

DEPARIMENTOF	ABS
RECREATION & PARKS	ADJ
221 N. Figueroa St. Ste 400	ALT.
	\angle
	APPROX.
	AC
	ASTM
PLANNING. CONSTRUCTION	0
and MAINTENANCE DIVISION	W BC
and MAINTENANCE DIVISION	BPU
	BM
DARRYL FORD	BS
SUPERINDENDENT	BW
(212)202 2682	B/W
(213)202-2082	СВ
	CJ
	CLF
	CO
	CONC.
(213)202-2652	CONST.
	CF
ZHIYA HUANG	CSP
LANDSCAPE ARCHITECTURAL	DF
LANDSCAPE ARCH ASSOCIATE I	DG
(213)206-2666	DIA.or O
	EA
YIYI PENG	EC
LANDSCAPE ARCHITECTURAL	EJ
	ELEV.
(213)204-0959	EQ. FB
	FL
	FG
	FIN.
MIKE BONIN	FS
COUNCIL DISTRICT 11	FOC
	FOW
	FI CA
	GALV
	GPM
	HORIZ.

BS	ACRYLONITRILE BUTADIENE	ID	INSIE
	STYRENE	INV.	INVE
JD.I	ADJACENT	IN.	INCH
U T	ALTERNATE	JOIN	MATO
/	ANGLE		BOTH
		JT.	JOIN
		IB.	POUI
STM		LE.	LINE
		MAX	MAXI
2		MEG	ΜΔΝΙ
<u>v</u>		MH C.	ΜΔΝΙ
		MIN	MININ
		MISC	MISC
		NIC	NOT
55	BOTTOM OF STEP	NO or #	
5VV	BOTTOM OF WALL	NU.01 #	NOT
3/ VV	BOTH WAYS		
В			
; 			
.C	CENTER TO CENTER		
;J	CONTROL JOINT		PULL
LF		P DOC	
:0	CLEAN OUT	PUC	POIN
CONC.	CONCRETE	PP	POW
CONST.	CONSTRUCT	PRC	POIN
CF	CUBIC FOOT	PSI DVO	POUI
SP	CORRUGATED STEEL PIPE	PVC	POLY
CY	CUBIC YARD		QUIC
)F	DRINKING FOUNTAIN	R	RADI
)G	DECOMPOSED GRANITE	RCP	REIN
0IA.or O	DIAMETER	RCV	REMO
A	EACH	RP	REDU
C	END OF CURVE		BACh
IJ	EXPANSION JOINT	SD	STOP
ELEV.	ELEVATION	SHT.	SHEE
Q.	EQUAL	SPECS.	SPEC
В	FIELD BOOK	SS	SANI
Ľ	FLOWLINE	SSPWC	STAN
G	FINISH GRADE		FOR
IN.	FINISH	SQ.FT.	SQU
S	FINISH SURFACE	TC	TOP
OC	FACE OF CURB	TG	TOP
WO	FACE OF WALL	TS	TOP
т	FEET	TW	TOP
GA.	GAUGE	VERT.	VERT
GALV.	GALVANIZED	W/	WITH
BPM	GALLONS PER MINUTE	WM	WATI
IORIZ.	HORIZONTAL	WWM	WEL
	LOCATION OF COMPACTION TEST,		
Ψ	AS INDICATED ON THE PLANS		

	INSIDE DIAMETER
	INVERT ELEVATION
	INCH
	MATCH EX. ADJACENT GRADE
	BOTH HORIZ. & VERT.
	JOINT
	POUND
•	
•	
<i>.</i>	
	NUTIN CONTRACT
r #	NUMBER
	NOT TO SCALE
	ON CENTER
	OUTSIDE DIAMETER
	PLANTING AREA
	PULL BOX
	PROPERTY LINE
	POINT OF CONNECTION
	POWER POLE
	POINT OF REVERSE CURVE
	POUND PER SQUARE INCH
	POLYVINYL CHLORIDE
	QUICK COUPLER VALVE
	RADIUS
	REINFORCED CONCRETE
	REMOTE CONTROL VALVE
	REDUCED PRESSURE
	BACKFLOW DEVICE
	STORM DRAIN
	SHEFT
CS.	SPECIFICATIONS
	SANITARY SEWER
NC.	STANDARD SPECIFICATION
	FOR PUBLIC WORKS CONSTRUCTION
т	SOLIARE EEET
1.	
-	
Ι.	
Λ	WELDED WIRE MESH

DWG NO.	DESCRIPTION
TS- 0.0	TITLE SHEET
SP- 0.1	SPECIFICATIONS
SP- 0.2	SPECIFICATIONS
SP- 0.3	SPECIFICATIONS
SP- 0.4	WATER CALCULATION SHEET
LS- 1.0	DEMOLITION PLAN
LS- 2.0	CALLOUTS PLAN
LS- 2.1	LAYOUT PLAN
LS- 3.0	PLANTING PLAN & PLANTING DETAIL
LS- 4.0	IRRIGATION PLAN
LS- 5.0	CONSTRUCTION DETAILS
LS- 6.0	IRRIGATION DETAILS
LS- 6.1	IRRIGATION DETAILS
19 62	



REVISION DATE: 2/16/2023 3:24 PM FILE: O:\ARCH_ENG\VENICE OF AMERICA CENTENNIAL PARK\CDS\TS.0.0 TITLE.DWG

GENERAL

Division 1, General Provisions for the Department of Recreation and Parks; the Standard Specifications for Public Works Construction, hereinafter referred to as SSPWC, latest edition with the current yearly supplements; and the 2002 Edition of the Additions and Amendments to the SSPWC, shall be made a part of these plans. Website: http://eng.lacity.org/techdocs/stdplans/s-600/s61028.pdf. Where conflicts occur between Division 1, General Provisions for the Department of Recreation and Parks and the Standard Specifications for Public Works Construction, Division 1 of the Department of Recreation and Parks shall take precedence. Where conflicts occur between this Notice To Contractors (NTC) and the SSPWC this NTC shall take precedence. Subsections included within this NTC modify or add to the corresponding subsection (by number) of the SSPWC, latest edition with current yearly supplements; where options for materials and/or methods appear in the SSPWC, the option listed hereon shall be used. This improvement consists only of work called for on these plans. The Contractor shall maintain adequate sanitary facilities on the jobsite from the beginning to end of grading operations. Underground substructures: the location of existing underground substructures, utilities, and pipelines as shown on the plans have been located from the best available records and have not been verified in the field. It shall be the contracor's responsibility to verify the locations of said substructures and lines even if not shown on the plans and to take all necessary precautions to prevent damage to the same. Straight grades shall be run between contours and/or spot elevations shown unless otherwise indicated. Should conflicting and/or erroneous information be found on the drawings, the Contractor shall notify the Landscape Architect prior to commencement of work. It shall be the responsibility of the Contractor to provide adequate supports for all excavations where necessary to protect personnel and property from any damage that might occur as a result of the collapse of excavation. The Contractor shall maintain current Cal OSHA permits as required and a copy of said permit shall be posted at the project. The Contractor shall provide access control for pedestrians and vehicles for entire project from the beginning to end of grading operations. The Contractor shall keep the construction area sufficiently dampened to control dust caused by grading and construction. Contractor shall, at all times, provide reasonable control of dust caused by wind. The Contractor shall control noise resulting from repair of heavy equipment after normal working hours by locating such activities as far as practicable from adjacent inhabited areas and so that such activities do not constitute a public nuisance or disturb the peace. Heavy equipment shall be kept in good operating condition and muffled as required by law.

PLANS AND SPECIFICATIONS

The Contractor/RAP Staff shall be responsible for:

To get the necessary approval, sign offs and authorization from the project landscape architect, as indicated on the plans, prior to proceeding to the next project phase. All approvals and submittals shall be transmitted to the Recreation and Parks Advance Planning project landscape architect.

Indicates required field inspections with the Department of Recreation and Parks Project Landscape Architect . Notify all party's three (3) days prior to the required inspection.

SCHEDULE OF WORK

The Contractor/Rap Construction staff shall submit a Schedule of Work for approval to the Department of Recreation and Parks Project Landscape Architect prior to the commencement of work. The Contractor/Rap Construction staff shall schedule all work on weekdays (excluding Saturday, Sunday and City holidays) between the hours of 7:00 a.m. and 4:00 p.m. The work area shall be as defined on the Title Sheet, or as indicated on the Plans by means of a contract limit line.

$\sqrt{\sqrt{}}$ INSPECTIONS

All work and materials are subject to inspection and approval by Department of Recreation and Parks Project Landscape Architect. Any work done without proper inspection will be subject to rejection. As indicated in Section 2-11 of the Standard Specifications for Public Works Construction.

The Contractor shall notify the Department of Recreation and Parks three (3) days prior to inspection of the following for approval. Failure to do so will hold the Contractor responsible for all charges that arise from this:

1.ROUGH GRADING: When forms have been set, to approve alignment. Offsets or vertical controls shall be verifiable in the field, or be provided in grade sheet form, and submitted to the Department of Recreation and Parks for approval prior to the inspection.

2.FINISH GRADE REVIEW: For all finish grades in planting areas following rolling and prior to turf or landscape planting.

- 3.PRE-FINAL INSPECTION (refer also to Section 42 of Division 1, General Provisions): A minimum of two weeks before the Final Inspection, Recreation and Parks shall hold a Pre-final Inspection. The Pre-Final Inspection shall be attended by the Department of Recreation and Parks, the Contractor, and invited parties associated with the Project. At this time, a list of items requiring correction or completion before the Final Inspection will be compiled. The following items shall be delivered to the appropriate Department of Recreation and Parks personnel: manufacturers' data, manuals, operating instructions, and keys, as required in Section 38 of Division 1, General Provisions.
- **4.CONTRACT FINAL INSPECTION** (refer also to Section 43 of Division 1, General Provisions): Approximately seven (7) days prior to completion of the Work, the Contractor shall first notify the Department of Recreation and Parks that he desires a Final Inspection of the Project. During this inspection, the Inspector, the Department of Recreation and Parks, the Contractor and other parties concerned only with the contractual requirements of the Work will compile a Final Inspection Correction List, incorporating all items of work and corrections required to complete the Project. This list must be completed with thirty (30) days of the Final Inspection, or a new Final Inspection and Correction List shall be required.
- **5.GENERAL GRADING** All trees to be planted in either an elevated berm or elevated planter. There shall be a minimum of 3' of clean soil between the top of the non permeable soil slab and the area where with the trees are to be planted. Contractor to provide all soil testing on site. Contractor to provide licensed hazardous waste hauler and provide manifest copies to the City prior to completion of the project. Contractor to pay and process a City of Los Angeles Department of Building and Safety grading and haul route permit. If any abandoned oil wells are encountered, the contractor shall contact the State Division of Oil, Gas and Geothermal Resources for inspection and direction. All work within an approximate radius of 50 feet, and or any work that is requiring a access through the radius as indicated above, of any unforeseen oil well shall stop until appropriate direction is received from the City. Contractor shall have identified an area for stockpiling of soil while contamination soil results are being assembled. Stockpile shall be covered with Visqueen and secured until a appropriate site for disposal and or reuse is identified. Site shall be secured with 6 foot temporary chain link fencing for the duration of the contract. During site grading and excavation, an onsite, unarmed security officer is required. Any railroad tracks encountered shall be recycled. Railroad ties shall be disposed of at appropriate landfill. All grading & drainage plans and sportsfield lighting foundations shall be designed, approved, wet stamped, and signed by a California licensed civil engineer.

MATERIALS SUBMITTAL

The Contractor shall submit a minimum of six copies of the Materials List, if applicable, to the Department of Recreation and Parks project landscape architect within ten days of receiving the Notice to Proceed. All submittals shall be sent to the Department of Recreation and Parks Project Landscape Architect at the same time as one submittal package. Any materials substituted for originally specified materials that have been rejected by Recreation and Parks shall have an alternate item resubmitted for approval within one week of the Contractor receiving the notice of rejection.

RECORD DRAWINGS (AS-BUILTS) SUBMITTALS

Record drawings shall reflect any changes made to the plans or specifications during the progress of the work as a result of addenda, change orders or adjustments due to field conditions or plan clarification. They shall also indicate any additional information discovered during the progress of construction that was not a part of the contract documents. All deviations from the specified depth at which materials are constructed shall be shown on the record drawings. Record all appropriate as-built information on the record drawings in red ink. As-built information shall include but not be limited to drain lines, valve locations, mainline locations and mainline wire installed separately from mainline. The record of each trade shall be made on the plan sheets for each trade as provided in the original plan set. The Contractor/RAP Construction Staff shall be responsible for coordinating all sub-Contractors work and shall produce a complete record of all installations, which shall be kept on the job site and updated daily during construction. At the completion of the Work and prior to final inspection, the Contractor shall submit signed 'as-built' blue-line prints to the Department of Recreation and Parks at the Operational Final Inspection, prior to the City's acceptance of the Contract Work, (per Section 39 of Division I of the General Provisions).

