

**LEGEND**

	PUMP
	PARKING LOT LIGHT
	STORM DRAIN MANHOLE
	CATCH BASIN
	SANITARY SEWER MANHOLE
	FIRE HYDRANT (FH/N)-WET BARREL TYPE WITH ONE 4 1/2 INCH CONNECTION AND TWO 2 1/2 INCH CONNECTIONS.
	GATE VALVE
	WATER METER
	POST INDICATOR VALVE
	FIRE DISTRICT CONNECTION
	SPRINKLER SYSTEM RISER
	BACK FLOW PREVENTER
	CHECK VALVE
	REDUCER
	GAS METER
	TRANSFORMER

	SPOT ELEVATION	100.00
	HANDICAP STALL	
	CURB	
	CURB & GUTTER	
	CONTOUR LINE /W ELEVATION	9.1
	RIDGE	
	SANITARY SEWER	SS
	STORM DRAIN (UNTREATED)	
	STORM DRAIN (TREATED)	SD
	DOMESTIC WATER SERVICE	DWS
	FIRE LOOP	FL
	FORCE MAIN	FM
	FIRE SERVICE	FS
	WATER	W
	ELECTRIC	E
	GAS	G
	JOINT TRENCH	JT

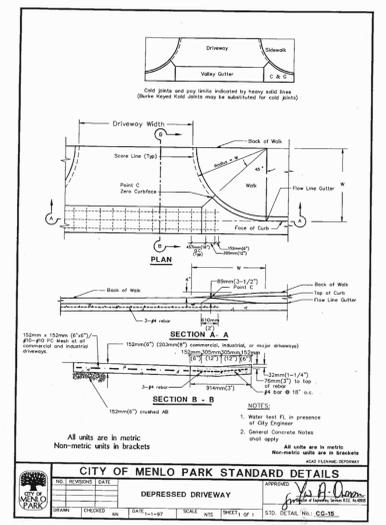
**ABBREVIATIONS**

	PROPERTY LINE
	ADJACENT PROPERTY LINE
	CENTERLINE
	EASEMENT
	NON-ACCESS

**ABBREVIATIONS**

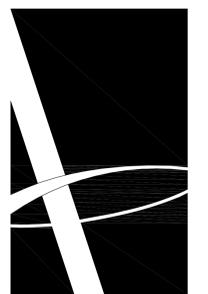
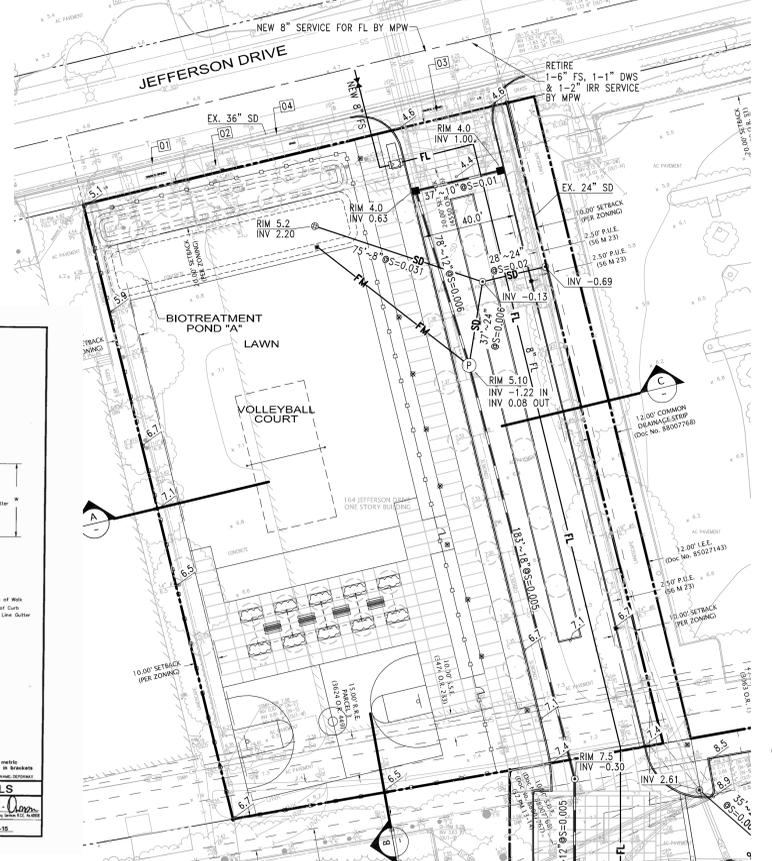
	AT
	BUBBLE UP
	CLEAN OUT TO GRADE
	DOMESTIC WATER SERVICE
	EXISTING
	FLOW LINE
	FIRE SERVICE
	INVERT ELEVATION
	IRRIGATION
	MENLO PARK WATER
	NEW
	RIDGE
	RIM ELEVATION
	SLOPE EQUALS
	SANITARY SEWER EASEMENT
	SANITARY SEWER

