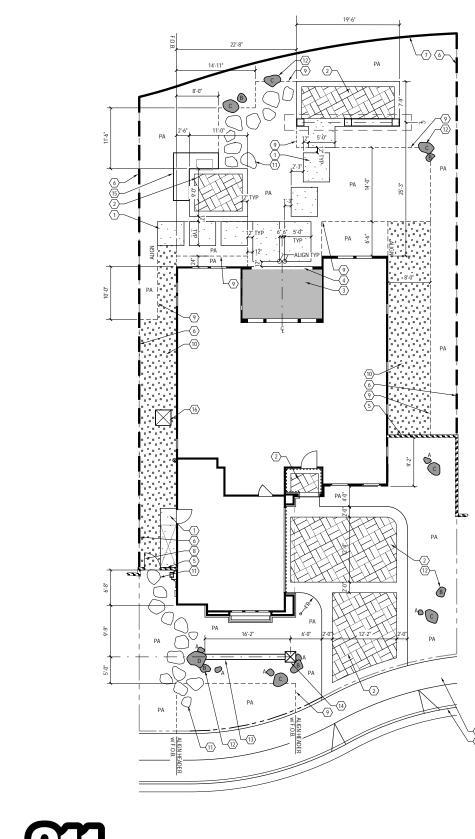


		LICENSED PROFESSIONAL LOGO AND COMPANY INFORMATION
ET PROJECT SITE		LAST NAME RESIDENCE 1357 STREET NAME OWNER CONTACT INFORMATION
		TITLE SHEET
		REVISIONS
P18-0608 scape Pla	n -	SHEET NO.: L1 1 OF 10





CONSTRUCTION NOTES

- CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO A FAILURE TO GIVE SUCH NOTIFICATION.
- 2. WALL AND FENCE LAYOUT SHALL CONFORM TO PROPERTY LINE AND TOP OF SLOPE CONDITIONS. STAKING FOR LOCATION OF WALLS AND FENCES SHALL BE PROVIDED BY THE CIVIL ENGINEER PRIOR TO EXCAVATION OF FOOTINGS.
- ALL FORMS AND ALIGNMENTS OF PAVING, WALL / FENCE LAYOUT, AND SPECIAL PAVING AREAS SHALL BE REVIEWED AND APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO POURING (GIVE A MINIMUM OF 48 HOURS NOTICE).
- 4. FOR SITE GRADING, SEE CIVIL ENGINEERS GRADING PLAN.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING HIMSELF FAMILIAR WITH ALL UNDERGROUND UTILITIES, PIPES AND STRUCTURES. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR COST INCURRED DUE TO DAMAGE AND REPLACEMENT OF SAID UTILITIES.
- CONTRACTOR SHALL COORDINATE IRRIGATION SLEEVE LOCATIONS UNDER PAVED AREAS AS REQUIRED. REFER TO IRRIGATION PLANS.
 CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH OTHER SUBCONTRACTORS AS REQUIRED TO ACCOMPLISH CONSTRUCTION
 OPERATIONS AS SHOWN.
- 8. PRIOR TO PLACING CONCRETE, THE CONTRACTOR SHALL SUFFICIENTLY COMPACT THE SUB-GRADE AND PROVIDE SUBSURFACE PREPARATION PER SPECIFICATIONS.
- 9. CONCRETE SURFACES SHALL BE FORMED WITH LONG, SMOOTH GRADIENT TO REDUCE DIPS, ABRUPT CHANGES AND SHARP TRANSITIONS.
- 10. ALL CURVILINEAR WALKS, CURBS, HEADER BOARDS, AND WALLS SHALL HAVE A CONTINUOUS SMOOTH CURVE WHERE APPLICABLE. ALL FORMS MUST BE INSPECTED AND APPROVED PRIOR TO BEGINNING THAT PHASE OF WORK.

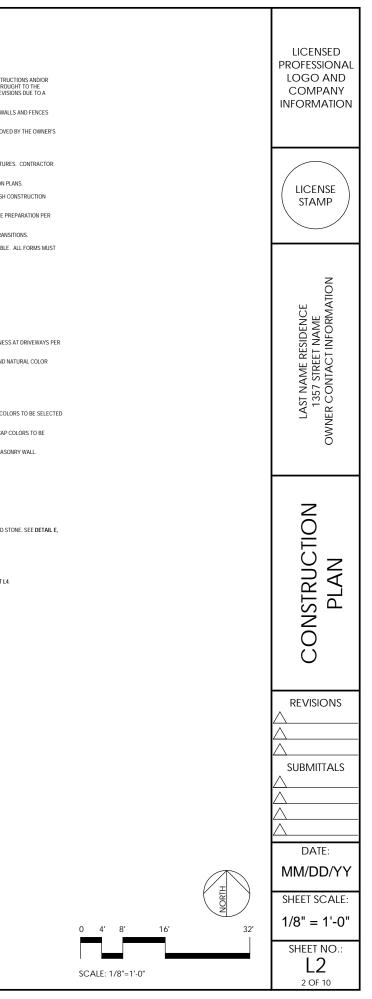
CONSTRUCTION LEGEND

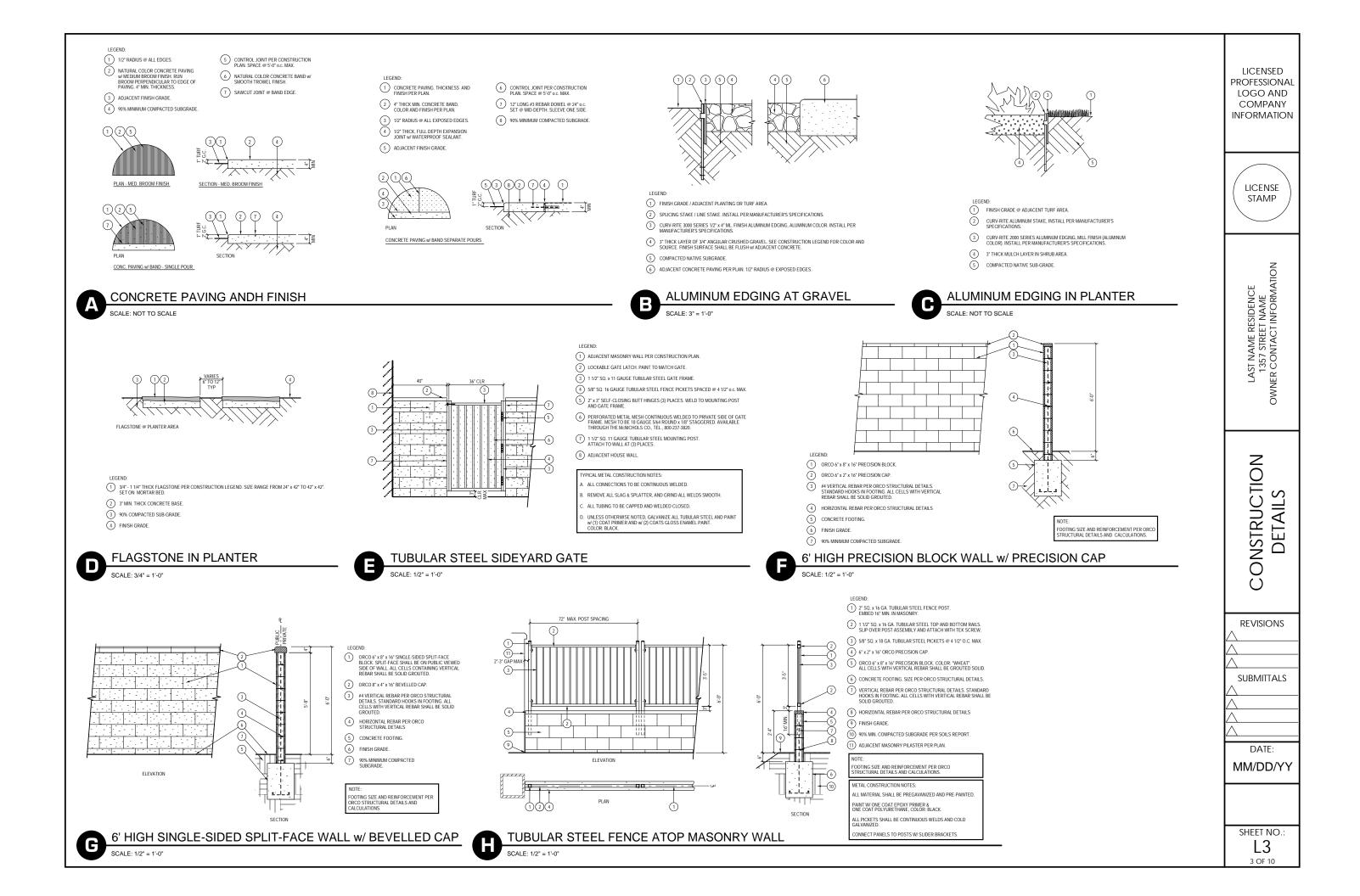


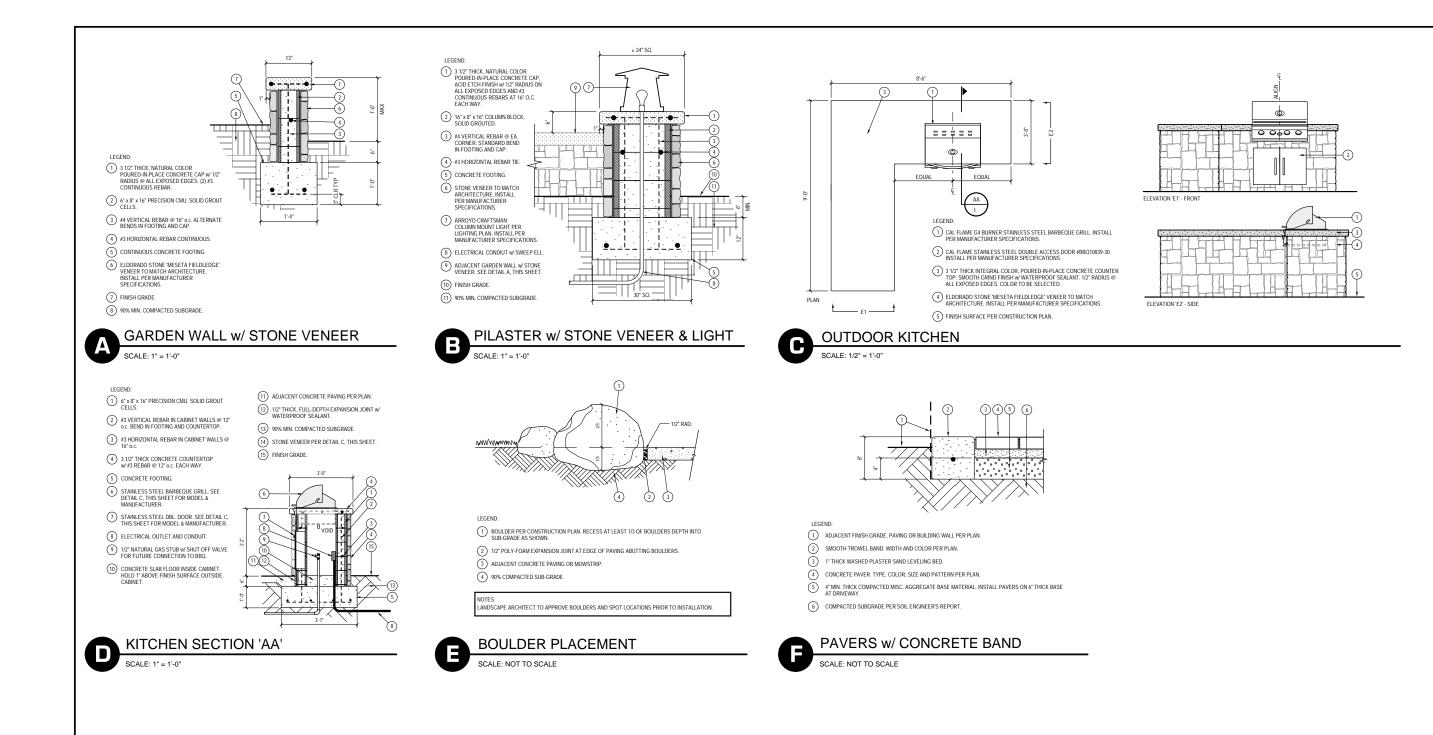
(18) CURB AND GUTTER PER CIVIL ENGINEER'S PLANS.

PLAN CROSS REFERENCES

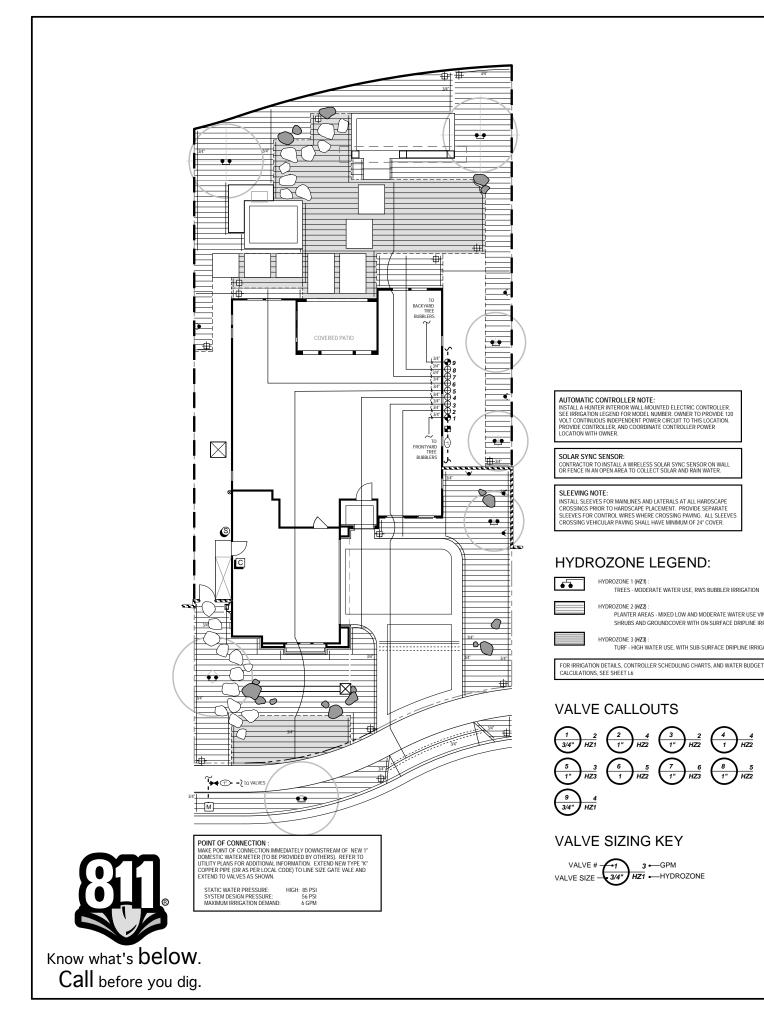
FOR CONSTRUCTION NOTES, SEE THIS SHEET FOR CONSTRUCTION DETAILS, SEE SHEET L3 AND L4 FOR CONSTRUCTION SPECIFICATIONS, SEE SHEET L9 FOR CORRESPONDING IRRIGATION PLAN SEE SHEET L5 FOR CORRESPONDING PLANTING PLAN SEE SHEET L7







LICENSED PROFESSIONAL LOGO AND COMPANY INFORMATION
LICENSE STAMP
LAST NAME RESIDENCE 1357 STREET NAME OWNER CONTACT INFORMATION
CONSTRUCTION DETAILS
SUBMITTALS
$\stackrel{\bigtriangleup}{\frown}$
date: MM/DD/YY
SHEET NO.: L4 4 OF 10



IRRIGATION NOTES

- 5. MAINLINE FEEDER BETWEEN POINT OF CONNECTION, METER, AND BACKFLOW PREVENTER TO BE OF MATERIAL REQUIRED BY CURRENT WATER DISTRICT.

