

CITY OF ALBUQUERQUE



May 22, 2017

David Aube, PE
Hartman + Majewski Design Group
120 Vassar Dr. SE Suite 100
Albuquerque, NM 87106

**Re: GAHP Casa Feliz
429 San Pablo Street SE and 416 Espanola
Request Permanent C.O. - Accepted
Engineer's Stamp dated: 12-18-15 (L19D073E)
Certification dated: 5-15-17**

Dear Mr. Aube,

Based on the Certification received 5/22/2017, the site is acceptable for release of Certificate of Occupancy by Hydrology.

If you have any questions, you can contact me at 924-3986 or Totten Elliott at 924-3982.

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

Sincerely,

James D. Hughes, P.E.
Principal Engineer, Planning Dept.
Development and Review Services

TE/JH

C: email: Serna, Yvette; Fox, Debi; Tena, Victoria; Sandoval, Darlene M.

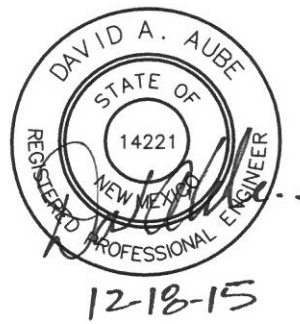


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CONSULTANT

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DOCUMENTS

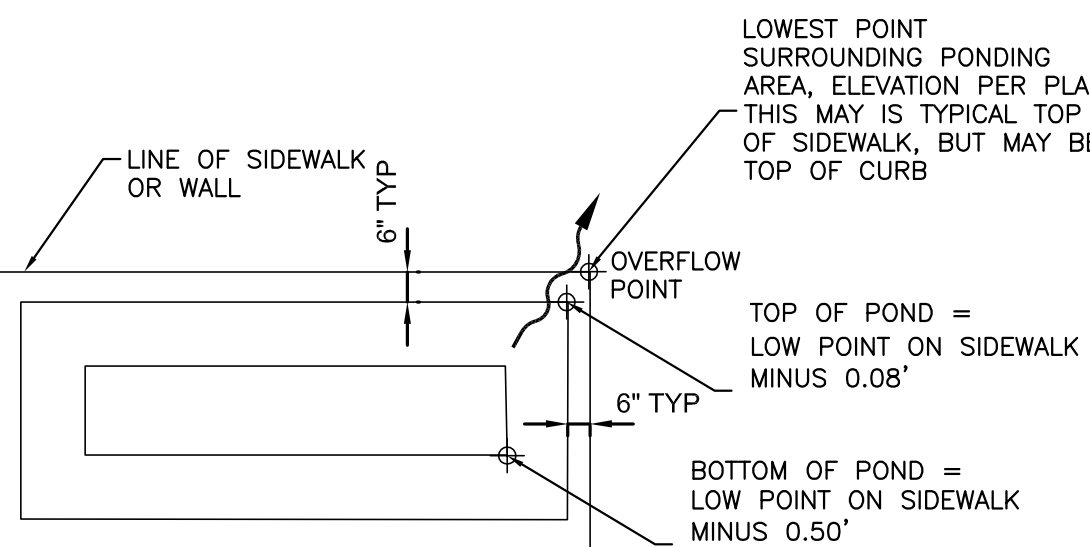
PROJECT NAME
CASA FELIZ

441 ESPANOLA STREET SE,
ALBUQUERQUE, NEW MEXICO 87108

GREATER ALBUQUERQUE
HOUSING PARTNERSHIP

DRAINAGE PLAN GENERAL NOTES

- SEE SHEET CD001 FOR COMPLETE LIST OF GENERAL NOTES AND SYMBOL/LINE/TYPE LEGEND THAT APPLY TO ALL SHEETS.
- SEE SHEET CD-202 FOR 3" PVC DRAINAGE PIPES THROUGH SIDEWALKS AND UNDER SIDEWALKS THROUGH CITY CURB FACE.



TYPICAL POND DETAIL

NOT TO SCALE

BUILDING F & G			
POND	LOWEST POINT ON CURB OR TSW	TOP ELEV	BOTTOM ELEV
A	5346.54	5346.46	5346.87
B	5346.37	5346.29	5346.29
C	5344.64	5344.56	5343.63
D	5343.93	5343.85	5343.38
E	5346.85	5346.77	5346.17
F	5346.52	5346.44	5346.92
G	5345.70	5345.62	5345.33
H	5345.21	5345.13	5344.99
I	5343.87	5343.79	5343.17
J	5343.42	5343.34	5342.63
K	5343.00	5342.92	5342.68
L	5342.47	5342.39	5341.89
M	5342.16	5342.08	5341.81
N	5341.84	5341.76	5341.63

Drainage Certification (L19D0073E, DRB#1010674)

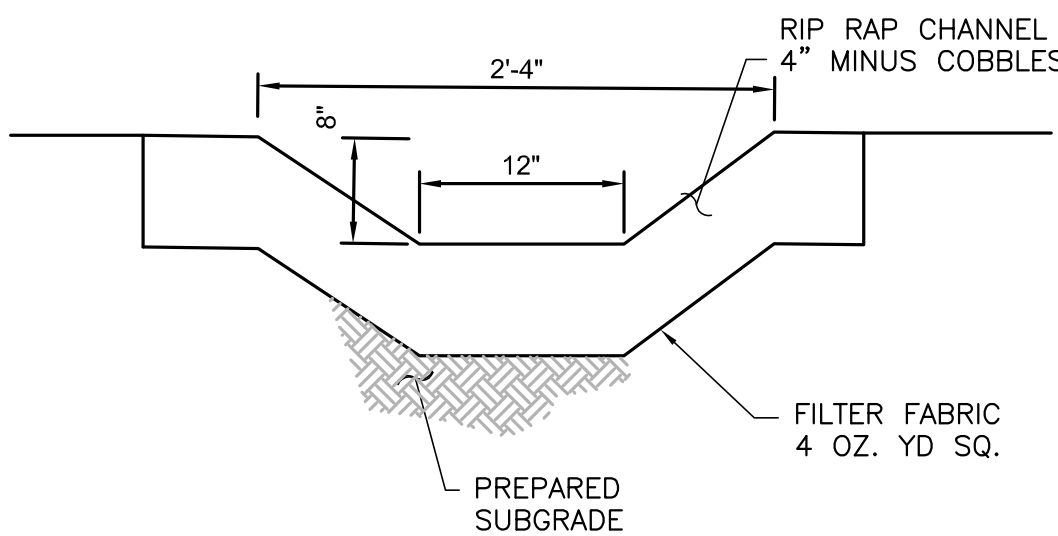
I, David A. Aube, NMPE 14221, of the firm The Hartman • Majewski Design Group, Inc. hereby certify that portion of the project (Building F located at 429 San Pablo Street SE and Buildings F & G located at 416 Espanola Street SE) is in substantial compliance with and in accordance with the design intent of the Grading and Drainage plan approved plan dated 12-18-15. The record information that has been edited onto the original design documents where obtained by Community Sciences Corporation on April 24, 2017. I further certify that I have personally visited the project site on May 15, 2017 and have determined by visual inspection that the actual site conditions shown on this plan to be true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Permanent Certificate of Occupancy for Building E located at 429 San Pablo St. SE and Buildings F and G located at 416 Espanola St. SE.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the drainage aspects of this project. Those relying on the record documents are advised to obtain independent verification of its accuracy before using it for any other purpose.



