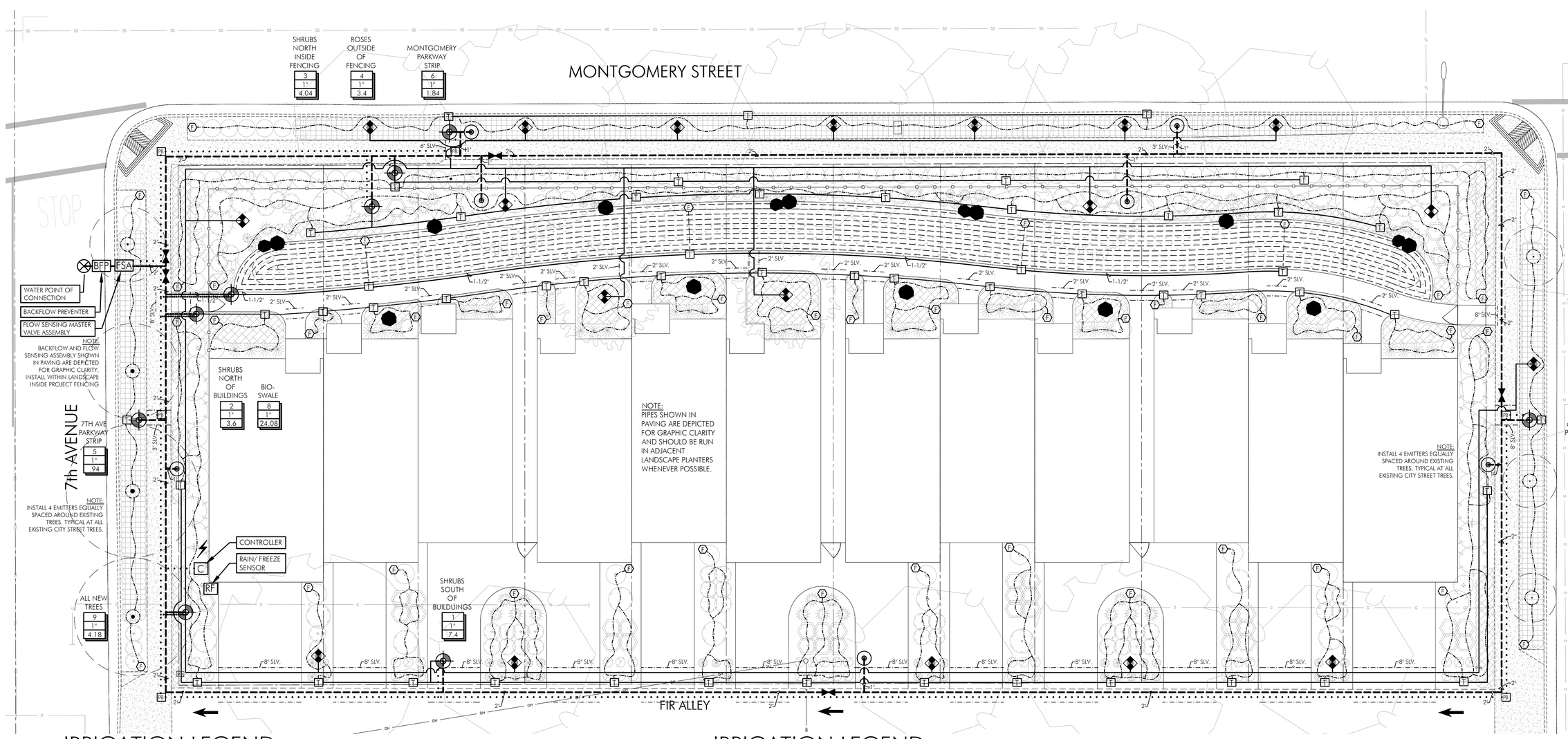
NO.	DESCRIPTION	DATE
	CD SUBMITTAL	12-1-20

Plot Date: November 30, 2020 - 11:57 am

PROJECT NUMBERS
BFLA PROJECT #: 2204
RGA PROJECT #: 20 600

SHEET NUMBER
L-2.1

File Name: Z:\BFLA (2200-2299)\2204 Oroville Veterans Housing\2204 CAD\2204 CDs\2204 Planting 11-24-20.dwg



IRRIGATION LEGEND

SYM.	MFG'R	DESCRIPTION	MODEL	REMARKS	DETAILS
⊗		WATER POINT OF CONNECTION		TIE INTO 1" DEDICATED LANDSCAPE WATER METER. SEE CIVIL ENGINEER'S PLANS.	--
BFP	WILKINS	BACKFLOW PREVENTER	975XL2 (LEAD FREE)	1" SIZE. INSTALL IN ENCLOSURE ON CONCRETE PAD. PROVIDE AND INSTALL LEAD FREE PRESSURE REGULATOR (LINE SIZE). PROVIDE AND INSTALL INSULATED BLANKET. INSTALL PRESSURE REDUCER AT BACKFLOW PREVENTER IN THE EVEN THAT WATER PRESSURE EXCEEDS 70 PSI	LS-23/ L-3.1
FSA	HUNTER/ HUNTER	FLOW SENSING / MASTER VALVE ASSEMBLY	HC-100-FLOW (1" SIZE) WITH ICV 101G	INSTALL AS PER MANUFACTURER'S SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE TO CONFIGURE SENSOR.	LS-27/ L-3.1
C	HUNTER	HUNTER HYDRAWISE COMMERCIAL CONTROLLER	MODEL: HPC-400 WITH PCM-300 MODULE AND PCM-900 MODULE (16 STATIONS TOTAL)	EXTERIOR WALL MOUNT TO BUILDING. SEE ARCHITECT'S PLANS FOR ELECTRICAL POINT OF CONNECTION. GROUND PER ASIC EARTH GROUNDING GUIDELINES 100-2002. CONTRACTOR RESPONSIBLE TO CONNECT TO BUILDING WiFi AND HYDRAWISE CLOUD BASED IRRIGATION MANAGEMENT SOFTWARE AND TO PROGRAM TO COMMUNICATE WITH AT LEAST ONE LOCAL WEATHER STATION. PROVIDE OWNER WITH ALL ADMINISTRATIVE PASSWORDS AND PERMISSIONS. CONTRACTOR IS ALSO RESPONSIBLE TO SET FLOW SENSOR PARAMETERS FOR THE MASTER VALVE ASSEMBLY.	1/ L-3.1
RF	HUNTER	RAIN/ FREEZE SENSOR	WRF-CLIK	INSTALL AS PER MANUFACTURER'S SPECIFICATIONS.	--
⋈	NIBCO	ISOLATION VALVE	T-113-LF	LINE SIZE. VALVE MUST BE LEAD FREE.	LS-26/ L-3.1
⊙	HUNTER	QUICK COUPLER VALVE	HQ-44LRC	INSTALL A MINIMUM OF 6 FEET AWAY FROM TREE PLANITNGS EXCEPT WHERE OTHERWISE NOTED. PROVIDE OWNER WITH 2 COMPATIBLE KEYS PRIOR TO CLOSEOUT.	LS-28/ L-3.2
	HUNTER	REMOTE CONTROL VALVE	ICZ 101	--	LS-31/ L-3.2
	HUNTER	DRIP CONTROL ZONE KIT	ICZ 1"-LF	--	LS-29/ L-3.2

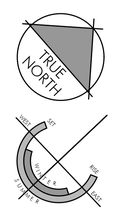
IRRIGATION LEGEND

SYM.	MFG'R	DESCRIPTION	MODEL	REMARKS	DETAILS
		PRESSURE MAINLINE		PVC SCHEDULE 40	LS-19 & LS-20/ L-3.1 AND LS-21/ L-3.2
		NON-PRESSURE LATERAL PIPE		PVC SCHEDULE 40	
	HUNTER	CONTROL WIRE CHASE	#14	2" DIAM SCHEDULE 40 PVC CONDUIT FOR CONTROL AND COMMON WIRES	
		IRRIGATION SLEEVE		PVC SCHEDULE 40. SIZE PER PLAN OR AS REQUIRED. NO LESS THAN 2" DIAMETER.	
	HUNTER	LANDSCAPE DRIPPERLINE WITH EMITTERS	HDL DRIPPERLINE WITH HE-10-B EMITTERS AND HE-DIFF DIFFUSER CAPS (APPROX 1,574 TOTAL QUANTITY)	1 GPH (0.01 GPM) PER BUBBLER. INSTALL 2 PER SHRUB 2GPH (.03 GPM) PER SHRUB PLANTING LOCATED WITHIN WATER RETENTION BERM. INSTALL WITH 6" STEEL "U" PINS AT 4'-0" O.C. AND AT EACH SIDE OF PLANTINGS. SEE DETAIL.	LS-45/ L-3.4
	HUNTER	SUBSURFACE LANDSCAPE DRIPPERLINE	HDL-06-12 WITH ECO-WRAP	INSTALL AT 6" FROM ADJACENT HARDSCAPE AND AT 12" O.C.	????/ L-3.4
T	HUNTER	TRANSITION TO DRIP	PLD-075-TBTEE	INSTALL IN CARSON 910 VALVE BOX OR EQUAL SET ELBOW A MINIMUM OF 1" BELOW TOP OF BOX	LS-39/ L-3.2
F	HUNTER	FLUSH VALVE	PLD-BV	INSTALL IN VALVE BOX AS PER PLANS AND DETAILS	LS-43/ L-3.2
	HUNTER	DRIPPERLINE AT TREES	HEB-05 AND PLD-06-12	TWO EMITTERS PER TREE. SEE DETAIL.	LS-44/ L-3.3
PB		PULL BOX		INSTALL IN CARSON 910 VALVE BOX OR EQUAL SET ELBOW A MINIMUM OF 1" BELOW TOP OF BOX	LS-52/ L3.2
	PAIGESPEC	CONTROLLER GROUNDING ROD OR PLATE	182000 OR 182199IC	INSTALL PER MANUFACTURER'S SPECIFICATIONS	--

SYMBOLS

1 / 1-1/2" / 28.4
- VALVE #/CONTROLLER STATION
- VALVE SIZE
- FLOW IN GALLONS PER MINUTE

SEE SHEET L-3.1 FOR IRRIGATION NOTES AND SPECIFICATIONS. SEE SHEETS L-3.1, L-3.2, & L-3.3FOR IRRIGATION DETAILS. SEE SHEET L-3.4 FOR WATER USE CALCULATIONS



SOLAR INFLUENCE

DESIGN NORTH

0 10 20

SCALE: 1"= 10'-0"

BRIAN FIRTH LANDSCAPE ARCHITECT, INC.
627 BROADWAY, SUITE 220, CHICO, CALIFORNIA 95928
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LICENSE

REGISTERED LANDSCAPE ARCHITECT BRIAN D. FIRTH #2752 STATE OF CALIFORNIA EXP. 08-21

PRELIMINARY NOT FOR CONSTRUCTION

PROJECT ARCHITECT:

RUSSELL GALLAWAY ASSOCIATES INC.

