CITY OF ALBUQUERQUE

July 16, 2015

Fred Arfman, PE
Issacson & Arfman
128 Monroe Street NE
Albuquerque, NM 87120

RE: **Unser & Vista Oriente Shell Building, Lot 1-B-3, Ladera Industrial Center, Unser Boulevard**
Grading and Drainage Plan
Engineer's Stamp Date 5-19-2015 (File: H10-D006A5)

Dear Mr. Arfman:

Based upon the supplemental information provided on 7-14-15 in addition to the previously submitted grading and drainage plan, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan in the construction sets when submitting for a 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 924-3924.

Sincerely,

Jeanne Wolfenbarger, P.E.
Senior Engineer, Planning Dept.
Development Review Services

Orig: Drainage file
c.pdf via Email: Recipient, Monica Ortiz

PO Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

RECEIVED
JUL 14 2015
LAND DEVELOPMENT SECTION

Project Title: Unser & Vista Oriente Shell Building Building Permit #: _____ City Drainage #: H10-D006A5

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

Legal Description: A Portion of Lot 1-B-3, Ladera Industrial Center, City of Albuquerque, Bernalillo County, NM

City Address: Unser Blvd. NW, 87120

Engineering Firm: Isaacson & Arfman, P.A. Contact: Fred C. Arfman, PE

Address: 128 Monroe Street, NE - Albuquerque, NM 87120

Phone#: (505) 268-8828 Fax#: N/A E-mail: freda@iacivil.com

Owner: _____ Contact: _____

Address: _____

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

Architect: Martin FM Grummer Architect Contact: Martin Grummer

Address: 331 Wellesley Place NE, Albuquerque, NM 87106

Phone#: 505-265-2507 Fax#: _____ E-mail: _____

Surveyor: Surv-Tek Consulting Surveyors Contact: Russ P. Hugg

Address: 9384 Valley View Drive, Albuquerque, NM 87114

Phone#: 505-897-3366 Fax#: _____ E-mail: _____

Contractor: TBD Contact: _____

Address: _____

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

TYPE OF SUBMITTAL:

____ DRAINAGE REPORT
x 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
x 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 x No ____ Copy Provided

DATE SUBMITTED: ~~May 19, 2015~~ July 14 2015 By: Fred C. Arfman, PE For: Isaacson & Arfman, PA

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 followin

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

ISAACSON & ARFMAN, P.A. *Consulting Engineering Associates*

Thomas O. Isaacson, PE(RET.) & LS(RET.) . Fred C. Arfman, PE . Åsa Nilsson-Weber, PE

June 16, 2015

Ms. Jeanne Wolfenbarger, P.E.
City of Albuquerque
Senior Engineer, Planning Dept.
Development Review Services

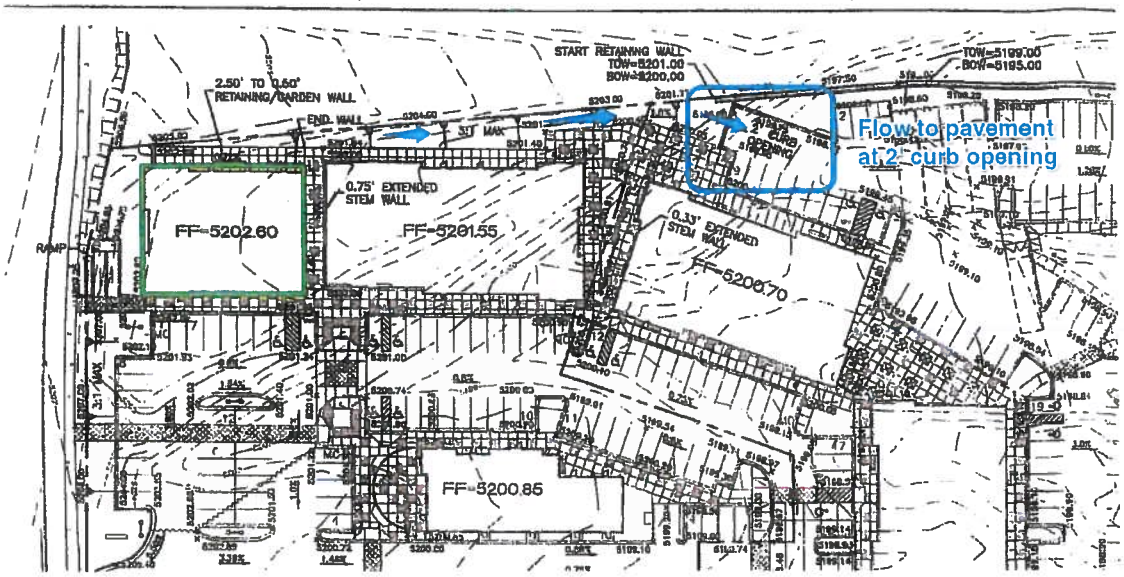
RE: Unser & Vista Oriente Shell Building, Lot 1-B-3, Ladera Industrial Center, Unser Blvd. (H10-D006A5)

Dear Ms. Wolfenbarger:

We received your review comments, dated June 12, 2015, for the above referenced project. Upon reviewing each comment, we believe the requested information is provided on the plans dated 5-19-2015. The following response is numbered to coordinate with your numbered comments:

1. Regarding the Ladera Industrial Center Site Development Plan (H9/D6A):

   a. The referenced Master Plan (Sheet C1) is attached with this letter for your files.



   b. Regarding cross-lot drainage: per our Drainage Concept on Sheet CG-101: EXISTING MUTUAL CROSS LOT DRAINAGE EASEMENT FOR THE BENEFIT OF LOTS 1-B-1 THRU 1-B-4 GRANTED BY PLAT FILED JANUARY 26, 2012. SAID EASEMENT SHALL RUN OVER, UNDER AND ACROSS THE COMMON AREAS (MEANING THOSE AREAS OF LOT NOT OCCUPIED BY A BUILDING FROM TIME TO TIME AND AT ANY APPLICABLE TIME). MAINTENANCE OF SAID EASEMENT SHALL BE THE RESPONSIBILITY OF THE RESPECTIVE LOT OWNERS AS TO THE PORTION CONTAINED WITHIN THEIR RESPECTIVE LOT.