- NOTES**
- EASEMENT FOR PARKING TO BE DEDICATED BY SEPARATE INSTRUMENT BASED ON FINAL DESIGN.
  - STORM DRAIN EASEMENT TO BE DEDICATED BY SEPARATE INSTRUMENT BASED ON FINAL DESIGN.
  - THE CITY HAS A STREET MORATORIUM POLICY. SHOULD THE PROJECT PROPOSE TO CUT THE STREET, THE APPLICANT MAY BE RESPONSIBLE FOR INSTALLING NEW SLURRY SEAL OVER THE FULL WIDTH OF THE STREET ALONG THE ENTIRE PROPERTY FRONTAGE.
  - GAS AND ELECTRIC FACILITIES ARE PRELIMINARY AND SUBJECT TO CHANGE PENDING UTILITY COMPANY REVIEW AND FINAL DESIGN.



**OFFSITE IMPROVEMENTS - 164 JEFFERSON**

- REMOVE WESTERLY DRIVEWAY AND CONSTRUCT CITY STANDARD CURB AND GUTTER
- INSTALL 5' WIDE DETACHED CITY STANDARD SIDEWALK ALONG PROJECT FRONTAGE TO MATCH ADJOINERS.
- REMOVE EASTERLY DRIVEWAY AND CONSTRUCT DEPRESSED DRIVEWAY PER CITY STANDARD DETAIL CG-15, SEE DETAIL BELOW.
- REMOVE AND REPLACE EXISTING CURB & GUTTER PER CITY STANDARDS ALONG THE PROJECT FRONTAGE THAT IS NOT A PORTION OF THE EXISTING OR NEW DRIVEWAY.



**ARC TEC**  
 ARCHITECTURAL TECHNOLOGIES  
 www.arcotecinc.com  
 Arizona  
 2560 East Northern Avenue, Building C  
 Phoenix, Arizona 85028  
 P 602.933.2335 F 602.933.2988  
 California  
 99 Almaden Boulevard, Suite 840  
 San Jose, California 95113  
 P 408.496.0676 F 408.496.1121