PRO F & G

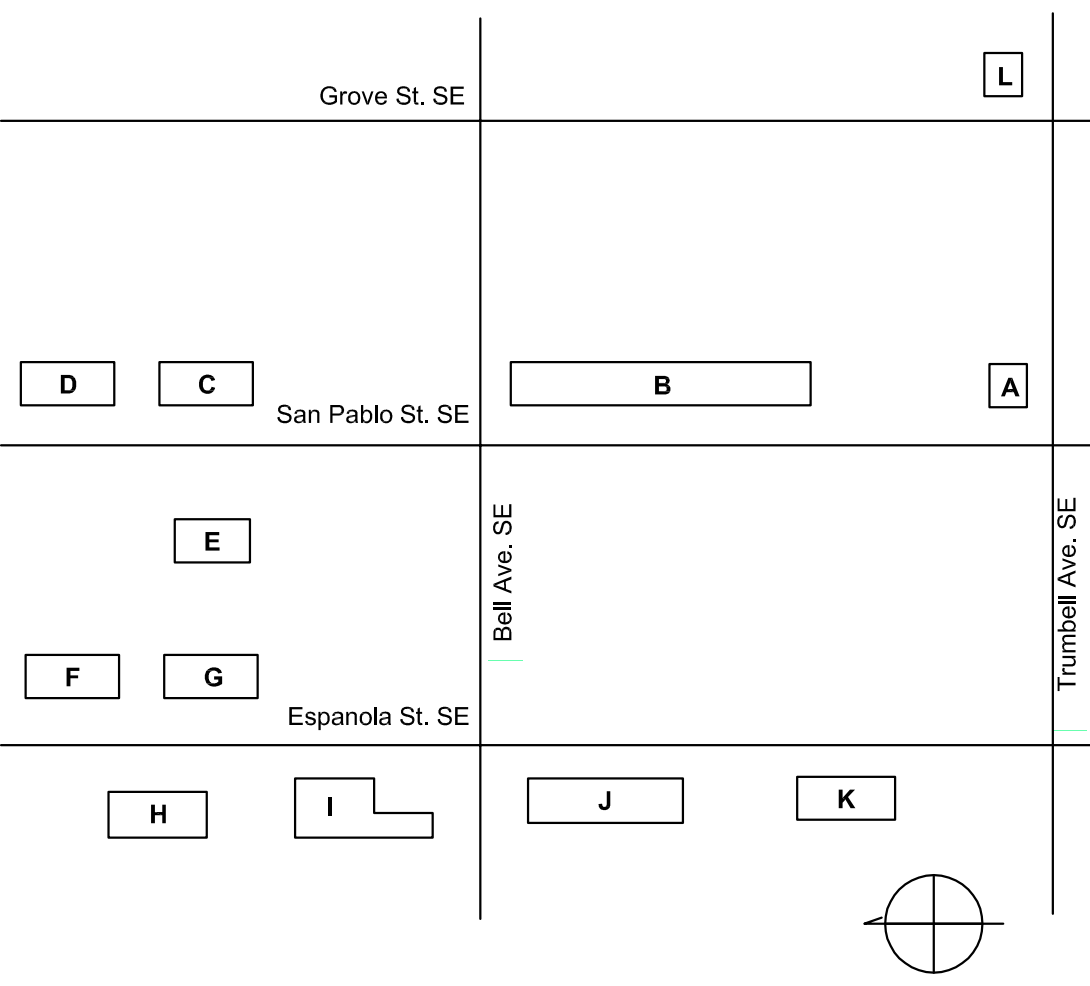
$Q_{100} = 3.74$ CU-FT/SEC



RIP-RAP CHANNEL SECTION B-B

NOT TO SCALE

KEY PLAN



REVISIONS

NO.	DATE	DESCRIPTION

Copyright: Design Group

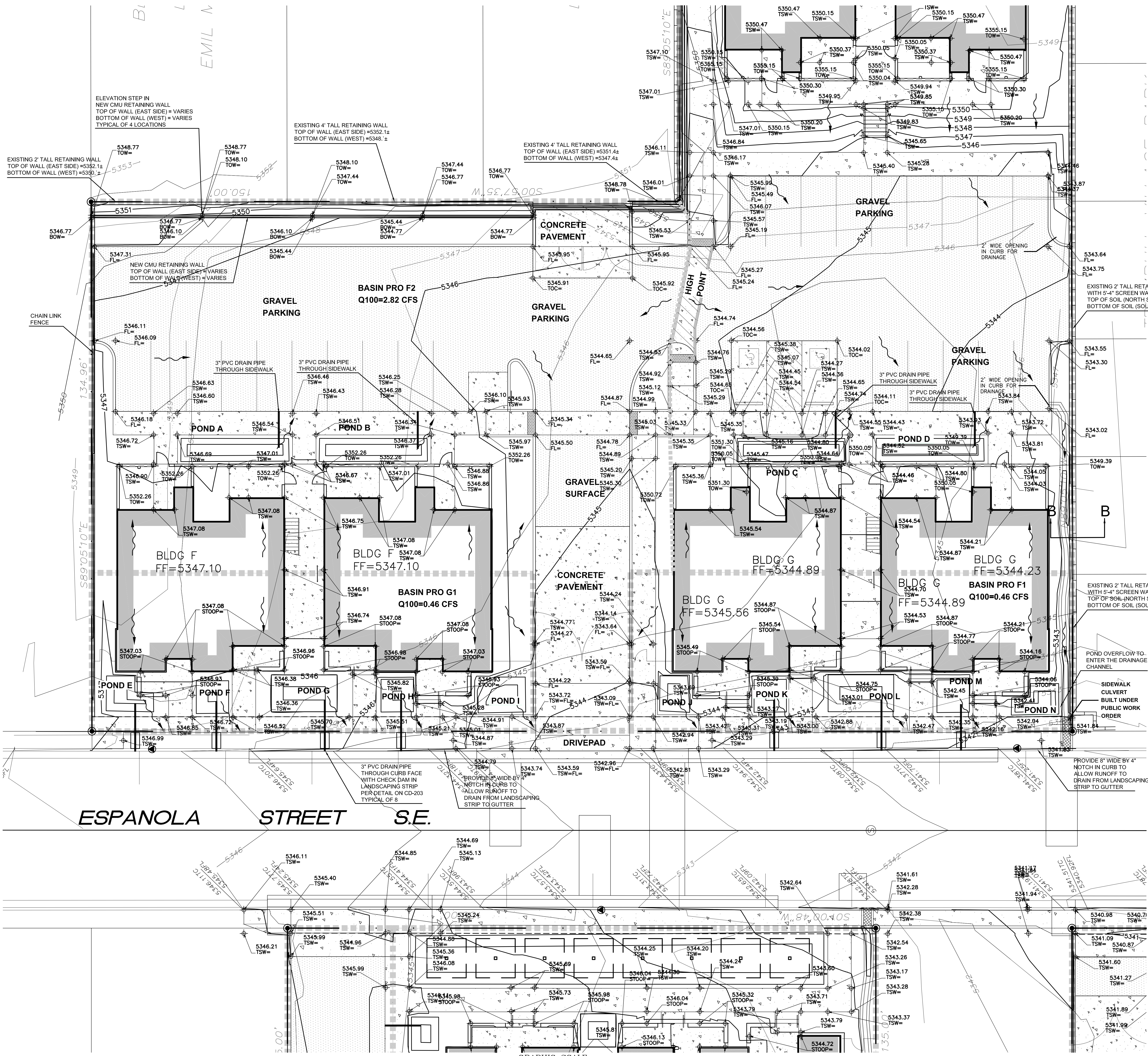
Drawn by: DAA
Checked by: DAA
Date: OCTOBER 19, 2015
Project number: 2491

