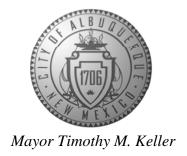
CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



August 2, 2018

Fred Arfman, P.E. Isaacson & Arfman, P.A. 128 Monroe St. N.E Albuquerque, NM 87108

RE: Nuevo Atrisco

Central and Unser NW Conceptual Grading and Drainage Plan

Plan Date: 7/26/18

Hydrology File: K10D058

Dear Mr. Arfman:

PO Box 1293

Based on the submittal provided on 7/26/18 the above-referenced plan cannot be approved for Preliminary/Final Plat and DRB- Site Plan until the following are corrected:

Albuquerque

Prior to Final Plat/ Site Plan:

NM 87103

1. The Tract A Basin needs to be further divided. Only the east portion of the Tract A will actually drain to the proposed pond; the west portion will free discharge to the private storm drain. The detention pond and orifice plate needs to be designed with the assumption that only part of Tract A will drain to it. i.e. Q_{in} will probably be closer to ~6.5cfs so Q_{out} will need to be limited to ~1-2cfs to meet the allowable discharge requirement for the larger site.

www.cabq.gov

Prior to Building Permit (For Information):

- 2. The Drainage Report will need to be stamped and signed by the Engineer; calculations will need to be re-verified with respect to the final site layout, especially the 80% impervious assumption and the assumed subbasin divides for Tract A.
- 3. If Tract A develops first, its downstream conveyance (private storm drain) across Tract B to the connection on Central will need to be constructed with Tract A and certified prior to C.O.
- 4. Remove all "Conceptual" markings.
- 5. Proposed contours and spot elevations are missing form sheet CG-102.
- 6. The waterblocks along the north drive aisle need to be 0.87' min. (not 0.8') unless supporting calculations for a variance can be provided.

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

- 7. For trash enclosures serving food service developments (if any are proposed for this site), demonstrate control of liquids from dumpster areas per DPM Chapter 22.9.E, Table 1 by containing runoff from the dumpster area and discharging to the sanitary sewer. If this information is on the utility plan please provide it, or show on the grading plan.
- 8. Subbasins will need to be delineated for each first flush pond and each pond sized for the area draining to it. Roof runoff needs to routed to the ponds once the site layout is finalized.
- 9. This project requires an ESC Plan, submitted to the Stormwater Quality Engineer (Curtis Cherne PE, ccherne@cabq.gov or 924-3420).
- 10. Additional comments may be provided at Building Permit, based on final site layout and level of detail shown on plans.
- 11. For Information. Hydrology and Transportation files are available online through the City's GIS Viewer 2.0: https://www.cabq.gov/gis/advanced-map-viewer. Turn on the *HydroTrans* layer: *Operational Layers > Albuquerque Layers > Sites > HydroTrans*. Select the desired polygon from the map and click *Link to Project Documents*.

PO Box 1293

Prior to Certificate of Occupancy (For Information):

Albuquerque

12. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required.

NM 87103

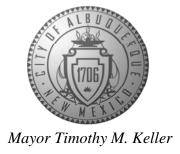
www.cabq.gov

- 13. A Bernalillo County Recorded <u>Drainage Covenant (No Public Easement)</u> is required for the stormwater detention pond (Tract A). The original notarized form, exhibit A (legible on 8.5x11 paper), and recording fee (\$25, payable to Bernalillo County) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) or Madeline Carruthers (mtafoya@cabq.gov, 924-3997) regarding the routing and recording process for covenants. The routing and recording process for covenants can take a month or longer; Hydrology recommends beginning this process as soon as possible as to not delay approval for certificate of occupancy.
- 14. Bernalillo County Recorded Private Facility Drainage Covenants are required for the stormwater quality ponds (one for Tract A and one for Tract B). The original notarized form, exhibit A (legible on 8.5x11 paper), and recording fee (\$25, payable to Bernalillo County) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) or Madeline Carruthers (mtafoya@cabq.gov, 924-3997) regarding the routing and recording process for covenants. The routing and recording process for covenants can take a month or longer; Hydrology recommends beginning this process as soon as possible as to not delay approval for certificate of occupancy.

