CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

April 26, 2023

Marion F. Hall IV, P.E.
Iris Development Services, LLC
2673 N. Riley Rd
Buckeye, AZ 85396

RE: Luxelocker
Grading & Drainage Plan
Engineer's Stamp Date: 04/21/23
Hydrology File: B18D031

Dear Mr. Hall:

Based upon the information provided in your submittal received 04/07/2023, the Grading & Drainage Plan is approved for Building Permit and Grading Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

PRIOR TO CERTIFICATE OF OCCUPANCY:

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.
2. Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for **$25.00** made out to "**Bernalillo County**" for the stormwater quality ponds per Article 6-15(C) of the DPM to Hydrology for review at Plaza de Sol.

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

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

Sincerely,

Renée C. Brissette

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

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: Luxelocker Building Permit #: BP-2022-45669 Hydrology File #: _____

DRB#: 2022-007664 EPC#: _____ Work Order#: _____

Legal Description: _____

City Address: 5601 San Diego Ave NE, Albuquerque, NM 87122

Applicant: Jeff Hatch Contact: Jeff Hatch

Address: 200 West 36th Street

Phone#: (208) 475-3204 Fax#: N/A E-mail: jeff@hatchda.com

Owner: ABQ Storage Partners, LLC Contact: David Ferrette

Address: 349 Lake Havasu Ave S, Suite 106, Lake Havasu City, AZ 86403

Phone#: (951) 312-5022 Fax#: N/A E-mail: david@luxelocker.com

TYPE OF SUBMITTAL:_____ PLAT (___# OF LOTS) ____ RESIDENCE X DRB SITE ____ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes X No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION X HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
____ CONCEPTUAL G & D PLAN
X GRADING PLAN
____ DRAINAGE MASTER PLAN
X DRAINAGE REPORT
____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
____ ELEVATION CERTIFICATE
____ 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
X GRADING PERMIT APPROVAL
____ SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: 04/04/23 By: Nicholas Lemke

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED:_____

FEE PAID:_____

TECHNICAL MEMORANDUM

To: Renee Christina Brissette, PE, CFM
Senior Engineer, Hydrology

From: Mac Hall, PE

Re: **LuxeLocker - Albuquerque – Drainage Report**

Date: March 14, 2023

1. Introduction

Albuquerque Storage Partners, LLC is proposing to develop an approximate 4.53-acre parcel within the City of Albuquerque, NM. The subject parcels are on UPC #s 101806505819430722, 101806507519530721, 101806509219430720, 101806510819530719 and 101806510717230707 located between Beverly Hills Avenue and San Diego Avenue. Figure 1 shows an aerial image of the City of Albuquerque with the general project location called out. Figure 2 shows an aerial image of the detailed project location.

Figure 1 – Aerial map of the City of Albuquerque – Vicinity Map

2. Project Background

The project site is generally located in the northern portion of the City of Albuquerque, west of Interstate 25. The site is bounded to the north by Beverly Hills Avenue, to the south by San Diego Avenue approximately 740 feet east of the intersection of Beverly Hills Avenue and San Mateo Boulevard. The proposed commercial storage facility will consist of approximately 101-unit Luxury RV and Boat Storage consisting of 5 buildings and paved driving areas as shown in the site layout exhibit enclosed in Appendix A. Included in this design report is an analysis of the proposed stormwater Best Management Practices (BMPs) needed to meet the applicable design requirements of the City of Albuquerque Development Process Manual.

Figure 2 – Project Location

3. Design Standards and Performance Requirements

The City of Albuquerque's storm water management guidelines and design requirements are stated in the City's Development Process Manual. Requirements relevant to the project are further outlined below.

<u>Stormwater Management Design Criteria</u>

- Hydrology computations shall follow the Rational Method and initial abstraction/uniform infiltration precipitation losses for watersheds 40 acres or less. (Part 6-2(A))
- Street Design shall be in accordance with Part 6-9.