2. The referenced spot elevations which are cut off on the right side of the plan view are continued on the insert at the bottom of sheet CG-102. Per keyed note #11:

   FIRST FLUSH POND (TEMPORARY). SEE INSERT THIS SHEET FOR CONTINUATION.

3. Basin area 3:

   a. On sheet CG-501 is labeled 14,308 SF with 10,162 SF land treatment 'D'. This does match the calculations shown.

   b. Regarding the comment "label lot line for 1-B-3". Sheet CG-101 provides the metes and bounds for the portion of the lot in the vicinity of the construction. Sheet CG-501 (top image) shows the lot outline and flags it as Lot 1-B-3. If you need additional labeling information, let me know.

4. The roof drain is shown on CG-101 and is identified as keyed note #3.

   BUILDING ROOF DISCHARGE LOCATION. EXTEND DRAIN PIPE THROUGH WALK TO RELEASE DIRECTLY TO FIRST FLUSH POND #1. SEE ARCHITECTURAL FOR ADDITIONAL INFORMATION.

Please give me a call at 268-8828 if you need any additional information.

Sincerely,
Isaacson & Arfman, PA

Fred C. Arfman, PE

128 Monroe St. N.E. * Albuquerque, NM 87108 * (505) 268-8828 * Fax: (505) 268-2632 *
www.iacivil.com

CITY OF ALBUQUERQUE

June 12, 2015

Fred Arfman, PE
Issacson & Arfman
128 Monroe Street NE
Albuquerque, NM 87120

RE: **Unser & Vista Oriente Shell Building, Lot 1-B-3, Ladera Industrial Center, Unser Boulevard**
Grading and Drainage Plan
Engineer's Stamp Date 5-19-2015 (File: H10-D006A5)

Dear Mr. Arfman:

Based upon the information provided in your submittal received 5-19-15, the above referenced plan cannot be approved for Building Permit until the following comments are addressed:

1) Provide excerpts from the Ladera Industrial Center Site Development Plan showing that the site adjacent to the east is accepting on-site flow. Since the storm flow is increased from existing conditions, a cross-lot access agreement may be needed unless one is already in place to accept the proposed 100-year flow.

2) A couple of the new spot elevations were cut off on the right side of the plan view on Sheet CG-102.

3) For Basin 3 on Sheet CG-501, the labeling of the basin area on the plan view needs to match the basin area in the calculations. Also, label lot line for Lot 1-B-3.

4) Show roof drains.