- 9. OUALITY CONTROL OBSERVATION SEQUENCES ARE FOUND IN THE SPECIFICATIONS.
- 10. CLEAN-UP ON A DAILY BASIS PER OWNER'S REPRESENTATIVE'S APPROVAL

IRRIGATION LEGEND

AUTOMATIC CONTROLLER NOTE:

OCATION WITH OWNER

AUTOWATIC CONTROLLER NOTE: STALL A HUTTE INTERIOR WALL-MOUNTED ELECTRIC CONTROLLER. SEE IRRIGATION LEGEND FOR MODEL NUMBER. OWNER TO PROVIDE 120 IOLT CONTINUOUS INDEPENDENT POWER CIRCUIT TO THIS LOCATION. ROVIDE CONTROLLER, AND COORDINATE CONTROLLER POWER

STELEVISION OF THE STATE OF MAINLINES AND LATERALS AT ALL HARDSCAPE CROSSINGS PRIOR TO HARDSCAPE PLACEMENT. PROVIDE SEPARATE SLEVES FOR CONTROL, WRES WHERE CROSSING PAVING. ALL SLEVES CROSSING VEHICULAR PAVING SHALL HAVE MINIMUM OF 24 COVER.

TREES - MODERATE WATER USE, RWS BUBBLER IRRIGATION

PLANTER AREAS - MIXED LOW AND MODERATE WATER USE VINES,

TURF - HIGH WATER USE, WITH SUB-SURFACE DRIPLINE IRRIGATION

SHRUBS AND GROUNDCOVER WITH ON-SURFACE DRIPLINE IRRIGATION

HYDROZONE 1 (HZ1) :

HYDROZONE 2 (HZZ)

HYDROZONE 3 (HZ3) :

SYMBOL	MANUFACTURER	MODEL NUMBER	DESCRIPTION	RADIUS
	NETAFIM	TLCV6-12	CV TECHLINE DRIPLINE	DRI
	NETAFIM	TLCV6-12	CV TECHLINE DRIPLINE	DRIP
۸	NETAFIM	XB-10PC	DRIP EMITTER	DRIP
••	RAINBIRD	RWS-M-B-C-1401	ROOT WATERING SYSTEM	BUB
FOUIPMENT	MANUFACTURE	R MODEL NUMBER	DESCRIPTION	
M			PROPOSED 1" DOMESTIC WA	TER METER
Ħ	NIBCO	T-585	LINE-SIZE BRONZE FULL POR	T BALL VAL
±	NETAFIM	TLSOV	1/2" MANUAL FLUSH VALVE @	EACH PLA
÷	RAINBIRD	075-ASVF	3/4" ELECTRIC ANTI-SIPHON (CONTROL V
Ð	RAINBIRD	XACZ-100-PRF	1" ASV ANTI-SIPHON VALVE v	v/ DRIP CON
C	HUNTER	PC400i, WITH (2) PCM-300	10 STATION INTERIOR CONTR INSTALL PER MANUFACTURE	
S	HUNTER	WSS	WIRELESS SOLAR SYNC W/ W RECOMMENDATIONS AND ST	
	APPROVED	SCH. 40 PVC	MAINLINE, SIZE AS SHOWN, N	IIN. COVER
	APPROVED	SCH. 40 PVC	LATERAL LINE, SIZE AS SHOV	VN, MIN. CO
	APPROVED	SCH. 40 PVC	SLEEVES, SIZED 2X LARGER SEE DETAIL D, SHEET L6.	THAN PIPE
	APPROVED	SCH. 40 PVC	WIRE SLEEVE, SIZE AS REQU	IRED, UNLE

NETAFIM INSTALLATION NOTES:

ETAFIM INSTALLATION NOTES: NETAFIM TECHNIE CVT, EMITTERS AND SPACING BETWEEN LINES AS PER IRRIGATION LEGEND. LOCATE NETAFIM FLUSH VALVE AT LOWEST POINTS OF SYSTEM. INSTALL IN PLANTER AREA. SEE FLUSH VALVE DETAIL FOR INSTALLATION. LOCATE AR RELIEF VALUE NARA SYSTEM HIGH POINT, IN REDEDD. CONNECT TECHLINE CVT OP VC WITH PVC TESS AND COMPRESSION FITTINGS. USE COMPRESSION FITTINGS FOR ALL PVC-TO-TECHLINE CV CONNECT TECHLINE CUT OP VC WITH PVC TONS.

PRESSURE LOSS CALCULATION

PROJECT: LAST NAME RESIDENTI STATIC PRESSURE SOURCE OF INFORMATION: CONT. SUPPLIER: CITY OF RIVERSIDE PU PHONE NUMBER: (XXX) XXX-XXXX VALVE STATION/GPM:	HIGH: ACT NAM BLIC UT	AE ILITIES	РМ	BY: X LOW:	X 77 PSI
ITEM:					P.S.I. LOSS:
SERVICE LINE SIZE: WATER METER SIZE: GATE VALVE(S): PRESSURE REGULATOR: MAINLINE (SCH. 40) AUTOMATIC VALVE SIZE: LATERAL LINE SIZE:	1 1	1" 1" 1" 1" 1" 3/4"	132 L.F. @	6 GPM 6 GPM 6 GPM 6 GPM 6 GPM	5.00 2.50
SYSTEM LOSSES SUBTOTAL: FITTING LOSSES (10% OF SUBTOT IRRIGATION HEAD PRESSURE: ELEVATION LOSSES/GAINS (ELEV.					15.00 1.50 30.00 0.00
TOTAL SYSTEM PRESSURE REO'D AVAILABLE PRESSURE (LOW): SET PRESSURE REGULATOR AT: (-) DEFICIT OR (+) RESIDUAL PRES					46.50 77.00 62.00 (+) 15.50
CONTRACTOR TO SET RRESSURE					DECULATOR

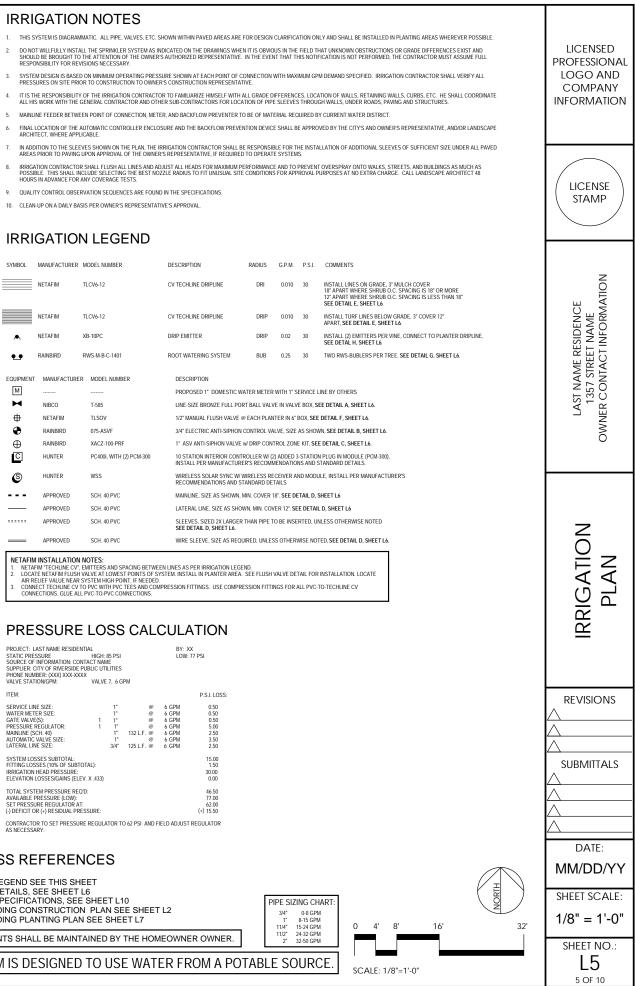
O SET PRESSURE REGULATOR TO 62 PSI AND FIELD ADJUST REGULATOR AS NECESSARY.

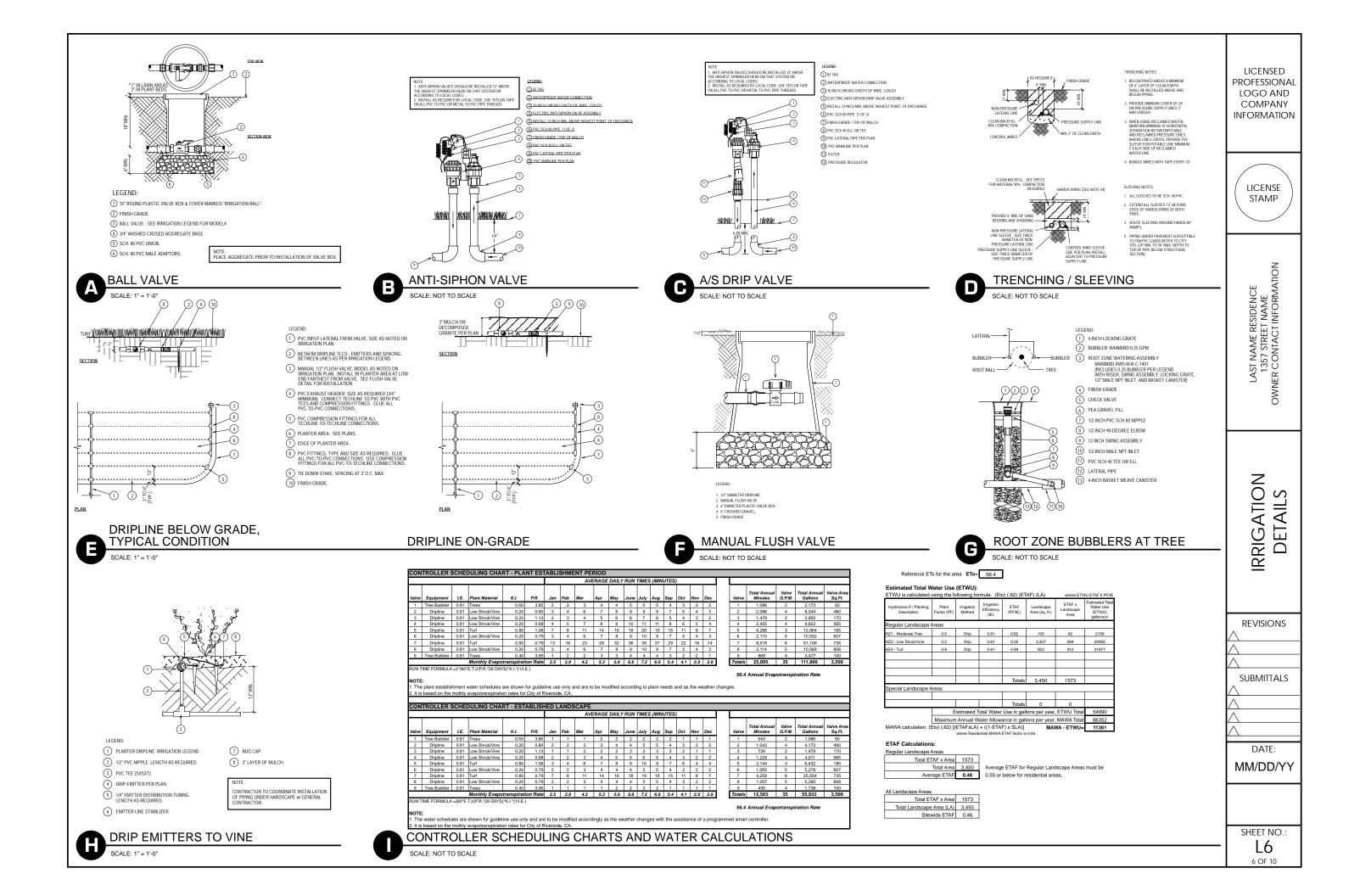
PLAN CROSS REFERENCES

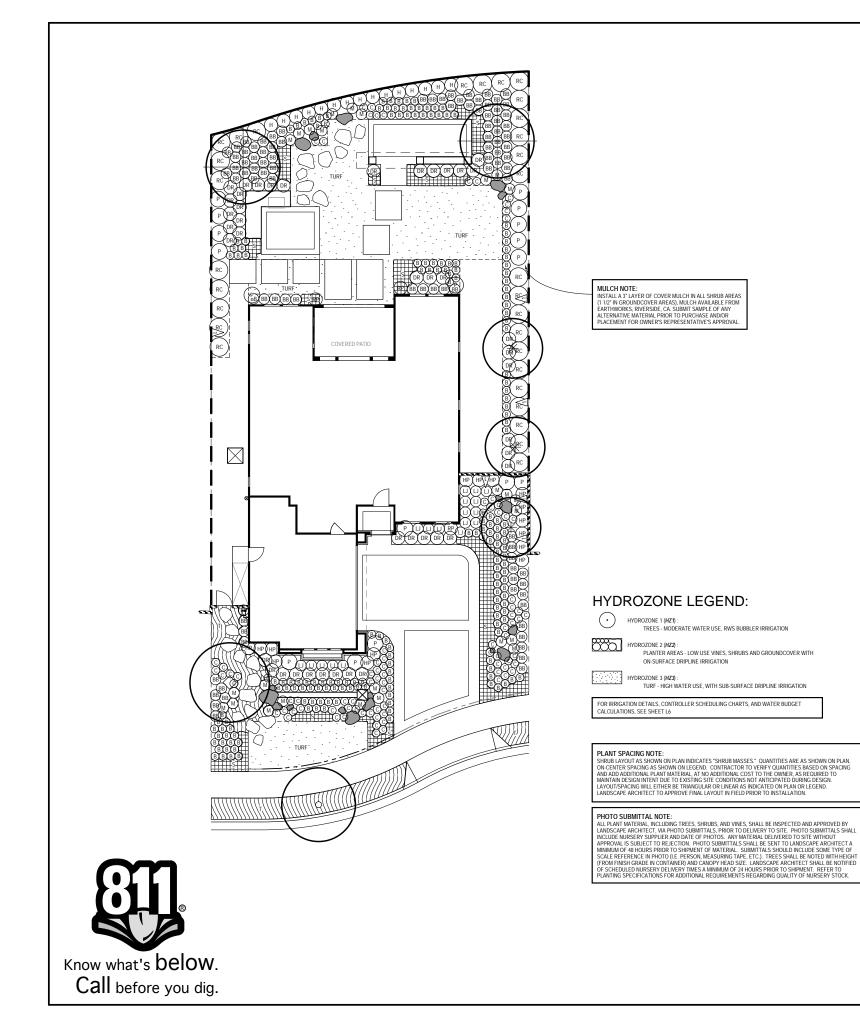
FOR NOTES AND LEGEND SEE THIS SHEET FOR IRRIGATION DETAILS, SEE SHEET L6 FOR IRRIGATION SPECIFICATIONS, SEE SHEET L10 FOR CORRESPONDING CONSTRUCTION PLAN SEE SHEET L2 FOR CORRESPONDING PLANTING PLAN SEE SHEET L7

ALL IMPROVEMENTS SHALL BE MAINTAINED BY THE HOMEOWNER OWNER.

