CITY OF ALBUQUERQUE

Planning Department Alan Varela, Interim Director



Mayor Timothy M. Keller

October 20, 2021

Mark H. Burak, P.E. 1512 Sagebrush Trail SE Albuquerque, NM 87123

RE: Tract "A" Southwynd Subdivision Grading and Drainage Plan Engineer's Stamp Date: 08/15/21 Hydrology File: L10D020A

Dear Mr. Burak:

PO Box 1293 Based upon the information provided in your submittal received 09/03/2021, the Grading & Drainage Plan **is not** approved for Grading Permit. The following comments need to be addressed for approval of the above referenced project:

2. Please place the existing floodplain on the Grading Plan.

- This submittal is only for filling in the existing detention pond and creating a gently sloping tract of land from Tower to Pronghorn. So basically the final product for Tract A should then be a general blank piece of property.
- NM 87103

www.cabq.gov



- 3. Since this will be just a simple grading plan, the calculations should be able to fit on one sheet with the grading.
- 4. Standard review fee of \$150 will be required at the time of resubmittal.

CITY OF ALBUQUERQUE

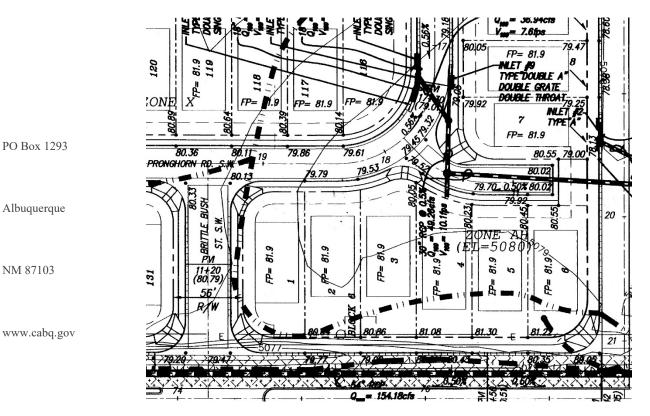
Planning Department Alan Varela, Interim Director



Mayor Timothy M. Keller

The next steps once Tract A Grading & Drainage Plan is approved by Hydrology are the following:

- 1. Pad Certification. Once the pond is properly filled and compacted in lifts, a pad certification will be required for approval.
- DRB actions. Next a Grading & Drainage Plan showing the proposed new lots and spur road as you have provided this time will need to be submitted and approved by Hydrology for Grading Permit, Work Order, and action by the DRB for Preliminary Plat/Final Plat. Please note that the lots have to drain from Tower to Pronghorn as originally designed in the Southwynd Subdivision (L10D020).



- 3. DRB Actions. Also at the DRB there will be an Infrastructure List showing all roadway items that need to be constructed under a Work Order set of construction plans. Please not that a LOMR will need to be included in the Infrastructure List. This was never done with the original subdivision. This will need to be done prior to Work Order closeout.
- 4. Building Permits. Building permits for each lot can be obtained once the DRB approves the plat. Please note that the lots that come off the spur road, the road will need to be built in order to access those lots.

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the

CITY OF ALBUQUERQUE

Planning Department Alan Varela, Interim Director



Mayor Timothy M. Keller

Stormwater Quality Engineer (Doug Hughes, PE, <u>jhughes@cabq.gov</u>, 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3995 or <u>rbrissette@cabq.gov</u>.

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM Senior Engineer, Hydrology Planning Department

