CALL OF SPECIAL MEETING
OF THE BEAUMONT-CHERRY VALLEY WATER DISTRICT
BOARD OF DIRECTORS

MAY 31, 2018 AT 6:00 P.M.

The undersigned, John Covington, President of the Beaumont-Cherry Valley Water District, hereby calls a Special Meeting of the Board of Directors to be held Thursday, May 31, 2018 at 6:00 p.m. at the District's Administrative Offices located at 560 Magnolia Avenue, Beaumont, California 92223.

The agenda for said meeting will be posted no later than 24 hours prior to the meeting.

Dated: Thursday, May 10, 2018

John Covington, President of the
Board of Directors of the
Beaumont-Cherry Valley Water District

SPECIAL MEETING NOTICE

Special Meeting of the Board of Directors of the Beaumont-Cherry Valley Water District Scheduled for Thursday, May 31, 2018 at 6:00 p.m.

NOTICE IS HEREBY GIVEN that a Special Meeting of the Board of Directors of the Beaumont-Cherry Valley Water District has been scheduled for Thursday, May 31, 2018 at 6:00 p.m., at 560 Magnolia Ave., Beaumont, CA 92223.

The agenda for this meeting will be posted no later than 5:59 p.m. on Wednesday, May 30, 2018.

Respectfully,

Dan Jaggers
General Manager

BEAUMONT-CHERRY VALLEY WATER DISTRICT
SPECIAL MEETING AGENDA
BOARD OF DIRECTORS ENGINEERING WORKSHOP
560 Magnolia Avenue, Beaumont, CA 92223
Thursday, May 31, 2018 - 6:00 p.m.

Call to Order, President Covington

Roll Call

Public Comment

PUBLIC COMMENT: At this time, any person may address the Board of Directors on matters within its jurisdiction which are not on the agenda. However, any non-agenda matters that require action will be referred to Staff for a report and possible action at a subsequent meeting. To provide comments on specific agenda items, please complete a speaker's request form and provide the completed form to the Board Secretary prior to the Board meeting. Please limit your comments to three minutes. Sharing or passing time to another speaker is not permitted.

ACTION ITEMS

1. **Presentation of Water Supply Analysis for the Sundance Specific Plan including TTMs 37426, 37427, and 37428 Pardee Homes Sundance – Specific Plan Amendment No. 3** (Tabled from 5/9/2018 meeting) (pages 03-73)

2. **Update: Bogart Park Ad Hoc Committee Report and District Planned Facilities at Park Site** (pages 74-88)

3. **Update on the Discussion of Potential Security Strategies for the Noble Creek Recharge Facility Phase I** (pages 89 - 111)

4. **Discussion: Beaumont Basin Watermaster – Study of Water Losses related to Recharge Activities** (page 112-113)

5. **Update: Status Report on 2018-2027 Capital Improvement Program** (pages 114-116)

6. **Update: Riverside County Flood Control – Beaumont Master Drainage Plan Line 16 – Grand Avenue Storm Drain Project** (page 117)

7. **Update: San Timoteo Groundwater Sustainability Agency**

8. **Update: Status of Wells 3, 26 and 29 Repairs**

9. **Update: Status of San Gorgonio Pass Water Agency 2018 Water Supply** (handout)

10. **General Manager's Report**

11. Topics for Future Meetings

12. Adjournment

AVAILABILITY OF AGENDA MATERIALS - Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Beaumont-Cherry Valley Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection in the District's office, at 560 Magnolia Avenue, Beaumont, California ("District Office"). If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available from the District Office at the same time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during the meeting, they can be made available from the District Office in the Board Room of the District's Office.

REVISIONS TO THE AGENDA -In accordance with §54954.2(a) of the Government Code (Brown Act), revisions to this Agenda may be made up to 72 hours before the Board Meeting, if necessary, after mailings are completed. Interested persons wishing to receive a copy of the set Agenda may pick one up at the District's Main Office, located at 560 Magnolia Avenue, Beaumont, California, up to 72 hours prior to the Board Meeting.

REQUIREMENTS RE: DISABLED ACCESS - In accordance with §54954.2(a), requests for a disability related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting, should be made to the District Office, at least 48 hours in advance of the meeting to ensure availability of the requested service or accommodation. The District Office may be contacted by telephone at (951) 845-9581, email at info@bcvwd.org or in writing at the Beaumont-Cherry Valley Water District, 560 Magnolia Avenue, Beaumont, California 92223.

CERTIFICATION OF POSTING
SPECIAL MEETING

I certify that on or before 5:59 p.m. May 30, 2018, a copy of the foregoing notice was posted near the regular meeting place of the Board of Directors of Beaumont-Cherry Valley Water District and to its website at least 24 hours in advance of the meeting (Government Code §54956(a)).

Yolanda Rodriguez
Director of Finance and Administration

Beaumont-Cherry Valley Water District
Special Board Meeting
May 31, 2018

Item 1

STAFF REPORT

TO: Board of Directors

FROM: Dan Jaggers, General Manager

SUBJECT: **Presentation of Water Supply Analysis for Sundance Specific Plan including TTMs 37426, 37427, and 37428, Pardee Homes Sundance – Specific Plan Amendment No. 3**

Staff Recommendation

No recommendation.

Background

Pardee Homes applied to the City of Beaumont for Amendment No. 3 to the Sundance Specific Plan and that application was approved by the City of Beaumont City Council on May 2, 2018.

On May 9, 2018, Pardee Homes also requested that the Board of Directors of BCVWD consider the following:

- A request to amend the existing "Will Serve Letter" for Tract 31469 and 31470 to add 41 dwelling units to Tract 31469-5.
- A request to update the original Specific Plan "Will Serve Letter", dated September 13, 2001 for the inclusion of Tract 37426 (PA 13, 90 dwelling units).
- A request for a "Will Serve Letter", for the redevelopment of the existing Chavez School site to Tract 37427 (PA 54, 31 dwelling units).

As a result, the Board requested that Pardee Homes provide a holistic and complete analysis of the water usage throughout the proposed areas as well as substantiation of the facts and figures presented at that meeting.

Pardee Homes has revised the approach to their existing analysis and has created a complete new analysis using facts and figures to substantiate their findings. This new analysis includes the following:

- Revised Water Demand Calculations for each of the newly proposed areas (Tracts 37426, 37427, and 37428).
- Identification of lot area breakdown (pervious and impervious) between currently proposed land use and previously proposed land use.
- Water Savings Analysis of the Active Adult Area (Tracts 3170-3 thru -6) due to the land use change from traditional single-family residential to age restricted (55+).
- Net water usage adjustments to Park and Open Space calculations due to the change in landscape usage and irrigation techniques (drip vs. sprinkler) in the affected areas.

- Supporting documentation regarding Water Use Factors (AFY/DU) for single-family and multi-family.
- Supporting documentation regarding population adjustment considerations between single-family residential and age restricted. (BCVWD UWMP)
- Supporting documentation regarding water consumption reduction considerations for age restricted in lieu of single-family residential. ("Approving 55+ Housing: Facts That Matter")
- Overall net summary of the water usage when considering the proposed developments, land use changes, landscape usage, and lot coverage considerations.

District Staff understands that Pardee Homes will be requesting a three-part request for water service for developments which consists of the modification of use for two existing planning areas located within the existing Sundance Specific Plan as well as the addition of one new Planning Area to the Specific Plan. District Staff has further identified the current status and requested modification of each of the Planning Areas as follows:

1. **PA 47 Currently Identified as Tract 31469-5 (Proposed Tentative Tract Map 37428)**
    a. Existing Tract 31469 WSL clearly identified a total number of 97 Dwelling Units 97 for this Planning Area per Tentative Tract Map 31469 attached as part of the WSL, Last Updated Oct. 2017.
    b. Proposed re-development which will require an amended WSL includes re-lot of said Tract 31469-5 from 97 to 138 dwelling units [EDUs (additional 41 EDUs].
    c. Minimum Lot sizes will decrease from 10,000 sf to 7,500 sf.
    d. BCVWD has previously plan checked and approved Water Facilities Plans consistent with development of 97 dwelling units.
    e. Water Main Extension and Facilities Agreement has been executed by BCVWD and Pardee Homes for 97 dwelling units and facilities fees paid by Pardee Homes for 97 dwelling units.

2. **Planning Area 13 (Currently identified as Tentative Tract Map 37426):**
    a. Proposed Development replaces Specific Plan identified Junior High School site located at the south end of the Sundance Specific Plan with 90 dwelling units.
    b. No active "Will Serve Letter" (original "Will Serve Letter" was issued for this area as part of the original Sundance Specific Plan Annexation and Water Service Letter dated September 13, 2001).

3. **Proposed Planning Area 54 (TTM 37427)**
    a. Proposed addition of new Planning Area 54 consisting of re-development of existing Beaumont Unified School District's Chavez School site to provide for 31 new dwelling units.
    b. No "Will Serve Letter" was issued for this area as part of the original Sundance Specific Plan. This area was not included within the original Sundance Specific Plan.
    c. Replace existing (but currently closed) school site with 31 proposed dwelling units.
    d. Historically consuming water as a school use since at least the early 1990s.

As part of these three “Will Serve Letter” requests, Pardee posits that additions of Equivalent Dwelling Units (EDUs) result in an overall balance of the estimated water use by the project and will present their analysis at the Engineering Workshop.

At this point, Pardee Homes has presented a revised analysis that generally support that the added homes will balance the overall project demand to less than or equal to the demands that were originally presented during the “Will Serve Letter” updates provided over the years, specifically for Tracts 31469 and 31470.

Pardee Homes has again requested to have this issue presented to the Board at the engineering workshop for discussion and resolution of questions in preparation to their desired upcoming request for amended “Will Serve Letter(s)” that address each of the three Planning Areas at the upcoming District June Board Meeting.

Fiscal Impact

None. All fees and deposits will be paid by the Applicant prior to providing service.

Attachment(s)

- Pardee Homes – Specific Amendment No.3 “Will Serve Letter” Requests for Tentative Tract Maps 37426, 37427, and 37428 Letter, Dated May 24, 2018 (with supporting Maps, Calculations and Documentation as Appendices A thru E)

Report prepared by Dan Jaggers, General Manager

PardeeHomes

May 24, 2018

Mr. Dan Jaggers
Beaumont Cherry Valley Water District
560 Magnolia Avenue
Beaumont, CA 92223

Subject: Sundance – Specific Plan Amendment No. 3 Will Serve Letter Requests for Tentative Tract Maps 37426, 37427 and 37428

Dear Mr. Jaggers,

Pardee Homes (Pardee) appeared before the Beaumont Cherry Valley Water District's (BCVWD) Board of Commissioners (Board) on the evening of 5/9/2018. During that meeting, the Board requested additional justification be presented at the 5/31/2018 engineering workshop supporting Pardee's request for a Will Serve letter for Tentative Tract Map (TTM) 37426, 37427 and 37428.

The Sundance masterplan (Sundance) has changed throughout the years to adapt to the home-purchasing marketplace. The Sundance entitlement allows for 4,450 EDUs but because of engineering constraints and market trends the buildout has been less. Currently, inclusive of the Specific Plan Amendment No. 3 (SPA#3), the total build out of Sundance is 4,299 EDUs. Please note the build out total does not include PA 48 which is not under Pardee's ownership or within the City of Beaumont. Refer to Appendix A for a few of the Sundance community site plan iterations over the past decade or so.

Sundance has always been contemplated as being an all ages, traditional single family development. However because of market demands, in 2016 Pardee changed directions and began planning and are currently developing a 704 EDU, age restricted, active adult community within Sundance. Because of this land use change, Pardee believes that there are a variety of factors that contribute to a cumulative water savings that can be applied to the additional EDUs being requested for TTMs 37426, 37427 and 37428.

Pardee reviewed a number of published studies including:

- San Gorgonio Pass Water Agency's (SGPWA) 2015 Capacity Fee Study
- Beaumont – Cherry Valley Water District's 2017 Urban Water Management Plan
- National Association of Home Builders (NAHB) Approving 55+ Housing: Facts That Matter Study

A conservative analysis was prepared and included in Appendix B using factors from these published studies to determine the new water demand related to increased landscaping within the active adult community and the additional EDUs for which Pardee is requesting Will Serve letters as well as the reduction in demand from developing an active adult community (i.e. larger home footprints, reduced school demand, etc) and the conversion of a proposed junior high school site to high density residential. A summary of our analysis is presented below:

SUMMARY - DEMAND vs SAVINGS

Item	Total AFY
New Water Demand	103.94
New Water Savings	107.35
Total Water Supply Savings (AFY):	**3.41**

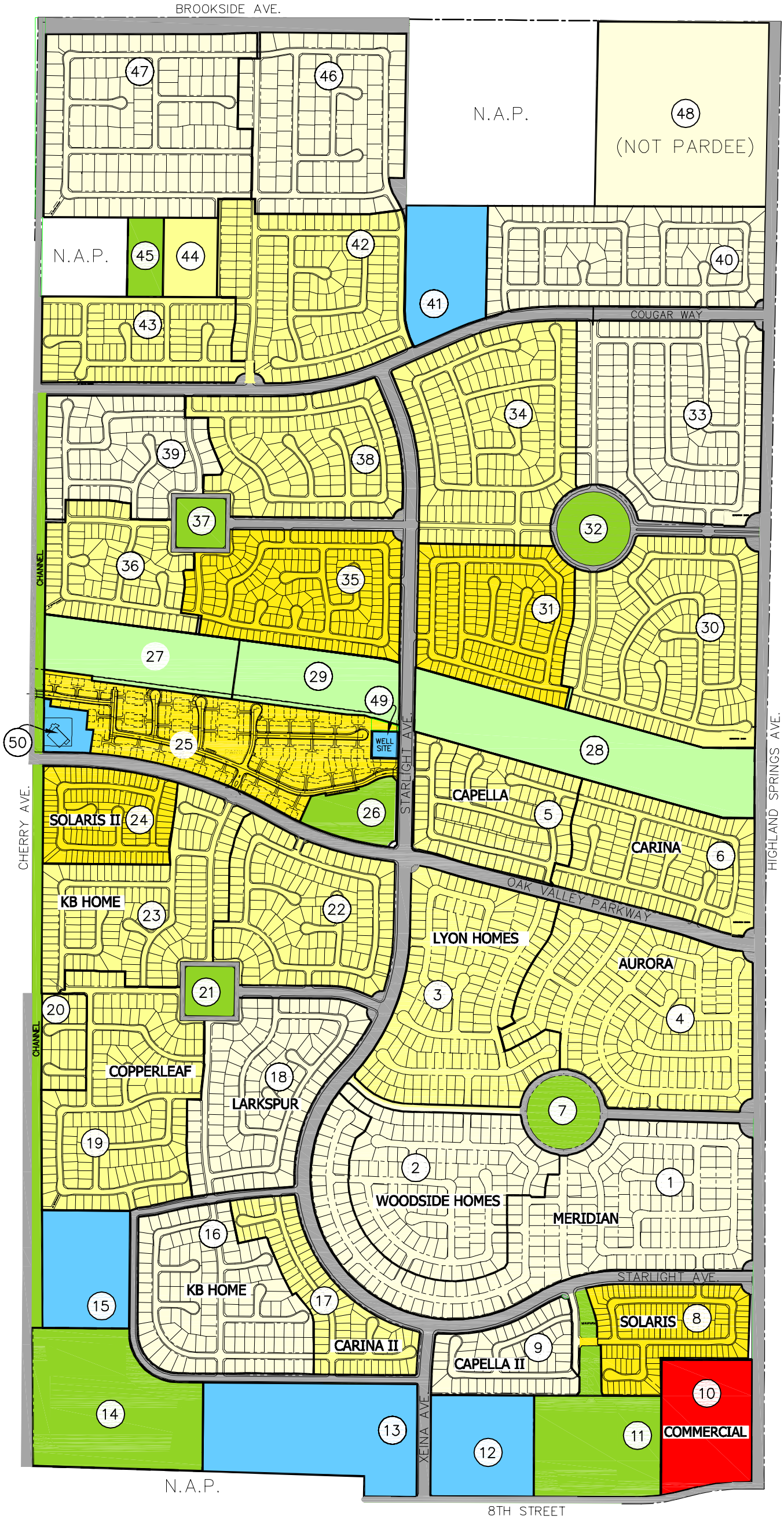
Based on the conservative analysis provided with this letter utilizing published factors, Pardee believes we have demonstrated to the BCVWD that the additional EDU's water demand for which we are requesting a Will Serve letter is an even trade-off for the water savings resulting from land use change from traditional housing to active adult housing.

Sincerely,

Michael Heishman
Pardee Homes
Project Manager

Appendix A – Sundance Site Plans
Appendix B – Table 1, Table 2 and Table 3
Appendix C – Lot Analysis
Appendix D – Reference Studies
Appendix E – Traditional vs. Active Adult Footprints

APPENDIX A



Phase	Planning Area	Product Size	Unit Count SF	Unit Count MF	Net Acres	Density
1	1	70' x 100'	214		52.18	4.10
	2	70' x 100'	131		32.4	4.04
	3	60' x 100'	168		38.09	4.41
	4	60' x 100'	202		43.14	4.68
	5	60' x 100'	101		21.17	4.77
	6	50' x 105'	130		24.46	5.31
	7	Park			5	
		PHASE 1 TOTAL	946		216.44	
2	8	38' x 90'	121		16.76	7.22
	9	60' x 100'	57		12.73	4.48
	10	Commercial			13.6	0.00
	11	Park/Detention			16.36	
	12	School			12.29	0.00
	13	School			22.39	0.00
	14	Park/Detention			23.91	0.00
	15	School			16.11	0.00
	16	70' x 100'	113		28.08	4.02
	17	50' x 105'	79		14.19	5.57
	18	70' x 100'	110		27.76	3.96
	19	60' x 100'	159		34.59	4.60
	20	60' x 100'	23		5.01	4.59
	21	Park			2.98	
	22	60' x 100'	132		27.92	4.73
	23	50' x 105'	155		28.75	5.39
	24	38' x 90'	110		13.95	7.89
	25	Cluster	279		30.26	9.22
	26	Park/Detention			4.38	
	49	Well Site			0.88	
	50	Community Center			2.62	
		PHASE 2 TOTAL	1,338		355.52	
3	28	Open Space			25.91	0.00
	30	50' x 105'	208		40.78	5.10
	31	47' x 72'	187		25.37	7.37
	32	Park			5.01	
	33	70' x 100'	165		41.13	4.01
	34	60' x 100'	177		39.05	4.53
	40	70' x 100'	125		32.76	3.82
	41	School			12	0.00
		PHASE 3 TOTAL	862		222.01	
4	27	Open Space			13.38	0.00
	29	RV Storage			11.58	0.00
	35	47' x 72'	197		27.7	7.11
	36	50' x 105'	92		18.17	5.06
	37	Park			3	
	38	60' x 100'	123		27.34	4.50
	39	70' x 100'	79		20.55	3.84
		PHASE 4 TOTAL	491		121.72	
5	42	60' x 100'	154		33.97	4.53
	43	50' x 105'	97		19.34	5.02
	44	60' x 100'	24		5	4.80
	45	Park			3.32	0.00
	46	95' x 105'	94		32.78	2.87
	47	80' x 125'	130		42.65	3.05
		PHASE 5 TOTAL	499		137.06	
		TOTAL	4,136	0	1052.8	
	48	95'x105'	112		37.46	2.98
		SPECIFIC PLAN TOTAL	4,248		1090.2	

SCALE: NTS

"NET ACRES" ARE DEFINED BY GROSS AREA MINUS OPEN SPACE, PARKS, AND RIGHT-OF-WAY FOR ARTERIAL AND COLLECTOR STREETS.

PLANNING AREAS NET ACRES ARE SHOWN BY COLOR.

LDM DATE

JOHN ARVIN DATE

SUNDANCE COMMUNITY PLAN

PardeeHomes

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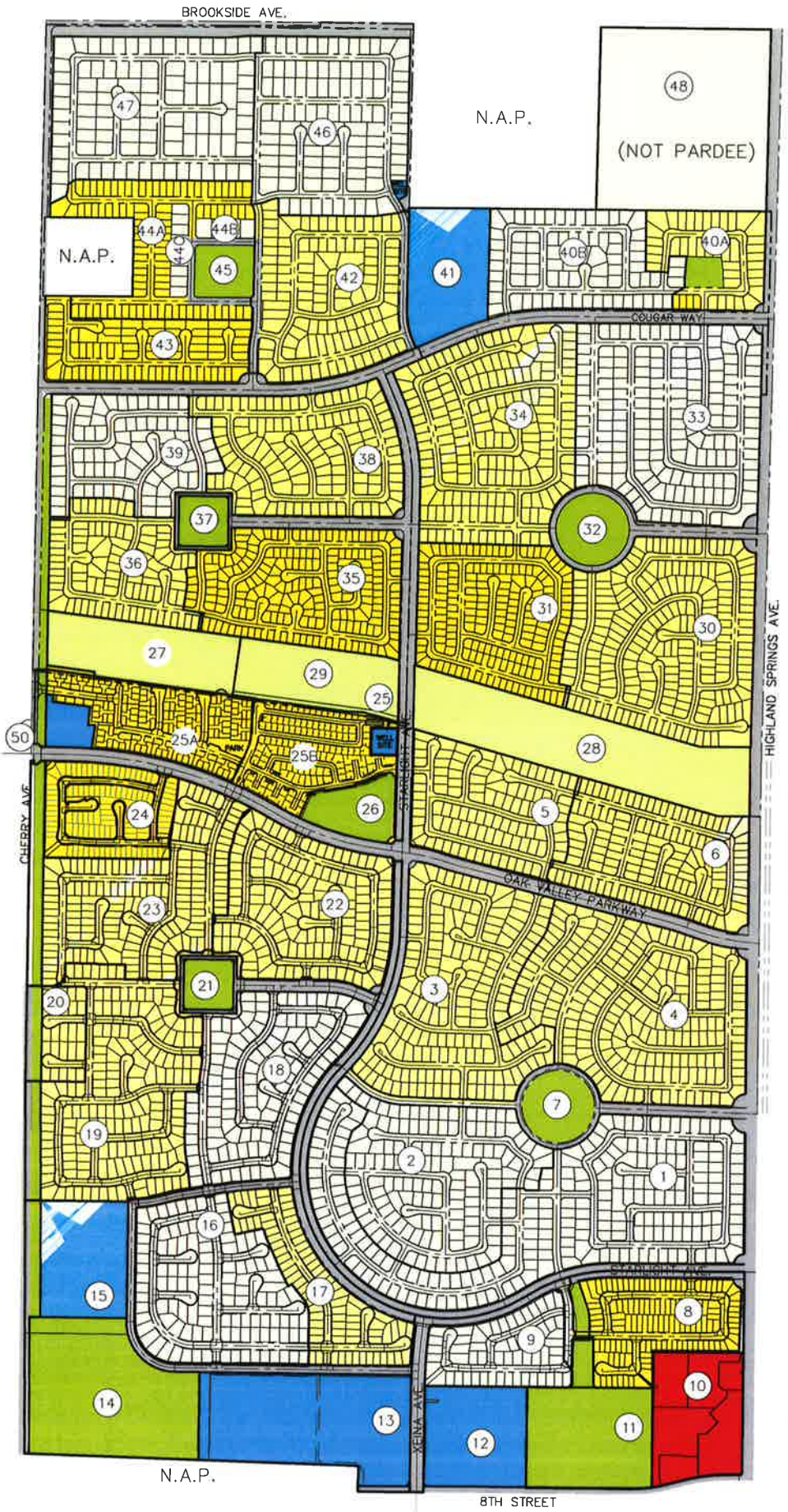

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1	1	70' x 100'	214		52.16	4.10
	2	70' x 100'	131		32.4	4.04
	3	60' x 100'	168		38.09	4.41
	4	60' x 100'	202		43.14	4.68
	5	60' x 100'	101		21.17	4.77
	6	50' x 105'	130		24.46	5.31
	7	Park			5	
		PHASE 1 TOTAL	946		216.44	
2	8	38' x 90'	121		16.76	7.22
	9	60' x 100'	57		12.73	4.48
	10	Commercial			13.6	0.00
	11	Park/Detention			16.36	
	12	School			12.29	0.00
	13	School			22.19	0.00
	14	Park/Detention			23.91	0.00
	15	School			16.11	0.00
	16	70' x 100'	313		28.08	4.02
	17	50' x 105'	79		14.19	5.57
	18	70' x 100'	110		27.76	3.96
	19	60' x 100'	159		34.59	4.60
	20	60' x 100'	23		5.01	4.59
	21	Park			2.98	
	22	60' x 100'	132		27.92	4.73
	23	50' x 105'	155		28.75	5.39
	24	38' x 90'	110		13.95	7.89
	25A	Cluster	152		15.96	9.52
	25B	43' X 53'	127		14.3	8.88
	26	Park/Detention			4.38	
	49	Well Site			0.88	
	50	Community Center			2.62	
		PHASE 2 TOTAL	1,338		355.52	
3	28	Open Space			25.91	0.00
	30	50' x 105'	208		40.78	5.10
	31	47' x 72'	187		25.37	7.37
	32	Park			5.01	
	33	70' x 100'	165		41.13	4.01
	34	60' x 100'	177		39.05	4.53
	40A	60' x 105'	36		10.23	3.52
	40A	50' x 105'	4		0.54	7.41
	40A	60' X 100'	3		0.46	6.52
	40B	70' X 100'	79		19.26	4.10
	41	School			12	0.00
		PHASE 3 TOTAL	859		219.74	
4	27	Open Space			13.38	0.00
	29	RV Storage			11.58	0.00
	35	47' x 72'	197		27.7	7.11
	36	50' x 105'	92		18.17	5.06
	37	Park			3	
	38	60' x 100'	123		27.34	4.50
	39	70' x 100'	79		20.55	3.84
		PHASE 4 TOTAL	491		121.72	
5	42	60' x 100'	114		28.25	4.04
	43	50' x 105'	76		14.96	5.08
	44A	50' x 105'	94		24.85	3.78
	44B	90' X 125'	4		1.15	3.48
	44C	70' X 125'	9		1.62	5.56
	45	Park			8.32	
	46	70' x 125'	104		31.06	3.35
	47	90' x 125'	100		34.13	2.93
		PHASE 5 TOTAL	501		139.34	
		TOTAL	4,135	0	1052.8	
48		95'x105'	112		37.46	2.98
		SPECIFIC PLAN TOTAL	4,247		1090.2	

"NET ACRES" ARE DEFINED BY GROSS AREA MINUS OPEN SPACE, PARKS, AND RIGHT-OF-WAY FOR ARTERIAL AND COLLECTOR STREETS.

PLANNING AREAS NET ACRES ARE SHOWN BY COLOR.

LDM DATE

JOHN ARVIN DATE

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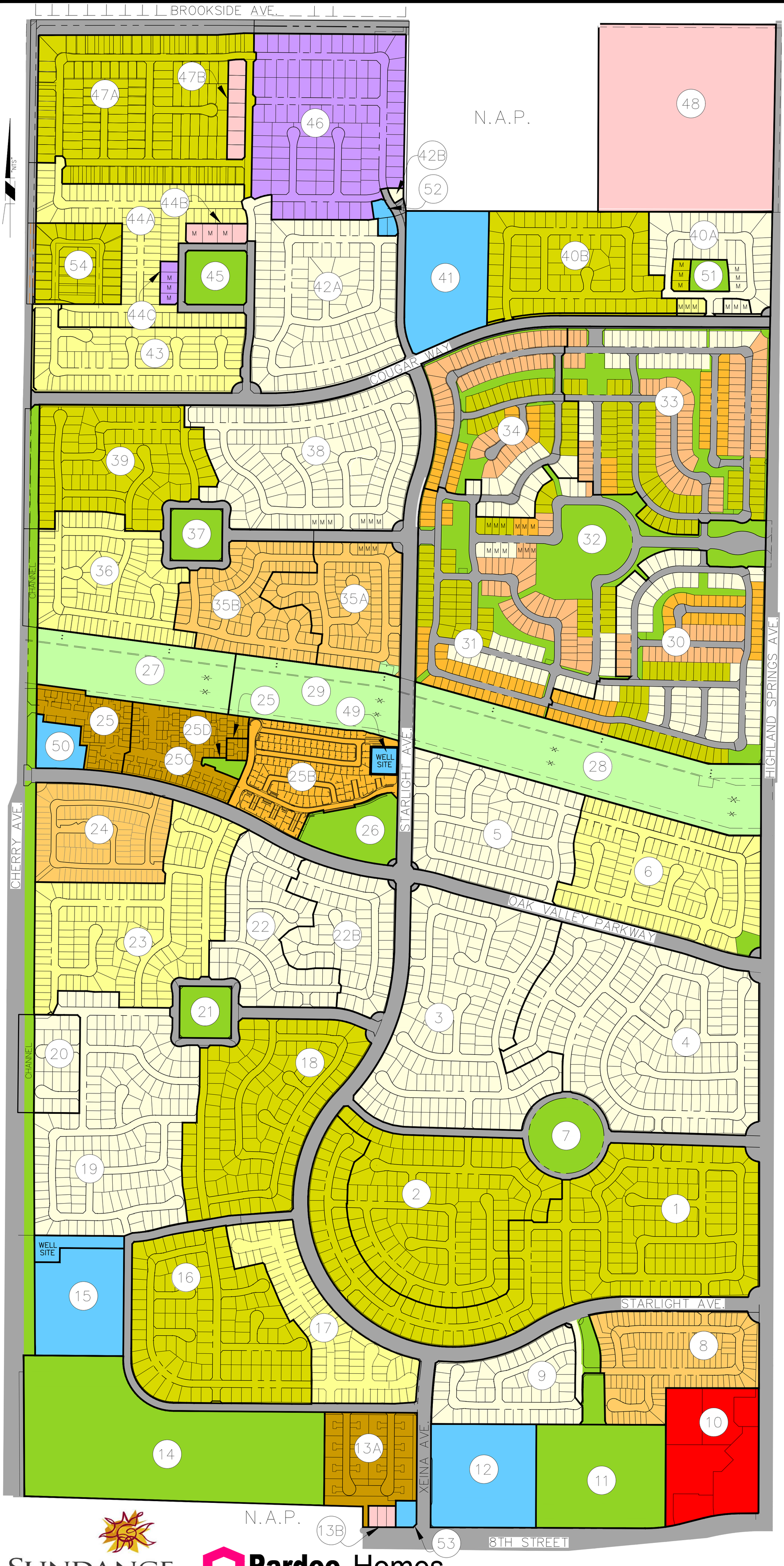
SUNDANCE COMMUNITY PLAN

Pardee Homes



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	3	60' x 100'	168		38.09	4.41
	4	60' x 100'	202		43.14	4.68
	5	60' x 100'	101		21.17	4.77
	6	50' x 105'	130		24.46	5.31
	7	Park			5	
		PHASE 1 TOTAL	946		216.44	
2	8	38' x 90'	121		16.76	7.22
	9	60' x 100'	57		12.73	4.48
	10	Commercial			13.6	
	11	Park/Detention			16.36	
	12	School			12.29	
	13A	Cluster	84		10.1	8.32
	13B	50' x 95'	3		0.68	4.41
	14	Park/Detention			34.76	
	15	School			16.11	
	16	70' x 100'	113		28.08	4.02
	17	50' x 105'	79		14.19	5.57
	18	70' x 100'	110		27.76	3.96
	19	60' x 100'	159		34.59	4.60
	20	60' x 100'	23		5.01	4.59
	21	Park			2.98	
	22	60' x 100'	68		14.8	4.59
	22B	60' x 100'	64		13.12	4.88
	23	50' x 105'	155		28.75	5.39
	24	38' x 90'	110		13.95	7.89
	25	Cluster	60		6.16	9.74
	25B	43' x 53'	127		14.3	8.88
	25C	Cluster	92		9.17	10.03
	25D	Park/Rec. Center			0.63	
	26	Park/Detention			4.38	
	49	Well Site			0.88	
	50	Community Center			2.62	
	53	Well Site			0.76	
		PHASE 2 TOTAL	1,425		355.52	
3	28	Open Space			25.91	
	30A	50' x 77'	50		8.66	5.77
	30B	45' x 105'	29		5.63	5.15
	30C	50' x 105'	37		9.09	4.07
	30D	55' x 105'	70		18.1	3.87
	31A	50' x 77'	51		6.90	7.39
	31B	45' x 105'	44		8.76	5.02
	31C	50' x 105'	53		7.98	6.64
	31D	55' x 105'	40		5.16	4.85
	32	Rec. Center			7.52	
	33A	50' x 77'	28		4.9	5.72
	33B	45' x 105'	78		13.47	5.79
	33C	50' x 105'	64		13.01	4.92
	33D	55' x 105'	35		6.47	5.41
	34A	50' x 77'	23		6.26	3.67
	34B	45' x 105'	54		13.66	5.13
	34C	50' x 105'	29		8.76	3.31
	34D	55' x 105'	19		7.30	2.60
		PHASE 3 TOTAL	704		177.52	
4	27	Open Space			13.38	
	29	RV Storage			11.58	
	35A	47' x 72'	98		14.2	6.90
	35B	47' x 72'	97		13.5	7.19
	36	45' x 105'	102		17.77	5.74
	37	Park			3	
	38	50' x 100'	142		30.05	4.73
	39	60' x 100'	88		20.47	4.30
		PHASE 4 TOTAL	527		123.95	
5	40A	60' x 105'	36		9.09	3.96
	40A	50' x 105'	4		0.46	8.70
	40A	60' x 100'	3		0.4	7.50
	40A	70' x 100'	3		0.46	6.52
	40B	70' x 100'	76		18.78	4.05
	41	School			12	
	42A	60' x 100'	112		27.52	4.07
	42B	60' x 110'	1		0.19	5.26
	43	50' x 105'	76		16.05	4.74
	44A	50' x 105'	106		18.56	5.71
	44B	90' x 125'	4		1.37	2.92
	44C	70' x 125'	4		0.86	4.65
	45	Park			3.72	
	46	70' x 125'	103		30.87	3.34
	47A	60' x 125'	131		31.28	4.19
	47B	90' x 125'	7		2	3.50
	51	Park			1.3	
	52	Well Site			0.73	
	54	60' x 115'	31		7.8	3.97
		PHASE 5 TOTAL	697		183.44	
		TOTAL	4,299		1056.9	
	48	95' x 105'	112		37.46	2.98
		SPECIFIC PLAN TOTAL	4,411		1094.3	

LEGEND

- 1 — PLANNING AREA
- M — MODELS
- SCHOOL, FIRE, INSTITUTIONAL
- COMMERICAL, RETAIL
- MULTI-FAMILY, CONDO
- CLUSTER PRODUCT
- 2,000 TO 2,999 SF LOTS
- 3,000 TO 3,999 SF LOTS
- 4,000 TO 4,999 SF LOTS
- 5,000 TO 5,999 SF LOTS
- 6,000 TO 6,999 SF LOTS
- 7,000 TO 7,999 SF LOTS
- 8,000 TO 8,999 SF LOTS
- 9,000 TO 11,999 SF LOTS
- PARKS, BASINS, PASEOS
- OPEN SPACE
- COLLECTOR, ARTERIAL ROADS

"NET ACRES" ARE DEFINED BY GROSS AREA MINUS OPEN SPACE, PARKS, AND RIGHT-OF-WAY FOR ARTERIAL AND COLLECTOR STREETS.

PLANNING AREAS NET ACRES ARE SHOWN BY COLOR.

PM DATE

DIVISION PRESIDENT DATE

SUNDANCE
This is your place.

Pardee Homes

PRODUCT DISTRIBUTION MAP

REVISION DATE: 5/18/2018

Michael Baker INTERNATIONAL
75-410 Gerald Ford Drive, Suite 100
Palm Desert, CA 92211
Phone: (760) 346-7481
MBAKERINTL.COM

H:\PDATA\PARDEE_PH3\CADD\LAND\EXHIBITS\LAND USE\SUNDANCE COMMUNITY PLAN.DWG CHARISSE.GARRIDO 5/18/18 8:17 am

APPENDIX B

TABLE 1
ACTIVE ADULT WATER NEEDS ANALYSIS
SUMMARY OF DEMANDS AND SUPPLIES

NEW PLANNING AREA WATER DEMAND

Planning Area	Dwelling Units	Description	Water Use Factor (AF/EDU)*	Total AFY Required
13	84	Cluster Product	0.267	22.43
	3	Single Family	0.546	1.64
	Total AF Needed for Development of Planning Area 13:			24.07

Planning Area	Dwelling Units	Description	Water Use Factor (AF/EDU)*	Total AFY Required
47	41	Single Family	0.546	22.39
	Total AF Needed for Development of Planning Area 47:			22.39

Planning Area	Dwelling Units	Description	Water Use Factor (AF/EDU)*	Total AFY Required
54	31	Single Family	0.546	16.93
	Total AF Needed for Development of Planning Area 54:			16.93

Total New Planning Area Demand Needed (AFY):	**63.38**

* Refer to Appendix D for factors from SGPWA 2015 Capacity Fee Study.

NEW PARK/PASEO WATER DEMAND

Planning Area	Water Demand Due to Increased Parks/Paseos (AFY)	Total Parks/Paseos Landscape Demand (AFY)
30, 31, 32, 33, 34	(See Table 2 for Active Adult Landscape Demand Analysis)	
Active Adult Parks/Pasoes	51.42	51.42
Exist. Park (PA 32) Reduction	-10.86	-10.86
Total New Park/Paseo Demand Needed (AFY):		**40.56**

NEW WATER SAVINGS

Planning Area 13 (Original Junior High School Site at 22.39 acres)

Usage Type	Estimated Children*	GPD per Child (Indoor use)	Water Use Factor (AFY/Child)	Total AFY Saved
Indoor Use	1,200	15	0.01680	20.16
Estimated Inside Water Supply Planned for Original School Development (AFY):				20.16

* Based upon 12 acre school site (see below for 10.39 acre field)

Usage Type	Field Area (Acres)	Estimated % of Developed Area	Water Use Factor (GPD/Acre)	Total AFY Saved
Field Total	10.39			
Turf	6.23	60.0%	3,000	20.95
Drip	2.60	25.0%	1,800	5.24
Impervious	1.56	15.0%	0	0.00
Estimated Outside Water Supply Planned for Original School Development (AFY):				26.19

Estimated Water Supply Planned for School Site Saved (AFY):	**46.35**

Active Adult Landscape Savings Due to Increased House Footprint

Planning Area	Landscape Reduction due to Increased Lot Coverage (Acres)	Estimated % of Area*	Water Use Factor (GPD/Acre)	Total AFY Saved
30, 31, 33, 34	8.20	(See Table 3 for Analysis of Coverage Reduction)		
Turf	2.71	33.0%	3,000	9.10
Drip	5.50	67.0%	1,800	11.08
Estimated Water Supply Saved by Converting to Active Adult Development (AFY):				**20.18**

* Refer to Attachment C for Traditional Lot Front and Rear Yard Landscape Coverage

Active Adult Indoor Water Use Reduction

Planning Area	55+ Reduction Percentage (14.23%)*	Demand Factor	Gross Water Use (AFY)	Adjusted Total (AFY)
30, 31, 33, 34				
Number of Dwelling Units	704			
AF/DU water use factor	0.546	(See SGPWA Capacity Fee Study, 2015)		
Outside Use @ 60%	85.77%	60.0%	230.6	32.83
Inside Use @ 40%	85.77%	40.0%	153.8	21.89
Estimated Total Water Supply Savings (AFY):				**21.89**

* Refer to Attachment D for NAHB Approving 55+ Housing: Facts That Matter.

Active Adult Community School-Aged Children Water Use Reduction

Planning Area	Estimated Children	GPD per Child	Water Use Factor (AFY/Child)	Total AFY Saved
30, 31, 33, 34				
Number of Dwelling Units	704			
Average Children per DU*	0.8			
Childern Lost to School System				
PA 13 Indoor Use	563.2	15	0.01680	9.46
PA 13 Outdoor Use	563.2	15	0.01680	9.46
Estimated Total Water Supply Savings (AFY):				**18.93**

* Refer to Attachment D BCVWD 2017 Urban Water Management Plan

SUMMARY - DEMAND vs SAVINGS

Item	Total AFY
New Water Demand	103.94
New Water Savings	107.35
Total Water Supply Savings (AFY):	**3.41**

TABLE 2
ACTIVE ADULT LANDSCAPE DEMAND ANALYSIS

Landscape Area	Yearly Water Use MAWA (HCF/Yr)*	Yearly Water Use ETWU (HCF/Yr)*	Yearly Water Use ETWU (CF/Yr)	Yearly Water Use ETWU (AFY)
PA 32 Rec Center	8,854	5,255	525,500	12.1
Park A (Starlight)	2,398	1,374	137,400	3.2
Park B (Cougar)	2,808	2,090	209,000	4.8
PA 30 (incl Paseos)	6,165	3,425	342,500	7.9
PA 31 (incl Paseos)	2,892	1,607	160,700	3.7
PA 33 (incl Paseos)	6,940	3,856	385,600	8.9
PA 34 (incl Paseos)	6,940	2,464	246,400	5.7
Primary Entry	4,024	2,327	232,700	5.3
Totals	**41,021**	**22,398**	**2,239,800**	**51.42**
			Original Park Landscape Demand (AFY):	**-10.86**
			Additional Active Adult Landscape Demand (AFY):	**40.56**

* Per landscaping construction plans

ORIGINAL PA 32 PARK WATER USE					
		GPD Factors (GPD per Acre)			
Total Park Acres	5.01	**3000**	**1800**	**1200**	**0**
Turf Area	56.50%	9.51			
Drip Area - Medium Demand	8.00%		0.81		
Drip Area - Low Demand	8.00%			0.54	
Impervious	27.50%				0.00
		9.51	0.81	0.54	0.00
				Original Park Landscape Demand (AFY):	**10.86**

Example of Existing Sundance Park

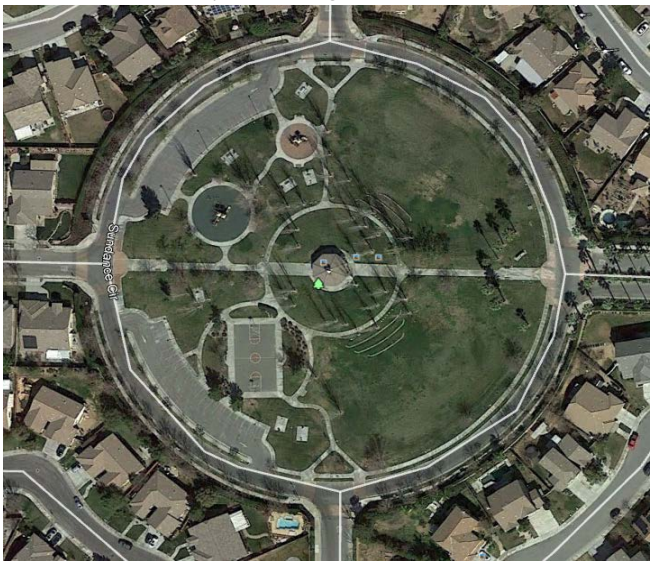


TABLE 3
TRADITIONAL SINGLE FAMILY DWELLING UNIT HOUSING VS ACTIVE ADULT LIVING HOUSING
SUNDANCE FOOTPRINT COMPARISON

Lot Type	Planning Area (PA)	Lot Size	Typical Building Pad (SF)	# of DUs in PA	Type of House	1st Floor Footprint (SF)*	Plotting Mix	Total Square Footage of 1st Floor Footprint (SF)	Total Square Footage of Typical Building Pad (SF)	Average 1st Floor Footprint (SF)	1st Floor Footprint (SF)*	Typical Developed Building Pad Size (SF)	Percentage of Building Pad Covered by House Footprint	Averaged Percentage of Coverage
Conventional	PA 35A/B	47x72	3,384	195	2 Story	1,688	33%	108,623	217,760	1,800	1,688	3,384	49.88%	51.54%
					2 Story	1,822	33%	117,246	217,760		1,822		53.84%	
					2 Story	1,888	34%	125,174	224,359		1,888		55.79%	
	PA 36	45x105	4,725	102	1 Story	2,431	33%	81,827	159,044	2,300	2,431	4,725	51.45%	
					1 Story	2,582	33%	86,910	159,044		2,582		54.65%	
					2 Story	1,900	34%	65,892	163,863		1,900		40.21%	
	PA 38**	50x100	5,000	142	1 Story	2,966	33%	138,987	234,300	2,442	2,966	5,000	59.32%	
					2 Story	2,081	33%	97,516	234,300		2,081		41.62%	
					2 Story	2,284	34%	110,272	241,400		2,284		45.68%	
	PA 39**	60x100	6,000	88	1 Story	3,786	33%	109,945	174,240	3,321	3,786	6,000	63.10%	
					2 Story	2,958	33%	85,900	174,240		2,958		49.30%	
					2 Story	3,221	34%	96,372	179,520		3,221		53.68%	
								1,224,665	**2,379,830**					

	Square Feet	Acres
Total Traditional SF Landscaping Area:	**1,155,166**	**26.52**

Lot Type	Planning Area (PA)	Lot Size	Typical Building Pad (SF)	# of DUs in PA	Type of House	1st Floor Footprint (SF)*	Plotting Mix	Total Square Footage of 1st Floor Footprint (SF)	Total Square Footage of Typical Building Pad (SF)	Average 1st Floor Footprint (SF)	1st Floor Footprint (SF)*	Typical Developed Building Pad Size (SF)	Percentage of Building Pad Covered by House Footprint	Averaged Percentage of Coverage
Active Adult	PA 30, 31, 33 & 34	50x77	3,850	152	1 Story	2,407	33%	120,735	193,116	2,495	2,407	3,850	62.52%	61.87%
					1 Story	2,456	33%	123,193	193,116		2,456		63.79%	
					1 Story	2,617	34%	135,247	198,968		2,617		67.97%	
		45x105	4,725	205	1 Story	2,756	33%	186,443	319,646	2,840	2,756	4,725	58.33%	
					1 Story	2,850	33%	192,803	319,646		2,850		60.32%	
					1 Story	2,911	34%	202,897	329,333		2,911		61.61%	
		50x105	5,250	183	1 Story	3,033	33%	183,163	317,048	3,152	3,033	5,250	57.77%	
					1 Story	3,215	33%	194,154	317,048		3,215		61.24%	
					1 Story	3,205	34%	199,415	326,655		3,205		61.05%	
		55x105	5,775	164	1 Story	3,487	33%	188,716	312,543	3,616	3,487	5,775	60.38%	
					1 Story	3,694	33%	199,919	312,543		3,694		63.97%	
					1 Story	3,665	34%	204,360	322,014		3,665		63.46%	
								2,131,045	**3,461,675**					

	Square Feet	Acres
Total Active Adult SF Landscaping Area:	**1,330,630**	**30.55**
Active Adult Coverage @ 61.87%	**2,141,641**	
Active Adult Coverage @ 51.54%	**1,784,279**	
Reduction to Landscape area due to increased lot coverage:	**357,362**	**8.20**

* Taken from City approved arch. submittal. Includes living space, garage, covered patio (if standard), porch and driveway. See Appendix E.
**Averaged the conventional 50x100 and 60x100 lots to get an Active Adult 55x100 lot for comparison.