SHEET TITLE
**ENLARGED
SITE DRAINAGE PLAN**

BUILDINGS F AND G

SHEET NUMBER

CD-207



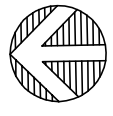
A1 ENLARGED SITE DRAINAGE PLAN - BUILDINGS F AND G

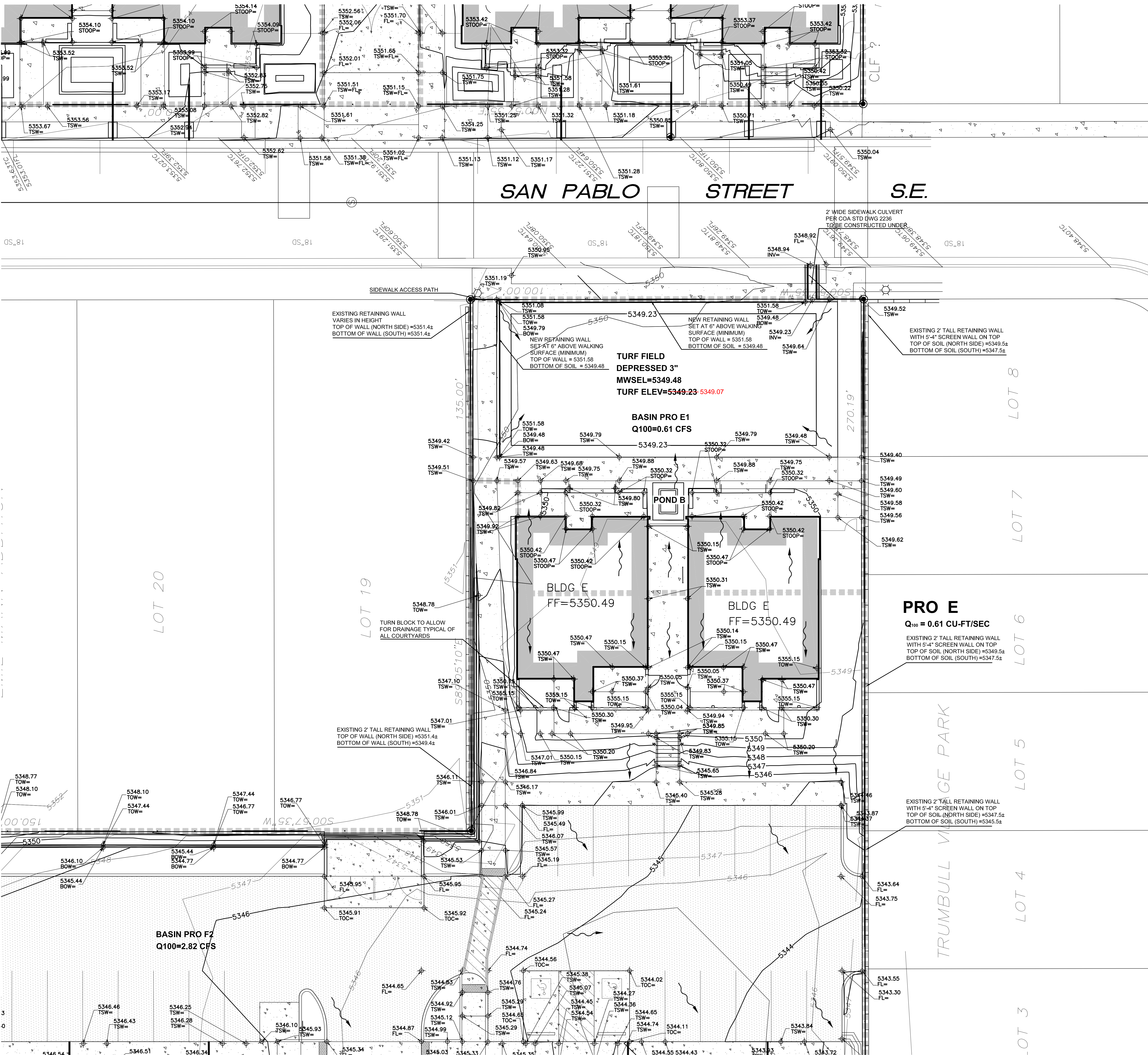
1" = 10'-0"

(IN FEET)

1 inch = 10 ft.