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

ALBU DU	AAA
	TI II F
	A. B. B. B. B.
MEN AAAAAA	

City of Albuquerque

PlanningDepartment Development& Building ServicesDivision

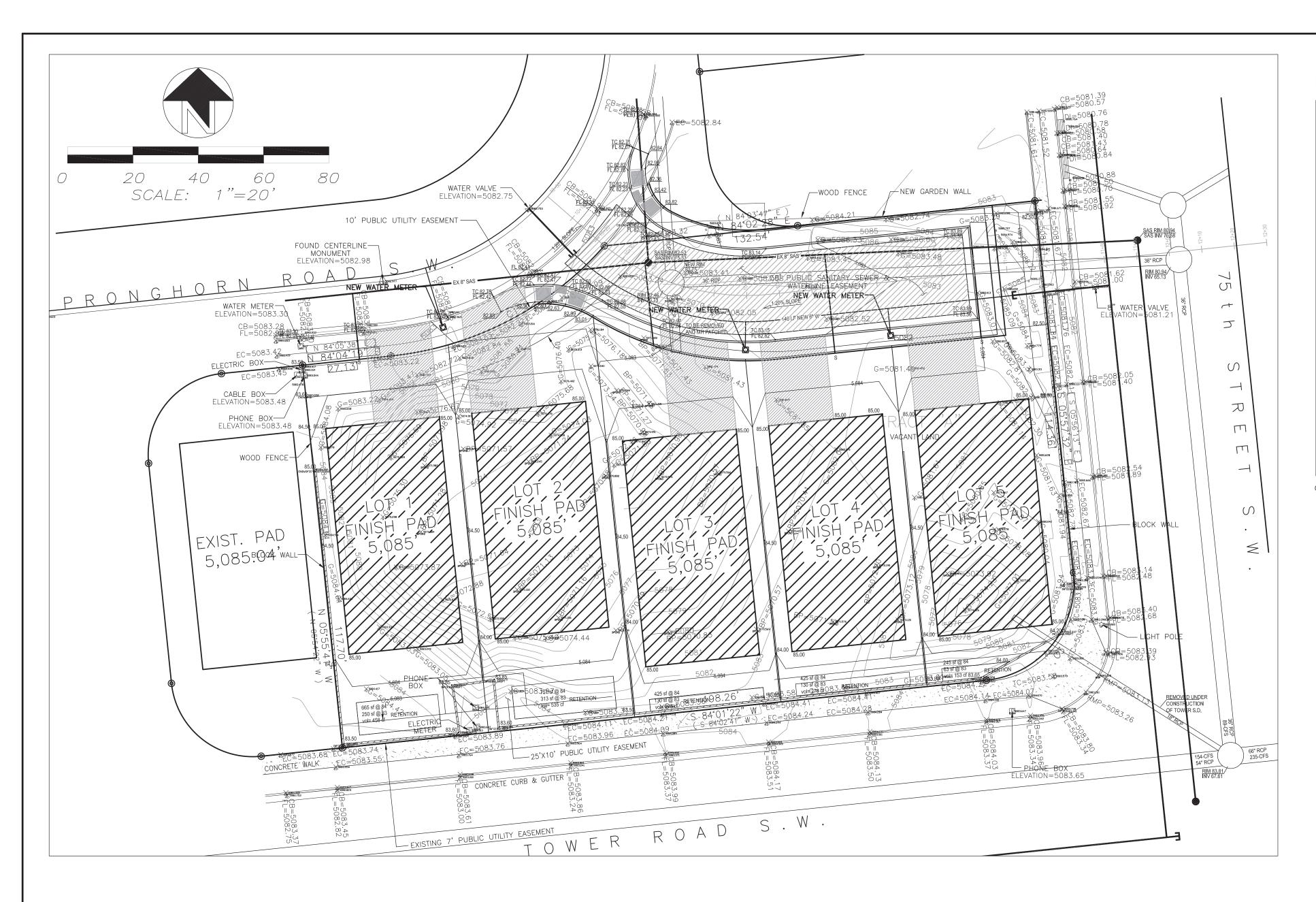
DRAINAGE AND TRANSPORTATIONINFORMATION SHEET (REV 6/2018)

ProjectTitle: Southwynd Addition	Building Permit#:	Hydrology File#:
		Work Order#:
Legal Description: Tract "A" South	wynd Subdivision	
City Address: NW Corner of To	ower Road and 75th Stre	et
Applicant Burak Consulting	7102	Contact: Mark Burak, PE
Address: 1512 Sagebrush Tr SE, 8		
		E-mail:mburak@comcast.net
Other Conta d :		Contact: Jeffrey Padilla
Address:		
Phone# <u>: (505)</u> 377-5451	Fax#:	E-mail:
TYPE OF DEVELOPMENT : 5 PLA	Γ (# of lots) RESIDEN	ICE X DRB SITE ADMIN SITE
IS THIS A RESUBMITTAL? Yes	<u> X </u> No	
DEPARTMENT TRANSPORTATION		RAINAGE
Check all that Apply: TYPE OF SUBMITTAL: ENGINEER/ARCHITECT CERTIFICATI PAD CERTIFICATION CONCEPTUALG & D PLAN X GRADING PLAN DRAINAGE REPORT DRAINAGE MASTER PLAN DRAINAGE MASTER PLAN DRAI	X BUI CEF PRE SIT SIA SIA	F APPROVAL/ACCEPTANCE SOUGHT: LDING PERMIT APPROVAL RTIFICATE OFOCCUPANCY ELIMINARY PLAT APPROVAL E PLAN FOR SUB'D APPROVAL E PLAN FOR BLDG. PERMIT APPROVAL AL PLAT APPROVAL / RELEASEOF FINANCIAL GUARANTEE JNDATION PERMIT APPROVAL ADING PERMIT APPROVAL 19 APPROVAL //ING PERMIT APPROVAL ADING/ PAD CERTIFICATION RK ORDER APPROVAL OMR/LOMR ODPLAIN DEVELOPMENT PERMIT HER (SPECIFY)

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED:

FEE PAID:



Site Location - As shown by the Vicinity Map (Zone Atlas Map L-10), the proposed residential project site is located on a single 0.70-acre parcel on the north side of Tower Road SW on the west side of 75th Street SW. The site is generally about 900 feet east of Unser and 2,500 feet west of Coors on Tower Road. The project site was utilized for temporary runoff retention for the Southwynd Subdivision. It currently is excavated approximately twelve feet deep and is fenced. Single family homes are adjacent to the west and north of the property and across Pronghorn Road to the north. The purpose of this project is to reclaim the parcel for five additional residential lots by filling the retention area and constructing a small access roadway with utilities.

Legal Description: TRACT "A", SOUTHWYND SUBDIVISION

Benchmark - Basis of elevation is ACS Station "11-L10" Elevation 5.081.821 NAVD 1988.

Flood Zone - As shown by Panel 35001-C0328J of the National Flood Insurance Program Flood Insurance Rate Maps (FIRM) for the City of Albuquerque, New Mexico, dated 11/04/2016 this site lies within a designated flood hazard Zone X, or 500-year frequency event.

