

# 1900 WARBURTON AVE

## SANTA CLARA, CA

**LPMD Architects**

1288 Kifer Road, Unit 206,  
Sunnyvale, CA 94086  
Telephone : 408-992-0280  
Fax : 408-992-0281



*Theresa Nguyen*

### PROJECT INFORMATION

EXISTING LAND USE	RETAIL/COMMERCIAL
PROPOSED USE	MEDIUM HIGH DENSITY RESIDENTIAL
CONSTRUCTION TYPE	V-B
OCCUPANCY	R-2
TOTAL BUILDING FOOTPRINT - (GARAGE)	5,112 S.F.
TOTAL BUILDING AREA - (RESIDENTIAL)	21,500 S.F.
TOTAL UNIT	12 UNITS (2 BUILDINGS)

SCOPE OF WORK:  
NEW 12 UNIT ON 2 BUILDING  
TOWNHOME-STYLE CONDOMINIUMS

### PROJECT DIRECTORY

OWNER	1900 WARBURTON, LLC.	
ARCHITECT	LPMD ARCHITECTS 1288 KIFER ROAD #206 SUNNYVALE, CA	408-992-0280 408-992-0281 FAX
LANDSCAPE ARCHITECT	GREG LEWIS LANDSCAPE 736 PARKWAY SANTA CRUZ, CA	408-992-0280 408-992-0281 FAX
CIVIL ENGINEER	SMP ENGINEERS 1534 CAROB LANE LOS ALTOS, CA	831-425-4747

### AREA CALCULATIONS

#### BUILDING 1 ANALYSIS :

	PLAN 1	PLAN 2	PLAN 3	BUILDING TOTAL
FIRST FLOOR	364	299	299	10,750 SQFT
SECOND FLOOR	756	721	721	(GARAGE NOT INCLUDED)
THIRD FLOOR	763	751	763	
TOTAL	1,883 SF.	1,771 SF.	1,783 SF.	
GARAGE	426 SF.	426 SF.	426 SF.	TOTAL GARAGE AREA: 2,556 SQFT
# OF PLAN	1	4	1	

#### BUILDING 2 ANALYSIS :

	PLAN 1	PLAN 2	PLAN 3	BUILDING TOTAL
FIRST FLOOR	364	299	299	10,750 SQFT
SECOND FLOOR	756	721	721	(GARAGE NOT INCLUDED)
THIRD FLOOR	763	751	763	
TOTAL	1,883 SF.	1,771 SF.	1,783 SF.	
GARAGE	426 SF.	426 SF.	426 SF.	TOTAL GARAGE AREA: 2,556 SQFT
# OF PLAN	1	4	1	

### SHEET INDEX

A-0	COVER SHEET
C-1	COVER SHEET
C-2	UTILITY PLAN
C-3	GRADING AND DRAINAGE PLAN
C-4	STORMWATER CONTROL NOTES
C-5	STORMWATER CONTROL PLAN
TM	TENTATIVE MAP
L-0	PLANTING PLAN
L-1	PLANTING PLAN
L-2	PLANTING PLAN
L-3	PLANTING PLAN
L-4	PLANTING PLAN
L-5	COMPOSITE UTILITY & TREE OVERLAY PLAN
A-10	SITE PLAN
A-2.1	PLAN 1
A-2.2	PLAN 2
A-2.3	PLAN 3
AA-2.1	BUILDING 1 FLOOR PLAN
AA-3.1	BUILDING 1 ELEVATION
AA-3.2	BUILDING 1 ELEVATION
AB-2.1	BUILDING 2 FLOOR PLAN
AB-3.1	BUILDING 2 ELEVATION
AB-3.2	BUILDING 2 ELEVATION

### SITE MAP



#### Revisions:

△	PLANNING 5-14-18

1900  
WARBURTON LLC

1900 WARBURTON AVE  
SANTA CLARA - CALIFORNIA

Project No: DATE: 11-10-2017  
Sheet Title:

COVER SHEET

Review by:   
Sheet No:

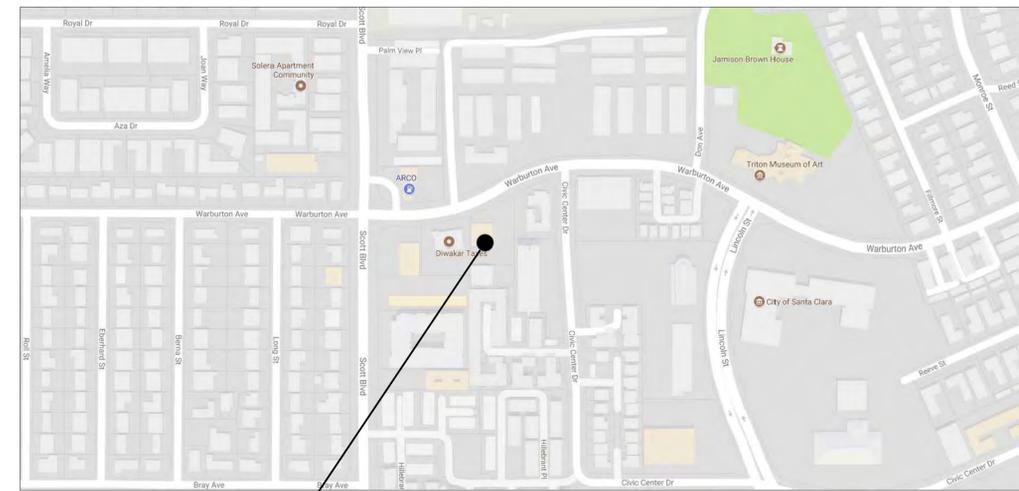
A-0

of Sheets

ABBREVIATIONS			
DESCRIPTION	DESCRIPTION	DESCRIPTION	
AB	AGGREGATE BASE	LND'G	LANDING
AC	ASPHALT CONCRETE	LP	LOW POINT
AD	AREA DRAIN	L/S	LANDSCAPE
BC	BACK OF CURB	MON	MONUMENT
BFL	BACKFLOW PREVENTOR	(N)	NEW
BW	BOTTOM OF WALL	QLR	OVER LAND RELEASE
C&G	CURB AND GUTTER	PB	PULL BOX
C.C./L	CENTERLINE	PGEV	PG&E VAULT
CLSW	CENTERLINE SWALE	R.P/L	PROPERTY LINE
CO	CLEANOUT	PP	POWER POLE
CP	CONTROL POINT	PPP	PLASTIC PERFORATED PIPE
DI	DROP INLET	PSE	PUBLIC SERVICE EASEMENT
D-S	DOWN-SPOUT	PVC	POLYVINYL CHLORIDE
DTL	DETAIL	R/W	RIGHT OF WAY
DWY	DRIVEWAY	RCP	REINFORCED CONCRETE PIPE
ELCT	ELECTRIC	SB	SETBACK
EP	EDGE OF PAVEMENT ELEVATION	SD	STORM DRAIN
EUC	EUCALYPTUS TREE	SDMH	STORM DRAIN MANHOLE
(E)EX	EXISTING	STD	STANDARD
FF	FINISH FLOOR	SS	SANITARY SEWER
FG	FINISH GRADE	SSMH	SANITARY SEWER MANHOLE
FH	FIRE HYDRANT	SW	SIDEWALK
FL	FLOWLINE	TC	TOP OF CURB
FNC	FENCE	TF	TOP OF FOUNDATION
FOC	FACE OF CURB	TO	TOP OF GRADE
GB	GRADE BREAK	TOS	TOP OF SLAB
GUY	GUY WIRE	TP	TOP OF PAVEMENT
HP	HIGH POINT	TW	TOP OF WALL
DIP	DUCTILE IRON PIPE	(TYP)	TYPICAL
INV	INVERT	VCP	VITRIFIED CLAY PIPE
JP	JOINT POLE	WL	WHITE LINE STRIPE
JB	JUNCTION BOX (UTILITY)	WLK	WALKWAY
LIP	LIP OF GUTTER	WM	WATER METER
		WV	WATER VALVE

# PRELIMINARY IMPROVEMENT PLANS 12 CONDOMINIUM UNITS ON A COMMON LOT

1900 WARBURTON AVENUE,,  
SANTA CLARA, CALIFORNIA  
APN: 224-20-027

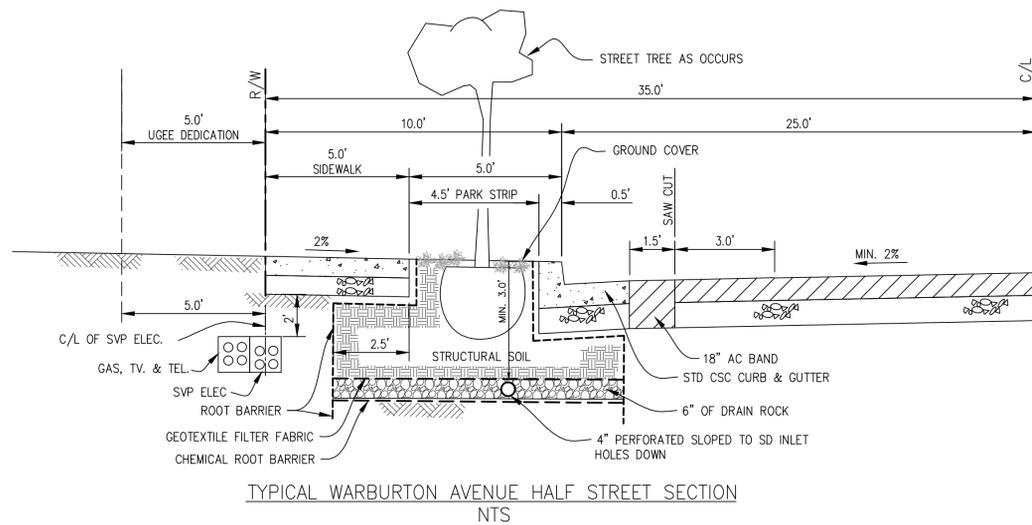


PROJECT SITE LOCATION MAP  
N.T.S.

## EASEMENT ABBREVIATIONS:

PUE	PUBLIC UTILITY EASEMENT
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT
UGE	UNDERGROUND ELECTRICAL EASEMENT
PIE	PRIVATE INGRESS EGRESS EASEMENT

EXISTING	PROPOSED	DESCRIPTION
---	---	STREET CENTER LINE
---	---	DISTINCTIVE BORDER LINE
---	---	EASEMENT LINE
---	---	LOT LINE
---	---	BUILDING FOOTPRINT
F	F	FILL AREA LIMIT
C	C	CUT AREA LIMIT
102	102	CONTOUR
W	W	WATER LINE
SD	SD	STORM DRAIN PIPE (SOLID)
SS	SS	SANITARY SEWER PIPE
SUD	SUD	SUBDRAIN PIPE (PERFORATED)
OH e,T,TV	OH e,T,TV	OVERHEAD UTILITIES WITH POLE
G	G	GAS LINE
E	E	ELECTRIC LINE (UNDERGROUND)
JT	JT	JOINT TRENCH (UNDERGROUND)
SLV	SLV	STREET LIGHT VAULT
SSCO	SSCO	SANITARY SEWER CLEANOUT
SSMH	SSMH	SANITARY SEWER MANHOLE
SDMH	SDMH	STORM DRAIN MANHOLE
SCM	SCM	SURVEY CITY MONUMENT
Electrolier	Electrolier	ELECTROLIER
WM	WM	WATER METER
Tree with trunk	Tree with trunk	TREE WITH TRUNK
Street tree	Street tree	STREET TREE
6' wooden fence	6' wooden fence	6' WOODEN FENCE
102.23	102.23	SPOT ELEVATION
Tree protection fence	Tree protection fence	TREE PROTECTION FENCE
5' tall chain link	5' tall chain link	5' TALL CHAIN LINK
Earthswale	Earthswale	EARTHSWALE
Concrete swale	Concrete swale	CONCRETE SWALE
Inlet/Junction box	Inlet/Junction box	INLET/ JUNCTION BOX
Area drain	Area drain	AREA DRAIN
Overland release path	Overland release path	OVERLAND RELEASE PATH
Drainage path	Drainage path	DRAINAGE PATH
(E) tree to be remove	(E) tree to be remove	(E) TREE TO BE REMOVE
Down-spout	Down-spout	DOWN-SPOUT



## SHEET INDEX:

C-1	COVER SHEET
C-2	UTILITY PLAN
C-3	GRADING AND DRAINAGE PLAN
C-4	STORMWATER CONTROL NOTES
C-5	STORMWATER CONTROL PLAN

## BASIS OF BEARINGS:

THE BEARING N. 0°18'50" W. OF THE CENTERLINE OF SCOTT BLVD., AS SHOWN UPON CERTAIN TRACT NO. 9627, RECORDED IN BOOK 779 OF MAPS AT PAGE 55, WAS TAKEN AS BASIS OF BEARINGS FOR THIS SURVEY

## REFERENCED ASSUMED BENCHMARK:

REFERENCED CITY OF SANTA CLARA B.M.:  
BM # E-3 EL.: 68.38' (NAVD88)

## EARTHWORK TABLE

	FILL (CY)	CUT (CY)	IMPORT (CY)	EXPORT (CY)
HOUSE/ BASEMENT	0	177		
GARAGE	0	185		
SITE	8	294		
TOTAL	8	656	0	656

## NOTE:

1. EARTHWORK QUANTITIES ON THIS TABLE ARE FOR INFORMATION ONLY. CONTRACTORS ARE TO PERFORM THEIR OWN QUANTITY TAKE OFFS.



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12 CONDOMINIUM UNITS ON A COMMON LOT  
1900 WARBURTON AVENUE,  
SANTA CLARA, CALIFORNIA  
APN: 224-20-027  
COVER SHEET

Revisions:



Date: 5/1/2018  
Scale: NTS  
Prepared by: V.G.  
Checked by: S.R.  
Job #: 217110

Sheet: 1 OF 5  
C-1



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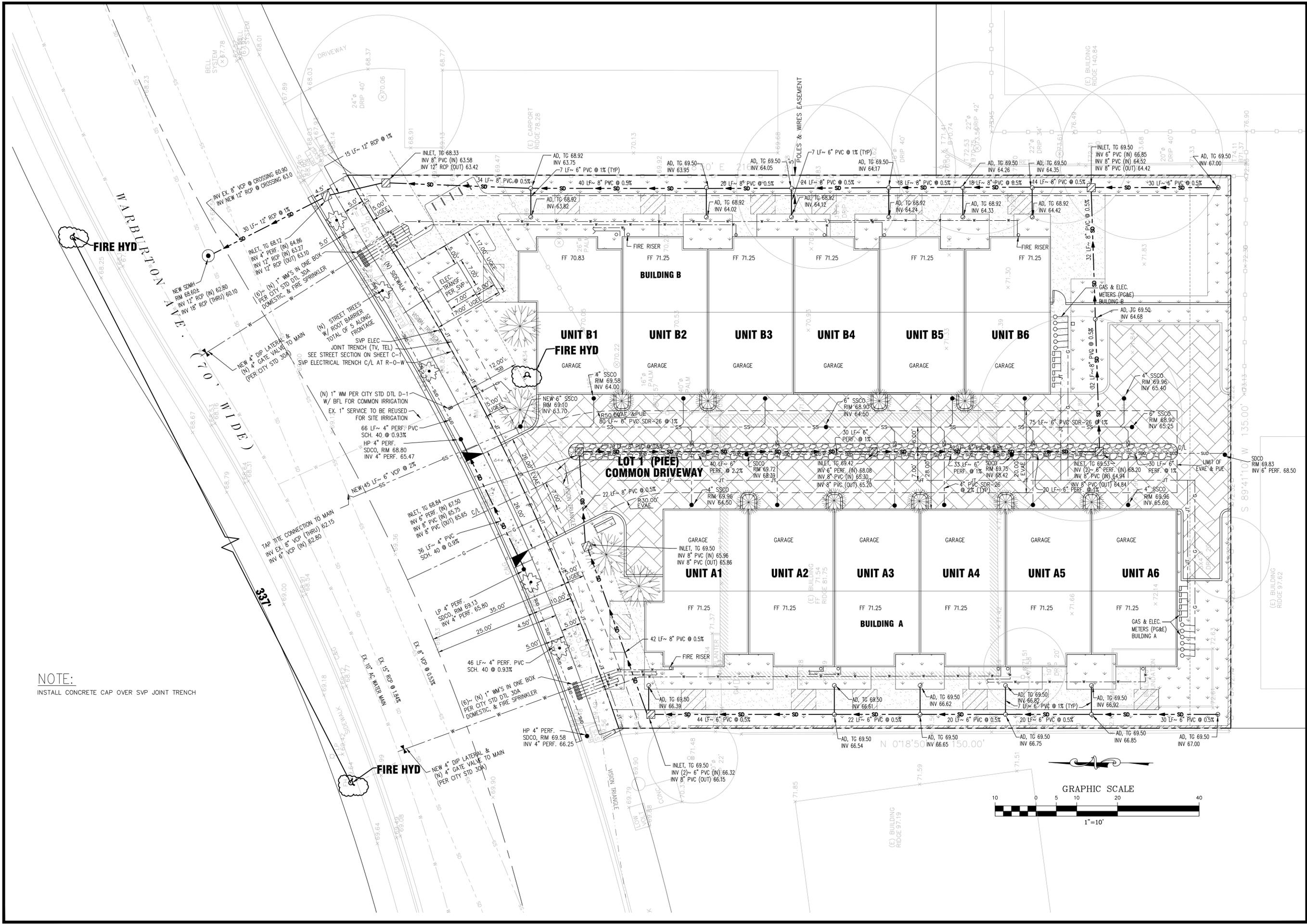
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Sheet: 2 OF 5  
C-2