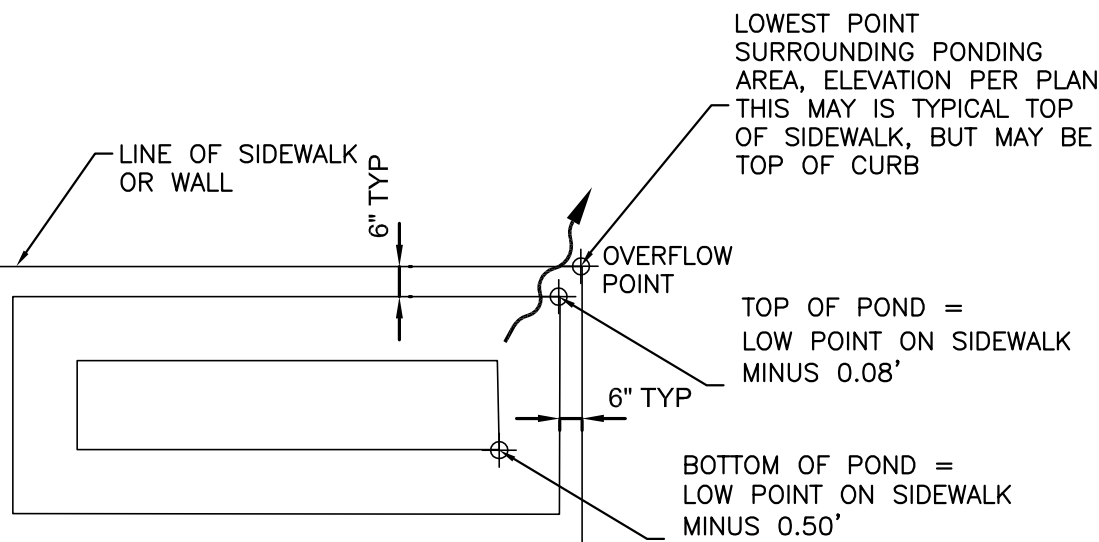
10 0 5 10 20 30 40





DRAINAGE PLAN GENERAL NOTES

- 1. SEE SHEET CG001 FOR COMPLETE LIST OF GENERAL NOTES AND SYMBOL/LINETYPE LEGEND THAT APPLY TO ALL SHEETS.
- 2. SEE SHEET CD-202 FOR 3" PVC DRAINAGE PIPES THROUGH SIDEWALKS AND UNDER SIDEWALKS THROUGH CITY CURB FACE.



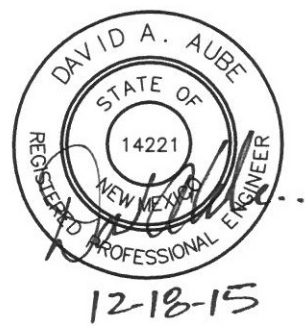
TYPICAL POND DETAIL

NOT TO SCALE

BUILDING E			
POND	LOWEST POINT ON CURB OR TSW	TOP ELEV	BOTTOM ELEV
A (TURF)	5349.48	5349.40	5349.07
B	5349.88	5349.80	5349.38

dg
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PROJECT NAME
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REVISIONS

NO.	DATE	DESCRIPTION

Copyright: Design Group

Drawn by: DAA
Checked by: DAA
Date: OCTOBER 19, 2015
Project number: 2491

SHEET TITLE

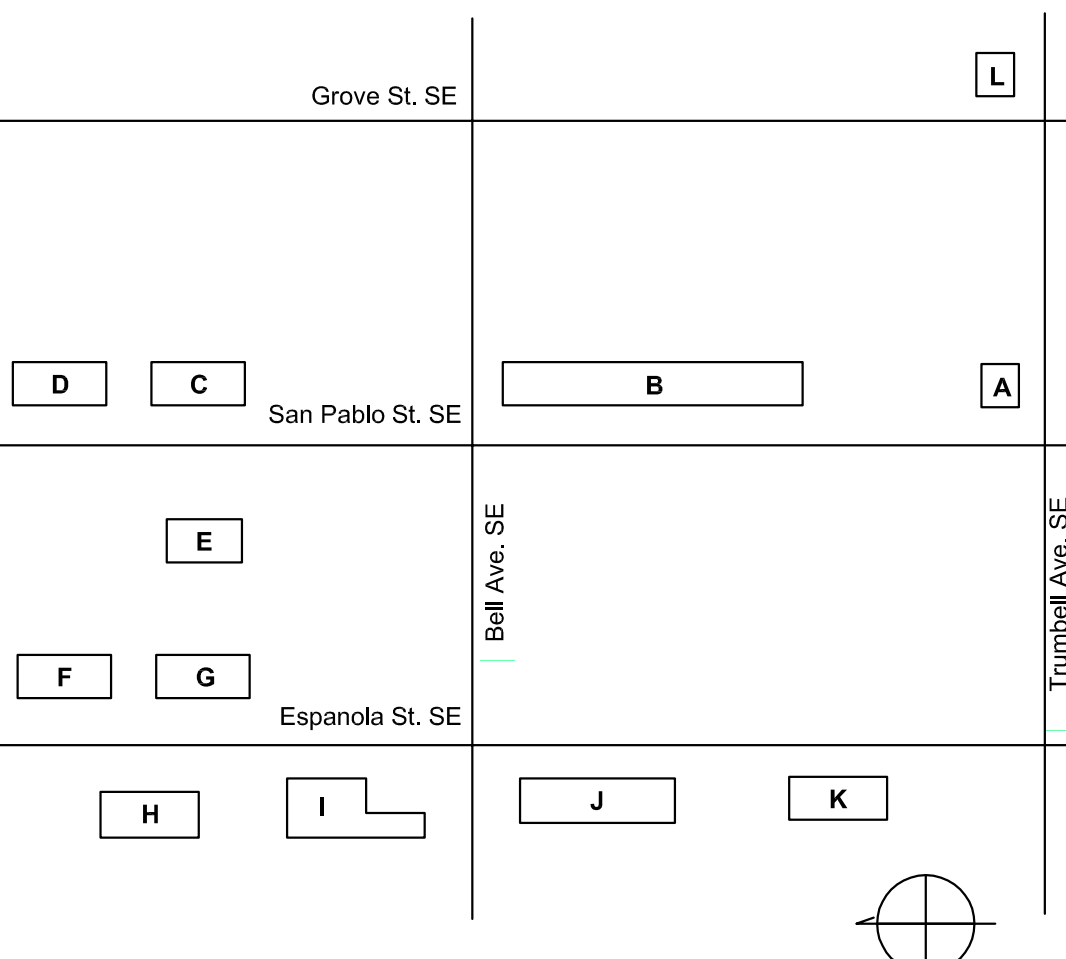
ENLARGED
SITE DRAINAGE PLAN

BUILDING E

SHEET NUMBER

CD-206

KEY PLAN



I. PURPOSE AND SCOPE

THE PURPOSE OF THIS DRAINAGE PLAN IS TO PRESENT THE EXISTING AND PROPOSED DRAINAGE MANAGEMENT PLANS FOR THE GREATER ALBUQUERQUE HOUSING PROJECT TITLED CASA FELIZ.

II. SITE DESCRIPTION AND HISTORY

THE PROJECT CONTAINS MANY SCATTERED SITES, LOCATED AROUND A PREVIOUS PROJECT BY GREATER ALBUQUERQUO HOUSING AUTHORITY CALLED PLAZA FELIZ. THE SITES ARE LOCATED ON ESPANOLA STREET SE, SAN PABLO STREET SE, GROVE STREET SE, BELL AVENUE SE, AND TRUMBELL AVENUE SE.

