PUD-116
RECEIVED April 21, 2016

EXHIBIT B

PLANNED UNIT DEVELOPMENT
BERLOGAR PROPERTY
CITY OF PLEASANTON, ALAMEDA COUNTY, CALIFORNIA

BENCHMARK

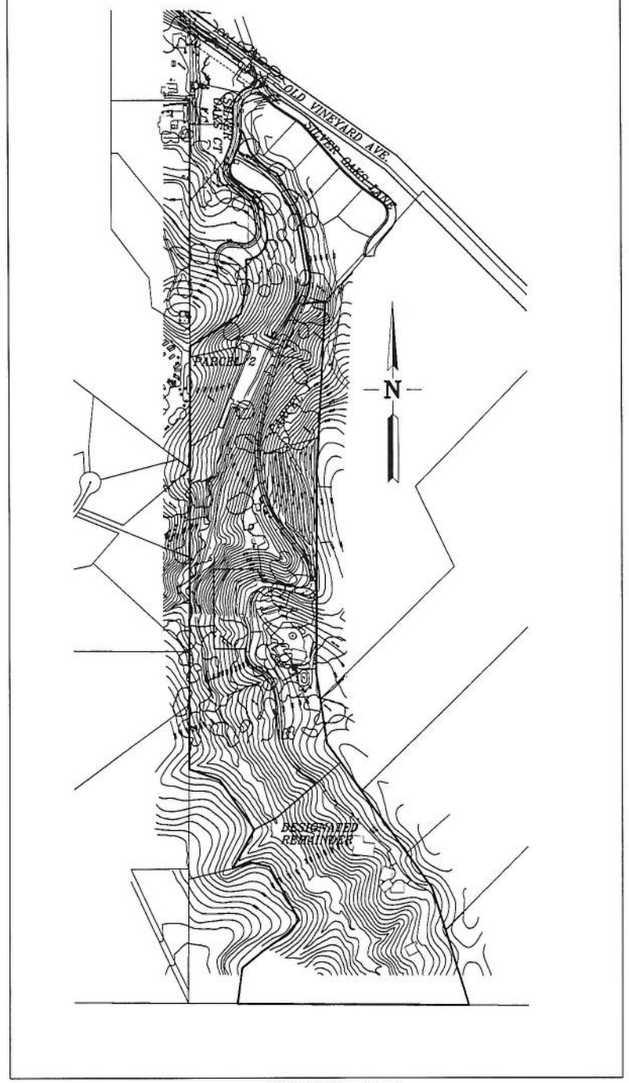
BRASS DISK LOCATED 0.5 MILES NORTHEAST ALONG THE SOUTHERN PACIFIC COMPANY RAILROAD FROM THE CROSSING OF NEAL STREET AT PLEASANTON, ALONG PLEASANTON–LIVERMORE ROAD, AT A CONCRETE HIGHWAY BRIDGE OVER ARROYO VALLE, IN THE TOP THE SOUTHWEST END OF THE NORTHWEST CONCRETE SIDEWALK, 18 FEET NORTHWEST OF THE CENTER LINE OF THE ROAD, 0.6 FOOT SOUTHWEST OF THE NORTHWEST END OF A STEEL HAND RAIL, AND ABOUT 1 FOOT HIGHER THAN THE ROAD.
ELEVATION = 361.910

ABBREVIATIONS

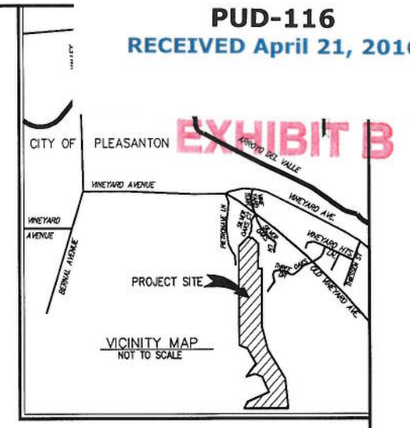
AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
AD	AREA DRAIN
BC	BEGINNING OF CURVE
BVC	BEGIN VERTICAL CURVE
BO	BLOW OFF
BW	BOTTOM OF WALL
CL	CENTER LINE
CMP	CORRUGATED METAL PIPE
CP	CENTER POINT
CS	CURB STATION
DWY	DRIVEWAY
DIP	DUCTILE IRON PIPE
EC	END OF CURVE
EVC	END VERTICAL CURVE
EVA	EMERGENCY VEHICLE ACCESS
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT
EX	EXISTING
FC	FACE OF CURB
FG	FINISHED GRADE
FI	FIELD INLET
FL	FLOW LINE
GB	GRADE BREAK
GR	GRATE
HP	HIGH POINT
INV	INVERT ELEVATION
LP	LOW POINT
MH	MANHOLE
PAE	PRIVATE ACCESS EASEMENT
PL	PROPERTY LINE
PSE	PUBLIC SERVICE EASEMENT
PUE	PRIVATE UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
RCP	REINFORCED CONCRETE PIPE
RW	RIGHT OF WAY
SDE	STORM DRAIN EASEMENT
STA	STATION
SWI	STORM WATER INLET
SWK	SIDEWALK
TC	TOP OF CURB
TRC	TOP OF ROLLED CURB
TW	TOP OF WALL
WM	WATER METER
VC	VERTICAL CURVE
U.O.N.	UNLESS OTHERWISE NOTED

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	TRACT BOUNDARY	
	LOT LINE	
	RIGHT OF WAY	
	CENTER LINE	
	MATCH LINE	
	RETAINING WALL	
	EASEMENT LINE	
12"SD	STORM DRAIN	SD 12"
8"SS	SANITARY SEWER	SS 8"
8"W	WATER	8"W
	CURB & GUTTER	
■	STORM WATER INLET	□
▣	FIELD INLET	□
►	DIRECTION OF FLOW	▷
●	MANHOLE	○
	FIRE HYDRANT	
	BLOW OFF	
	SANITARY SEWER CLEAN OUT	
	STREET LIGHT	
	SLOPE	
	EXIST. TREE (TO REMAIN)	20" OAK
130	CONTOUR ELEVATIONS	130
x 525.2	SPOT ELEVATION	x 525.2



LOCATION MAP
NOT TO SCALE



VICINITY MAP
NOT TO SCALE

SHEET INDEX

NOTES

1. OWNER:	FRANK BERLOGAR TRUST 5587 SUNOL BOULEVARD PLEASANTON, CA. 94566 CONTACT: FRANK BERLOGAR
2. CIVIL ENGINEER:	ALEXANDER & ASSOCIATES 147 OLD BERNAL DRIVE, SUITE 10 PLEASANTON, CA 94566 (925) 462-2255 CONTACT: DARRYL ALEXANDER
3. ASSESORS PARCEL NUMBER:	946-1350-025-03
4. CURRENT USE:	HILLSIDE RESIDENTIAL
5. EXISTING ZONING:	PLANNED UNIT DEVELOPMENT –
6. PROPOSED ZONING:	PLANNED UNIT DEVELOPMENT –
7. TOTAL NUMBER OF UNITS:	2 UNITS PLUS 1 EXISTING UNITS (3 UNITS TOTAL)
8. TOTAL SITE AREA:	34.3± ACRES
9. LOT SIZE:	PARCEL 1 – 3.88± ACRES PARCEL 2 – 14.56± ACRES REMAINDER – 15.86± ACRES
10. UTILITIES:	
WATER:	CITY OF PLEASANTON
SANITARY SEWER:	CITY OF PLEASANTON
STORM DRAIN:	CITY OF PLEASANTON
FIRE:	LIVERMORE–PLEASANTON FIRE DEPARTMENT
GAS AND ELECTRIC:	PACIFIC GAS AND ELECTRIC
TELEPHONE:	AT&T
CABLE TV:	COMCAST

11. TOPOGRAPHIC INFORMATION SHOWN IS BASED ON AERIAL SURVEY PREPARED BY: AERO GEODETIC CORPORATION, DATED MARCH 2015
12. THIS PROPERTY LIES WITHIN FLOOD ZONE "X" (AREAS OF MINIMAL FLOODING) AS SHOWN IN FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO 060001 0337 G DATED AUGUST 3, 2009
13. ALL EROSION CONTROL MEASURES SHALL BE IN CONFORMANCE WITH THE CRITERIA AND STANDARDS OF THE CITY OF PLEASANTON.

GRADING QUANTITIES

3,800 CU. YD. CUT
23,100 CU. YD. IMPORT

REV	DATE	DESCRIPTION	APPROVAL

PROJECT NAME

ALEXANDER & ASSOCIATES INC. — SURVEYORS, ENGINEERS, PLANNERS
147 OLD BERNAL AVE. SUITE 10, PLEASANTON, CALIFORNIA (925) 462-2255

DRAWN BY:	SL
DESIGNED BY:	
CHECKED BY	DA
SCALE:	AS SHOWN

SHEET TITLE
PLANNED UNIT DEVELOPMENT
COVER SHEET
BERLOGAR PROPERTY
CITY OF PLEASANTON CALIFORNIA

JOB NO.:	15223
DISK NO.:	
FILE NO.:	15223
DATE:	FEB 16, 2016

SHEET NO.: 1 OF 4 SHEETS

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

BASIS OF BEARINGS

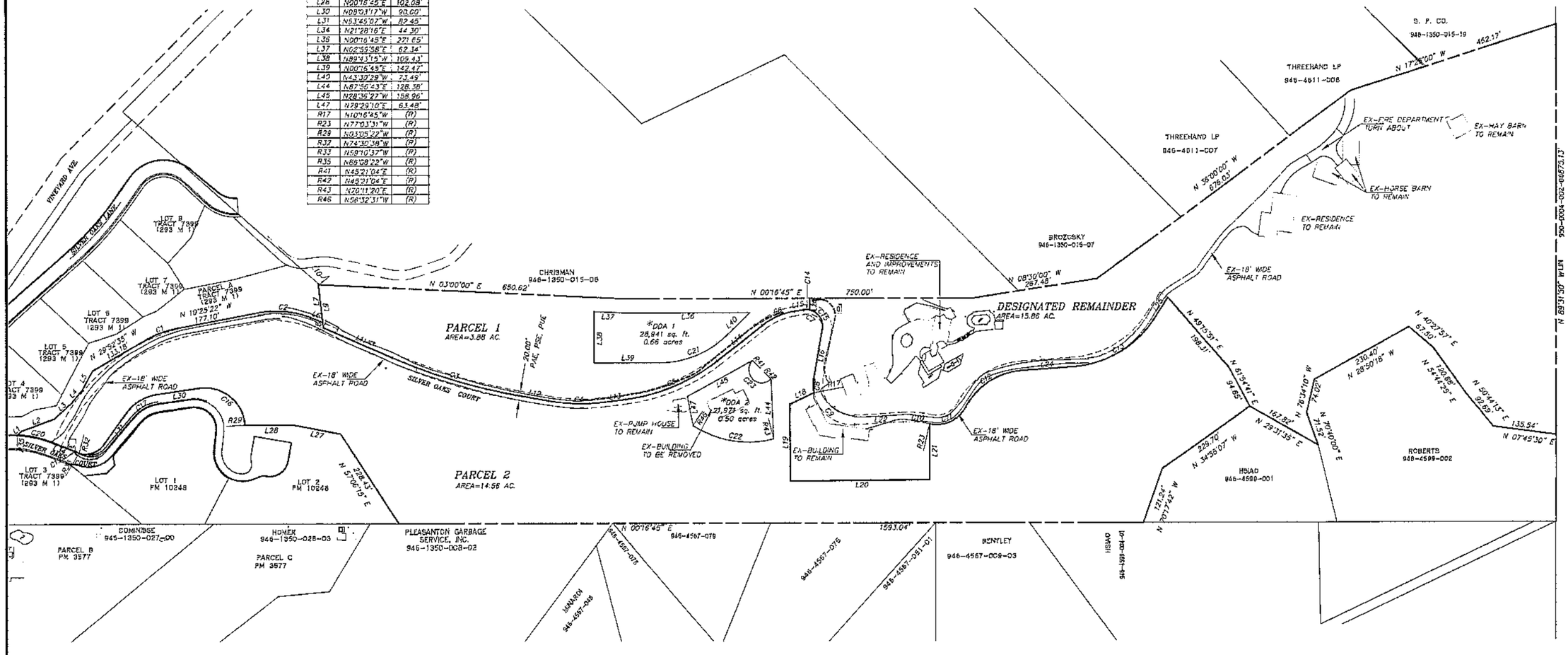
PARCEL MAP 8070 (274 PM 66)

NOTE:
THE EXISTING ACCESS EASEMENT FILED WITH PARCEL MAP 8070 (274 PM 66) TO BE ABANDONED WITH ACCEPTANCE OF THIS MAP.

*DESIGNATED DEVELOPMENT AREA (DDA)

LINE TABLE		
LINE	BEARING	LENGTH
L1	N42°51'24"W	10.36'
L2	N20°00'57"W	25.64'
L3	N42°04'58"W	48.14'
L4	N50°37'54"W	38.81'
L5	N61°20'29"W	49.12'
L6	N21°47'01"E	27.65'
L7	N83°43'38"E	82.95'
L8	N83°43'39"E	11.51'
L9	N83°43'38"E	94.46'
L10	N41°38'07"E	3.89'
L11	N23°48'03"E	162.40'
L12	N10°18'47"E	64.43'
L13	N07°03'42"W	44.42'
L14	N37°40'20"W	124.10'
L15	N08°51'13"W	20.38'
L16	N75°53'10"W	108.56'
L18	N25°22'59"W	57.00'
L19	N82°00'00"W	164.00'
L20	N90°11'34"W	289.39'
L21	N89°00'00"W	113.29'
L22	N03°02'47"W	104.51'
L24	N03°50'05"W	110.14'
L25	N56°20'22"W	55.90'
L26	N89°43'15"W	24.64'
L27	N11°48'01"E	104.62'
L28	N00°16'45"E	102.08'
L30	N08°03'17"W	90.00'
L31	N53°45'07"W	82.45'
L34	N21°28'16"E	44.30'
L36	N00°16'45"E	271.65'
L37	N02°59'58"E	62.34'
L38	N89°43'15"W	105.43'
L39	N00°16'45"E	142.47'
L40	N43°37'28"W	73.49'
L44	N67°56'43"E	128.38'
L45	N28°36'27"W	138.96'
L47	N78°29'10"E	63.48'
R17	N10°16'45"W	(R)
R23	N77°03'31"W	(R)
R28	N03°05'22"W	(R)
R32	N74°30'38"W	(R)
R33	N59°10'37"W	(R)
R35	N66°08'22"W	(R)
R41	N45°21'04"E	(R)
R42	N45°21'04"E	(R)
R43	N20°11'20"E	(R)
R46	N56°32'31"W	(R)

CURVE TABLE			
CURVE	RADIUS	DELTA	LENGTH
C1	205.00'	19°27'12"	69.60'
C2	203.00'	32°12'23"	114.11'
C3	1200.00'	13°29'16"	282.49'
C4	400.00'	17°22'29"	121.30'
C5	450.00'	30°36'38"	213.70'
C6	150.00'	28°45'07"	75.45'
C7	35.00'	108°58'03"	66.56'
C8	84.00'	20°23'35"	29.90'
C9	84.00'	82°45'01"	121.34'
C10	200.00'	15°52'16"	55.81'
C11	70.00'	74°24'13"	90.90'
C12	150.00'	57°37'38"	150.87'
C13	225.00'	52°30'17"	206.19'
C14	35.00'	21°31'07"	13.14'
C15	35.00'	87°28'26"	53.42'
C16	85.00'	94°57'55"	140.88'
C17	109.00'	45°41'51"	79.76'
C18	59.00'	63°14'28"	60.42'
C19	117.00'	9°21'07"	19.10'
C20	242.00'	17°36'38"	74.38'
C21	200.00'	43°47'15"	152.85'
C22	217.85'	47°16'09"	179.73'
C23	28.13'	180°00'00"	88.37'



REV	DATE	DESCRIPTION	APPROVAL

PROJECT NAME

ALEXANDER & ASSOCIATES INC.
SURVEYORS ENGINEERS PLANNERS
147 OLD BERNAL AVE. SUITE 10, PLEASANTON, CALIFORNIA (925) 462-2255

DRAWN BY: SL
DESIGNED BY:
CHECKED BY: DA
SCALE: AS SHOWN

SHEET TITLE
PLANNED UNIT DEVELOPMENT
SITE PLAN
BERLOGAR PROPERTY
CITY OF PLEASANTON CALIFORNIA

JOB NO.: 15223
DISK NO.:
FILE NO.: 15223
DATE: FEB 16, 2016

SHEET NO.: 2 OF 4 SHEETS

GRAPHIC SCALE

(IN FEET)
1 inch = 100 ft.

BASIS OF BEARINGS
PARCEL MAP 6070 (274 PM 66)

EX-3" WATER LINE (PRIVATE)
EX-8" SS (PRIVATE)
EX-8" FIRE SERVICE (PRIVATE)
EX-JT (PRIVATE)
INSTALLED PER TRACT 7399
WITHIN EX-ASPHALT ROAD
FROM INTERSECTION AT SILVER OAKS CT.
TO EX-RESIDENCE AT PARCEL 4

FIRE TURN AROUND TEMPLATE
SEE DETAIL ON SHEET 4

PARCEL 1

PARCEL 2

DESIGNATED REMAINDER

EX-RESIDENCE AND IMPROVEMENTS TO REMAIN

EX-FIRE DEPARTMENT TURN ABOUT

EX-HAY BARN TO REMAIN

EX-HORSE BARN TO REMAIN

EX-RESIDENCE TO REMAIN

EX-BUILDING TO BE REMOVED

EX-PUMP HOUSE TO REMAIN

EX-BUILDING TO REMAIN

EX-18' WIDE ASPHALT ROAD

20.00' ACCESS & UTILITY EASEMENT

N-SS-M-MS

EX-SS LAT

EX-FH

EX-WS

EX-JB

OLD VINEYARD AVE.

SILVER OAKS LANE

SILVER OAKS CT.

LOT 9 TRACT 7399 1293 M 17

LOT 8 TRACT 7399 1293 M 17

LOT 7 TRACT 7399 1293 M 17

LOT 6 TRACT 7399 1293 M 17

LOT 5 TRACT 7399 1293 M 17

PARCEL A TRACT 7399 1293 M 17

CHRISMAN
946-1350-015-08

BROZOSKY
946-1350-015-07

S. P. CO.
946-1350-015-19

THREEHAND LP
946-4611-008

THREEHAND LP
946-4611-007

HSIAO
946-4599-001

ROBERTS
946-4598-002

DOMINISSE
946-1350-027-00

PARCEL B
PM 3577

HOMER
946-1350-028-05

PARCEL C
PM 3577

PLEASANTON GARBAGE SERVICE, INC.
946-1350-008-03

946-4567-078

946-4557-079

946-4557-075

946-4557-051-01

BENTLEY
946-4557-009-05

HSIAO
946-4599-001-01

LOT 1 PM 10248

LOT 2 PM 10248

CT 9 ACT 7399 93 M 17

PROJECT NAME

REV	DATE	DESCRIPTION	APPROVAL

ALEXANDER & ASSOCIATES INC.
SURVEYORS
ENGINEERS
PLANNERS
147 OLD BERNAL AVE. SUITE 10, PLEASANTON, CALIFORNIA (925) 462-2255

DRAWN BY: SL
DESIGNED BY:
CHECKED BY: DA
SCALE: AS SHOWN

SHEET TITLE
PLANNED UNIT DEVELOPMENT
UTILITY PLAN
BERLOGAR PROPERTY
CITY OF PLEASANTON CALIFORNIA

JOB NO.: 15223
DISK NO.:
FILE NO.: 15223
DATE: FEB 16, 2016

SHEET NO.: 3 OF 4 SHEETS

950-0004-012-06

GRAPHIC SCALE

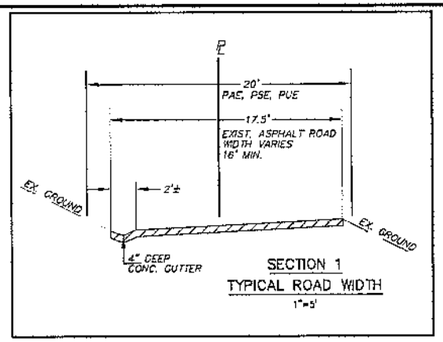
(IN FEET)
1 inch = 40 ft

BASIS OF BEARINGS
PARCEL MAP 8070 (274 PM 66)

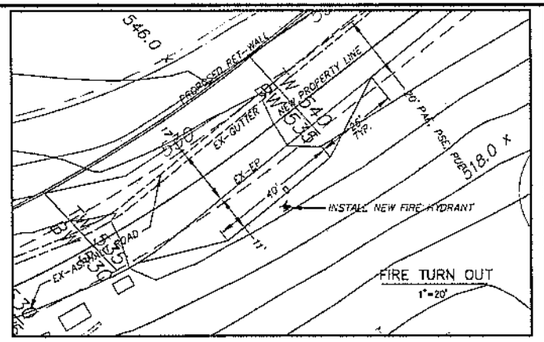
GRADING QUANTITIES

3,800 CU. YD. CUT
23,100 CU. YD. IMPORT

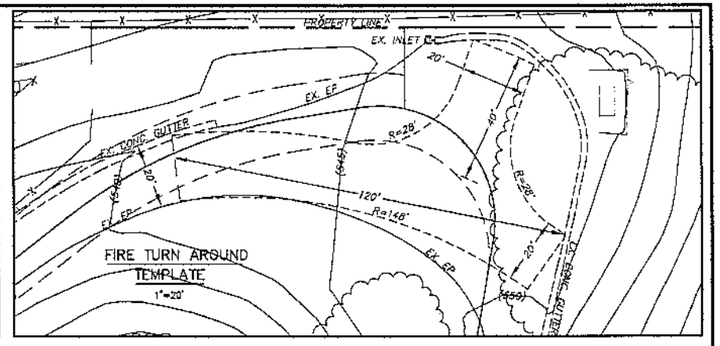
*FINISHED PAD ELEVATIONS MAY BE SLIGHTLY LOWER BASED UPON THE AVAILABILITY OF FILL MATERIAL GENERATED BY THE GRADING FOR PM 10248



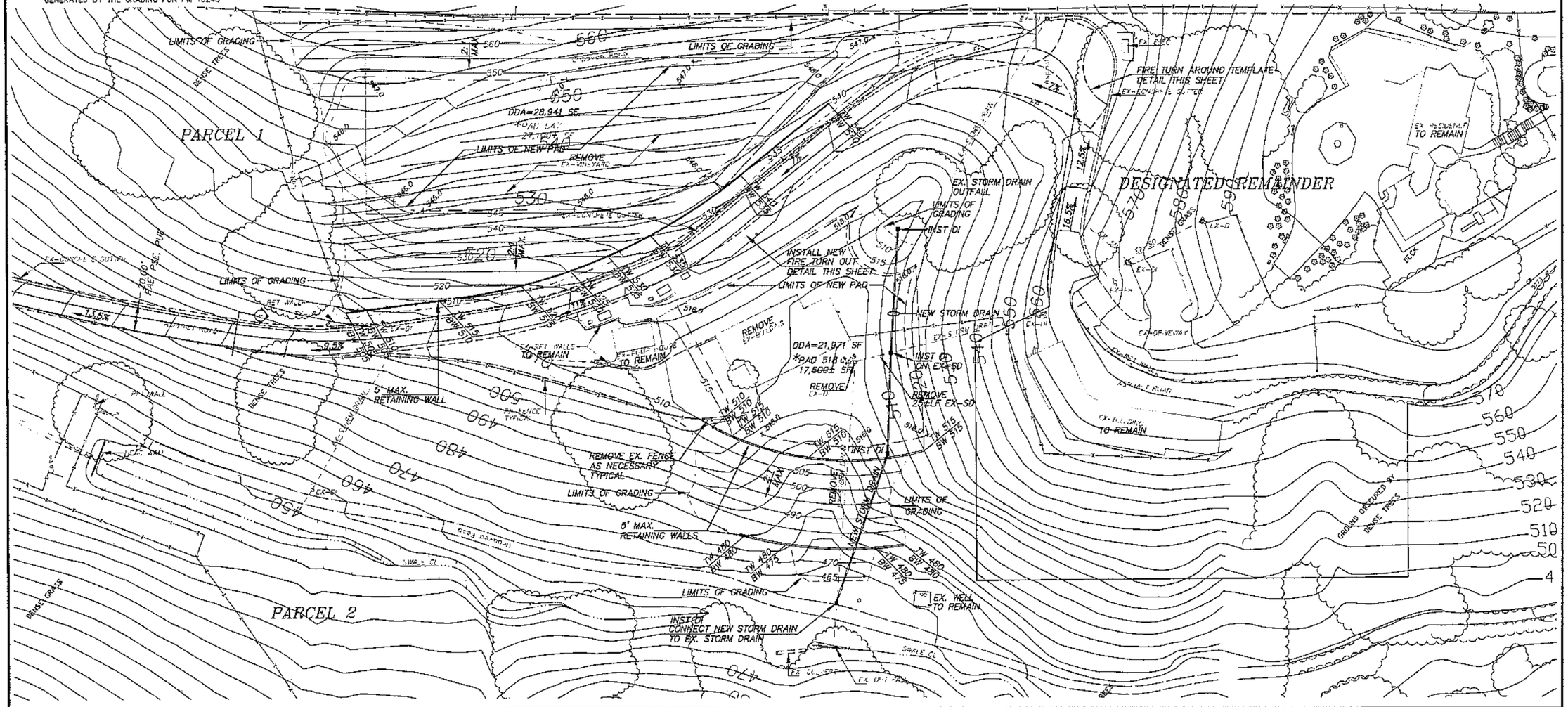
SECTION 1
TYPICAL ROAD WIDTH
1"=5'



FIRE TURN OUT
1"=20'



1"=20'



NO	DATE	DESCRIPTION	APPROVAL

PROJECT NAME

ALEXANDER & ASSOCIATES INC.
SURVEYORS
ENGINEERS
PLANNERS
147 OLD BERNAL AVE. SUITE 10, PLEASANTON, CALIFORNIA (925) 462-2255

DRAWN BY: SL
DESIGNED BY:
CHECKED BY DA
SCALE: AS SHOWN

SHEET TITLE
PLANNED UNIT DEVELOPMENT
GRADING PLAN
BERLOGAR PROPERTY
CITY OF PLEASANTON CALIFORNIA

JOB NO.: 15223
DISK NO.:
FILE NO.: 15223
DATE: Mar 7, 2016

SHEET NO.: 4 OF 4 SHEETS

PUD-116
RECEIVED April 21, 2016

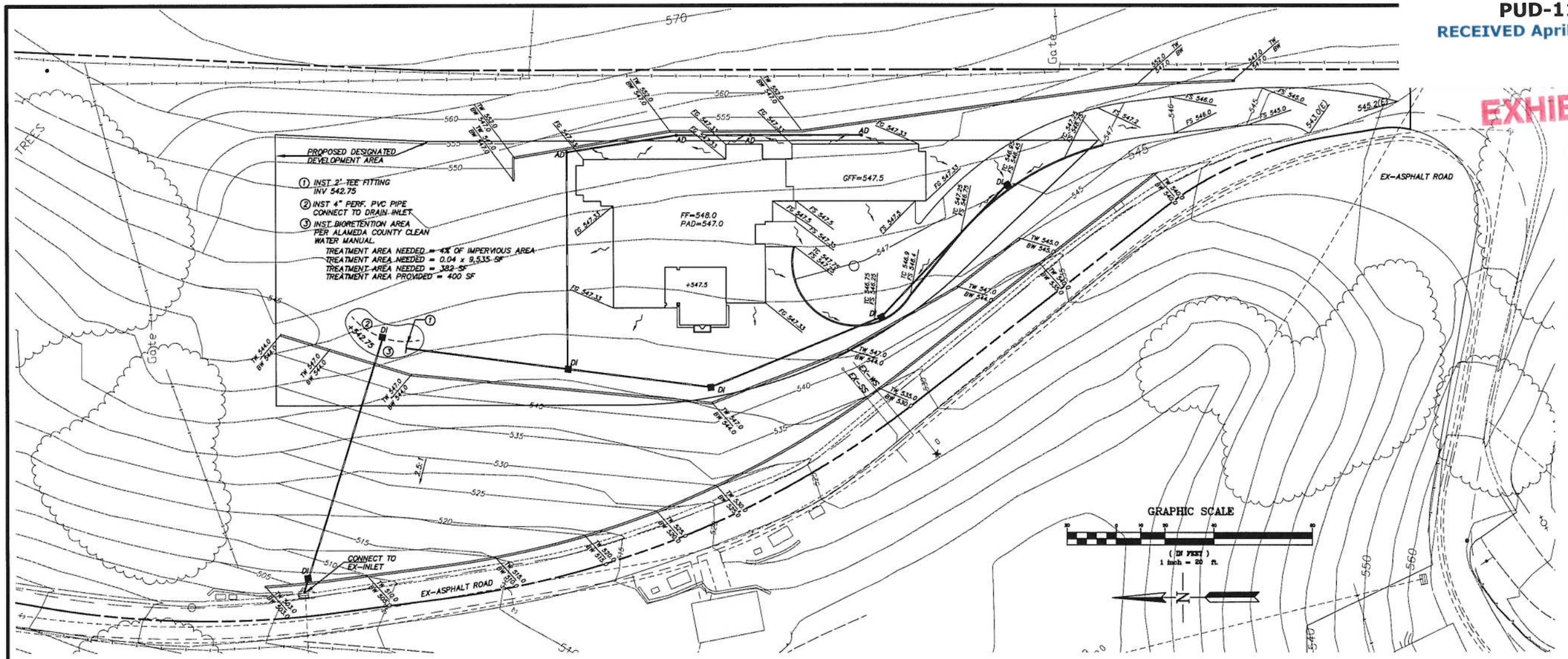
PARCEL 1 SILVER OAKS COURT PLEASANTON, CA
EXTERIOR COLORS

ROOFING: Concrete S-Tile	BORAL BARCELONA 900 / BOOSTED BARCELONA CALIFORNIA MISSION BLEND	
STUCCO BODY:	KELLY-MOORE OW256-1 ARIZONA HEAT	
TRIM 1: Eaves & Fasica Rafter Tails & Corbels at Gables Garage Door, Window & Door Trim	KELLY-MOORE KMA72-5 BARNWOOD	
TRIM 2: Columns/Posts Entry Door Trim	ARCUSTONE CHAMPAGNE (30) PITTED & HAND-STONED	
SHUTTERS:	KELLY MOORE HLS4230-5 ARTISAN TILE	
METAL ACCENTS:	POWDER COATING SANDCAST BRONZE CS3020	
GUTTERS:	MODERN MASTERS ENGLISH BROWN 525 SHADE	
WINDOWS:	ANDERSEN DARK BRONZE	
ENTRY DOOR:	IRON & GLASS METAL DOOR DESERT COFFEE	

EXHIBIT B

PUD-116
RECEIVED April 21, 2016

EXHIBIT B



GRADING NOTES:

1. ALL GRADING SHALL CONFORM TO THE CITY OF PLEASANTON STANDARDS.
2. ALL GRADING SHALL BE DONE UNDER THE SUPERVISION OF THE SOILS ENGINEER.
3. ALL DOWNSPOUTS SHALL HAVE A MINIMUM 3" DIAMETER SOLID DRAIN LINES AND DISCHARGE TO SPLASH BLOCKS.
4. ALL SURFACE WATER SHALL DRAIN AWAY FROM THE STRUCTURE WITH A MINIMUM 5% SLOPE FOR MINIMUM DISTANCE OF 5 FEET.
5. SURFACE WATER SWALES SHALL HAVE A 1% MINIMUM SLOPE AND BE CONVEYED TO AREA DRAINS.
6. AREA DRAINS SHALL HAVE A MINIMUM 6 INCHES DIAMETER GRATE OPENING.
7. ALL DRAIN LINES SHALL HAVE A 1% MINIMUM SLOPE.
8. ALL DRAIN LINES SHALL PASS UNDERNEATH THE GRADE BEAMS, NOT THROUGH THEM. ANY SUBDRAINS PLACED UNDER THE STRUCTURE SHALL BE LOCATED TO MISS PIERS AND/OR GRADE BEAMS.
9. WHEN A PERFORATED DRAIN LINE IS CONNECTED TO A SOLID DRAIN LINE, THE INVERT OF THE SOLID DRAIN SHALL BE HELD BELOW THE INVERT OF THE PERFORATED LINE.
10. ALL DRAIN LINES FOR SURFACE WATER SHALL BE SOLID, NON-FLEXIBLE PVC PIPE. PERFORATED PIPE SHALL BE USED FOR SUBDRAINS ONLY. 6" STORM DRAIN TO BE PVC SDR-35 OR APPROVED EQUAL. (SEE DETAILS)
11. CLEANOUTS FOR PERIMETER DRAIN SHALL BE SPACED 75' MAX O.C.
12. EROSION CONTROL PLANS SHALL BE SUBMITTED FOR APPROVAL TO THE BUILDING DEPARTMENT BY SEPTEMBER 15 IF WORK CONTINUES INTO THE RAINY SEASON.
13. THIS PLAN TO BE USED FOR GRADING AND DRAINAGE ONLY. REFER TO ARCHITECTURAL PLANS FOR OTHER INFORMATION.
14. THE CONTRACTOR SHALL MAINTAIN THE SITE IN AN ORDERLY MANNER CONTINUOUSLY THROUGHOUT THE PROJECT. THE STREET SHALL BE KEPT CLEAR OF MUD AND DEBRIS AT ALL TIMES. THE CONTRACTOR SHALL ALSO PROVIDE DUST CONTROL MEASURES TO THE SATISFACTION OF THE CITY. FAILURE TO COMPLY WITH ORDINANCES WILL RESULT IN A SUSPENSION OF WORK UNTIL COMPLIANCE IS VERIFIED.
15. THE OWNER SHALL BE RESPONSIBLE FOR INSPECTING, MAINTAINING, AND REPAIRING STORM DRAIN, PERIMETER DRAIN, DOWNSPOUTS, AND DRAINAGE SWALES.

