

City of Commerce

WASHINGTON BLVD.

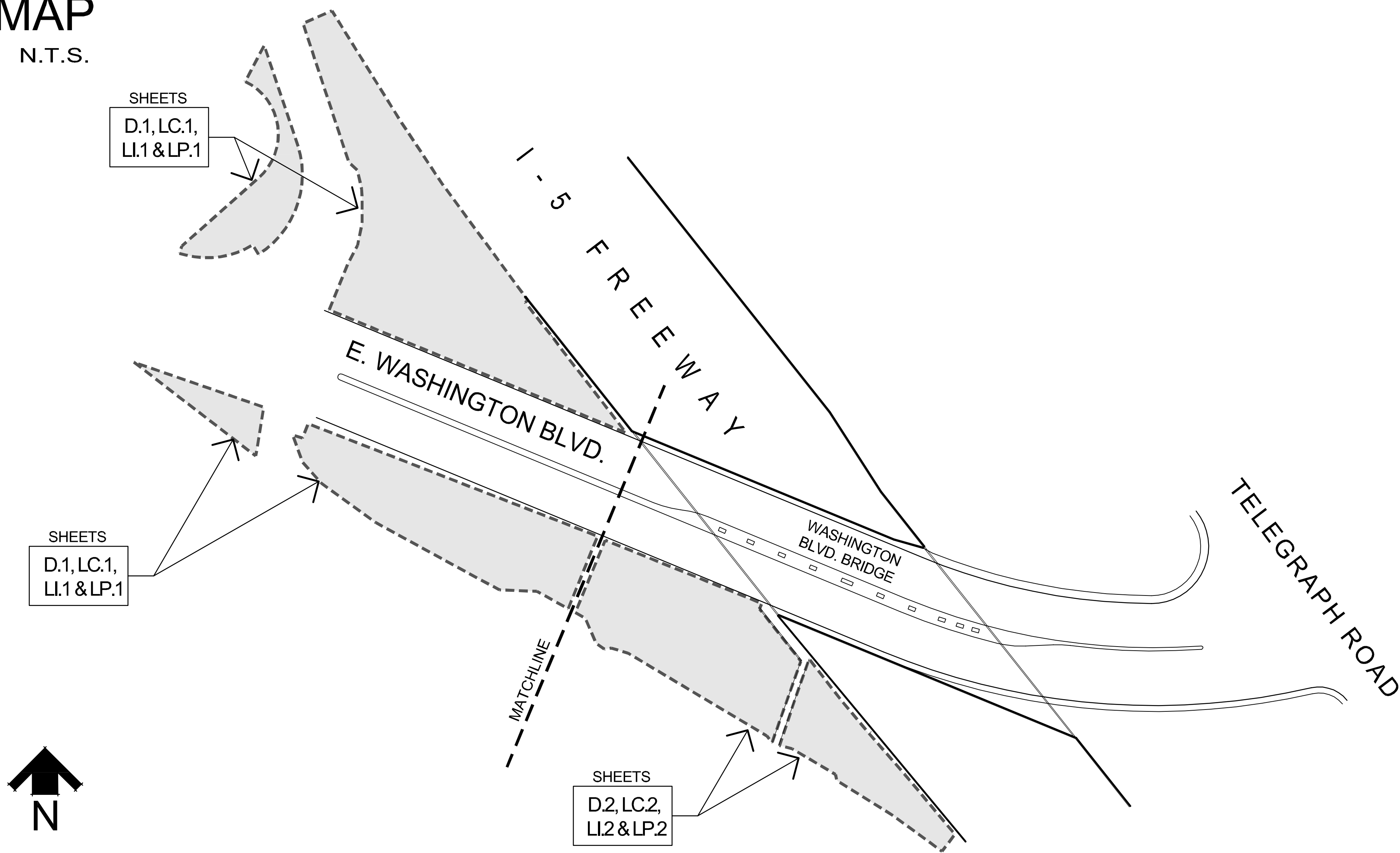
REHABILITATED LANDSCAPE PROJECT

CONSTRUCTION PLAN

CalTrans Permit No 716-NLF-2090

KEY MAP

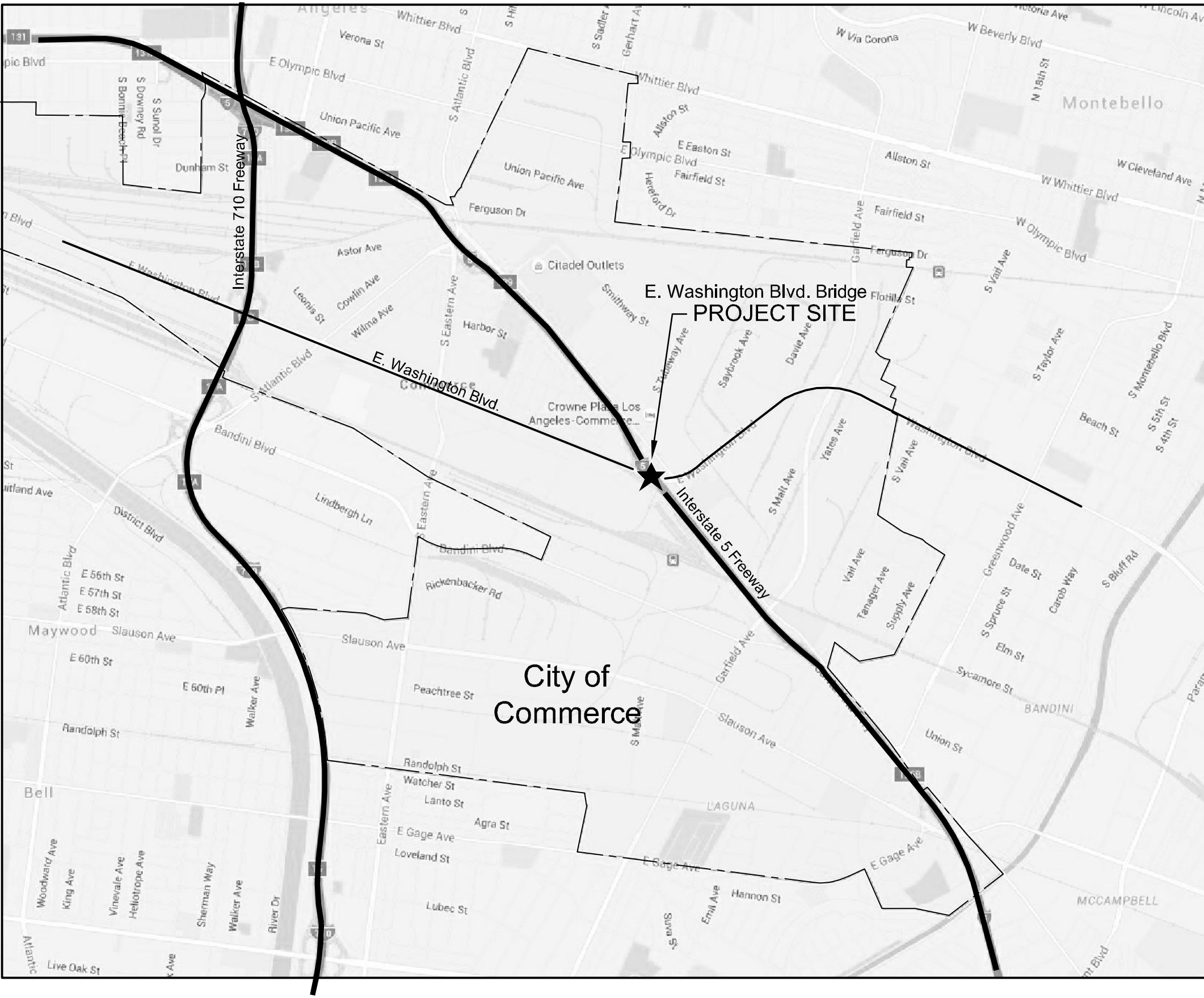
N.T.S.



DRAWING INDEX

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2	CT.1	CALTRANS SETBACKS, RECOVERY ZONES AND SIGHT LINES
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4	D.2	DEMOLITION PLAN
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VICINITY MAP



GENERAL NOTES

- GENERAL:** All local, municipal, county and state laws, rules, and regulations governing or relating to any portion of this work are hereby incorporated into and made part of the project plans and specifications; and their provisions shall be carried out by the Contractor. Additionally, all work shall be done in accordance with the applicable sections Standard Specifications for Public Works Construction, of the latest edition of the City of Commerce Standard Plans, APWA Standard Plans, Standard Specifications for Public Works Construction (Green Book), and the project's specifications.
- DAMAGE RESPONSIBILITY:** The contractor shall assume full responsibility for any damages imposed, intentionally or accidentally, to existing utilities, buildings, or other amenities, due to the actions of the contractors, contractor's employees and/or contractor's subcontractors.
- TRADE COORDINATION:** Construction and installation of all items within these documents shall require close coordination between trades involved in underground and utility installation, and tree location. The contractor's work force shall consist of persons skilled in their trade covered by this scope of work. Apprentices and/or unskilled laborers shall be under the direct supervision of skilled tradesmen at all times. Refer to Specifications.
- SITE DEBRIS:** The contractor shall keep the premises clean and free of excess equipment, materials and rubbish incidental to his work. All rubble, trash, debris or unwanted materials resulting from demolition or construction shall be disposed of in a legal and lawful manner to an approved disposal site. If debris remains on site for more than 12 hours, unless pre-approved by the city, such debris shall be removed by the Engineer at the expense of the Contractor.
- FIELD OBSERVATION:** The Contractor shall coordinate and verify all in-field layout, dimensioning of work, grades and elevations, and work schedules unless otherwise noted. The contractor shall carefully inspect the site and shall verify all conditions and dimensions prior to proceeding with any work under this contract. Any discrepancies in these documents shall be brought to the attention of the Engineer. The contractor shall not willfully implement any work described in these documents which is obviously in error, interferes with existing site features, or causes project complication or harm. The contractor shall be responsible for verifying the scale of the drawing. Written dimensions take preference over scaled dimensions and shall be verified on the job site and any discrepancy shall be brought to the attention of the Engineer. The contractor shall verify all property lines, lot lines, and easements prior to the commencement of work. The contractor shall be responsible for personally verifying with the Engineer that all copies of the construction documents and specifications are current and approved for construction.

- MUNICIPAL/COUNTY REQUIREMENTS:** The contractor shall obtain all the necessary permits and agency inspections prior to the commencement of work. Any permits, fees, and agency inspections required shall be paid by the contractor. In the event that the City has obtained permits, licenses or other authorizations applicable to the work, the Contractor shall comply with the provisions of said permit, licenses and other authorizations applicable to the work. The Contractor shall give all notices necessary and incident to the due and lawful prosecution of the work for this project. The Contractor shall also acquire all necessary right-of-way encroachment permits required for traffic control and lane closures from the City of Commerce. Encroachment Permit shall be obtained by the Contractor in sufficient time to prevent delays to the work necessary to complete this project. The contractor acknowledges that he has visited the site and is familiar with and has provided for the conditions that exist herein and that he has checked with the appropriate governing agencies and has made provisions for any and all requirements of those agencies.
- SITE SECURITY:** The contractor shall at all times protect his work from damage and theft and replace all damaged or stolen parts at his expense until the work is accepted in writing by the City. Contractor is liable for all damage or injury caused by any work or storage of materials on the site.
- EXISTING UTILITIES:** Extreme care shall be exercised while working near existing utilities. The Contractor shall verify the location and condition of all utilities and be responsible for any damages beyond the limit of work due to work performed by the contractor or of any agents of the Contractor. All damage to existing site features beyond the limit of work due to work performed by the Contractor or any subcontractor shall be the responsibility of the Contractor to reestablish service in a timely manner. It is the contractors responsibility to clean out and maintain the existing drainage system and proposed additions during the course of construction. The contractor shall investigate the location of the existing storm drain so that conflicts with play equipment footings and sump drain do not occur. In the case that conflicts do occur the contractor shall notify the Engineer and adjust the play equipment so that conflicts do not occur. The contractor shall be responsible for contacting underground service alert of southern California a minimum of 2 working days prior to the commencement of work.
- The contractor shall be responsible for personally verifying with the Engineer that all copies of the construction documents and specifications are current and approved for construction.

- The contractor shall submit a construction schedule as requested by the city. The contractor shall make every effort to adhere to the schedule as incorporated into the city engineer's (or his/hers representative's) master schedule. The contractor shall adhere to the construction sequence unless notified in writing by the city engineer.
- The contractor shall coordinate all field observations with the owner and notify both the owner and landscape architect at least 48 hours (two working days) in advance of all field observations. If the contractor calls for a field observation for which he is not prepared, he shall be responsible for reimbursing the Engineer or Landscape Architect at their current hourly billing rate, plus any transportation cost and/or reproductions.

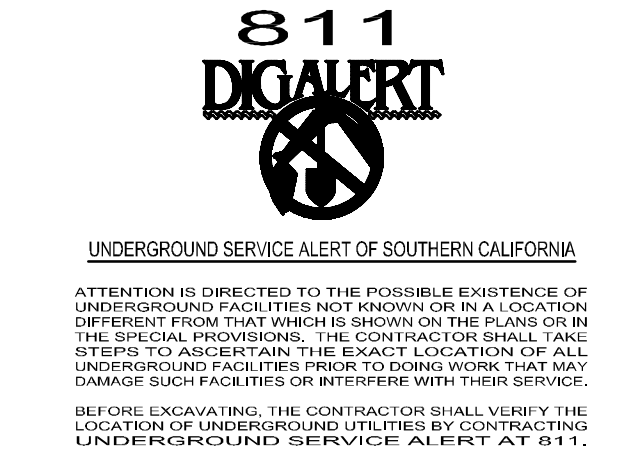
Landscape Architect:



Costa Mesa Office:
151 Kalmus Drive, Suite M8
Costa Mesa, CA 92626
Phone: (714) 641-1300
Fax: (714) 641-1323

e-mail: drawings@dvolzdesign.com
www.dvolzdesign.com

Subconsultant:



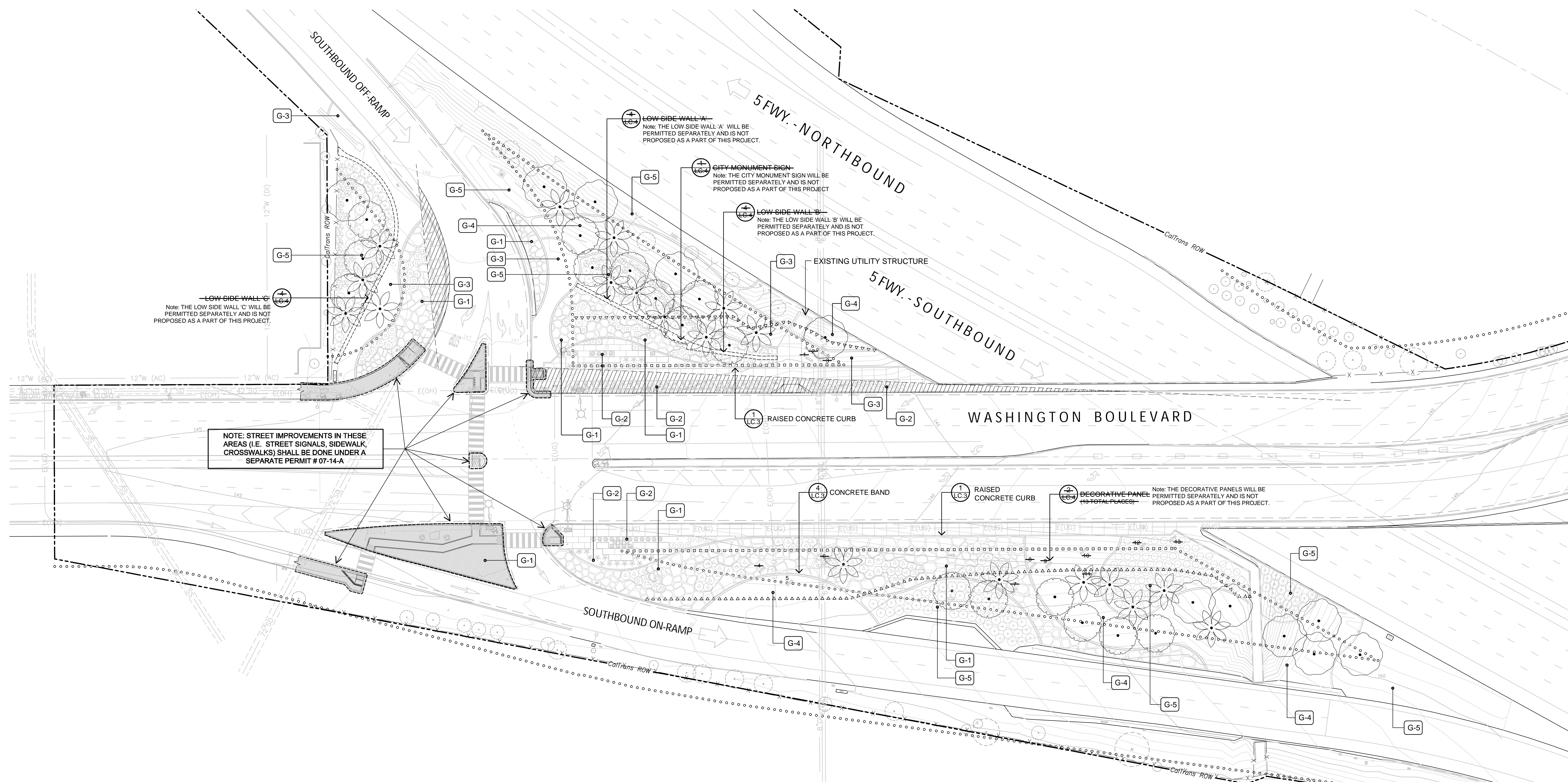
Revisions:			
No.	Date	Revisions	By

Project:
**WASHINGTON BLVD.
REHABILITATED
LANDSCAPE PROJECT**
Owner:
City of Commerce

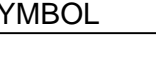


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Drawn By: PC
Checked By: GV
Date: APRIL 12, 2017
Scale: AS SHOWN

Drawing Title:
**COVER
SHEET**

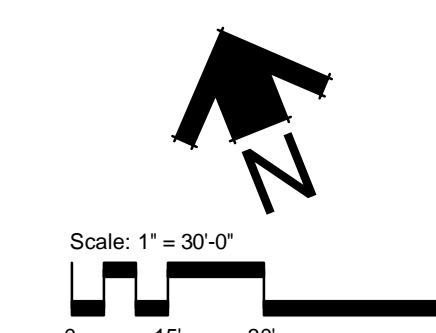
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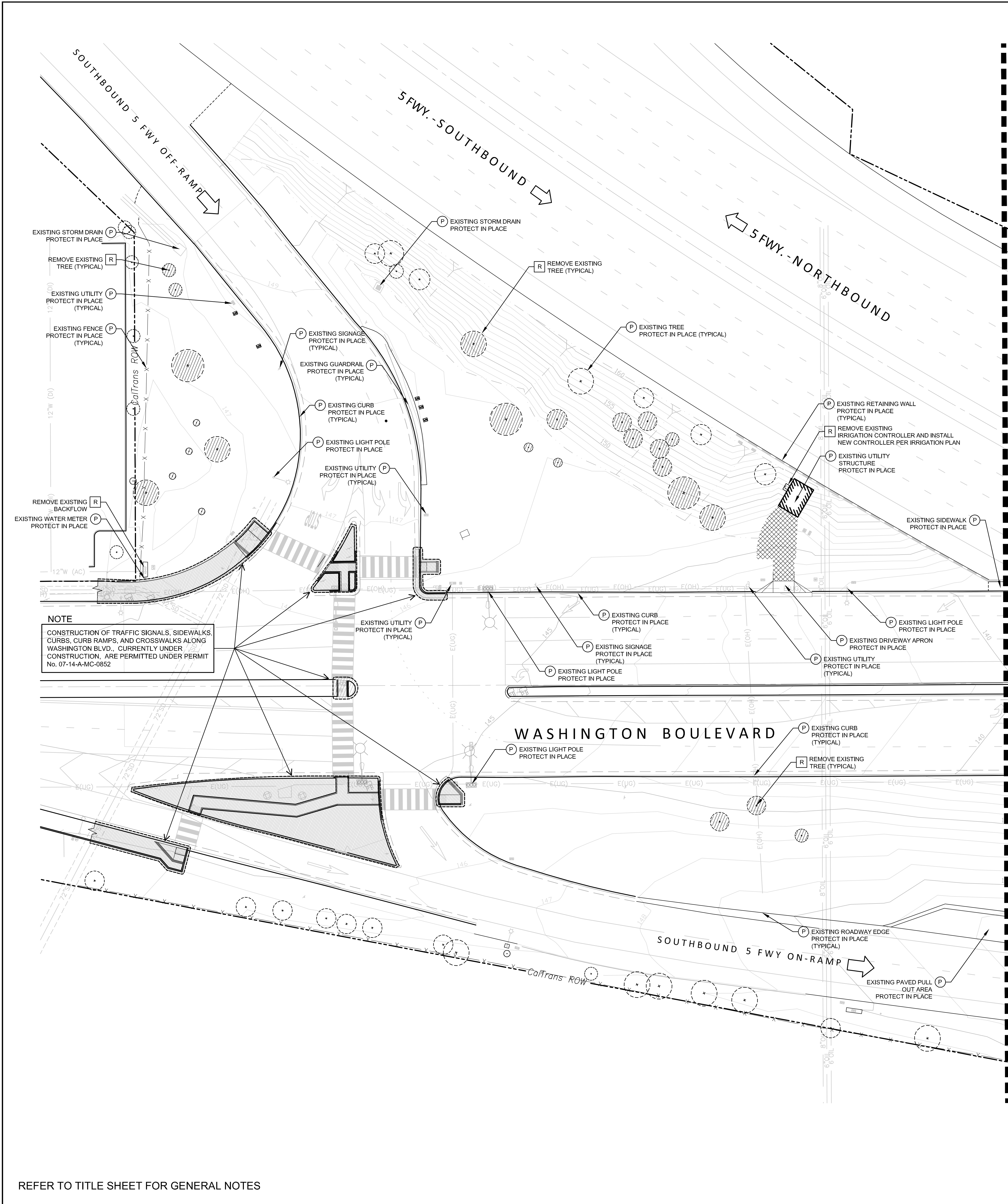


SYMBOL	DESCRIPTION
[Diagram showing two parallel rows of squares]	20' CLEAR RECOVERY ZONE
[Diagram showing two parallel rows of circles]	30' CLEAR RECOVERY ZONE
[Diagram showing two parallel rows of triangles]	DISCRETIONARY OBJECT SETBACK
[Diagram showing a dashed line]	SIGHT LINE
[Diagram showing diagonal hatching]	SIGHT DISTANCE CLEAR ZONE

PROPOSED TREE & PALM TREE PLANTINGS	
SYMBOL	TREE/PALM
	Phoenix dactylifera / DATE PALM
	Arbutus 'Marina' / MARINA STRAWBERRY TREE
	Olea europaea 'Wilsoni' / FRUITLESS OLIVE

PROPOSED GROUND PLANE SURFACING			
KEY	DESCRIPTION	SIZE	DETAIL
G-1	FLAGSTONE "SELECT" (SET IN CONCRETE)	4-12 SF/EA.	SEE DETAIL 8, SHEET LC.3
G-2	ROCK MULCH	1 3/4" INCH	SEE DETAIL 5, SHEET LC.3
G-3	COBBLE 'B' (ANGULAR) (TO BE INSTALLED PER CALTRANS STD. "ROCK BLANKET" DETAIL)	7-12 INCH	SEE DETAIL 6, SHEET LC.3
G-4	COBBLE 'C' (ROUND) (TO BE INSTALLED PER CALTRANS STD. "ROCK BLANKET" DETAIL)	4-8 INCH	SEE DETAIL 6, SHEET LC.3
G-5	WOOD MULCH	0-2 INCH	N/A





DEMOLITION LEGEND

- SYMBOL DESCRIPTION
- DESIGNATED LIMITS OF CLEAR AND GRUB. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING PLANT MATERIAL AND ALL SITE DEBRIS. REFER TO SPECIFICATIONS.
 - REMOVE AND DISPOSE CONCRETE FLATWORK AND/OR AC PAVING.
 - ITEM TO PROTECT IN PLACE.
 - ITEM TO BE REMOVED.

NOTE:
ALL ROADWAY SIGNS AND SIGNAL POLES, TO BE PROTECTED IN PLACE.
ALL UNDERGROUND AND ABOVE GROUND UTILITIES TO BE PROTECTED IN PLACE UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER TO MODIFY AND/OR RELOCATE. PULL BOXES IN CONFLICT WITH IMPROVEMENTS TO BE ADJUSTED TO GRADE.

IRRIGATION EQUIPMENT DISPOSITION NOTE:

PROTECT IN PLACE EXISTING PRESSURE MAINLINE. REMOVE AND DISPOSE OF EXISTING IRRIGATION SYSTEM WITHIN LIMITS OF WORK INCLUDING SPRAY HEADS, REMOTE CONTROL VALVES, NON-PRESSURE LATERAL LINES, VALVE BOXES, IRRIGATION CONTROLLERS (INCLUDING EXISTING ENCLOSURES AND CONCRETE FOOTINGS), OR TO SATISFACTION OF CITY.

TREE DEMOLITION LEGEND

- EXISTING TREE TO BE REMOVED. STUMP GRIND TO A DEPTH OF 18" BELOW FINISH GRADE. REMOVE ALL TREE ROOTS WITHIN 18" OF SURFACE. TO SATISFACTION OF CITY / LANDSCAPE ARCHITECT.
- EXISTING TREE PROTECT IN PLACE

GENERAL DEMOLITION NOTES

- THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS AND AGENCY INSPECTIONS PRIOR TO DEMOLITION. ANY FEES ASSOCIATED WITH PERMITS AND/OR AGENCY INSPECTIONS REQUIRED SHALL BE THE RESPONSIBILITY OF THE CITY.
- ALL DISPOSAL ITEMS SHALL BE MARKED AND IDENTIFIED BY THE CONTRACTOR PRIOR TO REMOVAL. ALL DISPOSAL ITEMS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO REMOVAL.
- THE CONTRACTOR SHALL PROTECT IN PLACE ALL TREES, SHRUBS, AND GROUND COVER ADJACENT TO LIMITS OF DEMOLITION, UNLESS INDICATED OTHERWISE ON THE DEMOLITION PLAN. CONTRACTOR TO REPAIR SHRUBS, OR TREES DAMAGED DUE TO CONTRACTORS OPERATIONS.
- DISPOSAL OF ALL REMOVED ITEMS DURING DEMOLITION OF THIS SITE SHALL BE DISPOSED AND/OR SALVAGED ACCORDING TO ALL APPLICABLE FEDERAL, STATE AND/OR CITY ORDINANCES AND LAWS.
- DUST SHALL BE CONTROLLED BY WATERING.
- DEMOLITION OPERATIONS WILL BE CONSIDERED COMPLETE UPON SATISFACTION AND WRITTEN APPROVAL OF THE CITY OF COMMERCE INSPECTOR.
- THE CONTRACTOR SHALL INSTALL A MIN. 6' HIGH CONSTRUCTION FENCE WITH PRIVACY SCREEN. THE COST FOR CONSTRUCTION FENCE AND PRIVACY SCREEN SHALL BE INCLUDED IN MOBILIZATION.
- 6' HIGH CONSTRUCTION CHAIN LINK FENCE TO BE IN PLACE AROUND PERIMETER OF SITE PRIOR TO ANY AND ALL CONSTRUCTION OPERATIONS. CONTRACTOR TO MAINTAIN FENCE AND ASSURE FENCE TO BE IN GOOD CONDITION AND UPRIGHT AT ALL TIMES SO AS TO KEEP SITE SECURE AND TO NOT BE A HAZARD TO THE PUBLIC. FENCE TO BE LOCKED AND SECURE AT THE END OF EACH DAY. A COMBINATION LOCK SHALL BE USED AND THE COMBINATION SHALL BE REPORTED TO THE POLICE, FIRE AND CITY IN CASE OF EMERGENCY. CONSTRUCTION FENCE TO REMAIN IN PLACE UNTIL REMOVAL IS APPROVED BY CITY.
- THE CONTRACTOR SHALL GIVE NOTICE TO AND COORDINATE WITH UTILITY AGENCIES.

BEST MANAGEMENT PRACTICES FOR NEW DEVELOPMENT

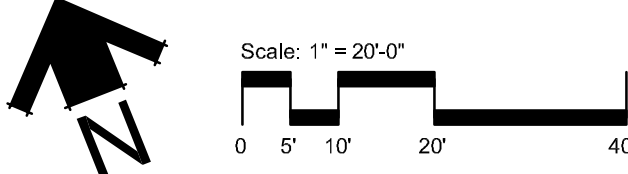
CONSTRUCTION SITE SHALL BE MAINTAINED IN SUCH A CONDITION THAT AN ANTICIPATED STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE.

DISCHARGES OF MATERIAL OTHER THAN STORM WATER ARE ALLOWED ONLY WHEN NECESSARY FOR PERFORMANCE AND COMPLETION OF CONSTRUCTION PRACTICES AND WHERE THEY DO NOT: CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY STANDARDS; CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR NUISANCE; OR CONTAIN A HAZARDOUS SUBSTANCE IN A QUANTITY REPORTABLE UNDER FEDERAL REGULATIONS 40 CFR PARTS 117 AND 302.

POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, GLUES, LIMES, PESTICIDES, HERBICIDES, WOOD PRESERVATIVES AND SOLVENTS; ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC RADIATOR OR BATTERY FLUIDS; FERTILIZERS; VEHICLE/EQUIPMENT WASH WATER AND CONCRETE WASH WATER; CONCRETE, DETERGENT OR FLOATABLE WASTES; WASTES FROM ANY ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; AND SUPER CHLORINATED POTABLE WATER LINE FLUSHINGS.

DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHALL OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE, PHYSICALLY SEPARATED FROM POTENTIAL STORM WATER RUN-OFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.

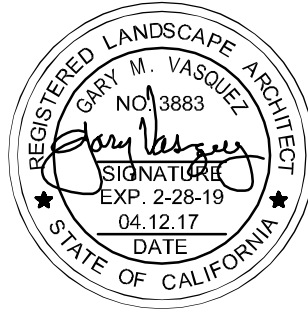
REFER TO TITLE SHEET FOR GENERAL NOTES



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Subconsultant:

Seal:



UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA
ATTENTION IS DIRECTED TO THE POSSIBLE EXISTENCE OF UNRECORDED UTILITIES THAT MAY BE PRESENT ON THE PLANS OR IN THE SPECIAL ENCLOSURES. THE CONTRACTOR SHALL, AND BE RESPONSIBLE TO, ADVISE AND THE EXACT LOCATION OF ALL UNDERGROUND AND PACE AREAS PRIOR TO DEMOLITION THAT MAY DAMAGE EACH FACE OF OR INTERFERE WITH THEIR SERVICE. BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTRACTING UNDERGROUND SERVICE ALERT AT 811.