THIS AREA WAS AT ONE TIME FULLY DEVELOPED WITH A FOURPLEX ON EACH OF THE LOTS BEING REDEVELOPED BY THIS PROJECT. THE LAND WAS ORIGINALLY SUBDIVIDED IN 1944 AND WAS FULLY DEVELOPED PRIOR TO THE IMPLEMENTATION OF THE DRAINAGE ORDINANCE RESTRICTING FLOW FROM THE SITES INTO THE PUBLIC WAY. DEMOLITION OF THESE PRIOR FOURPLEXES WAS COMPLETED BY 2010 WITH THE EXCEPTION OF ONE LOT THAT STILL NEEDS TO HAVE THE BUILDING REMOVED FOR THIS PROJECT.

THE SITES WERE ALL FREE DISCHARGE INTO THE STREET, OR IN SOME CASES INTO THE ADJACENT PROPERTIES. EACH OF THE SITES WERE ANALYZED AS TYPE C SOIL TO ACCOUNT FOR THE PREVIOUSLY COMPACTED SOIL CONDITIONS. THIS INCLUDES THE LOT WITH THE EXISTING BUILDING TO BE REMOVED.

III. COMPUTATIONAL PROCEDURES

HYDROLOGIC ANALYSIS WAS PERFORMED UTILIZING THE DESIGN CRITERIA BASED ON SECTION 22.2, HYDROLOGY, OF THE DEVELOPMENT PROCESS MANUAL.

IV. PRECIPITATION

THE STORM EVENT USED FOR THE FOLLOWING CALCULATIONS IS THE 100YR-6HR STORM. THE PROJECT SITE IS LOCATED IN ZONE 3.

V. EXISTING DRAINAGE CONDITIONS (REFER TO CD EX1)

CURRENTLY THE SITES FLOW FROM EAST TO WEST AND TOWARD BELL AVENUE FROM BOTH NORTH AND SOUTH. WITH THE PRIOR DEVELOPMENT, MANY OF THE LOTS CREATED CROSS LOT DRAINAGE PATTTURNS THAT WILL BE CORRECTED WITH THIS PROJECT. HISTORICALLY THE SITES HAD BEEN DEVELOPED AS FOURPLEX UNITS WITH APPROXIMATELY 6 PARKING SPACES ON SITE. THE SITES CONTAINED MINIMAL LANDSCAPING AND WERE LIKELY 85% IMPERVIOUS (USING SURROUNDING UNITS AS A TYPICAL DEVELOPMENT DENSITY).

USING THE 85% D AND 15% C SOIL TREATMENTS THE TYPCIAL 50X135 LOT (6750 SF) CREATES A PEAK RUNOFF RATE OF 0.74 CFS AND AN EXCESS RUNOFF VOLUME OF 0.0284 ACRE FEET DURING THE 100 YEAR 6 HOUR EVENT.

TO BE MORE CONSERVATIVE, THE SITES WERE ANALYZED AS 100% C SOIL AS REQUIRED FOR SOIL COMPACTED BY HUMAN ACTIVITY. THE REDUCES THE PEAK RUNOFF RATE TO 0.53 CFS AND AN EXCESS RUNOFF VOLUME OF 0.0167 ACRE FEET DURING THE 100 YEAR 6 HOUR EVENT.

VI. PROPOSED DRAINAGE CONDITIONS

THE SCATTERED SITE HAVE BEEN ANALYZED INDIVIDUALLY. BUILDINGS HAVE BEEN ASSIGNED LETTERS AND THIS REPORT IS ORGANIZED TO FOLLOW THAT SAME ORDER.

BUILDING/SITE A IS LOCATED IN A SINGLE LOT THAT WILL HAVE A PORTION OF TRUMBELL VACATED AND IS THEREFORE SLIGHTLY LARGER THAN THE TYPICAL LOT AND CONTAINS 7425 SF. THIS SITE CURRENTLY CONTAINS AN APARTMENT BUILDING THAT WILL BE DEMOLISHED. THE SITE IS BROKEN UP INTO TWO SUB BASINS, THE FIRST FLOWING WEST TOWARD SAN PABLO AND THE OTHER TO THE EAST AND INTO TRUMBELL ON THE SOUTH. THE COMBINED FLOW RATES FOR THIS SITE 0.70 CFS WHICH IS LESS THAN THE ACTUAL CURRENT CONDITIONS OF 0.82 SF. THESE NUMBERS WERE ADJUSTED BECAUSE THE SITE CONTAINS THE 7425 SF IN LIEU OF THE TYPCIAL 6750 SF. THE INCLUSION OF SHALLOW PONDING AREAS (4" DEEP) THAT HARVEST 113 OF THE FIRST FLUSH VOLUME (91.6 CF REQUIRED) WILL FURTHER REDUCE THE PEAK RUNOFF.

BUILDING/SITE B CONTAINS 7 PARCELS AND WOULD HAVE CREATED A PEAK RUNOFF IN THE PREVIOUSLY DEVELOPED CONDITION OF 5.18 CFS (7 * 0.74 CFS). THE PROPOSED DEVELOPMENT WILL CREATE A PEAK RUNOFF OF 4.32 CSF AND AN EXCESS RUNOFF VOLUME OF 0.1520 ACRE FEET. THE SHALLOW PONDS SURROUNDING THE BUILDING WILL HARVEST 576 CF WHICH EXCEEDS THE FIRST FLUSH REQUIRED VOLUME OF 305.6 CF.

BUILDING/SITE C AND D CONTAINS 5 PARCELS AND WOULD HAVE CREATED A PEAK RUNOFF IN THE PREVIOUSLY DEVELOPED CONDITION OF 3.71 CFS (5 * 0.74 CFS). THE PROPOSED DEVELOPMENT WILL CREATE A PEAK RUNOFF OF 3.28 CSF AND AN EXCESS RUNOFF VOLUME OF 0.1156 ACRE FEET. THE SHALLOW PONDS SURROUNDING THE BUILDING WILL HARVEST 454 CF WHICH EXCEEDS THE FIRST FLUSH REQUIRED VOLUME OF 271.3 CF.

BUILDING/SITE E, F AND G CONTAINS 7 PARCELS AND WOULD HAVE CREATED A PEAK RUNOFF IN THE PREVIOUSLY DEVELOPED CONDITION OF 5.19 CFS (7 * 0.74 CFS). THE PROPOSED DEVELOPMENT WILL CREATE A PEAK RUNOFF OF 4.35 CSF AND AN EXCESS RUNOFF VOLUME OF 0.1527 ACRE FEET. THE SHALLOW PONDS SURROUNDING THE BUILDING WILL HARVEST 393 CF WHICH EXCEEDS THE FIRST FLUSH REQUIRED VOLUME OF 263.0 CF.

EXCESS RUNOFF FROM THESE SITES CAN DISCHARGE INTO ESPANOLA THROUGH THE DRIVEWAY OPENING OR THROUGH A SMALL RUNDOWN CHANNEL LOCATED ON THE SOUTH SIDE OF BUILDING G AND THROUGH A SIDEWALK CULVERT UNDER THE PUBLIC SIDEWALK.

