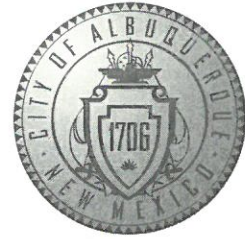


CITY OF ALBUQUERQUE



November 23, 2016

Richard J. Berry, Mayor

Mike Walla, P.E.
Walla Engineering, Ltd
6501 Americas Parkway NE, Suite 301
Albuquerque, NM, 87110

**RE: 7121 Washington
Grading and Drainage Plan
Engineer's Stamp Date 10-24-2016 (File:D17D016)**

Dear Mr. Walla:

Based upon the information provided in your submittal received 10-24-2016, the above-referenced revised plan is approved for Building Permit with the following conditions:

1. The first flush pond is designed with a berm, but it is not clear if a spillway is necessary. Please assess if one should be designed, and if needed, it can be included in the as-built.
2. The above-mentioned berm will need to be protected from erosion, to prevent sediment transport to the offsite pond.
3. Consider adding curbing or edge protection for the pond to prevent erosion at the edge of asphalt, and/or designing an inlet point with erosion control.

Please attach a copy of this approved plan in the construction sets when submitting for the building permit. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Abiel Carrillo, P.E.
Principal Engineer, Planning Dept.
Development Review Services

Orig: Drainage file



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: _____ Building Permit #: _____ City Drainage #: _____

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

Legal Description: _____

City Address: _____

Engineering Firm: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Owner: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Architect: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Surveyor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