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

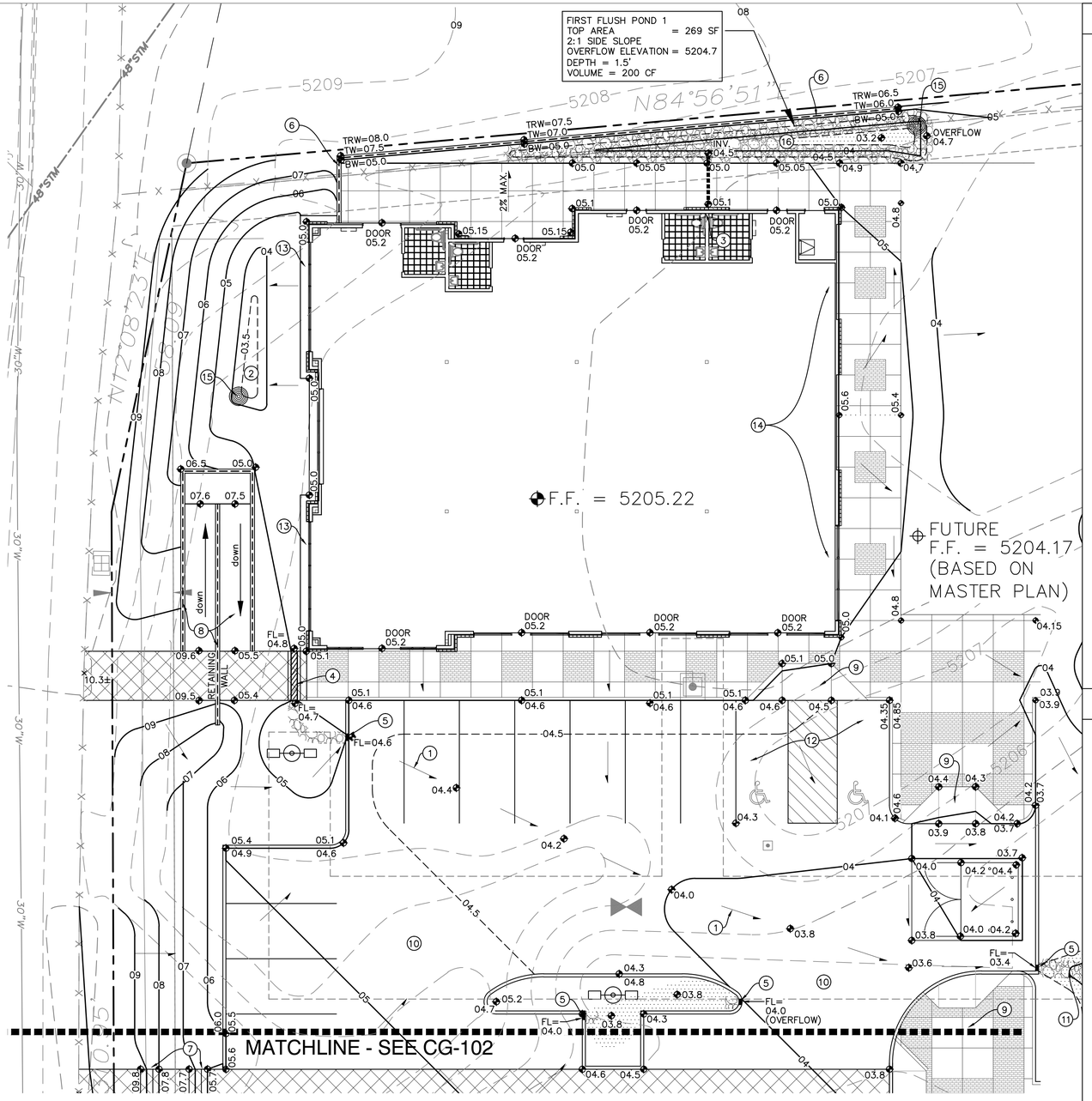
Sincerely,

Jeanne Wolfenbarger, P.E.
Senior Engineer, Planning Dept.
Development Review Services

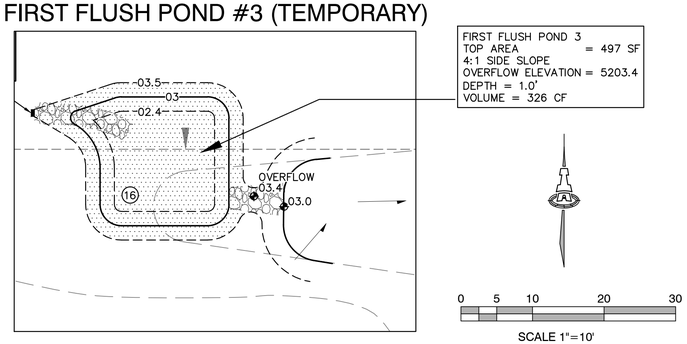
Orig: Drainage file
c.pdf Addressee via Email

PO Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

H10D006A5_BP_Grading_Cmmt



FIRST FLUSH POND #3 (TEMPORARY)



DRAINAGE CONCEPT

THIS SITE WILL DRAIN EAST TO THE ADJACENT PROPERTY PER THE UNSER AND VISTA ORIENTE GRADING AND DRAINAGE PLAN (APPROVED AS PART OF THE LADERA INDUSTRIAL CENTER SITE DEVELOPMENT PLAN FOR BUILDING PERMIT (H9/D6A) APPROVED 4/30/2008.

EXISTING MUTUAL CROSS LOT DRAINAGE EASEMENT FOR THE BENEFIT OF LOTS 1–B–1 THRU 1–B–4 GRANTED BY PLAT FILED JANUARY 26, 2012. SAID EASEMENT SHALL RUN OVER, UNDER AND ACROSS THE COMMON AREAS (MEANING THOSE AREAS OF LOT NOT OCCUPIED BY A BUILDING FROM TIME TO TIME AND AT ANY APPLICABLE TIME). MAINTENANCE OF SAID EASEMENT SHALL BE THE RESPONSIBILITY OF THE RESPECTIVE LOT OWNERS AS TO THE PORTION CONTAINED WITHIN THEIR RESPECTIVE LOT.

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 * 0.6 AC * 43560 = 740 CF

ROOF DISCHARGE WILL BE DIRECTED TO A FIRST FLUSH POND LOCATED WITHIN THE LANDSCAPE AREA ON THE NORTH SIDE OF THE PROPERTY. OVERFLOW WILL BE ROUTED EAST.

PARKING LOT DISCHARGE WILL BE DIRECTED TO ONE OF THREE FIRST FLUSH RETENTION PONDS. A PERMANENT POND IN THE CENTER PARKING ISLAND AND TWO TEMPORARY PONDS IN THE UNDEVELOPED PORTION OF THE PROPERTY. AS THE PROPERTY CONTINUES TO DEVELOP, PERMANENT FIRST FLUSH IMPROVEMENTS WILL BE CONSTRUCTED.

OVERFLOW FROM THESE FIRST FLUSH PONDS WILL CONTINUE EAST PER THE APPROVED MASTER DRAINAGE AND GRADING PLAN.

PROJECT DATA

PROPERTY: THE SITE IS A PARTIALLY DEVELOPED (UTILITIES ONLY) COMMERCIAL PROPERTY LOCATED WITHIN C.O.A. VICINITY MAP H–9. THE SITE IS BOUND TO THE NORTH BY THE LADERA DIVERSION CHANNEL, TO THE EAST AND SOUTH BY PARTIALLY DEVELOPED COMMERCIAL (UTILITIES ONLY), AND TO THE WEST BY UNSER BLVD.

SITE AREA TO BE DEVELOPED: 0.7 ACRES

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE CONSTRUCTION OF 5,820(±) SF RETAIL BUILDING WITH ASSOCIATED ASPHALT PAVED ACCESS AND PARKING, PEDESTRIAN WALKS, DRAINAGE IMPROVEMENTS, AND LANDSCAPING.

LEGAL: A PORTION OF LOT 1–B–3, LADERA INDUSTRIAL CENTER, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

UPC#: 100905946336210204

ADDRESS: UNSER BLVD NW ALBUQUERQUE NM 87120

BENCHMARK: VERTICAL DATUM SHOWN HEREON WAS DERIVED FROM THE ALBUQUERQUE CONTROL SURVEY MONUMENT "4–H9" HAVING A PUBLISHED ELEVATION OF 5209.315 FEET (NAVD 88).

