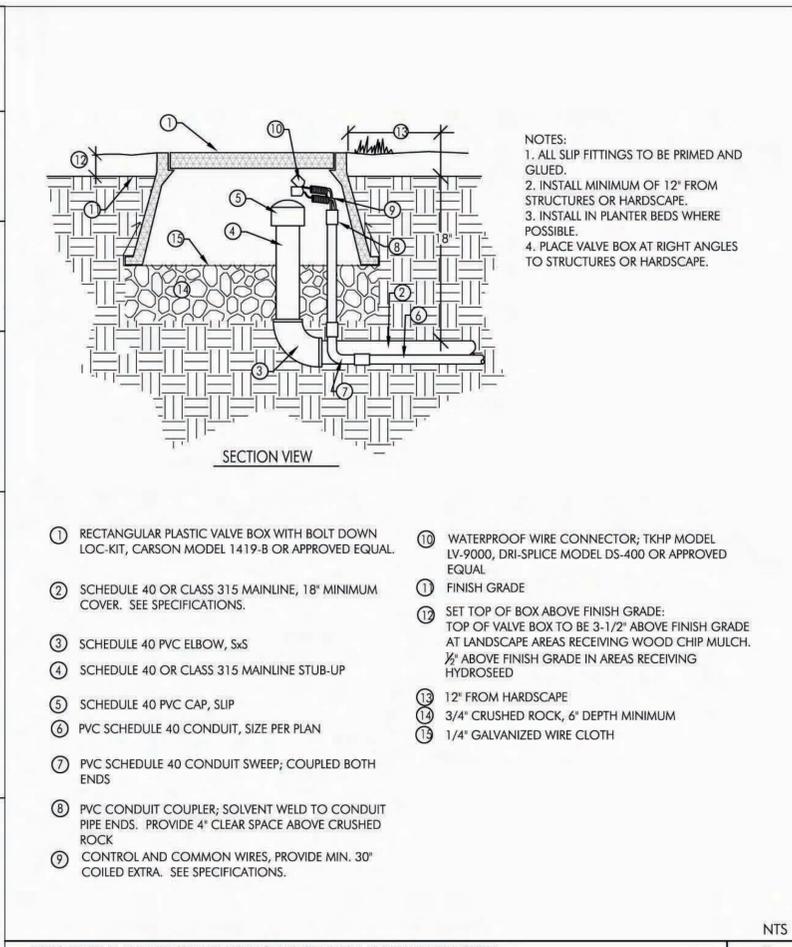


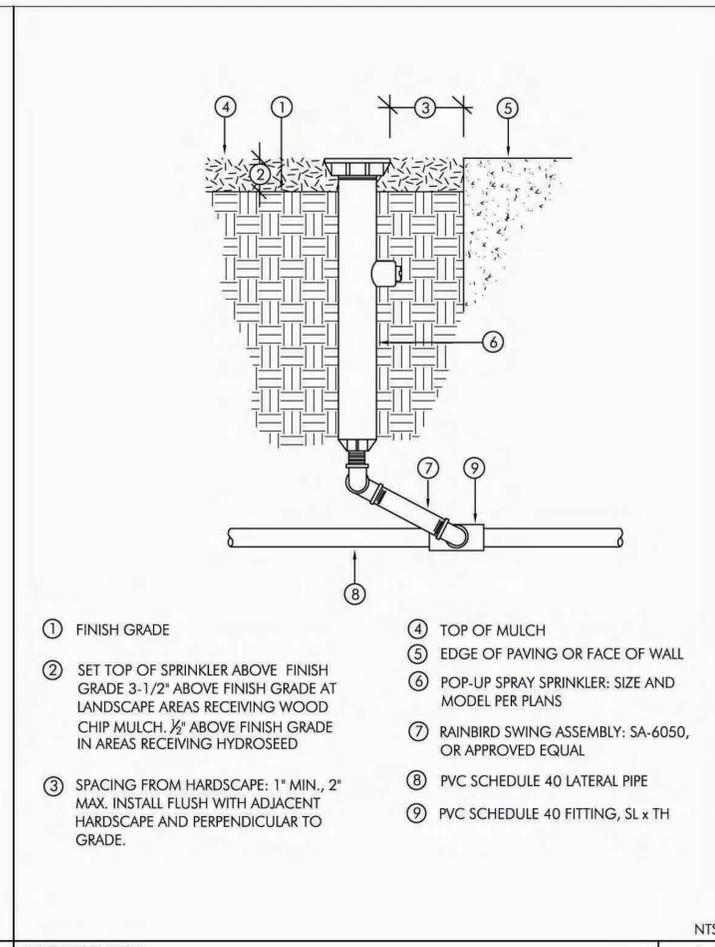
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 CONSULTANT FUNCTIONAL SUPERVISOR
 B. FIRTH / JBB
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 B. FIRTH
 B. FIRTH