The Following (a) and (b) shall be provided to the building inspector before and foundation inspection will be performed. Item (c) shall be provided before the shear and roof inspection. Item (d) shall be provided before a frame inspection will be performed.

a. A Licensed Land Surveyor must verify building setbacks to property lines and also pad elevation(s). This verification must b in the form of a professional report, stamped and signed by the registered professional. This report must be submitted to the field inspector at the time of foundation inspection.

b. When Fill is employed under the building a soils engineer must verify pad compaction. This verification must be in the form of a professional report, stamped and signed by the registered professional. This report must be submitted to the field inspector at the time of foundation inspection.

c. A Licensed Land Surveyor must verify finish floor elevations. This verification must be in the form of a professional report, stamped and signed by the registered professional. This report must be submitted to the field inspector at the time of shear and roof inspection.

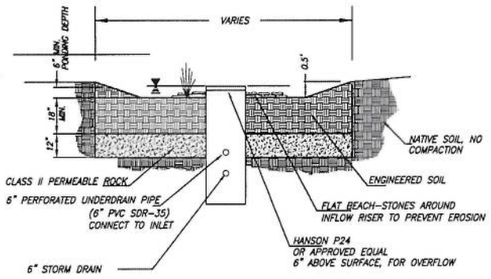
d. A Licensed Land Surveyor must verify the highest elevation of the highest point of any roof ridge of roof projection. This verification must be in the form of a professional report, stamped and signed by the registered professional. This report must be submitted to the field inspector at the time of frame inspection.

BASIS OF BEARINGS

THE BEARINGS SHOWN UPON THIS MAP ARE THE SAME AS SHOWN UPON PARCEL MAP 10248, CITY OF PLEASANTON.

BASIS OF ELEVATIONS

ELEVATIONS SHOWN ON THIS MAP ARE THE SAME AS SHOWN UPON THE IMPROVEMENTS PLANS FOR PM 10248.

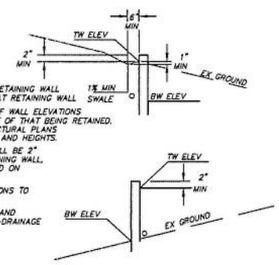


NOTES:

1. *SWALE SHALL BE GRADED TO DRAIN TOWARD OUTLET AT A MINIMUM SLOPE 0.2%*
2. *PLANTINGS MAY INCLUDE TREES, MINIMUM INFILTRATION RATE 5"/HR*
3. *ENGINEERED SOIL – USE TOPSOIL BLEND AS SPECIFIED IN THE MOST RECENT ALAMEDA COUNTY C.3 GUIDEBOOK*
4. *DO NOT CONNECT STORM DRAIN INFLOW PIPES TO UNDERDRAIN.*
5. *MINIMUM SLOPE MEASURED FROM TOP OF GRATE OF AREA DRAIN (OR DOWNSPOUT DRAIN) TO TOP OF EMITTER SHALL BE 1% (4" PIPE) OR 0.5 % (6" PIPE)*
6. *MINIMUM INFLOW PIPE SLOPE SHALL BE 1% (4" PIPE) OR 0.5% (6" PIPE)*
7. *MINIMUM UNDERDRAIN PIPE SLOPE SHALL BE 0.5% (6" PIPE)*
8. *INSTALL PERFORATED PIPE WITH PERFORATIONS DOWN.*
9. *NO FILTER FABRIC TO BE USED.*
10. *INSTALL CAPPED CLEANOUTS AT UNDERDRAIN ENDS.*

BIO-RETENTION DETAIL

NOT TO SCALE



TW – TOP OF SURFACE AT RETAINING WALL
BW – BOTTOM OF SURFACE AT RETAINING WALL

TOP OF WALL AND BOTTOM OF WALL ELEVATIONS ARE FOR THE ACTUAL HEIGHT OF THAT BEING RETAINED. SEE LANDSCAPE OR ARCHITECTURAL PLANS FOR ULTIMATE WALL DESIGNS AND HEIGHTS.

TOP OF WALL ELEVATION SHALL BE 2" MIN FROM THE TOP OF RETAINING WALL, UNLESS OTHERWISE SPECIFIED ON GRADING OR ARCH PLANS.

WALL STRUCTURAL CALCULATIONS TO BE DONE BY OTHERS.

REFER TO THE SOILS REPORT AND STRUCTURAL PLANS FOR SUB-DRAINAGE BEHIND RETAINING WALL.

RETAINING WALL ELEV

NO SCALE

HAUL ROUTE

1. *ACCESS TO THE DEVELOPMENT BY CONSTRUCTION EQUIPMENT, MATERIAL DELIVERIES AND OTHER HEAVY LOADS SHALL BE LIMITED BY THE DEVELOPER TO THE FOLLOWING ROUTE: HWY 580 OR HWY 680 TO HWY 84 TO VINEYARD AVE. TO OLD VINEYARD AVE. TO SILVER OAKS LANE*

WORK HOURS

1. *WORK HOURS SHALL BE LIMITED TO: 8:00 AM – 5:00 PM MONDAY THRU FRIDAY. NO CONSTRUCTION SHALL BE ALLOWED ON STATE AND FEDERAL HOLIDAYS OR SATURDAYS OR SUNDAYS.*

EXCESS SOIL

1. *EXCESS SOIL FROM THE SITE SHALL BE OFF-HAULED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER. NO TEMPORARY STOCKPILING OF DIRT ON THIS SITE SHALL OCCUR WITHOUT SPECIFIC REVIEW AND APPROVAL BY THE PLANNING DIVISION.*

TOTAL IMPERVIOUS AREA = 11,205 SQ FT
IMPERVIOUS AREA DRAINING TO BIO-TREATMENT AREA = 9,535 SF

NOTES:

ALL UNDERGROUND UTILITIES ARE TAKEN FROM AVAILABLE PUBLIC RECORDS, NOT FIELD LOCATED.

- *GARAGE FLOOR TO SLOPE TOWARDS THE FRONT AT 1% MIN.*
- *PAD TO FINISH FLOOR DISTANCE TO BE VERIFIED BEFORE CONSTRUCTION.*
- *SEE LANDSCAPE PLAN FOR ADDITIONAL INFORMATION. THIS PLAN IS INTENDED FOR GRADING AND DRAINAGE*

LEGEND

- *DRAINAGE ARROW INDICATES DIRECTION OF DRAINAGE*
- *INDICATES DIRECTION OF OVERLAND RELEASE FLOW*
- *STORM DRAIN*
- *PERIMETER DRAIN*
- *EX CONTOUR*
- *100 NEW CONTOUR*
- *SWALE*
- *PROPERTY LINE*

ABBREVIATIONS

AD	AREA DRAIN
CO	CLEAN-OUT
DI	DRAIN INLET (HANSON P18 OR EQUAL)
DS	DOWN SPOUT
BW	BOTTOM OF RETAINING WALL
FF	FINISHED FLOOR
FL	FLOWLINE
FG	FINISHED GRADE
FS	FINISHED SURFACE
GR	TOP OF GRATE
HP	HIGHPOINT
INV	INVERT
LS	LANDSCAPING
GFF	GARAGE FINISHED FLOOR
SWI	STORM WATER INLET
TC	TOP OF CURB
TG	TOP OF GRATE
TW	TOP OF RETAINING WALL

REGISTERED PROFESSIONAL ENGINEER
ROBERT D. DIESTER
NO. C 66722
EXPIRES 09/30/16
CIVIL
STATE OF CALIFORNIA

LEXANDER & ASSOCIATES INC.
SURVEYORS ENGINEERS PLANNERS
147 OLD BERNAL AVE. SUITE 10, PLEASANTON, CALIFORNIA (925) 462-2255

DRAWN BY: RD
DESIGNED BY: RD
CHECKED BY: DA
SCALE: 1"=20'

PROJECT NAME: PRELIMINARY GRADING AND PLAN
PARCEL 1 – PUD 116
CITY OF PLEASANTON
ALAMEDA COUNTY, CALIFORNIA

JOB NO.: 16091
DISK NO.:
FILE NO.: 16091
DATE: 4-21-2016

SHEET NO.: C1
OF 1 SHEETS

SHEET INDEX

PUD 116 - Parcel 1

Pleasanton, CA

Frank Berlogar

0 4 8 12

WILLIAM HEZMALHALCH ARCHITECTS INC.

March 18, 2016

A1

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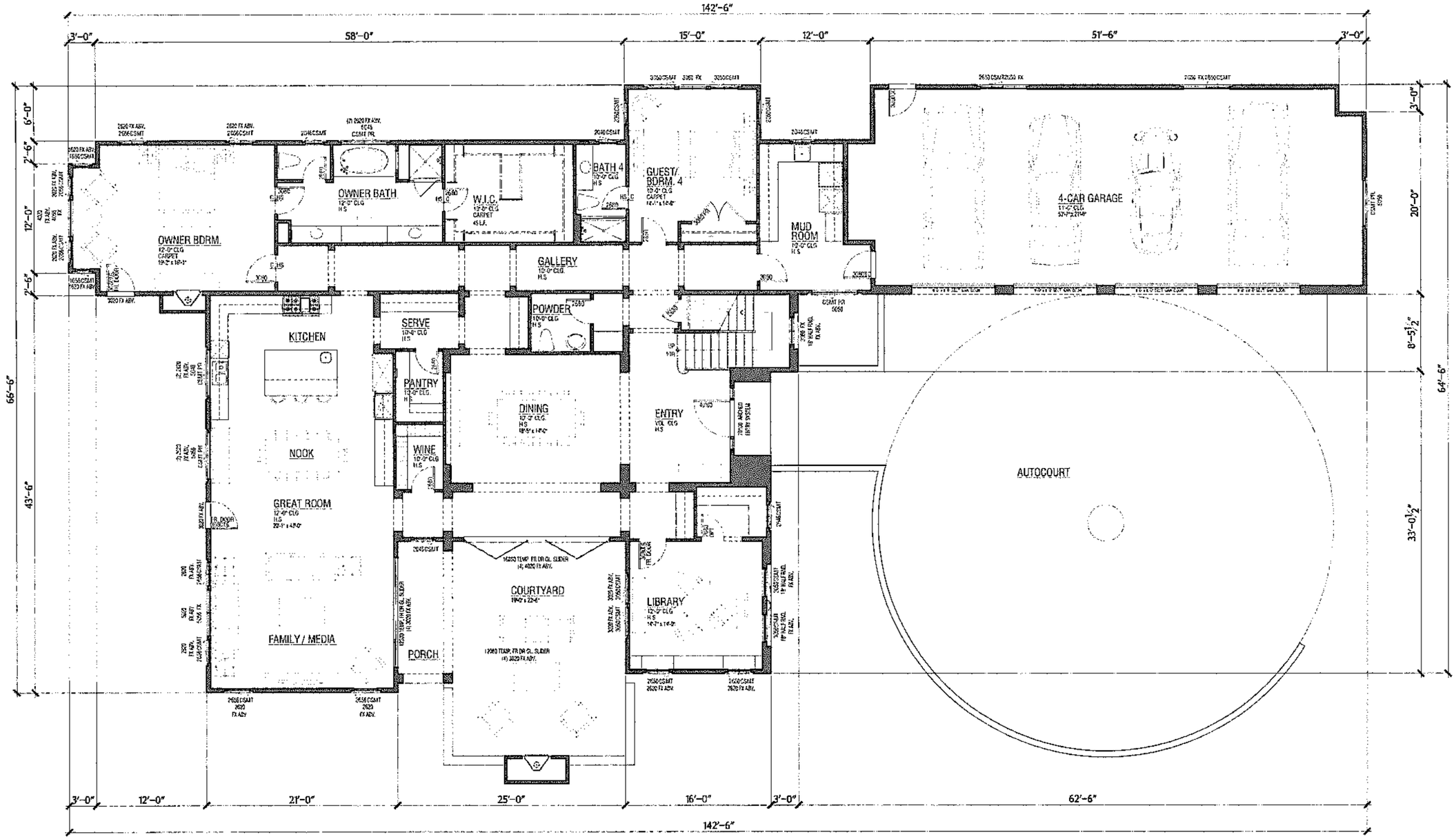

Floor Plan

First Floor
3,775 SF

4,907 SF - Living Area
1,270 SF - Garage

PUD 116 - Parcel 1

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ARCHITECTS INC.

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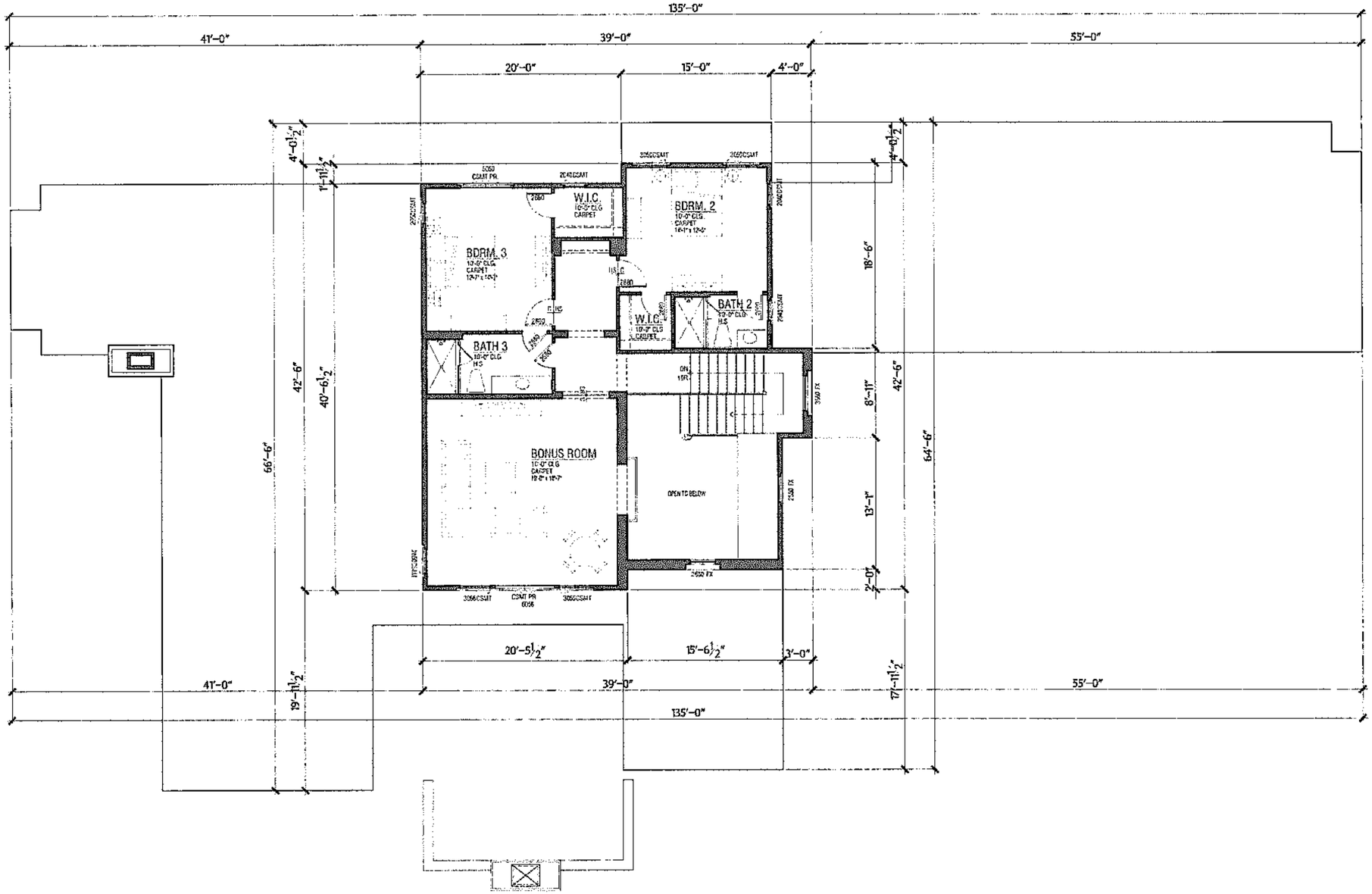

Second Floor
1,132 SF

PUD 116 - Parcel 1

Pleasanton, CA
Frank Berlogar

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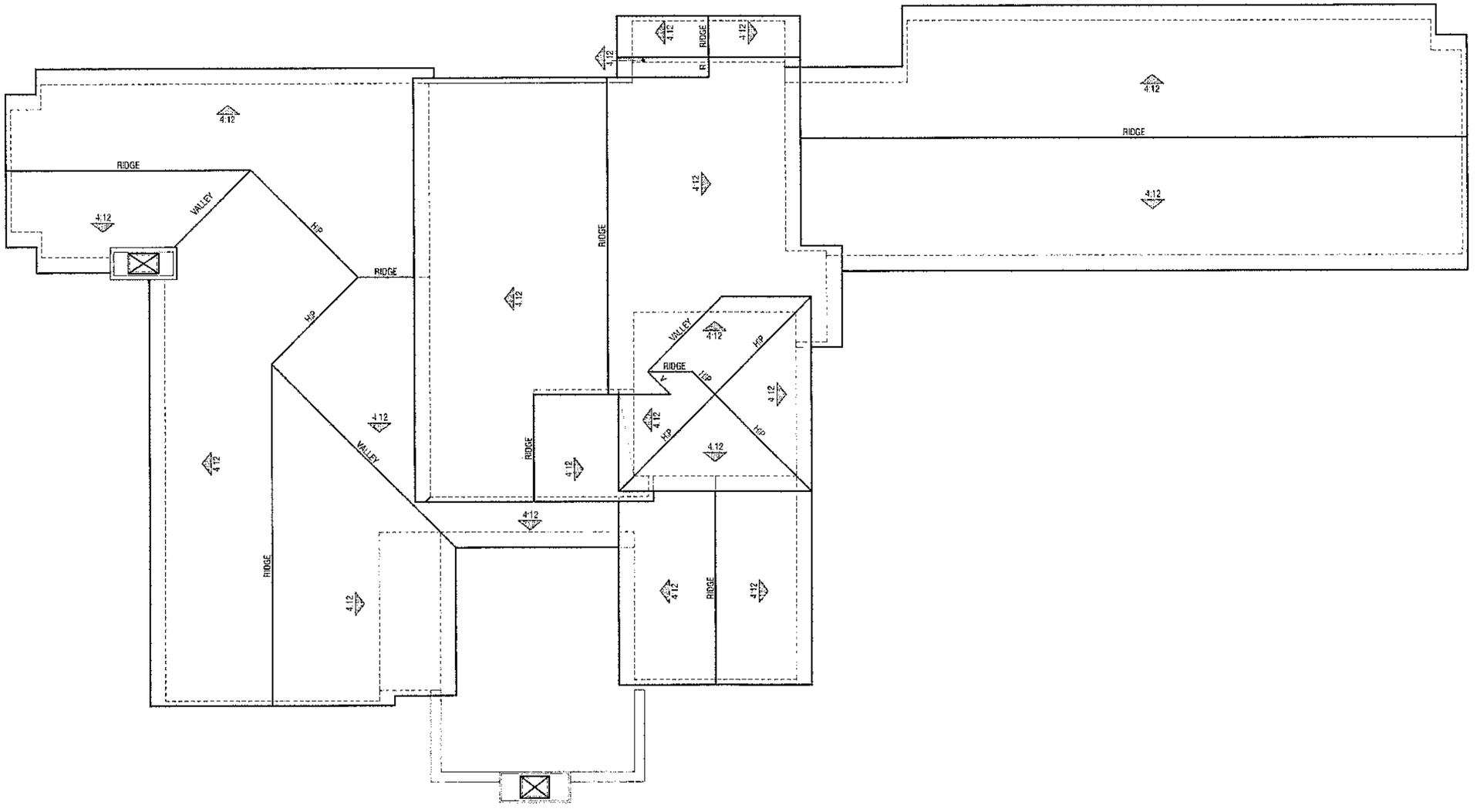

Roof Plan

PUD 116 - Parcel 1

Pleasanton, CA

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March 16, 2016

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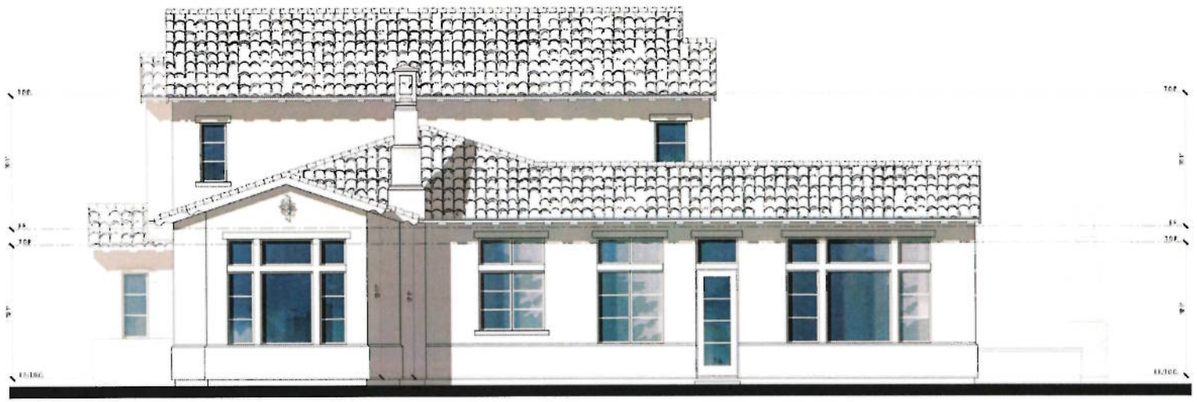
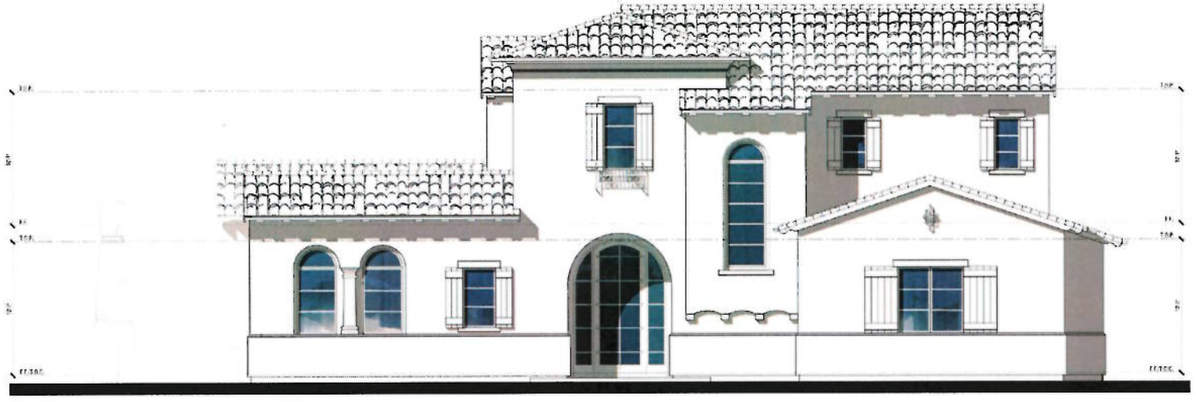


Rear



Front

Exterior Elevations

PUD 116 - Parcel 1

Pleasanton, CA

Frank Berlogar

0 4 8 12

WILLIAM HEZMALHALCH
ARCHITECTS INC.
3200 EL CAMINO REAL SUITE 370 SAN RAMON CA 94583-4211
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2650 REDHILL AVENUE SUITE 200 SANTA ANA CA 92705-5543
949 250 0607 www.wharchitects.com fax 949 250 1529

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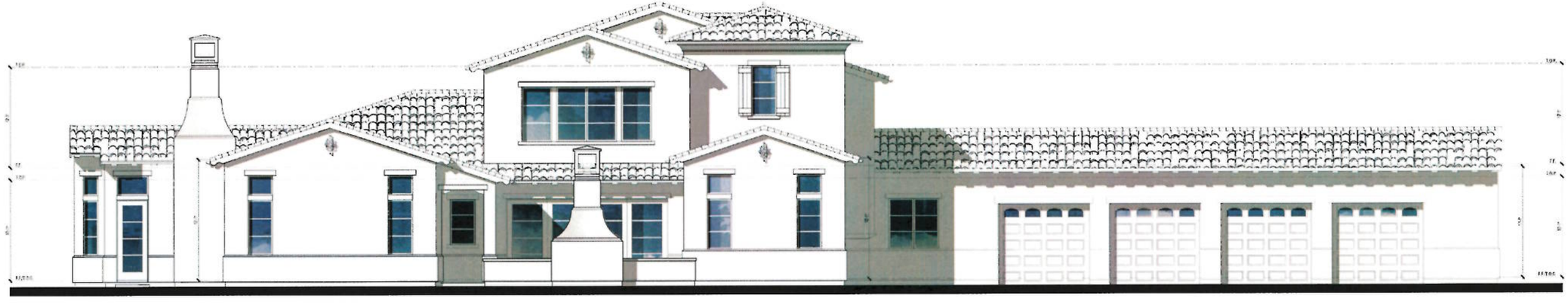
Right



Left

Exterior Elevations

PUD 116 - Parcel 1

Pleasanton, CA

Frank Berlogar

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WILLIAM HEZMALHALCH ARCHITECTS, INC.