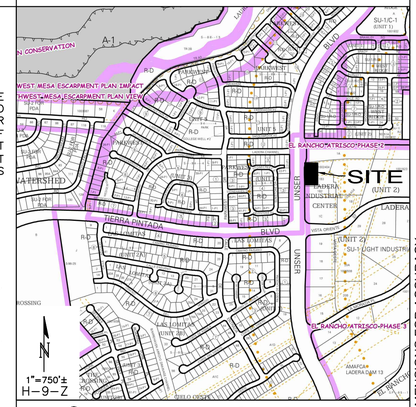
OFF–SITE: NO OFF–SITE DRAINAGE AFFECTS THIS PROPERTY.

FLOOD HAZARD: THIS PROPERTY APPEARS TO LIE WITHIN "ZONE X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN), WITH "ZONE A" (NO BASE FLOOD ELEVATIONS DETERMINED) ADJACENT TO THE NORTHERLY BOUNDARY ALONG THE LADERA DIVERSION CHANNEL, AS SHOWN ON NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP NUMBER 35001C0326G, MAP REVISED SEPTEMBER 26, 2008.

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

SURVEYOR: RUSS P. HUGG., NMPS 9750
SURV–TEK CONSULTING SURVEYORS
9384 VALLEY VIEW DRIVE, 87114
TELEPHONE: (505) 897–3366

VICINITY MAP



KEYED NOTES

KEYED NOTES SHOWN BELOW ARE FOR USE ON SHEETS CG–101 AND CG–102. NOT ALL NOTES ARE USED ON EACH SHEET.

1. PROVIDE SWALE WITHIN NEW ASPHALT AT FLOWLINE ELEVATIONS SHOWN TO DIRECT FLOW (MINIMUM SLOPE = 1%).
2. CONSTRUCT WATER HARVESTING BASIN WITHIN LANDSCAPING AT ELEVATIONS SHOWN TO COLLECT STORMWATER.
3. BUILDING ROOF DISCHARGE LOCATION. EXTEND DRAIN PIPE THROUGH WALK TO RELEASE DIRECTLY TO FIRST FLUSH POND #1. SEE ARCHITECTURAL FOR ADDITIONAL INFORMATION.
4. CONSTRUCT 1' WIDE (BOTTOM WIDTH) COVERED SIDEWALK CULVERT PER COA. STD. DWG. 2236 AT ELEVATIONS SHOWN TO PASS EMERGENCY OVERFLOW TO PAVEMENT.
5. PROVIDE 1.0' WIDE CURB OPENING TO PASS CONCENTRATED FLOW. INSTALL ROCK EROSION PROTECTION WITHIN LANDSCAPING AT EACH CURB OPENING (2'X2' OR TO EXTENTS SHOWN). TOP OF ROCK = PAVEMENT FLOWLINE. SEE CG–501 FOR DETAIL.
6. CONSTRUCT RETAINING WALL TO ACHIEVE GRADE DIFFERENCE SHOWN (2.5' MAX. RETAINING). SEE ARCHITECTURAL FOR DETAILS.
7. SITE ACCESS STAIRS – SEE ARCHITECTURAL FOR DETAILS.
8. SITE ACCESS RAMP / RETAINING WALL – SEE ARCHITECTURAL FOR DETAILS.
9. CONSTRUCT HANDICAP RAMPS PER ADA GUIDELINES. SLOPE AT 12:1 MAX. SEE ARCHITECTURAL FOR DETAILS.
10. CONSTRUCT ASPHALT PAVING AT ELEVATIONS SHOWN. SEE ARCHITECTURAL FOR PAVEMENT MATERIAL, JOINT INFORMATION, SECTIONS, PARKING LAYOUT, DIMENSIONS, STRIPING, ETC.
11. FIRST FLUSH POND (TEMPORARY). SEE INSERT THIS SHEET FOR CONTINUATION.
12. SLOPES WITHIN HANDICAP PARKING AREA TO MEET ADA REQUIREMENTS. MAX. SLOPE = 2% IN ANY DIRECTION. SEE ARCHITECTURAL PLANS FOR ADA PARKING DETAILS.
13. CONSTRUCT CONCRETE APRON (12" WIDE x 4" THICK WITH 6" TURNED–DOWN EDGE) THIS AREA. TOP OF APRON TO BE 0.1' BELOW F.F. ELEVATION TYPICAL. SLOPE @ 2%. SEE SHEET CG–501 FOR DETAIL.
14. RETAINING STEMWALL (1' MAX) REQUIRED THIS AREA. SEE ARCHITECTURAL.
15. CONSTRUCT PERCOLATION PIT (3 LOCATIONS) 10' MIN. FROM BUILDING. SEE SHEET CG–501 FOR DETAIL.
16. HATCHED AREA REPRESENTS EXTENTS OF 'FIRST FLUSH' RETENTION PONDING. CONSTRUCT TO ELEVATIONS SHOWN.

LEGEND

03.8	PROPOSED SPOT ELEVATION
—03—	PROPOSED CONTOUR (1' INTERVAL)
–03.5–	PROPOSED CONTOUR (0.5' INTERVAL)
	PROPOSED STORM DRAIN
	FLOW ARROW
	FIRST FLUSH RETENTION POND
	EROSION CONTROL
	PROPOSED SITE RETAINING WALL

Know what's below. Call before you dig.

