

CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

April 19, 2017

Farshad Omidvaran, P.E.
Parsons Brinkerhoff
6100 Uptown Blvd NE
Albuquerque, NM 87110

RE: **ABQ Ride Daytona Transit Facility
Conceptual Grading and Drainage Plan
Engineer's Stamp Date: 3/20/17
Hydrology File: J09D025**

Dear Mr. Omidvaran:

Based on the information provided in your submittal received on 3/20/17, the Conceptual Grading and Drainage Plan is approved for Administrative Amendment for Grading Permit and Paving Permit.

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

Sincerely,

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



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2016)

Project Title: ABQ Ride Daytona Design **Building Permit #:** _____ **Hydrology File #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: Lot A, West Side Transit Facility
City Address: 8001 Daytona Road NW, Albuquerque, NM 87121

Applicant: Daytona Transit Facility (COA) **Contact:** Nolan Meadows
Address: 8001 Daytona Place, NM, Albuquerque, NM 87121
Phone#: 505-239-9924 **Fax#:** _____ **E-mail:** nmeadows@cabq.gov
Other Contact: WSP|Parsons Brinckerhoff **Contact:** Jim Buckman
Address: 6100 Uptown Blvd. NE Suite 600, Albuquerque, NM 87110
Phone#: 505-878-6577 **Fax#:** _____ **E-mail:** Buckman@pbworld.com

Check all that Apply:

DEPARTMENT:

☒ **HYDROLOGY/ DRAINAGE**
☐ **TRAFFIC/ TRANSPORTATION**

TYPE OF SUBMITTAL:

☐ **ENGINEER/ARCHITECT CERTIFICATION**

☒ **CONCEPTUAL G & D PLAN**
☐ **GRADING PLAN**
☐ **DRAINAGE MASTER PLAN**
☐ **DRAINAGE REPORT**
☐ **CLOMR/LOMR**

☐ **TRAFFIC CIRCULATION LAYOUT (TCL)**
☐ **TRAFFIC IMPACT STUDY (TIS)**

☐ **OTHER (SPECIFY) _____**
☐ **PRE-DESIGN MEETING?**

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

☐ **BUILDING PERMIT APPROVAL**
☐ **CERTIFICATE OF OCCUPANCY**

☐ **PRELIMINARY PLAT APPROVAL**
☐ **SITE PLAN FOR SUB'D APPROVAL**
☐ **SITE PLAN FOR BLDG. PERMIT APPROVAL**
☐ **FINAL PLAT APPROVAL**

☐ **SIA/ RELEASE OF FINANCIAL GUARANTEE**
☐ **FOUNDATION PERMIT APPROVAL**
☐ **GRADING PERMIT APPROVAL**
☐ **SO-19 APPROVAL**
☐ **PAVING PERMIT APPROVAL**
☐ **GRADING/ PAD CERTIFICATION**
☐ **WORK ORDER APPROVAL**
☐ **CLOMR/LOMR**