Existing Conditions - Currently, the project site consists of a twelve foot deep excavation with 2:1 side slopes. The excavation was constructed as a temporary retention facility for the Southwynd Subdivision in 2002. Runoff enters the retention area through the existing 36-inch rcp storm drain system that collects runoff from within the subdivision. Since the development of the subdivision, a new 55-inch diameter rcp storm drain was installed in Tower Road that connects to the upstream older and current storm drainage piping system. The Tower Road storm drain extends east about one-half mile to discharge into an existing detention basin located on the west side of Coors Boulevard. This detention pond then discharges to the south in the Amole del Norte outfall channel. Under the construction of the Tower storm drain, the discharge from Tower Road to the retention ponding area was reduced by the removal of the 18-inch RCP that discharged to the southeast corner of the pond.

Proposed Grading - The Grading and Drainage Plan shows 1) existing and proposed grades indicated by spot elevations and contours; 2) the limit of existing and proposed improvements.

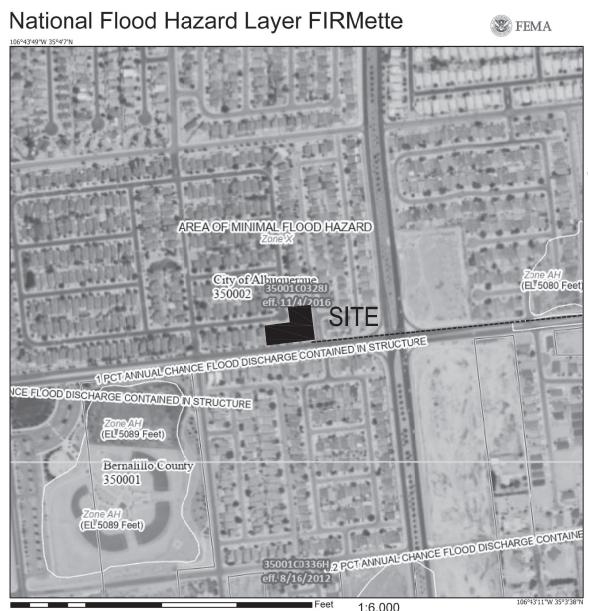
The site is to be filled and compacted to the finish pad elevations shown on the Plan. Fill material should be placed in one foot lifts and compacted to 95% with proper moisture content to the finish pad elevation. The proposed parcels will be graded to drain the front half to the roadways and the rear half to the back yards of each parcel for water quality ponding and retention.

The existing temporary 36-inch RCP outfall pipe needs to be removed and the side of the existing manhole filled and repaired before filling begins. This will ensure that all upstream runoff will discharge to the east into the existing pipe located in 75th Street and then into the larger storm drain in Tower Road. An additional outfall pipe was located near the SE corner of the property. According to AMAFCA, this pipe was removed during the construction of the Tower Road project.

As shown on the Plan, Lots 3, 4, and 5 will access a new roadway to be constructed on the north portion of the property. This roadway is to be connected to Pronghorn Road and will extend to the east approximately 140 linear feet from the Pronghorn centerline. The right-of-way for this roadway is shown as 40-feet and will slope west at a 1.20 percent to drain to the existing drop inlet located 40-feet to the north.

The five proposed on-site water quality retention areas will have a total capacity of 1,700 cubic Runoff from Basins G-K will be directed to the rear of each parcel to be discharged into five feet as shown on the Plan. The cumulative volume generated for the six-hour storm for all onsite small retention basins that are to be located near the back wall of the property. These retention sub-basins was estimated as 1,927 cubic feet for the ponds. basins will provide adequate storage for the 100-year event. ention

As part of this construction, the new roadway accessing Pronghorn Road will be installed including curb, gutter, and sidewalk. The proposed roadway section is 32-feet face to face. The curb, gutter, sidewalk and roadway will be sloped at 1.20-percent to match existing conditions. An additional 250 feet of new water line will need to be installed with the roadway. The sewer is currently in place within the roadway right-of-way.



2,000

FEMA MAP

1,000

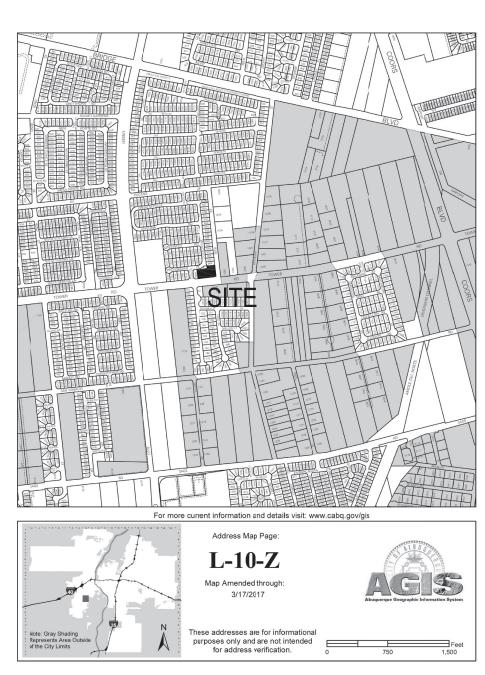
1,500

Hydrologic Methods - The drainage basin map shows eleven separate sub-basins (A-J) impacting the project area to assess peak flow rates at various points around the project site culminating at the retention basins or outfall drop inlet. The calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The process outlined in the DPM, Chapter 6 was used to quantify the peak flow rates and volumes. As shown by these calculations, the fully developed improvements will result in a slight increase in runoff generated by the site. When incorporating the proposed ponding, the downstream impact is similar when comparing to existing and/or historical conditions.