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87108
Ph. 505-268-8828 www.iacivil.com

2116 CG–101.dwg May 19,2015

MARTIN FM GRUMMER
ARCHITECT
331 WELLESLEY PLACE NE
ALBUQUERQUE, NEW MEXICO 87106
(505) 265–2507

UNSER & VISTA ORIENTE
...
SHELL BUILDING
ALBUQUERQUE, NM 87114
GRADING & DRAINAGE PLAN NORTH

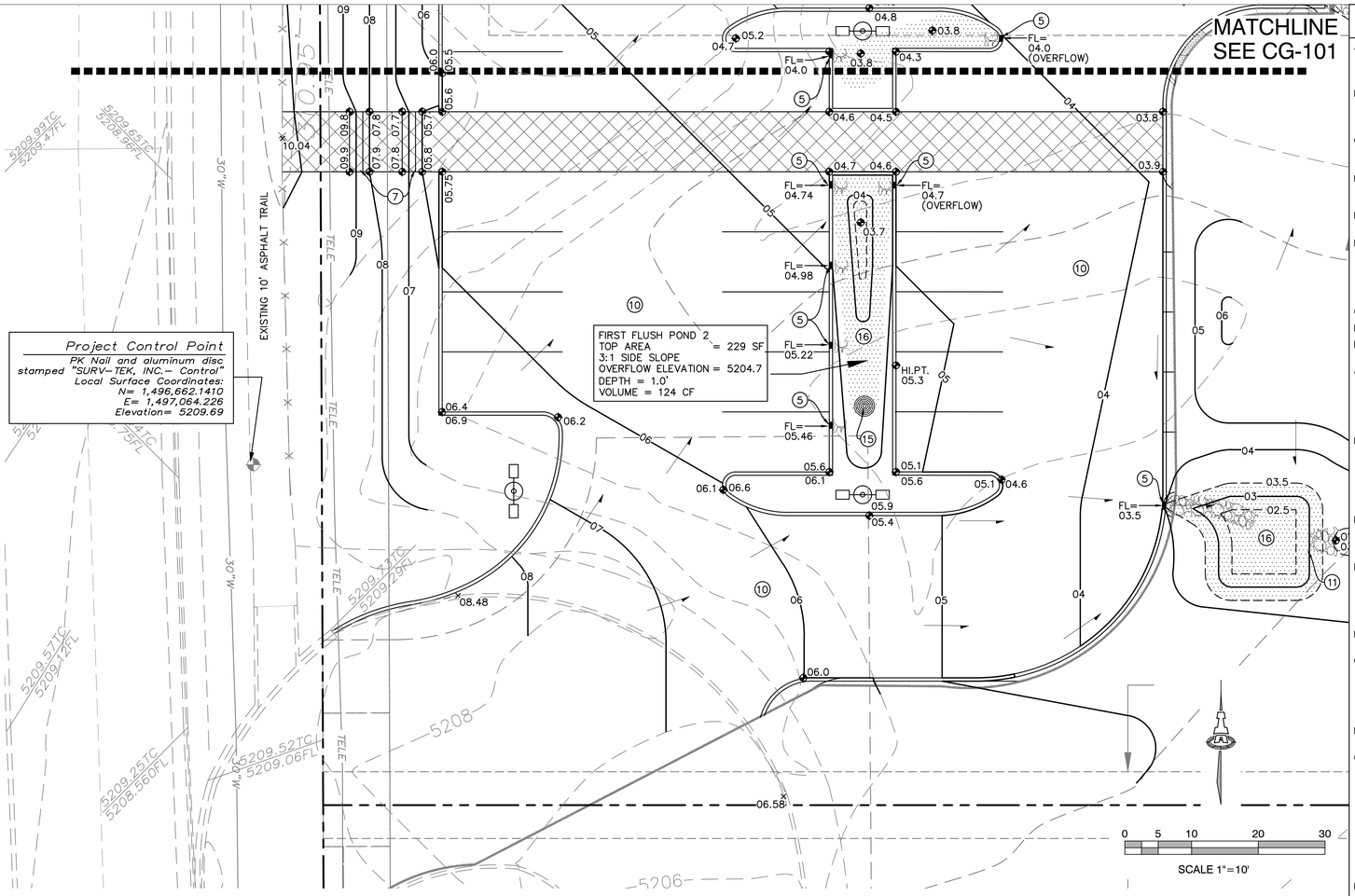
FRED C. ARFMAN NEW MEXICO 7322 LICENSED PROFESSIONAL ENGINEER
05-17-15

DATE: 18 MAY 2015
DRAWN BY: BJB
CHECKED BY: ANW
VERIFIED BY: FCA

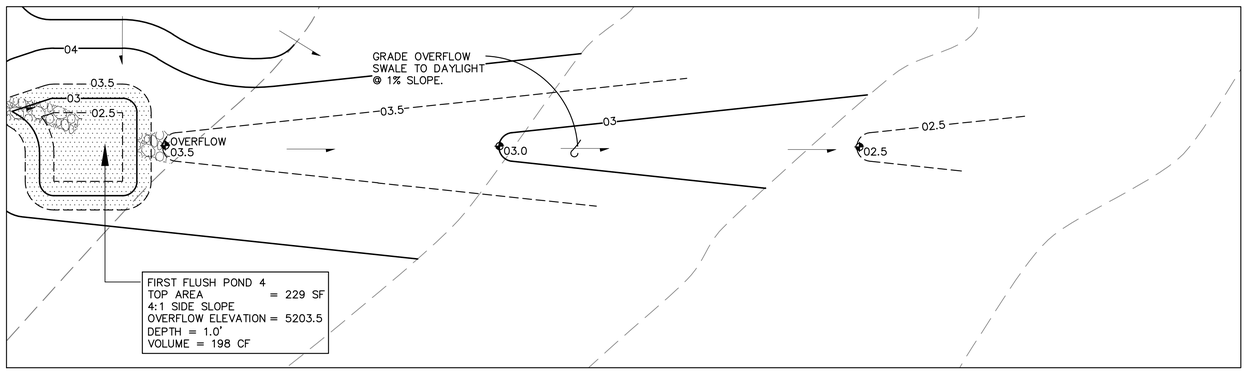
REVISIONS

SHEET NO: CG-101

ALL DIMENSIONS ARE TO BE FIELD VERIFIED. IF THERE ARE DISCREPANCIES, PLEASE NOTIFY THE ARCHITECT. DRAWING ARE NOT TO BE SCALED. USE DIMENSIONS FOR ACCURACY.