✓ LAYOUT OF WORK, GRADE SHEET APPROVAL

Grade stakes shall be a minimum size of 1" x 2" and shall be driven a minimum of 12" into ground; each grade stake shall be protected by a flagged lath projecting 24" above ground; grade stakes disturbed by on-site activities shall be reset by the Surveyor. If specified on the plan the Contractor shall have his surveyor provide grade sheets. The grade sheets shall be submitted to the Department of Recreation and Parks for approval one week in advance of any grading operations.

UNDERGROUND SUBSTRUCTURES

Service lines from other public utilities, including the Department of Water and Power shall be located by notifying **UNDERGROUND SERVICE ALERT at 1 - (800) 422-4133** prior to commencing any excavation. For all other utilities, contact Dig Alert at (800) 227-2600

1.GENERAL EARTHWORK

METHODS

The Grading Plan when approved shall be on the job at all times. All grades between contours and/or spot elevations shall be assumed to be straight grades. There shall be no localized depressions or humps, (308-2.1). The Contractor shall verify all grades and amounts of cut and fill before commencing work with the project Landscape Architect

The area to be filled shall be cleared of all vegetative material, except the existing trees to remain. Protect remaining trees during all construction.

All fill soil shall be compacted to 90% relative compaction and the Contractor shall obtain and pay for all soil compaction tests. Locations where compaction testing is required are shown on the plans with the symbol. The Department of Recreation and Parks may modify the exact location in the field, depending on field conditions. The total number of compaction test shall be no less than the number shown by the symbol. Minimum compaction of earthwork shall be 90% relative compaction unless noted otherwise. Prior to placing fill rip existing subgrade to a depth of 6 inches. Intermix first 6 inches of fill placed with ripped subgrade to eliminate interface lens. Place remaining fill in 8" lifts. The source of import soil shall be approved by the Department of Recreation and Parks prior to any grading operations. The Contractor/RAP Staff shall be required to provide an Agricultural Suitability soil test to establish the suitability of any imported soil and that soil concentrations of boron and salinity are within agricultural limits. The Contractor shall, at his own expense, amend the soil according to the recommendations of the soils report. Fill material 24 inches, or more, below the finish grade may contain up to 25 percent broken concrete or bituminous paving with maximum dimension of 3 inches of any piece. The top 24 inches of fill may contain up to 10 percent broken concrete or bituminous paving with a maximum dimension of 1-1/2 inches of any piece. Where the plans call for turf, the top 6" of soil shall have no object larger than 1" in least dimension. The contractor shall be responsible for removal and disposal of all excess soil and debris from the work area, (300-1.3.1, 300-2.6). No soil or debris shall be disposed of on Recreation and Parks Property without the permission of the Department of Recreation and Parks. The Contractor shall conform to Section 7-8.1 of the SSPWC latest edition with the current yearly supplements for clean up and dust control.

Ground water conditions encountered during the course of the work shall be brought to the attention of the Project Landscape Architect.

If any grading operation covered by this section shall extend into or through, or shall be commenced during the period of October 15 to April 15, the contractor/RAP STAFF shall be required to submit plans of the temporary erosion control methods and devices he proposes to use in connection with the grading operations to be performed during that period. Said plans shall be submitted to the Landscape Architect. The Contractor shall at no additional cost to the Department engage the services of an approved California licensed Soils Engineer and approved soils testing laboratory to provide subgrade, pipe bedding, and fill compaction control. The Soils Engineer shall perform field observation and testing during grading to assist the Contractor in obtaining the proper moisture content, compactive effort and degree of compaction. Where compaction is less than required, additional compaction effort shall be made with adjustment of moisture content, as necessary, until the specified compaction is obtained.

Upon completion of grading, the Contractor shall furnish the Department of Recreation & Parks' compaction report, certified by the Soils Engineers, showing the results of compaction tests of fill, subgrade and bedding and certifying that fill, subgrade and pipe bedding compaction complies with the percentage compaction specified.

2. CONCRETE

All concrete construction shall be as specified in this Section unless specified otherwise in this Notice to Contractors.

MATERIALS

BASE MATERIAL Base material for Portland Cement concrete shall be (CMB) crushed miscellaneous base, (200-2.4).

CONCRETE SPECIFIED BY CLASS receipt shall be given to the Department of Recreation and Parks, (201-1.1.2).

PORTLAND CEMENT All cement shall be Type II, low alkali Portland cement conforming to ASTM C150 (201-1.2).

AGGREGATES The aggregates for all concrete construction shall be fractured face aggregates obtained from a quarry in the San Gabriel River drainage area only and shall be certified non-reactive by an approved testing laboratory as approved by the Bureau of Contract Administration, (201-1.2.2).

COMBINED AGGREGATE GRADINGS

Combined aggregate gradings for Portland Cement shall be as specified under this section, (201-1.3.2). **EXPANSION JOINTS**

Expansion joints shall use a 3/8 inch thick asphalt impregnated felt expansion joint.

JOINT URETHANE SEALANT Lithoseal Trafficalk-G3 by L. M. Scofield Company, or an approved equal, (201-3). Color to match concrete.

EXPANSION JOINT PREMOLDED ASPHALTIC JOINT MATERIAL When specified, expansion joint material shall be 1/4 inch thick asphaltic joint material as manufactured by Sealtight Co., or an approved equal, (201-3).

DOWELS (EXPANSION AND END-OF-POUR JOINTS) Shall be grade 40 or grade 60 billet steel, (201-2.2).

END OF POUR JOINTS End of pour joints shall be 1/4 inch thick asphaltic joint material as manufactured by Sealtight Co., or an approved equal, (201-3).

COLORED CONCRETE ADMIXTURES Admixtures for colored concrete shall be Lithochrome Color Hardener by L.M. Scofield Company (800) 800-9900, or Davis Mix-in Colors for concrete by Davis Colors, (800) 800-6856, or an approved equal.

METHODS

SUBGRADE AND BASE PREPARATION AND COMPACTION Subgrade under all concrete shall be prepared and compacted in accordance with this section (301-1.). Locations where compaction testing is required are shown on the plans with the \bigoplus symbol. The Department of Recreation and Parks may modify the exact location in the field, depending on field conditions, if permission is granted from the Department of Recreation and Parks. The total number of compaction tests shall be no less than two (2) or the number indicated on the plans. The Contractor shall provide compaction tests for both subgrade and base material, if applicable, at the locations indicated on the construction plans. Results of the compaction tests shall be submitted to the Department of Recreation and Parks for approval prior to the pouring of concrete. Minimum subgrade and base compaction shall be 90% relative compaction.

EXPANSION JOINTS

Shall be placed against previously constructed concrete structures or as indicated in the plans (303-5.4.2) and per Recreation and Parks Detail 300 series. CONCRETE SURFACE FINISHING

CONNECTORCOLORNO. AND SIZE OF WIRE3M Model DBYYellowMax. 4-12 gage UF wires3M Model DBRRedMax. Concrete walks, pads shall have a medium sand blast finish, unless otherwise noted on the plans. The Contractor 3-14 gage UF wires shall prepare a minimum two foot by two foot sample for approval by the Department of Recreation and Parks before **QUICK COUPLING VALVES AND ASSEMBLIES** any concrete is placed, (303-5.5.3). Any sidewalk in the public street right of way constructed as a portion of this Quick couplers shall be 1 inch i.p.s., two piece, brass or bronze construction equipped with a cover, unless contract shall be finished in accordance with City of Los Angeles Public Works standards.

3. DISINTEGRATED GRANITE AND SOIL STABILIZERS

MATERIALS

DISINTEGRATED GRANITE Disintegrated granite shall be referred to by th disintegrated granite shall conform to the follo Sieve Designation

3/8 inch	100	No. 30	40-50
No. 4	95-100	No. 50	25-35
No. 8	75-80	No. 100	20-25
No. 16	55-65	No. 200	5-15

The portion of D.G retained on the no. 4 sieve shall have a maximum percentage of wear of 50 at 500 revolutions as determined by AASHTO T96-77. The portion passing a No. 40 sieve shall have a maximum liquid limit of 25 and maximum plasticity index of 7 as determined by AASHTO T89-81 and AASHTO T90-81, respectively. Crushed aggregate screenings shall be free from clay lumps, vegetative matter and deleterious material.

SOIL STABILIZER

be manufactured by Stabilizer Inc., (800) 336-2468, or an approved equal.

PINE RESIN EMULSION Pine resin emulsion for soil stabilization shall be Road Oyl by Soil Stabilization Products Company, Inc., (209) 383-3296, or an approved equal.

PORTLAND CEMENT (FOR SOIL CEMENT)

Placed concrete shall be class 520-C-2500, maximum 4 inch slump. Pumped concrete shall be class 560-E-2500, maximum 6 inch slump. A complete delivery receipt shall be required for each truckload of concrete delivered. The

When specified, expansion joint material shall be urethane elastomeric sealant for concrete pavement shall be

, the abbreviat	ion (D.G.), or referred to a	is a decomposed granite. All
ollowing gradir	ig requirements:	
% Passing	Sieve Designation	%Passing

The stabilizer shall be a non-toxic, colorless, odorless, organic powder that binds D.G. screenings. The stabilizer shall

Portland Cement shall be Type II, (201-1.2).

4. STRUCTURAL CONCRETE AND MASONRY

All work shall conform to the latest edition, L.A. City Building Code (LACBC) in addition to the SSPWC; the LACBC shall take precedence where conflicts occur with the SSPWC.

CERTIFICATION AND TESTING

As required by the LACBC, certificates of identification and/or testing shall be provided for all concrete, reinforcing steel, concrete block, mortar, and grout materials delivered to the job site.

The following items refer to the corresponding SSPWC subsections in order to resolve conflicts with the LACBC, to stress items of particular concern, or modify, add to, or choose options in the SSPWC.

MATERIALS

CONCRETE SPECIFIED BY CLASS Concrete is designed for Fc=2000 psi; for durability placed concrete shall be class 560-C-3250, maximum 4 inch

slump and pumped concrete shall be class 660-E-3250, maximum 6 inch slump. A complete delivery receipt shall be required for each truckload of concrete delivered. The receipt shall be given to the Department of Recreation and Parks. **PORTLAND CEMENT**

All Cement shall be Type II, low alkali Portland cement conforming to ASTM C150. (201-1.2).

AGGREGATES

The aggregates for all concrete construction shall be fractured face aggregates obtained from a quarry in the San Gabriel River drainage area only and shall be certified non-reactive by a testing laboratory as approved by the Bureau of Contract Administration per Section (201-1.2.2).

COMBINED AGGREGATE GRADINGS Combined aggregate gradings for Portland Cement shall be as specified under this section, (201-1.3.2).

REINFORCING STEEL

Use ASTM A615 Grade 40 billet steel, (201-2). EXPANSION JOINTS

Use "Sealtight" 1/2 inch thick, full depth, self-sealing asphalt expansion joints by W. R. Meadows Inc. or equal, (201-3).

CONCRETE CURING COMPOUND

Use Type I compound, (201-4). CEMENT MORTAR

Where irrigation piping crosses a vehicular roadway or other paving having a width greater than 25 feet, a In lieu of the class and proportions shown in SSPWC 201-5.1, use Type S mortar, Fc=2000 psi, LACBC 91.2403(g), trench shall be excavated across the roadway or paving to accommodate a Class 315 PVC sleeve a minimum (201-5, 202-2.1.2). of two pipe sizes larger than the piping to pass through it, at a depth of 36" below the bottom of the paving, GROUT as measured from the top of the sleeve. Where remote control wiring crosses under paving having a width In lieu of SSPWC 202-1.5.2, use 2000 psi grout per LACBC 91.2403(r), (201-1.5). greater than 25 feet, a 3 inch Schedule 40 PVC sleeve shall be installed at a depth of 36" below the bottom of CONCRETE BLOCK the paving, as measured from the top of the sleeve. The backfill of the trench shall be a 2 sack cement slurry. Use 8" x 8" x 16" lightweight (103 pcf) units conforming with ASTM C90 Grade N-1, (202.2.1). The slurry shall extend from the bottom of the trench to within one inch of the bottom of the existing paving. LUMBER AND PLYWOOD FORMS The trench in the existing paving shall be repaired with a like paving material and join the existing paving both Formwork shall comply with this section, (204-1). horizontally and vertically.