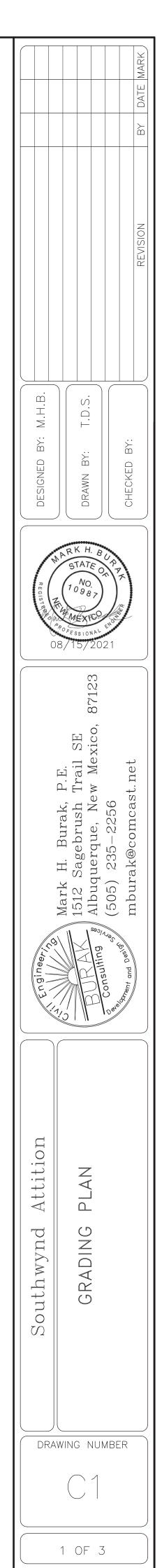
The proposed improvements will increase the existing peak runoff due to the higher percentage of impervious area proposed by the development. By controlling the calculated runoff within the retention areas, scour and erosion is expected to be reduced to a minimum amount. A spreadsheet for Precipitation Zone 1 is included on this plan. This spreadsheet outlines the peak runoff and volume generated for each sub-basin for existing and proposed fully developed conditions. Percentage of each land treatment is shown to illustrate the addition of impervious area related to the proposed construction.

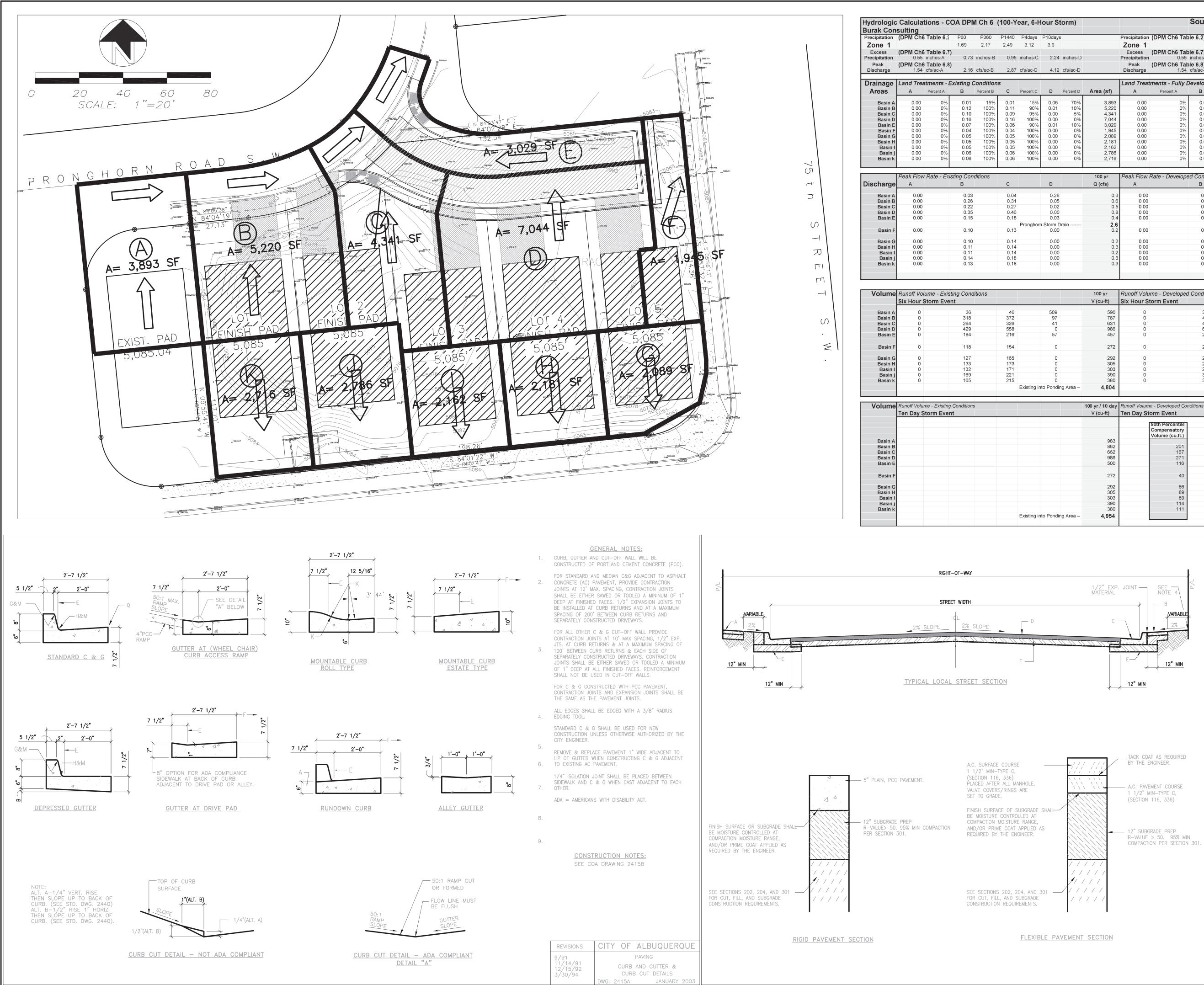
90% Compensatory Volume Management – The first flush has been mitigated based on the impervious areas listed on the attached spreadsheet. This equates to the total impervious area of the site multiplied by 0.615-inches or about 1,284 cubic feet for all of the ponding areas. This storage has been provided on the plan by the retention basins as shown.