THIS SYSTEM IS DESIGNED TO USE WATER FROM A POTABLE SOURCE







PLANTING NOTES

- SHRUB LAYOUT AS SHOWN ON PLAN INDICATES "SHRUB MASSES." QUANTITIES ARE AS LEGEND. CONTRACTOR TO VERHY QUANTITIES BASED ON SPACING AND ADD ADDITION OWNER, NEOURED TO MANITANI DESIGN INTERY DUE TO EXSTING STIE CONDITIONS IN WILL EITHER BE TRAINCULAR OR LINEAR AS SHOWN ON PLAN OR LEGEND. LANDSCAPE TO INSTALLATION.
- CONTRACTORS SHALL NOTIFY THE LANDSCAPE ARCHITECT OF SITE CONDITIONS WHICH SPECIFICATIONS.
- CONTRACTOR SHALL BE LIABLE FOR REMOVING AND RE-INSTALLING IRRIGATION EQUIP INSTALLED PER PLAN AND SPECIFICATIONS.
- 4. REFER TO PLANTING SPECIFICATIONS FOR INSPECTION/CERTIFICATION SCHEDULE.
- 5. IRRIGATION SYSTEM SHALL BE INSTALLED AND OPERATIONAL PRIOR TO INSTALLATION
- 6. TREES AND SHRUBS SHALL BE PLANTED AFTER CONCRETE PLACEMENT, BUT NOT BEFO APPROVED. (SEE SPECIFICATIONS).
- 7. PLACE TREES BETWEEN IRRIGATION HEADS WHEREVER POSSIBLE.
- IF ROUGH GRADING IS COMPLETED AFTER LANDSCAPE DOCUMENTS WERE PREPARED, SAMPLES FROM THE SITE. THE SAMPLES SHALL BE TAKEN AT A DEPTH OF 12' AND SUB LABORATORY FOR AGRICULTURAL SUITABILITY TESTING. THE COST OF TESTING SHALL
- THE RECOMMENDATIONS OF THE SOIL REPORT SHALL SUPERSEDE THE SOIL PREPARAT SPECIFICATIONS). THE CONTRACTOR SHALL SUBMIT A COPY OF ALL SOILS REPORTS TO OF THESE SPECIFICATIONS.
- 10. SHREDDED MULCH INSTALLATION: INSTALL SHREDDED MULCH IN ALL SHRUB AND GRO OTHERWISE INDICATED ON PLANS.
- CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS AND/OR REPLACEMENT OF ANY DAMA INCLUDING REPAIRING ANY IRRIGATION LINES/SPRINKLER HEADS, THAT IS A DIRECT RES SUB-CONTRACTOR. REPLACEMENT ITEMS SHALL BE EXACT DUPLICATION OF ORIGINAL THE LANDSCAPE ARCHITECT.
- 12. WHEREVER GROUNDCOVER AREAS ARE ADJACENT TO TURF INSTALL CONCRETE MOW
- 13. CLEAN-UP SHALL TAKE PLACE ON A DAILY BASIS UNLESS OTHERWISE APPROVED BY TH
- 14. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ALL GRADES AND FLOW LINES. BE INSTALLED ON A SWALE, THE FINISH GRADE MUST BE ADJUSTED SO THE SOD DOES

PLANTING LEGEND

SYMBOL		
CALLOUT	BOTANICAL NAME	COMMON NAME
TREES		
	Quercus agrifolia	Coast Live Oak
	Arbutus 'Marina'	Strawberry Tree
	Magnolia g. 'Samuel Sommer'	Samuel Sommer Magnolia
	Magnolia g. 'St. Mary'	St. Mary Magnolia
SHRUBS		
_ (RC)	Rhamnus c. 'Mound San Bruno'	Coffeeberry
P	Podocarpus m. 'Maki'	Shrubby Yew Pine
(RP)	Rosmarinus p. 'Blue Spires'	Blue Spires Rosemary
HP	Hesperaloe parviflora	Red Yucca
Н	Hesperaloe parviflora	Red Yucca
	Callistemon 'Little John'	Dwarf Bottlebrush
BB	Callistemon 'Little John'	Dwarf Bottlebrush
M	Muhlenbergia dubia	Pine Muhly
DR	Dianella revoluta 'Little Rev'	Little Rev Flax Lily
Ô	Coreopsis 'Early Sunrise'	Early Sunrise Coreopsis
B	Salvia 'Bee's Bliss'	Bee's Bliss Sage
GROUNDCOVER	S	
TURF	Marathon II	Turf
	Senecio mandraliscae	Kleinia
	Teucrium cossonii	Marjorcan Germander

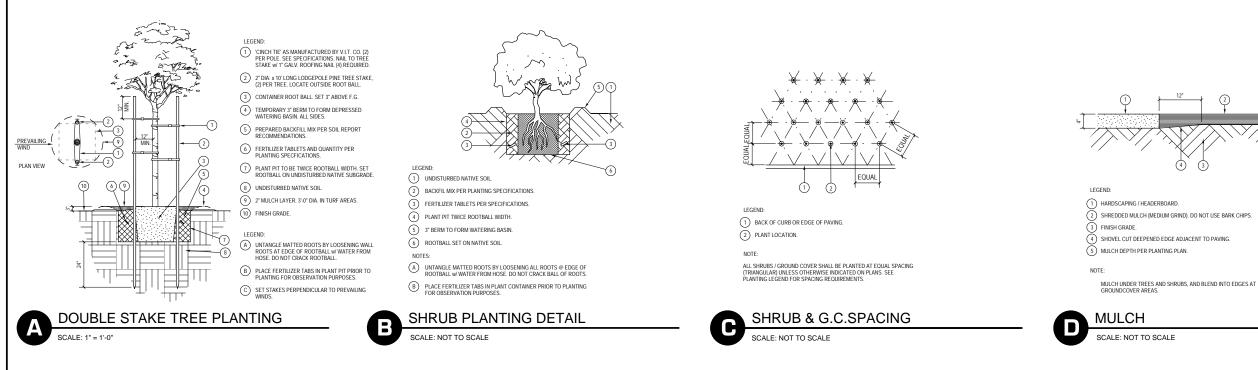
VINES Macfadyena unguis-cati

Cat's Claw Vine

PLAN CROSS REFERENCES

FOR NOTES AND LEGENDS, SEE THIS SHEET FOR PLANTING DETAILS, SEE SHEET L8 FOR PLANTING SPECS, SEE SHEET L-10 FOR CORRESPONDING CONSTRUCTION PLAN SEE SHI FOR CORRESPONDING IRRIGATION PLAN SEE SHEET I

ONAL PLANT MAT NOT ANTICIPATE & ARCHITECT TO ICH PREVENT INS IPMENT, AND REI N OF PLANT MAT	ERIAL (AT NC D DURING D) APPROVE F STALLATION F PLANTING AF ERIALS.	TER SPACING AS SI D'ADDITIONAL COS ESIGN. LAYOUTISF INAL LAYOUT IN FII PER PLANS AND REAS WHICH ARE N ETEST NO. 1 HAS B	t to the Pacing Eld Prior				LICENSED PROFESSIONAL LOGO AND COMPANY INFORMATION
JBMITTED TO AN LL BE INCLUDED RATION AND BACK TO THE LANDSC	APPROVED S IN THE CONT (FILL MIX SPI APE ARCHITE	TRACTOR'S BID. ECIFICATIONS (SEE ECT PRIOR TO MOD	IFICATION				LICENSE
MAGED LANDSCA RESULT OF THE L AL WORK OR PLA WSTRIP OR HEAL THE OWNER'S RE	PE AREAS B ANDSCAPE (NTS, UNLESS DERBOARD A PRESENTAT	ECIFICATIONS UNLI EYOND THE LIMIT C CONSTRUCTION AN S OTHERWISE APPI IS INDICATED ON D IVE. G PLAN. WHERE S	of Work, D/or HIS Roved By Rawings.				SIDENCE NAME NFORMATION
SIZE 36° box	SPACING Per plan	COMMENTS	WATER USE L	ОТY 2			LAST NAME RESIDENCE 1357 STREET NAME OWNER CONTACT INFORMATI
24" box 36" box	Per plan Per plan		M	3			
24" box	Per plan	Street Tree	М	1			ر ب
15 gal. 15 gal. 15 gal. 5 gal. 5 gal. 5 gal. 5 gal. 5 gal. 1 gal. 1 gal.	42° o.c. Per plan 30° o.c. 30° o.c. 24° o.c. 24° o.c. Per plan 30° o.c. 18° o.c. 18° o.c.		L L L L L L L	30 17 3 15 15 11 88 26 43 72 72			PLANTING
SOD 1 gal. 1 gal.	Install per m 18° o.c. 12° o.c.	ianul's rec's	H L L	923 s.f. 105 115			REVISIONS
15 gal.	Per plan	Train to wall	L	6			△ △ △ DATE:
		0 4'	8'	16'	HINORTH	32'	MM/DD/YY SHEET SCALE: 1/8" = 1'-0" SHEET NO.:
IEET L2 L5		SCALE: 1/8	8"=1'-0"				5HEET NO.: L7 7 OF 10



SOILS REPORT

ocation

element

procession iron manganess zinc copper boron calcium magnesium sodium sulfur molybdeni nickel aluminum cadmium chromium cobait lead lithium mercury selenium silver strontium tin

vanadium

pH value ECe (milli-mho/cm)

magnesium sodium potassium

chloride nitrate as N phosphorus as P sulfate as S

boron as B

ent-lbs./1000 sq. ft.

estimated soil texture lime (calcium carbonate) organic matter

ure content of soil

anion sur

calcium

Saturation Extract

auester

raphic interpr

Print Date

low, ** low, *** moderate

nple ID Number

Project Name Project Manager, Company Name 1 Group

Soil Sample Received MM/DD/YYYY graphic *****

27.04

187.12 ***** 9.64 *** 13.55 ***** 13.55 **** 0.14 ** 15.58 **** 7.31 * 15.21 *** 0.40 * nd * 0.63 * 0.12 * 0.08 * 0.63 * 0.12 * 0.08 * 0.28 * 0.46 * 0.28 * nd * 1.07 *

nd * 0.25 *

6.69

108.6

29.0

8.6 34.0

37

29 5.9 19.3

0.11 * 0.2 * 1

sandy loam

fair/good 1.8%

21.5%

0.78 **

5.4 2.4

0.4

2.1 0.2

hydrophobic

* * * * high, * * * * very high ##-###-## 16

MM/DD/YYYY14

SOIL LABORATORIES STREET NUMBER AND NAME CITY, STATE AND ZIP CODE PHONE (XXX) XXX-XXXX

7.

10. 11.

12.

cobalt

program as needed

Dear Allen,

The soil is slightly acidic with a pH of 6.69. Salinity is modest at 0.78 millimho/cm. Nitrogen and iron are modest. Boron and sulfur are low. Phosphorus, potassium magnesium and the other micronutrients are well supplied. Sodium is low. The soil is hydrophobic. It is difficult to wet. Water beads up on the soil surface initially and then slowly moves into the soil.

Recommendation

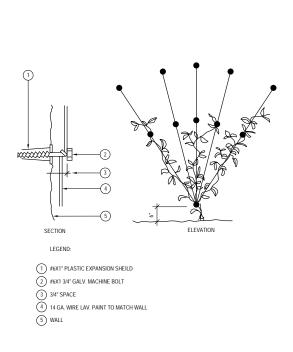
Soil Amendment General soil preparation on a square foot basis. Broadcast the following materials uniformly. The rates are per 1,000 square feet. Incorporate them homogeneously 6 inches

agricultural gypsum - 10 pounds good quality soil amendment - as needed, sufficient for 3% to 5% soil organic matter on a dry weight basis

Backfill For preparation on a volume basis, uniformly blend the following materials into clean excavated soil. Rates are per cubic yard:

agricultural gypsum - 1/2 pound good quality soil amendment - as needed, sufficient for 3% to 5% soil organic matter on a dry weight basis

- Organic soil amendment
- Humus material shall have an acid-soluble ash content of no less than 6% and no 1. more than 20%. The organic matter content shall be at least 50% on a dry weight
- The pH of the material shall be between 6 and 7.5. The salt content shall be less than 10 millimho/cm @ 25° C. (ECe less than 10) in 3
- a saturated paste extract. Boron content of the saturated extract shall be less than 1.0 part per million.
- Silicon content (acid-insoluble ash) shall be less than 50%.
- Calcium carbonate shall not be present if to be applied on alkaline soils.



A	VINE PLANTING	
E	SCALE: 1" = 1'-0"	

SOIL ANALYSIS AND RECOMMENDATIONS REPORT

SCALE: NOT TO SCALE

SOIL LABORATORIES

PHONE (XXX) XXX-XXXX (310) 013-0110

TREET NUMBER AND NAME

ammonium bicarbonate/DTPA extractable - mg/kg soil Interpretation of data low medium high

0 - 7 8-15 over 15 0-60 60 -120 121-180 0 - 4 4 - 10 over 10 0 - 0.5 0.6-1 over 1 0 - 1 1 - 1.5 over 1.5 0 - 0.2 0.3 - 0.5 over 0.5 0 - 0.2 0.2 0.5 over 1

0-0.2 0.2-0.5 over 1

The following trace elements may be toxic The degree of toxicity depends upon the pH of the soil, soil texture, organic matter, and the concentrations of the

ividual elements as wel

The pH optimum depends upon soil organic matter and clay content-for clay and loam soils: under 5.2 is too acidic

over 8.0 is too alkaline The ECe is a measure of the soil salinity:

1-2 affects a few plants

2-4 affects some plant

problems over 150 ppm good 20 - 30 ppm

toxic over 1 for many plants increasing problems start at 3

toxic over 800

est. gypsum req

pH and ECe are mea

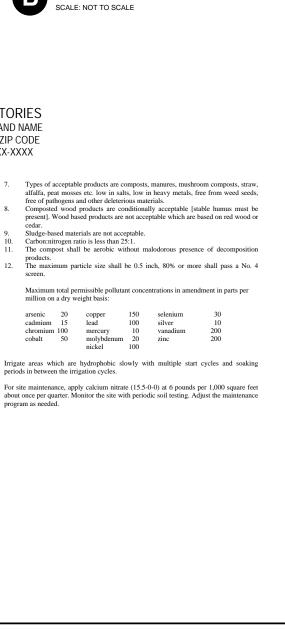
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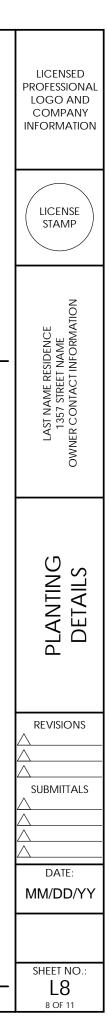
> 4 affects many plan

6.5 to 7 is ideal

s to their interactions.

moisture content of soil half saturation percentage ressed as mg/kg dry soil or mg/l for saturation extract. leasured in a saturation paste extract. nd means not detected. nined on soil fraction passing a 2 mm sieve





Flat surfaces shall be screeded to the required levels and slopes and then any excess water or latance removed. Concrete shall be compacted with a grid tamper and then floated to a true and level surface within the tolerance of 1/8-inch along a 10-inch straight edge. Contractor shall ensure positive drainage on all flatwork. See Plans for concrete limits in landscape areas.