METHODS

FOUNDATION MATERIAL TREATMENT AND SUBGRADE FOR CONCRETE SURFACES

Footing excavations shall comply with these subsections, (303-1.3). CONCRETE FORMWORK

Installation and removal of formwork for concrete footings and structures shall comply with these subsections, (303-1.3). PLACING REINFORCEMENT

The Contractor's attention is directed to the provisions of this subsection regarding: (1) securing reinforcing steel in position in accordance with the "Concrete Reinforcing Steel Institute" standards; (2) splicing of bars; and (3) bending of bars, (303-1.7). In masonry the thickness of grout between block units and reinforcing steel shall not be less than 1/2 inch.

PLACING CONCRETE

The Contractor's attention is directed to the provisions of this subsection regarding: (1) avoiding concrete segregation; (2) wetting forms and subgrade; (3) consolidation of concrete with vibrators; and (4) provision for construction and expansion joints, (303-1.8).

CONCRETE SURFACE FINISH AND CURING COMPOUND

Surface finish and provision for curing compound shall comply with these subsections, (303-1.9). MASONRY CONSTRUCTION

The Contractor's attention is directed to the provisions of this subsection regarding: (1) workmanship; (2) proper masonry units; (3) metal stops on horizontal reinforcing; (4) thoroughly rodding vertical cores; (5) cleaning cores of debris and mortar; (6) holding reinforcement straight and in place; and (7) cutting masonry with a power driven abrasive saw. If work is stopped for one hour or longer a horizontal construction joint shall be provided by stopping the grout $1 \frac{1}{2}$ inches below the top of block.

Masonry shall be laid in running bond, unless otherwise noted, (303-4).

7. IRRIGATION SYSTEMS

MATERIALS

SOLVENT WELDED PLASTIC PIPE

Schedule 40 PVC plastic pipe shall be used for pipe sizes up to and including 1 1/2 inch diameter on both the discharge and supply side of control valves, (212-2.1.3). Class 315 PVC plastic pipe shall be used for pipe sizes from 2 inch up to and including 3 inch diameter.

RESTRAINED PLASTIC PIPE

Class 150, DR 18, C900 PVC pipe shall be used for pipe sizes of 4inch up to and including 10inch diameter.

REMOTE CONTROL VALVES All remote control valves shall be electrically operated with body of cast brass or bronze construction, (212-2.2.4) and installed per details.

CONTROL WIRE

Connection between the automatic controller(s) and the remote control valves shall be made with direct burial 14 gage, AWG-UF, 600 volt, copper wire. Wires shall be provided in the following colors: red, yellow, blue, green, orange, tan, purple, pink, brown, gray, and white.

CONTROL WIRE CONNECTIONS

Control wire connections shall be made with 3-M brand of DBY or DBR Direct Burial Splice kits, or approved equal. The splice kit shall consist of a one-piece malleable plastic bulb body with internal locking fingers, filled with re-enterable gel sealant and a Scotchlok Electrical Spring Connector. Materials shall be as follows: Connector shall be a flame retardant PVC insulator with a steel spring and shell within. Connector shall be

a <u>non-crimping</u> system

Tube material shall be clear see-through polypropylene. Gel material shall be hixotropic calcium organic complex.

Wire sizes and numbers of wires shall be as shown below:

otherwise specified on plans. The Contractor shall provide one quick coupler key with hose swivel for each five quick couplers installed. Contractor shall supply a minimum of one quick coupler key with hose swivel, (212-2.2.6) and shall be installed per details.

$\sqrt{VALVE BOXES}$

Valve boxes shall be of Portland Cement concrete with a cast iron frame and hinged double toggle locking cover. The inside dimensions of the box shall be 10 1/2 inches by 17 1/4 inches, Model 363 1/2 HFL by Eisel Enterprises Inc., or approved equivalent. The cast iron cover shall be permanently embossed, "GV" for gate valve, "RCV" for remote control valves, "QC" for quick coupler valves, MV for Master Valves, or FM for Flow Meter. Paint is not acceptable. Contractor shall supply one (1) valve box cover key for each five (5) valve boxes installed. Provide a minimum of two (2) cover keys, (212-2.2.7). Boxes are to be installed per details.

METHODS

NEW PIPELINE INSTALLATION - GENERAL

 $\sqrt{\sqrt{}}$ When pipelines run parallel they shall be separated horizontally by a minimum distance of 12". When pipelines cross each other they shall be separated vertically by a minimum distance of 3".

 $\sqrt{\sqrt{}}$ No irrigation trenching shall pass closer than eight feet of the base of any tree. No tree root larger than 2" diameter shall be cut without approval of Department of Recreation and Parks Project Landscape Architect.

COVER OVER MAINLINES:

 $\sqrt{\sqrt{}}$ Maintain 24 inches of cover over mainlines 3" and smaller in diameter. Mainlines 4" and larger in diameter shall have 30" of cover over the top of the pipe, (308-5.2). All trenching shall be per details

COVER OVER LATERAL LINES:

 $\sqrt{\sqrt{}}$ Maintain 12 inches of cover over all lateral lines. Note: F.G. is top of soil and does not include mulch.

Pipe bedding and backfill: bedding shall surround the pipe to one foot above the top of the pipe. Bedding shall be placed in 6 inch lifts. All bedding shall be densified by water jetting. Water jetting shall be sufficient to thoroughly wet bedding material around the pipe, (306-1.2.1). There shall be no rocks over 1/2" in greatest dimension and no organic matter placed in the bedding material. Backfill shall be the material placed above the bedding. Backfill shall be placed in one-foot lifts and densified by water jetting. Jetting shall be continued until backfill collapses and water is forced to the surface, (306-1.3.1). Pipe trenches thoroughly densified by water settling shall have a minimum relative compaction of 85%. There shall be no rocks over 2" in greatest dimension or organic matter in the backfill. Trench areas which exhibit insufficient densification shall be subject to compaction tests as requested by the Department of Recreation and Parks. All such compaction tests shall be at the expense of the Contractor. Additional tests may be required until the 85% minimum compaction is achieved. Finished trenches shall match finish grades flush with adjacent finish grades. The Contractor shall be responsible for maintaining the trenches flush and smooth until final acceptance of the project. Trenches in existing lawn shall be repaired per method A lawn repair of the Landscape Planting section of the Notice to Contractors.

The maximum trench width shall be two and a half diameters of the pipe. Note: Trench depth must be verified by the project Landscape Architect.

PIPES CROSSING UNDER PAVING:

Where irrigation piping crosses a vehicular roadway or other paving having a width of less than 25 feet, a PVC Schedule 40 PVC sleeve which is a minimum of two pipe sizes larger than the piping to pass through it, shall be jacked under the paving at a depth of 36" minimum. Where remote control wiring crosses under paving having a width of less than 25 feet, a 3 inch PVC Schedule 40 PVC sleeve shall be jacked under the paving at a depth of 36" minimum. All sleeves shall extend 3' minimum beyond the edges of paving.

REMOTE CONTROL WIRING UNDER PAVING

Remote control wire under paving shall be placed in a 3" class 315 PVC sleeve buried at a depth of 36. Roadways less than 25 feet in width shall have the sleeve jacked under the roadway.

FITTINGS ON MAINLINES:

All outlets from a mainline shall be accomplished with line sized tees with an outlet of the specified size. No saddle tees shall be permitted.

INSTALLATION OF VALVE BOXES

Boxes shall be set flush with existing grade or grade as established on grading plans, including sloped areas, and all soil within 12 inches of the perimeter of the box shall be compacted by water settlement as indicated in the trench repair section of this specification. Boxes are to be positioned per details.

LAYOUT OF PIPING

Pipe layout as shown on irrigation plan is schematic. Contractor may route piping in the most expedient manner consistent with the requirements set forth herein, including avoidance of tree roots. Contractor shall adhere to As-Built requirements as shown below.

INSTALLATION OF IRRIGATION HEADS

Sprinkler heads in lawn areas shall be set flush with finish grade at initial installation and protected during construction. All soil 12 inches from the perimeter of the head shall be compacted by water jetting as indicated in this specification, or set in sand as shown on details. Turf Spray Heads that have a Matched Precipitation (MP) feature.

MAINTENANCE KIT

(Applies to cast iron and brass gear driven rotary pop-up heads only.) The Contractor shall supply to the Department of Recreation and Parks one rotor maintenance kit per 100 heads, or one kit minimum if less than 100 heads, (308-5.4.4).

SPRINKLER HEAD RISER

All plastic sprinkler heads shall be installed on swing joint assemblies as shown on details. Swing joint assemblies for Thompson gear driven rotary pop-up heads shall be fabricated of Schedule 40 galvanized steel pipe and fittings as specified in details. METHODS

NEW PIPELINE INSTALLATION - GENERAL

 $\sqrt{\sqrt{}}$ When pipelines run parallel they shall be separated horizontally by a minimum distance of 12". When pipelines cross each other they shall be separated vertically by a minimum distance of 3".

 $\sqrt{\sqrt{}}$ No irrigation trenching shall pass closer than eight feet of the base of any tree. No tree root larger than 2" diameter shall be cut without approval of Department of Recreation and Parks.

COVER OVER MAINLINES:

 $\sqrt{\sqrt{}}$ Maintain 24 inches of cover over mainlines 3" and smaller in diameter. Mainlines 4" and larger in diameter shall have 30" of cover over the top of the pipe, (308-5.2). All trenching shall be per details.

COVER OVER LATERAL LINES: $\sqrt{\sqrt{}}$ Maintain 12 inches of cover over all lateral lines.

SPRINKLER HEAD RISER

All plastic sprinkler heads shall be installed on swing joint assemblies as shown on details. Swing joint assemblies shall be as specified in details.

AUTOMATIC CONTROL SYSTEM INSTALLATION

The foundation of the automatic controller shall be per details. Each remote control valve shall have a separate 24 volt control wire from the automatic irrigation controller.

$\sqrt{\sqrt{}}$ LOW VOLTAGE WIRE CONNECTIONS

Connectors shall be DBY or DBR as manufactured by 3M Corp. Control wires shall be stripped of 1/2 inch insulation, inserted into the electrical spring connector, and the connector twisted in a clockwise direction until the wires are tight. Insert the completed splice into the gel-filled tube, and check visually to confirm that the wire nut has been pushed past the fingers and is seated in the bottom of the tube. Position wires in wire channels and close insulator cover.

CONTROL WIRE

Connection between the automatic controller(s) and the remote control valves shall be made with direct burial 14 gage, AWG-UF, 600 volt, copper wire. Wires shall be color coded as follows

CONTROLLER WIRE COLOR	CONTROLLER STATIONS	CONTROLLER STATIONS	CONTROLLER STATIONS	CONTROLLER STATIONS
RED	1	11	21	31
YELLOW	2	12	22	32
BLUE	3	13	23	33
GREEN	4	14	24	34
ORANGE	5	15	25	35
TAN	6	16	26	36
PURPLE	7	17	27	37
PINK	8	18	28	38
BROWN	9	19	29	39
GRAY	10	20	30	40





PROJECT NAME:	VENICE OF AMERICA	CENTENNIAL PARK COMPLEX	ADDRESS:	501 S Venice Blvd Venice CA 90291	
Δ	RE	VISIC	ONS:		DATE:
\triangle					
$\frac{\Delta}{\Lambda}$					
$\underline{\Delta}$					
\triangle					
Р С	IAN M		^{≣:} CAT	ΊC	NS
DRA YY.F	WN BY	:		OVE	D BY:
SCA	LE:		ISSUE	DA	TE: 23
	#			20	20

DRAWING NO.						
SP- 0.1						
HEET	2	OF	14	SHEETS		

1638

CONTROLLER	TAPE BUNDLE COLOR
A	RED
В	YELLOW
С	BLUE
D	GREEN
E	WHITE
F	BLACK

INSTALLATION OF IRRIGATION CONTROL WIRING Wire bundles shall be taped at 5' o.c. Lay bundles in the mainline trench. Do not tape bundles to the mainline piping.

The Contractor shall run two extra black control wires from the automatic controller to the farthest valve on the system, or to the farthest valve at each end of the controller area, if the farthest area extends in two directions from the controller

Each controller shall have a separate 14 gage, AWG-UF, 600 volt, WHITE common wire for each 10 consecutive stations on each irrigation controller.