March 18, 2016

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RESIDENCE

ARCHITECTURAL STOOP WITH TILE VENEER-TILE TO BE 'TIERRA TERRA COTTA' WITH DECORATIVE TILE RISERS BY TIERRA Y FUEGO

DECORATIVE INTERLOCKING CONCRETE PAVERS-PAVER TO BE COUNTRY COBBLE BY BASALITE OR EQUAL, COLOR TO BE 'VENICE' PATTERN: MISSION 3

COLORED CONCRETE DRIVEWAY WITH PAVER BANDING AND DECORATIVE SCORE PATTERN, CONCRETE COLOR TO BE DAVIS "SAND DIEGO BUFF"

PROPOSED TRANSITION ZONE PLANTING

6'-0" HIGH OPEN WIRE FENCE

RETAINING WALLS PER CIVIL'S GRADING PLANS

EXISTING TREE CANOPY, TYPICAL

TREE #7 MAY NEED TO BE REMOVED FOR SAFETY PURPOSES, REFER TO ARBORIST'S REPORT

GRAPHIC SCALE

0 10 20 30

(IN FEET)

1 inch = 10 ft.

PROPOSED TREES BOTANICAL NAME	COMMON NAME		
QUERCUS AGRIFOLIA	COAST LIVE OAK	24" BOX	LOW
LAGERSTROEMIA 'MUSKOGEE'	CRAPE MYRTLE	24" BOX	LOW
OLEA EUROPAEA 'WILSONII'	FRUITLESS OLIVE	24" BOX	LOW
QUERCUS DOUGLASII	BLUE OAK	24" BOX	LOW

Silver Oaks Hillside
Parcel 1

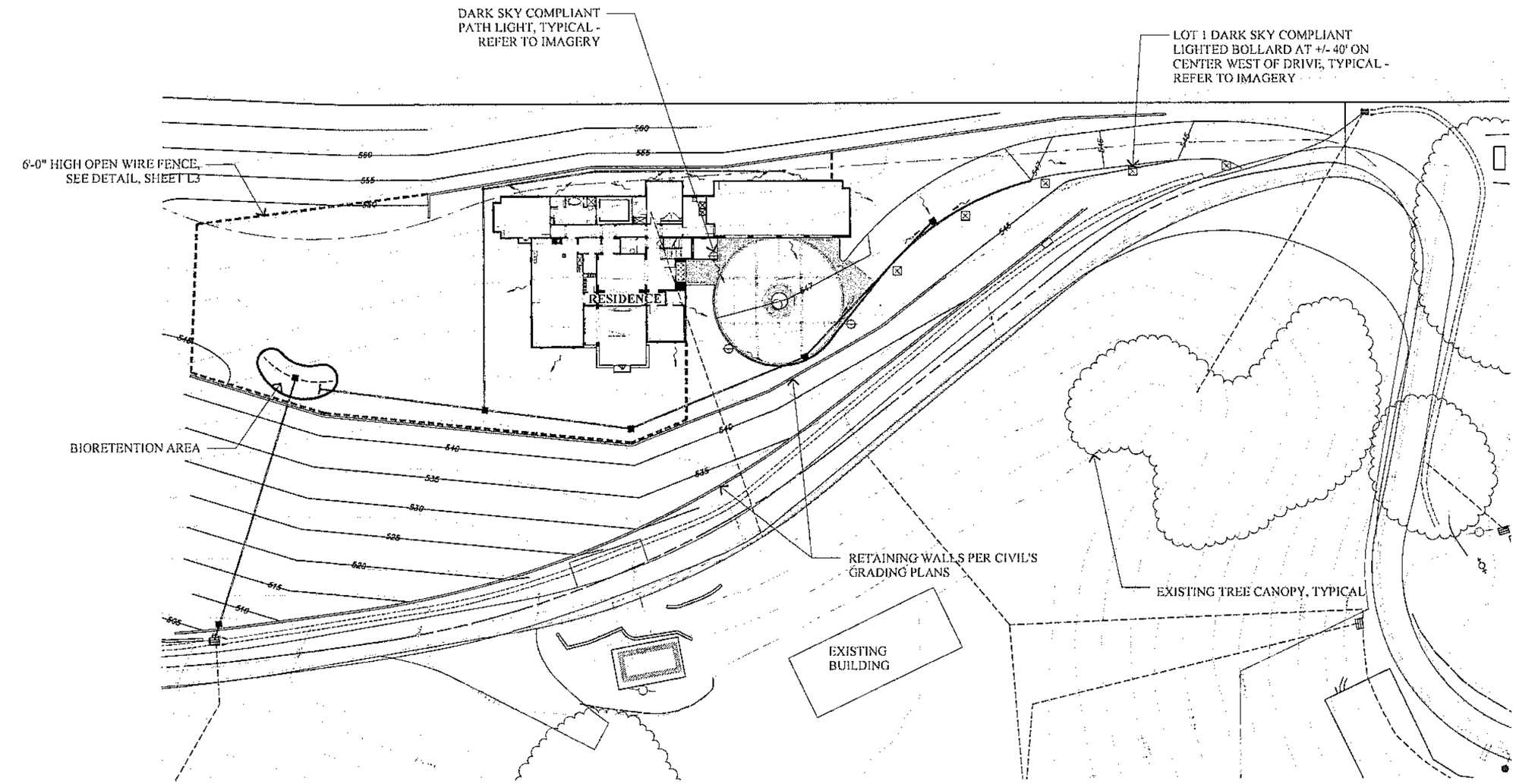
Pleasanton, California

APRIL 22, 2016 L1

PARCEL 1 SILVER OAKS

Preliminary Landscape Plan

RIPLEY DESIGN
LANDSCAPE ARCHITECTURE
LAND PLANNING
1615 BONANZA STREET
SUITE 314
WALNUT CREEK, CA 94596
TEL: 925.938.7377
FAX: 925.9387436



GRAPHIC SCALE

0 20 40 60

(IN FEET)
1 inch = 20 ft

FENCE LEGEND

6'-0" HIGH OPEN WIRE FENCE

RIPLEY DESIGN
LANDSCAPE ARCHITECTURE
LAND PLANNING
1615 BONANZA STREET
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WALNUT CREEK, CA 94596
TEL: 925.938.7377
FAX: 925.9387436

PARCEL 1 SILVER OAKS

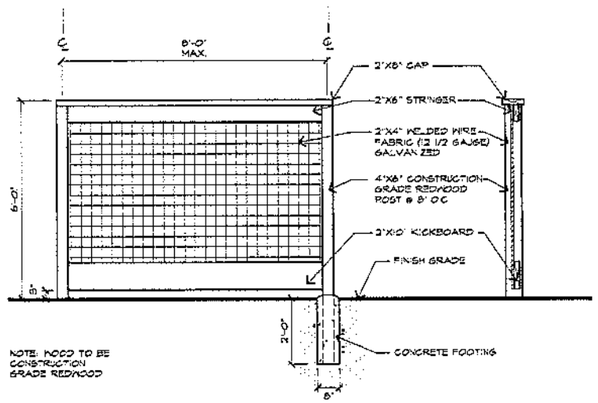
Preliminary Fencing & Lighting Plan

Silver Oaks Hillside

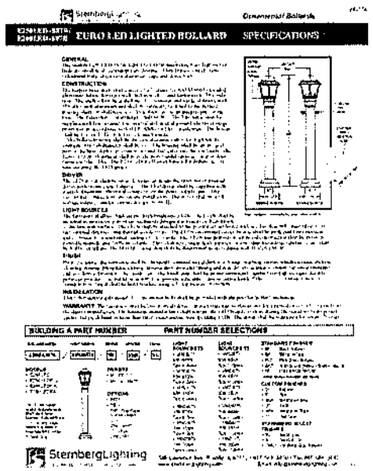
Parcel 1

Pleasanton, California

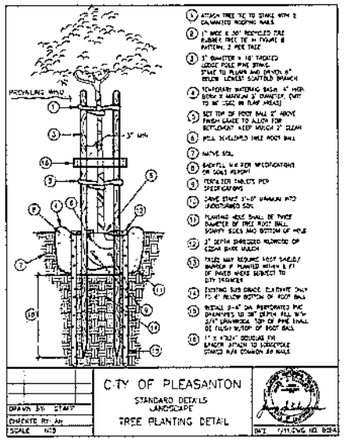
APRIL 22, 2016 L2

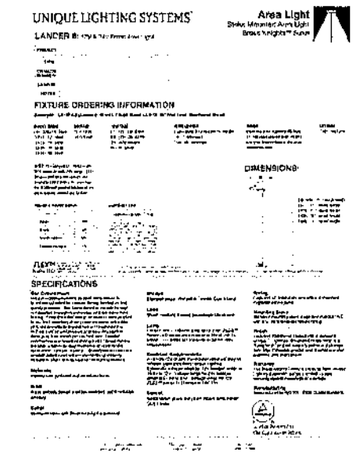


6'-0" WIRE MESH FENCE SCALE: 1/2" = 1'-0"



DRIVEWAY LIGHTED BOLLARD
EURO LED LIGHTED BOLLARD BY Sternberg Lighting or equal
Model: E250 LED FLB (24v)
Size: 13"W X 59" H
Colors: Dark Bronze Textured
Dark Sky Compliant: Yes





WALKWAY PATH LIGHT
LANCER 6 PATH LIGHT BY Unique Lighting Systems or equal
Model: L6-12-L3 LED (24v)
Size: 6"W X 18" H
Color: Weathered Brass
Dark Sky Compliant: Yes

PRELIMINARY SHRUB PLANTING PALETTE

BOTANICAL NAME	COMMON NAME	WATER USE
TRANSITION ZONE PLANTING - 5 GALLON MINIMUM		
ARCTOSTAPHYLOS 'HOWARD MCMINN'	MANZANITA	LOW
CEANOTHUS SPECIES	WILD LILAC	LOW
CISTUS HYBRIDUS	ROCKROSE	LOW
FREMONTODENDRON CALIFORNICA	FLANNEL BUSH	LOW
GREVILLEA NOELLII	WOOLY GREVILLEA	LOW
HETEROMELES ARBUTIFOLIA	TOYON	LOW
HYPERICUM MOSERANUM	CUP OF GOLD	LOW
JUNCUS PATENS	GREY RUSH	LOW
LAVATERA MARITIMA	TREE MALLOW	LOW
MUHLENBERGIA RIGENS	DEER GRASS	LOW
PHAMNUS CALIFORNICA	COFFEEBERRY	LOW
ROSMARINUS OFFICINALIS	ROSEMARY	LOW
ROSA CALIFORNICA	RAMANAS ROSE	LOW
FOUNDATION PLANTING - 5 GALLON MINIMUM		
FEIJOA SELLOWIANA	PINEAPPLE GUAVA	LOW
GREVILLEA 'NOELLI'	WOOLY GREVILLEA	LOW
ILEX C. 'BURFORDII'	BURFORD HOLLY	LOW
JUNIPERUS S. 'MEDORA	COLUMNAR JUMPER	LOW
LIGUSTRUM J. 'TEXANUM'	JAPANESE PRIVET	LOW
MYRTUS C. 'COMPACTA'	DWARF MYRTLE	LOW
NANDINA D. 'COMPACTA'	DWARF HEAVENLY BAMBOO	LOW
OLEA E. 'LITTLE OLLIE'	DWARF OLIVE	LOW
PITTOSPORUM T. 'VARIEGATA'	VARIEGATED TOBIRA	LOW
PODOCARPUS GRACILIOR	FERN PINE	MEDIUM
VIBURNUM TINUS	LAURUSTINUS	MEDIUM
XYLOSMA C. 'COMPACTA'	COMPACT XYLOSMA	LOW
FRONTYARD PLANTING - 5 GALLON MINIMUM		
BUDDLEIA DAVIDII	BUTTERFLY BUSH	LOW
CAREX TUMULICOLA	BERKELEY SEDGE	LOW
COLEONEMA 'SUNSET GOLD'	GOLDEN BREATH-OF-HEAVEN	MEDIUM
DIETES BICOLOR	FORTNIGHT LILY	LOW
DIETES IRIDIODES	FORTNIGHT LILY	LOW
EUONYMUS J. 'MICROPHYLLUS'	BOXLEAF EUONYMUS	LOW
FESTUCA GLAUCA	BLUE FESCUE	LOW
GERANIUM 'JOHNSON'S BLUE	GERANIUM	MEDIUM
HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	LOW
HEMEROCALLIS HYBRIDS	DAYLILY	MEDIUM
LANTANA MONTEVIDENSIS	TRAILING LANTANA	LOW
LAVANDULA A. 'MUNSTEAD'	ENGLISH LAVANDER	LOW
LIRIOPE GIGANTEA	GIANT LILY TURF	MEDIUM
LOROPETALUM CHINENSE	CHINESE FRINGE FLOWER	LOW
LOROPETALUM C. RAZZLEBERRY'	RED FRINGE FLOWER	LOW
NANDINA D. 'GULF STREAM'	GULF STREAM BAMBOO	LOW
NEPETA FAASSENN-	CATMINT	LOW
PENNISETUM 'HAMELN'	DWARF FOUNTAIN GRASS	LOW
PENSTEMON HETEROPHYLLUS	PENSTEMON	LOW
PHORMIUM T. 'MAORI MAIDEN'	NEW ZEALAND FLAX	LOW
PITTOSPORUM 'WHEELER'S DWARF	DWARF TOBIRA	LOW
PYRACANTHA 'SANTA CRUZ'	PROSTRATE FIRETHORN	LOW
RHAPHIOLEPIS I. 'BALLERINA'	INDIA HAWTHORN	LOW
RHAPHIOLEPIS I. 'WHITE ENCHANTRESS'	INDIA HAWTHORN	LOW
ROSMARINUS OFFICINALIS	ROSEMARY	LOW
STACHYS BIZANTINA	LAMBS EARS	LOW
GROUNDCOVERS - 1 GALLON MINIMUM		
ARCTOSTAPHYLOS D. 'EMERALD CARPET' : GALLON @ 36" O.C.	BEARBERRY	LOW
BACCHARIS PILULARIS 'PIGEON POINT' : GALLON @ 48" O.C.	DWARFCOYOTE BRUSH	LOW
MYOPORUM PARVIFOLIUM : GALLON @ 48" O.C.	MYOPORUM	LOW
SCAEVOLA 'MAUVE CLUSTERS' : GALLON @ 36" O.C.	FAN FLOWER	LOW

WATER BUDGET CALCULATIONS:

LOW WATER USE PLANTING AREA = 5,588 SF
MEDIUM WATER USE PLANTING AREA = 985 SF
HIGH WATER USE AREA - TURF = 0 SF
TOTAL PLANTING AREA = 6,573 SF

ESTIMATED TOTAL WATER USE:

ETWU (LOW WATER USE) = 144.2) X 10.62) X (0.3 X 5,588) / 0.70 = 65,628 GAL/YR

ETWU (MEDIUM WATER USE) = 144.2) X (0.62) X (0.6 x 985) / 0.70 = 23,036 GAL/YR

ETWU (HIGH WATER USE) = 144.2) X (0.62) X (1.0 X 0) / 0.70 = 0 GAL/YR

TOTAL ETWU = 88,764 GAL/YR

MAXIMUM APPLIED WATER ALLOWANCE:

MAWA (LOW WATER USE) = 144.2) X (0.621 X 10.55 X 4,745) = 99,069 GAL/YR

IRRIGATION SYSTEM DESIGN NOTES:

1. LANDSCAPE AND IRRIGATION SHALL COMPLY WITH CITY'S CURRENT WATER-EFFICIENT LANDSCAPE ORDINANCE.
2. PLANTING AREAS SHALL BE GROUPED BY HYDROZONE AND IRRIGATED SEPARATELY.
3. HYDROZONE BOUNDARIES WILL BE SHOWN ON IRRIGATION CONSTRUCTION DOCUMENTS.
4. ALL TREES WILL BE IRRIGATED USING LOW FLOW BUBBLERS.
5. ALL SHRUB AND GROUNDCOVER AREAS WILL BE IRRIGATED USING DRIP.
6. IRRIGATION PLAN WILL SHOW LOCATION OF WATER METER, MANUAL SHUT-OFF VALVES, AUTOMATIC CONTROL VALVES, MOISTURE AND RAIN SENSORS, PRESSURE REGULATORS, CONTROLLER, AND BACKFLOW PREVENTION DEVICES.
7. CHECK VALVES WILL BE SPECIFIED WHERE LOW HEAD DRAINAGE MAY OCCUR.
8. THE IRRIGATION SYSTEM WILL BE EQUIPPED WITH A MANUAL SHUT-OFF VALVE AT THE POINT OF CONNECTION TO THE DOMESTIC WATER SUPPLY, A BACKFLOW PREVENTION DEVICE, AND AUTOMATIC IRRIGATION CONTROLLER THAT UTILIZES EITHER EVAPOTRANSPIRATION OR SOIL MOISTURE SENSOR DATA TO AUTOMATICALLY ADJUST WATERING SCHEDULES, AND A RAIN SENSOR THAT SUSPENDS IRRIGATION DURING PERIODS OF RAIN.
9. THE IRRIGATION SYSTEM WILL BE DESIGNED TO PREVENT WATER RUNOFF BEYOND THE IRRIGATED LANDSCAPE AREAS.
10. ALL PLANTING AREAS SHALL BE MULCHED WITH 1" DIAM. FIR BARK TO A MINIMUM DEPTH OF 3".

RIPLEY DESIGN GROUP
LANDSCAPE ARCHITECTURE
LAND PLANNING
1615 BONANZA STREET
SUITE 314
WALNUT CREEK, CA 94596
TEL: 925.938.7377
FAX: 925.9387436

PARCEL 1 SILVER OAKS

Preliminary Landscape Details

Silver Oaks Hillside
Parcel 1

Pleasanton, California

APRIL 22, 2016 L3

PUD-116
RECEIVED April 21, 2016

EXHIBIT B

Page Index

Visual Analysis
PUD 116 - Parcel 1
Pleasanton, CA
Frank Berlogar

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5000 EXECUTIVE PARKWAY SUITE 375 SAN RAMON CA 94583-4310
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949 250 0607 www.whharchitects.com fax 949 250 1529

April 27, 2016
1
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View 1 - Existing

PUD 116 - Parcel 1

Pleasanton, CA

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949 250 0607 www.wharchitects.com fax 949 250 1529

April 27, 2016

2

2016023

2016023 - PUD 116, Parcel 1 - Pleasanton, CA

View 1 - With Proposed Rendering

Residence Height: 28'-4"

PUD 116 - Parcel 1

Pleasanton, CA

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April 21, 2016

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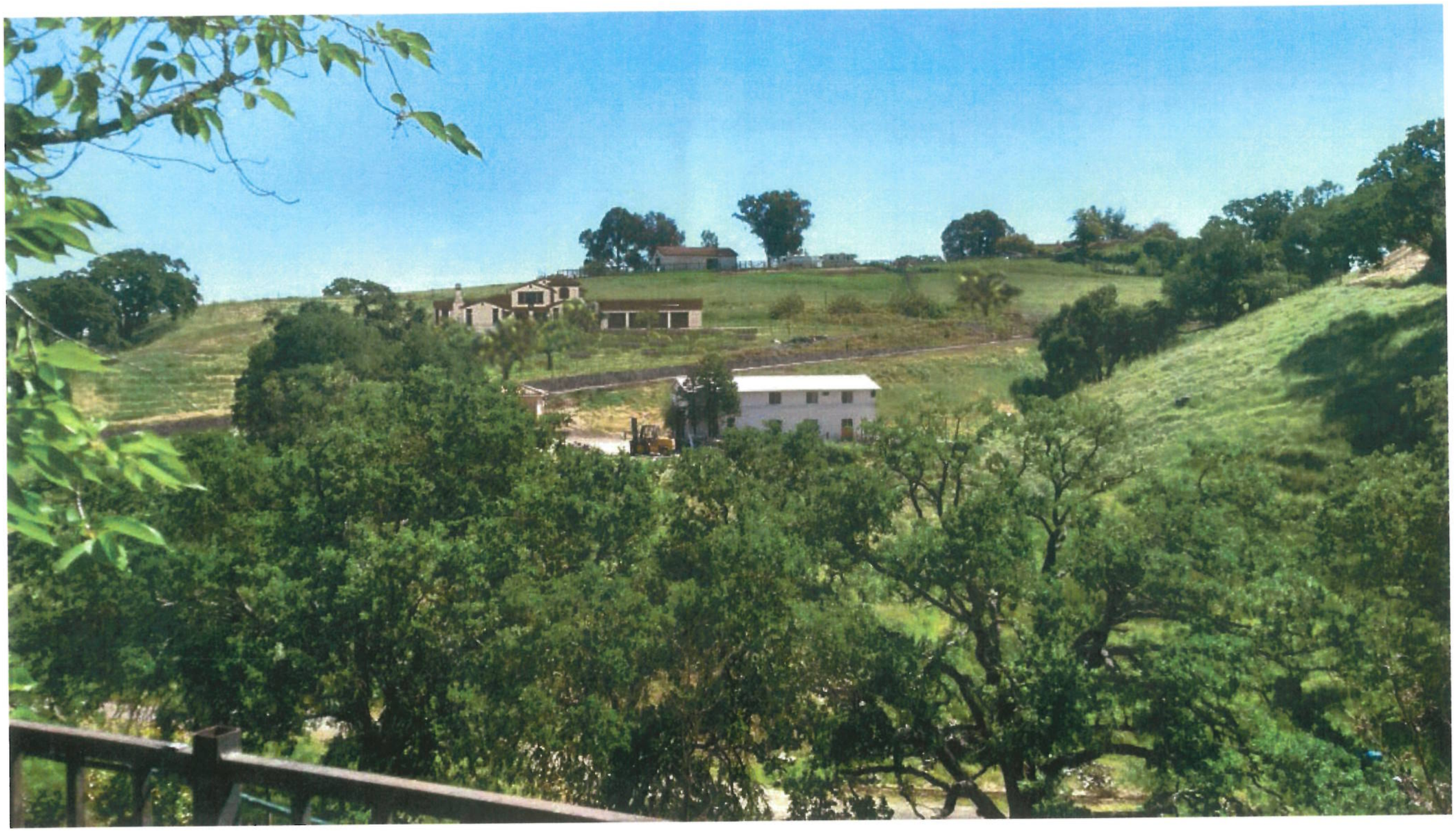

View 1 - With Proposed Rendering

Residence Height: 28'-4"

PUD 116 - Parcel 1

Pleasanton, CA

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View 1 - With Proposed Rendering

Residence Height: 25'-0"

PUD 116 - Parcel 1

Pleasanton, CA

Frank Berlogar

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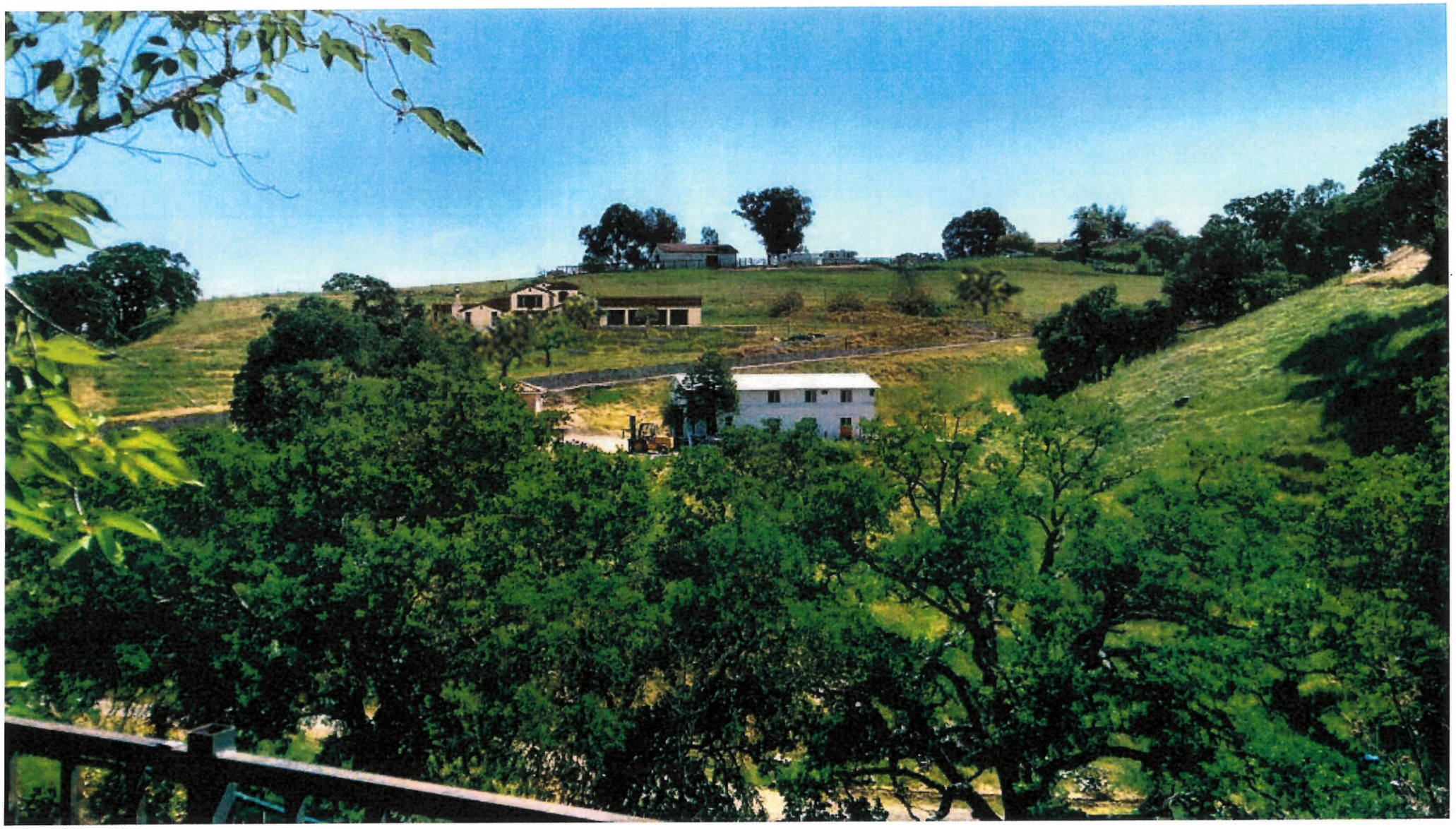

View 1 - With Proposed Rendering
Residence Height: 25'-0"

PUD 116 - Parcel 1

Pleasanton, CA
Frank Berlogar

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PARCEL 2 SILVER OAKS COURT PLEASANTON, CA
EXTERIOR COLORS

ROOFING: Concrete S-Tile	BORAL BARCELONA 900 / BOOSTED BARCELONA SALERNO CLAY	
STUCCO BODY:	KELLY-MOORE KM3973-2 WESTOVER HILLS	
TRIM 1: Eaves & Fasica Rafter Tails & Corbels at Gables Garage Doo , Door & Window Trim	KELLY-MOORE KM5762-3 HIKING BOOTS	
TRIM 2: Columns/Posts Entry Door Trim	ARCUSTONE CHAMPAGNE (30) PITTED & HAND-STONED	
MASONRY: Natural Stone Veneer	SBI BUILDING MATERIALS CASCADE	
METAL ACCENTS:	POWDER COATING SANDCAST BRONZE CS3020	
GUTTERS:	MODERN MASTERS ENGLISH BROWN 525 SHADE	
WINDOWS:	ANDERSEN COCOA BEAN	
ENTRY DOOR:	IRON & GLASS METAL DOOR DESERT COFFEE	

EXHIBIT B

PUD-116
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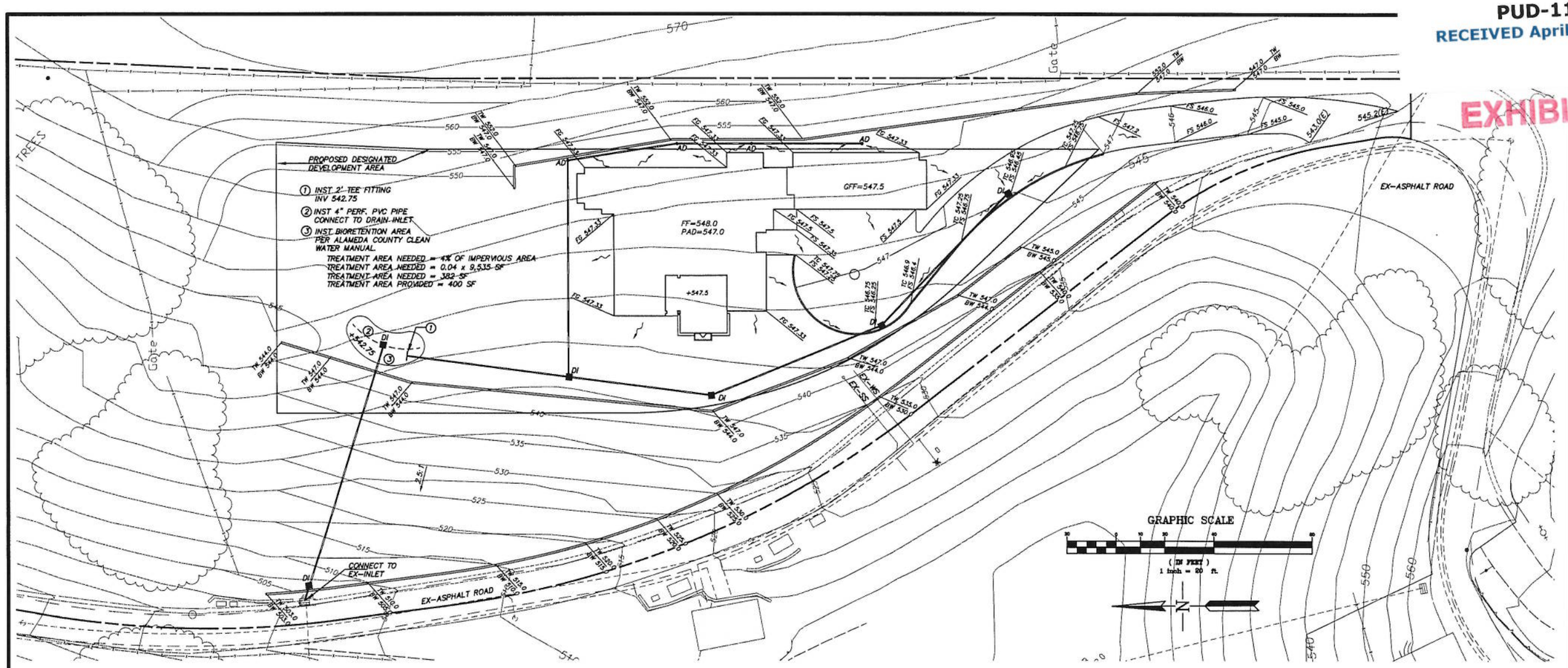


GRADING NOTES:

1. ALL GRADING SHALL CONFORM TO THE CITY OF PLEASANTON STANDARDS.
2. ALL GRADING SHALL BE DONE UNDER THE SUPERVISION OF THE SOILS ENGINEER.
3. ALL DOWNSPOUTS SHALL HAVE A MINIMUM 3" DIAMETER SOLID DRAIN LINES AND DISCHARGE TO SPLASH BLOCKS.
4. ALL SURFACE WATER SHALL DRAIN AWAY FROM THE STRUCTURE WITH A MINIMUM 5% SLOPE FOR MINIMUM DISTANCE OF 5 FEET.
5. SURFACE WATER SWALES SHALL HAVE A 1% MINIMUM SLOPE AND BE CONVEYED TO AREA DRAINS.
6. AREA DRAINS SHALL HAVE A MINIMUM 6 INCHES DIAMETER GRATE OPENING.
7. ALL DRAIN LINES SHALL HAVE A 1% MINIMUM SLOPE.
8. ALL DRAIN LINES SHALL PASS UNDERNEATH THE GRADE BEAMS, NOT THROUGH THEM. ANY SUBDRAINS PLACED UNDER THE STRUCTURE SHALL BE LOCATED TO MISS PIERS AND/OR GRADE BEAMS.
9. WHEN A PERFORATED DRAIN LINE IS CONNECTED TO A SOLID DRAIN LINE, THE INVERT OF THE SOLID DRAIN SHALL BE HELD BELOW THE INVERT OF THE PERFORATED LINE.
10. ALL DRAIN LINES FOR SURFACE WATER SHALL BE SOLID, NON-FLEXIBLE PVC PIPE. PERFORATED PIPE SHALL BE USED FOR SUBDRAINS ONLY. 6" STORM DRAIN TO BE PVC SDR-35 OR APPROVED EQUAL. (SEE DETAILS)
11. CLEANOUTS FOR PERIMETER DRAIN SHALL BE SPACED 75' MAX O.C.
12. EROSION CONTROL PLANS SHALL BE SUBMITTED FOR APPROVAL TO THE BUILDING DEPARTMENT BY SEPTEMBER 15 IF WORK CONTINUES INTO THE RAINY SEASON.
13. THIS PLAN TO BE USED FOR GRADING AND DRAINAGE ONLY. REFER TO ARCHITECTURAL PLANS FOR OTHER INFORMATION.
14. THE CONTRACTOR SHALL MAINTAIN THE SITE IN AN ORDERLY MANNER CONTINUOUSLY THROUGHOUT THE PROJECT. THE STREET SHALL BE KEPT CLEAR OF MUD AND DEBRIS AT ALL TIMES. THE CONTRACTOR SHALL ALSO PROVIDE DUST CONTROL MEASURES TO THE SATISFACTION OF THE CITY. FAILURE TO COMPLY WITH ORDINANCES WILL RESULT IN A SUSPENSION OF WORK UNTIL COMPLIANCE IS VERIFIED.
15. THE OWNER SHALL BE RESPONSIBLE FOR INSPECTING, MAINTAINING, AND REPAIRING STORM DRAIN, PERIMETER DRAIN, DOWNSPOUTS, AND DRAINAGE SWALES.