- 4.11 CONCRETE FINISHES
- B. All fines and irregularities shall be removed from exposed concrete surfaces while the concrete is still green. Where patching is required, all loose and uniform concrete shall be removed prior to patching.
- A Concrete which is not in accordance with these specifications, out of line, level, or plumb: showing structural cracks, rock pockets, works, spats, honeycombing, exposed reinforcing or other diamaged surfaces shall be consistered as directive.
- 4 10 DEFECTIVE CONCRETE
- All liquid curing compounds shall be used in accordance with the manufacturer's recommend and shall not be used on surfaces receiving concrete hardener.
- All exposed surfaces of concrete shall be protected form premature drying and leashly placed concrete shall be protected against wash by rain. All concrete shall be keyl well for a period of len dray, aller placing, in order that curring and environment or a valid, the forms shall be boosterid and unlet shall be posted over the logs of the walls and allowed to run down between the concrete and the forms.
- B. Curing shall be as follows;
- A. All exposed surfaces of concrete shall be protected from damage due to temperature, elements, and construction operations.
- 4.09 CURING AND PROTECTION
- A. Grout shall be composed of one part Portland Cement and two parts of fine aggregate by volume. Materials shall be mixed dry and water added just sufficient to make the mixture flow under its own weight. B. For dry tamp cement grout, a minimum of water shall be added to the mix so that when wet sample is squeezed hard in the hand, surface moisture, but no free water, shall appear on the sample. Do not mix more than can be incurs in the mixed are

4.08 GROUTING

- Integral color and Dust-On color hardner shall be as specified on plans and details.
- D. Concrete shall be spaded and vibrated with mechanical vibrators to a maximum subsidence, without separation of ingredients. The moving of concrete by vibration will not be permitted. 4.07. COLORED CONCRETE
- C. Covering and placing of concrete shall be done so as to prevent separation of ingredients, and in no case shall be feed alacocod feed. Tenters shall be used as required. Surfaces of concrete shall be texp reasonably level, with a minimum amount of concrete being almost of low after being placed. Placing shall be performed as a continuous operation until each section is completed.
- B. Before depositing new concrete against old concrete, all latance shall be removed, and the surfaces roughend to expose the embedded aggregate. The surfaces shall here be covered with cement grout, using the specified mit with 1/2 of the course aggregate omitted. 1/12 inches this:
- A. Before pouring, all forms shall be thoroughly cleaned and made light. The bottom of trenches shall be well down before pouring floring; earth shall not be madely at the time of pouring. Concrete shall not be placed until relationcements; rough hardware, and times are approved by Ordinet.
- 4.06 CONVEYING AND PLACING
- Reinforcing bar shall be spliced with 40 bar diamers minimum overlap.
- 4.05 REBAR
- C. Concrete which is not placed within 90 minutes after the introduction of cement and water, and concrete which has stood for 30 minutes after leaving the mixer, shall not be used.
- В. Two and one-half (2 1/2) gallons of water per cubic yard, shall be withheld from the mix at the plant, and all or a portion may be added to the mix at the job site as directed by the Inspector. The concrete shall be mixed at least 15 mixels are such water is added and not less that an immusic of this time shall be immediately prior to the discharge of the batch. Total mixing time after adding original water shall be at least 15 minutes.
- 4.04 FORMWORK A. Forms for concrete work shall be either medial or wood. Forms that are warped or that do not have a smooth signally depends a second barry index and the share that the second sec
- 4.03 CONCRETE APPROVAL The concrete quality, proportions, consistency, etc., is subject to the approval of Owner, and no changes shall be made without prior withen approval
- B. The recommended practices of the American Concrete Institute shall be followed inal applicable procedures. The maximum share shall not exceed (4) four inches for foorings, stats on grade, and mass concrete: 5 inches for foundation wals.
- A. The proportions of aggregate to cement shall provide a dense mixture which will readily work into all corners of the forms and around all reinforcements without any segregation of the matterials, cause excess free water to collect on the surface or cause excessive thereing on the forms.
- 4.02 CONCRETE PROPORTIONS & CONSISTENCY
- B. Concrete, minimum 28-day ultimate strength shall be 2000 PSI.
 C. Ready-mixed concrete shall conform to ASTM-C94.
- A. Contractor assumes responsibility for the design mix and guarantees the specified ultimate strength as indicated or specified herein.

4.01 CONCRETE DESIGN MIX

CONCRETE

PART 1 - SCOPE OF WORK

1.01 WORK INCLUDED

PART- 2 GENERAL

2.1 INSPECTION OF SITE

2.4 COORDINATION

2.5 APPROVAL

2.6 SUBMITTALS

2.7 SUBSTITUTIONS

PART 3 - MATERIALS

2.2 PROTECTION OF EXISTING CONDITIONS

- Plywood for forming of concrete which is exposed shall be Plyform. All plywood used for forming shall be at least 5/8-inch thick and edge sealed. G. Expansion joint filler shall conform with ASTM-D1751 (premolded). PART 4 - EXECUTION
- 1. Lumber shall be "construction grade" Douglas fir.
- Reinforcement: reinforcing steel ASTM-A15 and ASTM-A305 Wirefabric: ASTM-A185 F
- Water shall be clean, free from strong acid, alkali, oil or organic matter Admixture for all formed concrete shall be SIKA Chemical Corp.'s "Plastiment", or approved equal, applied in strict accordance with manufacturer's directions.
- B. Concrete appregate shall conform to ASTM-C33.

Work includes, but is not limited to the following: Furnish all labor and materials, appliances, tools, equipment, facilities, transportation, and services necessary for installing all concrete work complete as indicated on the drawings and specifications including, but not limited to:

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

Examine related work and surfaces before starting work in this section. Report to the Landscape Architect in writing, ade conditions which will greene the proper provision of the work. Beginning the work in this section Motori regording wristabile conditions to the Landscape Architect conditiones acceptance of all conditions by the Contractor. Any require terminal, repair, or replacement of this work caused by unsuitable conditions shall be done at in or additional cost to Owner.

Contractor shall acquaint himself with all site conditions. He shall take necessary precautions to protect existing site conditions. Should damage be incurred, this Contractor shall repair damage to its original condition or furnish and install equal replacement at his one excerne, to the satisfaction of the Owner.

B. Work With Other Trades: Coordinate with General Contractor items of other trades to be furnished as place. Such portions of their work as all or in part embedded, built in, attached to, or supported by the shall be executed by them in marke time that progress of the work is not designed. Any cultural or paid mode necessary to comply with this instruction shall be done at the Contractor's expension.

Wherever the terms "approve," "approval," or "approved" are used in the Specifications, they mean approval of the Landscape Architect, the Owner's Representative or their field representatives, or in writing.

At least 10 days after award of contract, Contractor shall submit for approval samples and/or manufacturers' talest catalog cuts and specifications of the following prior to beginning work. Approved samples shall be standards for completing work.

One 2-ft. x 2-ft. x 2-in. sample for each type of concrete linish and color at the job site.
 Color samples for expansion joint compounds.

C. All submittal data shall be forwarded in a single package to the Landscape Architect within 15 days after award of the GeneralContract unless otherwise approved by the Landscape Architect and/or Owner's Construction Representatives.

A. Standards: Specific reference to manufacturers' names and products specified in this section are used as standards; this implies no right to subsitute other material or methods without writien approval of the Landscape Architect.

Approval: Installation of any approved substitutions is Contractors's responsibility. Any charges required for installation of any approved substitution must be made to the satisfaction of Landscape Arabiect and utilited additional cost to Oumer, Approval by Landscape Arabiect of substituted materials and/or dimensional drawings do not waive these requirements.

A. Cooperation On-Site: Coordinate and cooperate with other contractors to enable the work to proceed as rapidly and as efficiently as possible.

C. Concrete mow curbs, banding, poured in place walls, other flatwork, footings, pans and slabs for: walls, fencing, benches, controllers, decks, etc., where applicable.

A. Furnish and set all reinforcing steel, bolts and anchors.

B. Install all items required by other trades which are to be cast into concrete

4.12 EXPANSION JOINTS

4.13 CONTROL JOINTS

4.14 PROTECTION

4.15 PATCHING

4.17 CLEAN-UP

4.16 CONCRETE CURBS

PART 5 - WARRANTIES

PART 1 - SCOPE OF WORK

1.01 WORK INCLUDED

1.02 RELATED WORK

PART 2 - GENERAL

2.01 PERMITS & INSPECTIONS

2.02 APPLICABLE STANDARDS

2.03 INSPECTION OF SITE

2.05 COORDINATION

2.06 FINAL ACCEPTANCE

PART 3 - MATERIALS

PART 4 - EXECUTION

4.04 PREPARATION

4.05 PLACING REINFORCEMENT

4.02 INSPECTION OF WORK AREAS

4.03 OBSERVATION OF MASONRY WORK

4.01 LAYOUT

2.04 PROTECTION OF EXISTING CONDITIONS

Materials shall be of first quality and of domestic manufacture as noted below:

Aggregates:

D. Water: Clean , portable, from domestic supply.

I. Expansion joint filler: ASTM C 1751.

Sealant materials: As noted on plans.

A. Inspect related Work and adjacent surfaces for comp

A. Place reinforcement in accord with ACI 531.

Submit Catalogue Cut Cementitious waterproofing materia

Each item of Work shall include excavations for foundations and footings, concrete masonry block, deformed billet-steel bars, Doublas Fir wood grant, stucco finishing and backfilling clean-up to the satisfaction of the Owner.

All walls are to be stated in the field for top of footing, top of walls lengths of walls and all steps in walls, on the square footings "as stated" in the field, Any changes or deviations which add or delete concrete block walls will be corrected or approved by Pröject Superindendent and adjusted by changings subfilled and approved by Landscape Architect and Project Superintendent. Any overages will be por square foollineal field unit cost.

Correct conditions detrimental to a proper and timely completion of the Work.

A. Previously placed concrete or masonry: Clean of encrustations, lailance, oil and coatings which would reduce bond. Wash Work throughly with water under pressure: leave surfaces damp where masonry units connect with earlier placed Work.

B. Masonry units: Thoroughly clean of dust, grease, oil, or other matter which would reduce bond.

C. Weifing: Do not wel concrete block units before installation. D. Reinforcement: Clean off excess mill scale, losse rust, oil and coatings which would reduce bond. Secure and/or in place.

erform all masonry Work under continuous observation by the Landscape Architect and/or Owner's representative.

Placement of expansion joints shall be as directed and determined by layouts of slab markings noted on drawings. Expansion joint material shall be Poly Foam, or approved equal; or as noted on Plans. Expansion joints shall be necessed one-quarter inch from finits ratice and sealed with a bead of grey thiokid sealant or equal. Saica sand fo match concrete color shall ben be tamped into mixing the state of the state of the state of the sealer of the sealer of the state of

Control joints and other edges shall be formed in fresh concrete using a clean edging or jointing tool to provide a smooth uniform finish.

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

Construct concrete curbs at locations shown on Plans as detailed, true to line and grade, as approved by the local County or City. Use natural grey Portland cement concrete, 2000 PSI compressive strength. Locate expansion joints as detailed or shown, and as directed, at intervision to exceed efficient left (15). Trinish with Set Borth Strandel to face or edge.

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

In addition to manufacturers' guarantees or warranties, all work shall be warranted for one year from the date of final acceptance against all defects in materials and workmanship by contractor. Warranty shall also cover repair of damage to any part of the premises resulting from defects in materials and workmanship to the satisfaction of the Owner.

Funish all labor, lools, equipment, materials, transportation, and perform all operations necessary and incidential for the proper execution and completion of all concrete unit masorry in accordance with the Drawings and Specifications including, but not limited to the following work items:

END OF SECTION

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

CONCRETE UNIT MASONRY AND STUCCO SURFACING

Masonry Barbeques (Stuccoed where applicable)

Any reference to the "Standard Specifications," "ASTM," or "ACI" manuals shall mean the current or latest editions.

Augen-Y, Department of Transportation, CALTRANS. B. Standards: 1. ASTM - American Society of Testing and Materials.

A. Standard Specifications: Standard Specifications of the State of Catifornia, Business and Transportation Agency, Department of Transportation, CALTRANS.

ACI - American Concrete Institute. Manual of Concrete Practice.

Examine related work and surfaces before starting work in MS Section. Report to the Landscape Architect in writing sile conditions which will preven the proper provision of the sound. Beginning the work in MS Section without regority municiable conditions to the Landscape Architect constitutes acceptance of sile conditions by the Contractor. Any required introval, repair, or replacement of this work, caused by unsuitable conditions table before an one distribution of the Omer.

Contractor shall acquaint himself with all site conditions. He shall take necessary precautions to protect existing site conditions. Should damage be incurred, this Contractor shall repair damage to its original condition or fumish and install equal replacement at his own expense. To the satisfaction of the Owner.

A. Cooperation onsite: Coordinate and cooperate with other contractors to enable the work to proceed as rapidly and as efficiently as possible.

B. Work with Other Trades: Coordinate with General Contractor items of other trades to be furnished and set in piptce. Such partners of their work as all of in part embedded, built in, attached up or supported by the work shall be exceeded by them in ample time that progress of the work is not delayed. Any cutiling or patching made necessary to comply with this injunction.

Review; Review for Final Acceptance shall be held in conjunction with the final review of Section 4-A & B, Planting and Construction.

A. Concrete masonry units: ASTM C 90, Grade N-1, hollow, normal weight lad bearing units.

E. Hydrated lime: ASTM C 207. Type S. and containing 85% by weight of calcium oxide.

Types and sizes: As indicated on drawings.
 Color: As indicated on Color Schedule.

B. Acceptorize: Work under this Section will be accepted by Landscape Architect upon satisfactory completion of all work. Upon Final Acceptance all the end of the maintenance period, including backfilling of walls, Daner will assume responsibility (or maintenance of the work. Said assumption does not releev Contractor of obligations under Warrachy.

Portland cement: ASTM C 150, Type I or Type II.

F. Admixture for grout: Material acceptable to Architect. Obtain acceptance from Project Supervisor prior to use.

G. Mineral color pigments: Pure ground mineral non-fading oxides, lime and alkali proof. Colors as selected by Landscape Architect where applicable.

H. Cleaning material: Sure Klean No. 600 detergent, by Process Solvent Co., Inc., or equivalent.

L. Vertical expansion joints: In concrete masonry wall construction shall be a minimum 20'- 0" apart. Use breaking bond whether for exposed or stuccoed masonry wall work.

Use according to manufacturer's printed instructions. Secure manufacturer or distributor initial supervision by a qualified field representative to assure proper use of admixture.

Sand: ASTM C 144, clean, hard, strong, durable, free from injurious amounts of saline, alkaline, organic or other deleterious substances, with not less than 3 percent by weight passing No. 100 steeve.

Pea gravel: ASTM C 404, worked and graded with no more than 5 percent passing No. 8 sieve and with 100 percent passing 3/8 inch sieve.

A. Pilasters (Stuccoed where applicable)

B. Walls (Stuccoed where applicable)

A. Furnishing and placing rebar. B. Concrete placement.

Stucco application.

Obtain necessary City Building & Safety Department permits and inspections.

