CITY OF ALBUQUERQUE



April 9, 2015

Fred Arfman, P.E. Issacson & Arfman, P.A. 128 Monroe Street NE Albuquerque, NM 87108

RE: S

Starbucks, 4407 Lomas Blvd. Grading and Drainage Plan

Engineer's Stamp Date 3-27-2015 (File: J17-D012)

Dear Mr. Arfman:

Based upon the information provided in your submittal received 3-30-15, the above referenced plan cannot be approved for a Building Permit until the following comments are addressed:

PO Box 1293

1) Under the Basin Calculations, label the associated impervious area next to the first flush volume for each of the basins. At the bottom end of the Basin Calculations Table, show the total proposed 100-year flow, the total of the impervious areas, and the total of the first flush volume.

Albuquerque

2) Provide calculations for the existing 100-year flow for comparison to the proposed 100-year flow.

New Mexico 87103

3) For each of the first flush retention ponding areas, label the volume that is being retained. Show capacity of each of the on-site sidewalk culverts and the flow that it is capturing.

New Mexico 8/103

4) Address any off-site impacts due to site grading with regard to the site immediately adjacent to the Starbucks site.

www.cabq.gov

If you have any questions, you can contact me at 924-3924.

Sincerely,

Jeanne Wolfenbarger, P.E.

Senior Engineer, Planning Dept. Development Review Services

Orig: Drainage file

Addressee via Email



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Starbucks @ Lomas & Washington	Building Permit #:	City Drainage #: J17/	
DRB#: EPC#:		Work Order#:	
Legal Description: Tract A-1; Dailey Addition			
City Address: 4407 Lomas Blvd.			
Engineering Firm: Isaacson & Arfman, P.A.		Contact:	
Address: 128 Monroe Street NE - Albud	querque, NM 87108	E 3 Glackill com	
Phone#: (505) 268-8828 Fax#:		E-mail: @lacivil.com	
Owner: Sedberry & Associates		Contact: John Sedberry	
Address: 4700 Montgomery Blvd NE # 2, Albuquerqu	ie, NM 87109		
Phone#: 855-7650 Fax#:		E-mail:	
Architect: Modulus Architects		Contact: Stephen Dunbar	
Address: 220 Copper Ave. NW, - Suite 350; ABQ, NM	1 87103		
Phone#: (505) 338-1499 Fax#:		E-mail: sdunbar@modulusarchitects	.com
Surveyor: Harris Surveying		Contact: Tony Harris	
Address:		<u></u>	
Phone#: (505) 899-8056 Fax#:		E-mail: tony@harrissurveying.comcastb	iz.net
Contractor: Wilger Enterprises		Contact: John Wilger	
Address: 425 Edmon Rd NE, ABQ, NM 87107			
Phone#: (505) 345-2854 Fax#:		E-mail: jwilger@wilger.com	
		AL/ACCEPTANCE SOUGHT:	
TYPE OF SUBMITTAL: DRAINAGE REPORT	SIA/FINANCIAL GUARAN		
X DRAINAGE REFORT X DRAINAGE PLAN 1st SUBMITTAL	PRELIMINARY PLAT APP		
DRAINAGE PLAN RESUBMITTAL	S. DEV. PLAN FOR SUB'D		
CONCEPTUAL G & D PLAN	S. DEV. FOR BLDG. PERM		
GRADING PLAN	SECTOR PLAN APPROVAL		
EROSION & SEDIMENT CONTROL PLAN (ESC)	FINAL PLAT APPROVAL	-	
ENGINEER'S CERT (HYDROLOGY)	CERTIFICATE OF OCCUPA	NCY (PERM)	
CLOMR/LOMR	CERTIFICATE OF OCCUPA		
TRAFFIC CIRCULATION LAYOUT (TCL)	X FOUNDATION PERMIT AF		
ENGINEER'S CERT (TCL)	X BUILDING PERMIT APPRO		
ENGINEER'S CERT (DRB SITE PLAN)	GRADING PERMIT APPRO		
ENGINEER'S CERT (ESC)	PAVING PERMIT APPROV	AL ESC PERMIT APPROVA	AL
SO-19	WORK ORDER APPROVAL		
OTHER (SPECIFY)	GRADING CERTIFICATION		
WAS A PRE-DESIGN CONFERENCE ATTENDED:	Yes No Co	opy Provided	
DATE SUBMITTED: March 20, 2015	By: Fred C. Arfman, PE		
	Isaacson & Afrman, 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

- Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
- Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5) acres
- Drainage Report: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
- 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

- B. THE CONTRACTOR SHALL ABIDE BY ALL STATE, LOCAL, AND FEDERAL LAWS, CODES, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF
- THESE IMPROVEMENTS, INCLUDING EPA AND ADA REQUIREMENTS. C. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION, OR PRIOR TO OCCUPANCY, AS APPROPRIATE. IF PERMITS ARE DELAYED OR ISSUED WITH CONDITIONS, THE
- D. COORDINATE WORK WITH SITE PLAN, UTILITY PLAN, DEMOLITION PLAN, AND LANDSCAPE PLAN.

CONTRACTOR SHALL NOTIFY THE OWNER AND ARCHITECT IMMEDIATELY.

- E. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING OBSTRUCTIONS, AND CONDITION OF ALL EXISTING INFRASTRUCTURE PRIOR TO CONSTRUCTION. REPORT ALL DISCREPANCIES TO THE ARCHITECT AND VERIFY THE ARCHITECT'S INTENT BEFORE PROCEEDING.
- F. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SAFETY
- G. THE CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS ON SITE AT ALL TIMES. THE CONTRACTOR SHALL NOT SCALE DRAWINGS. ONLY WRITTEN DIMENSIONS OR KEYED NOTES SHALL BE USED.
- H. CONTRACTOR SHALL OBTAIN ALL REQUIRED INSPECTIONS OF THE WORK. CONTRACTOR SHALL REGULARLY UPDATE OWNER AND ARCHITECT REGARDING THE STATUS OF THE INSPECTIONS.
- CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT STRUCTURES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
- J. CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS. EQUIPMENT SHALL ONLY OBSTRUCT DESIGNATED TRAFFIC LANES IF APPROPRIATE BARRICADING PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL IN THE RIGHT-OF-WAY.
- K. THE CONTRACTOR SHALL PROVIDE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN THAT CONFORMS TO THE LATEST EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND LOCAL REQUIREMENTS. THE CONTRACTOR SHALL OBTAIN BARRICADING PERMITS FROM THE APPROPRIATE AUTHORITIES PRIOR TO ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
- L. THE CONTRACTOR SHALL MAINTAIN ALL BARRICADING AND CONSTRUCTION SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADING AT THE END AND BEGINNING OF EACH DAY
- M. PAVEMENT GRADES IN MARKED HANDICAPPED PARKING AREAS SHALL NOT EXCEED 2.0% IN ANY DIRECTION. FOR ALL ACCESSIBLE ROUTES, MAXIMUM ALLOWABLE CROSS SLOPE IS 2.0% AND MAXIMUM LONGITUDINAL SLOPE WITHOUT RAMP IS 5.0%. FOLLOW ALL ADA ACCESSIBILITY GUIDELINES OR CITY CODES, WHICHEVER IS MORE STRINGENT.
- N. ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OF OFFSITE.
- O. PROPOSED SPOT AND CONTOUR ELEVATIONS SHOWN REPRESENT TOP OF FINISH MATERIAL (I.E. TOP OF CONCRETE, TOP OF CONCRETE BUILDING PAD, TOP OF PAVEMENT MATERIAL, TOP OF LANDSCAPING MATERIAL, ETC.). CONTRACTOR SHALL GRADE, COMPACT SUBGRADE AND DETERMINE EARTHWORK ESTIMATES BASED ON ELEVATIONS SHOWN MINUS FINISH MATERIAL THICKNESSES.
- P. IF FIELD GRADE ADJUSTMENTS ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT.
- Q. EXISTING UTILITY LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND MAY BE INCOMPLETE OR OBSOLETE. SUCH LINES MAY OR MAY NOT EXIST