APPENDIX C

OUTDOOR WATER USE SUMMARY
TRADITIONAL SINGLE FAMILY DWELLING UNIT HOUSING VERSUS ACTIVE ADULT LIVING HOUSING
LOT ANALYSIS SUMMARY

TRADITIONAL SINGLE FAMILY DWELLING UNIT WATER USE ANALYSIS LARGE DU SMALL LOT

								Water Use Factors (GPD per Acre)	3000	1800	1200
								Water Use Factors (AF per Year per Acre)	3.361	2.016	1.344
	Area 1	Area 2	Area 3	Area 4	Area 5	Total Area	% of Lot		Water Use in AFY per Lot		
Total Lot Sq Footage:	6423.09					6423.09			All Turf	Turf and Medium	Turf and Low
Sq Footage in Turf:	865.57					865.57	13.48%		0.0668	Drought Tollerant	Drought Tollerant
Sq Footage in Drip:	674.25	512.99	112.78	256.87	178.2	1735.07	27.01%		0.1339	0.0803	0.0535
								Total Lot Landscape Use AFY (based upon use):	**0.2006**	**0.1471**	**0.1203**

TRADITIONAL SINGLE FAMILY DWELLING UNIT WATER USE ANALYSIS SMALL DU LARGE LOT

								Water Use Factors (GPD per Acre)	3000	1800	1200
								Water Use Factors (AF per Year per Acre)	3.361	2.016	1.344
	Area 1	Area 2	Area 3	Area 4	Area 5	Total Area	% of Lot		Water Use in AFY per Lot		
Total Lot Sq Footage:	8972.46					8972.46			All Turf	Turf and Medium	Turf and Low
Sq Footage in Turf:	1963.86					1963.86	21.89%		0.1515	Drought Tollerant	Drought Tollerant
Sq Footage in Drip:	814.11	1950.7	111.37	365.17	404.3	3645.67	40.63%		0.2813	0.1688	0.1125
								Total Lot Landscape Use AFY (based upon use):	**0.4328**	**0.3203**	**0.2640**

ACTIVE ADULT LIVING SINGLE FAMILY DWELLING UNIT WATER USE ANALYSIS - MEDIUM DU MEDIUM LOT

								Water Use Factors (GPD per Acre)	3000	1800	1200
								Water Use Factors (AF per Year per Acre)	3.361	2.016	1.344
	Area 1	Area 2	Area 3	Area 4	Area 5	Total Area	% of Lot		Water Use in AFY per Lot		
Total Lot Sq Footage:	7289.87					7289.87			All Turf	Turf and Medium	Turf and Low
Sq Footage in Turf:	659.49	59.1				718.59	9.86%		0.0554	Drought Tollerant	Drought Tollerant
Sq Footage in Drip:	645.74	447.37	124.8	312.3	112.1	1642.34	22.53%		0.1267	0.0760	0.0507
								Total Lot Landscape Use AFY (based upon use):	**0.1821**	**0.1315**	**0.1061**

ACTIVE ADULT LIVING SINGLE FAMILY DWELLING UNIT WATER USE ANALYSIS - SMALL DU LARGE LOT

								Water Use Factors (GPD per Acre)	3000	1800	1200
								Water Use Factors (AF per Year per Acre)	3.361	2.016	1.344
	Area 1	**Area 2**	**Area 3**	**Area 4**	**Area 5**	**Total Area**	**% of Lot**		**Water Use in AFY per Lot**		
Total Lot Sq Footage:	8545.15					8545.15			All Turf	Turf and Medium	Turf and Low
Sq Footage in Turf:	497.9	69.77	203.58			771.25	9.03%		0.0595	Drought Tollerant	Drought Tollerant
Sq Footage in Drip:	214.13	234.38	1264.99	798.54	0.0	2512.04	29.40%		0.1938	0.1163	0.0775
								Total Lot Landscape Use AFY (based upon use):	**0.2533**	**0.1758**	**0.1370**

ACTIVE ADULT LIVING SINGLE FAMILY DWELLING UNIT WATER USE ANALYSIS - LARGE HOUSE SMALL LOT

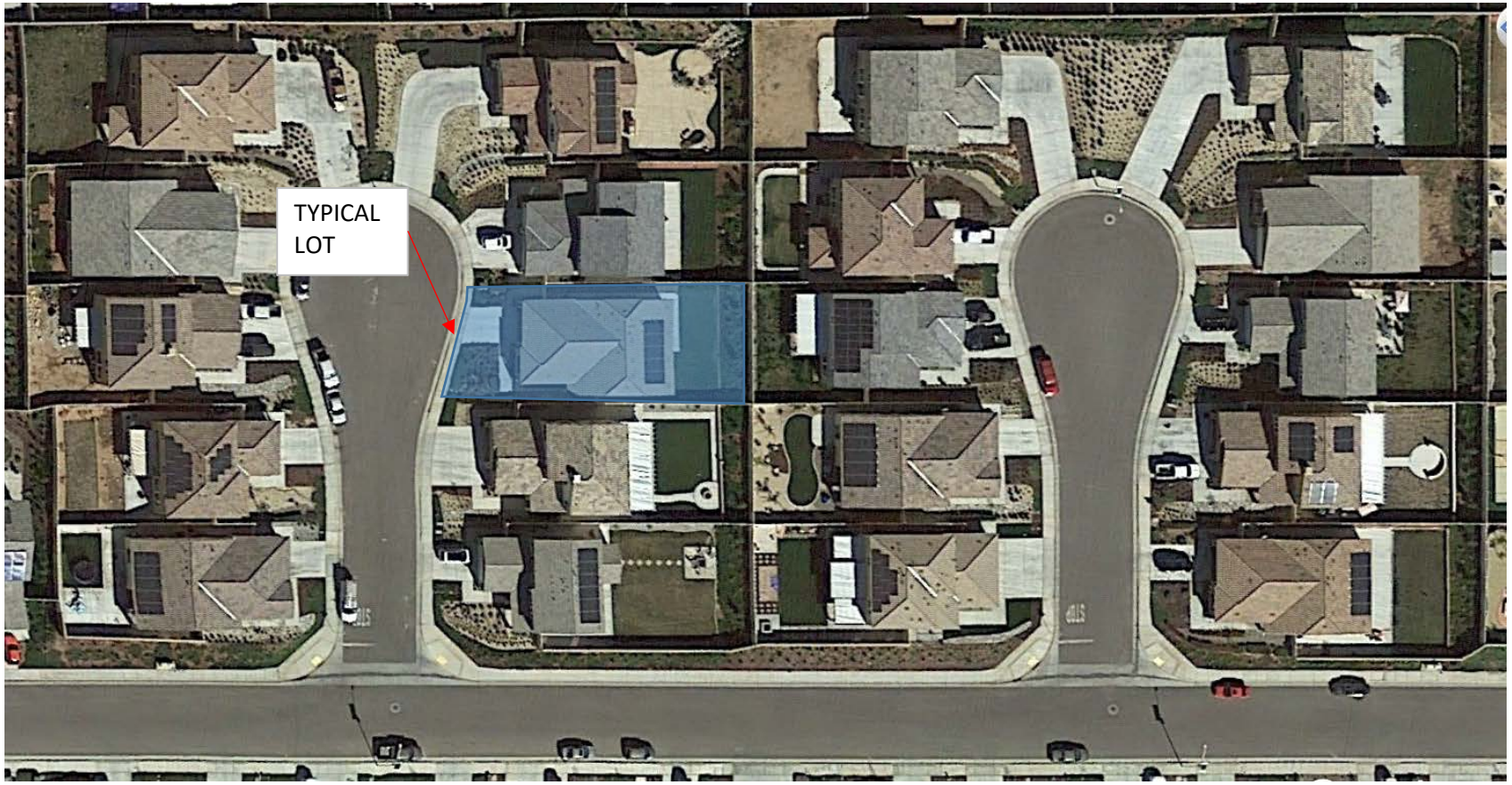
								Water Use Factors (GPD per Acre)	3000	1800	1200
								Water Use Factors (AF per Year per Acre)	3.361	2.016	1.344
	Area 1	**Area 2**	**Area 3**	**Area 4**	**Area 5**	**Total Area**	**% of Lot**	**ter Use in AFY per Lot**			
Total Lot Sq Footage:	7336.58					7336.58			All Turf	Turf and Medium	Turf and Low
Sq Footage in Turf:	127.05	108.98	153.9			389.93	5.31%		0.0301	Drought Tollerant	Drought Tollerant
Sq Footage in Drip:	222.82	128.78	534.21	289.65		1175.46	16.02%		0.0907	0.0544	0.0363
								Total Lot Landscape Use AFY (based upon use):	**0.1208**	**0.0845**	**0.0664**

	Use (AFY)	Avg Use (AFY)			
Traditional SFDU Water Use (Large DU Small Lot):	0.1471	0.1471	**Difference per House:**	**0.0363**	**Savings (AFY)**
Traditional SFDU Water Use (Small DU Large Lot):	0.3203	0.3203	**Houses:**	**704**	
Traditional SFDU Water Use (Medium DU Medium Lot):	0.1315	0.1315	**Total Savings (AFY):**	**25.58**	**AFY Savings**

PHOTO 1

TRADITIONAL SINGLE FAMILY DWELLING UNIT HOUSING VERSUS ACTIVE ADULT LIVING HOUSING

SUNDANCE TYPICAL SINGE FAMILY HOME COMPARISON LARGE DU SMALL LOT

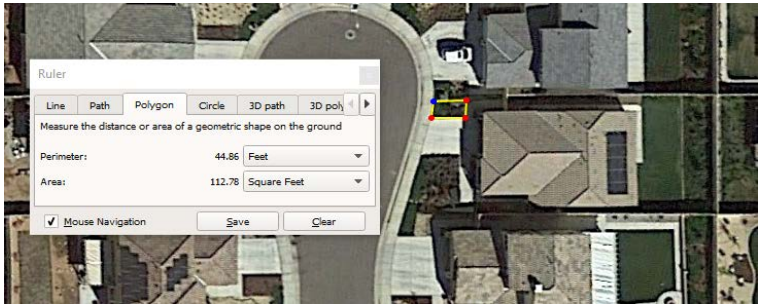


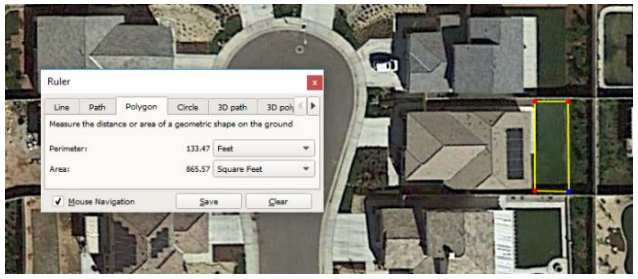
						Water Use Factors (GPD per Acre)		**3000**	**1800**	**1200**
						Water Use Factors (AF per Year per Acre)		**3.361**	**2.016**	**1.344**
	Area 1	Area 2	Area 3	Area 4	Area 5	Total Area	% of Lot	Water Use in AFY per Lot		
Total Lot Sq Footage:	6423.09					6423.09		All Turf	Turf and Medium	Turf and Low
Sq Footage in Turf:	865.57					865.57	13.48%	0.0668	Drought Tollerant	Drought Tollerant
Sq Footage in Drip:	674.25	512.99	112.78	256.87	178.2	1735.07	27.01%	0.1339	0.0803	0.0535
						Total Lot Landscape Use AFY (based upon use):		**0.2006**	**0.1471**	**0.1203**

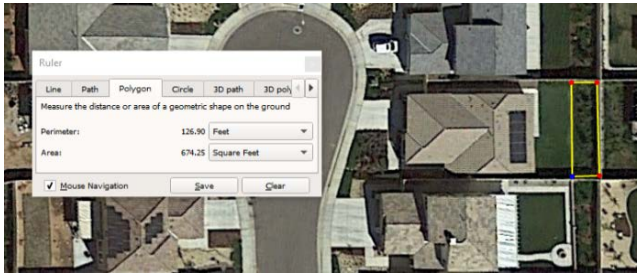
PHOTO 1

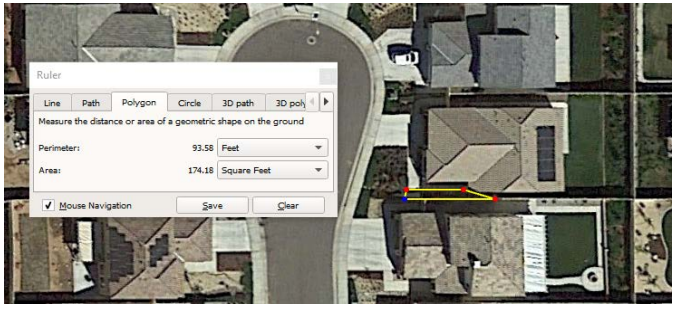
TRADITIONAL SINGLE FAMILY DWELLING UNIT HOUSING VERSUS ACTIVE ADULT LIVING HOUSING

SUNDANCE TYPICAL SINGE FAMILY HOME COMPARISON









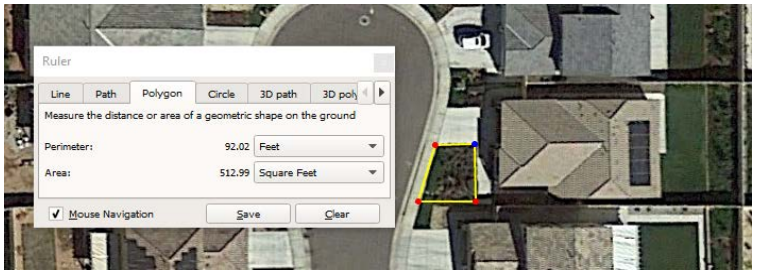
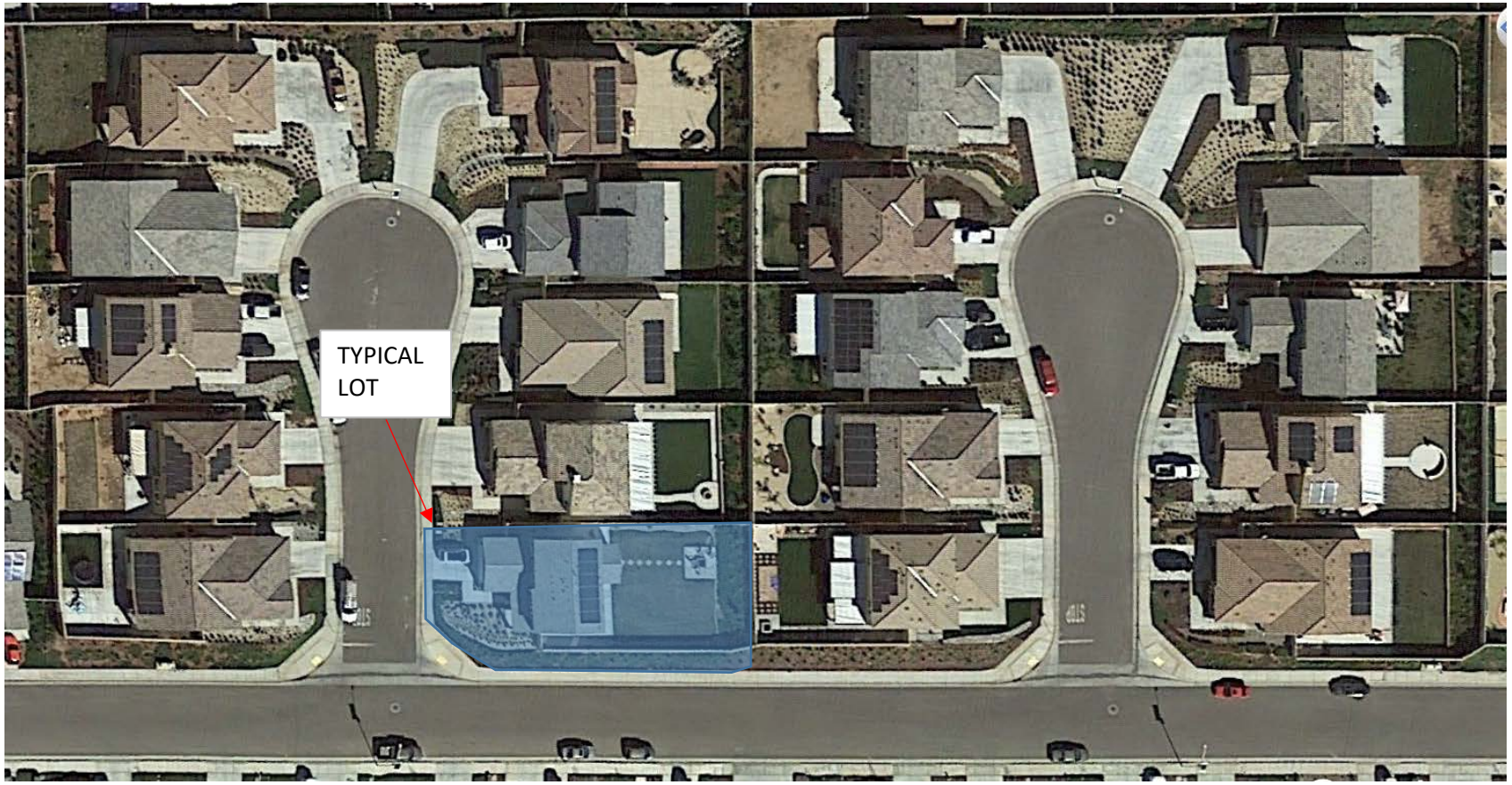


PHOTO 2

TRADITIONAL SINGLE FAMILY DWELLING UNIT HOUSING VERSUS ACTIVE ADULT LIVING HOUSING

SUNDANCE TYPICAL SINGE FAMILY HOME COMPARISON SMALL DU LARGE LOT

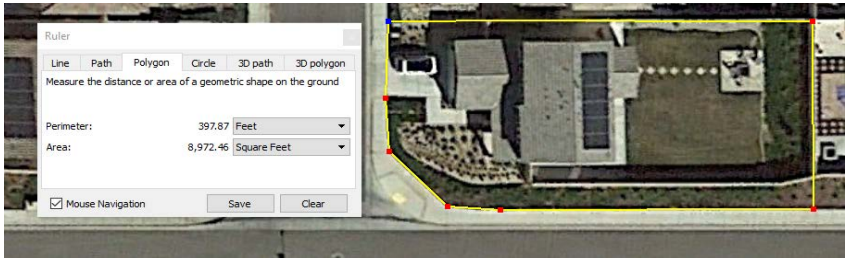


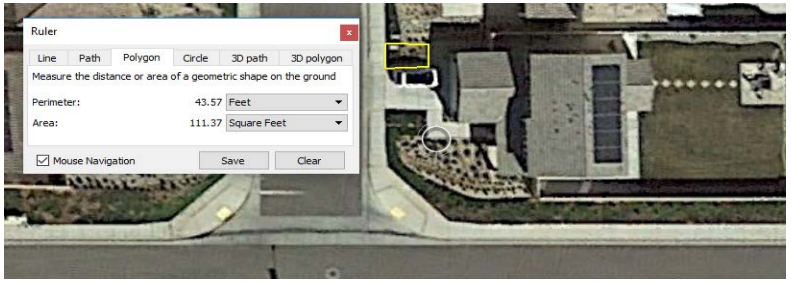
							Water Use Factors (GPD per Acre)	**3000**	**1800**	**1200**
							Water Use Factors (AF per Year per Acre)	**3.361**	**2.016**	**1.344**
	Area 1	Area 2	Area 3	Area 4	Area 5	Total Area	% of Lot	Water Use in AFY per Lot		
Total Lot Sq Footage:	8972.46					8972.46		All Turf	Turf and Medium Drought Tollerant	Turf and Low Drought Tollerant
Sq Footage in Turf:	1963.86					1963.86	21.89%	0.1515		
Sq Footage in Drip:	814.11	1950.7	111.37	365.17	404.3	3645.67	40.63%	0.2813	0.1688	0.1125
							Total Lot Landscape Use AFY (based upon use):	**0.4328**	**0.3203**	**0.2640**

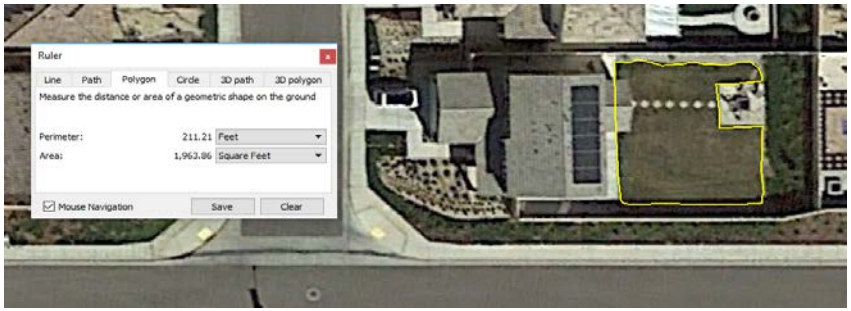
PHOTO 2

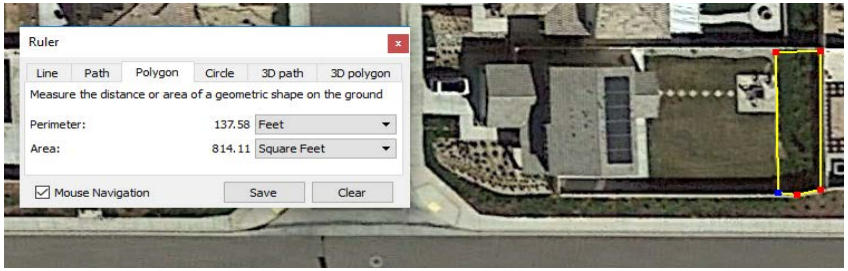
TRADITIONAL SINGLE FAMILY DWELLING UNIT HOUSING VERSUS ACTIVE ADULT LIVING HOUSING

SUNDANCE TYPICAL SINGE FAMILY HOME COMPARISON









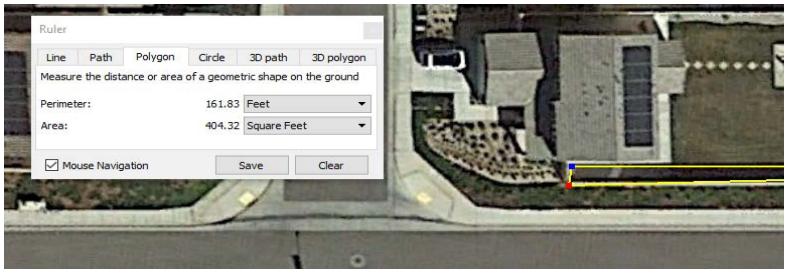
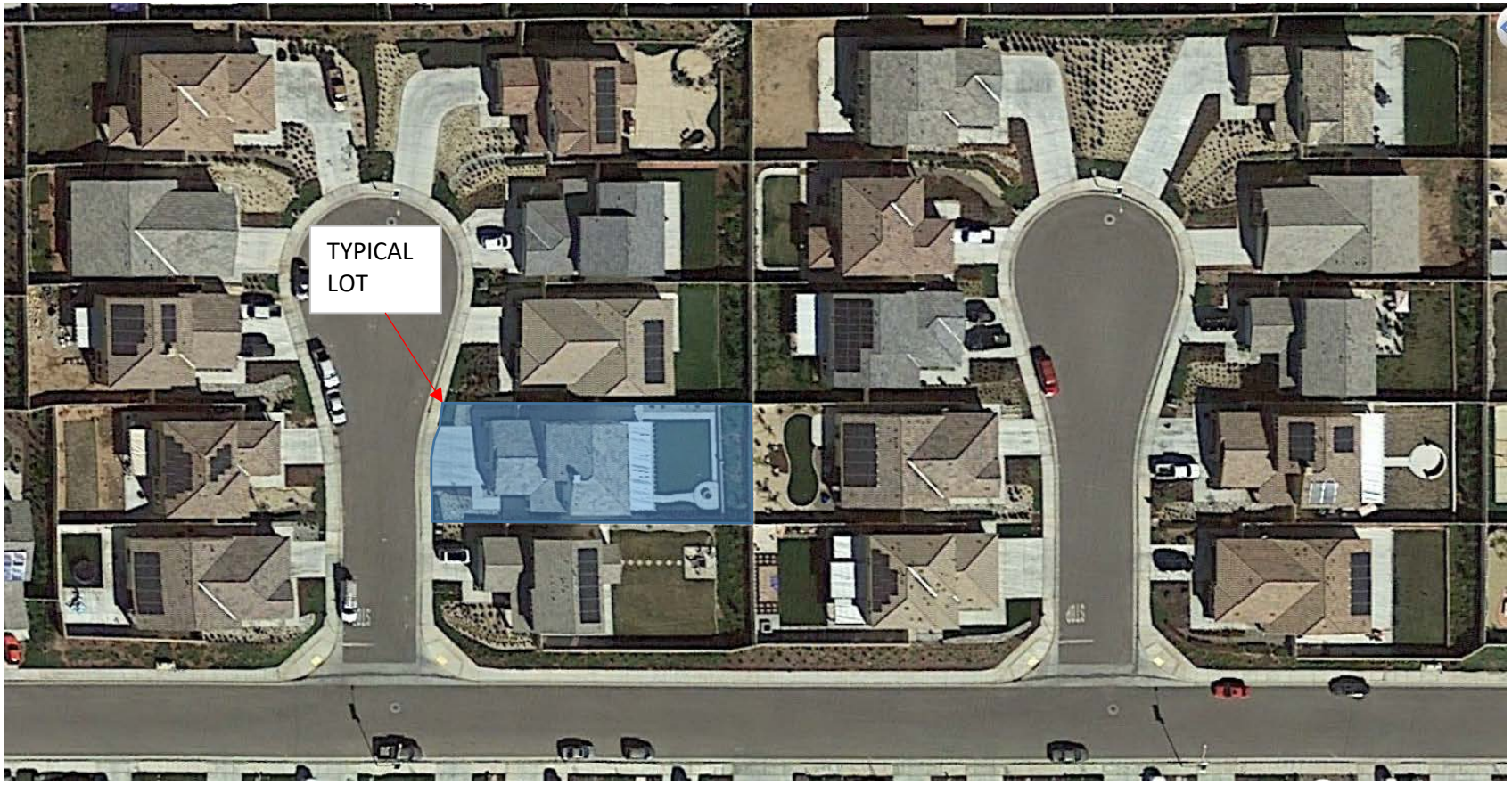


PHOTO 2

TRADITIONAL SINGLE FAMILY DWELLING UNIT HOUSING VERSUS ACTIVE ADULT LIVING HOUSING

SUNDANCE TYPICAL SINGE FAMILY HOME COMPARISON SMALL DU LARGE LOT



						Water Use Factors (GPD per Acre)		**3000**	**1800**	**1200**
						Water Use Factors (AF per Year per Acre)		**3.361**	**2.016**	**1.344**
	Area 1	Area 2	Area 3	Area 4	Area 5	Total Area	% of Lot	Water Use in AFY per Lot		
Total Lot Sq Footage:	7289.87					7289.87		All Turf	Turf and Medium	Turf and Low
Sq Footage in Turf:	659.49	59.1				718.59	9.86%	0.0554	Drought Tollerant	Drought Tollerant
Sq Footage in Drip:	645.74	447.37	124.77	312.3	112.1	1642.31	22.53%	0.1267	0.0760	0.0507
						Total Lot Landscape Use AFY (based upon use):		**0.1821**	**0.1315**	**0.1061**

PHOTO 3

TRADITIONAL SINGLE FAMILY DWELLING UNIT HOUSING VERSUS ACTIVE ADULT LIVING HOUSING

SUNDANCE TYPICAL SINGE FAMILY HOME COMPARISON

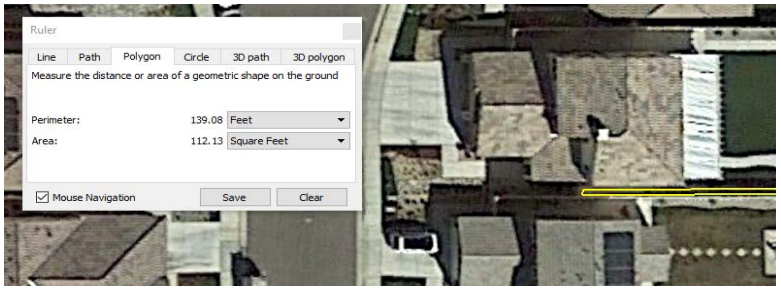
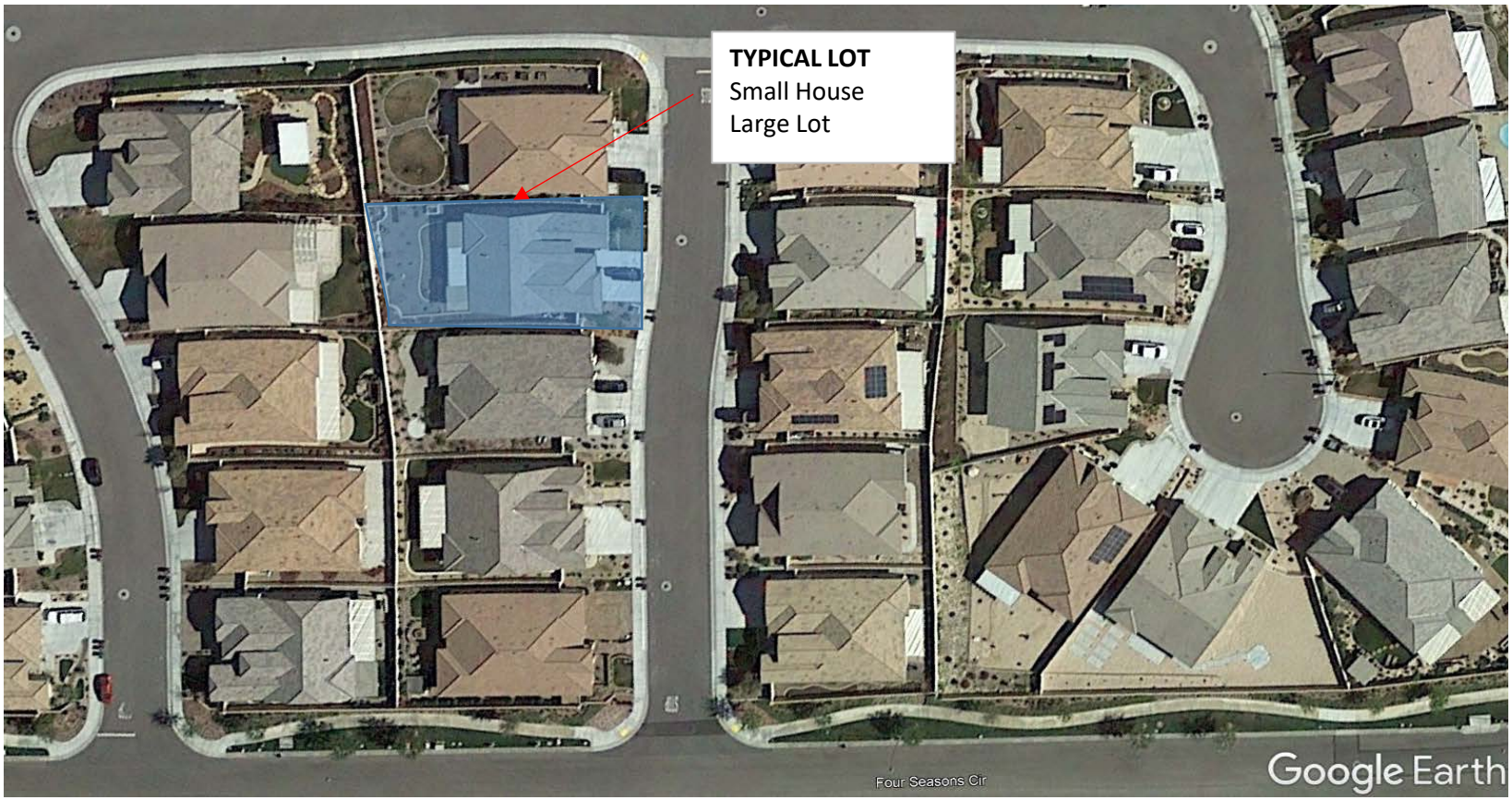


PHOTO 4

TRADITIONAL SINGLE FAMILY DWELLING UNIT HOUSING VERSUS ACTIVE ADULT LIVING HOUSING

K HOVNANIAN TYPICAL ACTIVE ADULT AREA HOME COMPARISON

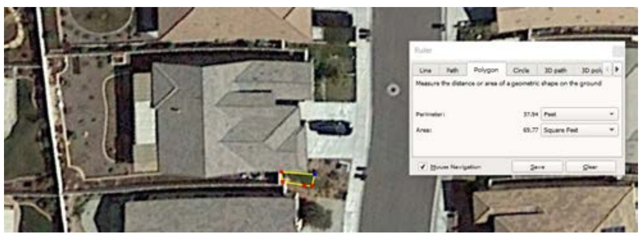


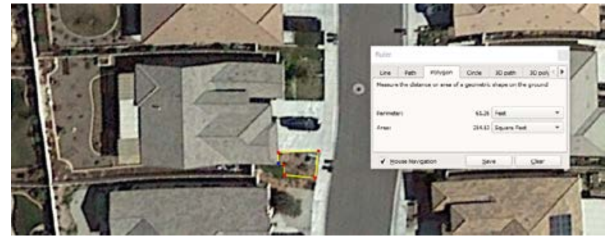
							Water Use Factors (GPD per Acre)	**3000**	**1800**	**1200**
							Water Use Factors (AF per Year per Acre)	**3.361**	**2.016**	**1.344**
	Area 1	**Area 2**	**Area 3**	**Area 4**	**Area 5**	**Total Area**	**% of Lot**	**Water Use in AFY per Lot**		
Total Lot Sq Footage:	8545.15					8545.15		All Turf	Turf and Medium Drought Tollerant	Turf and Low Drought Tollerant
Sq Footage in Turf:	497.9	69.77	203.58			771.25	9.03%	0.0595		
Sq Footage in Drip:	214.13	234.38	1265	798.54	0.0	2512.04	29.40%	0.1938	0.1163	0.0775
							Total Lot Landscape Use AFY (based upon use):	**0.2533**	**0.1758**	**0.1370**

PHOTO 4

TRADITIONAL SINGLE FAMILY DWELLING UNIT HOUSING VERSUS ACTIVE ADULT LIVING HOUSING

K HOVNANIAN TYPICAL ACTIVE ADULT AREA HOME COMPARISON





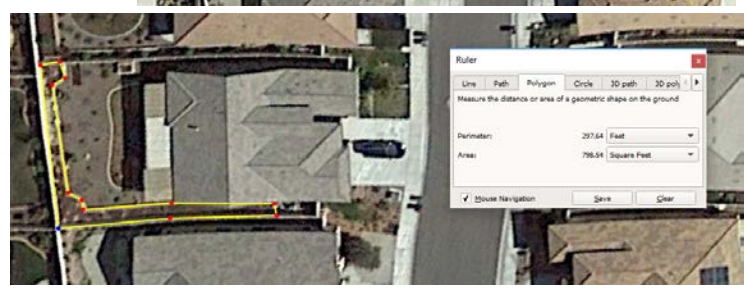


PHOTO 5

TRADITIONAL SINGLE FAMILY DWELLING UNIT HOUSING VERSUS ACTIVE ADULT LIVING HOUSING

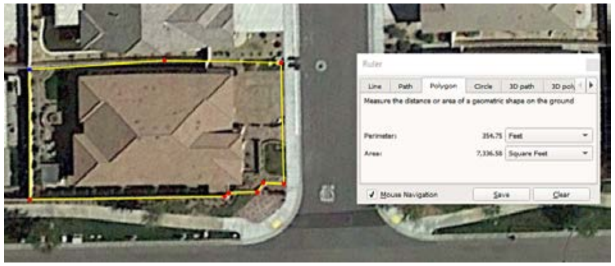
K HOVNANIAN TYPICAL ACTIVE ADULT AREA HOME COMPARISON

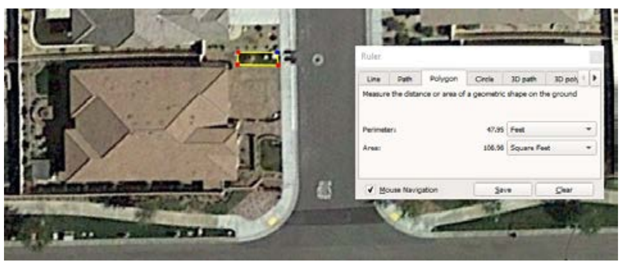
						Water Use Factors (GPD per Acre)		**3000**	**1800**	**1200**
						Water Use Factors (AF per Year per Acre)		**3.361**	**2.016**	**1.344**
	Area 1	**Area 2**	**Area 3**	**Area 4**	**Area 5**	**Total Area**	**% of Lot ter Use in AFY per Lot**			
Total Lot Sq Footage:	7336.58					7336.58		All Turf	Turf and Medium	Turf and Low
Sq Footage in Turf:	127.05	108.98	153.9			389.93	5.31%	0.0301	Drought Tollerant	Drought Tollerant
Sq Footage in Drip:	222.82	128.78	534.21	289.65		1175.46	16.02%	0.0907	0.0544	0.0363
						Total Lot Landscape Use AFY (based upon use):		**0.1208**	**0.0845**	**0.0664**

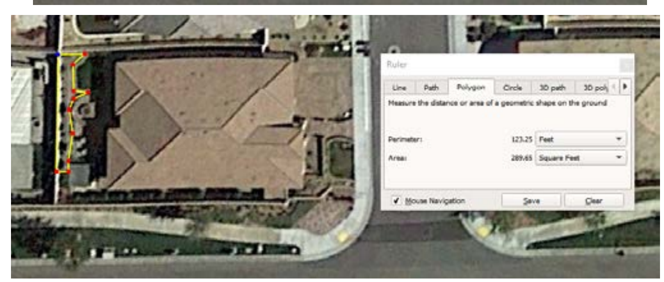
PHOTO 5

TRADITIONAL SINGLE FAMILY DWELLING UNIT HOUSING VERSUS ACTIVE ADULT LIVING HOUSING

K HOVNANIAN TYPICAL ACTIVE ADULT AREA HOME COMPARISON







APPENDIX D

DAVID TAUSSIG & Associates, Inc.

CAPACITY FEE STUDY FOR SAN GORGONIO PASS WATER AGENCY

JULY 21, 2015

Public Finance
Facilities Planning
Urban Economics

Newport Beach
Riverside
San Francisco
Chicago

CAPACITY FEE STUDY
FOR
SAN GORGONIO PASS WATER AGENCY

JULY 21, 2015

Prepared for
SAN GORGONIO PASS WATER AGENCY
1210 Beaumont Avenue
Beaumont, California 92223
(951) 845-2577

Prepared by
DAVID TAUSSIG & ASSOCIATES, INC.
5000 Birch Street, Suite 6000
Newport Beach, California 92660
(949) 955-1500

TABLE 7

EDU Calculation - Future Development

	(1)	(2)	(3)	(4)	(5)	(6)
Land Use	Water Use Factor (AFY/Ac)	Density (DU per acre or FAR)	Water Use (AFY per DU or KSF)	EDU Factor	DU or KSF	EDU
City of Banning:						
Single Family	2.73	5	0.546	1.00	5,771	5,771
Multi-Family	5.34	20	0.267	0.49	0	0
Commercial/Retail	5.76	0.20	0.662	1.21	2,482	3,008
Industrial	1.27	0.40	0.073	0.13	2,315	309
Total						9,088
City of Beaumont:						
Single Family	2.73	5	0.546	1.00	7,819	7,819
Multi-Family	5.34	20	0.267	0.49	37	18
Commercial/Retail	5.76	0.20	0.662	1.21	1,282	1,553
Industrial	1.27	0.40	0.073	0.13	511	68
Total						9,458
City of Calimesa:						
Single Family	2.73	5	0.546	1.00	9,300	9,300
Multi-Family	5.34	20	0.267	0.49	2,800	1,369
Commercial/Retail	5.76	0.20	0.662	1.21	23,413	28,371
Industrial	1.27	0.40	0.073	0.13	18,288	2,441
Total						41,481
Unincorporated Areas & others						
Single Family	2.85	5	0.570	1.04	2,492	2,602
Multi-Family	5.44	20	0.272	0.50	37	18
Commercial/Retail	5.79	0.20	0.664	1.22	1,332	1,620
Industrial	1.29	0.40	0.074	0.14	15	2
Total						4,242
					Total Future EDUs =	64,269
					% of total	55.40%
					Total EDU's =	116,004

Based on the numbers shown in Table 6 and Table 7, it is anticipated that in the year 2035 there will be 116,004 EDUs within the SGPWA service area (51,735 existing EDUs plus 64,269 future EDUs).