Common 1,	stations 1-10
Common 2,	stations 11-20
Common 3,	stations 21-30
Common 4,	stations 31-40

Each exterior controller enclosure shall have a ground rod installed if detailed on controller installation detail.

Wire shall not be taped to mainline (308-5.5). If control wires run in same trench as lateral lines, or are dead headed, wire depth shall be maintained at 24". For installation, see details.

IRRIGATION SYSTEM FLUSHING AND TESTING

The irrigation system shall be flushed in the presence of the Department of Recreation and Parks project Landscape Architect. Flushing shall start with the valve closest to the point of connection and proceed with each consecutive valve toward the valve farthest from the point of connection. Each lateral system shall have each riser capped during the flushing commencing with the riser closest to the valve and proceeding to the farthest riser. After the entire irrigation system has been flushed the system shall be pressure tested in accordance with section 308-5.6 of the SSPWC.

/ The irrigation system mainlines shall be pressure tested following the flushing of the complete system. The mainlines shall be tested for 24 hours at 125 p.s.i. with all control valves in place and closed. During the test, the Contractor shall provide pressure gauges downstream from the backflow device and upstream from the farthest remote control valve in the system. Air pressure testing of the irrigation system is acceptable if approved by the Department of Recreation and Parks.

RECORD DRAWINGS (AS-BUILTS) AND CONTROLLER CHARTS

As built plans shall be maintained daily throughout the construction period and turned over to the Department of Recreation and Parks project Landscape Architect at the Operational Final Inspection, as indicated in the General section of this Notice to Contractors in the Record Drawings Submittal section.

The Contractor shall provide two copies of a controller chart showing the irrigation system installed. The chart shall be done on a half size photographic reproduction of the irrigation plan and shall reflect the as-built data. Each station shall be shown in a different color and control wire locations shall be indicated. The complete plan shall be laminated on each side with a 20 mil acrylic plastic sheet. A 3/4" brass grommet shall be placed in each top corner. The Contractor shall obtain approval of the controller chart from the Department of Recreation and Parks, before proceeding with the plastic lamination.

WARRANTY FOR IRRIGATION SYSTEM WORK

The entire sprinkler irrigation system shall be warranted to be free from defects in materials and workmanship, and installed in accordance with this Notice to Contractors and the SSPWC. The Contractor shall be required to repair or replace any defects in material or workmanship which may develop within one (1) calendar year from the date of acceptance, ordinary wear and tear and unusual abuse or neglect excepted. Further, the Contractor shall be required to make any necessary repairs within 24 hours of notification at no cost to the Department. If the Contractor or his agent fail to make such repairs within the stipulated time, the Department shall make such repairs or have repairs made by a third party and bill the Contractor for all expenses that accrue from making such repairs.

GUARANTEE AGAINST SETTLEMENT

If, within one (1) calendar year from the date of acceptance, settlement occurs along mainlines, lateral lines, at valve boxes, or other irrigation related appurtenances, and adjustments in pipes valves and sprinkler heads are equired to bring the system, sod, or paving to the level of the permanent grades, the Contractor shall make all adjustments without additional cost to the Department, including complete restoration of any planting, paving, or other improvements damaged as a result of settlement.

STEEL PIPELINE

Joints shall be made with Teflon tape applied to the male threads only, (308-5.2.2).

PLASTIC PIPELINE-SOLVENT WELDED OR THREADED ENDS

Prior to the application of the P.V.C. solvent cement, prepare all surfaces to be solvent welded with tetrahydrofuran primer tinted purple. Teflon tape shall be used on all plastic male pipe threads, (308-5.2.3).

BACKFLOW DEVICE INSTALLATION AND CERTIFICATION

The Contractor shall obtain certification of the backflow device and submit two copies of the certification to the Department of Recreation and Parks at the Operational Final. The backflow certification shall be made on the County Health Department standard form and filed with the County Health Department, Cross Connection Section, Room 150, 2525 Corporate Place, Monterey Park, CA, 91754. The contractor shall paint all backflow prevention devices above ground with two coats of forest green enamel. Mask all identification tags prior to painting, (308-5.3). After certification remove all test cocks, replace with threaded brass plugs, and deliver test cocks to the Department of Recreation and Parks.

6. CHAIN LINK FENCING AND MISCELLANEOUS METAL CONSTRUCTION

MATERIALS

CHAIN LINK FENCING

Chain link fencing materials shall be as specified in details RP 500-506 and Section (206-6).

Pipes for posts, braces and rails shall be Class 1, Schedule 40, ASTM F 1083 or, Class 1A, with a minimum 50,000 psi yield strength. Class 1 pipe shall be galvanized as indicated in this section of the Notice to Contractors. Class 1A pipe shall have a minimum hot dipped zinc coating of 0.9 oz./Sq. Ft., 15 micrograms of chromate per square inch and a minimum or 3 mils of acrylic coating on the exterior of the pipe. The interior coating of Class 1A pipe shall be hot dipped galvanized with .9 oz/ Sq. Ft. Zinc. Materials for chain link fence posts, rails and braces shall be sized as follows:

NOMINAL SIZE (inches)	ACTUAL O.D. (inches)	CLASS 1 PIPE Wall Thickness	CLASS 1 Weight LBS per lin. ft.	CLASS 1A PIPE Wall Thickness	CLASS 1A Weight LBS/L.F. (pounds)
1 1/4"	1 5/8"	.140	2.27	.110	1.82
1 1/2"	1 7/8"	.145	2.72	.120	2.28
2"	2 3/8"	.154	3.65	.130	3.12
2 1/2"	2 7/8"	.203	5.79	.160	4.64
3"	3 1/2"	.216	7.57	.160	5.71
3 1/2"	4"	.226	9.11	.160	6.56
4"	4 1/2"	.237	10.79	NA	NA
6"	6 5/8"	.280	18.97	NA	NA

CHAIN LINK FENCING AND MISCELLANEOUS METAL CONSTRUCTION cont.

CHAIN LINK FABRIC

STEEL SHAPES

√√ GALVANIZING

SSPWC.

√√ MANUFACTURER'S CERTIFICATE OF COMPLIANCE The manufacturer of the Chain link fabric, fence posts, rails and braces shall provide the Contractor a Certificate of compliance for each shipment sent to the project site. The Certificate shall state that the materials delivered conform the specification for materials as indicated in Section 8 of these Notice to Contractors. The Certificate of Compliance shall be delivered to the Construction Manager before any fencing materials are installed at the project site.

REPAIRING OF DAMAGED GALVANIZED SURFACES Galvanized surfaces which have been damaged in transport or during installation shall be re-coated using the metalizing process or zinc oxide, zinc dust paint per Section 210-3.5 of the Standard Specification.

TUBULAR STEEL SHAPES Cold formed shapes for tubular steel fencing shall conform to ASTM A 500, Grade B, in the size and wall thickness shown on the plans and details. Unless specified on the plans all post and rails shall be 3/16" thick. All pickets for fencing shall be 11 gauge.

$\sqrt{\sqrt{}}$ TUBULAR STEEL WELDING

fabricated metal fencing panels shall be shop assembled and welded.

VV PAINTING (TUBULAR STEEL AND CHAIN LINK FENCING WHEN REQUIRED) "Factory" coated tubular steel fencing or chain link fencing shall be exempted from this requirement. All other shop fabricated tubular steel fencing or fencing constructed on site shall be painted in accordance with the requirements for painting "Ferrous Metal (Non-galvanized) Surfaces" below. The two finish coats shall be black unless otherwise specified.

METHODS

CHAIN LINK FENCE

All connection bolts shall not extend more than 1/4 inch past the end of the nut and be free from burrs.

TUBULAR STEEL PAINTING Prior to priming and painting, all steel shall be made free of loose mill scale, rust, oil and grease. Welds shall be smoothed by grinding. Damage to "factory" coated tubular steel or chain link fencing shall be repaired after installation by sanding damaged paint surfaces and by applying one coat of manufacturer specified primer and two

new coats of specified color coat.

7. PAINTING

MATERIALS

Ferrous Metal Tubular Shapes (Non-Galvanized), Semi-Gloss

Painting Sequence	Finishing Schedule	Recoat And Drying Time	Coverage At Required Wet Film Thickness	Required Wet Film/Dry Film Thickness
1 st coat: Synthetic	Corrobar	Min. 24 hrs.	450 square feet	3.5 wet mils;
alkyd white corrosion	(43-5)	Max. 72 hrs.	per gallon	2.0 dry mils
inhibiting primer				
2 nd coat: Semigloss	Permashee	Dry to touch: 30	375 square feet	4.2 wet mils;
enamel acrylic latex	n (W 901)	min.; Recoat: 4	per gallon	1.5 dry mils
exterior enamel		hrs.		
3 rd coat: Semigloss	Permashee	Dry to touch: 30	375 square feet	4.2 wet mils;
enamel acrylic latex	n (W 901)	min.	per gallon	1.5 dry mils
exterior enamel				

Non ferrous metals (Galvanized steel, Aluminum, Cor-Ten® Steel), Semi-Gloss

Painting Sequence	Finishing Schedule	Recoat And Drying Time	Coverage At Required Wet Film Thickness	Required Wet Film/Dry Film Thickness
Pre-coat: galvanized steel only. Acid etch*	Galva-etch (GE 123)	n/a	n/a	n/a
1 st coat: Alkyd primer	Galv-Alum (QD 43-7)	Dry to touch: 30 min.; recoat: 2 hrs. † Max. 48 hrs.	350 square feet per gallon	4.6 wet mils; 2.0 dry mils
2 nd coat: Synthetic alkyd white corrosion inhibiting primer	Permasheen (W 901)	Dry to touch: 30 min.; Recoat: 4 hrs.	375 square feet per gallon	3.5 wet mils; 2.0 dry mils
3 rd coat: Semigloss enamel acrylic latex exterior enamel	Permasheen (W 901)	Dry to touch: 30 min.	375 square feet per gallon	4.2 wet mils; 1.5 dry mils

* Galva-etch is a water reducible acid pre-treatment for galvanized metals. Do not use on aluminum.

[†] Recoat time for Galv-Alum is 2 hours if material is sprayed, 16 hours if brushed or rolled. Second coat must be applied within 48 hours

Primers, Sealer, and Undercoaters

Alkyd based	Block-it (QD 42-56) Quick-dry pigmented primer/sealer	Dry to touch: 30 min.; Recoat: 1 hr.	435 square feet per gallon	3.7 wet mils; 1.5 dry mils
	princi/scaler			l

Galvanized steel chain link fabric shall conform to ASTM A 392, Class 2, 1.20 0z./Sq.Ft. zinc. Fabric shall be 9 gauge and be woven in a 1 1/2" mesh unless otherwise indicated on the plan. Top and bottom selvages shall be knuckled.

PVC coated galvanized steel fabric, when specified, shall conform to ASTM F 668, Class 2b, "fused and adhered", and meet the galvanizing requirements contained in this section of the Notice to Contractors, (206-6.3).

All structural steel shapes shall be as specified in the applicable detail.

Where called out, metal products shall be hot dipped galvanized in accordance with TABLE 210-3.2(A) of the

Shall conform to the AWS code for procedures, appearance and quality. All welds shall be ground smooth. All

Chain link fence shall be installed and stretched tight between posts.

Paint systems, catalog names, and product numbers listed below are based on products of Dunn-Edwards Corporation. This shall be considered the standard of quality against which the Department of Recreation and Parks will judge equivalency. Equivalent materials from alternate manufacturers will be considered as an approved equal. Contractor's material submittal for proposed alternate must include complete material specifications from manufacturer. Paint systems described below are for specific surfaces as indicated. In addition to the information

provided herein, paint materials shall also be governed by the requirements set forth in section 210-1 of the SSPWC.

PANTING cont. METHODS

GENERAL Refer also to section 310-1of the SSPWC.

COLOR SPECIFIED Colors shall be selected from color chip samples provided by manufacturer of paint system approved for use by the Department of Recreation and Parks project Landscape Architect.

CONDITION OF SURFACES TO BE PAINTED

Contractor shall verify condition of surfaces to be painted prior to commencement of painting work. Work of other trades that been left or installed in a condition that is not suitable to receive paint, stain, or other specified coatings shall be immediately called to the attention of the Department of Recreation and Parks. Painting of defective or unsuitable surface implies acceptance of the surfaces.