- Manning's roughness coefficient is 0.017.
- The calculated hydraulic grade line (HGL) for the 100-year design discharge may not exceed curb height and the calculated energy grade line (EGL) shall be contained within the street right of way.
- For a sump condition, the HGL for the 100-year storm may extend to the street right of way.
- For storm events less than or equal to the 10-year design discharge one lane free of flowing or standing water in each traffic direction must be preserved on arterial streets.
- The product of depth times velocity shall not exceed 6.5 in any location in any street in the event of a 10-year design storm (with velocity calculated as the average velocity measured in fee per second and depth measured at the gutter flowline in feet).
- The size and type of inlets should be determined by physical requirements and by grate and flow capacities given in Figure 6.9.9 and 6.2.3.

- Stormwater management is required for all new development and redevelopment projects (Part 6-12).
  - Stormwater quality volume for new development sites are required to manage the runoff from a 0.62 inch storm.

4. Data Sources & Analysis Approach

The following data were used to conduct the site drainage analysis and prepare this drainage report:

- Existing boundary and site topographic survey prepared by Dehler Surveying.
- Detailed site grading plan prepared by Iris Development Services, PLLC.
- Rainfall data from Figure 6.2.3 of the Development Process Manual.

The hydrologic analysis was performed using the Rational Method, following the guidelines outlined in the City of Albuquerque's Development Process Manual. HY-8 was used to quantify the flow from a culvert crossing northwest of the site, see **Section 8** for more information.

5. Rainfall

Rainfall intensities for the 2, 10, and 100-year storm events are listed below in Table 1.

Table 1 -Summary of Rainfall Intensities

Rainfall Frequency	12-Minute Rainfall Intensity (in/hr)
2-year	1.87
10-year	3.01
100-year	4.81

6. Existing Conditions

The existing site comprises an area of approximately 4.53 acres of sparse growth of cacti, brush, and grass, with elevations ranging from 5161 to 5179. Typical existing slopes for the site range from 1 to 4 percent. Typical drainage patterns are from the east to the west. There are no offsite flows from the east as there is a swale/berm along the eastern property that conveys runoff to either Beverly Hills Avenue or San Diego Avenue. Table 2 details the hydrologic parameters of the site.

Table 2 -Existing Conditions Hydrology

Land Cover	Area (ac)	Runoff Coefficient (C)	Time of Concentration (min)
Open	4.53	0.34	12

7. Proposed Conditions

Site Topography

Most of the site (3.94 acres) will be impervious surface, with the remainder being open space (0.59 acres). The impervious surface will be comprised of commercial RV and Boat storage buildings with paved drive aisle/access to the storage units. The site will be relatively flat, with the majority of the development draining towards the western property line, where a retention pond will be located. The remainder of the site will drain to the southwest toward a proposed retention pond located in the southwest portion of the site.

Drainage Design

The runoff will be conveyed by one of two ways, through paved drive aisles or a storm sewer system. The majority of the paved drive aisles flow towards the western portion of the development, except for the southern portion of the eastern drive aisles that flows south. The storm sewer system, consisting of small storm sewer systems, collects the runoff from the drive aisles and discharges it into the proposed retention basins.

Both stormwater retention basins are designed to store the required water quality volume. See Appendix A for the Stormwater Figure and Section 8 for volume requirements.

Beverly Hills Avenue will be improved from the eastern boundary of the proposed development and tie into existing infrastructure on the west side of the development. Part of the improvements will be the extension of the existing storm sewer network to the eastern property line. See Appendix A for the Stormwater Figure and Section 8 for design.

Hydrology

The site will be graded such that all runoff from impervious surfaces will route to either the stormwater retention facility along the western property line or the retention facility located in the southwest corner of the property adjacent to San Diego Avenue. Table 3 details the hydrologic parameters of the proposed conditions.

Table 3 – Proposed Conditions Hydrology

Land Cover	Area (ac)	Runoff Coefficient (C)	Time of Concentration (min)
Impervious	3.94	0.90	12
Open Space	0.59	0.34	12

8. Results

The stormwater design was modeled separately for HWL analysis and rate control analysis. The rate control analysis only includes the site's impervious area and the stormwater detention facility for proposed conditions, as the remaining area remains effectively the same land over and thus will not affect the difference between existing and proposed rates. The HWL analysis included all contributing areas to the two storage nodes (Both Stormwater Detention Facilities) and the bypass storm network in order to accurately determine the 100-year water surface elevations.