- WHERE SHOWN OR NOT SHOWN. CONTRACTOR SHALL CONTACT NM-811 FOR UTILITY LINE SPOTS TWO WORKING DAYS PRIOR TO CONDUCTING SITE FIELD WORK. CONTRACTOR SHALL FIELD VERIFY AND LOCATE ALL UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF NECESSARY DRY UTILITY ADJUSTMENTS.
- R. SOIL TESTING AND INSPECTION SERVICES DURING EARTHWORK OPERATIONS ARE REQUIRED. CONTRACTOR SHALL ALLOW TESTING LABS TO INSPECT AND APPROVE COMPACTED SUBGRADES, BACKFILL, AND FILL LAYERS BEFORE FURTHER CONSTRUCTION WORK IS DONE. SHOULD COMPACTION TESTS INDICATE INADEQUATE DENSITY, CONTRACTOR SHALL PROVIDE ADDITIONAL COMPACTION AND TESTING AT THE CONTRACTOR'S SOLE EXPENSE.
- CONTRACTOR SHALL PROVIDE ALL OTHER CONSTRUCTION STAKING. CONTRACTOR SHALL LOCATE AND PRESERVE ALL BOUNDARY CORNERS AND REPLACE ANY LOST OR DISTURBED CORNERS AT CONTRACTOR'S SOLE EXPENSE. PROPERTY CORNERS SHALL ONLY BE RESET BY A REGISTERED
- T. A CURRENT STORMWATER CONTROL PERMIT, INCLUDING AN EROSION SEDIMENT CONTROL PLAN (E.S.C.)FOR EROSION AND SEDIMENT CONTROL IS REQUIRED FOR ALL CONSTRUCTION, DEMOLITION CLEARING, AND GRADING OPERATIONS THAT DISTURB THE SOIL ON ONE ACRE OR MORE OF LAND. OWNER WILL COORDINATE.
- U. IF THE SITE IS SMALL ENOUGH NOT TO REQUIRE A SWPPP/NPDES PERMIT (LESS THAN ONE ACRE), THE CONTRACTOR SHALL STILL BE RESPONSIBLE FOR ÙSING EROSION AND SÉDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PUBLIC RIGHT-OF-WAY.
- V. POST-CONSTRUCTION MAINTENANCE FOR PRIVATE STORMWATER FACILITIES WILL BE THE RESPONSIBLITY OF THE FACILITIES OWNER. PERIODIC INSPECTION AND
- CERTIFICATIONS OF THE FACILITIES MAY BE REQUIRED BY THE CITY ENGINEER. W. STORMWATER CONTROL MEASURES SHOWN ON THIS PLAN ARE REQUIRED TO PROVIDE MANAGEMENT OF 'FIRST FLUSH' (DEFINED AS THE 90TH PERCENTILE STORM EVENT OR 0.44" OF STORMWATER WHICH DISCHARGES DIRECTLY TO A
- X. ADJUST ANY RIMS OF EXISTING UTILITY FEATURES AS NECESSARY TO MATCH NEW GRADES. UTILITIES IN PAVED AREAS SHALL BE HS-25 TRAFFIC RATED.

PUBLIC STORM DRAINAGE SYSTEM)

