CITY OF ALBUQUERQUE

August 2, 2017

Craig Hagelgantz, PE
ABQ Engineering Inc.
8102 Menaul Blvd NE, Suite D
Albuquerque, NM 87110

RE: **10800 Gibson SE (SSTP)**
Grading and Drainage Plan
Engineer's Stamp Date: 7/18/17
Hydrology File: M21D007A1

Dear Mr. Hagelgantz:

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

Based on the information provided in the submittal received on 7/27/17, the Grading and Drainage Plan cannot be approved for grading or paving permit until the following comments are addressed:

1. First flush volume needs to be determined from: (0.44"-0.10") x impervious area. The determination from 0.43" x impervious area over-estimates the required ponding volume.

2. What is the 100yr water surface elevation for the pond and where does it overflow?

    a. An outfall capable of passing the 100-yr peak inflow (roughly 2.5 cfs for this site) is recommended for ponds storing less than the 100-yr, 10 day runoff. Ideally, the outfall invert should be at least 1ft below the finished floor of the adjacent building; this may not be possible for this site. The southeast corner of the pond, near the ADA parking seems to be the only outfall that will keep flows routing away from the building.

    b. For ponds with no outfall, the 100yr, 10day water surface elevation should be determined; ideally the maximum water surface should be at least 1ft below the building finished floor. Some ponding in the parking lot is permissible for the City, but should be discussed with the client.

3. If any of these changes significantly change the pond layout or size, the exhibits for the private facility drainage covenant should be updated. Please contact Madeline Carruthers (mtafoya@cabq.gov, 4th floor, Plaza del Sol) for updating the exhibits.

Orig: Drainage File

CITY OF ALBUQUERQUE

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

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

Orig: Drainage File

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 10/2015)

Project Title: _____ Building Permit #: _____ Hydrology File #: _____

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: Sandia Science and Technology Park, Tract TR E-1, Parcel Bulk Land Plat Unit

City Address: 10800 Gibson SE, ABQ NM

Applicant: ABQ Engineering Inc. Contact: Craig Hagelgantz

Address: 8102 Menaul Blvd. NE, Suite D, Albuquerque NM 87110

Phone#: 505-255-7802 Fax#: 505-255-7902 E-mail: chagelgantz@abqeng.com

Other Contact: Scott Leonard DPS Architects Contact: Scott Lenard

Address: 7601 Jefferson NE, ABQ, NM 87109

Phone#: 505-761-9700 Fax#: _____ E-mail: ScottL@dpsdesign.org

Check all that Apply:

DEPARTMENT:

____ HYDROLOGY/ DRAINAGE
____ TRAFFIC/ TRANSPORTATION
____ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION

____ CONCEPTUAL G & D PLAN
XX GRADING PLAN
____ DRAINAGE MASTER PLAN
____ DRAINAGE REPORT
____ CLOMR/LOMR

____ TRAFFIC CIRCULATION LAYOUT (TCL)
____ TRAFFIC IMPACT STUDY (TIS)
____ EROSION & SEDIMENT CONTROL PLAN (ESC)

____ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: XX Yes ____ No

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
XX GRADING PERMIT APPROVAL
____ SO-19 APPROVAL
XX PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR

____ **PRE-DESIGN MEETING?**

____ OTHER (SPECIFY) _____

DATE SUBMITTED: _____ By: _____

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: ___

ABQ Engineering, Inc.
Engineers ▪ Planners ▪ Construction Services

7/26/2017

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

RE: 10800 Gibson SE (SSTP) Grading and Drainage Plan
Engineer's Stamp Date: Signed, undated
Hydrology File: M21D007Al

The following is a response to your hydrology comments on the submittal plans. The item numbers below refer to your comments:

1. Drainage Plan and Narrative has been updated to show compliance with previous drainage reports and master plan. See updated narrative.

2. First flush calculations and pond volume has been updated to reflect calculation of (0.44"-0.10"). Additional runoff for 100yr, 10 day volume has not been included in the new ponding area.

3. Finish floor elevations for the existing building has been added to plan.

4. Water surface elevation for the first flush pond has been shown as two feet below finished floor of existing building.

5. Additional spot elevations have been shown along the side of the existing building and the sloped paved area of the parking lot has been increased to improve positive drainage away from the building.