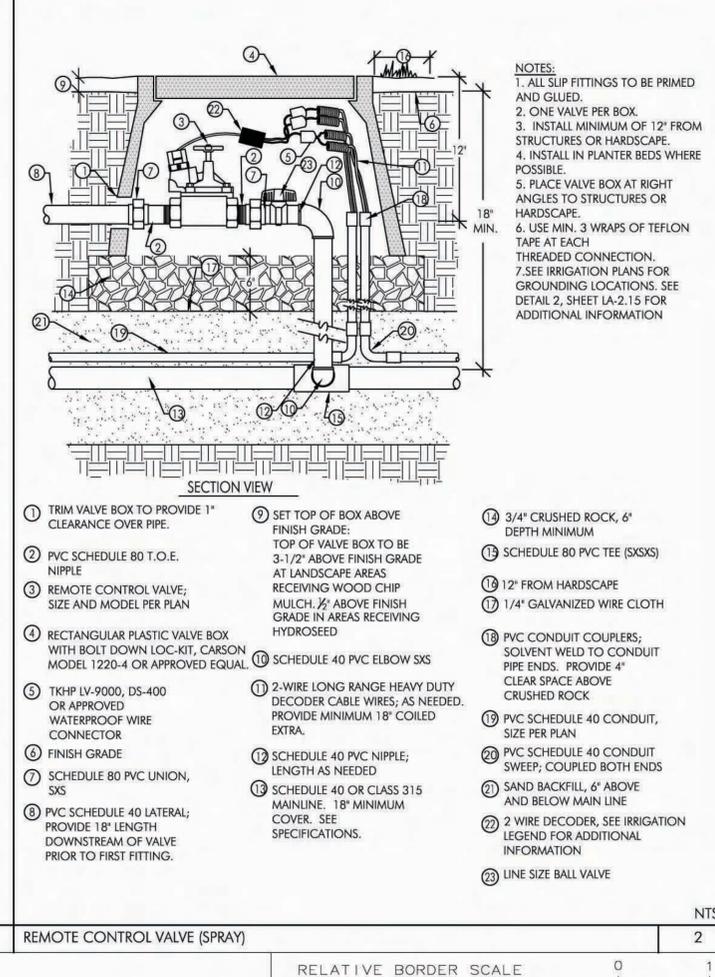
IRRIGATION MAINLINE/ TWO WIRE STUB OUT FOR FUTURE EXPANSION 3

MAINTENANCE SCHEDULE

| Task |
|---|
| 1 Weekly Service (Throughout the year) |
| A. Visual Check for hazards and damage due to vandalism & repair damaged areas and facilities. Address All Graffiti Immediately upon Observation. |
| B. Visual check of landscape irrigation for lateral and mainline breaks |
| C. Trash, litter, and debris removal (Year Round) |
| 2 Spring, Summer, and Fall Bi-Weekly Service (Every other week) |
| A. Weed Control |
| 3 Monthly Service |
| A. Clean all walks |
| B. Remove suckers and water sprouts from trees |
| C. Irrigation System Repair |
| D. Check Tree Ties. Adjust as Required. |
| 4 Twice Yearly |
| A. Pest Control |
| B. Check Overall Operability of Irrigation System |
| 5 Annually |
| A. Spot Supplement Bark Mulch as required to maintain a 3" layer |
| B. Corrective Pruning as Required |
| C. Dead head Container flowers and Plants that die back |
| D. Test Backflow Preventer (Certified Inspector to Perform) |
| 6 Specialized/ Seasonal Activities |
| A. Tree Stake Removal at Termination of Usefulness (One time at approximately 3 years growth) |
| B. Fertilize Shrub and Groundcover Areas (every 6 weeks) |
| C. Plant Replacement |



IRRIGATION HEAD 1



REMOTE CONTROL VALVE (SPRAY) 2

Highway 32 (Phase 1, El Monte to Highway 99) Chico, California

Irrigation Documentation Package Water Budget Calculation

Maximum Applied Water Allowance (MAWA) - Calculation

MAWA = (Eto) (0.7) (LA) (0.62)
MAWA = 1,486,966 Gallons per Year

Where:
 51.6 = Reference Evapotranspiration (ETo) (Ref: CIMIS Station 131)
 0.7 = ET Adjustment Factor (percent)
 66,399 = 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:
 51.6 = 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