TOP AREA

3:1 SIDE SLOPE

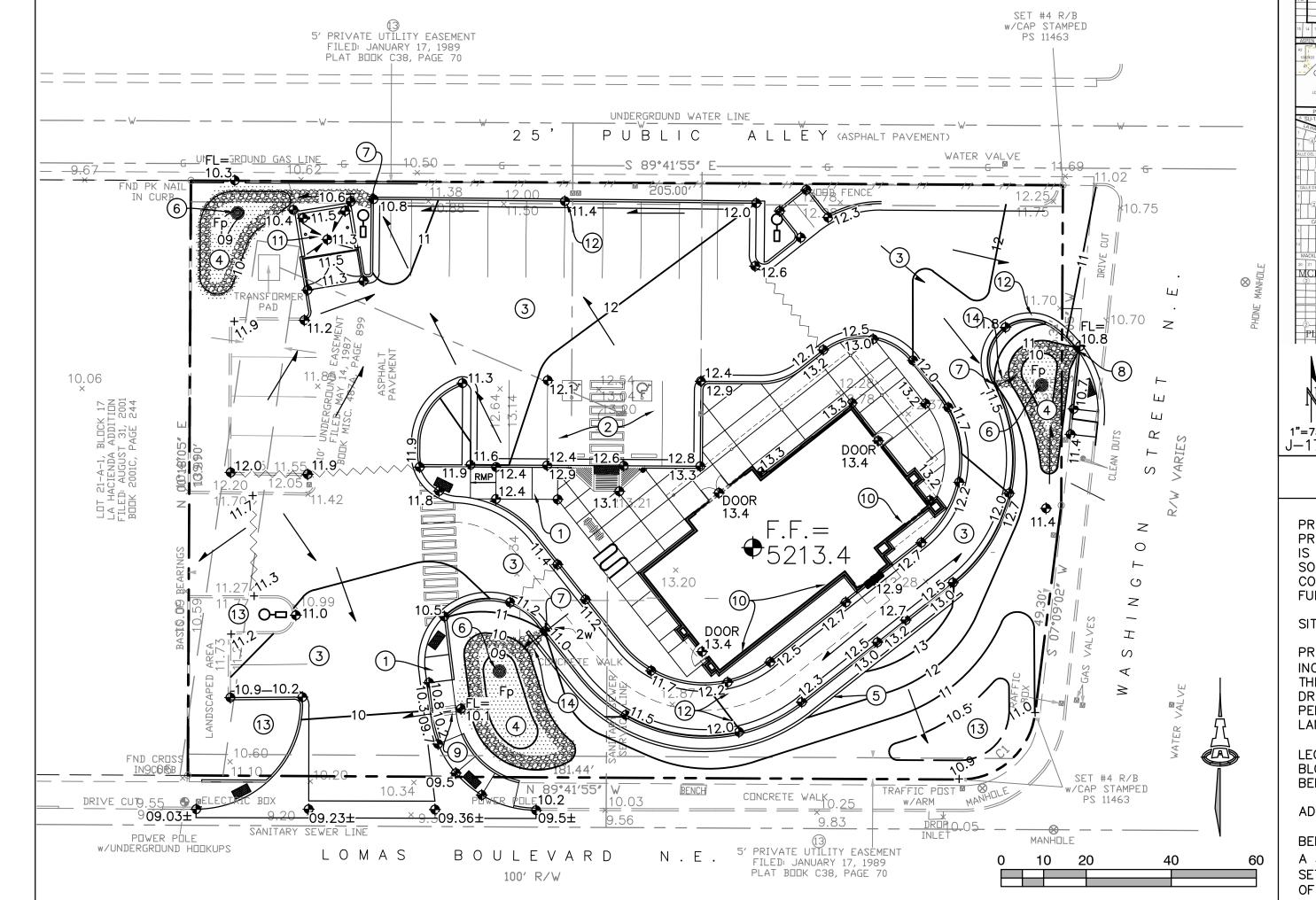
DEPTH = 1.3'

VOLUME = 296 CF

OVERFLOW ELEVATION = 5210.3

= 330 SF

- Y. ALL NEW PAVEMENT SURFACES SHALL BE CONSTRUCTED WITH POSITIVE SLOPE AWAY FROM BUILDINGS AND POSITIVE SLOPE TOWARD EXISTING AND/OR PROPOSED DRAINAGE PATHS. PAVING AND ROADWAY GRADES SHALL BE ±0.1' FROM PLAN ELEVATIONS. BUILDING PAD ELEVATION SHALL BE ±0.05' FROM PLAN ELEVATION.
- Z. WHERE GRADES BETWEEN NEW AND EXISTING ARE SHOWN AS 'MATCH' OR '±', TRANSITIONS SHALL BE SMOOTH.
- AA. ALL EROSION PROTECTION TO BE FRACTURED FACE ROCK (F.F. ROCK) = 6" AVG. DIA. ANGULAR FACED ROCK PLACED OVER GEOTEX 501 NON-WOVEN GEOTEXTILE (O.E.).
- AB. CONTRACTOR SHALL COMPLY WITH LOCAL REGULATIONS FOR RESEEDING OF DISTURBED AREAS.
- AC. ENGINEER RECOMMENDS THAT OWNER MAINTAIN EROSION PROTECTION ELEMENTS. ENGINEER RECOMMENDS THAT OWNER INSPECT SITE YEARLY AND AFTER EACH RAINFALL TO IDENTIFY NEW AREAS OF EROSION AND INSTALL ADDITIONAL EROSION PROTECTION AS NEEDED BASED ON ACTUAL
- AD. MEASURES REQUIRED FOR EROSION AND SEDIMENT CONTROL SHALL BE INCIDENTAL TO THE PROJECT COST.