115 MEYERS ST #110, CHICO, CA 95928
PHONE: (530) 342-0302

OWNER AND APPLICANT DEVELOPER:

VETERANS HOUSING DEVELOPMENT CORPORATION (VHDC)
153 HARTNELL AVE SUITE 200
REDDING CA 96002

PROJECT
OROVILLE VETERANS' HOUSING

711 MONTGOMERY STREET
OROVILLE, CALIFORNIA

SHEET TITLE
LANDSCAPE IRRIGATION PLAN

DATES

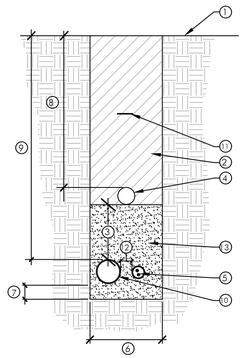
NO.	DESCRIPTION	DATE
	CD SUBMITTAL	12-1-20

Plot Date: November 30, 2020 - 12:07 pm

PROJECT NUMBERS
BFLA PROJECT #: 2204
RGA PROJECT #: 20 600

SHEET NUMBER
L-3.0

File Name: Z:\BFLA (2200-2299)\2204 Oroville Veterans Housing\2204 CAD\2204 CDs\2204 Irrigation 11.24.20.dwg



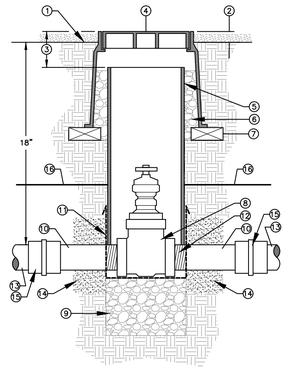
SECTION VIEW

1. FINISH GRADE.
2. TRENCH BACKFILL PER SPECIFICATIONS.
3. SIX INCHES SAND FILL COVER, ABOVE MAINLINE.
4. PVC SCHEDULE 40 LATERAL LINE.
5. CONTROL WIRES OR DECODER CABLE IN GRAY SCHEDULE 40 PVC CONDUIT. SIZE PER PLAN, 2" DIAM. MIN.
6. 6" OR AS NEEDED TO PROVIDE FOR A MINIMUM 4" CLEARANCE BETWEEN PIPES.
7. 2" MIN. SAND BEDDING BELOW PIPING.
8. LATERAL -12" MIN. COVER.
9. MAINLINE -18" MIN. COVER.
10. PVC MAINLINE.
11. 3" DETECTABLE TAPE. CHRISTY MODEL TA-DT-03-B-IRR OR EQUAL.
12. 2" MIN. SEPARATION.
13. SAND BACKFILL PER SPECIFICATIONS.

NOTES:

1. SIDES OF TRENCH WILL BE DUG SQUARE AND CLEAN OF ALL SHARP MATERIAL.
2. ALLOW FOR SETTLING.
3. MAINLINE TO BE INSPECTED BY OWNERS REPRESENTATIVE PRIOR TO BACKFILL. SEE INSPECTION SCHEDULE.

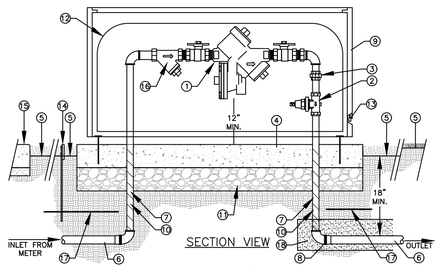
STANDARD TRENCHING DETAIL NO. LS–19



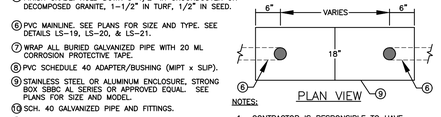
SECTION VIEW

1. FINISH GRADE.
2. SET TOP OF BOX ABOVE FINISH GRADE: 1/2" IN SEED, 1–1/2" IN SOD, 3–1/2" IN PLANTER OR DECOMPOSED GRANITE OR CRUSHED ROCK. LEVEL WITH ADJACENT HARDSCAPE.
3. ALLOW 3" BETWEEN TOP OF VALVE BOX AND PVC PIPE.
4. CARSON 910 OR EQUAL 10" DIAMETER GREEN PLASTIC VALVE BOX WITH BOLT DOWN LOCKING LID.
5. 8" DIAMETER VERTICAL EXTENSION SCH 40 PVC PIPE. LENGTH AS REQUIRED. NOTCH TO ACCEPT MAINLINE
6. PEA GRAVEL AS REQUIRED BETWEEN VALVE BOX AND VERTICAL PIPE.
7. (3) COMMON BRICKS FOR SUPPORT.
8. NIBCO T–113–K–LF LEAD FREE THREADED GATE VALVE WITH BRONZE CROSSHANDLE AND NON–RISING STEM (OR APPROVED EQUAL). LINE SIZE, MODEL PER PLANS.
9. 2" DRAIN ROCK; 6" DEPTH.
10. SCH. 80 NIPPLE, T.O.E. 6" MIN. LENGTH.
11. 1/4" GALVANIZED WIRE CLOTH.
12. USE MIN. 5 WRAPS OF TEFLON TAPE AT EACH THREADED CONNECTION.
13. IRRIGATION MAINLINE. SEE DETAILS LS–19, LS–20, & LS–21.
14. SAND FILLED IRRIGATION MAINLINE TRENCH. SEE DETAILS LS–19, LS–20, & LS–21.
15. COUPLING. SXS.
16. 3" DETECTABLE TAPE. CHRISTY MODEL TA–DT–03–B–IRR OR EQUAL. SEE DETAILS LS–19, LS–20, & LS–21.

GATE VALVE DETAIL NO. LS–26



SECTION VIEW



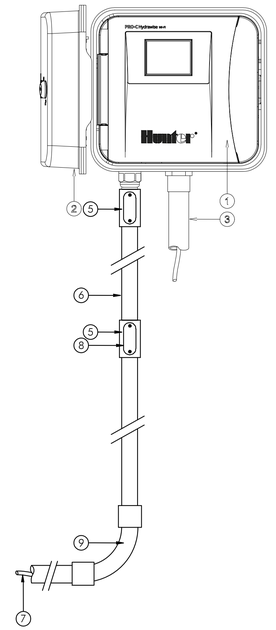
PLAN VIEW

1. REDUCED PRESSURE BACKFLOW PREVENTER. SEE PLANS FOR MAKE, MODEL, AND SIZE.
2. PRESSURE REGULATOR–LINE SIZE (ONLY APPLICABLE IF SPECIFIED ON IRRIGATION PLAN).
3. UNION. LINE SIZE.
4. 4" CONCRETE PAD– MEDIUM BROOM FINISH. FINISH SURFACE OF CONCRETE PAD SHALL BE FLUSH WITH ADJACENT HARDSCAPE OR HEADER. EXTEND 4" BEYOND OUTSIDE DIMENSION OF ENCLOSURE.
5. FINISH GRADE. HOLD DOWN 3–1/2" IN GROUNDCOVER OR DECOMPOSED GRANITE, 1–1/2" IN TURF, 1/2" IN SEED.
6. PVC MAINLINE. SEE PLANS FOR SIZE AND TYPE. SEE DETAILS LS–19, LS–20, & LS–21.
7. WRAP ALL BURIED GALVANIZED PIPE WITH 20 MIL CORROSION PROTECTIVE TAPE.
8. PVC SCHEDULE 40 ADAPTER/BUSHING (MIPT x SUP).
9. STAINLESS STEEL OR ALUMINUM ENCLOSURE, STRONG BOX SBBC AL SERIES OR APPROVED EQUAL. SEE PLANS FOR SIZE AND MODEL.
10. SCH. 40 GALVANIZED PIPE AND FITTINGS.
11. 4" MIN. LAYER COMPACTED CLASS II AGGREGATE BASE.
12. INSULATED BLANKET– FROSTGUARD OR APPROVED EQUAL. SIZE AS REQUIRED
13. PROVIDE AND INSTALL PAD–LOCK. PROVIDE OWNER WITH 2 KEYS (MIN.)
14. STEEL HEADER (WHERE APPLICABLE).
15. HARDSCAPE FINISH SURFACE (WHERE APPLICABLE).
16. LEAD FREE STRAINER (ONLY APPLICABLE IF SPECIFIED ON IRRIGATION PLAN).
17. 3" DETECTABLE TAPE. CHRISTY MODEL A–DT–03–B–IRR OR EQUAL. SEE DETAILS LS–19, LS–20, & LS–21.
18. SAND FILLED IRRIGATION MAINLINE TRENCH. SEE DETAILS LS–19, LS–20, & LS–21.

NOTES:

1. CONTRACTOR IS RESPONSIBLE TO HAVE BACKFLOW PREVENTER CERTIFIED PRIOR TO ACCEPTANCE OF PROJECT BY CITY.
2. CONTRACTOR SHALL PERFORM A HYDROSTATIC PRESSURE TEST IN ACCORDANCE WITH SPECIFICATIONS.

REDUCED PRESSURE BACKFLOW PREVENTER DETAIL NO. LS–23



~~EXTERIOR~~ WALL

DETAIL LEGEND:

1. HYDRAWISE PRO-C CONTROLLER, PLASTIC ENCLOSURE, ~~INDOOR OR~~ OUTDOOR WALL MOUNT, PER PLAN
2. PLASTIC CONTROLLER HOUSING DOOR
3. IRRIGATION CONTROL WIRE IN CONDUIT TO PLANTER. SIZE AND TYPE ~~PER LOCAL CODES.~~ PER PLANS.
4. ~~STANDARD 110 VAC CABLE & PLUG FOR CONNECTION TO GROUNDED 110 VAC POWER RECEPTACLE~~
5. METAL CONDUIT OUTLET BODY WITH COVER AND GASKET.
6. METAL CONDUIT (PER NATIONAL ELECTRICAL CODE) TO POWER SUPPLY
7. #8 BARE COPPER WIRE TO GROUND ROD OR PLATE, INSTALL PER N.E.C. AND LOCAL CODES (INSTALL IN IRRIGATED AREA)
8. HARDWIRE TO 120 V POWER SUPPLY. SEE ARCHITECT'S PLAN FOR POWER SUPPLY. CONNECTION TO POWER SHALL BE PERFORMED BY A LICENSED ELECTRICIAN.
9. SCH 40 PVC SWEEP. INSTALL BELOW GRADE.

NOTES:

A. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

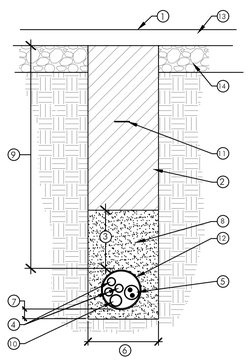
B. CONTROLLER ACCEPTS 120 VOLTS A.C. ~~OR 230 VOLTS A.C. (INTERNATIONAL MODEL)~~

C. SEE PLAN LEGEND FOR MODEL NUMBER AND SPECIFICATIONS.

D. ALWAYS REFER TO PRODUCT INSTALLATION NOTES PRIOR TO INSTALLATION.

E. MOUNT CONTROLLER LCD SCREEN AT EYE LEVEL. CONTROLLER SHALL BE HARD-WIRED TO GROUNDED 110 VAC POWER SOURCE.

1 HYDRAWISE PRO-C CONTROLLER
Hunter IRRIGATION DETAIL NOT TO SCALE



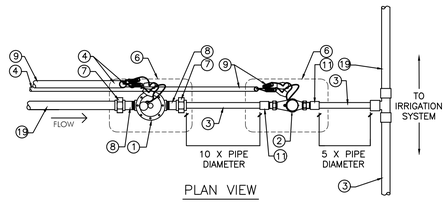
SECTION VIEW

NOTES:

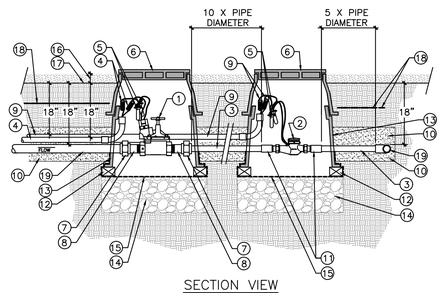
1. SIDES OF TRENCH WILL BE DUG SQUARE AND CLEAN OF ALL SHARP MATERIAL.
2. ALLOW FOR SETTLING.
3. SEE TRANSITION TO SLEEVING BENEATH PAVING DETAIL FOR ADDITIONAL INFORMATION.