| Hydrozone 1: Low water use trees; drip. | PR= 0.21 |
|---|---|
| PF = 0.2 | |
| HA = 66,399 (square feet) | 1.524311 acres |
| IE = 0.9 | |
| EWU = 472052.624 (gallons per year) | 1.448676 acre-feet/year 631.0864 ccf/year |

| Hydrozone 2: Low water use shrubs and ground cover; drip. | PR= 0.21 |
|---|---|
| PF = 0.2 | |
| HA = 66,399 (square feet) | 1.524311 acres |
| IE = 0.9 | |
| EWU = 472052.624 (gallons per year) | 1.448676 acre-feet/year 631.0864 ccf/year |

WATER USE DOCUMENTATION

| Hydrozone 3: Medium water use vines; drip. | PR= 0.21 |
|--|---|
| PF = 0.5 | |
| HA = 4,893 (square feet) | 0.112328 Acres |
| IE = 0.9 | |
| EWU = 86964.92 (gallons per year) | 0.265886 acre-feet/year 116.2633 ccf/year |

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

EWU = 1,031,070 (gallons per year) 3.164238 Acre-Feet per Year
 1,378 (100 cubic feet per year) 0.031645 Acres

Estimated Water Use for Hydrozones (EWU) - Calculation

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

EWU = 1,031,070 Gallons per Year

Where:
 LA = Total Landscape area (Square Feet)
 HA = Hydrozone Landscape Area (Square Feet)
 52.2 = Reference Evapotranspiration (ET_r) (Ref: AB325, Section495)
 0.8 = ET_r Adjustment (Ref: CUWCC AB2717 Task Force Recommendation 13)
 0.62 = Conversion factor from inches to gallons
 748 = Gallons per hundred cubic foot (ccf)
 325,851 = Gallons per acre-foot

0.2 = Plant Factor (KL) - Low
 0.5 = Plant Factor (KL) - Medium
 0.8 = Plant Factor (KL) - High, Turf

0.625 = Irrigation Efficiency - Rotors, Rotators, Spray
 0.90 = Irrigation Efficiency - Bubblers, Surface Drip
 0.90 = Irrigation Efficiency - Sub-surface Drip

WATER USE DOCUMENTATION

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|------|--------|-------|--------------------------|-----------|--------------|
| 03 | But | 32 | 10.3/11.3 | 127 | 144 |

