CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director

Mayor Timothy M. Keller

May 29, 2018

Scott Eddings, P.E.
Huitt-Zollars
333 Rio Rancho Blvd., Suite 101
Rio Rancho, NM, 87124

RE: **3300 2nd St NW**
Grading and Drainage Plan
Engineer's Stamp Date: 5/25/18
Hydrology File: G14D091

Dear Mr. Eddings:

Based on the information provided in your submittal received on 5/25/18, the Grading Plan is approved for Paving Permit and SO-19 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

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

EXISTING DRAINAGE CONDITIONS

THIS SITE IS FULLY DEVELOPED AND CURRENTLY DIRECTLY DISCHARGES ONTO SECOND STREET.

PROPOSED DRAINAGE CONDITIONS

DEVELOPMENT SHALL BE IN ACCORDANCE WITH EXISTING DRAINAGE PATTERNS. LANDSCAPE AREAS SHALL BE DEPRESSED AND GRADES SHALL BE DESIGNED TO PROVIDE POSITIVE DRAINAGE TOWARD DEPRESSED LANDSCAPE AREAS. STORM WATER DESIGN EVENT SHALL DISCHARGE INTO THE SITE IN ACCORDANCE WITH THE APPROVED DRAINAGE MASTER PLAN.

THE TOTAL SITE AREA IS APPROXIMATELY 2.52 ACRES WITH THE FOLLOWING ESTIMATED LAND TREATMENTS FOR THE SITE:

A: 0% B: 5% C: 0% D: 95%

CURRENT SITE DISCHAGE IS 11.53 CFS AND THE VOLUME OF RUNOFF FROM THE SIX HOUR 100-YEAR EVENT IS 22,762 CF. SITE GRADES SHALL BE MODIFIED SLIGHTLY TO DIRECT SITE RUNOFF TO THE PROPOSED FIRST FLUSH POND AT TO THE NORTHWEST CORNER OF THE PROPERTY. DESIGN EVENT RUNOFF SHALL BE CONVEYED TO SECOND STREET UNDER TWO PROPOSED SIDEWALK CULVERTS (1 EACH 24" AND 1 EACH 12" WIDTH).

FIRST FLUSH REQUIRED VOLUME FOR THE DISTURBED AREA IS 478 CF.

FIRST FLUSH

EXISTING SITE IS FULLY DEVELOPED AND DIRECT DISCHARGES ONTO SECOND STREET. IMPROVEMENTS FROM THIS PROJECT DISTURBS APPROXIMATELY 22,040 SQUARE FEET.

FIRST FLUSH REQUIREMENTS TREATING THE DISTURBED AREA.

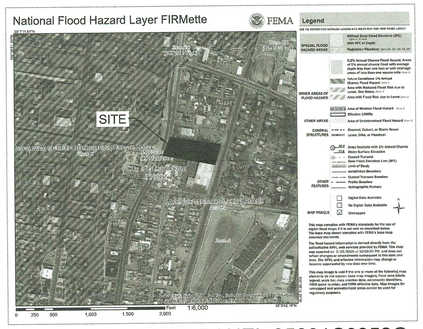
VOLUME = 22,040 SF * 0.26IN/12 = 477.53 CUBIC FEET

THIS PROJECT INCLUDES A FIRST FLUSH POND AT THE NORTHWEST CORNER OF THE SITE WHICH WILL OVERFLOW THRU A NEW SIDEWALK CULVERT ONTO SECOND STREET.