- A. Portland cement shall conform to ASTM-C150, Type I or Type II.
- Materials shall be of first quality and of domestic manufacture as no

		i
4.03 CLEANUP AND		
A	Safely/Cleanifness: Lipon completion of the painting work. Contractor shall remove from the premises and dispose of all scatfolding and equipment, surplus material, emply containers and other detris resulting from Contractor's operations. The sile will be ded clean and neal nall respects.	LICENSED
PART 5 - WARRANT		PROFESSIONAL
In addition to manufactu against defects in materi	ers' guarantees or warranties, all work shall be warranted for one year from the date of Final Acceptance als and workmanship by Contractor. Warranty shall also cover repair of damage to any part of the premises materials and workmanship to the satisfaction of the Oumer.	LOGO AND
resulung irom delects in	materials and workmaniship to the satisfaction of the United. END OF SECTION	COMPANY
		INFORMATION
TUBULAR ST		
PART 1 - SCOPE OF		
A.	Furnish and install lubular steel per plans, details and specifications.	
1.02 RELATE	D WORK IN OTHER SECTIONS	
The following items of as	socialed work are included in other sections of these Specifications: Paintino	
PART 2 - GENERAL		
2.01 QUALITY ASSU	RANCE	LICENSE
A	Qualifications: 1. Perform shop welding on the premises of a fabricator licensed by the City Building and Safety	STAMP
	Department. 2. Perform welding by welders approved and certified in accordance with requirements of AWS.	
В.	Reference Standards:	
	"AISC Steel Construction Manual". "Oode for Arc and Gas Welding in Building Construction". AWS D1.0 of the American Welding Society.	
	Society. 3. "Metal Finished Manual", of the National Association of Architectural Metal Manufacturers (NAAMM).	
2.02 SUBMITTALS		
A.	Submit complete shop drawings to the Landscape Architect and/or Owner's Representative for review in advance of fabrication. Show the following on the shop drawings:	z
	 Show dimensions, sites, thicknesses, gauges, finishes, joining, attachments and relationship to adjacent work. 	<u> </u>
	Where welded connections, concrete inserts, and other items are required to receive other work, show exact locations required.	ΕE
	 For standard manufactured items, submit work sheets showing illustrates cuts of items to be furnished, scale, details and dimensions. 	⊃ ⊒ Ž
	WITH OTHER WORK	LAST NAME RESIDENCE 1357 STREET NAME NER CONTACT INFORMA
A	Examine drawings and specifications, and include all miscellaneous metal work which is not distinctly specified in other sections.	NF ZE
B. C.	Provide all connections; anchors, bolls, welding, cutling, panching, drilling, tapping or other connecting required to fit miscellaneous metal with other work.	E E E
	Provide items to be installed by other trades well in advance, to permit proper sequencing and scheduling of other work.	AC AC
PART 3 - MATERIAL Materials shall be of first	suaiity and of domestic manufacture as noted below:	AP ST VI
A	Rolled steel shapes and steel plates: ASTM A36.	N 12
B. C.	Steel tubing: ASTM A500 Grade A, or ASTM A501 seamless - G A. per details. Steel pipe: ASTM A53, Type E or S, Grade A or A120, galvanized &' diameter.	AST 13 2 C
D.	Steep ppe: As in Adds, type e of s, orade A of Adds, gawainzed of utalinetes. Steel bolts: ASTM A307, Grade A.	IER LA
E.	Welding rods: Conform to AWS requirements for intended use. Concrete inserts: As indicated on the plans.	∠ ≤
F. G.	Shop prime-coat paint: Conform to either FS TT-P-86 Type II for red lead/alkyd type paint or to FS TT-P-45 for	Ó
Н.	zinc chromate type paint (2 applications - shop & site). Touch-up for galvarized surfaces: All Saar 423 Galvanizing Powder (30% lin, 30% zinc, 40% lead and flux) as manufacturate by All Satie Weiding Alloys O.o., or Speed Galvanized by W.D.L. Co. or equal.	
L	Non-shrink grout: Mini Wax Construction Products Division Por-Rock, or approved equal.	
1.	Metal enamel: FS TT-P-37C - (2 coals).	
PART 4 - EXECUTIO 4.01 FABRICATION	<u>N</u>	
4.01 FABRICATION	Conform to the requirements of the referenced standards.	
	 For manual welding, use low hydrogen type E7015 and E7016 electrodes. 	
	 Weld preheat shall be determined from Mill Reports showing the chemical composition of the r einforcement. 	RUCTIO
В.	Shop prime all ferrous items to 1 mill dry coat thickness after fabrication, deburing and grinding smooth welds and rough spots. Touch-up after installation. Leave in proper condition to receive finish painting.	$I \cong O$
С.	Do not paint rebar and steel surfaces to be embedded in or bonded to concrete. Welds shall be ground smoothy, all weld spatier removed and work shall comply with the specifications of the 'Amelican Welden Society.'	
D.	"American Welding Society." Subcontractor to perform all the above work in accordance with the governing plans and specifications.	
4.02 INSTALLATION		$ \supset $
A. B	Miscellaneous metalwork shall be free from defects which would impair strength, durability and appearance. Erect plumb, straight, true and accurately fit in place. Brace, reinforce, and anchor in place. Grind all field	$\square \simeq \bigcirc$
в. С.	webs.	
с. D.	Provide non-shrink grouting of all frames, plates, sills, bolts and other items not designated to be done by others.	
E.	Concoul all connections in the finished work, where possible. Exposed screw connections shall be Allenhead screws matching the material they lasted. See the screw connection of the screw connections of the screw connect Set base table for support posts, true and plants in concrete footing per details.	≤ 0
E.	Protect all dissimilar metals from galvanic corrosion by pressure tapes, coatings, or isolators.	
G.	After erection, clean off all rust, scale and oil. Clean field welds, bolts, and abraded areas. Touch-up all areas with the same material as used for the shop coat, leaving all surfaces ready to receive finish coats. Apply second coat of primer on site.	I Č G
Н.	secono coai o prime on see. Apply one primer coal and two finish coats of exterior metal enamel to metal surfaces, color as selected by Owner's Regressientative.	
4.03 REPAIR OF DE		
A. Landscap	All defective or damaged work shall be replaced, removed and repaired as directed by the Architect or Owner's Representative at no cost to the owner.	
4.04 CLEAN-UP		REVISIONS
A	Clean-up and remove from the site all unused materials and debris resulting from the performance of this work not less than once a week or the last working day each week. All trash shall be removed completely from the project site.	\wedge
В.	Touchup: Contractor shall clean and relouch Contractor's work as necessary, or as required for final approval by the Landscape Architect within 24 hours notice.	\checkmark
С.	 Unpainted Surfaces: Contractor shall leave all surfaces not to be painted, paving, hardware, or plant materials free from any paint, stain, spatietings, smears or smudges which are the result of his operation. 	
D.	Location: Contractor shall not clean equipment and trushes or dispose of thinners, paint or other chemicals in areas to be planted or in the vicinity of existing plants.	\bigtriangleup
PART 5 - WARRANT	<u>ES</u>	SUBMITTALS
In addition to manufactu against defects in materi resulting from reducts in	rers' guarantees or warranties, all work shall be warranted for one year from the date of Final Acceptance as and workmanship by Contractor. Warranty shall also cover repart of damage to any part of the premises materials and workmanship to the satisfaction of the Dourner.	\wedge
	END OF SECTION	\checkmark
		Δ
		\triangle
		DATE:
		MM/DD/YY
		SHEET NO.:
		L9
		. – .
		9 OF 10

2.02 STORAGE & HANDLING

B.

PART 3 - MATERIALS

C. Hardware:

PART 4 - EXECUTION

4.01 QUALITY

4.02 HARDWARE

4.04 EASED EDGES

4.05 HEADERS

4.06 CLEANUP

PAINTING

PART 1 - SCOPE OF WORK

A. Handrails

D. Decks

E. Fencing

1.02. RELATED WORK IN OTHER SECTIONS

R Miscellaneous metals

Wood overhead structures

The following items of associated work are included in other sections of these Specifications:

Shop paint of steel materials and miscellaneous metal items

Before beginning work, prepare for approval a sample of each color and finish required. Such samples, when approved, shall constitute standards for order and finish for acceptance of compileted work. Samples shall be made upon materials corresponding with those to be finished on the site. All work shall match the approved colors and samples. Submit samples to the Landscape Architect 15 days prior to construction for approval.

All painting materials shall be defivered to the site in the manufacturers' original containers with labels intact and seals unbroken. They shall be stored in a safe place, in accordance with current local regulations. All necessary precautions shall be taken to avoid a sea of the search of the state of

Surfaces shall be painted only when they are free from moisture. No painting of exterior surfaces shall be done less than 72 hours after a rain, nor during periods of dew or fog. Receiving surfaces shall be properly dried out before proceeding with the work. No painting shall be done when temperatures is below 50 degrees?.

Furrish, maintain and remove all scaffolding and ladders required for this work, and all doep clothes for the protection of walks, fautures, or other surfaces not to be painted. Painted and finished surfaces subject to damage or deducement shall be properly protected and covered. Contractor shall be responsible for any and all damage to painted work, and to that of other work caused by operations under this Section, part 3 - materials.

A. Materials are specified by trand names to establish a standard of quality. The Landscape Architect will consider substitutions for trans name of products specified, provided the procedures so if on the substitutions of product and the standard states of the state of the s

A. Colors shall be selected by Landscape Architect. Owner reserves the right to change colors to match and/or contrast building colors up to and including time of execution.

A. Painting No painting or freishing shall be started until the surfaces to be painted or freished are in proper condition in every respect. Surfaces that cannot be properly prepared by the painted for firshing shall not be prime of a mission of an instruct. In an instruct, and the surface is the surface of the surface is the surface of the surface.

B. Cleantiness: Surfaces to be painted shall be clean and free of dirt, dust, and any other substance which might interfere with the application of the paint. All surfaces to be painted shall be in proper condition to accept, and assume the more adhesion and functionian or the particular statistic nor conting a sociefied.

constitution is provided by the standard of the properties of a specified shall be immediately brought to the anticipate Architect. Staffing of undi without such notifications will be considered acceptance by improper or delective surfaces, as directed by the Landscape Architect, at no additional cost to the Owner.

A Duality All painting shall be done by skilled and experienced craftomen working under the supervision of a capabit foreman. All workmenships shall be of the highest paubit part to the complex satisfaction of the Landscape Architek. All materials shall be painted and scale and the manufacturer's directions, and materials shall be binned only in compliance with the manufacturer's genetications.

B. Preparation: All material shall be evenly brushed, rolled or smoothly flowed on without runs or sagging and free from drops, ridges, laps, and brush marks. No coasts shall be applied until any previously applied coals have throroughly dried. Stand surfaces between coasts as necessary to produce a smooth finish.

Primer: Two coats - one coat shop applied and one coat site applied.

Paint: Two coats to match color of buildings - color to be selected by Owner.

Unless otherwise instructed, all paints and primers shall be spraved or rolled on-site.

D. Finished Product: Completed painted surfaces shall be free of blistering, running, peeling, scaling, streaks or stains, and the colors of all surfaces shall remain free from fading and uniform in color.

Thinner, linseed oil, or other solvents required shall be as recommended by each manufacturer for his respective product.

Primer: Federal Specification TT-P-86, Type II (red lead/alkyd type) or TT-P-645 (zinc chromate type) to be compatible with finish coat.

Finish Coats: Enamel, paint, stain, vamishes, emulsions, lacquers and sealers shallbe as specified on clans and details.

Color of all surfaces finished under this Section shall, all the end of one year, have remained from serious fading, and no variations will be allowed. All materials shall then have adherence to the end of one year, and there shall be no evidence of bitlesrs, numing, peaking, sealing, chaking, streaks or strains at the end of this

1.01 WORK INCLUDED

PART 2 - GENERAL

2.01 SUBMITTALS

2.02 PRODUCT HANDLING

2.03 ENVIRONMENTAL CONDITIONS

2.04 SCAFFOLDING AND PROTECTION

3.01 MANUFACTURERS

3.02 COLOR AND LIFE OF FINISH

3.03 MATERIALS FOR GENERAL USE

B.

PART 4 - EXECUTION

4.01 SURFACE PREPARATION

4.02 WORKMANSHIP AND APPLICATION

C. Application shall be as follows:

Moorlary one to be installed in

PART 5 - WARRANTIES

A. Storage: Lumber shall be stored in neat stacks at the site unless it is to be used immediately. All lumber shall be pled so that it may be readily inspected and shall be handled in a manner that will avoid injury or breakage.

A. Grading standards: Redwood shall be in accordance with "Standard Specifications for Grades of California Redwood Lumber" graded under the rules of the Redwood Inspection Service.

Lumbe:
 Lumbe:
 Lumbe:
 Lumbe: All Lumber shall conform to the advance characteristics permitted within the supplicable grading
 nules. Notes, decises, beine, decay or other irregulatilies will be permitted enceget those
 characteristic of that grade.

Piling Wood/Protection: Structural limber shall be nearly piled on skids above ground and shall be protected from the sum when necessary to prevent warping. Treated lamber shall be handled with rope slings. Cant hooks, peaveys, or other sharp instruments shall not be used in handling treated limber. Undue rijury in handling will be cause for rejection.

Unless otherwise indicated on Drawings or Specifications, lumber shall be either redwood construction heart and for douglas fir, resawn, with no exposed sapwood.

Header: Construction heart grade redwood header and stake, where applicable. SAS or roughsawn as detailed.

Galvanized: All hardware required for fabrication, including brackets, hangers, hanges, fasteners, and nails shall be hot dip galvanized. Screws, nuts, bolts, and washers shall be hot dip galvanized or cardinam olded.

Additional Hardware: When shown on the plans and in addition to hardware, structural members fabricated from steel, concrete, or other materials shall be incorporated into the structure.

Notestanding shall be first does transport. At larger shall be accounting our entraneous to a door if and shall have not ben'ting one the entire count durates. All phiss hall be again and tiggit states benefations to be thereing a state of the presented in making pairs. Wen't shall be ben of humanne mark's, den't or other diffequations. Naith take shaded than alress dhermise about the statest of the scatest duratest statest of the states

A. All bolts 518 inch and less in diameter shall be fitted with cut washers, and all bolts and lag screws over 518 inch in diameter shall be fitted with cast or malikable iron washers, unless otherwise shown on the plans.

B. All exposed hardware items shall be installed as hot-dipped galvanized unless otherwise instructed on plan.
 4.03 NAILING

All subcontractor's materials and tools of the trade shall be removed from the job site upon completion of work. Subcontractor shall be responsible for damage b the finished surfaces of other work. Subcontractor guarantees all work will be performed in a good and workmanifice manner.

In addition to manufacturers' guarantees or warranties, all work shall be warranted for one year from the date of Final Acceptance against defects in materials and workmarship by Contractor. Warranty shall also cover repair of damage to any part of the premises reading itom defects in materials and workmarship to the satisfaction of the Owner.

Funish all labor, lools, equipment, materials, transportation, and perform all operations necessary and incidental to proper execution and completion of all painting work in accordance with the Drawings and Specifications. Such work includes, but is not limited to, the influence.

END OF SECTION

When toe nailing of structural members is required, toe nailing shall be at an angle and penetration to firmly secure member

Edges of seat decks, benches, handrails, planter caps and other exposed or leading corners are to be eased.

B. Place all reinforcement and embeds prior to grouting.

A. Mortar: Type S in accord with UBC Chapter 24.

D. Mortar and grout minimum compressive strength:

4.06 MORTAR AND GROUT

4.07 WORKMANSHIP

С.

E. F.

E.

4.09 GROUTING

D.

С.

D.

4.11 STUCCO SURFACING

A. Wood Framed Walls: 1. Stucco

B. Block Walls

4.12 CLEANUP

PART 5 - WARRANTIES

SITE CARPENTRY

PART 1 - SCOPE OF WORK

1.01 WORK INCLUDED

PART 2 - GENERAL

2.01 SUBMITTALS

A. Miscellaneous light form work

Overhead structure:

The following items of associated work are included in other sections of these Specifications:

C Decks

1.02. RELATED WORK IN OTHER SECTIONS

Painting

Reinforcing steel, except dowels in other Material.

Color: As indicated on plans.

Mortar: 28 days 1 800 psi

Grout: 28 days 2,000 psi

Set units with joints straight and uniform in width.

A. Joints: Raked as exposed masonry and flush with stuccoed; concave tooled with brick.

Keep all areas to be grouted free from mortar so that grout will contact foundation.

Rake out joints which are not light at time of tooling, point and then tool - where applicable.

Fill joints solidly from face of block to at least depth of face shell.

A. Fill all masonry cells containing reinforcing steel solidly with grout.At finished course, stop grout one-half the course height below top of last course grouted.

E. Set bolts, frames and inserts necessary for attachment of subsequent Work must be secured in place prior to grouting.

After wall in constructed, do not saturate with water for curing or any other purpose.

Stucco shall be three coat work not less then 7/8" thick.

1. Stucco shall be two coat work not less than 1/2" thick.

B. Keep mortar dropping out of or remove from grout space before grouting.

A. Immediately remove from exposed surfaces surplus mortar, grout, foreign material, and stains.

Bond: Common running bond, unless otherwise indicated.

Set lintels, capping units and bearing plates in a full bed of mortar.

4.08 JOINTS AND COURSING - EXPOSED MASONRY

Joints: 3/8 inch wide.

Puddle grout or vibrate in place.