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director

Sincerely,



If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

Dana Peterson, P.E.
Senior Engineer, Planning Dept.
Development Review Services

PO Box 1293
Albuquerque
NM 87103

www.cabq.gov



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Nuevo Atrisco			
DRB#: PR-2018-1007489	EPC#:	Work (Order#:
Legal Description: Tract B-1, West Route	66 Addition II		
City Address: 7909 Central Ave. NW - Albu	querque, NM 87121		
Applicant: Isaacson & Arfman, PA		Contact:	Fred C. Arfman
Address: 128 Monroe Street NE - Albuquerque	e, NM 87108	OI	r Bryan J. Bobrick
Phone#:(505) 268-8828			freda@iacivil.com
		or bry	anb@iacivil.com
Address: 7601 Jefferson Street NE, Suite 100	- Albuquerque, NM 87109		
Phone#: (505) 761-9700	Fax#:	E-mail: _	
TYPE OF DEVELOPMENT: X PLAT	RESIDENCE	DRB SITE	ADMIN SITE
Check all that Apply:			
DEPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION TYPE OF SUBMITTAL: ENGINEER/ARCHITECT CERTIFICATION PAD CERTIFICATION X CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE REPORT DRAINAGE MASTER PLAN FLOODPLAIN DEVELOPMENT PERMIT AI ELEVATION CERTIFICATE CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL) TRAFFIC IMPACT STUDY (TIS) STREET LIGHT LAYOUT X OTHER (SPECIFY) Supplemental Drainage PRE-DESIGN MEETING? IS THIS A RESUBMITTAL?: _X Yes No	BUILDING CERTIFIC. PRELIMIN SITE PLAN SITE PLAN X FINAL PL. SIA/ RELE PPLIC — FOUNDAT GRADING SO-19 APF PAVING P GRADING WORK ORI Calculations — CLOMR/LG	F PERMIT APPR ATE OF OCCUP IARY PLAT APP N FOR SUB'D A N FOR BLDG. P AT APPROVAL CASE OF FINAN PERMIT APPR PROVAL PERMIT APPRO / PAD CERTIFI DER APPROVAL OMR AIN DEVELOPN	PANCY PROVAL APPROVAL PERMIT APPROVAL CICIAL GUARANTEE APPROVAL COVAL VAL CATION
DATE SUBMITTED: July 26, 2017			
COA STAFF:	ELECTRONIC SUBMITTAL RECEIVED:	:	

FEE PAID:___

JULY 26, 2018

Supplemental Drainage Calculations

for

Nuevo Atrisco

Conceptual Grading and Drainage Plan Submittal

by



Project Information

<u>PROPERTY</u>: THE SITE IS AN UNDEVELOPED COMMERCIAL PROPERTY LOCATED WITHIN C.O.A. VICINITY MAP K-10. THE SITE IS BOUND TO THE EAST BY UNSER BLVD, TO THE NORTH AND WEST BY DEVELOPED COMMERCIAL PROPERTY AND SARRACINO PI NW AND TO THE SOUTH BY CENTRAL AVE.

<u>PROPOSED IMPROVEMENTS</u>: THE PROPOSED IMPROVEMENTS INCLUDE FARMERS MARKET OPEN PAVILIONS, OFFICE SPACE, APARTMENTS 4 STORIES, RETAIL/RESTRAURANTS, PARKING, AND LANDSCAPING.

<u>LEGAL</u>: A PORTION OF TRACT B1 WEST ROUTE 66 ADDITION II, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

<u>BENCHMARK</u>: VERTICAL DATUM IS BASED UPON THE ALBUQUERQUE CONTROL SURVEY MONUMENT "9-K10", ELEVATION = 5117.72 FEET (NAVD 1988).

OFF-SITE FLOW: NO OFF-SITE DRAINAGE AFFECTS THIS PROPERTY.

<u>FLOOD HAZARD</u>: PER BERNALILLO COUNTY FIRM MAP 35001C0328J, MAP (REVISION DATE NOVEMBER 4, 2016), THE SITE IS LOCATED WITHIN FLOODZONE 'X' DESIGNATED AS AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN. A PORTION OF THE ADJACENT STREET, CENTRAL AVENUE, IS ENCUMBERED BY ZONE AO (DEPTH 1').

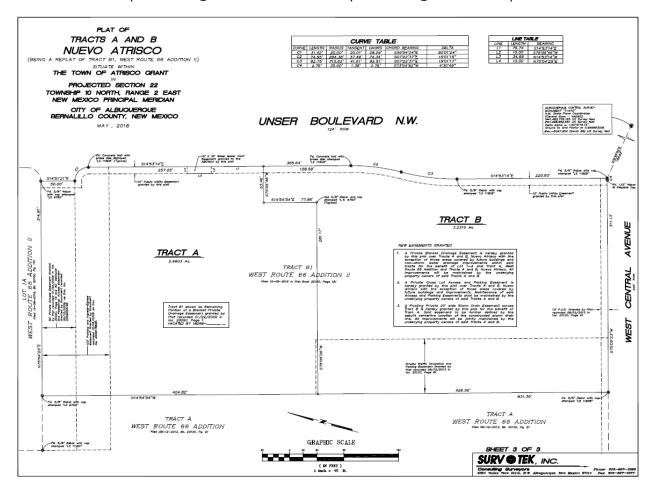
DRAINAGE PLAN CONCEPT: PER THE UNSER BOULEVARD RECONSTRUCTION DRAINAGE REPORT (COA HYDROLOGY FILE K10/D057,) BY HUITT-ZOLLARS DATED APRIL 2017, THIS PROPERTY FALLS WITHIN DRAINAGE BASIN 13D.3. THE OVERALL BASIN IS SIZED AT 17.613 ACRES WITH A CALCULATED DISCHARGE OF 60.77 CFS (3.45 CFS/ACRE). NEW STORM DRAIN IMPROVEMENTS WILL BE CONSTRUCTED (CITY PROJECT NO. 4383.91) WHICH INCLUDES STORM DRAIN ACCESS TO THE EXISTING 48" STORM DRAIN PROVIDED FOR THIS BASIN (PASSING FLOW UNDER CENTRAL AVENUE).



COA Hydrology and Transportation M



The existing property (West Route 66 Addition II, Tract B1) is 6.2218 acres and will be subdivided into two tracts. Tract A (north side @ 2.9903 ac. and Tract B (south side @ 3.2315 acres).