NOTE:  
INSTALL CONCRETE CAP OVER SVP JOINT TRENCH



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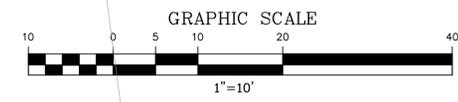
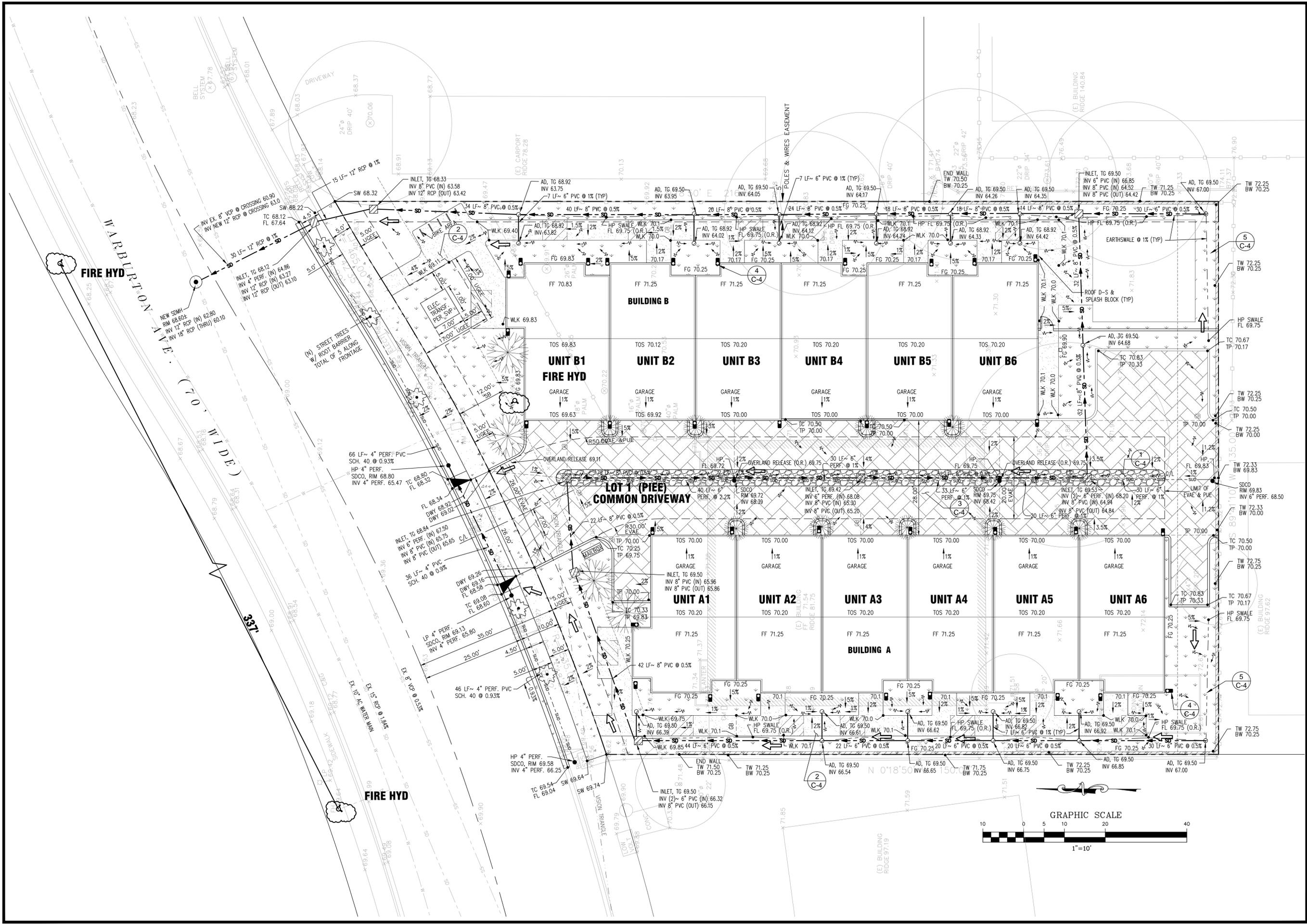
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GRADING AND DRAINAGE PLAN

Revisions:



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SIZING FOR VOLUME BASED TREATMENT	
DMA #	1
A=	10830 s.f.
Impervious Area =	5270 s.f.
Pervious Pavement Area =	5560 s.f.
MAPsite =	14
MAPpage =	13.9
P6(gage) =	0.512 in
P6(site) = P6(gage) x Correction Factor	
P6(site):	0.51568 in
Cw = 0.858i <sup>0.3</sup> - 0.78i <sup>0.2</sup> + 0.774i + 0.04	
Cw:	0.3308035
Regression Factor (a)	a = 1.963 (48 hour draw down)
Po = a x Cw x P6(site)	
Po:	0.33487 in
Design Volume = Po x A x 1ft/12in	
Design Volume =	302.218 ft <sup>3</sup>

SELF RETAINING (PERVIOUS PAVEMENT)		
Porosity of Rock*	Min. Storage Depth Required (in)	Pervious ≥ 1/2 Impervious**
0.40	1.63	Yes

Minimum Storage Depth = Design Volume (c.f.) / Pervious Pavement Area (s.f.) / rock porosity x 12 in/1 ft

\* Porosity of Class II Permeable = 0.4 based on SCVUURP training.

PERVIOUS AND IMPERVIOUS COMPARISON TABLE					
a. Project Phase Number (N/A, 1, 2, 3, etc.):	N/A	b. Total Site (acres):	0.557		
c. Total Site Existing Impervious Surfaces (square feet):	4,421	d. Total Area of Site Disturbed (acres):	0.557		
e. Impervious Surfaces	Existing Condition of Site Area Disturbed (square feet)	Proposed Condition of Site Area Disturbed (square feet)			
		Replaced <sup>1</sup>	New <sup>2</sup>		
Roof Area(s)	4,421	2,570	7,028		
Parking	0	0	0		
Sidewalks, Patios, Paths, etc.	0	0	0		
Streets (public)	0	0	0		
Streets (private)	0	0	0		
<b>Total Impervious Surfaces:</b>	<b>e.1: 4,421</b>	<b>e.2: 2,570</b>	<b>e.3: 7,028</b>		
f. Pervious Surfaces	Existing Condition of Site Area Disturbed (square feet)	Proposed Condition of Site Area Disturbed (square feet)			
		Replaced <sup>1</sup>	New <sup>2</sup>		
		Landscaped Areas	19,853	4,932	1,740
		Pervious Paving	0	7,893	111
Other Pervious Surfaces (green roof, etc.)	0	0	0		
<b>Total Pervious Surfaces:</b>	<b>f.1: 19,853</b>	<b>f.2: 12,825</b>	<b>f.3: 1,851</b>		
<b>g. Total Proposed Replaced + New Impervious Surfaces (e.2 + e.3):</b>		<b>9,598</b>			
<b>h. Total Proposed Replaced + New Pervious Surfaces (f.2 + f.3):</b>		<b>14,676</b>			
<b>i. Percent of Replacement of Impervious Area in redevelopment projects (e.2 + e.3 x 100):</b>			<b>58.1%</b>		

**Table Footnotes:**  
<sup>1</sup>Proposed Replaced Impervious Surface: All impervious surfaces added to any area of the site that was a previously existing impervious surface.  
<sup>2</sup>Proposed New Impervious Surface: All impervious surfaces added to any area of the site that was a previously existing pervious surface.

**Compliance with NPDES Permit Provision C.3:**

The San Francisco Bay Regional Water Quality Control Board (SFRWQCB) incorporated updated requirements into Santa Clara County's National Pollution Discharge Elimination System (NPDES) Permit in August 06. These updated stormwater quality control requirements are predominantly in the category of new development discharge controls. The Permit requires that permanent, post-construction stormwater quality control measures be implemented as part of development projects.

Updated stormwater quality control measures include:  
 - Source Control Measures  
 - Site Design Measures  
 - Treatment Control Measures

Beginning August 15, 2006, all projects creating or replacing 10,000 sq. ft. or more of impervious surface area must design and install a permanent post-construction stormwater treatment facility on the site. The system must be designed and installed according to numeric sizing criteria.

All projects, regardless of size that create or replace impervious surface may be required to install stormwater quality controls to the maximum extent practicable.

This project proposes to implement appropriate source control and site design measures. The project creates/replaces LESS THAN 10,000 SQFT of impervious surface area, therefore, it is EXEMPT to provide stormwater treatment facilities based on numeric sizing criteria. However, the project proposes to implement stormwater design measures to maximize the removal of pollutants to the maximum extent practicable.

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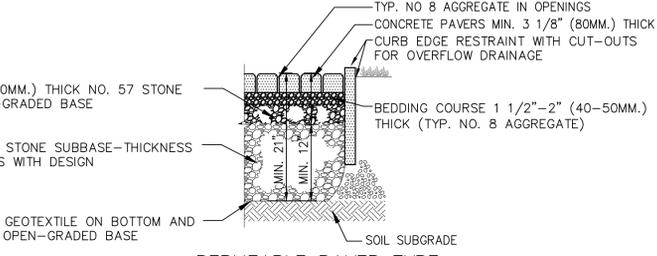
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**STORMWATER CONTROL NOTES**

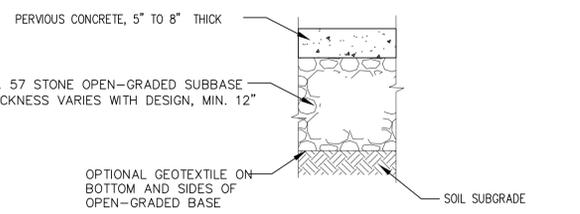
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 Sheet: 4 OF 5  
**C-4**



**3 TYPICAL PERMEABLE INTERLOCKING CONCRETE PAVERS SELF-RETAINING** NTS



**2 PERVIOUS CONCRETE PAVEMENT DETAIL SELF-TREATING** NTS

**PERVIOUS CONCRETE REQUIREMENTS**

CONTRACTOR OR PERMITEE SHALL:

- PROVIDE CERTIFICATION FROM THE CONCRETE MANUFACTURER THAT THE CONCRETE MEETS THE REQUIREMENTS OF THE C3 STORMWATER HANDBOOK FOR PERVIOUS PAVERS. THIS INCLUDES, BUT IS NOT LIMITED TO, HAVING A MINIMUM SURFACE INFILTRATION RATE OF 100"/HR WHEN TESTED IN ACCORDANCE WITH ASTM C1701.
- ONLY CONTRACTORS HOLDING CERTIFICATION OF COMPLETION FROM THE NATIONAL READY MIX CONCRETE ASSOCIATION (NRMA) SHALL INSTALL THE CONCRETE AND AT LEAST ONE FOREMAN WITH THIS CERTIFICATION MUST BE ON THE JOB SITE AT ALL TIMES DURING CONCRETE INSTALLATION.
- PROTECT THE EXCAVATED AREA FOR FROM EXCESSIVE COMPACTION DUE TO CONSTRUCTION TRAFFIC AND PROTECT THE FINISHED PAVEMENT FROM CONSTRUCTION TRAFFIC.

**PERVIOUS PAVER REQUIREMENTS**

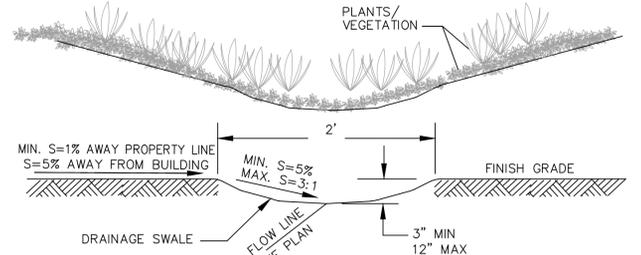
CONTRACTOR OR PERMITEE SHALL:

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- ONLY CONTRACTORS HOLDING CERTIFICATION OF COMPLETION IN THE INTERLOCKING CONCRETE PAVEMENT INSTITUTES PICP INSTALLER TECHNICIAN COURSE SHALL BE USED TO INSTALL THE PAVERS AND AT LEAST ONE FOREMAN WITH THIS CERTIFICATION MUST BE ON THE JOBSITE AT ALL TIMES DURING CONCRETE PAVEMENT INSTALLATION.
- PROTECT THE EXCAVATED AREA FOR PERVIOUS PAVERS FROM EXCESSIVE COMPACTION DUE TO CONSTRUCTION TRAFFIC AND PROTECT THE FINISHED PAVEMENT FROM CONSTRUCTION TRAFFIC.

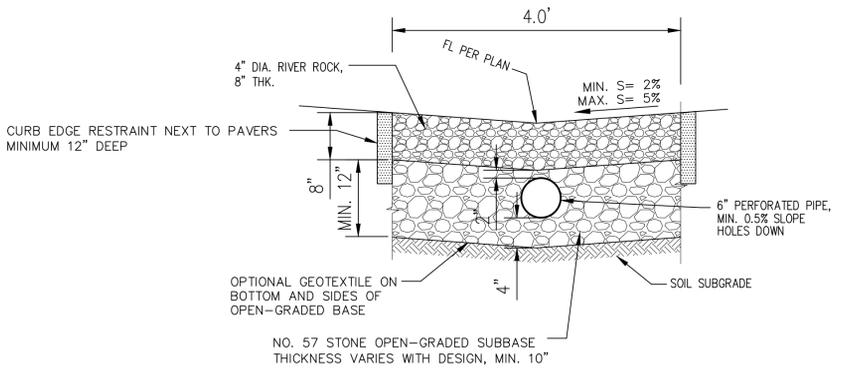
**INTERCEPTOR TREE REQUIREMENTS**

NEW INTERCEPTOR TREES ELIGIBLE FOR STORMWATER CREDIT SHALL MET THESE MINIMUM CRITERIA:

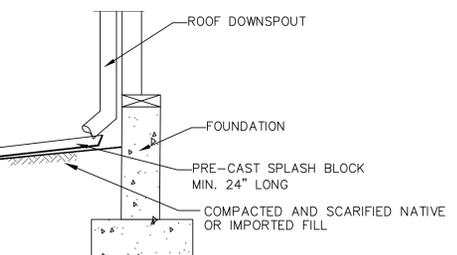
- PLANT TREES WITHIN 25 FT OF GROUND SURFACE IMPERVIOUS AREAS.
- TREE SPECIES SHALL BE EVERGREEN AND SELECTED FROM APPROVED PLANTING LIST (APPENDIX D, C3 MANUAL).
- SPACE TREES SO CROWNS DO NOT OVER LAP AT 15 YEARS MATURITY DATE.
- DWARF TREES ARE NOT ACCEPTED AS INTERCEPTOR TREES. NATIVE TREES WITH LARGE MATURITY SIZE ARE PREFERRED.
- MAINTAIN APPROPRIATE SEPARATION FROM INFRASTRUCTURES SUCH AS UTILITIES, SIDEWALKS AND BUILDING FOUNDATIONS.
- SPECIFIED TREES SHALL BE MINIMUM 15 GAL SIZE AT PLANTING.



**5 EARTH SWALE DETAIL** NTS



**1 PERVIOUS RIVER ROCK DRIVEWAY & UNDER-DRAIN DETAIL SELF-RETAINING** NTS



**4 DISCONNECTED ROOF DOWN-SPOUT DETAIL** NTS

TABLE 1 ROUTINE MAINTENANCE ACTIVITIES FOR PERVIOUS PAVEMENT		
NO.	MAINTENANCE TASK	FREQUENCY OF TASK
1	CHECK FOR SEDIMENT AND DEBRIS ACCUMULATION. PREVENT SOIL FROM WASHING OR BLOWING ONTO THE PAVEMENT. DO NOT STORE SAND, SOIL, MULCH OR OTHER LANDSCAPING MATERIALS ON PERVIOUS PAVEMENT SURFACES.	TWO TO FOUR TIMES ANNUALLY
2	CONDUCT PREVENTATIVE SURFACE CLEANING, USING COMMERCIALY AVAILABLE REGENERATIVE AIR OR VACUUM SWEEPERS, TO REMOVE SEDIMENT AND DEBRIS.	TWO TO FOUR TIMES ANNUALLY
3	INSPECT FOR ANY SIGNS OF PAVEMENT FAILURE. REPAIR ANY SURFACE DEFORMATIONS OR BROKEN PAVERS. REPLACE MISSING JOINT FILLER IN PICP.	TWO TO FOUR TIMES ANNUALLY
4	CHECK FOR STANDING WATER ON THE PAVEMENT SURFACE WITHIN 30 MINUTES AFTER A STORM EVENT.	TWO TO FOUR TIMES ANNUALLY
5	INSPECT UNDERDRAIN OUTLETS AND CLEANOUTS, PREFERABLY BEFORE THE WET SEASON. REMOVE TRASH/DEBRIS.	TWO TO FOUR TIMES ANNUALLY
6	REMOVE SEDIMENT AND DEBRIS ACCUMULATION ON PERVIOUS PAVEMENT.	TWO TO FOUR TIMES ANNUALLY
7	REMOVE WEEDS. MOW VEGETATION IN GRID PAVEMENTS (SUCH AS TURF BLOCK) AS NEEDED.	AS NEEDED
8	PERFORM RESTORATIVE SURFACE CLEANING WITH A VACUUM SWEEPER, AND/OR RECONSTRUCTION OF PART OF THE PERVIOUS SURFACE TO RESTORE SURFACE PERMEABILITY AS NEEDED. REPLENISH AGGREGATE IN PICP JOINTS OR GRIDS AS NEEDED AFTER RESTORATIVE SURFACE CLEANING.	AS NEEDED
9	POWER WASHING WITH SIMULTANEOUS VACUUMING ALSO CAN BE USED TO RESTORE SURFACE INFILTRATION TO HIGHLY CLOGGED AREAS OF PERVIOUS CONCRETE, POROUS ASPHALT OR PICP, BUT IS NOT RECOMMENDED FOR GRID PAVEMENTS.	AS NEEDED
10	INSPECT PERVIOUS PAVING AREA USING THE ATTACHED INSPECTION CHECKLIST.	QUARTERLY OR AS NEEDED