Revisions:

No.	Date	Revisions	By

Project:

WASHINGTON BLVD.
REHABILITATED
LANDSCAPE PROJECT

Owner:

City of Commerce

Project No.:

PC

Drawn By:

GV

Checked By:

APRIL 12, 2017

Date:

AS SHOWN

Scale:

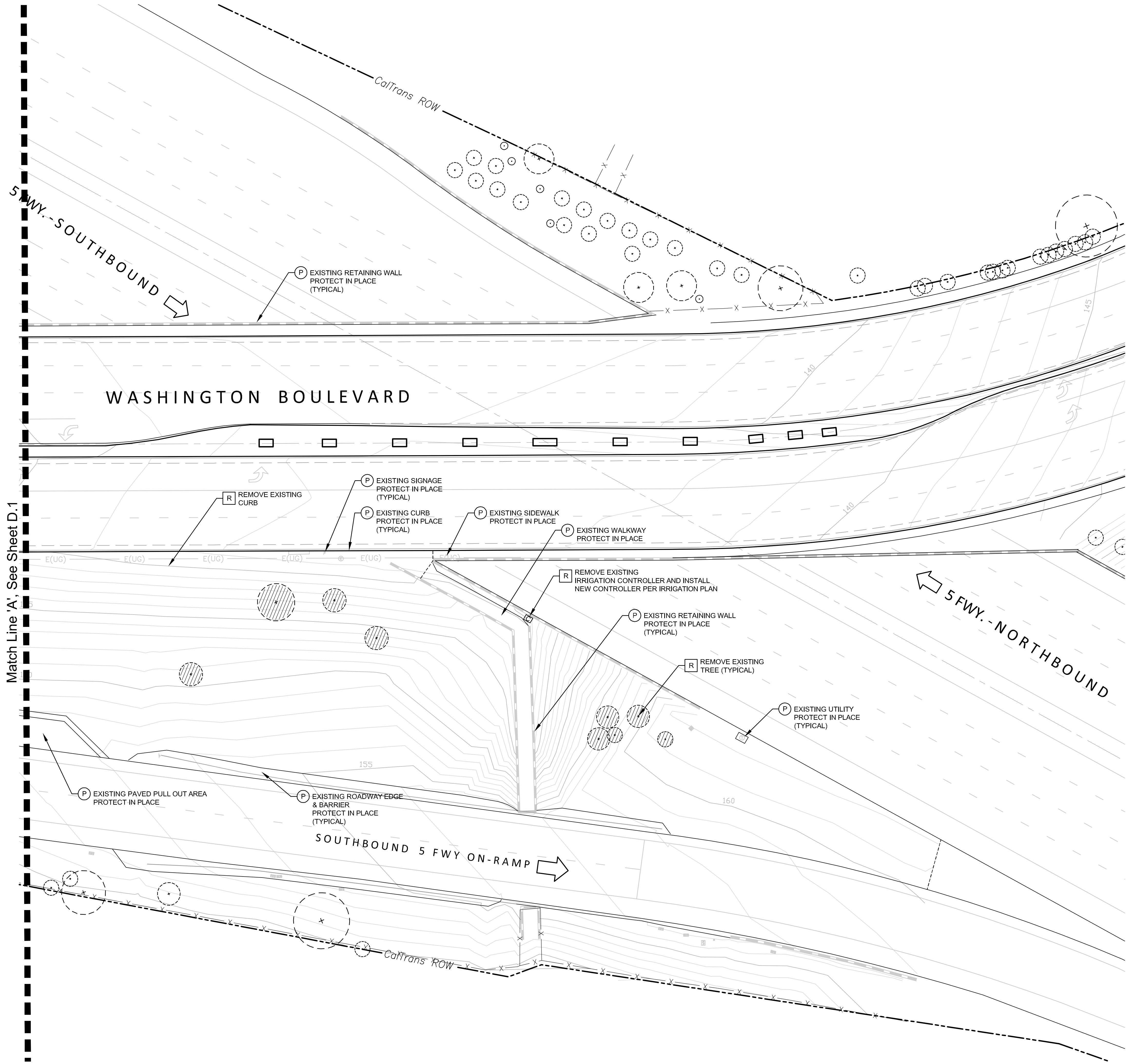
Drawing Title:

DEMOLITION PLAN

Drawing No.:

D.1

SHEET 3 OF 14



DEMOLITION LEGEND

SYMBOL	DESCRIPTION
	DESIGNATED LIMITS OF CLEAR AND GRUB. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING PLANT MATERIAL AND ALL SITE DEBRIS. REFER TO SPECIFICATIONS.
	REMOVE AND DISPOSE CONCRETE FLATWORK.
	ITEM TO PROTECT IN PLACE.
	ITEM TO BE REMOVED.

NOTE:
ALL ROADWAY SIGNAGE AND SIGNAL POLES, TO BE PROTECTED IN PLACE.
ALL UNDERGROUND AND ABOVE GROUND UTILITIES TO BE PROTECTED IN PLACE UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER TO MODIFY AND/OR RELOCATE.

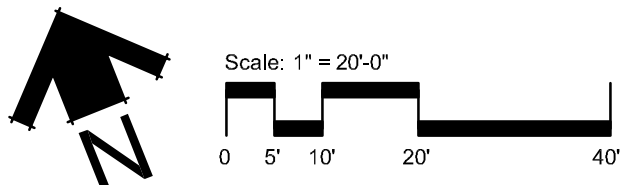
IRRIGATION EQUIPMENT DISPOSITION NOTE:

PROTECT IN PLACE EXISTING PRESSURE MAINLINE. REMOVE AND DISPOSE OF EXISTING IRRIGATION SYSTEM WITHIN LIMITS OF WORK INCLUDING SPRAY HEADS, REMOTE CONTROL VALVES, NON-PRESSURE LATERAL LINES, VALVE BOXES, IRRIGATION CONTROLLERS (INCLUDING EXISTING ENCLOSURES AND CONCRETE FOOTINGS), OR TO SATISFACTION OF CITY.

TREE DEMOLITION LEGEND

	EXISTING TREE TO BE REMOVED. STUMP GRIND TO A DEPTH OF 18" BELOW FINISH GRADE. REMOVE ALL TREE ROOTS WITHIN 18" OF SURFACE. TO SATISFACTION OF CITY / LANDSCAPE ARCHITECT.
	EXISTING TREE PROTECT IN PLACE

REFER TO SHEET D.1 FOR GENERAL DEMOLITION NOTES
REFER TO TITLE SHEET FOR GENERAL NOTES



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DVD
David Volz Design
Landscape Architecture & Park Planning

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Subconsultant:

Seal:



811
DIALERT

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

ATTENTION IS DIRECTED TO THE POSSIBLE EXISTENCE OF UNDERGROUND UTILITIES AT THE LOCATION OF ANY PROPOSED CONSTRUCTION OR A LOCATION DIFFERENT FROM THAT SHOWN ON THE PLANS OR IN THE SPECIAL PROVISIONS. THE CONTRACTOR SHALL, AND BE RESPONSIBLE TO, ADVISE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO ANY CONSTRUCTION THAT MAY DAMAGE SUCH UTILITIES OR INTERFERE WITH THEIR SERVICE. BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UNDERGROUND SERVICE ALERT AT 811.

Revisions:

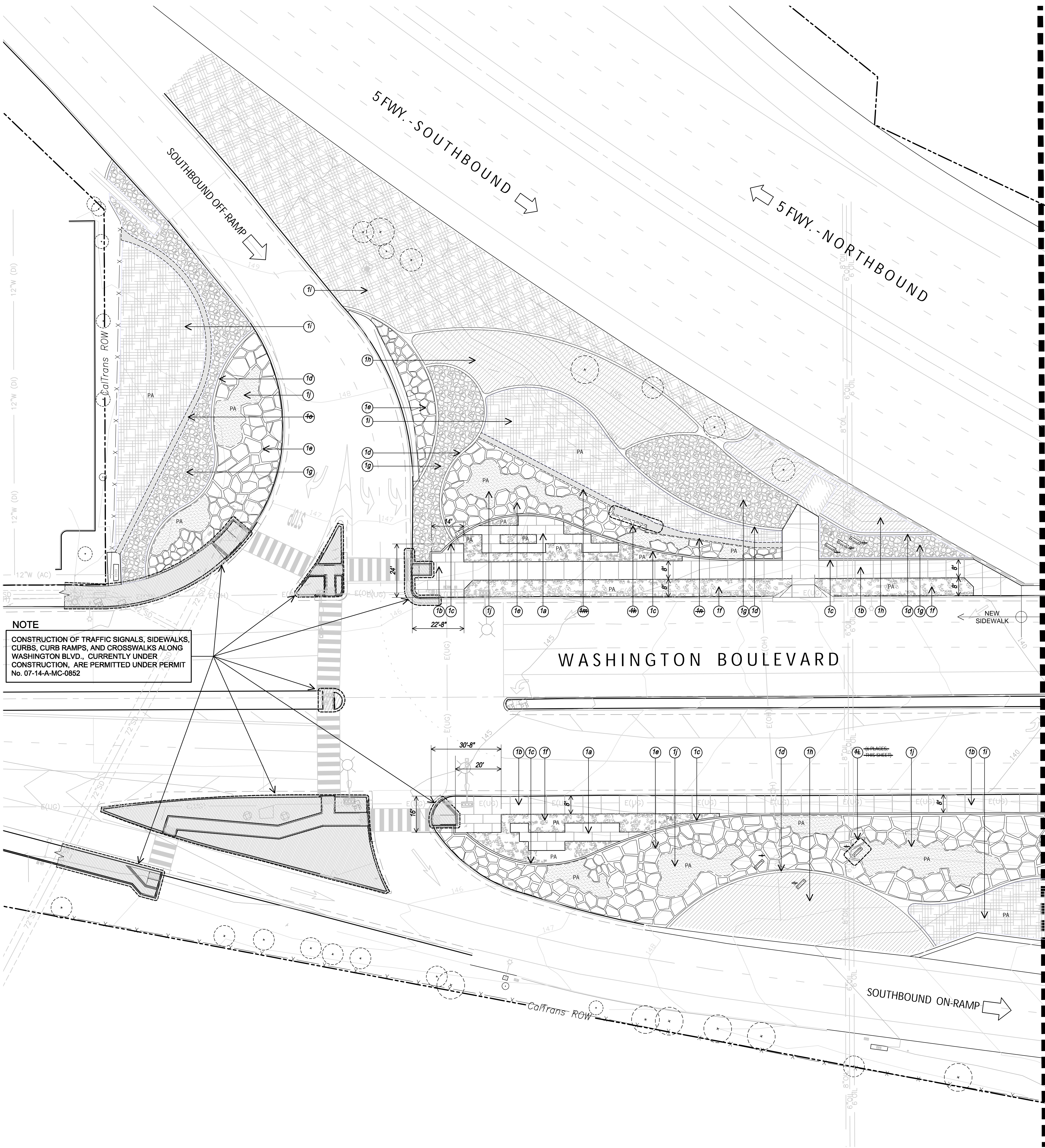
No.	Date	Revisions	By

Project :
WASHINGTON BLVD.
REHABILITATED
LANDSCAPE PROJECT
Owner:
City of Commerce

Project No :
Drawn By : PC
Checked By : GV
Date : APRIL 12, 2017
Scale : AS SHOWN
Drawing Title :

DEMOLITION
PLAN

Drawing No :



CONSTRUCTION MATERIALS SCHEDULE						
KEY	HARDSCAPE / PAVING	MATERIAL & MODEL #	MANUFACTURER / SUPPLIER	COLOR	FINISH	DETAIL / SHEET NO.
1a	CONSTRUCT CONCRETE FLATWORK	CONCRETE	---	NATURAL GRAY	MEDIUM BROOM	DETAIL 2, SHEET LC.3
1b	CONSTRUCT CONCRETE SIDEWALK	CONCRETE	---	NATURAL GRAY	MEDIUM BROOM	DETAIL 1A, SHEET LC.3
1c	CONSTRUCT CONCRETE RETAINING CURB	CONCRETE	---	NATURAL GRAY	MEDIUM BROOM	DETAIL 1B, SHEET LC.3
1d	CONSTRUCT CONCRETE BAND	INTERGRAL COLOR CONCRETE	DAVIS COLORS (800) 356-4848	COCOA #6130	MEDIUM BROOM	DETAIL 4, SHEET LC.3
1e	LARGE FLAGSTONE 'SELECT' PAVE STONES w/ DECORATIVE GRAVEL FILL	FLAGSTONE: ARIZONA CHOCOLATE --- SUPPLIER 'B' - OR APPROVED EQUIVALENT, SEE BELOW REGULAR SELECT' (1 1/2 INCH THICKNESS) GRAVEL FILL: COPPER CANYON (3/8 INCH) - SUPPLIER 'B' - OR APPROVED EQUIVALENT, SEE BELOW			---	DETAIL 8, SHEET LC.3
1f	ROCK MULCH AND WEED BARRIER FABRIC	BEACH PEBBLE MIXED (1 1/2 TO 3 INCH) --- SUPPLIER 'A' - OR APPROVED EQUIVALENT, SEE BELOW			---	DETAIL 5, SHEET LC.3
1g	COBBLE 'B' (ANGULAR)	COBBLE: OAK CREEK COBBLE (7-12 INCH) SUPPLIER 'A' - OR APPROVED EQUIVALENT, SEE BELOW			---	DETAIL 6, SHEET LC.3 CalTrans 2015 STD. PLAN H9
1h	COBBLE 'C' (ROUNDED)	MORAINES COBBLE (4-8 INCH) --- SUPPLIER 'A' - OR APPROVED EQUIVALENT, SEE BELOW			---	DETAIL 8, SHEET LC.3 CalTrans 2015 STD. PLAN H9
1i	INSTALL WOOD MULCH (4" LAYER)	FOREST-FLOOR (0-2 INCH) --- AGUINAGA GREEN (877) 626-8524			---	---
1j	DECORATIVE GRAVEL & WEED BARRIER	COPPER CANYON (3/8 INCH) --- SUPPLIER 'A' - OR APPROVED EQUIVALENT			---	DETAIL 9, SHEET LC.3
1k	--- (SIGN-MONUMENT SIGN)	(NOTE: TO BE PERMITTED UNDER SEPARATE PROJECT)				
1l	--- (DECORATIVE GUT PANEL)	(NOTE: TO BE PERMITTED UNDER SEPARATE PROJECT)				
1m	--- (LOW-SIDE WALL 'A')	(NOTE: TO BE PERMITTED UNDER SEPARATE PROJECT)				
1n	--- (LOW-SIDE WALL 'B')	(NOTE: TO BE PERMITTED UNDER SEPARATE PROJECT)				
1o	--- (LOW-SIDE WALL 'C')	(NOTE: TO BE PERMITTED UNDER SEPARATE PROJECT)				

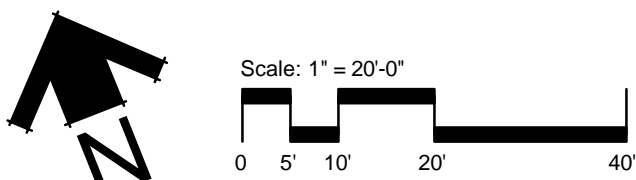
PA --- PLANTER AREA

MATERIAL SUPPLIER/SOURCE

SUPPLIER A: DECORATIVE STONE SOLUTION (800) 699-1878
SUPPLIER B: SOUTHWEST BOULDERS AND STONE (877) 792-7025

NOTE
CONSTRUCTION OF TRAFFIC SIGNALS, SIDEWALKS, CURBS, CURB RAMPS, AND CROSSWALKS ALONG WASHINGTON BLVD., CURRENTLY UNDER CONSTRUCTION, ARE PERMITTED UNDER PERMIT No. 07-14-A-MC-0852

REFER TO SHEETS LC.3 & LC.4 FOR CONSTRUCTION DETAILS
REFER TO TITLE SHEET FOR GENERAL NOTES

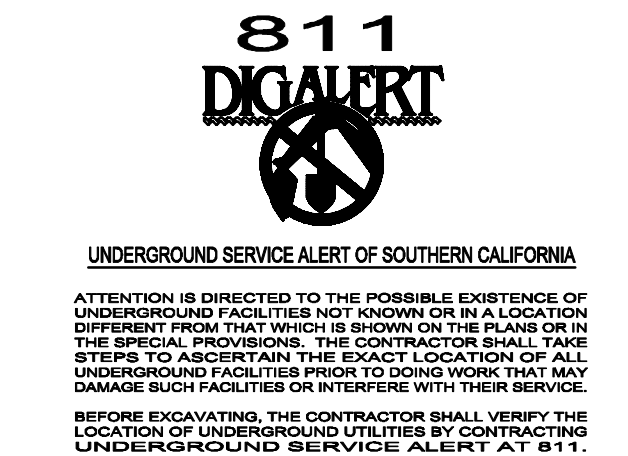


Landscape Architect:



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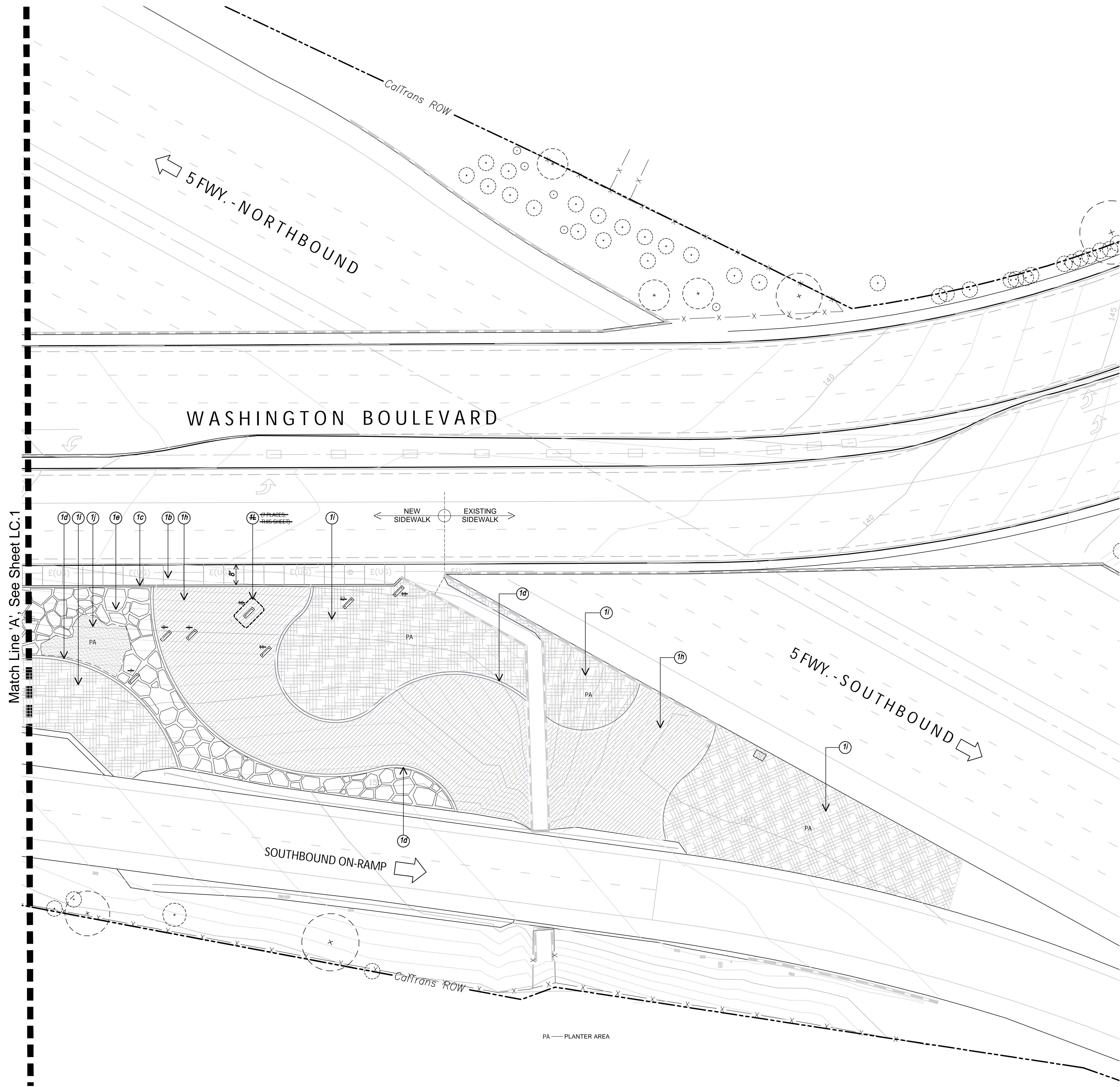
Project:
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Owner:
City of Commerce

Project No.:
Drawn By: PC
Checked By: GV
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Scale: AS SHOWN

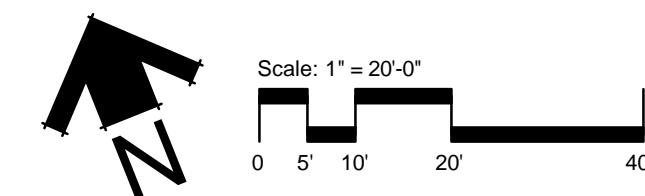
Drawing Title:
CONSTRUCTION
PLAN

Drawing No.:

LC.1



REFER TO SHEET LC.1 FOR CONSTRUCTION MATERIALS SCHEDULE
REFER TO SHEETS LC.3 & LC.4 FOR CONSTRUCTION DETAILS
REFER TO TITLE SHEET FOR GENERAL NOTES

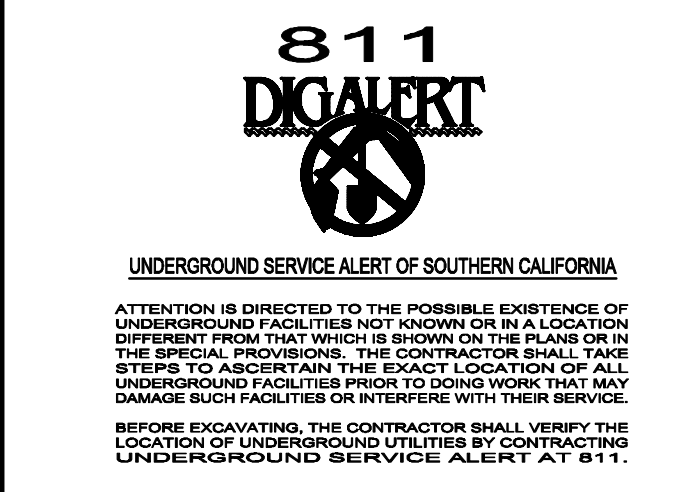
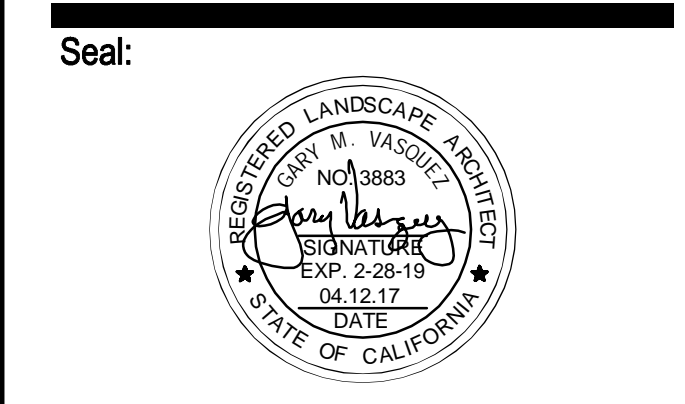


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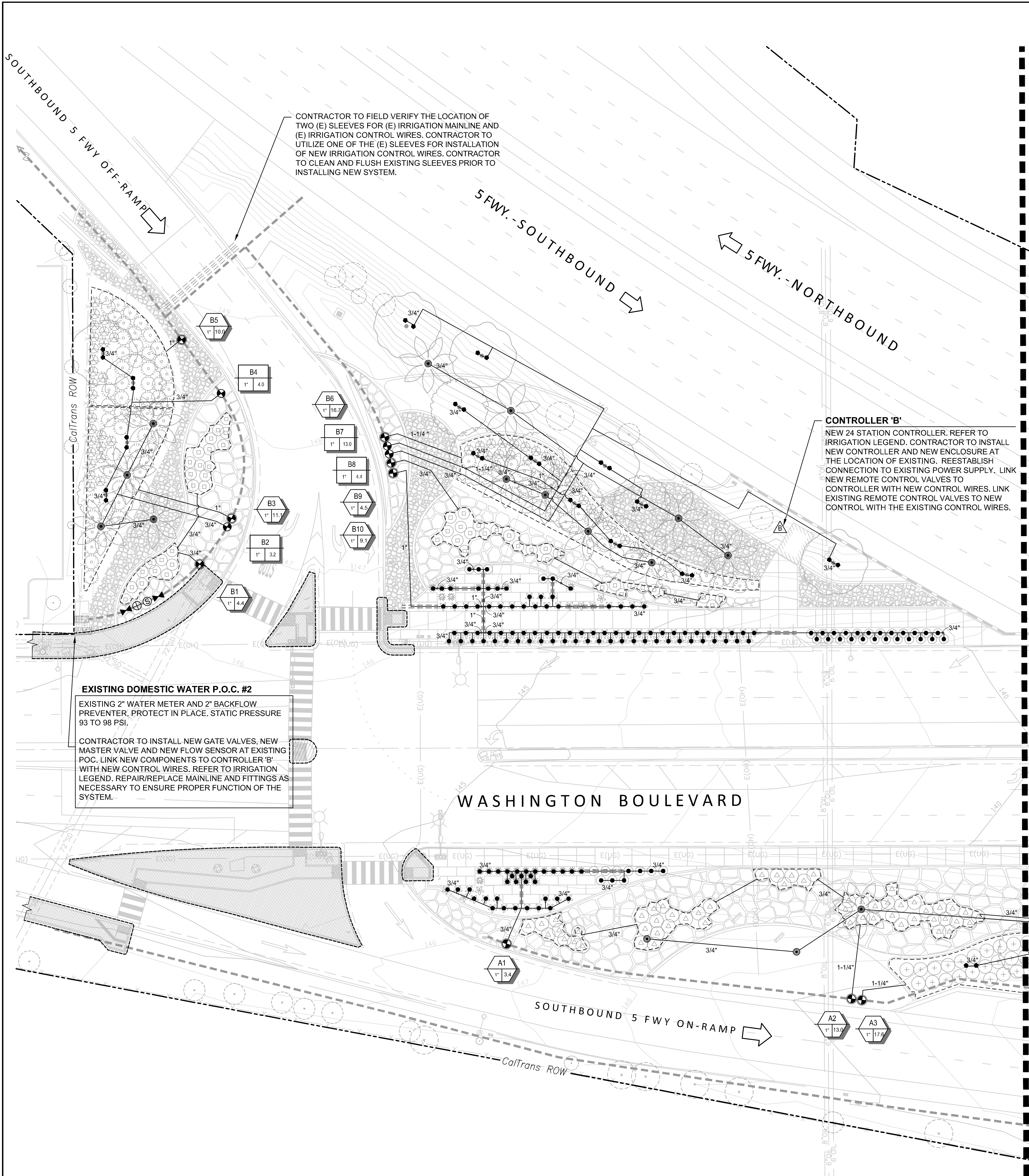
Drawing No :

LC.2

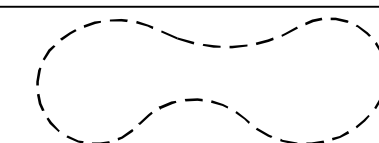
3	ISOLATION JOINT	N.T.S.
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N.T.S.	2	CONCRETE PAVING
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8	LARGE FLAGSTONE "SELECT" PAVERS w/ DECORATIVE GRAVEL FILL MATERIAL
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IRRIGATION LEGEND

SPRAY NOZZLES											
SYMBOL		MANUFACTURER/ DESCRIPTION	NOZZLE	RAD.	HOUSING	GPM		PSI	PRECIP. RATE		
360°	240°	180°	120°	90°		360°	240°	180°	120°	90°	
⊙		●		●							
		RAINBIRD 12" POP-UP SPRAY	12 SERIES HE-VAN	12"	1812-SAM-PRS	2.37	1.18		.59	30	1.83 IN/HR
MICRO SPRAY NOZZLES											
SYMBOL		MANUFACTURER/ DESCRIPTION	NOZZLE	RAD.	HOUSING	FLOW			PSI	PRECIP. RATE	
⊙		RAINBIRD 6" POP-UP SPRAY	SQ-HLF	4"	1806-SAM-PRS	0.2 GPM			30	N/A	
REPRESENTS FOUR (4) SPRAY BODIES AND NOZZLES PER TREE											
BUBBLERS AND DRIP EMITTERS											
SYMBOL		MANUFACTURER/ DESCRIPTION	MODEL	RAD.	HOUSING	FLOW			PSI	PRECIP. RATE	
●		RAINBIRD ROOT WATERING SYS.	BUBBLER 1402	N/A	RWS-B-C-1402	0.5 GPM			30	N/A	
●		RAINBIRD DRIP EMITTER	PC-05-1032 LT. BROWN, PC DIFFUSER CAP	N/A	PFR-FRA24 24" POLY FLEX RISER ASSEMBLY, CUT AS NECESSARY (SEE DETAIL L. SHEET LI.3)	5.0 GPH			30	N/A	
IN-LINE DRIP											
SYMBOL		MANUFACTURER/ DESCRIPTION	MODEL	RAD.	HOUSING	FLOW			PSI	PRECIP. RATE	
		RAINBIRD DRIP LINE TUBING AREA	XFS-06-12	N/A	INSTALL 4" BELOW FINISH GRADE. REFER TO DETAILS	0.6 GPH			30	N/A	

NOTE:

EXISTING MAINLINE: THE EXISTING MAINLINE IS SHOWN TO BE DIAGRAMMATIC. THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY THE MAINLINE'S ACTUAL LOCATION. MODIFY AS NEEDED.

NEW REMOTE CONTROL VALVES AND GATE VALVES: THE NEW REMOTE CONTROL VALVES AND GATE VALVES SHALL BE CONNECTED TO THE EXISTING MAINLINE AT THE APPROXIMATE LOCATION SHOWN ON PLANS. THE CONNECTIONS BETWEEN THE EXISTING MAINLINE AND NEW VALVES WILL REQUIRE ADDITIONAL PIPES AND FITTINGS. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ANY NECESSARY MATERIALS AND/OR EQUIPMENT TO SUCCESSFULLY CONNECT NEW VALVES TO EXISTING MAINLINE.

EXISTING MAINLINE MODIFICATIONS: MODIFICATIONS TO THE EXISTING MAINLINE SHALL BE MADE TO THE SATISFACTION OF THE CITY ENGINEER AND LOCAL WATER PURVEYOR.

NEW CONTROL WIRES: TO ENSURE PROPER FUNCTION OF THE NEW IRRIGATION SYSTEM, NEW CONTROL WIRES SHALL BE INSTALLED, LINKING NEW VALVES TO DESIGNATED CONTROLLER.

WATER UTILITY INFORMATION

CALIFORNIA WATER SERVICE COMPANY
EAST LOS ANGELES DISTRICT
2000 SOUTH TUBEWAY
COMMERCE CA, 90040
(323) 722-8601

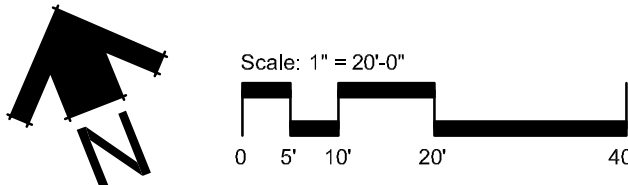
REMOTE CONTROL DRIP ZONE KIT

VALVE SIZE — A2 — CONTROLLER STATION
1" 7.0 — GALLONS PER MINUTE

REMOTE CONTROL VALVE

VALVE SIZE — A1 — CONTROLLER STATION
1" 9.0 — GALLONS PER MINUTE

REFER TO SHEETS LI.3 & LI.4, FOR IRRIGATION DETAILS, NOTES, AND CALCULATIONS
REFER TO TITLE SHEET FOR GENERAL NOTES



Landscape Architect:



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151 Kalmus Drive, Suite M8
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www.dvolzdesign.com

Subconsultant:

Seal:



UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA
ATTENTION IS DIRECTED TO THE POSSIBLE EXISTENCE OF
UNDERGROUND UTILITIES THAT MAY BE LOCATED IN THE AREA
DIFFERENT FROM THAT SHOWN ON THE PLANS OR IN
THE SPECIAL PROVISIONS. THE CONTRACTOR SHALL
VERIFY THE LOCATION AND DEPTH OF ALL
UNDERGROUND UTILITIES PRIOR TO ANY CONSTRUCTION
BEFORE EXCAVATING. THE CONTRACTOR SHALL VERIFY
THE LOCATION OF UNDERGROUND UTILITIES BY CONTRACTING
UNDERGROUND SERVICE ALERT AT 811.