FIRST FLUSH POND #4 (TEMPORARY)



Know what's below. Call before you dig.

GENERAL NOTES

A. ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT. WHERE APPLICABLE, CITY OF ALBUQUERQUE AND NMDOT STANDARDS APPLY

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. ALL SUBGRADE, OVEREXCAVATION, BACKFILL, AND FILL SHALL BE PLACED AND / OR COMPACTED PER THE GEOTECHNICAL REPORT AND CITY OF ALBUQUERQUE SPECIFICATIONS.

D. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION, OR PRIOR TO OCCUPANCY, AS APPROPRIATE.

E. COORDINATE WORK WITH SITE PLAN, UTILITY PLAN AND LANDSCAPE PLAN.

F. 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.

G. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SAFETY.

H. CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS ON SITE.

I. CONTRACTOR SHALL OBTAIN ALL REQUIRED INSPECTIONS OF THE WORK.

J. 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.

K. 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. CONTRACTOR SHALL MAINTAIN ALL BARRICADING AND CONSTRUCTION SIGNING AT ALL TIMES. 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 ENGINEER.

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. CONTRACTOR SHALL PROVIDE ALL 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 LAND SURVEYOR.

S. THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND THE CITY OF ALBUQUERQUE REQUIRE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND AN NDPES PERMIT FOR PROJECTS WHERE CONSTRUCTION ACTIVITIES MEET THE EPA THRESHOLD. (SWPPP, NPDES PERMIT BY OTHERS)

T. A CITY-APPROVED EROSION AND SEDIMENT CONTROL (ESC) PERMIT MUST BE INCLUDED WITH THE CONTRACTOR'S SUBMITTAL FOR A ROUGH GRADING, GRADING, PAVING, BUILDING, OR WORK ORDER PERMIT. ESC PLAN BY OTHERS.

U. POST-CONSTRUCTION MAINTENANCE FOR PRIVATE STORMWATER FACILITIES WILL BE THE RESPONSIBILITY OF THE FACILITIES OWNER. PERIODIC INSPECTION AND CERTIFICATIONS OF THE FACILITIES MAY BE REQUIRED BY THE CITY ENGINEER.

V. STORMWATER CONTROL MEASURES SHOWN ON THIS PLAN ARE REQUIRED TO PROVIDE MANAGEMENT OF 'FIRST FLUSH'. PER THE CITY DRAINAGE ORDINANCE, THE 90TH PERCENTILE STORM EVENT, WHICH IS 44 INCHES, IS TO BE MANAGED. REDUCE 0.44 INCH BY THE 0.1 INCH FOR THE INITIAL IMPERVIOUS ABSTRACTION IN TABLE A-6 OF SECTION 22 OF THE DPM. MULTIPLY THE REMAINING 0.34 INCH BY THE IMPERVIOUS AREA. THIS IS THE PORTION TO RETAIN.

W. ADJUST ANY RIMS OF EXISTING UTILITY FEATURES AS NECESSARY TO MATCH NEW GRADES. UTILITIES IN PAVED AREAS SHALL BE HS-25 TRAFFIC RATED.

X. 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.

Y. WHERE GRADES BETWEEN NEW AND EXISTING ARE SHOWN AS 'MATCH' OR '±', TRANSITIONS SHALL BE SMOOTH.

Z. CONTRACTOR SHALL COMPLY WITH LOCAL REGULATIONS FOR RESEEDING OF DISTURBED AREAS.

AA. FIRST FLUSH RETENTION DESIGN PARAMETERS TO BE STRICTLY ADHERED TO FOR CERTIFICATION PURPOSES.

AB. 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 OCCURRENCES.

AC. MEASURES REQUIRED FOR EROSION AND SEDIMENT CONTROL SHALL BE INCIDENTAL TO THE PROJECT COST.

AD. FIVE WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (811) FOR LOCATION OF EXISTING UTILITIES.

KEYED NOTES

KEYED NOTES SHOWN BELOW ARE FOR USE ON SHEETS CG-101 AND CG-102. NOT ALL NOTES ARE USED ON EACH SHEET.