The summary of existing EDUs and growth EDUs at 2035 by land use is shown below in Table 8, “EDU Summary at 2035”:

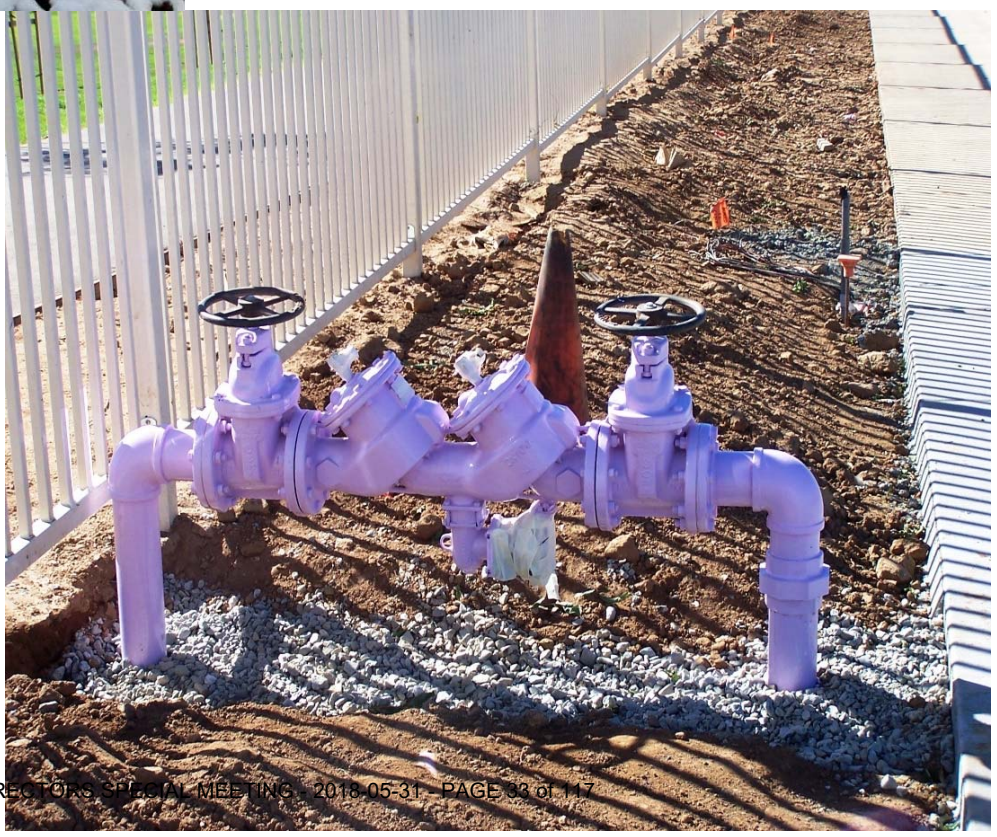
2015 URBAN WATER MANAGEMENT PLAN

BEAUMONT CHERRY VALLEY WATER DISTRICT

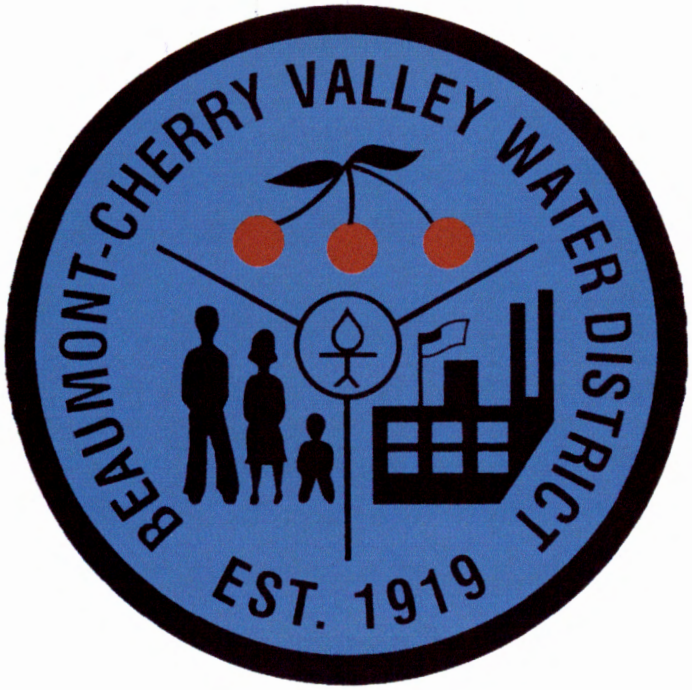
560 Magnolia Avenue

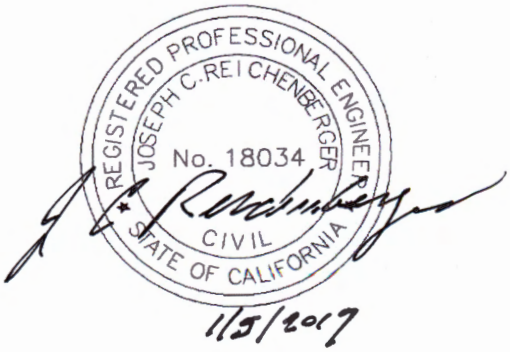
Beaumont, CA 92223

January 2017



2015
URBAN WATER MANAGEMENT PLAN





Prepared by

BEAUMONT CHERRY VALLEY WATER DISTRICT
560 N. MAGNOLIA AVENUE
BEAUMONT, CALIFORNIA 92220

January 2017

The housing units yet to be constructed in Table 3-5 plus the EDUs in the other projects in Table 3-6 total 14,254 EDUs in the City of Beaumont. This would result in an increase in population of 40,000 people based on 2.8 people per EDU. This would bring the total Beaumont population to 81,780.

This population estimate approaches the build out population presented previously (90,600), which was based on average densities within the various land use categories. The 81,780 estimate is consistent with the City of Beaumont's General Plan build out population of 87,200.[10]

Cherry Valley Population Growth and BCVWD Served Population

As presented previously, the ultimate build-out population served by BCVWD for Cherry Valley based on the Pass Area Land Use Plan[11] densities is 21,700 people or about 7,750 EDUs. This is based on an increase to 2.8 persons per EDU projected at build-out.

There are 2,874 housing units in Cherry Valley in 2010 per the census data, but 26.6% of those are mobile homes. The 2,874 housing units are equivalent to about 2,485 EDUs. So build-out will result in about another 5,265 new EDUs. The Sunny Cal Egg Ranch Development (560 EDUs), included in the City of Beaumont, is actually within the current Cherry Valley census area and would have been included among the 5,265 EDU increase for Cherry Valley. So to avoid "double counting," the Sunny Cal Egg Ranch EDUs were deducted resulting in a net projected 4,655 EDU increase for Cherry Valley.

Except for the Sunny Cal Egg Ranch project, BCVWD believes the bulk of the 4,655 Cherry Valley EDUs will not be constructed until after 2030.

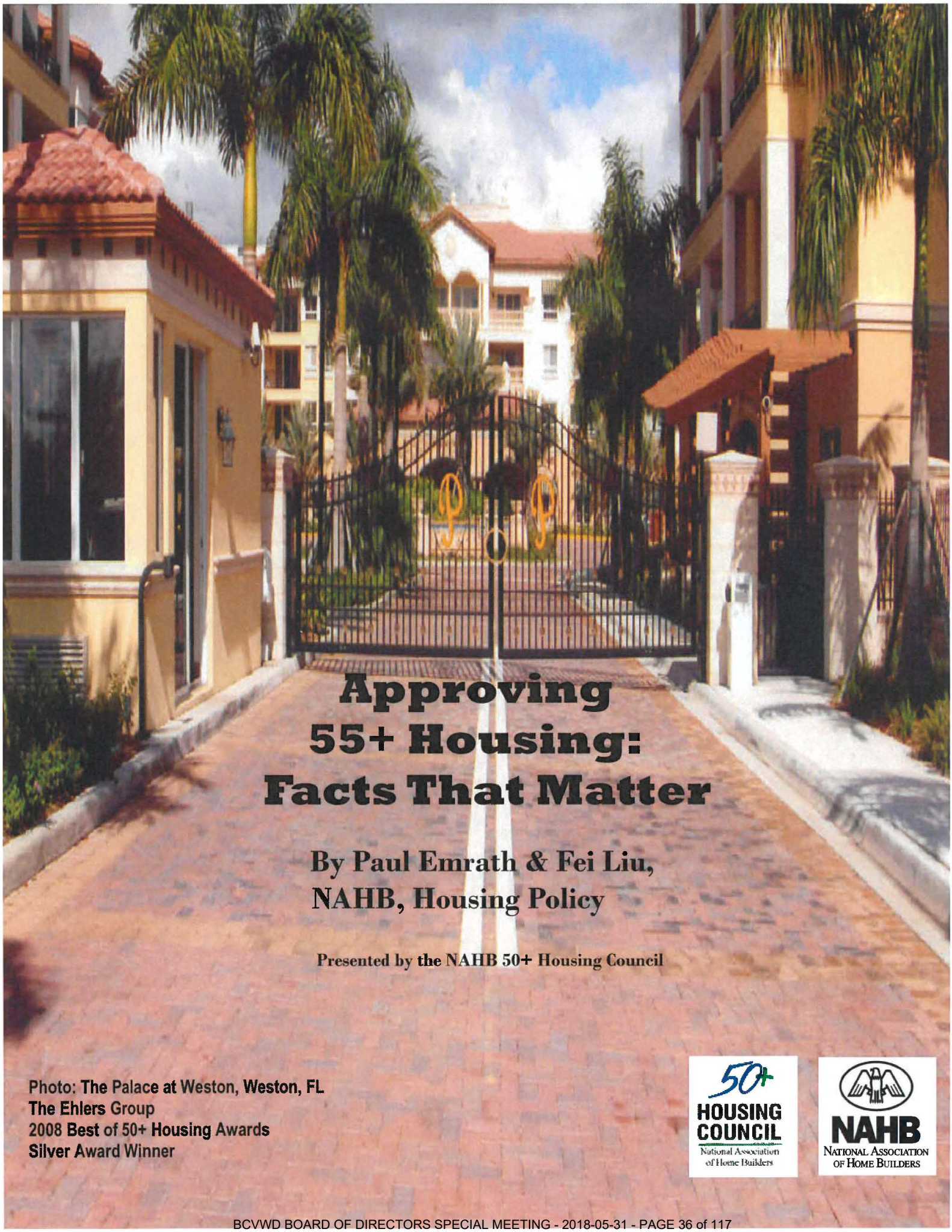
The City of Beaumont's population from the developments, (81,780 presented previously), combined with the Cherry Valley build-out population, (21,700 presented above), the total population served by BCVWD 103,480. This is consistent with the GIS land use based build-out estimate of 112,300 presented previously. The 112,300 estimate will be used as the District's build-out, served, population for planning purposes.

Existing EDUs and EDU Growth to Build-out

BCVWD uses Equivalent Dwelling Units (EDUs) to calculate and project potable water demand. BCVWD Rules and Regulation, Section 5, defines the water use as 580 gal/EDU/day. This is equivalent to 0.65 AFY/EDU. (An analysis developed for and presented in the 2015 Adopted Potable Water Master Plan supports this demand.)

[10] City of Beaumont General Plan, March 2007, page 25.

[11] Pass Area Land Use Plan, October 7, 2003, Part of Riverside County General Plan.



Approving 55+ Housing: Facts That Matter

By Paul Emrath & Fei Liu,
NAHB, Housing Policy

Presented by the NAHB 50+ Housing Council

Photo: The Palace at Weston, Weston, FL
The Ehlers Group
2008 Best of 50+ Housing Awards
Silver Award Winner

50+ HOUSING COUNCIL
National Association of Home Builders

NAHB
National Association of Home Builders

Approving 55+ Housing: Facts That Matter

Authors

Paul Emrath, Assistant Staff Vice President of Housing Policy Research, Housing Policy Department, National Association of Home Builders, Washington, D.C.

Fei Liu, Housing Policy Economist, Housing Policy Department, National Association of Home Builders, Washington, D.C.

About the Authors

Paul Emrath, Assistant Staff Vice President of Housing Policy Research. At NAHB, Emrath's responsibilities include conducting statistical and economic research on a wide variety of housing policy topics, estimating the economic impact of home building, and generally overseeing the research activities of the Housing Policy Department. Since joining NAHB in 1992, he has developed many of the methods NAHB uses to analyze government programs and housing market data, produced more than 400 customized reports analyzing the impact of residential construction in various metropolitan areas, non-metropolitan counties and states across the country, and published more than 100 research articles. His articles "Seniors in the Market for Housing: State Forecasts Through 2006" (NIC Review, Vol. 6, November 1998) and "The American Housing Survey: A Valuable New Information Source for Seniors Housing" (Seniors Housing & Care Journal, Vol. 10 No. 1, 2003) won National Investment Center awards for original research in the field of 50+ housing.

Before his promotion to Assistant Staff Vice President, Emrath worked for NAHB as Housing Policy Analyst (1992-1994), Director of Survey Analysis (1994-1995), Senior Economist (1995-1999) and Regulatory Economist (1999-2001). Prior to joining NAHB, he taught economic theory and statistics at the University of Wisconsin-Oshkosh. Emrath has a Ph.D. in Economics from the University of Wisconsin-Milwaukee.

Fei Liu, Housing Policy Economist, joined NAHB's Housing Policy Department in 2006. She also earned a Ph.D. degree in Economics from Indiana University in 2006.

Acknowledgements

The authors would like to thank the NAHB 50+ Housing Council's Research Committee for the contributions in made to this project. The Research Committee reviewed drafts of each chapter and provided valuable insights that significantly improved the final product. During this process, the Committee was chaired by Steve Wattenbarger, Bellevue, Washington.

About the 50+ Housing Council

The NAHB 50+ Housing Council exists to encourage the development and management of an adequate supply of housing for 50+ consumers by serving its members and affiliated local councils through education, membership, research, communication, information, advocacy and networking products and services. As information providers, we are committed to compiling and sharing strategic housing solutions that optimize individual and corporate achievements of NAHB and 50+ Housing Council members as they strive to meet the housing needs of 50+ consumers in the United States. For more information or to join, visit www.nahb.org/join50plus.

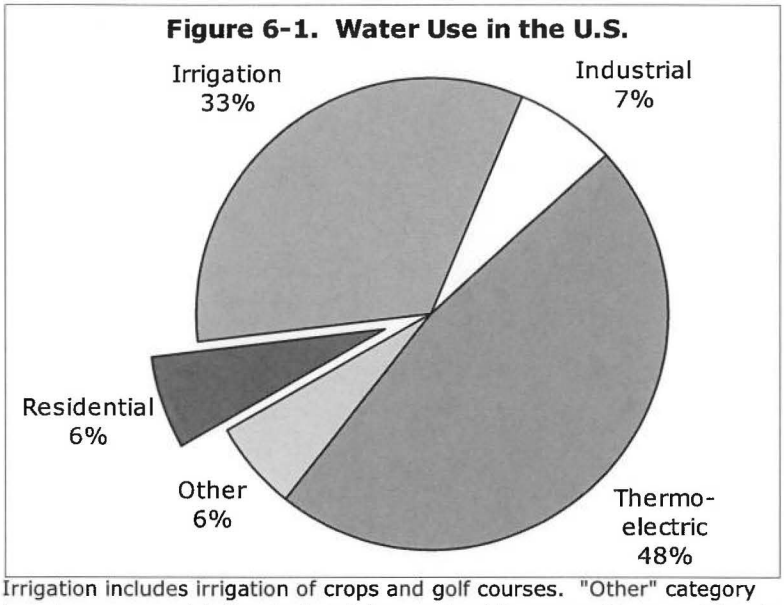
Table of Contents

Chapter 6 Water Supply and Sewerage

In 2000, the estimated water use in the United States was about 408 billion gallons per day for all users including households, farms, businesses and governments, according to the U.S. Department of the Interior's most recent report. This total has varied less than 3 percent since 1985 as water withdrawals have stabilized for the two largest components of water usage—thermoelectric power and irrigation.

This report shows that about 81.5 percent of the water used in the United States is used to irrigate farmland and generate thermoelectric power. Although the latest report lacks detail on water consumed by the residential sector, it is possible to get these numbers from the previous (1995) report, noting that total water withdrawal in the U.S. has been rather stable over the past two decades. As shown in Figure 6-1, in 1995 residential uses accounted for only about 6 percent of total water usage.

Figure 6-1. Water Use in the U.S.



Irrigation includes irrigation of crops and golf courses. "Other" category includes commercial, livestock, mining, and public use and losses. The chart is based on water withdrawn, so it excludes hydroelectric power that uses water without diverting it

Source: U.S. Department of the Interior, Estimated Use of Water in the United States in 1995, U.S. Geological Survey Circular 1200.

Providing water and sewer services is most often the responsibility of local governments. Local jurisdictions often impose indirect costs on residential customers by charging fees for extending the services to new home, most commonly by levying a fee on the developer before the construction begins. This is another area where local jurisdictions should take differences between younger and older households into account—for example, when calculating impact or tap fees for a 55+ housing project.

Again, household size is relevant. Older households will tend to use water and sewer services less, simply because older households contain fewer people (Figure I-1). In the

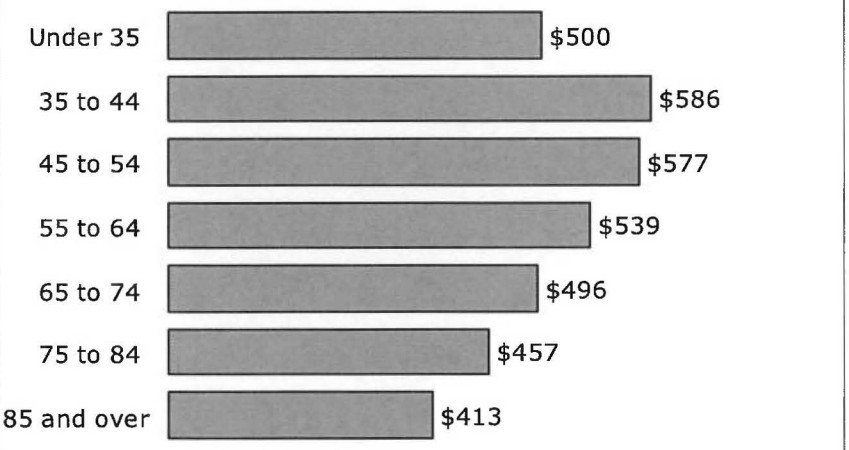
absence of a dataset containing information on both age and gallons of water used,[6] we can use a data on utility bills, or, the dollar amount spent on water and sewer services. The dollar amount is the physical units of water used multiply by a price of water. If the price varies with age—as might occur if areas with an older population also tended to charge higher or lower prices for water service, it has the potential to distort the results.

The 2007 American Housing Survey (AHS), which collects detailed utility expenditure data for individual households. In the AHS, expenses on water usage and sewage disposal over the course of a year are counted as one item. Actually, wastewater flow is usually monitored together, and utilities conventionally assume that it's proportional to water use.

We restrict the sample to be single-family detached home owners. Renters are excluded because of differential practices in including utility expenses in rents. Single-family detached, which account for the majority of owner-occupied homes, are used to control for possible differences among structure types. The samples of owner-occupied units in other types of structures are generally too small to cross tabulate by other variables.

Average water and sewer expenses by age of the household head are shown in Figure 6-2. Households in the age brackets 35 to 44 and 45 to 54 pay the most for water and sewer services. When the head of the household reaches 55, the expenses decline consistently as age increases. After age 65, water and sewer use drops even below the levels for the under-35 households and continues to decline with age.

Figure 6-2. Average Water/Sewer Bills in Single Family Homes by Age of Household Head



Source: 2007 American Housing Survey, U.S. Census Bureau and HUD

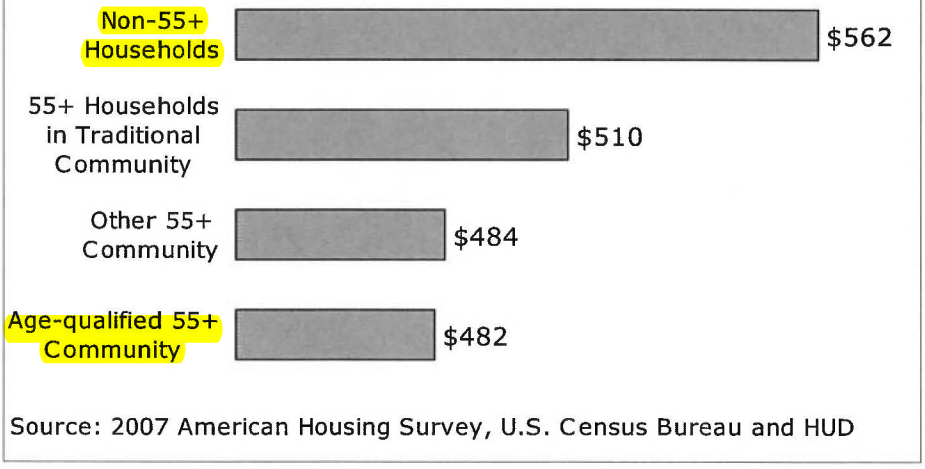
Households living in 55+ communities spend less on water and sewer bills than households living in traditional communities, as shown in Figure 6-3—water and sewer bills by community type. An age-qualified 55+ community is defined as age-restricted

[6] At NAHB's request, the American Water Works Association conducted an extensive search of thousands of articles and databases. It found no source of information on water use measured in physical units that identifies the age of the household or specifically separates seniors from other types of housing

communities in which the residents are households headed by someone age 55 and older. If the community is not specifically age-restricted, but the majority of the neighbors is 55 and older, then we name it "Other 55+ community". If the 55+ households live neither in age-qualified 55+ community, nor in other 55+ community, then we classify them to be "55+ households in traditional community." All other households headed by some one under 55 are in the "Non-55+ households" category.

On average, households living in age-qualified 55+ communities spend $482 per year on water and sewer services, and households living in other 55+ communities spend a similar of $484 per year. In contrast, if 55+ households live in traditional communities, they spend more—about $510 per year.

Figure 6-3. Average Water/Sewer Bills in Single Family Homes by Community Type



Source: 2007 American Housing Survey, U.S. Census Bureau and HUD

This finding supports our hypothesis that older households use fewer water and sewer services than younger households. Therefore, when approving a 55+ housing project, local governments should be aware that they will spend less on water sewer infrastructure per housing unit on a 55+ housing project than a typical project for residents of any age.

APPENDIX E

16-PP-01

CITY OF BEAUMONT
APPROVED
BY: Rebecca Jemison
PLANNING DIVISION
DATE: 4/12/16

PardeeHomes

ELARA

PLANNING AREA 35A

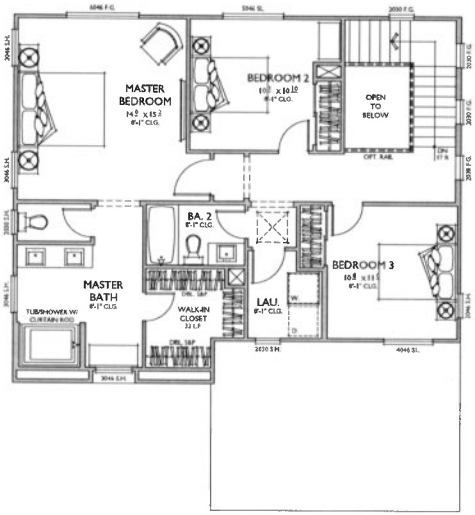
TRACT 31469-4
City of Beaumont, CA

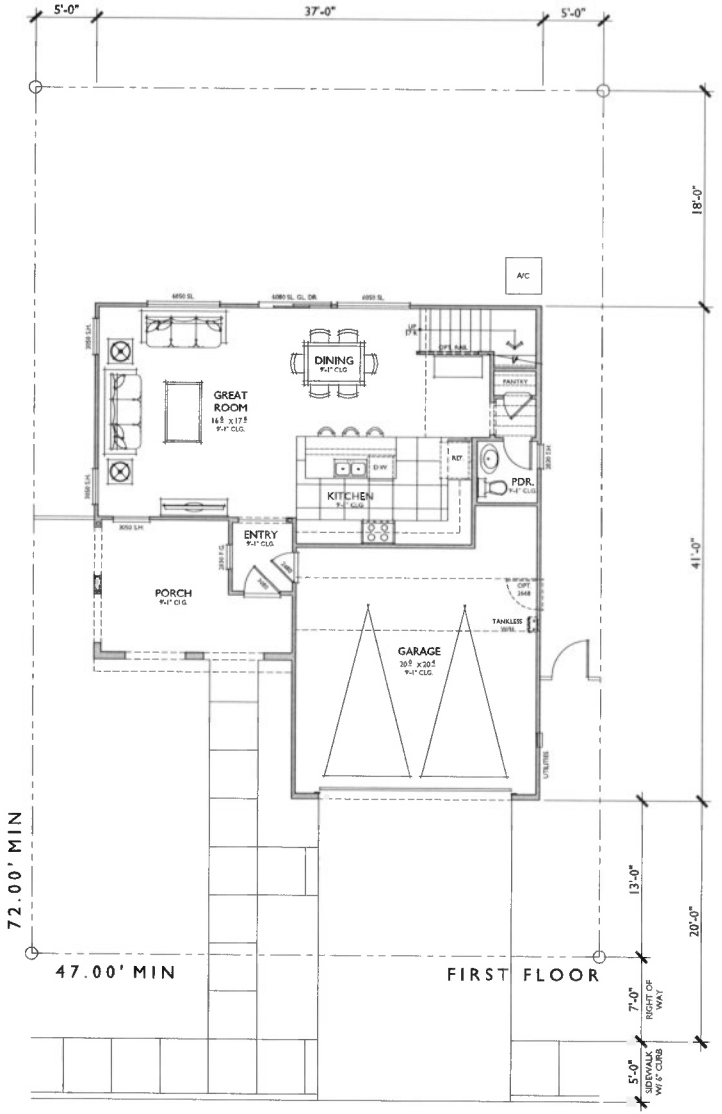
Plot Plan & Architectural Review Package

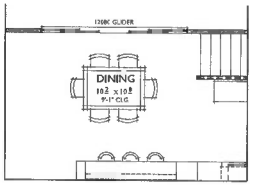
SUNDANCE

This is your place.

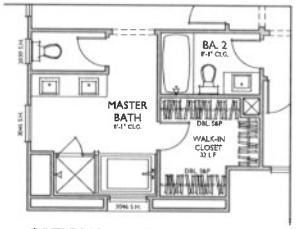
February 8, 2016







OPTIONAL 12080 GLIDER
AT DINING



OPTIONAL TUB/SHOWER
AT MASTER BATH

PLAN 1A
1,662 SQ. FT.

TARGET: 1,650 SQ. FT.
3 BEDROOMS / 2.5 BATHS
2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	726 SQ. FT.
2ND FLOOR	936 SQ. FT.
TOTAL	1,662 SQ. FT.
2 - CAR GARAGE	446 SQ. FT.
PORCH	156 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

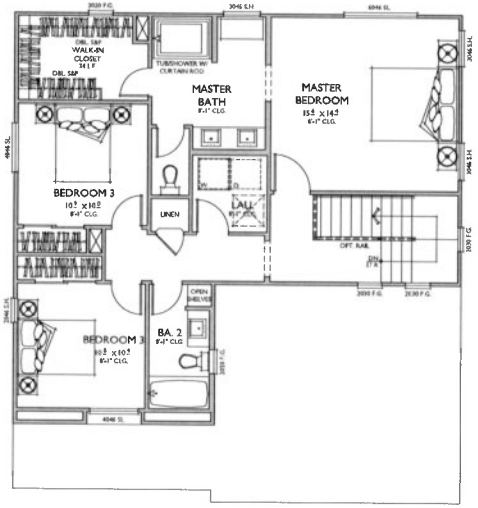
Bassenian | Lagoni
ARCHITECTURE • PLANNING • INTERIORS

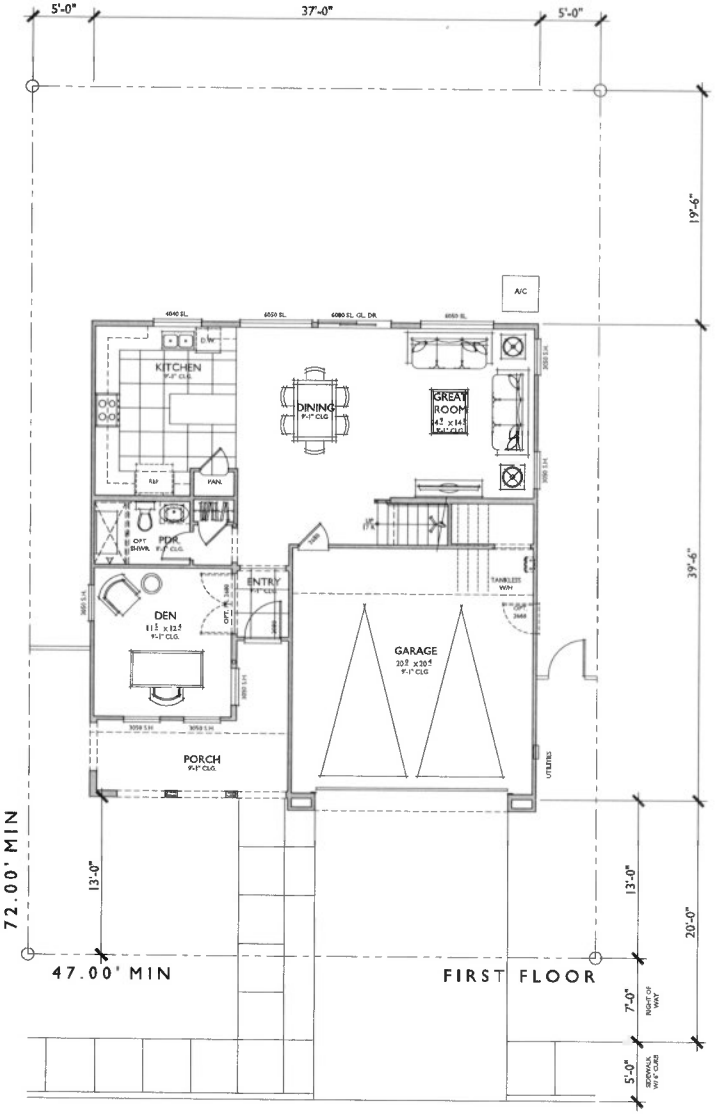
PLAN 1A
Reflects Spanish Elevation
ELARA - SUNDANCE PA-35A - 47' X 72'
Beaumont . California
023.15271

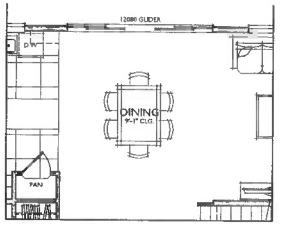
02.03.16

PardeeHomes

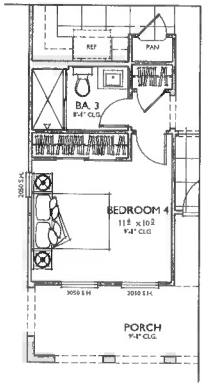
OPTIONAL TUB/SHOWER
AT MASTER BATH







OPTIONAL 12080 GLIDER
AT DINING



OPTIONAL BEDROOM 4
IN LIEU OF DEN

PLAN 2A

1,868 SQ. FT.

TARGET: 1,850 SQ. FT.

3 BEDROOMS / 2.5 BATHS + DEN /
OPT. BEDROOM 4/BATH 3
2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	875 SQ. FT.
2ND FLOOR	993 SQ. FT.
TOTAL	1,868 SQ. FT.
2 - CAR GARAGE	453 SQ. FT.
PORCH	134 SQ. FT.

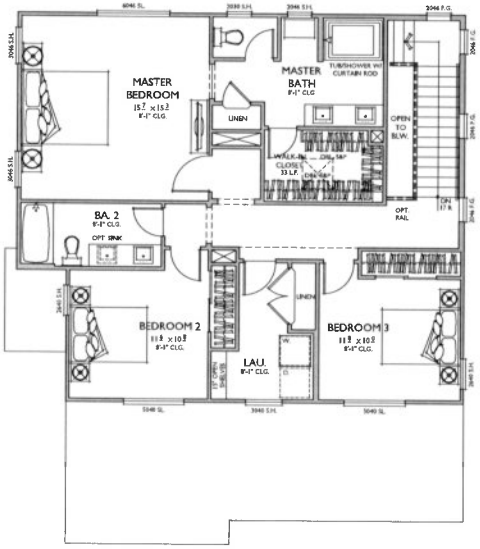
NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

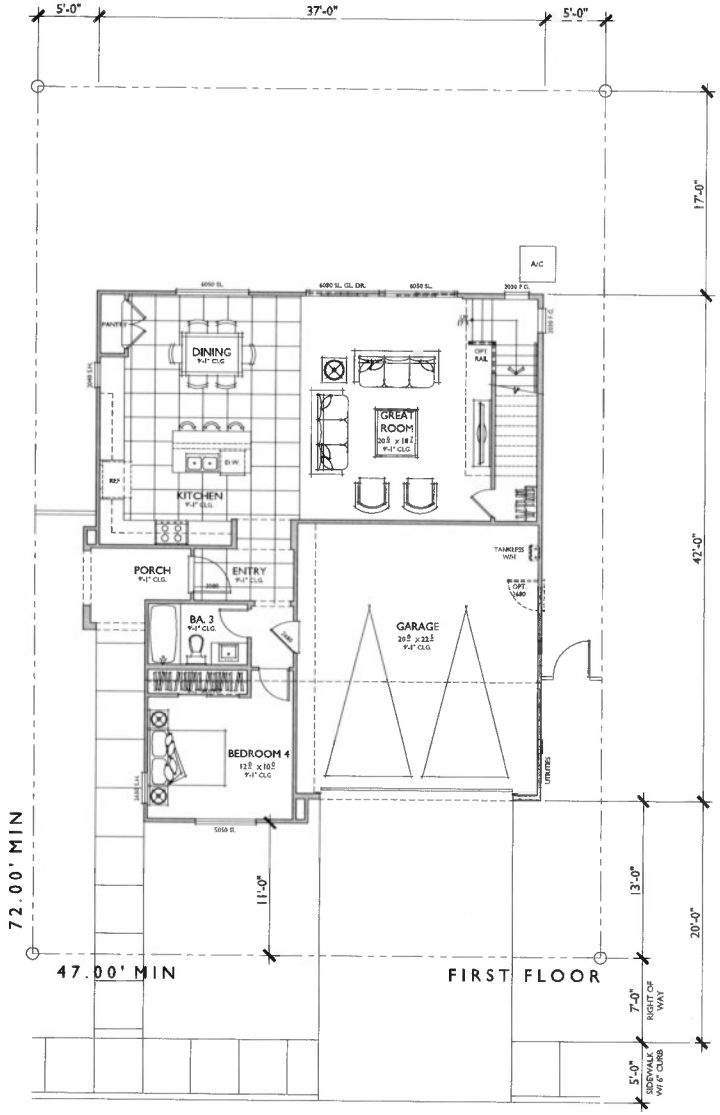
Bassenian | Lagoni
ARCHITECTURE • PLANNING • INTERIORS

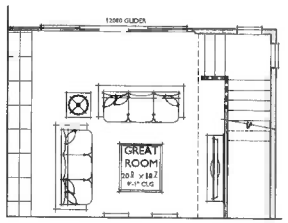
PLAN 2A
Reflects Spanish Elevation
ELARA - SUNDANCE PA-35A - 47' X 72'
Beaumont , California
023.15271

02.03.16

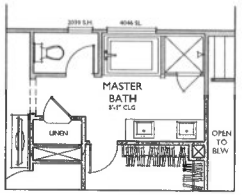
PardeeHomes







OPTIONAL 12080 GLIDER
AT DINING



OPTIONAL TUB/SHOWER
AT MASTER BATH

PLAN 3A
2,067 SQ. FT.
TARGET: 2,050 SQ. FT.
4 BEDROOMS / 3 BATHS
2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	1,015 SQ. FT.
2ND FLOOR	1,052 SQ. FT.
TOTAL	2,067 SQ. FT.
2 - CAR GARAGE	463 SQ. FT.
PORCH	50 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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PLAN 3A
Reflects Spanish Elevation
ELARA - SUNDANCE PA-35A - 47' X 72'
Beaumont , California
023.15271

02.03.16

PardeeHomes

16-PP-05
CITY OF BEAUMONT
APPROVED
BY: Rebecca Lemings
PLANNING DIVISION
DATE: 12/14/16

PardeeHomes

LUNETTA II

PLANNING AREA 36

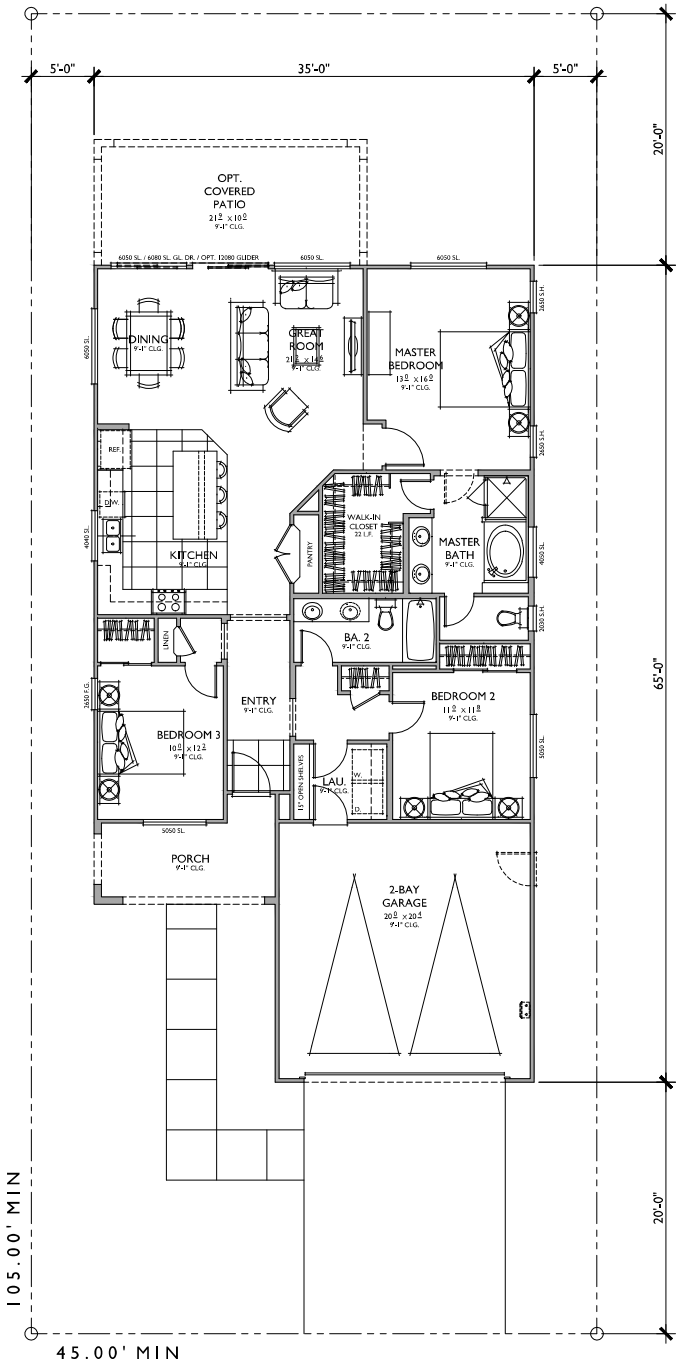
TRACT 31469-8
City of Beaumont, CA

Plot Plan & Architectural Review Package

SUNDANCE

This is your place.

November, 2016



PLAN 1A
1,544 SQ. FT.

TARGET: 1,500 SQ. FT.
3 BEDROOMS / 2 BATHS
2 - BAY GARAGE

FLOOR AREA TABLE	
1ST FLOOR	1,544 SQ. FT.
TOTAL	1,544 SQ. FT.
2 - BAY GARAGE	425 SQ. FT.
OPT. COVERED PATIO	220 SQ. FT.
PORCH	102 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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fax +1 949 553 0548

PLAN 1A
Reflects Spanish Elevation

PA - 36 - 45 X 105 (LUNETTA II)

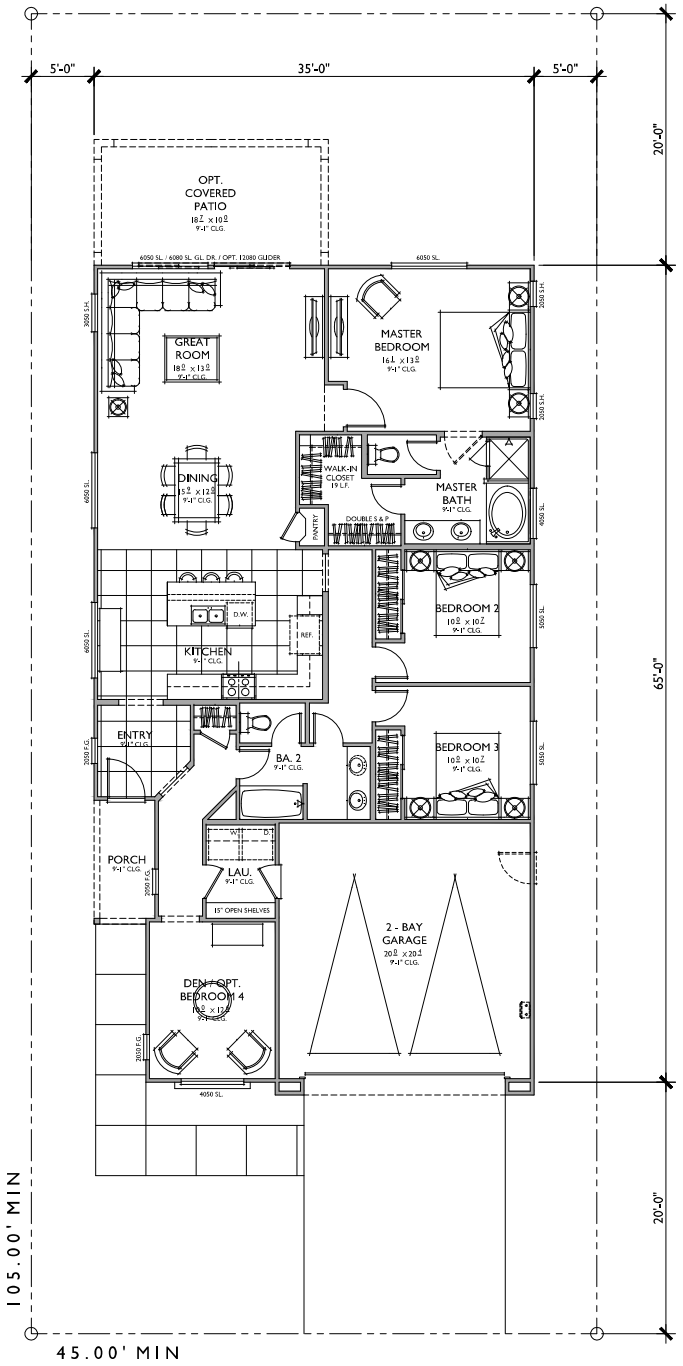
Beaumont, California

0 2 4 8

023.16157

08.15.16

PardeeHomes



PLAN 2A

1,757 SQ. FT.

TARGET: 1,700 SQ. FT.