Revisions:

No.	Date	Revisions	By

Project:

WASHINGTON BLVD.
REHABILITATED
LANDSCAPE PROJECT

Owner:

City of Commerce

Project No.:

PC

Checked By: GV

Date: APRIL 12, 2017

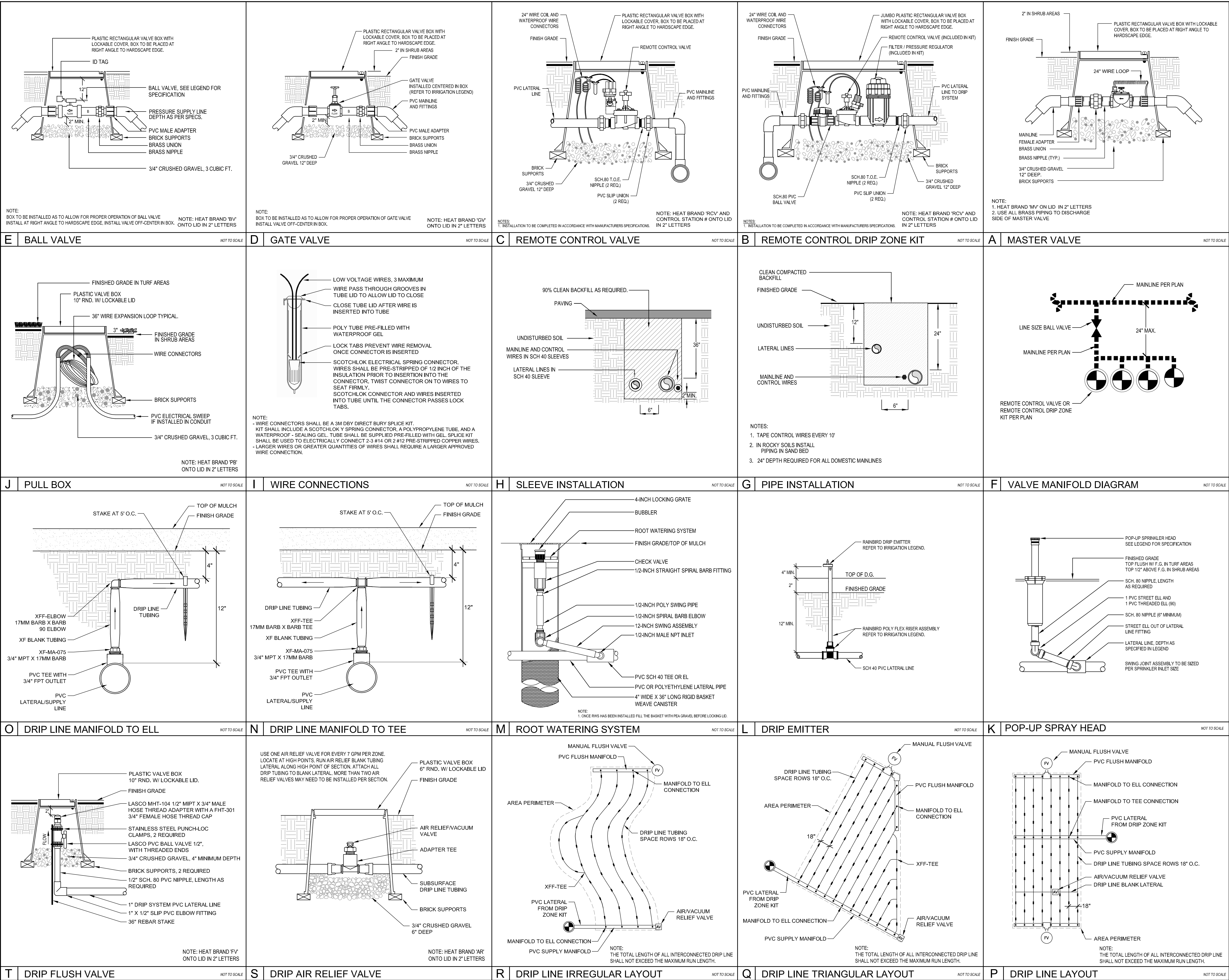
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Drawing Title:

IRRIGATION
PLAN

Drawing No.:

LI.1



Landscape Architect:

DVD
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Landscape Architecture & Park Planning

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Subconsultant:

Seal:

Professional Engineer
State of California
No. 1988
Exp. 12-17-19
David Volz

811
DIY ALERT

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

ATTENTION IS DIRECTED TO THE POSSIBLE EXISTENCE OF UNRECORDED UTILITIES IN THE AREA OF THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION.

Revisions:

No.	Date	Revisions	By

Project:

**WASHINGTON BLVD.
REHABILITATED
LANDSCAPE PROJECT**

Owner:
City of Commerce

Project No.:
Drawn By: PC
Checked By: GV
Date: APRIL 12, 2017
Scale: AS SHOWN

Drawing Title:
**IRRIGATION
DETAILS**

Drawing No.:
LI.3

SHEET 10 OF 14

GENERAL IRRIGATION NOTES

1. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALL, RETAINING WALLS, STRUCTURES AND UTILITIES. THE CONTRACTOR SHALL REPAIR OR REPLACE, AT NO ADDITIONAL COST TO THE CITY, ALL ITEMS DAMAGED BY HIS WORK. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES AND LATERALS THROUGH WALLS, UNDER ROADWAYS AND PAVING, ETC.
2. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES IN THE AREA DIMENSION EXIST THAT MIGHT NOT HAVE BEEN ADDRESSED IN THE DESIGN OF THE IRRIGATION SYSTEM. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE CITY ENGINEER. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY NECESSARY ALTERATIONS TO THE WORK.
3. THE CONTRACTOR SHALL OBTAIN, COORDINATE, AND PAY FOR ANY AND ALL INSPECTIONS AS REQUIRED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR ANY ENCROACHMENT INTO ADJACENT PROPERTY, R.O.W.'S EASEMENTS SETBACKS OR ANY OTHER LEGAL PROPERTY RESTRICTIONS EITHER MARKED OR UNMARKED.
5. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE UNLESS OTHERWISE SPECIFIED. INSTALL ALL HEADS WITH DOUBLE SWING JOINTS AS PER DETAIL. ALL HEADS ADJACENT TO PARKING LOTS, WALKS, ROADS, OR OTHER PAVED AREAS SHALL BE INSTALLED WITH POP-UP BODIES.
6. THE CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS AND VALVES FOR OPTIMUM COVERAGE WITH MINIMAL MISTING AND/OR OVER SPRAY ONTO WALKS, STREETS, WALLS, ETC. SUBSTITUTION OF NOZZLE PATTERN OR RADIUS AS REQUIRED TO ACHIEVE OPTIMUM COVERAGE IS RESPONSIBILITY OF CONTRACTOR.
7. ALL IRRIGATION EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
8. TRENCHING WITHIN THE DRIPLINE OF LARGE EXISTING TREES SHALL BE PERFORMED BY HAND, AND WITH EXTREME CARE NOT TO SEVER ROOTS 1-1/2" IN DIAMETER AND LARGER, WHERE ROOTS 1-1/2" IN DIAMETER AND LARGER ARE ENCOUNTERED, THE CONTRACTOR SHALL TUNNEL UNDER SAID ROOTS. EXPOSED ROOTS THAT HAVE BEEN TUNNELED UNDER SHALL BE WRAPPED IN WET BURLAP AND KEPT MOIST WHILE THE TRENCH IS OPEN.
9. PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON THE DRAWINGS. NO SUBSTITUTIONS OF SMALLER PIPE SIZES SHALL BE PERMITTED, BUT SUBSTITUTIONS OF LARGER SIZES MAY BE APPROVED. ALL DAMAGED AND REJECTED PIPE SHALL BE REMOVED FROM THE SITE AT THE TIME OF SAID REJECTION.

IRRIGATION SYSTEM LAYOUT

DUE TO THE SCALE OF THESE DRAWINGS THE CONTRACTOR SHOULD BE AWARE OF THE POSSIBILITY THAT THE NEED FOR MINOR ADJUSTMENTS TO THE IRRIGATION SYSTEM MAY BE NECESSARY TO PROVIDE PROPER COVERAGE. THESE ADJUSTMENTS COULD INCLUDE NOZZLE CHANGES AND/OR ADDITION OR DELETION OF INDIVIDUAL HEADS TO COMPENSATE FOR CHANGES MADE ON THE SITE. FURTHERMORE, THE IRRIGATION DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC., SHOWN WITHIN PAVED AREAS IS FOR DESIGN CLARIFICATIONS ONLY AND SHALL BE INSTALLED IN **SHRUB** AREAS WHEREVER POSSIBLE.

EXISTING CONDITIONS

THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY EXISTING DAMAGED ITEMS DURING CONSTRUCTION INCLUDING HARDSCAPE, LIGHTING, DRAINAGE, IRRIGATION EQUIPMENT, TREES, SHRUBS, TURF AND GROUNDCOVER. THE CONTRACTOR SHALL REPLACE ANY AND ALL DAMAGED ITEMS TO THE SATISFACTION OF THE ENGINEER.

EQUIPMENT BOXES

ALL REMOTE CONTROL VALVES, BALL VALVES, QUICK COUPLERS, ETC. SHALL BE INSTALLED IN SPECIFIED GREEN SUBGRADE VALVE BOXES AS SHOWN IN IRRIGATION LEGEND COMPLETE WITH LOCKING COVERS. VALVE BOXES SHALL BE CARSON OR APPROVED EQUAL AND SHALL BE MARKED G.V. FOR GATE VALVES, R.C.V. FOR REMOTE CONTROL VALVES, Q.C. FOR QUICK COUPLERS, ETC. REMOTE CONTROL VALVE BOXES ARE ALSO TO BE HEAT BRANDED WITH THE CONTROLLER AND STATION NUMBER. ALL MARKINGS SHALL BE 2" LETTERS AND NUMBERS.

REMOTE CONTROL VALVE LABELS

ALL VALVES ARE TO BE FASTENED WITH CHRISTY'S VALVE IDENTIFICATION TAGS IDENTIFYING STATION # AND APPROPRIATE CONTROLLER IDENTIFICATION INFORMATION.

SLEEVING

SLEEVES SHALL BE PLACED UNDER ALL DRIVEWAYS AND WALKS WHERE IRRIGATION LATERAL, MAINLINE, AND WIRE WILL CROSS. SLEEVES SHALL BE PVC SCH. 40, MINIMUM BURY 36" DEEP. MINIMUM DISTANCE PAST EDGE OF DRIVEWAY OR CONCRETE WALK SHALL BE 24". WATER AND WIRE SHALL NOT BE PLACED IN THE SAME SLEEVE. SLEEVES TO BE TWICE THE DIAMETER OF THE PIPE BEING SLEEVED. CONTRACTOR SHALL ADD TWO (2) ADDITIONAL PIPES SEALED ON BOTH ENDS WITH DUCT TAPE TO EACH SLEEVE. WIRE SLEEVES TO BE 2" DIA.

POLYVINYL CHLORIDE PIPE CEMENT

IPS WELD-ON PVC 721 BLUE MEDIUM-BODIED (USE WITH 1/2" TO 1-1/2" PVC PIPE)
IPS WELD-ON PVC 711 GRAY HEAVY-BODIED (USE WITH 2" AND LARGER PVC PIPE AND ALL MAIN LINES)

POLYVINYL CHLORIDE PIPE PRIMER

IPS WELD-ON P-70 PRIMER PURPLE (USE WITH ALL PVC CONNECTIONS)

DETECTABLE MARKING TAPE

'CHRISTY'S' UNDERGROUND MARKING TAPE SHALL BE RUN WITH ALL MAINLINES AND MUST BE INSTALLED AT LEAST 6" ABOVE TOP OF PIPE.

DIRECT BURIAL CONTROL WIRES

(SOLID COPPER, 600 VOLT, TYPE UF)

COMMON WIRES:
WHITE (#12 AWG)

STATION WIRES:
(#14 AWG) COLOR-CODED REQUIREMENTS PER CITY STANDARD. INSTALL TWO (2) ADDITIONAL STATION WIRES AND TWO (2) ADDITIONAL COMMON WIRES TO ALL NEW VALVES FROM EXISTING CONTROLLER.

WIRE SPLICES/ CONNECTORS ARE TO BE 3M DBY DIRECT BURY SPLICE KIT. USE EXTRA SEALANT INSIDE CONNECTORS.

PVC PIPE FITTINGS

ALL FITTINGS CONNECTING PVC TO PVC SHALL BE SCH.80. ALL PVC FITTINGS TO BRASS VALVES SHALL BE REINFORCED WITH STAINLESS STEEL COLLAR.

STATIC PRESSURE

FIELD CHECK EXISTING STATIC PRESSURE AT THE POINT OF WATER SERVICE CONNECTION PRIOR TO THE START OF IRRIGATION SYSTEM WORK. THE STATIC PRESSURE INFORMATION WAS PROVIDED BY CAL WATER AND WAS SAID TO BE 93 TO 98 PSI AT BOTH POINTS OF CONNECTION. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE ENGINEER.

Maximum Applied Water Allowance Calculations for New and Rehabilitated Non-Residential Landscapes		
Enter value in Pale Blue Cells		
Tan Cells Show Results		
Messages and Warnings		
Click on the blue cell on right to Pick City Name	Los Angeles	Name of City
ET _a of City from Appendix A	50.10	ET _a (inches/year)
	4756	Overhead Landscape Area (ft ²)
	15438	Drip Landscape Area (ft ²)
	0	SLA (ft ²)
Total Landscape Area	20,194	
Results:		
(ET _a) x (0.62) x [(0.45 x LA) + ((1.0 - 0.45) X SLA)]	-	Gallons
	-	Cubic Feet
	-	HCF
	-	Acre-feet
	-	Millions of Gallons
MAWA calculation incorporating Effective Precipitation (Optional)		
Precipitation (Optional)		
ET _a of City from Appendix A	50	ET _a (inches/year)
Total Landscape Area	20,194	LA (ft ²)
Special Landscape Area	0	SLA (ft ²)
	17	Total annual precipitation (inches/year)
Enter Effective Precipitation	4.25	Eppt (in/yr)(25% of total annual precipitation)
Results:		
MAWA = [(ET _a - Eppt) x (0.62)] x [(0.45 x LA) + ((1.0 - 0.45) x SLA)]	258,325	Gallons
	34,533.10	Cubic Feet
	345.33	HCF
	0.79	Acre-feet
	0.26	Millions of Gallons

Estimated Total Water Use

Equation: $ETWU = ET_a \times 0.62 \times [(IPF \times HA)(IE) + SLA]$; Considering precipitation $ETWA = (ET_a - Eppt) \times 0.62 \times [(IPF \times HA)(IE) + SLA]$

Enter values in Pale Blue Cells

Tan Cells Show Results

Messages and Warnings

Irrigation Efficiency Default Value for overhead 0.75 and drip 0.81.