PROTECTION OF EXISTING WORK

The Contractor shall take all necessary precautions to protect previously installed work and materials which may be affected by work. Items to be protected include, but are not limited to, turfgrass, shrubs, trees, ground cover, prefinished surfaces, and adjacent surfaces. Contractor shall furnish at his expense sufficient drop cloths, shields, and other protective devices necessary to prevent spray or splatter from fouling surfaces not being painted. Contractor shall be responsible for protecting equipment and fixtures from damage resulting from use of fixed, movable and hanging scaffolding, planking and staging, (310-1.4) Damaged equipment to be repaired or replaced at contractor's expense.

PROTECTION OF NEW PAINTING

"WET PAINT" signs, barricades, and such other devices as are required to protect newly finished surfaces shall be provided. Contractor shall be responsible for removal of signs protective materials, and temporary protective wrappings provided by others for protection of their work after completion of painting operations.

SURFACE PREPARATION, GENERAL

The Contractor shall perform preparation and cleaning procedures in strict accordance with coating manufacturer's instructions for each substrate condition, (310-2)

√√ SURFACE PREPARATION FOR GALVANIZED SURFACES

Galvanized surfaces shall be prepared for painting in accordance with section 310-3 of the SSPWC.

√√ SURFACE PREPARATION FOR WOOD SURFACES Wood surfaces shall be prepared for painting in accordance with section 310-4 of the SSPWC.

APPLICATION

The Contractor shall apply painting and finishing materials in accordance with the manufacturer's printed instructions. Application methods and techniques that are best suited for the materials and surfaces to which coatings are being applied shall be used, (310-5)

The number of coats specified is the minimum that shall be applied. All undercoats shall be tinted to the approximate color of the finish coat. The Contractor shall apply additional coats when undercoats, stains, or other conditions show through the final paint coat, until paint film is of uniform finish, color and appearance.

Each material shall be applied at not less than the manufacturer's recommended spreading rate and mil thickness. The total dry-film thickness of coatings shall not be less than 1.2 mils for each required coat.

CLEANING, TOUCH-UP AND REFINISHING

The Contractor shall remove all spattering, spots and blemishes caused by work done throughout the work period. Upon completion of painting, the Contractor shall remove all rubbish, paint cans and accumulated materials resulting form work and dispose of off site. All areas of work shall be left in a clean, orderly condition. Runs, sags, misses, holidays, stains, or any other defects in the painted surfaces, including inadequate coverage and mil thickness, shall be satisfactorily touched up, refinished, or repaired a necessary to produce a result satisfactory to the Department of Recreation and Parks project Landscape Architect.

8. LANDSCAPE PLANTING

MATERIALS

AMMONIUM PHOSPHATE

Shall be a standard agricultural grade of ammonium phosphate having guaranteed analysis of 16-20-0.

GYPSUM

Shall be agricultural grade.

approved equal.

ESTABLISH - GENERAL PURPOSE FERTILIZER(Not intended for soils with Native Plant Materia) Shall have a minimum analysis of 1-1.3-5, (N-P-K), derived from rock phosphate, peat moss, chicken manure, sand, sulfate of potash, gypsum, and EDDHA chelate. As manufactured by Earth Works Soil Amendment, Inc., (310) 322-9702, or an

HYDROSEED MULCH FIBER

Shall consist of virgin wood fiber of Aspen or Alder. It shall <u>not</u> contain any waste paper, newsprint or straw material. The mulch shall contain a green dye to facilitate application. Fiber shall be as manufactured by Conwed Co., (Green Tag), Silva-Fiber by Weyerhauser Co., or an approved equal, (212-1.2 (e)). Submit spec to the project Landscape Architect prior to start of work.

HYDROSEED STABILIZER

Shall consist of natural muciloid materials supplied by Ecology Controls M-binder, (805) 684-0436, no equal.

HYDROBLEND SOIL ACTIVATOR Shall have a minimum analysis of 1.2-1.4-5, (N-P-K), derived from rock phosphate, peat moss, chicken manure, sulfate of potash, gypsum. As manufactured by Earth Works Inc., (310) 322-9702, or an approved equal.

FEATHER MEAL

Shall have a minimum analysis of 12-0-0,(N-P-K), derived from feathermeal. As manufactured by Earth Works Inc., (310) 322-9702, or an approved equal.

NITROFORM UREAFORM

Shall be a standard commercial grade of nitroform having a guaranteed analysis of 38-0-0.

ORGANIC AMENDMENT

Shall be type I organic soil amendment, consisting of nitrolized fir shavings.

OVERSEED TOPDRESSING, EARTH WORKS ORGANIC TOPDRESSING Shall be, derived from composted wood products, peat moss, chicken manure and a wetting agent. As manufactured by Earth Works Inc., (310) 322-9702, or an approved equal.

Potassium sulfate

Shall be a standard agricultural grade of potassium sulfate having guaranteed analysis of 0-0-50.

ROUNDUP

Shall be a water-soluble herbicide for non-selective control of weeds containing 480 grams per liter of the active ingredient Isopropylamine salt of N-(phosphonomethyl) Glycine (Glyphosate) per U.S. gallon, as manufactured by Monsanto Chemical Company, or approved equal.

PRE-EMERGENT HERBICIDE

Shall be Balan Granular, by Elanco, or an approved equal. All pre-emergent herbicides, when required, shall be specified and applied by a licensed Pest Control Advisor.

FERTILIZER TABLETS

Shall be fertilizer tablets shall be Agriform 21 gram, 20-10-5, available from Western Farm Service, (805) 487-4961.

MULCH

Shall be seasoned tree chip mulch, free all foreign matter including weed and tree seeds. Mulch chip size shall be minimum one (1) inch in diameter and not more than two (2) inches in diameter. Submit sample of mulch and source to Landscape Architect/ The Department of Recreation and Parks for approval prior to application.

WATER HOLDING POLYMER Shall be "Broadleaf P-4"

METHODS

TOPSOIL PREPARATION - GENERAL The type and thickness of topsoil shall be as shown on the plans. If not shown, the topsoil shall be the existing class "C"

on-site topsoil. Remove all stones over 1 inch in greatest dimension, to a depth of 6 inches below finish grade, (308-2.3.1).

Prior to planting, the top six (6) inches of all areas (including slopes) shall be free of weeds, stones, and other deleterious matter one (1) inch in diameter and larger.

RAP STAFF/ CONTRACTOR TO: Provide agricultural suitability tests from a approved Lab for all areas that are to be planted. Depth of test to coincide with size of material to be planted, i.e.: bore depth fo turf 6, 12" for shubs and 24" for trees. Suitability text to be given to the project Landscape Architect. Contractor/RAP staff to amend soils as recommended on the soils report. Soils report recommendations shall supercede amendments specified here within.

TOPSOIL PREPARATION

If not otherwise specified, all lawn and ground cover areas shall receive the following soil preparation:

- 3 cubic yards, Type I organic soil amendment per 1,000 sq. ft., (.003 CY/Sq.Ft.)
- 75 lbs of Establish per 1,000 sq.ft., (.075 Lbs./Sq.Ft.) 5 lbs. of Feathermeal, 12-0-0, per 1,000 sq. ft., (.005 Lbs./Sq.Ft.)

The soil preparation materials shall be cultivated into the soil to a depth of 6 inches minimum and thoroughly watered, (308-2.3.1).

LANDSCAPE PLANTING cont.

FINISH GRADING (FOR LAWN AREAS)

Finish grading of lawn areas shall take place after the soil has dried out to a workable condition following the soil preparation operations. The soil shall be remodeled and smoothed to the required grades and contours, then rolled in two directions at right angles with a water ballast roller weighing 200 to 300 pounds. Any resulting irregularities in the grade after the initial rolling shall be re-raked, cut or filled, then re-rolled until the grade is free from irregularities. No heavy objects shall be taken over the areas at any time. The final finish grade shall be uniform, without abrupt changes in grade, within one-tenth of a foot of the grades shown on the plan, and approved by the Department of Recreation and Parks project Landscape Architect prior to seeding, (308-2.4).

WEED ABATEMENT ("GROW AND KILL")

Weed abatement shall apply to all turf and planting areas. The abatement operation shall be commenced only after removals, grading, hardscape, construction, installation of irrigation system, soil preparation, and fine grading of turf and planting areas have been completed.

NOTE: It is required that herbicides be applied by a licensed **PEST CONTROL APPLICATOR.**

CONTRACTOR RESPONSIBILITY DURING WEED ABATEMENT OPERATION AND

APPLICATION PRECAUTIONS

The Contractor/RAP staff shall abide by all laws and codes governing weed abatement operations including but not limited to CAL-OSHA requirements and The Healthy School Act which includes 72 hour notice to employees and patrons, submittal of a "Pest Control Recommendation Form" to Recreation and Parks, and a completed and accurate MSDS (Material Safety Data Sheet) to be at the site of application. The area of application shall be posted as such and barricaded for public safety and information. On sites over 1/2 acre in size the contractor shall utilize a Department of Recreation and Parks approved plan of phasing the application.

The Contractor/RAP staff is responsible or any and all damage done to plant materials outside of the treatment area. Contractor shall replace, in kind and size, any plant material damaged or killed through the application of herbicide.

Any Contractor, who is obligated under contract with the Department for the construction or refurbishment of a park facility that involves the intended use of herbicides or other pesticides, must first notify the pest management supervisor of the Forestry Division. Prior to any approved pesticide applications at any recreation/child care center, the contractor is also required to notify the recreation director-in-charge at least 72 hours in advance of the date/s of application. This is to conform to the State of California Healthy Schools Act of 2000(AB2260). Also, all pest control work performed at any facility should fall within the guidelines of the Department's IPM programs. In addition, each individual project will require a written recommendation by a licensed Pest Control Advisor for any pesticide application.

Any guestions regarding pesticide application and procedures at Recreation and Parks facilities shall be directed to the Department of Recreation and Parks and the Department's Forestry group, Vegetative Management (213) 485-4826.

In addition to the afore listed responsibilities the following precautions shall be observed in handling and

applying herbicide 1. Before applying, Contractor shall read and understand all instructions provided by the manufacturer. 2. Product shall not be used when winds are gusty or in excess of 3 miles per hour, or when any other

- conditions exist, which would result in drift. 3. Avoid combinations of pressure and nozzle type or adjustment that result in mist.
- 4.Do not apply during rain, or if rain is forecast within twelve hours. If rain occurs within twelve hour period,
- material must be reapplied after plant growth has dried out. 5. Contractor shall observe extreme care not to allow spray to contact desirable plant material. Use cardboard, plywood, or other appropriate material to shield plant materials outside of the treatment area from overspray.
- 6.Do not apply to bare ground.
- 7.Do not add any other products to any herbicide mix, including spreader stickers or surfactants, unless required by the label directions and approved by the Department's Pest Control Advisor (PCA).

WEED ABATEMENT: GROW AND KILL METHOD

- Contractor shall follow the "grow and kill" steps set forth below:
- Step 1. Clear site of all dead or living vegetative growth by hand or mechanical means. Step 2. Thoroughly water all turf and planting areas daily to keep soil evenly moist for a period of at least two weeks.
- Step 3. At the conclusion of the growth period, treat all plants within the treatment area with Roundup at an application rate of five (5) quarts of Roundup mixed in 50 gallons of clean water per acre applied by spraying. Thoroughly moisten all plant material with herbicide. Step 4. Do not water or otherwise disturb treated areas for a period of two (2) weeks.
- After two week kill period, remove all dead plant growth. If any living plants are observed, entire Step 5. plant, including roots, shall be removed by hand. Minimize physical disturbance of the soil. Repeat process.

WEED SUPPRESSION (NON-HERBICIDE WEED REMOVAL)

Weed suppression, shall apply to all turf and planting areas. The suppression operation shall be commenced only after removals, grading, hardscape construction, installation of irrigation system, soil preparation, and fine grading of turf and planting areas have been completed. Contractor shall thoroughly water all turf and planting areas for a period of two weeks minimum prior to commencing removal. Contractor shall clear site of all dead vegetation and living weeds by hand or mechanical means. All removed vegetation shall be properly disposed of off site and site to be inspected by the project Landscape Architect prior to commencement of work.

TREE AND SHRUB PLANTING

Plant pits for all 1 gallon, 5 gallon, 15 gallon, and all boxed size trees, shall be twice the width and equal to the depth of the container rootball. Note that this requirement differs from the SSPWC (308-4.5).

All plant pit backfill soil mix shall be amended per the site Agricultural Suitability Test recommendations that had been performed by an approved Lab.

See planting plans for locations of soil sample extractions. Samples shall be taken at a depth of 6", 12", and (24" if trees are present).