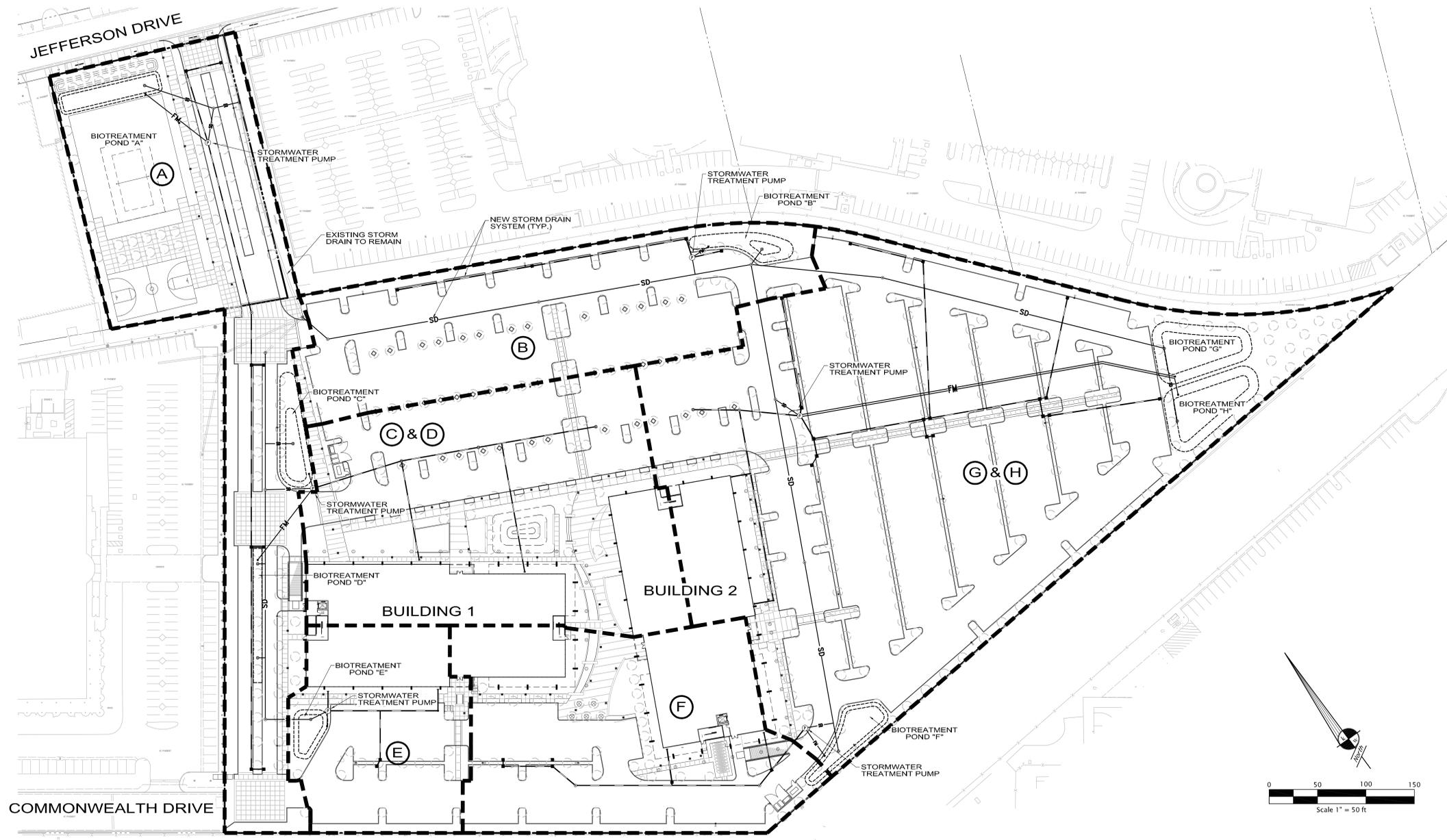
**KIER & WRIGHT**  
 CIVIL ENGINEERS & SURVEYORS, INC.  
 3350 Scott Boulevard, Building 22  
 Santa Clara, California 95054  
 (408) 727.6665  
 Fax (408) 727.5641

A Planning Department Submittal for  
**COMMONWEALTH CORPORATE CENTER**  
 151 Commonwealth Drive  
 Menlo Park, California 94025

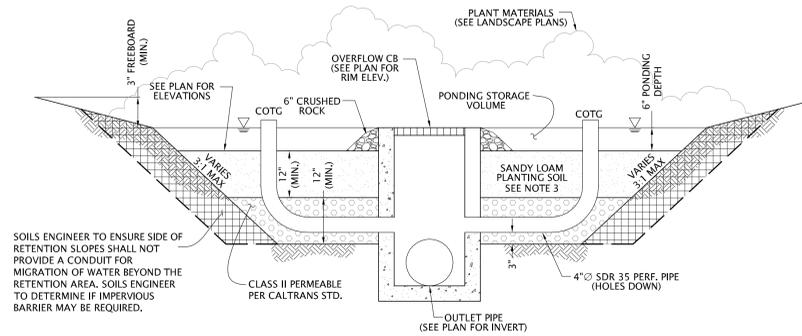
The **SOBRATO** Organization

DATE	DESCRIPTION
11.23.11	PLANNING DEPARTMENT SUBMITTAL
07.20.12	PLANNING DEPARTMENT SUBMITTAL
01.13.14	PLANNING DEPARTMENT SUBMITTAL

