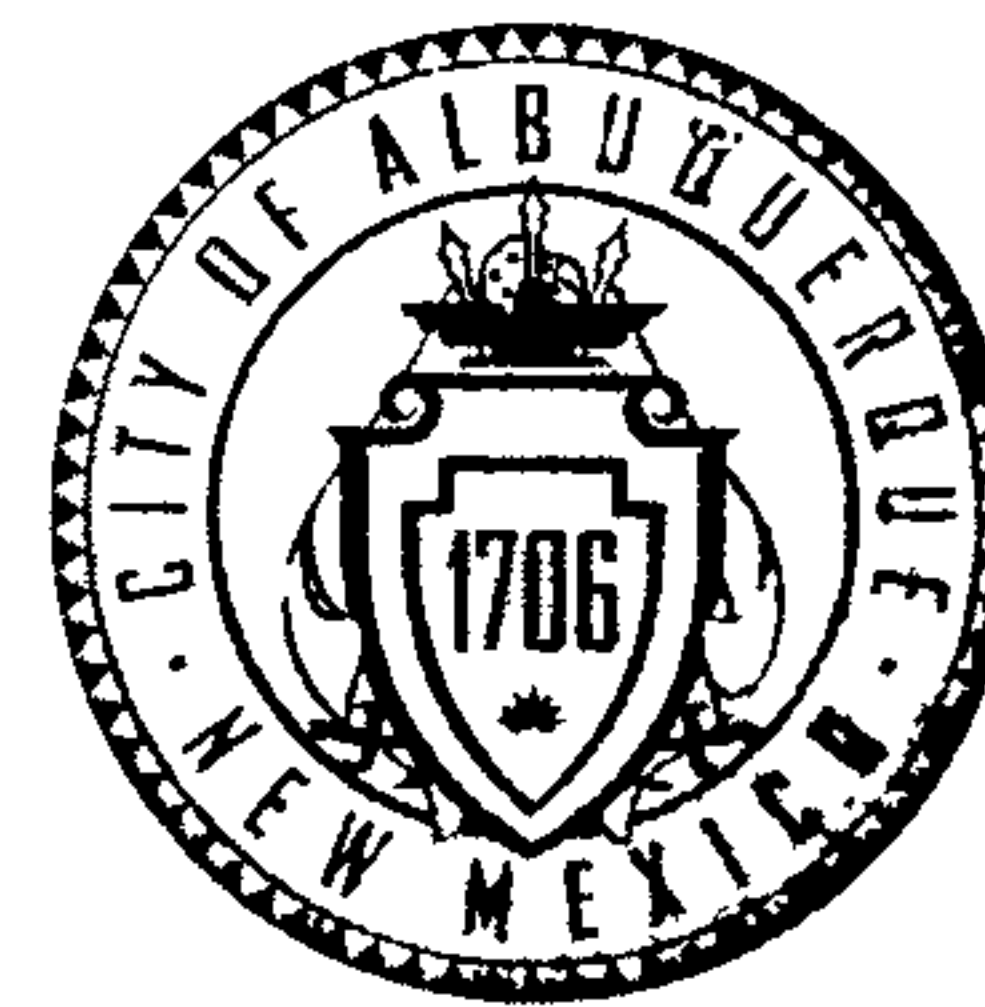


CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



December 22, 2015

Åsa M. Nilson-Webber, P.E.
Isaacson & Arfman, P.A.
128 Monroe Street N.E.
Albuquerque, NM 87108

Richard J. Berry, Mayor

**RE: Generations at West Mesa
Grading & Drainage Plan
Engineer's Stamp Date 12-22-2015 (File: K11D084)**

Dear Mrs. Weber:

Based upon the information provided in your submittal received 12-22-15, the above referenced plan is approved for Site Plan for Building Permit

Prior to Building Permit approval, the following comments must be addressed:

1. Since you are opting to discharge into 57th Street, provide street capacity calculations.
2. Show retaining wall locations, with T.O.W. and B.O.W. elevations.
3. Note any existing walls along boundaries
4. North side of site: provide SW culvert beyond alley gutter
5. Along East and West side of site, provide positive flow path. Provide a section and adjust sidewalk to allow for flow path.
6. Provide a curb cut so swale along eastern edge discharges to driveway
7. Call out inlet on east side of driveway
8. South side of site: provide SW culvert so discharge enters first flush pond

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

If you have any questions, you can contact me at 924-3695.