Plant Water Use Type	Plant Factor
Very Low	0 - 0.1
Low	0.2 - 0.3
Medium	0.4 - 0.6
High	0.7 - 1.0
SLA	1.0

Hydrozone	Select System From the Dropdown List click on cell below	Plant Water Use Type (s) (low, medium, high)	Plant Factor (PF)	Hydrozone Area (HA) (ft ²) Without SLA	Enter Irrigation Efficiency (IE)	(PF x HA (ft ²))/IE
A1	Drip	Low	0.30	825	0.81	306
A2	Drip	Low	0.30	2,200	0.81	815
A3	Drip	Low	0.30	2,637	0.81	977
A4	Overhead Spray	Low	0.30	144	0.75	58
A5	Drip	Low	0.30	160	0.81	59
A6	Overhead Spray	Low	0.30	1,457	0.75	583
A7	Overhead Spray	Low	0.30	2,008	0.75	803
A8	Drip	Low	0.30	64	0.81	24
A9	Overhead Spray	Low	0.30	955	0.75	382
B1	Drip	Low	0.30	660	0.81	244
B2	Overhead Spray	Low	0.30	64	0.75	26
B3	Drip	Low	0.30	1,457	0.81	614
B4	Drip	Low	0.30	64	0.81	24
B5	Drip	Low	0.30	1,500	0.81	556
B6	Drip	Low	0.30	2,550	0.81	926
B7	Drip	Low	0.30	208	0.81	77
B8	Overhead Spray	Low	0.30	128	0.75	51
B9	Drip	Low	0.30	255	0.81	280
B10	Drip	Low	0.30	2,208	0.81	818
						7,620
		SLA		0		0
		Sum		20,194		

Results

MAWA = 258,325

ETWU = 216,619 Gallons

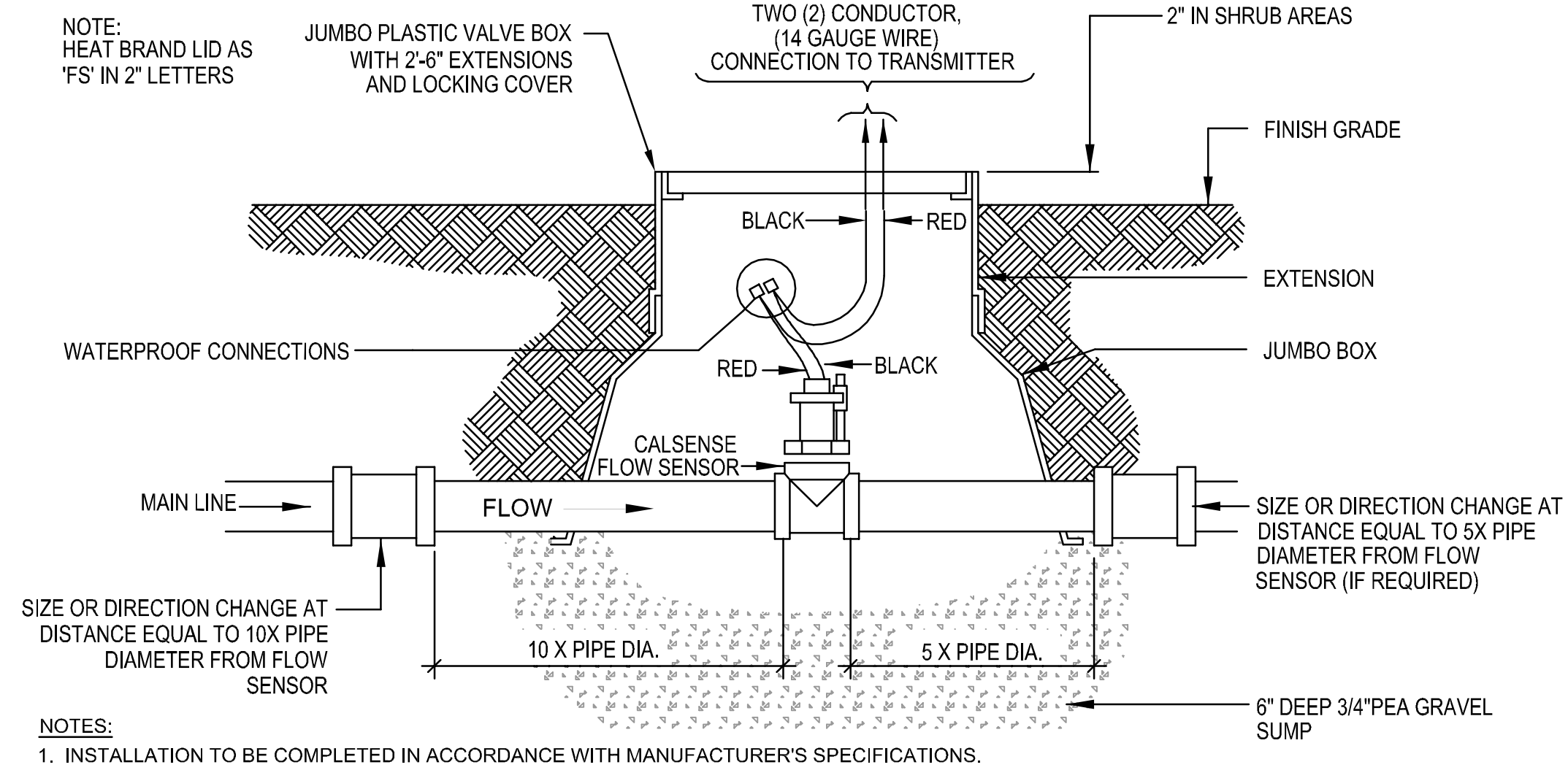
28,958 Cubic Feet

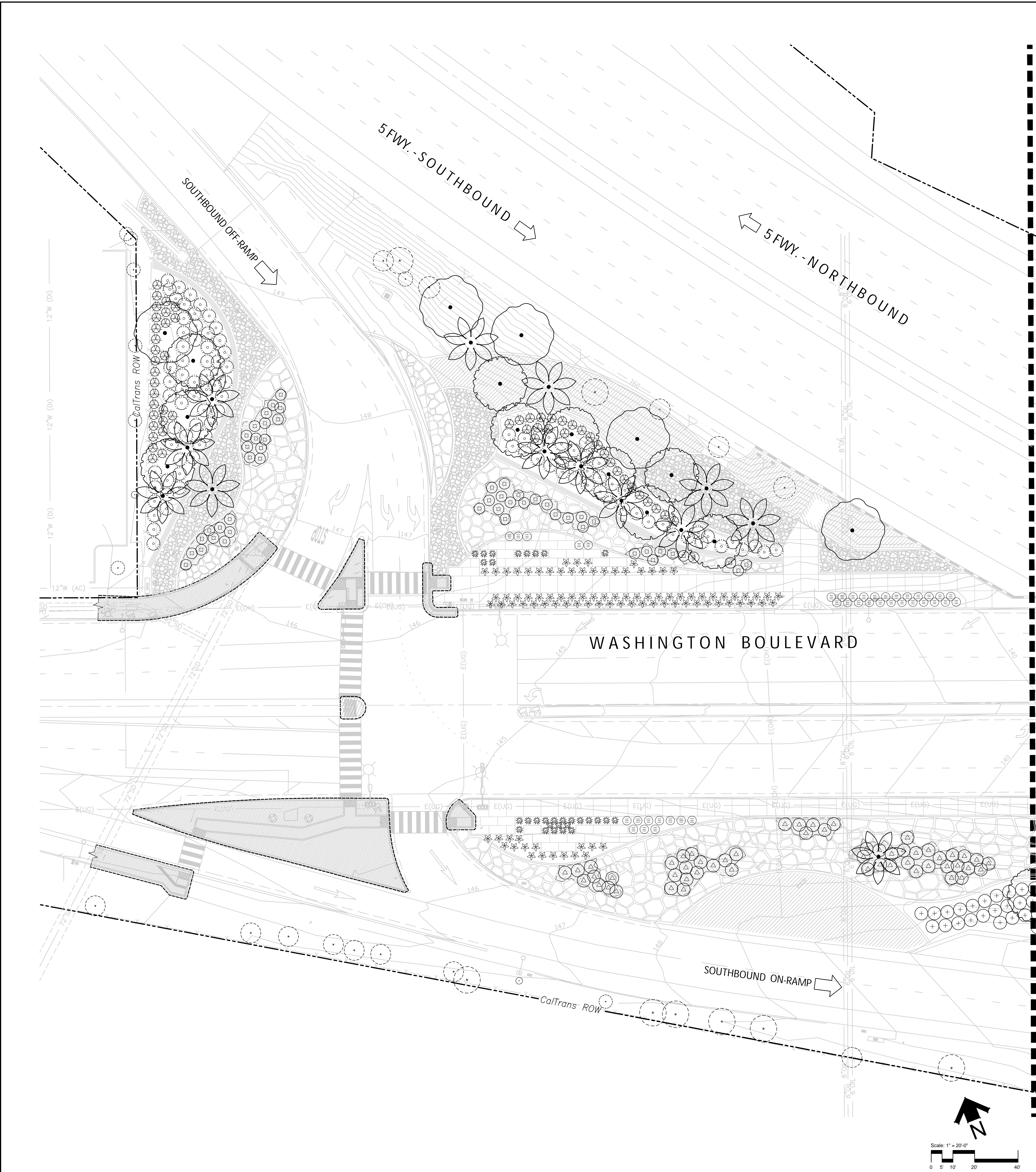
289.58 HCF

0.66 Acre-feet

0.22 Millions of Gallons

ETWU complies with MAWA





PLANTING PLAN

REFER TO SHEET LP. 3 FOR GENERAL, TREE, AND PALM TREE PLANTING NOTES
REFER TO TITLE SHEET FOR GENERAL NOTES

PLANT LEGEND

TREES & PALM				
SYMBOL	BOTANICAL COMMON NAME	QUANTITY - SIZE	COMMENTS	WATER USE
	Arbutus 'Marina' Marina Strawberry Tree	11 - 48" box	MULTI TRUNK WITH THREE (3) LEADER BRANCHES MINIMUM	LOW .3
	Olea europaea 'Wilsoni' Fruitless Olive	16 - 48" box	MULTI TRUNK WITH THREE (3) LEADER BRANCHES MINIMUM	LOW .2
	Phoenix dactylifera Date Palm	8 - 20' B.H.T. 11 - 15' B.H.T.	THE FINAL LOCATION OF EACH PALM TREE SHALL BE COORDINATED WITH THE LANDSCAPE ARCHITECT	LOW .3

SHRUBS, SUCCULENTS & GROUND COVER

SYMBOL	BOTANICAL COMMON NAME	QUANTITY - SIZE	COMMENTS	WATER USE
	Agave 'Mateo' Matthew's Agave	31 - 5 gal.		VERY LOW <.1
	Agave pedunculifera Durango Soft Agave	94 - 5 gal.		LOW .2
	Agave bracteosa 'Calamar' Calamar Squid Agave	40 - 5 gal.		VERY LOW <.1
	Bougainvillea 'Moneth' Purple Queen Bougainvillea	51 - 5 gal.	MUST BE AT LEAST CAN FULL TO BE ACCEPTED	LOW .3
	Bougainvillea 'Torch Glow' Torch Glow Bougainvillea	53 - 1 gal.	MUST BE AT LEAST CAN FULL TO BE ACCEPTED	LOW .3
	Bougainvillea 'Singapore White' Ms. Alice Bougainvillea	97 - 5 gal.	MUST BE AT LEAST CAN FULL TO BE ACCEPTED	LOW .3
	Bougainvillea 'Monka' Oo-La-La Bougainvillea	70 - 5 gal.	MUST BE AT LEAST CAN FULL TO BE ACCEPTED	LOW .3
	Lantana camara 'New Gold' Gold Spreading Lantana	84 - 5 gal.	MUST BE AT LEAST CAN FULL TO BE ACCEPTED	VERY LOW <.1
	Olea europaea 'Montra' P.P. #6266 Little Olive Dwarf Olive	98 - 5 gal.	MUST BE AT LEAST CAN FULL TO BE ACCEPTED	LOW .2

Landscape Architect:

DVD
David Volz Design
Landscape Architecture & Park Planning

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Subconsultant:

Seal:

811
DISAERT

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

ATTENTION IS DIRECTED TO THE POSSIBLE EXISTENCE OF UNDERGROUND UTILITIES LOCATED ON OR NEAR THE PLANS OR IN THE FIELD. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL TAKE STEPS TO ASCERTAIN THE EXACT LOCATION OF ALL UNDERGROUND FACILITIES PRIOR TO ANY WORK THAT MAY DAMAGE SUCH FACILITIES OR INTERFERE WITH THEIR SERVICE. BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UNDERGROUND SERVICE ALERT AT 811.

Revisions:

No.	Date	Revisions	By

Project:

WASHINGTON BLVD.
REHABILITATED
LANDSCAPE PROJECT

Owner:

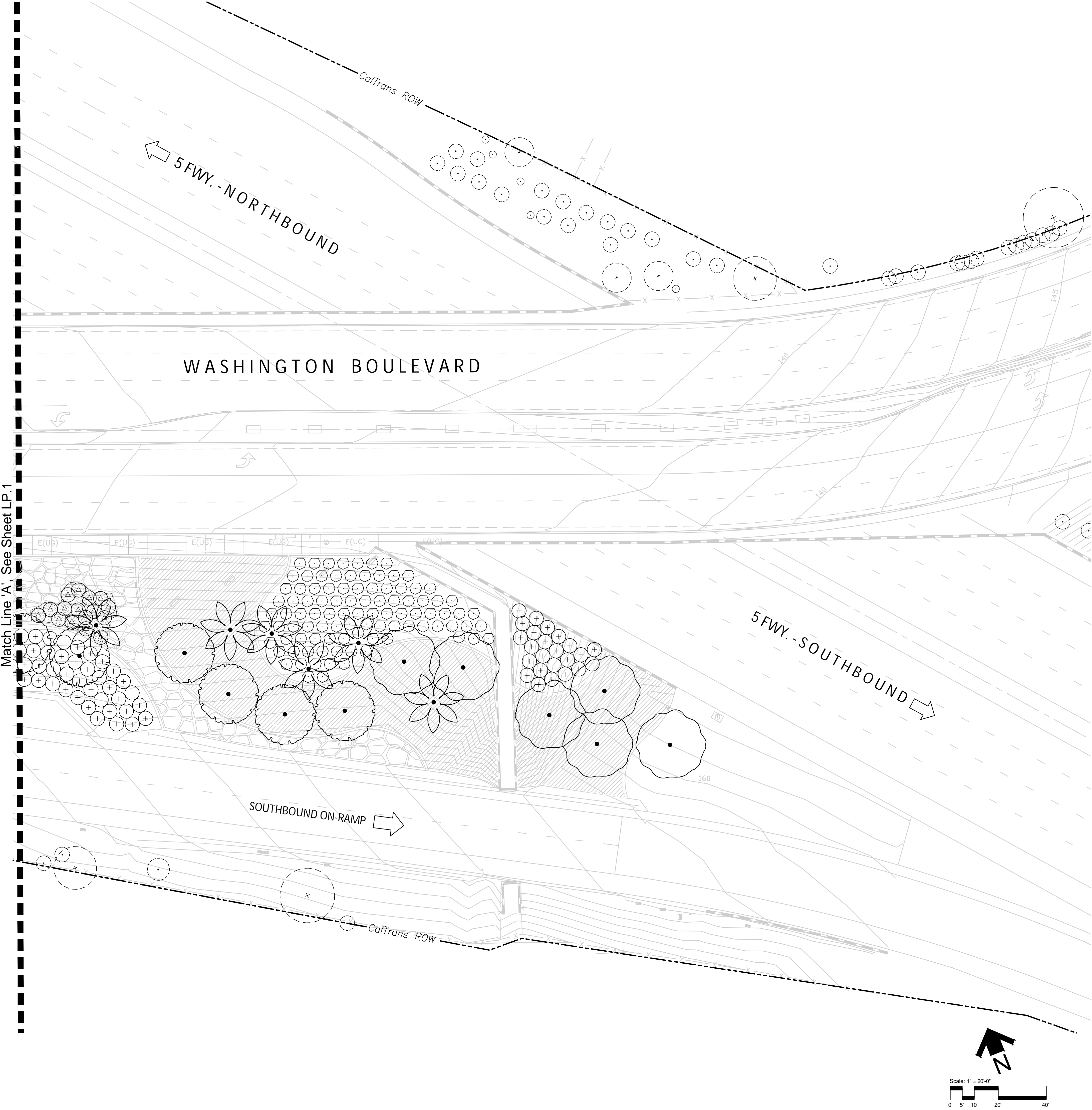
City of Commerce

Project No.:
Drawn By: PC
Checked By: GV
Date: APRIL 12, 2017
Scale: AS SHOWN

Drawing Title:

PLANTING
PLAN

Drawing No:



PLANTING PLAN

TREES & PALM

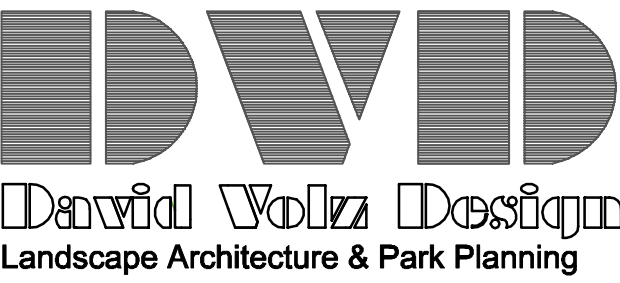
SYMBOL	BOTANICAL COMMON NAME
	Arbutus 'Marina' Marina Strawberry Tree
	Olea europaea 'Wilsoni' Fruitless Olive
	Phoenix dactylifera Date Palm

SHRUBS, SUCCULENTS & GROUND COVER

SYMBOL	BOTANICAL COMMON NAME
	Bougainvillea 'Singapore White' Ms. Alice Bougainvillea
	Bougainvillea 'Monka' Oo-La-La Bougainvillea
	Lantana camara 'New Gold' Gold Spreading Lantana

SEE PLANT LEGEND ON SHEET LP.1 FOR THE COMPLETE PROJECT'S PLANT PALETTE, INCLUDING QUANTITIES AND SIZES.