4.10 POINTING AND CLEANING

B. Grout: In accord with UBC Chapter 24, with exception that lime shall not be used.

Vertical bars: Continuous from bottom cell to top of wall, centered in cells, except where otherwise indicated. Secure vertical reinforcement in position at top, bottom and at intervals not farther apart than 192 bar diameters. Where necessary, hold vertical steel firmly in place by frames or other suitable devices as accepted by Architect.

Horizontal bars: Wire temporarily above exact position and tag to indicate correct locations. Use calibrated vertical bars where indicated, wired to vertical bars or dowels.

Accurately splice using lap of bars as indicated on drawings with a minimum of 40 bar diameters.

C. Dispose of mortar and grout not used within 30 minutes after leaving mixer. Retempering of mixture will be allowed in accord with UBC Chapter 24.

E. After all ingredients are in the batch mixer, mix mechanically for not less than three minutes. Do not use hand mixing unless specifically acceptable to Project Superintendent.

A. Preserve unobstructed vertical continuity of cells to be filled. Fully bed webs and crosswalls forming such cells in mortar to prevent leakage of grout.

B. Fractional parts of masonry units are prohibited where whole units can be used. Chinking of interstices with fragments will not be allowed. Provide special units as necessary to form openings and lintels.

Do not construct any part of any masonry wall more than 6 feet higher than adjoining portions.

D. Where absolutely necessary, for construction purposes to stop off longitudinal runs of masonry, stop off only by racking back one-half unit length in each course. Toothing shall not be permitted.

All openings for ducts, pipes and conduit built into masonry walls, cut to form fractional units with abrasive saw. Align vertical cells to maintain continuous unobstructed cell area.

Perform tooling or raking when mortar is partially set but still sufficiently plastic to bond. Use a tool which compacts mortar, pressing excess mortar out of joint rather than dragging it out.

Butter vertical head joints well for thickness equal to face shell of unit and shove these joints tightly so that motar bonds well to both units.

Control joints shall be as detailed. Apply sealant, where required, in accord with plans and specifications.

Grout bolls and anchors insorted in wall solidly in place so that there s a minimum of 1 inch of grout between boll and masonry unit, unless otherwise indicated.

Defective joints: Point holes or defective mortar joints in exposed masonry and cut out and repoint defective joints. Replace chipped or broken masonry units.

pron. Respec copped at taken meaning unas. Stating and excess most: Protect exposed missionry against grad staining. Where grad or mortar does contact the backs of missionry, interve I minimidiately. Shadl accidental splatige accur, and and clean statism where they recard. This marks and and when shadling, therebag is a hoursy when since. Remove statism where they recard, this marks and and when shadling, therebag is a hoursy when since. Remove statism where they recard, this marks and and when shadling, therebag is a hoursy when since. Remove shadling when they recard the statism of the statism of the shadling of the shadling when the shadling when the shadling when the shadling of the shadling when the shadli

(a). Scratch coat shall be approximately 1/2" thick. Before the scratch coat has set, it shall be well cross-scratched to provide a strong bond and damp cured for al least 48 hours.

(b) Brown coal shall be 1/F thick. When trown coal has set sufficiently it shall be final to the set of the

(c). Finish color coat shall be approximately 18" thick and shall be applied and damp cured shirity in accordance with the manufacturer's directions, and city and local governing holders.

(a). Brown coat shall be approximately 3/8" thick. Float with a dry float to form a bond for the finish coat.

(b). Finish color coat shall be approximately 18" thick and shall be applied and damp cured shirdly in accordance with the manufacturer's direction including city and governing bodies.

Deliver packaged material in original packages bearing the manufacturer's and brand names.

2. Stucco shall be Mertax, La Habra or approved equal as per color selection by Landscape Architect.

Packaged material shall be delivered in the original packages, containers or bundles bearing the name of manufacturer and the brand name.

Texture to be rubber float finish (scrub coat) or as approved by Landscape Architect. 5. All exposed foundations shall receive one application of finish color coat to match building color.

All stucco shall be water proofed up to three feet above finish grade with Thompson's Water Sealer or enrol

2. Color and manufacturer shall be selected and approved by Landscape Architect.

5. All exposed foundation shall receive one application of finish color coat to match building color.

END OF SECTION

Texture as called out on plan or I.P. field approval.

All subcontractor's materials and tools of the trade shall be removed from the job site upon completion of work. Subcontractor shall be responsible for damage to the finished surfaces of other work. Subcontractor guarantees all work will be performed in a good and workmanike manner.

In addition to manufacturers' guarantees or warranties, all work shall be warranted for one year from the date of Final Acceptance against defects in materials and workmanship by Contractor. Warranty shall also cover repart of damage to any part of the premises resulting from defects in materials and workmanship to the satisfaction of the Owner.

Contractor shall provide all materials and work necessary to furnish and install complete and in place all site carpentry work shown on the Drawings and Specifications herein.

Perform all work necessary and required for the construction of wood structures and devices as indicated on the Drawings. Such work includes, but is not limited to, the following:

Submit color samples of all samples of all paints and stains to Landscape Architect for approval, 10 days prior to application.

Tie at intersections using No. 16 gauge annealed wire.

LANDSCAPE IRRIGATION SYSTEM

1.02 SCOPE OF WORK: Furnish labor, materials, equipment, appliances and services necessary for the execution and completion of "Landscape irrigation" as indicated on the drawings and/or herein specified.

PART 2 - MATERIALS

aterials shall be of first quality and of domestic manufacture unless otherwise note

2.01 SUBMISSION FOR APPROVAL:

- Furnish the articles, equipment, materials, or processes specified by name on the drawings and in specifications. No subsitutions will be allowed without prior written approval of the Owner's Representative. A complete material ist shall be submitted to the Owner's Representative prior to performing any we Catalog data and the descriptive Benature must be submitted inherence the use of items different the hore segrefield is requested. In biotratical certificates must be submitted by physics (per and fifting manufacture indicating that material complex with specifications, unless material has been previou approved.
- B. The material list shall be submitted using the following layout (double space between each item): Item No. Description Manufacturer Model# 1. Pressure Supply Lines Lasco Schedule 40 2. Lawn Head Buckner #404 3. Elc. Elc. Elc. Elc.
- C. Equipment or materials installed or furnished without the prior approval of the Owner's Rep be rejected and such material removed from the site at no expense to the Owner.
- D. Approval of any items, alternates, or substitutes indicates only that product(s) apparently meet the requirements of the drawings and specifications on the basis of the information or samples submittee Manufacturer's warranties shall not relieve liability under the guarantee. Such warranties shall only supplement the guarantee. The Owner's Representative may, at his option, require a manufacturer's warranty on any roodust offered for use.

2.02 GENERAL PIPING

- A. Pressure supply line from point of connection through backflow prevention unit shall be per local code Pressure supply lines downstream of backflow prevention unit shall be per the legend.
- B. Non-pressure lines shall be Class 200 PVC pipe.
- 2.03 PLASTIC PIPE AND FITTINGS
- All pipe shall be estuded of an improved PVC virgin pipe compound featuring high tensile strength, high chemical resistance and high impact strength. In terms of the current ASTM Standard D-1769 or D-2741, Pisis compound shall meet the requirements of cell classification 17454 Biol for pipe and 13454B for fittings. This compound must have a 2,000 psi hydrostalic design stress rating. All pipe shall b
- All pipe must bear the following markings: Manufacturer's name, nominal pipe size, schedule or class, pressure rating in P.S.I., and NSF (Mational Sanitation Foundation). The manufacturer shall also mark the date of extrusion on the pipe. Solvent cement joints for plastic pipe and fittings shall be made as prescribed by the manufacturer, high chemical resistance of the pipe and fitting compounds specified in the foregoing sections make mondation that an agressive pinner, which is a two schwich for VPC, be used in conjunction with a solvent cement designed for the fit of the pipe and the fittings of each size range specified.
- Each pipe installer expected to make solvent joints shall receive instructions in the proper assembly of such joints from the representative of either pipe, cement, or fitting manufacturer before starting the job unless he has been previously instructed on recommended solvent cemeriting procedures by a
- unless he has been previously instructed on reco competent representative of the manufacturer. All fittings shall be standard weight schedule 40. At the purchaser's discretion, contract preference n be given those suppliers able to furnish all types of fittings required under this contract from a single manufacturer, in order that responsibility will not be divided in warranty claim situations.
- All fittings shall be injection motified of an improved PVC fittings compound featuring high lensile strength, high chemical resistance, and high impact strength. In terms of the current ASTM Standard D-1784-09, the compound must meet the requirements described in oil classification 13648. Where threads are required in plastic fittings, these shall be injection molded also. All tees and ells shall be side
- Apply primer and solvent on all pipe sizes and fittings. Primer solvent on both female and male end
- H All threaded nipples shall be standard weight Schedule 80, with molded threads. All Rtlings shall bear the company's name or trademark, material designation, size applicable I.P.S. schedule, and NSF seal of approval.

2.04 PVC CONDUIT/SLEEVING

- Pipe that is used for control wires sleeving shall be PVC conduit Schedule 40: Type 1220. All wires under paving shall be installed in PVC conduit, or sleeves as indicated in details and Legend.
- 2.05 RING-TITE PVC PIPE
- A. All pipe indicated on the working drawings, shall be Class 160 PSI Johns-Manville PVC pipe with ring-tile pints. B. All ring-file joints shall be sealed with rubber rings as provided by the manufacturer. All pipe joints shall provide for expansion and contraction.
- C. Thrust blocks shall be provided as required for proper anchorage and durability of the ring like pipe. (Refer to Details) FITTINGS (if required) 2 06 BRASS PIPE
- Brass pipe shall be 80% red brass, American National Standard Institute (ANSI), Schedule 40 screwed pipe. Fittings shall be medium brass, screwed 125 pound class.

2.07 BACKFLOW PREVENTION UNIT:

- ee plan for type, manufacturer, and size 2.08 QUICK COUPLING VALVES
- A. The body of the valve shall be red brass with a wall thickness guaranteed to withstand normal working pressure of 150 pounds per square inch without leakage. Valve shall have a 3/4-inch femal threaded opening at base.
- B. Hinge cover shall be red brass with a rubber-like vinyl cover bonded to it in such a manner that it becomes a permanent-type cover, yellow in color. Hinge shall be locking type.
- C. Quick couplers shall be installed as indicated on Plan and Details.
- 2.09 AUTOMATIC CONTROL VALVES, ELECTRICAL A. Valve shall be per legend.
- B. Valve shall be capable of being operated in the field without electricity at the controller, by a bleeding valve.
- C. Valve shall be completely serviceable in the field without removing valve body from the line.

 D. Valve shall be installed in a shrub area whenever possible and installed according to construction detail.
 2.10 GATE VALVES

NI remote control valves, gate valves, and pressure relief valves shall be installed in suitable valve boxes as shown i details, complete with locking covers. All shall be 'Christie', or an approved equal. Install tags.

- 2.12 AUTOMATIC CONTROLLER
- A. The Automatic Sprinkler Controller shall be as noted in the legend.
- B. All wiring to and from the controller shall be through color-coded plugs and sockets. The controller shall be locking, weather-proof type, constructed of heavy gauge steel with corrosion resistant enamel finish inside and out.
- 2.13 ELECTRICAL, HIGH VOLTAGE A. Power to and connection to the automatic controller shall be provided by the Owner.
- R All electrical equipment outside of buildings shall be Nema 3 type, waterproof for such installatio
- C. All high voltage work shall be installed under this section. Refer to Wiring, Low Voltage for additional information.
- 2.14 WIRING, LOW VOLTAGE
- A. Connections between the controller and remote control valves shall be made with direct burial AWG-UF type whe, installed in accordance with valve manufacturer's specifications. Were color: black or color coded for control, while for ground.

endations, in no case less than #14 in size

- B Sizing of wire shall be according to manufacturer recommendation
- 2.15 SMALL SHRUBBERY SPRINKLER HEADS
- See irrigation plan legend for manufacturer and model
- PART 3 EXECUTION
- 3.01 GENERAL
 A Materials shall be of first quality and of domestic manufacturer unless otherwise noted.
- B. Coordinate the installation of all sprinkler materials, including pipe, with the landscape drawings, to avoid interfering with the trees, shrubs, or other planting.
- C. For purposed of legibility, sprinkler lines are essentially diagrammatic. Although size and location of sprinkler equipment are drawn to scale whenever possible, make use of all data in all of the contract documents and verify this information at construction site.
- D. All work called for on the drawings by notes shall be furnished and installed whether or not specifically mentioned in the specifications.
- Do not will ultiply install the sprinkler system as indicated on the drawings when it is obvious in the field that ultiplications of advances and differences solid. But insplit on three bears considered in the such obvious the obvious of the obvious the broad broad advances of the Obvious hypersectative is not determined and obvious of the obvious the advances of the Obvious hypersectative in the over this is not down, the Octatuator mud assume the responsibility for ensistem recentary before any work commencies, conter with the Obvious hypersectative legating against details of details.

- 3.02 OBSERVATION SCHEDULE
- A. Contractor will be responsible for notifying the Landscape Architect and Owner's Representative in advance for the following observations according to the time indicated: •Pre-job Conference - 7 days
- -Pressure supply line installation and testing 36 hours
- ·System layout 36 hours Coverage tests 36 hours
- -Final Inspection 48 hours B. When observations have been conducted by other than the regular Owne show evidence of when and by whom these observations were made.
- C. No observation will commence without as-built drawings.

3.20 COVERAGE TEST:

3.21 HYDROSTATIC TEST:

3.22 COMPLETION

C.

When the sprinkler system is completed, perform a coverage test in the presence of the Owner's Represental to determine if the water coverage for planting areas is complete and adequate. Furnish all materials and perform all work required to correct any inadequates of coverage due to deviations from plans, or where the

All Hydrostatic tests shall be made only in the presence of the Owner's Representative, or other duty representative of the Owner. No pipe shall be backfilled until it has been inspected, tested, and appro-Pressure supply lines shall be tested under a hydrostatic pressure of 150 pounds per square inch for house.

A. Upon completion of the work, make ground surface level, remove excess materials, rubbish, debris, etc., and remove construction and installation equipment from the premises.

Two wertches for disassembling and adjusting each type of sprinkler head supplied. Two keys for each automatic controller. - Four quark coupler keys will attached hose sailvets. - Four quark coupler laws of a sprinkler heads and nozzles. - Two keys for enclosure lock: - Two keys for encl

The above equipment shall be turned over to the Owner at the conclusion of the project. Before final acceptance can occur, evidence that the Owner has received materials must be shown to the Owner's Representative.

Record accurately on one set of black and while prints of the drawings, all changes in the work constituting departures from the original contract drawings, including changes in both pressure and non-pressure lines.

Upon completion of each increment of work transfer all such information and dimensions to the prints. The changes and dimensions shall be recorded in a legible and workmanilie manner to the satisfaction of the Owner's Regreseitable. When the damings are approved, transfer all information to a set of reproducible damages at costs by the Owner's Regreseitable.

Dimensions from two permanent points of reference (buildings, monuments, sidewalks, curbs, pavement, etc.). Locations shown on as-built drawings shall be kept day to day as the project is being installied. All dimensions noted on drawings shall be 38-inch in size.

-Point of connection. -Routing of spiritide pressure lines (dimension maximum 100 feel along routing). -Spiritide control valves. -Routing of control valves. -Other related expirment (as may be directed by the Owner's Representative).

Make at changes to reproducible drawings in ink. If necessary, use eradicating fluid when redoing drawings.
 4.02 CONTROLLER CHARTS

As-built drawings must be approved by the Owner's Representative before charts are prepared.

Provide one controller chart for each controller supplied, of the maximum size the controller door will allow, showing the area covered by the automatic controller. The chart is to be a reduced drawing of the actual as basel psychem. However, in the worth the controller sequences is not algeble when the drawing is reduced, it shall be entraged to a size that will be readable when reduced. The chart shall be a blacking period. It shall be entraged to a size that will be readable when reduced. The chart shall be a blacking period as different color shall be used to show the axes of coverage for each shallow.