The Following (a) and (b) shall be provided to the building inspector before and foundation inspection will be performed. Item (c) shall be provided before the shear and roof inspection. Item (d) shall be provided before a frome inspection will be performed.

a. A Licensed Land Surveyor must verify building setbacks to property lines and also pad elevation(s). This verification must b in the form of a professional report, stamped and signed by the registered professional. This report must be submitted to the field inspector at the time of foundation inspection.

b. When Fill is employed under the building a soils engineer must verify pad compaction. This verification must be in the form of a professional report, stamped and signed by the registered professional. This report must be submitted to the field inspector at the time of foundation inspection.

c. A Licensed Land Surveyor must verify finish floor elevations. This verification must be in the form of a professional report, stamped and signed by the registered professional. This report must be submitted to the field inspector at the time of shear and roof inspection.

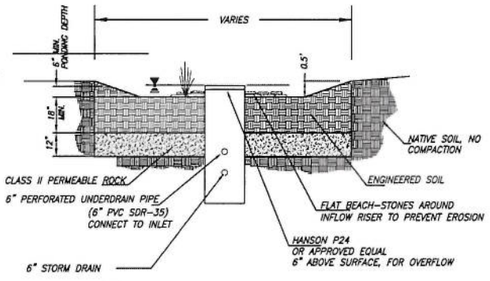
d. A Licensed Land Surveyor must verify the highest elevation of the highest point of any roof ridge of roof projection. This verification must be in the form of a professional report, stamped and signed by the registered professional. This report must be submitted to the field inspector at the time of frome inspection.

BASIS OF BEARINGS

THE BEARINGS SHOWN UPON THIS MAP ARE THE SAME AS SHOWN UPON PARCEL MAP 10248, CITY OF PLEASANTON.

BASIS OF ELEVATIONS

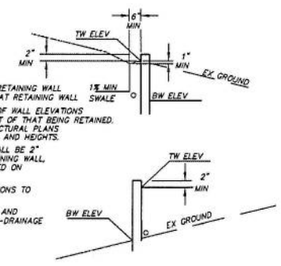
ELEVATIONS SHOWN ON THIS MAP ARE THE SAME AS SHOWN UPON THE IMPROVEMENTS PLANS FOR PM 10248.



NOTES:
1. SWALE SHALL BE GRADED TO DRAIN TOWARD OUTLET AT A MINIMUM SLOPE 0.2%
2. PLANTINGS MAY INCLUDE TREES, MINIMUM INFILTRATION RATE 5"/HR
3. ENGINEERED SOIL – USE TOPSOIL BLEND AS SPECIFIED IN THE MOST RECENT ALAMEDA COUNTY C.3 GUIDEBOOK
4. DO NOT CONNECT STORM DRAIN INFLOW PIPES TO UNDERDRAIN.
5. MINIMUM SLOPE MEASURED FROM TOP OF GRATE OF AREA DRAIN (OR DOWNSPOUT DRAIN) TO TOP OF EMITTER SHALL BE 1% (4" PIPE) OR 0.5 % (6" PIPE)
6. MINIMUM INFLOW PIPE SLOPE SHALL BE 1% (4" PIPE) OR 0.5% (6" PIPE)
7. MINIMUM UNDERDRAIN PIPE SLOPE SHALL BE 0.5% (6" PIPE)
8. INSTALL PERFORATED PIPE WITH PERFORATIONS DOWN.
9. NO FILTER FABRIC TO BE USED.
10. INSTALL CAPPED CLEANOUTS AT UNDERDRAIN ENDS.

BIO–RETENTION DETAIL

NOT TO SCALE



TW – TOP OF SURFACE AT RETAINING WALL
BW – BOTTOM OF SURFACE AT RETAINING WALL

TOP OF WALL AND BOTTOM OF WALL ELEVATIONS ARE FOR THE ACTUAL HEIGHT OF THAT BEING RETAINED. SEE LANDSCAPE OR ARCHITECTURAL PLANS FOR ULTIMATE WALL DESIGNS AND HEIGHTS.

TOP OF WALL ELEVATION SHALL BE 2" MIN FROM THE TOP OF RETAINING WALL, UNLESS OTHERWISE SPECIFIED ON GRADING OR ARCH PLANS.

WALL STRUCTURAL CALCULATIONS TO BE DONE BY OTHERS.

REFER TO THE SOILS REPORT AND STRUCTURAL PLANS FOR SUB-DRAINAGE BEHIND RETAINING WALL.

RETAINING WALL ELEV

NO SCALE

HAUL ROUTE

1. ACCESS TO THE DEVELOPMENT BY CONSTRUCTION EQUIPMENT, MATERIAL DELIVERIES AND OTHER HEAVY LOADS SHALL BE LIMITED BY THE DEVELOPER TO THE FOLLOWING ROUTE: HWY 580 OR HWY 680 TO HWY 84 TO VINEYARD AVE. TO OLD VINEYARD AVE. TO SILVER OAKS LANE

WORK HOURS

1. WORK HOURS SHALL BE LIMITED TO: 8:00 AM – 5:00 PM MONDAY THRU FRIDAY. NO CONSTRUCTION SHALL BE ALLOWED ON STATE AND FEDERAL HOLIDAYS OR SATURDAYS OR SUNDAYS.

EXCESS SOIL

1. EXCESS SOIL FROM THE SITE SHALL BE OFF-HAULED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER. NO TEMPORARY STOCKPILING OF DIRT ON THIS SITE SHALL OCCUR WITHOUT SPECIFIC REVIEW AND APPROVAL BY THE PLANNING DIVISION.

TOTAL IMPERVIOUS AREA = 11,205 SQ FT
IMPERVIOUS AREA DRAINING TO BIO–TREATMENT AREA = 9,535 SF

NOTES:

ALL UNDERGROUND UTILITIES ARE TAKEN FROM AVAILABLE PUBLIC RECORDS, NOT FIELD LOCATED.

- GARAGE FLOOR TO SLOPE TOWARDS THE FRONT AT 1% MIN.
- PAD TO FINISH FLOOR DISTANCE TO BE VERIFIED BEFORE CONSTRUCTION.
- SEE LANDSCAPE PLAN FOR ADDITIONAL INFORMATION

THIS PLAN IS INTENDED FOR GRADING AND DRAINAGE

LEGEND

- DRAINAGE ARROW INDICATES DIRECTION OF DRAINAGE
- INDICATES DIRECTION OF OVERLAND RELEASE FLOW
- STORM DRAIN
- PERIMETER DRAIN
- EX CONTOUR
- 100 NEW CONTOUR
- SWALE
- PROPERTY LINE

ABBREVIATIONS

AD	AREA DRAIN
CO	CLEAN-OUT
DI	DRAIN INLET (HANSON P18 OR EQUAL)
DS	DOWN SPOUT
BW	BOTTOM OF RETAINING WALL
FF	FINISHED FLOOR
FL	FLOWLINE
FG	FINISHED GRADE
FS	FINISHED SURFACE
GR	TOP OF GRATE
HP	HIGHPOINT
INV.	INVERT
LS	LANDSCAPING
GFF	GARAGE FINISHED FLOOR
SWI	STORM WATER INLET
TC	TOP OF CURB
TG	TOP OF GRATE
TW	TOP OF RETAINING WALL

REGISTERED PROFESSIONAL ENGINEER
ROBERT D. DIETZ
NO. C 66722
EXPIRES 09/30/16
CIVIL
STATE OF CALIFORNIA

REVISIONS: NO. | BY | DATE

ALEXANDER & ASSOCIATES INC.
SURVEYORS ENGINEERS PLANNERS
147 OLD BERNAL AVE. SUITE 10, PLEASANTON, CALIFORNIA (925) 462-2255

DRAWN BY: RD
DESIGNED BY: RD
CHECKED BY: DA
SCALE: 1"=20'

PROJECT NAME
PRELIMINARY GRADING AND PLAN
PARCEL 1 – PUD 116
CITY OF PLEASANTON
ALAMEDA COUNTY, CALIFORNIA

JOB NO.: 16091
DSK NO.:
FILE NO.: 16091
DATE: 4-21-2016

SHEET NO.:
C1
OF 1 SHEETS

SHEET INDEX

PUD 116 - Parcel 1

Pleasanton, CA

Frank Berlogar

0 4 8 12

WILLIAM HEZMALHALCH
ARCHITECTS INC.
5301 EXECUTIVE PARKWAY SUITE 275 SAN RAMON CA 94583-4212
925 463 1700 fax 949 250 1529
2151 RICHMILL AVENUE SUITE 202 SANTA ANA CA 92705 6543
949 250 3617 www.wharchitects.com fax 949 250 1529

March 18, 2016

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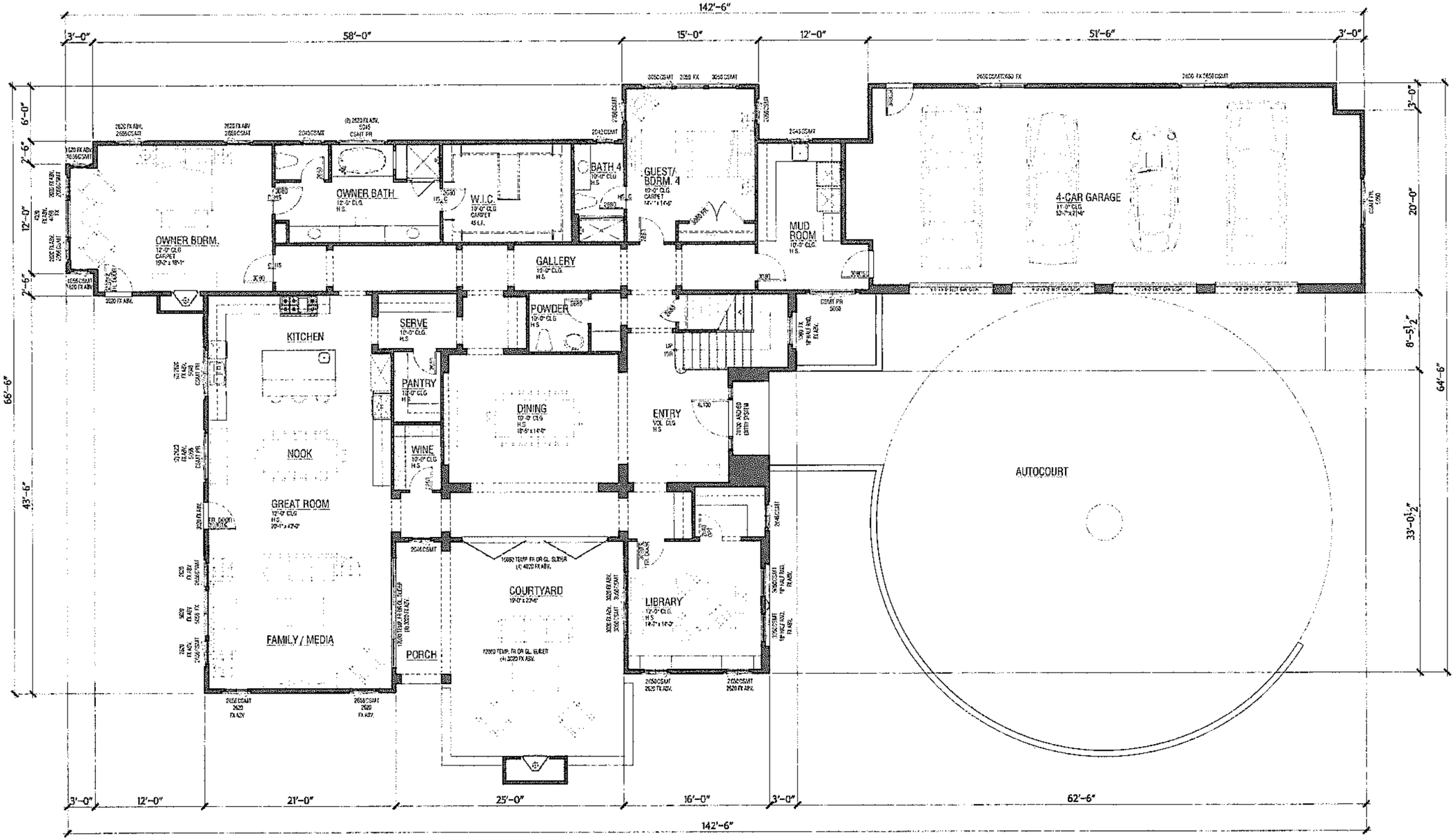
2016023 - PUD 116 - Parcel 1 - Pleasanton, CA



Floor Plan

First Floor
3,775 SF

4,907 SF - Living Area
1,270 SF - Garage

PUD 116 - Parcel 1

Pleasanton, CA
Frank Berlogar

0 4 8 12

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ARCHITECTS INC.

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A2
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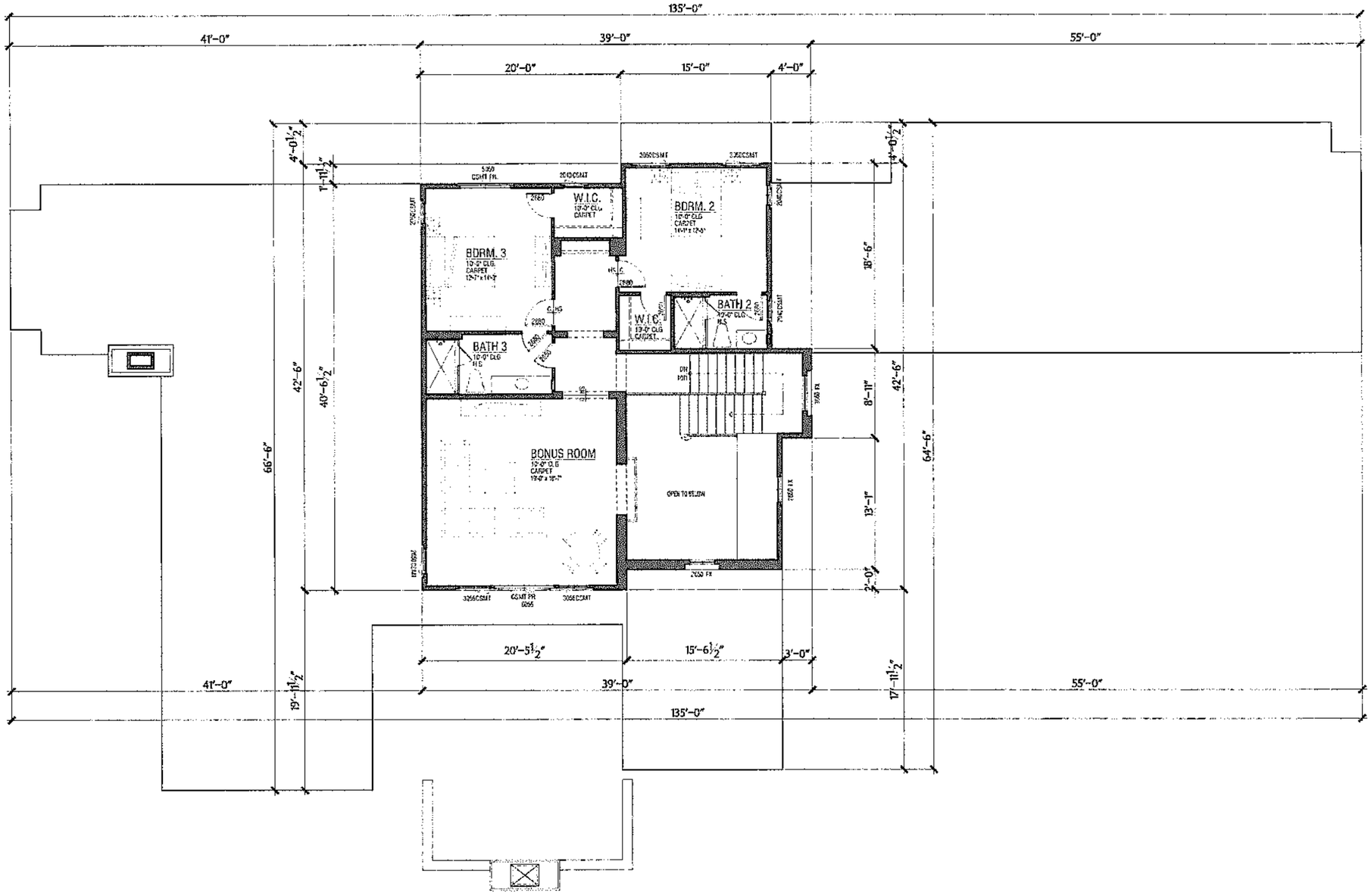
20160023 - PUD 116 - Parcel 1 - Pleasanton, CA



Second Floor
1,132 SF

PUD 116 - Parcel 1

Pleasanton, CA
Frank Berlogar

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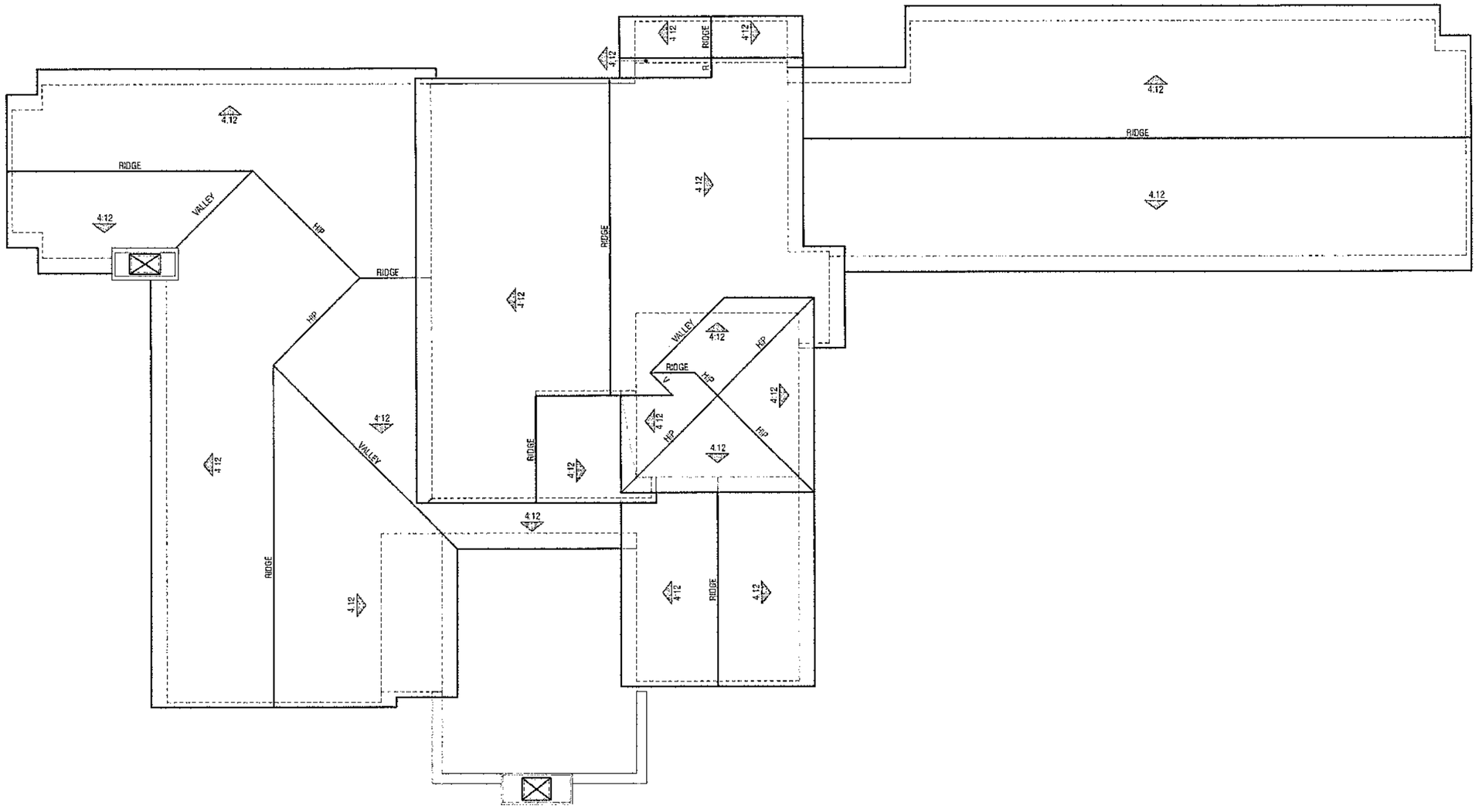

Roof Plan

PUD 116 - Parcel 1

Pleasanton, CA

Frank Berlogar

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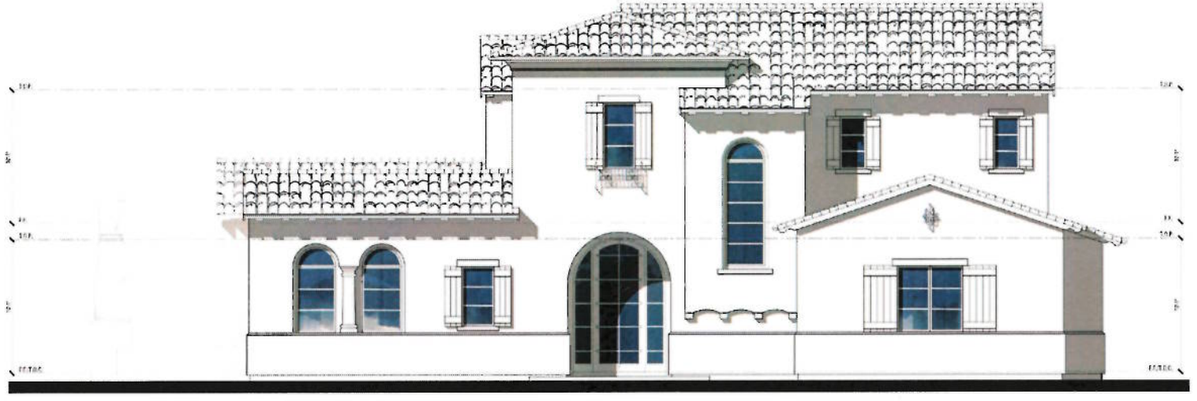
Rear



Front

Exterior Elevations

PUD 116 - Parcel 1

Pleasanton, CA
Frank Berlogar

0 4 8 12

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949 250 0607 www.whainc.com fax 949 250 1529

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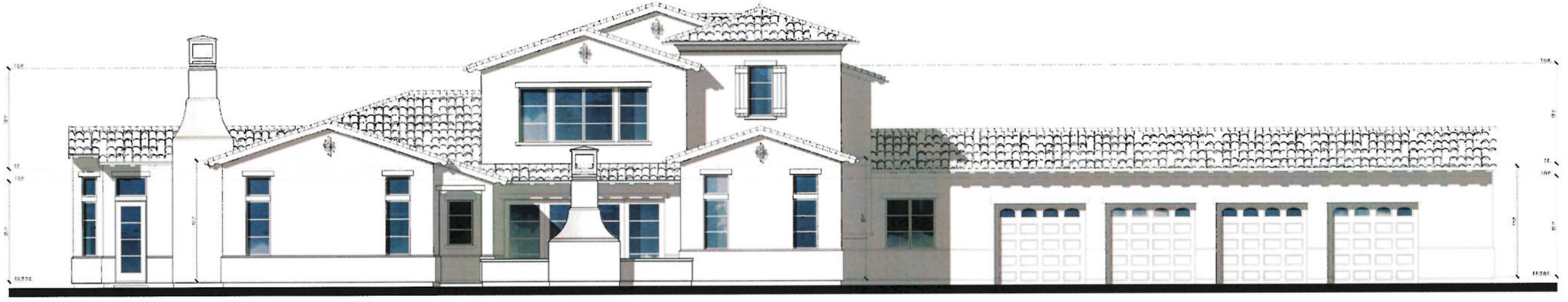
Right



Left

Exterior Elevations

PUD 116 - Parcel 1

Pleasanton, CA
Frank Berlogar

0 4 8 12

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RESIDENCE

ARCHITECTURAL STOOP WITH TILE VENEER-TILE TO BE 'TIERRA TERRA COTTA' WITH DECORATIVE TILE RISERS BY TIERRA Y FUEGO

DECORATIVE INTERLOCKING CONCRETE PAVERS-PAVER TO BE COUNTRY COBBLE BY BASALITE OR EQUAL, COLOR TO BE 'VENICE' PATTERN: MISSION 3

COLORED CONCRETE DRIVEWAY WITH PAVER BANDING AND DECORATIVE SCORE PATTERN, CONCRETE COLOR TO BE DAVIS "SAND DIEGO BUFF"

PROPOSED TRANSITION ZONE PLANTING

6'-0" HIGH OPEN WIRE FENCE

RETAINING WALLS PER CIVIL'S GRADING PLANS

EXISTING TREE CANOPY, TYPICAL

TREE #7 MAY NEED TO BE REMOVED FOR SAFETY PURPOSES. REFER TO ARBORIST'S REPORT

GRAPHIC SCALE

0 10 20 30

(IN FEET)

1 inch = 10' ft.