		Retent
•	Lot 1	458 cf
•	Lot 2	535 cf
•	Lot 3	278 cf
•	Lot 4	278 cf
•	Lot 5	153 cf



VICINITY MAP





	OTT OF REDOCOERCOE
/91	PAVING
1/14/91 2/15/92 /30/94	CURB AND GUTTER & CURB CUT DETAILS

	orm)				South	wynd /	Additic	n				
											J	uly 2021
10days				(DPM Ch6 Tab	le 6.2)	P60	P360	P1440	P4days	P10days		
3.9			Zone 1			1.69	2.17	2.49	3.12	3.9		
2.24	inches-D		Excess Precipitation	(DPM Ch6 Tab 0.55	inches-A	0.73	inches-B	0.95	inches-C	2.24	in	
			Peak	(DPM Ch6 Tab								
4.12	cfs/ac-D		Discharge	1.54	cfs/ac-A	2.16	cfs/ac-B	2.87	cfs/ac-C	4.12	cf	
			Land Treat	ments - Fully D)evelone/	d Conditi	ions					
D	Percent D	Area (sf)	A	Percent A	В	Percent B	C	Percent C	D	Percent D		Area (sf)
0.06 0.01	70% 10%	3,893 5,220	0.00 0.00	0% 0%	0.01 0.02	15% 15%	0.01	15% 10%	0.06	70% 75%		3,893 5,220
0.00	5%	4,341	0.00	0%	0.02	15%	0.01	10%	0.03	75%		4,341
0.00	0%	7,044	0.00	0%	0.02	15%	0.02	10%	0.12	75%		7,044
0.01	10%	3,029	0.00	0%	0.01	15%	0.01	10%	0.05	75%		3,029
0.00	0%	1,945 2,089	0.00	0%	0.01 0.01	20%	0.02	40% 0%	0.02	40%		1,945 2,089
0.00 0.00	0% 0%	2,089	0.00 0.00	0% 0%	0.01	20% 20%	0.00	0%	0.04	80% 80%		2,089
0.00	0%	2,161	0.00	0%	0.01	20%	0.00	0%	0.04	80%		2,161
0.00	0%	2,786	0.00	0%	0.01	20%	0.00	0%	0.05	80%		2,786
0.00	0%	2,716	0.00	0%	0.01	20%	0.00	0%	0.05	80%		2,716
_		100 yr		Rate - Develope		ons						100 yr
D		Q (cfs)	A		В		С		D			Q (cfs)
0.26 0.05		0.3 0.6	0.00		0.03 0.04		0.04 0.03		0.26 0.37			0.: 0.:
0.05		0.8	0.00		0.04		0.03		0.37			0.4
0.02		0.8	0.00		0.05		0.05		0.50			0.
0.03		0.4	0.00		0.02		0.02		0.21			0.
	rain	2.6							Pronghor	n Storm Drain		2.0
0.00		0.2	0.00		0.02		0.05		0.07			0.
0.00		0.2	0.00		0.02		0.00		0.16			0.1
		0.3	0.00		0.02		0.00		0.17 0.16			0.:
0.00		0.0							0.10			
0.00		0.2	0.00		0.02							0.1
		0.2 0.3 0.3	0.00 0.00 0.00		0.02 0.03 0.03		0.00		0.21 0.21			0.
0.00 0.00		0.3	0.00 0.00	me - Developed torm Event	0.03	15	0.00		0.21			0.2
0.00 0.00		0.3 0.3 100 yr V (cu-ft) 590	0.00 0.00 <i>Runoff Volu</i> Six Hour St		0.03 0.03 (<i>Condition</i> 36	٦S	0.00		0.21 0.21			0.2 0.2 100 yr
0.00 0.00 0.00		0.3 0.3 100 yr V (cu-ft) 590 787	0.00 0.00 <i>Runoff Volu</i> Six Hour St 0 0		0.03 0.03	าร	0.00		0.21 0.21			0.2 0.2 100 yr V (cu-ft) 590 820
0.00 0.00 0.00 509 97 41		0.3 0.3 100 yr V (cu-ft) 590 787 631	0.00 0.00 <i>Runoff Volu</i> Six Hour St 0 0 0		0.03 0.03 1 Condition 36 48 40	ĩs	0.00 0.00 46 41 34		0.21 0.21 509 731 608			0.2 0.2 100 yr V (cu-ft) 590 820 682
0.00 0.00 0.00 509 97 41 0		0.3 0.3 100 yr V (cu-ft) 590 787 631 986	0.00 0.00 <i>Runoff Volu</i> Six Hour St 0 0 0 0		0.03 0.03 Condition 36 48 40 64	15	0.00 0.00 46 41 34 56		0.21 0.21 509 731 608 986			0.: 0.: 100 yr V (cu-ft) 590 820 682 1,106
0.00 0.00 0.00 509 97 41		0.3 0.3 100 yr V (cu-ft) 590 787 631	0.00 0.00 <i>Runoff Volu</i> Six Hour St 0 0 0		0.03 0.03 1 Condition 36 48 40	15	0.00 0.00 46 41 34		0.21 0.21 509 731 608 986 424	Storm Drain		0 0 100 yr V (cu-ft) 590 820 682 1,106 476
0.00 0.00 0.00 509 97 41 0		0.3 0.3 100 yr V (cu-ft) 590 787 631 986	0.00 0.00 <i>Runoff Volu</i> Six Hour St 0 0 0 0		0.03 0.03 Condition 36 48 40 64	าร	0.00 0.00 46 41 34 56		0.21 0.21 509 731 608 986 424	n Storm Drain		0 0 100 yr V (cu-ft) 590 820 682 1,106
0.00 0.00 0.00 509 97 41 0 57		0.3 0.3 100 yr V (cu-ft) 590 787 631 986 457 272	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0		0.03 0.03 7 Condition 36 48 40 64 28 24	าร	0.00 0.00 46 41 34 56 24 62		0.21 0.21 509 731 608 986 424 Pronghorr 145	n Storm Drain		0.: 0.: 100 yr V (cu-ft) 590 682 1,106 476 3,674 230
0.00 0.00 0.00 509 97 41 0 57 0 0		0.3 0.3 100 yr V (cu-ft) 590 787 631 986 457 272 292	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0		0.03 0.03 7 Condition 36 48 40 64 28 24 24 25	15	0.00 0.00 46 41 34 56 24 62 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312	n Storm Drain		0.: 0.: 100 yr V (cu-ft) 590 682 1,106 476 476 476 3,674 230 337
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0		0.3 0.3 100 yr V (cu-ft) 590 787 631 986 457 272 272 292 305	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0.03 0.03 (<i>Condition</i>) 36 48 40 64 28 24 24 25 27	15	0.00 0.00 46 41 34 56 24 62 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326	n Storm Drain		0.: 0.: 0.: 100 yr V (cu-ft) 590 682 1,106 476 3,674 230 337 352
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0		0.3 0.3 100 yr V (cu-ft) 590 787 631 986 457 272 272 292 305 303	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0.03 0.03 2 2 2 3 6 4 8 40 64 28 24 24 25 27 26	15	0.00 0.00 46 41 34 56 24 62 0 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323	n Storm Drain		0 0 0 100 yr V (cu-ft) 590 820 682 1,106 476 3,674 230 337 352 349
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0		0.3 0.3 100 yr V (cu-ft) 590 787 631 986 457 272 272 292 305	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0.03 0.03 (<i>Condition</i>) 36 48 40 64 28 24 24 25 27	าร	0.00 0.00 46 41 34 56 24 62 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326	n Storm Drain		0.: 0.: 0.: 100 yr V (cu-ft) 590 682 1,106 476 3,674 230 337 352