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: _____ By: _____

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

D

C

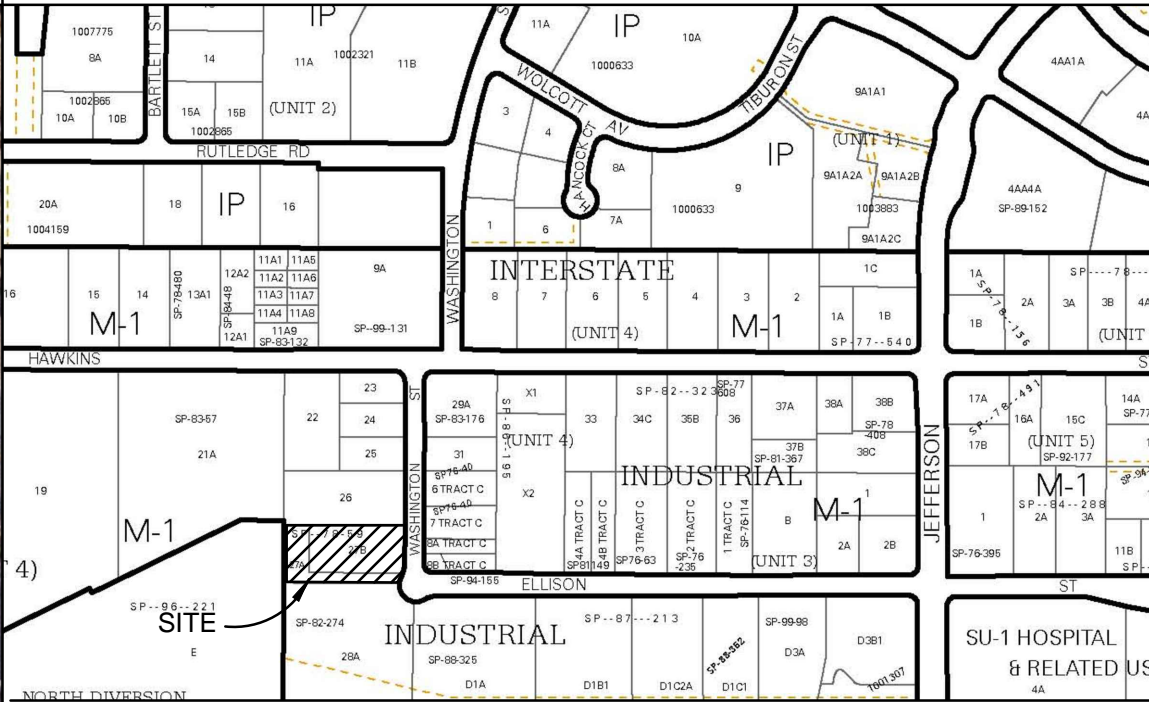
B

A

AREA DRAINAGE POND and CHANNEL



VICINITY MAP D-17-Z



HYDROLOGY CALCULATIONS

PRECIPITATION ZONE 2 DESIGN STORM: (IN)									
				1hr	6hr	24hr	4day	10day	
				2.01	2.35	2.75	3.30	3.95	
EXISTING CONDITIONS - ENTIRE SITE									
LAND TRTMT	AREA (ACRE)	AREA %	P6	Q (CFS/AC)	Q (CFS)	V6 (CF)	V24 (CF)	V4DAY (CF)	V10DAY (CF)
A	0.000	0%	0.53	1.56	0.00	0	0	0	0
B	0.054	4%	0.78	2.28	0.12	153	154	153	153
C	0.410	32%	1.13	3.14	1.29	1,682	1,682	1,682	1,682
D	0.834	64%	2.12	4.70	3.92	6,420	7,632	9,298	11,266
TOTALS	1.298	100%			5.33	8,255	9,467	11,132	13,101
PROPOSED CONDITIONS									
LAND TRTMT	AREA (ACRE)	AREA %	P6	Q (CFS/AC)	Q (CFS)	V6 (CF)	V24 (CF)	V4DAY (CF)	V10DAY (CF)
A	0.000	0%	0.53	1.56	0.00	0	0	0	0
B	0.108	8%	0.78	2.28	0.25	306	306	306	306
C	0.221	17%	1.13	3.14	0.69	907	907	907	907
D	0.969	75%	2.12	4.70	4.55	7,457	8,864	10,799	13,085
TOTALS	1.298	100%			5.49	8,669	10,076	12,011	14,297
FIRST FLUSH : 42209 SF X 0.44"/12 IN per FT = 1548 CF									
Pond Volume : 2025 SF X 1.0' = 2025 CF									

DESIGN NARRATIVE

THE SUBJECT PROJECT IS A 1.298 ACRE DEVELOPED SITE THAT IS BEING RENOVATED IN ORDER TO ADD A 2000 SF BUILDING AND SOME ASPHALT PAVING ON A PREVIOUSLY UNIMPROVED PORTION OF THE SITE. THE SCOPE OF THE CONSTRUCTION WILL INCLUDE CONSTRUCTION OF A SMALL ONSITE POND REQUIRED TO HOLD A FIRST FLUSH VOLUME OF WATER FROM THE IMPERMEABLE SURFACE AREA ON THE SITE. THE EXISTING SITE HAS 2 EXISTING BUILDINGS AND A PAVED PARKING AND DRIVE ACCESS FOR TRUCK LOADING. THESE BUILDINGS AND PAVING WILL NOT BE CHANGED IN THE SCOPE OF THIS WORK. THE NEW SITE IMPROVEMENTS WILL INCREASE THE ON-SITE DEVELOPED Q BY LESS THAN 3%, OR APPROXIMATELY 0.16 CFS. THE EXISTING SITE POND SOME RUNOFF WITHIN THE PROPERTY BOUNDARY BUT MUCH OF THE DEVELOPED RUNOFF IS DEPOSITED IN A CONCRETE CHANNEL ADJACENT TO THE SITE ON THE SOUTH BORDER OF THE PROPERTY. THIS RUNOFF THEN IS COLLECTED IN A PUBLIC POND FACILITY WEST AND SOUTH OF THE PROPERTY. THE NEW WORK WILL NOT CHANGE THE VOLUME CURRENTLY DRAINING INTO THE CONCRETE CHANNEL.

NO OFF SITE RUNOFF AFFECTS THE SUBJECT PROPERTY NOR DOES ANY SITE DEVELOPED RUNOFF FLOW TO ADJACENT PROPERTIES FROM THIS SITE.