**PRELIMINARY GRADING, DRAINAGE & UTILITY PLAN**  
**C2.0**  
 PROJECT NO: A11089-2



TREATMENT TRIBUTARY AREAS AND TREATMENT METHODS



- BIOTREATMENT AREAS SHALL BE CONSTRUCTED UNDER THE OBSERVATION OF THE SOILS ENGINEER.
- SOIL AT BOTTOM OF RETENTION AREA SHALL HAVE A MINIMUM PERCOLATION RATE OF 5 INCHES/HOUR AND A MAXIMUM PERCOLATION RATE OF 10 INCHES/HOUR. IN-SITU TESTING SHALL BE CONDUCTED TO VERIFY THAT THE MATERIAL MEETS THE PERCOLATION REQUIREMENTS.
- SINCE THE NATIVE SOILS DO NOT SUPPORT THE ABOVE MENTIONED PERCOLATION RATES, ENGINEERED SOIL SHALL BE INSTALLED. IT SHALL BE COMPOSED OF THE FOLLOWING: 50% CONSTRUCTION SAND, 20-30% TOPSOIL WITH LESS THAN 5% MAXIMUM CLAY CONTENT AND 20-30% LEAF COMPOST. ENGINEERED SOIL SHALL BE IMPORTED AND SUBJECT TO OBSERVATION AND TESTING BY THE SOILS ENGINEER.
- NO BARK MULCH SHALL BE PLACED IN THE BIOTREATMENT AREA.
- PERK RATE SHALL BE VERIFIED BY SOILS ENGINEER.
- SOIL MIX SHALL CONSIST OF 50% CONSTRUCTION SAND, 20-30% TOPSOIL WITH LESS THAN 5% MAXIMUM CLAY CONTENT, AND 20-30% ORGANIC LEAF COMPOST WITH AN INFILTRATION RATE OF 5-10 INCHES/HOUR.

BIOTREATMENT AREA DETAIL  
N.T.S.