Water Quality Volume

City of Albuquerque requires the proposed development to retain the water quality volume onsite. Table 4 summarizes the drainage characteristics for each of the proposed retention basins. Note that his analysis only included the onsite area (4.53 acres) as that is the only area being altered.

Table 4 – Stormwater Quality Basin Design

Basin ID	Drainage Area ID	Drainage Area (ac)	Rainfall (in)	Basin Volume (ac-ft)	Required Basin Volume (ac-ft)
SWMF 1	P-DA-1	3.48	0.42	0.12	0.12
SWMF 2	P-DA-2	0.94	0.42	0.07	0.03

Channel Capacity

The drivel aisles were analyzed to determine whether they can adequately convey the peak flow from their respective drainage areas. Table 5 summarizes the hydrology for each drive aisle, Table 6 details each channel's geometry, and Table 7 summarizes the peak flows in each channel and the corresponding freeboard.

Table 5 – Channel Hydrology

Drainage Basin ID	Incoming Drainage Area (ac)	Dominant Land Cover	Runoff Coefficient (C)	Time of Concentration (min)
A1	0.75	Impervious	0.90	12
A2	0.74	Impervious	0.90	12
A3	0.20	Impervious	0.90	12
A4	0.49	Impervious	0.90	12
A5	0.54	Impervious	0.90	12
A6	0.75	Impervious	0.90	12
A7	0.45	Impervious	0.90	12

Table 6 – Channel Geometry

Drainage Basin ID	Longitudinal Slope (%)	Side Slope (H:V)	Manning's Roughness (n)	Depth (ft)
A1	1.0	Varies	0.015	0.55
A2	1.0	Varies	0.015	0.31
A3	0.5	Varies	0.015	0.25
A4	1.0	Varies	0.015	0.31
A5	1.0	Varies	0.015	0.36
A6	1.0	Varies	0.015	0.34
A7	0.5	Varies	0.015	0.75

Table 7 – Channel Peak Flow Rates

Drainage Basin ID	Contributing Drainage Basins	100-Year Flow (cfs)	100-year Flow Depth (ft)	Lowest Freeboard from Nearby Structure (ft)
A1	A1	3.24	0.19	0.36
A2	A2	3.20	0.16	0.15
A3	A3	0.87	0.14	0.11
A4	A4	2.12	0.16	0.15
A5	A5	2.34	0.16	0.20
A6	A3 & A6	4.12	0.17	0.17
A7	A2, A4, A5 & A7	9.61	0.29	0.46

Onsite Storm Sewer Capacity Analysis

Table 8 summarizes the design geometry, design flows, and capacities for each of the storm sewer segments on the site. All design flow is based on the WQV, and the table footnotes additional details on the source for the design flow and pipe capacities, were relevant.

Table 8 – Pipe Design Table

Upstream Structure ID: Rim Elev/inv Elev (ft)	Downstream Structure ID: Rim Elev/inv Elev (ft)	Pipe Slope (%)	Length (ft)	Diameter (in)	Material	Design Flow (cfs)	Capacity (cfs)
SD 1: 5162.63/5159.23	SD 2: 5162.26/5159.13	1.0	10	15	HDPE	4.64	6.46
SD 2: 5162.26/5159.13	SDMH 1: 5161.30/5158.16	1.0	97	18	HDPE	7.55	10.50
SDMH 1: 5161.30/5158.16	FES 1: 5158.00	1.0	16	18	HDPE	7.55	10.51
SD 3: 5172.02/5168.29	FES 2: 5168.00	1.0	29	15	HDPE	2.06	6.47

Stormwater Conveyance in Streets

Stormwater will be conveyed in Beverly Hills Avenue to the existing storm conveyance system using a typical crown street section. Runoff coefficients were based on the Development Process Manual. A runoff coefficient of 0.7 was selected to represent average values for medium density development. Street capacity was calculated at each proposed curb inlet.

Proposed runoff parameters used in rational method to calculate the 100-year, 12-minute peak flow within the street corridor are listed below in Table 9. Note that the contributing drainage area is the immediate drainage area along with any upstream drainage areas.