Sincerely,

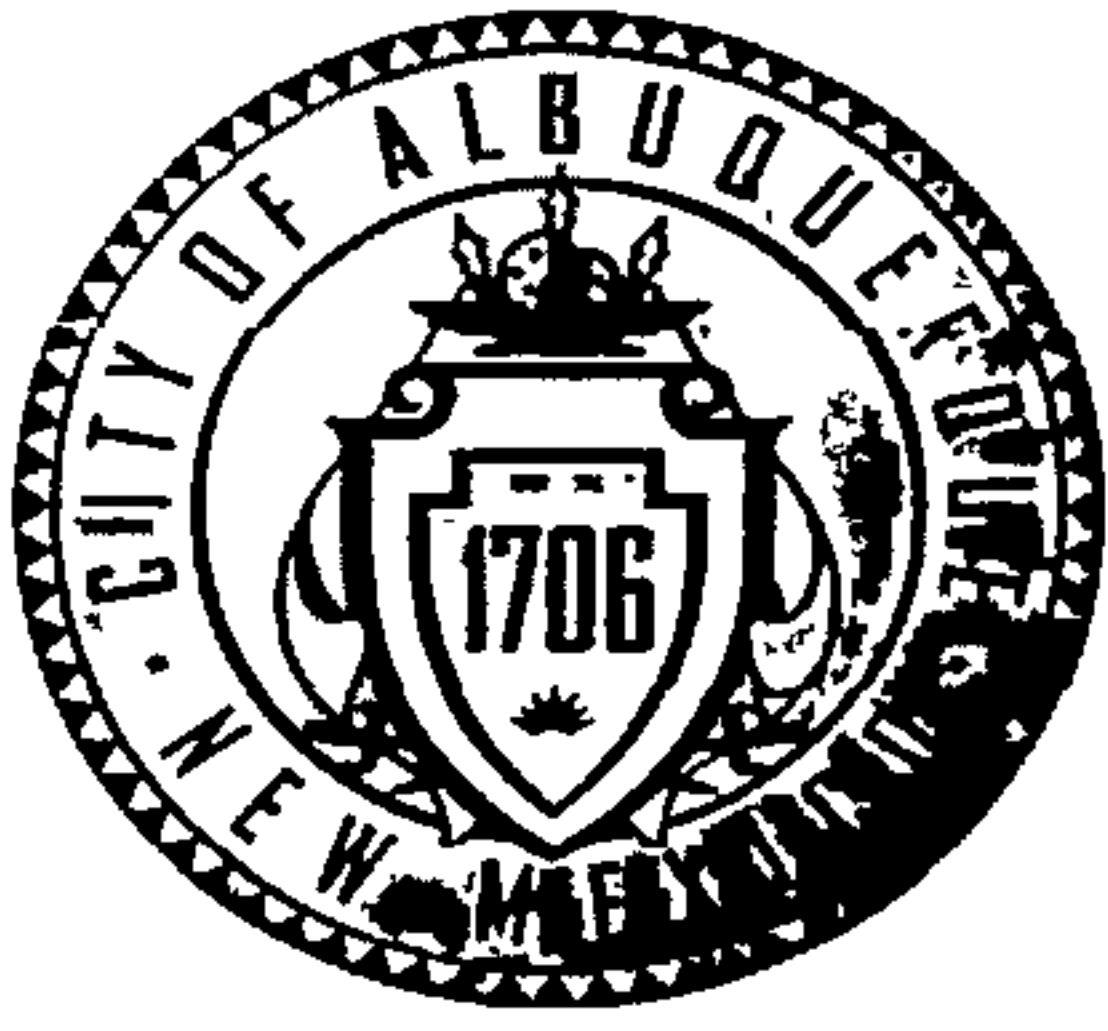
Rita Harmon, P.E.
Senior Engineer, Planning Dept.
Development Review Services

Orig Drainage file
c pdf Addressee via Email

K11D084_SPBP_Appr.doc

K11

1 of 1



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: Generations at West Mesa Building Permit #: _____ City Drainage #: K11/DO84
DRB#: _____ EPC#: _____ Work Order#: _____
Legal Description: Tract C-8-B, Town of Atrisco Grant, Airport Unit AND Lots 5 & 6, Torres Addition AND Vacated Portion of Esperanza Drive NW
City Address: 57th Street & Avalon Road NW