BIOTREATMENT MAINTENANCE

INSPECTION ACTIVITIES	SUGGESTED FREQUENCY
<ul style="list-style-type: none"> <li>INSPECT AFTER SEEDING AND AFTER FIRST MAJOR STORMS FOR ANY DAMAGES.</li> </ul>	POST-CONSTRUCTION
<ul style="list-style-type: none"> <li>INSPECT FOR SIGNS OF EROSION, DAMAGE TO VEGETATION, CHANNELIZATION OF FLOW, DEBRIS AND LITTER, AND AREAS OF SEDIMENT ACCUMULATION. PERFORM INSPECTIONS AT THE BEGINNING AND END OF THE WET SEASON. ADDITIONAL INSPECTIONS AFTER PERIODS OF HEAVY RUNOFF ARE DESIRABLE.</li> </ul>	SEMI-ANNUAL
<ul style="list-style-type: none"> <li>INSPECT VEGETATION ALONG SIDE SLOPES FOR EROSION AND FORMATION OF RILLS OR GULLIES, AND SAND/SOIL BED FOR EROSION PROBLEMS.</li> </ul>	ANNUAL
MAINTENANCE ACTIVITIES	SUGGESTED FREQUENCY
<ul style="list-style-type: none"> <li>MOW IF GRASS IS PLANTED. TO MAINTAIN A HEIGHT OF 3-4 INCHES. FOR SAFETY, AESTHETIC, OR OTHER PURPOSES. LITTER SHOULD ALWAYS BE REMOVED PRIOR TO MOWING. CLIPPINGS SHOULD BE COMPOSTED.</li> <li>IRRIGATE BIOTREATMENT AREAS DURING DRY SEASON (APRIL THROUGH OCTOBER) OR WHEN NECESSARY TO MAINTAIN THE VEGETATION.</li> <li>PROVIDE WEED CONTROL. IF NECESSARY TO CONTROL INVASIVE SPECIES.</li> </ul>	AS NEEDED (FREQUENT, SEASONALLY)
<ul style="list-style-type: none"> <li>REMOVE LITTER, BRANCHES, ROCKS BLOCKAGES AND OTHER DEBRIS AND DISPOSE OF PROPERLY.</li> <li>REPAIR ANY DAMAGED AREAS WITHIN A CHANNEL IDENTIFIED DURING INSPECTIONS. EROSIONS RILLS OR GULLIES SHOULD BE CORRECTED AS NEEDED. BARE AREAS SHOULD BE REPLANTED AS NECESSARY.</li> </ul>	SEMI-ANNUAL
<ul style="list-style-type: none"> <li>CORRECT EROSION PROBLEMS IN THE SAND/SOIL BED OF DRY BIOTREATMENT AREAS.</li> <li>PLANT AN ALTERNATIVE GRASS SPECIES IF THE ORIGINAL GRASS COVER HAS NOT BEEN SUCCESSFULLY ESTABLISHED. RESEED AND APPLY MULCH TO DAMAGED AREAS.</li> </ul>	ANNUAL (AS NEEDED)
<ul style="list-style-type: none"> <li>REMOVE ALL ACCUMULATED SEDIMENT THAT MAY OBSTRUCT FLOW THROUGH THE BIOTREATMENT AREAS. SEDIMENT ACCUMULATING NEAR CULVERTS AND IN CHANNELS SHOULD BE REMOVED WHEN IT BUILDS UP TO 3 IN. AT ANY SPOT, OR COVERS VEGETATION, OR ONCE IT HAS ACCUMULATED TO 10% OF THE ORIGINAL DESIGN VOLUME. REPLACE THE GRASS AREAS DAMAGED IN THE PROCESS.</li> <li>ROTTOTILL OR CULTIVATE THE SURFACE OF THE SAND/SOIL BED OF DRY BIOTREATMENT AREAS IF THE BIOTREATMENT AREAS DOES NOT DRAW DOWN WITHIN 48 HOURS.</li> </ul>	AS NEEDED (INFREQUENT)

IMPERVIOUS/PERVIOUS AREA TABLE

EXISTING	AREA (S.F.)	% TOTAL
IMPERVIOUS	540577	93.4
PERVIOUS	37895	6.6
TOTAL	578472	100.0
C-FACTOR	0.86	

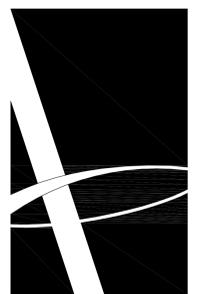
  

PROPOSED	AREA (S.F.)	% TOTAL
IMPERVIOUS	430278	74.4
PERVIOUS	148194	25.6
TOTAL	578472	100.0
C-FACTOR	0.75	

BIOTREATMENT AREA CALCULATIONS

BIOTREATMENT AREA	IMPERVIOUS AREA (SQ. FT.)	IMPERVIOUS AREA (ACRES)	REQUIRED TREATMENT AREA (SQ. FT.)	ACTUAL TREATMENT AREA (SQ. FT.)
(A)	54305	1.25	2172	2200
(B)	54866	1.26	2195	2200
(C)	46300	1.06	1852	2095
(D)	27903	0.64	1116	1260
(E)	29420	0.68	1177	1200
(F)	53623	1.23	2145	2210
(G)	81855	1.88	3274	3595
(H)	82006	1.88	3280	3750
TOTAL	430278	9.88	17211	18510

\*REQUIRED BIOTREATMENT AREA IS 4% OF THE IMPERVIOUS AREA WITHIN THE CONTRIBUTING WATERSHED AREA.