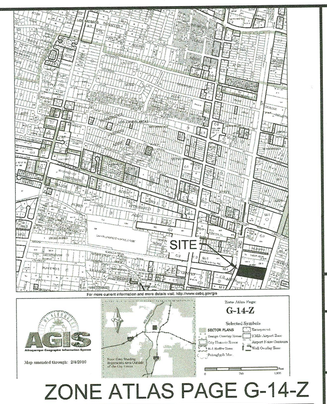
SIDEWALK CULVERT ANALYSIS

Worksheet for Rectangular Channel - 1

Project Description		
Friction Method	Manning Formula	
Solve For	Discharge	
Input Data		
Roughness Coefficient	0.013	
Channel Slope	0.02000	ft/ft
Normal Depth	0.50	ft
Bottom Width	3.00	ft
Results		
Discharge	12.61	ft³/s
Flow Area	1.50	ft²
Wetted Perimeter	4.00	ft
Hydraulic Radius	0.38	ft
Top Width	3.00	ft
Critical Depth	0.82	ft
Critical Slope	0.00471	ft/ft
Velocity	8.41	ft/s
Velocity Head	1.10	ft
Specific Energy	1.60	ft
Froude Number	2.10	
Flow Type	Supercritical	
GVF Input Data		
Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	
GVF Output Data		
Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	0.50	ft
Critical Depth	0.82	ft
Channel Slope	0.02000	ft/ft
Critical Slope	0.00471	ft/ft



FIRM PANEL 35001C0352G



ZONE ATLAS PAGE G-14-Z

GENERAL NOTES

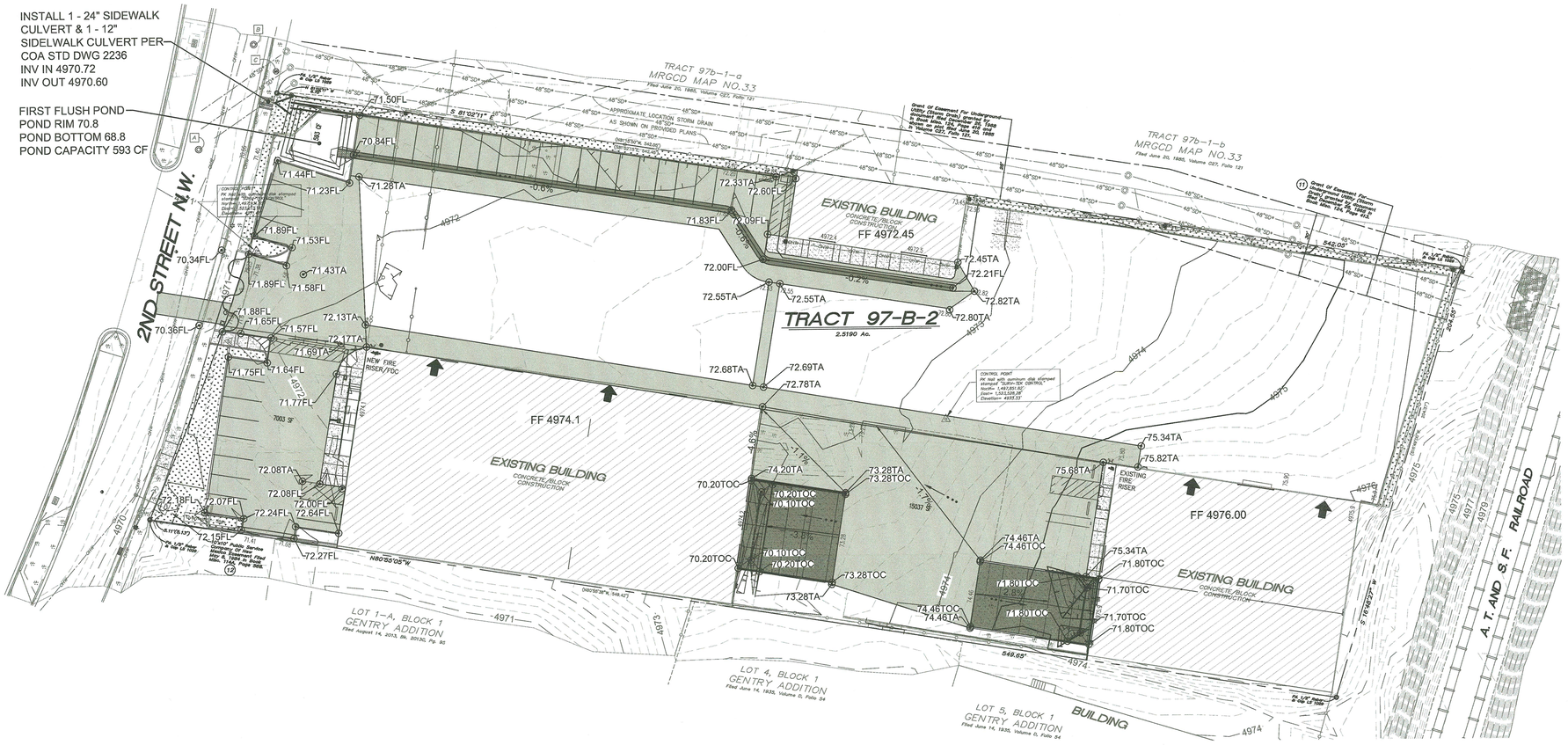
- Bearings are grid based on New Mexico State Plane Coordinate System, Central Zone (NAD 83).
- All corners found in place and held were tagged with a brass disk stamped "HUGG L.S. 9750" unless otherwise indicated hereon.
- All corners that were set are either a 5/8" rebar with cap stamped "HUGG L.S. 9750" or a concrete nail with brass disk stamped "HUGG L.S. 9750" unless otherwise indicated hereon.
- Field surveys were performed during the month of October, 2016.
- Contour interval is one foot.
- Vertical Datum is based upon the Albuquerque Control Survey Monument "NM–448–N8", Elevation = 5021.651 (NAVD 1988).
- Plat entitled "PLAT OF TRACTS 97–B–1–A & 97–B–1–B, A REPLAT OF TRACT 97–B–1, M.R.G.C.D. MAP NO. 33, ALBUQUERQUE, NEW MEXICO, JUNE, 1985", filed in the office of the County Clerk of Bernalillo County, New Mexico, on June 20, 1985, in Volume C27, Folio 121.
- Albuquerque Zone Atlas Page G–14–Z.