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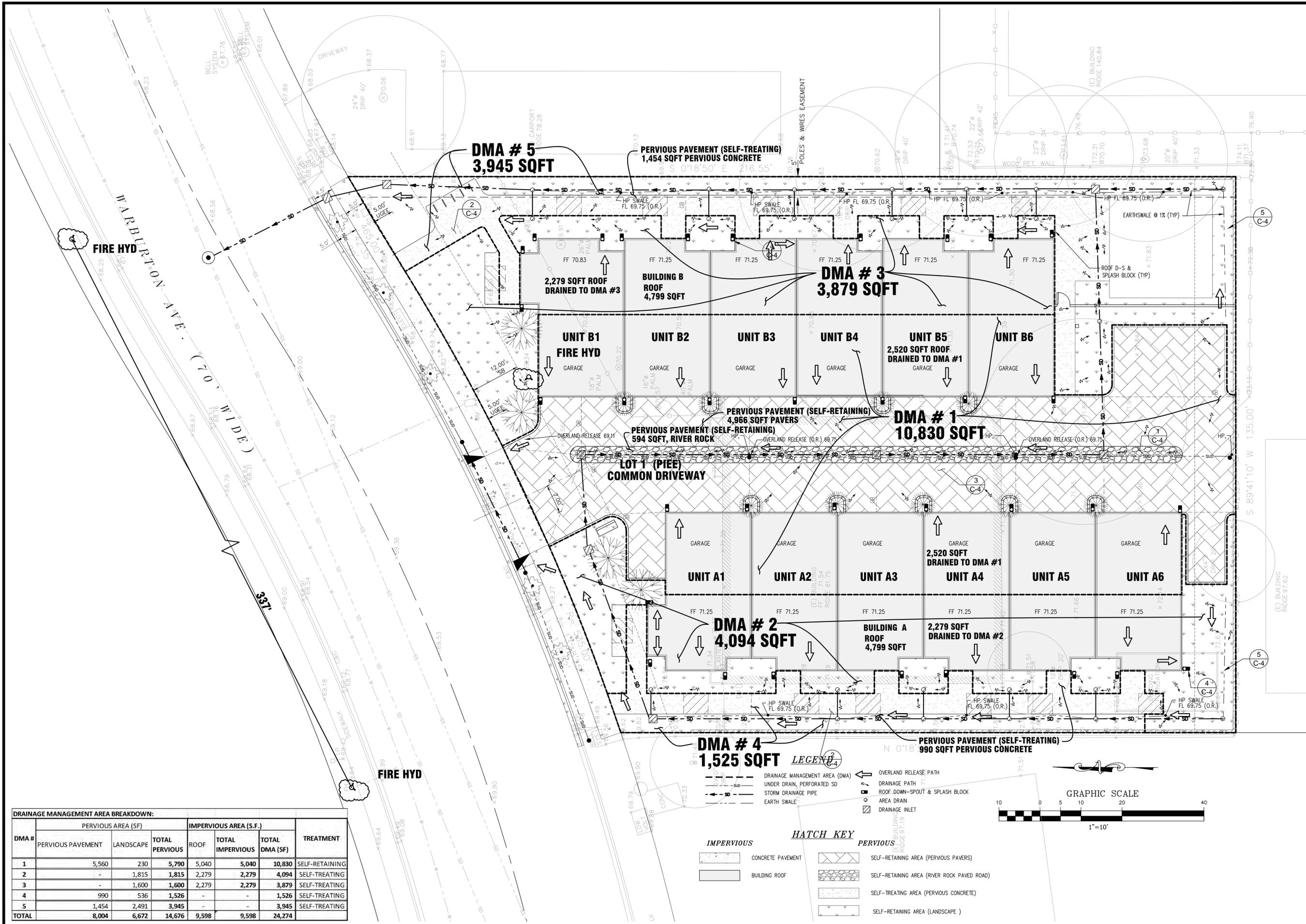
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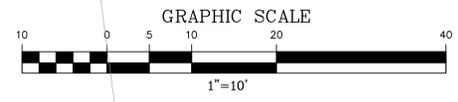
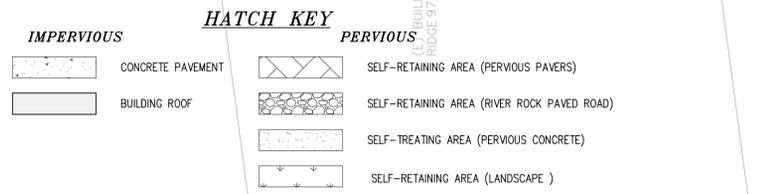
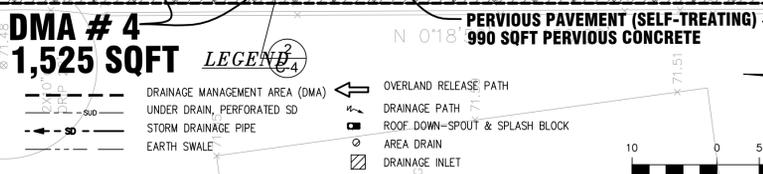
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Sheet: **5 OF 5**  
**C-5**



**DRAINAGE MANAGEMENT AREA BREAKDOWN:**

DMA #	PERVIOUS AREA (SF)			IMPERVIOUS AREA (S.F.)		TOTAL DMA (SF)	TREATMENT
	PERVIOUS PAVEMENT	LANDSCAPE	TOTAL PERVIOUS	ROOF	TOTAL IMPERVIOUS		
1	5,560	230	5,790	5,040	5,040	10,830	SELF-RETAINING
2	-	1,815	1,815	2,279	2,279	4,094	SELF-TREATING
3	-	1,600	1,600	2,279	2,279	3,879	SELF-TREATING
4	990	536	1,526	-	-	1,526	SELF-TREATING
5	1,454	2,491	3,945	-	-	3,945	SELF-TREATING
<b>TOTAL</b>	<b>8,004</b>	<b>6,672</b>	<b>14,676</b>	<b>9,598</b>	<b>9,598</b>	<b>24,274</b>	



# TENTATIVE MAP

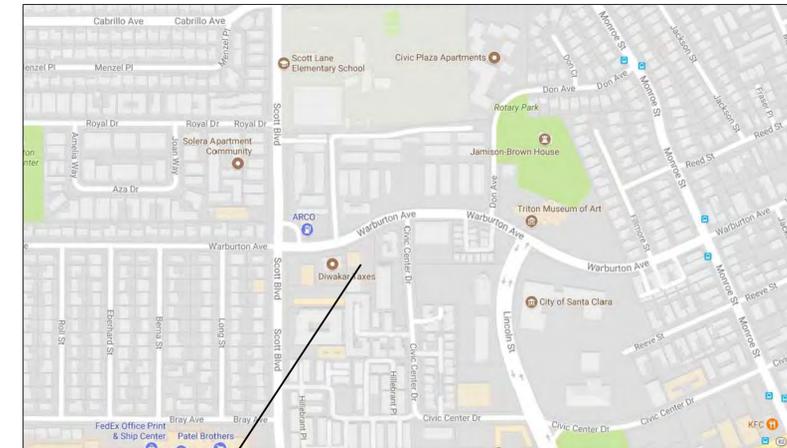
ONE LOT SUBDIVISION FOR CONDOMINIUM PURPOSES

ALL THAT CERTAIN REAL PROPERTY IN THE CITY OF SANTA CLARA, COUNTY OF SANTA CLARA, STATE OF CALIFORNIA DESCRIBED IN DOC# 12933317 BY CHICAGO TITLE CO. DATED 6/30/1995, RECORDED IN SANTA CLARA COUNTY.

LYING ENTIRELY WITHIN THE  
CITY OF SANTA CLARA SANTA CLARA COUNTY STATE OF CALIFORNIA

JANUARY 208, SCALE 1" = 20'  
**SMP ENGINEERS**

1534 CAROB LANE  
LOS ALTOS, CA 94024



PROJECT SITE

LOCATION MAP  
N.T.S.

## SHEET INDEX:

TM TENTATIVE MAP

### GENERAL NOTES AND STATEMENTS:

- OWNERS AND DEVELOPERS: SAMIR SHARMA 1495 FLAMINGO WAY SUNNYVALE, CA 94087
- APPLICANT: SAME AS ABOVE
- APN# 224-20-027
- EXISTING ZONE: OG
- EXISTING USE: COMMERCIAL BUILDING
- PROPOSED USE: CONDOMINIUM UNITS, RESIDENTIAL
- FLOODING: NONE
- STREETS: ALL PROPOSED STREET MODIFICATIONS WILL BE DONE TO THE SATISFACTION OF PUBLIC WORKS.
- EXISTING USE OF ADJACENT PROPERTIES: RESIDENTIAL/ APARTMENTS
- WATER: CITY OF SANTA CLARA
- FIRE PROTECTION: CITY OF SANTA CLARA FIRE DEPARTMENT
- STORM/SANITARY SEWER: CITY OF SANTA CLARA
- POWER AND GAS: CITY OF SANTA CLARA/PACIFIC GAS AND ELECTRIC
- TELEPHONE: AT&T
- STREET TREES: NEW STREET TREES WILL BE PLANTED PER CITY SATISFACTION, WITH A MINIMUM OF 10' FROM EXISTING AND NEW CITY WATERS & SANITARY SEWER FACILITIES.
- AREA OF SUBJECT PROPERTY: 0.557 ACRES (24,274 SQUARE FEET)

### LEGEND

- DISTINCTIVE BORDER LINE
- - - EASEMENT LINE
- PROPOSED UNIT LINE

### ABBREVIATIONS

- PUE PUBLIC UTILITY EASEMENT
- EVAE EMERGENCY VEHICLE ACCESS EASEMENT
- UGE E UNDERGROUND ELECTRICAL EASEMENT
- PIEE PRIVATE INGRESS EGRESS EASEMENT
- SB SETBACK LINE

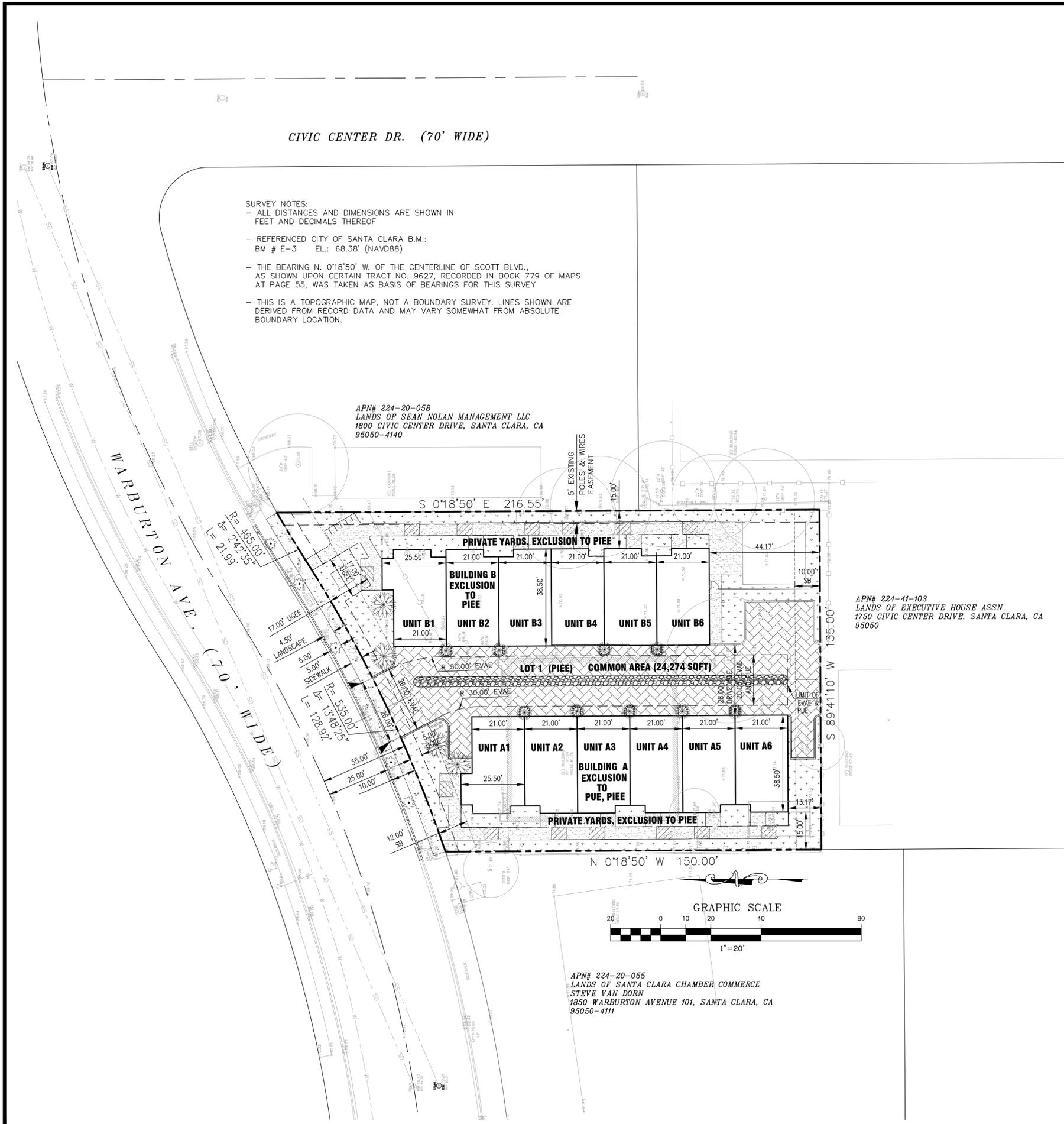
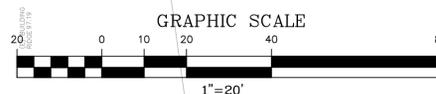
CIVIC CENTER DR. (70' WIDE)

- SURVEY NOTES:
- ALL DISTANCES AND DIMENSIONS ARE SHOWN IN FEET AND DECIMALS THEREOF
  - REFERENCED CITY OF SANTA CLARA B.M.: BM # E-3 EL.: 68.38' (NAVD86)
  - THE BEARING N. 0'18'50" W. OF THE CENTERLINE OF SCOTT BLVD., AS SHOWN UPON CERTAIN TRACT NO. 9627, RECORDED IN BOOK 779 OF MAPS AT PAGE 55, WAS TAKEN AS BASIS OF BEARINGS FOR THIS SURVEY
  - THIS IS A TOPOGRAPHIC MAP, NOT A BOUNDARY SURVEY. LINES SHOWN ARE DERIVED FROM RECORD DATA AND MAY VARY SOMEWHAT FROM ABSOLUTE BOUNDARY LOCATION.

APN# 224-20-058  
LANDS OF SEAN NOLAN MANAGEMENT LLC  
1800 CIVIC CENTER DRIVE, SANTA CLARA, CA  
95050-4140

APN# 224-41-103  
LANDS OF EXECUTIVE HOUSE ASSN  
1750 CIVIC CENTER DRIVE, SANTA CLARA, CA  
95050

APN# 224-20-055  
LANDS OF SANTA CLARA CHAMBER COMMERCE  
STEVE VAN DORN  
1850 WARBURTON AVENUE 101, SANTA CLARA, CA  
95050-4111



1534 CAROB LANE  
LOS ALTOS, CA 94024  
TEL: (650) 941-8055  
FAX: (650) 941-8755

OWNER:

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SMP ENGINEERS  
CIVIL ENGINEERS

TENTATIVE MAP  
12 CONDOMINIUM UNITS ON A COMMON LOT  
1900 WARBURTON AVENUE  
SANTA CLARA, CALIFORNIA  
APN: 224-20-027  
TENTATIVE MAP

Revisions:



Date: 1/30/2018  
Scale: 1"=20'  
Prepared by: V.G.  
Checked by: S.R.  
Job #: 217110

Sheet:

1 OF 1  
TM

### Hydrozone Summary Sheet

HYDROZONE	VALVES	IRRIG. METHOD	AREA (Sq.Ft.)	% of NEW LANDSCAPE
1 Low Water Shrubs	3,5,8,10,13,14,15,17	Drip	4275	69%
2 Low Water Trees	6,7,11,16	Drip	225	4%
3 Med Water Vines/Shrubs	4,9	Drip	617	10%
4 High Water Lawn	12	Spray	625	10%
5 Med Water Street Trees	1	Bub	125	2%
6 Low Water Street Grndcvr	2	Drip	348	5%
<b>TOTAL</b>			<b>6215</b>	<b>100%</b>

SUMMARY by HYDROZONE	AREA (Sq.Ft.)	% of LANDSCAPE
High Water Use	625	10%
Medium Water Use	742	12%
Low Water Use	4848	78%
<b>TOTAL</b>	<b>6215</b>	<b>100%</b>

### WATER EFFICIENT LANDSCAPE WORKSHEET

Date: 4/25/2018  
 Project: Warburton Condominiums  
 Address: 1900 Warburton Ave., Santa Clara  
 Total Planted Area (sq.ft.) 6,215

HYDRO ZONE NO.	VALVES	HYDRO ZONE DESC.	Plant Factor PF	Reference Evapotranspiration (Eto): 45.3 Santa Clara/San Jose			LDSCP AREA Square Feet	ETAF x Area	Estimated Total Water Use (Gal.)
				Irrig. Method	Irrig. Efficiency IE	ETAF PF/IE			
<b>Regular Landscape Areas</b>									
1	3,5,8,10,13,14,15,17	Drip, low water, sun, shrub	0.3	Drip	0.81	0.3704	4,275	1583.33	44,470
2	6,7,11,16	Drip, low water, sun, tree	0.3	Drip	0.81	0.3704	225	83.33	2,341
3	4,9	Drip, med water, sun, shrub	0.5	Drip	0.81	0.6173	617	380.86	10,697
4	12	Spray, high water lawn	0.8	Spray	0.75	1.0667	625	666.67	18,724
5	1	Bub, med water street tree	0.5	Bub	0.81	0.6173	125	77.16	2,167
6	2	Drip, low water street shrub	0.3	Drip	0.81	0.3704	348	128.89	3,620
7									
8									
<b>Totals</b>							<b>6,215</b>	<b>2,920</b>	<b>82,019</b>

<b>Special Landscape Areas</b>									
							1	0	
							1		
							1		
<b>Totals</b>							<b>0</b>	<b>0</b>	<b>0</b>
								<b>ETWU Total</b>	<b>82,019</b>
								<b>Maximum Allowed Water Allowance (MAWA)</b>	<b>96,005</b>

Residential ETAF for MAWA calc. 0.55 MAWA (Annual Gallons Allowed) = (Eto) (0.62) [ (ETAF x LA) + ((1-ETAF) x SLA) ]

#### ETAF Calculations

<b>Regular Landscape Areas</b>	
Total ETAF x Area	2,920
Total Area	6,215
Average ETAF	0.47

<b>All Landscape Areas</b>	
Total ETAF x Area	2,920
Total Area	6,215
Sitewide ETAF	0.47

Average total ETAF must be .55 or less for residential

## LANDSCAPE DOCUMENTATION PACKAGE CHECKLIST

- 1 - PROJECT INFORMATION
  - a Date - 4-25-18
  - b Applicant - Greg Lewis - Landscape Architect
  - c Project Address - 917 Warburton Ave., Santa Clara
  - d Total Irrigated Landscape Area - 6215 sf
  - e Type of project - 6 residential condominiums
  - f Potable water
  - g Checklist of all documents in package - see this page
  - h Contacts of Applicant -  
 Greg Lewis - Landscape Architect  
 lewislandscape@sbcglobal.net  
 phone (831) 359-0960  
 Owner's rep. - Samir Sharma (206) 931-4169  
 samir19@gmail.com
  - i "I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package"