1. FINISH SURFACE OF PAVING.
2. TRENCH BACKFILL PER SPECIFICATIONS.
3. SIX INCHES SAND FILL COVER, ABOVE MAINLINE.
4. PVC SCHEDULE 40 LATERAL LINE.
5. CONTROL WIRES OR DECODER CABLE IN GRAY SCHEDULE 40 PVC CONDUIT. SIZE PER PLAN, 2" DIAM. MIN.
6. 6" OR AS NEEDED TO PROVIDE FOR A MINIMUM 4" CLEARANCE BETWEEN PIPES.
7. 2" MINIMUM SAND BEDDING BELOW PIPE.
8. SAND BACKFILL PER SPECIFICATIONS.
9. 18" MINIMUM COVER BENEATH NON VEHICULAR PAVING.
10. PVC MAINLINE.
11. 3" DETECTABLE TAPE. CHRISTY MODEL TA-DT-03-B-IRR OR EQUAL.
12. IRRIGATION SLEEVE PER IRRIGATION PLAN. SIZE PER PLAN, 4" MINIMUM.
13. PEDESTRIAN PAVING PER CITY STANDARDS.
14. PAVING SUBGRADE PER CITY STANDARDS.

TRENCHING DETAIL BENEATH PAVING (NON–VEHICULAR) NO. LS–20



PLAN VIEW



SECTION VIEW

1. MASTER VALVE, NORMALLY CLOSED. INSTALL DOWNSTREAM OF BACKFLOW PREVENTER. MANUFACTURER AND MODEL PER PLANS.
2. FLOW SENSOR. MANUFACTURER AND MODEL PER PLANS.
3. PVC FLOW SENSING MANIFOLD. DIAMETERS AS PER FLOW SENSOR MANUFACTURER SPECIFICATIONS.
4. CONTROL/ COMMON WIRE (OR DECODER CABLE) IN A 2" MIN. DIAM GRAY PVC CONDUIT. CONTROL WIRES (OR DECODER CABLE)MUST BE RUN IN A SEPARATE CONDUIT FROM FLOW SENSOR WIRES.
5. WATERPROOF CONNECTIONS 3M MODEL DBY–6 OR APPROVED EQUAL.
6. GREEN PLASTIC VALVE BOX WITH BOLT DOWN LOC–KIT; CARSON MODEL 1419 OR APPROVED EQUAL.
7. PVC SCHEDULE 80 UNION, S X S.
8. PVC SCHEDULE 80 NIPPLE, T.O.E.; SIZE PER VALVE SIZE, 3" MINIMUM LENGTH.
9. TWO WIRES TO FLOW SENSOR TERMINAL AT THE IRRIGATION CONTROLLER (18 AWG MIN.). SHIELDED WIRE WITH DIFFERENT COLOR FROM CONTROL/ COMMON WIRE OR DECODER CABLE. INSTALL IN GRAY SCH 40 PVC CONDUIT. WIRES MUST BE RUN IN A SEPARATE CONDUIT FROM CONTROL/ COMMON WIRES OR DECODER CABLE. PIGTAIL 18" MIN. EXTRA IN VALVE BOX.
10. SANDED MAINLINE TRENCH. SEE DETAILS LS–19, LS–20, & LS–21.
11. SCH 80 PVC FEMALE ADAPTER (S X T)
12. (4) COMMON BRICKS FOR VALVE BOX SUPPORT
13. VALVE BOX EXTENSION
14. 3/4" CRUSHED DRAIN ROCK; 6" MINIMUM DEPTH
15. 1/4" GALVANIZED WIRE CLOTH
16. 1/2" IN SEED
    1–1/2" IN SOD
    3–1/2" IN PLANTER AND/ OR DECOMPOSED GRANITE
17. LANDSCAPE FINISH GRADE.
18. 3" DETECTABLE TAPE. CHRISTY MODEL TA–DT–03–B–IRR OR EQUAL. INSTALL ABOVE ALL MAINLINE. SEE DETAILS LS–19, LS–20, & LS–21.
19. PVC MAINLINE. SEE PLANS AND SPECIFICATIONS. SEE DETAILS LS–19, LS–20, & LS–21.

NOTES:

1. INSTALL FLOW SENSOR AS PER MANUFACTURERES SPECIFICATIONS.
2. INSTALL FLOW SENSOR WIRES IN 1" MIN. DIAM. GRAY SCH 40 PVC CONDUIT FROM FLOW SENSOR TO CONTROLLER ENCLOSURE.
3. CONTRACTOR IS RESPONSIBLE TO CONFIGURE THE FLOW METER USING THE HYDRAWISE ACCOUNT. CONTACT OWNER TO OBTAIN THE REQUIRED PERMISSIONS.
4. CONTRACTOR SHALL PROGRAM ONE STATION OF THE CONTROLLER TO ALLOW FOR THE USE OF QUICK COUPLING VALVES WITHOUT TRIGGERING A MASTER VALVE SHUTOFF.

FLOW SENSOR/ MASTER VALVE ASSEMBLY DETAIL NO. LS–27 SHEET 1 OF 2

FLOW SENSOR/ MASTER VALVE ASSEMBLY NOTES NO. LS–27 SHEET 2 OF 2

IRRIGATION NOTES

1. THIS SYSTEM IS DESIGNED TO IRRIGATE THE ENTIRE LANDSCAPE WITHIN AN EIGHT HOUR WINDOW USING A MINIMUM DESIGN CAPACITY OF 25 GPM. DESIGN PRESSURE IS 55 PSI MINIMUM AT THE POINT OF CONNECTION AND 30 PSI AT THE FARTHEST IRRIGATION HEAD. CONTACT THE LANDSCAPE ARCHITECT IN THE EVENT THAT FIELD TESTED PRESSURE IS LESS THAN STATED, PRIOR TO CONSTRUCTION.
2. THE INTENT OF THIS IRRIGATION SYSTEM IS TO PROVIDE THE MINIMUM AMOUNT OF WATER REQUIRED TO SUSTAIN GOOD PLANT HEALTH. ADJUST CLOCK AS REQUIRED TO ACHIEVE THIS GOAL AS REQUIRED BY THE TIME OF YEAR.
3. IT IS THE RESPONSIBILITY OF THE LANDSCAPE MAINTENANCE CONTRACTOR AND/OR OWNER TO PROGRAM THE IRRIGATION CONTROLLER TO PROVIDE THE MINIMUM AMOUNT OF WATER NEEDED TO SUSTAIN GOOD PLANT HEALTH. THIS INCLUDES MAKING ADJUSTMENTS TO THE PROGRAM FOR SEASONAL CHANGES, PLANT MATERIAL, WATER REQUIREMENTS, MOUNDS AND SLOPES, AND SUN, SHADE AND WIND EXPOSURES.
4. THIS DRAWING IS DIAGRAMMATIC. IRRIGATION COMPONENTS SHOWN BENEATH PAVING OR PLANTINGS ARE FOR GRAPHIC CLARITY ONLY. PLACE ALL PIPING, VALVES, AND OTHER IRRIGATION COMPONENTS WITHIN THE ADJACENT PLANTER EXCEPT WHERE PIPES CROSS PAVING. PLACE PIPING TO PREVENT CONFLICT WITH SUBSEQUENT PLANTING. REFER TO PLANTING PLAN.
5. CONTRACTOR TO PROVIDE COMPLETE 'AS-BUILT' DRAWINGS (DIGITAL AND HARD COPY) TO THE CITY AT COMPLETION OF PROJECT AND CONFIRM CONNECTION OF CONTROLLER TO CENTRAL CONTROL WITH THE CITY AND THAT THE SYSTEM FUNCTIONS PROPERLY.
6. TRENCH ALL MAIN LINES TO A DEPTH OF 18", TRENCH ALL LATERAL LINES TO A DEPTH OF 12". TRENCH ALL MAIN OR LATERAL LINES TO A DEPTH OF 24" WHERE CROSSING UNDER DRIVEWAY PAVEMENT AND PLACE WITHIN A SCHEDULE 40 SLEEVE, SIZE AS SHOWN.
7. INSTALL SLEEVES WHERE SHOWN ON PLAN AND AS REQUIRED, PRIOR TO THE PLACEMENT OF PAVING. COORDINATE WITH PAVING CONTRACTOR.
8. ALL REMOTE CONTROL VALVES, QUICK COUPLER VALVES, AND FLUSH VALVES SHALL BE INSTALLED IN PLANTER AND IN VALVE BOXES.
9. CONTRACTOR IS RESPONSIBLE FOR COMPLETE COVERAGE OF ALL PLANT MATERIAL. INSTALL ADDITIONAL EMITTERS OR ADJUST SPACING AS REQUIRED.
10. MAIN LINE PIPE SIZE DOWNSTREAM OF LAST PIPE SIZE CALLOUT TO BE 1" PIPE (MAIN LINE PIPE SIZE DIAMETER NOT TO BE LESS THAN 1"). LATERAL PIPE SIZE DOWNSTREAM OF LAST PIPE SIZE CALLOUT TO BE 3/4" PIPE (LATERAL PIPE SIZE DIAMETER NOT TO BE LESS THAN 3/4").
11. IT IS IMPORTANT THAT THE CONTROLLER IS GROUNDED TO GROUND RODS OR PLATES WITH LESS THAN 10 OHMS RESISTANCE. THE GROUND SHOULD ALWAYS BE MEASURED WITH A GROUND RESISTANCE METER. A "CLAMP ON METER" CANNOT BE USED FOR GROUND MEASUREMENT, SINCE THIS IS AN ISOLATED SYSTEM. GROUND RESISTANCE MEASUREMENTS SHOULD BE PERFORMED WITH A "FALL OF POTENTIAL" TYPE METER IN DECODER SYSTEMS. CONTRACTOR IS RESPONSIBLE TO PROVIDE THE OWNER AND THE CITY OF CHICO WITH A CERTIFIED GROUNDING REPORT SHOWING THE RESULTS OF THE TEST.
12. CONTRACTOR IS RESPONSIBLE TO PROVIDE AND INSTALL A HUNTER COMPATIBLE WIRELESS MODEM TO CONNECT TO THE CITY CENTRAL CONTROL. CONTRACTOR IS RESPONSIBLE FOR WORKING WITH CITY TO MAKE CONNECTION.
13. SEE DETAILS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

IRRIGATION SPECIFICATIONS

1. GENERAL - CONTRACTOR SHALL BID AND INSTALL IRRIGATION PER THESE PLANS AND SPECIFICATIONS UNLESS GIVEN FURTHER WRITTEN INSTRUCTIONS OR REVISED PLANS PER OWNER OR LANDSCAPE ARCHITECT. WORK INCLUDES BUT IS NOT LIMITED TO ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO FURNISH, INSTALL AND TEST IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN.

2. QUALITY ASSURANCE - MANUFACTURERS DIRECTIONS AND DETAILED DRAWINGS SHALL BE FOLLOWED IN ALL CASES WHERE THE MANUFACTURERS OF COMPONENTS USED IN THIS CONTRACT COVER POINTS NOT SHOWN ON DRAWINGS AND SPECIFICATIONS.