3 BEDROOMS / 2 BATHS + DEN OPT. BED 4

2 - BAY GARAGE

FLOOR AREA TABLE	
1ST FLOOR	1,757 SQ. FT.
TOTAL	1,757 SQ. FT.
2 - BAY GARAGE	419 SQ. FT.
OPT. COVERED PATIO	186 SQ. FT.
PORCH	46 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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PLAN 2A

Reflects Spanish Elevation

PA - 36 - 45 X 105 (LUNETTA II)

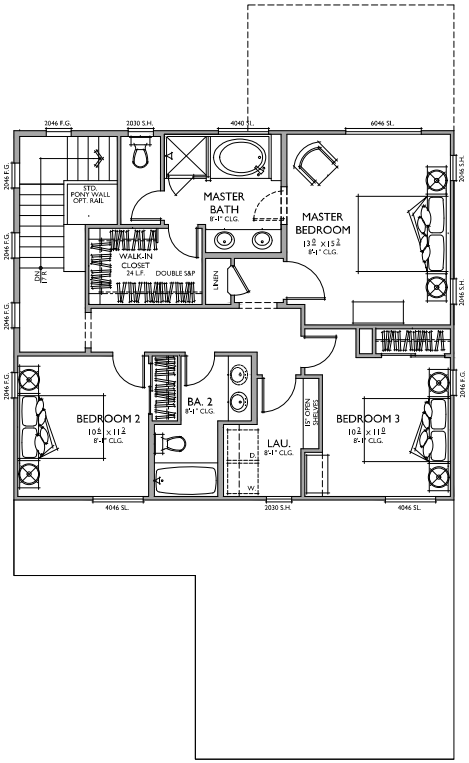
Beaumont, California

0 2 4 8

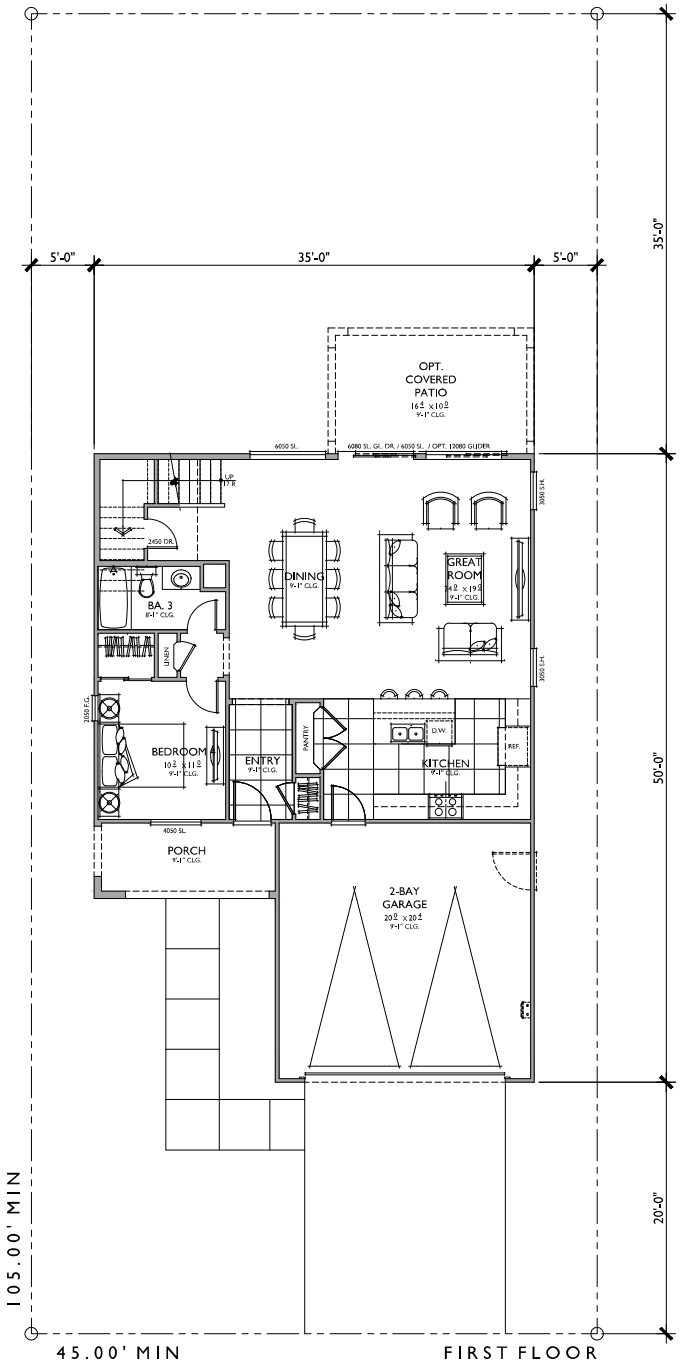
023.16157

08.15.16

PardeeHomes



SECOND FLOOR



FIRST FLOOR

PLAN 3A

1,975 SQ. FT.

TARGET: 1,950 SQ. FT.
3 BEDROOMS / 3 BATHS
2 - BAY GARAGE

FLOOR AREA TABLE	
1ST FLOOR	1,028 SQ. FT.
2ND FLOOR	947 SQ. FT.
TOTAL	1,975 SQ. FT.
2 - BAY GARAGE	425 SQ. FT.
OPT. COVERED PATIO	164 SQ. FT.
PORCH	87 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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fax +1 949 553 0548

PLAN 3A
Reflects Spanish Elevation
PA - 36 - 45 X 105 (LUNETTA II)
Beaumont, California
0 2 4 8
023.16157

08.15.16

PardeeHomes

16-PP-06
CITY OF BEAUMONT
APPROVED
BY:
PLANNING DIVISION
DATE: 1/10/17

PardeeHomes

DAYBREAK

PLANNING AREA 38

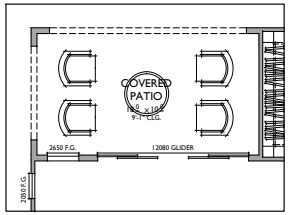
TRACT 31469
City of Beaumont, CA

Plot Plan & Architectural Review Package

SUNDANCE

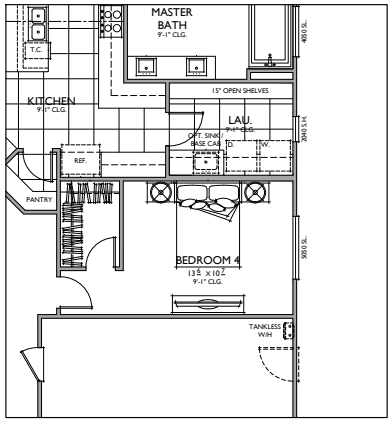
This is your place.

December 5, 2016



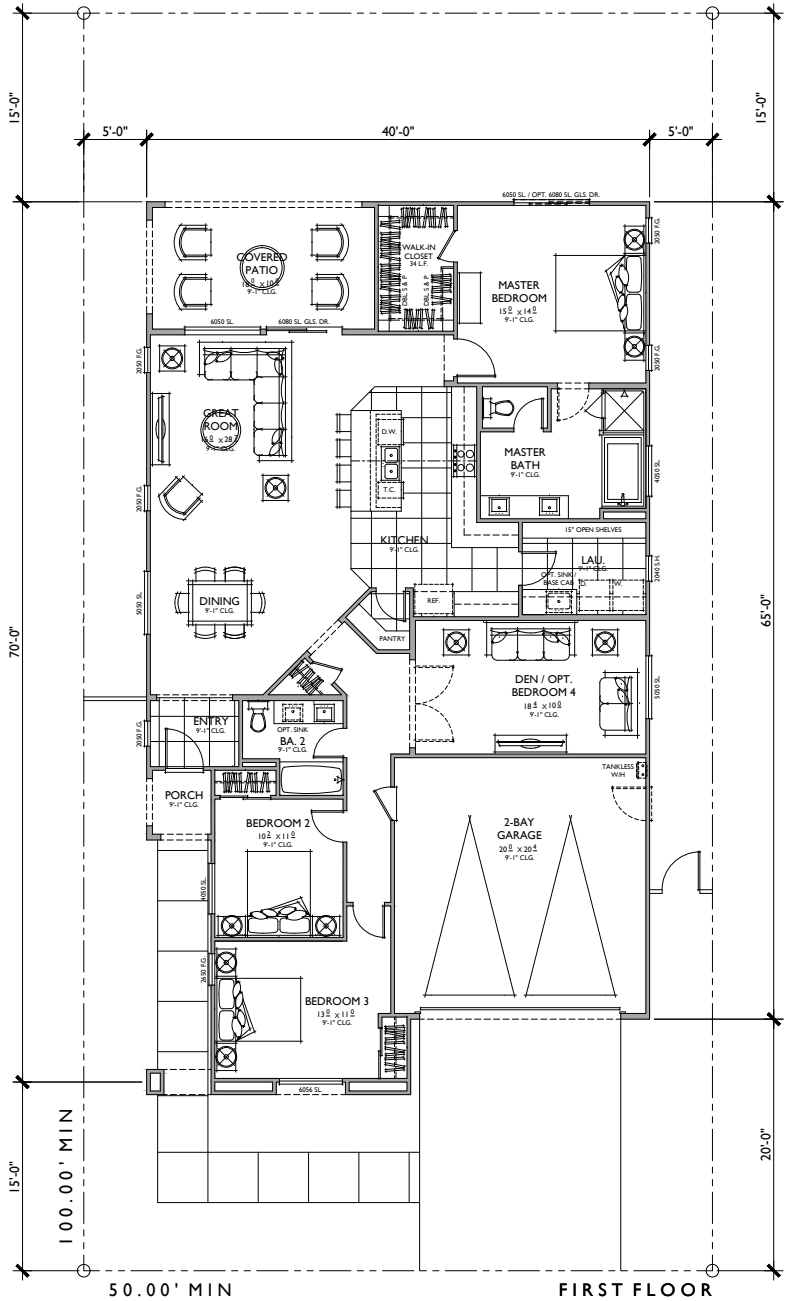
OPT. GLIDER DOORS

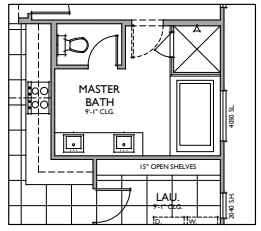
AT GREAT ROOM



OPT. BEDROOM 4

IN LIEU OF DEN





OPT. TILE TUB / SHOWER

AT MASTER BATH

PLAN 1A

1,973 SQ. FT.

TARGET: 1,800 SQ. FT.
3 BEDROOMS / 2 BATHS + DEN / OPT. BEDROOM 4
2 - BAY GARAGE

FLOOR AREA TABLE	
1ST FLOOR	1,973 SQ. FT.
TOTAL	1,973 SQ. FT.
2 - BAY GARAGE	421 SQ. FT.
COVERED PATIO	184 SQ. FT.
PORCH	28 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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fax +1 949 553 0548

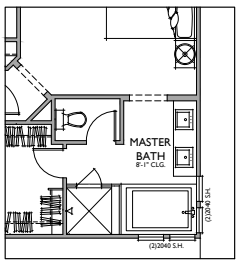
PLAN 1A
Reflects Modern Spanish Elevation
DAYBREAK - TRACT 31469 - PA-38
Beaumont, California

0 2 4 8

023.16158

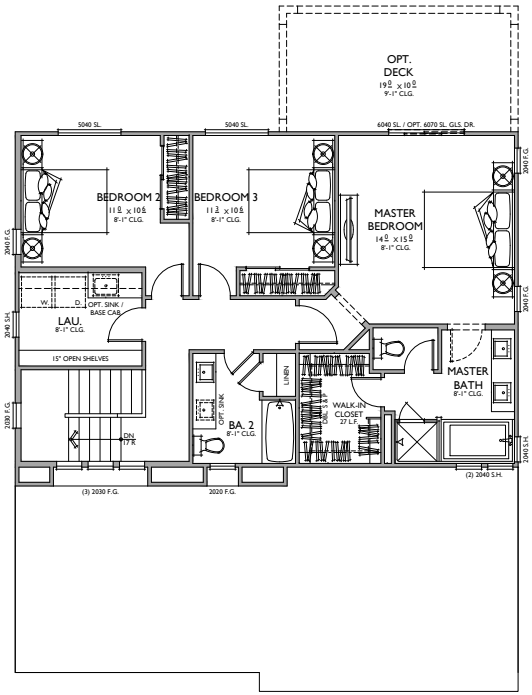
11.30.16

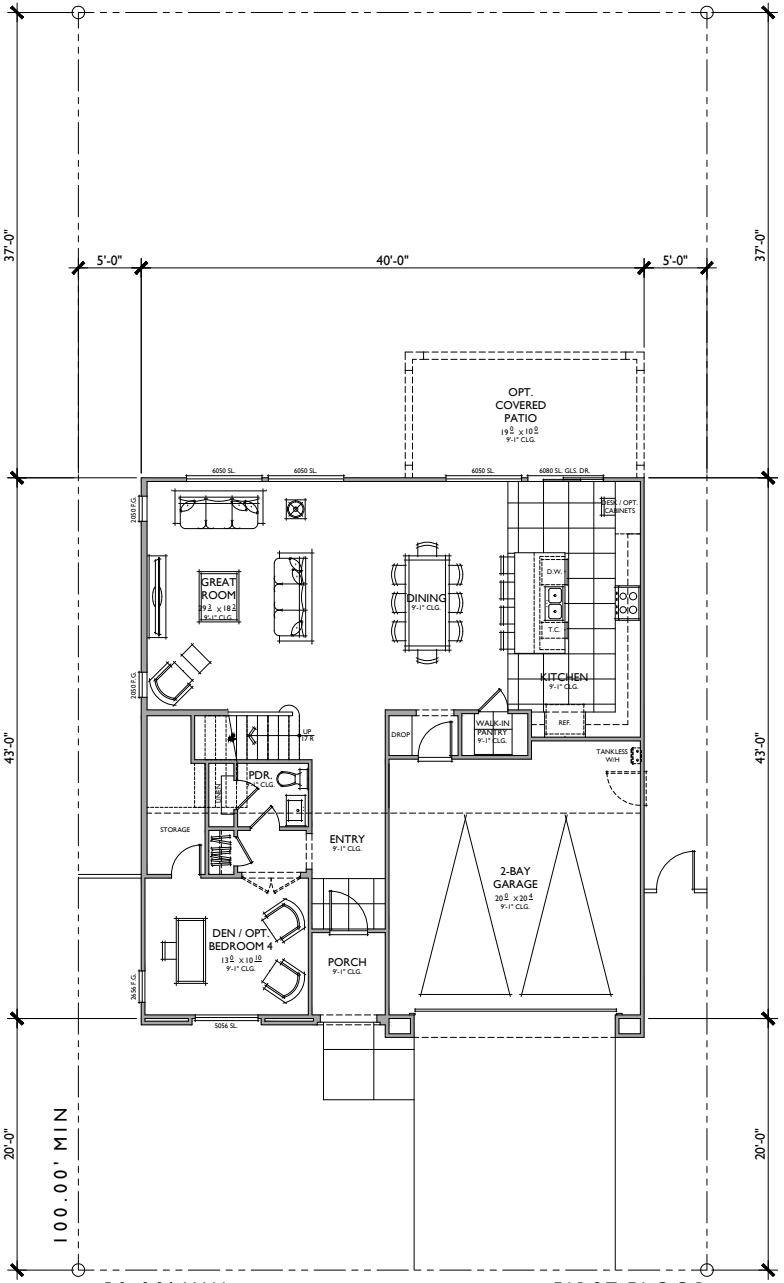
PardeeHomes



OPT. TILE TUB / SHOWER

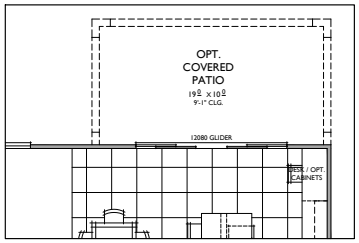
AT MASTER BATH



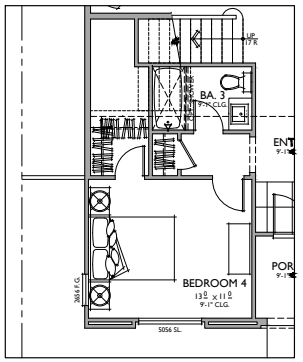


SECOND FLOOR

FIRST FLOOR



OPT. 12080 GLIDER



OPT. BEDROOM 4 AND BATH 3

IN LIEU OF DEN

PLAN 2A

2,239 SQ. FT.

TARGET: 2,200 SQ. FT.
3 BEDROOMS / 2.5 BATHS + DEN / OPT. BEDROOM 4
2 - BAY GARAGE

FLOOR AREA TABLE	
1ST FLOOR	1,243 SQ. FT.
2ND FLOOR	996 SQ. FT.
TOTAL	2,239 SQ. FT.
2 - BAY GARAGE	438 SQ. FT.
COVERED PATIO	206 SQ. FT.
PORCH	40 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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PLAN 2A

Reflects Modern Spanish Elevation

DAYBREAK - TRACT 31469 - PA-38

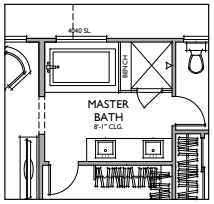
Beaumont, California

0 2 4 8

023.16158

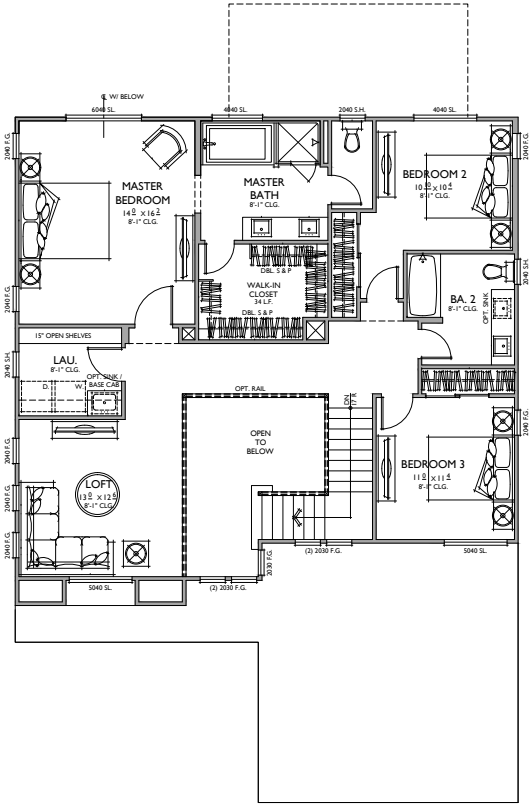
11.30.16

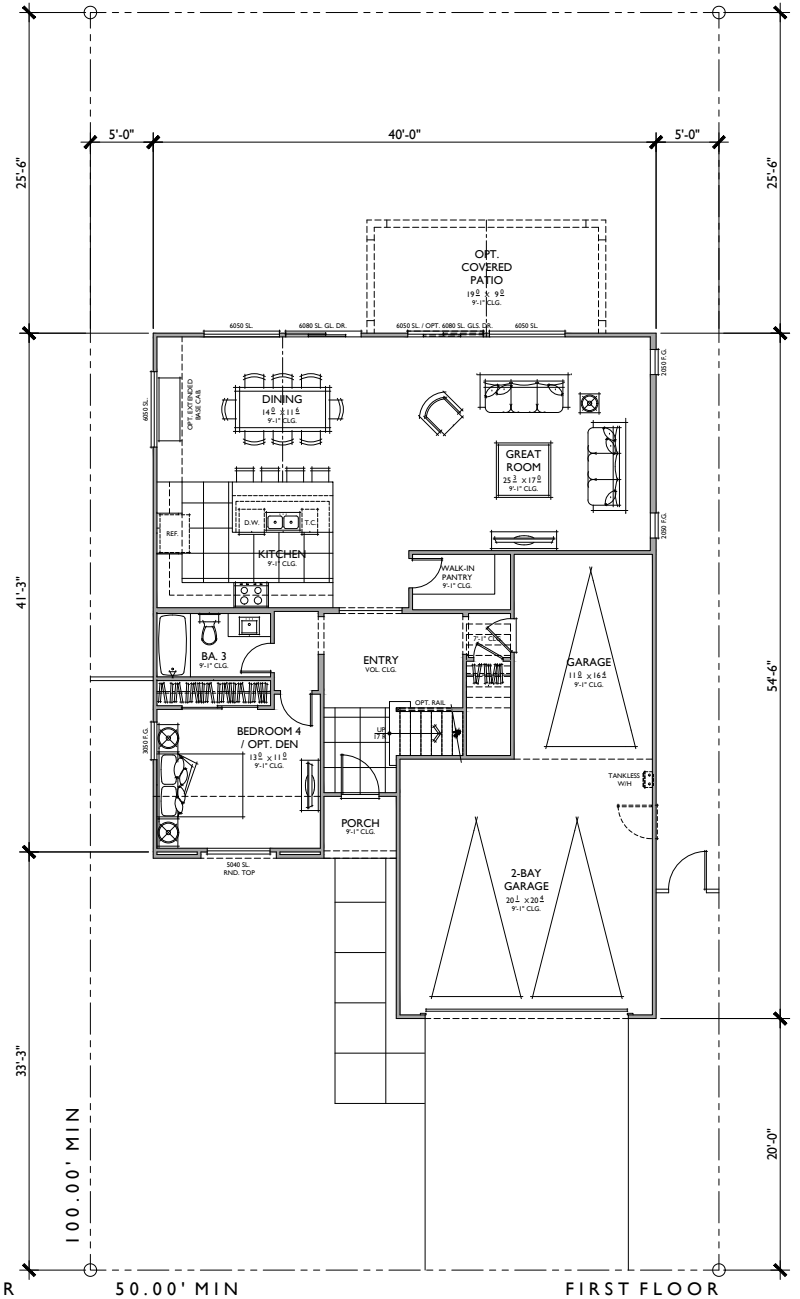
PardeeHomes

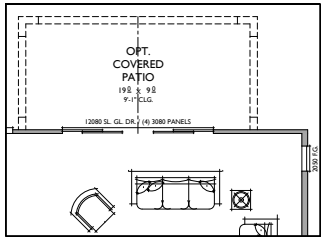


OPT. TILE TUB / SHOWER

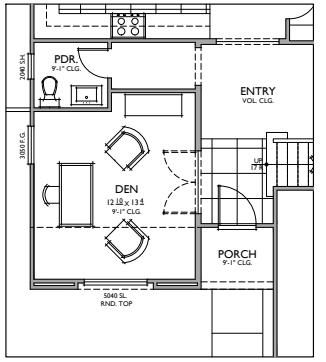
AT MASTER BATH







OPT. 12080 GLIDER DOORS



OPT. DEN

IN LIEU OF BEDROOM 4

PLAN 3A

2,516 SQ. FT.

TARGET: 2,450 SQ. FT.
4 BEDROOMS / 3 BATHS / OPT. DEN
2 - BAY GARAGE

FLOOR AREA TABLE	
1ST FLOOR	1,289 SQ. FT.
2ND FLOOR	1,227 SQ. FT.
TOTAL	2,516 SQ. FT.
2 - BAY GARAGE	608 SQ. FT.
OPT. COVERED PATIO	171 SQ. FT.
PORCH	27 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

SECOND FLOOR

50.00' MIN

FIRST FLOOR

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PLAN 3A
Reflects Modern Spanish Elevation
DAYBREAK - TRACT 31469 - PA-38
Beaumont, California

0 2 4 8

023.16158

11.30.16

PardeeHomes

PardeeHomes

PP2017-0033
CITY OF BEAUMONT
APPROVED
BY: Rebecca Lemona
PLANNING DIVISION
DATE: 10/10/17

ABRIO

PLANNING AREA 39

LOTS 1-72, TRACT 31469-9

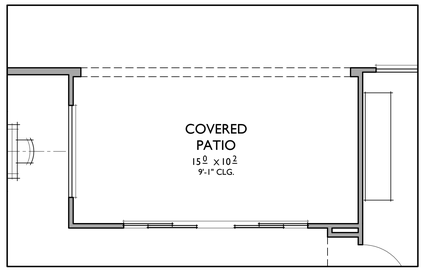
MODEL SITE
LOTS 98-101, TRACT 31469-3(PA 44)
City of Beaumont, CA

Plot Plan & Architectural Review Package

SUNDANCE

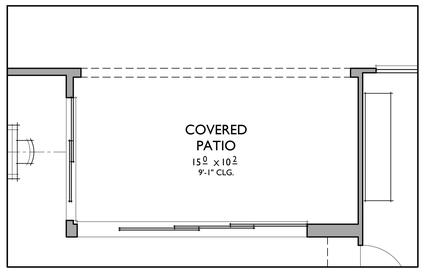
This is your place.

September 1, 2017
Revised September 20, 2017



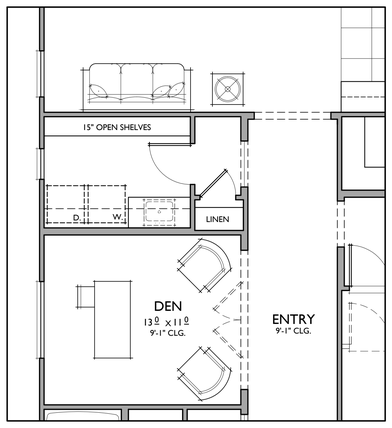
OPT.12080 GLIDER

1/4"=1'-0"



OPT. CORNER STACKING DOORS

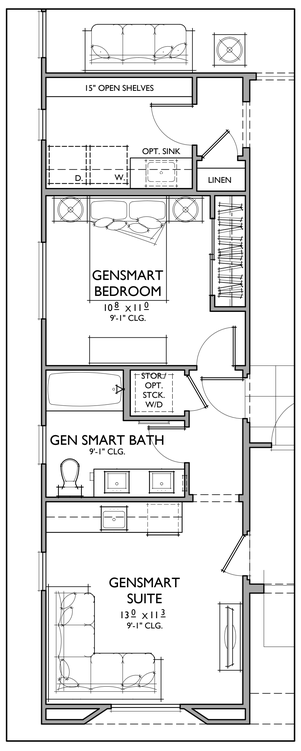
1/4"=1'-0"



OPT. DEN

IN LIEU OF BEDROOM 4

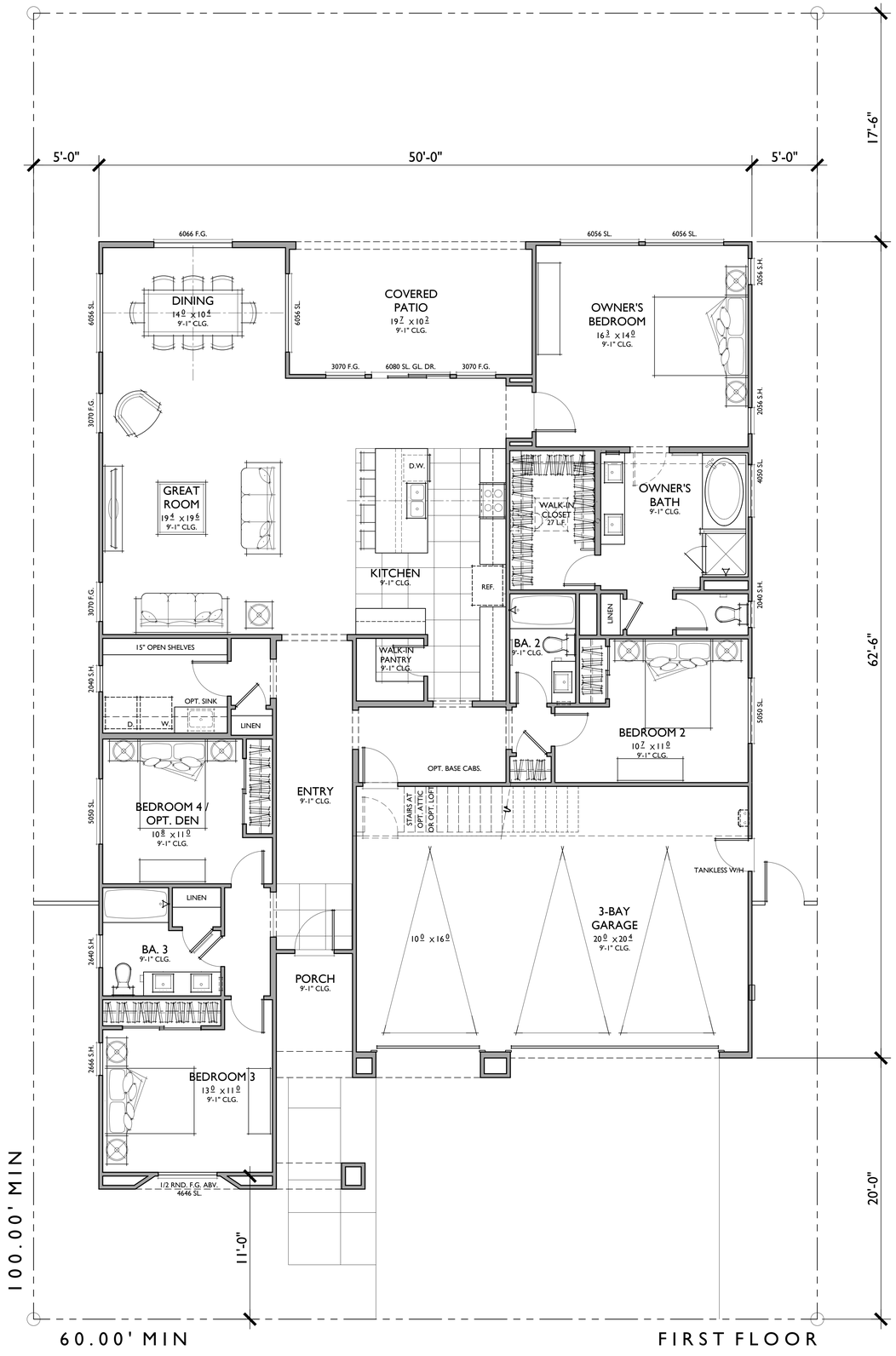
1/4"=1'-0"

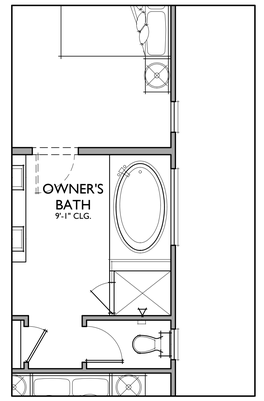


OPT. GENSMART SUITE

IN LIEU OF BEDROOM 3 & 4

1/4"=1'-0"

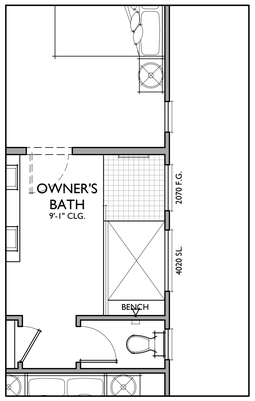




OPT. TILE TUB/SHOWER

IN LIEU OF MASTER BATH

1/4"=1'-0"



OPT. SPA SHOWER

IN LIEU OF MASTER BATH

1/4"=1'-0"

PLAN 1A

2,380 SQ. FT.

TARGET: 2,200 SQ. FT.
4 BEDROOMS / 3 BATHS + OPT. DEN + OPT. ATTIC STORAGE / OPT. BONUS ROOM / OPT. BEDROOM 5 WITH BATH 4
3 - BAY GARAGE

FLOOR AREA TABLE	
1ST FLOOR	2,380 SQ. FT.
TOTAL	2,380 SQ. FT.
OPT. 2ND FLOOR	536 SQ. FT.
TOTAL W/ OPT. 2ND FLOOR	2,958 SQ. FT.
OPT. LOFT	536 SQ. FT.
3 - BAY GARAGE	630 SQ. FT.
COVERED PATIO	189 SQ. FT.
PORCH	47 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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fax +1 949 553 0548

PLAN 1A

Reflects Spanish Elevation

ABRIO – PA 39 TRACT 31469-9 PRODUCTION AND PA 44-3 TRACT 31469 -3 MODELS AND MBO

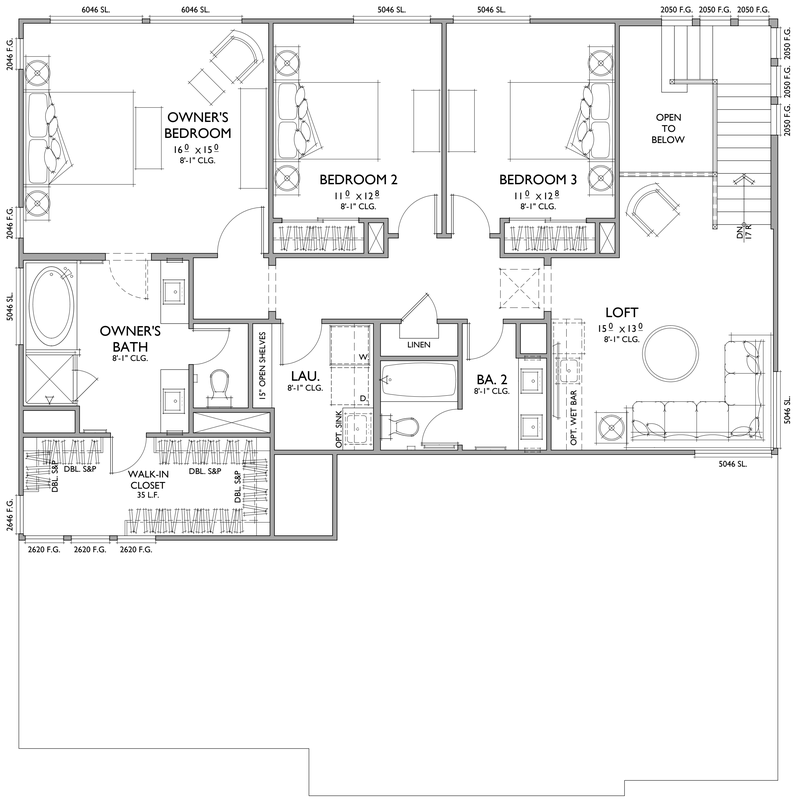
09.18.17

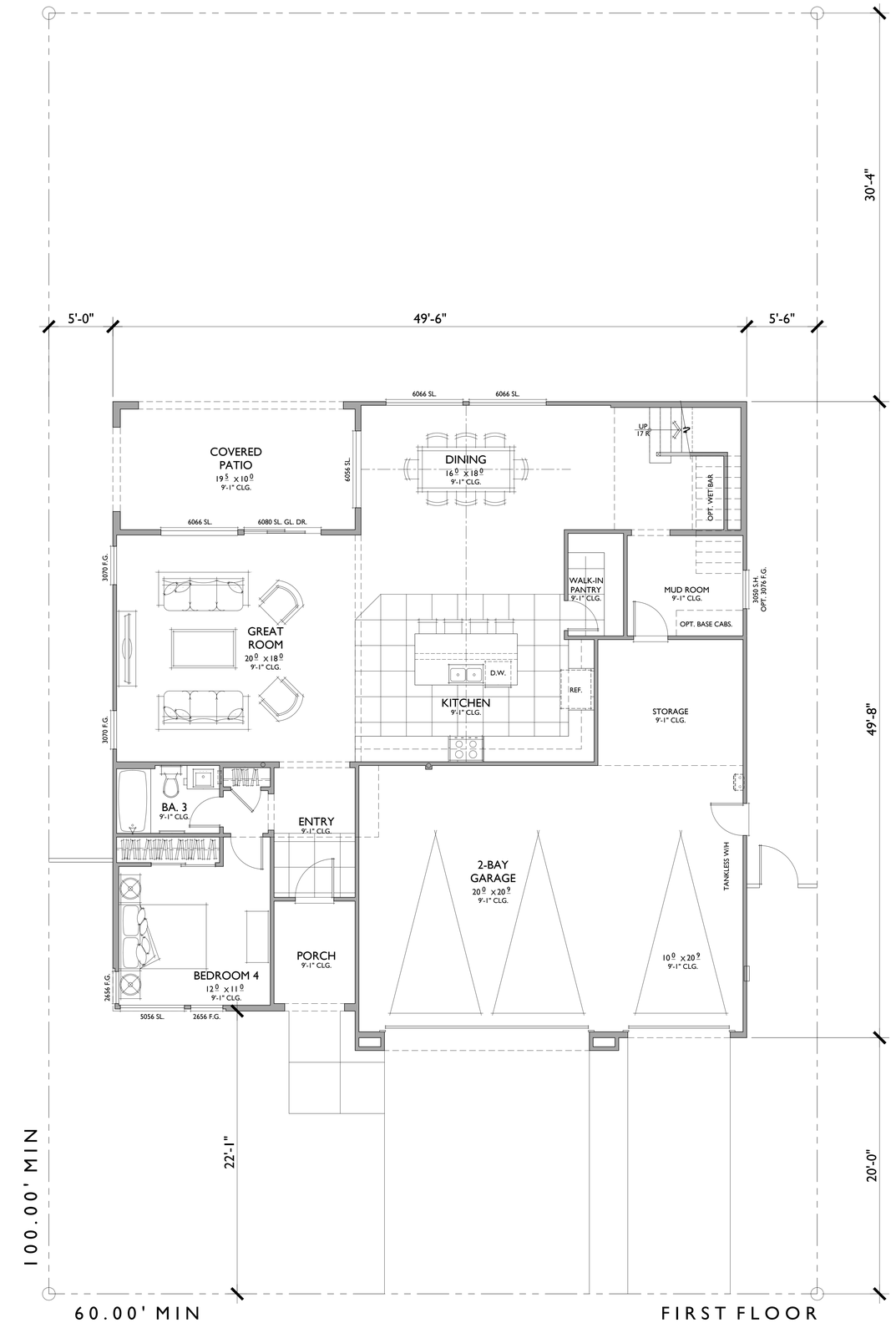
Beaumont, California

0 2 4 8

023.16159

PardeeHomes





SECOND FLOOR

FIRST FLOOR

PLAN 2A

2,797 SQ. FT.

TARGET: 2,650 SQ. FT.
4 BEDROOMS / 3 BATHS + LOFT
3 - BAY GARAGE

FLOOR AREA TABLE	
1ST FLOOR	1,414 SQ. FT.
2ND FLOOR	1,383 SQ. FT.
TOTAL	2,797 SQ. FT.
3 - BAY GARAGE	761 SQ. FT.
COVERED PATIO	189 SQ. FT.
PORCH	54 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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PLAN 2A
Reflects Spanish Elevation

ABRIO – PA 39 TRACT 31469-9 PRODUCTION AND PA 44-3 TRACT 31469 -3 MODELS AND MBO

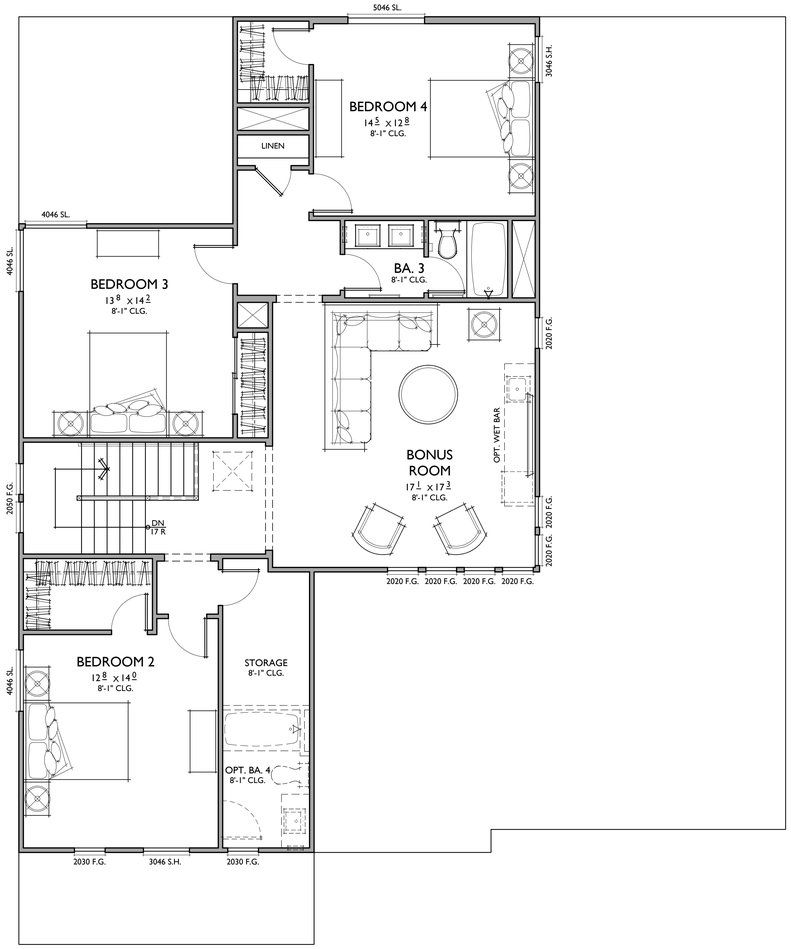
09.18.17

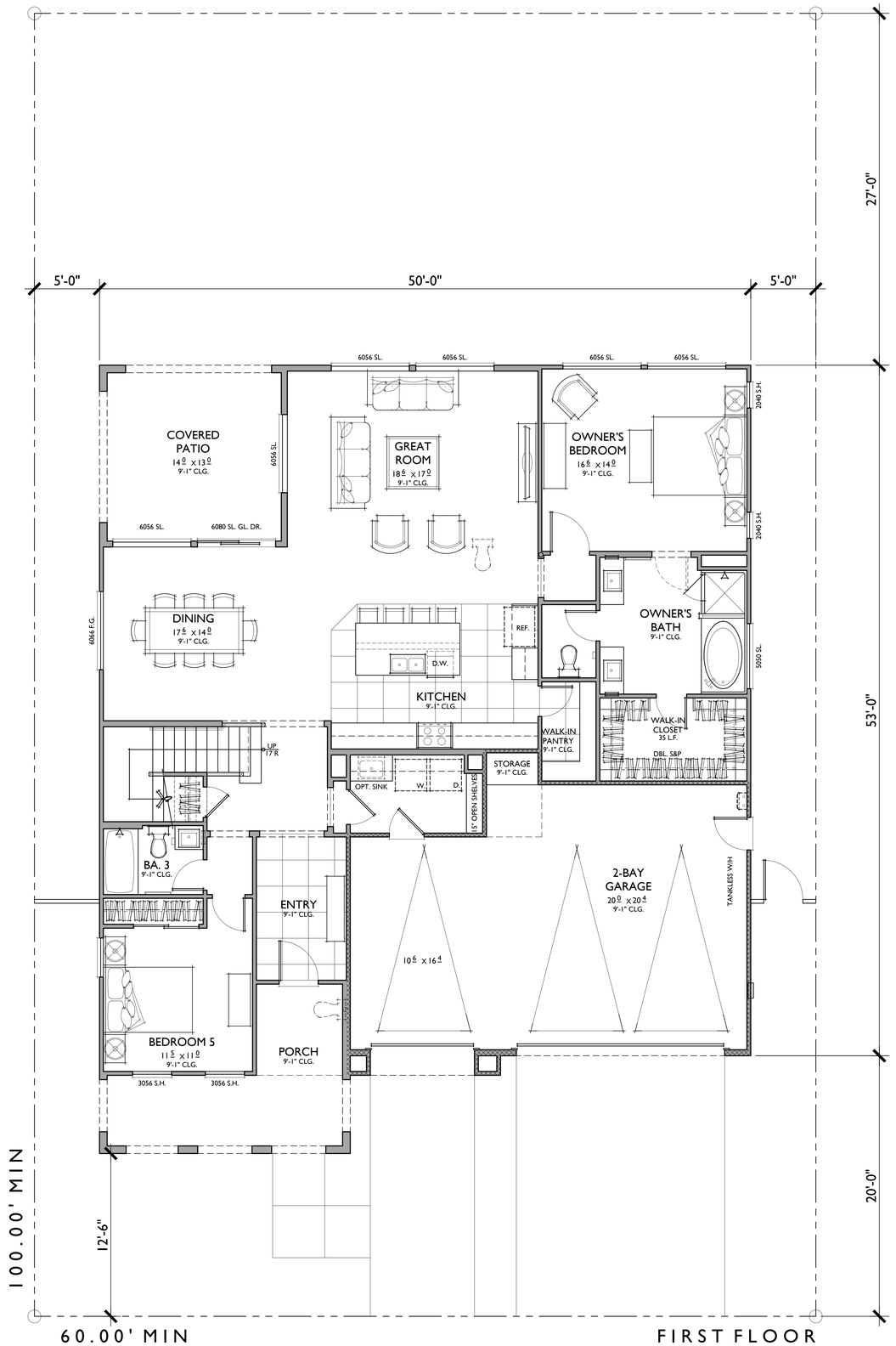
Beaumont, California

0 2 4 8

023.16159

PardeeHomes





SECOND FLOOR

FIRST FLOOR

PLAN 3A

3,168 SQ. FT.