When completed and approved, the chart shall be hermetically sealed between two pieces of plastic each piece being a minimum 20 mils. thick. The chart shall be mounted using Velcro or approved equal type of tape.

vm vmz nawnić texavic E MANULAS Prepiser do dalne is bie Curech solgen dalne je bie Curech solgen dalne je bie curech dalne je bie curech solgen dalne je

In addition to the above maintenance manuals, provide the maintenance personnel with instructions major equipment and show written evidence to the Owner's Representative at the conclusion of the project that this service has been rendered.

The entire sprinkler system shall be unconditionally guaranteed by Contractor as to material an workmanship, including setting of backfilled areas below grade for a period of one (1) way

following the date of final acceptance of the work. Owner may exercise option to withhold part of final payment until the one year product/workmanship guarantee has elapsed from date of final acceptance.

Lambian one year than the date of completent settlement occurs, and adjustments in pipes, where and spitisk heads or paring necessary bit high heypoleme pairing but the piper end of the permanent pair date, contracturs, and pite instantian of a damaged planting, pairing adjustments without onto a cost to theme instanting the instantian of a damaged planting, pairing pairing and the provide the set of the adjustments without onto a cost to theme instanting the instantian of the set of the adjustments without onto a cost to the set of the set of the set of the set of the provide which come for the piper adjustment of the set of the set of the pair adjustment of the set of the pairs and the set of the pairs and the set of the pairs and the set of the s

defects. Failure of Contractor to respond in a timely manner to repair damage concerning defects. Failure of Contractor to respond in a timely manner to repair damaged condition prompt owner to repair same and deduct costs of labor, material and equipment used fro Contractor's final payment.

D. Written guarantee shall be supplied in the completion of the project, showing date of completion

END OF SECTION

The Owner reserves the privilege of making any emergency repair without relieving Contractor's warranty obligations.

non-technical contractual requirements and condition

Work included: All labor and materials, appliances, tools, equipment, facilities, transportation, and services necessary for and incidential to performing all operations in connection with lumishing, delivery, and installation of "Landscaping", complete, as sho the drawings and/or specified herein. Work incides, but is not limited to the following:

10. Maintenance of all plantings until end of maintenance period and acceptance

Verification of Plant Quantilies: Quantilies given for plant materials are shown for convenience only. The Contractor shall provide all plants shown on the plans.

Fertilizer for soil conditioning and maintenance shall bear the manufacturer's gua analysis, and shall be as recommended in the required soils laboratory report.

Related work specified under other contracts (copies available from the Owner)

Los introcesses. Trepastiels, samples of solis additives and plants shall be submitted for inspection and stored on the site until furnishing of materialisis completed. Delivery may begin upon approval of samples, or as directed by the Onner's Representative. A copy of delivery slaps on all materialis used on project shall be forwarded to the Onner's Representative. Substitutions in any material will not be permitted unless specifically approved in unifing by the Onner's Representative.

Provide the fine grading in all areas to be planted.

Furnish and apply weed control to all planting areas

3 Preparation of soil in all planting areas per soils analysis.

4. Furnish and install all plant materials.

7. Furnish and install redwood header board.

Guarantee of materials and workmanship.

Furnish and apply bark mulch

Pruning of nursery stock.

1. Concrete sidewalks and curbs.

Asphalt paving.

Rough grading.

Electrical.

A. Soil and Soil Amendments:

C.

PART 2 - MATERIALS

2.01 MATERIALS:

6. Furnish and install sodded lawn.

Stake trees.

D. These charts must be completed and approved prior to final inspection of the irrigation system.

Index sheet stating Contractor's address and telephone number, duration of guarantee period, list of equipment with names and addresses of local manufacturers.

2. Complete operating and maintenance instructions on all major equipment

system has been willfully installed as indicated on the drawings when it is obviously this to the attention of the Owner's Representative. This test shall be accomplished

B. Supply as part of this contract the following tools:

PART 4- RECORD DRAWINGS, CHARTS & MANUALS

E. Quick coupling valves.

4 03 OPERATION AND MAINTENANCE MANUALS

В.

PART 5 - GUARANTEES

A.

PLANTING

1.02 SCOPE

1.01

F. Maintain as-built drawings on site at all times.

Show locations and depths of the following items:

Fertilizer plant tablets shall be 'AGRIFORM SLOW RELEASE' to be applied per Manufacturer's Specifications.

Shrubs: -1 gai shrub -1 tablet -5 gai shrub -3 tablets -15 gai & 24* box shrubs - 1 tablet for each 1/2* of trunk Diameter or each foot of height or spread.

Apply one 21 gram agriform lablet for each 1/2* of trunk diameter or each foot of height or serveral

Ground Cover: Apply one 5 gram agriform tablet per rooted ground cover cutting. Refer to Manufac Specification for installation procedure.

Organic amendment shall be nitrolized redwood sawdust (5% actual nitrogen), or Fir 1% nitrogen). It shall be fine textured, having minimum 80% passing #8 screen and minimum 95% passing #4 mesh screen. Sairing shall be no higher than 3.5 millimh

Quality and size of all plants shall conform to the California Standard Grad nursery slock and shall be No. 1 grade. Plants shall be vigorous, or norms from disease, insects, insect eggs and larvae. All plants shall equal or exc measurements specified and shall be supplied from the source indicated w specified.

Container stock shall have grown in containers for at least one year, but not over h years. Samples shall be shown to grow that no rootbound contlines prevail. No container plants that have cracked or broken balls of earth, when taken from conta shall be planted except on special approval from the Owner's Representative.

Nomenclature conforms to customary nursery usage: For clarification, the term "multi-trunk" defines a plant having a minimum of three trunks and a maximum of five trunks of nearly equal diameter.

Inspections: All plant materials must have been previously inspected at the nursery b State or County Horticultural Department, and shall be subject to the inspection and approval of the Landscape Architect before planting.

Inspection of Plant Material: Inspection of plant materials required by County, State, or Federal authorities shall be the responsibility of the and where necessary he shall have secured permits or certificates pri delivery of plants to the site.

Substitutions for the indicated plant materials will be permitted provided the substitu-materials are approved in advance by the Landscape Architect and the substitution made at no additional cost to Owner. Except for advanced variations, at substitute materials shall contino the nerequirements of these specifications. The accepted substitute materials are of a less value than those indicated or specified, the Contra price will be adjusted in accentance with the provisions of the Contrat.

Plants shall be subject to inspection and approval or rejection at place of growt and on the project site at any lime before and during progress of work or during the maintenance period. Poor condition, latent detects, injuries, and improper size, variely, and singe shall be cause for rejection. Rejected plants shall be removed from the project site immediately.

Stakes for tree support shall be lodgepole pine free from knots, rol, cross grain or other defects that would impair strength. Stakes shall be pressure treated with pentachlorophenol and a minimum of 2* diameter by 8*.0° long and pointed at one end.

Ties for holding trees shall be "cinch-lie" or approved equal. "Cinch-lie" manuf. by V.I.1 Products, 15561 Product Lane, D-4, Huntington Beach, CA 92649.

Tree guying materials shall be as follows:

(a) Ground anchors for guying shall be redwood per detail.

(b) Guying wire shall be 12 gauge annealed galvanized steel.

(c) Guying cable shall be a minimum of two strands, making a 3/16" diameter steel cable.

(d) Hose challing guards shall be new or used 2 ply, one hall inch (1/2') reinforced rubber or plastic hose and shall be all the same color on the project. Length shall be one and one-hall times the circumference of the plant at its base.

(e) Guying cable shall be covered with 3/8" dia x 3" long white PVC tubing.

(f) Tumbuckles shall be galvanized or cadmium-plated steel and have a 3" minimum lengthwise opening fitted with screw eyes.

(g) Duckbil 88-OTS earth anchor may be used as an alternate to the guying materials specified above manuf. by Foresight Products, Inc. North Glen, Colorado, (1-800) 325-5360.

Mulching: Mulch shall consist of processed wood fiber material equal to or supplied by Initavaia Rock and Sand, Upland, CA, (909) 982-6713. Submit sample of any alternative material prior to purchase and/or placement for Owner's Representative's approximate.

... Lawn from Sod: Marathon Hybrid Fescue. Submittal for type and grower required for Architect's approval.

(a) Pre-emergency application of "Treflan 5% Granules" or equivalent, applied according to manufacturer's recommendations and incorporatedinto soil as specified.

Post - emergence application of "Round-up" or equivalent, applied as specified by manufacturer. Spray with extreme care to avoid contact with landscape plantings.

Commence work as directed by the Owner's Representative and conduct operations continually to completion unless weather conditions are unfavorable. All work shall conform to high standards of practice within the trade.

Clean up and remove from planting areas all existing plant material not removed under the genera site construction contract, including roots and any accumulated debris and rubbish before commencing work. Legally dispose of such materials off the site.

If underground utilities, construction or solid nock ledges are encountered, other locations for planting may be selected by the Owner's Representative. Damage to utility lines shall be repaired at the Contractor's expense at no additional cost to the Owner or Tenant.

If lawns have been established prior to planting operations, the surrounding but shall be covered in a manner that will protect but areas before excavations having

Storage: Store plants and materials on the project site, and ensure that they are protected from damage by sun, rain, wind, theft, vandalism, and construction work. Water plants regularly.

A. Installations and operations in progress must be approved at various stages by the Owner's authorized Representative.

B. In no event shall the Contractor proceed from one state to another of the work, without prior approval of the Owner's authorized Representative.

C. The Contractor must notify the Owner's authorized Representative for inspections of the folio stages of work:

When all plants are ready to be delivered at the nursery or when plants have been delivered to the site and prior to any planting.

3. When all trees and shrubs have been spotled on the site where shown on the drawings.

4. When all tree and shrub pits have been excavated after water has leached out of the pits

When weed germination and removal is complete, and seedbed is prepared but prior to installation of seed.

A. The Contractor shall import as required. The Contractor's bid shall indicate the total in-place cost of required import. No additional charges will be allowed.

B. The soil shall not be worked when moisture content is so great that excessive compaction will occur, nor when it is so dry that dust will form, or clods not readily break up.

Rough grade requirements shall allow for soil amendments. Coordinate with General Contractor

bing the alterior of the turner's adhetical depresentations at our inplanting mores that content any policities and annexes such as of alterior terrorists granting more, inclusions, etc. Upon the approval of the Ounter's authetical Representative, remove and dispose of all above enteriorist edu to the level of disposes in the direct annexes. The address state and the second stress of the Contract darks in notify Ounter's authetical Representative of the address of the Contract darks in notify Ounter's authorized Representative of the address of the Ounter's authetical stress Contracts what her exponsible is in adjustment of the address of the Ounter's authetical stress.

If an area to be landscaped is not acceptable to the Contractor, he shall notify the Owner's Representative. Finish grade all planting areas to a smooth and even conditions, making certain that no water po or irregularities remain. Remove and dispose of all foreign materials, clods and rocks over one i diameter within ski inches of the surface so that, after conditions and planting, the firsk grade in shrub and in groundworer areas is 37 below the top of all curbs and 1° below the top of all walks.

C. The Contractor shall be responsible for dust control in areas within the scope of this contract.

Rip in two directions to the depth of 12° on all areas upon which fill will be placed.

When all grading within planting areas has been completed.

Underground Obstructions to Planting:

D. Protection of Existing Vegetation:

3.02 INSPECTION OF WORK IN PROGRESS

Herbicides used must comply with all applicable State and Federal laws and be registered with the U.S. Environmental Protection Agency Herbicide control shall be:

F. Header board/Mowstrip: See details.

Herbicides:

PART 3 - EXECUTION

A.

3 03 FINE GRADING

3.01 GENERAL PREPARATION

Application rates: Apply 21 gram agriform tablets at the following rates per plant by size:

centimeter at 25 Centigrade as measured by satural organic amendment.

- 3.03 WATER SUPPLY:
- Connections to the existing points of connection shall be at the approximate locations shown on the drawings. Minor chances caused by actual site conditions shall be made without additional cost to the Owner.
- 3.04 LAYOUT: Layout sprinkler heads and make any minor adjustments required due to differences between site and drawings. Any such devisions in layout shall be within the intent of the original drawings, and without additional cost to the Owner. Layout shall be approved by the Owner's Representative before installation.
- 3.05 GRADES:
- Before starting work on the sprinkler system, carefully check all grades to determine that work may safely proceed, keeping within the specified material depths.
- 3.06 ASSEMBLIES A. Install the backflow assembly at the height required by local codes. B. Routing of pressure supply lines as indicated on drawings is diagrammatic. Install lines (and various assemblies) to conform with details on plans.
- Install no multiple assemblies on plastic lines. Provide each assembly with its own outlet. When called for, the pressure relief valve shall be the last assembly
- Press pipe and fittings shall be assembled using Tellon dope, or equivalent, applied to the make threads only. This is also true of plastic pipe and threaded fittings.
- 3.07 LINE CLEARANCE: All lines shall have a minimum clearance of 4 inches from each other, and 6 inches from lines of other trades. Parallel lines shall not be installed directly over one another.
- 3.08 TRENCHING
- A. Dig trenched and support pipe continuously on bottom of dich. Lay pipe to an even grade. Trenching encavation shall follow layout indicated on drawings and as noted. Where lines occ under pared area, these dimensions shall be considered below subgrade. Provide minimum cover of 18 inches on all pressure supply lines.
- Provide minimum cover of 18 inches for all control wires. Provide minimum cover of 12 inches for non-pressure lines.
- D. Provide minimum cover of 24 inches for all lines under paving.
- 3.09 BACKFILLING A. Initial backfill on all lines shall be of a fine granular material with no foreign matter larger that 1/2-inch in size. Backfill material shall be approved soil.
 - BackIII material shall be tamped in 4-inch bayers, under the pipe and uniformly on both sides for the ball wide of the triorab and the bill length of the pipe. Materials shall be sufficiently during bayering the verticing shall be compared to be dynamic equal to the subject modifications of all and confer background packs without deps. Summer areas, hamps or other imeglatilies. Under no discumstances shall build, where the used to compareding solution.
- C. Provide sand backfill a minimum of 6 inches over and under all piping under paved areas
- 3.10 PVC PIPE Α. PVC pipe shall be snaked in a manner which will provide for expansion and contraction as recommended by the pipe manufacturer.
 - All plastic to metal joints shall be made with plastic male adaptors, unless otherwise shown in details.
- The joints shall be allowed to set at least twenty-four (24) hours before pressure is applied to the PVC pipe system. C.
- Main lines shall be tested in place before backfilling for a period of nd less than four (4) hours and shall shown no keakage of biss of pressure. During the test period, minimum test pressure, at the highest point of the section being tested, shall be 150 pounds per square inch. Center filling of pipe lengths is alowed.
- After all new sprinkler piping and risers are in place and connected, all necessary work has been completed and prior to the installation of sprinkler heads, control valves shall opened and a full head o water used to flush out the system for a minimum of five (5) minutes.
- At the conclusion of a system flushing, the heads shall be installed and tested for operation in accordance with design requirements under normal operating pressure. Contractor shall verify head pressures with plot tube and adjust valve to correspond with design pressure.
- 3 11 INSTALLATION OF RING-TITE PVC PIPE
- Except car may be noted in other parts of the Specifications or on the densings, installation of Reng Tite pipe and connecting fillings shall be outlined in manual as lamshed by pipe. The start of the induct. In our behavior of the start of the start of the piper depth and the correct location of connect here tables does also be start of the installation and during control connect of the manufacturer's representative at the start of the installation and during construction.
- Each line shall be tested at a pressure 50 PSI greater than the manufacturer's recommended working pressure for a period of four (4) hours, with the couplings and connections exposed and with the center of pipe section sufficiently supported and filled to hold pipe in place.
- 3 12 SPRINKLERS All nozzles on sprinklers shall be lightened after installation. All sprinklers having an adjustment stem shall be adjusted on a lateral line for the proper radius, diameter and/or gallonage per approval of the Owner's Representative. A.
- в Sprinkler heads and risers shall be installed according to details for final approval.
- Spacing of heads shall not exceed the maximum indicated on the drawings. In no case shall the spacing exceed the maximum recommendation by the manufacturer. C.
- 3.13 VALVES
- A. Quick coupling valves shall be set approximately 12' from walks, curbs, header boards, or paved areas where designed. Refer to installation detail. Place quick couplers in valve boxes.