**ARC TEC**  
ARCHITECTURAL TECHNOLOGIES  
www.arcotecinc.com

Arizona  
2940 East Northern Avenue, Building C  
Phoenix, Arizona 85028  
P 602.953.2335 F 602.953.2988

California  
99 Almaden Boulevard, Suite 840  
San Jose, California 95113  
P 408.496.0676 F 408.496.1121

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**KIER & WRIGHT**  
CIVIL ENGINEERS & SURVEYORS, INC.  
3350 Scott Boulevard, Building 22  
Santa Clara, California 95054  
(408) 727 6665  
Fax (408) 727 5641

A Planning Department Submittal for  
**COMMONWEALTH CORPORATE CENTER**  
151 Commonwealth Drive  
Menlo Park, California 94025

The **SOBRATO** Organization

DATE	DESCRIPTION
11.23.11	PLANNING DEPARTMENT SUBMITTAL
07.20.12	PLANNING DEPARTMENT SUBMITTAL
01.13.14	PLANNING DEPARTMENT SUBMITTAL

PRELIMINARY  
STORMWATER  
MANAGEMENT PLAN  
**C3.0**



**ARC TEC**  
ARCHITECTURAL TECHNOLOGIES  
www.arctecinc.com

Arizona  
2960 East Northern Avenue, Building C  
Phoenix, Arizona 85028  
P 602.933.2355 F 602.933.2988

California  
99 Almaden Boulevard, Suite 840  
San Jose, California 95113  
P 408.496.0676 F 408.496.1121