AS-BUILT SPOT ELEVATIONS AT EACH DESIGN SPOT

TOP AND BOTTOM ELEVATIONS DEFINING ALL FIRST FLUSH

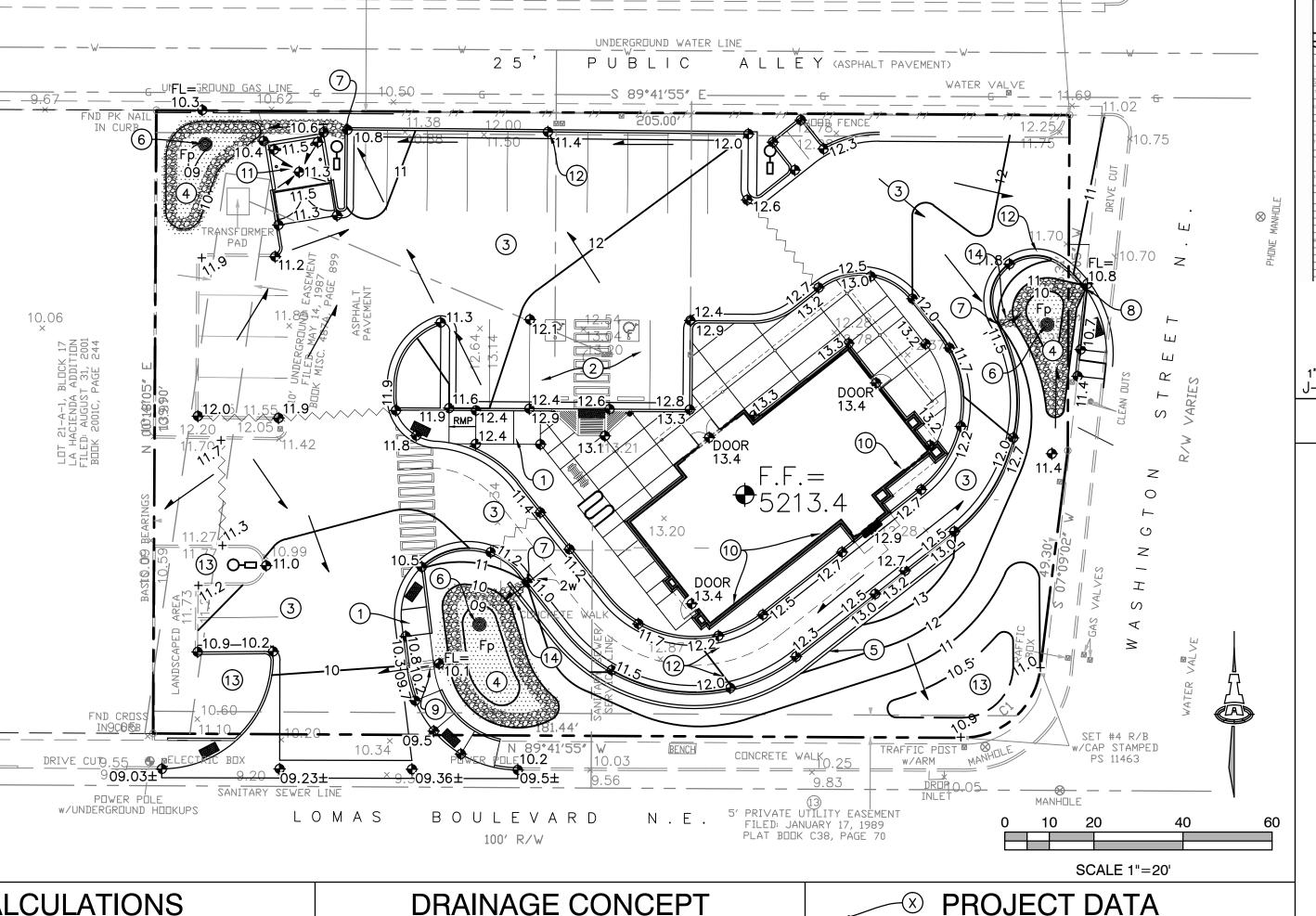
SHOW LINEWORK FOR ANYTHING CONSTRUCTED DIFFERENT