3. ORDINANCES AND REGULATIONS - THE CONTRACTOR SHALL OBTAIN AND PAY FOR ANY AND ALL PERMITS AND INSPECTIONS AS REQUIRED. THE MATERIALS AND WORK SHALL CONFORM TO ALL APPLICABLE PROVISIONS OF THE LATEST EDITION OF THE UNIFORM PLUMBING CODE AND THE NATIONAL ELECTRIC CODE.

4. EXPLANATION OF DRAWINGS - ALL OFFSETS, FITTINGS, SLEEVES, ETC. NOT INDICATED DUE TO SCALE OF DRAWINGS ARE TO BE FURNISHED AS REQUIRED. BEFORE PROCEEDING WITH ANY WORK, CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND QUANTITIES AND SHALL INFORM THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL CONDITIONS. CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR WORK INSTALLED IN SUCH AN AREA, FOR WORK MODIFIED WITHOUT APPROVAL. PIPE SIZES ON PLANS ARE MINIMUM ALLOWABLE.

5. SUBMITTALS - CONTRACTOR SHALL SUPPLY OWNER WITH AS-BUILT RECORD OF IRRIGATION ILLUSTRATING EXACT LOCATION OF LATERAL AND MAIN LINES, REMOTE CONTROL VALVES, POINTS OF CONNECTION, BACKFLOW PREVENTER, AND CONTROLLER. CONTRACTOR SHALL FURNISH TO OWNER KEYS TO CONTROLLER ENCLOSURE, AND ANY SPECIAL TOOLS REQUIRED FOR MAINTENANCE OF ALL IRRIGATION COMPONENTS.

6. GUARANTEE - THE CONTRACTOR SHALL GUARANTEE THE IRRIGATION SYSTEM FOR A PERIOD OF 120 DAYS THAT THE SYSTEM SHALL BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP AND THAT THE WORK HAS BEEN COMPLETED IN ACCORDANCE TO THE DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY DEFECTS FOR THE ABOVE MENTIONED TIME PERIOD AT NO COST TO THE OWNER. SUCH REPAIRS OR REPLACEMENTS SHALL BE COMPLETED WITHIN A 48 HOUR TIME PERIOD.

7. CONTROL WIRES - CONNECTIONS BETWEEN THE CONTROLLER AND THE REMOTE CONTROL VALVES SHALL BE MADE WITH DIRECT BURIAL COPPER WIRE AWG-U.F. 600 VOLT. WIRE SHALL BE SIZED NO LESS THAN #14, SHALL BE TAPED TO THE MAIN LINE AT 10 FOOT INTERVALS EXCEPT WHERE INDEPENDENTLY SLEEVED. AN EXPANSION CURL SHALL BE PROVIDED WITHIN 3 FEET OF EACH WIRE CONNECTION. EXPANSION CURLS SHALL BE 18 INCHES IN LENGTH AT EACH SPLICE CONNECTION AND AT EACH CONTROL VALVE SO THAT IN CASE OF REPAIR THE VALVE BONNET CAN BE BROUGHT TO THE SURFACE WITHOUT DISCONNECTION OF CONTROL WIRES. ALL SPLICES SHALL BE MADE WITH TOM KING HARMONY PRODUCTS SNAPLOC LV-9000 SEALING PACKS, DRI-SPLICE DS-400 WIRE CONNECTORS, 3M DBY SEALING PACKS OR APPROVED EQUAL. ALL SPLICES SHALL BE WATERPROOF.

8. BACKFILL - THE TRENCHES SHALL NOT BE BACKFILLED UNTIL ALL REQUIRED TESTS ARE PERFORMED. BACKFILL SHALL BE MECHANICALLY COMPACTED IN LANDSCAPED AREAS TO A DRY DENSITY EQUAL TO ADJACENT UNDISTURBED AREAS. BACKFILL SHALL CONFORM TO ADJACENT GRADES WITHOUT DIPS, SUNKEN AREAS, HUMPS, OR OTHER SURFACE IRREGULARITIES. IF SETTLEMENT OCCURS AND SUBSEQUENT ADJUSTMENTS ARE NECESSARY, THE CONTRACTOR SHALL MAKE ALL REQUIRED ADJUSTMENTS WITHOUT COST TO THE OWNER.

9. ADJUSTMENT OF THE SYSTEM - THE CONTRACTOR SHALL FLUSH AND ADJUST ALL IRRIGATION HEADS FOR OPTIMUM PERFORMANCE AND TO PREVENT OVER SPRAY ONTO BUILDINGS, WALKS, WALLS AND FENCES AS MUCH AS POSSIBLE.

10. TESTING - TEST ALL PRESSURE LINES, PRIOR TO BACKFILLING, UNDER HYDROSTATIC PRESSURE OF 150 PSI FOR A PERIOD OF 2 HOURS. IF LEAKS DEVELOP, REPAIR SYSTEM AND REPEAT TEST UNTIL PRESSURE IS HELD.

11. BACKFLOW PREVENTION ASSEMBLY - INSTALL AS PER SPECIFICATIONS AND DETAILS.

12. VALVES - INSTALL IN VALVE BOXES WITH DRAIN ROCK.

13. SWING JOINTS - INSTALL IRRIGATION HEADS AS PER SPECIFICATIONS AND DETAILS.

14. CLEAN UP - CLEAN UP SHALL BE MADE AS EACH PORTION OF WORK PROGRESSES. ALL PAVING AND WALKS SHALL BE BROOMED OR WASHED DOWN AND ANY DAMAGE SUSTAINED TO THE WORK OF OTHERS SHALL BE REPAIRED TO ORIGINAL CONDITIONS ACCEPTABLE TO THE OWNER.

BRIAN FIRTH LANDSCAPE ARCHITECT, INC.
627 BROADWAY, SUITE 220,
CHICO, CALIFORNIA 95928
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LICENSE

REGISTERED LANDSCAPE ARCHITECT BRIAN D. FIRTH #5752 EXP. 06-21 STATE OF CALIFORNIA

PRELIMINARY NOT FOR CONSTRUCTION

PROJECT ARCHITECT:

RUSSELL GALLAWAY ASSOCIATES INC.

115 MEYERS ST #110,
CHICO, CA 95928
PHONE: (530) 342-0302

OWNER AND APPLICANT DEVELOPER:

VETERANS HOUSING DEVELOPMENT CORPORATION (VHDC)
153 HARTNELL AVE SUITE 200
REDDING CA 96002

PROJECT
OROVILLE VETERANS' HOUSING

711 MONTGOMERY STREET
OROVILLE,
CALIFORNIA

SHEET TITLE
LANDSCAPE IRRIGATION DETAILS

DATES

NO.	DESCRIPTION	DATE
	CD SUBMITTAL	12-1-20

Plot Date: November 30, 2020 - 12:06 pm

PROJECT NUMBERS

BFLA PROJECT #: 2204

RGA PROJECT #: 20 600

SHEET NUMBER

L-3.1

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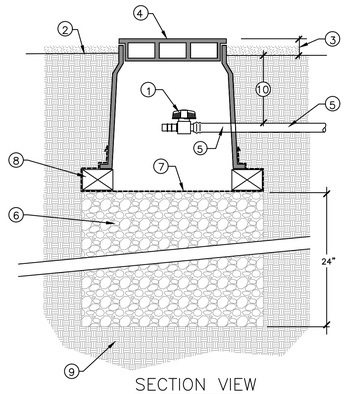
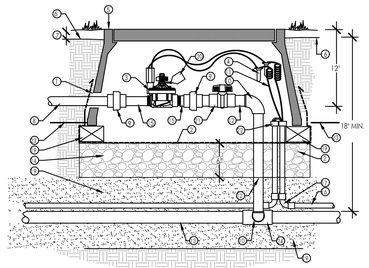


SECTION VIEW

1. COMPRESSION FLUSH VALVE. MANUFACTURER/ MODEL PER PLAN.
2. FINISH GRADE
3. SET TOP OF BOX ABOVE FINISH GRADE:
   1/2" IN SEED
   1-1/2" IN SOD
   3-1/2" IN PLANTER
4. PLASTIC VALVE BOX WITH BOLT DOWN LOC-KIT; CARSON MODEL 910 OR APPROVED EQUAL.
5. HEAVY DUTY SUBSURFACE DRIPPERLINE (MODEL PER PLANS)
6. 3/4" CRUSHED ROCK; 6" – 8" DIAMETER X 24" DEPTH
7. 1/4" GALVANIZED WIRE CLOTH
8. COMMON BRICKS FOR SUPPORT. 3 (MIN.), TYPICAL AT ALL VALVE BOXES.
9. UNDISTURBED SUBGRADE
10. "SCRATCH IN" DRIPPERLINE. SEE SPECIFICATIONS.

DRIPPERLINE MANUAL FLUSH VALVE DETAIL NO. LS–43

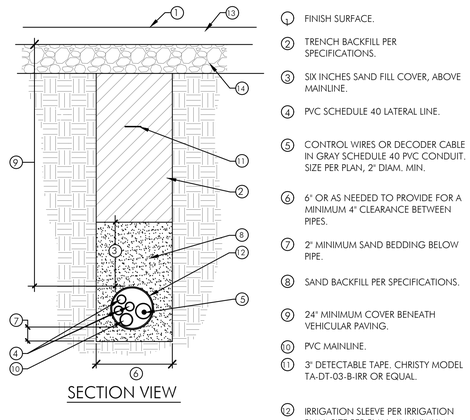


SECTION VIEW

1. BLOCK OPENING AROUND PIPE AS REQUIRED TO PREVENT SOIL INTRUSION.
2. 1/4" GALVANIZED WIRE CLOTH PLACED ABOVE GRAVEL
3. REMOTE CONTROL DRIP VALVE ASSEMBLY; SIZE AND MODEL PER PLAN
4. LOCKING WATERPROOF WIRE CONNECTOR, MODEL DBY-6 OR APPROVED EQUAL.
5. PLASTIC VALVE BOX WITH LOCKING COVER. CARSON MODEL 1419 OR APPROVED EQUAL AS REQUIRED TO HOUSE ENTIRE ASSEMBLY. SEE SPECIFICATIONS.
6. FINISH GRADE
7. 1/2" IN SEED 1-1/2" IN SOD 3-1/2" IN PLANTER AND/ OR DECOMPOSED GRANITE
8. PVC SCHEDULE 40 LATERAL LINE; PROVIDE 18" LENGTH PRIOR TO FIRST FITTING. SEE DETAILS LS-19, LS-20, & LS-21.
9. SCHEDULE 80 PVC UNION, SxS
10. SCHEDULE 40 PVC ELBOW (SXS)
11. CONTROL AND COMMON WIRES PER PLANS AND SPECIFICATIONS. PROVIDE MIN. 18" EXTRA COILED. SEE DETAILS LS-19, LS-20, & LS-21.
12. SCHEDULE 40 PVC PIPE; LENGTH AS REQUIRED.
13. PVC MAINLINE. 18" MINIMUM COVER. SEE DETAILS LS-19, LS-20, & LS-21.
14. 3/4" CRUSHED ROCK; 6" DEPTH
15. SCHEDULE 80 PVC NIPPLE. THREAD ONE END.
16. GRAY PVC SCHEDULE 40 ELECTRICAL CONDUIT; SIZE AS NEEDED. SEE SPECIFICATIONS. SEE DETAILS LS-19, LS-20, & LS-21.
17. PVC SCHEDULE 40 CONDUIT SWEEP, COUPLED BOTH ENDS
18. 4 COMMON BRICKS FOR VALVE BOX SUPPORT
19. SAND TRENCH BACKFILL. 6" ABOVE MAINLINE, 2" BELOW, MINIMUM. SEE DETAILS LS-19, LS-20, & LS-21.
20. CHRISTY ID-MAX-P2-RC005 WITH CONTROLLER AND VALVE NUMBER IDENTIFICATION TO VALVE STEM WITH NYLON CABLE TIE. SEE SPECIFICATIONS.
21. PVC BALL VALVE (SXS). LINE SIZE.
22. PVC CONDUIT COUPLER. SOLVENT WELD TO CONDUIT PIPE ENDS. PROVIDE 4" CLEAR SPACE ABOVE CRUSHED ROCK.
23. 3" DETECTABLE TAPE. CHRISTY MODEL TA-DT-03-B-IRR OR EQUAL. INSTALL ABOVE ALL MAINLINE. SEE DETAILS LS-19, LS-20, & LS-21.
24. SCHEDULE 40 PVC "T" (SXSXS)

NOTES:
1. ALL SLIP FITTINGS TO BE PRIMED AND GLUED.
2. ONE VALVE PER BOX
3. INSTALL MINIMUM OF 12" FROM STRUCTURES OR HARDSCAPE.
4. INSTALL IN PLANTER BEDS WHERE POSSIBLE.
5. PLACE VALVE BOX AT RIGHT ANGLES TO STRUCTURES OR HARDSCAPE.
6. USE MIN. 3 WRAPS OF TEFLON TAPE AT EACH THREADED CONNECTION.