Landscape Architect:



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www.dvolzdesign.com

Subconsultant:

Seal:



UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA
ATTENTION IS DIRECTED TO THE POSSIBLE EXISTENCE OF UNDERGROUND FACILITIES THAT MAY BE DAMAGED OR AVOIDED BY THE CONTRACTOR. THE CONTRACTOR SHALL TAKE STEPS TO AVOID OR MINIMIZE THE EXISTENCE OF ALL UNDERGROUND FACILITIES PRIOR TO ANY WORK THAT MAY DAMAGE SUCH FACILITIES OR INTERFERE WITH THEIR SERVICE. BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UNDERGROUND SERVICE ALERT AT 811.

Revisions:

No.	Date	Revisions	By

Project:

WASHINGTON BLVD.
REHABILITATED
LANDSCAPE PROJECT

Owner:

City of Commerce

Project No.:

Drawn By: PC

Checked By: GV

Date: APRIL 12, 2017

Scale: AS SHOWN

Drawing Title:

PLANTING
PLAN

Drawing No.:

LP.2

GENERAL PLANTING NOTES

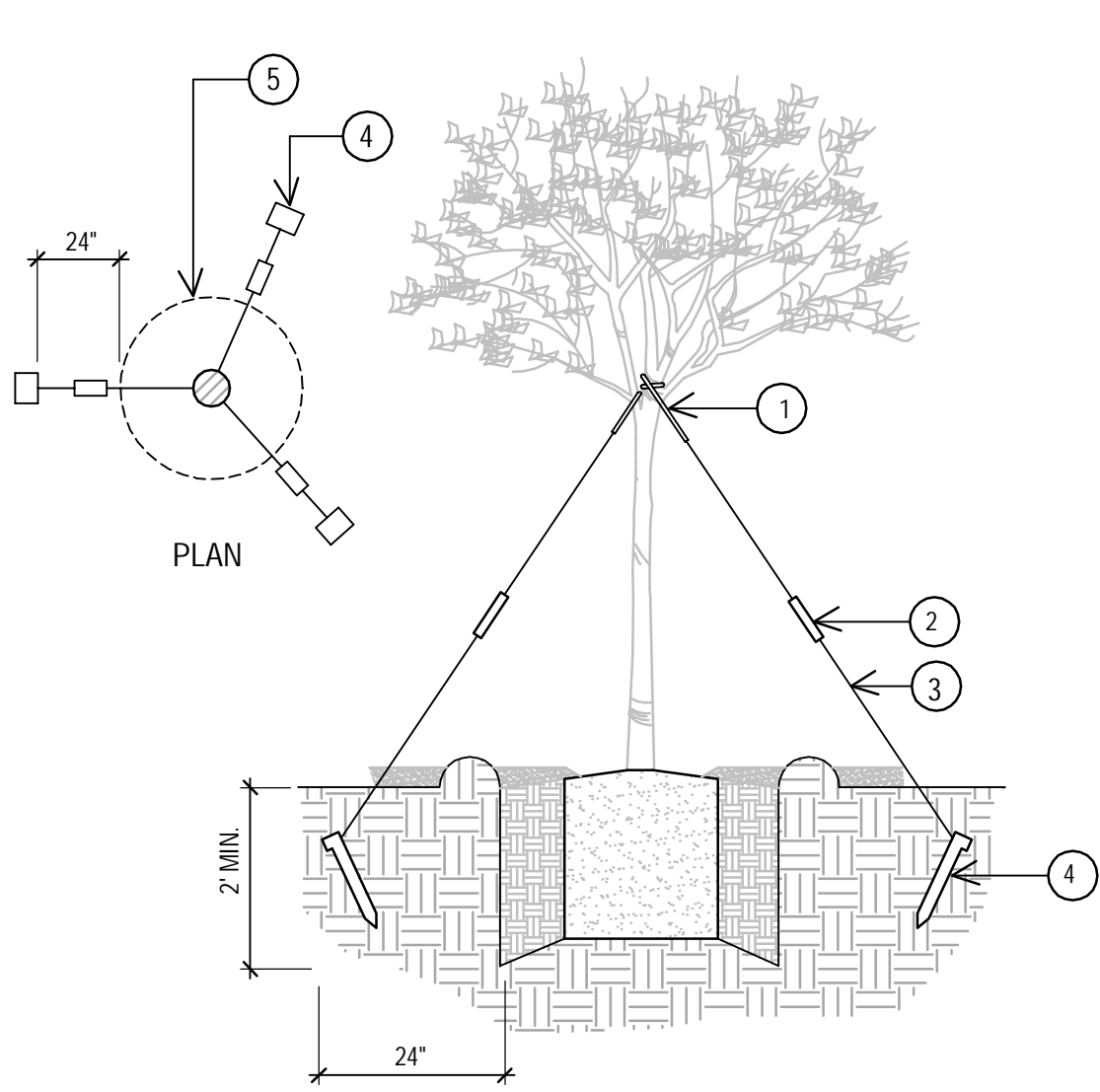
1. ALL TREES WITHIN A SPECIES SHALL HAVE MATCHING FORM.
2. ALL LANDSCAPED AREAS TO RECEIVE AUTOMATED IRRIGATION.
3. REFER TO PLANTING SPECIFICATIONS FOR SOIL PREPARATION, FERTILIZATION, MULCHING, AND OTHER ADDITIONAL PLANTING INFORMATION. ALL PLANT MATERIAL SHALL BE APPROVED BY THE CITY'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION.
4. FINAL LOCATION OF ALL PLANT MATERIALS SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER'S AUTHORIZED REPRESENTATIVE. CONTRACTOR SHALL NOTIFY CITY'S AUTHORIZED REPRESENTATIVE 48 HOURS PRIOR TO COMMENCEMENT OF WORK TO COORDINATE PROJECT INSPECTION SCHEDULES.
5. SEE DETAILS AND SPECIFICATIONS FOR TREE STAKING METHOD, PLANT PIT DIMENSIONS AND BACKFILL REQUIREMENTS.
6. IF CONFLICTS ARISE BETWEEN SIZE OF AREAS AND PLANS, CONTRACTOR TO CONTACT LANDSCAPE ARCHITECT FOR RESOLUTION. FAILURE TO MAKE SUCH CONFLICTS KNOWN TO THE LANDSCAPE ARCHITECT WILL RESULT IN CONTRACTOR'S LIABILITY TO RELOCATE THE MATERIALS.
7. CONTRACTOR SHALL SUBMIT FOR APPROVAL PHOTOS OF ALL BOXED TREES. PHOTOS SHOULD INCLUDE A PERSON FOR SCALE PURPOSES. ALL BOX TREES SHALL BE OF QUALITY AS DETERMINED BY THE LANDSCAPE ARCHITECT. MATERIAL FOUND UNSUITABLE FOR THE DESIGN OR SPECIFIED INTENT WILL BE REJECTED.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH PLANT MATERIALS FREE OF PESTS OR PLANT DISEASES. PRE-SELECTED OR 'TAGGED' MATERIAL MUST BE INSPECTED BY THE CONTRACTOR AND CERTIFIED PEST AND DISEASE FREE. IT IS THE CONTRACTOR'S OBLIGATION TO WARRANTY ALL PLANT MATERIALS PER THE SPECIFICATIONS.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING HIMSELF FAMILIAR WITH ALL UNDERGROUND UTILITIES, PIPELINES AND STRUCTURES. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF SAID UTILITIES.
10. CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CITY ENGINEER. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH SUBCONTRACTORS AS REQUIRED TO ACCOMPLISH PLANTING OPERATIONS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY PLANT MATERIAL QUANTITIES PER PLAN.
13. GRADING: THE CONTRACTOR TO ASSURE POSITIVE DRAINAGE IN ALL PLANTING AREAS - 2% MINIMUM AFTER ROUGH GRADES HAVE BEEN ESTABLISHED IN PLANTING AREAS.
14. SOIL TESTING: THE CONTRACTOR SHALL HAVE FOUR (4) SOIL SAMPLES TAKEN AT TWO (2) DIFFERENT LOCATIONS. THE LOCATION OF EACH SAMPLE SHALL BE DETERMINED IN THE FIELD BY THE LANDSCAPE ARCHITECT. SOIL SAMPLES SHALL BE TESTED FOR SOIL FERTILITY, AGRICULTURAL SUITABILITY BY A CERTIFIED SOIL TESTING LAB. THE SOIL TESTING FACILITY WILL PREPARE A SOIL REPORT WITH BACKFILL AND SOIL PREPARATION RECOMMENDATIONS. TWO (2) SOIL SAMPLES SHALL BE TAKEN AT EACH LOCATION: (1) SAMPLE AT GROUND LEVEL TO 10" DEEP AND ONE (1) AT 24" TO 36" DEEP. EACH SAMPLE SHALL CONTAIN APPROXIMATELY 1 QUART OF SOIL AND BE LABELED PER LOCATION AND DEPTH.
15. THE CONTRACTOR SHALL IMPLEMENT THE RECOMMENDATIONS IDENTIFIED IN THE SOILS REPORT AND NO ADDITIONAL COST TO THE CITY.
16. GROUND COVERS AND SHRUBS SHALL BE TRIANGULARLY SPACED, UNLESS OTHERWISE INDICATED.
17. SOIL IMPORT: IF NECESSARY, ALL SOIL FOR LANDSCAPE PLANTING AREAS OR BERMS SHALL BE OBTAINED FROM ON-SITE EXCAVATIONS UNLESS IT IS DETERMINED BY AN SOIL TESTING LAB THAT THE SOIL IS UNFIT FOR USE. SHOULD IMPORT SOIL BE NECESSARY, THE CONTRACTOR WILL INDICATE SOURCE LOCATION. SOIL SHALL BE SANDY LOAM CONTAINING NO TOXIC CHEMICALS OR ELEMENTS WHICH MAY INHIBIT OR RETARD NORMAL PLANT GROWTH.
18. SOIL IMPORT: IF NECESSARY, ANY SOIL IMPORT SHALL BE TESTED FOR SUITABILITY PRIOR TO BEING TRANSPORTED TO THE SITE. TESTING RESULTS SHALL BE REVIEWED AND APPROVED BY THE LANDSCAPE ARCHITECT.
19. WOOD MULCH: ALL LANDSCAPED AREAS (EXCLUDING TURF AND AREAS RECEIVING ROCK COBBLE) SHALL BE MULCHED WITH A 4" DEEP LAYER OF WOOD MULCH. REFER TO SPECIFICATIONS FOR TYPE, AT THE CONCLUSION OF PLANTING OPERATIONS.
20. AT EDGES OF PLANTING AREAS, THE CENTER LINE OF THE LAST ROW OF SHRUBS AND/OR GROUND COVER SHALL BE LOCATED NO FARTHER FROM OR CLOSER TO THE EDGE THAN ONE-HALF THE SPECIFIED ON-CENTER SPACING.
21. REMOVE ALL NURSERY STAKES AND ESPALIER RACKS IMMEDIATELY AFTER INSTALLATION, UPON PROVIDING SUPPORT PER DETAIL.

TREE PLANTING NOTES

1. TREE MUST BE OF QUALITY NURSERY STOCK, FREE FROM PESTS, DISEASE AND STRUCTURAL DEFECTS.
2. DIG PLANTING PIT TWICE AS WIDE AS ROOT BALL, OR AS WIDE AS PRACTICAL PER PLANTING LOCATION. PIT SHOULD BE NO DEEPER THAN SOIL IN THE TREE CONTAINER.
- NOTE: IF DRAINAGE IS A CONCERN, THE OUTSIDE PERIMETER OF THE PIT CAN BE DUG DEEPER TO DIVERT EXCESS WATER AWAY FROM THE ROOT BALL. (SEE DETAIL).
3. REMOVE THE TREE FROM THE CONTAINER OR BOTTOM FROM BOX SIZE TREES AND PLACE IN PLANTING PIT. SET THE TOP OF ROOT BALL 1" ABOVE FINISH GRADE TO ALLOW FOR SETTLING. REMOVE THE REMAINDER OF THE BOX.
4. BACK FILL THE PIT 1/2 WAY WITH AMENDED SOIL. ADD FERTILIZER TABLETS IF REQUIRED. ADD WATER TO FLOOD THE BOTTOM OF THE PIT.
5. COMPLETE BACK FILL OF PIT WITH AMENDED SOIL, TAMPING SOIL AROUND ROOT BALL TO INSURE THAT NO AIR POCKETS EXISTS AND THAT SOIL IS REASONABLY FIRM.
6. PREPARE A TEMPORARY EARTHEN WATER BASIN CAPABLE OF HOLDING AT LEAST 10 GALLONS OF WATER.
7. REMOVE NURSERY STAKES AND INSTALL NEW TREE STAKES PER TREE STAKING DETAILS.
8. ATTACH TREES SUPPORT TIES PER TREE STAKING DETAIL.
10. FILL THE WATER BASIN AND LET SEEP TWO TIMES.