IS THIS A RESUBMITTAL?: ☐ **Yes** ☒ **No**

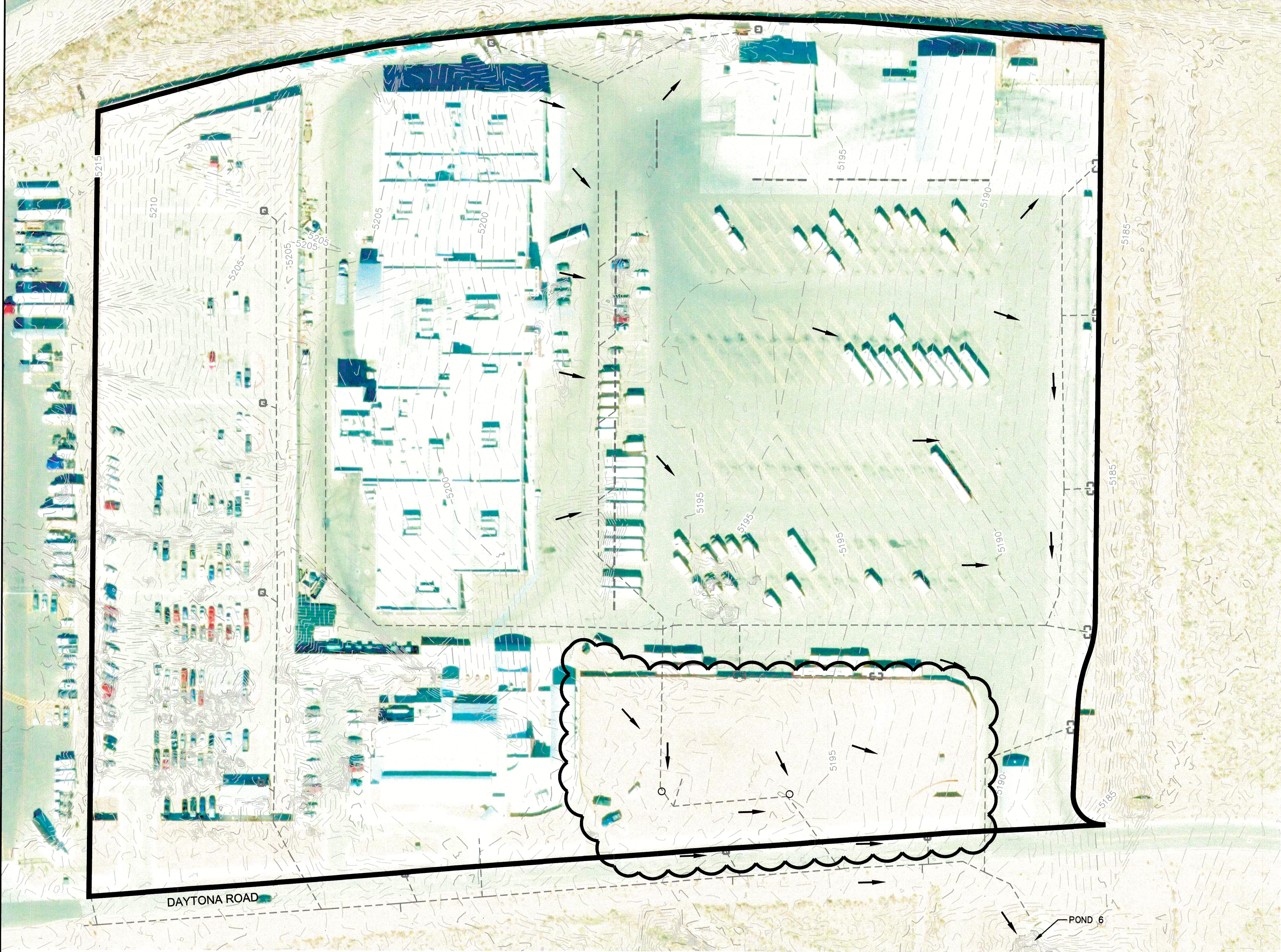
☒ **OTHER (SPECIFY)** Administrative Amendment