6. An alley gutter has been added to the paved area to improve positive drainage for the parking area towards the first flush ponding area.

7. Drainage Covenant will be submitted concurrently with the re-submittal to Madeline Carruthers for signature routing.

8. Date for engineers stamp has been added to drawing.

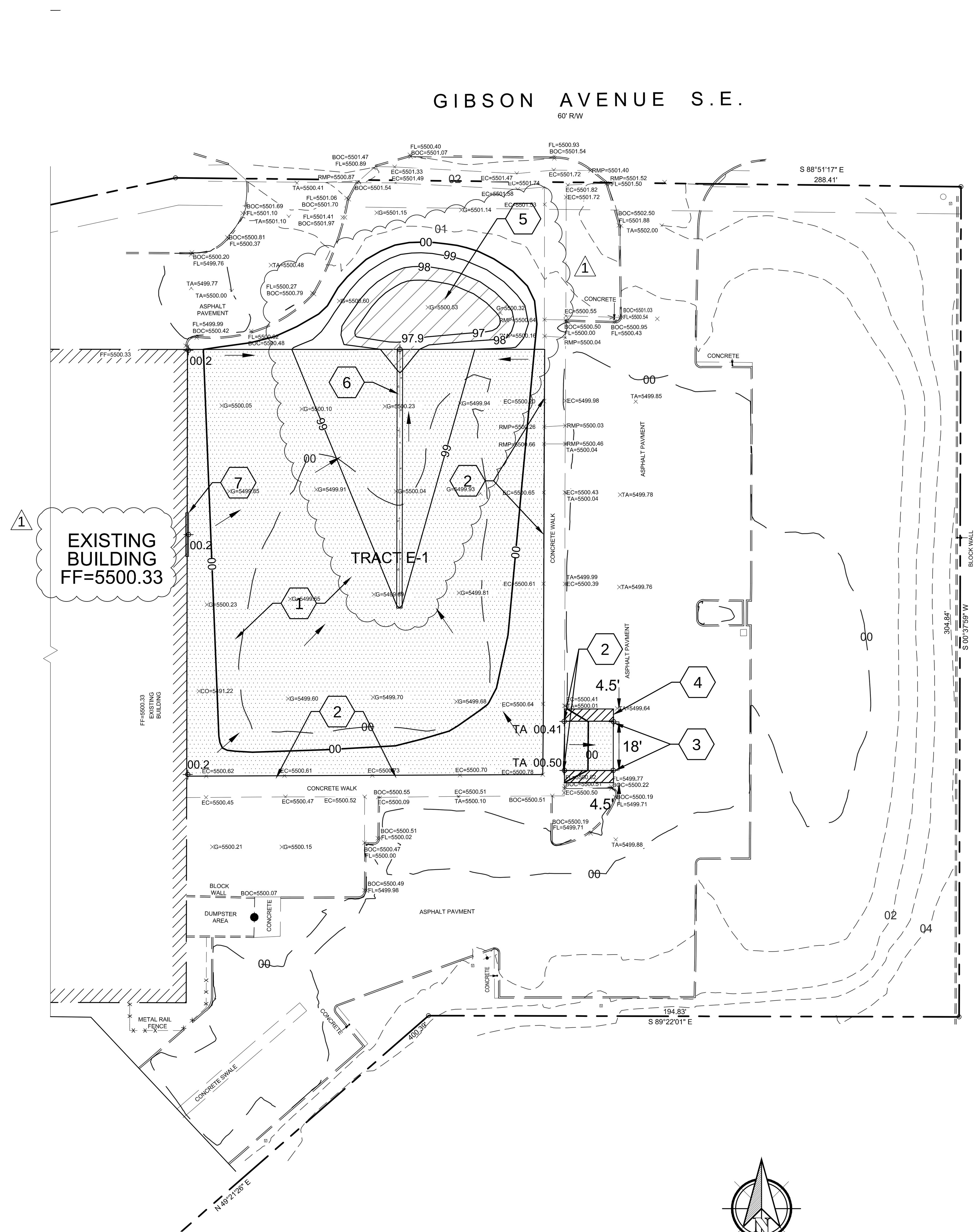
9. DTIS has been updated to request paving permit approval.