REMOTE CONTROL VALVE (CONVENTIONALLY WIRED) NO. LS–31



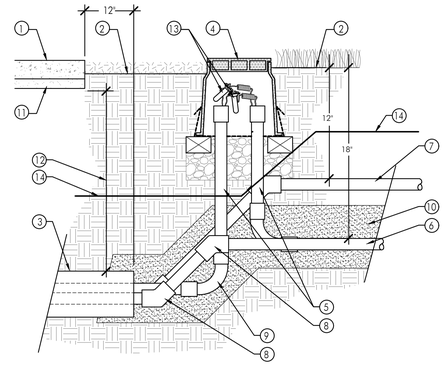
SECTION VIEW

1. FINISH SURFACE.
2. TRENCH BACKFILL PER SPECIFICATIONS.
3. SIX INCHES SAND FILL COVER, ABOVE MAINLINE.
4. PVC SCHEDULE 40 LATERAL LINE.
5. CONTROL WIRES OR DECODER CABLE IN GRAY SCHEDULE 40 PVC CONDUIT. SIZE PER PLAN, 2" DIAM. MIN.
6. 6" OR AS NEEDED TO PROVIDE FOR A MINIMUM 4" CLEARANCE BETWEEN PIPES.
7. 2" MINIMUM SAND BEDDING BELOW PIPE.
8. SAND BACKFILL PER SPECIFICATIONS.
9. 24" MINIMUM COVER BENEATH VEHICULAR PAVING.
10. PVC MAINLINE.
11. 3" DETECTABLE TAPE. CHRISTY MODEL TA-DT-03-B-IRR OR EQUAL.
12. IRRIGATION SLEEVE PER IRRIGATION PLAN. SIZE PER PLAN, 4" MINIMUM.
13. VEHICULAR PAVING PER CIVIL ENGINEER
14. PAVING SUBGRADE PER CIVIL ENGINEER

NOTES:

1. SIDES OF TRENCH WILL BE DUG SQUARE AND CLEAN OF ALL SHARP MATERIAL.
2. ALLOW FOR SETTLING.
3. SEE TRANSITION TO SLEEVING BENEATH PAVING DETAIL FOR ADDITIONAL INFORMATION.

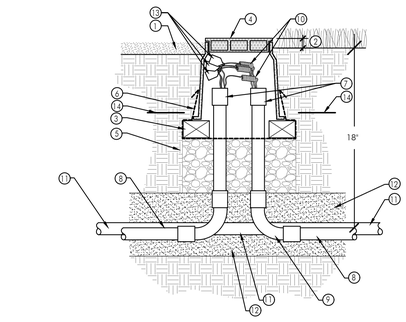
TRENCHING DETAIL BENEATH PAVING (VEHICULAR) NO. LS–21 SHEET 1 OF 2



SECTION VIEW- TRANSITION TO SLEEVING BENEATH PAVING

1. HARDSCAPE FINISH SURFACE.
2. LANDSCAPE FINISH GRADE. SEE SPECIFICATIONS.
3. PVC IRRIGATION SLEEVE. SIZE PER PLAN. EXTEND 1' BEYOND EXTENT OF HARDSCAPE.
4. PULL BOX. SEE DETAIL LS-53 OR LS-54..
5. PVC CONDUIT PER PLAN.
6. PVC MAINLINE PER PLAN.
7. PVC LATERAL LINE PER PLAN.
8. 45° PVC FITTING.
9. PVC CONDUIT SWEEP (90°).
10. 45° PVC FITTING.
11. PVC CONDUIT SWEEP (90°).
12. SAND FILLED AND PIPE BEDDING.
13. PAVEMENT SUBGRADE PER CITY SPECIFICATIONS.
14. 24" MINIMUM COVER BENEATH VEHICULAR PAVING. 18" MINIMUM COVER BENEATH NON-VEHICULAR PAVING.
15. LOCKING WATERPROOF WIRE CONNECTOR, MODEL DBY-6 OR APPROVED EQUAL.
16. 3' DETECTABLE TAPE. CHRISTY MODEL TA-DT-03-B-IRR OR EQUAL.

TRENCHING DETAIL BENEATH PAVING (VEHICULAR) NO. LS–21 SHEET 2 OF 2

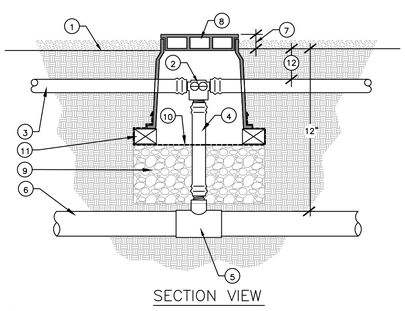


SECTION VIEW

1. FINISH GRADE
2. SET TOP OF BOX ABOVE FINISH GRADE:
   1/2" IN SEED
   1-1/2" IN SOD
   3-1/2" IN PLANTER OR DECOMPOSED GRANITE.
3. 3 COMMON BRICKS FOR SUPPORT
4. GRAY PLASTIC VALVE BOX WITH LOCKING COVER, CARSON MODEL 910-GRAY OR 1419-GRAY OR APPROVED EQUAL. INSTALL WITH LOCKING BOLT KIT.
5. 3/4" CRUSHED ROCK; 6" MINIMUM DEPTH
6. 1/4" GALVANIZED WIRE CLOTH
7. PVC CONDUIT COUPLER. SOLVENT WELD TO CONDUIT PIPE ENDS. PROVIDE 4" CLEAR SPACE ABOVE CRUSHED ROCK.
8. GRAY SCHEDULE 40 PVC ELECTRICAL CONDUIT
9. PVC SCHEDULE 40 CONDUIT SWEEP ELBOWS WITH COUPLERS BOTH ENDS
10. CONTROL/ COMMON WIRES (WHERE APPLICABLE). PROVIDE MINIMUM 18" COILED EXTRA.
11. IRRIGATION MAINLINE (WHERE APPLICABLE)
12. SAND BACKFILL AT MAINLINE- 6" ABOVE AND 2" BELOW, MINIMUM.
13. CHRISTY ID-MAX-P2-RC005 WITH CONTROLLER AND VALVE NUMBER IDENTIFICATION TO VALVE STEM WITH NYLON CABLE TIE. SEE SPECIFICATIONS.
14. 3" DETECTABLE TAPE. CHRISTY MODEL TA-DT-03-B-IRR OR EQUAL. INSTALL ABOVE ALL MAINLINE. SEE DETAILS LS-19, LS-20, & LS-21.

NOTES:
1. PULL BOXES SHALL BE INSTALLED AT BOTH SIDES OF CROSSINGS BENEATH ROADWAY PAVING AND AT BENDS ALONG CONDUIT ROUTE.
2. USE LOCKING WATERPROOF WIRE CONNECTOR, MODEL DBY-6 OR APPROVED EQUAL FOR ALL WIRE SPLICES

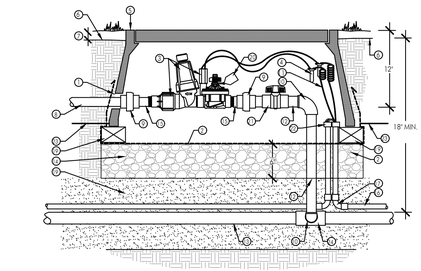
PULL BOX DETAIL (CONVENTIONALLY WIRED) NO. LS–52



SECTION VIEW

1. FINISH GRADE
2. HEAVY DUTY SUB-SURFACE DRIPPERLINE FITTING: 2-WAY TEE OR EL, AS REQURIED (3/4" THREAD X BARB). MANUFACTURER PER PLAN. HOLD DOWN 2" FROM BOTTOM OF VALVE BOX LID.
3. HEAVY DUTY SUB-SURFACE DRIPPERLINE (MANUFACTURER/ MODEL PER PLANS). MODEL PER PLAN.
4. BLANK HEAVY DUTY SUBSURFACE DRIPPERLINE RISER WITH MPT FITTINGS. LENGTH AS REQUIRED.
5. PVC SCHEDULE 80 TEE OR EL (SxSxT)
6. 3/4" PVC SCHEDULE 40 LATERAL LINE. SEE DETAILS LS-19, LS-20, & LS-21.
7. SET TOP OF BOX ABOVE FINISH GRADE:
   1/2" IN SEED
   1-1/2" IN SOD
   3-1/2" IN PLANTER OR DECOMPOSED GRANITE.
8. PLASTIC VALVE BOX WITH BOLT DOWN LOC-KIT; CARSON MODEL 910 OR APPROVED EQUAL
9. 3/4" CRUSHED ROCK, 6" MINIMUM DEPTH
10. 1/4" GALVANIZED WIRE CLOTH
11. COMMON BRICKS FOR SUPPORT. 3 (MIN.), TYPICAL AT ALL VALVE BOXES.
12. "SCRATCH IN" DRIPPERLINE. SEE SPECIFICATIONS.