Table 4: Proposed 100-year, 5-minute Runoff Parameters Used in Street Flow Calculations

Immediate Drainage Area	Contributing Drainage Area (sf)	Rational Runoff Coefficient	100-Year, 5-Minute Intensity (in/hr.)
A8	196,891	0.70	4.81
A9	11,719	0.70	4.81
A10	9,955	0.70	4.81
A11	156,433	0.70	4.81

Proposed street characteristics used in manning's equation to calculate street conveyance capacity are listed in ***Table 10***.

Table 10: Proposed Street Conveyance Parameters

Immediate Drainage Area	Manning's Roughness Coefficient (n)	Cross Sectional Area (square feet) (A)	Hydraulic Radius (R)	Slope (%)
A8	0.17	4.364	0.205	2.51
A9	0.17	4.364	0.205	1.93
A10	0.17	4.364	0.205	0.80
A11	0.17	4.364	0.205	1.30

The 100-year Peak discharge and Street Capacity is summarized in ***Table 11***.

Table 11: 100-year, 5-minute Discharge and Street Capacity (cfs)

Immediate Drainage Area	100-Year, 5-minute Peak Discharge (cfs)	Runoff Intercepted by Inlet (cfs)	Bypass Runoff (cfs)	Total Runoff at Inlet (cfs)	Street Capacity (cfs)	Avg Water depth in roadway (ft) (Max depth: 0.418)
A8	15.22	5.6	-	15.22	21.00	0.37
A9	0.91	5.4	9.62	10.53	18.42	0.34
A10	0.77	4.1	5.13	5.90	11.86	0.32
A11	12.09	-	1.80	13.89	15.11	0.41

Offsite Storm Sewer Capacity Analysis

Table 12 summarizes the design geometry, design flows, and capacities for each of the storm sewer segments on the site. All design flow is based on the WQV, and the table footnotes additional details on the source for the design flow and pipe capacities, were relevant.

Table 12 – Pipe Design Table

Upstream Structure ID: Rim Elev/inv Elev (ft)	Downstream Structure ID: Rim Elev/inv Elev (ft)	Pipe Slope (%)	Length (ft)	Diameter (in)	Material	Design Flow (cfs)	Capacity (cfs)
SDCB-6: 5171.81/5167.11	SDMH-5: 5172.04/5167.05	0.5	12	18	RCP	5.60	7.43
SDMH-5: 5172.04/5165.71	SDMH 3: 5166.70/5160.25	2.14	255	36	RCP	5.60	97.59
SDCB-4: 5166.56/5161.85	SDMH 3: 5166.70/5161.79	0.5	12	18	RCP	5.40	7.43
SDMH 3: 5166.70/5160.05	SDMH 1: 5162.26/5155.65	1.73	255	36	RCP	11.00	87.61
SDCB-2: 5162.02/5157.32	SDMH 1: 5162.26/5157.26	0.5	12	18	RCP	4.10	7.43
SDMH 1: 5162.26/5155.45	Connection: 5154.86	0.5	119	36	RCP	15.10	46.97

9. Conclusion

As seen from previous sections, the stormwater design meets the applicable requirements.

IRIS DEVELOPMENT SERVICES
PLLC

Appendix A
Stormwater Figure

IRIS DEVELOPMENT SERVICES, PLLC

NORTH

0 80

Scale in Feet
1 Inch = 80 Feet

ALBUQUERQUE
BERNALILLO COUNTY,
NEW MEXICO

LUKELOCKER ALBUQUERQUE

DATE: 3/13/2023

- Project Location
- Offsite Watersheds
- Onsite Watersheds
- Building
- Pavement
- Storm Basins
- Flow Arrows (Offsite to Onsite)
- Proposed Contours
- Existing Contours

