

**DEKKER
PERICH
SABATINI**

7601 JEFFERSON NE, SUITE 100
ALBUQUERQUE, NM 87109

505.761.9700 / DPDESIGN.ORG

SEAL

PROJECT

UPTOWN SHOPS
ALBUQUERQUE, NM

URT REVIEW

REVISIONS

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DRAWN BY

REVIEWED BY FCA

DATE 11/13/2015

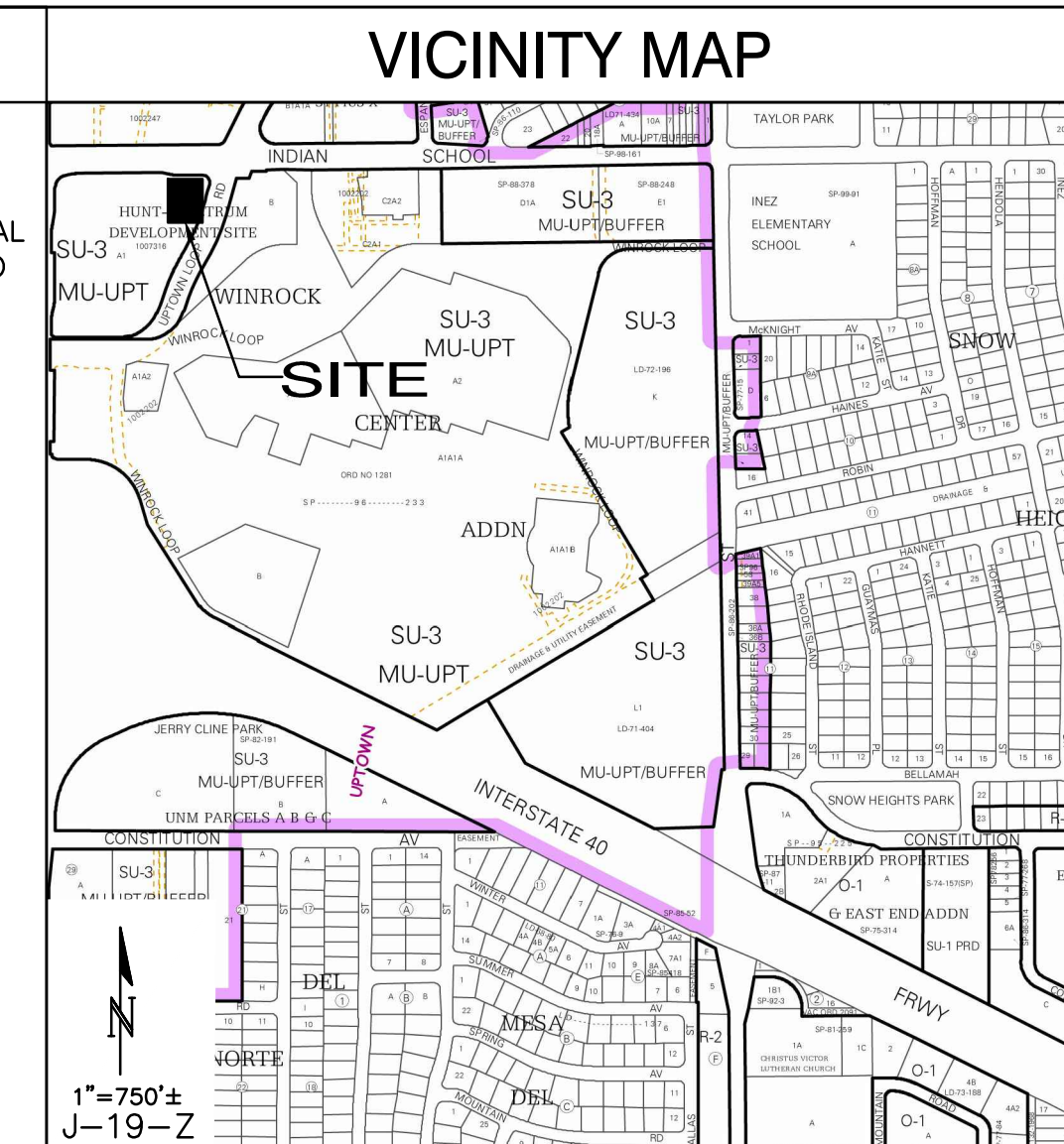
PROJECT NO 15-0102

DRAWING NAME

CONCEPTUAL
GRADING &
DRAINAGE PLAN

SHEET NO

05 of 11



PROJECT DATA

PROPERTY: THE SITE IS AN UNDEVELOPED COMMERCIAL PROPERTY LOCATED WITHIN C.O.A. VICINITY MAP J-19. THE SITE IS BOUND TO THE EAST BY UPTOWN LOOP RD. NE, TO THE NORTH BY INDIAN SCHOOL BLVD. NE AND TO THE SOUTH AND WEST BY DEVELOPED COMMERCIAL PROPERTIES.