Engineering Firm: Isaacson & Arfman, P.A. Contact: Fred C. Arfman
Address: 128 Monroe Street NE - Albuquerque, NM 87108
Phone#: (505) 268-8828 Fax#: _____ E-mail: freda@iacivil.com

Owner: City of Albuquerque - Department of Family & Community Services Contact: Doug Chaplin
Address: P.O. Box 1293 - Albuquerque, NM 87103
Phone#: (505) 768-2860 Fax#: _____ E-mail: dchaplin@cabq.gov

Architect: Dekker/Perich/Sabatini Contact: Miriam Hicks
Address: 7601 Jefferson Street NE, Suite 100 - Albuquerque, NM 87109
Phone#: (505) 761-9700 Fax#: _____ E-mail: miriamh@dpsdesign.org

Other Contact: Surv-Tek, Inc. Contact: Russ P. Hugg
Address: _____
Phone#: (505) 897-3366 Fax#: _____ E-mail: _____

Check all that Apply:

DEPARTMENT:

- ☒ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

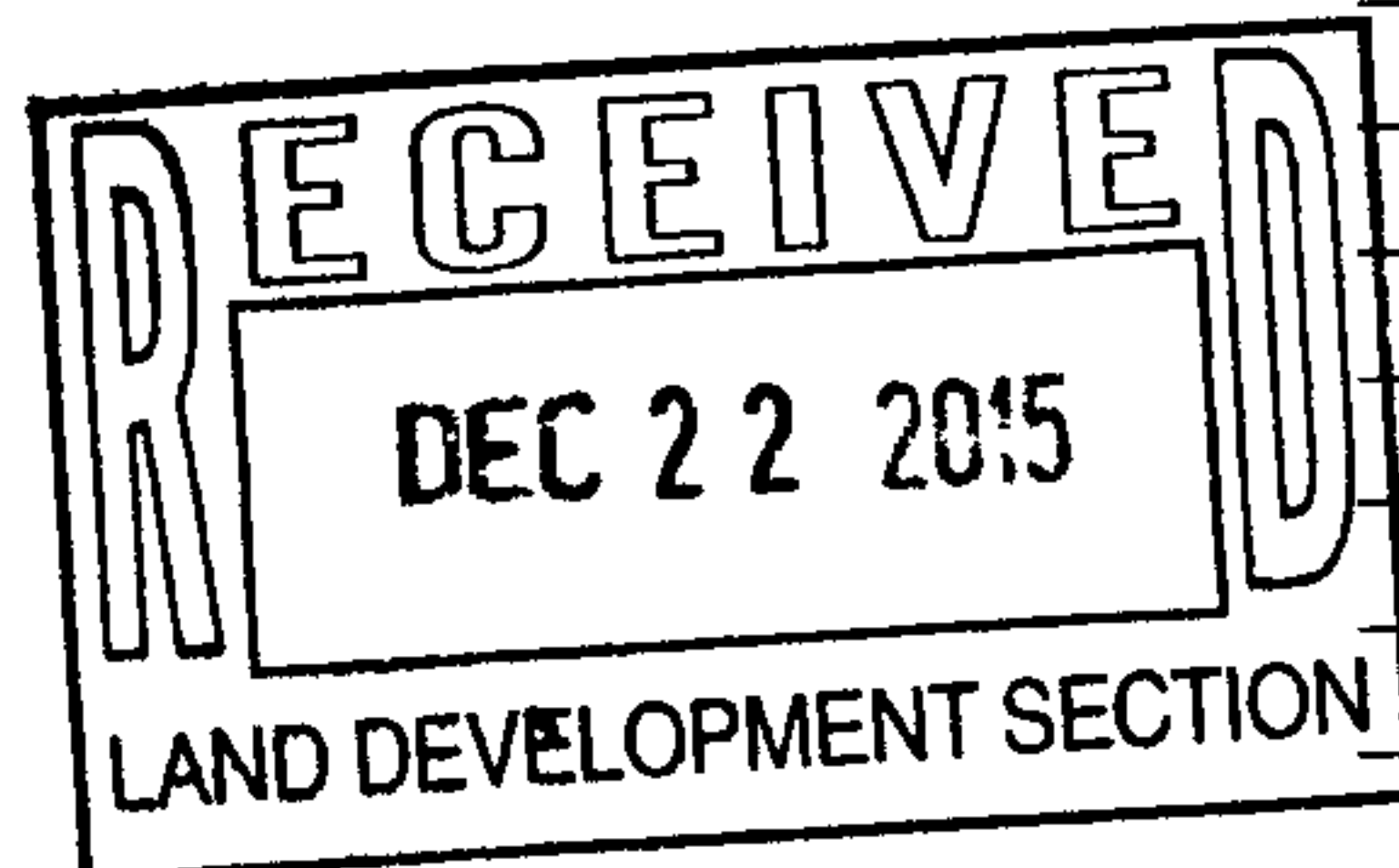
- ☒ ENGINEER ARCHITECT CERTIFICATION
☐ CONCEPTUAL G & D PLAN
☒ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
☐ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ☒ Yes ☐ No