FLOOD ZONE DETERMINATION

The subject property appears to lie within "ZONE X" (Areas determined to be outside the 0.2% annual chance floodplain) as shown on National Flood Insurance Program Flood Insurance Rate Map Number 35001C0342G, Map Revised Map Revised September 26, 2009.

SO 19 PERMIT REQUIREMENTS

1. An excavation permit will be required before beginning any work within City Right-Of-Way.
2. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
3. Two working days prior to any excavation, the contractor must contact **New Mexico One Call, dial "811"** [or (505) 260-1990] for the location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to traffic/street use.
6. Maintenance of the facility shall be the responsibility of the owner of the property being served.
7. Work on arterial streets may be required on a 24-hour basis.
8. Contractor must contact Jason Rodriguez at 235-8016 and Construction Coordination at 924-3416 to schedule an inspection.



A1 GRADING PLAN
SCALE 1"=30'

LEGEND

- BUILDING
- CONCRETE
- ASPHALT
- GRADE BREAK
- ROOF DRAIN LOCATION
- DIRECTION OF FLOW
- DISCHARGE LOCATION

NO.	DESCRIPTION	DATE	BY
1			
2			
3			
4			
5			
6			
7			

REVISIONS (OR CHANGE NOTICES)

Designed By: HUITT-ZOLLARS
Huitt-Zollars, Inc.
333 Rio Rancho Drive NE, Suite 101
Rio Rancho, New Mexico 87124
Phone (505) 892-5141 Fax (505) 892-3259

Designed For: LEAPING LAB PROPERTIES, LLC.
P.O. BOX 9043
ALBUQUERQUE, NEW MEXICO 87119

GRADING AND DRAINAGE PLAN

3300 SECOND STREET
TENANT IMPROVEMENTS

SCOTT E. MEDDINGS NEW MEXICO 12858 REGISTERED PROFESSIONAL ENGINEER
5/25/18

PROJECT NO.	R307382.02
DESIGNED BY:	GM
DRAWN BY:	VKL
CHECKED BY:	SE
DATE:	MAR. 28, 2018
DPW CHK:	-

SHEET: C102