1. PROVIDE SWALE WITHIN NEW ASPHALT AT FLOWLINE ELEVATIONS SHOWN TO DIRECT FLOW (MINIMUM SLOPE = 1%).
2. CONSTRUCT WATER HARVESTING BASIN WITHIN LANDSCAPING AT ELEVATIONS SHOWN TO COLLECT STORMWATER.
3. BUILDING ROOF DISCHARGE LOCATION. EXTEND DRAIN PIPE THROUGH WALK TO RELEASE DIRECTLY TO FIRST FLUSH POND #1. SEE ARCHITECTURAL FOR ADDITIONAL INFORMATION.
4. CONSTRUCT 1' WIDE (BOTTOM WIDTH) COVERED SIDEWALK CULVERT PER COA. STD. DWG. 2236 AT ELEVATIONS SHOWN TO PASS EMERGENCY OVERFLOW TO PAVEMENT.
5. PROVIDE 1.0' WIDE CURB OPENING TO PASS CONCENTRATED FLOW. INSTALL ROCK EROSION PROTECTION WITHIN LANDSCAPING AT EACH CURB OPENING (2'X2' OR TO EXTENTS SHOWN). TOP OF ROCK = PAVEMENT FLOWLINE. SEE CG-501 FOR DETAIL.
6. CONSTRUCT RETAINING WALL TO ACHIEVE GRADE DIFFERENCE SHOWN (2.5' MAX. RETAINING). SEE ARCHITECTURAL FOR DETAILS.
7. SITE ACCESS STAIRS – SEE ARCHITECTURAL FOR DETAILS.
8. SITE ACCESS RAMP / RETAINING WALL – SEE ARCHITECTURAL FOR DETAILS.
9. CONSTRUCT HANDICAP RAMPS PER ADA GUIDELINES. SLOPE AT 12:1 MAX. SEE ARCHITECTURAL FOR DETAILS.
10. CONSTRUCT ASPHALT PAVING AT ELEVATIONS SHOWN. SEE ARCHITECTURAL FOR PAVEMENT MATERIAL, JOINT INFORMATION, SECTIONS, PARKING LAYOUT, DIMENSIONS, STRIPING, ETC.
11. FIRST FLUSH POND (TEMPORARY). SEE INSERT THIS SHEET FOR CONTINUATION.
12. SLOPES WITHIN HANDICAP PARKING AREA TO MEET ADA REQUIREMENTS. MAX. SLOPE = 2% IN ANY DIRECTION. SEE ARCHITECTURAL PLANS FOR ADA PARKING DETAILS.
13. CONSTRUCT CONCRETE APRON (12" WIDE x 4" THICK WITH 6" TURNED-DOWN EDGE) THIS AREA. TOP OF APRON TO BE 0.1' BELOW F.F. ELEVATION TYPICAL. SLOPE @ 2%. SEE SHEET CG-501 FOR DETAIL.
14. RETAINING STEMWALL (1' MAX) REQUIRED THIS AREA. SEE ARCHITECTURAL.
15. CONSTRUCT PERCOLATION PIT (3 LOCATIONS) 10' MIN. FROM BUILDING. SEE SHEET CG-501 FOR DETAIL.
16. HATCHED AREA REPRESENTS EXTENTS OF 'FIRST FLUSH' RETENTION PONDING. CONSTRUCT TO ELEVATIONS SHOWN.

LEGEND

- 03.8 — PROPOSED SPOT ELEVATION
- 03 — PROPOSED CONTOUR (1' INTERVAL)
- 03.5 — PROPOSED CONTOUR (0.5' INTERVAL)
- PROPOSED STORM DRAIN
- FLOW ARROW
- FIRST FLUSH RETENTION POND
- EROSION CONTROL
- PROPOSED SITE RETAINING WALL

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87108
Ph. 505-268-8828 www.iacivil.com

2116 CG-101.dwg May 19,2015

MARTIN FM GRUMMER
ARCHITECT
331 WELLESLEY PLACE NE
ALBUQUERQUE, NEW MEXICO 87106
(505) 265-2507

ALL DIMENSIONS ARE TO BE FIELD VERIFIED. IF THERE ARE DISCREPANCIES, PLEASE NOTIFY THE ARCHITECT. DRAWING ARE NOT TO BE SCALED. USE DIMENSIONS FOR ACCURACY.

UNSER & VISTA ORIENTE
...
SHELL BUILDING
ALBUQUERQUE, NM 87114
GRADING & DRAINAGE PLAN SOUTH

FRED C. ARFMAN
NEW MEXICO
7322
LICENSED PROFESSIONAL ENGINEER
05-18-15

DATE: 18 MAY 2015
DRAWN BY: BJB
CHECKED BY: ANW
VERIFIED BY: FCA

REVISIONS

SHEET NO: CG-102

CALCULATIONS: Vista Oriente : 5/14/2015

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

ON-SITE

AREA OF SITE: 30790 SF = 0.7

100-year, 6-hour

HISTORIC FLOWS:				DEVELOPED FLOWS:				EXCESS PRECIP:
	Treatment SF	%			Treatment SF	%	Precip. Zone	1
Area A =	0	0%		Area A =	0	0%	E_A =	0.44
Area B =	15395	50%		Area B =	3079	10%	E_B =	0.67
Area C =	15395	50%		Area C =	3695	12%	E_C =	0.99
Area D =	0	0%		Area D =	24016	78%	E_D =	1.97
Total Area =	30790	100%		Total Area =	30790	100%		

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

Weighted $E = \frac{E_AA_A + E_BA_B + E_CA_C + E_DA_D}{A_A + A_B + A_C + A_D}$

Historic E	=	0.83 in.	Developed E	=	1.72 in.