TRANSITION TO DRIPPERLINE DETAIL NO. LS–39

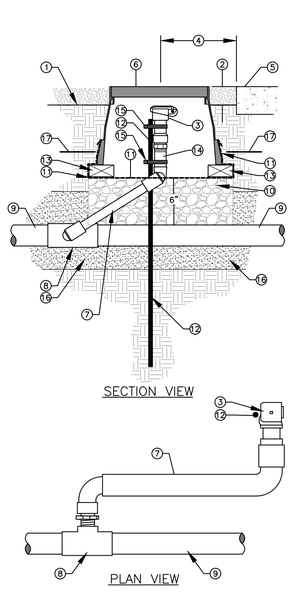


SECTION VIEW

1. BLOCK OPENING AROUND PIPE AS REQUIRED TO PREVENT SOIL INTRUSION.
2. 1/4" GALVANIZED WIRE CLOTH PLACED ABOVE GRAVEL
3. REMOTE CONTROL DRIP VALVE ASSEMBLY; SIZE AND MODEL PER PLAN
4. LOCKING WATERPROOF WIRE CONNECTOR, MODEL DBY-6 OR APPROVED EQUAL.
5. PLASTIC VALVE BOX WITH LOCKING COVER. CARSON MODEL 1730 OR APPROVED EQUAL AS REQUIRED TO HOUSE ENTIRE ASSEMBLY. SEE SPECIFICATIONS.
6. FINISH GRADE
7. 1/2" IN SEED 1-1/2" IN SOD 3-1/2" IN PLANTER AND/ OR DECOMPOSED GRANITE
8. PVC SCHEDULE 40 LATERAL LINE; PROVIDE 18" LENGTH PRIOR TO FIRST FITTING. SEE DETAILS LS-19, LS-20, & LS-21.
9. SCHEDULE 80 PVC UNION, 5x5
10. SCHEDULE 40 PVC ELBOW (SXS)
11. CONTROL AND COMMON WIRES PER PLANS AND SPECIFICATIONS. PROVIDE MIN. 18" EXTRA COILED.
12. SCHEDULE 40 PVC PIPE; LENGTH AS REQUIRED
13. PVC MAINLINE. 18" MINIMUM COVER. SEE DETAILS LS-19, LS-20, & LS-21.
14. 3/4" CRUSHED ROCK; 6" DEPTH
15. SCHEDULE 80 PVC NIPPLE. THREAD ONE END.
16. GRAY PVC SCHEDULE 40 ELECTRICAL CONDUIT; 3" MINIMUM DIAMETER. SEE SPECIFICATIONS. SEE DETAILS LS-19, LS-20, & LS-21.
17. PVC SCHEDULE 40 CONDUIT SWEEP, COUPLED BOTH ENDS
18. 4 COMMON BRICKS FOR VALVE BOX SUPPORT
19. SAND TRENCH BACKFILL. 6" ABOVE MAINLINE, 2" BELOW, MINIMUM. SEE DETAILS LS-19, LS-20, & LS-21.
20. CHRISTY ID-MAX-P2-RC005 WITH CONTROLLER AND VALVE NUMBER IDENTIFICATION TO VALVE STEM WITH NYLON CABLE TIE. SEE SPECIFICATIONS.
21. PVC BALL VALVE. 5x5. LINE SIZE.
22. PVC CONDUIT COUPLER. SOLVENT WELD TO CONDUIT PIPE ENDS. PROVIDE 4" CLEAR SPACE ABOVE CRUSHED ROCK.
23. 3" DETECTABLE TAPE. CHRISTY MODEL TA-DT-03-B-IRR OR EQUAL. INSTALL ABOVE ALL MAINLINE. SEE DETAILS LS-19, LS-20, & LS-21.
24. SCHEDULE 40 PVC "T" (SXSXS)

NOTES:
1. ALL SLIP FITTINGS TO BE PRIMED AND GLUED.
2. ONE VALVE PER BOX
3. INSTALL MINIMUM OF 12" FROM STRUCTURES OR HARDSCAPE.
4. INSTALL IN PLANTER BEDS WHERE POSSIBLE.
5. PLACE VALVE BOX AT RIGHT ANGLES TO STRUCTURES OR HARDSCAPE.
6. USE MIN. 5 WRAPS OF TEFLON TAPE AT EACH THREADED CONNECTION.

VALVE DETAIL DRIP CONTROL ZONE KIT (CONVENTIONALLY WIRED) NO. LS–29



SECTION VIEW

PLAN VIEW

1. FINISH GRADE.
2. SET TOP OF BOX ABOVE FINISH GRADE: 1" IN SOD, 3-1/2" IN PLANTER OR DECOMPOSED GRANITE.
3. QUICK COUPLING VALVE WITH LOCKING RUBBER COVER. SEE PLANS FOR MAKE AND MODEL.
4. SET QUICK COUPLER 12" FROM EDGE OF PLANTING AREA.
5. CURB, HEADER OR PAVING.
6. PLASTIC VALVE BOX: CARSON 910 OR APPROVED EQUAL. INSTALL WITH LOCKING BOLT DOWN KIT.
7. LASCO STANDARD UNITIZED SWING JOINT OR APPROVED EQUAL. 1" MINIMUM SIZE, WITH SNAP-LOK STABILIZER ELBOW OUTLET. INLET IS MIPT, OUTLET IS BRASS MIPT W/SNAP LOK.
8. SCHEDULE 40 PVC TEE (SXSXT).
9. PRESSURE MAINLINE, SIZE AND TYPE PER PLAN; 18" MINIMUM COVER. SEE DETAILS LS-19, LS-20, & LS-21.
10. 3/4" CRUSHED DRAIN ROCK; 6" DEPTH.
11. 1/4" GALVANIZED WIRE CLOTH PLACED ABOVE GRAVEL.
12. #8 (1" DIA.) X 30" REBAR; INSTALL PLUMB AND TRUE. SECURE TO QUICK COUPLER VALVE WITH STAINLESS STEEL HOSE CLAMPS AND SCREWS (TYP. 2 PLCS.)
13. (3) COMMON BRICKS FOR SUPPORT.
14. SCH. 80 NIPPLE, T.O.E.
15. STAINLESS STEEL HOSE CLAMP WITH STAINLESS STEEL SCREWS (TYP. 2 PLCS.)
16. SANDED MAINLINE TRENCH. SEE DETAILS LS-19, LS-20, & LS-21.
17. 3" DETECTABLE TAPE. CHRISTY MODEL TA-DT-03-B-IRR OR EQUAL. INSTALL ABOVE ALL MAINLINE. SEE DETAILS LS-19, LS-20, & LS-21.

NOTES:
1. USE MINIMUM 5 WRAPS OF TEFLON TAPE AT EACH THREADED CONNECTION.
2. PROGRAM CONTROLLER TO OPEN MAINLINE TO OPERATE.

QUICK COUPLING VALVE DETAIL NO. LS–28

BRIAN FIRTH LANDSCAPE ARCHITECT, INC.
627 BROADWAY, SUITE 220,
CHICO, CALIFORNIA 95928
PHONE: (530) 899-1130
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www.facebook.com/BFLAdesign

LICENSE

REGISTERED LANDSCAPE ARCHITECT BRIAN D. FIRTH #2752 EXP. 06-21 STATE OF CALIFORNIA

PRELIMINARY NOT FOR CONSTRUCTION

PROJECT ARCHITECT:

RUSSELL GALLAWAY ASSOCIATES INC.

115 MEYERS ST #110,
CHICO, CA 95928
PHONE: (530) 342-0302

OWNER AND APPLICANT DEVELOPER:

VETERANS HOUSING DEVELOPMENT CORPORATION (VHDC)
153 HARTNELL AVE SUITE 200
REDDING CA 96002

PROJECT
OROVILLE VETERANS' HOUSING

711 MONTGOMERY STREET
OROVILLE,
CALIFORNIA

SHEET TITLE
LANDSCAPE IRRIGATION DETAILS

DATES

NO.	DESCRIPTION	DATE
	CD SUBMITTAL	12-1-20

Plot Date: November 30, 2020 - 11:59 am

PROJECT NUMBERS

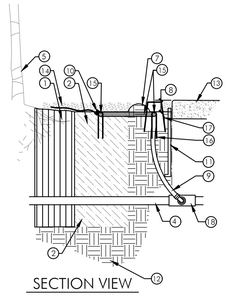
BFLA PROJECT #: 2204

RGA PROJECT #: 20 600

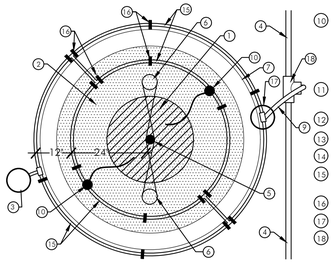
SHEET NUMBER

L-3.2

File Name: Z:\BFLA (2200-2299)\2204 Oroville Veterans Housing\2204 CAD\2204 CDs\2204 Irrigation 11-24-20.dwg



SECTION VIEW

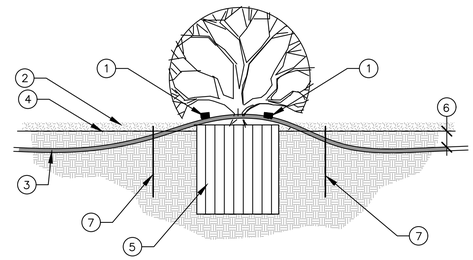


PLAN VIEW

NOTE:
OMIT OUTER RING OF DRIPPERLINE AND ADJUST LAYOUT AS REQUIRED TO FIT INTO THE SMALLER PLANTERS AT THE NOSES OF THE MEDIANS.

1. TREE ROOTBALL. SEE TREE PLANTING DETAIL FOR ADDITIONAL INFORMATION.
2. TREE PLANTING HOLE. SEE TREE PLANTING DETAIL FOR ADDITIONAL INFORMATION.
3. LINE FLUSHING VALVE. SEE DETAIL LS–42 OR LS–43.
4. PVC LATERAL PIPE AND FITTING. INSTALL 8'–0" MIN OR AS CLEAR OF TREE AS POSSIBLE. AVOID PLACING IN PARKWAY STRIPS– INSTALLATION AT BACK OF WALK IS PREFERRED.
5. TREE. SEE PLANTING PLAN AND TREE PLANTING DETAIL
6. TREE STAKE (TYPICAL). SEE TREE PLANTING DETAIL.
7. OPTIONAL TEMPORARY WATER RETENTION BERM (TYPICAL). SEE TREE PLANTING DETAIL FOR ADDITIONAL INFORMATION.
8. LANDSCAPE FINISH GRADE AS PER PLANTING SPECIFICATIONS
9. BLANK DRIPPERLINE (NO INLINE EMITTERS) WITH BARBED COMPRESSION FITTINGS.
10. IRRIGATION EMITTER. MODEL PER IRRIGATION PLAN. 2 PER TREE. USE ¼" DISTRIBUTION TUBING TO DISTRIBUTE WATER TO TREE ROOTBALL. SECURE TO ROOTBALL WITH ¼" DISTRIBUTION TUBING STAKE.
11. ROOT BARRIER (WHERE APPLICABLE). REFER TO TREE PLANTING DETAILS.
12. UNDISTURBED SUBGRADE
13. CONCRETE FLATWORK (WHERE APPLICABLE)
14. TOP DRESSING. PER SPECIFCATIONS
15. DRIPPERLINE PER PLAN. "SCRATCH –IN" PER SPECIFICATIONS.
16. 6" MIN SOIL STAPLES AS SHOWN. TYPICAL.
17. TRANSITION TO DRIP. SEE DETAIL LS–39.
18. SCH 40 PVC "T" (SXSXT)

DRIPPERLINE DETAIL AT TREES NO. LS–44



SECTION VIEW

1. EMITTER. MANUFACTURER/ MODEL PER PLAN.
2. TOP DRESSING PER PLANS AND SPECIFICATIONS.
3. BLANK HEAVY DUTY SUBSURFACE DRIPPERLINE. MANUFACTURER/ MODEL PER PLAN
4. FINISH GRADE
5. SHRUB PLANTING. SEE SHRUB PLANTING DETAIL.
6. "SCRATCH IN" DRIPPERLINE. SEE SPECIFICATIONS.
7. METAL SOIL STAPLE. 6" MINIMUM LENGTH @ 4'–0" O.C., AT CHANGES IN DIRECTION, AND AT FITTINGS.