Unless otherwise specified, the backfill mix for all plants shall be 60% percent on site soil and 40% percent Type I organic soil amendment and 1 lb. of "Establish," general purpose fertilizer per gallon of container, or 1 lb. per each 4" of box size. "Broadleaf P-4" water holding poylmer shall also be added to the backfill mix at the rate of 1 oz. per foot of rootball diameter. Backfill shall be native soil where native plant material is used.

Unless plant material is native, Each plant pit shall also receive "Agriform" slow release fertilizer tablets, 21 gram, 20-10-5, as shown in the relevant planting details, and as follows:

1 gallon - 1 tablet 5 gallon - 2 tablets

15 gallon - 6 tablets

Larger than 15 gallon size - 2 tablets per half inch of trunk diameter

Space tablets evenly around the perimeter of the rootball, approximately 3 inches below finish surface. After shrub or tree has been planted, water by hand to hydrate polymer.

Remove all watering basins around trees planted in lawn areas at the end of the maintenance period. All trees planted in lawn areas shall have a 36 inch diameter unplanted area around each tree.

METHOD "A" LAWN PLANTING - REPAIR, SEEDING

Irrigation trenches shall be fully compacted and the grade brought flush with the adjacent undisturbed finish grade. Irrigation trench areas and areas where equipment has damaged the existing lawn shall be seeded per this

Sow seed at a rate of three (3) pounds of common Bermuda per 1,000 sq. ft. and six (6) pounds of perennial ryegrass per 1,000 sq. ft. Mulch all seed with 1/4"(or 3/4 cubic yard per 1,000 sq. ft.) of Bio-organic Finale. Verify seed mix with the Project Landscape Architect prior to planting

Alternate method: Existing sod may be carefully cut, removed and reused to sod trenches after backfilling and densification.

SOD LAWN

The sod shall be machine cut to between 1/4" and 5/8" thick, not including top growth or thatch. Sod shall be laid on a grade which has been amended and finish graded in accordance with the topsoil preparation and finish lawn grading specifications of the Notice To Contractors. The sod strips shall be laid tight against the adjacent strip with adjacent ends forming a running bond pattern. After laying the sod, roll with a minimum 300 lb. water ballast roller and irrigate. The sod shall be as specified on plans.

MULCHING

All planting areas except lawn shall receive a three (3) inch deep layer of tree chip mulch per the Planting Details and this Notice to Contractor Materials list. Mulch shall be spread evenly throughout planting beds and tree watering basins. Do not bury ground cover. Mulch to be kept away crown of the root ball.



DRAWING NO.

SP- 0.2

HEET 3 OF 14 SHEETS

REVISION DATE: 12/22/2022 10:24 AM FILE: O:\ARCH_ENG\VENICE OF AMERICA CENTENNIAL PARK\CDS\SP.0.0 SPECS.DWG

LANDSCAPE PLANTING cont.

MAINTENANCE AND PLANT ESTABLISHMENT

The Contractor shall be responsible for maintenance within the area of work throughout the period of construction and the plant establishment period. The maintenance shall include continuous operations of watering, the removal of all weeds in planting areas and all broad leaf weeds in lawn areas, mowing, rolling, trimming, edging, cultivation, fertilization, spraying, control of pests, insects and rodents, reseeding, plant replacement (irrespective of cause), or any other operations necessary to assure normal plant growth and the collection and removal of all trash daily. Any malfunctions of, or damage to, the irrigation system caused by the Contractor or RAP staff in the prosecution of his work shall be repaired within 24 hours.

The plant establishment period shall be for a period of 120 days unless extended as described in this section. The plant establishment period shall be started when all planting and related work has been completed, in accordance with the contract documents. The beginning of the plant establishment period shall be determined by an on site review by the Department of Recreation and Parks project Landscape Architect. Trees and shrubs shall be healthy and vigorous at the completion of the maintenance period. Broken or vandalized tree stakes shall be repaired to a condition as initially installed within seven (7) days of damage.

All lawn areas shall have 95 percent coverage with bare areas not exceeding three square inches. All lawns shall be of the grass specified and be free from all broad leaf weeds. The lawn shall not be allowed to grow higher than three (3) inches and shall be mowed to a one and one half (1 1/2) inch height. The lawn shall be mowed at least twice during the plant establishment period.

The Contractor shall maintain the area of work at maximum seven (7) day intervals and perform any needed tasks to keep the plants in a optimum growing condition/which includes repeal all invasive plants(including weeds.)

Five weeks after lawn seeding the RAP staff shall apply a slow release 38-0-0 granular fertilizer at a rate of 15 pounds per 1000 sq. ft. to all lawn areas. The fertilizer shall be applied in the presence of the Department of Recreation and Parks.

The Contractor shall immediately replace any and all plant materials and/or grass which, for any reason dies or is damaged while under the Contractors care. Replacement shall be made with seed and/or plants as indicated or specified for the original planting.

All shrubs and ground covers shall be guaranteed for a period of 6 months from the end of the plant establishment period. All trees and shrubs 15 gallon size or larger shall be guaranteed for a period of one (1) year from the end of the plant establishment period.

The designated plant establishment period is part of the total contract time. The plant establishment period will be extended at fourteen (14) day intervals if, at the end of the plant establishment period, the planting, irrigation and other improvements that do not reflect the intent of the plans

TREE PROTECTION SPECIFICATIONS

1.01 TREE PROTECTION

(a) All trees that occur within the area of work, as shown on the plans, and NOT specifically designated for removal, shall be protected by the following means:

- 1. ANY FAILURE BY THE CONTRACTOR TO ADHERE TO THE REQUIREMENTS SPECIFIED BELOW WILL RESULT IN THE SUSPENSION OF ALL CONSTRUCTION ACTIVITIES, TO BE DONE AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF OR PAYMENT FOR ANY TREES DAMAGED THROUGH NON-COMPLIANCE WITH THESE SPECIFICATIONS. THE MONETARY OR REPLACEMENT VALUE OF IMPACTED TREES WILL BE DETERMINED BY A RECREATION AND PARKS (RAP) ARBORIST OR BY A RAP APPROVED ARBORIST.
- 2. Defining the Tree Protection Zone (TPZ) The radius (not the diameter) of the TPZ, measured from the outside of the tree trunk, shall be calculated according to the following:
- (a) Single trunk trees multiply the trunk diameter in inches, measured 4.5' above grade, by 1.5 feet.
- (b) Multi trunk trees multiply the sum of the diameters of all trunks in inches, measured 4.5' above grade, by 1.5 feet.
- (c) Palm trees 5' from the base of the trunk.
- 3. Beyond the TPZ, the contractor shall also be responsible for protecting all trees within the boundaries of the construction zone, including vehicular access areas, lay down areas, and any other areas impacted by construction activities. Any damage to trees in these areas shall also be subject to the same monetary or replacement requirements specified in #1 above. Any necessary root cutting in this area must be confirmed with either the RAP or other RAP approved arborist. See also the General Conditions for any damage done by the contractor to landscaping or other park amenities that fall outside the boundaries of the construction zone.
- 4. Within the boundaries of the construction zone (including the TPZ), the contractor shall be responsible for mitigating construction-related dust accumulation on all trees by spraying the trunks, limbs, and foliage with water to a maximum height of 30 feet during the months of April through November, at monthly intervals.
- 5. Within the TPZ, the contractor shall adhere to the following requirements, including, but not limited to:
- (a) No stockpiling or storage of any material, debris, or soil.
- (b) No storage of any construction equipment.
- (c) No vehicular access. (d) No cutting of roots.
- (e) No disturbance of soil or grade changes.
- (f) No objects of any kind to be attached to tree trunks.
- 6. The contractor shall install a 5' temporary chain link fence with one pedestrian access gate along the boundary of the TPZ. See detail for temporary chain link fence on detail sheet.
- 7. The contractor shall provide one sign per each 20 lineal ft. of fence bordering the TPZ indicating that fencing shall not be removed. See sign detail that is included as part of the temporary chain link detail.
- 8. No work is permitted within the TPZ without the approval of: 1) the project landscape architect, 2) the project manager, and 3) RAP Forestry staff. Any work authorized within the TPZ must be done in accordance with the recommendations of a RAP arborist and under the supervision of a Monitoring Arborist. A Monitoring Arborist must be: 1) an ISA Certified Arborist or a Registered Consulting Arborist, with verifiable experience in protecting trees during construction; 2) approved by RAP Forestry. The Monitoring Arborist shall be hired and paid for by the contractor.
- 9. Irrigation to all trees NOT specifically designated for removal shall be kept in operation for the duration of the project. Contractor shall be responsible for hand watering all impacted trees if necessitated by temporary shutdowns to existing irrigation systems. Trees are to be irrigated deeply and infrequently so that soil moisture is detectable at a minimum depth of 18" using a soil probe. Watering schedule shall be verified with RAP Arborist, project manager, project Landscape Architect or the approved monitoring Arborist.
- 10.Upon job completion, contractor shall remove all items installed to protect trees during the construction process.
- 11. Any of the following Southern California native tree species fall under Ordinance No. 177404 of the Los Angeles Municipal
- (a) Oaks, including Valley Oak (Quercus lobata), California Live Oak (Quercus agrifolia), or any other tree of the oak genus indigenous to California but excluding Scrub Oak (Quercus dumosa);
- (b) Southern California Black Walnut (Juglans californica var. californica);
- (c) Western Sycamore (Platanus racemosa);
- (d) California Bay (Umbellularia californica). Contractor shall comply with the requirements of the ordinance found at: http://cityplanning.lacity.org/Code_Studies/Other/ProtectedTreeOrd.pdf.

(END OF SECTION)

PART ONE - GENERAL

1.1 DESCRIPTION

QUALITY ASSURANCE 1.2

- C. Miscellaneous Requirements:
- 1. Erection and maintenance of protections
- 2. Dust Control
- 3. Repair of Damages
- 4. Cleaning and Removal of Rubbish

PART TWO - PRODUCTS

- 2.1 MATERIALS

PART THREE - EXECUTION

3.1 SITE CONDITIONS

Examine the job-site and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper site-clearing operations, as directed by the City Engineer or the Consultant. Do not proceed until such detrimental conditions have been corrected.

3.2 PROTECTION

В.

D.

Α.

facilities.

- latest edition.
- performing work on or near the job-site. Comply with governing regulations.

3.3 SITE CLEARING AND GRUBBING

- A. General:

SITE CLEARING AND GRUBBING

A. All site clearing and grubbing on the job-site indicated on the Contract Drawings.

B. Site clearing shall consist of removing all vegetable growth such as trees, roots, stumps, shrubs, brush, limbs; and stone, boulders, clods, wood and other vegetative growth from the growth surface. Clearing shall also include the removal and disposal of trash piles, rubbish, etc.

Grubbing shall consist of the removal and disposal of wood roots, stumps, shrubs, brush, stone, boulders, clods, vegetable growth, etc. below the ground or subgrade surface.

A. Labor: Use adequate numbers of skilled laborers thoroughly trained in site-clearing operations and experienced in the necessary crafts and completely familiar with the specified requirements and methods needed for the proper performance of the work of this Section.

*B. Codes and Regulations: Perform all work of this Section in strict accordance with applicable Government Codes and Regulations especially meeting all safety standards and requirements of CAL/OSHA, County and [1999] Los Angeles City Building Code and applicable Amendments. [Conform to all storm water pollution control measures as required and provided in Section 02220 - EARTHWORK of the Project Manual.] Provide additional measures, added materials and devices as may be needed as directed by the City Engineer or the Consultant at no added cost to the City.

D. <u>Permits and Licenses</u>: Procure all City, County and State Permits and Licenses, including Municipal Business License and pay all charges and fees for the same.

A. Soil Sterilant: As specified in Section 02200 - EARTHWORK.

B. <u>Soil Treatment for Termite Control</u>: As specified in [Section 02200 - EARTHWORK Section 02285 - TERMITE CONTROL.

C. Provide Materials not specifically described but required for completion of the work of this Section as selected by the Contractor subject to the approval of the City Engineer or the Consultant.

Protect Existing Structures and Site Improvements [Indicated to remain] from damage by approved methods and/or as authorized by the City Engineer. Removal of all protections shall be when work of this Section is completed or when so authorized by the City Engineer or the Consultant. Apply protections to adjacent properties as required and directed by the City Engineer.

Protect Existing Utilities [Indicated or made known to remain] traversing the job-site and serving existing adjacent

Protect Existing Trees and Shrubs [Indicated to remain] by providing temporary surrounding fencing so located a sufficient distance away so that trees and shrubs will not be damaged by site-clearing operations.

Protection of Persons and Property (existing structures and site improvements).