LUKELOCKER, LLC

IRIS DEVELOPMENT SERVICES PLLC

IRIS DEVELOPMENT SERVICES
PLLC

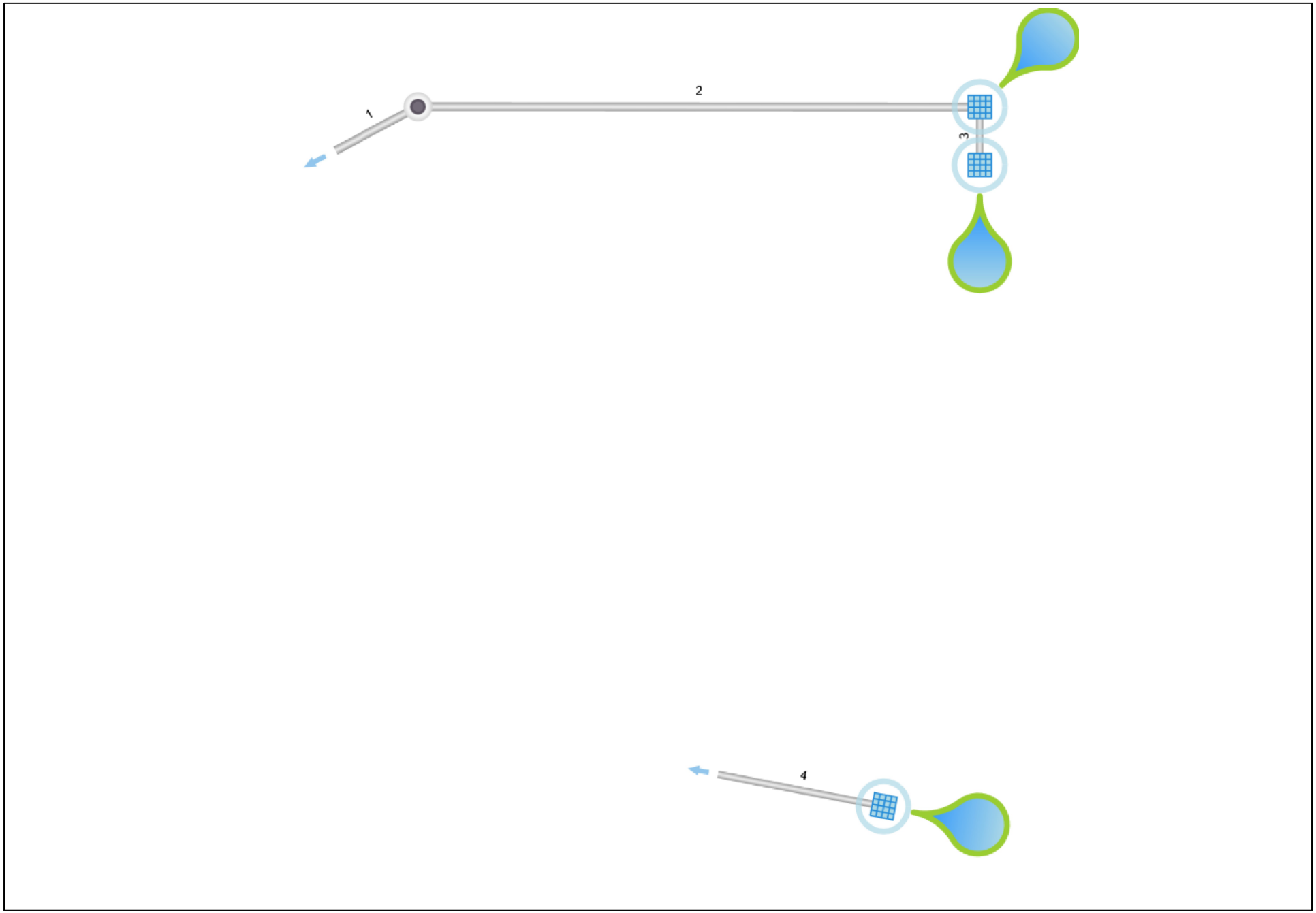
Appendix B
Onsite Storm Sewer System Summary

Plan View

Stormwater Studio 2023 v 3.0.0.31

Project Name: Enter Project Name...

03-14-2023



Storm Sewer Tabulation

Project Name: Enter Project Name...