- 2 - WATER EFFICIENT LANDSCAPE WORKSHEETS - SEE SHEET L0
- 3 - SOIL MANAGEMENT REPORT  
This will be done by after grading
- 4 - LANDSCAPE DESIGN PLAN  
See sheets L1
- 5 - IRRIGATION DESIGN PLAN  
See sheets L2
- 6 - GRADING DESIGN PLAN  
See the Grading and Drainage Plans done by  
SMP Engineers - Saeid Razavi (650) 941-8055

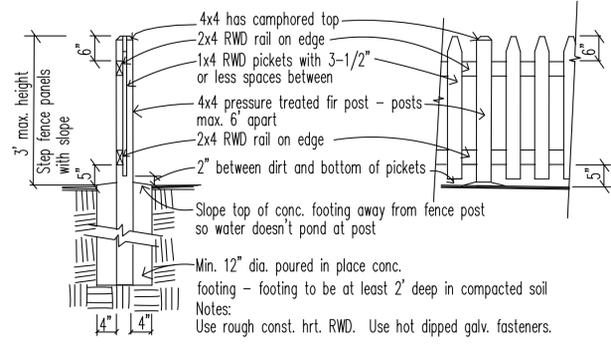
The following items are required when the landscape construction is complete

- CERTIFICATION OF COMPLETION  
 Project information sheet - see L0 for sample form
- Certification that the landscape project has been installed per the approved Landscape Documentation Package see L0 for sample form
- Irrigation Scheduling
- Landscape and Irrigation Maintenance Schedule
- Irrigation Audit Report
- Documentation verifying implementation of soil report recommendations

## SHEET INDEX

- L0 - LANDSCAPE DOCUMENTATION
- L1 - PLANTING PLAN
- L2 - IRRIGATION PLAN
- L3 - LANDSCAPE DETAILS
- L4 - LANDSCAPE SPECIFICATION
- L5 - COMPOSITE UTILITY AND TREE OVERLAY

<p>Revision</p> <p>2/5/18 City comments</p> <p>4/25/18 City comments</p>	<p style="text-align: center;">#2176</p> <p style="text-align: center;">GREGORY LEWIS LANDSCAPE ARCHITECT</p> <p style="text-align: center;">738 Park Way Santa Clara, CA 95065 (831) 359-0960 lewislandscape@sbcglobal.net</p> <div style="text-align: center;">  </div> <p style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; font-size: 1.2em;">Warburton St. Condominiums</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold;">1900 Warburton St., Santa Clara, CA</p>
<p>Date 9/6/17</p> <p>Scale As Noted</p> <p>Drawn Greg</p> <p>Job</p> <p>Sheet</p>	<p style="font-size: 2em; font-weight: bold;">L0</p> <p>of 6</p>



### 3' Wood Picket Fence

No Scale

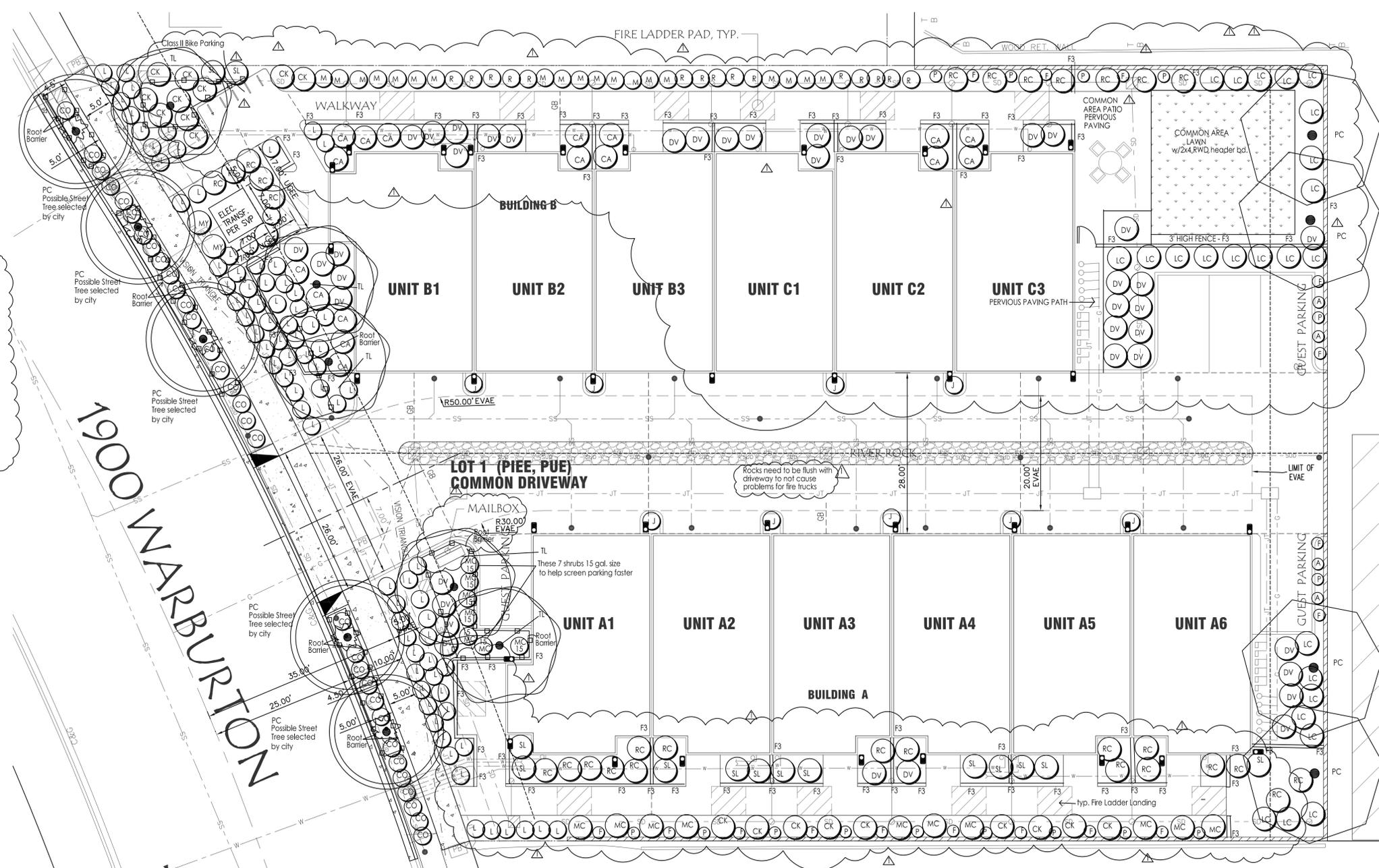


### Plant Legend

KEY	SIZE	WATER USE	BOTANICAL NAME	COMMON NAME	
<b>TREES</b>					
TL	24" box	LOW	Lagerstroemia indica Tuscarora	Crape Myrtle	
PC	24" box	LOW	Pistacia chinensis Keith Davey (male only)	Chinese Pistache	
<b>VINES</b>					
F	5	MED	Ficus pumila	Creeping Fig	
P	5	MED	Parthenocissus tricuspidata	Boston Ivy	
Both of these vines can grip and climb on the concrete block wall without wires					
<b>MEDIUM SHRUBS</b>					
RC	5	LOW	Rhaphiolepis minor	India Hawthorne	
DV	5	LOW	Dietes vegeta	Fortnight Lily	
LC	5	LOW	Loropetalum Razzeberry		
MC	15	LOW	Myrtus communis	Myrtle	
CK	CA	5	LOW	Calamagrostis Karl Foerster	Pacific Reed Grass
<b>GROUND COVERS</b>					
L	1	LOW	Lomandra Breeze		
SL	1	LOW	Salvia leucantha	Mexican Sage	
M	1	LOW	Lantana montevidensis purple	Purple Lantana	
W	1	LOW	Lantana montevidensis white	White Lantana	
R	1	LOW	Rosmarinus Collingwood Ingram	Rosemary	
J	1	LOW	Juncus patens	Gray Rush	
A	1	MED	Agapanthus Peter Pan	Lily of the Nile	
CO	1	LOW	Coprosma kikii		
MY	1	LOW	Myoporum parvifolium		
LAWN sod HIGH Turf tall fescue sod with 2x4 rough redwood headerboard at edge					
F3 3 foot high fences for individual front yards					

### Landscape Notes

- See sheets L3 and L4 for landscape Details, and Specs.
- Exact location of plants on site to be adjusted so as to best coordinate with sprinkler head locations, lights, drainage features, and swales.
- Use 3 inch deep mulch in all shrub and ground cover planting areas. Provide owner with different mulch samples and prices including small Fir Bark or dark brown mahogany colored Wonder Mulch from Vision Recycling.
- Install plants for all plant circles shown on the plan even if they aren't labeled. Call for clarification. For bidding purposes, if no one is available to answer questions, assume that any plant circle scaled less than 8" wide is 5 gal. size and any circle scaled larger is 24" box size.
- The plan is schematic. Don't install plants too close to edges of paving or buildings. Keep valves and quick couplers away from trees.
- See specs. concerning soil amendments and fertilizer. For bidding purposes until the soil fertility test is done, bid 6 cubic yards of nitrated redwood sawdust or BFI Super Humus Compost and 16 pounds of 12-12-12 fertilizer filled into the top 6" to 8" of soil after ripping soil to 12" deep, except under existing trees or on steep slopes.
- Don't trench too close to structures without getting an OK from the building architect or structural engineer.
- Prior to signing contract for work or ordering plants check with landscape architect to make sure you have the current drawings and to make sure there aren't any plant changes.
- Existing trees are being removed. See demo, plan in civil drawings.
- See Civil Plans for site paving materials and specifications.
- Root Barriers - Proposed trees shall be 5 feet minimum clear of public sidewalks. Provide root barriers when the drip line of the mature trees covers the public sidewalk. Root barriers for public sidewalk protection shall be 16 feet long or extend to drip line of mature tree whichever is greater and be 1.5 feet deep, and centered on trees. Root barriers for public curb and gutter protection shall be 16 feet long or extend to drip line of the mature tree, whichever is greater and be 2 feet deep, and centered on trees.
- Keep trees at least 10 feet from sanitary sewer, water and recycled water pipes except trees can be 5 feet away from water pipes if pipe protected by a root barrier that is 5 feet from water pipe.
- Sanitary sewer and storm drain mains and laterals shall be outside the drip line of mature trees or 10 feet clear of the tree trunk whichever is greater.
- No trees are allowed in the Triangle of Safety and the Intersection Visibility Obstruction Clearance areas except city required street trees. Visual obstructions over 3 feet in height will not be allowed within the driver's sight triangle near driveways in order to allow an unobstructed view of oncoming traffic.
- All trees shall be a minimum 5 feet from any existing or proposed Electric Dept. facilities. Trees shall not be planted in P.U.E.s or Electric easements.
- Front individual entry yards to have 3 foot high fences. Much care must be taken to coordinate the fence post with all of the utility lines and drain inlets in this project.
- Project site landscaping shall be maintained in good condition throughout the life of the Project and no trees shall be removed without City review and approval. Trees permitted by the City for removal shall be replaced at a 2:1 ratio with 24 inch box specimen trees or equal alternative as approved by the Director of community Development.
- Landscape installation shall meet City water conservation criteria in a manner acceptable to the Director of Planning and Inspection.



## Planting Plan

1"=10'-0"  
0' 10' 20'

Revision	
2/5/18	City comments
4/25/18	City comments
GREGORY LEWIS LANDSCAPE ARCHITECT 738 Park Way Santa Cruz, CA 95065 (831) 359-0960 lewislandscape@sbcglobal.net	
#2176	
<h1>Warburton St. Condominiums</h1> <p>1900 Warburton St., Santa Clara, CA</p>	
Date	11/9/17
Scale	As Noted
Drawn	Greg
Job	
Sheet	L1
of	6

### Drip Irrigation Notes

- 1) Secure larger 3/4" drip tubing 1" below grade with 7" or 11" U-shaped stakes 3 feet on center or closer so that the tubing can be found easily but does not show if the mulch gets brushed away. Cover tubing with soil and mulch and install manual flush valves at ends of tubing and mark them so they can be found easily.
- 2) Run large tubing over top of or right next to edge of plant rootballs to minimize length of smaller 1/4" tubing. Secure emitters on 3/4" tubing at plant root balls. When necessary run short lengths of 1/4" tubing from emitters to plant root balls. Install stakes on 1/4" tubing at 12" on center and cover tubing with 1" of soil plus mulch.
- 3) As the plant and plant rootball increase in size, the locations of the emitters may need to be adjusted so they are evenly spaced over the rootball.
- 4) Install pressure compensating emitters (with minimal difference in flow between 10 PSI and 40 PSI) at each plant on root ball (not right at stem). Use Agrifilm PC Plus (pressure compensating emitters). Use the ones that 1/4" tubing can be connected to. Other emitters may have a higher discharge rate at startup requiring larger pipe sizes.

Emitter schedule:  
 Two 2 GPH emitters at small ground covers and shrubs (eventual size) MY.M, W, R, J, A  
 Three 2 GPH emitters of medium shrubs RC.DV, LC, SL, MC, CA, F.P.L  
 Five 1 GPH emitters of tall shrubs - none on this project  
 With shrubs that have multiple emitters, put some at edge of root ball (not right at stem) and some out under future canopy. Space emitters evenly in future root zone area.  
 Trees to have six 2 GPH emitters at root ball and 14 additional 2 GPH emitters under future canopy of tree at 2x2' grid spacing

### Irrigation Notes

- 1) See sheet L3 and L4 for details and specifications
- 2) This system is designed to operate with minimum 7 GPM at minimum 40 p.s.i. at the point of connection. If this condition is not met contact the Landscape Architect for possible redesign. If pressure exceeds 75 psi at point of connection install a Wilkins 600 1" pressure regulator.
- 3) Deflector tape should be installed with any pressure lines not buried in the same trench with control wires and with any lines of any kind under paving not in a trench with control wires.
- 5) Electric controllers should be set to water between 6:00 PM and 11:00 a.m. to avoid watering during times of higher wind or temperature and programmed with repeat cycles to avoid runoff. This is not as important for drip that is not affected by the wind. Set irrigation schedule according to plants' water needs.
- 6) Run 2 extra control wires from the controller to the far end of each leg and to the furthest hose bib, coming up at each valve with some extra wire along the way so valves could be added if necessary in the future. - does not apply in this case because valves are all in one place
- 7) The routing of sprinkler lines is schematic on the plan. Do not put valves too close to trees. Stay 8' to 10' away if possible. Do not put pressure lines under trees. Install line in planting areas instead of under paving whenever possible.

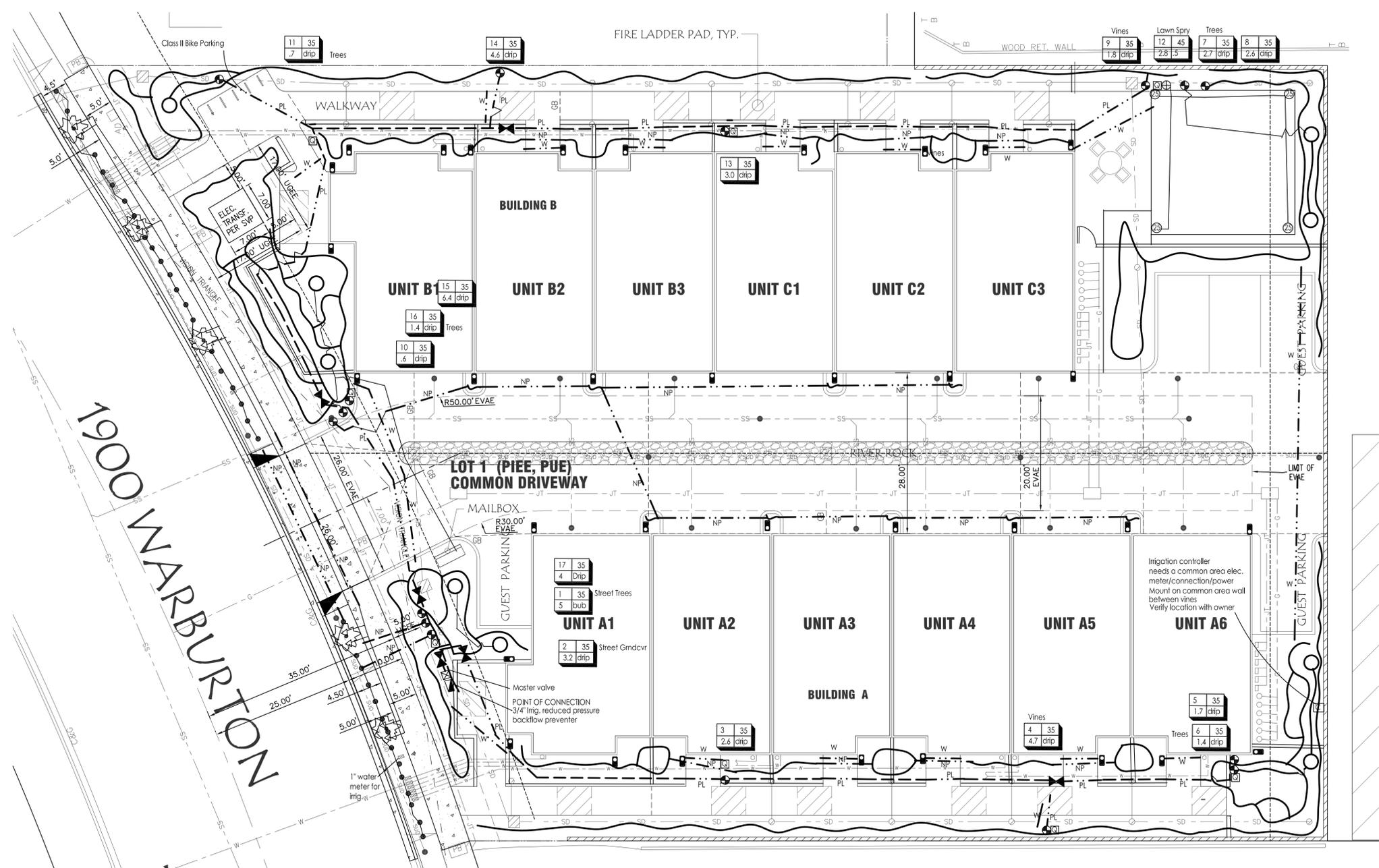
### Irrigation Legend

KEY	MANUF.	MANUF. #	DESCRIPTION
IC	Hunter	IC-600SS	Controller with enough modules for 18 stations (expandable to 42) wall mount exterior with Wireless Solar Sync On-Site Weather Station. Controller has stainless steel box and is mounted on concrete wall based on current weather conditions. Controller has stainless steel box and is mounted on concrete wall
FB	Febco	825Y 3/4"	Reduced pressure backflow preventer for HOA maintained irrigation Manual shutoff valve in valve box same size as pressure line
ICV	Hunter	ICV-101-G	1" globe valve - master valve below grade in valve box Pressurizes main line only during irrigation run times
PCZ	Hunter	PCZ-101-2S	Drip control zone kit This kit is good for up to .5 to 15 GPM flow.
PGV	Hunter	PGV-101G	1" globe valve with flow control for lawn spray below grade in valve box
RWS	Rainbird	RWS-B-1402	3/4" hosebib pointed up in 10" round valve box with ball down lid
PCT	Rainbird	PCT-05	Two .5 GPM bubblers at each street tree - 1/2" FPT threaded 5 GPH drip/bubbler on 3' length of Rainbird SPX-FLEX 100 pipe with SB spiral barb fittings Use one per small and medium shrub/ground cover at edge of root ball of plant in ROW planter strip
MP	Hunter	MP3000	MP Rotorator nozzle on 6" pop-up with 30 psi pressure regulator quarter radius with 25' throw with 0.69 GPM at 25 psi