NEW EASEMENTS GRANTED

- 1. A Private Blanket Drainage Easement is hereby granted by this plat over Tracts A and B, Nuevo Atrisco with the exception of those areas covered by future buildings and non—storm water drainage improvements within said tracts for the benefit of Lot 1—A and Tract A, West Route 66 Addition and Tracts A and B, Nuevo Atrisco. All improvements will be maintained by the underlying property owners of said Tracts A and B.
- 2. A Private Cross Lot Access and Parking Easement is hereby granted by this plat over Tracts A and B, Nuevo Atrisco with the exception of those areas covered by future buildings and improvements. Maintenance of said Access and Parking Easements shall be maintained by the underlying property owners of said Tracts A and B.
- 3. A Floating Private 20' wide Storm Drain Easement across Tract B is hereby granted by this plat for the benefit of Tract A. Said easement to be further defined by the asbuilt centerline location of the constructed storm drain line. All improvements will be jointly maintained by the underlying property owners of said Tracts A and B.

ALLOWABLE DISCHARGE

Per the Unser Boulevard Reconstruction Drainage Report (COA Hydrology File K10/D057 dated April 2017) by Huitt-Zollars, West Route 66 Addition II, Tracts A and B fall within Drainage Basin 13D.3 (17.613 acres) which has an allowable release rate of 60.77 cfs or 3.45 cfs / acre.

Tract A (2.9903 ac) + Tract B (3.2315 ac) total 6.2218 acres. At 3.45 cfs/acre, the Property is permitted to discharge:

3.45 * 6.2218 = 21.47 cfs TOTAL ALLOWABLE DISCHARGE FROM TRACT A + TRACT B

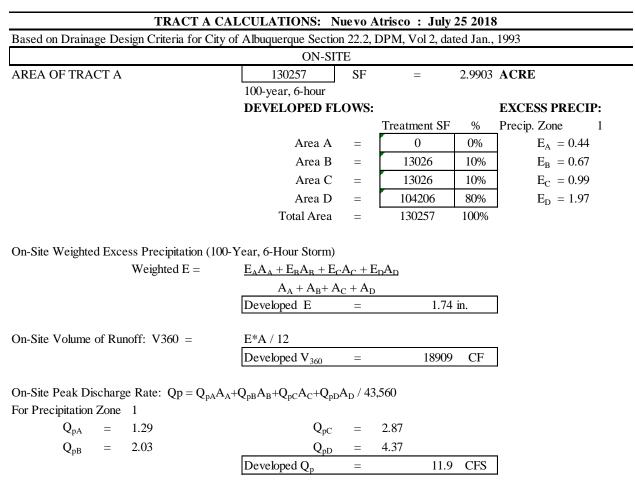
Based on a proposed land treatment ration of 0%A: 5%B: 10%C: 85%D, Tract B will generate 13.3 cfs.

TRACT B CAI	LCULATIONS: No	ue vo A	trisco : July	25 2018	3
Based on Drainage Design Criteria for City of			·		
	ON-SIT	E			
AREA OF TRACT B	140764	SF	=	3.2315	ACRE
	100-year, 6-hour				
	DEVELOPED FL	OWS:			EXCESS PRECIP:
			Treatment SF	%	Precip. Zone 1
	Area A	=	0	0%	$E_{A} = 0.44$
	Area B	=	7038	5%	$E_{B} = 0.67$
	Area C	=	14076	10%	$E_{\rm C} = 0.99$
	Area D	=	119650	85%	$E_{\rm D} = 1.97$
	Total Area	=	140764	100%	
On-Site Weighted Excess Precipitation (100-Y Weighted E $=$	Year, 6-Hour Storm) $ \underline{E_A A_A + E_B A_B + E_C} $ $ \underline{A_A + A_B + A_C} $ Developed E			in.]
On-Site Volume of Runoff: V360 =	E*A / 12 Developed V ₃₆₀	=	21197	CF]
On-Site Peak Discharge Rate: $Qp = Q_{pA}A_A +$ For Precipitation Zone 1 $Q_{pA} = 1.29$ $Q_{pB} = 2.03$	$Q_{pB}A_B+Q_{pC}A_C+Q_{pD}A_C$ Q_{pC} Q_{pD} Developed Q_p	$A_{D} / 43$ $=$ $=$ $=$ $=$	2.87 4.37	CFS	1
	z t reloped Qp		13.3	015	J

Tract B will be permitted free discharge of 13.3 cfs to the existing storm drain system installed as part of the recent Central Ave. improvements (City Project No. 4383.91).

The Tract A + Tract B allowable discharge (21.47 cfs) - Tract B fully developed (13.3 cfs) = 8.17 cfs for Tract A maximum discharge rate.

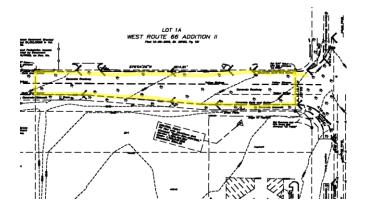
Based on a proposed land treatment ration of 0%A: 10%B: 10%C: 80%D, Tract A will generate 11.9 cfs.



The north end of the Tract A includes an existing paved Private Access Easement. This easement will continue to surface drain east to Unser Blvd.

The 10,970 sf area is 100% Impervious and generates 1.10 cfs. New water blocks at the Tract A north entrance drives will ensure this drainage does not enter the property.