DATE SUBMITTED: December 22, 2015 By: Fred C. Arfman

CHECK 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
☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____





Bryan Bobrick <bryanb@iacivil.com>

Hydrology Submittal - Generations at West Mesa

1 message

Bryan Bobrick <bryanb@iacivil.com>

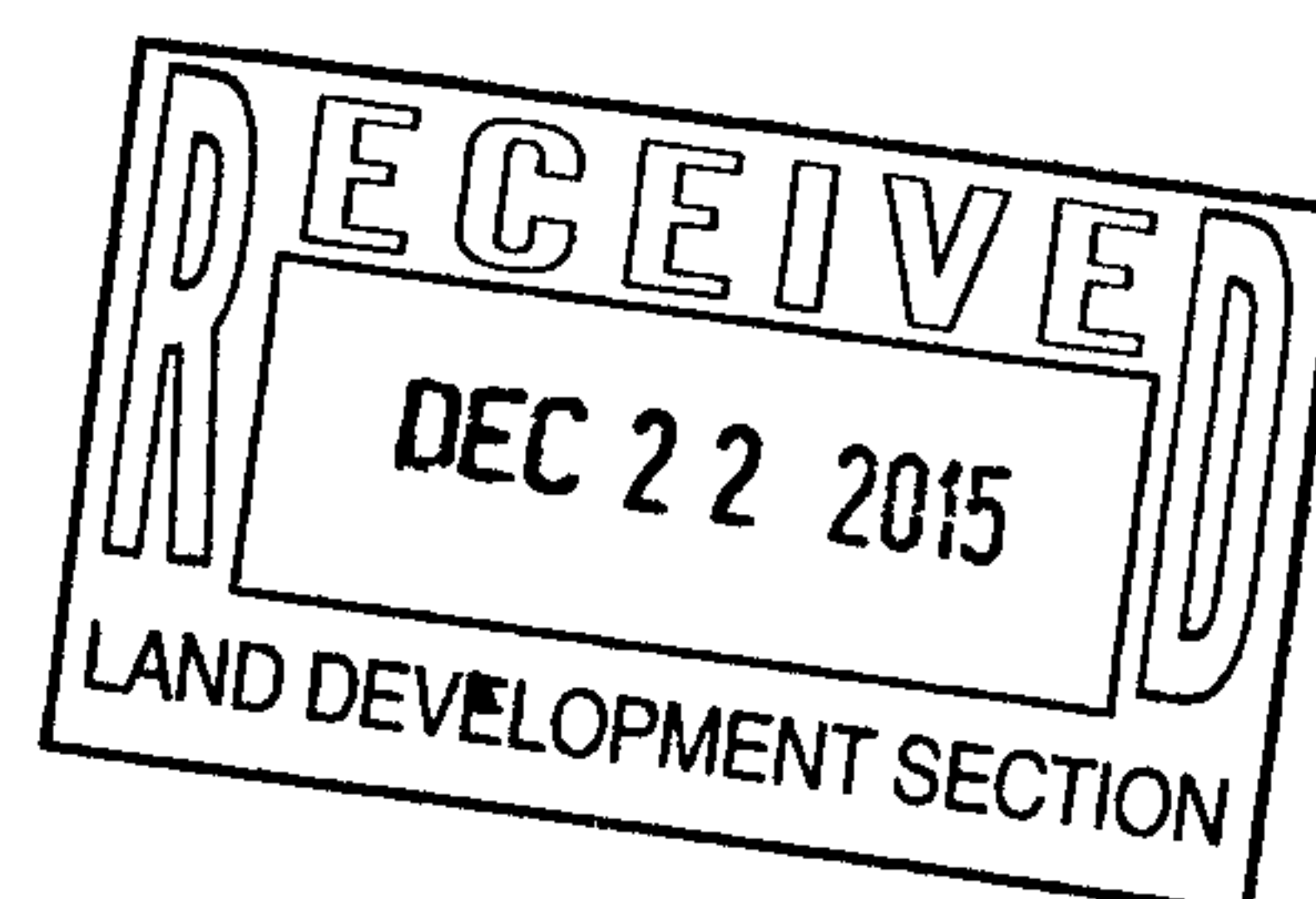
Tue, Dec 22, 2015 at 2:56 PM

To: COA Planning Development Review Services <PLNDRS@cabq.gov>

Cc: Ruth Lozano <ruthl@iacivil.com>, Fred Arfman <freda@iacivil.com>, Asa Weber <asaw@iacivil.com>