10. One hard copy of submittal has been re-remitted.

Please let me know if there's additional information we need to provide.

Sincerely,
ABQ Engineering Inc.

8102 Menaul Blvd. NE, Suite D ● Albuquerque, NM 87110 ● (505) 255-7802 ● Fax (505) 255-7902



GRADING & DRAINAGE PLAN

Scale: 1" = 30'

DRAINAGE NARRATIVE

THIS SITE IS LOCATED AT 10800 GIBSON AVENUE SE IN ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO AND IS A PORTION OF TRACT E-1 OF THE SANDIA SCIENCE & TECHNOLOGY PARK.THIS PROJECT DISTURBS APPROXIMATELY 0.47 ACRE OF AN EXISTING SITE. THE PROPOSED DRAIANGE AND EXISTING SITE HYDROLOGY WILL COMPLY WITH HYDROLOGY REQUIERMENTS AS SHOWN IN DRAINAGE REPORT (M21-D7A1, PREPARED BY ABQ ENGINEERING, 7/25/05) AND DRAINAGE MASTER PLAN (M21D007A PREPARED BY BHI, 9/21/01) THE EXISTING SITE USES SURFACE DRAINAGE DIRECTED TO ON-SITE STORM WATER INLETS AND STORM WATER PIPING TO DIRECT RUNOFF TO ON-SITE RETAINING PONDS #1 AND #2, WHICH CONNECT INTO THE CITY STORM DRAINS IN THE SURROUNDING STREETS. THE DRAINAGE REPORT FROM ABQ ENGINEERING, 7/25/17 SHOWS THE SITE FULLY DEVELOPED AND GRADED. THOSE PLANS SHOW BOTH PHASES OF THE BUILDING DEVELOPED, ALONG WITH THE FUTURE PARKING AREA ON THE EAST SIDE OF THE PROPERTY FULLY DEVELOPED AND GRADED. (SEE GRADING PLAN SHEET C1 STAMP DATED 7/25/05). THE DRAINAGE REPORT (M21-D7A1 PREPARED BY ABQ ENGINEERING DATED 7/25/05) SHOWS 80% OF THE SITE LAND TREATMENT AREA EQUAL TO TYPE "D" IMPERVIOUS AND 20% OF THE SITE EQUAL TO TYPE "B" LANSCAPING (SEE SECT IV. DRAINAGE COMPUTATIONS), ALSO THE DRAINAGE REPORT INDICATES COMPLIANCE WITH THE BHI MASTER PLAN INCLUDING LIMITS TO THE DEVLOPED RUOFFOFF RELEASED AS OFF SITE FLOW TO PUBLIC STORM DRAIN SYSTEMS. (SEE SECT VI. SUMMARY AND CONCLUSION)

THE PROPOSED DEVELOPMENT INVOLVES THE ADDITION OF A PAVED PARKING AREA FOR VEHICLE/EQUIPMENT STORAGE. THE AREA OF THE NEW IMPERVIOUS PARKING LOT IS LOCATED WITHIN THE AREA DESIGNATED IN THE DRAINAGE REPORT (M21-D7A1, PREPARED BY ABQ ENGINEERING, 7/25/05) AS IMPERVIOUS AREA FOR "FUTURE BUILDING" (TREATMENT "D") AND IS GENERALY FLAT. THE AREA FOR PROPOSED PAVING CURRENTLY DRAINS TO A SLIGHT DEPRESSION IN THE CENTER OF AN UNDEVELOPED AREA. THE PROPOSED GRADING WILL DRAIN THE RUNOFF AWAY FROM THE EXISTING BUILDING AND TOWARDS AN UNDEVELOPED AREA TO THE NORTH OF THE PROPOSED PARKING AREA. THIS AREA WILL CONTAIN A NEW POND WITH VOLUME PROVIDED TO CONTAIN THE VOLUME OF THE FIRST FLUSH RUNOFF. THE TOP WATER SURFACE ELEVATION FOR THE NEW FIRST FLUSH POND WILL BE A MINIMUM OF TWO FEET BELOW FINISH FLOOR OF THE BUILDING.