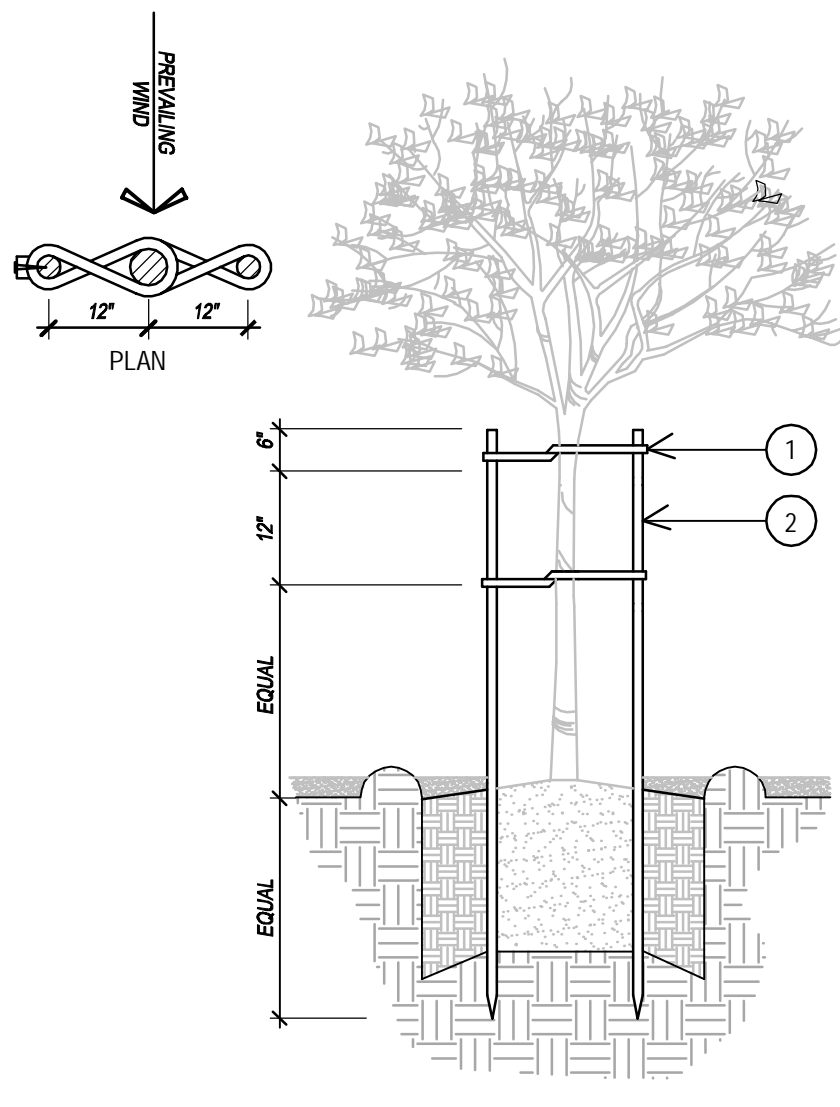
PALM TREE PLANTING NOTES

1. THE CONTRACTOR, ALONG WITH A CITY DESIGNATED REPRESENTATIVE, SHALL INSPECT ALL PALMS AT THE NURSERY OR SUPPLIER PRIOR TO THEIR BEING DELIVERED TO THE JOB SITE.
2. THE LANDSCAPE ARCHITECT AND/OR THE CITY OF COMMERCE RESERVES THE RIGHT TO REJECT ANY PALMS DELIVERED TO THE SITE THAT DOES NOT MEET THE DESIRED APPEARANCE AND SIZE SPECIFIED.
3. BALL & BURLAP (B&B) PALMS SUPPLIED FOR THIS PROJECT SHALL BE DUG WITH THE LARGEST ROOT BALL POSSIBLE TAKING INTO CONSIDERATION THE PROPOSED LOCATION. THE ROOT BALL SHALL BE DUG USING SHARP/CLEAN CUTS.
4. ROOT BALLS SHALL BE KEPT MOIST DURING TRANSPORT.
5. ALL PALMS SHALL BE PLANTED IMMEDIATELY UPON ARRIVAL TO THE JOB SITE. PALMS SHALL BE STORED ON SITE ONLY WITH PRIOR APPROVAL OF THE CITY. IF PALMS ARE STORED ON SITE THE ROOT BALLS SHALL BE FULLY COVERED WITH SAND AND NEVER COVER THE ROOT BALLS WITH PLASTIC.
6. ADEQUATE SIZED NYLON SLINGS SHALL BE USED FOR RIGGING PALMS IN PREPARATION FOR LIFTING. DO NOT USE STEEL CABLES FOR TUGGING ON PALMS. EXTRA PRECAUTIONS SHALL BE TAKEN TO PREVENT DISFIGURATION OF THE TRUNK.
7. TIES THAT HOLD THE FRONDS CLUSTERS SHALL BE A SINGLE "ORGANIC" TYPE TWINE. AVOID USING TWINE THAT WILL REQUIRE CUTTING DURING THE MAINTENANCE PERIOD.
8. PRIOR TO THE INSTALLATION OF PALMS AND WHILE THE PALMS ARE LYING DOWN THE CONTRACTOR SHALL APPLY A FUNGICIDE TO THE CROWN OF EACH PALM TO PREVENT "PINK ROT".
9. EXTRA PRECAUTIONS SHALL BE TAKEN IF USING A CRANE FOR INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE TO THOROUGHLY INSPECT THE SITE FOR ANY OVERHEAD ELECTRICAL WIRES AND BE FULLY AWARE OF ALL O.S.H.A. RULES AND PROCEDURES INVOLVING CRANE OPERATION.
10. BACKFILLING SHALL OCCUR ONLY AFTER THE PALMS ARE SET STRAIGHT AND PLUMB.
11. UNDER NO CIRCUMSTANCES SHALL COURSE PLASTER SAND WITH EXCESSIVE SALT LEVELS BE USED FOR BACKFILL.
12. ALL PALMS SHALL BE PLANTED AT GRADE LEVEL.
13. FRONT TIES SHALL REMAIN IN PLACE FOR A MINIMUM OF 60 DAYS TO PROTECT THE LEAVES FROM DRYING OUT OR DIRECT HEAT OF THE SUN.

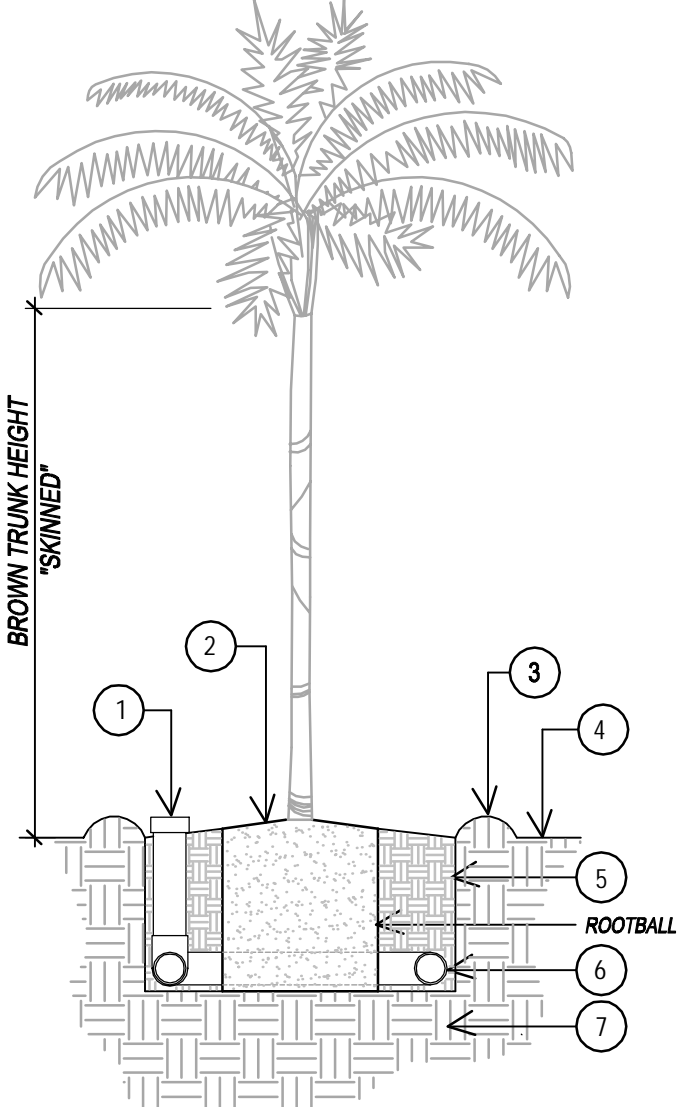


- LEGEND
- 1 BLACK RUBBER HOSE (3) PER TREE
- 2 GALVANIZED STEEL TURNBUCKLE (3) PER TREE
- 3 MIN. 3/4" DIA. BRAIDED CABLE WITH 1/2" X 12" LONG PVC TUBING COVER FOR VISUAL IDENTITY
- 4 DUCKBILL EARTH ANCHOR ING SYSTEM (3 CABLES PER TREE)
- 5 ROOTBALL

NOTE: ATTACH GUYS TO MAJOR TRUNKS ONLY.



- LEGEND
- 1 PADDED "TWIST BRACE" BY V.I.T. CO. (#19) 673-1760 NAIL TO POLES WITH (2) GALVANIZED ROOFING NAILS.
- 2 TREATED LODGE POLE STAKE - 3" DIA. BY 10 FEET LONG
- NOTE: MINIMUM (3) TIES (TOP & BOTTOM) REQUIRED. USE THIRD TIE WHEN NECESSARY TO HOLD TREE IN UPRIGHT POSITION. TIES TO BE SECURED TO AVOID SLIPPAGE. WRAP STAKE, TO FORM FIGURE EIGHT. SCREW WITH (1) GALV. SCREW THROUGH EACH TIE INTO POLE.



- LEGEND
- 1 4" DIAMETER VERTICAL PERFORATED DRAIN PIPE. CONNECT TO PIPE AT BASE OF PIT AND CAP AT SURFACE. WRAP PIPE WITH FILTER FABRIC.
- 2 SET TOP OF ROOT BALL 1-2 INCHES ABOVE FINISH GRADE.
- 3 4 INCH HIGH WATERING BASIN
- 4 FINISH GRADE
- 5 MEDIUM GRADE PLASTER SAND BACKFILL. WATER JETTED INTO HOLE FOR MAXIMUM STABILITY.
- 6 4 INCH DIAMETER FLEXIBLE PERFORATED DRAIN PIPE ENCIRCLING BASE OF PLANTING PIT. CONNECT TO VERTICAL PIPE. WRAP PIPE WITH FILTER FABRIC.
- 7 NATIVE SUBGRADE

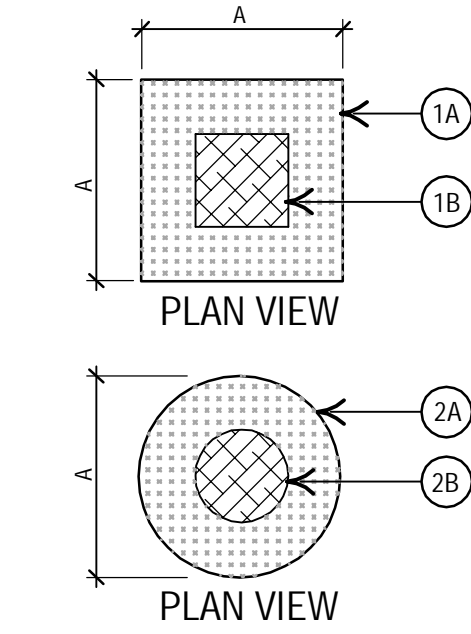
NOTE:
1. ALL PALM TREES ARE TO BE BOXED (UNLESS OTHERWISE NOTED ON PLAN). CONTRACTOR SHALL HAVE A SOIL AGRONOMIST PREPARE A DETAILED SOIL ANALYSIS AT TREE PLANTING LOCATIONS AND INSTALL ALL PALMS FOLLOWING THE RECOMMENDATIONS OF THE REPORT.
2. APPLY "OSMOCOTE" SLOW-RELEASE FERTILIZER ON SURFACE OF PLANTING PIT PER MANUFACTURER'S DIRECTION.

3 TREE GUYING - 36" & 48" BOX TREES N.T.S.

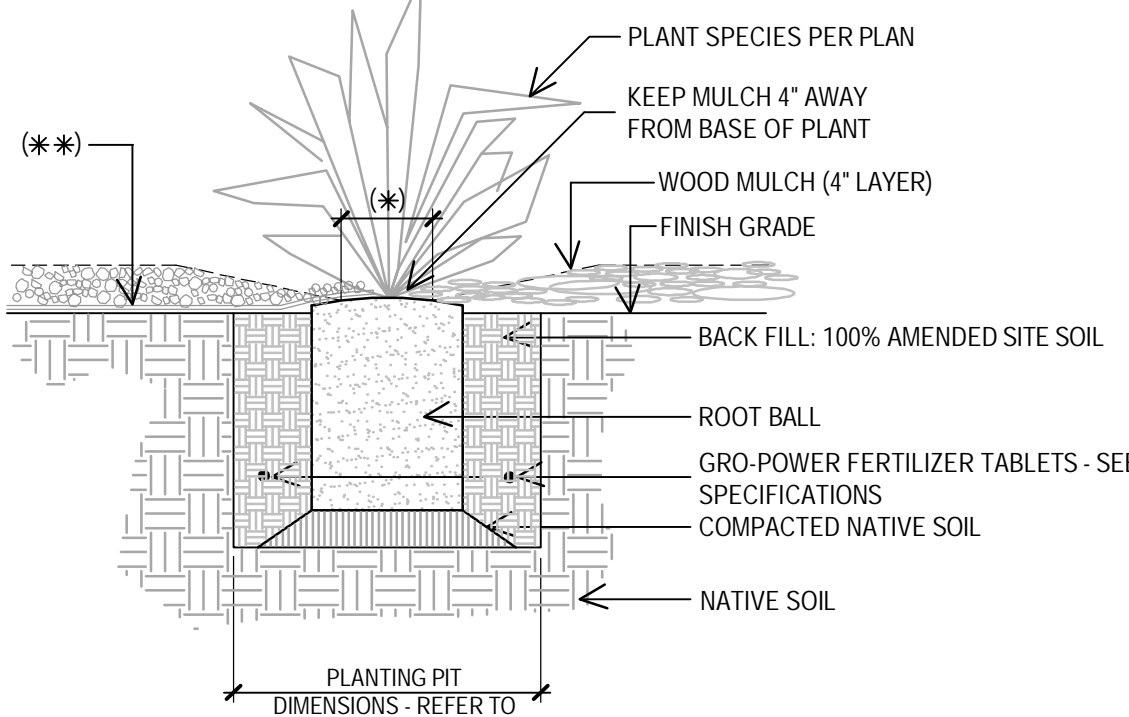
CONTAINER/BOX SIZE	"A" WIDTH/DIAMETER	DEPTH
1 GALLON	12 INCHES	12 INCHES
5 GALLON	26 INCHES	18 INCHES
15 GALLON	36 INCHES	24 INCHES
24 INCH BOX	48 INCHES	R.D.
30 INCH BOX	54 INCHES	R.D.
36 INCH BOX	66 INCHES	R.D.
48 INCH BOX	84 INCHES	R.D.

(R.D.) - ROOT BALL DEPTH

- BOX TREES
- 1A — PLANT PIT TO BE SQUARE, SEE CHART ABOVE FOR THE PLANT PIT DIMENSIONS.
- 1B — ROOTBALL



- CONTAINER PLANTS
- 2A — PLANT PIT TO BE ROUND, SEE CHART ABOVE FOR THE PLANT PIT DIMENSIONS.
- 2B — ROOTBALL



- (*) — LIGHTLY SPREAD MULCHING MATERIAL TO A DEPTH OF 1". TO COVER WEED BARRIER UNDERLAYMENT WHERE OCCURS
- (**) — INSTALL WEED BARRIER UNDERLAYMENT UNDER ROCK AND COBBLE MULCH. DO NOT INSTALL WEED BARRIER UNDER WOOD MULCH

5 PLANTING PIT DIMENSIONS

4 SHRUB PLANTING

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UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA
ATTENTION IS DIRECTED TO THE POSSIBLE EXISTENCE OF DIFFERENT FROM THAT WHICH IS SHOWN ON THE PLANS OR IN THE SPECIAL INSTRUCTIONS. THE CONTRACTOR SHALL TAKE STEPS TO ASCERTAIN THE EXACT LOCATION OF ALL UNDERGROUND FACILITIES PRIOR TO DIGGING WORK THAT MAY DAMAGE SUCH FACILITIES OR INTERFERE WITH THEIR SERVICE. BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND UTILITIES BY CONTACTING UNDERGROUND SERVICE ALERT AT 811.

Revisions:

No.	Date	Revisions	By
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Project:

WASHINGTON BLVD.
REHABILITATED
LANDSCAPE PROJECT

Owner:

City of Commerce

Project No.:

Drawn By: PC

Checked By: GV

Date: APRIL 12, 2017

Scale: AS SHOWN

Drawing Title:

PLANTING
DETAILS &
NOTES

Drawing No.:

LP.3