BASIN NO. E1		DESCRIPTION	Existing	North Drive Drain	ning to Unser Blvd.	
Area of basin flows =	10970	SF	=	0.3 Ac.		
The following calculation	ons are based on	Treatment areas as shown	in table to the righ	t LAND TR	REATMENT	
	Sub-basin Weig	hted Excess Precipitation (s	see formula above) A =	0%	
	Weighted E	= 1.9	7 in.	$\mathbf{B} =$	0%	
	Sub-basin Volun	ne of Runoff (see formula a	bove)	C =	0%	
	V_{360}	= 180	1 CF	D =	100%	
	Sub-basin Peak	Discharge Rate: (see formu	la above)			
	Q_{P}	= 1.1	0 cfs			



The existing paved access discharging east to Unser Blvd.

Subtracting 1.10 cfs draining to Unser Blvd. leaves (11.9 cfs – 1.10 cfs) 10.8 cfs.

As calculated above, Tract A is permitted to discharge 8.17 cfs total to meet the allowable release rate for Tracts A and B of 21.47 cfs.

Subtracting 1.10 cfs draining to Unser Blvd. leaves (8.17 cfs - 1.10 cfs) = 7.07 cfs allowable discharge rate for the portion of Tract A draining south through Tract B.

7.07 cfs from Tract A and 13.3 cfs from Tract B (20.37 cfs total) will be directed south to an existing 48" storm drain pipe connected to the Unser Blvd. trunk line specifically left open to collect flow from the Property: West Route 66 Addition II tract B1.

Therefore, 10.8 cfs (remainder of Tract A) - 7.07 cfs (allowable discharge from Tract A) = required Tract A detention of 3.73 cfs.

Based on the inflow/outflow hydrograph below, a detention pond volume of 6823 cf will be required.

CALCULATIONS: Nuevo Atrisco: July 25 2018
HYDROGRAPH FOR SMALL WATERSHED
DPM SECTION 22-2 * PAGE A-13/14

Base time, t_B, for a small watershed hydrograph is,

$$tB = (2.107 * E * A / Q_P) - (0.25 * A_D / A)$$

Where

	QF) (0:25	11D / 11)	
E	=	1.74 inches	
A	=	2.99 acres	
A_{D}	=	2.39 acres	
Q_{P}	=	10.8 cfs	

$$t_B = 0.82 \text{ hours}$$

E is the excess precipitation in inches (from DPM TABLE A-8), Q_P is the peak flow, A_D is the area (acres) of treatment D, and A_T is the total area in acres. Using the time of concentration, t_C (hours), the time to peak in hours is:

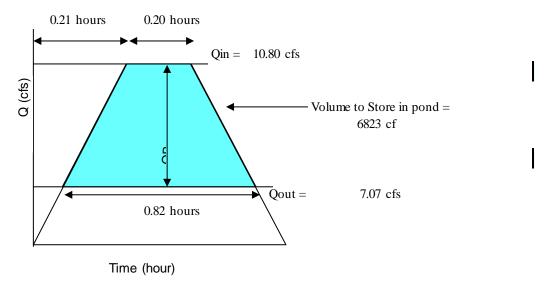
$$t_P = (0.7 * tC) + ((1.6 - (A_D / A)) / 12)$$

Where

$$t_C = 0.20 \text{ hours}$$

$$t_P = 0.21 \text{ hours}$$

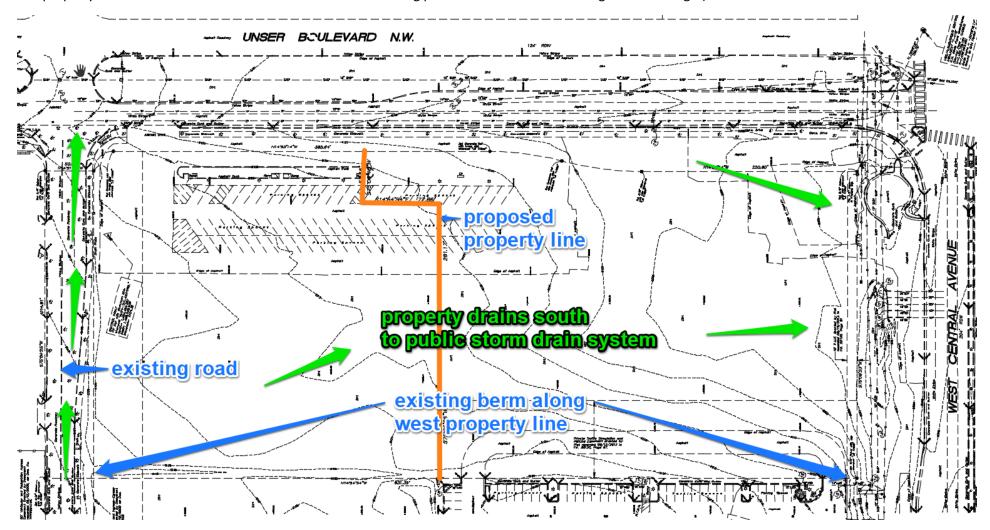
Continue the peak for $0.25 * A_D / A_T$ hours. When A_D is zero, the hydrograph will be triangular. When A_D is not zero, the hyrograph will be trapezoidal. see the graph below:

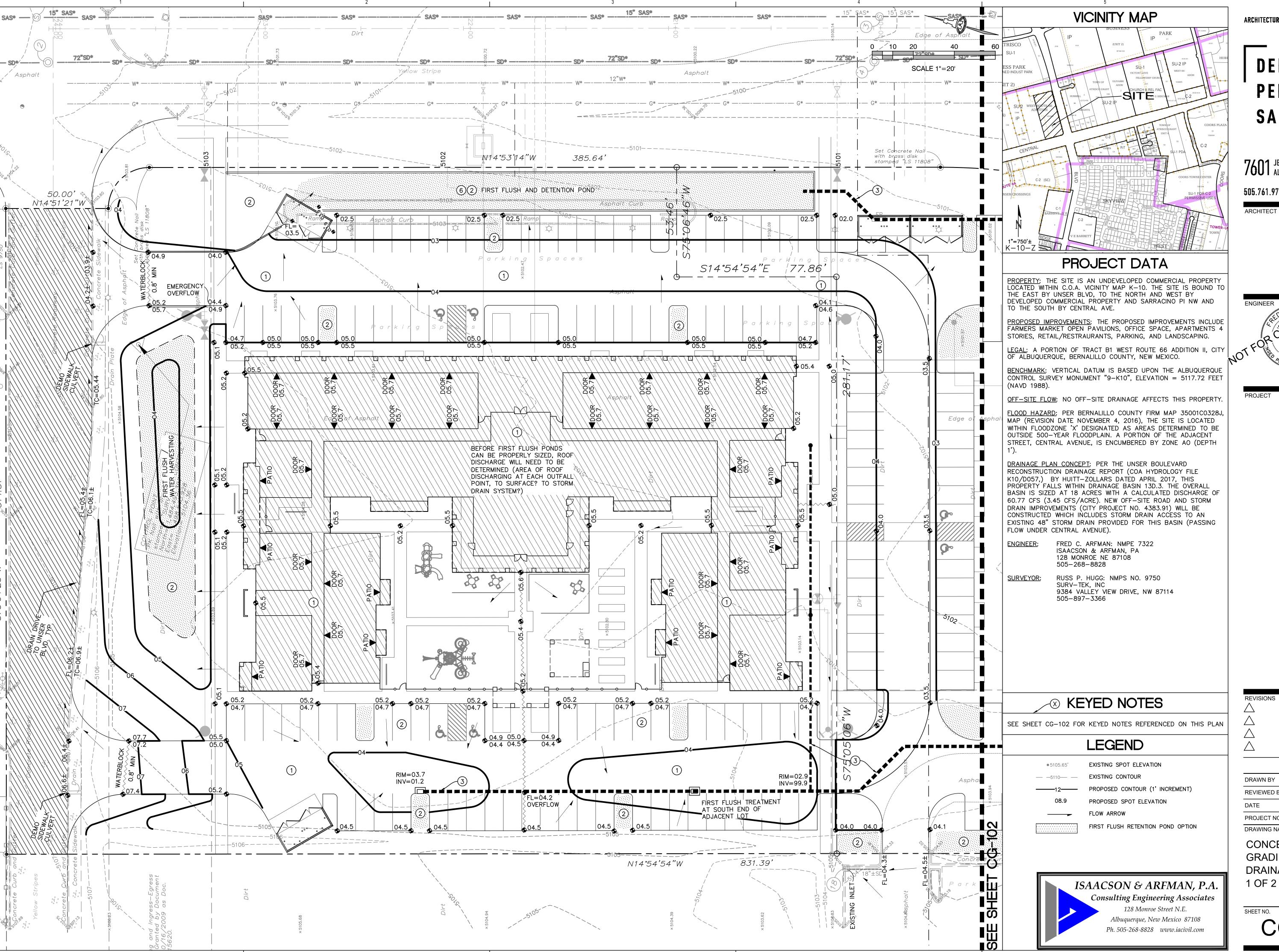


INFLOW / OUTFLOW HYDROGRAPH

Tract A will develop first. A permanent detention pond will be constructed on Tract A which with orifice control to limit release.

The property is isolated from off-site flow other than to the existing private access easement along the north edge (