THIS SITE IS LOCATED ON FIRM MAP NO. 3500C0367H, PANEL 367 WHICH INDICATES THE ENTIRE SITE IS LOCATED IN ZONE X, AND THAT NO PORTION OF THE SITE IS LOCATED WITHIN A 100 YEAR FLOOD PLAIN.

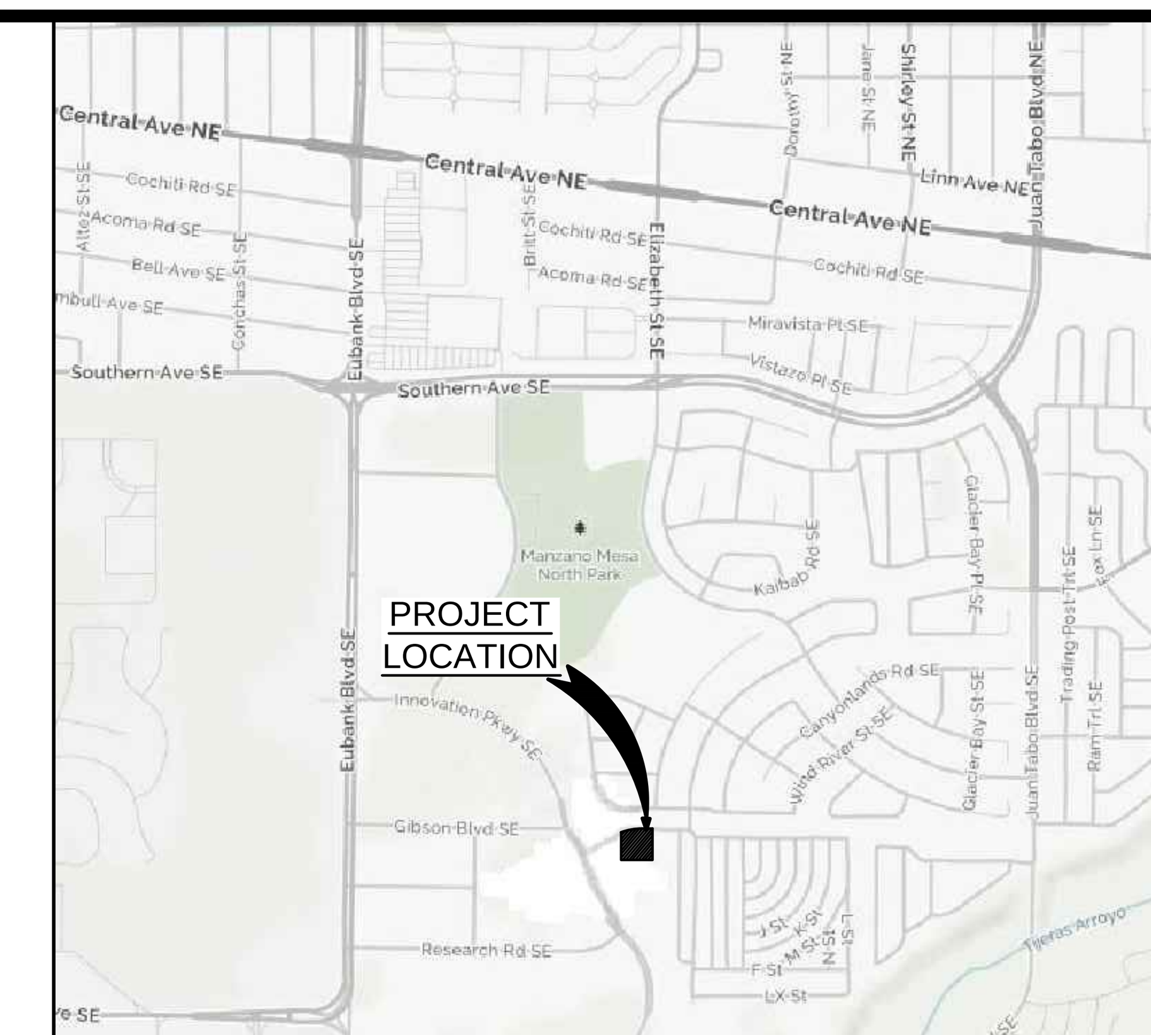
ONSITE DRAINAGE RETENTION

FIRST FLUSH STORAGE REQUIRED BY COA HYDROLOGY:

PROVIDE STORAGE FOR FIRST FLUSH RUNOFF PER SECTION 22 OF DPM
TABLE A-6 USE 0.44 - 0.1 = 0.43 IN

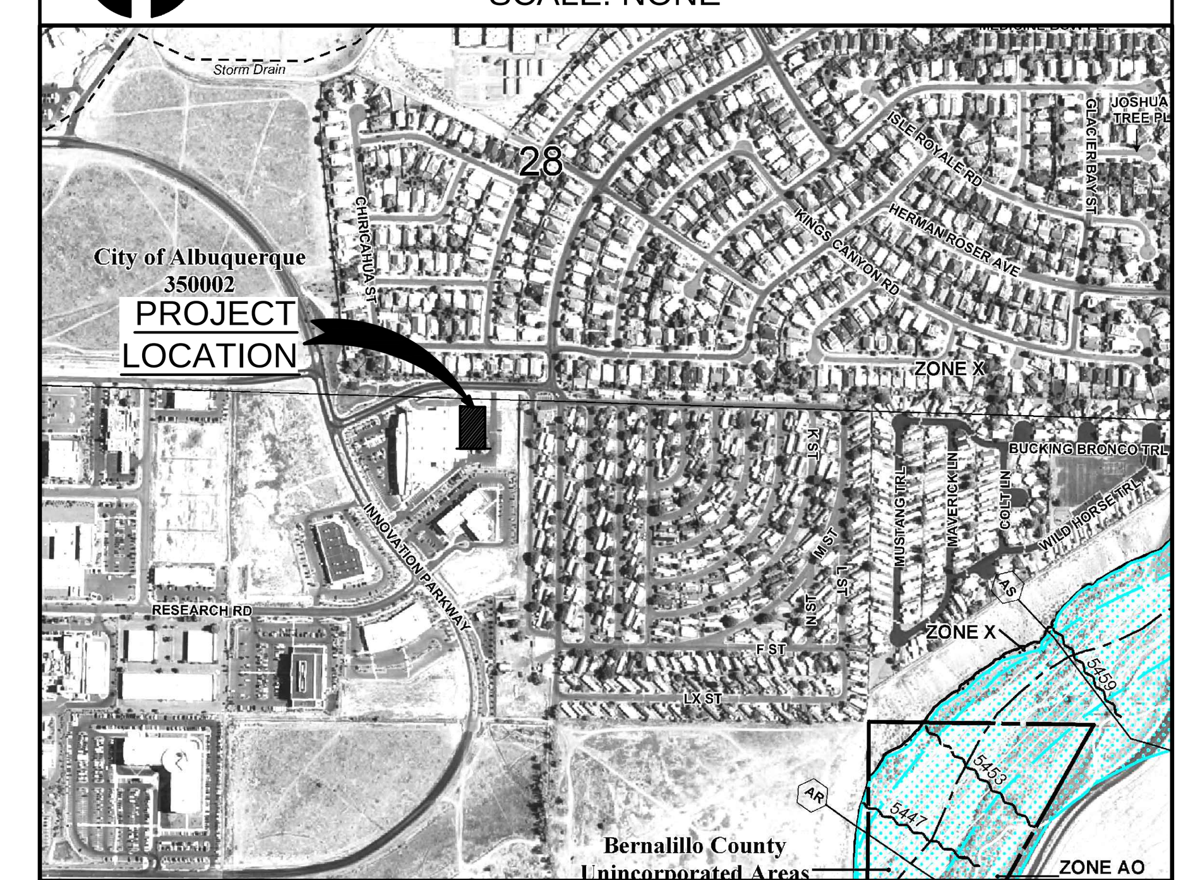
FIRST FLUSH (IN) APPLIED OVER IMPERVIOUS AREAS (ACRES)
THEREFORE 0.43/12 X 0.47 X 43560 = 733 CF