LEGAL DESCRIPTION

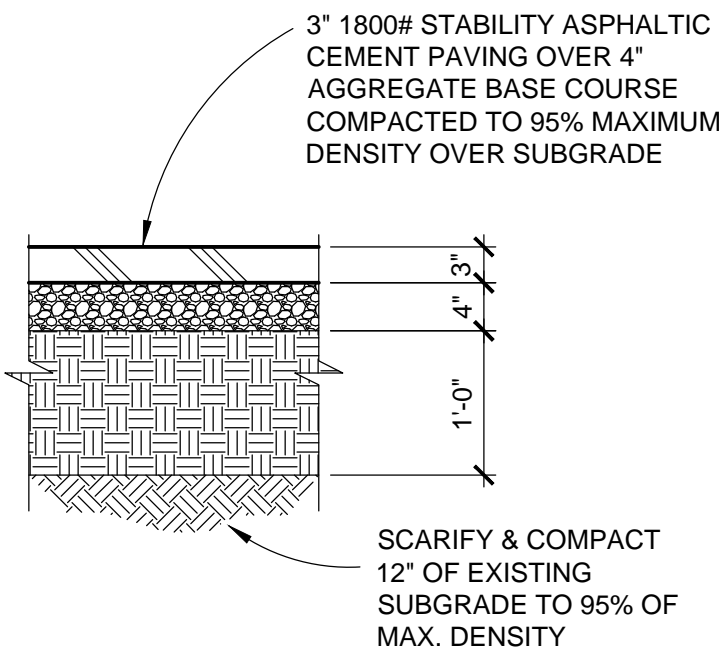
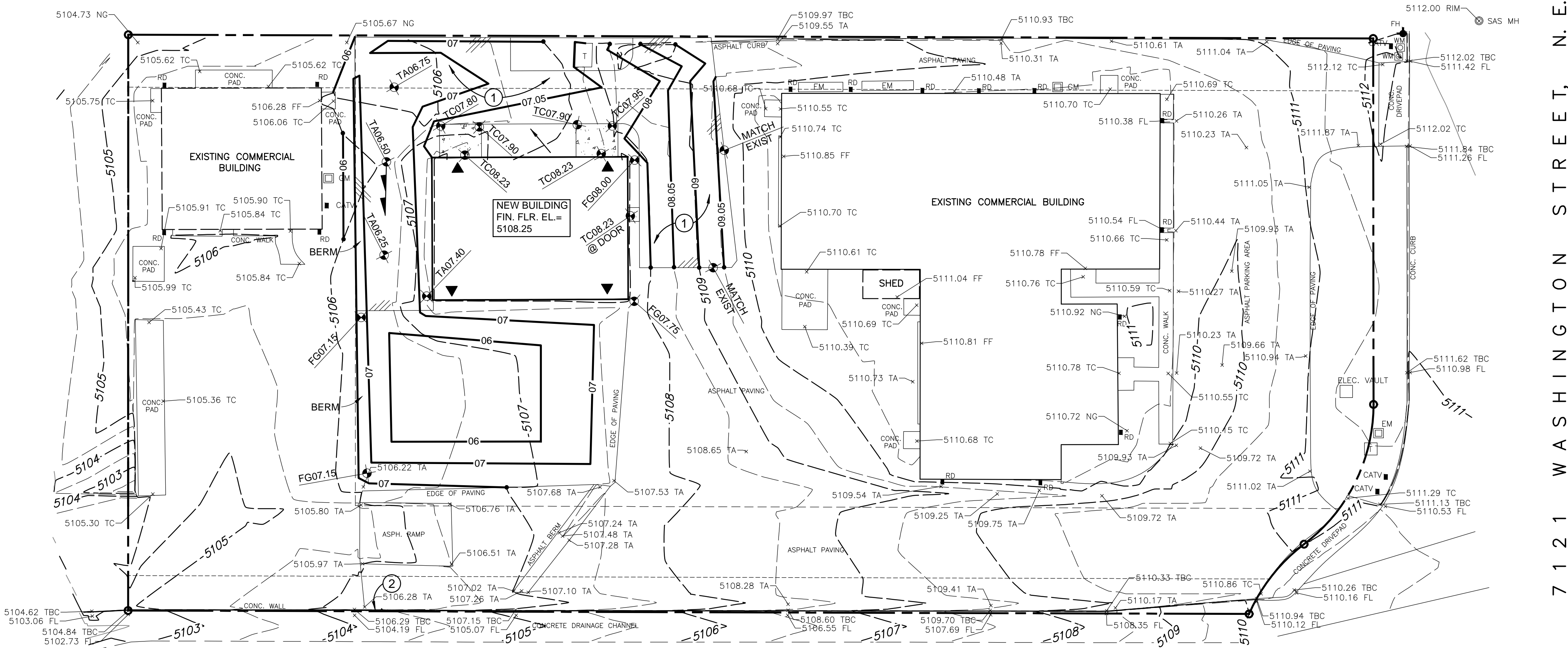
LOT 27-B OF SUMMARY PLAT SHOWING LOTS 27-A & 27-B, UNIT IV, INTERSTATE INDUSTRIAL TRACT, ALBUQUERQUE, NM

SHEET KEYNOTES

- ASPHALT PAVING PER DETAIL A5/C101
- EXISTING BREAK IN CURB FOR DRAINAGE TO OUTLET CHANNEL

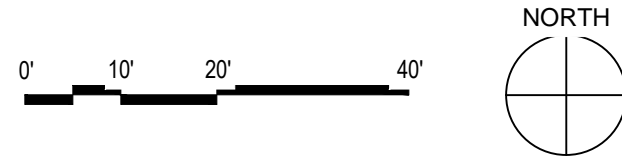
LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- NEW SPOT ELEVATION
- NEW CONTOUR
- FLOWLINE
- TOP OF CONCRETE
- FINISHED GRADE
- TOP OF ASPHALT
- FLOW DIRECTION
- ROOF DRAIN LOCATION
- NEW CONCRETE PAVING
- NEW ASPHALT PAVING
- DRAINAGE SWALE



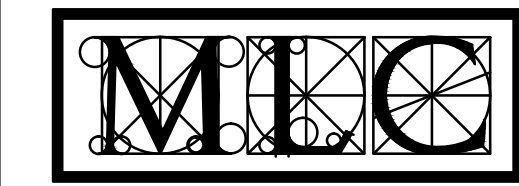
A5 TYPICAL PAVING SECTION
3/4"=1'-0"

A1 GRADING AND DRAINAGE PLAN
1"=20'



Walla ENGINEERING LTD.
6501 American Parkway NE • Suite 301
Albuquerque • New Mexico • 87110
881-3008 • Facsimile 881-4025

Structural Engineering
Civil Engineering



MLC ARCHITECTS, LLC
Rio Rancho, NM (505) 994-2770

Architect

Consultant



7121 WASHINGTON (HARROUN)
7121 Washington Ave NE
Albuquerque, NM 87113

DEVCORP

GRADING AND DRAINAGE PLAN

Project Number 16 - 002
Date 10/24/2016
Drawn by LEK
Checked by MJW

C 101

Scale As indicated