BUILDING/SITE H CONTAINS 3 PARCELS AND WOULD HAVE CREATED A PEAK RUNOFF IN THE PREVIOUSLY DEVELOPED CONDITION OF 2.22 CFS (3 * 0.74 CFS). THE PROPOSED DEVELOPMENT WILL CREATE A PEAK RUNOFF OF 1.81 CSF AND AN EXCESS RUNOFF VOLUME OF 0.0629 ACRE FEET. THE SHALLOW PONDS SURROUNDING THE BUILDING WILL HARVEST 315 CF WHICH EXCEEDS THE FIRST FLUSH REQUIRED VOLUME OF 203.8 CF.

EXCESS RUNOFF FROM THESE SITES CAN DISCHARGE INTO ESPANOLA THROUGH THE DRIVEWAY OPENING OR THROUGH A SMALL RUNDOWN CHANNEL LOCATED ON THE SOUTH SIDE OF BUILDING H AND THROUGH A SIDEWALK CULVERT UNDER THE PUBLIC SIDEWALK.

BUILDING/SITE I CONTAINS 4 PARCELS AND WOULD HAVE CREATED A PEAK RUNOFF IN THE PREVIOUSLY DEVELOPED CONDITION OF 2.97 CFS (4 * 0.74 CFS). THE PROPOSED DEVELOPMENT WILL CREATE A PEAK RUNOFF OF 2.88 CSF AND AN EXCESS RUNOFF VOLUME OF 0.1089 ACRE FEET. THE SHALLOW PONDS SURROUNDING THE BUILDING WILL HARVEST 218.3 CF WHICH EXCEEDS THE FIRST FLUSH REQUIRED VOLUME OF 117.1 CF. THIS SITE DRAINS OUT THE SOUTHERN DRIVEWAY INTO BELL AVENUE, SE.

BUILDING/SITE J CONTAINS 4 PARCELS AND WOULD HAVE CREATED A PEAK RUNOFF IN THE PREVIOUSLY DEVELOPED CONDITION OF 3.03 CFS (SLIGHTLY LARGER DUE TO VACATED ROW ON BELL AVENUE SE THAT IS INCORPORATED INTO THE SITE). THE PROPOSED DEVELOPMENT WILL CREATE A PEAK RUNOFF OF 2.48 CSF AND AN EXCESS RUNOFF VOLUME OF 0.0848 ACRE FEET. THE SHALLOW PONDS SURROUNDING THE BUILDING WILL HARVEST 308 CF WHICH EXCEEDS THE FIRST FLUSH REQUIRED VOLUME OF 151 CF. THIS SITE DRAINS OUT THE NORTHERN DRIVEWAY INTO BELL AVENUE, SE.

BUILDING/SITE K CONTAINS 3 PARCELS AND WOULD HAVE CREATED A PEAK RUNOFF IN THE PREVIOUSLY DEVELOPED CONDITION OF 2.22 CFS (3 * 0.74 CFS). THE PROPOSED DEVELOPMENT WILL CREATE A PEAK RUNOFF OF 1.81 CSF AND AN EXCESS RUNOFF VOLUME OF 0.0629 ACRE FEET. THE SHALLOW PONDS SURROUNDING THE BUILDING WILL HARVEST 338CF WHICH EXCEEDS THE FIRST FLUSH REQUIRED VOLUME OF 102 CF.

BUILDING/SITE L IS LOCATED IN A SINGLE LOT THAT WILL HAVE A PORTION OF TRUMBELL VACATED AND IS THEREFORE SLIGHTLY LARGER THAN THE TYPICAL LOT AND CONTAINS 7425 SF. THE COMBINED FLOW RATES FOR THIS SITE 0.70 CFS WHICH IS LESS THAN THE ACTUAL CURRENT CONDITIONS OF 0.81 SF. THE INCLUSION OF SHALLOW PONDING AREAS (4" DEEP) THAT HARVEST 116 OF THE FIRST FLUSH VOLUME (91.6 CF REQUIRED) WILL FURTHER REDUCE THE PEAK RUNOFF.

VII. CONCLUSIONS

EACH INDIVIDUAL SITE HAS BEEN DESIGNED TO HARVEST MORE THAN IS REQUIRED TO MEET THE MSSSS PERMIT REQUIREMENTS FOR FIRST FLUSH VOLUMES. SITES HAVE BEEN DESIGNED TO DIRECT EXCESS RUNOFF TO THE PUBLIC STREETS WHERE PREVIOUS DEVELOPMENTS DISCHARGED IN A CROSS LOT CONFIGURATION.

EACH LOT IS STILL ALLOWING FOR FREE DISCHARGE FOR RUNOFF EXCEEDING THAT CONTAINED IN THE MSSSS REQUIREMENTS DESCRIBED ABOVE. THIS IS CONSISTENT WITH A REDUCTION FROM THE HISTORIC DISCHARGE RATES FROM THE PREVIOUSLY DEVELOPED LOTS.

BECAUSE THERE IS A REDUCTION IN FLOW RATES AND EXCESS RUNOFF IS DIRECTED TOWARD THE PUBLIC STREET INSTEAD OF CROSS LOT DRAINAGE, THERE SHOULD BE BENEFITS TO THE DOWNSTREAM LOTS.

Drainage Summary

Project: Casa Feliz
Project Number: 2491
Date: 10/12/15
By: Dave A

Site Location

3 Per Table A-1 COA DPM Section 22.2

Existing summary

Basin Name	EX A	EX B	EX C & D	EX E	EX F & G	EX H	EX I	EX J	EX K	EX L	Typ 85% D	Typ 100%C
Area (sf)	7425	47202	33742	13504	33742	20250	26999	27556	20250	7425	6750	6750
Area (acres)	0.170	1.084	0.775	0.310	0.775	0.465	0.620	0.633	0.465	0.170	0.155	0.155
%A Land treatment	0	0	0	0	0	0	0	0	0	0	0	0
%B Land treatment	0	0	0	0	0	0	0	0	0	0	0	0
%C Land treatment	15	15	15	15	15	15	15	15	15	15	100	100
%D Land treatment	85	85	85	85	85	85	85	85	85	85	85	0
Soil Treatment (acres)												
Area "A"	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Area "B"	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Area "C"	0.03	0.16	0.12	0.05	0.12	0.07	0.09	0.09	0.07	0.03	0.02	0.15
Area "D"	0.14	0.92	0.66	0.26	0.66	0.40	0.53	0.54	0.40	0.14	0.13	0.00
Excess Runoff (acre-feet)												
100yr. 6hr.	0.0312	0.1986	0.1420	0.0568	0.1420	0.0852	0.1136	0.1160	0.0852	0.0312	acre-ft.	0.0284
10yr. 6hr.	0.0194	0.1235	0.0883	0.0353	0.0883	0.0530	0.0707	0.0721	0.0530	0.0194	acre-ft.	0.0177
2yr. 6hr.	0.0112	0.0710	0.0508	0.0203	0.0508	0.0305	0.0406	0.0415	0.0305	0.0112	acre-ft.	0.0102
100yr. 24hr.	0.0373	0.2370	0.1694	0.0678	0.1694	0.1017	0.1356	0.1384	0.1017	0.0373	acre-ft.	0.0339
Peak Discharge (cfs)												
100 yr.	0.82	5.18	3.71	1.48	3.71	2.22	2.97	3.03	2.22	0.82	cfs	0.74
10yr.	0.54	3.45	2.46	0.99	2.46	1.48	1.97	2.01	1.48	0.54	cfs	0.49
2yr.	0.32	2.01	1.43	0.57	1.43	0.86	1.15	1.17	0.86	0.32	cfs	0.29