Bryan Bobrick
Isaacson & Arfman, P.A.
128 Monroe N.E.
Albuquerque, NM 87108
(505) 268-8828

 **GENERATIONS G&D PLANS.pdf**
1723K



CALCULATIONS: 2124 Generations at West Mesa : August 19, 2015

Based on Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993

ON-SITEAREA OF SITE:

159019

 ment "NM" = 3.7

100-year, 6-hour

HISTORIC FLOWS:**DEVELOPED FLOWS:****EXCESS PRECIP:**

	Treatment SF	%
Area A =	0	0%
Area B =	0	0%
Area C =	159018.8287	100%
Area D =	0	0%
Total Area =	159018.8287	100%

	Treatment SF	%
Area A =	0	0%
Area B =	28623	18%
Area C =	31804	20%
Area D =	98592	62%
Total Area =	159018.8287	100%

Precip. Zone	1
$E_A = 0.44$	
$E_B = 0.67$	
$E_C = 0.99$	
$E_D = 1.97$	

On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)

$$\text{Weighted E} = \frac{E_A A_A + E_B A_B + E_C A_C + E_D A_D}{A_A + A_B + A_C + A_D}$$

Historic E =	0.99 in.	Developed E =	1.54 in.
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On-Site Volume of Runoff: $V_{360} = E * A / 12$

Historic V_{360} =	13119 CF	Developed V_{360} =	20407 CF
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On-Site Peak Discharge Rate: $Q_p = Q_{pA} A_A + Q_{pB} A_B + Q_{pC} A_C + Q_{pD} A_D / 43,560$