DATE SUBMITTED: 3-20-2017 **By:** Zachary O'Connell for Jim Buckman

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

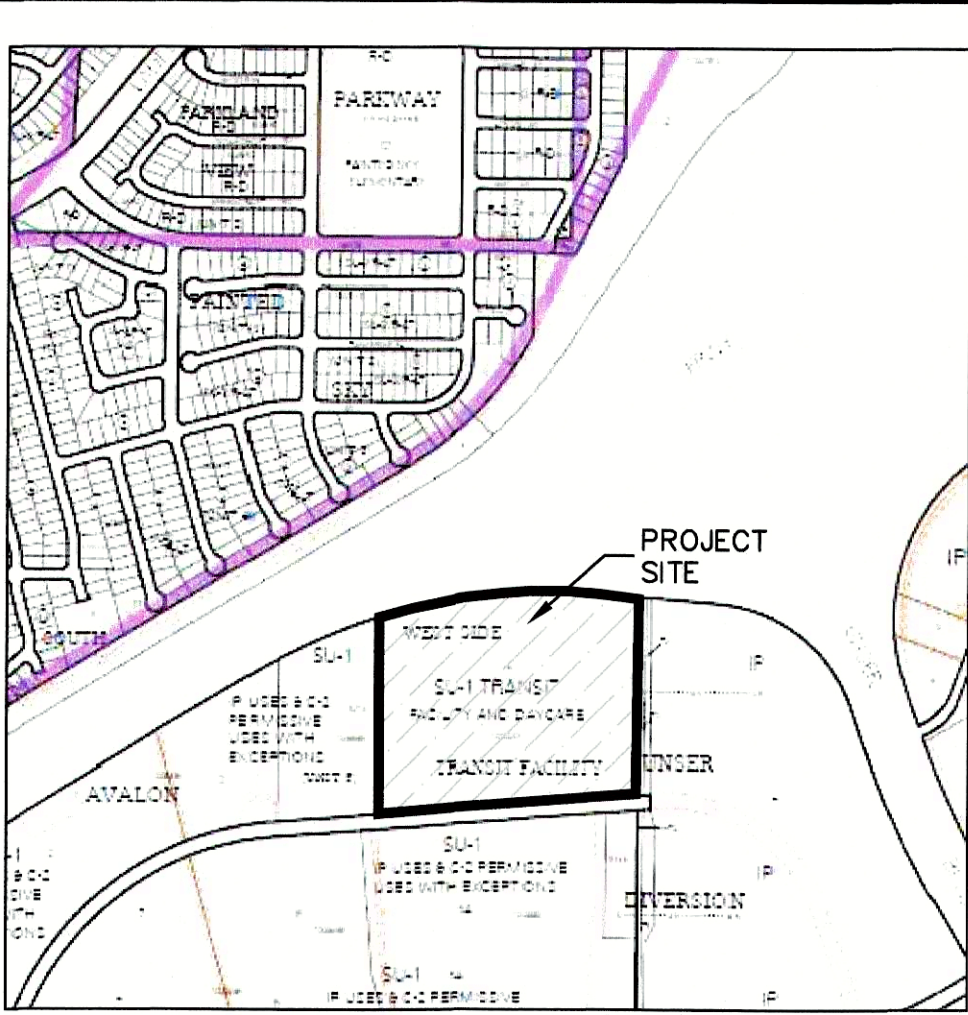
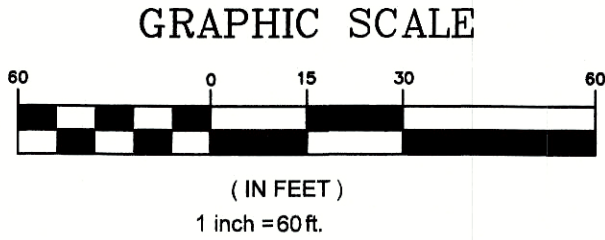
FEE PAID: _____