Stormwater Studio 2023 v 3.0.0.31

03-14-2023

Line ID	Length	Drng Area		Rational	C x A		Tc		Intensity	Total Q	Capacity	Velocity	Line		Invert Elev		HGL Elev		Surface Elev		Line No
		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Up	Dn	Up	Dn	Up	Dn	
	(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
SDMH-1 to FES 1	16.00	0.000	0.000	0.00	0.00	0.00	0.0	12.28	6.67	7.55	10.51	4.34	18	1.00	5158.16	5158.00	5159.56	5159.50	5161.30	5161.00	1
SD 2 to SDMH 1	97.00	0.000	0.000	0.00	0.00	0.00	12.0	12.03	6.74	7.55	10.50	4.92	18	1.00	5159.13	5158.16	5160.21	5159.82	5162.26	5161.30	2
SD 1 to SD 2	10.00	0.000	0.000	0.00	0.00	0.00	12.0	12.00	6.74	4.64	6.46	3.78	15	1.00	5159.23	5159.13	5160.84	5160.79	5162.63	5162.26	3
SD 3 to FES 2	29.00	0.000	0.000	0.00	0.00	0.00	12.0	12.00	6.74	2.06	6.48	1.85	15	1.01	5168.29	5168.00	5169.26	5169.25	5172.02	5172.26	4

Notes: IDF File = Bellemont.idf, Return Period = 100-yrs.

Project File: Onsite Stormwater Analysis.sws

IRIS DEVELOPMENT SERVICES
PLLC

Appendix C
Offsite Storm Sewer System Summary

Plan View

Stormwater Studio 2023 v 3.0.0.31

Project Name: Enter Project Name...

03-14-2023

Storm Sewer Tabulation

Project Name: Enter Project Name...

Stormwater Studio 2023 v 3.0.0.31

03-14-2023

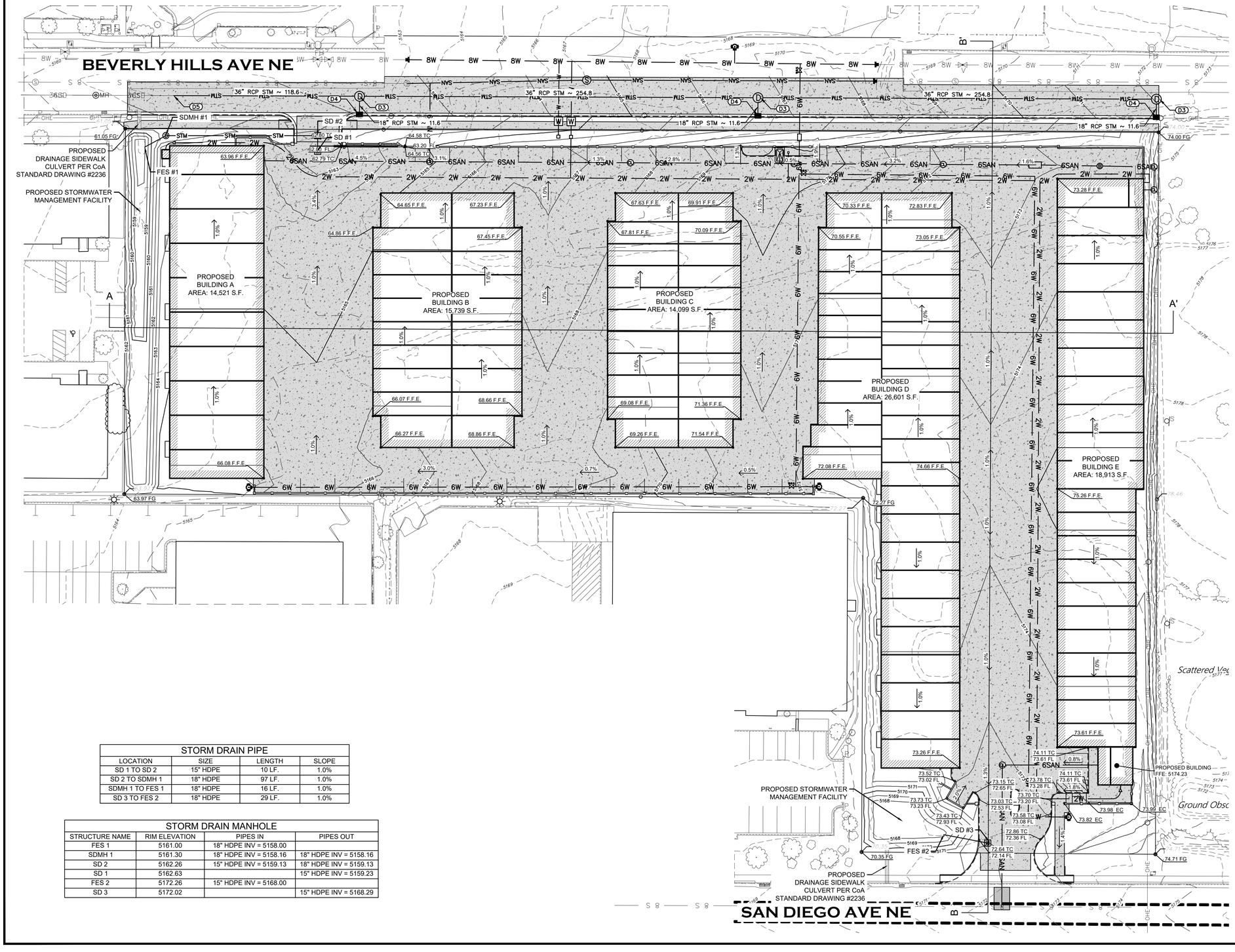
Line ID	Length	Drng Area		Rational	C x A		Tc		Intensity	Total Q	Capacity	Velocity	Line		Invert Elev		HGL Elev		Surface Elev		Line No
		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Up	Dn	Up	Dn	Up	Dn	
	(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
SDMH-1 to Connection	119.00	0.000	0.000	0.00	0.00	0.00	0.0	13.11	6.46	15.10	46.97	2.29	36	0.50	5155.45	5154.86	5157.90	5157.86	5162.26	0.00	1
SDCB-2 to SDMH-1	12.00	0.000	0.000	0.00	0.00	0.00	12.0	12.00	6.74	4.10	7.43	4.31	18	0.50	5157.32	5157.26	5158.12	5158.06	5162.02	5162.26	2
SDMH-3 to SDMH-1	255.00	0.000	0.000	0.00	0.00	0.00	0.0	12.61	6.58	11.00	87.61	3.40	36	1.73	5160.05	5155.65	5161.11	5158.00	5166.70	5162.26	3
SDCB-4 to SDMH-3	12.00	0.000	0.000	0.00	0.00	0.00	12.0	12.00	6.74	5.40	7.43	4.58	18	0.50	5161.85	5161.79	5162.80	5162.74	5166.56	5166.70	4
SDMH-5 to SDMH-3	255.00	0.000	0.000	0.00	0.00	0.00	0.0	12.04	6.73	5.60	97.59	3.08	36	2.14	5165.71	5160.25	5166.46	5161.44	5172.04	5166.70	5
SDCB-6 to SDMH-5	12.00	0.000	0.000	0.00	0.00	0.00	12.0	12.00	6.74	5.60	7.43	4.62	18	0.50	5167.11	5167.05	5168.08	5168.02	5171.81	5172.04	6