ARCHITECTURE / DESIGN / INSPIRATION

DEKKER PERICH SABATINI

7601 JEFFERSON NE, SUITE 100 ALBUQUERQUE, NM 87109

505.761.9700 / DPSDESIGN.ORG

ENGINEER

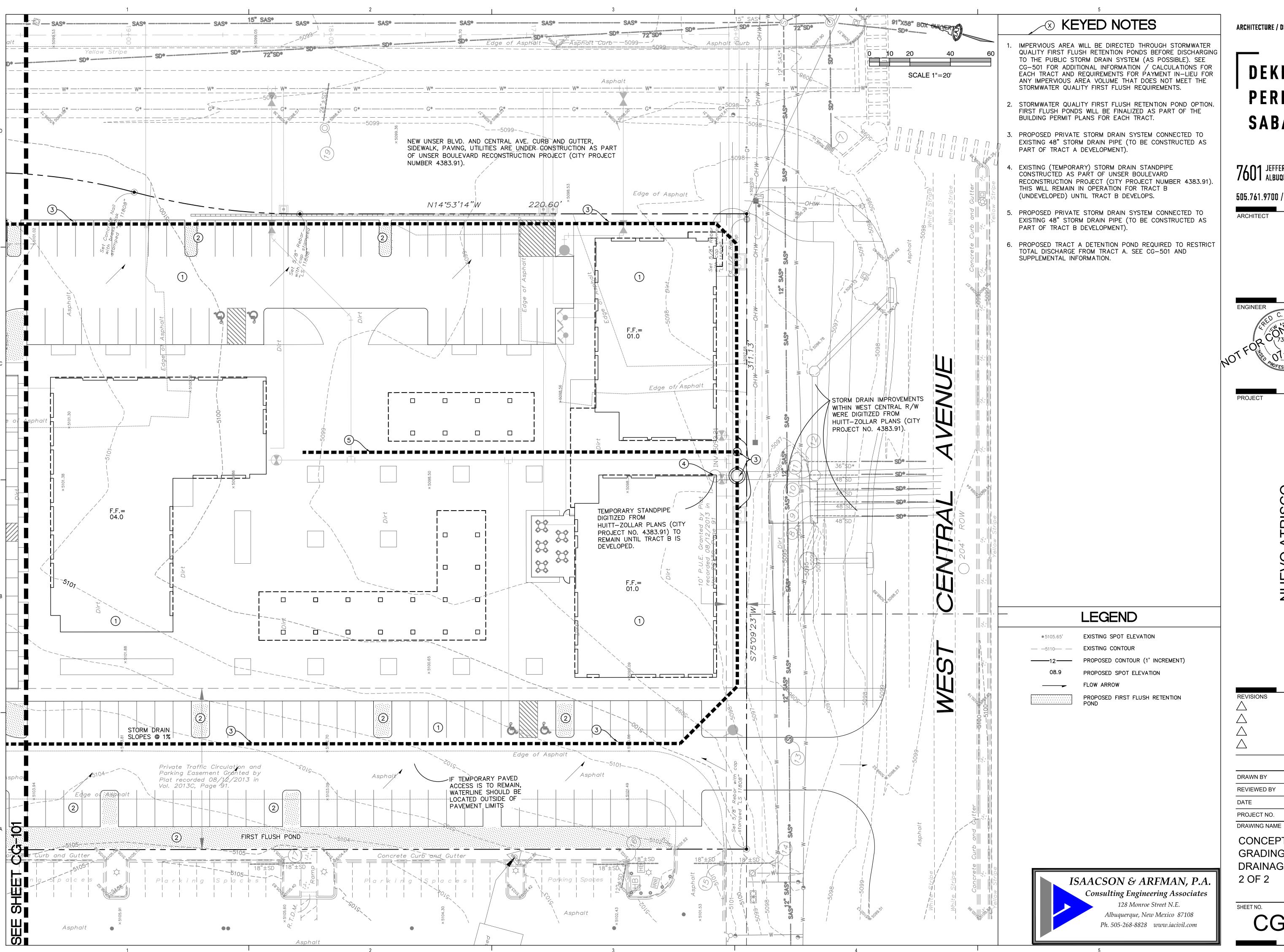
NUEVO ATRISCO CENTRAL & UNSER ALBUQUERQUE, NM

REVISIONS

DRAWN BY BJB **REVIEWED BY** FCA DATE 6/18/2018 PROJECT NO. 17-0153 DRAWING NAME

CONCEPTUAL **GRADING AND** DRAINAGE PLAN 1 OF 2

SHEET NO. CG-101



ARCHITECTURE / DESIGN / INSPIRATION

DEKKER PERICH SABATINI

7601 JEFFERSON NE, SUITE 100 ALBUQUERQUE, NM 87109

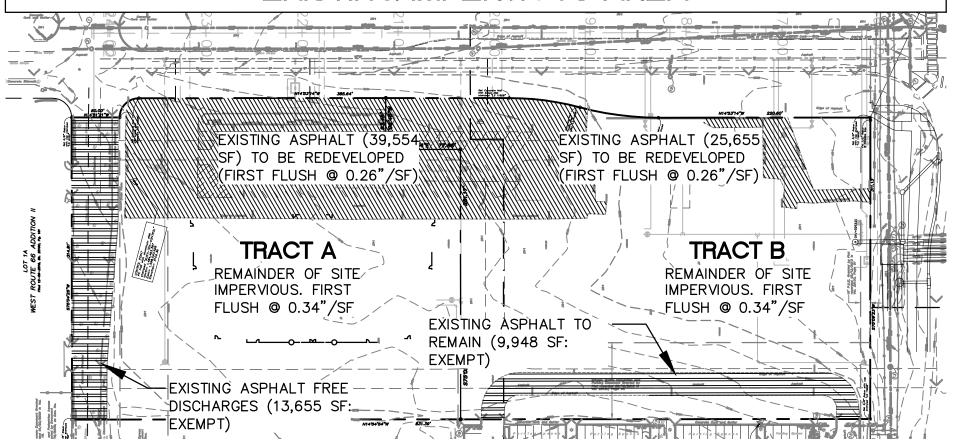
505.761.9700 / DPSDESIGN.ORG

REVISIONS

DRAWN BY REVIEWED BY FCA 6/18/2018 PROJECT NO. 17-0153

CONCEPTUAL **GRADING AND** DRAINAGE PLAN 2 OF 2

SHEET NO. CG-102



STORMWATER QUALITY CONTROL MEASURES ARE REQUIRED TO PROVIDE MANAGEMENT OF 'FIRST FLUSH' (FFL: DEFINED AS THE 90TH PERCENTILE STORM EVENT OR 0.34" [0.44" LESS 0.1" FOR INITIAL ABSTRACTION] OF STORMWATER WHICH DISCHARGES DIRECTLY TO A PUBLIC STORM DRAINAGE SYSTEM).