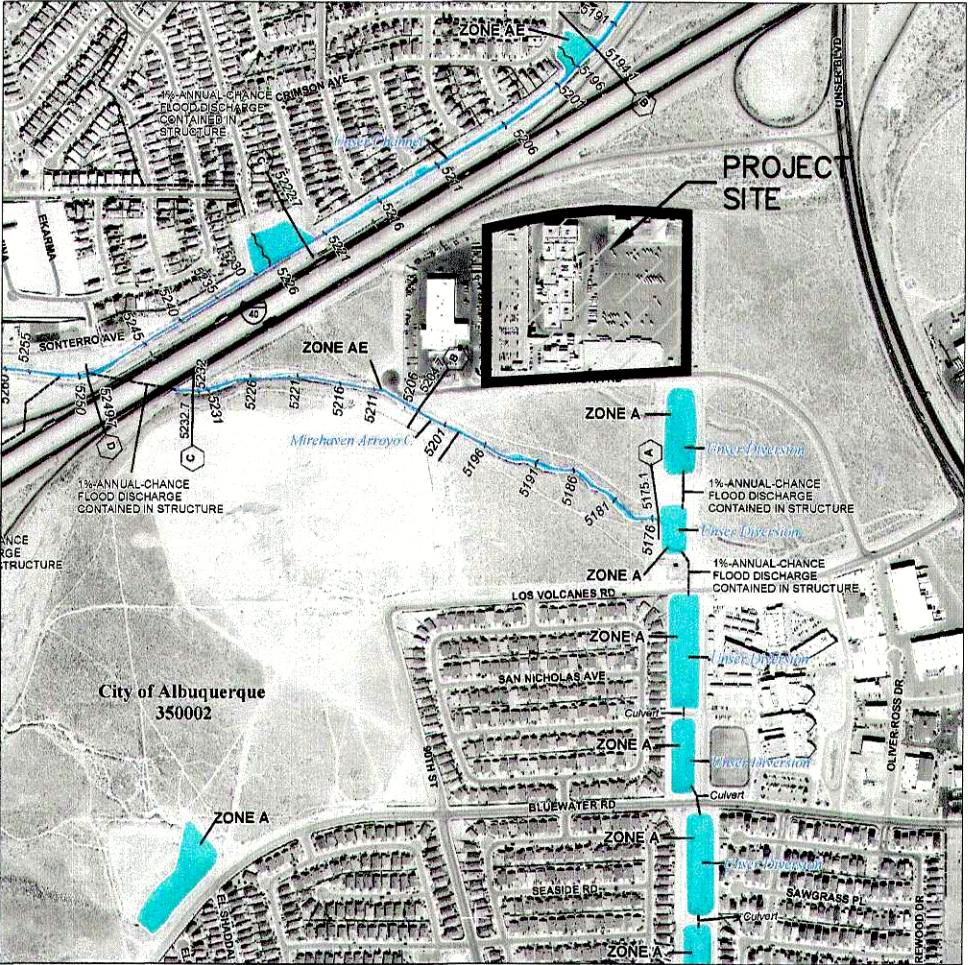
EXISTING CONDITIONS
THE EXISTING SITE IS NOT LOCATED WITHIN A DESIGNATED FLOOD ZONE. THE ENTIRE SITE DRAINS EASTERLY AND SOUTHEASTERLY TO AN EXISTING STORM DRAIN SYSTEM THAT CONVEYS THE FLOW TO AN EXISTING OFFSITE POND KNOWN AS POND 6 IN THE I-40 SOUTH AND UNSER DIVERSION MINI DMP.

LEGAL DESCRIPTION
LOT A, WEST SIDE TRANSIT FACILITY

NOTE:
THE CLOUDED AREA IDENTIFIES THE PORTION OF THE SITE THAT WOULD BE MODIFIED UNDER THIS PROJECT. NO CHANGES TO THE REMAINDER OF THE SITE ARE ANTICIPATED. SEE SHEET 2, PROPOSED CONDITIONS DRAINAGE BASIN MAP OF THE PLANS FOR THE PROPOSED MODIFICATIONS.



VICINITY MAP
ZONE ATLAS MAP: J-09-Z



FIRM MAP
MAP# 35001C0328
11/04/2016

- LEGEND**
- EXISTING FLOW DIRECTION
 - EXISTING STORM DRAIN SYSTEM
 - EXISTING BASIN BOUNDARY
 - EXISTING INLET
 - EXISTING TRENCH DRAIN

**PARSONS
BRINCKERHOFF**



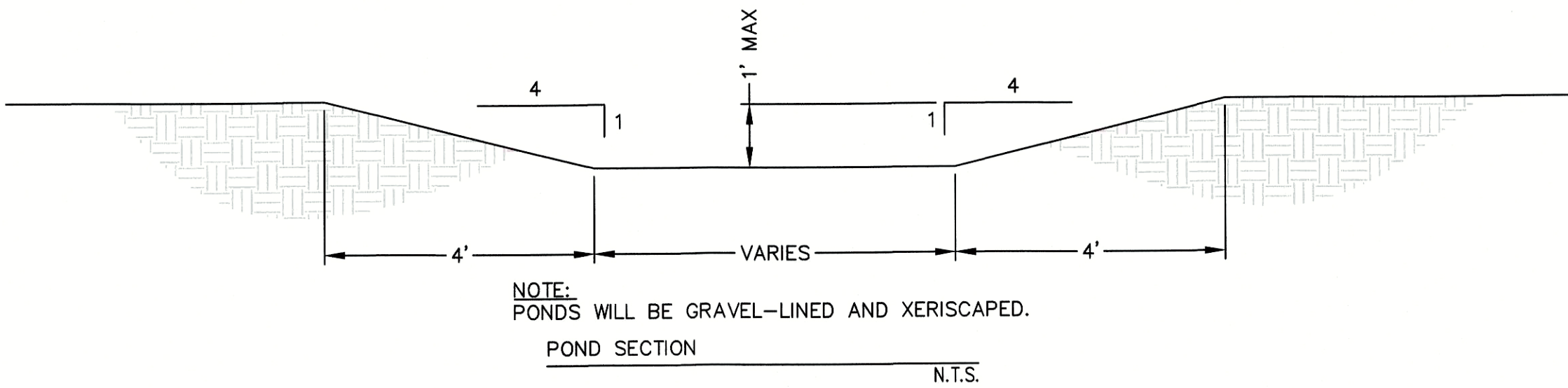
CITY OF ALBUQUERQUE
TRANSIT DEPARTMENT
ABQ RIDE