FIRST FLUSH PONDING AREA REQD. = 733 CF < 880 CF PROVIDED



LOCATION MAP

SCALE: NONE



FIRM MAP

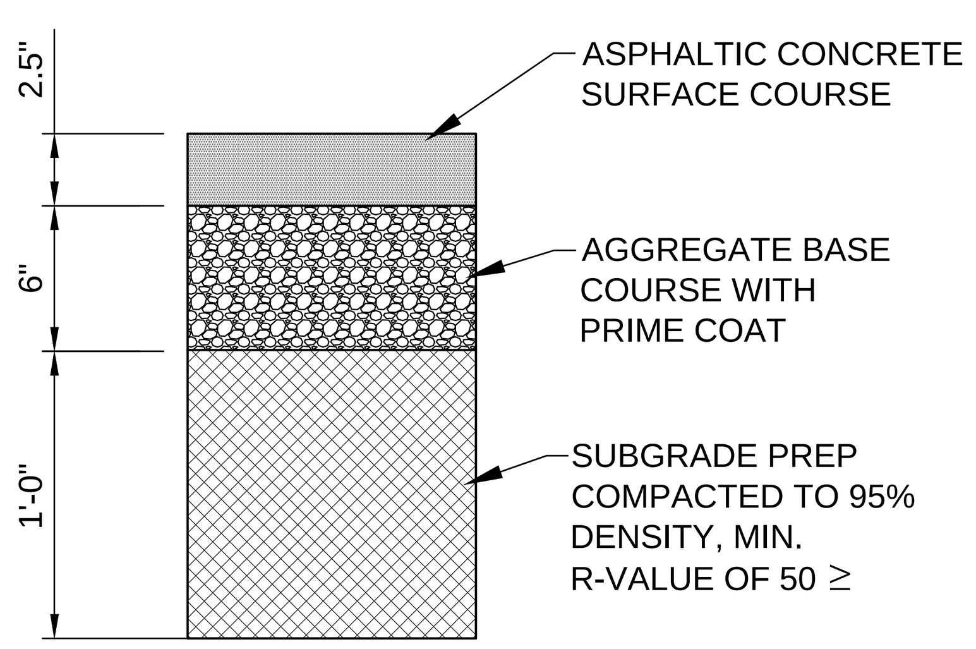
SCALE: NONE

KEYED NOTES

1. CONSTRUCT NEW 20600 S.F. (0.47 Acres) ASPHALT PARKING AREA. SEE DETAIL 2/C-101.
2. MATCH NEW ASPHALT TO EXISTING CONCRETE WALK GRADES. SEE DETAIL 3/C-101
3. MATCH NEW ASPHALT TO EXISTING ASPHALT GRADES.
4. INSTALL PAINTED STRIPING ON EXISTING ASPHALT.
5. CONSTRUCT NEW PONDING AREA. VOLUME OF PONDS AS SHOWN ON PLAN BETWEEN T.O.P = 98.0 AND B.O.P 97.0 IS APPROX. 880 CF.
6. CONSTRUCT 95 LF CONCRETE ALLEY GUTTER. PER DETAIL 4/C-10
7. NEW 16' x 16' OVERHEAD DOOR IN EXTERIOR WALL OF EXISTING BUILDING.