Notes: IDF File = Bellemont.idf, Return Period = 100-yrs.

Project File: Offsite Stormwater Analysis.sws

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 04/26/23
BY: Ronald R. Bohannan
HydroTrans #: B18D031

THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY ORDINANCE OR STATE LAW, NOR SHALL IT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION, OR ERROR OR DIMENSIONS IN PLANS, SPECIFICATIONS, OR CONSTRUCTION. ALL APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED, OR ALTERED WITHOUT AUTHORIZATION.



STORM DRAIN PIPE			
LOCATION	SIZE	LENGTH	SLOPE
SD 1 TO SD 2	15" HDPE	10 LF.	1.0%
SD 2 TO SDMH 1	18" HDPE	97 LF.	1.0%
SDMH 1 TO FES 1	18" HDPE	16 LF.	1.0%
SD 3 TO FES 2	18" HDPE	29 LF.	1.0%

STORM DRAIN MANHOLE			
STRUCTURE NAME	RIM ELEVATION	PIPES IN	PIPES OUT
FES 1	5161.00	18" HDPE INV = 5158.00	
SDMH 1	5161.30	18" HDPE INV = 5158.16	18" HDPE INV = 5158.16
SD 2	5162.26	15" HDPE INV = 5159.13	18" HDPE INV = 5159.13
SD 1	5162.63		15" HDPE INV = 5159.23
FES 2	5172.26	15" HDPE INV = 5168.00	
SD 3	5172.02		15" HDPE INV = 5168.29