1. Provide barricades, warning signs at open depressions and holes on adjacent property and public accesses.

2. Provide operating warning lights during hours from dusk to dawn each day or as otherwise required.

3. Protect existing remaining structures, utilities, sidewalks, pavements other facilities from damage as caused by settlement, undermining, washout or other hazards created by site-clearing operations of this Section.

4. Provide and maintain pedestrian and vehicular access in accordance with Work Area Traffic Control Handbook (WATCH),

E. Use means necessary to prevent air pollution or dust from becoming a nuisance to the public, to neighbors and to others

F. Maintain access to the job-site, other neighboring property, street and alley at all times.

G. The project site shall be maintained in conformance with Section 7-8 - PROJECT SITE MAINTENANCE of the Standard Specifications for Public Works Construction (SSPWC) and the requirements of this Project Manual.

1. For drawing clarity, not all trees, shrubs, brush, grass, weeds, or exact amount of trash or debris are shown on the drawings. Contractor shall carefully study the Contract Drawings, [the Soil Investigation Report and the Survey], visit the job site and verify the extend of the work to be done prior to the Bid.

2. Prior to starting job-site clearing operations in the company of the RAP Landscape Architect or Consultant Architect, Soil Engineer and Inspector; visit the job site and verify the extent of the work.

3. Site clearing and grubbing shall conform to Section 300-1 - CLEARING AND GRUBBING of SSPWC and applicable requirements of the Project Manual.

4. Site clearing and grubbing shall be done in the presence of the project manager or designated staff whom shall be notified 72 hours prior to clearing operation.

SITE CLEARING AND GRUBBING cont.

- B. Site Clearing and Grubbing Operations
- 1. To a depth of at least [1 feet] below [finish grade indicated on contract drawings] [existing ground surfaces] [or new graded surfaces whichever is lower] [or to a depth where settlement will not occur as caused by decomposition of roots]. Clean out all vegetable growth, roots, stomps, clods and other objective materials.
- 2. Treat roots remaining in the soil with a weed killer approved and as directed by the City Engineer or the Consultant.
- 3. Remove all concrete and masonry debris. Remove stones, boulders, clods which are [one (1) inch] [two (2) inches] or larger. Remove stones, boulders, clods which are one (1) inch or larger from all utility trenches.
- 4. Remove all existing rubbish and debris or those resulting from work operations of this Section as soon as possible, do not allow to pile up. Do not burn rubbish and debris on the job-site.
- 5. Remove all growths including trees and shrubs on the job-site within property lines including trees in tree wells and elsewhere [as noted on the Contract Drawings].
- 6. Existing Services to remaining structures are to be maintained at all times.
- 3.4 TOPSOIL
- A. Strip and remove existing sod, and stock pile existing sod if specified for reuse in the Contract Works.
- **B.** After proposed planting area(s) has been cleared of vegetation and grubbed, strip the existing topsoil to a depth specified and to provide at least a [6-inch depth of topsoil] [in areas shown on the Contract Drawings] to be turfed or planted and to fill planters without contamination with subsoils.
- **C.** If on site topsoil is specified for reuse, stock pile topsoil in an area clear of new construction or where directed by the City Engineer or the Consultant.
- [D. Maintain topsoil stockpiles in a manner which will not obstruct the natural flow of drainage.
- 1. Maintain the stockpiled topsoil free from debris and trash.
- 2. Keep the stockpiled topsoil damp to prevent drying out and creating a dusts source.
- 3. Soil samples shall be obtained and analyzed for agricultural suitability and fertility.
- and cultivate in accordance with Section 02950-TREE, PLANTS AND GROUND COVER of the Project Manual.
- 5. Provide Soil Sterilization in accordance with Section 02220 EARTHWORK of the Project Manual.]

3.6 STORAGE OF MATERIALS AT THE JOB-SITE

Storage not permitted beyond brief accumulation awaiting pick up by removal trucks. Delays in the removal of site-clearing materials from the job-site shall be subject to the approval of the RAP project manager.

(END OF SECTION)

4. Place and compact backfill in the planting area. Add soil amendments to topsoil in accordance with the recommendation



	NUE.				PH. NO.		
ALVE NUN	/BER	A-7 [RRIG. TYPE	MPR	GPM	10.7	
STATIC WA	TER PRESSURE @ WATER ME	ETER					74.0 (High 9)
SIZE	DESCRIPTION		G	PM	L	.OSS	
		Length	PSI loss/100'				
2"	SERVICE LINE			30.0			
		Length	PSI loss/100'				
2"	_WATER METER			30.0			
3"	BACKFLOW PREVENTER			30.0		40.00	
1 1/2"	_MASTER VALVE			30.0		10.00	
1 1/2"	FLOW SENSOR			30.0			
1 1/Z				30.0			
1 1/0"				30.0			
1 1/2	REMOTE CONTROL VALVE			30.0			
		Length	PSI loss/100'	GPM			
3"	MAINI INF	Lengar	1 10	110.0	-	0.00	
•		Lenath	PSI loss/100'	GPM	-	loss	
2"	MAINLINE	720	1.74	1.0		12.53	
		Length	PSI loss/100'	GPM		loss	
1 1/2"	LATERAL LINE	20	2.28	30.0		0.456	
		Length	PSI loss/100'	GPM	_	Loss	
1 1/4"	LATERAL LINE	0	2.72	22.0		0	
		Length	PSI loss/100'	GPM	_	Loss	
1"	LATERAL LINE	160	3.70	12.0		5.92	
		Length	PSI loss/100'	GPM	_	Loss	
3/4"	LATERAL LINE	40	4.50	7.0		1.8	
0.1		Length	PSI loss/100'	GPM	_	Loss	
2"	LATERAL LINE	0				0	
	AL LINE FITTING LOSS (10%)				_	0.00	007
		0.0			0.0		30.7
		0.0		0 422	0.0	+	0.0
	RED AT HEAD	0.0	*	0.433	0.00	±	0.0
							0.0

TOAL AVAILABLE WILL BE43.3 PSI.

alculate Max Annual Applied Water Allowance (MAWA) and Estimated Total Water Use (ETWU):	
	-

City	Los Angeles	State	Ca	Zip	90012		
Street	Address	221 N. Fig	ueroa Fourth Floor	Ste. 400			
Comp	any	Recreation	Recreation & Park, City of LA				
Email	Address	zhiyaHuan	g@lacity.org				
Fax No	0.						
Telepł	hone No.	213-202-2	213-202-2666				
Title		Landscap	Landscape architecture I				
Name	of Project Applicant	Zhiya Hua	Zhiya Huang				
Projec	et Name		F AMERICA CENTE	ENNIAL PARK SITE IMPR	ROVEMENT		

To determine if plantings are Low, Moderate or High water requirement plants, see CA Dept of Water

Resources Species Evaluati	on List:	http://www.slocity.org/utili	ties/download/outdoo	rconserv.pdf
nter values for your project in sq	uare feet:	MAWA Gallons	340,963.16	
Total Landscape Area	16859	MAWA Units	455.83	
Turf	0			
Low (Drought Tolerant)	16859	ETWU Gallons	121,772.56	
Moderate	0	ETWU Units	162.80	
High (Thirsty)	0			
Sports Field	0			

16859 [check total]

Average Eto for Los Angeles City (2000-2009) = 46.6 inches /year

Mandated ET adjustment factor = 0.70

Conversion factor (gallons to square feet) = 0.62 LA = Landscape Area

SLA = Special Landscape Area (sports field, vegetable garden)

SLA adjustment factor = 0.30 PF = Plant Factor from WUCOLS III

Vegetables

HA = Hydrozone Area square feet IE = Irrigation Efficiency (80%)

Units = Billing Units or 748 gallons MAWA = (Eto)(0.62)[0.7 * LA + 0.3 * SLA] ETWU = (Eto)(.062)((PF*HA)/IE+SLA)

O:\ARCH_ENG\Venice of America Centinneal Park\Water& pressure calculation\Indscpcalc

11/9/2022



City: Los Angeles

Property Owner

3<u>.....</u>

CERTIFICATE OF COMPLETION

This certificate is filled out by the project applicant upon completion of the landscape project.

T	IF	0	R/	ИA	T	10	N	S	H	9	ET
							2			-	

	11/2022						
	VENICE OF AMER	VENICE OF AMERICA CENTENNAIL PARK SITE					
	IMPROVEMENT	IMPROVEMENT					
int	Telephone No. 213-	202-2666					
	Fax No.						
	Email Address						
6	Zhiya.huang@lacity	Zhiya.huang@lacity.org					
	Street Address: 221	Street Address: 221 N. Figueroa Fourth Floor Ste. 400					
	State	Zip Code					
	CA	90012					
and Locat	Parcel, tract or lot n	umber, if available.					
Code 291							
or his/her (designee:						
	Telephone No.						
	213-202-2652						
	Fax No.						
	Email Address						
tect II	craig.raines@lacity.	org					
	Street Address: 221	N. Figueroa					
	Fourth Floor Ste. 40	0					
	Los Angeles. Ca 90	012					
	State: CA	Zip Code: 90012					
		I					

"I/we certify that I/we have received copies of all the documents required by the City and the Certificate of Completion and that it is our responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule."

O:\ARCH_ENG\Venice of America Centinneal Park\Water& pressure calculation\Indscpcalc

11/9/2022

"I/we certify that based upon periodic site obser accordance with the ordinance and that the l the criteria and specifications of the City ap	rvations, the work has been andscape planting and irriga proved landscape and irrigat	substantially completed in ation installation conform with tion plans
Signature*	Date	
Name (print) Chris Atencio	Telephone No.: 213-202-2649	
	Fax No.	
Title: Landscape Architectural Assoc. II	Email Address: chri	s.atencio@lacity.org
License No. or Certification No. 5559		
Company: Rec & Park	Street Address: 221 N. Figueroa Fourth Floor Ste. 400 Los Angeles. Ca 90012	
City: Los Angeles	State: CA	Zip Code:90012
*Signer of the landscape design plan, si contractor.	gner of the irrigation p	lan, or a licensed landscape
PART 3. IRRIGATION SCHED	ULING	
Attach parameters for setting the irrigation Standards.	schedule on controller pe	er the City's Engineering
PART 4. SCHEDULE OF LAND	SCAPE AND IRRI	IGATION
Attach schedule of Landscape and Irrig Standards.	ation Maintenance per	the City's Engineering
PART 5. SOIL MANAGEMENT Attach soil analysis report, if not previously Attach documentation verifying implement	TREPORT y submitted with the build ation of recommendation	ding application submittal. Is from soil analysis report .

O:\ARCH_ENG\Venice of America Centinneal Park\Water& pressure calculation\Indscpcalc

	REC &	L PARKS L		
' OF LOS ANGELES REGREATION AND PARKS	SUPERINTENDENT: DARRYL FORD	LIC: NO: 4082	LIC. NO.	DATE:
O THERTRIC OF	GENERAL MANAGER: JIMMY KIM	PROJECT LANDSCAPE ARCHITECT: CRAIG RAINES	PROJECT ENGINEER:	AS-BUILTS DRAWN BY:
A CONTRACT OF A CONTRACTACT OF A CONTRACT OF A	No. 4082	Signature	A Renewal Date	STREEL FR
			0291	VEU
VENICE OF AMERICA		CENTENNIAL FARM C	ADDRESS: 501 S Venice Blvd Venice CA 9	
S A A AMERICA S A MERICA			VOID	

11/9/2022

REVISION DATE: 12/22/2022 10:24 AM FILE: O:\ARCH_ENG\VENICE OF AMERICA CENTENNIAL PARK\CDS\SP.0.0 SPECS.DWG









	M K K K K K K K K K K K K K K K K K K K
POB	A R R
83) <u>(</u> 지지)
90	The second secon
	ZLZ MARF
	SS (A) ZA) TI ERINTE
	SUP SUP
10 CNIC	
>	
	D_A MANAG APE ARCHIT BY:
	LTS DRAWN
	GEN PROJE PROJE
	ANDSCA ANDSCA No. 4082 Signature Reneat Date Date Date
	91
	902
	RK RK
	PA Ven
	Vd, J
	Δ
	$\begin{array}{c c} \Delta \\ \hline \Delta \\ \hline \end{array}$
	Δ
	PLAN NAME:
	LAYOUT PLAN
	YY.P CR SCALE: ISSUE DATE:
	1"=20' 02/2023 PRJ # FILE NO. 21638 FILE NO.
	LJ Z. I Sheet 8 of 14 sheets