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0 0 0 0 0	g Area –	0.3 0.3 100 yr V (cu-ft) 590 787 631 986 457 272 272 292 305 303 390	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0.03 0.03 2 2 3 6 4 8 40 64 28 24 24 25 27 26 34	15	0.00 0.00 46 41 34 56 24 62 0 0 0 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323 416 406	n Storm Drain		0.2 0.2 0.2 100 yr V (cu-ft) 590 820 682 1,106 476 3,674 230 337 352 349 450
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0 0 0 0 0	g Area –	0.3 0.3 100 yr V (cu-ft) 590 787 631 986 457 272 292 305 303 390 380	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0.03 0.03 2 2 3 6 4 8 40 64 28 24 24 25 27 26 34	7S	0.00 0.00 46 41 34 56 24 62 0 0 0 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323 416 406			0.2 0.2 0.2 100 yr V (cu-ft) 590 820 682 1,106 476 476 3,674 230 337 352 349 450 439
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0 0 0 0 0	g Area –	0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.5 0.0 0.7 87 631 986 457 272 292 305 303 390 380 4,804 100 yr / 10 day	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	torm Event	0.03 0.03 2 2 3 6 4 8 40 64 28 24 24 25 27 26 34 33	75	0.00 0.00 46 41 34 56 24 62 0 0 0 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323 416 406		5 :	0.2 0.2 0.2 100 yr V (cu-ft) 590 682 1,106 476 3,674 230 337 352 349 450 439 1,927
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0 0 0 0 0	g Area –	0.3 0.3 100 yr V (cu-ft) 590 787 631 986 457 272 292 305 303 390 380 4,804	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0	torm Event	0.03 0.03 2 2 3 6 4 8 40 64 28 24 24 25 27 26 34 33	7S	0.00 0.00 46 41 34 56 24 62 0 0 0 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323 416 406		5 :	0 0 0 100 yr V (cu-ft) 590 820 682 1,106 476 3,674 230 337 352 349 450 439 450 439
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0 0 0 0 0	g Area –	0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.5 0.0 0.7 87 631 986 457 272 292 305 303 390 380 4,804 100 yr / 10 day	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	e - Developed Con orm Event 90th Percentile	0.03 0.03 2 2 3 6 4 8 40 64 28 24 24 25 27 26 34 33	75	0.00 0.00 46 41 34 56 24 62 0 0 0 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323 416 406		5 :	0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0 0 0 0 0	g Area –	0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.5 0.0 0.7 87 631 986 457 272 292 305 303 390 380 4,804 100 yr / 10 day	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	e - Developed Con orm Event 90th Percentile Compensatory	0.03 0.03 2 2 3 6 4 8 40 64 28 24 24 25 27 26 34 33	15	0.00 0.00 46 41 34 56 24 62 0 0 0 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323 416 406		5 :	0 0 0 0 100 yr V (cu-ft) 590 682 1,106 476 3,674 230 337 352 349 450 439 1,927
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0 0 0 0 0	g Area –	0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.0 787 631 986 457 272 292 305 303 390 380 4,804 100 yr / 10 day V (cu-ft) 983	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	e - Developed Con orm Event 90th Percentile	0.03 0.03 2 2 3 6 4 8 40 64 28 24 24 25 27 26 34 33	15	0.00 0.00 46 41 34 56 24 62 0 0 0 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323 416 406		5 :	0.: 0.: 0.: 100 yr V (cu-ft) 590 820 682 1,106 476 3,674 230 337 352 349 450 439 1,927 00 yr / 10 day V (cu-ft)
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0 0 0 0 0	g Area –	0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.0 787 631 986 457 272 292 305 303 390 380 4,804 100 yr / 10 day V (cu-ft) 983 862	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	e - Developed Con orm Event 90th Percentile Compensatory Volume (cu.ft.) 201	0.03 0.03 2 2 3 6 4 8 40 64 28 24 24 25 27 26 34 33	15	0.00 0.00 46 41 34 56 24 62 0 0 0 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323 416 406		5 :	0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.:
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0 0 0 0 0	g Area –	0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.0 787 631 986 457 272 292 305 303 390 380 4,804 100 yr / 10 day V (cu-ft) V (cu-ft)	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	e - Developed Con orm Event 90th Percentile Compensatory Volume (cu.ft.) 201 167	0.03 0.03 2 2 3 6 4 8 40 64 28 24 24 25 27 26 34 33	15	0.00 0.00 46 41 34 56 24 62 0 0 0 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323 416 406		5 :	0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.:
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0 0 0 0 0	g Area –	0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.5 0.0 0.787 631 986 457 272 292 305 303 390 380 4,804 100 yr / 10 day V (cu-ft) 100 yr / 10 day V (cu-ft) 983 862 662 986	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	e - Developed Con orm Event 90th Percentile Compensatory Volume (cu.ft.) 201 167 271	0.03 0.03 2 2 3 6 4 8 40 64 28 24 24 25 27 26 34 33	15	0.00 0.00 46 41 34 56 24 62 0 0 0 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323 416 406		5 :	0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.:
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0 0 0 0 0	g Area –	0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.0 787 631 986 457 272 292 305 303 390 380 4,804 100 yr / 10 day V (cu-ft) V (cu-ft)	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	e - Developed Con orm Event 90th Percentile Compensatory Volume (cu.ft.) 201 167	0.03 0.03 2 2 3 6 4 8 40 64 28 24 24 25 27 26 34 33	75	0.00 0.00 46 41 34 56 24 62 0 0 0 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323 416 406 Individual	Retention Ponds	5 : 10	0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.:
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0 0 0 0 0	g Area –	0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.5 0.0 0.787 631 986 457 272 292 305 303 390 380 4,804 100 yr / 10 day V (cu-ft) 100 yr / 10 day V (cu-ft) 983 862 662 986	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	e - Developed Con orm Event 90th Percentile Compensatory Volume (cu.ft.) 201 167 271	0.03 0.03 2 2 3 6 4 8 40 64 28 24 24 25 27 26 34 33	75	0.00 0.00 46 41 34 56 24 62 0 0 0 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323 416 406 Individual		5 : 10	0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.:
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0 0 0 0 0	g Area –	0.3 0.3 0.3 0.3 0.3 0.3 0 0 787 631 986 457 272 292 305 303 390 380 4,804 100 yr / 10 day V (cu-ft) V (cu-ft) 983 862 662 986 500 272	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	e - Developed Con orm Event 90th Percentile Compensatory Volume (cu.ft.) 201 167 271 116 40	0.03 0.03 2 2 3 6 4 8 40 64 28 24 24 25 27 26 34 33	15	0.00 0.00 46 41 34 56 24 62 0 0 0 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323 416 406 Individual	Retention Ponds	5 : 10	0.: 0.: 0.: V (cu-ft) 590 682 1,106 476 3,674 230 337 352 349 450 450 439 1,927 00 yr / 10 day V (cu-ft) 00 yr / 10 day V (cu-ft) 983 1,384 1,151 1,868 803 6,190 343
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0 0 0 0 0	g Area –	0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.5 0.0 0.787 631 986 457 272 292 305 303 390 380 4,804 100 yr / 10 day V (cu-ft) 100 yr / 10 day V (cu-ft) 983 862 662 986 500	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	e - Developed Con orm Event 90th Percentile Compensatory Volume (cu.ft.) 201 167 271 116	0.03 0.03 2 2 3 6 4 8 40 64 28 24 24 25 27 26 34 33	75 75	0.00 0.00 46 41 34 56 24 62 0 0 0 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323 416 406 Individual	Retention Ponds	5 : 10	0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.:
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0 0 0 0 0	g Area –	0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.5 0.0 0.787 0.31 986 457 272 292 305 303 390 380 4,804 100 yr / 10 day V (cu-ft) 100 yr / 10 day V (cu-ft) 983 862 662 986 500 272 292 305 303	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	e - Developed Con orm Event 90th Percentile Compensatory Volume (cu.ft.) 201 167 271 116 40 86 89 89	0.03 0.03 2 2 3 6 4 8 40 64 28 24 24 25 27 26 34 33	15	0.00 0.00 46 41 34 56 24 62 0 0 0 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323 416 406 Individual	Retention Ponds	5 : 10	0.: 0.: 0.: V (cu-ft) 590 682 1,106 476 3,674 230 337 352 349 450 439 1,927 00 yr / 10 day V (cu-ft) 00 yr / 10 day V (cu-ft) 983 1,384 1,151 1,868 803 6,190 343 578
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0 0 0 0 0	g Area –	0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.0 787 631 986 457 272 292 305 303 390 380 4,804 100 yr / 10 day V (cu-ft) 100 yr / 10 day V (cu-ft) 983 862 662 986 500 272 292 305 303 390	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	e - Developed Con orm Event 90th Percentile Compensatory Volume (cu.ft.) 201 167 271 116 40 86 89 89 89 114	0.03 0.03 2 2 3 6 4 8 40 64 28 24 24 25 27 26 34 33	75 75	0.00 0.00 46 41 34 56 24 62 0 0 0 0 0		0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323 416 406 Individual	Retention Ponds	5 : 10	0.2 0.2 0.2 0.2 100 yr V (cu-ft) 590 682 1,106 476 3,674 230 337 352 349 450 439 1,927 00 yr / 10 day V (cu-ft) 00 yr / 10 day V (cu-ft) 983 1,384 1,151 1,868 803 6,190 343 578 604 599 771
0.00 0.00 0.00 509 97 41 0 57 0 0 0 0 0 0 0 0 0 0 0 0 0 0	g Area –	0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.5 0.0 0.787 0.31 986 457 272 292 305 303 390 380 4,804 100 yr / 10 day V (cu-ft) 100 yr / 10 day V (cu-ft) 983 862 662 986 500 272 292 305 303	0.00 0.00 Runoff Volu Six Hour St 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	e - Developed Con orm Event 90th Percentile Compensatory Volume (cu.ft.) 201 167 271 116 40 86 89 89	0.03 0.03 2 2 3 6 4 8 40 64 28 24 24 25 27 26 34 33	15	0.00 0.00 46 41 34 56 24 62 0 0 0 0 0		0.21 0.21 0.21 509 731 608 986 424 Pronghorr 145 312 326 323 416 406 Individual	Retention Ponds	5 : 10	0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.: 0.:

GENERAL NOTES:

- 1. CROWN ON STREET SHALL BE AS FOLLOWS: a. 32' STREET = 4" b. 40' STREET = 5"
- c. LESS THAN 32' STREET, PAVEMENT SLOPE = 2% 2. ALL SUBGRADE COMPACTION FOR C & G SHALL EXTEND 12" MIN ON EITHER SIDE OF C & G OR CURB
- SECTION. 3. SUBGRADE PREPARATION UNDER SIDEWALK AND DRIVE PADS SHALL BE INCIDENTAL TO ITEM.
- 4. FINISH GRADE AT PROPERTY LINE SHALL BE BASED ON A MIN 2% SLOPE FROM TOP OF CURB.
- 5. ALL ASPHALT CONCRETE (AC) PAVEMENT SHALL COMPLY WITH SECTION 116.
- 6. ALL PORTLAND CEMENT CONCRETE (PCC) PAVEMENT SHALL COMPLY WITH SECTION 101.
- 7. IN ACCORDANCE WITH COA DPM THE FOLLOWING APPLIES UNLESS AUTHORIZED OTHERWISE BY THE CITY ENGINEER: * RESIDENTIAL STREETS SERVING 50 LOTS OR LESS SHALL BE DESIGNED AS LOCAL RESIDENTIAL STREETS. * RESIDENTIAL STREETS SERVING MORE THAN 50 LOTS WITH AN ANTICIPATED AWDT < 3000 SHALL BE DESIGNED AS MAJOR LOCAL STREETS.
- 8. FOR SUBGRADE R-VALUE < 50, PAVEMENT SECTION SHALL BE DESIGNED IN ACCORDANCE WITH DPM CH. 23
- 9. SUBGRADE PREPARATION SHALL BE PERFORMED AFTER ALL SUBSURFACE UTILITIES ARE CONSTRUCTED.

CONSTRUCTION NOTES:

- A. SIDEWALK AT STANDARD SETBACK.
- B. SIDEWALK ADJACENT TO CURB. (NON-STANDARD, VARIANCE REQUIRED).
- C. STANDARD CURB AND GUTTER.

REVISIONS

12/15/92

8/29/94

1/91

- D. ASPHALT CONCRETE (AC) OR PORTLAND CEMENT (PCC) PAVEMENT.
- E. 12" COMPACTED SUBGRADE PREP, 95% COMPACTION.

PAVING

STREET SECTION