12-22-11
 LICENSED LANDSCAPE ARCHITECT DATE

DECEMBER 22, 2011
 PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

BRIAN FIRTH LANDSCAPE ARCHITECT, INC. CITY OF CHICO
 627 BROADWAY, SUITE 220 CAPITAL PROJECT SERVICES
 CHICO, CALIFORNIA 95928 CHICO, CA 95927

HIGHWAY 32- PHASE 1 LANDSCAPE IRRIGATION DETAILS, WATER USE DOCUMENTATION, AND MAINTENANCE SCHEDULE

Highway 32 (Phase 1, El Monte to Highway 99) Chico, California

MONTHLY IRRIGATION SCHEDULE

Irrigation Window = 8 Hours

Hydrozone 1: Low water use trees; drip.

| Month | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| MINI / WEEK | 17 | 29 | 42 | 70 | 87 | 110 | 122 | 105 | 80 | 53 | 24 | 14 |
| DAYS / WEEK | 2 | 2 | 2 | 3 | 3 | 4 | 5 | 4 | 3 | 3 | 2 | 2 |
| MINI / WATER DAY | 9 | 14 | 21 | 23 | 29 | 27 | 24 | 26 | 27 | 19 | 12 | 7 |
| CYCLE / DAY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| MINI / CYCLE | 9 | 14 | 21 | 23 | 29 | 27 | 24 | 26 | 27 | 19 | 12 | 7 |
| GAL / MONTH | 10,804 | 17,943 | 26,110 | 43,727 | 54,922 | 69,847 | 76,530 | 65,726 | 50,240 | 33,313 | 14,886 | 9,094 |
| C.F. / MONTH | 1.444 | 2.389 | 3.491 | 5.846 | 7.342 | 9.204 | 10.291 | 8.797 | 6.717 | 4.454 | 1.990 | 1.204 |

Hydrozone 2: Low water use shrubs and ground cover; drip.

| Month | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| MINI / WEEK | 17 | 29 | 42 | 70 | 87 | 110 | 122 | 105 | 80 | 53 | 24 | 14 |
| DAYS / WEEK | 2 | 2 | 2 | 3 | 3 | 4 | 5 | 4 | 3 | 3 | 2 | 2 |
| MINI / WATER DAY | 9 | 14 | 21 | 23 | 29 | 27 | 24 | 26 | 27 | 19 | 12 | 7 |
| CYCLE / DAY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| MINI / CYCLE | 9 | 14 | 21 | 23 | 29 | 27 | 24 | 26 | 27 | 19 | 12 | 7 |
| GAL / MONTH | 10,804 | 17,943 | 26,110 | 43,727 | 54,922 | 69,847 | 76,530 | 65,726 | 50,240 | 33,313 | 14,886 | 9,094 |
| C.F. / MONTH | 1.444 | 2.389 | 3.491 | 5.846 | 7.342 | 9.204 | 10.291 | 8.797 | 6.717 | 4.454 | 1.990 | 1.204 |

Hydrozone 3: Medium water use vines; drip.

| Month | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|--------------|-------|-------|-------|-------|--------|--------|--------|--------|-------|-------|-------|-------|
| MINI / WEEK | 3 | 4 | 5 | 8 | 8 | 8 | 8 | 6 | 6 | 5 | 3 | 3 |
| DAYS / WEEK | 14 | 41 | 48 | 80 | 84 | 105 | 117 | 101 | 77 | 61 | 46 | 26 |
| CYCLE / DAY | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| MINI / CYCLE | 14 | 41 | 48 | 80 | 84 | 105 | 117 | 101 | 77 | 61 | 46 | 26 |
| GAL / MONTH | 875 | 3,349 | 4,873 | 5,193 | 10,291 | 12,050 | 14,294 | 12,207 | 9,377 | 6,218 | 2,778 | 1,880 |
| C.F. / MONTH | 0.117 | 0.448 | 0.651 | 0.691 | 1.376 | 1.616 | 1.910 | 1.640 | 1.254 | 0.831 | 0.371 | 0.255 |

SHEET LS-2.10