ABQ RIDE DAYTONA DESIGN
CONCEPTUAL GRADING AND DRAINAGE PLAN
EXISTING CONDITIONS DRAINAGE BASIN MAP

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	
		MO./DAY/YR.	MO./DAY/YR.
City Project No. COA 201700667	Zone Map No. J-09-Z	Sheet	
		1 of 2	

SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
FIELD NOTES		SURFACE ELEVATIONS DERIVED FROM 2010		CONTRACTOR	
NO.	BY	DATE	BERNALILLO COUNTY LIDAR DATA	WORK STARTED BY	NO.
				INSPECTOR	
				FIELD	
				VERIFICATION BY	
				CORRECTED BY	
				MICRO-FILM INFORMATION	
				RECORDED BY	
				NO.	





PROPOSED CONDITIONS
THE EXISTING SITE CONDITIONS OUTSIDE OF THE PROPOSED PAVED AREA WILL REMAIN THE SAME. FIRST FLUSH RUNOFF WILL BE RETAINED IN PROPOSED PONDING AREAS. THE VOLUME SHALL BE EQUAL TO: (IMPERVIOUS AREA x (0.44 - 0.1)/12)

IMPERVIOUS AREA = 54,353 SQ. FT.

REQUIRED VOLUME = 1540 CU. FT.

PROPOSED VOLUME PROVIDED = 1909 CU. FT.

THE EFFECTS OF THE IMPROVEMENTS (ADDITIONAL IMPERVIOUS AREA) ON THE DOWNSTREAM FACILITIES

HYDROLOGIC DATA - EXISTING (UNPAVED AREA)								
AREA (acres)	LAND TREATMENT PERCENTAGES BY TYPE				YIELD (cfs/ac)	Q100 (cfs)	V100-24 (ac-ft)	V100-24 (cu-ft)
	A	B	C	D				
1.25	-	-	100	-	2.87	3.6	0.103	4484

HYDROLOGIC DATA - PROPOSED (PAVED AREA)								
AREA (acres)	LAND TREATMENT PERCENTAGES BY TYPE				YIELD (cfs/ac)	Q100 (cfs)	V100-24 (ac-ft)	V100-24 (cu-ft)
	A	B	C	D				
1.25	-	-	-	100	4.37	5.5	0.253	11006

DELTA Q100 = 1.87 CFS

DELTA V100-24 = 6522.36 CU. FT.

THE I-40 SOUTH AND UNSER MINI DMP PREPARED BY EASTERLING CONSULTANTS LLC, APRIL 2014. HAS EVALUATED THIS SITE AS FULLY DEVELOPED AND HAS CONCLUDED THAT THE DOWNSTREAM STORM DRAIN AND POND FACILITIES HAVE SUFFICIENT CAPACITY. THE REPORT DESIGNATES THE SITE AS SUBBASIN A-3D WITH A DRAINAGE AREA OF 19.63 ACRES AND A CURVE NUMBER OF 91 ON THE EXISTING CONDITIONS DRAINAGE BASIN MAP.

TWO OF THE EXISTING COA SINGLE TYPE A DROP INLETS LOCATED ON DAYTONA ROAD (JUST SOUTH OF THE SITE) WOULD EACH RECEIVE AN ADDITIONAL FLOW OF 1 CFS ±. THIS IS BASED ON EXISTING OFFSITE FLOW TO EACH OF THESE INLETS OF 3.6 / 2 = 1.8 CFS ±, AND IT WOULD INCREASE TO 5.5 / 2 = 2.8 CFS ±.