DRIPPERLINE DETAIL AT SHRUBS NO. LS–45

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EXP. 06-21
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OROVILLE VETERANS' HOUSING

711 MONTGOMERY STREET
OROVILLE,
CALIFORNIA

SHEET TITLE
LANDSCAPE IRRIGATION DETAILS

DATES

NO.	DESCRIPTION	DATE
	CD SUBMITTAL	12-1-20

Plot Date: November 30, 2020 - 11:58 am

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BFLA PROJECT #: 2204
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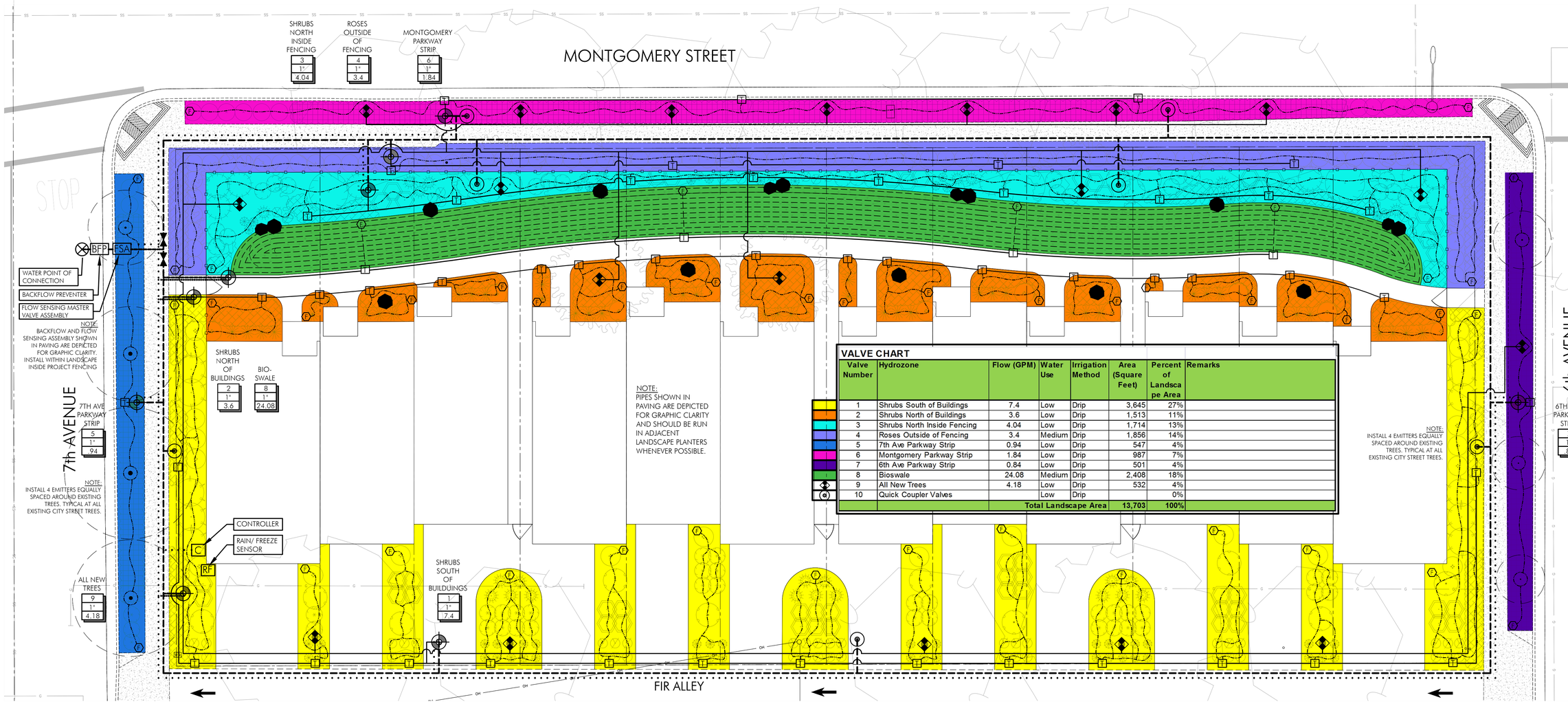
SHEET NUMBER
L-3.3

File Name: Z:\BFLA (2200-2299)\2204 Oroville Veterans Housing\2204 CAD\2204 CDs\2204 Irrigation 11-24-20.dwg



VALVE CHART

Valve Number	Hydrozone	Flow (GPM)	Water Use	Irrigation Method	Area (Square Feet)	Percent of Landscape Area	Remarks
1	Shrubs South of Buildings	7.4	Low	Drip	3,645	27%	
2	Shrubs North of Buildings	3.6	Low	Drip	1,513	11%	
3	Shrubs North Inside Fencing	4.04	Low	Drip	1,714	13%	
4	Roses Outside of Fencing	3.4	Medium	Drip	1,856	14%	
5	7th Ave Parkway Strip	0.94	Low	Drip	547	4%	
6	Montgomery Parkway Strip	1.84	Low	Drip	987	7%	
7	6th Ave Parkway Strip	0.84	Low	Drip	501	4%	
8	Bioswale	24.08	Medium	Drip	2,408	18%	
9	All New Trees	4.18	Low	Drip	532	4%	
10	Quick Coupler Valves		Low	Drip		0%	
		Total Landscape Area			13,703	100%	

PRESSURE LOSS CALCULATIONS

1" WATER METER: -3.4 PSI
1" BACKFLOW PREVENTER: -13.PSI
400 LF, 2" SCH. 40 PVC MAINLINE: -1.88 PSI
VALVE: -2 PSI
SCH. 40 PVC LATERAL LINE: -2.5 PSI
TOTAL PRESSURE LOSS: 22.78 PSI

Oroville Veterans' Housing
Oroville, California

System Capacity
(Maximum daily water required to irrigate the landscape area in an 8 hour irrigation window)

Where:

27,154 = Gallons per Acre-Inch
HA = Irrigated Landscape Area (Acres)
43,560 = Square Feet per Acre
Eto = Reference Evapotranspiration
0.269 =Historical Daily Peak ETo (Worst Case)
0.70 = Irrigation Efficiency (IE) - Rotors, Rotators, Spray
0.85 = Irrigation Efficiency (IE) - Bubblers, Surface Drip
0.90 = Irrigation Efficiency (IE) - Sub-surface Drip
HR = Irrigation Window (Hours per Day)
60 = Minutes per Hour

Design Capacity

SC = (27,154) (HA) (ETo / IE) / (HR) (60)

SC = 6.84 **GPM**

Irrigation Window

8 Hours per Day

Irrigated Landscape Area

13,703 = Irrigated Landscape Area (Square Feet)
0.31 =Irrigated Landscape Area (Acres)

Hydrozone 1; Low Water Use Shrub; Drip. PR= 0.8

PF = 0.2
HA = 8,907 (square feet) 0.204477 acres
IE = 0.81
EWU = 70495.0563 (gallons per year) 0.216341 acre-feet/year 94.24473 cct/year

Hydrozone 2; Low Water Use Trees (28 sf/ tree); Drip PR= 2.5

PF = 0.2
HA = 532 (square feet) 0.012213 Acres
IE = 0.81
EWU = 4210.550123 (gallons per year) 0.012922 acre-feet/year 5.629078 cct/year

Hydrozone 5; Medium Water Use shrubs; Drip. PR= 0.8

PF = 0.5
HA = 1,856 (square feet) 0.042608 Acres
IE = 0.81
EWU = 36723.59506 (gallons per year) 0.112701 acre-feet/year 49.09572 cct/year

Hydrozone 13; Bioswale Grasses; Drip. PR= 0.8

PF = 0.6
HA = 2,408 (square feet) 0.05528 Acres
IE = 0.81
EWU = 57174.83852 (gallons per year) 0.175463 acre-feet/year 76.43695 cct/year

Total Estimated Water Use for All Hydrozones (EWU) - Sum

EWU = 168,604 (gallons per year) 0.517427 Acre-Feet per Year
225 (100 cubic feet per year) 0.005175 Acres

Maximum Applied Water Allowance (MAWA) - Calculation

MAWA = (Eto) (0.7) (LA) (0.62)

MAWA = 197,656 Gallons per Year

Where:

51.7 = Reference Evapotranspiration (ETo)
0.45 = ET Adjustment Factor (percent)
13,703 = Landscape Area (LA) (square feet)
0.62 = Conversion factor (inches to gallons)

Estimated Water Use for Hydrozones (EWU) - Calculation

EWU = (Eto) (PF) (HA) (0.62) / (IE)

Where:

51.7 = Reference Evapotranspiration (ETo) (Ref: CIMIS)
PF = Plant Factor per Hydrozone
HA = Hydrozone Area (square feet)
0.62 = Conversion factor (inches to gallons)
IE = Irrigation Efficiency per Sprinkler Type

PLANT ESTABLISHMENT SCHEDULE

Hydrozone 1; Low Water Use Shrub; Drip.

Days	Month	Daily ET	Monthly ET	Water Per Month	Precipitation Rate	Inches Per Week	Infiltration Rate	Minutes Per Week	Maximum Run Time	Water Days Per Week	Minutes Per Water Day	Cycles	Minutes Per Cycle
31	JAN	0.04	1.20	0.3	0.80	0.07	0.40	5	30	2	3	3	1
28	FEB	0.06	1.80	0.4	0.80	0.11	0.40	8	30	2	4	3	1
31	MAR	0.09	2.90	0.7	0.80	0.16	0.40	12	30	2	6	3	2
30	APR	0.11	4.70	1.2	0.80	0.27	0.40	20	30	3	7	3	2
31	MAY	0.16	6.10	1.5	0.80	0.34	0.40	26	30	3	9	3	3
30	JUN	0.25	7.40	1.8	0.80	0.43	0.40	32	30	4	8	3	3
31	JUL	0.27	8.50	2.1	0.80	0.47	0.40	36	30	5	7	3	2
31	AUG	0.25	7.30	1.8	0.80	0.41	0.40	31	30	4	8	3	3
30	SEPT	0.18	5.40	1.3	0.80	0.31	0.40	23	30	3	8	3	3
31	OCT	0.12	3.70	0.9	0.80	0.21	0.40	15	30	3	5	3	2
30	NOV	0.05	1.60	0.4	0.80	0.09	0.40	7	30	2	3	3	1
31	DEC	0.04	1.00	0.2	0.80	0.06	0.40	4	30	2	2	3	1

Hydrozone 2; Low Water Use Trees (28 sf/ tree); Drip

Days	Month	Daily ET	Monthly ET	Water Per Month	Precipitation Rate	Inches Per Week	Infiltration Rate	Minutes Per Week	Maximum Run Time	Water Days Per Week	Minutes Per Water Day	Cycles	Minutes Per Cycle
31	JAN	0.04	1.20	0.3	2.5	0.1	0.40	2	10	2	1	3	0
28	FEB	0.06	1.80	0.4	2.5	0.1	0.40	3	10	2	1	3	0
31	MAR	0.09	2.90	0.7	2.5	0.2	0.40	4	10	3	1	3	0
30	APR	0.11	4.70	1.2	2.5	0.3	0.40	6	10	4	2	3	1
31	MAY	0.16	6.10	1.5	2.5	0.3	0.40	8	10	5	2	3	1
30	JUN	0.25	7.40	1.8	2.5	0.4	0.40	10	10	5	2	3	1
31	JUL	0.27	8.50	2.1	2.5	0.5	0.40	11	10	6	2	3	1
31	AUG	0.25	7.30	1.8	2.5	0.4	0.40	10	10	6	2	3	1
30	SEPT	0.18	5.40	1.3	2.5	0.3	0.40	7	10	5	1	3	0
31	OCT	0.12	3.70	0.9	2.5	0.2	0.40	5	10	4	1	3	0
30	NOV	0.05	1.60	0.4	2.5	0.1	0.40	2	10	3	1	3	0
31	DEC	0.04	1.00	0.2	2.5	0.1	0.40	1	10	2	1	3	0

Hydrozone 5; Medium Water Use shrubs; Drip.