A. Valve boxes shall be set one inch (1^{*}) above the designated finish grade in lawn areas and three inches (3^{*}) above finish grade in ground cover areas.

C. Valve boxes shall be installed in shrub planters, not in turf areas whenever possible, unless otherwise approved.

A. The automatic controller shall be installed at the approximate location shown on the Plan, unless otherwise instructed by the Owner's Representative.

B. All local and other applicable codes shall take precedence in connecting the 100 volt electrical service to the controller. Owner shall provide power to controller. Imgation Contractor shall complete hook-up to controller.

C. There shall be adequate coverage of earth (18" minimum) over the 24-volt control wire. Bundle and tape wires at 15' O.C. and install adjacent to maintine.

B. Connecting and splicing of wire at the valves or in the field shall be made using Rain Bird Pen-Tite connectors

C. Three (3) feet long Pig-Tail wire splices shall be allowed only at 1500 ft. intervals. The wire splices shall be enclosed in an RCV Box with cover stenciled "E8" in yellow.

A The backflow prevention units shall be installed as shown on Plans and Details. Backflow prevention units shall be installed per local codes including certification.

Adjust the valves and alignment and coverage of all spiritider heads. If it is determined that adjustments in the irrigidion equipment or nozzle changes will provide proper and mnee adequate coverage, make all necessary changes or make arrangements with the mandacture to have adjustments make, prior to any planting. These changes or adjustments shall be made without adjustments on the Oamer.

After all new sprinkler pipe lines and risers are in place and connected, all necessary diversion work has been completed, and prior to installation of sprinkler heads, the control values shall be opened and a full head of water used to flush out the system for a minister of simular. Sprinkler heads shall be installed only after flushing of the system has been accomplished to the complete satisfaction of the Dumn's Representative.

The entire system shall be operating properly before any planting o

A All electrical equipment and wiring shall comply with local and state codes and be ins skilled and licensed in the trade.

Valve boxes installed near walks, curbs, header boards, and paving shall not abut those items. Top surfaces shall be flush with, and perpendicular to, items listed above.

Remote control values shall be adjusted in order that a uniform distribution of water is applied by th sprinkler heads to the planting areas for each individual value system.

3.14 VALVE BOXES

3.15 AUTOMATIC CONTROLLER LOCATION AND INSTALLATION

3.16 CONTROL WIRE

3 17 BACKELOW PREVENTION UNITS

3.18 FLUSHING THE SYSTEM:

3.19 ADJUSTING THE SYSTEM

- Stakes shall be driven into the ground in such a way as to minimize damage to the ball of the tree, and shall I placed so that the tree will blow away from the stakes, except where such placement will cause damage by parked cars.
- B. Form loops around trunk with lies, and securely attach to stake(s). Attach loose enough so that tree can sway slightly in the wind. (Refer to Detail)

Broadcast the recommended soil additives per 1,000 square feet and cultivate to a depth of C based upon required softs and plant laboratory report. It is the contractor's responsibility to extain softs lests. Softs analysis shall be done by Soils & Plant Laboratory, Inc. 412:5 Lyon, Santa Ana, CA (714) 558-8333. Copies of the report shall be set to the Chunck Representatives. 3 10 GUYING

Omit rototiling on skepes 2 to 1 or greater in ration. Instead, lightly hand scarify the soil. Refer to Drawings for sloped areas, if any.

J. Patch all areas having damage from erosion and so related earth moving to create a smooth and regular surface for planting. Final grade to be approved by Owner's Representative.

For plants other than azaleas, camellias, and fems, backfill plant pits with soil excavated from pit. Do not any additional amendments to backfill mix.

Prepare soil mix for back fill in pits for azaleas, camellias, ferns and other plants (as specified) as follows:

The prepared soil shall be uniformly blended in an area adjacent to the planting work and shall be accurately proportioned using a sullatile measuring container. Unused excavaled soil shall be removed from site. Protect the mix from water until this see nglaced in factofit around plants.

Weed abatement: after earthwork, installation of irrigation system, and soil preparation, but prior to planting, perform weed abatement program to all planting areas as follows:

C. All the end of two weeks, apply Toxond Lip' or equal systemic herbicide. Do not imgain within site (b) hows site application, therbicide short be applied by an Do not imgain within site (b) hows site application. Herbicide short be applied by an Do not med application is more imgineering pairtuin. All exemptions are applied to the required to me the application is more imgineering pairtuin. All exemptions are applied by an exemption of the application is and applied pair (and exemptions) and applied the structure site applied by a second structure and a second structure and applied pair (and exemptions) applied to the structure site applied by a second structure applied pair (and exemptions) applied to the structure site applied pair (and exemptions) applied to the structure structure applied pair (and exemptions) applied to the structure structure applied pair (and exemptions) applied p

Apply pre-emergent weed control chemicals to hand planted groundcover areas. Do not apply to areas to be seeded.

b. Proceed with installistion of shrubs and groundcover after removal of any weeds by cultivation. The Contractor bale presponsible for control of weeds in all landscape areas through the final acceptance of the work. Any selective weed control straying or physical weed (removal shall be the Contractor's responsibility and the Contractor where parts are resulting to make a contractor and the responsibility and the Contractor's response resulting to make a contractor and the responsibility and the Contractor where parts are response resolution to make a contract data for the response response resolution to make a contractor and the response response response response resolution to make a response response resolution to make a response results for more areas response response resolution to make a response response response resolution to make a response response response response response response response response resolution to make a response respons

All herbicides shall be applied only by a licensed herbicide application agency. No herbicides shall be applied without first obtaining written approval from the city inspector.

Position plants in plant locations indicated on drawings and secure approval before excavating pits, making necessary adjustments as indicated.

An pils for two-shall be day squares with bottom level, the length of sides equal to three times the width and 2' less than the degring of the two rest and L. Compacied solis at sides and bottoms shall be loosened by scalinging or other agrouped method. Once the there is positioned in the pl. the pit shall be filled with soil as per specs, theroughly settled by water application. (Refer to planting details and spacing details.)

Prepare depressed water basin as wide as plant rootballs at each plant. Water thoroughly, backfilling any voids with additional soil.

may views, anothe after structures were for earl shifts shift be printed in plus at least one and one-half limes greater than the diameter of the routial and is "beine habition" for batil. Compacted soil at bottom of plus all be lossed and the plift least in "habition" to be bottom of the batil. Company justicely builty the plift shall have been down and were all has been properly shall. The plift shall have been down as shall be intered of batility and the plant shall be also all the shall be intered from the shall be shared from the shall be battle that the shall be intered from the shall be shared from the shared battle shared bottom in the battle intered from the shall be shared from the shared battle s

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

(b) Set plants in center of pits so that crown of plant will be level with finished grade after settling of soil, then backfill, and water. (Refer to spacing detail)

Ground Covers (a) Pits for flat sized plants to be at least 4" x 4" x 4". Ground cover areas shall be movined prior to planting. No flatted liner, or potted plants shall be planted in my solit.

(c) Flatted plants shall be well-rooted with runners at least 4" but not more than 6" in length.

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

A Roll subgrade when soil is reasonably dry, using a 125 pound water baltast roller. If rolling will not fem the sod bed undernorful, it shall be permitted to settle until the Ountry's Representative determines a satisfactory controlline has developed. Revised er scaraft all imparations and cost of this required to establish unitimiting and an analysis of the Aurer's Representative determines and initiated and an analysis of the Aurer's Representative bedree any soil a function.

The lawn edges shall be maintained in a neat condition until acceptance of the work.

All trees shall be installed with bark protection devices at their crowns. (Refer to planting detail)

Sod is to be freshly cut and placed in sections not smaller than one square foot. Stagger the joints between rolls. Sit soil (use soil waste that has failen off sod) into all joints to fill any voids created. Roll soil with lightly weighter office after completion of all sodding operations.

Sufficient measures shall be taken to the Contractor to ensure the lawns against damage resulting from pedestrian traffic. If any type of barrier is used, it must meet with the approval of the Owner's Representative. Any damage to the lawns shall be repaired by the Contractor before acceptance will be made.

made. Repain: When any portion of the sod area becomes discolored, waterbagged, or otherwise damage unhealthy following sodding within the period of Contractor's responsibility, the affected portion sha repared to re-establish the condition and grade of the sol prior to installation and shall then be rep as originally specified at in cost to the Outer.

A Sign erase. Bolt to lighting planted sign inclusions for lyoss and amount of code to be used. Alevate scale characts may be only only gene sparated of the Unacharage Arbitects for the Dam's. Beyeserstatism: The designed stary marks that be applied by an approved hydromach company Designed stary marks will be effect to finished or non-singled arbits a 2 hour time limit, or be rejecte and ensemble and a Contraction or dury marks that be applied within a 2 hour time limit, or be rejecte and ensemble all Contractions or dury marks that be applied within a 2 hour time limit, or be rejected and ensemble all Contractions or dury marks that be applied within a 2 hour time limit, or be rejected and ensemble accounted to the space.

Turf Areas: The designed seed and sturry mix shall be applied in designated areas by a hydromulch company within a 2 hour time limit per container mix. (Refer to Planting Plan Where applicable, a substitute seed mix may be used only upon approval of the Landsca Owner's Recrementative.

Daily Work Sheets: Daily work sheets shall be signed by the Nozzlemen and sent to the Owner's Representative for payment approval. The following information shall be recorded:

Protection/Cleanup: Prevent and/or clean up overspray onto concrete reservoirs, drainage dtbhes, channels, structures, roads and waikways. Overspray and spitage onto restricted an shall be removed the same day at Contractor's expense to the satisfaction of the Owner's Representative.

Law around trees shall be installed no closer to the tree trunk than the width of the rootball, and shall be maintained at this distance.

Apply sulfate of ammonia at the rate of 5 Lbs. per 1,000 Sq. FI. to all areas be planted.

Keep area moist by regular irrigations for a period of two (2) weeds to germinate existing weed seeds.

3.04 SOIL CONDITIONING (also see Fine Grading Section)

2 CU. YDS. nitrolized wood shavings 20 LBS. iron sulfate

1/3 Washed Plaster sand 1/3 Canadian Peat Moss 1/3 Loamite or Forest Hum

3.05 WEED CONTROL/ABATEMENT

Backfill mix for Palms shall be concrete sand. (Refer to details)

Hydroseeded or hand seeded planting areas;

2. Shrub and hand planted ground cover areas

3.06 PLANTING SHALL BE DONE AS FOLLOWS:

Planting Vines, Shrubs and Groundcovers

Trees and Vines Occurring in Lawn

3.07 TURF GRASS SOD

3.08 HYDROSEEDING

1. Seed - types, amounts

3. Mulch - type, amount

6. Area covered - in acres

2. Fertilizer - analysis, amount

4. Seeding additive - type, amount

5 Number of loads - amount of water

7. Equipment used - capacity and license numbe

A. Planting of Trees

Trees 36" box size or larger, shall be immediately guyed after planting with four guys per tree. (Refer to Detail)

3.11 PRUNING For bidding purposes when no soils report is available in all planting areas the following application shall be made per 1,000 square feet of area and shall be thoroughly cultivated in two directions into the top 9° of soil, and the area

Pureling of narsery stock shall not be done pilor to delivery. Plants and trees shall only be grained for health or structural reasons, including the need to eliminate diseased, damaged or structurally unsound growth. Pureling shall be performed counting in MISA 2000 in terministical Society of Automature structurals under seguritis and a regulated atomit approach by the Landscape Architect. LEAVE OPEN WOUNDES TO AIR GRY - DO NOT USE MY FORM OF "TREE PANIT" OR WOUND SEALER. 3.12 MULCHING:

Planing pits shall be excavated three times the diameter and 2" shallower than the rootball depth for trees, twice as wide and 6" deeper than the rootball for shrubs. (Refer to planting details).

A All planting areas (except as noted) shall be mulched (top dressed) with a minimum of 2' depth layer of wood fiber material. Remove mulch falling on hard-surface areas. 3.13 CLEAN-UP

A. During the course of the work and at its conclusion, remove surface material from the site and leave the premises in a neat and clean condition. Remove all tags, labels, nursery stakes and ties from all plants.

3.14 PROTECTION

Contractor shall carefully and continuously protect all areas included in the Contract, including plant materials fences, supports, public safety, etc., until final acceptance of the work by the Owner's Representative.

3.15 MAINTENANCE

- A. Maintenance operations shall begin immediately after each plant is planted and shall be continued satisfactority for a period of 90 days after the time all items of work have been completed as specified herein and to the satisfaction of the Ouner's Representative.
- During the maintenance period specified in paragraph A. above, all plants and planted areas shall be kedt watered at all times: weeds shall be removed and disposed of: basins and depressions shall be topi maretra ai ai imes; meses sinai te remove and oppose or clasms and oppession stati te mariatarie and culturel and key term of timed anound news and sharks appeared and debits shall be regularly removed from planets; and water system shall be maintained and repaired; rodents; shall be controlled; and the entire project shall be courted for that a neat and ciene condition is presented at all times. Keep walks and culturs swept clean. Legally dispose of excess materials including paper and debits in planet areas.
- Maintain a sufficient number of men and adequate equipment to perform the maintenance work herei specified from the time of planting until completion of the maintenance period and acceptance by the Durner
- An application of fertilizer shall be made to all landscape areas just prior to the completion of the maintenance period according to the recommendations for the required soils laboratory report.
- A written notice requesting a pre-maintenance inspection shall be received by the Owne at least 5 days to completion of the project.
- A written notice requesting final inspection shall be received by the Owner's Representative at least 5 days prior to completion of maintenance period.
- The Contractor shall make a periodic inspection of plant materials until the end of the guarantee plant period. If unfavorable conditions exist which might be harmful to be guaranteed plant, be contractor shall not have be clower on the plant of the conditor, or the may be bedit responsible under the guarantee. Pure maintenance: inspection and final inspections are to be held with the understanding that the pr
- has been reviewed by the principals of the responsible Contractor in advance of the review by the Owner's Representative and/or Owner. Discrepancies noted during this advance review are to be corrected before the province review these official inspections.
- The Landscape Contractor shall refer to the Landscape Maintenance Manual for further maintena requirements (if applicable). L.

PART 4 - GUARANTEES

4.01 GUARANTEE

The defaultion and groundhoot shall be generated by Control to a to grow that and health by control of more (9) do you at the term of the default of the def

4.02 REPLACEMENT STOCK

All replacement shock shall be subject to the same warranty requirements as the original stock. Any damage due t replacement operations shall be repaired by the Landscape Contractor. At the end of the warranty period, interpetions shall be required in only the T-canadic Construction Respectisible, Developer, Frenti and Landscape Contractor. At plants and Isam areas not in a healthy growing condition shall be removed and replaced with plant and grasses of all level and and size border be tooled the not plant grasses.

END OF SECTION

LICENSED PROFESSIONAL LOGO AND COMPANY INFORMATION
LICENSE STAMP
LAST NAME RESIDENCE 1357 STREET NAME OWNER CONTACT INFORMATION
PLANTING AND IRRIGATION SPECIFICATIONS
REVISIONS
MM/DD/YY
sheet no.: L10

10 OF 10