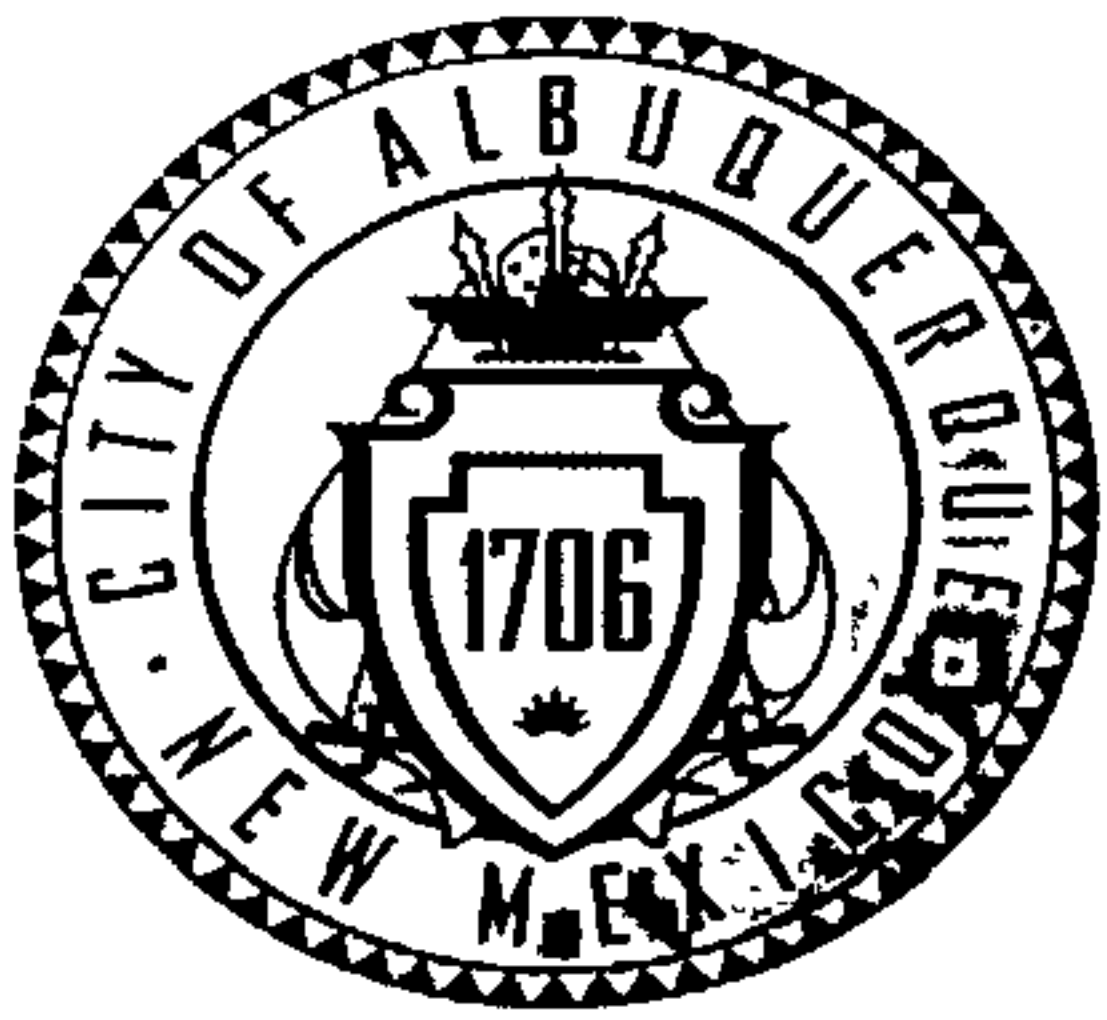
For Precipitation Zone 1

$Q_{pA} =$	1.29	$Q_{pC} =$	2.87
$Q_{pB} =$	2.03	$Q_{pD} =$	4.37

Historic Q_p =	10.5 CFS	Developed Q_p =	13.3 CFS
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BASIN NO.	DESCRIPTION	FIRST FLUSH TOTAL - OVERALL PROPERTY
Area of basin flows =	159019 SF	3.7 Ac.
The following calculations are based on Treatment areas as shown in table to the right		
Sub-basin Weighted Excess Precipitation (see formula above)		LAND TREATMENT
Weighted E =	1.54 in.	A = 0%
Sub-basin Volume of Runoff (see formula above)		B = 18%
V ₃₆₀ =	20407 CF	C = 20%
Sub-basin Peak Discharge Rate: (see formula above)		D = 62%
Q _P =	13.3 cfs	FIRST FLUSH VOL.
		2793 CF

PRE-DESIGN CONFERENCE IS REQUESTED



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

*Verbal No
To be developed
per Pre-conf
meeting
7/7/15*

Project Title: Generations at West Mesa Building Permit #: _____ City Drainage #: K11 / D084
DRB#: _____ EPC#: _____ Work Order#: _____
Legal Description: Tract C-8-B, Town of Atrisco Grant, Airport Unit AND Lots 5 and 6, Torres Addition AND Vacated Portion of Esperanza Dr. N.W.
City Address: 57th Street and Avalon Road NW **5710 AVALON**

Engineering Firm: Isaacson & Arfman, P.A. Contact: Fred Arfman, PE
Address: 128 Monroe Street NE - Albuquerque, NM 87108
Phone#: (505) 268-8828 Fax#: _____ E-mail: Freda@iacivil.com

Owner: City of Albuquerque Contact: Doug Chaplin, COA Dept. of Family & Comm Serv
Address: POBox 1293, Albuquerque, NM 87103
Phone#: 7689-2860 Fax#: _____ E-mail: dchaplin@cabq.gov

Architect: Dekker/Perich/Sabatini Contact: Miriam Hicks
Address: 7601 Jefferson NE, Suite 100, Albuquerque, NM 87109
Phone#: (505) 761-9700 Fax#: _____ E-mail: miriamh@dpsdesign.org

Surveyor: Surv-Tek, Inc Contact: Russ Hugg
Address: _____
Phone#: (505) 897-3366 Fax#: _____ E-mail: Hugg@survtek.com