### Irrigation Legend

KEY	MANUF.	MANUF. #	DESCRIPTION
3/4"			Nonpressure line - SCH 40 PVC 3/4" unless noted for larger size - 12" cover - pipes less than 2" to be Sch 40 PVC
1"			1" Pressure line - Sch 40 PVC - 18" of cover (24" of cover under A.C. paving)
PL			LINES UNDER PAVING Sch 40 PVC - 24" of cover Pressure line - 1" Sch 40 PVC in 1-1/2" sleeve
NP			Non Pressure line - 1" Sch 40 PVC in 1-1/2" sleeve
W			1-1/2" gray elec. conduit for control wires.
3/4" PE			3/4" PE drip tubing with compression fittings - see drip notes
3/4" PE			Drip irrigation on trees 3/4" PE drip tubing with compression fittings - see drip notes

All lines under pavement to be sleeved using a Sch 40 PVC sleeve 2 sizes larger than the pipe inside

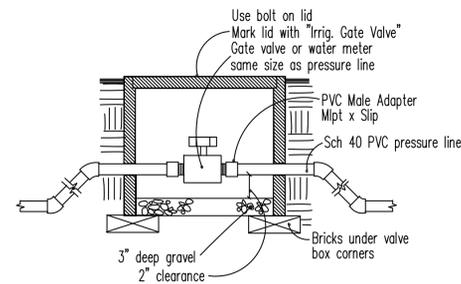


# Irrigation Plan

1"=10'-0"

0' 10' 20'

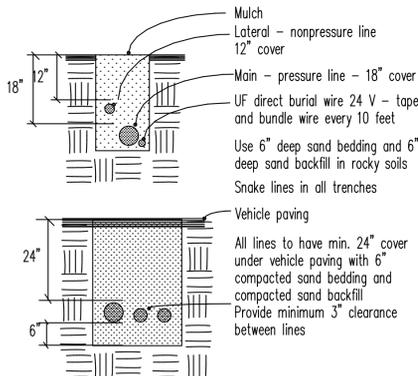
Revision	2/5/18 City comments
	4/25/18 City comments
GREGORY LEWIS LANDSCAPE ARCHITECT	#2176
738 Park Way Santa Cruz, CA 95065 (831) 359-0960	lewisl@landscape.com
<h2>Warburton St. Condominiums</h2> <p>1900 Warburton St., Santa Clara, CA</p>	
Date	11/9/17
Scale	As Noted
Drawn	Greg
Job	
Sheet	<b>L2</b>
of	6



**Manual Gate Valve**

No Scale

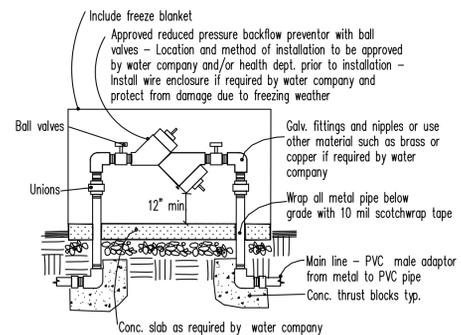
A



**Trenches/Lines**

No Scale

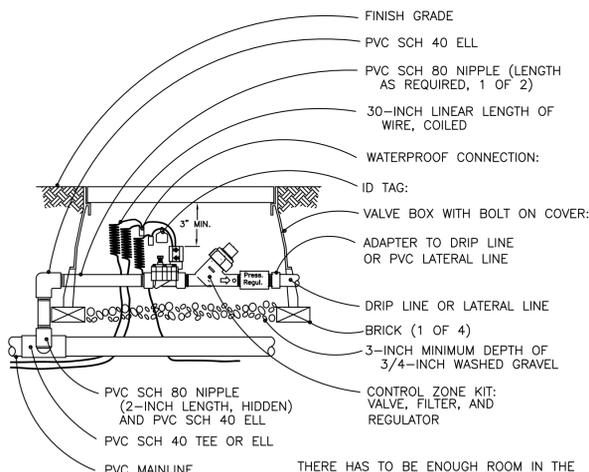
B



**Reduced Pressure  
Backflow Preventor**

No Scale

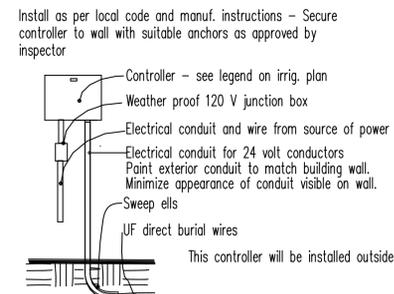
C



**Remote Control Globe Valve,  
Filter and Pressure Regulator**

No Scale  
Use this same detail for the master valve without the filter and regulator  
Also use for lawn valve without the filter and regulator

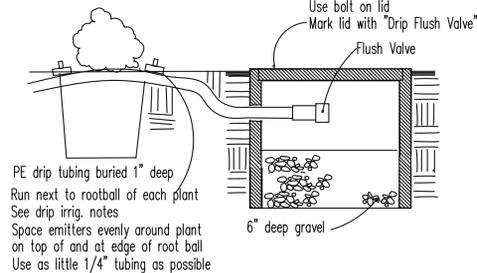
D



**Wall Mount Controller**

No Scale

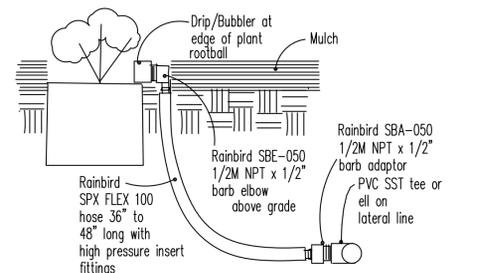
E



**Drip Emmitter and Flush Valve**

No Scale

F

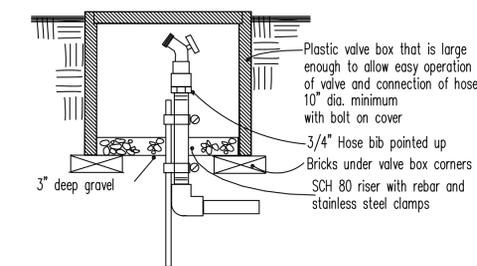


**Drip/Bubbler w/Flexible PVC Riser**

No Scale

G

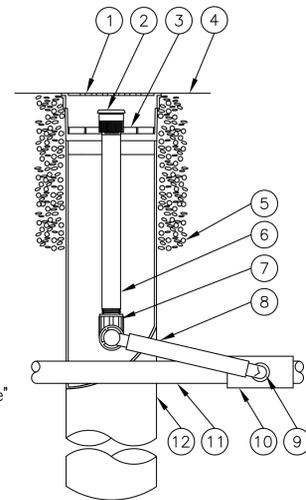
All male adapters above grade to be Sch 80 or marlex  
When using multi outlet emitters run 1/4" tubing to locations equally spaced around  
edge of rootball and install bug caps on ends of tubing  
Secure tubing to soil under mulch with 7" metal U stables



**Hose bib Pointed Up  
Below Grade**

No Scale

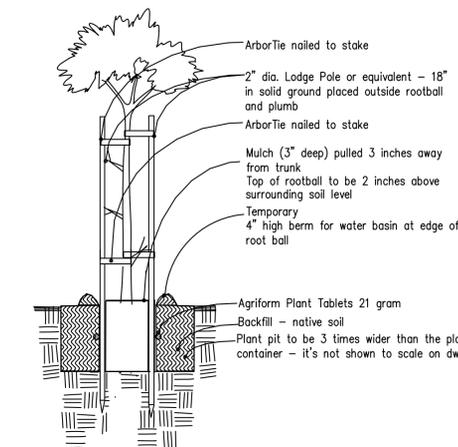
H



**Tree Bubbler**

No Scale

J

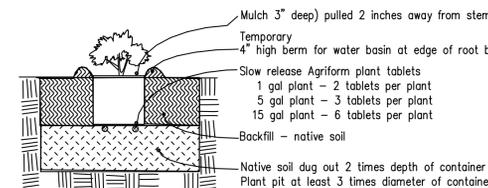


- 8 - 12 hours before installation, water all plants while still in containers sufficiently to thoroughly wet root balls
- Dig hole at least 2" less deep than the container and 3 times wider than the diameter of the container the plants were delivered in.
- Gauge holes in the side of the plant pit - 2 holes per sq. ft. of wall surface
- Remove rootball carefully from container with support from below. Sever any circling roots (3/16" dia. or greater) with sharp knife. Do not pull roots apart. The severing of large roots will encourage new roots at the cuts. Install enough backfill under root ball so top of rootball ends up 2" above grade of surrounding soil when it settles. Install some of fertilizer packets under root ball.
- Fill around rootball with backfill mix to 1/2 its height and pack soil as you fill with shovel handle or feet being careful not to disturb root ball
- Put Agriform Plant Tablet fertilizer at this level adjacent to rootball and at bottom of hole (5 tablets per 15 gal. or 5 tablets per 1 inch of caliper width. Fill the remainder of the hole with backfill and pack it.
- Water tree thoroughly by filling the basin and allowing the water to percolate in, doing this 3 times or more until root ball and backfill is wet
- Install stakes such that the stakes and the tree ties won't damage the tree and the stakes won't lean toward each other. Cut off tops of stakes if necessary to lower below branches that could be rubbed by stakes. Install stakes so they are straight up and don't lean in to each other

**Tree Planting**

No Scale

Q



- 8 - 12 hours before installation, water all plants while still in containers sufficiently to thoroughly wet root balls
- Dig the plant hole at least 3 times the dia. and 2 times the depth of the plant container.
- Replace this mixture in bottom half of hole and walk on it. The level of it should be such that when the plant is installed and settled it will be slightly above grade of existing soil. Fill hole with water
- Remove rootball carefully from container by tapping out, not pulling out by the stem. Scarify rootball walls in 3 vertical cuts and bottom to 1/2" deep, or by cutting roots of 1/2" or larger with shears. Do not pull roots apart.
- Install fertilizer packets under rootball of plant. Set rootball on prepared surface and fill hole to 1/2 the depth, tamping soil around rootball. Fill hole with water.
- Fill the remainder of the hole with backfill and pack it but do not tamp rootball.
- Make the water basin.
- Water shrub thoroughly within 1 hour of planting by filling the basin and allowing the water to percolate in, doing this 3 times or more until root ball and backfill is wet
- Install mulch

**Shrub Planting**

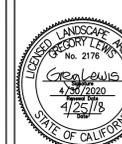
No Scale

R

**Revision**

City comments  
2/5/18  
4/25/18  
City comments

#2776  
GREGORY LEWIS LANDSCAPE ARCHITECT  
736 Park Way Santa Cruz, CA 95065 (831) 359-0960  
lewislandscape@sbcglobal.net



**Warburton St. Condominiums**  
1900 Warburton St., Santa Clara, CA

Date 1/7/16  
Scale As Noted  
Drawn Greg  
Job  
Sheet

**Landscape Details**

L3

GENERAL CONDITIONS – SOIL PREPARATION, PLANTING, AND IRRIGATION

1.1 QUALITY ASSURANCE:

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this section.
- B. It is the Contractor's responsibility to verify all information contained in the plans and specifications and to notify the Architect of any discrepancy prior to ordering products or commencing with the work.
- C. Check and verify dimensions, reporting any variations to the Architect before proceeding with the work.

1.2 CONTRACTOR COORDINATION

- A. It is the responsibility of the Landscape Contractor to familiarize himself with all grade differences, location of walls, retaining walls, etc., and to coordinate work with the General Contractor.

1.3 DIMENSIONS AND SCALE

- A. Dimensions are to take precedence over scale at all times. Large scale details are to take precedence over those at small scale. Dimensions shown on plans shall be adhered to insofar as it is possible, and no deviation from such dimensions shall be made except with the consent of the Architect. The Contractor shall verify all dimensions at the site and shall be solely responsible for same or deviations from same.

1.4 LAWS AND REGULATIONS

- A. The Contractor shall conform to and abide by all city, county, state and federal building, labor and sanitary laws, ordinances, rules, and regulations.

1.5 LICENSES AND PERMITS

- A. The Contractor shall give all notices and procure and pay for all permits and licenses that may be required to complete the work.

1.6 SUBMITTALS

- A. At the request of the owner or the Landscape Architect, submit manufacturer's and/or supplier's specifications and other data needed to prove compliance with the specified requirements including certificates stating quantity, type, composition, weight, and origin of all amendments, chemicals, import soil, planter mix, plants, and irrigation equipment used on the site.

1.7 PRODUCT SUBSTITUTIONS

- A. Any product substitutions shall be requested in writing. The Landscape Architect must approve or refuse any substitutions in writing. Lack of written approval will mean the substitution is not approved. Any difference in cost to the Contractor of a less expensive substitution shall be credited to the Owner's

1.8 ERRORS AND OMISSIONS

- A. The Contractor shall not take advantage of any unintentional error or omission in the drawings or specifications. He will be expected to furnish all necessary materials and labor that are necessary to make a complete job to the true intent and meaning of these specifications. Should there be discrepancies in the drawings or specifications, the contractor shall immediately call the attention of the Architect to same and shall receive the complete instructions in writing.

1.9 INSPECTIONS/REVIEWS DEFINITION

- A. Inspection or observation as used in these specifications means visual observation of materials, equipment, or construction work on an intermittent basis to determine that the work is in substantial conformance with the contract documents and the design intent. Such inspection or observation does not constitute acceptance of the work nor shall it be construed to relieve the contractor in any way from his responsibility for the means and methods of construction or for safety on the construction site. Inspection or observation will be done by the Landscape Architect only if requested by the owner in writing. This service will require a written contract for additional fees.

LANDSCAPE IRRIGATION

PART 1 – GENERAL

1.1 WORK INCLUDED

- A. The work includes but is not necessarily limited to the furnishing of all materials, equipments, and labor required to install a complete irrigation system.

- 1.2 GUARANTEE. The entire sprinkler system shall be guaranteed by the Contractor in writing to be free from defects in material and workmanship for a period of one year from acceptance of the work. The guarantee shall include repair of any trench settlement occurring within the guarantee period, including related damage to paving, landscaping, or improvements of any kind.

1.3 REVIEWS

- A. Request the following reviews prior to progressing with the work: (1) Layout of system (2) Depth of lines prior to backfilling (3) Coverage adjustment of all heads, valve boxes and operation of system.

1.4 WATER PRESSURE

- A. Verify the existence of the minimum acceptable volume of water at the minimum acceptable dynamic pressure as per plan at the point of connection at the earliest opportunity, reporting insufficient volume and/or pressure to the Landscape Architect. Contractor is responsible for cost of installation of pressure regulator if pressure exceeds 80 psi.

1.5 UTILITIES

- A. Verify the location of all existing utilities and services in the line of work before excavating. Take all precautionary measures necessary to avoid damaging

1.6 ELECTRICAL CONNECTION

- A. Verify existence of 110 Volt 20 Amp. circuit for irrigation controller (by others) at location noted on plan for installation of controller.

PART 2 – PRODUCTS

2.1 PIPE

- A. Plastic pipe is to be polyvinyl chloride, marked 1120–1220, and bearing the seal of the National Sanitation Foundation. Use Schedule 40 polyvinyl chloride, type I–II fittings bearing the seal of the National Sanitation Foundation, and complying with ASTM D2466 for pressure line and also for any water lines under asphalt paving. Use Sch 40 PVC for lateral lines in planting areas unless stronger pipe is specified in the irrigation legend. For joining, use a solvent complying with ASTM D2466 and recommended by the manufacturer of the approved pipe. Pipe is to be continuously and permanently marked with the manufacturer's name, pipe size, schedule number, type of material, and code number.
- B. Galvanized steel pipe is to comply with ASTM A120 or ASTM A53, galvanized, Schedule 40, threaded, coupled, and hot–dip galvanized. Use 150 lb. rated galvanized malleable iron, banded pattern fittings. Wrap all galvanized pipe below grade with 2" wide, 10 mil. plastic wrapping tape (#50 Scotch wrap or equal).
- C. Drip tubing is to be as noted on plans. Use compression fittings.

2.2 CONTROL WIRE

- A. Use type UF direct burial wire minimum size #14, copper, U.L. approved for irrigation control use for runs of 1000 feet or less. For longer runs consult with Landscape Architect. Use 3M DBY Direct Bury Wire Splice Kits or dry splice type wire connectors at splices. No underground splices will be allowed without a splice box.

2.3 OTHER MATERIALS

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

PART 3 – EXECUTION

3.1 SURFACE CONDITIONS

- A. Examine the areas and conditions under which the work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

3.2 EXCAVATION

- A. Trenches may be excavated either by hand or machine, but shall not be wider than is necessary to lay the pipes. Care should be taken to avoid damage to existing water lines, utility lines, and roots of plants to be saved.
- B. Minimum depth of cover for buried pipelines shall be: 1. Eighteen (18) inches for mainline pressure piping. 2. Eighteen (18) inches for 24 volt wiring from controllers to remote control valves. 3. Twelve (12) inches for lateral distribution lines. 4. Twenty–four (24) inches, minimum cover, with 6" sand bedding and 6" sand cover for any pipe or wire sleeve under A.C. paving.
- C. Under existing paving, piping may be installed by jacking, boring, or hydraulic driving except that no hydraulic driving will be permitted under asphalt concrete pavement (most pipes and sleeves under A.C. paving are to be installed prior to installation of the paving). Where cutting or breaking of existing pavement is necessary, secure permission from the Architect before cutting or breaking the pavement, and then make necessary repairs and replacements to the approval of the Architect and at no additional cost to the Owner.