PROPOSED TREES BOTANICAL NAME	COMMON NAME		
QUERCUS AGRIFOLIA	COAST LIVE OAK	84" BOX	LOW
LAGERSTROEMIA 'MUSKOGEE'	CRAPE MYRTLE	24" BOX	LOW
OLEA EUROPAEA 'WILSON'	FRUITLESS OLIVE	24" BOX	LOW
QUERCUS DOUGLASII	BLUE OAK	24" BOX	LOW

Silver Oaks Hillside
Parcel 1

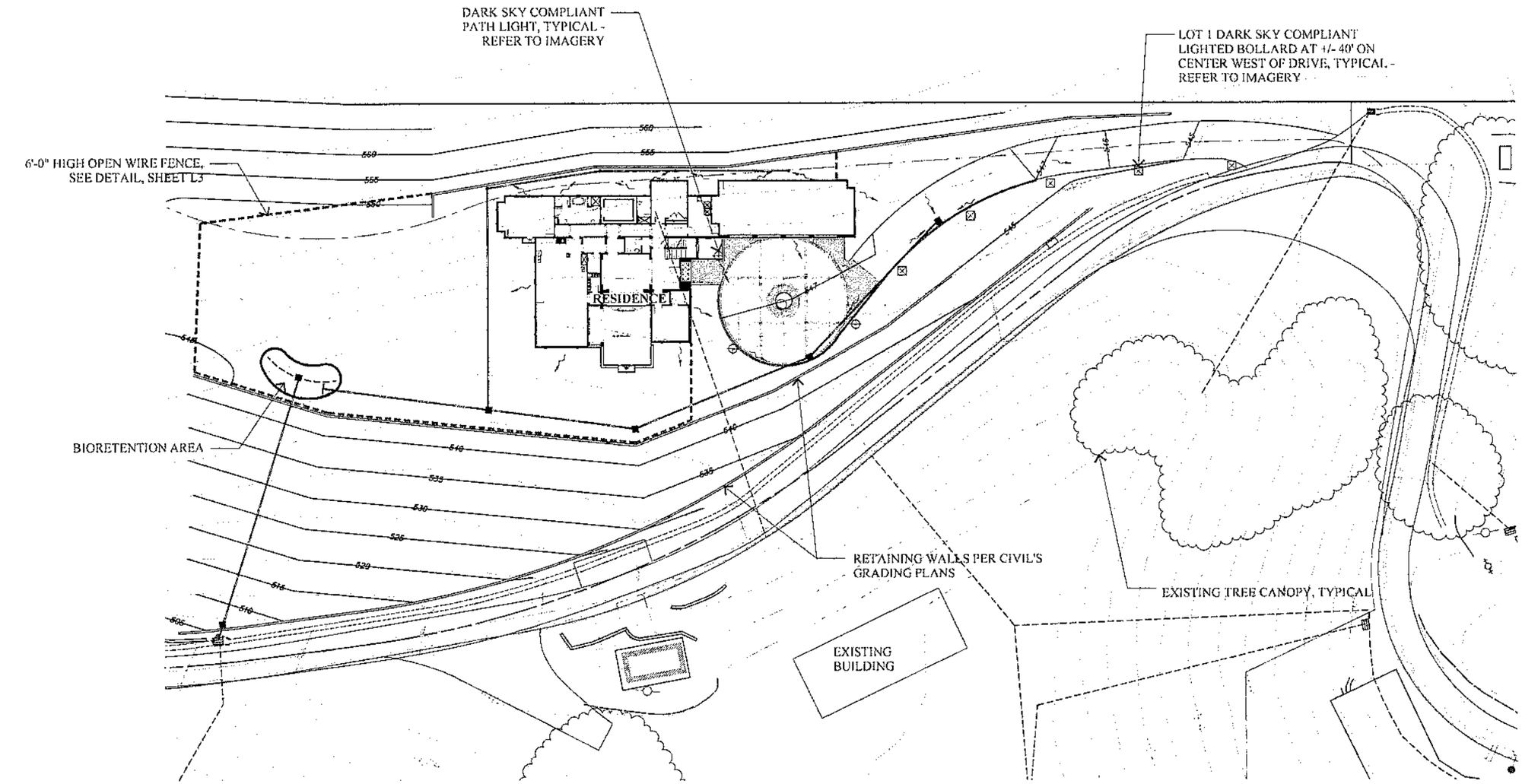
Pleasanton, California

APRIL 22, 2016 L1

PARCEL 1 SILVER OAKS

Preliminary Landscape Plan

RIPLEY DESIGN GROUP
LANDSCAPE ARCHITECTURE
LAND PLANNING
1615 BONANZA STREET
SUITE 314
WALNUT CREEK, CA 94596
TEL: 925.938.7377
FAX: 925.9387436



GRAPHIC SCALE

0 20 40 80

(IN FEET)
1 inch = 80 ft

FENCE LEGEND

6'-0" HIGH OPEN WIRE FENCE

RIPLEY DESIGN
LANDSCAPE ARCHITECTURE
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TEL: 925.938.7377
FAX: 925.9387436

PARCEL 1 SILVER OAKS

Preliminary Fencing & Lighting Plan

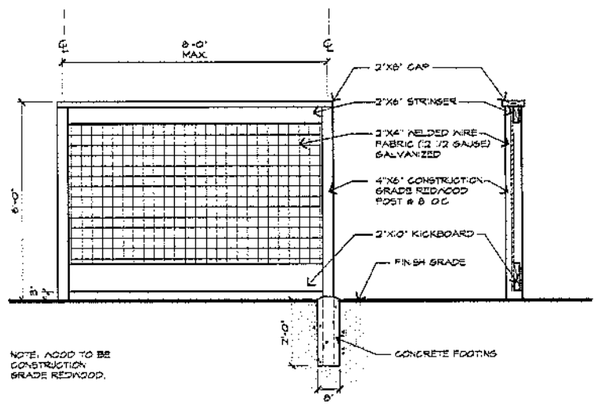
Silver Oaks Hillside

Parcel 1

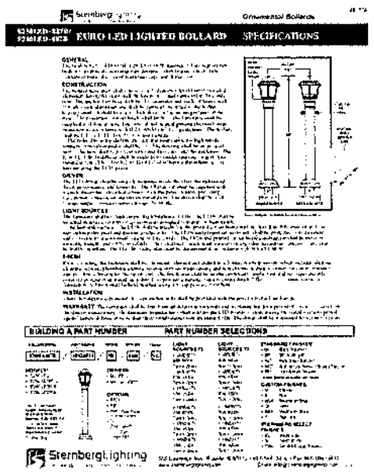
Pleasanton, California

APRIL 22, 2016

L2



6'-0" WIRE MESH FENCE SCALE: 1/2" = 1'-0"



☒ **DRIVEWAY LIGHTED BOLLARD**
EURO LED LIGHTED BOLLARD BY Sternberg Lighting or equal
Model: E 250 LED FLD (35w)
Size: 13"W X 50" H
Color: Dark Bronze Textured
Dark Sky Compliant: Yes

PRELIMINARY SHRUB PLANTING PALETTE

BOTANICAL NAME	COMMON NAME	WATER USE
TRANSITION ZONE PLANTING - 5 GALLON MINIMUM		
ARCTOSTAPHYLOS 'HOWARD MCMINN'	MANZANITA	LOW
CEANOTHUS SPECIES	WILD LILAC	LOW
CISTUS HYBRIDUS	ROCKROSE	LOW
FREMONTODENDRON CALIFORNICA	FLANNEL BUSH	LOW
GREVILLEA 'NOELLI'	WOOLY GREVILLEA	LOW
HETEROMELES ARBUTIFOLIA	TOYON	LOW
HYPERICUM MOSERANUM	CUP OF GOLD	LOW
JUNCUS PATENS	GREY RUSH	LOW
LAVATERA MARITIMA	TREE MALLOW	LOW
MUHLENBERGIA RIGENS	DEER GRASS	LOW
RHAMNUS CALIFORNICA	COFFEEBERRY	LOW
ROSMARINUS OFFICINALIS	ROSEMARY	LOW
ROSA CALIFORNICA	RAMANAS ROSE	LOW
FOUNDATION PLANTING - 5 GALLON MINIMUM		
FEIJOA SELLOWIANA	PINEAPPLE GUAVA	LOW
GREVILLEA 'NOELLI'	WOOLY GREVILLEA	LOW
ILEX C. 'BURFORD'	BURFORD HOLLY	LOW
JUNIPERUS S. 'MECORA'	COLUMNAR JUNIPER	LOW
LIGUSTRUM J. 'TEXANUM'	JAPANESE PRIVET	LOW
MYRTUS C. COMPACTA	DWARF MYRTLE	LOW
NANDINA D. 'COMPACTA'	DWARF HEAVENLY BAMBOO	LOW
OLEA E. 'LITTLE OLLIE'	DWARF OLIVE	LOW
PITTOSPORUM T. 'VARIEGATA'	VARIEGATED TOBIRA	LOW
PODOCARPUS GRACILIOR	FERN PINE	MEDIUM
VIBURNUM TINUS	LAURUSTINUS	MEDIUM
XYLOSMA C. 'COMPACTA'	COMPACT XYLOSMA	LOW
FRONTYARD PLANTING - 5 GALLON MINIMUM		
BUDDLEIA DAVIDII	BUTTERFLY BUSH	LOW
CAREX TUMULICOLA	BERKELEY SEDGE	LOW
COLEONEMA 'SUNSET GOLD'	GOLDEN BREATH-OF-HEAVEN	MEDIUM
DIETES BICOLOR	FORTNIGHT LILY	LOW
DIETES IRIDIODES	FORTNIGHT LILY	LOW
EUONYMUS J. 'MICROPHYLLUS	BOXLEAF EUONYMUS	LOW
FESTUCA GLAUCA	BLUE FESCUE	LOW
GERANIUM 'ROBINSON'S BLUE	GERANIUM	MEDIUM
HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	LOW
HEMEROCALLIS HYBRIDS	DAYLILY	MEDIUM
LANTANA MONTEVIDENSES	TRAILING LANTANA	LOW
LAVANDULA A. 'MUNSTEAD'	ENGLISH LAVANDER	LOW
LIRIOPE GIGANTEA	GIANT LILY TURF	MEDIUM
LORPETALUM CHINENSE	CHINESE FRINGE FLOWER	LOW
LORPETALUM C. 'RAZZLEBERRY'	RED FRINGE FLOWER	LOW
NANDINA D. 'GULF STREAM'	GULF STREAM BAMBOO	LOW
NEPETA FAASSENII'	CATMINT	LOW
PENNISETUM 'HAMELN'	DWARF FOUNTAIN GRASS	LOW
PENSTEMON HETEROPHYLLUS	PENSTEMON	LOW
PHORMIUM T. 'MAORI MAIDEN'	NEW ZEALAND FLAX	LOW
PITTOSPORUM 'WHEELER'S DWARF	DWARF TOBIRA	LOW
RYRACANTHA 'SANTA CRUZ'	PROSTRATE FIRETHORN	LOW
RHAPHIOLEPIS I. 'BALLERINA'	INDIA HAWTHORN	LOW
RHAPHIOLEPIS I. 'WHITE ENCHANTRESS	INDIA HAWTHORN	LOW
ROSMARINUS OFFICINALIS	ROSEMARY	LOW
STACHYS BIZANTINA	LAMBS' EARS	LOW
GROUNDCOVERS - 1 GALLON MINIMUM		
ARCTOSTAPHYLOS D. 'EMERALD CARPET' 1 GALLON @ 36" O.C.	BEARBERRY	LOW
BACCHARIS PILULARIS 'PIGEON POINT' 1 GALLON @ 48" O.C.	DWARFCOYOTE BRUSH	LOW
MYOPORUM PARVIFOLIUM 1 GALLON @ 48" O.C.	MYOPORUM	LOW
SCAEVOLA 'MAUVE CLUSTERS' 1 GALLON @ 36" O.C.	FAN FLOWER	LOW

WATER BUDGET CALCULATIONS:

LOW WATER USE PLANTING AREA	=	5,588 SF
MEDIUM WATER USE PLANTING AREA	=	985 SF
HIGH WATER USE AREA -TURF	=	0 SF
TOTAL PLANTING AREA	=	6,573 SF

ESTIMATED TOTAL WATER USE:

ETWU (LOW WATER USE) = (44.2) X (0.62) X (0.3 X 5,588) / 0.70 = 63,628 GAL/YR

ETWU (MEDIUM WATER USE) = (44.2) X (0.62) X (0.5 X 985) / 0.70 = 23,136 GAL/YR

ETWU (HIGH WATER USE) = (44.2) X (0.62) X 1.0 X 0 / 0.70 = 0 GAL/YR

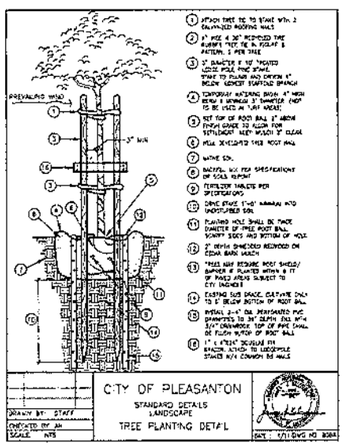
TOTAL ETWU = 86,764 GAL/YR

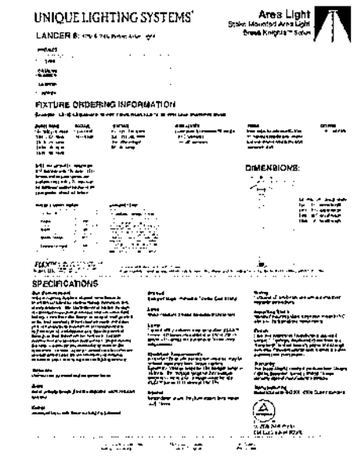
MAXIMUM APPLIED WATER ALLOWANCE:

MAWA (LOW WATER USE) = (44.2) X (0.62) X (0.55 X 6,745) = 99,069 GAL/YR

IRRIGATION SYSTEM DESIGN NOTES:

1. LANDSCAPE AND IRRIGATION SHALL COMPLY WITH CITY'S CURRENT WATER-EFFICIENT LANDSCAPE ORDINANCE.
2. PLANTING AREAS SHALL BE GROUPED BY HYDROZONE AND IRRIGATED SEPARATELY.
3. HYDROZONE BOUNDARIES WILL BE SHOWN ON IRRIGATION CONSTRUCTION DOCUMENTS.
4. ALL TREES WILL BE IRRIGATED USING LOW FLOW BUBBLERS.
5. ALL SHRUB AND GROUNDCOVER AREAS WILL BE IRRIGATED USING DRIP.
6. IRRIGATION PLAN WILL SHOW LOCATION OF WATER METER, MANUAL SHUT-OFF VALVES, AUTOMATIC CONTROL VALVES, MOISTURE AND RAIN SENSORS, PRESSURE REGULATORS, CONTROLLER, AND BACKFLOW PREVENTION DEVICES.
7. CHECK VALVES WILL BE SPECIFIED WHERE LOW HEAD DRAINAGE MAY OCCUR.
8. THE IRRIGATION SYSTEM WILL BE EQUIPPED WITH A MANUAL SHUT-OFF VALVE AT THE POINT OF CONNECTION TO THE DOMESTIC WATER SUPPLY. A BACKFLOW PREVENTION DEVICE, AND AUTOMATIC IRRIGATION CONTROLLER THAT UTILIZES EITHER EVAPOTRANSPIRATION OR SOIL MOISTURE SENSOR DATA TO AUTOMATICALLY ADJUST WATERING SCHEDULES, AND A RAIN SENSOR THAT SUSPENDS IRRIGATION DURING PERIODS OF RAIN.
9. THE IRRIGATION SYSTEM WILL BE DESIGNED TO PREVENT WATER RUNOFF BEYOND THE IRRIGATED LANDSCAPE AREAS.
10. ALL PLANTING AREAS SHALL BE MULCHED WITH 1" DIAM. FIR BARK TO A MINIMUM DEPTH OF 3".





⊕ **WALKWAY PATH LIGHT**
LANCER 6 PATH LIGHT BY Unique Lighting Systems or equal
Model: L6-12-LE LED (7w)
Size: 6"W X 18" H
Color: Weathered Brass
Dark Sky Compliant: Yes

RIPLEY DESIGN GROUP
LANDSCAPE ARCHITECTURE
LAND PLANNING
1615 BONANZA STREET
SUITE 314
WALNUT CREEK, CA 94596
TEL: 925.938.7377
FAX: 925.9387436

PARCEL 1 SILVER OAKS

Preliminary Landscape Details

Silver Oaks Hillside
Parcel 1

Pleasanton, California

APRIL 22, 2016 L3

PUD-116
RECEIVED April 21, 2016

EXHIBIT B

Page Index

Visual Analysis
PUD 116 - Parcel 2
Pleasanton, CA
Frank Berlogar

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April 27, 2016
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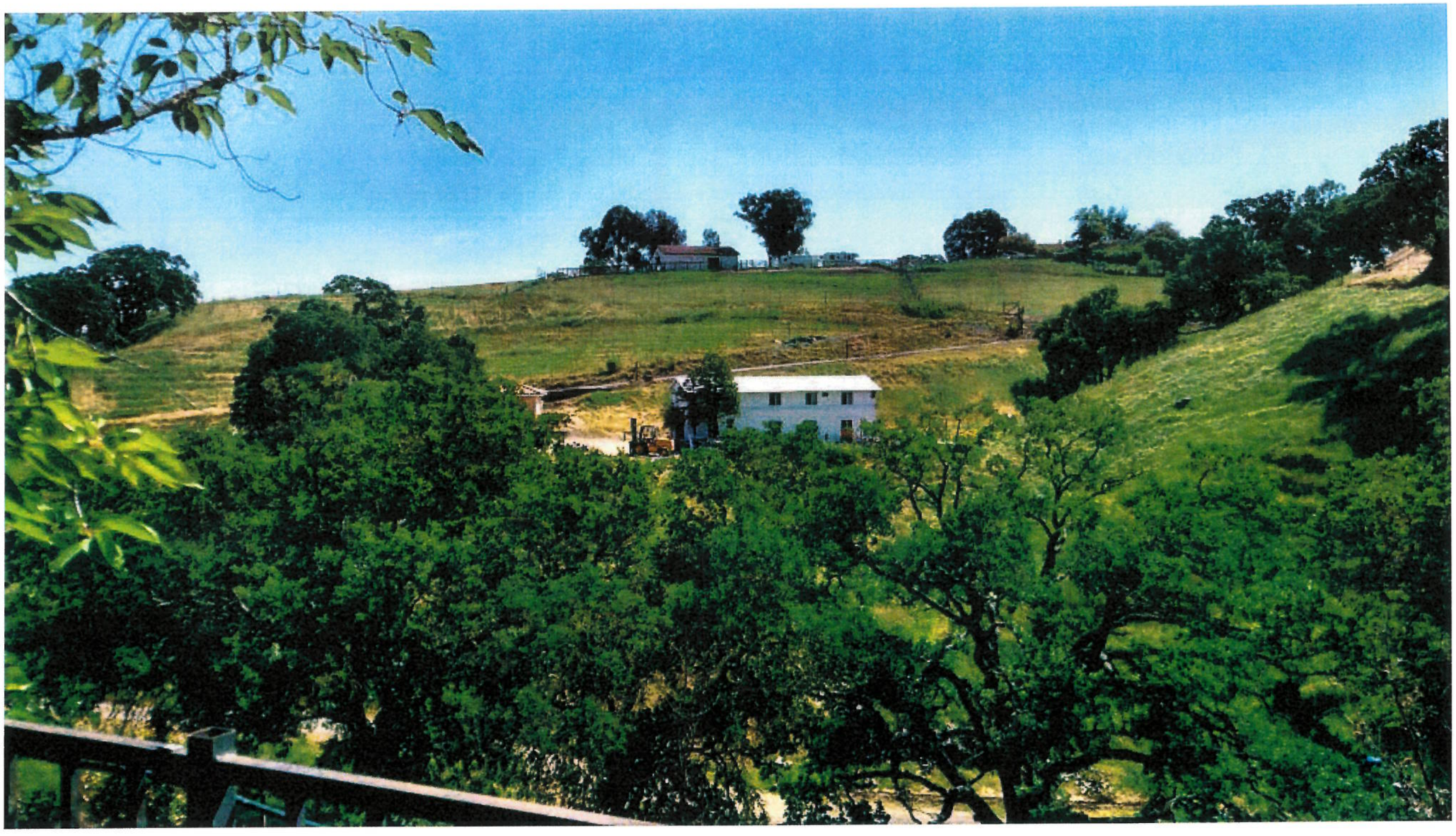
2016026 - PUD 116, Parcel 2 - Pleasanton, CA



View 1 - Existing

PUD 116 - Parcel 2

Pleasanton, CA

Frank Berlogar

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April 27, 2016

2

2016026

2016026 - PUD 116, Parcel 2 - Pleasanton, CA

View 1 - With Proposed Rendering

PUD 116 - Parcel 2

Pleasanton, CA

Frank Berlogar

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April 21, 2016

3

2016026

2016026 - PUD 116, Parcel 2 - Pleasanton, CA

View 1 - With Proposed Rendering

PUD 116 - Parcel 2

Pleasanton, CA

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2016026 - PUD 116, Parcel 2 - Pleasanton, CA

ASCA Registered Consulting Arborist #401/ ISA Tree Risk Assessment Qualified / ISA Certified Arborist #WC-3172 cell (415) 203-0990 / drtree@sbcglobal.net

Assessment of Trees
at
88 Silver Oaks
Pleasanton, California

Field Visit:
Walter Levison, Consulting Arborist (WLCA)
2/2/2016

Report by WLCA
Version: 2/2/2016

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1.0 Summary

1. Sixteen (16) heritage trees were tagged and assessed by Walter Levison, Consulting Arborist (WLCA), per requirement by the City of Pleasanton. These trees are tag numbers #1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, and 18.

   All of these trees are expected to be protected and retained, except for possibly tree #7 which is in very poor condition due to a structure defect (active fork crack) in the lower trunk area which may cause the tree to fail catastrophically.

   The owner notes that an area of fill soil will be built up in the east portion of the tree #9 canopy dripline (see tree map markup below in this report). The presence of this fill is not expected to be a problem in terms of negatively affecting tree health or structure. The area proposed to be filled is currently an asphalt surfaced roadway.

2. Two (2) non-heritage size trees #2 and #17 were also tagged and assessed by WLCA.

   Tree #2 is to be protected and retained.
   Tree #17 is a standing stump that can either be removed, or retained as a wildlife attractor for woodpecker nesting purposes, etc.

3. Risk tree management:

   Tree #7 can either be removed outright, or an attempt can be made to salvage the tree through the following suggested actions:

   - Perform branch endweight reduction pruning to shorten lengths of extended limbs, reducing load forces acting on the lower trunk fork crack.
   - Install arborist cabling per ANSI A300 guidelines.
   - Install one or more through-bolt fork braces at the lower trunk area, per ANSI A300 guidelines.

   Contact reputable tree care companies for quotes as needed.

4. Grading Daylight Limits: The grading limits appear to have been moved out of the canopy driplines of almost every tree being retained, except for possibly tree #15 which exhibits a low hanging canopy that extends southward to approximately 30 or 35 feet radius into the grading area, at only 6 feet or so above grade elevation (see images of trees below in this report). WLCA suggests moving the grading daylight limit slightly southward to approximately 5 feet south of where it is currently shown on the grading plan, for the grading area directly south of tree #15.

2.0 Assignment & Background

Walter Levison, Consulting Arborist (WLCA) was directed to tag and assess eighteen trees on the proposed 88 Silver Oaks project site, and prepare a formal written arborist report per City of Pleasanton planning division arborist report submittal standards, detailing existing conditions of trees tagged as #1 through #18.

These trees are located on a tree map markup with tree protection fence routes indicated as red dashed lines, included below in this report. The sheet used to prepare this tree map is the applicant's grading plan sheet dated 10/21/2015 by Alexander and Associates Inc. Surveyors of Pleasanton, California. The sheet scale and north arrow are both retained on the marked up scan located below in this report.

Per City of Pleasanton report submittal requirements, WLCA has determined appraised dollar values for all of the survey trees, using the 9th edition of *Guide for Plant Appraisal* and the "trunk formula method" of appraisal value determination. The tree appraisal worksheet is attached to the end of this report.

Tree data charts are attached to the end of the report. Data determined in the Excel tree data charts were collected by WLCA during the 2/2/2016 site field assessment. Trees were tagged at eye level using racetrack-shaped aluminum numbered tags. Diameters were determined by using a forester's D-tape which converts circumference to diameter. Tree heights and canopy spread diameters were estimated visually.

Written detailed recommendations for maintenance and protection of the survey trees are included below in this report.

Digital images of the trees are included below in this report as pre-project documentation of existing conditions.

3.0 Observations and Discussion

WLCA noted during the field assessment on 2/2/2016 that most of the survey trees in the south grove of trees #1 through #7 exhibit very significant trunk scars on the lower trunk areas between grade and as much as 10 feet above grade (see images). These scars are located only on the south sides of the trunks, and are assumed to have been caused by cattle foot pressure causing slumping of the erosive soil areas uphill from (south of) the trunks and down over the flaring root crowns, which then resulted in an anaerobic condition that caused root death and/or physical deterioration of the root systems on that uphill (south) side of each trunk. Another theory is that the lower trunk dieback was a result of physical rubbing by cattle bodies on the uphill sides of the trunks as the animals passed by the trees hundreds of times, walking along horizontal contours across the hillslope.

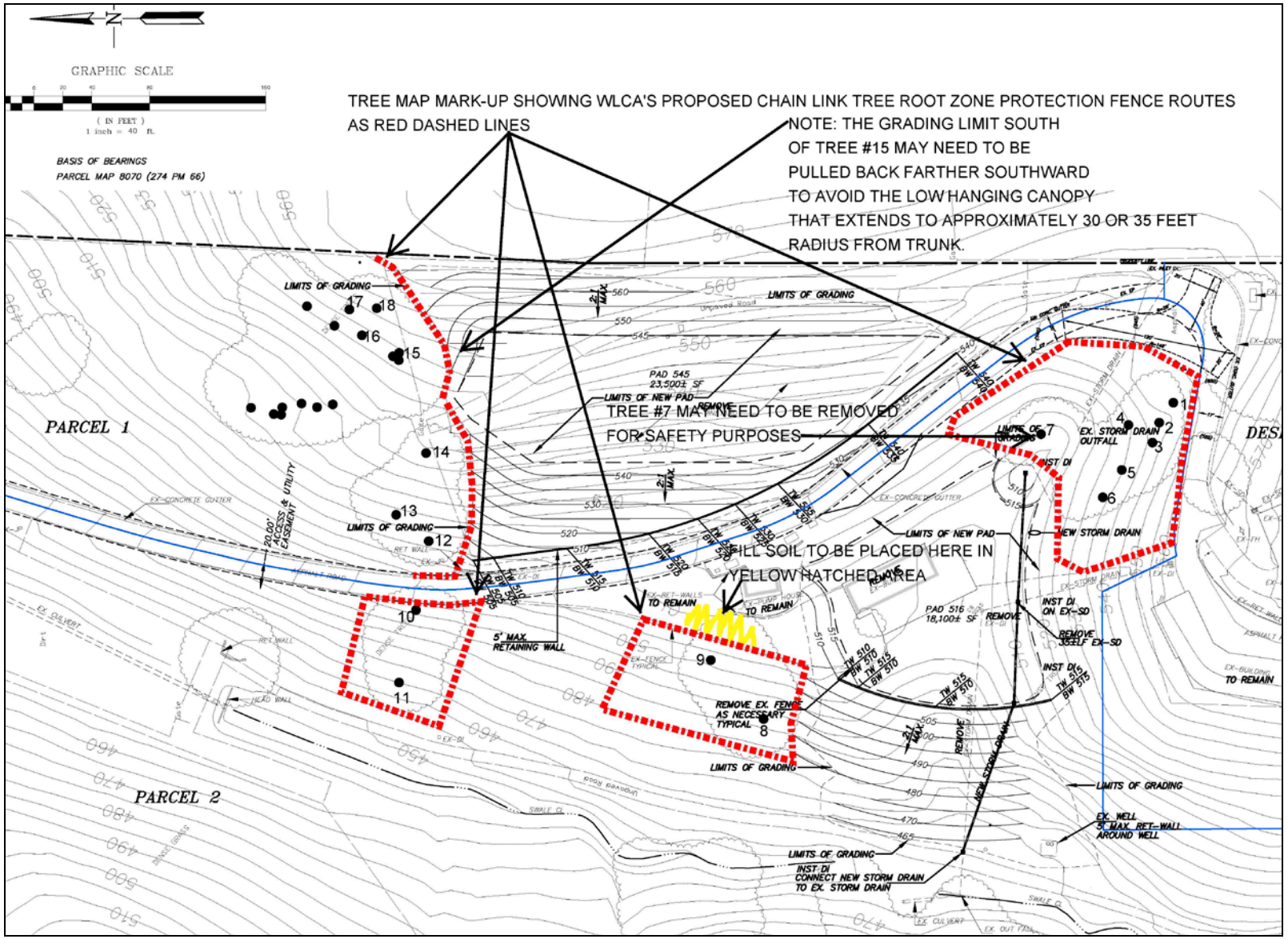
The main concern at this time is oak #7, which exhibits an active crack at the lower trunk fork (see images below). This tree should probably be removed outright for safety purposes. However, if for some reason it is required to be retained, then the best way to reduce risk of splitout would be to reduce endweight by performing branch reduction pruning to shorten branch lengths and thereby reduce load forces acting on the crack. Mitigation could also include installation of arborist cables and/or through-bolt braces at the crack. Note that there is no way to reduce risk of tree or tree part failure and impact with a target without removing the entire tree.

Fencing appears to be adequate for protection of the trees, assuming that fences are all chain link set on 2 inch diameter iron tube posts and reinforced with silt fence per the author's spec images below in the recommendations section of this report. The only area of grading that might be a problem is the south canopy of oak #15 where the grading daylight limit appears to encroach slightly into the south end of the canopy. This situation can be remedied by pulling the grading daylight limit southward about 5 additional feet such that there is a 35 foot distance between the trunk edge of oak #15 and the nearest grading. The oak #15 canopy hangs down relatively low at about 6 feet above grade elevation, which means that the canopy itself is threatened with breakage damage if grading encroaches within 35 feet of the trunk. Fencing needs to remain in place at the canopy dripline edges of the trees.

The only exception to the canopy dripline root protection zone fence will be situations such as at oak #9 where fill soil will be built up under the canopy dripline along a zone where an existing asphalt roadway is located (see tree map below).

On a final note, California native blue oaks and valley oaks are relatively very sensitive to construction pressures when compared to average tree species. Per the calculation chart in *Trees and Development* by Matheny and Clark, this means that the optimal distance for fencing protection and "no dig zones" for mature blue oaks and mature valley oaks in relatively good overall condition is approximately 1.25 feet X trunk diameter inches as a radial distance to maintain fencing from trunk edge. For example: a 30 inch diameter tree would require a radial fence distance of 30 X 1.25 = 37.5 feet radius from trunk edge for optimal long term preservation of the tree in its current condition rating. Most of the trees at this site would require a protection radius of 30 or more linear feet (radius) per this rule. Note that since construction at 88 Silver Oaks is only occurring on one side of the trees in most cases, this root zone protection rule can be significantly adjusted downward, as the 1.25 X (diameter inches) rule assumed that tree root systems would be destroyed in a circular area 360 degrees around the tree, which is not the case at our site. Therefore, root zone radial distances protected with chain link fencing per the WLCA tree map markup in this report are considered to be very good, and should be adequate to allow for tree survival over the long term if the recommendations in the recommendations section of the report are adhered to.