VICINITY MAP
SCALE: NOT TO SCALE

GENERAL NOTES

1. CONTACT ARIZONA ONE CALL AT (800) STAKE-IT OR 811 PRIOR TO START OF ANY EXCAVATION FOR LOCATIONS OF BURIED UTILITIES. THE LOCATIONS OF ANY AND ALL UNDERGROUND UTILITIES SHOWN ARE BASED UPON ABOVE GROUND EVIDENCE (INCLUDING, BUT NOT LIMITED TO, MANHOLES, INLETS, AS-BUILT MAPS, AND MARKS MADE ON THE GROUND BY OTHERS) AND ARE SPECULATIVE IN NATURE. THERE MAY BE UNDERGROUND UTILITIES, WHETHER IN SERVICE OR ABANDONED, FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH THE ABOVE GROUND EVIDENCE WAS NOT OBSERVED. FURTHERMORE, THE UTILITIES MAY NOT BE IN THE EXACT LOCATIONS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND ELEVATIONS OF UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF CONSTRUCTION. ANY AND ALL DAMAGES THAT MAY OCCUR FROM THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE ANY AND ALL UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES OR VARIANCES TO THE PLANS ARE FOUND.
2. SEE ARCHITECTURAL/FOUNDATION CONSTRUCTION PLANS FOR ALL ACTUAL BUILDING DIMENSIONS. DIMENSIONS SHOWN ON CIVIL SITE PLAN ARE APPROXIMATE.

PROJECT NARRATIVE

THE EXISTING SITE FALLS FROM THE WEST TO THE EAST ACROSS THE SITE APPROXIMATELY 13 FEET IN ELEVATION. IN ADDITION TO SLOPING FROM EAST TO WEST, THE SITE FALLS FROM THE SOUTHERN PROPERTY LINE TO BEVERLY HILLS NE APPROXIMATELY 2 FEET AND TO THE NORTHERN PROPERTY LINE TO SAN DIEGO AVENUE NE APPROXIMATELY 4 FEET.

THE PROPOSED GRADING WILL UTILIZE THE SAME DRAINAGE PATTERNS AS THE EXISTING CONDITIONS. THE SITE WILL DRAIN TO TWO STORMWATER MANAGEMENT FACILITIES. ONE IS LOCATED ALONG THE WESTERN PROPERTY LINE NEXT TO BEVERLY HILLS AVENUE AND THE OTHER ONE IS LOCATED IN THE SOUTHWEST CORNER ADJACENT TO SAN DIEGO AVENUE.

STORM SEWER NOTES

D1. STORM DRAINS #1, #2 AND #3 SHALL HAVE A STRUCTURE WITH A MINIMUM 4'x4' STRUCTURE WITH 4'x4' P 1 7/8 GRATE.

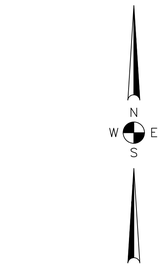
D2. STORM DRAIN MANHOLE #1 SHALL BE INSTALLED PER C.O.A. STANDARD DETAIL 2209.

D3. INSTALL 48" SANITARY SEWER MANHOLE PER C.O.A. STANDARD DETAIL 2102.

D4. INSTALL TYPE A CURB INLET PER C.O.A. STANDARD DETAIL 2201 & 2202.

D5. CONNECT TO EXISTING 36" RCP PER C.O.A. STANDARD DETAIL 2237.

D6. INSTALL 12" NYLOPLAST DRAIN BASIN PER DETAIL B



30' 0' 15' 30' 60'
SCALE IN FEET 1" = 30'
WHEN PRINTED ON 24" x 36" SHEET

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MARION F. HALL
NEW MEXICO
27768
04/21/2023
PROFESSIONAL ENGINEER

Rev	Date	Description
1	04/18/2023	ADDENDUM 1

LUXELOCKER - ALBUQUERQUE
BEVERLY HILLS AVE NE & SAN DIEGO AVE NE
ALBUQUERQUE, NM

Scale:	1" = 30'
Date:	SEPT 2022
Drawn By:	MFH
Project Number:	2022 - 09

Sheet Title: GRADING PLAN

Sheet Number: C6