3.3 INSTALLATION OF PIPE

- A. Handling and assembly of pipe, fittings, and accessories shall be by skilled tradesmen using methods and tools approved by the manufacturers of the pipe and equipment and exercising care to prevent damage to the materials or equipment.
- B. Metal pipe threads shall be sound, clean cut, and cored to full inside diameter. Threaded joints shall be made up with the best quality pure joint compound carefully and smoothly placed on the male threads only throughout the system.
- C. On plastic threaded connections use the sealer recommended by the manufacturer of the plastic valve or fitting. Do not use paste sealer products on plastic valves. Tighten plastic threaded connections with light wrench pressure only.
- D. Connections and controls shall be functionally as shown on the drawings, but physically shall be the most direct and convenient method while imposing the least hydraulic friction. Install lines in planting areas whenever possible.
- E. Thread male PVC connections into metal female connections rather than the opposite.
- F. Interior of pipe fittings, and accessories shall be kept clean at all times, and all openings in piping runs shall be closed at the end of each day's work or otherwise as necessary to prevent the entry of foreign materials. Bending of galvanized steel pipe will not be permitted. Install plastic pipe with the markings turned up to be seen from above until the pipe is buried. "Snake" the pipe in the trenches so that there will be a small amount of excess length in the line to compensate for contraction and expansion of the pipe.
- G. Place backfill in 6" layers such that there will be no settling. The top 6" of soil is to be the top soil and soil amendment mixture. All backfill shall be free of rock and debris. Test pipe for leaks prior to backfilling joints. Obtain approval of the owner's representative before backfilling joints.

3.4 INSTALLATION OF EQUIPMENT

- A. Flush lines clean prior to installation of valves, sprinkler heads, or hose bibs. Install valves, sprinkler heads, controllers, backflow preventors, hose bibs, and other equipment as per the Irrigation Plan and details.

3.5 ELECTRICAL WORK

- A. The line voltage work shall consist of connecting the controller to the nearest available 115 volt supply. The line voltage connection shall be in conduit, in accordance with local electrical code. Controllers mounted inside buildings can be plugged into outlets. The low voltage work shall include all necessary wiring from the controller to the automatic sprinkler valves, installed in accordance with the manufacturer's recommendations. A loop of extra wire, a minimum of eighteen (18) inches long shall be provided at each automatic valve. Appropriate expansion loops shall be provided throughout the system to assure that no wiring will be under stress.
- B. All splices and connections on the 24 volt system shall be made using 3M DBY Direct Bury Splice Kits, Rain Bird Pentite connector, or equal.
- C. Wiring, wherever possible, shall be placed in the same trench with, and alongside of, the irrigation main water line. Tape and bundle wire every ten feet. All wiring placed under paving shall be put in adequately sized Sch 40 PVC pipe sleeves prior to paving operations.
- D. Wire for 24 volt control lines shall be size #14 UF direct burial irrigation wire. Unless noted differently on the plan, common grounds shall be white, size #14 UF direct burial wire. For wire runs over 1000 feet consult with Landscape Architect for wire size. Under no circumstances, on multiple controller installations, will a single common ground, shared by each controller, be permitted. Each controller shall have its own separate common ground wire.

3.6 TESTING

- A. All testing shall be done in the presence of the Owner's Representative. Center–load all pipelines with clean soil approximately every four feet to resist hydraulic pressures, but leave fittings exposed for inspection. Piping under paving shall be tested before paving is in place. Install a 0 to 160 P.S.I. gauge on lines to be tested. All valves shown on Plans shall be in place and shall be in the closed position. Mains shall be tested at 100 P.S.I., and laterals at 65 P.S.I. If available static water pressure is under 100 P.S.I., provide suitable pump for tests. Fill pipelines slowly to avoid pipe damage, and bleed all air from lines as they are being filled. After closing valve at water source, mains shall hold 100 P.S.I. gauge pressure for two hours with no leaks. Laterals are expected to have minor seepage at multiple swing joint assemblies. Major leaks are not acceptable. Laterals shall be tested for one hour at 65 P.S.I. solely to reveal any piping or assembly flaws. The laterals are not expected to hold gauge pressure. For testing laterals, cap risers or turn adjusting screws on nozzles to the "off" position, as appropriate. Repair any flaws discovered in mains or laterals, then retest in same fashion as outlined in presence of the Landscape Architect until all lines have been approved. Provide required testing equipment and personnel.

3.7 SYSTEM ADJUSTMENT

- A. The entire sprinkler system shall be properly adjusted before final acceptance. Adjustments shall include but not necessarily be limited to: (1) Adjustment of arc and distance control devices on sprinklers, including changing nozzle sizes if necessary to assure proper coverage of planted areas. (2) Relocation or addition of sprinkler heads if necessary to properly cover planted areas, without causing excessive water to be thrown onto building, walks, paving, etc. (3) Throttling of automatic valves as necessary to operate sprinklers at manufacturer's recommended pressure. (4) Adjustment and testing of all automatic control devices to assure their proper function, both automatically and manually. (5) Installation of pop–up heads anywhere there is a chance of pedestrians or vehicles hitting heads even if pop–ups are not shown on the plan. (6) Installation of check valves to keep sprinkler head drainage from eroding landscape areas, wasting water, or creating soggy spots in the landscaping.

3.8 AS–BUILT DRAWINGS AND INSTRUCTION

- A. Regularly update a print of the system noting any changes which are made by dimensioning features below grade from surface features with at least two dimensions. Prior to final approval, give the Owner 2 copies of clean blueprints marked to show changes during construction. The most important features to mark on the plan are valves, pressure lines, wires, and hose bibs.
- B. After the system has been completed, inspected, and approved, instruct the Owner's maintenance personnel in the operation and maintenance of the system. Give the Owner completed warranty cards for the irrigation equipment and keys to controllers and hose bibs.

SOIL PREPARATION AND PLANTING

PART 1 – GENERAL

1.1 DESCRIPTION

- A. The work includes, but is not necessarily limited to, the furnishing of all materials, equipment, and labor required to do the installation and complete placement of topsoil, fine grading, soil conditioning, and planting.

1.2 QUALITY ASSURANCE

- A. Plant Identification and Quality
  - 1. Plants are to be true to name, with one of each bundle or lot tagged with the name of the plants in accordance with standards of practice of the American Association of Nurserymen. In all cases, botanical names take precedence over common names.
  - 2. Plants shall be vigorous, of normal growth habit, free of diseases, insects, eggs, larvae, excessive abrasions, sun scalds, or other objectionable disfigurements, and shall conform to the standards as outlined by the California Association of Nurserymen. Tree trunks shall be sturdy and well "hardened off". All plants shall have normal well developed branch system, and vigorous, fibrous root systems which are not root bound. Ground cover plants (rooted cuttings) shall have well developed root systems and be kept moist prior to and during installation. Plants shall be nursery grown and of size indicated on Drawings. All plants not conforming to those requirements will be considered defective, removed from the site and replaced with acceptable new plants at the Contractor's expense.
  - 3. Sod shall have a well developed root system. Yellowing, brown, diseased, dried, or pest infested sod shall be rejected. Sod is to be cleanly mowed within 72 hours of delivery to the site. Sod is to be delivered to the site within 24 hours after being harvested and installed immediately after being delivered. Sod shall not be stored on the site overnight. Any sod delivered to the site that cannot be installed the same day shall be removed and not used on the site.
  - 4. Ground cover is to have well developed roots and foliage. It is to be grown in and delivered to the site in flats.

1.3 SUBMITTALS

- A. Provide the results of lab tests done on representative samples of existing soils and imported soils to be used for the top 12" or more of landscape area. Tests are to be done by a reputable soils lab (i.e., Perry Lab, Watsonville or Santa Clara Soil and Plant Lab). Samples to be tested are to be collected by lab personnel. Soil samples are to be tested for:
  1. Particle size distribution (clay, silt, sand).
  2. Agricultural suitability including any excess problems; i.e., salinity (calcium, magnesium), boron, sodium, pH level.
  3. Fertility – amounts of available nitrogen, potassium, phosphorous, iron, magnesium, copper, zinc, and boron.
  4. Chemicals and/or poisons that would hinder plant growth. The owner is to decide if tests for poisons will be done since there is a small chance that any exist and the cost of testing for them is expensive and difficult.

- An interpretation of the test results and their affect on plant performance done by the lab staff or an approved horticultural consultant should be included in the report. The Owner is responsible for the cost of initial testing and for any additional chemicals and amendments that are required that are not already included in the Specifications or Drawings. Soils tests must be done as soon as possible and prior to ordering or installing soil amendments or plant materials. Plant selections and soil amendment specifications are subject to change depending on the results of the soil tests.
- 5. If bidding is done prior to soil fertility tests, bid 6 cu. yds. of nitrated RWD sawdust and 16 lbs. of 12–12–12 fertilizer per 1000 sq.ft. tilled or dug into the top 6" to 8" of soil in all planting areas for bidding purposes only. Revise bid when results of soil fertility tests are obtained.

1.4 QUARANTEE

- A. Trees shall be guaranteed 1 year – all other plant material 120 days following final acceptance. Any plant material needing replacement because of weakness or probability of dying will be replaced with material of similar type and size to that of the surrounding area. The replacement plants will have the same guarantee as the original plants or trees, starting the day of their replacement. The Contractor is not responsible for losses due to vandalism if he has taken reasonable measures for protection of the plants.

1.5 PRODUCT HANDLING

- A. Protect plants before and during installation, maintaining them in a healthy condition. Application(s) of anti–desiccant may be required to minimize damage. The Contractor is responsible for vandalism, theft, or damage to plant material until commencement of the maintenance period.

1.6 REVIEWS

- A. Request the following reviews by the Owner's Representative at least three (3) days in advance (in writing): (1) Rough grading (of landscape area) (2) Soil test (3) Verification of incorporation depths (4) Finish grade (5) Plant material quality approval (6) Plant material layout (7) Plant pit sizes (prior to planting plants) (8) Preliminary inspection (9) Final inspection (5 day advance notice required)

PART 2 – PRODUCTS

2.1 TOPSOIL

- A. Native topsoil or import landscape soil

2.2 NATIVE TOPSOIL

- A. Native soil on site without admixture of subsoil, free from rocks over two cubic inches, debris, and other deleterious material. Native topsoil is to be stripped, stockpiled, and reinstalled.

2.3 IMPORT LANDSCAPE SOIL

- A. Import landscape soil must be tested and meet the following specification:
  1. TEXTURE: Sandy loam to loam
  2. GRADING:
 

SEIZE SIZE	PERCENT PASSING SIEVE
25.4 mm (1")	95 – 100
9.51 mm (3/8")	85 – 100
53 Micron (270 mesh)	10 – 30

3. CHEMISTRY – SUITABILITY CONSIDERATIONS:

- a. Salinity: Saturation Extract Conductivity (ECe x 103 @ 25 degree C.) Less than 4.0
- b. Sodium: Sodium Adsorption Ration (SAR) Less than 9.0
- c. Boron: Saturation Extract Concentration Less than 1.0 PPM
- d. Reaction: pH of Saturated Paste: 5.5 – 7.5
- e. Lime: less than 3% by weight

4. PESTS:

- a. The population of any single species of plant pathogenic nematode: fewer than 500 per pint of soil.

5. ORGANIC MATTER

- a. Soil is to have 5% to 10% organic matter at below 18 inches in depth. Soil is to have less than 30% organic matter at 0 to 18 inches in depth. Organic matter to be less than 1" dia. Do not use mushroom compost. No noxious weeds are allowed.

6. FERTILITY CONSIDERATIONS:

- a. Soil is to contain sufficient quantities of available nitrogen, phosphorous, potassium, calcium, and magnesium to support normal plant growth. In the event of nutrient inadequacies, provisions shall be made to add required materials to overcome inadequacies prior to planting.
- 7. COMPACTION
  - a. Compact the soil enough so it doesn't settle more when walked on and not significantly over time where the flow of drainage will be affected or soil needs to be added. Don't over compact or work soil when it has too much moisture. Dig bottom layer of import soil into existing soil. Compact in 6 inch lifts.

2.4 ORGANIC SOIL AMENDMENT

- A. Redwood sawdust, 0–1/4" in diameter, that is not nitrogen stabilizing by the supplier, and contains a wetting agent. Also see note on planting plan

2.5 ORGANIC MULCH

- A. See Planting Plan

2.6 PLANTER SOIL MIX

- A. See Planting Plan and Details.

2.7 BACKFILL FOR PLANT PITS

- A. For native soils with 50% or more clay content – 75% topsoil and 25% organic amendment thoroughly mixed and incorporated together with no topsoil clods larger than 1/2" diameter. In heavy clay soils or other soils with large clods this will require mixing the backfill in a stockpile at the site or at the supplier. For soils with less clay content amend only the top 8" of the plant pit backfill as per the soils lab recommendations.

2.8 FERTILIZER

- A. Fertilizer needs and amounts will be based on the results of the soil test

- B. Sod lawn areas (there is no lawn on the plan)

2.9 PLANT MATERIAL SUBSTITUTES

- A. Substitutes will not be permitted except when proof is submitted that plants specified are not available and then only upon approval of the Landscape Architect and Owner.

2.10 OTHER MATERIALS

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Landscape Architect.

PART 3 – EXECUTION

3.1 SURFACE CONDITIONS

- A. Examine the areas and conditions under which the work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.
- B. Weed and Debris Removal – All ground areas to be planted shall be cleaned of all weeds and debris prior to any soil preparation or grading work. Weeds and debris shall be disposed of off the site.

- C. Contaminated Soil – Do not perform any soil preparation work in areas where soil is contaminated with cement, plaster, paint or other construction debris. Bring such areas to the attention of the Owner's Representative and do not proceed until the contaminated soil is removed and replaced.
- D. Moisture Content – Soil shall not be worked when moisture content is so great that excessive compaction will occur, nor when it is so dry that dust will form in the air or that clods will not break readily. Water shall be applied, if necessary, to bring soil to an optimum moisture content for tilling and planting.

3.2 ROUGH GRADING AND TOPSOIL PLACEMENT

- A. Request a review by the Owner's Representative to verify specified limits and grades of work completed to date before starting soil preparation work. Place topsoil as required to obtain an 12" minimum depth of topsoil or as noted otherwise on the Plans. (Topsoil may already exist in the planting areas). Integrate topsoil layer into subsoil or existing compacted topsoil layer by ripping. Complete rough grading as necessary to round top and toe of all slopes, providing naturalized contouring to integrate newly graded area with the existing topography. Verify that rough grading is completed in accordance with civil engineering drawings and/or any landscape grading drawings. Break through any compacted layers of subgrade material (sometimes left from building or paving pad compaction) that will not allow water in planting areas to percolate through, causing a boggy, over saturated soil condition. You may have to use a backhoe or rototillers to break up and turn soil to a minimum depth of 12". If proposed planters are in areas of existing paving or baseroack, remove at least 12" of material and bring in top soil up to grade required by grading plan. Rough grading in planting areas is to be such that when amendment is incorporated and the mulch is installed, the grade will be + 1" to finish grade.
- B. Soil Preparation: (1) Distribute soil (organic) amendment and fertilizer in the amounts recommended by the soils lab over all planting areas unless noted otherwise on the Plans. (2) Rip and/or till the amendment and fertilizer into the top 6" to 8" of soil until they are thoroughly mixed in. Hand work areas inaccessible to mechanical equipment. (3) Moisten to uniform depth for settlement and regrade to establish elevations and slopes indicated on Drawings.

3.3 FINISH GRADING

- A. The Contractor shall make himself familiar with the site and grading plans and do finished grading in conformance with said Plans and as herein specified.
- B. Grades not otherwise indicated shall be uniform levels or slopes between points where elevations are given or between points established by walks, paving, curbs, or catch basins. Finish grades shall be smooth, even, and on a uniform plane with no abrupt changes of surface. Minor adjustments of finish grades shall be made at the direction of the Landscape Architect, if required.
- C. All grades shall provide for natural runoff of water without low spots or pockets. Flowline grades shall be accurately set and shall be not less than 2% gradient wherever possible. Grades shall slope away from building foundations unless otherwise noted on Plans. All finish grades (top of mulch) are 1" below finish grade of walks, pavements, curbs, and valve boxes unless otherwise noted.

3.5 MULCHING

- A. Recultivate soils compacted by planting or other operations and smooth the soil areas prior to applying mulch. Mulch all plants even after to a depth as noted on plans. This depth should be as per the plans even after being settled and stepped on 30 days after installation. Water lightly to settle mulch. Do not bury ground cover with mulch. Place and settle mulch in such a way that it does not get washed onto paving or block drain swales or inlets.

3.6 WEED CONTROL

- A. The Contractor is responsible for pre–emergent weed control. Follow the manufacturer's directions. The Contractor is responsible for the replacement of any plants (other than weeds) that are hurt or killed due to the misuse of weed control products or use of the wrong product. Clay soils can increase the affect of certain pre–emergents. Adjust the application rate accordingly. Some owners may prefer hand weeding to chemical weed control although it is usually more expensive.

3.7 MAINTENANCE

- A. Maintenance shall begin immediately after each plant is installed.
- B. Maintenance will include:
  1. Continuous operations of watering, weeding, cultivating, fertilizing, spraying, insect, pest, fungus, and rodent control, and any other operations to assure good normal growth.
  2. Fertilizing: In addition to fertilizing of trees, shrubs and ground covers, herein specified, furnish and apply any additional fertilizers necessary to maintain plantings in a healthy, green vigorous growing condition during the maintenance period.
  3. Weeding, Cultivating and Clean Up: Planting areas shall be kept neat and free from debris at all times and shall be cultivated and weeded at no more than 10–day intervals.
  4. Insect, Pest and Disease Control: Insects and diseases shall be controlled by the use of approved insecticides and fungicides. Moles, gophers, and other rodents shall be controlled by traps, approved pellets inserted by probe gun, or other approved means.
  5. Protection: Work under this Section shall include complete responsibility for maintaining adequate protection for all areas. Any damaged areas shall be repaired at no additional expense to the Owner.
  6. Replacements: Immediately replace any plant materials that die or are damaged. Replacements shall be made to the Specifications as required for original plantings.
  7. Hand Watering: Even when planting areas are watered with automatic irrigation, the soil surrounding the plant pits can be moist while the sawdust/sand root ball is dry. This can cause the plants to deteriorate or not grow (even during the winter). The plants will do best (especially during the hot season) if they are hand watered deeply until their roots grow out into the surrounding soil.