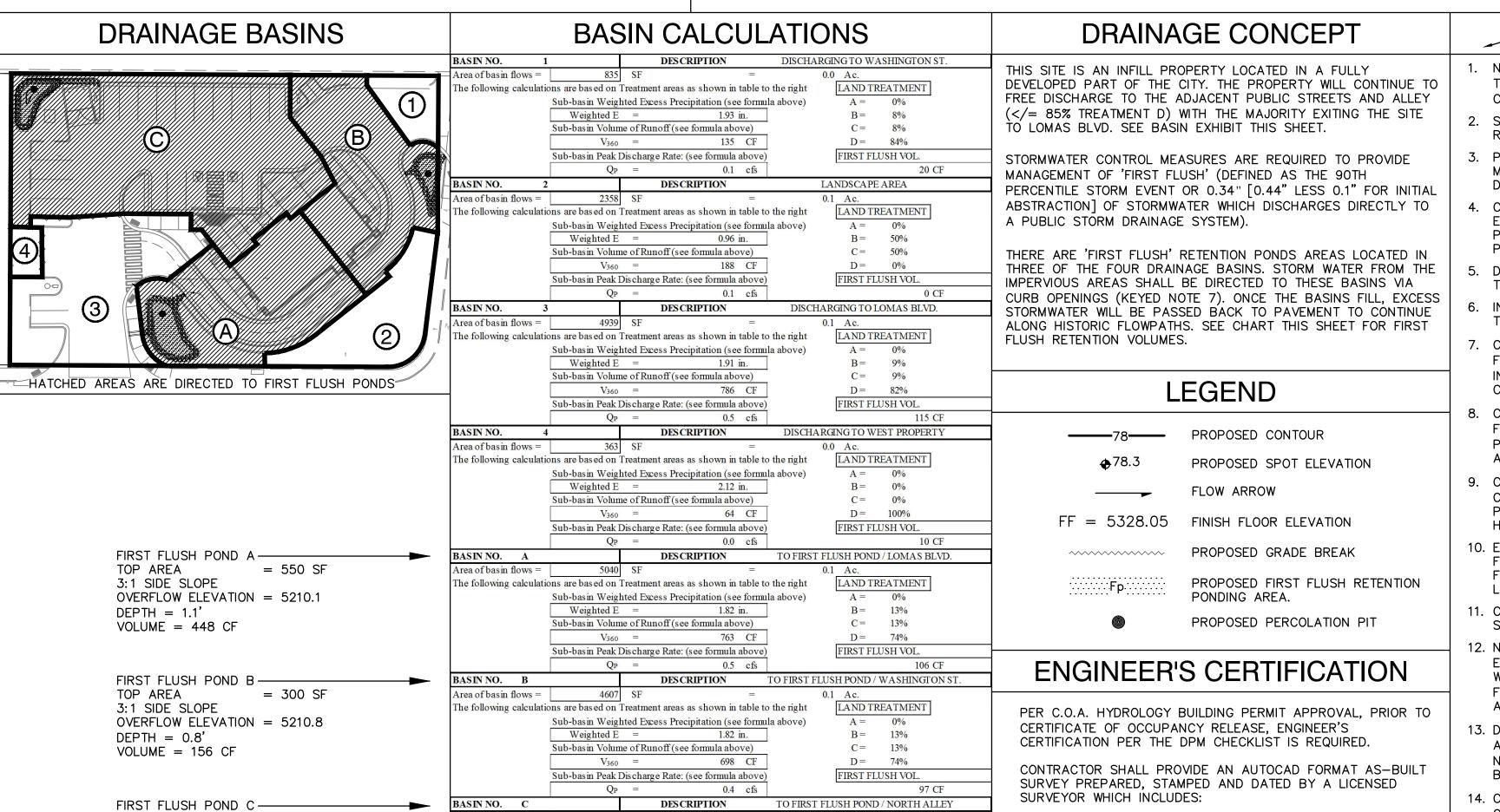
ELEVATION SHOWN ON THE APPROVED PLAN;