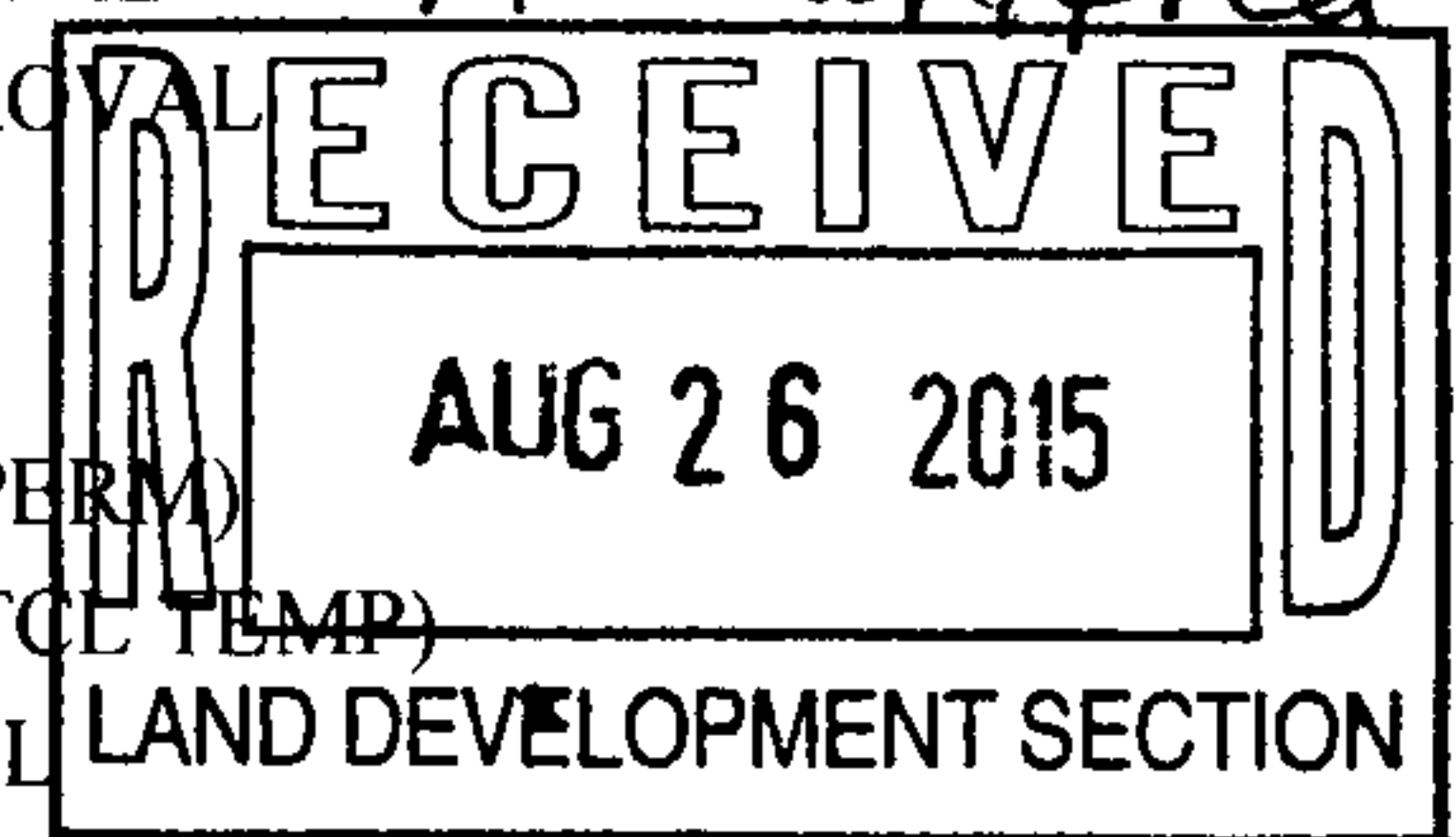
Contractor: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1st SUBMITTAL
- ☐ DRAINAGE PLAN RESUBMITTAL
- ☒ CONCEPTUAL G & D PLAN
- ☐ GRADING PLAN
- ☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ☐ ENGINEER'S CERT (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEER'S CERT (TCL)
- ☐ ENGINEER'S CERT (DRB SITE PLAN)
- ☐ ENGINEER'S CERT (ESC)
- ☐ SO-19
- ☐ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ SIA/FINANCIAL GUARANTEE RELEASE
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D APPROVAL
- ☒ S. DEV. FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY (PERM)
- ☐ CERTIFICATE OF OCCUPANCY (TCL TEMP)
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ BUILDING PERMIT APPROVAL
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☐ GRADING CERTIFICATION
- ☐ SO-19 APPROVAL
- ☐ ESC PERMIT APPROVAL
- ☐ ESC CERT. ACCEPTANCE
- ☐ OTHER (SPECIFY)



WAS A PRE-DESIGN CONFERENCE ATTENDED: _____ Yes _____ No _____ Copy Provided

DATE SUBMITTED: August 26, 2015 By: Fred C. Arfman, PE

Isaacson & Arfman, P.A.