SITE AREA: 0.68 ACRES

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE A 5000 SF COMMERCIAL BUILDING WITH ASSOCIATED ASPHALT PAVED ACCESS AND PARKING, PEDESTRIAN WALKS, DRAINAGE IMPROVEMENTS, AND LANDSCAPING.

LEGAL: TRACT A-1-B HUNT - SPECTRUM DEVELOPMENT SITE

BENCHMARK: VERTICAL DATUM IS BASED UPON THE ALBUQUERQUE CONTROL SURVEY BENCHMARK 20-H18", ELEVATION = 5283.22 (NAVD 1988)

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

FLOOD HAZARD: THE SUBJECT PROPERTY (AS SHOWN HEREON) APPEARS TO LIE WITHIN ZONE "X" (AREAS DETERMINED TO BE OUTSIDE 0.2% ANNUAL CHANCE FLOODPLAIN) IN ACCORDANCE WITH THE NATIONAL FLOOD INSURANCE PROGRAM RATE MAP NO. 35001C0352 H, EFFECTIVE DATE 8-16-2012.

DRAINAGE PLAN CONCEPT: AN EXISTING PRIVATE STORM DRAIN SYSTEM WILL BE MODIFIED (INLET LOCATIONS) TO CONTINUE TO COLLECT ON-SITE RUNOFF AND ROUTE TO THE EXISTING STORM DRAIN INLET LOCATED ON THE ADJACENT TARGET PROPERTY. FREE DISCHARGE IS APPROPRIATE FOR THE SITE AS DOWNSTREAM CAPACITY IS AVAILABLE. PRIOR TO ENTERING THE STORM DRAIN SYSTEM, IMPERVIOUS AREAS WILL BE ROUTED THROUGH FIRST FLUSH RETENTION PONDS.

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SURVEYOR: RUSS P. HUGG, NMPS 9750
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FIRST FLUSH RETENTION

STORMWATER CONTROL MEASURES ARE REQUIRED TO PROVIDE MANAGEMENT OF 'FIRST FLUSH' (DEFINED AS THE 90TH PERCENTILE STORM EVENT OR 0.34" [0.44" LESS 0.1" FOR INITIAL ABSTRACTION] OF STORMWATER WHICH DISCHARGES DIRECTLY TO A PUBLIC STORM DRAINAGE SYSTEM).

THE ESTIMATED PONDING VOLUME REQUIRED IS 0.34" * TYPE 'D' AREA: 0.34/12 * (0.68 AC * 85%) * 43560 = 713 CF

THERE WILL BE 'FIRST FLUSH' RETENTION BASIN AREAS THROUGHOUT THE SITE (HATCHED AREAS). STORM WATER FROM THE IMPERVIOUS AREAS SHALL BE DIRECTED TO THESE BASINS VIA CURB OPENINGS (SEE DETAIL THIS SHEET).

THE 'FIRST FLUSH' BASIN VOLUMES SHALL BE ANALYZED AND SIZED AS PART OF THE BUILDING PERMIT PLANS SUBMITTAL. CURB OPENING LOCATIONS ARE SHOWN CONCEPTUALLY AND SHALL BE LOCATED AND SIZED WITH FINAL DESIGN.

CALCULATIONS

CALCULATIONS: 2136 - Uptown Commercial : November 12, 2015 by BJB
Based on Drainage Design Criteria for City of Albuquerque
Section 22.2, DPM, Vol 2, dated Jan., 1993

ON-SITE CALCULATIONS: 100-YEAR, 6-HOUR STORM

AREA OF SITE: 29664.6484 SF = 0.68

HISTORIC FLOWS:

Area	Treatment S1	%
Area A	0	0%
Area B	0	0%
Area C	29665	100%
Area D	0	0%
total Area	29664.6484	100%

DEVELOPED FLOWS:

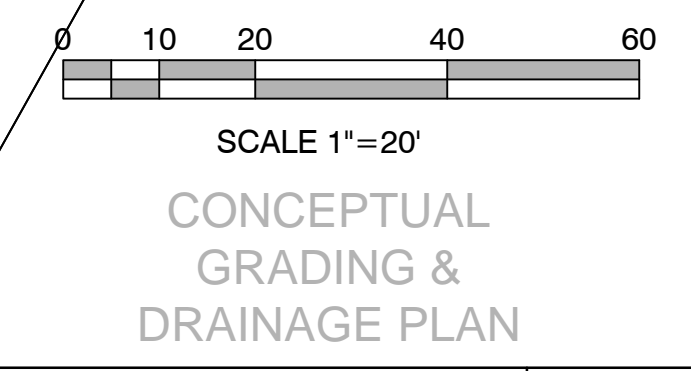
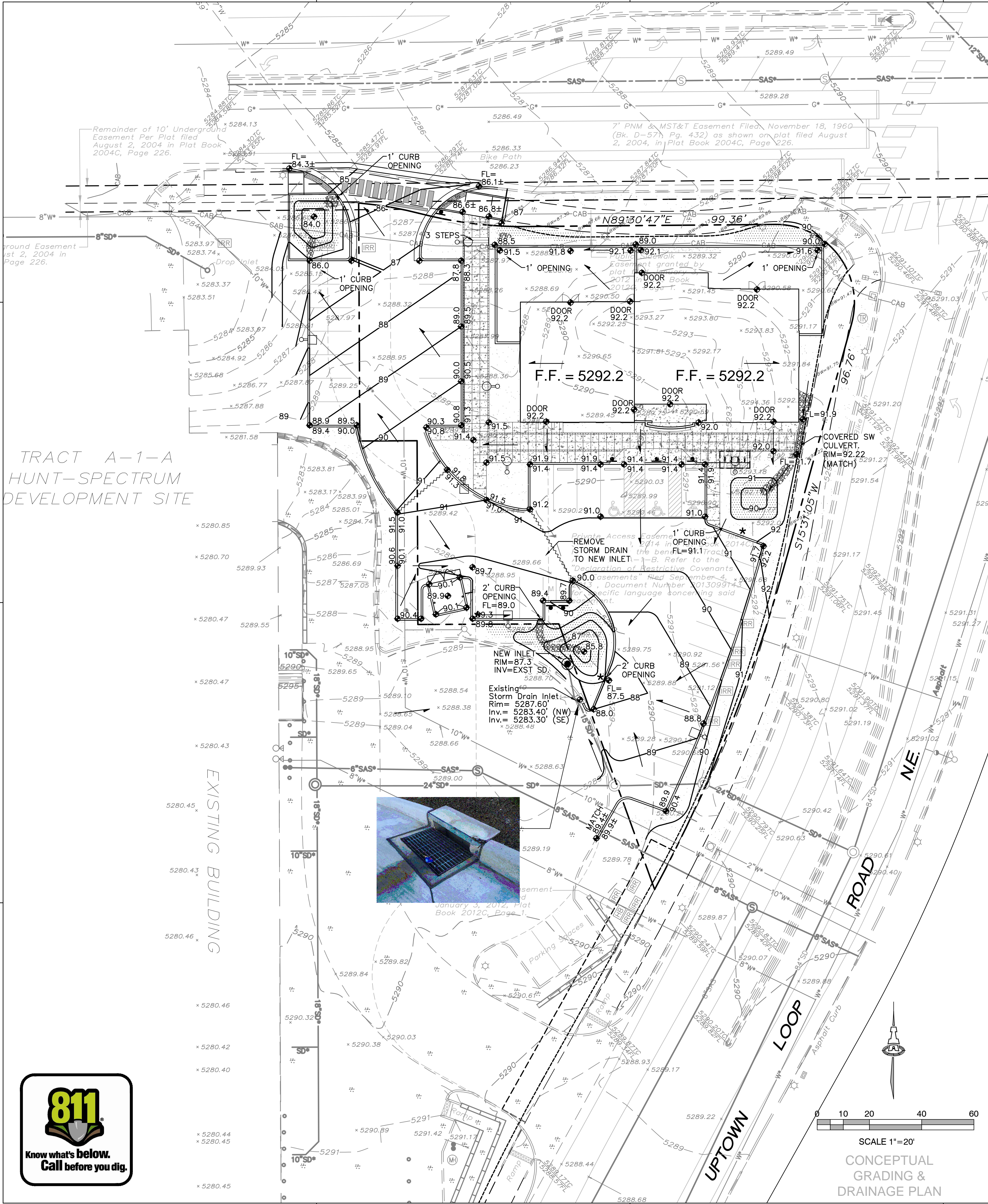
Area	Treatment S1	%	EXCESS PRECIP:
Area A	0	0%	Precip. Zone 3
Area B	1483	10%	Ea = 0.66
Area C	29666	5%	Eb = 0.92
Area D	25215	85%	Ec = 1.29
total Area	29664.6484	100%	Ed = 2.36

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

Weighted E = $\frac{EaAa + EbAb + EcAc + EdAd}{Aa + Ab + Ac + Ad}$

Historic E	1.29 in.	Developed E	2.18 in.
On-Site Volume of Runoff: V360 =	$E^*A / 12$		
Historic V360	3189 CF	Developed V360	5392 CF
On-Site Peak Discharge Rate: $Qp = QpAa + QpAb + QpAc + QpAd / 43.560$			
For Precipitation Zo 3			
QpA	1.87	QpC	3.45
QpB	2.60	QpD	5.02
Historic Qp	2.3 CFS	Developed Qp	3.2 CFS

- S.O.19 : NOTICE TO CONTRACTORS**
- AN EXCAVATION / CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY.
 - ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #8.
 - TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (CALL '811') FOR LOCATION OF EXISTING UTILITIES.
 - PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
 - BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC / STREET USE.
 - MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
 - WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.
- | APPROVAL | NAME | DATE |
|-----------|------|------|
| INSPECTOR | | |



CONCEPTUAL
GRADING &
DRAINAGE PLAN



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