TRACT A:

THE ESTIMATED IMPERVIOUS AREA FOR TRACT A IS 80% OF TOTAL AREA. (0.80 * 130,257) = 104,206 SF.

EXISTING ASPHALT TO REMAIN CONSISTS OF THE ACCESS ROAD ON THE NORTH END OF THE SITE (13,655 SF). THIS IS EXEMPT FROM FFL REQUIREMENT REDUCING THE FFL IMPERVIOUS AREA TO 104,206-13,655 = 90,551 SF.

EXISTING ASPHALT THAT IS BEING REDEVELOPED (REMOVED/REPLACED) IS SUBJECT TO A REDUCED RATE OF 0.26"/SF.

THE EXISTING NE ASPHALT PAVED PARKING WITHIN TRACT A IS 39,554 SF. FFL RETENTION PONDING VOLUME REQUIRED FOR THIS AREA = 0.26" * TYPE 'D' AREA: 0.26/12 * (39,554 SF) = 857 CF.

FFL RETENTION PONDING VOLUME REQUIRED FOR THE REMAINING AREA (90,551-39,554) = 50,997 SF @ 0.34" * TYPE 'D' AREA: 0.34/12 * (50,997 SF) = 1,445 CF

TOTAL FFL RETENTION FOR TRACT A = 857 + 1,445 = 2,302 CF.

FFL RETENTION PONDS WILL BE CONSTRUCTED AS POSSIBLE. FINAL LOCATIONS AND DESIGN WILL BE PROVIDED AS PART OF BUILDING PERMIT CONSTRUCTION DOCUMENTS. HATCHED AREAS ARE SHOWN TO INDICATE POSSIBLE POND LOCATIONS. A PRIVATE FACILITY DRAINAGE COVENANT WILL BE PROVIDED FOR THE FIRST FLUSH PONDS.

TRACT B:

THE ESTIMATED IMPERVIOUS AREA FOR TRACT B IS 85% OF TOTAL AREA. (0.85 * 140,764) = 119,650 SF.

EXISTING ASPHALT TO REMAIN CONSISTS OF THE EXISTING ASPHALT DRIVE CONSTRUCTED AS PART OF THE ADJACENT LIBRARY IMPROVEMENTS, WITHIN A SHARED EASEMENT (9,948 SF). THIS IS EXEMPT FROM FFL REQUIREMENT REDUCING THE FFL IMPERVIOUS AREA TO 119,650-9,948 = 109,702 SF.

EXISTING ASPHALT THAT IS BEING REDEVELOPED (REMOVED/REPLACED) IS SUBJECT TO A REDUCED RATE OF 0.26"/SF.

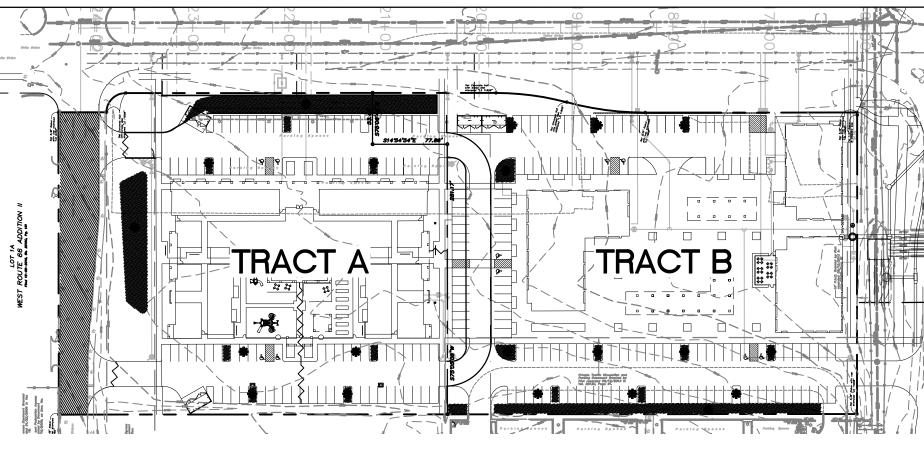
THE EXISTING ASPHALT PAVED PARKING WITHIN TRACT B IS 25,655 SF. FFL RETENTION PONDING VOLUME REQUIRED FOR THIS AREA = 0.26" * TYPE 'D' AREA: 0.26/12 * (25,655 SF) = 556 CF.

FFL RETENTION PONDING VOLUME REQUIRED FOR THE REMAINING AREA (109,702 - 25,655) = 84,047 SF @ 0.34" * TYPE 'D' AREA: 0.34/12 * (84,047 SF) = 2,381 CF

TOTAL FFL RETENTION FOR TRACT A = 556 + 2,381 = 2,937 CF.