THE CONTRIBUTORY DRAINAGE BASIN TO EACH OF THESE INLETS FROM THE STREET IS 0.15 ACRES ±, RESULTING IN A FLOW OF 4.37 * 0.15 = 0.7 CFS.

TOTAL FLOW (PROPOSED CONDITIONS) TO EACH INLET 2.8 + 0.7 = 3.5 CFS ±.

DPM - STREET AND GRATING CAPACITIES CHARTS:
LONGITUDINAL SLOPE OF DAYTONA ROAD = 1.5% ±
100-YEAR FLOW DEPTH = 0.32' < 0.5' FLOW DEPTH CRITERION FOR 10-YEAR STORM IN ANY COLLECTOR STREET
100-YEAR VELOCITY = 2.7 FPS
THE PRODUCT OF DEPTH TIMES VELOCITY = 0.9 < 6.5 CRITERION FOR 10-YEAR STORM IN ANY STREET

THEREFORE, PROPOSED IMPROVEMENTS MEET THE DPM'S STREET FLOW CRITERIA.

LEGEND

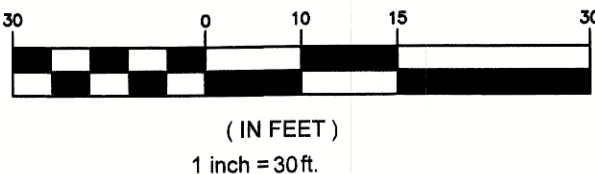
- (A) BASIN DESIGNATION
- (A1) POND DESIGNATION (FIRST FLUSH WATER QUALITY POND)
- PROPOSED FLOW DIRECTION
- EXISTING INLET
- EXISTING STORM DRAIN SYSTEM
- PROPOSED PAVED AREA

BASIN	AREA (sq-ft)	BASIN RUNOFF VOLUME (cu-ft)	POND VOLUME PROVIDED (cu-ft)	STORED VOLUME IN THE POND (cu. Ft.)
A	4379	124	123	123
B	19030	539	757	539
C	17704	502	346	346
D	19262	546	426	426
E	16732	474	632	474
TOTAL =				1909

BASINS	AREA (acres)	LAND TREATMENT PERCENTAGES BY TYPE				YIELD (cfs/ac)	Q100 (cfs)	V100-24 (ac-ft)
		A	B	C	D			
A	0.101	-	-	-	100	4.37	0.44	0.020
B	0.437	-	-	-	100	4.37	1.91	0.088
C	0.406	-	-	-	100	4.37	1.78	0.082
D	0.442	-	-	-	100	4.37	1.93	0.090
E	0.384	-	-	-	100	4.37	1.68	0.078

PROVIDED POND VOLUME (cu-ft)													
POND #	A1	B1	B2	B3	C1	C2	D1	D2	D3	E1	E2	E3	E4
AREA	123	96	360	301	99	247	76	94	256	143	184	118	186

GRAPHIC SCALE



PARSONS
BRINCKERHOFF



CITY OF ALBUQUERQUE
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PROPOSED CONDITIONS DRAINAGE BASIN MAP

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
City Project No. COA 201700667		Zone Map No. J-09-Z	Sheet 2 of 2

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		DESIGN		REMARKS		NO. DATE	
CONTRACTOR	WORK	SURFACE ELEVATIONS DERIVED FROM 2010	DATE	BY	NO.	SEAL	DATE	DESIGNED BY:	DATE	DESIGNED BY:	DATE	DESIGNED BY:	DATE
INSPECTOR'S	STAKED BY	BERNALILLO COUNTY LIDAR DATA						FARSHAD OMIIVARAN	03/01/17	FARSHAD OMIIVARAN	03/01/17	FARSHAD OMIIVARAN	03/01/17
ACCEPTANCE BY	VERIFICATION BY							AMANDA RAMIREZ	03/01/17	AMANDA RAMIREZ	03/01/17	AMANDA RAMIREZ	03/01/17
DRAWINGS	CORRECTED BY							FARSHAD OMIIVARAN	03/01/17	FARSHAD OMIIVARAN	03/01/17	FARSHAD OMIIVARAN	03/01/17
MICRO-FILM INFORMATION	RECORDED BY												
	NO.												