NOTE ANY ITEMS NOT CONSTRUCTED;

FROM THE APPROVED PLAN.

RETENTION PONDS, AND OTHER SITE PONDING;





LAND TREATMENT

A = 0%

B = 10%

C = 10%

D = 80%

FIRST FLUSH VOL.

232 CF

The following calculations are based on Treatment areas as shown in table to the right

Weighted E =

 $V_{360} =$

 $Q_P =$

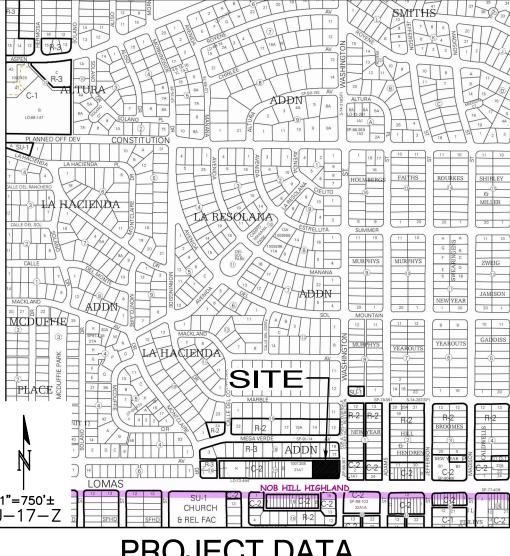
Sub-basin Weighted Excess Precipitation (see formula above)

1610 CF

Sub-basin Volume of Runoff (see formula above)

ub-basin Peak Discharge Rate: (see formula above)

- NEW PEDESTRIAN WALK AT ELEVATIONS SHOWN. ALL WALKS TO BE ADA ACCESSIBLE (5% MAX SLOPE, 2% MAX CROSS-SLOPE).
- 2. SLOPES WITHIN HANDICAP PARKING AREA TO MEET ADA REQUIREMENTS. MAX. SLOPE = 2% IN ANY DIRECTION.
- 3. PROPOSED PAVING. SEE ARCHITECTURAL FOR PAVEMENT MATERIAL, JOINT INFORMATION, SECTIONS, PARKING LAYOUT, DIMENSIONS, STRIPING, ETC.
- CONSTRUCT SHALLOW FIRST FLUSH RETENTION POND AT ELEVATIONS SHOWN. INSTALL ANGULAR ROCK TO DEFINE PERIMETER. HATCHED AREA REPRESENTS EXTENTS OF PONDING. SLOPE AT 3:1.
- DECORATIVE LANDSCAPE WALL WITH MINOR GRADE TRANSITIONS. SEE ARCHITECTURAL PLANS.
- INSTALL PERCOLATION PIT THIS AREA. SEE DETAIL SHEET
- 7. CONSTRUCT 12" WIDE (BOTTOM WIDTH) CURB CUT AT FLOWLINE (FL=) SHOWN TO PASS 'FIRST FLUSH' DISCHARGE INTO PONDING AREAS. ALL 'FIRST FLUSH' PONDING AND CURB CUTS MUST BE INSTALLED PER PLAN.
- CONSTRUCT 12" WIDE (BOTTOM WIDTH CURB CUT AT FLOWLINE (FL=) SHOWN TO PASS EXCESS FLOW BACK TO PAVEMENT TO FOLLOW HISTORIC FLOWPATH TO STREET / ALLEY.
- 9. CONSTRUCT 12" WIDE COVERED SIDEWALK CULVERT PER C.O.A. STD. DWG. 2236 AT FLOWLINE (FL=) SHOWN TO PASS EXCESS FLOW BACK TO PAVEMENT TO FOLLOW HISTORIC FLOWPATH TO STREET.
- 10. EXTEND ROOF STORMWATER DISCHARGE PIPES THROUGH FACE OF CURB PER C.O.A. STD. DWG. 2235, USING FITTINGS AS REQUIRED. SEE PLUMBING PLAN FOR SPECIFIC LOCATIONS.
- 11. CONSTRUCT NEW CONCRETE DUMPSTER PAD SLOPING TO SANITARY SEWER INLET. SEE UTILITY PLAN.
- 12. NOTE: TO ENSURE READABILITY, NOT ALL PAVEMENT SPOT ELEVATIONS SHOW ADJACENT TOP OF CURB / TOP OF WALK. TEXT SHOWN WITHIN FLOWLINE REPRESENTS FLOWLINE ELEVATION. ADD 0.5' TYPICAL FOR TOP OF ADJACENT CURB OR WALK ELEVATIONS.
- 13. DEPRESS LANDSCAPING FOR WATER HARVESTING (THESE ARE SEPARATE FROM FIRST FLUSH PONDING). TYPICAL. NOTE: NO WATER HARVESTING SHALL OCCUR WITHIN 10' OF BUILDING.
- 14. CONSTRUCT 2' WIDE FRACTURED FACE ROCK SWALE (SEE GENERAL NOTE AA) AT ELEVATIONS SHOWN. SEE DETAIL THIS SHEET.