TARGET: 3,100 SQ. FT.
5 BEDROOMS / 3 BATHS + BONUS ROOM
3 - BAY GARAGE

FLOOR AREA TABLE	
1ST FLOOR	1,833 SQ. FT.
2ND FLOOR	1,322 SQ. FT.
TOTAL	3,168 SQ. FT.
3 - BAY GARAGE	610 SQ. FT.
COVERED PATIO	188 SQ. FT.
PORCH	###########

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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PLAN 3A
Reflects Spanish Elevation

ABRIO – PA 39 TRACT 31469-9 PRODUCTION AND PA 44-3 TRACT 31469 -3 MODELS AND MBO

09.18.17

Beaumont, California

0 2 4 8

023.16159

PardeeHomes

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ALTIS

PLANNING AREA 31

TRACT 31470-3
City of Beaumont, CA

Plot Plan & Architectural Review Package

PROVIDE PLANNING DEPARTMENT
WITH A DIGITAL SCAN (PDF FORMAT)
OF THESE STAMPED APPROVED PLANS

SUNDANCE

PP2018-0083
CITY OF BEAUMONT
APPROVED
BY: Rebecca Leming
PLANNING DIVISION
DATE: 4/19/18

This is your place.

January 29, 2018
Revised February 21, 2018

CITY OF BEAUMONT
550 E. 6th Street, Beaumont, CA 92223
Phone (951) 769-8520 Fax (951) 769-8526
www.Beaumont-Ca.gov

May 8, 2018

Pardee Homes
Attn: Michael Heishman
1250 Corona Pointe Court, Ste. 600
Corona, CA 92879

SUBJECT: **Plot Plan PP2018-0083 Sundance Planning Area 31 Altis**

Dear Pardee Homes:

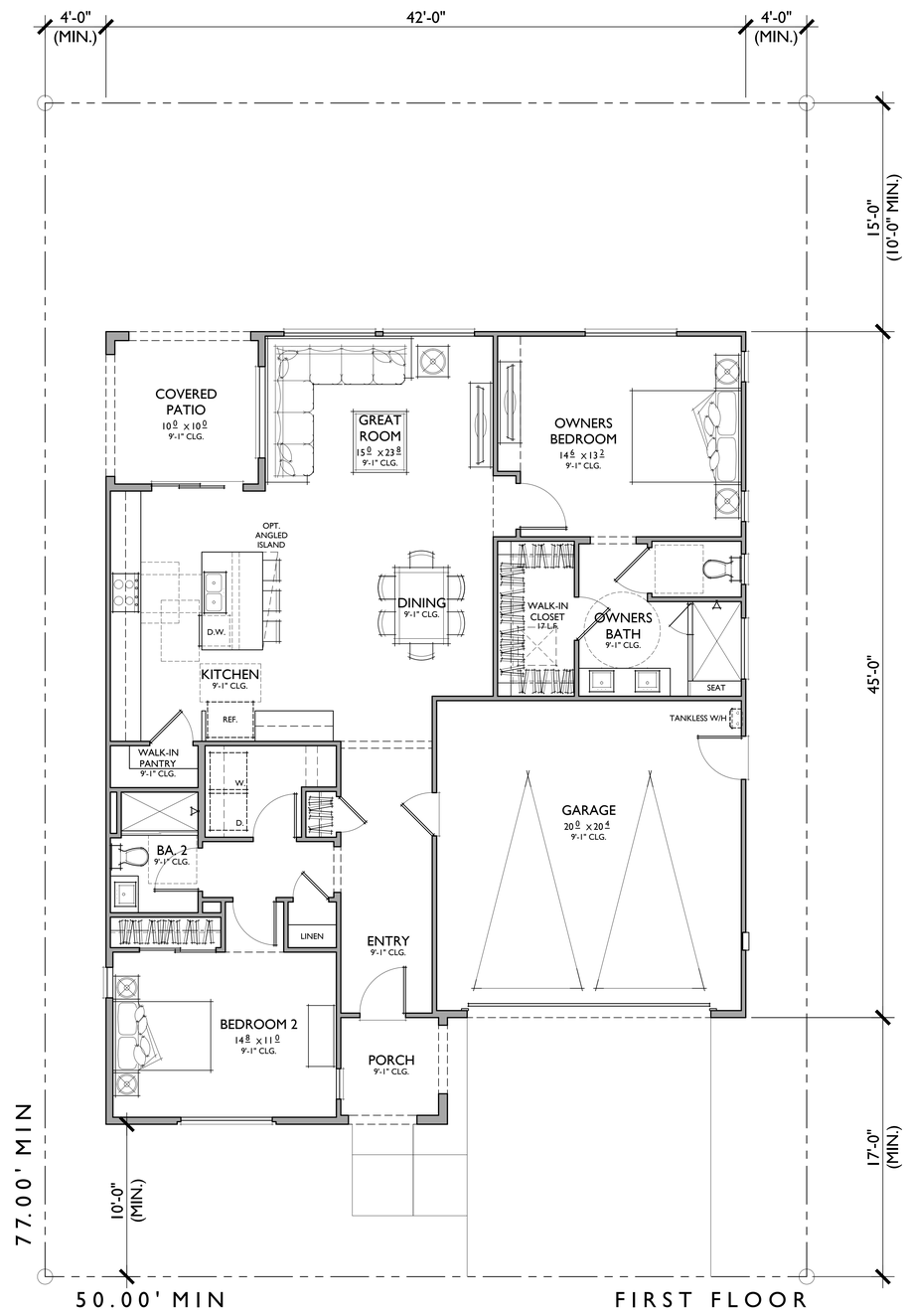
The City of Beaumont Planning Commission has approved a Plot Plan for Altis on Planning Area 31 of the Sundance Specific Plan at its meeting of April 19, 2018 subject to the following conditions:

1. Enhanced architectural features shall be installed on all second-story rear and side elevations that face streets or open-space areas to the satisfaction of the Planning Department.
2. Authorization of the use of the approved standards and elevations in Planning Areas 30, 31, 33, and 34

If you have any questions please feel free to call the Planning Department at (951) 769-8518.

Very truly yours,
CITY OF BEAUMONT

Rebecca Deming
Community Development Director



PLAN 1A

1,476 SQ. FT.

TARGET: 1,450 SQ. FT.
2 BEDROOMS / 2 BATHS
2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	1,476 SQ. FT.
TOTAL	1,476 SQ. FT.
2 - CAR GARAGE	422 SQ. FT.
COVERED PATIO	100 SQ. FT.
PORCH	49 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

Bassenian | Lagoni
ARCHITECTURE • PLANNING • INTERIORS

2031 Orchard Drive, Suite 100
Newport Beach, CA USA 92660
tel. +1 949 553 9100
fax +1 949 553 0548

PLAN 1A
Reflects Modern Spanish Elevation
ALTIS 50'x77' - PA 31 TRACT 31470-3
Beaumont , California

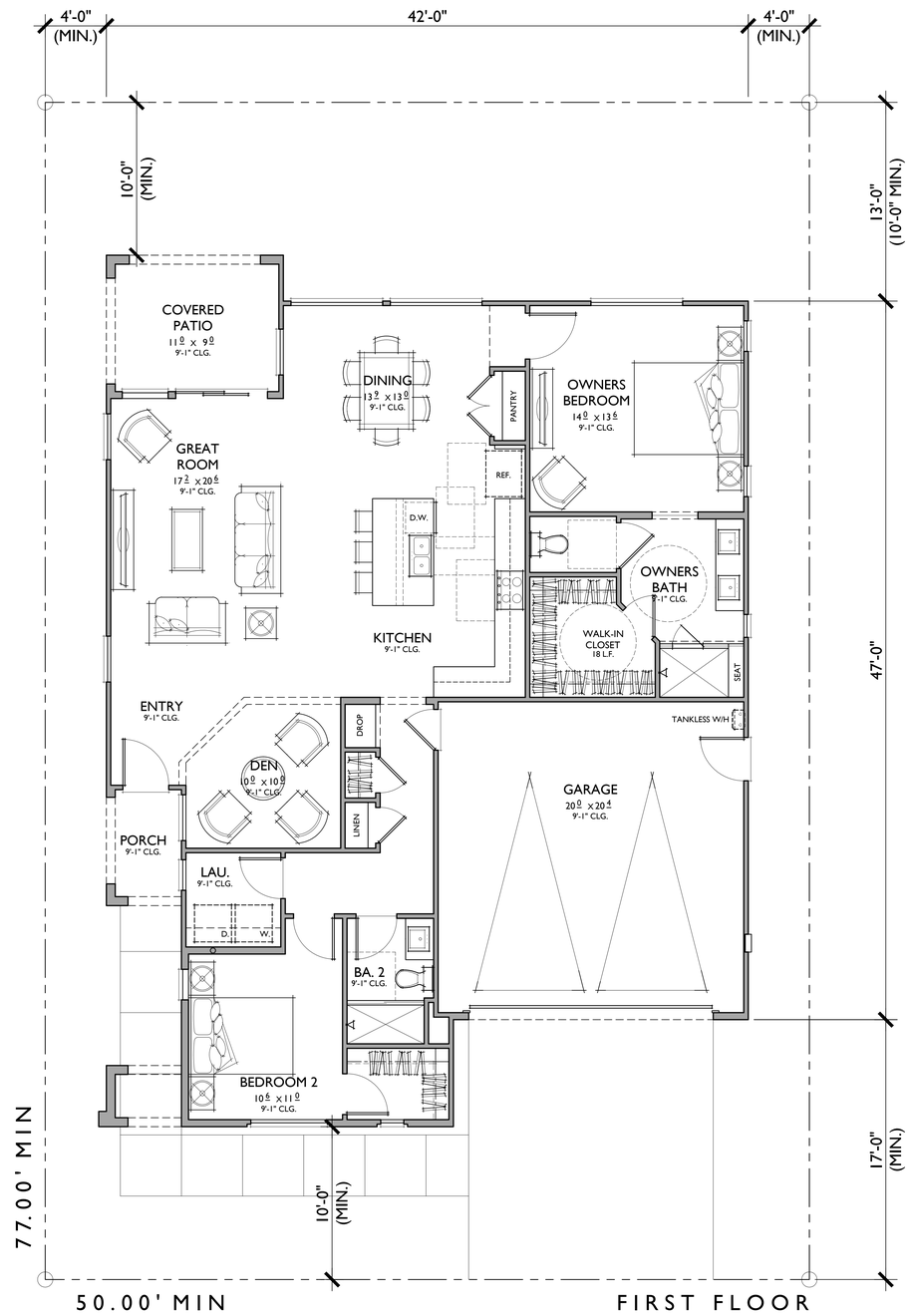
0 2 4 8

023.17293

01.12.17

A 1.2

PardeeHomes



PLAN 2A
1,536 SQ. FT.

TARGET: 1,550 SQ. FT.
2 BEDROOMS / 2 BATHS + DEN
2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	1,536 SQ. FT.
TOTAL	1,536 SQ. FT.
2 - CAR GARAGE	421 SQ. FT.
COVERED PATIO	102 SQ. FT.
PORCH	37 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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PLAN 2A
Reflects Modern Spanish Elevation

ALTIS 50'x77' - PA 31 TRACT 31470-3

Beaumont , California

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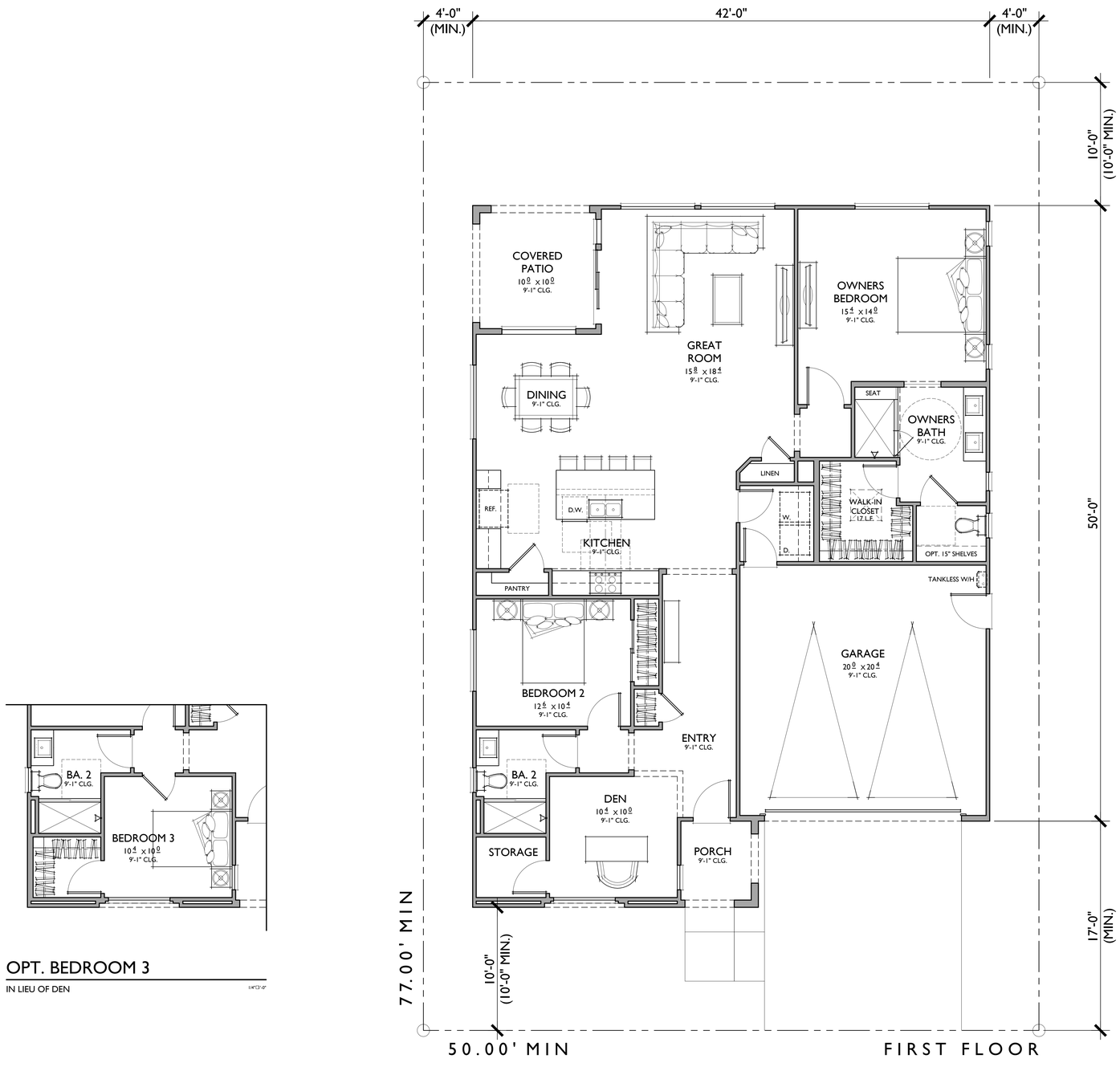
PardeeHomes



OPT. BEDROOM 3

IN LIEU OF DEN

PLAN 3A

1,691 SQ. FT.

TARGET: 1,700 SQ. FT.

2 BEDROOMS / 2.5 BATHS + DEN / OPT. BED. 3

2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	1,691 SQ. FT.
TOTAL	1,691 SQ. FT.
2 - CAR GARAGE	422 SQ. FT.
COVERED PATIO	100 SQ. FT.
PORCH	44 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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PLAN 3A

Reflects Modern S☐anis☐ Elevation

ALTIS 50'x77' - PA 31 TRACT 31470-3

Beaumont , California

0 2 4 8

023.17293

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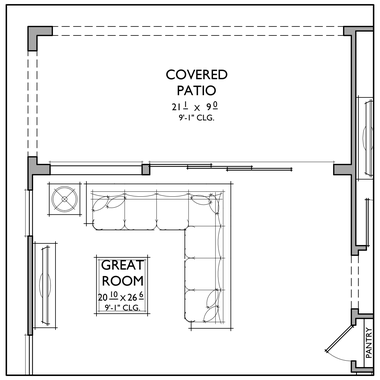
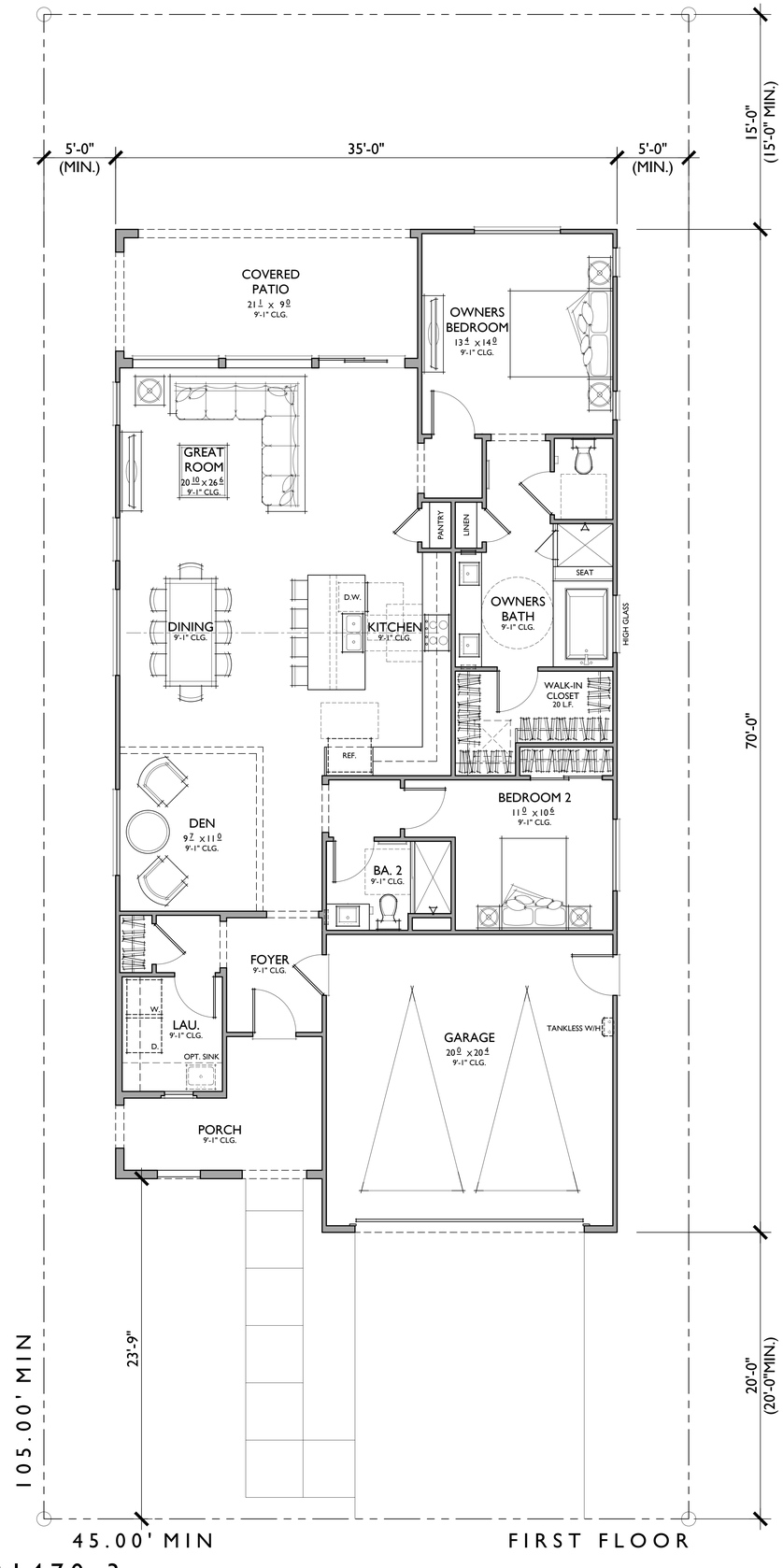
A 3.2

PardeeHomes





PLAN 1A

1,669 SQ. FT.

TARGET: 1,600 SQ. FT.
2 BEDROOMS / 2 BATHS + FLEX
2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	1,669 SQ. FT.
TOTAL	1,669 SQ. FT.
2 - CAR GARAGE	426 SQ. FT.
COVERED PATIO	190 SQ. FT.
PORCH	111 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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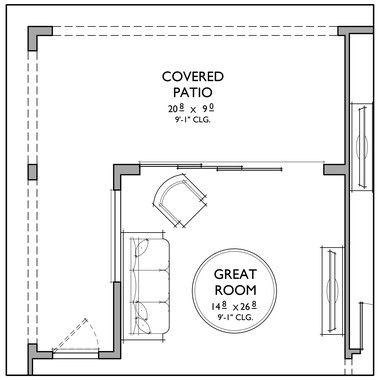
PLAN 1A
Reflects Modern S☐anis☐ Elevation
ALTIS 45'x105' - PA 31 TRACT 31470-3
Beaumont , California
0 2 4 8
023.17294

01.19.18

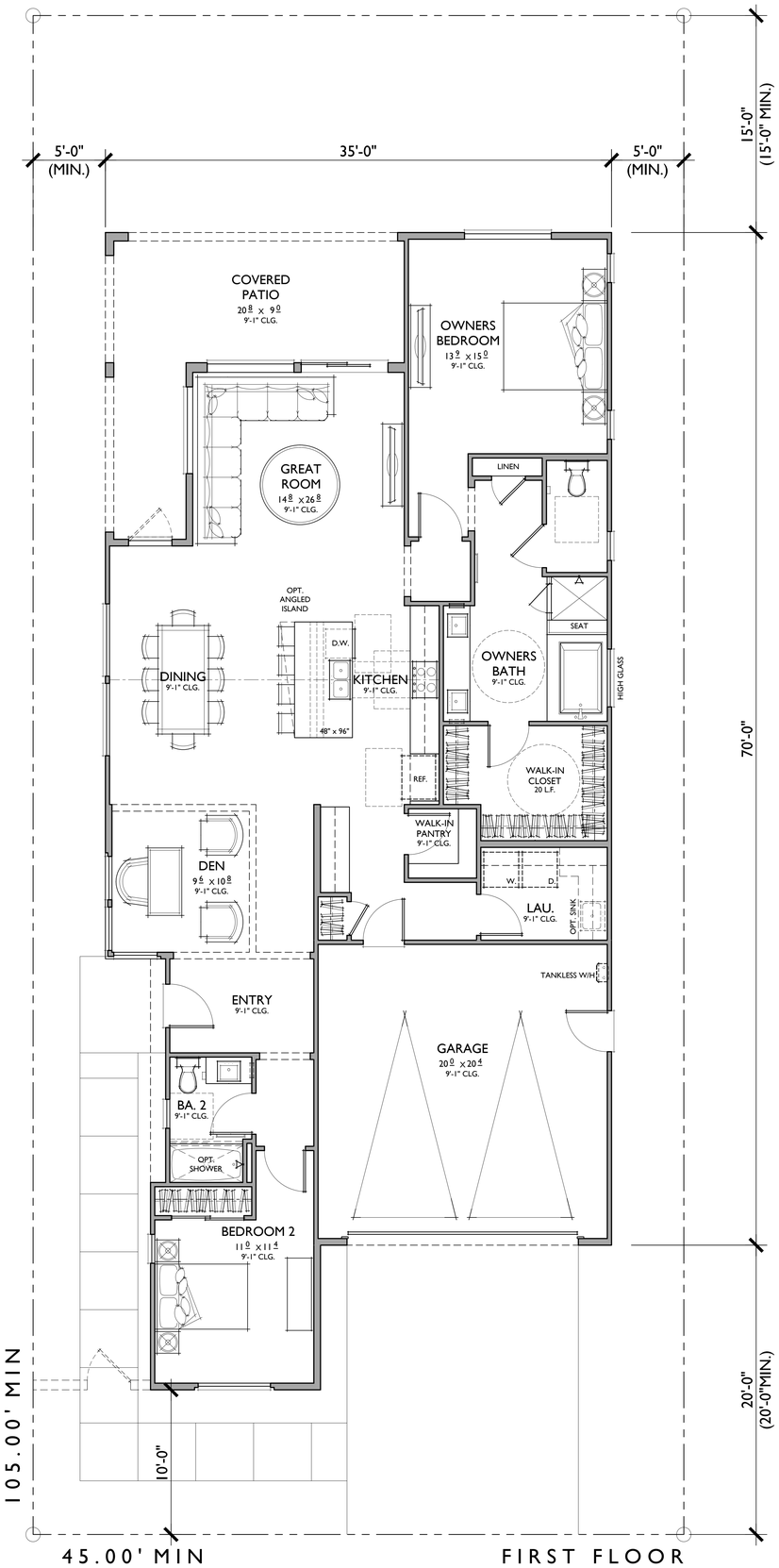
A 1.2

PardeeHomes



OPTIONAL STACKING DOOR

AT COVERED PATIO



PLAN 2A

1,814 SQ. FT.

TARGET: 1,800 SQ. FT.

2 BEDROOMS / 2 BATHS + DEN

2 - CAR GARAGE

FLOOR AREA TABLE	
IST FLOOR	1,814 SQ. FT.
TOTAL	1,814 SQ. FT.
2 - CAR GARAGE	422 SQ. FT.
COVERED PATIO	254 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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PLAN 2A

Reflects Modern Scheme Elevation

ALTIS 45'x105' - PA 31 TRACT 31470-3

Beaumont , California

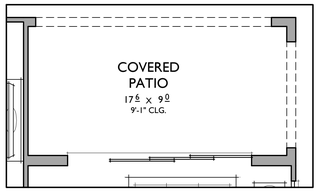
0 2 4 8

023.17294

01.19.18

A 2.2

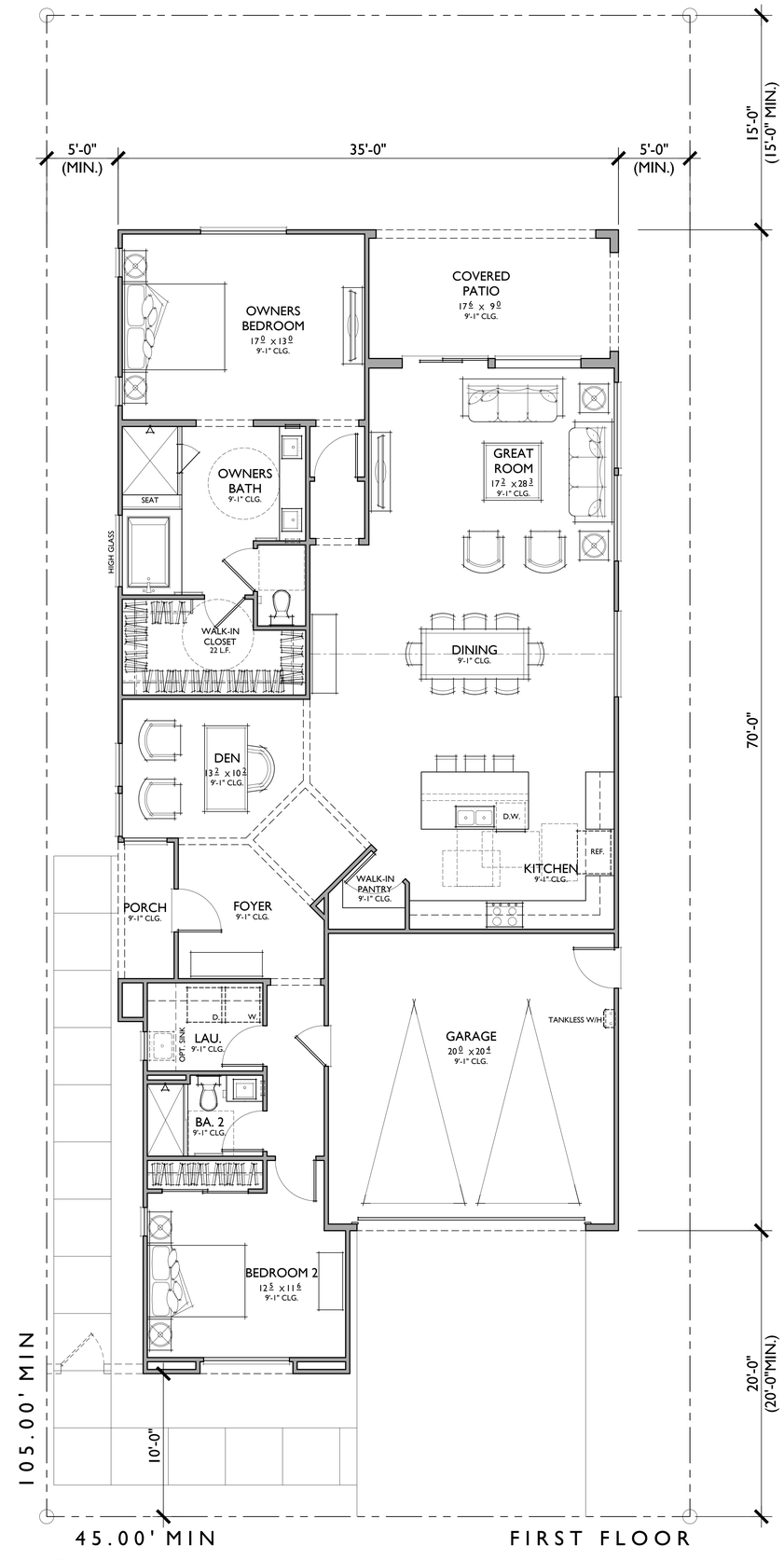
PardeeHomes



OPTIONAL STACKING DOOR

AT COVERED PATIO

1/4"=1'-0"



PLAN 3A

1,936 SQ. FT.

TARGET: 1,950 SQ. FT.

2 BEDROOMS / 2 BATHS + DEN / OPT. BED 3

2 - CAR GARAGE

FLOOR AREA TABLE

1ST FLOOR	1,936 SQ. FT.
TOTAL	1,936 SQ. FT.
2 - CAR GARAGE	421 SQ. FT.
COVERED PATIO	157 SQ. FT.
PORCH	37 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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PLAN 3A

Reflects Modern S□anis□ Elevation

ALTIS 45'x105' - PA 31 TRACT 31470-3

Beaumont , California

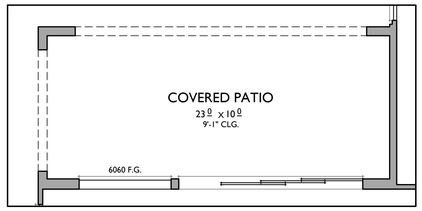
0 2 4 8

023.17294

01.19.18

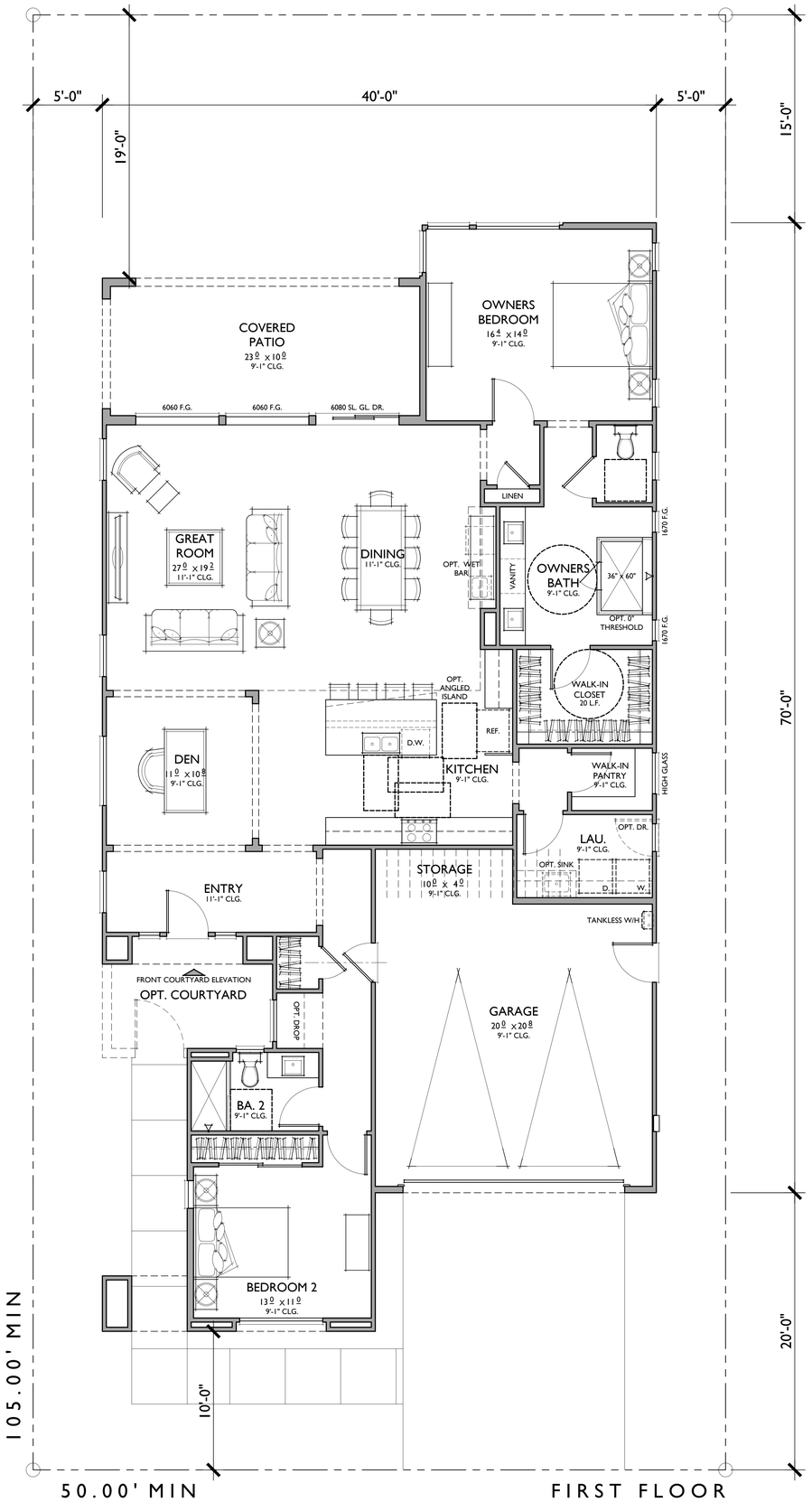
A 3.2

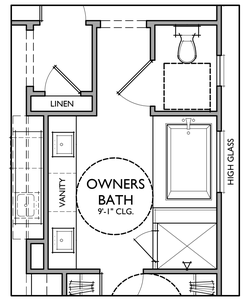
PardeeHomes



OPTIONAL STACKING DOOR

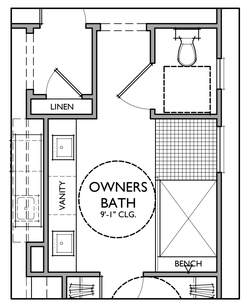
AT COVERED PATIO





OPTIONAL TUB

AT OWNERS BATH



OPTIONAL SPA SHOWER

AT OWNERS BATH

PLAN 1A

1,985 SQ. FT.

TARGET: 2,000 SQ. FT.

2 BEDROOMS / 2 BATHS + DEN

2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	1,985 SQ. FT.
TOTAL	1,985 SQ. FT.
2 - CAR GARAGE	461 SQ. FT.
COVERED PATIO	227 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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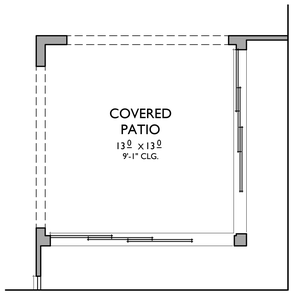
PLAN 1A
Reflects Modern Scheme Elevation
ALTIS 50'x105' - PA 31 TRACT 31470-3
Beaumont , California
023.17258

01.19.18

A 1.3

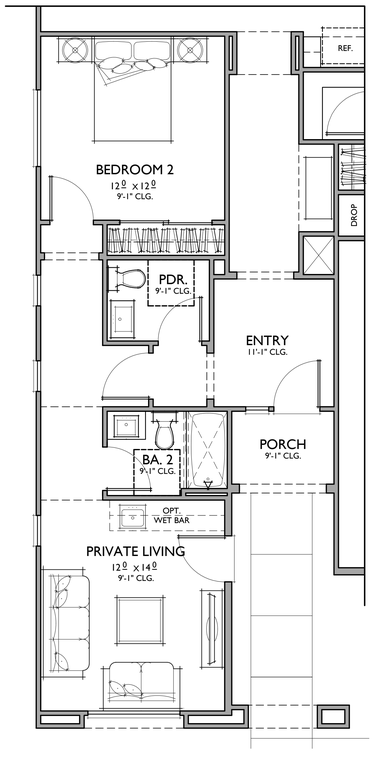
PardeeHomes



OPT. STACKABLE DOORS

AT COVERED PATIO

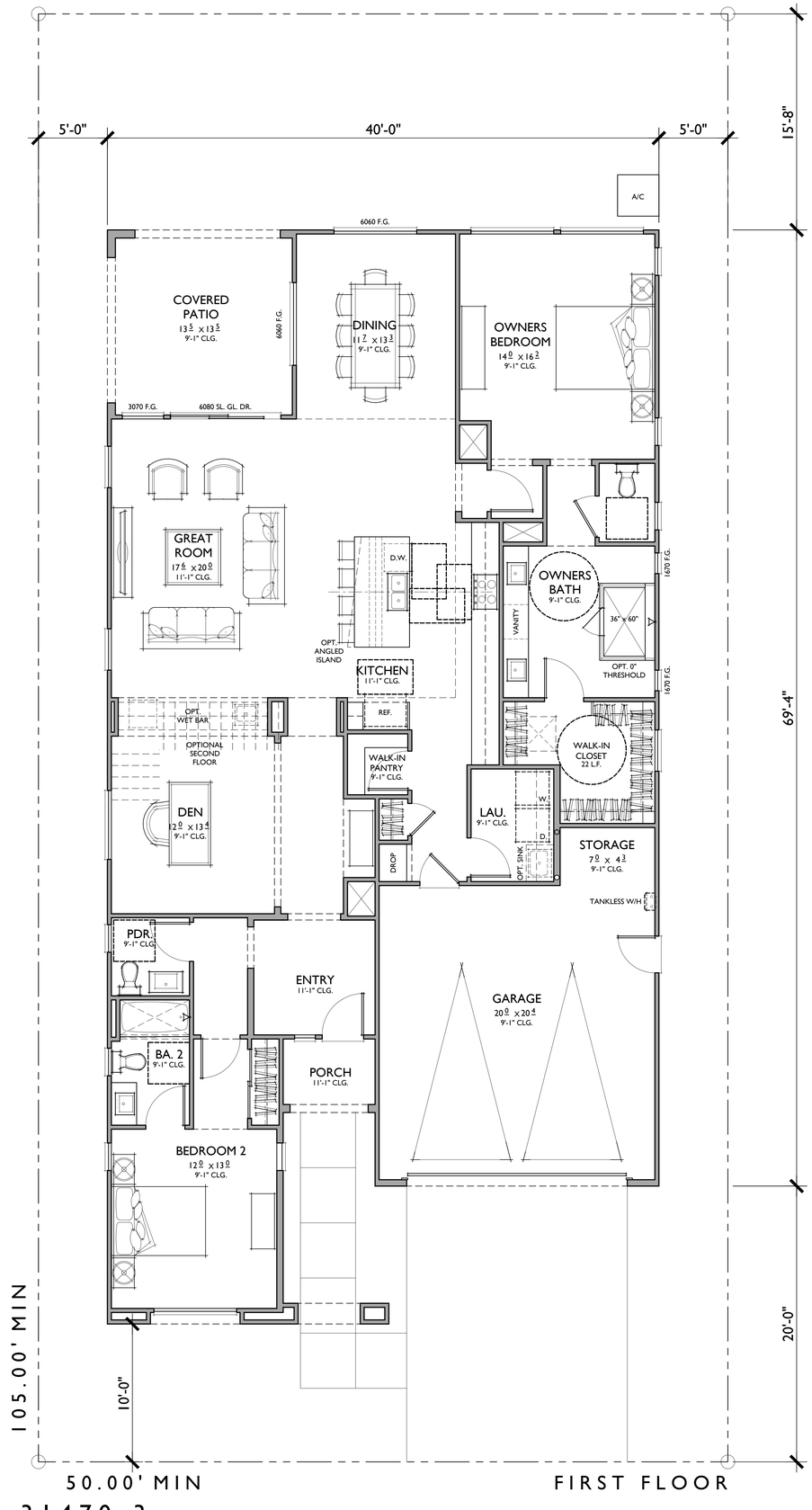
1/4"=1'-0"

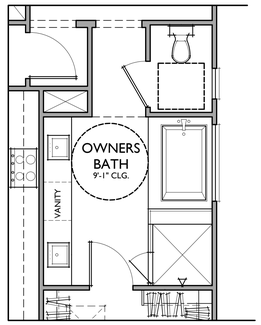


OPT. GENSMART SUITE

IN LIEU OF BEDROOM 2 AND DEN

1/4"=1'-0"

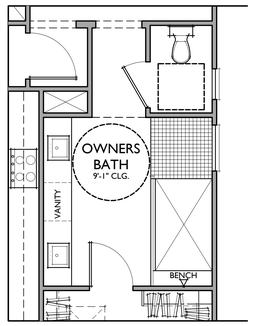




OPTIONAL TUB

AT OWNERS BATH

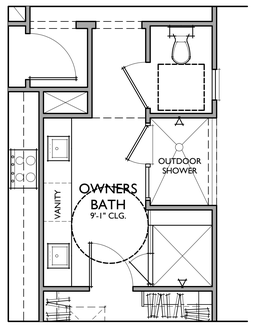
1/4"=1'-0"



OPTIONAL SPA SHOWER

AT OWNERS BATH

1/4"=1'-0"



OPTIONAL GROTTO

AT OWNERS BATH

1/4"=1'-0"

PLAN 2A

2,174 SQ. FT.

TARGET: 2,150 SQ. FT.