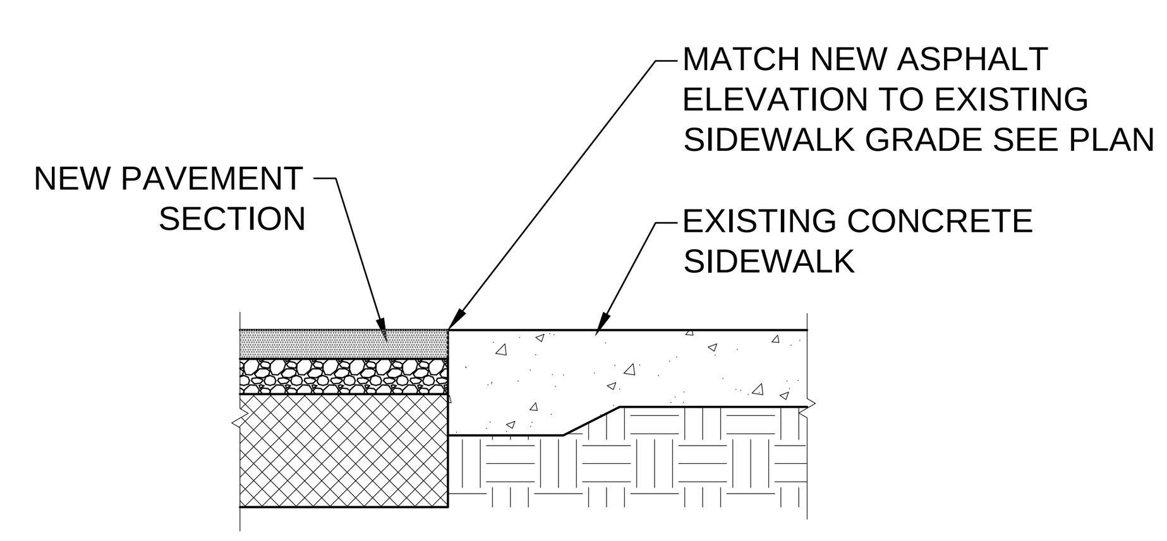
LEGEND

-6510-	EXISTING INDEX CONTOUR
-6509-	EXISTING INTERIM CONTOUR
10	NEW INDEX CONTOUR
09	NEW INTERIM CONTOUR
+ 22.8	EXISTING SPOT ELEVATION
+ 22.8	NEW SPOT ELEVATION
	NEW CONCRETE
	NEW ASPHALT
	EXISTING BUILDING
	DIRECTION OF FLOW



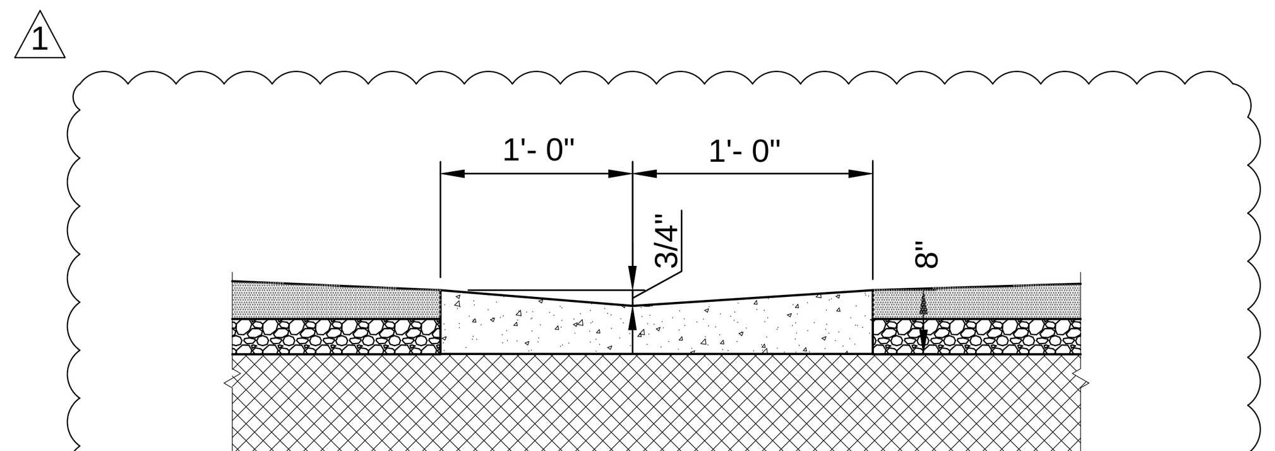
2 PAVING SECTION

Scale: NTS



3 CONCRETE TO ASPHALT TRANSITION

Scale: NTS



4 ALLEY GUTTER DETAIL

Scale: NTS

ABQ Engineering
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8102 Menaul Blvd. NE, Suite D, Albuquerque, NM 87110
tele: 505.255.7802 Proj. No.: 16-087 www.abqeng.com

REV. NO.	REV. DATE	DESCRIPTION
1	7/26/17	COA COMMENTS

ENGINEERING STAMP
JAMES CRAIG HAGELGANTZ, NEW MEXICO, 15559, LICENSED PROFESSIONAL ENGINEER
7/18/17

DO NOT SCALE DRAWINGS
CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS- NOTIFY ENGINEER/ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION

SANDIA SCIENCE & TECHNOLOGY PARK
10800 GIBSON AVENUE SE
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

PROJECT NO.:	16-087
DATE:	JULY 2017
DESIGNED BY:	CAB
DRAWN BY:	CAB

SHEET TITLE
GRADING & DRAINAGE PLAN

SHEET NUMBER
C-101