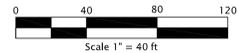
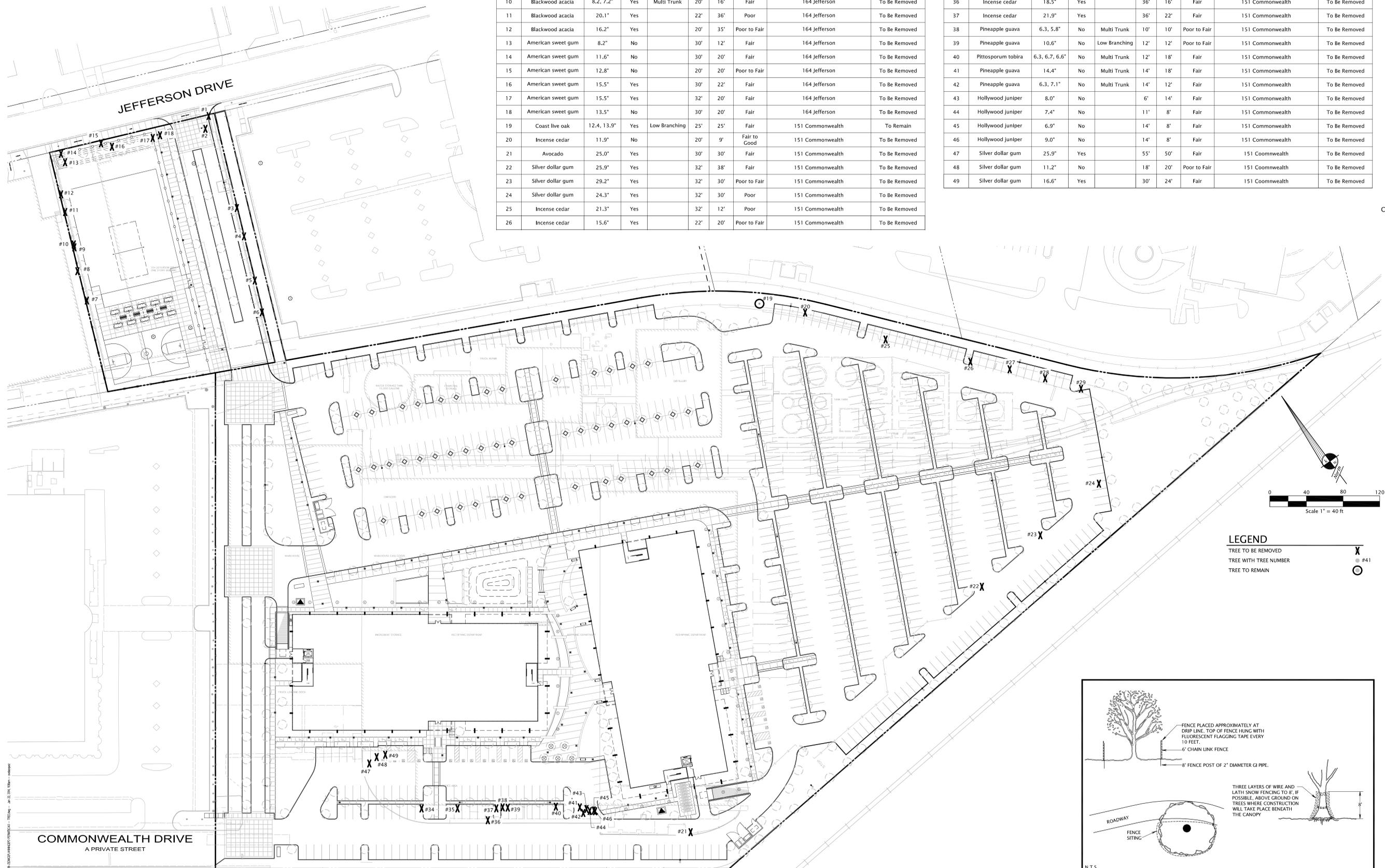
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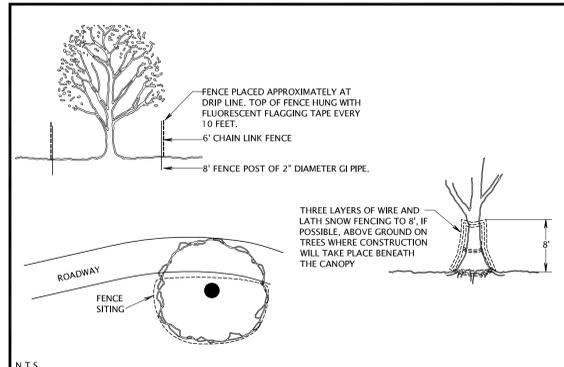
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Santa Clara, California 95054  
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Number	Name	Diameter	Heritage	Trunk Type	Height	Spread	Condition	Location	Disposition
1	Blackwood acacia	13.2"	No		18'	22'	Poor to Fair	164 Jefferson	To Be Removed
2	American sweet gum	6.2"	No		20'	10'	Fair	164 Jefferson	To Be Removed
3	Red Ironbark	15.7"	Yes		24'	22'	Poor to Fair	164 Jefferson	To Be Removed
4	Red Ironbark	19.1"	Yes		24'	26'	Poor	164 Jefferson	To Be Removed
5	Red Ironbark	18.1"	Yes		32'	28'	Poor to Fair	164 Jefferson	To Be Removed
6	Blackwood acacia	23"	Yes		20'	26'	Poor	164 Jefferson	To Be Removed
7	Blackwood acacia	16.3"	Yes		20'	30'	Poor to Fair	164 Jefferson	To Be Removed
8	Blackwood acacia	12.2, 8.2, 6.4"	Yes	Multi Trunk	22'	20'	Poor to Fair	164 Jefferson	To Be Removed
9	Blackwood acacia	9.2"	No		22'	14'	Fair	164 Jefferson	To Be Removed
10	Blackwood acacia	8.2, 7.2"	Yes	Multi Trunk	20'	16'	Fair	164 Jefferson	To Be Removed
11	Blackwood acacia	20.1"	Yes		22'	36'	Poor	164 Jefferson	To Be Removed
12	Blackwood acacia	16.2"	Yes		20'	35'	Poor to Fair	164 Jefferson	To Be Removed
13	American sweet gum	8.2"	No		30'	12'	Fair	164 Jefferson	To Be Removed
14	American sweet gum	11.6"	No		30'	20'	Fair	164 Jefferson	To Be Removed
15	American sweet gum	12.8"	No		20'	20'	Poor to Fair	164 Jefferson	To Be Removed
16	American sweet gum	15.5"	Yes		30'	22'	Fair	164 Jefferson	To Be Removed
17	American sweet gum	15.5"	Yes		32'	20'	Fair	164 Jefferson	To Be Removed
18	American sweet gum	13.5"	No		30'	20'	Fair	164 Jefferson	To Be Removed
19	Coast live oak	12.4, 13.9"	Yes	Low Branching	25'	25'	Fair	151 Commonwealth	To Remain
20	Incense cedar	11.9"	No		20'	9'	Fair to Good	151 Commonwealth	To Be Removed
21	Avocado	25.0"	Yes		30'	30'	Fair	151 Commonwealth	To Be Removed
22	Silver dollar gum	25.9"	Yes		32'	38'	Fair	151 Commonwealth	To Be Removed
23	Silver dollar gum	29.2"	Yes		32'	30'	Poor to Fair	151 Commonwealth	To Be Removed
24	Silver dollar gum	24.3"	Yes		32'	30'	Poor	151 Commonwealth	To Be Removed
25	Incense cedar	21.3"	Yes		32'	12'	Poor	151 Commonwealth	To Be Removed
26	Incense cedar	15.6"	Yes		22'	20'	Poor to Fair	151 Commonwealth	To Be Removed