2 BEDROOMS / 2.5 BATHS + DEN

2 - CAR GARAGE

FLOOR AREA TABLE	
IST FLOOR	2,174 SQ. FT.
TOTAL	2,174 SQ. FT.
2 - CAR GARAGE	475 SQ. FT.
COVERED PATIO	170 SQ. FT.
PORCH	36 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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PLAN 2A

Reflects S□anis□ Modern Elevation

ALTIS 50'x105' - PA 31 TRACT 31470-3

Beaumont , California

0 2 4 8

023.17258

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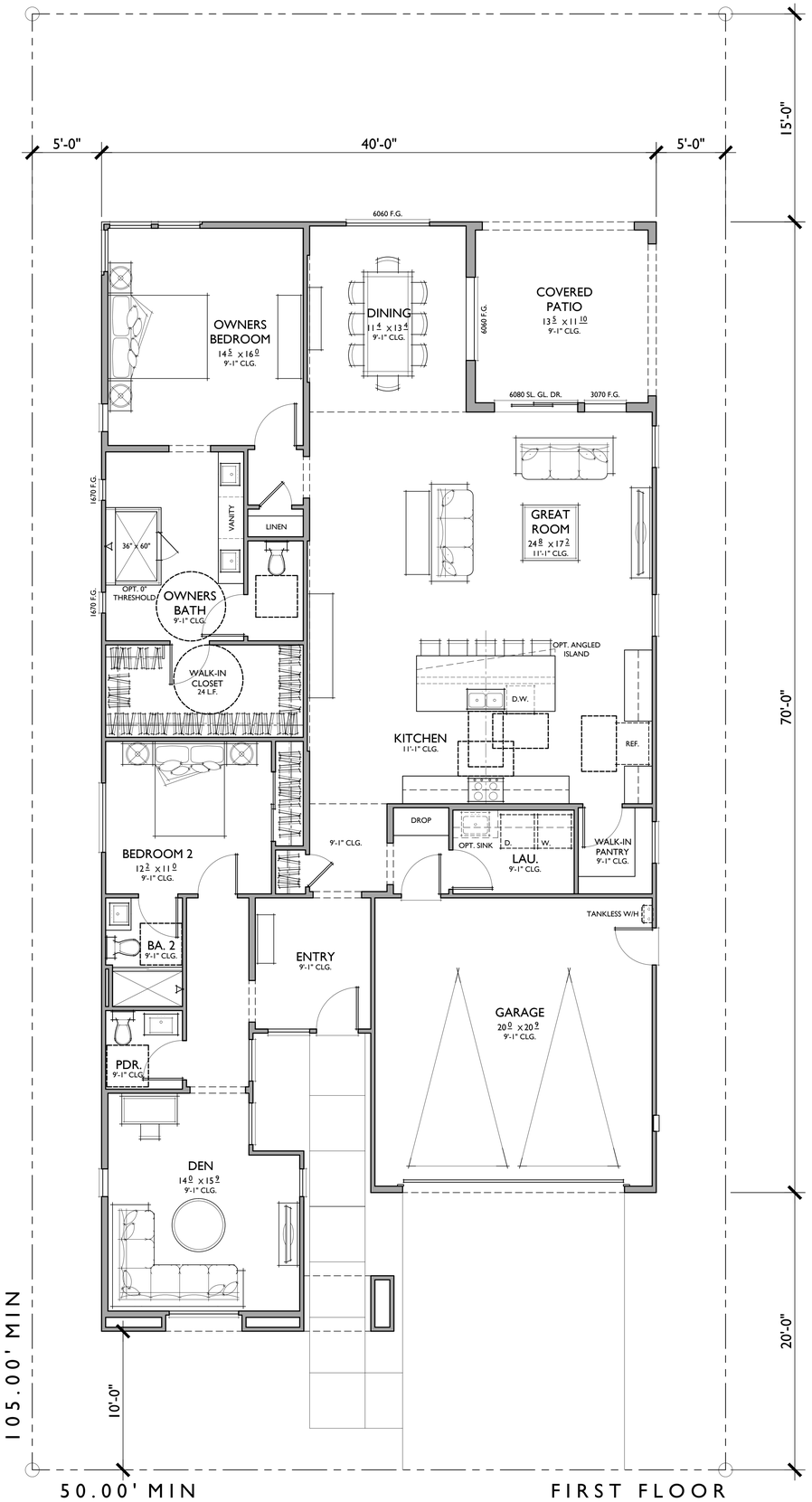
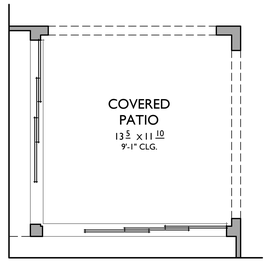
PardeeHomes

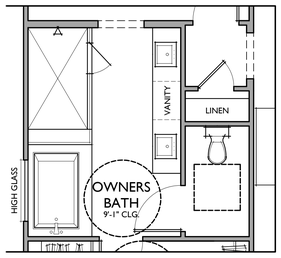




OPTIONAL STACKING DOOR

AT COVERED PATIO

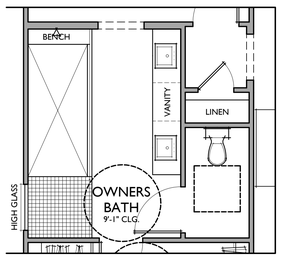
1/4"=1'-0"



OPTIONAL TUB

AT OWNERS BATH

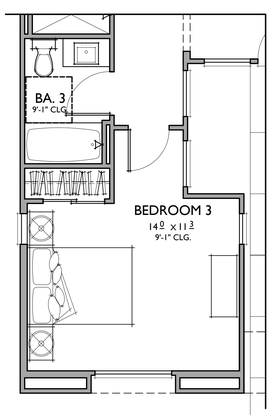
1/4"=1'-0"



OPTIONAL SPA SHOWER

AT OWNERS BATH

1/4"=1'-0"



OPT. BEDROOM 3

IN LIEU OF DEN

1/4"=1'-0"

PLAN 3A

2,240 SQ. FT.

TARGET: 2,300 SQ. FT. (2,250 SQ. FT.)

2 BEDROOMS / 2.5 BATHS + DEN / OPT. BED 3

2 - CAR GARAGE

FLOOR AREA TABLE	
IST FLOOR	2,240 SQ. FT.
TOTAL	2,240 SQ. FT.
2 - CAR GARAGE	435 SQ. FT.
COVERED PATIO	170 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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PLAN 3A

Reflects S□anis□ Modern Elevation

ALTIS 50'x105' - PA 31 TRACT 31470-3

Beaumont , California

0 2 4 8

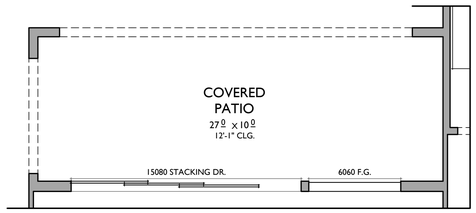
023.17258

FIRST FLOOR

01.19.18

A 3.2

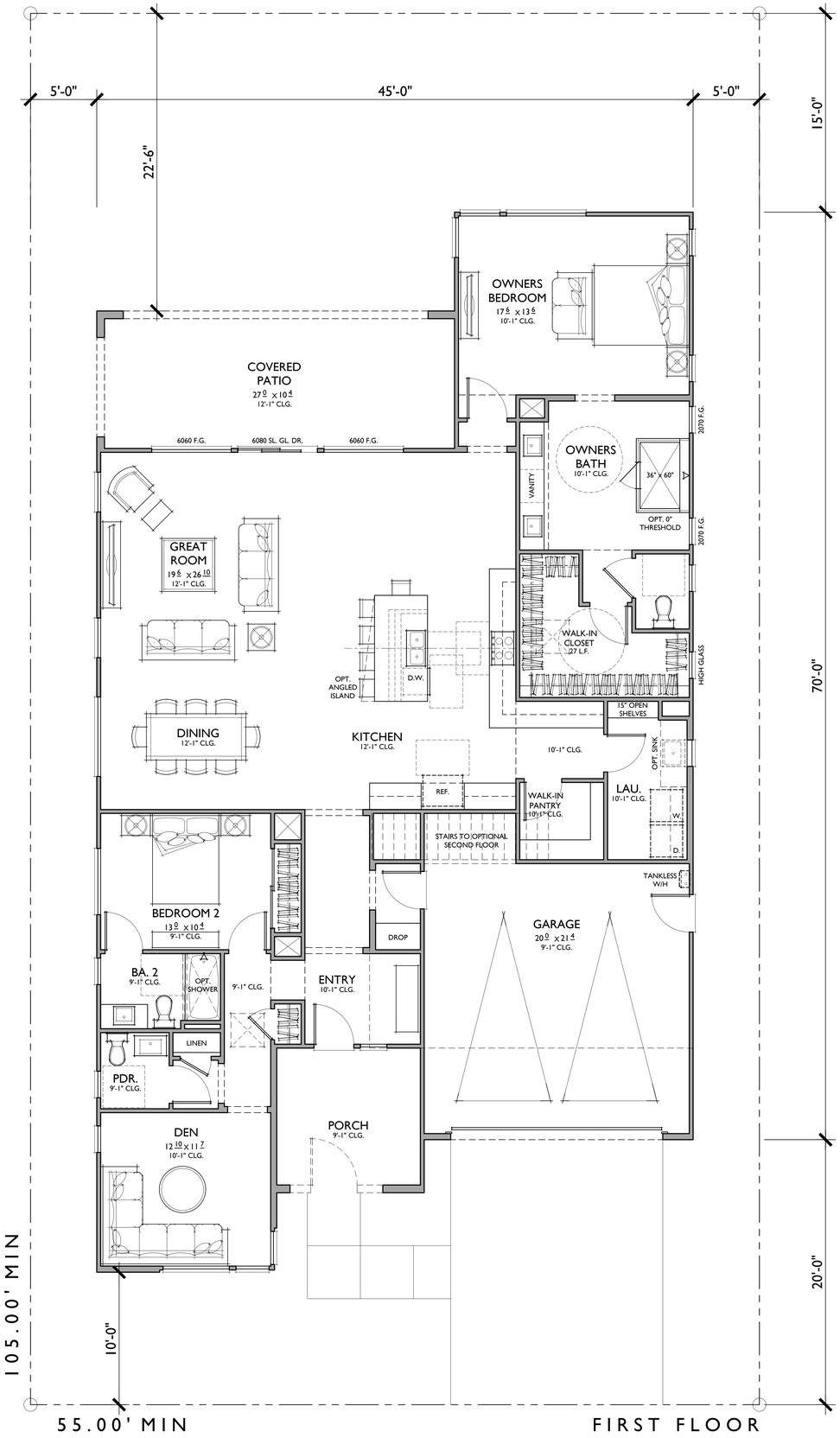
PardeeHomes



OPTIONAL STACKING DOOR

AT COVERED PATIO

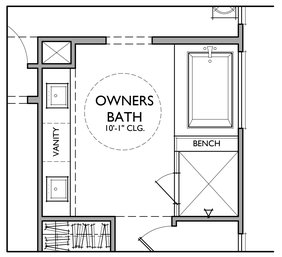
1/4"=1'-0"



OPTIONAL SPA SHOWER

AT OWNERS BATH

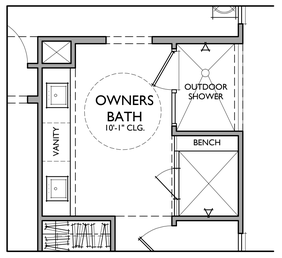
1/4"=1'-0"



OPTIONAL SHOWER/TUB

AT OWNERS BATH

1/4"=1'-0"



OPTIONAL GROTTO

AT OWNERS BATH

1/4"=1'-0"

PLAN 1A

2,278 SQ. FT.

TARGET: 2,200 SQ. FT.

2 BEDROOMS / 2.5 BATHS + DEN

2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	2,278 SQ. FT.
TOTAL	2,278 SQ. FT.
2 - CAR GARAGE	451 SQ. FT.
COVERED PATIO	280 SQ. FT.
PORCH	118 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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PLAN 1A

Reflects S☐anis☐ Modern Elevation

ALTIS 55'x105' - PA 31 TRACT 31470-3

Beaumont , California

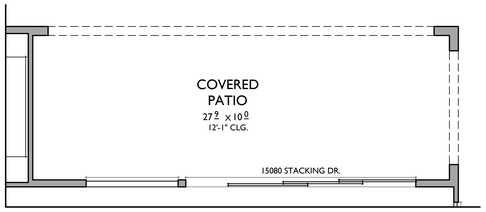
0 2 4 8

023.17259

01.19.18

A 1.3

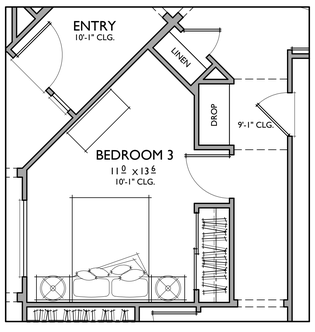
PardeeHomes



OPTIONAL STACKING DOOR

AT COVERED PATIO

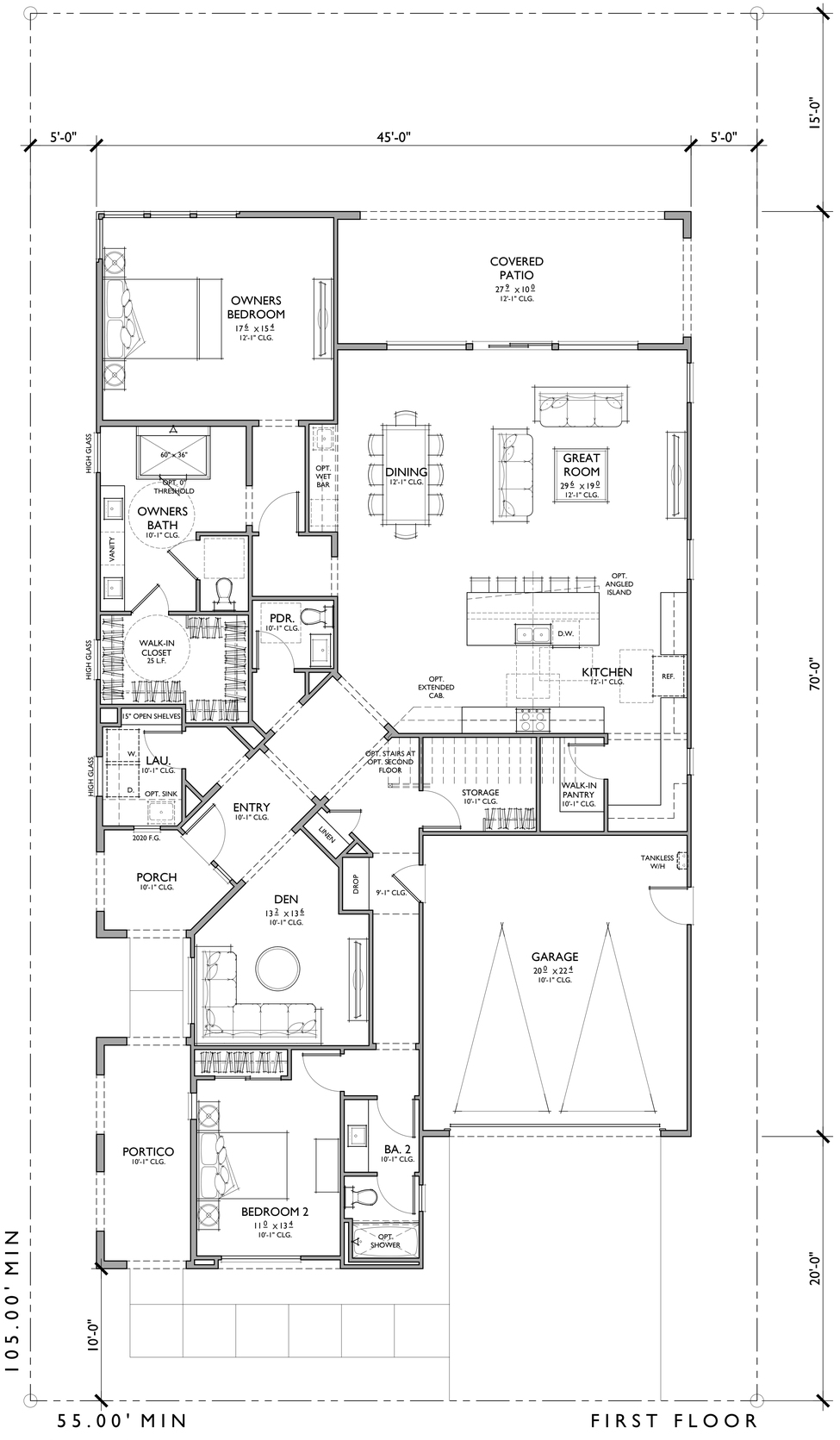
1/4"=1'-0"

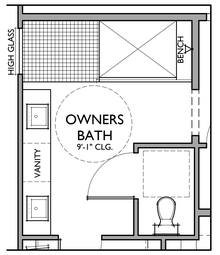


OPTIONAL BEDROOM 3

IN LIEU OF DEN

1/4"=1'-0"

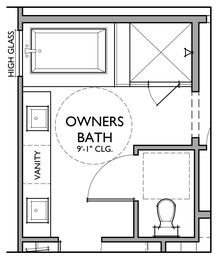




OPTIONAL SPA SHOWER

AT OWNERS BATH

1/4"=1'-0"



OPTIONAL SHOWER/TUB

AT OWNERS BATH

1/4"=1'-0"

PLAN 2A

2,412 SQ. FT.

TARGET: 2,400 SQ. FT.

2 BEDROOMS / 2.5 BATHS + DEN + OPT. BED 3

2 - CAR GARAGE

FLOOR AREA TABLE	
1ST FLOOR	2,412 SQ. FT.
TOTAL	2,412 SQ. FT.
2 - CAR GARAGE	462 SQ. FT.
COVERED PATIO	267 SQ. FT.
PORCH	68 SQ. FT.
PORTICO	125 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

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PLAN 2A

Reflects S☐anis☐ Modern Elevation

ALTIS 55'x105' - PA 31 TRACT 31470-3

Beaumont , California

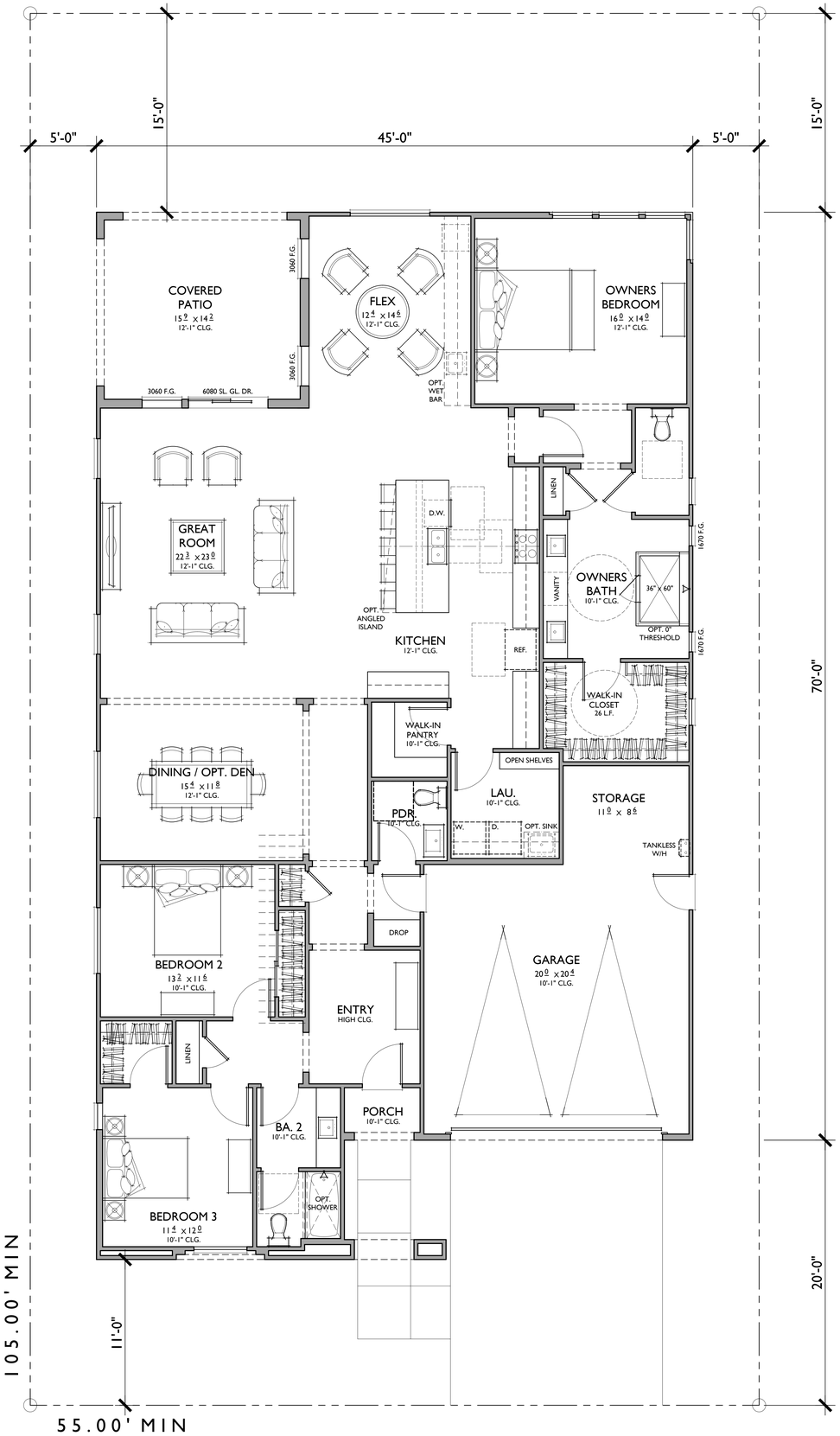
0 2 4 8

023.17259

01.19.18

A 2.4

PardeeHomes



PLAN 3A

2,569 SQ. FT.

TARGET: 2,600 SQ. FT.

3 BEDROOMS / 2.5 BATHS + FLEX

2 - CAR GARAGE

FLOOR AREA TABLE	
IST FLOOR	2,569 SQ. FT.
TOTAL	2,569 SQ. FT.
2 - CAR GARAGE	496 SQ. FT.
COVERED PATIO	217 SQ. FT.
PORCH	23 SQ. FT.

NOTE: SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION

Bassenian | Lagoni
ARCHITECTURE • PLANNING • INTERIORS

2031 Orchard Drive, Suite 100
Newport Beach, CA USA 92660
tel. +1 949 553 9100
fax +1 949 553 0548

PLAN 3A

Reflects Modern Scheme Elevation

ALTIS 55'x105' - PA 31 TRACT 31470-3

Beaumont , California

0 2 4 8

023.17259

01.19.18

A 3.3

PardeeHomes

Beaumont-Cherry Valley Water District
Special Board Meeting
May 31, 2018

Item 2

STAFF REPORT

TO: Board of Directors

FROM: Dan Jaggers, General Manager

SUBJECT: **Update: Bogart Park Ad Hoc Committee Report and District Planned Facilities at Park Site**

Staff Recommendation

No recommendation. Discussion with Beaumont-Cherry Valley Recreation and Park District and Riverside County Park and Open Space District and direction to staff.

Background

BCVWD currently owns 254+ acres of property historically used as a large portion of Bogart Park, located at 9600 Cherry Avenue, Cherry Valley, CA. A 99-year lease with the Riverside County Park and Open Space District (the County) has approximately 12 years remaining, but the County has expressed disinterest in continuing to operate the Park.

At its regular meeting on May 18, 2017 the Board of Directors approved a Memorandum of Intent between the County, the Beaumont-Cherry Valley Recreation and Park District, and the Beaumont-Cherry Valley Water District to memorialize efforts among the parties to develop a transitional plan to transfer Bogart Park operational activity from the Park and Open Space District to the Recreation and Park District.

At the October 5, 2017 BCVWD Engineering Workshop, General Manager Duane Burk of the Beaumont-Cherry Valley Recreation and Park District (hereinafter BCV Rec & Park) spoke to the Board about moving forward with a transition plan for the park and the potential for a new, 99-year lease with the BCV Rec & Park, eliminating the County Regional Park and Open Space District. He indicated strong interest by BCV Rec & Park to preserve the current uses of Bogart Park and to partner with BCVWD on potential capital improvements, upgrades and maintenance.

On May 1, 2018 the BCVWD hosted a meeting for the Bogart Park Ad Hoc Committee. At this meeting, representatives from BCVWD, BCV Rec & Park, and the County discussed the issues regarding the potential new lease, capital improvements, upgrades and maintenance described above.

At the Ad Hoc Committee meeting, BCVWD Staff identified a discrepancy in the park property boundaries. The BCVWD land identified in the 1931 Lease Agreement between BCVWD and the County identifies a written boundary description which described the BCVWD land to be 254.58 acres. However, in recent records, the County Assessor-Clerk-Recorder shows information regarding the acreage of BCVWD's parcels that were supposedly included in the lease do not add up to the stated acreage. The acreage of the parcels are given in Figure 1 (attached) and sum to 381.70 acres not the 254.58 acres identified in the original lease. It was agreed that this issue needs to be addressed and that the County would do the preliminary research to resolve the discrepancies.

BCVWD staff also felt that BCVWD existing and historically planned recycled water and recharge facilities, should be discussed to ensure long term understanding of possible uses of BCVWD lands by the District as the Ad Hoc Committee moves forward with the potential new lease. BCVWD identified that portions of the Bogart Park area may have the potential to be utilized in maximizing water supply opportunities along Noble Creek as the District moves forward. The potential facilities that BCVWD previously envisioned which were described in a Water Resource Program published by BCVWD in 2003 and presented to Santa Ana Watershed Project Authority. Relevant slides and figures from the Water Resource Program Presentation showing the potential facility locations are attached. BCVWD Staff will continue to discuss these facilities at the next Ad Hoc Committee meeting.

Fiscal Impact

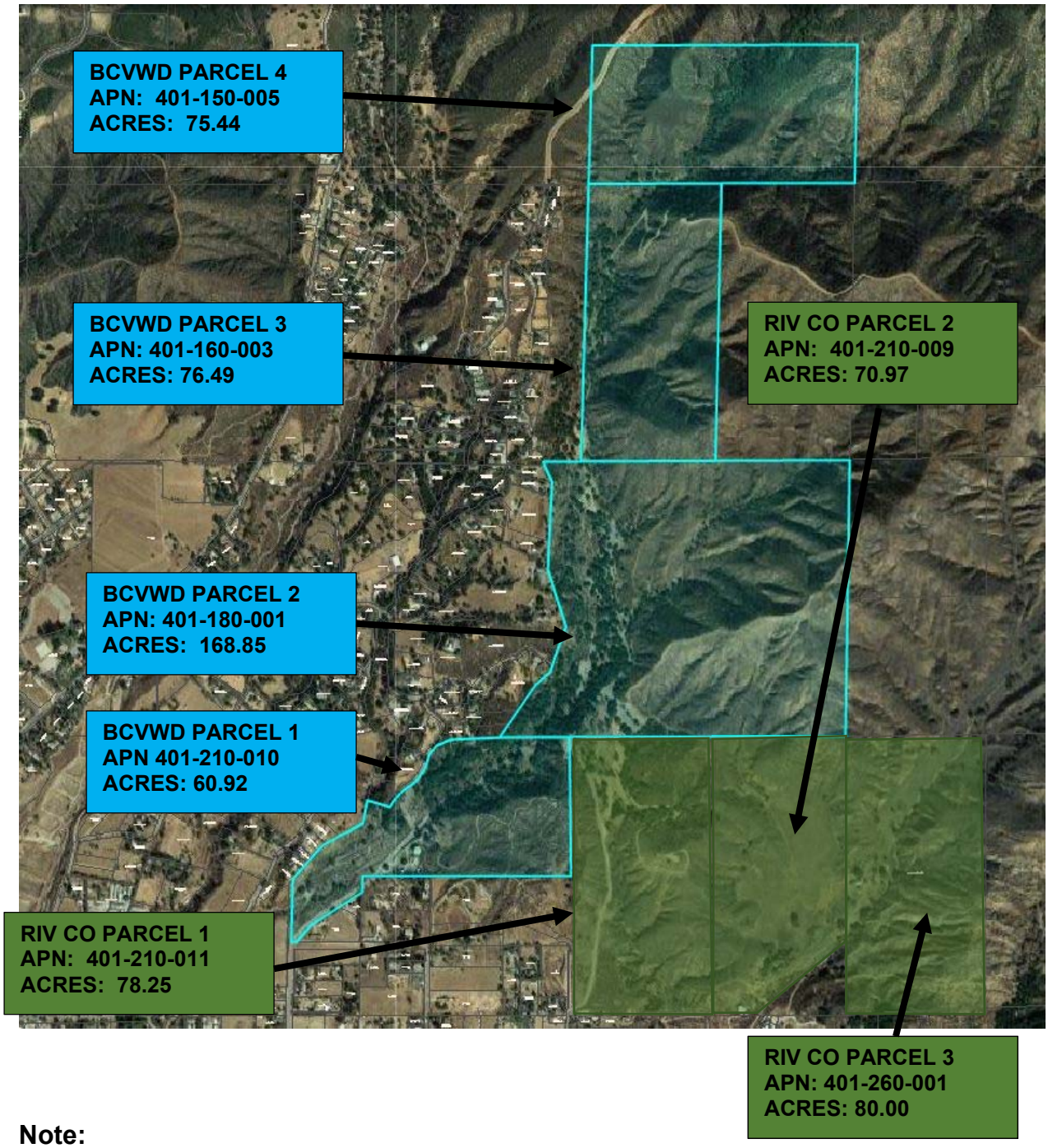
Any further costs related to continued BCVWD participation in development of “Bogart Park” will be assessed at the time that further participation is identified.

Attachment(s)

Bogart Park Map
Water Resource Program Relevant Figures

Report prepared by Kaden Johnsen, Civil Engineering Assistant

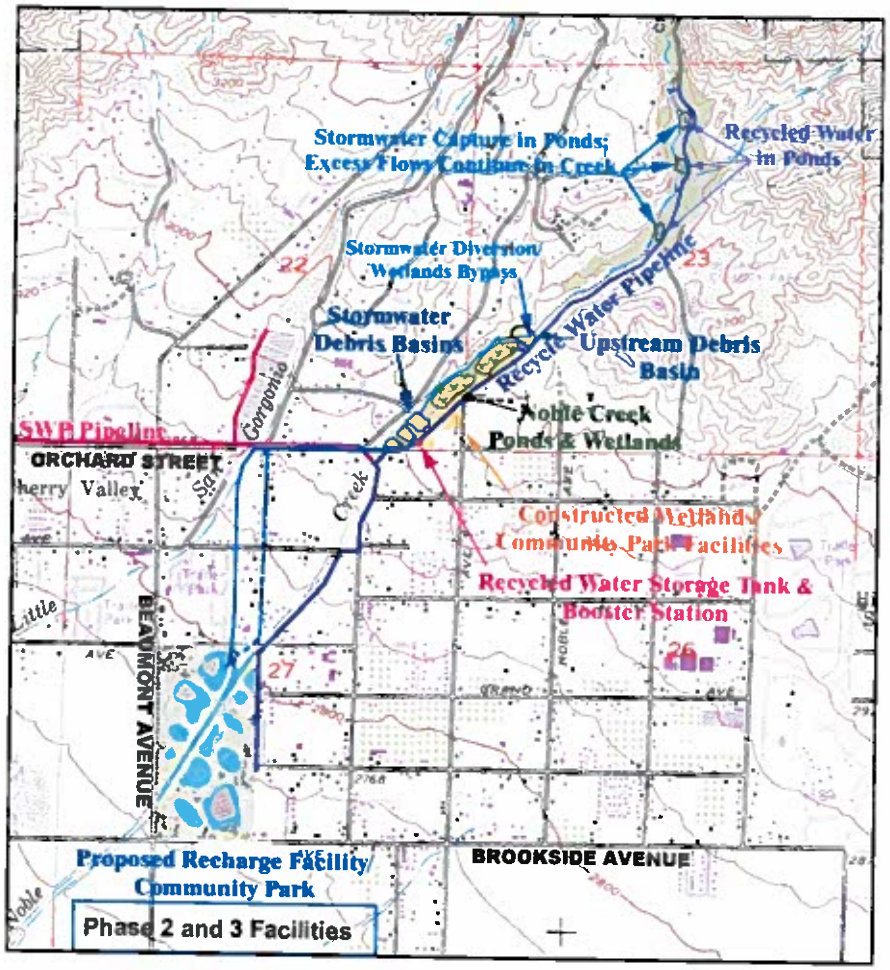
FIGURE 1
BOGART PARK MAP

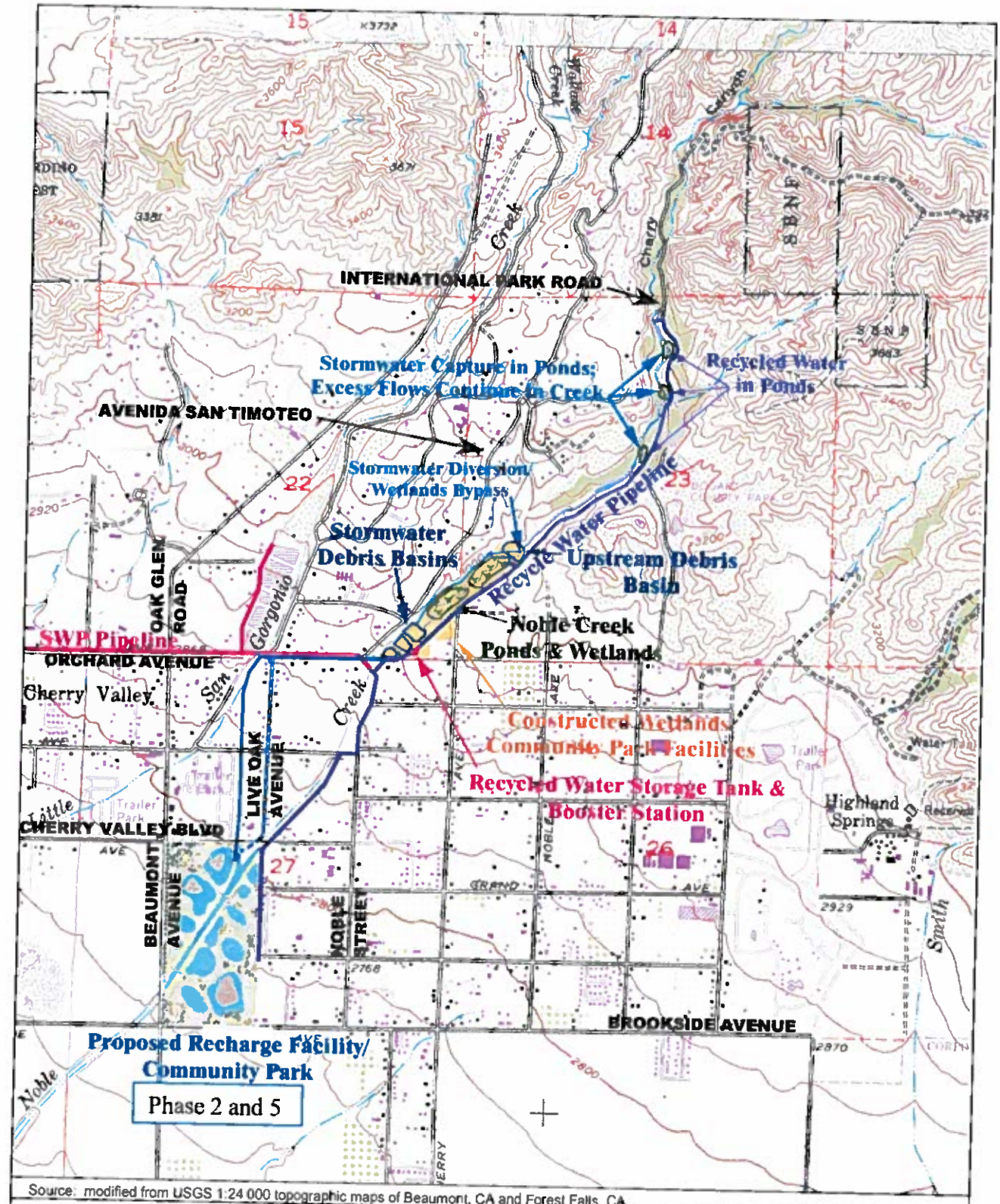


Note:
The map attached with the lease agreement between Beaumont-Cherry Valley Water District identifies the parcels identified in Blue above however the total acreage associated with those parcels is **381.70** acres, while the lease agreement identifies the total acreage as **254.58** acres. (District Staff is currently reviewing this discrepancy)

Phase 3 Facilities

- Three beautification ponds inside Bogart County Park would divert partial flows and overflow back to creek
- Entry berm outside Bogart County Park for constructed wetlands
- Up to 20 acres of constructed wetlands, depending on recycled water availability and other design constraints





Source: modified from USGS 1:24 000 topographic maps of Beaumont, CA and Forest Falls, CA

NORTH

0 2000

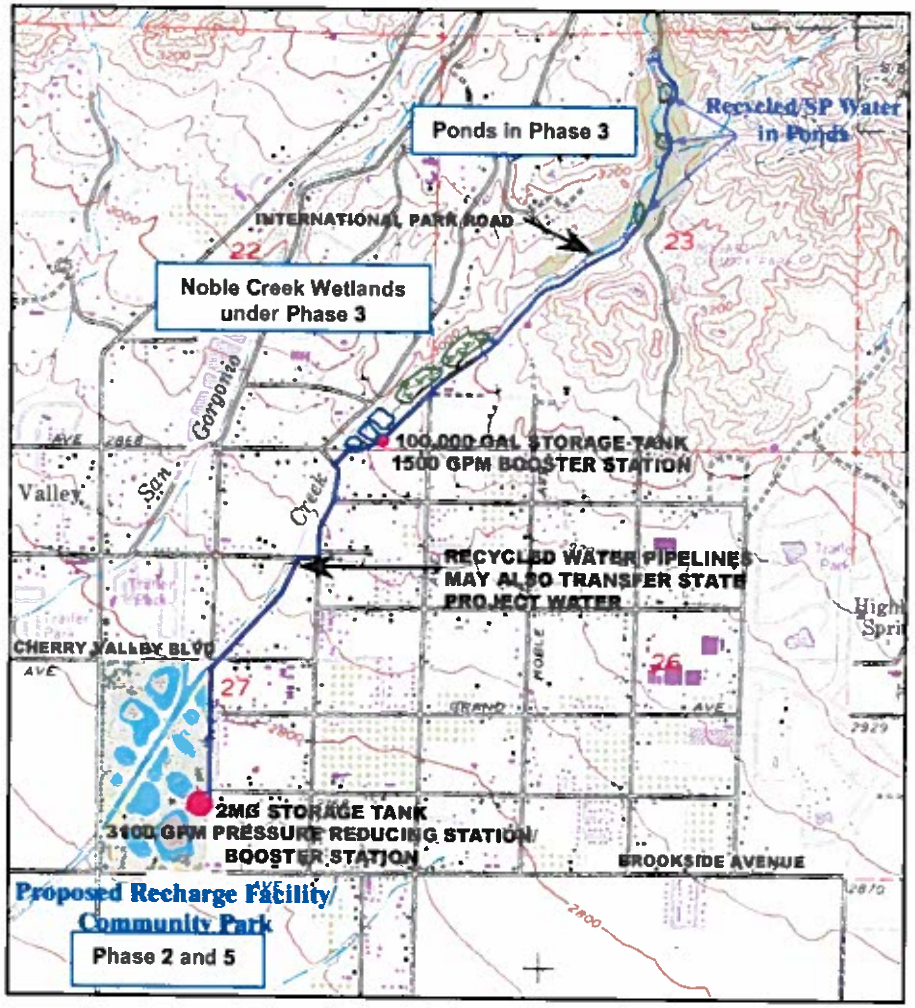
Approximate Scale in Feet

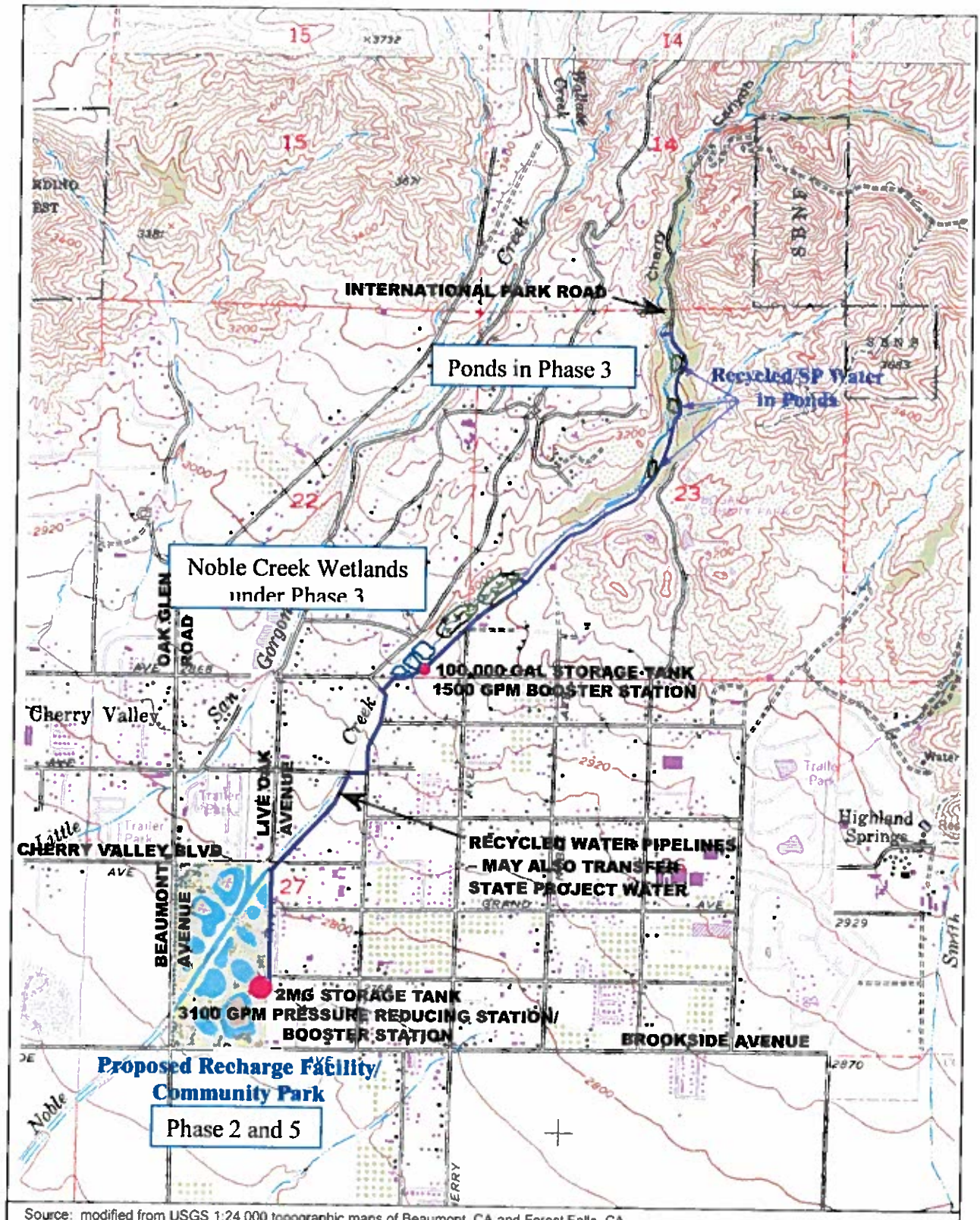
Figure 1 – Phase 3 Engineered Facilities for Noble Creek Wetlands, without Park Funds,
Recharge and Park Facilities under Phases 2 & 5 of the
Water Resource Development Program

Beaumont Cherry Valley Water District
Beaumont, California

Phase 4 Facilities

- Recycled/SWP water would be introduced via 7,150 feet of 12" pipeline and 6,300 feet of 24" pipeline from the RF/CP site to Noble Creek for co-mingling with natural flows
- One 2 MG Storage Tank and one 100,000 gal Storage Tank
- One 3,100 gpm booster station and one 1,500 gpm booster station





Source: modified from USGS 1:24 000 topographic maps of Beaumont, CA and Forest Falls, CA