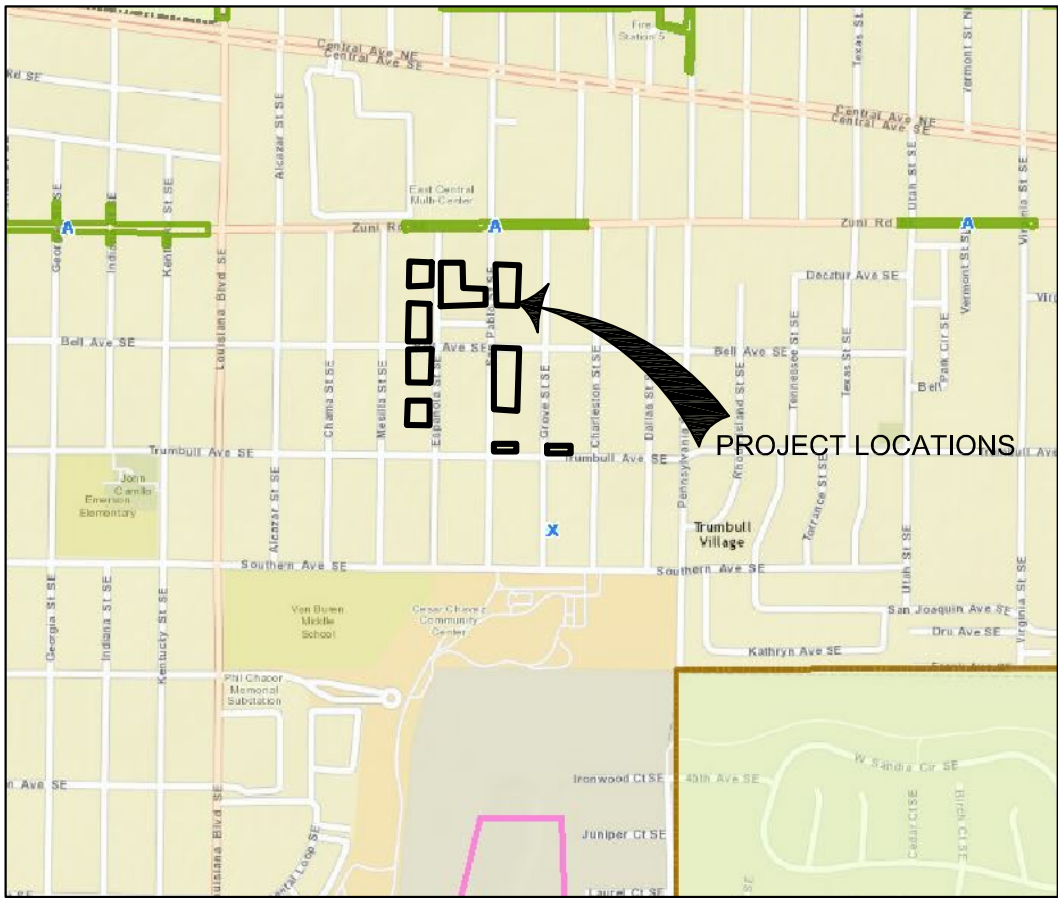
Proposed summary

Basin Name	Pro A1	Pro A2	Pro B1	Pro B2	Pro C1	Pro C2	Pro D1	Pro E1	Pro F1	Pro F2	Pro G1	Pro H1	Pro H2	Pro I1	Pro I2	Pro I3	Pro J1	Pro J2	Pro J3	Pro K1	Pro K2	Pro L1	Pro L2
Area (sf)	2104	5321	12942	34260	4525	25692	7462	4525	30721	4525	4525	6275	13975	3257	3342	20400	5469	21808	278	6435	13815	2104	5321
Area (acres)	0.048	0.122	0.297	0.787	0.104	0.590	0.104	0.171	0.104	0.705	0.104	0.144	0.321	0.075	0.077	0.468	0.126	0.501	0.006	0.148	0.317	0.048	0.122
%A Land treatment	10	0	15	15	10		10	50	10		10	25	10	10			25	10		25	10	10	
%B Land treatment	25	65	25	50	25	65	25	15	25	65	25	60	25	60	20	65	15	25	60	50	25	60	25
%C Land treatment	65	35	60	35	65	35	65	35	65	35	65	50	30	70	35	85	50	30	50	50	30	65	65
%D Land treatment																							
Soil Treatment (acres)																							
Area "A"	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Area "B"	0.00	0.00	0.04	0.12	0.01	0.00	0.01	0.09	0.01	0.00	0.01	0.04	0.03	0.01	0.00	0.00	0.03	0.05	0.00	0.04	0.03	0.00	0.00
Area "C"	0.01	0.06	0.07	0.36	0.03	0.36	0.03	0.03	0.03	0.46	0.03	0.04	0.19	0.01	0.05	0.07	0.03	0.30	0.00	0.04	0.19	0.01	0.08
Area "D"	0.03	0.04	0.18	0.28	0.07	0.21	0.07	0.06	0.07	0.25	0.07	0.07	0.10	0.05	0.03	0.40	0.06	0.15	0.00	0.07	0.10	0.03	0.04
Excess Runoff (acre-feet)																							
100yr. 6hr.	0.0078	0.0169	0.0465	0.1055	0.0169	0.0818	0.0169	0.0211	0.0169	0.0978	0.0169	0.0208	0.0421	0.0125	0.0106	0.0858	0.0181	0.0657	0.0010	0.0213	0.0416	0.0078	0.0169
10yr. 6hr.	0.0047	0.0094	0.0275	0.0583	0.0101	0.0456	0.0101	0.0114	0.0101	0.0545	0.0101	0.0119	0.0229	0.0075	0.0059	0.0534	0.0104	0.0358	0.0006	0.0122	0.0227	0.0047	0.0094
2yr. 6hr.	0.0026	0.0045	0.0147	0.0276	0.0055	0.0217	0.0055	0.0053	0.0055	0.0259	0.0055	0.0061	0.0105	0.0042	0.0028	0.0307	0.0053	0.0164	0.0003	0.0063	0.0104	0.0026	0.0045
100yr. 24hr.	0.0062	0.0187	0.0539	0.1169	0.0197	0.0904	0.0197	0.0236	0.0197	0.1081	0.0197	0.0238	0.0461	0.0147	0.0118	0.1024	0.0207	0.0719	0.0011	0.0244	0.0456	0.0092	0.0187
Peak Discharge (cfs)																							
100 yr.	0.21	0.49	1.27	3.05	0.46	2.36	0.46	0.61	0.46	2.82	0.46	0.58	1.23	0.33	0.31	2.24	0.51	1.92	0.03	0.59	1.22	0.21	0.49
10yr.	0.14	0.30	0.81	1.86	0.29	1.47	0.29	0.36	0.29	1.75	0.29	0.36	0.75	0.22	0.19	1.49	0.31	1.17	0.02	0.37	0.74	0.14	0.30
2yr.	0.07	0.15	0.43	0.89	0.16	0.72	0.16	0.16	0.16	0.86	0.16	0.18	0.35	0.12	0.09	0.87	0.16	0.55	0.01	0.19	0.35	0.07	0.15
Roof Areas	1615	1615	5394	5394	1643	6296	1643	1355	1643	4641	1643	3598	3598	1367	0	2796	2505	2812	0	1800	1800	1615	1615
First Flush Ponding Voulme (cf)	45.8	45.8	152.8	152.8	46.6	178.1	46.6	38.4	46.6	131.5	46.6	101.9	101.9	38.7	0.0	78.4	71.0	79.7	0.0	51.0	51.0	45.8	45.8
First Flush Acre Feet	0.0011	0.0011	0.0035	0.0035	0.0011	0.0041	0.0011	0.0009	0.0011	0.0030	0.0011	0.0023	0.0023	0.0009	0.0000	0.0018	0.0016	0.0018	0.0000	0.0012	0.0012	0.0011	0.0011