4.0 Tree Location & Protection Fence Map



5.0 Recommendations

1. PROJECT SITE PLAN ADJUSTEMENTS:

   It is suggested that the grading daylight limit be moved approximately five (5) feet southward in the area south of oak #15, in order to avoid encroaching within the canopy dripline of that tree which appears to extend out as far as 30 or 35 feet radius southward from trunk, and hangs down to approximately 6 feet above grade.

2. PROJECT ARBORIST:

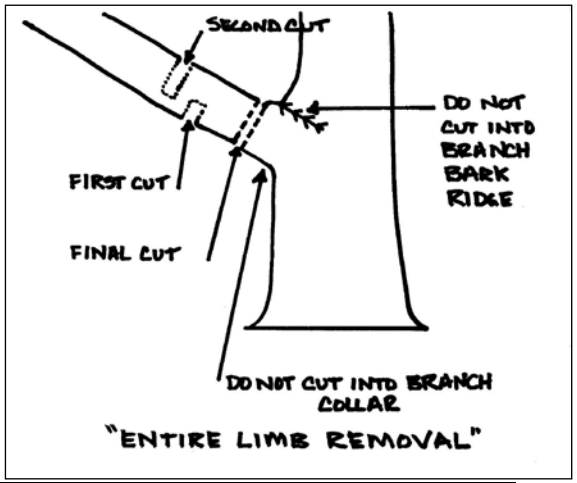
   It is suggested that the applicant retain a project arborist ("PA") with the ASCA registered consulting arborist credential, such as WLCA or another professional consultant. The following items may be required to be performed by the project arborist (if applicable):

   a. Verification of tree protection and maintenance: The project arborist shall verify in writing that all pre-construction conditions of approval for the project have been met (tree fencing, trunk buffer, temporary irrigation, etc. and are in place. Written verification may or may not need to be approved by the local governing planning department prior to demolition, grading, or building permit issuance.

   b. Pre-construction meeting: The construction superintendent and other pertinent personnel are required to meet with the project arborist at the site prior to beginning work to review root pruning protocols, tree protection and maintenance measures, and establish staging areas, supplemental irrigation around trees, etc.

   c. Monthly monitoring reports: If required by the local governing authority, the project arborist shall be responsible for visiting the site on at least a once monthly basis throughout the life of the project, during which the status of trees and tree protection measures and maintenance shall be inspected and commented on in a brief letter report sent to the City Arborist via email as per City requirement. During these monthly inspections, the project arborist may probe open soil root zones to test soil moisture percentage which will help in identifying whether trees are receiving too much or too little supplemental irrigation. Arborist will contact site personnel to adjust supplemental watering volumes accordingly.

   d. Special Activity Monitoring: Site personnel shall contact the project arborist (PA) in order to facilitate arborist monitoring of portions of the following activities (none required for this project).



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PRE-PROJECT ITEMS

3. PRUNING & MAINTENANCE PRE-PROJECT:

   All pruning (if necessary) shall be performed by an ISA Certified Arborist using ANSI A300 pruning standards to perform branch and limb removal, and/or branch and limb reduction pruning (i.e. endweight reduction pruning) on trees being retained to reduce endweight and provide clearance between canopies and proposed work airspace.

The image at above right is a WLCA-representation for reference, showing an ANSI A300-compliant pruning cut sequence used during entire limb removal.

Refer to the tree vendors list in this report.

Specific pruning recommendations: Branch endweight reduction pruning (i.e. "reduction pruning") per ANSI A300 standards, for the laterally-extended canopy areas of oaks #5, 6, 8, and #15.
Monitoring:

Call the project arborist 48 hours prior to performing crown raising pruning, branch endweight reduction pruning, and other types of pruning so that the PA can monitor portions of this work at site (if applicable).

Standards:

All pruning cuts shall be in compliance with *ANSI A300 Part 1 Tree Shrub and Other Woody Plant Maintenance – Standard Practices, Pruning*, and *Best Management Practices: Tree Pruning – Companion publication to the ANSI A300 Part Tree Shrub and Other Woody Plant Maintenance – Standard Practices, Pruning* (2002. ISA Publications, Champaign, IL. www.isa-arbor.com).

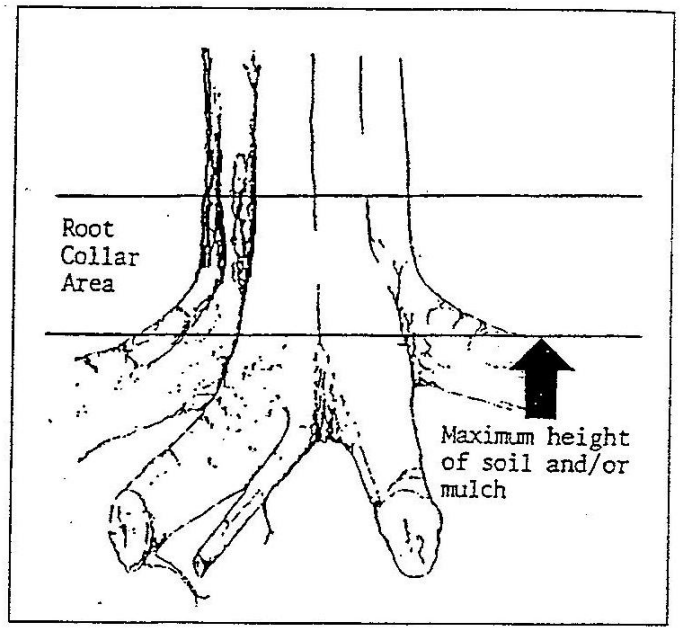
Optional Oak #7 Maintenance:

If oak #7 is to be retained, then consider performing some or all of the following:

- Steel support prop installation under horizontally extended limbs.
- Branch endweight reduction pruning to shorten extended branch and limb lengths to reduce load forces acting on the lower trunk fork with active crack.
- Install arborist cable(s) per ANSI A300 standards.
- Install one or more through-bolt brace rods through the fork crack, per ANSI A300 standards.

Root Crown Excavation (RCx):

It is suggested that the buried root crowns not visible for assessment during the author's field visit should be excavated per arborist industry standards:
Use small hand tools to gently shovel out the excess soil between trunk edges and two horizontal feet out from trunk edges, to unbury the flaring basal portion of the trunks of **oaks #1, 2, 3, 4, 9, 10, and #11**, until the flare is visible (see image at right from Bartlett Tree Research Labs, Charlotte, NC):



4. TREE REMOVAL:

Consider removing **oak #7** outright for safety purposes.

Consider removing dead standing remnant **stump #17**, or retain for wildlife attracting purposes (e.g. woodpecker nesting, etc.).

5. FENCING / TREE PROTECTION (TPZ):

Install chain link fencing, minimum 5-feet in height, mounted on 2-inch diameter iron tube posts minimum 7-feet long pounded 24-inches into the ground. Horizontal distance between tube posts shall be between 6 and 10 feet on center maximum spread. Optimal post distance is 6 feet on center.

The areas between chain link fencing and tree trunk edges shall be known as the tree protection zones or root protection zones (TPZ or RPZ). No soil disturbances are allowed within these protected zones unless authorized by the local governing authority.

No substances, materials, tools, supplies, liquids, wastes, etc. are to be dumped or stored within the TPZ, even temporarily.

The TPZ fencing must not be moved or altered without the authorization of the Project Arborist.

Fencing shall be completely installed before site plan-related activity commences on site.

Locations: See red dashed lines on tree map mark-up in this report.

Duration of Fencing: Fencing shall remain in place until final signoff inspection of the project.

All work in the TPZs shall be performed under direct supervision of the project arborist (i.e. if fencing needs to be temporarily removed).

For added protection of the root zone, use silt fencing dig into the ground per package directions and affixed to the outside of the fence lines, and then pin straw wattles down over the bottom edge of the silt fence using the wood dowels provided with the wattles (see image above on page 8).

*Tree protection fencing may be required to be inspected by the City Arborist and/or Project Arborist prior to issuance of building permits.

SILT FENCING & STRAW WATTLES TO PREVENT SILT MIGRATION INTO RPZ.

Augment the chain link fence with silt fencing material that is either dug into the ground per package directions along the uphill sides of all RPZ fencing perimeters, or secured down to the ground using a length of straw wattle pinned down with wooden dowels (see image above right), to prevent soil slumping downhill into the RPZ areas, which is a common occurrence on steep sloped sites such as 88 Silver Oaks. Zip-tie the silt fence material to the chain link to keep it upright in good order.

6. SIGNAGE:

Affix Tree Protection Fence signage to the chain link. These signs must be waterproofed, minimum 8X11 size, and affixed approximately once every 25-linear feet of TPZ fenced distance. The sign should state wordage approximating the following:

ROOT PROTECTION ZONE FENCE
ZONA DE PROTECCION PARA ARBOLES

-NO ENTRE SIN PERMISO. LLAME EL ARBOLISTA WALTER LEVISON-

DO NOT MOVE OR REMOVE WITHOUT AUTHORIZATION FROM
WALTER LEVISON, PROJECT ARBORIST

CALL OR EMAIL 48-HRS ADVANCE FOR PERMISSION

TELEFONO CELL 415-203-0990 / EMAIL DRTREE@SBCGLOBAL.NET

7. TRUNK BUFFER:

Trunk buffers act as secondary “redundant” tree protection for the above-ground lower trunk areas, in the case that chain link root protection zone fencing (RPZ) is temporarily removed for any reason. The trunk buffer is designed to prevent or mitigate most physical impacts to trunk bark by machinery travel in close proximity to trees.

For all survey trees, wrap the lower area of trunks between grade and approximately 8 feet above grade with a straw wattle, and affix using duct tape and/or orange plastic fencing (see image)*

*If the project will extend into winter 2016-2017, it is suggested that we first wrap the trees with **10 to 20 wraps of orange plastic snow fencing before wrapping the straw wattle around the trunk**, in order to create an air gap between the straw wattles and the tree trunk bark to avoid having wet straw pushed against the bark of the trees which could potentially cause disease.

DURING PROJECT ITEMS

8. ARBORIST MONITORING:

   (None needed for this project other than initial verification of erection of chain link root protection fences with silt fencing and straw wattle silt barrier protection along the uphill sides of the fences).

9. ROOT SEVERING & ROOT PRUNING:

   Back-digging by hand using small hand tools will be required prior to root severing, if roots measuring 1 inch diameter or larger are encountered during site plan-related work (see images at right).

   If roots 1.0 inches diameter or larger are encountered, call the PA immediately so that the PA can direct and monitor root pruning activity such that roots are severed at right angles to the direction of root growth using sharp hand tools such as professional grade loppers, hand shears, chain saw, A/C sawzall, or other tools.

   Root pruning shall occur only under his/her direct supervision and only after digital images of the roots are archived by the PA and a hand sketch of root locations, depths, sizes is complete (i.e. a "root map").

   Woody roots shall not be shattered or broken in any way as a result of site activities. Shattered or broken areas shall be hand-dug back into clear healthy root tissue and severed at right angles to root growth direction under the direct supervision of the project arborist as noted above in this item and as shown in the image on page 10 of this report. This is referred to as "back-digging".

   Backfill around roots immediately (same day) or cover each root with 5 to 10 layers of wet, muddy burlap material to avoid root desiccation (see sample photo at right showing roots completely moistened with full-cover wetted burlap, towels, and straw). Keep roots moist until backfilled. Do not compact soil around roots. Backfill using existing parent soil.

10. PRUNING DURING PROJECT:

    All "during project" pruning at this site shall be performed by or under direct supervision of an ISA Certified Arborist only, and shall conform to the latest version of "ANSI A300 standard for tree care operations, tree, shrub, and other woody plant maintenance – standard practices (pruning)". See approved vendor list below in this report.

    Call the PA prior to commencing pruning, so that the PA can meet with the chosen tree care vendor to determine specific branches and/or limbs to be removed, and specific pruning cut locations.

Do NOT thin, lion-tail, shear, top, pollard, or otherwise perform pruning that is non-compliant with the most current iterations of ANSI-A300 standards for tree care operations.

11. WATER SPRAY:

    If standard pressure water is available on site, spray off foliage of all trees being retained on a 1x/month basis using a high power garden hose to wash both the upper and lower surfaces of the foliage. This helps keep the gas portals (stomata) unclogged for better gas exchange which is crucial for normal tree function (see image at right showing a fire hose being used to wash fifty redwood specimens being retained at a demolition site).

12. TEMPORARY IRRIGATION:

    Temporary irrigation of oaks in close proximity to excavation cuts may be required on a once monthly basis. Irrigation water for oaks is best applied at the canopy dripline only, and can be applied against a straw wattle placed along a level contour line along the slope to force irrigation water to percolate downward into the tree root zone more efficiently and minimize runoff/sheet flow.

    The project arborist can determine if and when irrigation is warranted at this site.

    Acceptable methods of water delivery include water tank truck, tow-behind water tank with sprayer, soaker hose, garden hose, fire hose, and Netafim or equivalent emitter line.

6.0 Author's Qualifications

- Contract Town Arborist, Town of Los Gatos, California
  Community Development Department / Planning Division
  2015-onward

- ISA Qualified Tree Risk Assessor

- ASCA Registered Consulting Arborist #401

- Millbrae Community Preservation Commission (Tree Board)
  2001-2006

- ASCA Arboriculture Consulting Academy graduate, class of 2000

- ISA Certified Arborist #WC-3172

- B.A. Environmental Studies/Soil and Water Resources
  UC Santa Cruz, Santa Cruz, California 1990

- Peace Corps Soil and Water Conservation Extension Agent
  Chiangmai Province, Thailand 1991-1993

- Associate Consulting Arborist
  Barrie D. Coate and Associates
  4/99-8/99

- Contract City Arborist, City of Belmont, California
  Planning and Community Development Department
  5/99-present

- Continued education through attendance of arboriculture lectures and forums sponsored by The American Society of Consulting Arborists, The International Society of Arboriculture (Western Chapter), and various governmental and non-governmental entities.

  (My full curriculum vitae is available upon request)

7.0 Assumptions and Limiting Conditions

Any legal description provided to the consultant/appraiser is assumed to be correct. Any titles and ownership to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised and evaluated as through free and clean, under responsible ownership and competent management.

It is assumed that any property is not in violation of any applicable codes, ordinance, statutes, or other government regulations.

Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant/appraiser can neither guarantee nor be responsible for the accuracy of information provided by others.

The consultant/appraiser shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.

Unless required by law otherwise, the possession of this report or a copy thereof does not imply right of publication or use for any other purpose by any other than the person to whom it is addressed, without the prior expressed written or verbal consent of the consultant/appraiser.

Unless required by law otherwise, neither all nor any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales, or other media, without the prior expressed conclusions, identity of the consultant/appraiser, or any reference to any professional society or institute or to any initiated designation conferred upon the consultant/appraiser as stated in his qualifications.

This report and any values expressed herein represent the opinion of the consultant/appraiser, and the consultant's/appraiser's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.

Sketches, drawings, and photographs in this report, being intended for visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys unless expressed otherwise. The reproduction of any information generated by engineers, architects, or other consultants on any sketches, drawings, or photographs is for the express purpose of coordination and ease of reference only. Inclusion of said information on any drawings or other documents does not constitute a representation by Walter Levison to the sufficiency or accuracy of said information.

Unless expressed otherwise:
a. information contained in this report covers only those items that were examined and reflects the conditions of those items at the time of inspection; and
b. the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.

Loss or alteration of any part of this report invalidates the entire report.

Arborist Disclosure Statement:

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Tree are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborist cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate the trees.

8.0 Certification

I hereby certify that all the statements of fact in this report are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Signature of Consultant

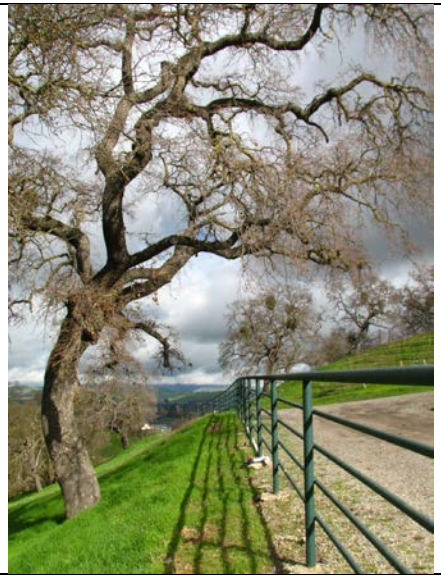
9.0 Digital Images

WLCA archived images of survey trees on 2/2/2016

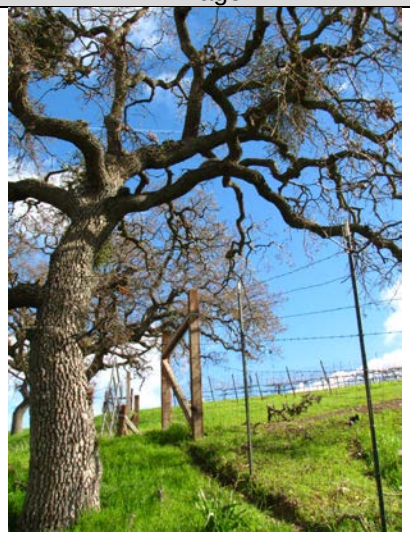
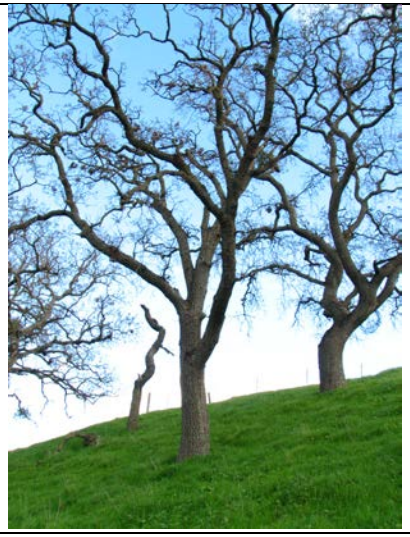
Tree #	Image	Tree #	Image
1		2	

ASCA Registered Consulting Arborist #401/ ISA Tree Risk Assessment Qualified / ISA Certified Arborist #WC-3172 cell (415) 203-0990 / drtree@sbcglobal.net

Tree #	Image	Tree #	Image
3		4	
5		6	

Tree #	Image	Tree #	Image
7		7	 Close-up view of the active crack at the fork at lower trunk of tree #7
8		9	

Tree #	Image	Tree #	Image
10		11	
12		13	

Tree #	Image	Tree #	Image
14		15	
16		17	

Tree #	Image	Tree #	Image
18			

10.0 Attached: Appraisal Worksheet

11.0 Attached: Excel Tree Data Charts

Walter Levison
CONSULTING ARBORIST

Appraisal Worksheet, 88 Silver Oaks, Pleasanton, CA

	Ln 1		Ln 2	Ln 3	Ln 4	..... Location....				Ln 5	Ln 6	Ln 7	Ln 8	Ln 9	Ln 10	Ln 11	Ln 11.1	Ln 11.2	Line 12	Line 13	Line 14	Line 15
Tree #	Name (Initials)	"Green Book" Page	Condition	Diameter	Location %	Site	Contribution	Placement	"Grn Bk" Group	"Grn Bk" Species	"Grn Bk" TA_r	"Green Book" Replacement Cost	"Green Book" Installation Cost	Installed Tree Cost	Unit Tree Cost	(A)TAa	<30" TAa	>30" ATAa	Ta_{incr}	Basic Tree Cost	Appraised Value	Rounded-off Appraised Values
1	QI	31	45%	22.5	57%	50%	30%	90%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	397.41	397.41		395.166	$ 30,789.07	$ 7,851.21	$7,900
2	QI	31	43%	multi stem	57%	50%	30%	90%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	246.00	246.00		243.76	$ 19,124.73	$ 4,660.06	$4,660
3	QI	31	67%	23	60%	50%	40%	90%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	415.27	415.27		413.025	$ 32,164.91	$ 12,930.29	$12,900
4	QI	31	50%	26.3	60%	50%	40%	90%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	542.98	542.98		540.737	$ 42,003.81	$ 12,601.14	$12,600
5	Qd	30	60%	24.2	60%	50%	40%	90%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	459.73	459.73		457.487	$ 35,590.29	$ 12,812.50	$12,800
6	QI	31	68%	21	60%	50%	40%	90%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	346.19	346.19		343.945	$ 26,842.98	$ 10,951.94	$11,000
7	QI	31	20%	adj trunk area	25%	50%	5%	20%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	835.00	835.00	835	832.76	$ 64,501.29	$ 3,225.06	$3,230
8	Qd	30	84%	adj trunk area	63%	50%	50%	90%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	900.00	900.00	900	897.76	$ 69,508.89	$ 36,978.73	$37,000
9	QI	31	78%	adj trunk area	60%	50%	40%	90%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	980.00	980.00	980.00	977.76	$ 75,672.09	$ 35,414.54	$35,400
10	QI	31	79%	adj trunk area	60%	50%	40%	90%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	1065.00	1065.00	1065.00	1062.76	$ 82,220.49	$ 38,972.51	$39,000
11	Qd	30	75%	24.6	60%	50%	40%	90%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	475.05	475.05		472.811	$ 36,770.79	$ 16,546.85	$16,500
12	QI	31	75%	adj trunk area	58%	50%	35%	90%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	925.00	925.00	925.00	922.76	$ 71,434.89	$ 31,252.76	$31,300
13	QI	31	55%	23	58%	50%	35%	90%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	415.27	415.27		413.025	$ 32,164.91	$ 10,319.57	$10,300
14	QI	31	75%	23.7	58%	50%	35%	90%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	440.93	440.93		438.687	$ 34,141.88	$ 14,937.07	$14,900
15	QI	31	70%	multi stem	63%	50%	50%	90%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	900.00	900.00		897.76	$ 69,508.89	$ 30,815.61	$30,800
16	QI	31	40%	21.8	58%	50%	35%	90%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	373.06	373.06		370.823	$ 28,913.69	$ 6,746.53	$6,700
17	QI	31	0%	14.4	47%	50%	0%	90%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	162.78	162.78		160.538	$ 12,713.28	$ -	$0
18	QI	31	70%	28.2	60%	50%	40%	90%	2	100%	2.24	$172.73	$172.73	$345.46	$77.04	624.26	624.26		622.023	$ 48,266.14	$ 20,271.78	$20,300

Walter Levison
CONSULTING ARBORIST

Appraisal Worksheet, 88 Silver Oaks, Pleasanton, CA

	Ln 1		Ln 2	Ln 3	Ln 4	..... Location....				Ln 5	Ln 6	Ln 7	Ln 8	Ln 9	Ln 10	Ln 11	Ln 11.1	Ln 11.2	Line 12	Line 13	Line 14	Line 15
Tree #	Name (Initials)	"Green Book" Page	Condition	Diameter	Location %	Site	Contribution	Placement	"Grn Bk" Group	"Grn Bk" Species	"Grn Bk" TA_r	"Green Book" Replacement Cost	"Green Book" Installation Cost	Installed Tree Cost	Unit Tree Cost	(A)TAa	<30" TAa	>30" ATAa	Ta_{incr}	Basic Tree Cost	Appraised Value	Rounded-off Appraised Values

Notes:

1. Trees with individual mainstems measuring greater than 30 inches diameter each were calculated using "adjusted trunk area" for reasonableness, which reduced the trunk cross sectional area of each tree. The adjusted cross sectional area numbers are bolded above for reference.

2. **Note that trees #2 and #17 are not of protected size, and are not considered to be heritage trees.**

3. Trees with multiple mainstems were treated by calculating the sum of the cross sectional areas of the stems, and plugging that number into line 11.1 or 11.2.

4. Tree #15 multiple mainstem cross sectional areas were significantly reduced for reasonableness.

total appraised value of all survey trees

$307,290

Appraisal Legend

Per the CTLA Guide for Plant Appraisal (9th ed, 2000), pp. 70-71.

CTLA = Council of Tree and Landscape Appraisers (a concensus group of seven green industry organizations: ISA, NAA, ASCA, ANLA, ALCA, ACF, and ASLA).

Note: the CTLA calls for the development of locally relevant species and nursery data by a Regional Plant Appraisal Committee.

Note: ISA is the publisher of the GPA, and local ISA chapters have developed the regional data -- in our area, the Western Chapter ISA (WC-ISA) (see "Green Book" below).

Ln # = Line number on worksheet published in The Guide..

Tree # = per Tree Chart & Tree Map in this report.

"Green Book" = colloquial name for the Species Classification & Group Assignment (used to have a green cover); refers to standard publication required for local reference, published by WC-ISA.

Condition = from Tree Chart in this report.

Diameter = from Tree Chart in this report.

Location = guided by the Guide, derived by averaging the ratings for Site, Contribution, and Placement.

Green Bk Group = Group assigned by the committee/authors of "Green Book".

Green Bk Species = Species classification assigned by the committee/authors of "Green Book".

Green Bk TAr = Replacement tree trunk area specified for the group assigned by the committee/authors of "Green Book".

Green Book Replacement Cost = Cost to acquire largest "commonly available" (48"-box) at local nursery, averaged out by "Green Book" committee.

Walter Levison
CONSULTING ARBORIST

Appraisal Worksheet, 88 Silver Oaks, Pleasanton, CA

	Ln 1		Ln 2	Ln 3	Ln 4	..... Location....				Ln 5	Ln 6	Ln 7	Ln 8	Ln 9	Ln 10	Ln 11	Ln 11.1	Ln 11.2	Line 12	Line 13	Line 14	Line 15
Tree #	Name (Initials)	"Green Book" Page	Condition	Diameter	Location %	Site	Contribution	Placement	"Grn Bk" Group	"Grn Bk" Species	"Grn Bk" TA_r	"Green Book" Replacement Cost	"Green Book" Installation Cost	Installed Tree Cost	Unit Tree Cost	(A)TAa	<30" TAa	>30" ATAa	Ta_{incr}	Basic Tree Cost	Appraised Value	Rounded-off Appraised Values
Green Book Installation Cost = Cost, averaged out by "Green Book" committee, to transport from nursery to site, prep hole & plant, stake, water, overhead, profit, etc..																						
Installed Tree Cost = Sum of two previous lines (replacement + installation).																						
Unit Tree Cost = Calculated for each "Group" by "Green Book" committee.																						
(A)TAa = (Adjusted) Trunk Area of the Appraised tree. Sum of the cross sectional areas of all trunks that contribute to the canopy in equal percentages.																						
TAa = Trunk Area of the Appraised tree. Calculated directly from the trunk diameter (hence trunk formula method) by the formula: d2 X 0.785.																						
ATAa = Adjusted Trunk Area of Appraised tree, if over 30" dbh, adjusted by CTLA formula to compensate for the "rate-of-tree-value increase of a large tree being less than its rate of increase in TA".																						
TAincr = Trunk Area Increase. Arithmetic difference between the Trunk Area of the Appraised tree and the Replacement tree (Line 11 minus Line 6).																						
Note: If calculation for "Trunk Area Increase" yields a negative number (due to small tree size), then next column, "Basic Tree Cost", uses cost to acquire & plant a smaller specimen from a nursery.																						
Basic Tree Cost = Sum of the Installed Tree Cost plus the quotient derived from multiplying the Unit Tree Cost times the Trunk Area Increase (Ln 12 X Ln 10 + Ln 9).																						
Appraised Value = Calculated by reducing the Basic Tree Cost by the Species, Condition, and Location factors (Ln 13 X Ln 5 X Ln 2 X Ln 4)																						
Rounded-off Appraised Value = Appraised Value rounded to nearest $10, if less than $5000. Else rounding to nearest $100, if equal to or more than $5000.																						
Note = for existing trees which are still smaller than the typical nursery's 24-inch-box specimen, the smaller nursery specimen's cost has been substituted into the "Basic Tree Cost" cell.																						