Days	Month	Daily ET	Monthly ET	Water Per Month	Precipitation Rate	Inches Per Week	Infiltration Rate	Minutes Per Week	Maximum Run Time	Water Days Per Week	Minutes Per Water Day	Cycles	Minutes Per Cycle
31	JAN	0.04	1.20	0.7	0.8	0.2	0.40	13	30	3	4	3	1
28	FEB	0.06	1.60	2.0	0.8	0.5	0.40	38	30	4	9	3	3
31	MAR	0.09	2.90	3.3	0.8	0.7	0.40	55	30	5	11	3	4
30	APR	0.11	4.70	5.3	0.8	1.2	0.40	93	30	5	19	3	6
31	MAY	0.16	6.10	6.9	0.8	1.5	0.40	116	30	6	19	3	6
30	JUN	0.25	7.40	8.3	0.8	1.9	0.40	146	30	6	24	3	8
31	JUL	0.27	8.50	9.6	0.8	2.2	0.40	162	30	6	27	3	9
31	AUG	0.25	7.30	8.2	0.8	1.9	0.40	139	30	6	23	3	8
30	SEPT	0.18	5.40	6.1	0.8	1.4	0.40	106	30	6	18	3	6
31	OCT	0.12	3.70	4.2	0.8	0.9	0.40	70	30	5	14	3	5
30	NOV	0.05	1.60	1.8	0.8	0.4	0.40	32	30	4	8	3	3
31	DEC	0.04	1.00	1.1	0.8	0.3	0.40	19	30	3	6	3	2

Hydrozone 13; Bioswale Grasses; Drip.

Days	Month	Daily ET	Monthly ET	Water Per Month	Precipitation Rate	Inches Per Week	Infiltration Rate	Minutes Per Week	Maximum Run Time	Water Days Per Week	Minutes Per Water Day	Cycles	Minutes Per Cycle
31	JAN	0.04	1.20	0.9	0.8	0.2	0.40	15	30	2	8	3	3
28	FEB	0.06	1.60	1.3	0.8	0.3	0.40	25	30	2	13	3	4
31	MAR	0.09	2.90	2.1	0.8	0.5	0.40	36	30	2	18	3	6
30	APR	0.11	4.70	3.5	0.8	0.8	0.40	61	30	3	20	3	7
31	MAY	0.16	6.10	4.5	0.8	1.0	0.40	77	30	3	26	3	9
30	JUN	0.25	7.40	5.5	0.8	1.3	0.40	96	30	4	24	3	8
31	JUL	0.27	8.50	6.3	0.8	1.4	0.40	107	30	5	21	3	7
31	AUG	0.25	7.30	5.4	0.8	1.2	0.40	92	30	4	23	3	8
30	SEPT	0.18	5.40	4.0	0.8	0.9	0.40	70	30	3	23	3	8
31	OCT	0.12	3.70	2.7	0.8	0.6	0.40	46	30	3	15	3	5
30	NOV	0.05	1.60	1.2	0.8	0.3	0.40	21	30	2	10	3	3
31	DEC	0.04	1.00	0.7	0.8	0.2	0.40	13	30	2	6	3	2

ESTABLISHED PLANT MAINTENANCE SCHEDULE

Hydrozone 1; Low Water Use Shrub; Drip.

Days	Month	Daily ET	Monthly ET	Water Per Month	Precipitation Rate	Inches Per Week	Infiltration Rate	Minutes Per Week	Maximum Run Time	Water Days Per Week	Minutes Per Water Day	Cycles	Minutes Per Cycle
31	JAN	0.04	1.20	0.3	0.8	0.1	0.40	5	30	2	3	1	3
28	FEB	0.06	1.80	0.4	0.8	0.1	0.40	8	30	2	4	1	4
31	MAR	0.09	2.90	0.7	0.8	0.2	0.40	12	30	2	6	1	6
30	APR	0.11	4.70	1.2	0.8	0.3	0.40	20	30	3	7	1	7
31	MAY	0.16	6.10	1.5	0.8	0.3	0.40	26	30	3	9	1	9
30	JUN	0.25	7.40	1.8	0.8	0.4	0.40	32	30	4	8	1	8
31	JUL	0.27	8.50	2.1	0.8	0.5	0.40	36	30	5	7	1	7
31	AUG	0.25	7.30	1.8	0.8	0.4	0.40	31	30	4	8	1	8
30	SEPT	0.18	5.40	1.3	0.8	0.3	0.40	23	30	3	8	1	8
31	OCT	0.12	3.70	0.9	0.8	0.2	0.40	15	30	3	5	1	5
30	NOV	0.05	1.60	0.4	0.8	0.1	0.40	7	30	2	3	1	3
31	DEC	0.04	1.00	0.2	0.8	0.1	0.40	4	30	2	2	1	2

Hydrozone 2; Low Water Use Trees (28 sf/ tree); Drip

Days	Month	Daily ET	Monthly ET	Water Per Month	Precipitation Rate	Inches Per Week	Infiltration Rate	Minutes Per Week	Maximum Run Time	Water Days Per Week	Minutes Per Water Day	Cycles	Minutes Per Cycle
31	JAN	0.04	1.20	0.3	2.5	0.1	0.40	2	10	2	1	1	1
28	FEB	0.06	1.80	0.4	2.5	0.1	0.40	3	10	2	1	1	1
31	MAR	0.09	2.90	0.7	2.5	0.2	0.40	4	10	3	1	1	1
30	APR	0.11	4.70	1.2	2.5	0.3	0.40	6	10	4	2	1	2
31	MAY	0.16	6.10	1.5	2.5	0.3	0.40	8	10	5	2	1	2
30	JUN	0.25	7.40	1.8	2.5	0.4	0.40	10	10	5	2	1	2
31	JUL	0.27	8.50	2.1	2.5	0.5	0.40	11	10	6	2	1	2
31	AUG	0.25	7.30	1.8	2.5	0.4	0.40	10	10	6	2	1	2
30	SEPT	0.18	5.40	1.3	2.5	0.3	0.40	7	10	5	1	1	1
31	OCT	0.12	3.70	0.9	2.5	0.2	0.40	5	10	4	1	1	1
30	NOV	0.05	1.60	0.4	2.5	0.1	0.40	2	10	3	1	1	1
31	DEC	0.04	1.00	0.2	2.5	0.1	0.40	1	10	2	1	1	1

Hydrozone 5; Medium Water Use shrubs; Drip.

Days	Month	Daily ET	Monthly ET	Water Per Month	Precipitation Rate	Inches Per Week	Infiltration Rate	Minutes Per Week	Maximum Run Time	Water Days Per Week	Minutes Per Water Day	Cycles	Minutes Per Cycle
31	JAN	0.04	1.20	0.7	0.8	0.2	0.40	13	30	3	4	1	4
28	FEB	0.06	1.60	2.0	0.8	0.5	0.40	38	30	4	9	1	9
31	MAR	0.09	2.90	3.3	0.8	0.7	0.40	55	30	5	11	1	11
30	APR	0.11	4.70	5.3	0.8	1.2	0.40	93	30	5	19	1	19
31	MAY	0.16	6.10	6.9	0.8	1.5	0.40	116	30	6	19	1	19
30	JUN	0.25	7.40	8.3	0.8	1.9	0.40	146	30	6	24	1	24
31	JUL	0.27	8.50	9.6	0.8	2.2	0.40	162	30	6	27	1	27
31	AUG	0.25	7.30	8.2	0.8	1.9	0.40	139	30	6	23	1	23
30	SEPT	0.18	5.40	6.1	0.8	1.4	0.40	106	30	6	18	1	18
31	OCT	0.12	3.70	4.2	0.8	0.9	0.40	70	30	5	14	1	14
30	NOV	0.05	1.60	1.8	0.8	0.4	0.40	32	30	4	8	1	8
31	DEC	0.04	1.00	1.1	0.8	0.3	0.40	19	30	3	6	1	6

Hydrozone 13; Bioswale Grasses; Drip.

Days	Month	Daily ET	Monthly ET	Water Per Month	Precipitation Rate	Inches Per Week	Infiltration Rate	Minutes Per Week	Maximum Run Time	Water Days Per Week	Minutes Per Water Day	Cycles	Minutes Per Cycle
31	JAN	0.04	1.20	0.9	0.8	0.2	0.40	15	30	2	8	1	8
28	FEB	0.06	1.60	1.3	0.8	0.3	0.40	25	30	2	13	1	13
31	MAR	0.09	2.90	2.1	0.8	0.5	0.40	36	30	2	18	1	18
30	APR	0.11	4.70	3.5	0.8	0.8	0.40	61	30	3	20	1	20
31	MAY	0.16	6.10	4.5	0.8	1.0	0.40	77	30	3	26	1	26
30	JUN	0.25	7.40	5.5	0.8	1.3	0.40	96	30	4	24	1	24
31	JUL	0.27	8.50	6.3	0.8	1.4	0.40	107	30	5	21	1	21
31	AUG	0.25	7.30	5.4	0.8	1.2	0.40	92	30	4	23	1	23
30	SEPT	0.18	5.40	4.0	0.8	0.9	0.40	70	30	3	23	1	23
31	OCT	0.12	3.70	2.7	0.8	0.6	0.40	46	30	3	15	1	15
30	NOV	0.05	1.60	1.2	0.8	0.3	0.40	21	30	2	10	1	10
31	DEC	0.04	1.00	0.7	0.8	0.2	0.40	13	30	2	6	1	6

NOTE:

IRRIGATION SCHEDULES ARE BASED UPON THE BEST SEASONAL DATA AVAILABLE. THE CONTRACTOR IS RESPONSIBLE FOR THE ESTABLISHMENT OF PLANT MATERIAL AND MAY NEED TO MAKE SOME ADJUSTMENTS IN ORDER TO PROVIDE ADEQUATE IRRIGATION FOR OPTIMAL PLANT GROWTH. IT SHOULD ALSO BE NOTED THAT THE IRRIGATION CONTROLLER IS CONNECTED TO A WEB BASED IRRIGATION MANAGEMENT SOFTWARE THAT PROVIDES REALTIME WEATHER DATA THAT THE CONTROLLER UTILIZES TO ADJUST THE BASELINE SCHEDULE TO PROVIDE OPTIMAL IRRIGATION. ONCE PLANT MATERIAL HAS BEEN ESTABLISHED, ALL IRRIGATION SHALL OCCUR BETWEEN THE HOURS OF 8PM AND 10 AM.

BRIAN FIRTH LANDSCAPE ARCHITECT, INC.
627 BROADWAY, SUITE 220,
CHICO, CALIFORNIA 95928
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LICENSE

REGISTERED LANDSCAPE ARCHITECT
BRIAN D. FIRTH #2752
EXP. 06-21
STATE OF CALIFORNIA

PROJECT ARCHITECT:

RUSSELL GALLAWAY ASSOCIATES INC.

115 MEYERS ST #110,
CHICO, CA 95928
PHONE: (530) 342-0302

OWNER AND APPLICANT DEVELOPER:

VETERANS HOUSING DEVELOPMENT CORPORATION (VHDC)
153 HARTNELL AVE SUITE 200
REDDING CA 96002

PROJECT
OROVILLE VETERANS' HOUSING

711 MONTGOMERY STREET
OROVILLE,
CALIFORNIA

SHEET TITLE
LANDSCAPE WATER USE CALCULATIONS

DATES

NO.	DESCRIPTION	DATE
	CD SUBMITTAL	12-1-20

Plot Date: November 30, 2020 - 11:59 am

PROJECT NUMBERS

BFLA PROJECT #: 2204
RGA PROJECT #: 20 600

SHEET NUMBER

L-3.4

File Name: Z:\BFLA (2200-2299)\2204 Oroville Veterans Housing\2204 CAD\2204 CDs\2204 Irrigation 11-24-20.dwg