Number	Name	Diameter	Heritage	Trunk Type	Height	Spread	Condition	Location	Disposition
27	Coast redwood	2.7"	No		11'	7'	Fair to Good	151 Commonwealth	To Be Removed
28	Coast redwood	5.8"	No		12'	10'	Fair to Good	151 Commonwealth	To Be Removed
29	Coast redwood	7"	No		14'	8'	Good	151 Commonwealth	To Be Removed
30	Not Used								
31	Not Used								
32	Not Used								
33	Not Used								
34	Incense cedar	22.6"	Yes		20'-	20'	Fair	151 Commonwealth	To Be Removed
35	Incense cedar	23.4"	Yes	Low Branching	20'	18'	Fair	151 Commonwealth	To Be Removed
36	Incense cedar	18.5"	Yes		36'	16'	Fair	151 Commonwealth	To Be Removed
37	Incense cedar	21.9"	Yes		36'	22'	Fair	151 Commonwealth	To Be Removed
38	Pineapple guava	6.3, 5.8"	No	Multi Trunk	10'	10'	Poor to Fair	151 Commonwealth	To Be Removed
39	Pineapple guava	10.6"	No	Low Branching	12'	12'	Poor to Fair	151 Commonwealth	To Be Removed
40	Pittosporum tobira	6.3, 6.7, 6.6"	No	Multi Trunk	12'	18'	Fair	151 Commonwealth	To Be Removed
41	Pineapple guava	14.4"	No	Multi Trunk	14'	18'	Fair	151 Commonwealth	To Be Removed
42	Pineapple guava	6.3, 7.1"	No	Multi Trunk	14'	12'	Fair	151 Commonwealth	To Be Removed
43	Hollywood juniper	8.0"	No		6'	14'	Fair	151 Commonwealth	To Be Removed
44	Hollywood juniper	7.4"	No		11'	8'	Fair	151 Commonwealth	To Be Removed
45	Hollywood juniper	6.9"	No		14'	8'	Fair	151 Commonwealth	To Be Removed
46	Hollywood juniper	9.0"	No		14'	8'	Fair	151 Commonwealth	To Be Removed
47	Silver dollar gum	25.9"	Yes		55'	50'	Fair	151 Commonwealth	To Be Removed
48	Silver dollar gum	11.2"	No		18'	20'	Poor to Fair	151 Commonwealth	To Be Removed
49	Silver dollar gum	16.6"	Yes		30'	24'	Fair	151 Commonwealth	To Be Removed



**LEGEND**  
 TREE TO BE REMOVED (X)  
 TREE WITH TREE NUMBER (O)  
 TREE TO REMAIN (circle with dot)



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**TREE SURVEY & DISPOSITION PLAN**

**C4.0**  
 PROJECT NO: A11089-2