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres
3. **Drainage Report**: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
4. **Erosion and Sediment Control Plan**: Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development

CITY OF ALBUQUERQUE
PLANNING DEPARTMENT
DEVELOPMENT SERVICE / HYDROLOGY SECTION

DATE: _____
CONFERENCE RECAP

ZONE ATLAS PAGE NO: K 11
DRAINAGE FILE: K-11 D084
ZONING: _____
DRB: Yes
SUBJECT: ~~Sub Division~~ - GENERATIONS @ WEST MESA (SR. HOUSING)
STREET ADDRESS (IF KNOWN): _____
SUBDIVISION NAME: _____

APPROVAL REQUESTED:

ATTENDANCE: Curtis Cherne, Bryan Bobrick, Rita Harman

FINDINGS:

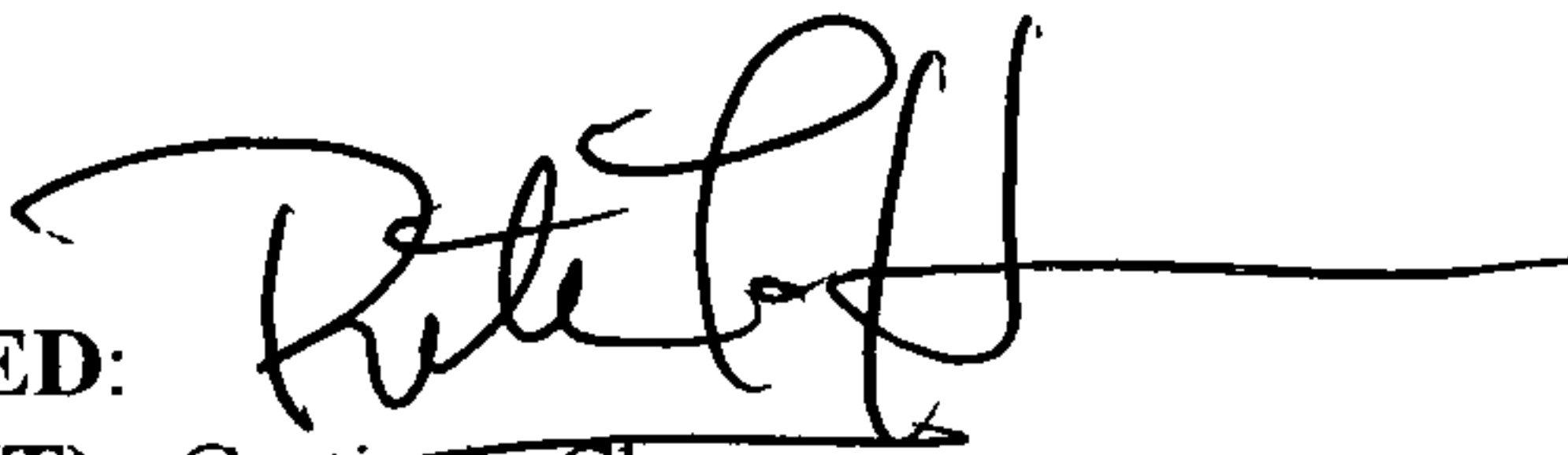
- FREE DISCHARGE AFTER FIRST FLUSH CAPTURED


→ - opt ① Analyze 57th St. Capacity + discharge into St (analyze onsite Drive for capacity)

② Put inlet in onsite + tie to existing MH in 57th

- Double A inlet Downstream (near Fire station) can pick up St. flows + flows from this development.

THE UNDERSIGNED AGREES THAT THE ABOVE FINDINGS ARE SUMMARIZED ACCURATELY AND ARE SUBJECT TO CHANGE IF FURTHER INVESTIGATION REVEALS THAT THEY ARE NOT REASONABLE OR THAT THEY ARE BASED ON INACCURATE INFORMATION.

SIGNED: 
NAME (PRINT): Curtis A. Cherne
Rita Harman

SIGNED: 
NAME (PRINT): Bryan Bobrick

****NOTE**** PLEASE PROVIDE A COPY OF THIS RECAP WITH YOUR DRAINAGE SUBMITTAL.