NORTH

0 2000

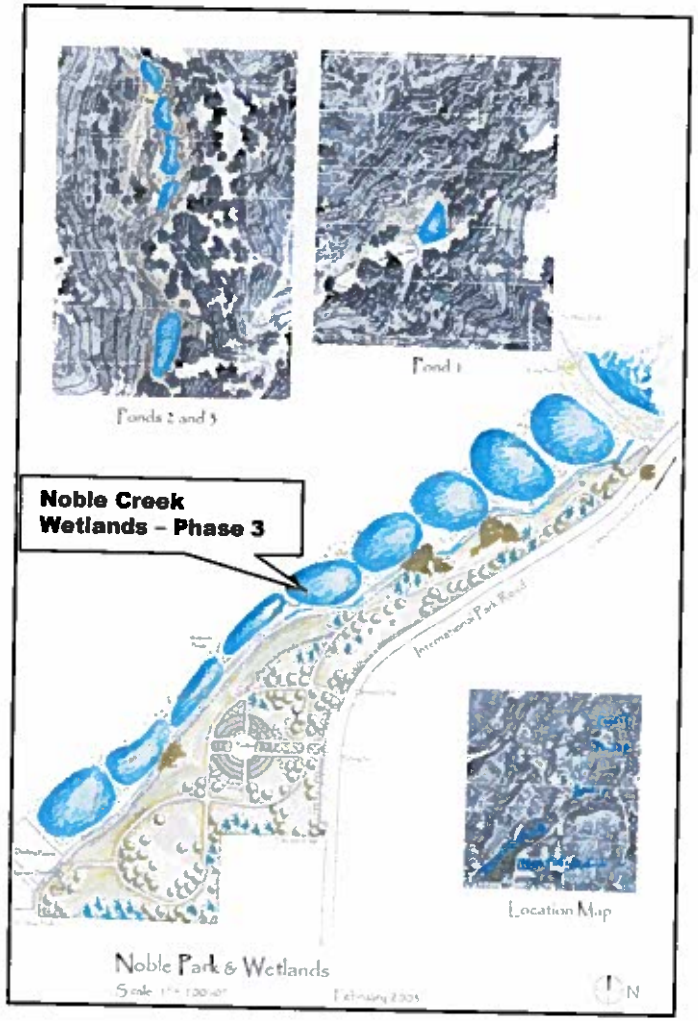
Approximate Scale in Feet

Figure 1 – Phase 4 Recycled Water Facilities for Delivery into Bogart Park & Wetlands,
Recharge and Park Facilities under Phases 2 & 5 of the Water Resource Development Program

Beaumont Cherry Valley Water District
Beaumont, California

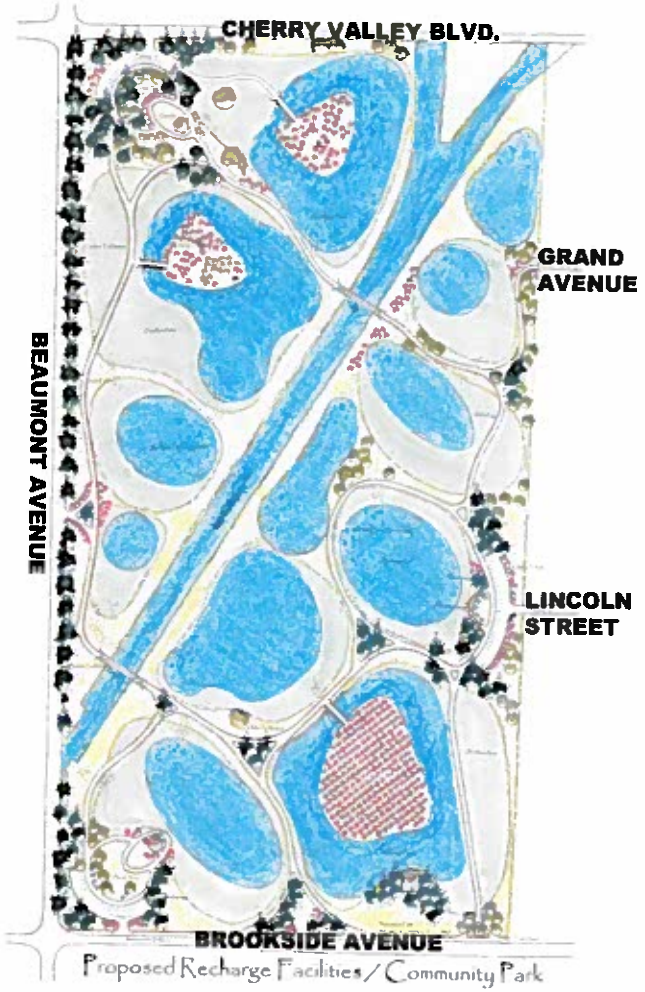
Phase 5 Facilities

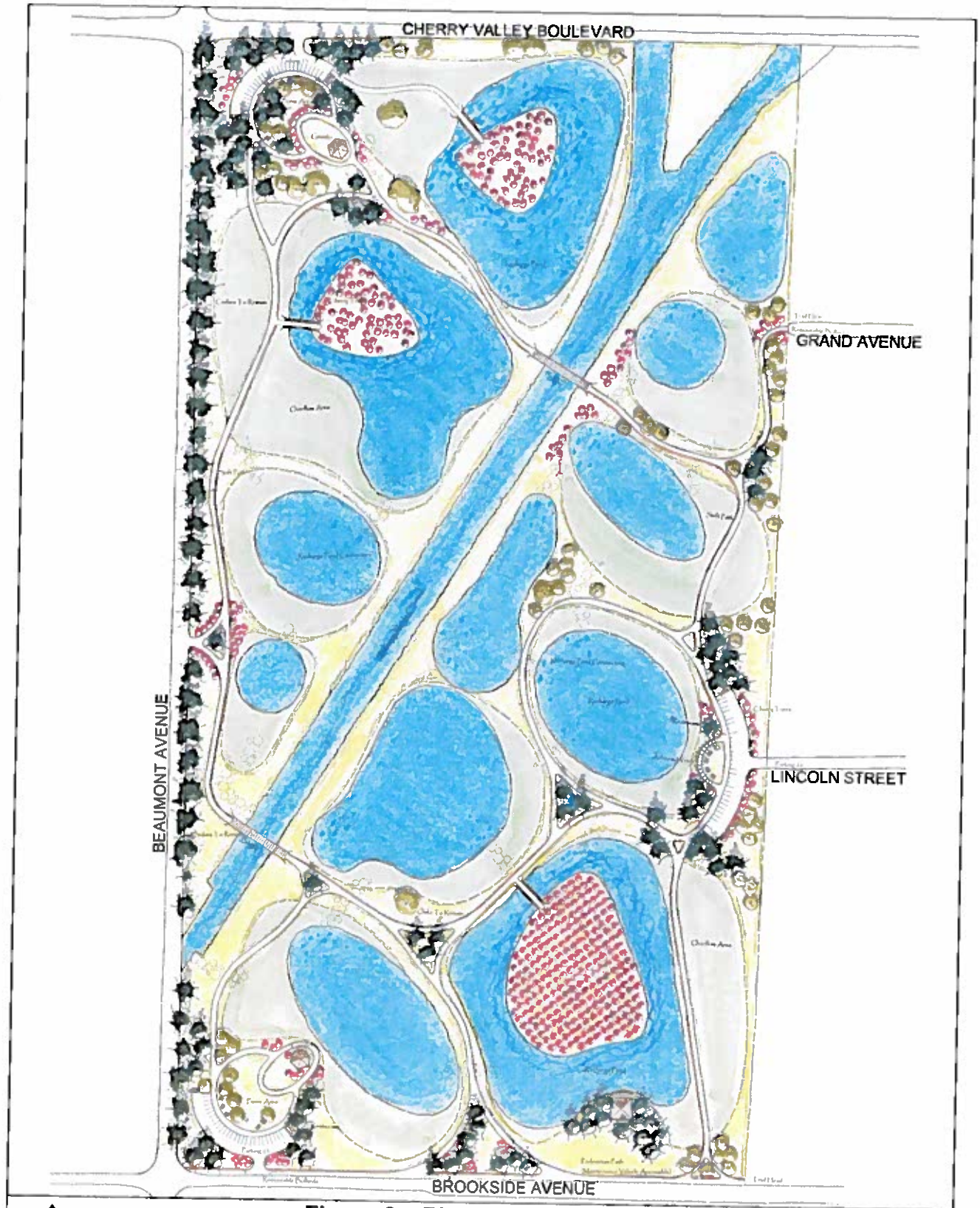
- Community park area on Noble Creek Wetlands
- Park to include natural setting atmosphere, pavilion, walking/ horseback trails, parking area, and educational signage on wetlands
- Horse trails to connect to existing trails into Bogart County Park
- Parking area accessed off Cherry Avenue



Phase 5 Facilities cont.

- Community park facilities on RF/CP would be located adjacent to the intersection of Beaumont and Brookside Avenues
- Park facilities to include cherry trees, horse trails, walking trails, two scenic bridges, two gazebos, bathroom facilities, parking areas, lighting, and picnic areas
- Public vehicle access off Cherry Valley Blvd., Brookside Avenue, and Lincoln Street

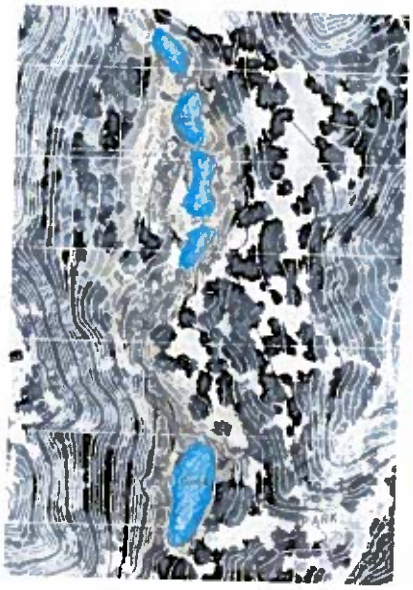




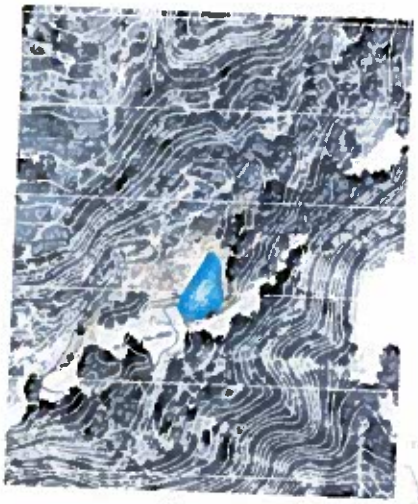
NORTH
NOT TO SCALE

Figure 2 – Phase 5 Development of Two Community Park Areas Related to Overall Program,
Recharge Facilities under Phase 2 of the Water Resource Development Program

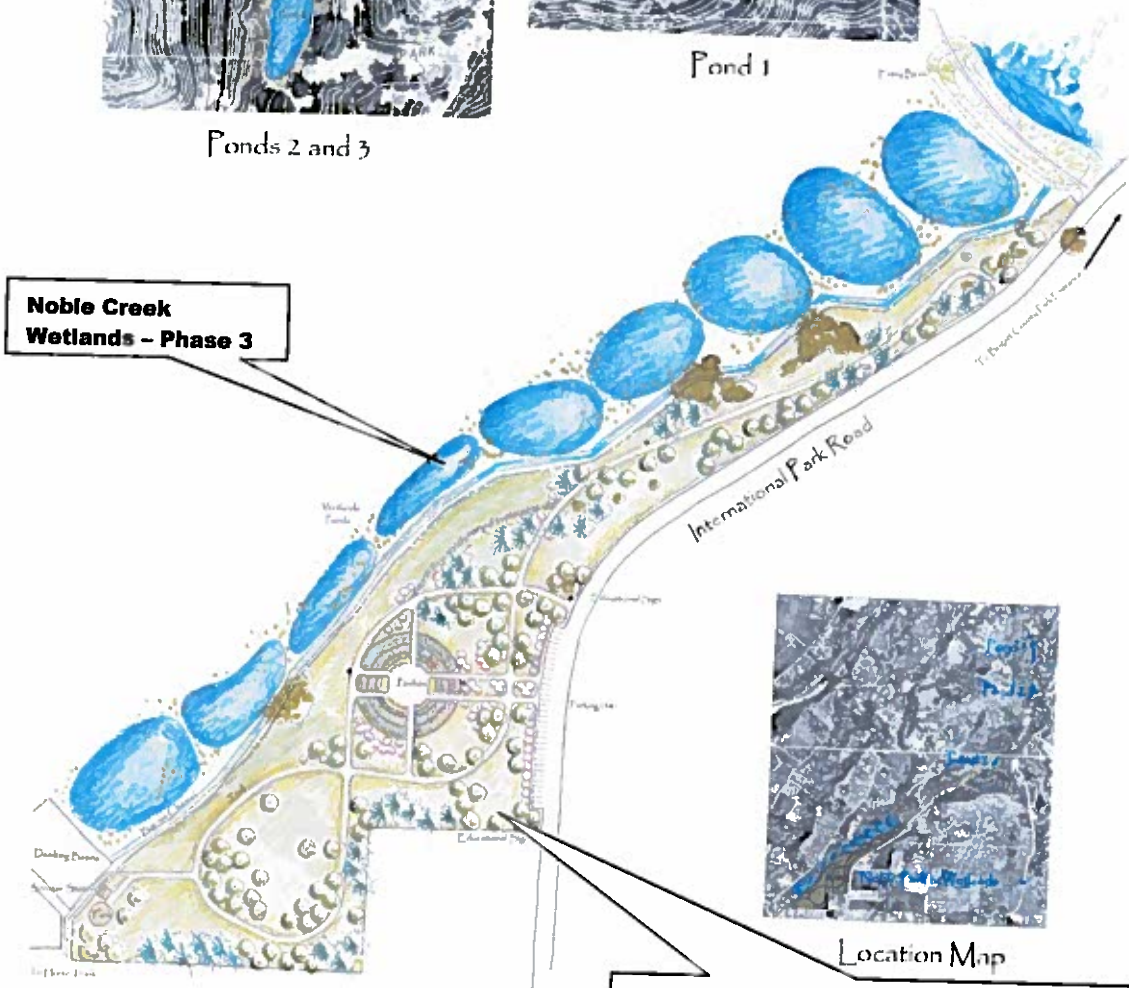
Beaumont Cherry Valley Water District
Beaumont, California



Ponds 2 and 3



Pond 1



Noble Park & Wetlands

Location Map

Noble Park to be developed into Natural Setting Educational Park next to Wetlands, including Trails and Viewing Areas – Phase 5

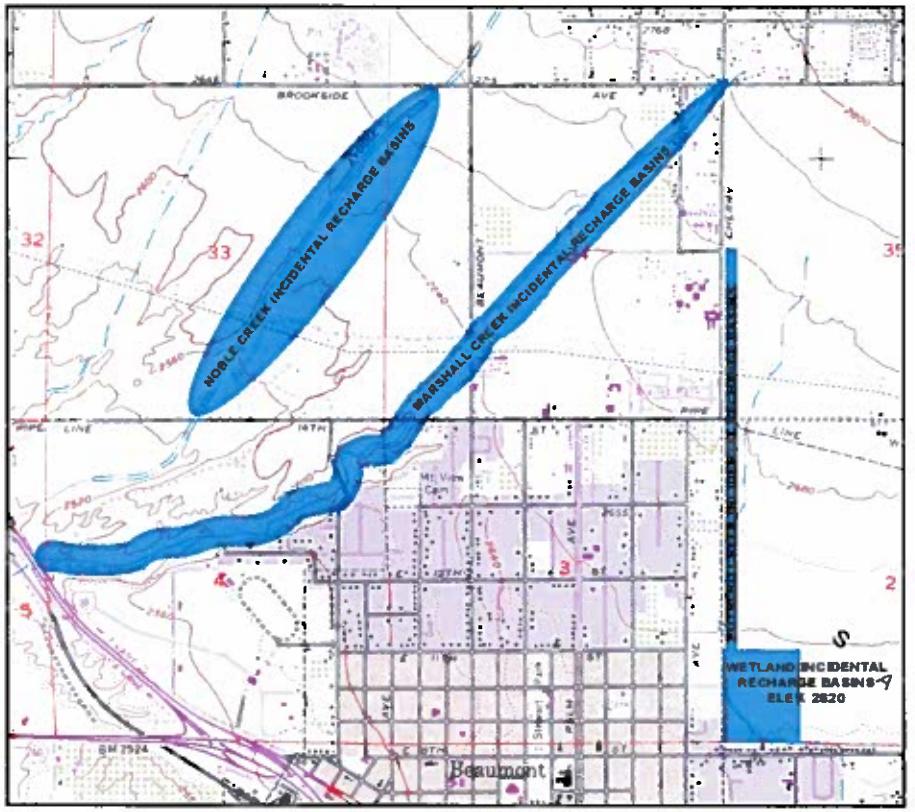
Figure 2 – Phase 5 Development of Two Community Park Areas Related to Overall Program,
Noble Creek Park Area Outside Bogart County Park shown,
Wetlands Facilities under Phase 3 of the
Water Resource Development Program

NORTH
NOT TO SCALE

Beaumont Cherry Valley Water District
Beaumont, California

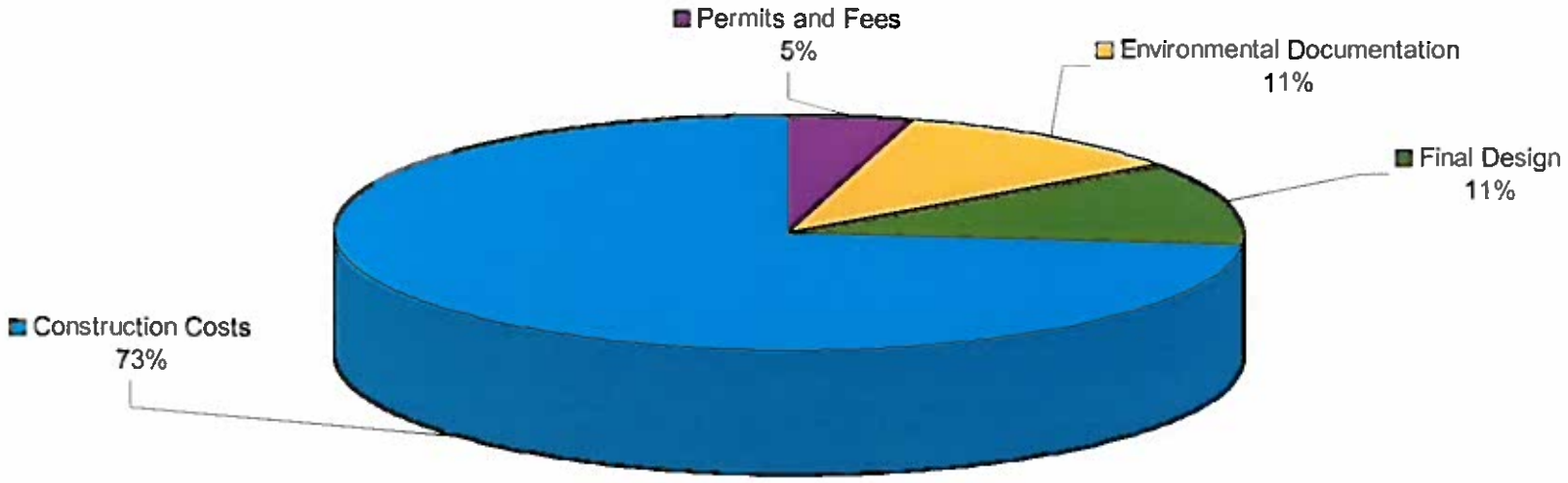
IRP Facilities

- Construct percolation/recharge basins to capture incidental stormwater runoff for percolation into the groundwater basin
- Basins will be constructed by excavating shallow ponds and/or installing rubber inflated dams across the creeks
- Area available for incidental recharge is ~35 acres located on Noble, Marshall, and Potrero Creeks; land currently owned by National Audubon Society
- Install release valves on recycled water system for recharge of surplus

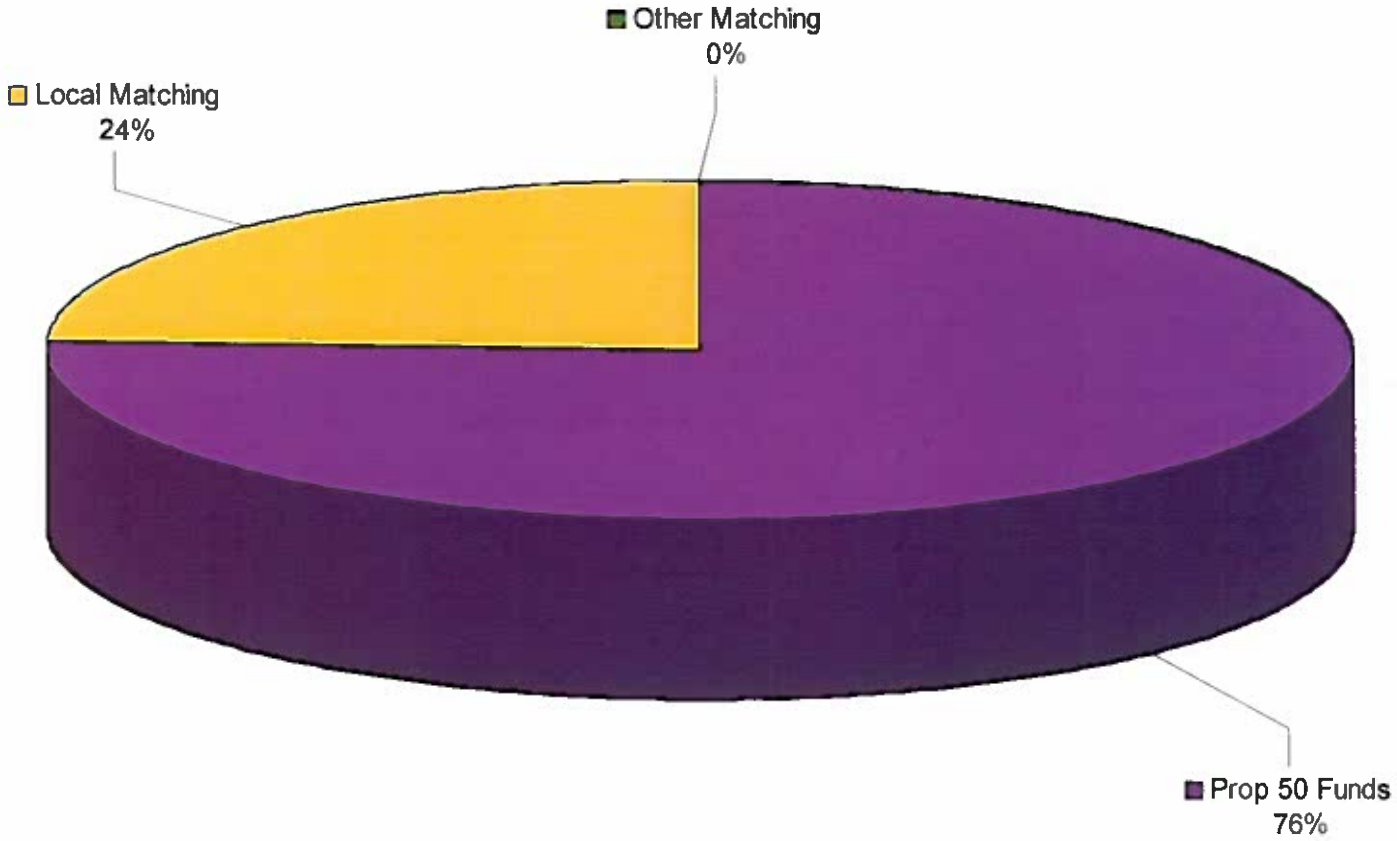


Estimated IRP Costs

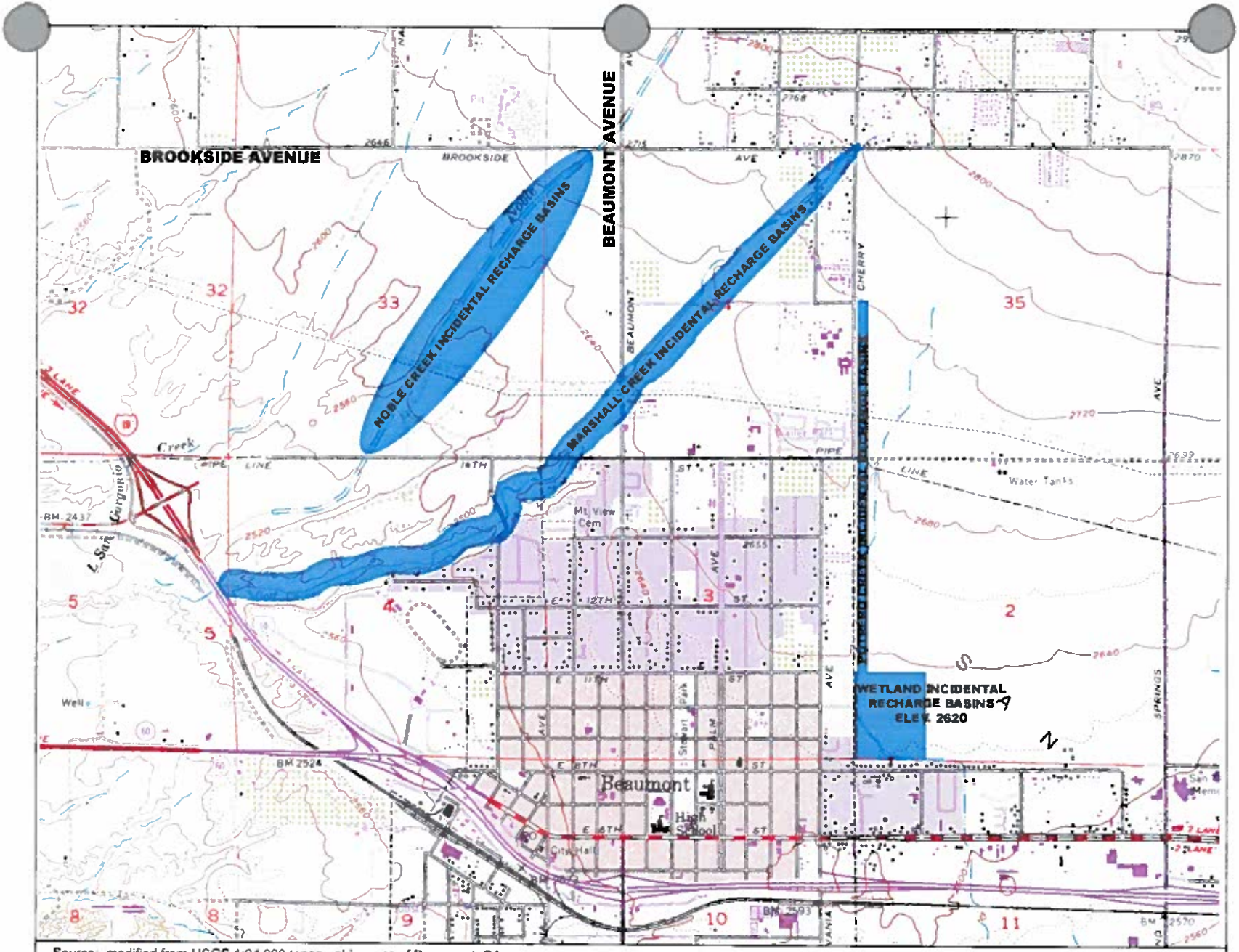
- Estimated IRP costs of $1,850,000 ($400,000 contributed through local funds) include:
  - $208,000 for engineering (preliminary and final design)
  - $1,363,000 for construction
  - $195,000 for environmental documentation
  - $84,000 for permits and fees
- Additional local funds of ~$70,000 for land acquisition



IRP Cost Breakdown*



* Includes additional land acquisition costs



Source: modified from USGS 1:24 000 topographic maps of Beaumont, CA

NORTH

Figure 1 – Incidental Recharge Program

Beaumont Cherry Valley Water District

Beaumont, California

Beaumont-Cherry Valley Water District
Special Board Meeting
May 31, 2018

Item 3

STAFF REPORT

TO: Board of Directors

FROM: Dan Jaggers, General Manager

SUBJECT: **Update on the Discussion of Potential Security Strategies for the Noble Creek Recharge Facility Phase I**

Staff Recommendation

Board discussion and direct staff as desired.

Background

On April 18, 2018, the District presented a Staff Report with a solution to the lack of security fencing around the Noble Creek Recharge Facility (NCRF), Phase I which is approximately 28.5 acres. The NCRF is located on the east side of Beaumont Avenue between Cherry Valley Boulevard and Brookside Avenue and consists of both spreading basins and trails.

NCRF Phase 1 is currently posted to be open to the public from sunrise to sunset with the intent of allowing public day use of the property for community park purposes, but currently, there is no way to secure the site after hours. The northwest corner of the property is open space, with picnic tables and barbecues. The interior of the recharge facility is also open to District vehicles (maintenance) and public foot traffic; with pathways among the ponds, additional picnic benches, trash cans and a park-like walkway along the edge of Noble Creek.

During the last few years, both directors and staff have noticed increasing problems with site security, site use, and/or undesirable activity at the NCRF. Per the direction of the Board, staff has proposed three (3) potential options for security fencing (chain link, wrought iron, and block wall) to mitigate the undesirable activity and increase safety at the NCRF.

After the April 18 Engineering Workshop, the Board requested that a preliminary construction cost estimate and site photographs be obtained for further discussion of the facility security.

On May 9, 2018, the District presented a slide show and a supplemental staff report which provided preliminary costs for the installation of perimeter chain link fencing. Through Board discussion and at the direction of the Board, staff was requested to evaluate an alternative fence type to provide a more aesthetically pleasing look than chain link. Director Hoffman suggested that Staff look into Welded Wire Fencing (WWF) as has been installed at nearby local areas/facilities.

Summary

At the request of the Board, Staff has evaluated WWF[1] as has determined the following:

- Fence panels are available in 4', 5', 6', and 8' heights.
- Fence material is 2"x6" mesh and 6 ga. steel.
- Posts are 2" square and 16 ga.
- Single- and Double-Swing gates
- Single-gate widths are 3.5' to 16' wide.
- Double-gate widths are 7' to 32' wide.
- Steel is galvanized steel, then coated in zinc phosphate, epoxy powder coat, and a polyester color coat.
- 10 year limited warranty.
- Optional Barb-wire Arm Kit or "Y" Bracket for Barb-wire
- Color Options are available.

[1] Wire Works Plus manufactured by Ameristar Fence was evaluated.

Fiscal Impact

The below is a preliminary summary of construction costs based on past and recently obtained construction cost information.

Alternative	Type of Fencing	Preliminary Estimated Cost (rounded)
A	6' Chain link	$144,160
B	6' Welded Wire Fencing	$284,140
C	6' Welded Wire Fencing (w/ Barbed Tape)	$306,340

Attachment(s):

- Preliminary Cost Estimates
  - Alternative "A" – 6' Chain link
  - Alternative "B" – 6' WWF
  - Alternative "C" – 6' WWF w/ Barbed Tape
- *WireWorks Plus* Information Sheets
- "Y" Bracket Photograph

Report prepared by Mark Swanson, Senior Engineer – May 24, 2018


CHERRY VALLEY BLVD
950 LF
PARK AREA
Point B
PHASE I
2,100 LF
BEAUMONT
HIGH SCHOOL
PHASE II
Point A
SPORTS PARK
© 2018 Google

BEAUMONT-CHERRY VALLEY WATER DISTRICT

CHAIN LINK SECURITY FENCE
Alternative "A"

NOBLE CREEK RECHARGE FACILITIES PHASE 1 SECURITY EAST AND NORTH FENCE AND ENTRANCE GATES
ENGINEER'S PRELIMINARY ESTIMATE

		ENGINEER'S ESTIMATE			
Item No.	Description	Qty.	Units	Unit Price	Amount
1	Contract bonds, insurance, permits, project management, mobilization of equipment, materials, and labor prior to starting work, and demobilization	1	L.S.	$ 3,000.00	$ 3,000.00
2	**Site Work**				
a.	Chain Link Fence Construction (w/ Barbed Wire)	2,910	L.F.	$ 26.50	$ 77,115.00
b.	Drive Access Gate (30 foot wide)	4	L.S.	$ 1,250.00	$ 5,000.00
c.	Concrete Gate Runner (2.25' wide x 1' thick x Length)	120	L.F.	$ 25.00	$ 3,000.00
d.	Man Access Gate (5 foot wide)	5	L.S.	$ 500.00	$ 2,500.00
3	**Electrical**				
a.	Construct Electrical Gate Operator (One Drive Access Gate - Mechanical)	1	L.S.	$ 4,000.00	$ 4,000.00
b.	Gate Opener Electrical (One Drive Access Gate - Mechanical)	1	L.S.	$ 7,500.00	$ 7,500.00
4	**Misc.**				
a.	Start-up and performance testing of all equipment, controls, and instrumentation	1	L.S.	N/A	$ -
b.	Furnish operation and maintenance manuals for all equipment, controls, and instrumentation	1	L.S.	$ 1,000.00	$ 1,000.00
TOTAL ENGINEERS ESTIMATE					**$ 103,115.00**
CONTINGENCY				**20%**	**$20,623.00**
TOTAL CONSTRUCTION ESTIMATE AND CONTINGENCIES					**$ 123,738.00**

		ENGINEER'S ESTIMATE			
Item No.	Description	Qty.	Units	Unit Price	Amount
1	Engineering	1	L.S.	5.00%	$ 6,186.90
2	Survey / Mapping	1	L.S.	3.50%	$ 4,330.83
3	Geotechnical		L.S.	0.00%	$ -
4	Materials Testing		L.S.	0.00%	$ -
5	Environmental & Permitting		L.S.	0.00%	$ -
6	Construction Contract Administration	1	L.S.	3.00%	$ 3,712.14
7	Inspection	1	L.S.	3.00%	$ 3,712.14
8	Legal and Administration	1	L.S.	2.00%	$ 2,474.76
	SUBTOTAL OTHER COSTS				**$ 20,416.77**
	SUBTOTAL COSTRUCTION AND OTHER COSTS				**$ 144,154.77**
9	Land, acre				$ -
	TOTAL CONSTRUCTION ESTIMATE AND CONTINGENCIES				**$ 144,154.77**

TOTAL CONSTRUCTION ESTIMATE AND CONTINGENCIES (ROUNDED)	**$ 144,160**

BEAUMONT-CHERRY VALLEY WATER DISTRICT

WIREWORKS[1] SECURITY FENCE

Alternative "B" - Fencing w/o Barbed Wire

NOBLE CREEK RECHARGE FACILITIES PHASE 1 SECURITY EAST AND NORTH FENCE AND ENTRANCE GATES

ENGINEER'S PRELIMINARY ESTIMATE

		ENGINEER'S ESTIMATE			
Item No.	Description	Qty.	Units	Unit Price	Amount
1	Contract bonds, insurance, permits, project management, mobilization of equipment, materials, and labor prior to starting work, and demobilization	1	L.S.	$ 3,000.00	$ 3,000.00
2	**Site Work**				
a.	Wireworks Plus 6' Security Fencing (w/ 2" posts)	2,910	L.F.	$55.84	$ 162,494.40
b.	Drive Access Gate (20' wide)	4	L.S.	$ 4,000.00	$ 16,000.00
c.	Concrete Gate Runner (2.25' wide x 1' thick x Length)	120	L.F.	$ 25.00	$ 3,000.00
d.	Man Access Gate (5' wide)	5	L.S.	$ 1,250.00	$ 6,250.00
3	**Electrical**				
a.	Construct Electrical Gate Operator (One Drive Access Gate - Mechanical)	1	L.S.	$ 4,000.00	$ 4,000.00
b.	Gate Opener Electrical (One Drive Access Gate - Mechanical)	1	L.S.	$ 7,500.00	$ 7,500.00
4	**Misc.**				
a.	Start-up and performance testing of all equipment, controls, and instrumentation	1	L.S.	N/A	$ -
b.	Furnish operation and maintenance manuals for all equipment, controls, and instrumentation	1	L.S.	$ 1,000.00	$ 1,000.00
	TOTAL ENGINEERS ESTIMATE				**$ 203,244.40**
	CONTINGENCY			**20%**	**$40,648.88**
	TOTAL CONSTRUCTION ESTIMATE AND CONTINGENCIES				**$ 243,893.28**

		ENGINEER'S ESTIMATE			
Item No.	Description	Qty.	Units	Unit Price	Amount
1	Engineering	1	L.S.	5.00%	$ 12,194.66
2	Survey / Mapping	1	L.S.	3.50%	$ 8,536.26
3	Geotechnical		L.S.	0.00%	$ -
4	Materials Testing		L.S.	0.00%	$ -
5	Environmental & Permitting		L.S.	0.00%	$ -
6	Construction Contract Administration	1	L.S.	3.00%	$ 7,316.80
7	Inspection	1	L.S.	3.00%	$ 7,316.80
8	Legal and Administration	1	L.S.	2.00%	$ 4,877.87
	SUBTOTAL OTHER COSTS				**$ 40,242.39**
	SUBTOTAL COSTRUCTION AND OTHER COSTS				**$ 284,135.67**
9	Land, acre				$ -
	TOTAL CONSTRUCTION ESTIMATE AND CONTINGENCIES				**$ 284,135.67**

TOTAL CONSTRUCTION ESTIMATE AND CONTINGENCIES (ROUNDED)	**$ 284,140**

[1] Wireworks is manufactured by Ameristar. This product was pulled for costing purposes only.

BEAUMONT-CHERRY VALLEY WATER DISTRICT

WIREWORKS[1] SECURITY FENCE

Alternative "C" - Fencing with Barbed Tape

NOBLE CREEK RECHARGE FACILITIES PHASE 1 SECURITY EAST AND NORTH FENCE AND ENTRANCE GATES

ENGINEER'S PRELIMINARY ESTIMATE

		ENGINEER'S ESTIMATE			
Item No.	Description	Qty.	Units	Unit Price	Amount
1	Contract bonds, insurance, permits, project management, mobilization of equipment, materials, and labor prior to starting work, and demobilization	1	L.S.	$ 3,000.00	$ 3,000.00
2	**Site Work**				
a.	Wireworks Plus 6' Security Fencing (w/ 2" posts)	2,910	L.F.	$55.84	$ 162,494.40
b.	Barbed Wire "Y" Bracket	375	E.A.	$21.00	$ 7,873.32
c.	Barbed Tape	2,910	L.F.	$2.75	$ 8,002.50
d.	Drive Access Gate (20' wide)	4	L.S.	$ 4,000.00	$ 16,000.00
e.	Concrete Gate Runner (2.25' wide x 1' thick x Length)	120	L.F.	$ 25.00	$ 3,000.00
f.	Man Access Gate (5' wide)	5	L.S.	$ 1,250.00	$ 6,250.00
3	**Electrical**				
a.	Construct Electrical Gate Operator (One Drive Access Gate - Mechanical)	1	L.S.	$ 4,000.00	$ 4,000.00
b.	Gate Opener Electrical (One Drive Access Gate - Mechanical)	1	L.S.	$ 7,500.00	$ 7,500.00
4	**Misc.**				
a.	Start-up and performance testing of all equipment, controls, and instrumentation	1	L.S.	N/A	$ -
b.	Furnish operation and maintenance manuals for all equipment, controls, and instrumentation	1	L.S.	$ 1,000.00	$ 1,000.00
	TOTAL ENGINEERS ESTIMATE				**$ 219,120.22**
	CONTINGENCY			**20%**	**$43,824.04**
	TOTAL CONSTRUCTION ESTIMATE AND CONTINGENCIES				**$ 262,944.26**

		ENGINEER'S ESTIMATE			
Item No.	Description	Qty.	Units	Unit Price	Amount
1	Engineering	1	L.S.	5.00%	$ 13,147.21
2	Survey / Mapping	1	L.S.	3.50%	$ 9,203.05
3	Geotechnical		L.S.	0.00%	$ -
4	Materials Testing		L.S.	0.00%	$ -
5	Environmental & Permitting		L.S.	0.00%	$ -
6	Construction Contract Administration	1	L.S.	3.00%	$ 7,888.33
7	Inspection	1	L.S.	3.00%	$ 7,888.33
8	Legal and Administration	1	L.S.	2.00%	$ 5,258.89
	SUBTOTAL OTHER COSTS				**$ 43,385.80**
	SUBTOTAL COSTRUCTION AND OTHER COSTS				**$ 306,330.07**
9	Land, acre				$ -
	TOTAL CONSTRUCTION ESTIMATE AND CONTINGENCIES				**$ 306,330.07**

TOTAL CONSTRUCTION ESTIMATE AND CONTINGENCIES (ROUNDED)	**$ 306,340**

[1] Wireworks is manufactured by Ameristar. This product was pulled for costing purposes only.

WireWorks Plus®

COMMERCIAL WELDED WIRE STEEL FENCE

The WireWorks Plus fence system is the *new standard in welded wire fencing*. With this product, Ameristar has a fence solution that will reduce dependency on chain link. WireWorks Plus provides *unobstructed visibility, aesthetics, and security* while delivering a *value added fencing solution.*

PRIMARY APPLICATIONS

- ***Commercial Developments***
- ***Parking Facilities***
- ***Self Storage***
- ***Parks & Recreation***
- ***Schools & Universities***
- ***Apartments*** *(Multi-Family)*
- ***Amusement Parks***
- ***Healthcare Facilities***

FENCE PRODUCTS

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ASSA ABLOY, the global leader in door opening solutions

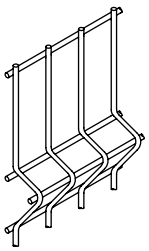
AMERISTAR®

ASSA ABLOY

WireWorks Plus®

COMMERCIAL WELDED WIRE STEEL FENCE

6ga WIRE PANELS / 3" V-FOLDS | 2"sq x 16ga & 2.5"sq x 16ga POSTS



REINFORCED WELDED WIRE "V" FOLDS

Each WireWorks Plus panel has been designed with a series of architectural "V" folds, vital to the overall reinforcement and strength of the welded wire fence system. These fence panels are fabricated in a pattern of vertical and horizontal wires that are welded at each intersection. The unique design of WireWorks Plus provides strength and stability that is unmatched by typical chain link fence.

PERMACOAT™ PROTECTIVE FINISH

Ameristar's production facilities use a state-of-the-art polyester powder coating system that provides a durable and scratch resistant finish. WireWorks Plus is protected with Ameristar's PermaCoat multi-layer coating process. The combination of these layers delivers a system that increases weathering resistance and product durability. The Ameristar coating system results in finished surfaces with unmatched performance.

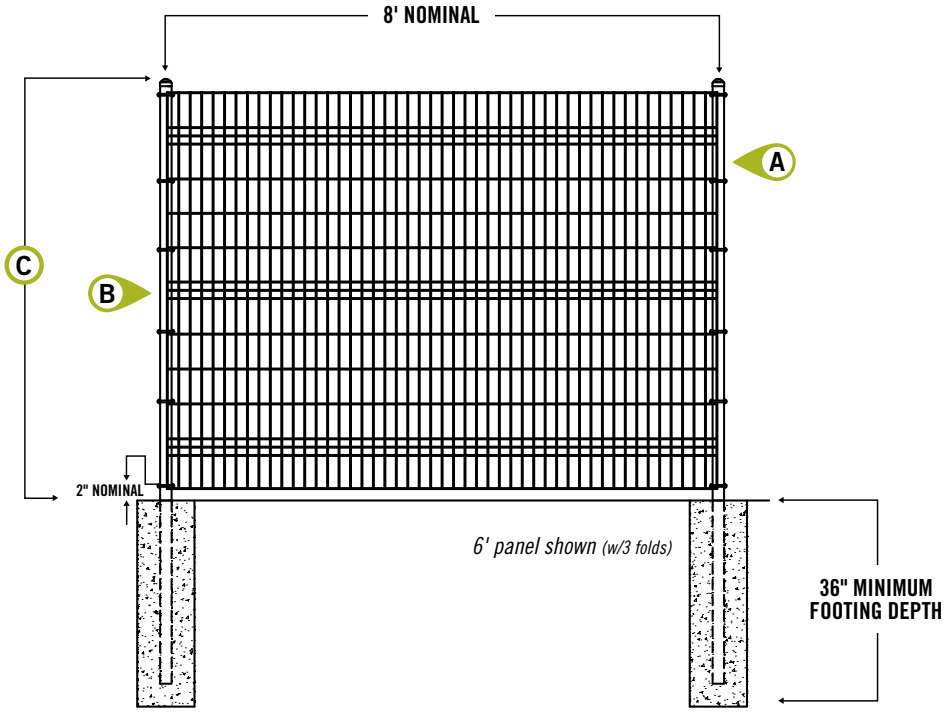
- *"No-Mar" Polyester Color Coat*
- *Epoxy Powder Coat*
- *Zinc Phosphate*
- *Galvanized Steel*

10 YEAR LIMITED WARRANTY

The family of WireWorks welded steel fencing products are manufactured from the highest quality materials by skilled craftsmen to meet the highest standards of workmanship in the industry. This is why Ameristar proudly offers a limited 10 year warranty.