Drainage Certification (L19D073E, DRB#1010674)

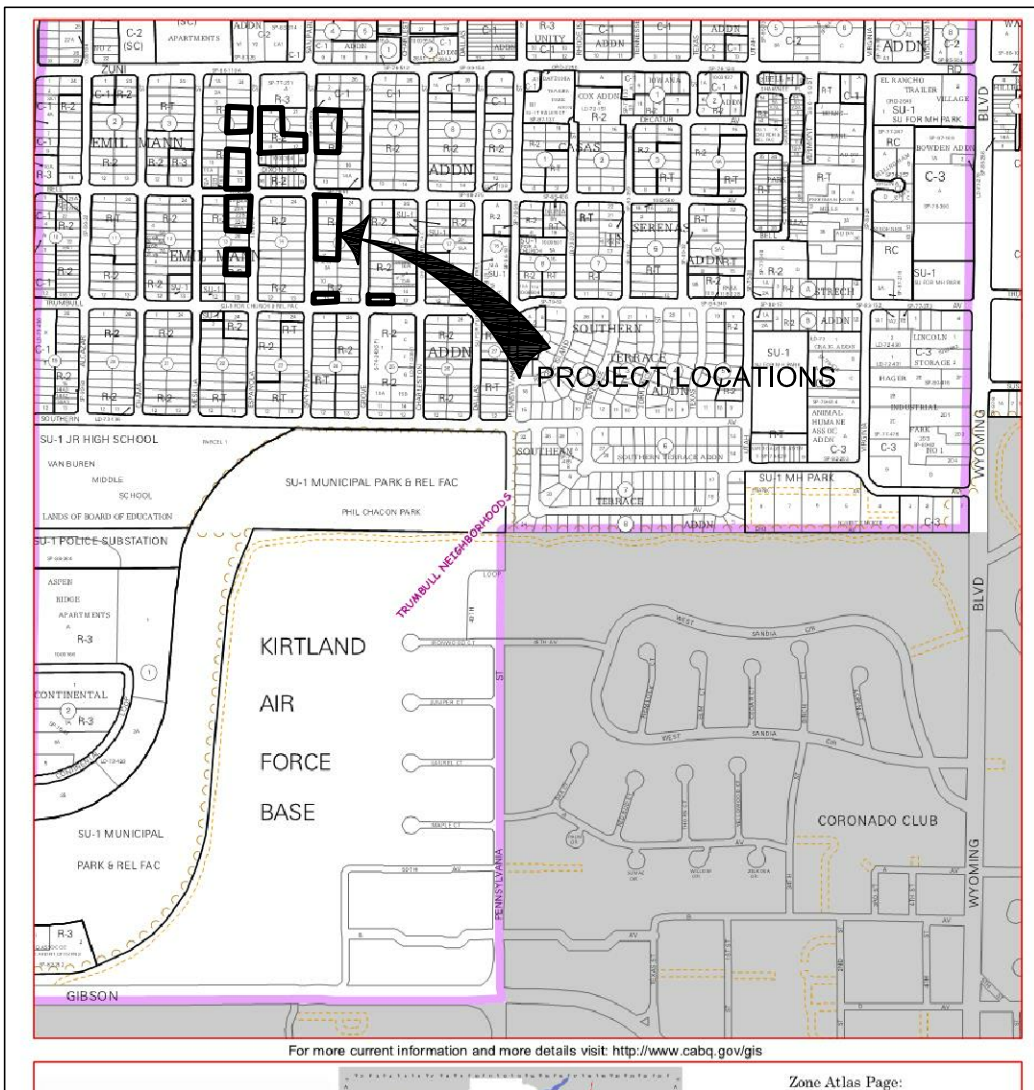
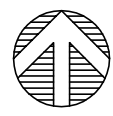
I, David A Aube. NMPE 14221, of the firm The Hartman + Majewski Design Group, Inc. hereby certify that portion of the project (Building E located at 429 San Pablo Street SE and Buildings F & G located at 416 Espanola Street SE) is in substantial compliance with and in accordance with the design intent of the Grading and Drainage plan approved plan dated 12-18-15. The record information that has been edited onto the original design documents where obtained by Community Sciences Corporation on April 24, 2017. I further certify that I have personally visited the project site on May 15, 2017 and have determined by visual inspection that the actual site conditions shown on this plan to be true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Permanent Certificate of Occupancy for Building E located at 429 San Pablo St. SE and Buildings F and G located at 416 Espanola St. SE.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the drainage aspects of this project. Those relying on the record documents are advised to obtain independent verification of its accuracy before using it for any other purpose.



A4 FIMA FLOOD MAP

SCALE: NOT TO SCALE



A4 L-19-Z ZONE ATLAS PAGE

SCALE: NOT TO SCALE



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100% CONSTRUCTION DOCUMENTS

PROJECT NAME
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GREATER ALBUQUER