PC DLUMN	QUANTITY RESOURCE	
5'	309 San Marcos Nursery or approved equal	REC 8
	1410 San Marcos Nursery or approved equal	
		S
	ENICE BLUD.	Image: Constant of the stand of the sta
		「D) 夏ア (A) 引加 GENERAL MANAGER: 、 PROJECT LANDSCAPE ARCHITECT: PROJECT ENGINEER: AS-BUILTS DRAWN BY:
	 SOIL CONDITIONING (OPTIONAL, BASE ON THE SOIL TEST FINDS.) ALL PLANTING AREAS SHALL HAVE THE FOLLOWING AMENDMENTS TILLED INTO THE TOP 6" OF THE SOIL PER 1000 SQUARE FEET: 	No. 4082 July 31. 2019 Bale
	 A. THREE (3) CUBIC YARDS OF NITROGEN FORTIFIED WOOD COMPOST (TYPE 1 ORGANIC SOIL AMENDMENT). B. TWO (2) CUBIC YARDS OF ORGANIC FERTILIZER (TYPE 2 ORGANIC SOIL AMENDMENT) C. 100 POUNDS OF AGRICULTURAL GYPSUM D. 20 POUNDS OF 12-12-12 QUICK RELEASE COMMERCIAL FERTILIZER THESE QUANTITIES ARE FOR BID BASIS ONLY. REFER TO SOILS REPORTS FOR FINAL QUANTITIES (SEE SPECIFICATIONS). 8. BACKFILL MIX ALL PLANTING HOLES, EXCLUDING PLANTING HOLES SMALLER THAN 1 GALLON SHALL HAVE THE FOLLOWING BACKFILL MIXTURE: 70% EXISTING TOPSOIL (OPTIONAL, BASE ON THE SOIL TEST FINDS.) 30% NITROGEN FORTIFIED WOOD COMPOST (TYPE 1 ORGANIC SOIL AMENDMENT) (FOR AZALEAS, SUBSTITUTE 30% PEAT MOSS) 2 POUNDS PER CUBIC YARD OF IRON SULFATE AND THE FOLLOWING AMOUNT OF PLANTING TABLETS: 15 GAL. PLANT = FIVE (5) TABLETS 5 GAL. PLANT = THREE (3) TABLETS 1 GAL. PLANT = ONE (1) TABLET ONE(1) TABLET PER 4" BOX SIZE 	IERICA PARK COMPLEX Venice, CA 90291
RACTOR	 MULCH APPLY 1" OF TYPE 5 MULCH IN ALL PLANTING AREAS. 10. FERTILIZER (OPTIONAL, BASE ON THE SOIL TEST FINDS.) 	ZAN AL I Slvd, '
R AND ND NOTIFY	THE CONTRACTOR SHALL APPLY AN 8-8-4 COMMERCIAL SLOW RELEASE FERTILIZER TO ALL PLANTING AREAS AT A RATE OF 20 POUNDS PER 1000 SQUARE FEET UPON COMPLETION OF THE GROUND COVER PLANTING AND AT THIRTY DAY INTERVALS THEREAFTER UNTIL THE END OF THE PLANT ESTABLISHMENT PERIOD. THOROUGHLY WATER ALL PLANTING AREAS FOLLOWING THE APPLICATION OF THE FERTILIZER. ALL FERTILIZER APPLICATIONS SHALL BE PERFORMED UNDER INSPECTION BY A REPRESENTATIVE FROM THE RUPEAU OF CONTRACT ADMINISTRATION	
STALLATION	 11. PLANT REPLACEMENT THE CONTRACTOR SHALL REPLACE AS SOON AS POSSIBLE, ANY PLANT THAT SHOWS SIGNS OF FAILURE TO GROW AT ANY TIME DURING THE CONTRACT PERIOD OR THOSE PLANTS THAT ARE INJURED OR SO DAMAGED AS TO RENDER THEM UNSUITABLE FOR THE PURPOSE INTENDED. PROVIDE REPLACEMENT PLANTS OF THE SAME TYPE AND SIZE, AND INSTALL THEM PER THE PLANTING SPECIFICATION 	PROJECT NAM VENIC CENTI ADDRESS: 501 S Ve
SOIL. TO THE EY	12. PLANT ESTABLISHMENT PERIOD THE PLANT ESTABLISHMENT PERIOD SHALL BE FOR A PERIOD OF 120 DAYS UNLESS EXTENDED AS DESCRIBED IN THIS SECTION. SEE SP-0.3 MAINTENANCE AND PLANT ESTABLISHMENT PARAGRAPH 2.	REVISIONS: DATE:
DRT.	13. RESTORATION OF DAMAGED AREAS THE CONTRACTOR SHALL RESTORE ALL LANDSCAPED AREAS TO THEIR ORIGINAL CONDITION THAT ARE NOT SPECIFICALLY PROVIDED FOR BY THESE PLANS, BUT HAVE BEEN IMPACTED BY CONSTRUCTION. PROVIDE ALL NECESSARY MATERIAL, INCLUDING IRRIGATION EQUIPMENT, SOIL, SOIL AMENDMENTS, PLANTS OF THE SAME SPECIES, KINDS, AND SIZED, ETC. TO THE SATISFACTION OF THE CITY ENGINEER AND THE CITY LANDSCAPE ARCHITECT AT NO ADDITIONAL COST TO THE CITY.	$ \begin{array}{c c} \underline{\Delta} \\ \underline{\Delta} \\ \underline{\Delta} \\ \underline{\Delta} \\ \underline{\Delta} \end{array} $
or ro D	14. GUARANTEES THE CONTRACTOR SHALL WARRANT ALL TREES 15 GALLON SIZED AND LARGER FOR ONE YEAR AND ALL SHRUBS SHALL BE WARRANTED FOR A PERIOD OF SIX MONTHS. THE WARRANTY PERIOD SHALL BEGIN UPON THE DATE OF THE FINAL POST MAINTENANCE ACCEPTANCE. THIS WARRANTY DOES NOT INCLUDE ITEMS DAMAGED DUE TO THE CITY'S NEGLECT AND/OR TO ACTS OF GOD.	PLAN NAME: PLANTING PLAN& DETAILS
٩G	15. INSPECTIONS ALL WORK AND MATERIALS ARE SUBJECT TO INSPECTION AND APPROVAL IN ADDITION TO INSPECTIONS REQUIRED BY THE STANDARD PLANS SPECIFICATIONS. THE FOLLOWING INSPECTIONS ARE REQUIRED:	
-	-IRRIGATION SYSTEM PRESSURE TESTING	DRAWN BY: APPROVED BY:
S	-IRRIGATION COVERAGE TEST -IRRIGATION SYSTEM OPERATIONS TEST *TAGGING OF PLANT MATERIAL 15 GALLON AND LARGER AT THEIR SOURCE. *APPROVAL OF ALL PLANT MATERIAL AT THE SITE PRIOR TO PLANTING OPERATIONS. *CONFIRMATION AND APPROVAL OF PLANT MATERIAL LOCATION AND SPACING PRIOR TO PLANTING. *PRE-MAINTENANCE FINAL LANDSCAPE INSPECTION. *POST-MAINTENANCE FINAL LANDSCAPE INSPECTION.	SCALE: ISSUE DATE: 1"=20' 02/2023 PRJ # FILE NO. 21638 SDD 0.04/01/2000
AS S AL	 -IRRIGATION COVERAGE TEST -IRRIGATION SYSTEM OPERATIONS TEST *TAGGING OF PLANT MATERIAL 15 GALLON AND LARGER AT THEIR SOURCE. *APPROVAL OF ALL PLANT MATERIAL AT THE SITE PRIOR TO PLANTING OPERATIONS. *CONFIRMATION AND APPROVAL OF PLANT MATERIAL LOCATION AND SPACING PRIOR TO PLANTING. *PRE-MAINTENANCE FINAL LANDSCAPE INSPECTION. *POST-MAINTENANCE FINAL LANDSCAPE INSPECTION. 16. RECYCLING THE CONTRACTOR SHALL RECYCLE ON-OR OFF-SITE ALL VEGETATIVE WASTE (PER SECTION 12.43 OF LAMC). 	TT.P CR SCALE: ISSUE DATE: 1"=20' 02/2023 PRJ # FILE NO. 21638 FILE NO. DRAWING NO. LS- 3.0



IDDICATION LECEND.

SYMBOL	MANUFACTURER/MODEL/ DESCRIPTION	QTY.	DEGREE	P.S.I.	GPM	RADIUS	DETAIL	REMARKS
	RAINBIRD 1812-SAM-PRS 8 SERIES MPR SHRUB SPRAY 12" POPUP OR APPROVED EQUAL.	15 38 5	360 180 90	30 30 30	1.05 ,52 ,26	8°8,	LS6.0-6,1	ADJUST ARC AND RADIUS AS NEEDED FOR FULL COVERAGE.
	RAINBIRD 1812—SAM—PRS 10 SERIES MPR SHRUB SPRAY 12" POPUP OR APPROVED EQUAL.	22 73 44	360 180 90	30 30 30	1.58 ,79 ,39	10' 10' 10'	LS6.0-6.1	ADJUST ARC AND RADIUS AS NEEDED FOR FULL COVERAGE.
	RAINBIRD 1812—SAM—PRS 12 SERIES MPR SHRUB SPRAY 12" POPUP OR APPROVED EQUAL.	8 26 7	360 180 90	30 30 30	2.60 1.30 ,65	12' 12' 12'	LS6.0-6.1	ADJUST ARC AND RADIUS AS NEEDED FOR FULL COVERAGE.
	RAINBIRD 1812-SAM-PRS 15 SERIES MPR SHRUB SPRAY 12" POPUP OR APPROVED EQUAL.	1 9 7	360 180 90	30 30 30	3.70 1.85 ,92	15' 15' 15'	LS6.0–6.1	ADJUST ARC AND RADIUS AS NEEDED FOR FULL COVERAGE.
B	RAINBIRD 1402 BUBBLER ON RISER OR APPROVED EQUAL.	34	FULL	30	.50	1*	LS6.0-6,1	ADJUST ARC AND RADIUS AS NEEDED FOR FULL COVERAGE.

9.39

A-11

A-12

12.3

A-13

12.3

A-14

A-15

16.02

10.56

NVENICE BLVD.

8.12

12.16



REVISION DATE: 3/8/2023 9:50 AM	FILE: O:\ARCH_ENG\VENICE OF AMERICA CENTENNIAL PARK\CDS\ARCHIVE\11.15\LS.4.0 RRI.DWG

	REC&	PARKS		
	_			
7 OF LOS ANGELES 1 RECREATION AND PARKS	SUPERINTENDENT: DARRYL FORD	LIC: NO. 4082	LIC. NO.	DATE:
DEPARTMIENT OF	GENERAL MANAGER: JIMMY KIM	PROJECT LANDSCAPE ARCHITECT: CRAIG RAINES	PROJECT ENGINEER:	AS-BUILTS DRAWN BY:
A CONTRACT OF	No. 4082	Signature	★ Renewal Date	STEPCIER A
-				
VENICE OF AMERICA			ADDRESS: 501 C Vanica Blvd Vanica CA 90301	
			¹⁰ ADDRESS: 501 C Vanica Blvd Vanica CA 00201	
			ROL & Venice Blvd Venice CA 90301	
			501 C Vanica Blvd Vanica CA 90301	
			501 S Vanica Blvd Vanica CA 90301	
			ADDRESS:	
			N PI	
			SUE DADRESS:	

SHEET 10 OF 14 SHEETS

S









REC & A
GELES NAND PARKS ENT: DARRYL FORD LIC. NO. 4082 LIC. NO. 4082 DATE:
E CITY OF LOS AM NT OF RECREATIO Y KIM SUPERINTENDE ANES
「アビー」 「アビー 「アビー」 「アビー 「アビー」 「アビー 「アビー」 「アビー 「アビー」 「アビー 「アビー」 「アビー 「アビー」 「アビー 「アビー」 「アビー 「アビー」 「アビー 「アビー」 「アビー 「アビー」 「アビー」 「アビー」 「ア 「ア 「ア 「ア 「ア 「ア 「ア 「ア 「 「 「 「 「 「 「 「 「 「 「 「 「
No. 4082 Signature Barewan Date
A COMPLEX CA 90291
OF AMERIC INIAL PARK ce Blvd, Venice, (
DJECT NAME: ENICE ENTEN DRESS: 1 S Venio
PLAN NAME: IRRIGATION DRAWN BY: APPROVED BY: YY.P CR SCALE: N.T.S. 02/2023 PRJ # FILE NO.