3.8 PRELIMINARY INSPECTION

- A. As soon as all the planting is installed, the Contractor will request the Owner's Representative (in writing) to make a preliminary inspection. The 30 calendar day maintenance period will start when the work is approved. Replacement and/or repairs may be required for approval. The Contractor is to notify the Owner and the Owner's Representative in writing when the 30 day maintenance period begins.

3.9 FINAL INSPECTION

- A. At least 5 days prior to the anticipated end of the maintenance period, the Contractor shall submit a written request for final inspection. The planting areas shall be weeded, neat and clean. The work shall be accepted by the Owner exclusive of the plant materials upon written approval of the work by the Owner's Representative.

Revision

2/5/18  
City comments  
4/25/18  
City comments

#2176

GREGORY LEWIS LANDSCAPE ARCHITECT  
736 Park Way Santa Cruz, CA 95065 (831) 359-0960  
lewlandscape@gmail.com



### Tree Legend

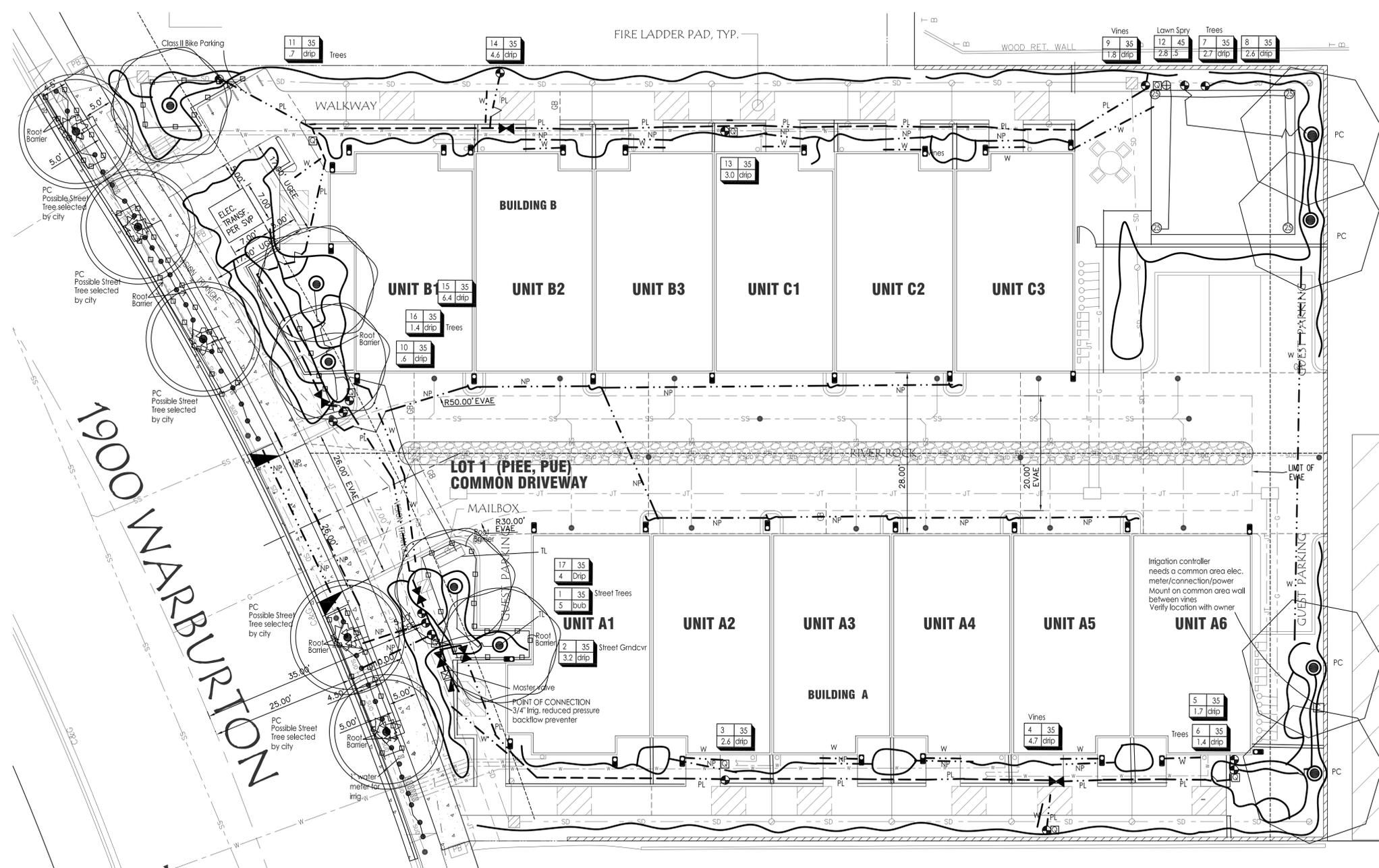
KEY	SIZE	WATER USE	BOTANICAL NAME	COMMON NAME
TREES				
TL	24" box	LOW	Lagerstroemia indica Tuscarora	Crape Myrtle
PC	24" box	LOW	Pistacia chinensis Keith Davey (male only)	Chinese Pistache

See sheet L1 for notes concerning root barriers and min. tree distances from utilities and sidewalks

### Irrigation Legend

KEY	MANUF.	MANUF. #	DESCRIPTION
3/4"			Nonpressure line - SCH 40 PVC 3/4" unless noted for larger size - 12" cover - pipes less than 2" to be Sch 40 PVC
1"			1" Pressure line - Sch 40 PVC - 18" of cover (24" of cover under A.C. paving)
1-1/4"			LINES UNDER PAVING Sch 40 PVC - 24" of cover
PL			Pressure line - 1" Sch 40 PVC in 1-1/2" sleeve
NP			Non Pressure line - 1" Sch 40 PVC in 1-1/2" sleeve
W			1-1/2" gray elec. conduit for control wires.
3/4" PE drip			3/4" PE drip tubing with compression fittings - see drip notes
Drip irrigation on trees			Drip irrigation on trees
3/4" PE drip			3/4" PE drip tubing with compression fittings - see drip notes

All lines under pavement to be sleeved using a Sch 40 PVC sleeve 2 sizes larger than the pipe inside



# Composite Utility and Tree Overlay Plan

1"=10'-0"

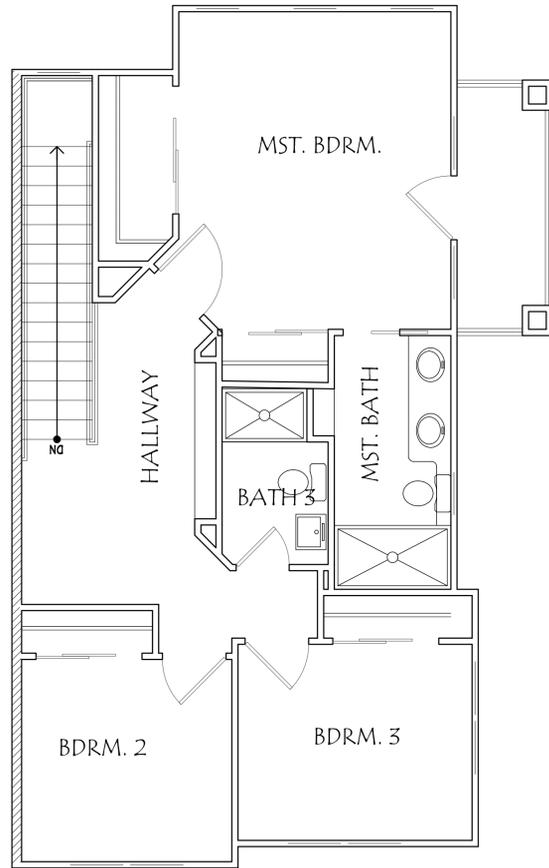
0' 10' 20'

Revision	2/5/18 City comments
	4/25/18 City comments
<p>GREGORY LEWIS LANDSCAPE ARCHITECT</p> <p>738 Park Way Santa Cruz, CA 95065 (831) 359-0960</p> <p>lewislandscape@sbcglobal.net</p>	
<h2>Warburton St. Condominiums</h2> <p>1900 Warburton St., Santa Clara, CA</p>	
Date	11/9/17
Scale	As Noted
Drawn	Greg
Job Sheet	L5
of	6

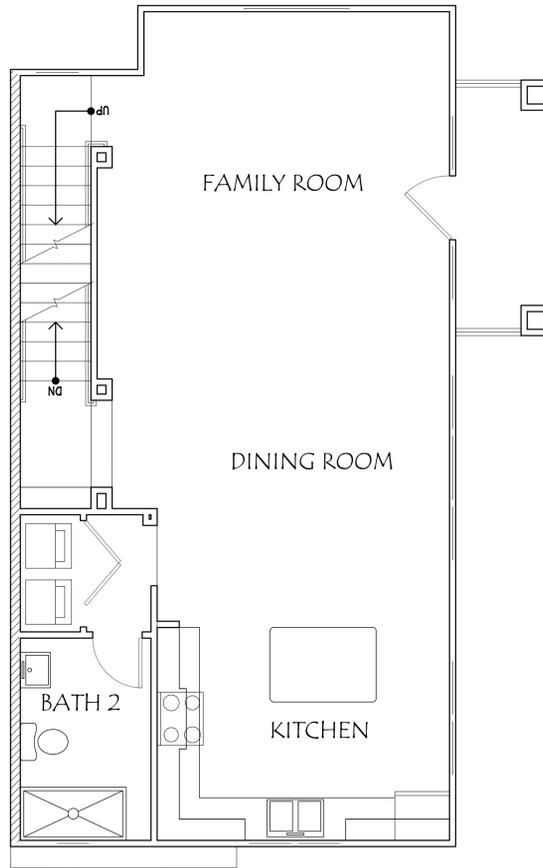




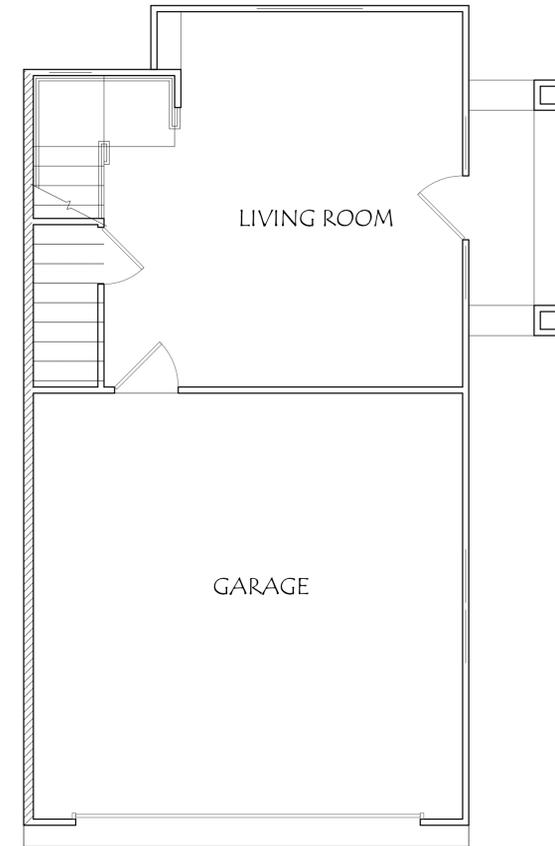
*Gregory G. Kuykendall*



THIRD FLOOR PLAN  
763 SQFT



SECOND FLOOR PLAN  
756 SQFT



FIRST FLOOR PLAN  
364 SQFT LIVING  
426 SQFT GARAGE

PLAN 1- 1,883 SQFT

Revisions:


1900  
WARBURTON LLC  
1900 WARBURTON AVE  
SANTA CLARA - CALIFORNIA

Project No:      DATE: 11-10-2017  
Sheet Title:

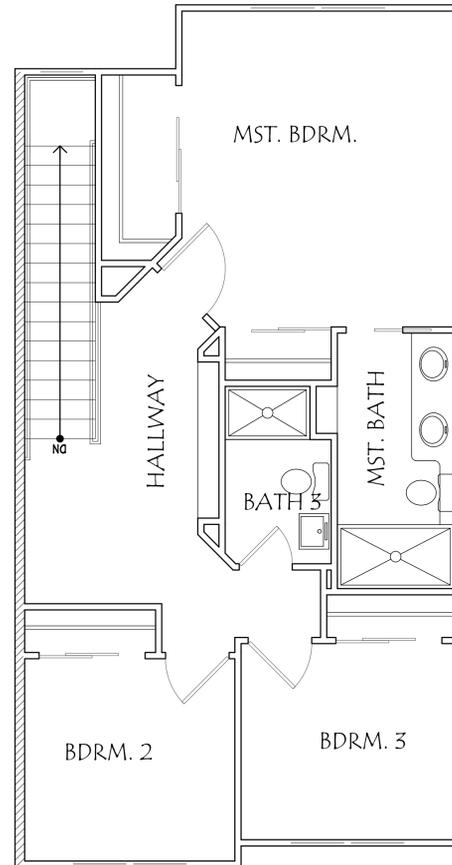
PLAN 1  
FLOOR PLAN

Review by:   
Sheet No:

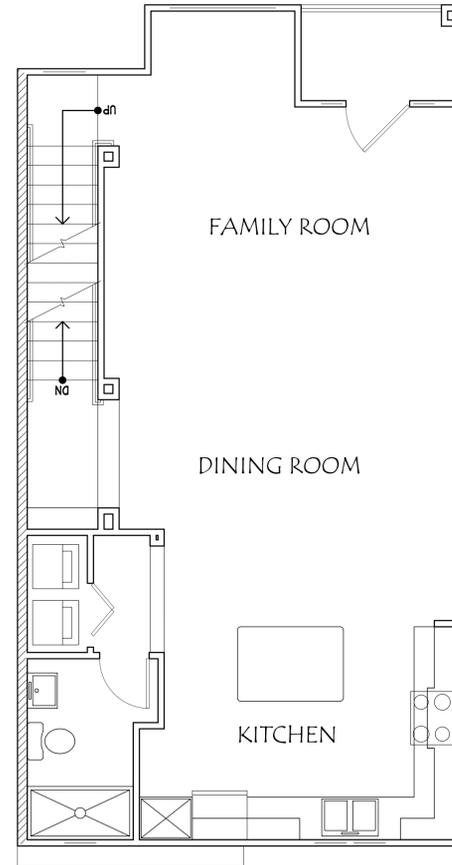
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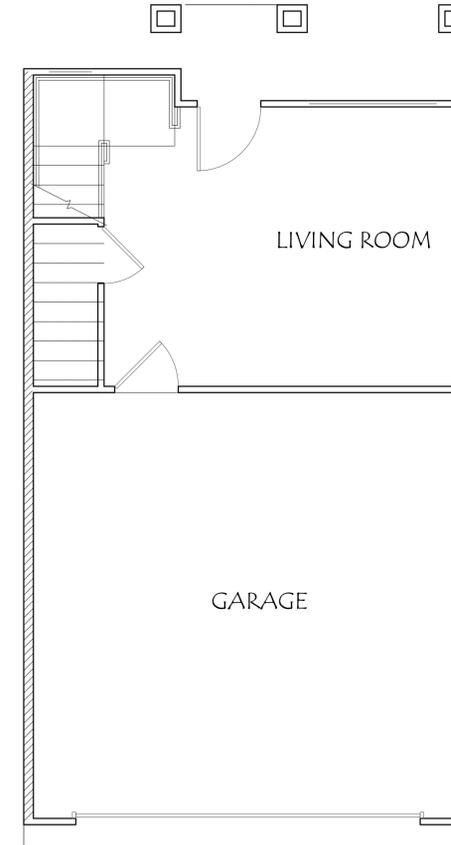
*Gregory G. Kuykendall*



THIRD FLOOR PLAN  
751 SQFT



SECOND FLOOR PLAN  
721 SQFT



FIRST FLOOR PLAN  
299 SQFT LIVING  
426 SQFT GARAGE

PLAN 2- 1,771 SQFT

Revisions:


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1900 WARBURTON AVE  
SANTA CLARA - CALIFORNIA

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Sheet Title:

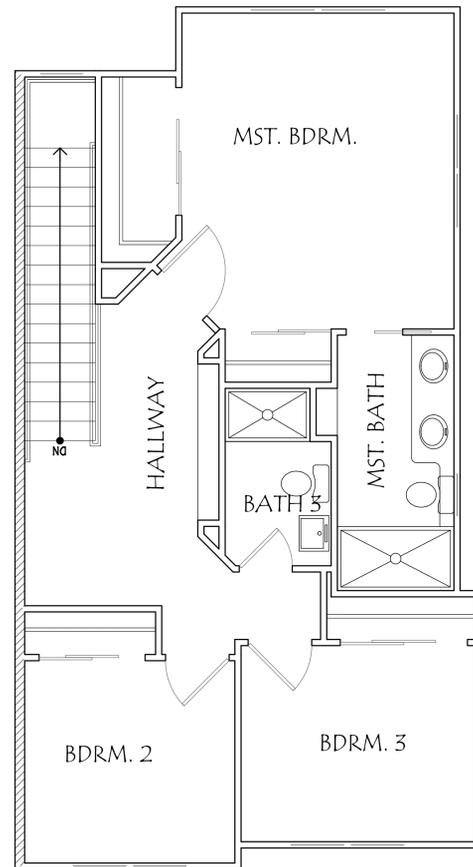
PLAN 2  
FLOOR PLAN

Review by:   
Sheet No:

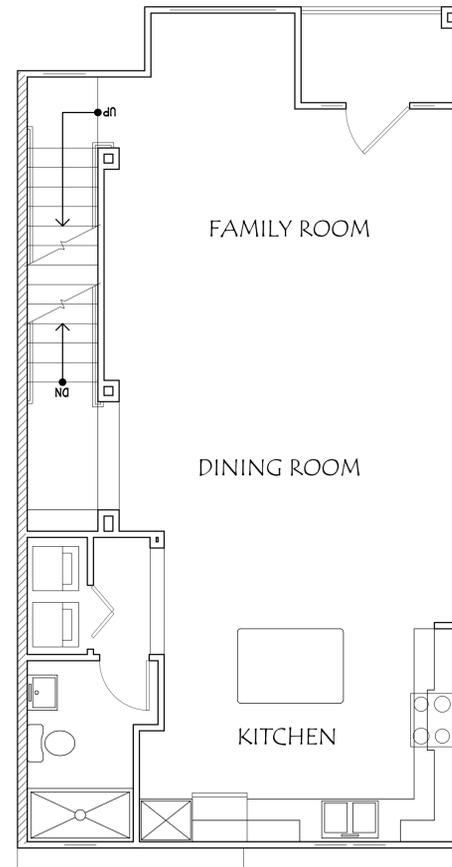
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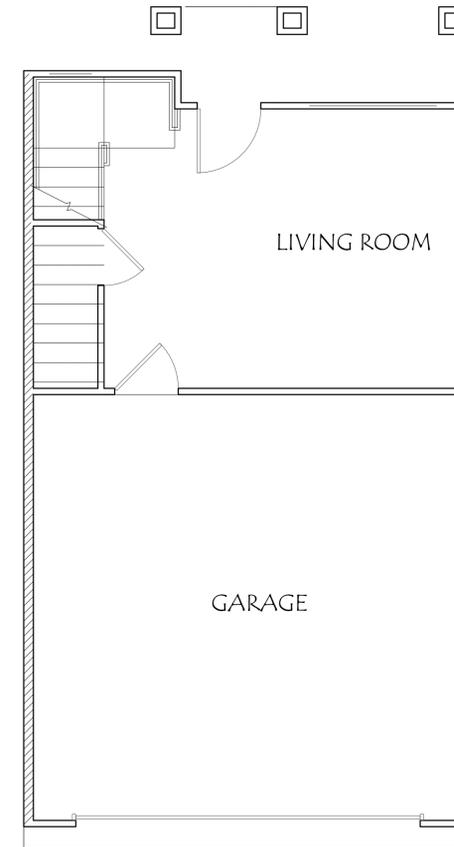
*Gregory G. Kuykendall*



THIRD FLOOR PLAN  
763 SQFT



SECOND FLOOR PLAN  
721 SQFT



FIRST FLOOR PLAN  
299 SQFT LIVING  
426 SQFT GARAGE

PLAN 3- 1,783 SQFT

Revisions:


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SANTA CLARA - CALIFORNIA

Project No: DATE: 11-10-2017  
Sheet Title:

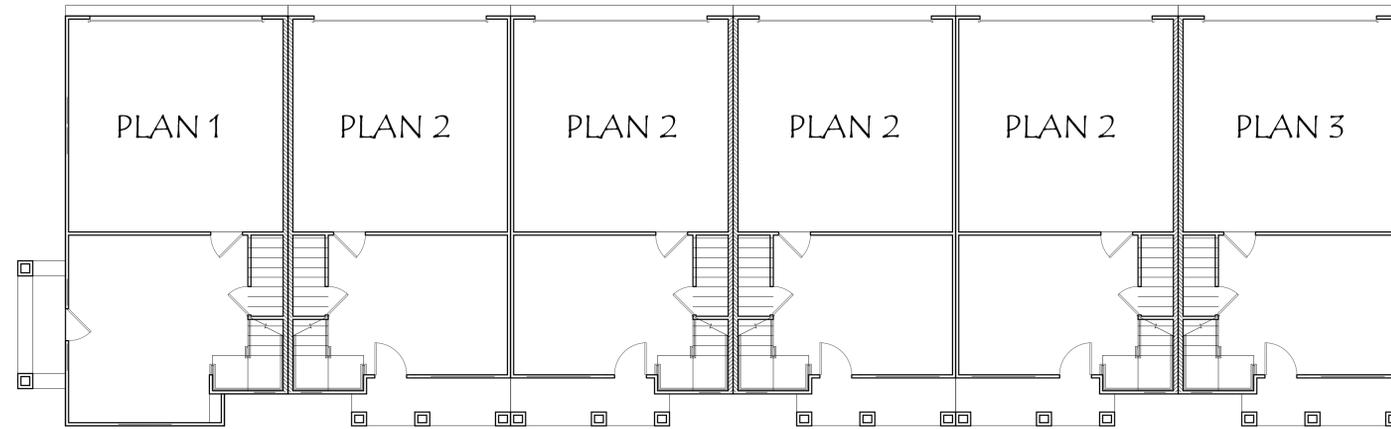
PLAN 3  
FLOOR PLAN

Review by:   
Sheet No:

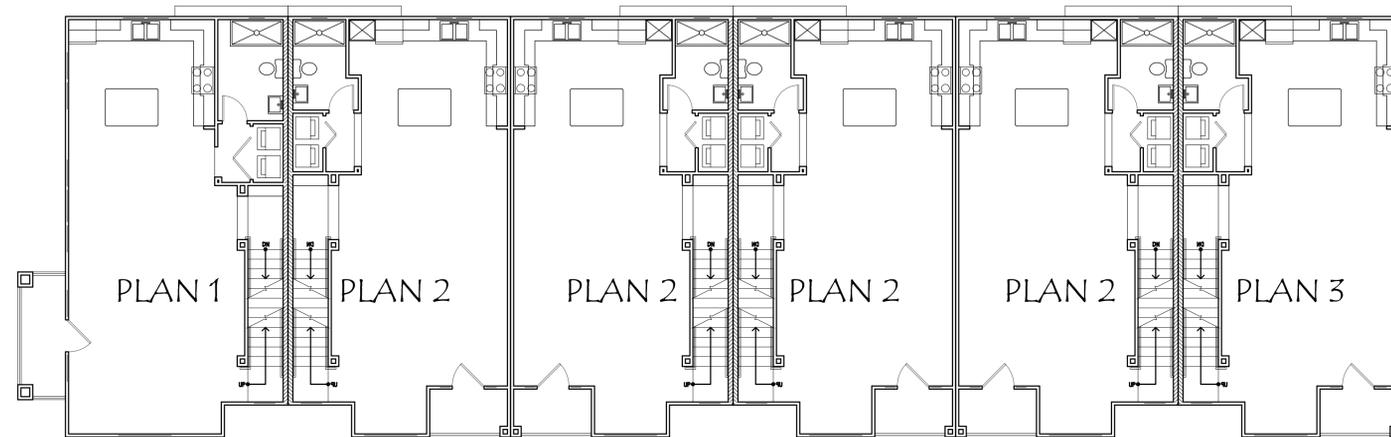
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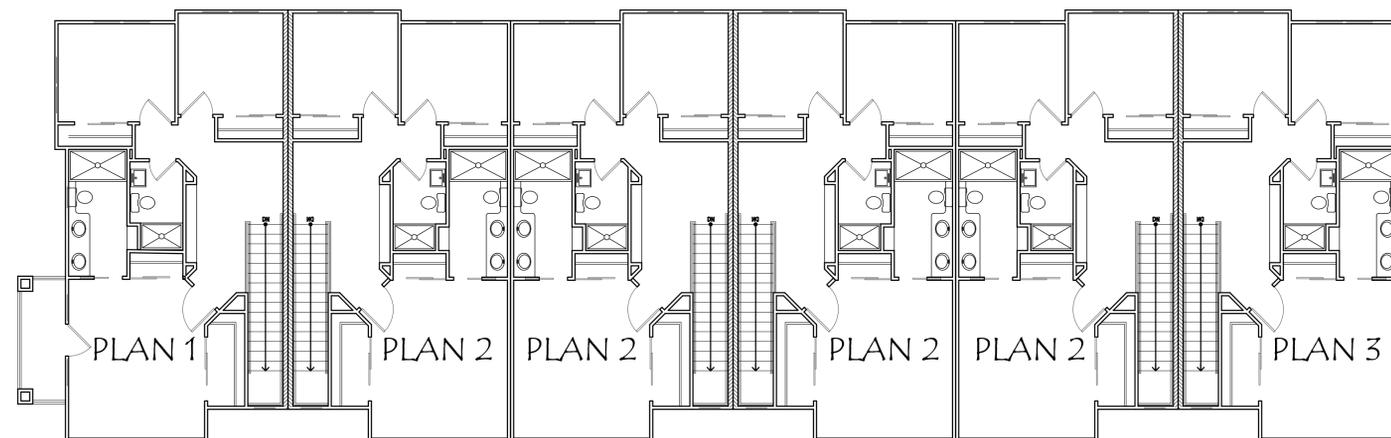
*Theresa J. Johnson*



FLOOR 1



FLOOR 2



FLOOR 3

Review:


1900  
WARBURTON LLC

1900 WARBURTON AVE  
SANTA CLARA - CALIFORNIA

Project No: DATE: 11-10-2017

Sheet Title:

BUILDING 1  
FLOOR PLAN

Review by:

Sheet No:

AA-2.1

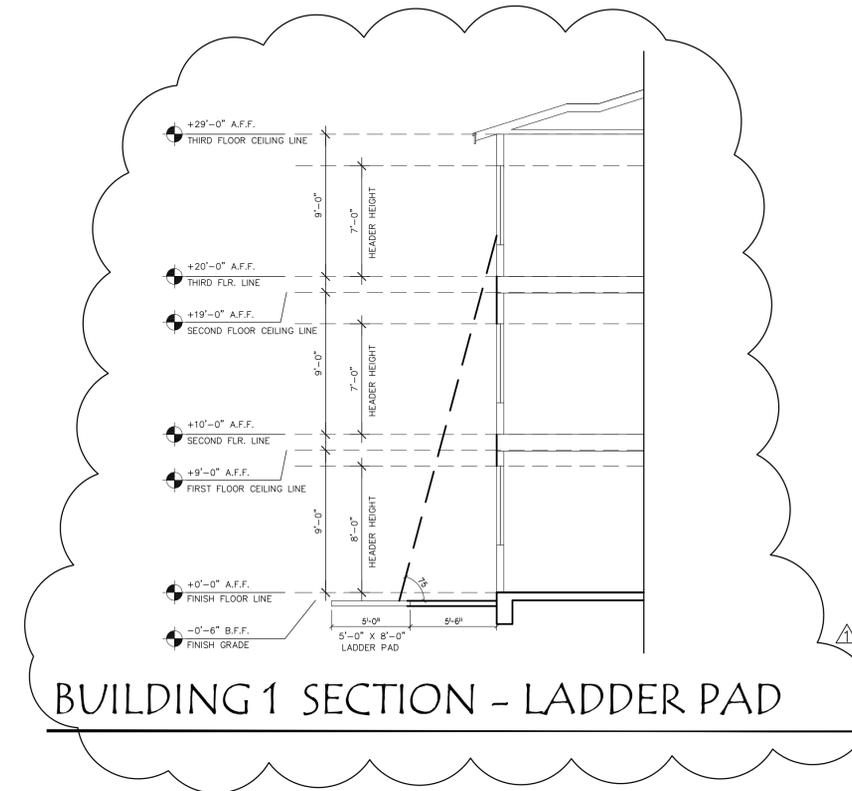
of Sheets



*Theresa Augustine*



**BUILDING 1 ELEVATION - VIEW FROM WARBURTON**



**BUILDING 1 SECTION - LADDER PAD**



**BUILDING 1 FRONT ELEVATION - VIEW FROM WALKWAY**

Revisions:

▲	PLANNING 5-14-18

1900  
WARBURTON LLC  
1900 WARBURTON AVE  
SANTA CLARA - CALIFORNIA

Project No: DATE 11-10-2017  
Sheet Title:

**BUILDING 1 ELEVATIONS**

Review by:   
Sheet No:

**AA-3.1**

of Sheets



*Gregory Q. Kuykendall*



**BUILDING 1 ELEVATION - VIEW FROM SOUTH**



**BUILDING 1 REAR ELEVATION - VIEW FROM DRIVEWAY**

Review by: \_\_\_\_\_

\_\_\_\_\_

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1900  
WARBURTON LLC

1900 WARBURTON AVE  
SANTA CLARA - CALIFORNIA

Project No: \_\_\_\_\_ DATE: 11-10-2017

Sheet Title: \_\_\_\_\_

**BUILDING 1  
ELEVATIONS**

Review by: \_\_\_\_\_

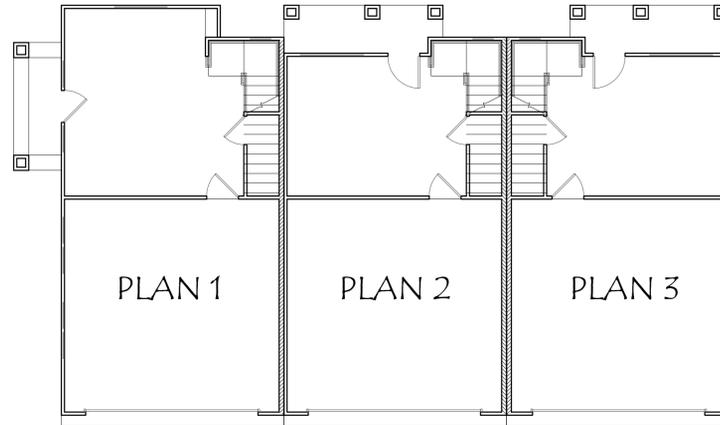
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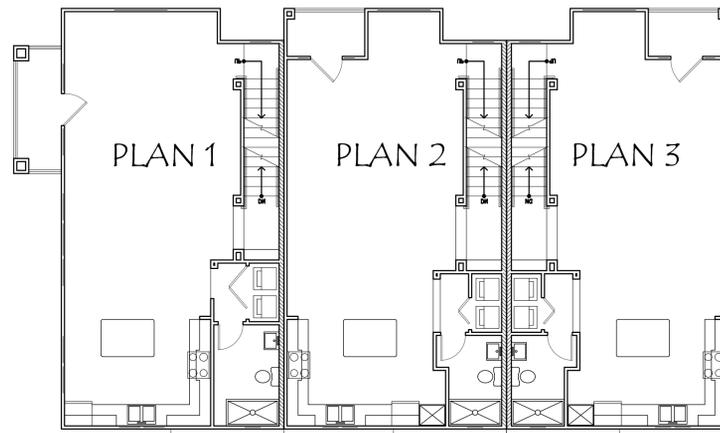
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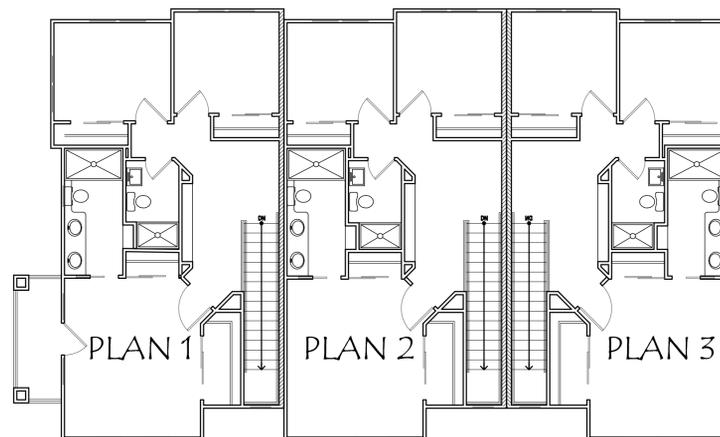
*Gregory G. Kuykendall*



FLOOR 1



FLOOR 2



FLOOR 3

Revisions:


1900  
WARBURTON LLC

1900 WARBURTON AVE  
SANTA CLARA - CALIFORNIA

Project No: DATE: 11-10-2017

Sheet Title:

BUILDING 2  
FLOOR PLAN

Review by:

Sheet No:

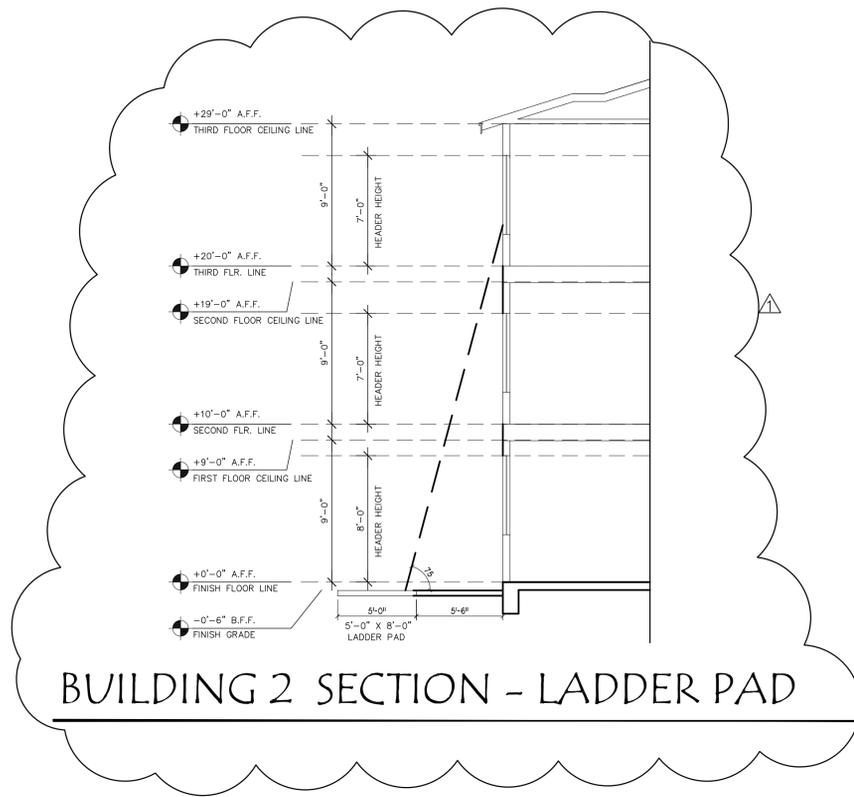
AB-2.1



*Fredrick Q. Nguyen*



**BUILDING 2 ELEVATION - VIEW FROM WARBURTON**



**BUILDING 2 SECTION - LADDER PAD**



**BUILDING 2 FRONT ELEVATION - VIEW FROM WALKWAY**

Revisions:

▲	PLANNING 5-14-18

1900  
WARBURTON LLC  
1900 WARBURTON AVE  
SANTA CLARA - CALIFORNIA

Project No: DATE 11-10-2017  
Sheet Title:

**BUILDING 2 ELEVATIONS**

Review by:   
Sheet No:

**AB-3.1**



*Gregory G. Kuykendall*



**BUILDING 2 ELEVATION - VIEW FROM SOUTH**



**BUILDING 2 REAR ELEVATION - VIEW FROM DRIVEWAY**

Revisions:


1900  
WARBURTON LLC

1900 WARBURTON AVE  
SANTA CLARA - CALIFORNIA

Project No:      DATE: 11-10-2017

Sheet Title:

BUILDING 2  
ELEVATIONS

Review by:

Sheet No:

AB-3.2

of      Sheets