Tree Tag Number (WLCA)	City of Pleasanton Heritage Tree? (17.5 inches diameter at 4.5 feet above grade)	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	COMMON NAME & *Scientific Name*	Height and Canopy Spread (ft.)	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Good, Mod, Poor, Very Poor)	Lopsided Canopy	Trunk Lean	Severely Pruned or Topped	Soil Moisture Deficit from Extended California Drought	Requires Chain Link Fencing Protection	Requires Trunk Buffer Wrap	Requires Temporary Irrigation at Dripline During Construction	Requires Root Crown Excavation	Pruning Required (Specify Locations, Types)	Trunk Scar/Decay (Note Elevations)	Notes
1	Yes	22.5					22.5	Valley oak (*Quercus lobata*)	35/45	50/40	45% Poor	Poor to Mod	East			X	X	X	to be determined	X		0 to 5 ft	Root crown not visible, and not able to be assessed. Suggest root crown excavation. Trunk scar zero to 5 ft.
2	No	13.2	12.1				25.3	Valley oak (*Quercus lobata*)	30/25	45/40	43% Poor	Poor to Mod				X	X	X	to be determined	X		0 to 10 ft.	Root crown not visible, and not able to be assessed. Suggest root crown excavation. Trunk scar zero to 10 ft.
3	Yes	23.0					23.0	Valley oak (*Quercus lobata*)	40/45	80/60	67% Fair	Good	W	W		X	X	X	to be determined	X		0 to 8 ft.	Root crown not visible, and not able to be assessed. Suggest root crown excavation. Trunk scar zero to 8 ft.
4	Yes	26.3					26.3	Valley oak (*Quercus lobata*)	50/40	60/50	50% Fair	Poor to Mod	NE	NE		X	X	X	to be determined	X		0 to 5 ft	Root crown not visible, and not able to be assessed. Suggest root crown excavation. Trunk scar zero to 5 ft.
5	Yes	24.2					24.2	Blue oak (*Quercus douglasii*)	35/45	75/60	60% Fair	Mod				X	X	X	to be determined		Branch reduction pruning to reduce endweight	0 to 5 ft	Trunk scar zero to 5 ft. Tree exhibits an extended canopy form that may require endweight reduction pruning to reduce limb lengths.
6	Yes	21.0					21.0	Valley oak (*Quercus lobata*)	45/40	75/60	68% Fair	Mod				X	X	X	to be determined		Branch reduction pruning to reduce endweight		Mistletoe noted in 30 feet. Extended form may require endweight reduction pruning. South stem exhibits extensive decay.
7	Yes	33.1					33.1	Valley oak (*Quercus lobata*)	40/55	75/20	20% Very Poor	Good				X	X	X	to be determined			Historical trunk splitout at zero to 6 ft.	Tree exhibits twisted branch architecture. Tree will require through-bolt brace installation per ANSI A300 standards at the broken fork that exhibits an active crack (see images), or possibly entire tree removal. Another option may be to reduce endweight by reducing the extension of the south side of canopy to reduce load forces acting on the broken fork area. Through-bolt bracing and endweight reduction pruning combined may still not be enough to make this tree "safe". Author suggests considering removal of the tree.
8	Yes	34.5					34.5	Blue oak (*Quercus douglasii*)	55/75	90/75	84% Good	Good				X	X	X	to be determined		Branch length reduction pruning to reduce endweight		canopy extended in a north-south form.
9	Yes	36.2					36.2	Valley oak (*Quercus lobata*)	55/55	80/75	78% Good	Mod to Good	East	East		X	X	X	to be determined	X			Root crown buried. Suggest root crown excavation.
10	Yes	38.1					38.1	Valley oak (*Quercus lobata*)	50/65	80/75	79% Good	Mod to Good		West		X	X	X	to be determined	X			Root crown buried. Suggest root crown excavation.
11	Yes	24.6					24.6	Blue oak (*Quercus douglasii*)	50/60	80/65	75% Good	Mod to Good	West	West		X	X	X	to be determined	X			Root crown buried. Suggest root crown excavation.
12	Yes	34.9					34.9	Valley oak (*Quercus lobata*)	50/50	80/65	75% Good	Mod to Good		East		X	X	X	to be determined				Mistletoe noted in canopy.
13	Yes	23.0					23.0	Valley oak (*Quercus lobata*)	40/40	55/55	55% Fair	Poor to Mod	East	East		X	X	X	to be determined				Mistletoe noted in canopy.

Tree Tag Number (WLCA)	City of Pleasanton Heritage Tree? (17.5 inches diameter at 4.5 feet above grade)	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	COMMON NAME & *Scientific Name*	Height and Canopy Spread (ft.)	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	Live Twig Density (Good, Mod, Poor, Very Poor)	Lopsided Canopy	Trunk Lean	Severely Pruned or Topped	Soil Moisture Deficit from Extended California Drought	Requires Chain Link Fencing Protection	Requires Trunk Buffer Wrap	Requires Temporary Irrigation at Dripline During Construction	Requires Root Crown Excavation	Pruning Required (Specify Locations, Types)	Trunk Scar/Decay (Note Elevations)	Notes
14	Yes	23.7					23.7	Valley oak (*Quercus lobata*)	40/35	80/70	75% Good	Good		South-east		X	X	X	to be determined				Mistletoe in canopy. Canopy extends 25 feet southeast toward the proposed work area. Grading limit clears canopy, which is good.
15	Yes	30.2	21.4	20.2			71.8	Valley oak (*Quercus lobata*)	45/60	75/65	70% Good	Mod				X	X	X	to be determined		Branch length reduction pruning to reduce endweight		Crowded stems fork at 3 feet above grade, with possible high load issues. Canopy extends approx. 35 feet south toward the proposed grading area. Grading limit currently shown at 30 feet south of trunk may have to be slightly pulled back southward 4 or 5 feet to clear the low hanging canopy which hangs down to about 6 feet above grade. Endweight reduction pruning is advised to reduce load forces acting on the crowded mainstem fork.
16	Yes	21.8					21.8	Valley oak (*Quercus lobata*)	45/25	40/40	40% Poor	Poor	North-west			X	X	X	to be determined				
17	No	14.4					14.4	Valley oak (*Quercus lobata*)	16/0	0/0	Dead	Dead											(Dead standing mainstem "pole"). Remove tree, or leave as wildlife attractor for woodpeckers, etc.
18	Yes	28.2					28.2	Valley oak (*Quercus lobata*)	35/45	75/65	70% Good	Mod				X	X	X	to be determined				Canopy extends approx. 25 to 30 feet radius southward toward project area. Grading limits as proposed will clear the canopy dripline on the south side.

DESIGN LEVEL GEOTECHNICAL INVESTIGATION
PLANNED UNIT DEVELOPMENT 116
88 SILVER OAKS COURT
PLEASANTON, CALIFORNIA

FOR
MR. FRANK BERLOGAR
February 12, 2016

Job No. 3769.100

BERLOGAR STEVENS & ASSOCIATES

Via E-Mail and Mail

Febuary 12, 2016
Job No. 3769.100

BERLOGAR STEVENS & ASSOCIATES

Mr. Frank Berlogar
88 Silver Oaks Court
Pleasanton, California 94566

Subject: Design Level Geotechnical Investigation
Planned Unit Development 116
88 Silver Oaks Court
Pleasanton, California

Dear Mr. Berlogar:

INTRODUCTION

This report presents our design level geotechnical investigation for 2 proposed single-family residences at Berlogar Ranch in Pleasanton, California (see Plate 1, Vicinity Map). The proposed residences are located at the end of Silver Oaks Court as shown on Plate 2, Site Plan. We previously prepared a Geotechnical Investigation report dated March 30, 2012 for the two parcels located north of the site. We reviewed the Planned Unit Development Grading Plan prepared by Alexander & Associates Inc. dated October 9, 2015. Based on the plans, the development will consists of two pads of approximate sizes of 24,000 square feet (sf) and 17,500 sf. It is our understanding that the site will require import fill, which will come from the stockpile on the adjacent Tentative Map 10248 site.

PURPOSE AND SCOPE OF SERVICES

The purpose of this geotechnical investigation was to investigate the site soil, bedrock and groundwater conditions and to evaluate the feasibility of the planned development from a geotechnical engineering standpoint. Our scope of services included:

1. Review of published maps and literature pertinent to the site and vicinity.
2. Review of existing geotechnical and geologic reports pertaining to the site.
3. Drill and logging four exploratory borings.
4. Geotechnical engineering and geologic analysis.
5. Providing grading recommendations
6. Preparing of this report.

FIELD EXPLORATION AND LABORATORY TESTING

Our field exploration was performed on January 22, 2016, and consisted of drilling 4 borings between 10 feet and 15½ feet deep using a truck-mounted CME-55 drill rig with hollow-stem augers. The approximate boring locations are shown Plate 2, Site Plan. Materials encountered in the borings were sampled, visually classified in the field and logs were recorded. Sampling was

conducted in the borings using a 2.5-inch I.D. Split Barrel sampler driven by a 140-pound hammer with a 30-inch fall. The Boring Logs and the Key to the Boring Logs are presented in Appendices A.

Two soil samples of the proposed import material were collected from the neighboring property and were transported to our laboratory for testing. Laboratory testing included Direct Shear, Atterberg Limits, and hydrometer tests were performed. The results of our laboratory tests are contained in Appendix B.

SITE CONDITIONS

SURFACE CONDITIONS

The proposed development is separated by Rock Spring Road. The road runs through the center of the site in the north-south direction. The development plans call for the road to remain. East of the road there is an existing vineyard located on an approximately 3 Horizontal to 1 Vertical (3H:1V) slope. There is some existing fill located in the vineyard area that was placed during vineyard development. The area south of Rock Spring Road was previously graded to an approximate elevation of 510 feet MSL to accommodate barn construction. It is our understanding that the pump house and its respective retaining walls will remain, while the existing barn will be demolished.

SUBSURFACE CONDITIONS

The two borings located on the eastern pad encountered fill. B-1 encountered 6 feet of fill and B-2 encountered 2 feet of fill. Fill material consisted of moist, stiff sandy clay and silty clay. Below the fill in boring B-1 we encountered very dense gravel to a depth of 12 feet. The sandy gravel was underlain by very dense conglomerate. B-2 encountered very stiff clay between 4 and 6 feet. The silty clay was underlain by silty claystone. Borings B-3 and B-4 were located on the western pad. B-3 encountered approximately 1 foot of road base. The road base was underlain by silty claystone. B-4 encountered stiff clays to an approximate depth of 5 feet. The clays were underlain by a two-foot thick layer of medium dense silty sand. Very dense conglomerate was encountered at a depth of 7 feet. The boring logs and a key to the boring logs are presented in Appendix A.

Atterberg limits and direct shear tests were performed on two samples located from the proposed import fill. Atterberg Limits tests resulted in Plastic Indices (PI) of 15 and 11, with Liquid limits of 33 and 25. The Atterberg Limits test results are indicative of soils having a low to moderate expansion potential. Direct shear tests resulted in cohesions of 500 psf and 330 psf, with peak friction angles of 30 degrees and 34 degrees. The direct shear samples were remolded to 92% relative compaction after materials larger than 3/8" were sieved out. Due to the quantity of larger materials removed from the direct shear samples, it is our opinion that the peak friction angles are likely to be 10° greater than indicated by the laboratory test. The laboratory results are contained in Appendix B.

Groundwater was not encountered in the borings. It is our opinion that groundwater will have a minimal effect of the proposed development.

SLOPE STABILITY

There are two proposed fill slopes within the project, one west of Slope stability analyses were performed using Geo-Slope International Ltd. Slope/W 2007 program using the Morgenstern-Price method. The following are the shear strength parameters utilized in the slope stability analyses.

Material	Friction Angle, degrees	Cohesion, psf
Bedrock	35	500
Engineered Fill	30	300

The slope stability analyses were performed on the approximately 45 foot 2H to 1V fill slope with a 5 foot high retaining wall for both global and shallow failures. Groundwater should not be present in the fill slopes. Groundwater is anticipated at depths exceeding 15 feet and should water permeate into the engineered fill it will be controlled by the keyways and bench subdrains. The factors of safety obtained for global failure was 2.3 and shallow failure was 1.9.

We also performed the slope stability analyses using a pseudostatic factor. The pseudostatic factor to be applied was determined in accordance with Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California, California Geologic Survey, 2008. A pseudostatic factor, Keq, of 0.30 was determined utilizing the chart for a 5 cm threshold displacement, a magnitude of 6.8, a distance of 6.4 km from the earthquake, and a 0.60g maximum horizontal acceleration (PGA from the 2013 CBC). The factors of safety obtained for global failure was 1.3 and shallow Failure was 1.1.

The following table presents a summary of our slope stability analyses:

		Factor of Safety
Static Conditions	Global Failure	2.3
	Shallow Failure	1.9
Pseudostatic Condition	Global Failure	1.3
	Shallow Failure	1.1

LIQUEFACTION

The site is underlain by the Livermore Gravel Formation bedrock. The potential for liquefaction is judged very low for this site.

CONCLUSIONS AND RECOMMENDATIONS

GENERAL

From a geotechnical engineering standpoint, the proposed home sites appear to be feasible at the site, provided the conclusions and recommendations contained in this report are followed as project planning advances.

SITE PREPARATION AND GRADING

Our general site preparation and grading recommendations for proposed redevelopment are as follows:

1. The site should be cleared of existing vegetation.
2. The areas to be grade should be cleared of abandoned utilities and deleterious materials.
3. Existing fill not removed by designed cuts should be completely removed and replaced with engineered fill.
4. If zones of soft or saturated soils are encountered during grading, the area should be over excavated to expose firm soils. This should be determined in the field by the soils engineer or a designated representative of the soils engineer.
5. Keyways should be constructed at the toes of fill slopes. Details for the keyways are presented on Plate 3.

Parcel 1 Fill Slope Keyway	Should be at least 4 feet deep and a minimum of 15 feet wide
Parcel 2 Fill Slope Keyway	Should be at least 6 feet deep and a minimum of 15 feet wide

6. Engineered fill should be moisture conditioned and compacted within the following specifications.

Within 5 feet of Designed Pad Grade	Moisture conditioned to 3 percent above optimum moisture condition and compacted to at least 90 percent of the maximum relative density
Deeper than 5 feet of Designed Pad Grade	Moisture conditioned to 2 percent above optimum moisture condition and compacted to at least 94 percent of the maximum relative density

7. Fill should be properly moisture conditioned and placed in thin lifts (normally 6 to 8 inches depending on the compaction equipment) and compacted as discussed above.
8. Where bedrock is encountered within 3 feet of the designed pad grade in building areas, the bedrock should be overexcavated and replaced with engineered fill.
9. Import fill should contain no deleterious matter and should have a PI less than 15. Fill materials should be subject to the evaluation of the soil engineer prior to their use. Import fill should also be cleared of toxic or hazardous materials prior to importing to the site.
10. Relative compaction refers to the in-place dry density of soil expressed as a percentage of the maximum dry density determined by ASTM D1557 compaction test procedure. Optimum moisture is the water content (percentage by dry weight) corresponding to the maximum dry density.
11. Observation and soil density tests should be performed during grading to assist the contractor in obtaining the required degree of compaction and proper moisture content. Where the compaction is outside the range required, additional effort and adjustments to the moisture content should be made until the specified compaction and moisture conditioning is achieved.
12. The soils engineer should be notified at least 48 hours prior to any grading operations. The procedure and methods of grading may then be discussed between the contractor and the soils engineer.

SITE GRADING

CALIFORNIA BUILDING CODE (CBC) SEISMIC DESIGN PARAMETERS

The subject is at approximately 37.6591 degrees North latitude and 121.8366 degrees West longitude. The peak ground acceleration (PGA) according to the 2013 CBC is 0.60g. We are providing the following 2013 California Building Code seismic design criteria using the USGS Seismic Design Maps program, Version 3.1.0 dated July 11, 2013.

Mapped Spectral Acceleration for Short Periods, S_s	1.568 g
Mapped Spectral Acceleration for 1-Second Period, S_1	0.600 g
Site Class	D
Site Coefficient F_a (for Site Class D)	1.0
Site Coefficient F_v (for Site Class D)	1.5
Acceleration Parameter S_{MS} (adjusted for Site Class D)	1.568 g
Acceleration Parameter, S_{M1} (adjusted for Site Class D)	0.900 g
Acceleration Parameter, S_{DS}(adjusted for Site Class D)	1.045 g
Acceleration Parameter, S_{D1} (adjusted for Site Class D)	0.600 g

FOUNDATIONS

POST-TENSIONED SLAB FOUNDATIONS

It is our opinion that post-tensioned slab-on-grade foundations can be used to support the proposed residences. We recommend the following preliminary design criteria be incorporated in the design of post-tension slab foundations, utilizing the third edition of the PTI design manual.

Allowable Bearing Capacity (may be increased by 1/3 for seismic and wind loads at the discretion of the structural engineer)	2,000 psf
Passive Equivalent Fluid Pressure (neglect the upper foot if the ground surface is not confined by slabs or pavement)	300 pcf
Base Friction Coefficient	0.27
Edge Moisture Variation Distance Center Lift Edge Lift	 9.0 feet 4.5 feet
Differential Swell Center Lift Edge Lift	 0.95 inches 1.55 inches

The upper foot of the subgrade soils should be pre-soaked to at least 5 percent above optimum moisture content prior to constructing the foundations. The pre-soaked pad should not be allowed to dry out to less than the recommended moisture content before concrete is placed. Subgrade moisture should be observed by a BSA representative prior to concrete placement.

RETAINING WALL FOUNDATIONS

For retaining walls supported on continuous strip footings, we recommend that the footings be designed using an allowable bearing pressure of 3,000 psf in native firm materials or fill, provided the footing is embedded a minimum of 8 inches below the lowest adjacent grade for flat terrain and 4 feet embedment for 2H:1V sloping grades. The allowable bearing pressure may be increased by one-third for temporary seismic and wind loads at the discretion of the structural engineer.

Passive pressures acting on foundations and keyways may be assumed as 300 pcf provided that the face of the footing or keyway is located at least 10 feet from the face of a slope as measured at the base of the foundation for the lower wall, and that the upper three feet of embedment is disregarded. The friction factor for sliding resistance may be assumed as 0.30.

RETAINING WALL DESIGN PARAMETERS

It is our understanding that site retaining walls will have a maximum height of 5 feet. The following design parameters should be used for the retaining wall design:

Active Equivalent Fluid Pressure (Level backfill and drained conditions)	40 pcf
Active Equivalent Fluid Pressure (2H:1V backfill and drained conditions)	55 pcf
Surcharge Load	Determined by Structural Engineer

DRY STACK MASONRY WALLS

Dry Stack Masonry (DSM) walls can be supported on footing foundations founded on engineered fill or firm native soils. We recommend that the following geotechnical criteria be incorporated in the retaining wall design:

Allowable bearing capacity (may be increased by 1/3 for seismic and/or wind load)	3,000 psf
Passive equivalent fluid pressure (neglect the upper 1 foot if not confined by pavement or slab and upper 3 feet for sloping ground condition)	300 pcf
Friction coefficient	0.30

The bases of the concrete masonry blocks for DSM walls should be embedded at least 8 inches for level adjacent grade and 4 feet for 2H:1V sloping adjacent grade.

CONCRETE FLATWORK

Exterior concrete flatwork, such as sidewalks and patios, can be placed directly on the prepared subgrade. The subgrade should be presoaked to at least 5 percent over optimum moisture content prior to placing concrete. The moisture content of the subgrade soils should be checked immediately prior to the placement of baserock or concrete (if the flatwork is supported directly on the subgrade). Reinforcing steel should be considered to reduce potential tripping hazards caused by expansive soil swell and tree roots. Deep, scored joints spaced no more than 6 feet apart should be considered to control shrinkage cracking.

UTILITY TRENCH EXCAVATION AND BACKFILL

Excavations should conform to applicable State and Federal safety requirements. Where trench excavations are more than 5 feet deep, they should be sloped no steeper than 1H:1V and/or shored. Flatter trench slopes may be required if seepage is encountered during construction or if exposed soil conditions differ from those encountered in the borings. If the trench side slopes cannot be excavated due to site constraints, shoring should be provided to ensure trench stability and safety.

Materials quality, placement procedures and compaction operations for utility bedding and shading materials should meet local agency and/or other applicable agency requirements. Utility trench backfill above the shading materials may consist of native soils that have been processed to remove rubble, rock fragments over 4 inches in largest dimension, rubbish, vegetation and other undesirable substances. Backfill materials should be placed in level lifts about 8 to 12 inches in loose thickness, moisture conditioned to at least 3 percent over the optimum moisture content and mechanically compacted to at least percent relative compaction. No jetting is permissible on this project.

Relative compaction refers to the in-place dry density of the soil expressed as a percentage of the maximum dry density determined by ASTM D1557 compaction test procedure. Optimum moisture is the water content (percentage by dry weight) corresponding to the maximum dry density.

ADDITIONAL SOIL ENGINEERING SERVICES

Prior to construction, our firm should be provided the opportunity to review the plans and specifications to determine if the recommendations of this report have been implemented in those documents. We would appreciate the opportunity to meet with the contractors prior to the start of, underground utility installation and pavement construction to discuss the procedures and methods of construction. This can facilitate the performance of the construction operation and minimize possible misunderstanding and construction delays.

To a degree, the performance of the proposed project is dependent on the procedures and quality of the construction. Therefore, we should provide observations of the contractor's procedures and the exposed soil conditions, and field and laboratory testing during site preparation and grading, placement and compaction of fill, underground utility installation, and foundation and pavement construction. These observations will allow us to check the contractor's work for conformance with the intent of our recommendations and to observe any unanticipated soil conditions that could require modification of our recommendations.

LIMITATIONS

The conclusions and recommendations of this geotechnical investigation report are based on the information provided to us regarding the proposed development, subsurface conditions encountered at the test pit locations, laboratory tests and professional judgment. The study has

been conducted in accordance with current professional geotechnical engineering standards; no other warranty is expressed or implied.

The locations of the test pits were estimated by pacing from existing features and should be considered approximate only. The test pits show subsurface conditions encountered at the locations and dates indicated; it is not warranted that they are representative of such conditions at other locations or times.

In the event that changes in nature, design, and location of the proposed development are planned, or if the subsurface conditions differ from those described herein during construction, then the conclusions and recommendations presented in this report should be considered invalid unless the changes are reviewed, and the conclusions and recommendations are modified or approved in writing.

Respectfully submitted,

BERLOGAR STEVENS & ASSOCIATES

Nicholas Cardanini
Staff Engineer

William R. Stevens
Principal Engineer
GE 2339

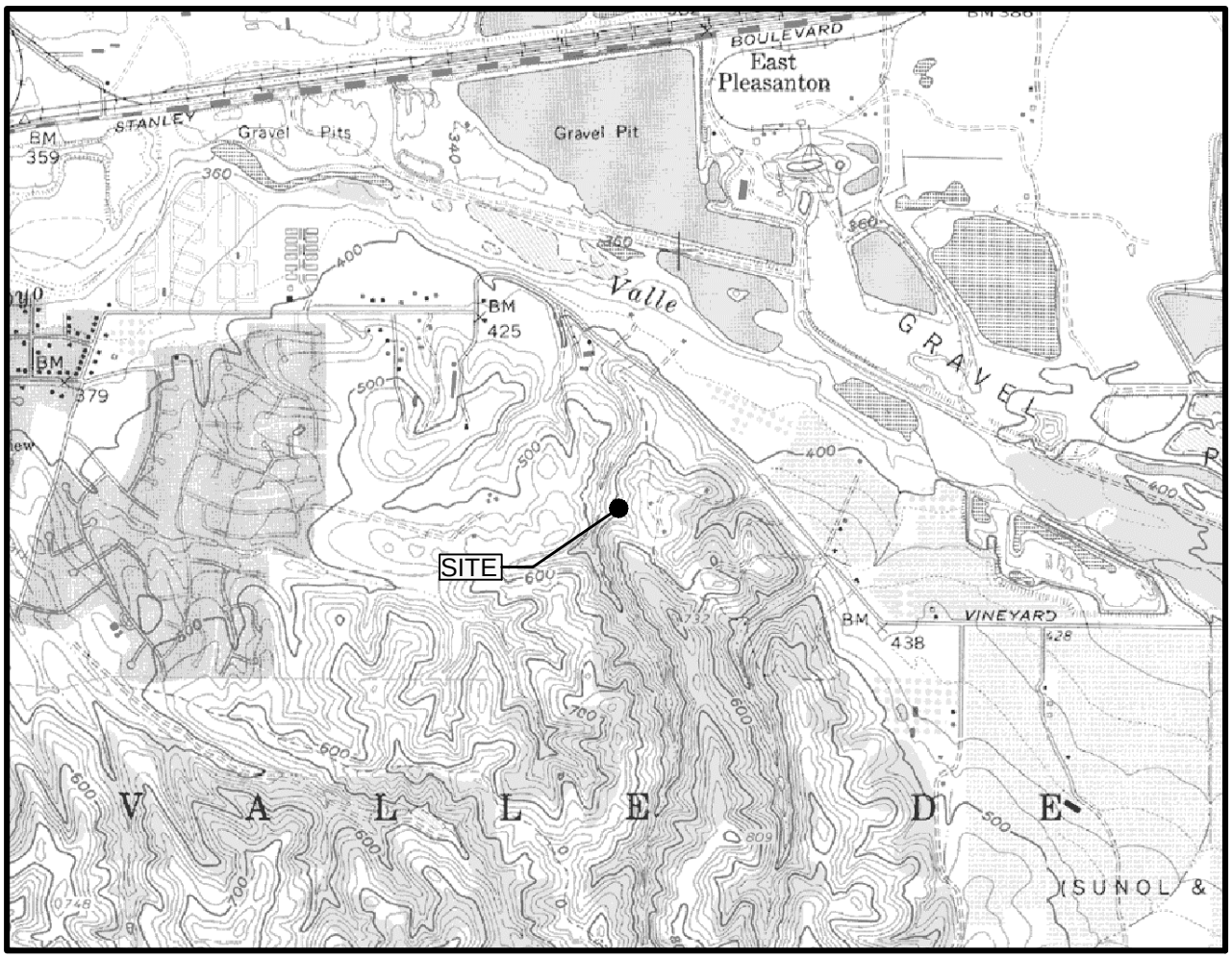
NC/FB:jmo

Attachment: Plate 1 – Vicinity Map
Plate 2 – Site Plan
Plate 3 – Keyway Details
Appendix A – Boring Logs and Key to the Boring Logs
Appendix B – Laboratory Test Results
Appendix C – Slope Stability Analyses

Copies: Addressee (3)

U:\@@@Public\1-Pleasanton\3769 - PUD 116\100\Design Level GI - PUD 116 - 28229.doc

JOB NUMBER: 3769.100 DATE: 1-25-16 BY: CC



VICINITY MAP

PUD-116

88 SILVER OAKS COURT

PLEASANTON, CALIFORNIA

FOR

FRANK BERLOGAR

BASE: PORTION OF U.S.G.S. 7.5 MINUTE TOPOGRAPHIC QUADRANGLES, LIVERMORE, CALIFORNIA, PHOTOREVISED 1980, AT A SCALE OF 1:24,000.

PLATE 1

DRAWN BY: CC

DATE: 1-27-16

JOB NUMBER: 3769.100

N

0 60

1"=60'

B-1 B-2 B-3 B-4

PAD 545
23,500± SF

LIMITS OF NEW PAD

REMOVE
EX-VINEYARD

PAD 516
18,100± SF

REMOVE
EX-BUILDING

REMOVE
35±LF EX-SD

REMOVE EX. FENCE
AS NECESSARY
TYPICAL

DESIGNATED REMAINDER

LIMITS OF GRADING

EX. STORM DRAIN
OUTFALL

NEW STORM DRAIN

INST DI

INST DI
ON EX-SD

INST DI
CONNECT NEW STORM DRAIN
TO EX. STORM DRAIN

EX-CONCRETE GUTTER

EX-RET-WALLS
TO REMAIN

EX-PUMP HOUSE
TO REMAIN

EX-BUILDING
TO REMAIN

EX-DRIVEWAY

EX-RET WALL

ASPHALT ROAD

5' MAX.
RETAINING WALL

EX-FENCE
TYPICAL

EX. WELL
5' MAX. RET-WALL
AROUND WELL

EX. CULVERT

EX. OUT FALL

SWALE CL

DENSE TREES

DENSE GRASS

UNPAVED ROAD

EX. ELEC.