WIREWORKS PLUS® | 2, 3 & 4 ARCHITECTURAL V-FOLD OPTIONS*

*Depending on fence height

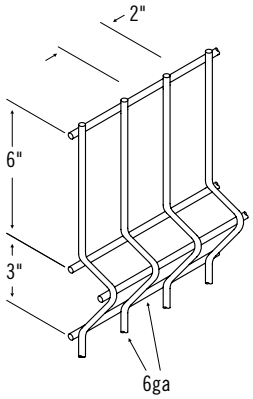


- (A) **2"sq x 16ga / 2.5"sq x 16ga POST OPTIONS**
- (B) **2" X 6" MESH / 6ga WIRE**
- (C) **2/2/3/4 V-FOLDS** *(4'/5' /6'/8' heights respectively)*
- (D) **4', 5', 6' & 8' PANEL HEIGHT OPTIONS**

Refer to construction specification & tables within this section for product details

WIREWORKS PLUS® | V-FOLD PANELS

8' PANEL LENGTH *(96" actual width)* | **2" w. x 6" h. MESH** | **6 GAUGE WIRE**

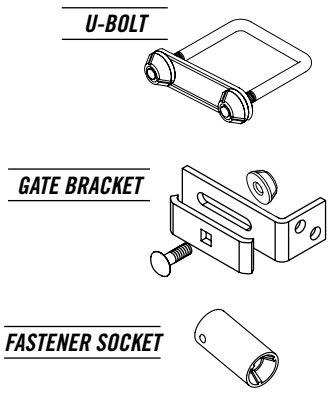


PANEL	ITEM NUMBER	WEIGHT	STOCKING
4'	5WP⊗0408	30 lbs	⊘
5'	5WP⊗0508	36 lbs	⊘
6'	5WP⊗0608	43 lbs	⊘
8'	5WP⊗0808	59 lbs	⊘

⊗ = ***COLOR OPTIONS AVAILABLE*** | **B** = Black **G** = Green **N** = Bronze **S** = Sand **TB** = Tube Brown **W** = White

⊘ = ***NON-STOCKED PRODUCT***
For details, see Ameristar's Sales Policy in the catalog guide.

WIREWORKS PLUS® | V-FOLD BRACKETS



DESCRIPTION	SIZE	ITEM NUMBER	BOX QTY	WEIGHT EA	STOCKING
U-BOLT BRACKET FOR LINE / END POST	2"	UB⊗2R	50	.5 lbs	⊘
	2.5"	UB⊗25R	50	.8 lbs	⊘
	3"	UB⊗3R	50	.9 lbs	⊘
	4"	UB⊗4R	50	.9 lbs	⊘
CORNER / GATE BRACKET	N/A	W⊗GBSR	50	.9 lbs	⊘
FASTENER SOCKET	N/A	6-0058PFG	1	.06 lbs	⊘

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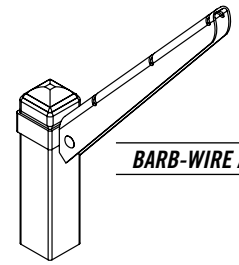
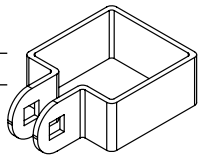
Notes: 4' height require (3) brackets per post / 6' height require (5) brackets per post / 8' height require (7) brackets per post.

WIREWORKS PLUS® | PANEL ACCESSORIES



BARB-WIRE ARM KIT



BARB-WIRE BANDS

DESCRIPTION	SIZE	ITEM NUMBER	BAG QTY	WEIGHT EA	STOCKING
BARB-WIRE ARM KIT*	2"	BWAB⊗2	1	---	⊘
	2.5"	BWAB⊗25	1	---	⊘
BARB-WIRE BANDS**	2"	BWB⊗2R	3	---	⊘
	2.5"	BWB⊗25R	3	3 lbs	⊘

Each kit includes band, fasteners & barb arm blade.
NOTE: Allow 2 inches above panel for barb arm attachment.

Each bag includes carriage bolts & Tri Groove Security Nuts.
NOTE: Allow a minimum of 14 inch post extension above the fence panel for barb-wire attachment.

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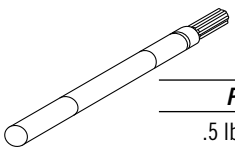
⊘ = ***NON-STOCKED PRODUCT***
For details, see Ameristar's Sales Policy in the catalog guide.

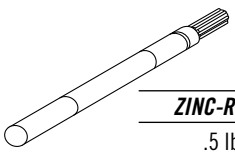
** Extend end, gate & corner posts to accommodate barb-wire arm attachment.*
*** Use barb-wire bands to attach barb-wire to end, gate & corner posts.*

WIREWORKS PLUS® | CUSTOM FINISHES

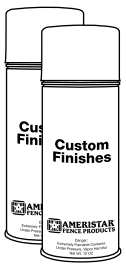
WARRANTY ON RAILS CUT VOID WITHOUT PROPER APPLICATION OF ZINC RICH PRIMER & TOUCH-UP PAINT PENS



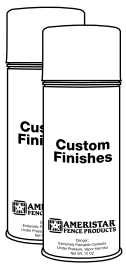
PAINT PEN
.5 lbs / P⊗100



ZINC-RICH PAINT PEN
.5 lbs / PZ100



SPRAY PAINT
1.1 lbs / F⊗100



ZINC-RICH PRIMER
1.1 lbs / FZ100

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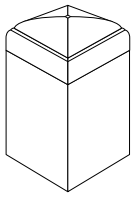
Effective: 01/01/18

WIREWORKS PLUS® | STEEL SQUARE POSTS



STEEL POSTS

	POST LENGTH	ITEM NUMBER	WEIGHT
2"sq. x 16ga.	6' 9"	WP⊗20081	11 lbs
	7' 9"	WP⊗20093	13 lbs
	8' 9"	WP⊗20105	14 lbs
	10'	WP⊗20120	16 lbs
2.5"sq. x 16ga.	11'	WP⊗25132	22 lbs
	12'	WP⊗25144	24 lbs
2.5"sq. x 12ga.	6'	P⊗25072	19 lbs
	7'	P⊗25084	22 lbs
	8'	P⊗25096	26 lbs
	9'	P⊗25108	28 lbs
	10'	P⊗25120	31 lbs
	11'	P⊗25132	35 lbs
	12'	P⊗25144	36 lbs
3"sq. x 12ga.	6'	P⊗30072	24 lbs
	7'	P⊗30084	30 lbs
	8'	P⊗30096	34 lbs
	9'	P⊗30108	39 lbs
	10'	P⊗30120	43 lbs
	11'	P⊗30132	47 lbs
	12'	P⊗30144	51 lbs
4"sq. x 11 ga.	6'	P⊗40072	39 lbs
	7'	P⊗40084	47 lbs
	8'	P⊗40096	54 lbs
	9'	P⊗40108	61 lbs
	10'	P⊗40120	67 lbs
	11'	P⊗40132	74 lbs
	12'	P⊗40144	81 lbs
6"sq. x .1875" wall	7'	P⊗60084	102 lbs
	8'	P⊗60096	116 lbs
	9'	P⊗60108	131 lbs
	10'	P⊗60120	145 lbs
	11'	P⊗60132	160 lbs
	12'	P⊗60144	174 lbs

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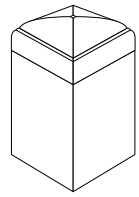
N = Bronze **S** = Sand
TB = Tube Brown **W** = White

Effective: 01/01/18

WIREWORKS PLUS® | STEEL PLATED SQUARE POSTS & POST CAPS



STEEL POSTS

POST LENGTH	PLATE SIZE	ITEM NUMBER	WEIGHT
2.5"sq. x 12ga.			
4'	*5" sq. x .25" / .5625" holes (8833G)*	P⊗25048P	**16 lbs**
5'	*5" sq. x .25" / .5625" holes (8833G)*	P⊗25060P	**19 lbs**
6'	*5" sq. x .25" / .5625" holes (8833G)*	P⊗25072P	**22 lbs**
7'	*5" sq. x .25" / .5625" holes (8833G)*	P⊗25084P	**26 lbs**
8'	*5" sq. x .25" / .5625" holes (8833G)*	P⊗25096P	**28 lbs**
9'	*5" sq. x .25" / .5625" holes (8833G)*	P⊗25108P	**31 lbs**
10'	*5" sq. x .25" / .5625" holes (8833G)*	P⊗25120P	**34 lbs**
3"sq. x 12ga.			
4'	*6" sq. x .25" / .5625" holes (5003G)*	P⊗30048P	**20 lbs**
5'	*6" sq. x .25" / .5625" holes (5003G)*	P⊗30060P	**24 lbs**
6'	*6" sq. x .25" / .5625" holes (5003G)*	P⊗30072P	**30 lbs**
7'	*6" sq. x .25" / .5625" holes (5003G)*	P⊗30084P	**34 lbs**
8'	*6" sq. x .25" / .5625" holes (5003G)*	P⊗30096P	**39 lbs**
9'	*6" sq. x .25" / .5625" holes (5003G)*	P⊗30108P	**43 lbs**
10'	*6" sq. x .25" / .5625" holes (5003G)*	P⊗30120P	**47 lbs**
4"sq. x 11ga.			
4'	*8" sq. x .375" / .5625" holes (8876G)*	P⊗40048P	**33 lbs**
5'	*8" sq. x .375" / .5625" holes (8876G)*	P⊗40060P	**39 lbs**
6'	*8" sq. x .375" / .5625" holes (8876G)*	P⊗40072P	**47 lbs**
7'	*8" sq. x .375" / .5625" holes (8876G)*	P⊗40084P	**54 lbs**
8'	*8" sq. x .375" / .5625" holes (8876G)*	P⊗40096P	**61 lbs**
9'	*8" sq. x .375" / .5625" holes (8876G)*	P⊗40108P	**67 lbs**
10'	*8" sq. x .375" / .5625" holes (8876G)*	P⊗40120P	**74 lbs**

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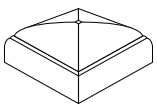

STANDARD FLAT CAP

Steel

CAP SIZE	ITEM NUMBER	WEIGHT
2.5"sq.	A⊗507	.3 lbs
3"sq.	A⊗508	.3 lbs
4"sq.	A⊗509	.4 lbs
6"sq.	A⊗515	.8 lbs
8"sq.	A⊗801	2 lbs

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Effective: 01/01/18

WIREWORKS PLUS® | CONSTRUCTION SPECIFICATION 32 31 00

COMMERCIAL WELDED WIRE ARCHITECTURAL FENCE SYSTEM

PART 1 - GENERAL

1.01 WORK INCLUDED

The contractor shall provide all labor, materials and appurtenances necessary for installation of the commercial welded wire architectural fence system defined herein at *(specify project site).*

1.02 RELATED WORK

Section ___ ___ - Earthwork
Section ___ ___ - Concrete

1.03 SYSTEM DESCRIPTION

The manufacturer shall supply a total commercial welded wire architectural fence system of the Ameristar® WireWorks Plus® design. The system shall include all components *(i.e., panels, brackets, posts, gates and hardware)* required.

1.04 QUALITY ASSURANCE

The contractor shall provide laborers and supervisors who are thoroughly familiar with the type of construction involved and materials and techniques specified.

1.05 REFERENCES

- **ASTM A653/A653M** – Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process
- **ASTM B117** – Practice for Operating Salt-Spray (Fog) Apparatus
- **ASTM D523** – Test Method for Specular Gloss
- **ASTM D714** – Test Method for Evaluating Degree of Blistering in Paint
- **ASTM D1654** – Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments
- **ASTM D2244** – Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates
- **ASTM D2794** – Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)
- **ASTM D3359** – Test Method for Measuring Adhesion by Tape Test
- **ASTM D6695** – Standard Practice for Xenon-Arc Exposures of Paint and Related Coatings
- **ASTM F2453/F 2453M** – Standard Specification for Welded Wire Mesh Fence Fabric

1.06 SUBMITTAL

The manufacturer's submittal package shall be provided prior to installation.

1.07 PRODUCT HANDLING AND STORAGE

Upon receipt at the job site, all materials shall be checked to ensure that no damages occurred during shipping or handling. Materials shall be stored in such a manner to ensure proper ventilation and drainage, and to protect against damage, weather, vandalism and theft.

PART 2 - MATERIALS

2.01 MANUFACTURER

The fence system shall conform to Ameristar WireWorks Plus design by Ameristar Fence Products, Inc. in Tulsa, Oklahoma.

2.02 MATERIAL

A. Steel material for fence posts shall be galvanized prior to forming in accordance with the requirements of **ASTM A653/A653M**, with minimum yield strength of 45,000 psi (310 MPa). The steel shall be hot-dip galvanized to meet the requirements of **ASTM A653/A653M** with a minimum zinc coating weight of 0.60 oz/ft2, Coating Designation G-60. Fence posts and gate posts shall meet the minimum size requirements of **Table 1**.

B. Steel wire mesh fence panels shall be welded by resistance welding per **ASTM A185** using 6 gauge (0.192") pre-galvanized steel wire, welded at each crossing to form rectangles. Vertical 6ga. (0.192") wires shall be spaced at 2"; horizontal 6ga. (0.192") wires shall be spaced at 6 inches. The cold rolled wire shall have a tensile strength of at least 70,000 PSI and 74,000 PSI weld shear strength. Wire strand shall be galvanized before welded (GBW), .050 ounces per square foot zinc coating conforming to the **ASTM A641**.

2.03 FABRICATION

A. Panels and posts shall be precut to specified lengths. Panels shall have a number of structural folds based on the specified panel height as follows:

1. 48" & 61" height x 96" width panel – 2 horizontal panel folds
2. 69" height x 96" width panel – 3 horizontal panel folds
3. 96" height x 96" width panel – 4 horizontal panel folds

B. The manufactured panels and posts shall be subjected to an inline electro-deposition coating (E-Coat) process consisting of a multi-stage pretreatment/wash, followed by a duplex application of an epoxy primer and an acrylic topcoat. The minimum cumulative coating thickness of epoxy and acrylic shall be 2 mils (0.058 mm). The color shall be *(specify Black or Bronze).* If color shall be *(specify White, Desert Sand, Green, or Tube Brown)* panels, posts,

WIREWORKS PLUS® | CONSTRUCTION SPECIFICATION 32 31 00

COMMERCIAL WELDED WIRE ARCHITECTURAL FENCE SYSTEM

and brackets will undergo Ameristar PermaCoat coating process. The coated panels and posts shall be capable of meeting the performance requirements for each quality characteristic shown in **Table 2**.

C. Swing gates shall be fabricated using 2" x 12ga square rails and gate ends. Gates that exceed 6' in width will have a 2" sq. x 12ga. intermediate upright. All rail, upright, and gate end intersections shall be joined by welding. Steel gussets (1/4" x 2") shall be welded at each rail to gate end intersection and rail to intermediate intersections (4 gussets per gate bay). Gusset shall be punched to accept gate trussing cable and turnbuckle.

PART 3 - EXECUTION

3.01 PREPARATION

All new installation shall be laid out by the contractor in accordance with the construction plans.

3.02 FENCE INSTALLATION

Fence post shall be spaced according to **Table 3**, plus or minus ¼". Fence panels shall be attached to posts with brackets supplied by the manufacturer. Posts shall be set in concrete footers having a minimum depth of 36" *(Note: In some cases, local restrictions of freezing weather conditions may require a greater depth).* The "Earthwork" and "Concrete" sections of this specification shall govern material requirements for the concrete footer. Posts setting by other methods such as plated posts or grouted core-drilled footers are permissible only if shown by engineering analysis to be sufficient in strength for the intended application.

3.03 FENCE INSTALLATION MAINTENANCE

When cutting/drilling rails or posts adhere to the following steps to seal the exposed steel surfaces; 1) Remove all metal shavings from cut area. 2) Apply zinc-rich primer to thoroughly cover cut edge and/or drilled hole; let dry. 3) Apply 2 coats of custom finish paint matching fence color. Failure to seal exposed surfaces per steps 1-3 above will negate warranty. Ameristar spray cans or paint pens shall be used to prime and finish exposed surfaces; it is recommended that paint pens be used to prevent overspray. Use of non-Ameristar parts or components will negate the manufactures' warranty.

3.04 GATE INSTALLATION

Gate posts shall be spaced according to the manufacturers' gate drawings, dependent on standard out-to-out gate leaf dimensions and gate hardware selected. Type and quantity of gate hinges shall be based on the application; weight, height, and number of gate cycles. The manufacturers' gate drawings shall identify the necessary gate hardware required for the application. Gate hardware shall be provided by the manufacture of the gate and shall be installed per manufacturer's recommendations.

3.05 CLEANING

The contractor shall clean the jobsite of excess materials; post-hole excavations shall be scattered uniformly away from posts.

SEE REFERENCED TABLES ON THE FOLLOWING PAGE

WIREWORKS PLUS® | CONSTRUCTION SPECIFICATION 32 31 00

COMMERCIAL WELDED WIRE ARCHITECTURAL FENCE SYSTEM

TABLE 1

MINIMUM SIZES FOR WIREWORKS PLUS POSTS	
FENCE POSTS	PANEL HEIGHTS
2" x 16 ga.	up to 6' height
2.5" x 16 ga.	8' height

GATE LEAF	GATE HEIGHT	
	up to & including 6'	*Over 6' and up to 8'*
up to 4'	2½" x 12 gauge	3" x 12 gauge
4'1" to 6'	3" x 12 gauge	3" x 12 gauge
6'1" to 10'	4" x 11 gauge	6" x 3/16"
10'1" to 16'	6" x 3/16"	6" x 3/16"

TABLE 2

COATING PERFORMANCE REQUIREMENTS		
QUALITY CHARACTERISTICS	ASTM TEST METHOD	PERFORMANCE REQUIREMENTS
ADHESION	D3359 – METHOD B	**Adhesion** *(retention of coating)* **over 90% of test area** *(tape and knife kit test).*
CORROSION RESISTANCE	B117, D714, D1654	**Corrosion resistance over 1,000 hours** *(scribed per D1654; failure mode is accumulation of 1/8" coating loss from scribe or medium #8 blisters)*
IMPACT RESISTANCE	D2794	**Impact resistance over 60" lb.** *(forward impact using 0.625" ball).*
WEATHERING RESISTANCE	D822 D2244, D523 (60º method)	**Weathering resistance over 1,000 hours** *(failure mode is 60% loss of gloss or color variance of more than 3 delta-E color units).*

TABLE 3

WIREWORKS PLUS POST SPACING BY BRACKET TYPE		
SPAN	WIREWORKS PLUS	
POST SIZE	2"	2½"
POST SETTINGS ± ¼" O.C.	96½"	96½"

WIREWORKS PLUS® | LIMITED WARRANTY

COMMERCIAL WELDED WIRE FENCE

WireWorks Plus® Commercial Welded Wire Architectural Fence System by Ameristar® is manufactured from the highest quality materials by skilled craftsmen to meet the highest standards of workmanship in the industry. Galvanized steel framework shall be subject to a six stage pretreatment/wash followed by an electrostatic spray application of PermaCoat® Color System, a two coat powder system. The base coat is a thermosetting epoxy powder coating *(gray in color).* The top coat is a "no-mar" TGIC polyester powder coat finish, which provides the protection necessary to withstand adverse environmental conditions.

The powder coated surface on all framework *(i.e., panels, posts and brackets)* by Ameristar is guaranteed under normal and proper usage, against cracking, peeling, chipping, blistering or corroding for a period of ten (10) years from the original purchase date. Normal and proper usage does not include physical damage, abrasion or exposure to salty environments to the protective coating.
WireWorks Plus Commercial Welded Wire Architectural Fence System framework is also guaranteed for the same period of time against defects in workmanship or materials.

Should any architectural fence framework manufactured by Ameristar Fence Products fail in accordance with any of the above conditions, Ameristar Fence Products warrants to the original purchaser their redemption through replacement, renewal or issuance of a pro-rated credit. The decision as to which method of redemption is allowed is solely at the discretion of Ameristar. If pro-rated allowance is the chosen alternative, the amount will be based on the total number of years under warranty from date of purchase to date of claim, based on the original cost of framing materials found to be defective. Notice of failure under the conditions of this warranty shall be sent to Ameristar Fence Products or its authorized representative, in writing, together with proof of purchase and shall specify the nature of the defect and when it was first observed. When cutting WireWorks Plus products immediately seal the exposed surfaces by 1) Removing all metal shavings from cut area 2) Apply zinc-rich primer to thoroughly cover cut edge and drilled hole; let dry 3) Apply 2 coats of custom finish paint matching fence color. Failure to seal exposed surfaces per steps 1-3 above will negate warranty. If contractor uses non Ameristar parts/components this will negate the warranty. Should the fence be improperly installed, Ameristar Fence Products shall not be responsible for guaranteed performance or appearance of the material. Neither does this guarantee apply when failure or damage is due to improper use or application, abuse or misuse, salty environments, vandalism or acts of God. Ameristar Fence Products reserves the right to inspect the material to determine validity of the claim.

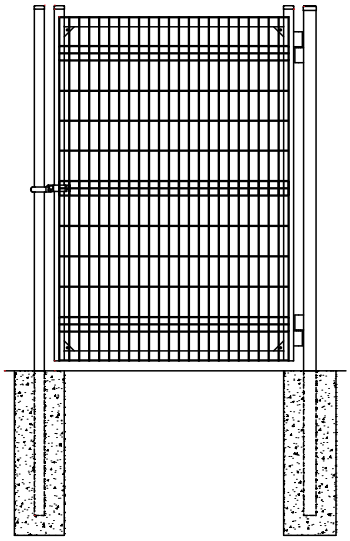
Upon validation of the claim by Ameristar Fence Products or its authorized representative, redemption by replacement, renewal or issuance of a pro-rated credit shall be made by Ameristar Fence Products. Reimbursement for the costs of removal and installation of materials are not included in the guarantee, nor will Ameristar Fence Products provide those services.

The above constitutes the complete warranty by the manufacturer. No other agreement, written or implied, is valid. Ameristar Fence Products does not authorize any other person or agent to make any other express warranties. Ameristar Fence Products neither assumes nor authorizes any other person or agent to assume any other liability in connection with WireWorks Plus Commercial Welded Wire Architectural Fence System. Some jurisdictions do not allow limitations on how long an implied warranty lasts, nor do they allow an exclusion or limitation of incidental or consequential damages; therefore, the limitations and exclusions noted herein may not apply.

WIREWORKS PLUS® | SINGLE SWING GATE SPECIFICATIONS

2"sq x 12ga GATE ENDS | 2"sq x 12ga RAILS | 2"x 6"x 6ga WELDED WIRE | 3.5' - 16' NOMINAL OPENINGS

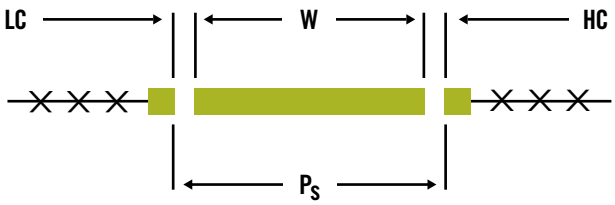
SINGLE SWING
DIMENSIONAL DRAWING



SINGLE SWING
HARDWARE KITS & POST INTERSPACES

					HGBS-25 / HGBS-3 180 HINGE & STRONG ARM LATCH KITS			IGBSX25 / IGBSX3 BOX HINGE & FORK LATCH KITS		
OPENING	LEAF WIDTH*	HC	LC	P_S	HC	LC	P_S	HC	LC	P_S
3.5'	42"	1.25"	3"	46.25"	2"	2"	46"			
4'	48"	1.25"	3"	52.25"	2"	2"	52"			
5'	60"	1.25"	3"	64.25"	2"	2"	64"			
6'	72"	1.25"	3"	76.25"	2"	2"	76"			
7'	84"	1.25"	3"	88.25"	2"	2"	88"			
8'	96"	1.25"	3"	100.25"	2"	2"	100"			
9'	108"	1.25"	3"	112.25"	2"	2"	112"			
10'	120"	1.25"	3"	124.25"	2"	2"	124"			
11'	132"	1.25"	3"	136.25"	2"	2"	136"			
12'	144"	1.25"	3"	148.25"	2"	2"	148"			
13'	156"	1.25"	3"	160.25"	2"	2"	160"			
14'	168"	1.25"	3"	172.25"	2"	2"	172"			
15'	180"	1.25"	3"	184.25"	2"	2"	184"			
16'	192"	1.25"	3"	196.25"	2"	2"	196"			

W = width* | **HC** = hinge clearance | **LC** = latch clearance | **P_S** = gate post spacing**
** From outside to outside | ** From inside to inside*

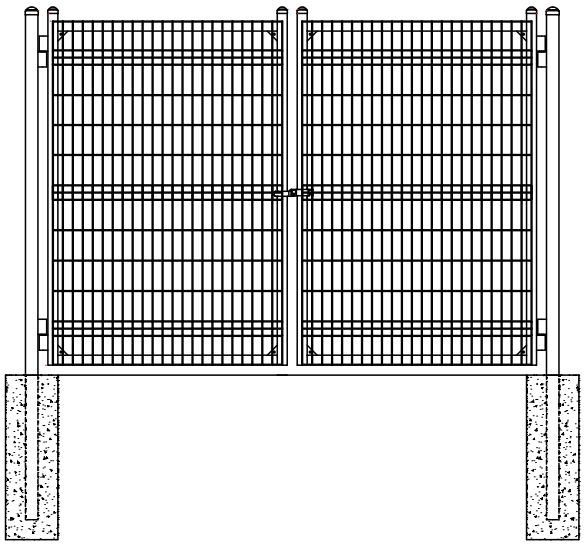


Effective: 01/01/18

WIREWORKS PLUS® | DOUBLE SWING GATE SPECIFICATIONS

2"sq x 12ga GATE ENDS | 2"sq x 12ga RAILS | 2"x 6"x 6ga WELDED WIRE | 7' - 32' NOMINAL OPENINGS

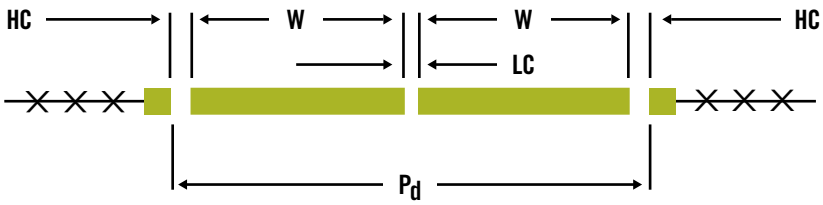
DOUBLE SWING
DIMENSIONAL DRAWING



DOUBLE SWING
HARDWARE KITS & POST INTERSPACES

		HGBD 180 HINGE & STRONG ARM LATCH KIT			IGBDX BOX HINGE & FORK LATCH KIT		
OPENING	LEAF WIDTH*	HC	LC	P_d	HC	LC	P_d
7'	42"	1.25"	3"	89.5"	2"	2"	90"
8'	48"	1.25"	3"	101.5"	2"	2"	102"
10'	60"	1.25"	3"	125.5"	2"	2"	126"
12'	72"	1.25"	3"	149.5"	2"	2"	150"
14'	84"	1.25"	3"	173.5"	2"	2"	174"
16'	96"	1.25"	3"	197.5"	2"	2"	198"
18'	108"	1.25"	3"	221.5"	2"	2"	222"
20'	120"	1.25"	3"	245.5"	2"	2"	246"
22'	132"	1.25"	3"	269.5"	2"	2"	270"
24'	144"	1.25"	3"	293.5"	2"	2"	294"
26'	156"	1.25"	3"	317.5"	2"	2"	318"
28'	168"	1.25"	3"	341.5"	2"	2"	342"
30'	180"	1.25"	3"	365.5"	2"	2"	366"
32'	192"	1.25"	3"	389.5"	2"	2"	390"

W = width (x2)* | **HC** = hinge clearance (x2) | **LC** = latch clearance
P_d = gate post spacing**
** From outside to outside | ** From inside to inside*



Effective: 01/01/18

WIREWORKS PLUS® | V-FOLD WELDED WIRE GATES

GATE HARDWARE SOLD SEPARATELY

	OPENING	ITEM NUMBER	WEIGHT	STOCKING
4' HEIGHT	3½'	5WP⊗04-42	55	⊘
	4'	5WP⊗04-48	60	⊘
	5'	5WP⊗04-60	70	⊘
	6'	5WP⊗04-72	79	⊘
	7'	5WP⊗04-84	100	⊘
	8'	5WP⊗04-96	109	⊘
	9'	5WP⊗04-108	118	⊘
	10'	5WP⊗04-120	128	⊘
	11'	5WP⊗04-132	137	⊘
	12'	5WP⊗04-144	147	⊘
	13'	5WP⊗04-156	156	⊘
	14'	5WP⊗04-168	165	⊘
	15'	5WP⊗04-180	175	⊘
	16'	5WP⊗04-192	184	⊘
5' HEIGHT	3½'	5WP⊗05-42	64	⊘
	4'	5WP⊗05-48	70	⊘
	5'	5WP⊗05-60	80	⊘
	6'	5WP⊗05-72	90	⊘
	7'	5WP⊗05-84	115	⊘
	8'	5WP⊗05-96	125	⊘
	9'	5WP⊗05-108	135	⊘
	10'	5WP⊗05-120	146	⊘
	11'	5WP⊗05-132	156	⊘
	12'	5WP⊗05-144	166	⊘
	13'	5WP⊗05-156	177	⊘
	14'	5WP⊗05-168	187	⊘
	15'	5WP⊗05-180	197	⊘
	16'	5WP⊗05-192	208	⊘

⊗ = ***COLOR OPTIONS AVAILABLE*** | **B** = Black **G** = Green **N** = Bronze **S** = Sand **TB** = Tube Brown **W** = White

⊘ = ***NON-STOCKED PRODUCT***
For details, see Ameristar's Sales Policy in the catalog guide.

Effective: 01/01/18

WIREWORKS PLUS® | V-FOLD WELDED WIRE GATES

GATE HARDWARE SOLD SEPARATELY

	OPENING	ITEM NUMBER	WEIGHT	STOCKING
6' HEIGHT	3½'	5WP⊗06-42	73	⊘
	4'	5WP⊗06-48	79	⊘
	5'	5WP⊗06-60	90	⊘
	6'	5WP⊗06-72	102	⊘
	7'	5WP⊗06-84	130	⊘
	8'	5WP⊗06-96	141	⊘
	9'	5WP⊗06-108	152	⊘
	10'	5WP⊗06-120	164	⊘
	11'	5WP⊗06-132	175	⊘
	12'	5WP⊗06-144	186	⊘
	13'	5WP⊗06-156	197	⊘
	14'	5WP⊗06-168	209	⊘
	15'	5WP⊗06-180	220	⊘
	16'	5WP⊗06-192	231	⊘
8' HEIGHT	3½'	5WP⊗08-42	88	⊘
	4'	5WP⊗08-48	94	⊘
	5'	5WP⊗08-60	106	⊘
	6'	5WP⊗08-72	118	⊘
	7'	5WP⊗08-84	153	⊘
	8'	5WP⊗08-96	165	⊘
	9'	5WP⊗08-108	178	⊘
	10'	5WP⊗08-120	190	⊘
	11'	5WP⊗08-132	202	⊘
	12'	5WP⊗08-144	214	⊘
	13'	5WP⊗08-156	227	⊘
	14'	5WP⊗08-168	239	⊘
	15'	5WP⊗08-180	251	⊘
	16'	5WP⊗08-192	263	⊘

⊗ = ***COLOR OPTIONS AVAILABLE*** | **B** = Black **G** = Green **N** = Bronze **S** = Sand **TB** = Tube Brown **W** = White

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Effective: 01/01/18

Beaumont-Cherry Valley Water District
Special Board Meeting
May 31, 2018

Item 4

STAFF REPORT

TO: Board of Directors

FROM: Dan Jaggers, General Manager

SUBJECT: **Discussion: Beaumont Basin Watermaster – Study of Water Losses related to Recharge Activities**

Staff Recommendation

No recommendation.

Background

The Beaumont Basin Watermaster (BBWM) is a five-member committee consisting of representatives from the BCVWD, the City of Banning, the City of Beaumont, the Yucaipa Valley Water District, and the South Mesa Water Company. The Watermaster was established in 2004 by a stipulated judgment and exists to jointly manage the adjudicated Beaumont Basin. The Superior Court of Riverside County maintains jurisdiction should there be any need to resolve difficult issues between the parties.

Summary

Earlier this year at the BBWM Committee meeting, the Watermaster's Hydrogeologic Consultant, Thomas Harder (Harder) was tasked with studying the effects of water recharge on loss rates around the Basin. Harder delivered a report to the Committee at its March 28, 2018 meeting, entitled "Recharge and Recovery Scenarios for Analysis to Estimate Storage Losses in the Beaumont Basin – Project Progress Update."

Harder concluded that, depending on recharge activities and pumping conditions, as much as 20 percent of the recharge water escapes the Basin.

Some natural losses occur mainly in the southeast portion and west side of the basin at San Timoteo Creek. However, when artificial recharge is introduced into the basin, it creates a "mound" that can accelerate the rate of flow out of the basin if it is not captured. *When* supplemental water is introduced and depending on pumping activity, these losses can be influenced quite a bit.

Harder created several model run scenarios to assess how water loss could increase, by how much, and whether such losses associated with managed recharge could be limited by adjusting recharge activities and water extraction (pumping) across the Beaumont Basin.

During the ten year period from 2006 to 2016, BCVWD spread 70,000 AF of supplemental water in the recharge facilities. During that time, average annual well production was 12,000 AF. Harder's draft analysis calculated that the cumulative loss from the southeast portion of the basin was about 14,000 AF – water that would not have been lost had there been no recharge. Harder

concluded that the Beaumont Basin is sensitive due to hydrogeology, permeability of the sediments, and steepness of the gradient.

Harder also noted a cumulative loss of 90 AF over the ten-year period on the west side.

In analysis of future recharge based on UWMP projections, 13,000 AF of recharge over the next ten-year period, shows there is a potential increased loss of 2,000 AF over the basin – about 15 percent of the water spread. Harder's modeling also considered the addition of the San Gorgonio Pass Water Agency's projected recharge to the model, the loss estimate increases due to the additional recharge activity.

The model showed that selective pumping – specific wells, on the down gradient from the NCRF, and at combined pump rates of up to 5,000 AF per year – successfully decreased the losses by 13,000 AF. So by increasing pumping by 5,000 AF per year, the losses can be almost completely mitigated.

The information provided herein is set forth to provide the Board of Directors with a current update on the landscape of the ever increasing burden of effectively managing the Beaumont Basin.

Fiscal Impact

BCVWD currently recharges State Water Project (SWP) water in its Noble Creek facility at a current cost of **$317 per acre feet**. If 20 percent of this is lost from the basin annually, this could result in a monetary loss of approximately **$63.40 per acre foot** of purchased water supply at today's rate.

In addition, the current wholesale water rate of $317.00/AF is being reviewed and modeled by the San Gorgonio Pass Water Agency (SGPWA) and the SGPWA indicated that the wholesale water rate will most likely be considered for increase within the next six months. District Staff will update the Board of Directors on the possible rate increases as this item develops further.

Report prepared by Dan Jaggers, General Manager
DKJ:ljk

Beaumont-Cherry Valley Water District
Special Board Meeting
May 31, 2018

Item 5

STAFF REPORT

TO: Board of Directors

FROM: Dan Jaggers, General Manager

SUBJECT: **Status Report on 2018-2027 Capital Improvement Program**

Staff Recommendation

No recommendation.

Background

In February 2018, the Board approved the Beaumont-Cherry Valley Water District 2018 Capital Improvement Budget and 10-Year Capital Improvement Plan, forecasting projects to 2027 and totaling $11.6 million for 2018.

The 10-Year Capital Improvement Plan (CIP) serves as the District's multi-year planning instrument used to identify needs and financing sources for public infrastructure improvements as well as capital acquisition needs. The purpose of a CIP is to facilitate the orderly planning of infrastructure improvements; to maintain, preserve, and protect the District's existing infrastructure system; and to provide for the acquisition or scheduled replacement of equipment to ensure the efficient delivery of services that the community desires. The CIP is considered a "dynamic" document.

Summary

At the District's Engineering Workshop on August 1, 2017, District Staff gave a status report on the 2018-2027 Capital Improvement Plan and its various projects. Since that report, District Staff has been actively working on moving the Capital Improvement Plan projects forward and felt it important to provide an update giving the current Capital Improvement Project status.

District staff has been actively working to move forward the listed projects. It should be noted that priorities shift given varying circumstances, for example, the rehabilitation of Well Nos. 3, 26, and 29 was prioritized due to necessity.

Below is a matrix of projects as included in the CIP, the current status of each, as well as brief descriptions of the work completed on some of the larger projects:

2018 Budgeted Projects actively moving forward and / or complete

Item	Project Description	Status
1	Grand Avenue Storm Drain (MDP Line 16)	On-Going
2	Well Head Treatment Plant Well 25 Cr VI	On Hold – Pending CrVI Limits
3	Well 1 Redrill	On-Going (Spec @ 75%)
4	Well 2 Redrill	On-Going (Spec @ 75%)
5	Noble Creek Park Well (Well 30)	On-Going
6	Sundance North Well (Well 31)	On-Going
7	District Vehicle Replacements	80% Complete (2018, purchased 4 of 5)
8	Well 25 East Block Wall and Entrance Gate	Spec @ 80% Complete
9	800 hp Spare Pump and Motor Purchase	Spec @ 75% Complete
10	Raw Water Filter System at 2800 PZ Tank	On Hold – Pending Recycled Water System Testing/DDW Coordination
11	Wonderware SCADA Phase I	Completed (January 2018)
12	Noble Tank No. 2 & Noble Tank Pipeline Project	On-Going (See Update Below)
13	Pipeline Replacement Projects at Egan Ave., Ave Altejo Bella, and Appletree Lane	On-Going (See Update Below)
14	Pass Agency Imported Water Strategy	On-Going
15	COB Recycled Water Project	On-Going
16	8th Street Laterals Replacement Project	Complete (February 2018)
17	SWP Purchase by SGPWA per Capacity Fee	SGPWA Updating Rate and Capacity Fee

Specific Project Updates

Noble Tank No. 2 & Noble Tank Pipeline Project (Item 12)

The Preliminary and Final Design for the Noble Water Storage Tank No. 2 and Transmission Pipeline Project was awarded to Cozad & Fox, Inc. District Staff has been working with Cozad & Fox to move the project forward. Cozad & Fox has started work on the following project tasks:

- Environmental Review (underway)
- Permit Compliance (underway)
- Preparation of Contract Documents (underway)
- Data Gathering, System Hydraulic Evaluation, Site Analysis & Refinement (underway)
- Surveying and Utility Review/Verification – 75% Complete
- Geotechnical Report – Preliminary Site Review Complete
- Preliminary Design Report

2017 Pipeline Replacement Projects at Egan Avenue, Ave Altejo Bella, and Appletree Lane (Item 13)

The 2017 Pipeline Replacement Projects were awarded to Michael Baker International. District Staff has been working with Michael Baker International to move the project forward. Michael Baker International has completed the following work efforts:

- Kick-off meeting with District
- Letter/Exhibit crafted for District to coordinate with residences, coordination in process
- Initial cost estimating for various replacement alternatives
- Creating mapping base (50% complete, awaiting final alignment selection)
- Utility letters and coordination with District
- Pricing on pipe bursting and preliminary design report
- Utility mapping using District's GIS data and as-builts from utility surveyors

The District has been contributing to the work efforts, interfacing with the residents affected by the pipeline replacements and field-reviewing the proposed alignment, walking the sites to identify the best possible alignments for each new line. This has taken a considerable amount of effort on the Ave Altejo Bella line in particular given the existing improvements conflicting with both the previous alignment of the pipe and proposed new alignments. The final alignments are currently being decided. Once the alignments are finalized, Michael Baker International will move forward with survey, environmental and pipeline design work.

Well Nos. 1 and 2 Re-Drill Project and Well Nos. 30 and 31 Project (Items 3, 4, 5, and 6)

These Well Projects were awarded to Thomas Harder & Co. District Staff has given considerable effort assisting Thomas Harder & Co. in moving the project forward. In particular, District efforts were made related to project contract document standardization in order to establish a format that may be used on all well projects moving forward. Thomas Harder & Co. has completed the following work efforts:

- Well Siting and Survey Services
- Environmental Compliance
- Preparation of Well Drilling Specifications

Major projects that are listed in the CIP which District Staff has yet to complete work on are as follows:

2018 Budgeted Projects yet to begin

Item	Project Description	Status
1	2850-3040 Booster Station	Not Started
2	Highland Springs and Lower Edgar Reservoir Recoat and Retrofit Project	Not Started
3	2850/2750 Pressure Reducing Station and Piping (at Cherry Reservoir)	Not Started

Prepared by Kaden E. Johnsen, Civil Engineering Assistant and Daniel K. Jaggers, General Manager

Beaumont-Cherry Valley Water District
Special Board Meeting
May 31, 2018

Item 6

STAFF REPORT

TO: Board of Directors

FROM: Dan Jaggers, General Manager

SUBJECT: **Update: Riverside County Flood Control – Beaumont Master Drainage Plan Line 16 – Grand Avenue Storm Drain Project**

Staff Recommendation

No recommendation. Update only.

Background

In July 2017, the Board conditionally approved the cooperative agreement between BCVWD and Riverside County Flood Control and Water Conservation District (RCFC&WCD) for development of a storm water capture project to capture high quality storm water for recharge at BCVWD's Noble Creek Recharge Facility - Phase II Ponds (NCRF- PH II).

The Board had requested that negotiations between BCVWD and RCFC&WCD occur to further the Cooperative Agreement between BCVWD and RCFC&WCD and move the project forward.

Over the past several months, there have been minimal interactions between BCVWD and RCFC&WCD due to RCFC&WCD soliciting bids from engineers for their design efforts. It is Staff's understanding that RCFC&WCD has chosen an engineer to design their portion of the system. The Cooperative Agreement has not yet been finalized and Staff is working with RCFC&WCD staff to execute the agreement with Board considerations which have already been conveyed to RCFC&WCD.

A meeting is scheduled with RCFC&WCD on Thursday, May 31 to discuss the project status and necessary steps needed by each party to begin design efforts.

Summary

Staff shall provide a verbal update to the Board after the May 31st meeting with RCFC&WCD.

Fiscal Impact

As reported in July 2017, BCVWD's share of the construction cost is expected to range between $1.39 million and $1.89 million. This project is budgeted in the Capital Improvement Plan which was approved by the Board in January 2018.

Report prepared by Mark Swanson, Senior Engineer