FFL RETENTION PONDS WILL BE CONSTRUCTED AS POSSIBLE. FINAL LOCATIONS AND DESIGN WILL BE PROVIDED AS PART OF BUILDING PERMIT CONSTRUCTION DOCUMENTS. HATCHED AREAS ARE SHOWN TO INDICATE POSSIBLE POND LOCATIONS. A PRIVATE FACILITY DRAINAGE COVENANT WILL BE PROVIDED FOR THE FIRST FLUSH PONDS.

* FIRST FLUSH RETENTION POND OPTIONS



STORMWATER QUALITY CONTROL FIRST FLUSH POND OPTIONS ARE AVAILABLE ON BOTH TRACTS A AND B. TOTAL STORMWATER QUALITY POND VOLUMES ARE ANALYZED / CALCULATED AT LEFT.

FIRST FLUSH PONDS WILL BE FINALIZED AS PART OF THE BUILDING PERMIT PLANS FOR EACH TRACT.

PRIOR TO BUILDING PERMIT APPROVAL, A "PAYMENT IN-LIEU FOR STORM WATER QUALITY VOLUME REQUIREMENT" TREASURY DEPOSIT SLIP WILL BE PROVIDED BY C.O.A. HYDROLOGY. THIS WILL BE BASED ON THE PORTION OF FIRST FLUSH VOLUME (\$8.00 PER CF) THAT IS NOT RETAINED ON-SITE. A COPY OF THE PAID RECEIPT WILL BE REQUIRED PRIOR TO BUILDING PERMIT APPROVAL.

A DRAINAGE COVENANT IS REQUIRED FOR THE STORMWATER QUALITY FIRST FLUSH PONDS AND FOR THE DETENTION POND(S) AND THEIR OUTFALL STRUCTURES. THE ORIGINAL NOTARIZED FORM, EXHIBIT A (LEGIBLE ON 8.5X11 AND RECORDING FEE (\$25, PAYABLE TO CITY OF ALBUQUERQUE) MUST BE TURNED INTO DRC (4TH, PLAZA DEL SOL) FOR ROUTING. PLEASE CONTACT CHARLOTTE LABADIE (CLABADIE@CABQ.GOV, 924—3996) OR MADELINE CARRUTHERS (MTAFOYA@CABQ.GOV, 924—3997) REGARDING THE ROUTING AND RECORDING PROCESS FOR COVENANTS.

ALLOWABLE DISCHARGE

PER THE UNSER BOULEVARD RECONSTRUCTION DRAINAGE REPORT (COA HYDROLOGY FILE K10/D057 DATED APRIL 2017) BY HUITT-ZOLLARS, WEST ROUTE 66 ADDITION II, TRACTS A AND B FALL WITHIN DRAINAGE BASIN 13D.3 WHICH HAS AN ALLOWABLE RELEASE RATE OF 3.45 CFS / ACRE.

TRACT A (2.9903 AC) + TRACT B (3.2315 AC) TOTAL 6.2218 ACRES. AT 3.45 CFS/ACRE, THE PROPERTY IS PERMITTED TO DISCHARGE:

3.45 * 6.2218 = 21.47 CFS TOTAL ALLOWABLE DISCHARGE FROM TRACT A + TRACT B

TRACT B WILL BE PERMITTED FREE DISCHARGE 13.3 CFS (BASED ON 0%A: 5%B: 10%C: 85%D).

TRACT A WILL REQUIRE DETENTION PONDING TO LIMIT DISCHARGE TO 8.17 CFS. DISCHARGE THE EXISTING NORTH ACCESS ROAD WILL CONTINUE TO FREE DISCHARGE 1.10 CFS TO UNSER BLVD. THE REMAINDER (7.07 CFS) WILL DISCHARGE TO THE 48" DIA. STORM DRAIN PIPE PROVIDED INTO PROPERTY FROM CENTRAL BLVD.

TOTAL DISCHARGE FROM PROPERTY IS LIMITED TO 21.47 CFS:

13.3 CFS TRACT B

1.10 CFS EXISTING TRACT A ACCESS ROAD (NORTH SIDE)

7.07 CFS REMAINDER OF TRACT A (EXCESS TO BE DETAINED WITHIN EAST POND USING ORIFICE CONTROL

STRUCTURE TO BE DESIGNED AS PART OF BUILDING PERMIT PLANS FOR TRACT A)

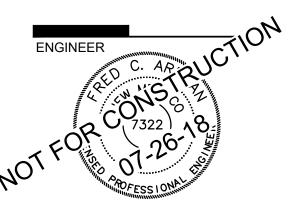
ARCHITECTURE / DESIGN / INSPIRATION

DEKKER
PERICH
SABATINI

7601 JEFFERSON NE, SUITE 100 ALBUQUERQUE, NM 87109

505.761.9700 / DPSDESIGN.ORG

ARCHITECT



PROJECT

NUEVO ATRISCO CENTRAL & UNSER ALBUQUERQUE, NM

DRAWN BY

REVIEWED BY

FCA

DATE

6/18/2018

PROJECT NO.

17-0153

DRAWING NAME

GRADING AND DRAINAGE DETAILS AND CALCULATIONS

SHEET NO.

ISAACSON & ARFMAN, P.A.

Consulting Engineering Associates

128 Monroe Street N.E.

Albuquerque, New Mexico 87108

Ph. 505-268-8828 www.iacivil.com