EX-DI

EX-FH

EX-SD

EXPLANATION

B-4 BORING LOCATION

AREAS OF EXISTING FILL TO BE REMOVED

SITE PLAN

PUD-116

88 SILVER OAKS COURT
PLEASANTON, CALIFORNIA
FOR
FRANK BERLOGAR

Berlogar Stevens & Associates
SOIL ENGINEERS * ENGINEERING GEOLOGISTS

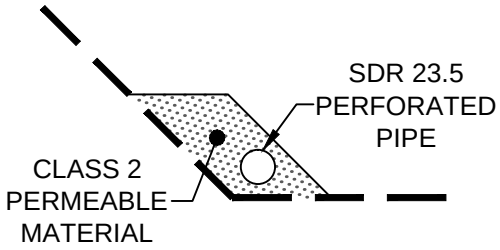
BASE: SHEET 4 OF 4 TITLED, "PLANNED UNIT DEVELOPMENT GRADING PLAN", PREPARED BY: ALEXANDER & ASSOCIATES INC., DATED: 10-9-15

PLATE 2

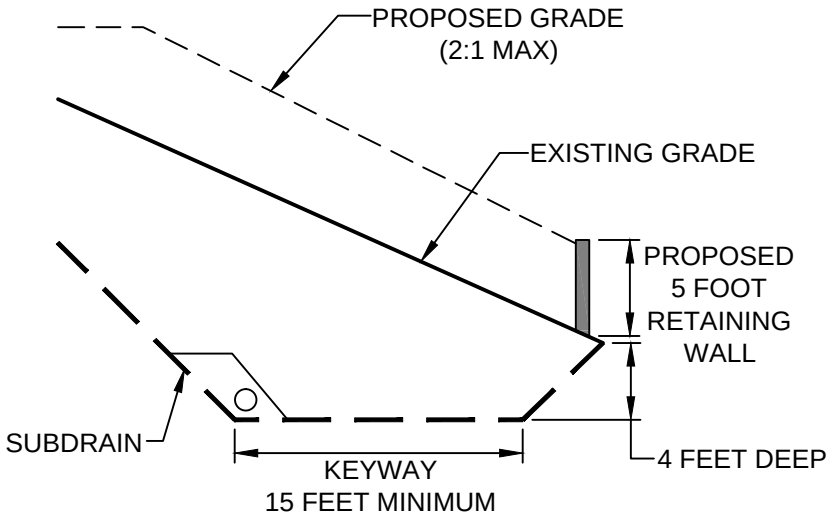
DRAWN BY: CC

DATE: 2-1-16

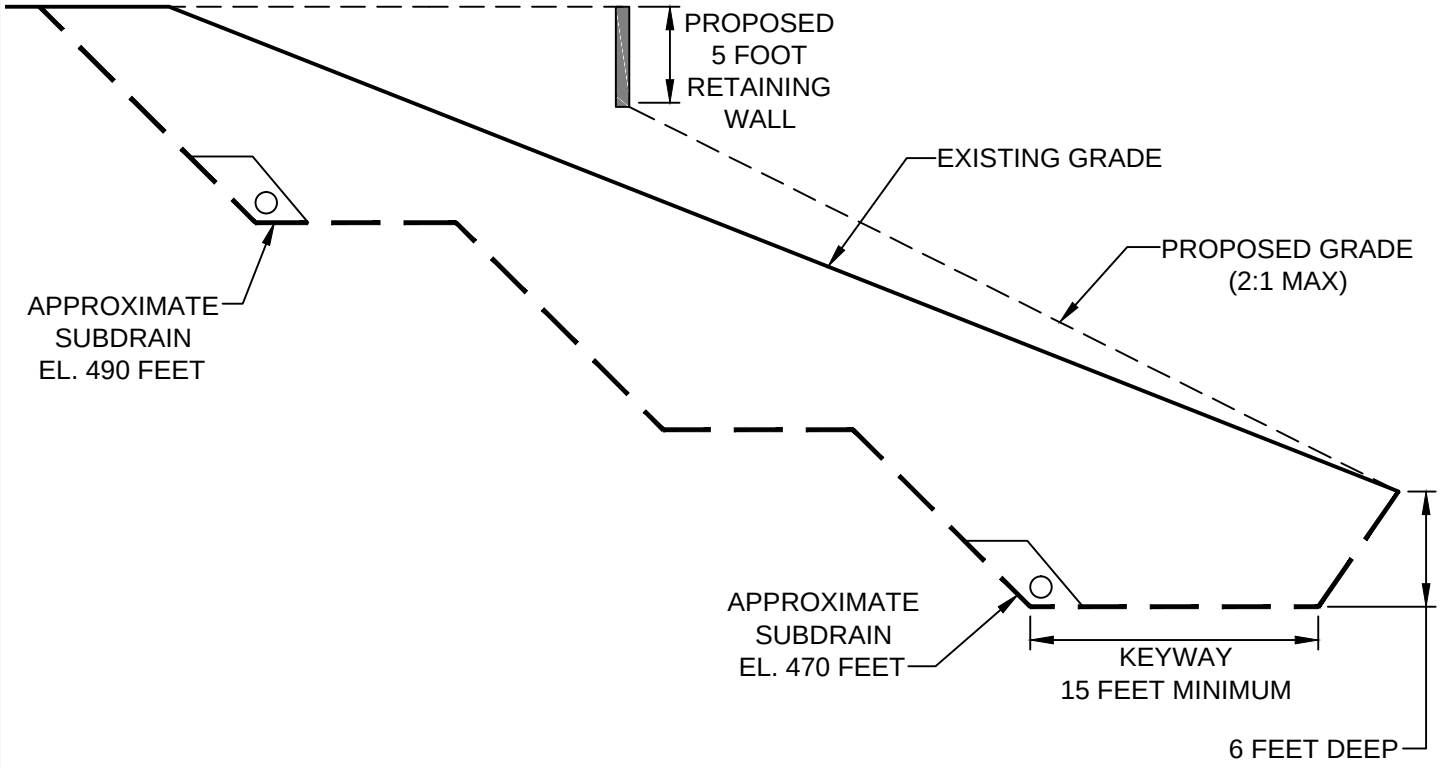
JOB NUMBER: 3769.100



SUBDRAIN DETAIL



PARCEL 1 KEYWAY



PARCEL 2 KEYWAY

KEYWAY DETAILS

APPENDIX A

Boring Logs and Key to the Boring Logs

BORING LOG B-1

Job No.: 3769.100	**Client:** Frank Berlogar	**Elevation**: 555 feet
Job Name: PUD-116	**Drill Method**: Hollow-stem Auger	**Date Drilled**: 1-22-16

SAMPLER TYPE:	DRIVE WEIGHT (LBS.)	HEIGHT OF FALL (IN.)
2.5-inch I.D. Split Barrel	140	30

Moisture Content (%)	Dry Unit Weight (PCF)	Penetration Resistance (blows/foot)	Depth (feet)	Sample Symbol	USCS Classification	DESCRIPTION AND REMARKS
			0			
-	-	15	-		CL	SILTY CLAY, gray-brown, moist to wet, stiff, some fine-to medium-grained sand, trace fine-to coarse gravel (fill)
-	-	19	5		CL/SC	SANDY CLAY/CLAYEY SAND, light to medium brown, moist, medium dense, fine-to coarse-grained sand, some fine gravel (fill)
-	-	50/4”	10		GP	SANDY GRAVEL, orange-brown, dry to moist, very dense, fine-to coarse-grained sand, fine-to coarse gravel, trace clay and silt, occasional cobbles
-	-	95	15		SP/GP	GRAVELLY SAND/SANDY GRAVEL, orange-brown, dry to moist, very dense, fine-to coarse-grained sand, fine-to coarse gravel, trace clay and silt
			20			Boring terminated at 15 feet No groundwater encountered

BORING LOG B-2

Job No.: 3769.100	**Client:** Frank Berlogar	**Elevation**: 557 feet
Job Name: PUD-116	**Drill Method**: Hollow-stem Auger	**Date Drilled**: 1-22-16

SAMPLER TYPE:	DRIVE WEIGHT (LBS.)	HEIGHT OF FALL (IN.)
2.5-inch I.D. Split Barrel	140	30

Moisture Content (%)	Dry Unit Weight (PCF)	Penetration Resistance (blows/foot)	Depth (feet)	Sample Symbol	USCS Classification	DESCRIPTION AND REMARKS
			0			
					CL	SANDY CLAY, gray-brown, moist to wet, stiff, fine-to coarse-grained sand, trace fine-to coarse gravel (fill)
-	-	18				
					CL	SILTY CLAY, light to medium gray-brown, moist, stiff to very stiff, trace fine-to medium-grained sand, trace fine gravel
-	-	23	5			
					CL	SILTY CLAY, light to medium brown-gray, moist, very stiff to hard, caliche stains
-	-	39	10			
						below 13 feet, limonite stains
-	-	50	15			
						Boring terminated at 15-1/2 feet No groundwater encountered
			20			

BORING LOG B-3

Job No.: 3769.100	**Client:** Frank Berlogar	**Elevation**: 508 feet
Job Name: PUD-116	**Drill Method**: Hollow-stem Auger	**Date Drilled**: 1-22-16

SAMPLER TYPE:	DRIVE WEIGHT (LBS.)	HEIGHT OF FALL (IN.)
2.5-inch I.D. Split Barrel	140	30

Moisture Content (%)	Dry Unit Weight (PCF)	Penetration Resistance (blows/foot)	Depth (feet)	Sample Symbol	USCS Classification	DESCRIPTION AND REMARKS
			0			
					SP	GRAVELLY SAND, brown-gray, moist to wet, medium dense, fine-to coarse-grained sand, fine gravel
-	-	43			CL	SILTY CLAY, light to medium gray-brown, moist, very stiff to hard, caliche stains
-	-	57	5			
-	-	60/6”	10		CL	SANDY CLAY, light gray-brown, moist, hard, fine-grained sand, some silt, caliche and limonite stains
-	-		15			Boring terminated at 10 feet No groundwater encountered
			20			

BORING LOG B-4

Job No.: 3769.100	**Client:** Frank Berlogar	**Elevation**: 505 feet
Job Name: PUD-116	**Drill Method**: Hollow-stem Auger	**Date Drilled**: 1-22-16

SAMPLER TYPE:	DRIVE WEIGHT (LBS.)	HEIGHT OF FALL (IN.)
2.5-inch I.D. Split Barrel	140	30

Moisture Content (%)	Dry Unit Weight (PCF)	Penetration Resistance (blows/foot)	Depth (feet)	Sample Symbol	USCS Classification	DESCRIPTION AND REMARKS
			0			
-	-	15	-	■	CL	SILTY CLAY, gray-brown, moist, stiff, trace fine-grained sand, large tree roots
-	-	24	5	■	CL	SANDY CLAY, light gray-brown, moist, stiff, fine-grained sand
					SM	SILTY SAND, light gray-brown, moist, medium dense, fine-to medium-grained sand, trace fine gravel
-	-	88	10	■	SP	GRAVELLY SAND, light orange-brown, moist, very dense, fine-to coarse-grained sand, fine-to coarse gravel, trace silt and clay (conglomerate)
-	-		15			Boring terminated at 10 feet No groundwater encountered
			20			

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			CLASSIFICATION SYMBOL	TYPICAL NAMES
COARSE GRAINED SOILS MORE THAN HALF OF THE MATERIAL IS LARGER THAN NO. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS WITH LITTLE TO NO FINES	GW	WELL GRADED GRAVELS, GRAVEL/SAND MIXTURES
			GP	POORLY GRADED GRAVELS, GRAVEL/SAND MIXTURES
		GRAVEL WITH OVER 12% FINES	GM	SILTY GRAVELS, POORLY GRADED GRAVEL/SAND/SILT MIXTURES
			GC	CLAYEY GRAVELS, POORLY GRADED GRAVEL/SAND/CLAY MIXTURES
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE	CLEAN SANDS WITH LITTLE TO NO FINES	SW	WELL GRADED SANDS, GRAVELLY SANDS
			SP	POORLY GRADED SANDS, GRAVELLY SANDS
		SANDS WITH OVER 12% FINES	SM	SILTY SANDS, POORLY GRADED SAND/SILT MIXTURES
			SC	CLAYEY SANDS, POORLY GRADED SAND/CLAY MIXTURES
FINE GRAINED SOILS MORE THAN HALF OF THE MATERIAL IS SMALLER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
			OL	ORGANIC CLAYS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			Pt	PEAT AND OTHER HIGHLY ORGANIC SILTS

KEY TO BORING LOG SYMBOLS

Depth in Feet	Moisture Content (%)	Dry Unit Weight (pcf)	Blows per foot	Unified Soil Classification System	
					Bulk Sample
					2.5-inch I.D. Split Barrel Sample
					2.8-inch I.D. Shelby Tube Sample
					No Sample recovered
					Standard Penetration Test interval
					Well-defined stratum change
					Gradual stratum change
					Interpreted stratum change
					Water level encountered while drilling boring
					Stabilized water level in boring after drilling

Note: Soils described as dry, moist, and wet are estimated to be dry of optimum, near optimum, and more wet than optimum moisture content, respectively. Saturated soils are estimated to be within areas of free groundwater.

BY: CC

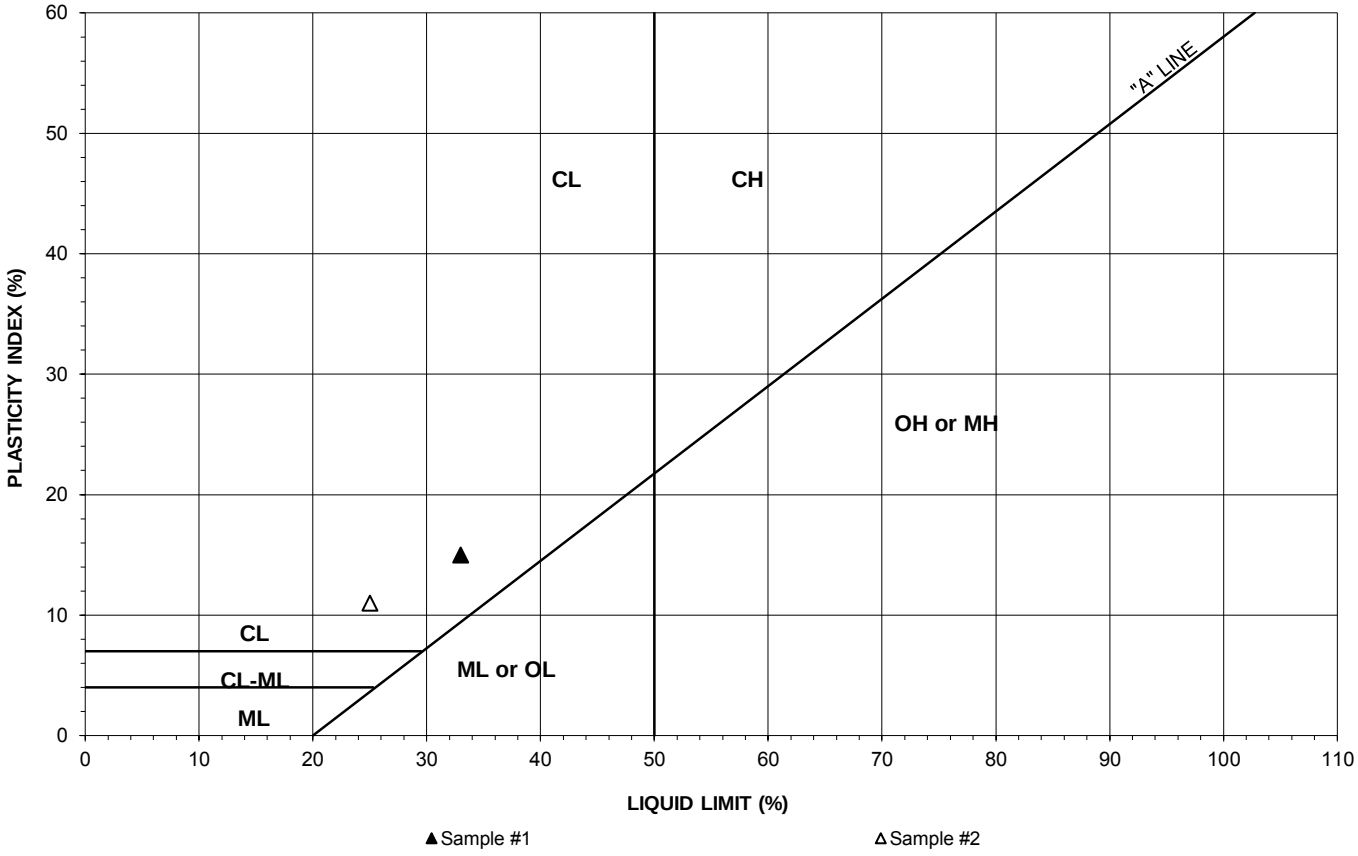
DATE: 1-25-16

JOB NUMBER: 3769.100

APPENDIX B

Laboratory Test Results

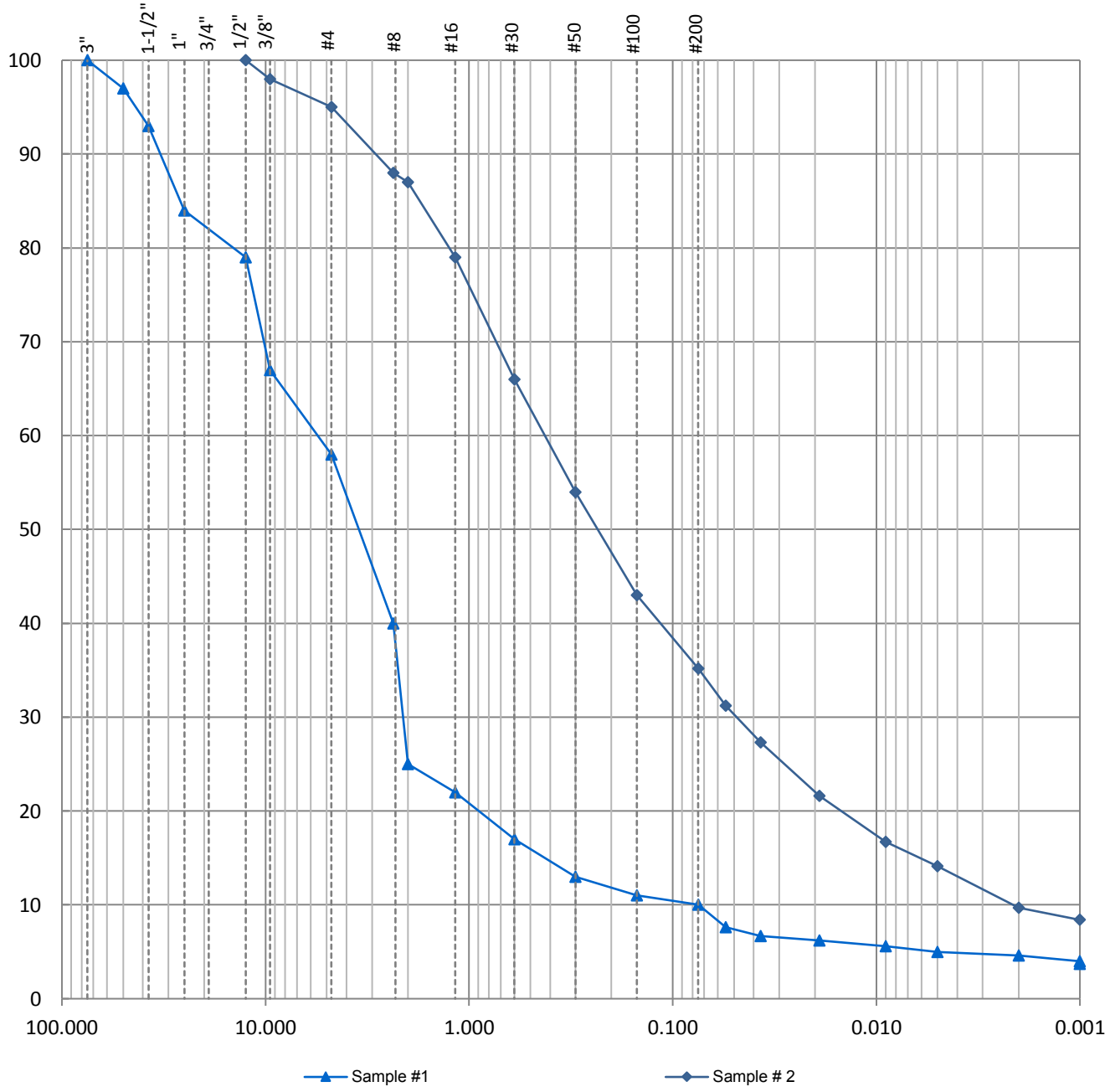
JOB NUMBER: 3769.100 DATE: 2-1-16 BY: CC

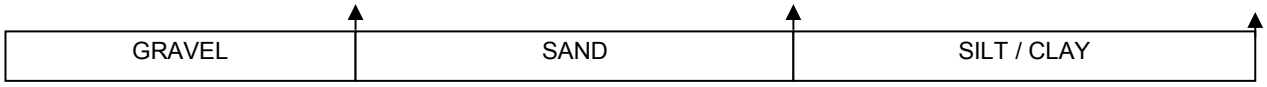


LOCATION	LIQUID LIMIT	PLASTICITY INDEX	USCS CLASSIFICATION
Sample #1	33	15	**C L**
Sample #2	25	11	**C L**

ATTERBERG LIMITS TEST

JOB NUMBER: 3769.100 DATE: 2-12-16 BY: CC





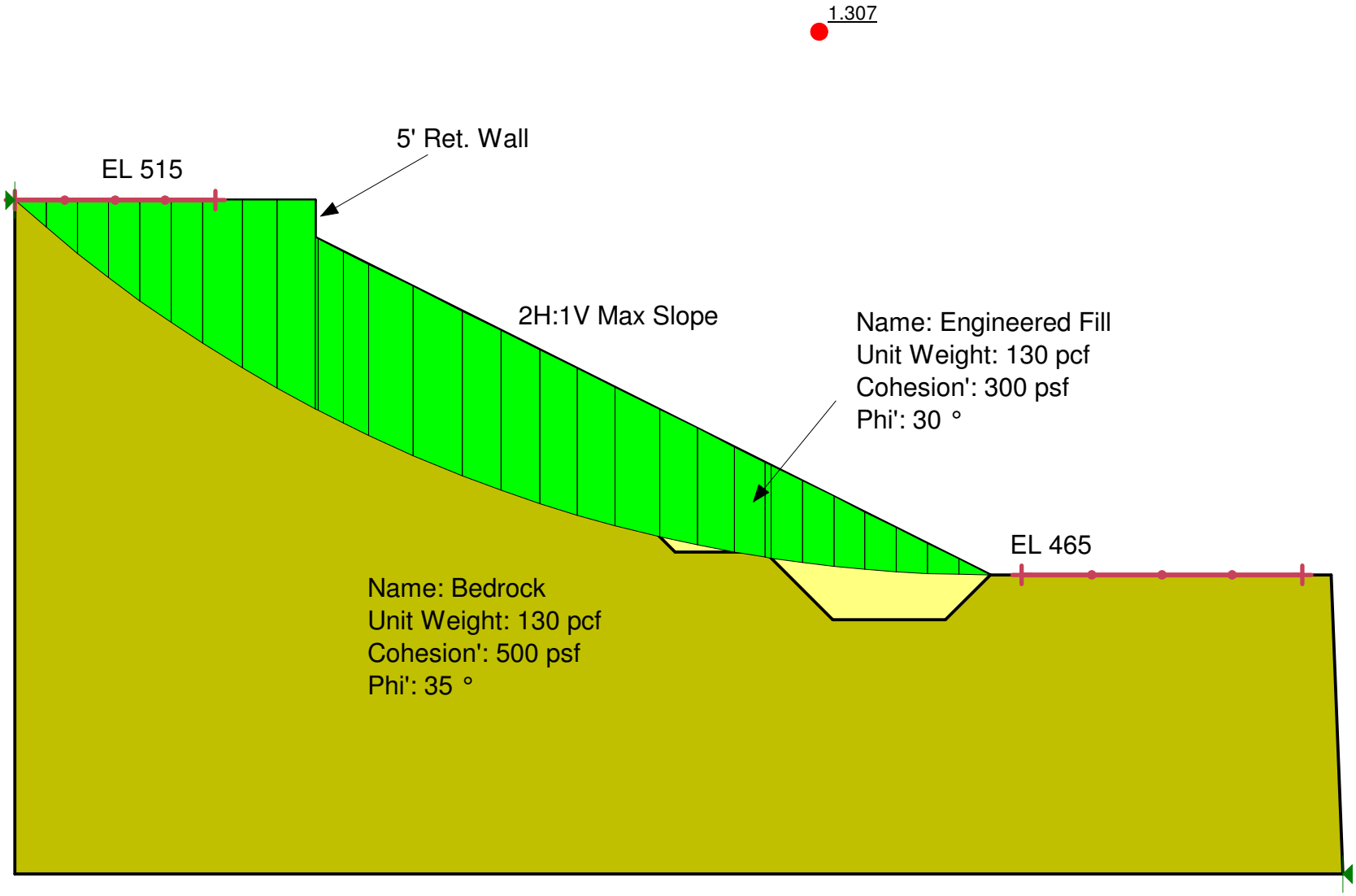
LOCATION	DESCRIPTION
Sample #1	SILTY SANDY GRAVEL, red-brown
Sample # 2	CLAYEY SAND, red-brown

GRADATION TEST DATA

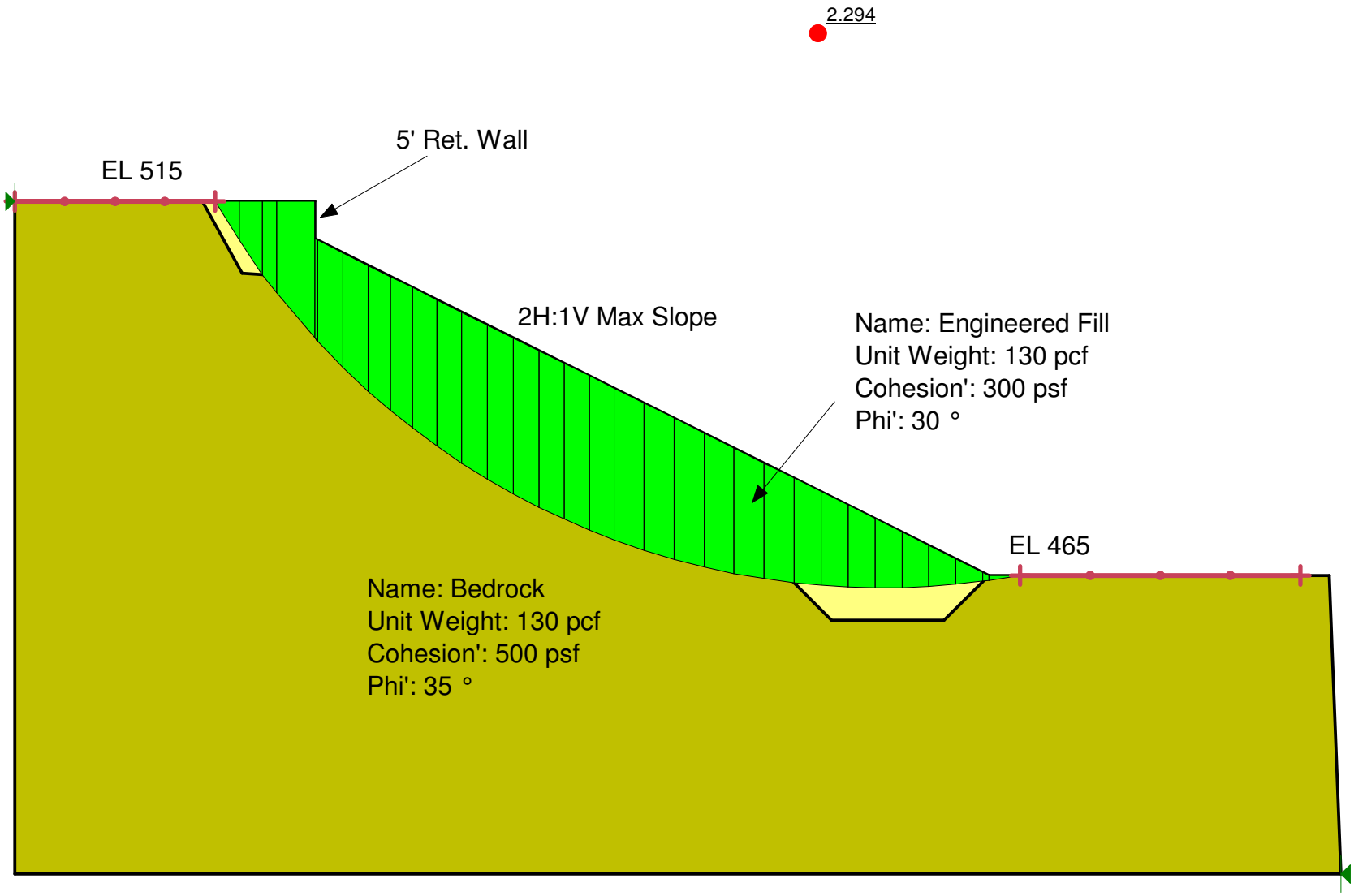
APPENDIX C

Slope Stability Analyses

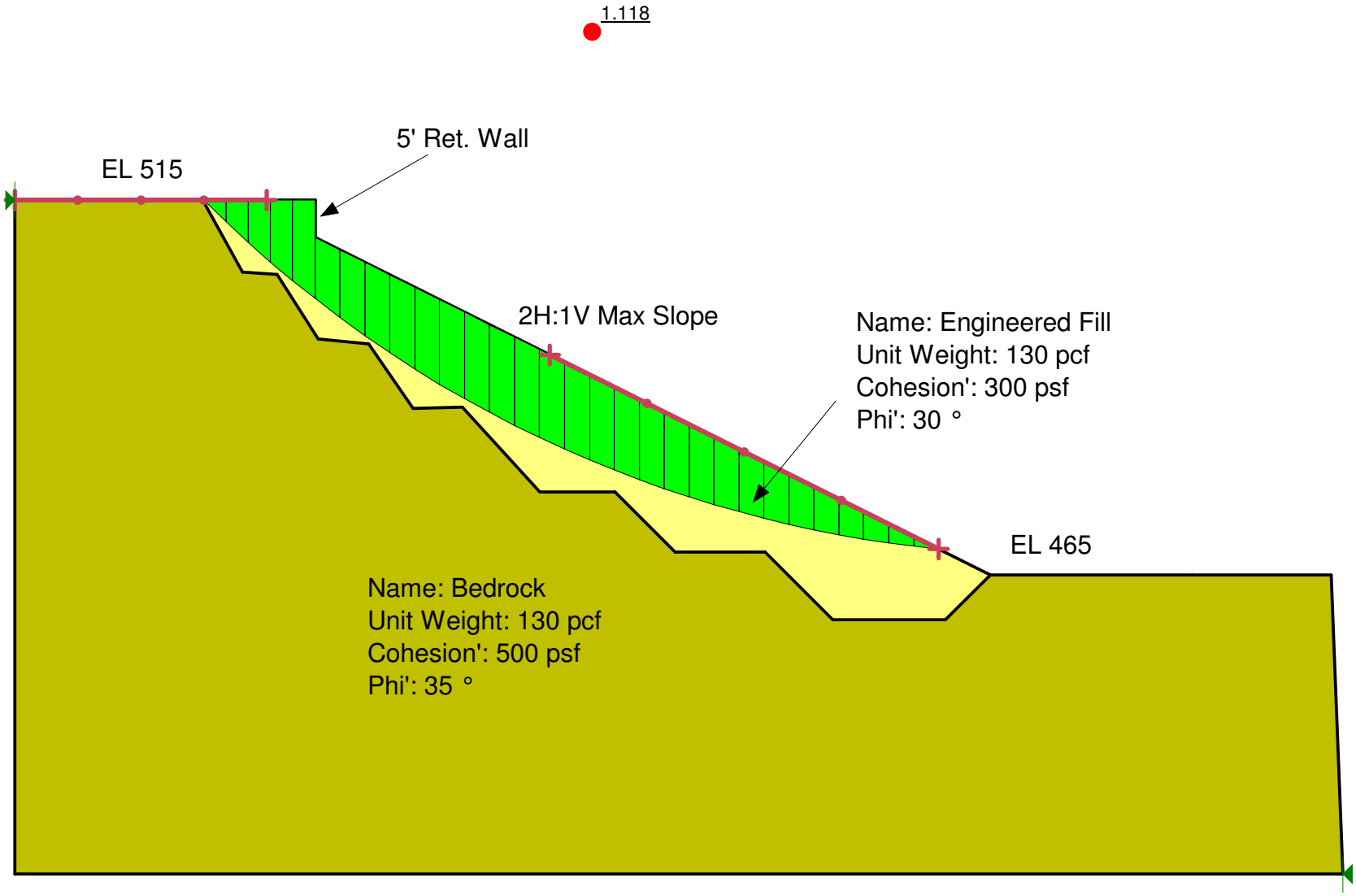
GLOBAL FAILURE
PSEUDOSTATIC CONDITION



GLOBAL FAILURE
STATIC CONDITION



SHALLOW FAILURE
PSEUDOSTATIC CONDITION



SHALLOW FAILURE
STATIC CONDITION