PROJECT DATA

PROPERTY: THE SITE IS A FULLY DEVELOPED COMMERCIAL PROPERTY LOCATED WITHIN C.O.A. VICINITY MAP J-17. THE SITE IS BOUND TO THE EAST BY WASHINGTON STREET, TO THE SOUTH BY LOMAS BLVD., TO THE WEST BY DEVELOPED COMMERCIAL AND TO THE NORTH BY A PUBLIC ALLEY AND FULLY DEVELOPED RESIDENTIAL PROPERTY.

SITE AREA: 0.6515 ACRES

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE DEMOLITION OF THE EXISTING BUILDING / PARKING AND THE CONSTRUCTION OF A NEW COMMERCIAL BUILDING WITH DRIVE-THRU, UPDATED ASPHALT PAVED ACCESS AND PARKING, PEDESTRIAN WALKS, DRAINAGE IMPROVEMENTS, AND LANDSCAPING.

LEGAL: TRACT A-1, JOSEPH L. DAILEY'S SUBDIVISION OF BLOCK 17, LA HACIENDA SUBDIVISION, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO,

ADDRESS: 4407 LOMAS BLVD. N.E., ALBUQUERQUE NM

BENCHMARK: MONUMENT 9_J17 : ELEVATION (88) 5210.959 IS A 3-1/4 INCH ALUMINUM DISC STAMPED "ACS 9-J17 1990", SET FLUSH IN THE TOP OF THE CONCRETE CURB OF THE NOSE OF THE MEDIAN LOCATED AT THE INTERSECTION OF LOMAS BOULEVARD AND WASHINGTON STREET NE.

OFF-SITE: NO OFF-SITE DRAINAGE AFFECTS THIS PROPERTY

FLOOD HAZARD: PER BERNALILLO COUNTY FIRM MAP #35002C0353H DateD AUGUST 16, 2012, THE SITE IS LOCATED WITHIN FLOODZONE 'X' DESIGNATED AS AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN.

ENGINEER:

FRED C. ARFMAN, P.E., NMPE 7322 ISAACSON & ARFMAN, PA 128 MONROE NE, 87111 TELEPHONE: (505) 268-8828



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> STARBUCKS LOMAS & WASHINGTON

GRADING & DRAINAGE PLAN

MODULUS ARCHITECTS

Date:	No.	Revision:	Date:	Job No.
03/21/15				2115
Drawn By:				
DEC/BJB				CG-101
•				
Ckd By: FCA				SH. OF
FCA				Sn. Or

Know what's **below.**

Call before you dig.