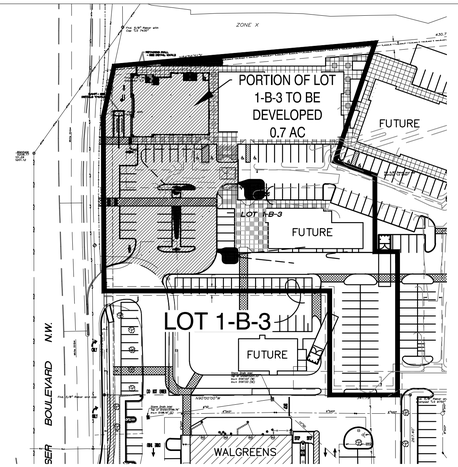
On-Site Volume of Runoff: V360 = E*A / 12

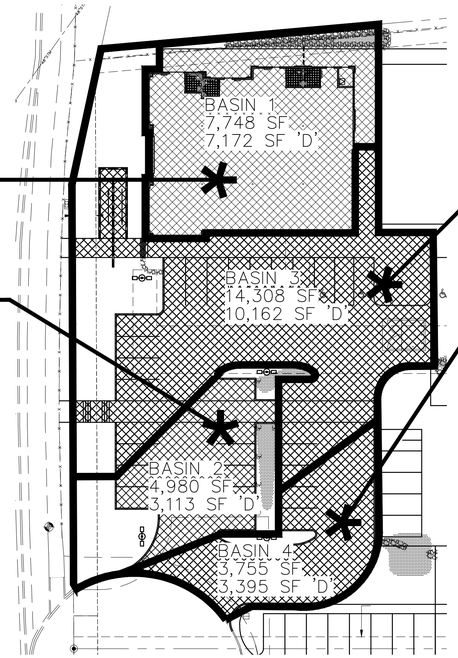
Historic V_{360}	=	2130 CF	Developed V_{360}	=	4419 CF

On-Site Peak Discharge Rate: $Qp = Q_{pA}A_A+Q_{pB}A_B+Q_{pC}A_C+Q_{pD}A_D$ / 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	=	1.7 CFS	Developed Q_p	=	2.8 CFS





FIRST FLUSH POND #1		
Contour	Area	Volume
5204.70	269	
5204.00	135	141 CF
5203.20	12	59 CF
TOTAL VOL.		**200** CF

FIRST FLUSH POND #2		
Contour	Area	Volume
5204.70	229	
5203.70	18	124 CF
TOTAL VOL.		**124** CF

PERMANENT FIRST FLUSH RETENTION IS PROVIDED FOR:

BASIN NO. 1 | **DESCRIPTION** | TO NORTH FIRST FLUSH POOND

Area of basin flows = 7748 SF = 0.18 Ac.

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

Sub-basin Weighted Excess Precipitation (see formula above): Weighted E = 1.90 in.

Sub-basin Volume of Runoff (see formula above): V_{360} = 1228 CF

Sub-basin Peak Discharge Rate: (see formula above): Qp = 0.8 cfs

LAND TREATMENT	
A =	0%
B =	0%
C =	7%
D =	93%
FIRST FLUSH VOL.	204 CF

BASIN NO. 2 | **DESCRIPTION** | TO PARKING ISLAND FIRST FLUSH POND

Area of basin flows = 4980 SF = 0.11 Ac.

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

Sub-basin Weighted Excess Precipitation (see formula above): Weighted E = 1.56 in.

Sub-basin Volume of Runoff (see formula above): V_{360} = 647 CF

Sub-basin Peak Discharge Rate: (see formula above): Qp = 0.4 cfs

LAND TREATMENT	
A =	0%
B =	18%
C =	18%
D =	64%
FIRST FLUSH VOL.	90 CF

TEMPORARY FIRST FLUSH RETENTION IS PROVIDED FOR:

BASIN NO. 3 | **DESCRIPTION** | TO TEMPORARY FIRST FLUSH POND

Area of basin flows = 14308 SF = 0.33 Ac.

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

Sub-basin Weighted Excess Precipitation (see formula above): Weighted E = 1.65 in.

Sub-basin Volume of Runoff (see formula above): V_{360} = 1968 CF

Sub-basin Peak Discharge Rate: (see formula above): Qp = 1.3 cfs

LAND TREATMENT	
A =	0%
B =	14%
C =	14%
D =	72%
FIRST FLUSH VOL.	292 CF

BASIN NO. 4 | **DESCRIPTION** | TO TEMPORARY FIRST FLUSH POND

Area of basin flows = 3755 SF = 0.1 Ac.

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

Sub-basin Weighted Excess Precipitation (see formula above): Weighted E = 1.86 in.

Sub-basin Volume of Runoff (see formula above): V_{360} = 581 CF

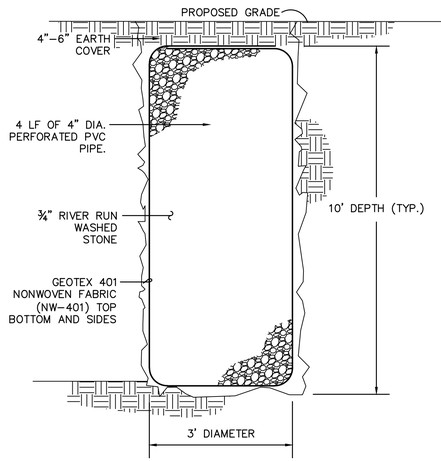
Sub-basin Peak Discharge Rate: (see formula above): Qp = 0.4 cfs

LAND TREATMENT	
A =	0%
B =	5%
C =	5%
D =	90%
FIRST FLUSH VOL.	96 CF

AS THE UNDEVELOPED PORTION OF LOT 1-B-3 DEVELOPS, THESE TEMPORARY FIRST FLUSH PONDS WILL BE INCORPORATED INTO THE OVERALL FIRST FLUSH SYSTEM FOR THE OVERALL PROPERTY.

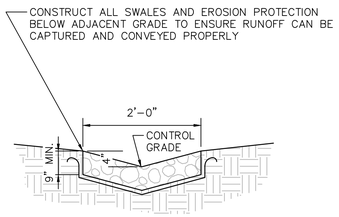
FIRST FLUSH POND #3 (TEMP)		
Contour	Area	Volume
5203.40	497	
5203.00	332	166 CF
5202.40	202	160 CF
TOTAL VOL.		**326** CF

FIRST FLUSH POND #4 (TEMP)		
Contour	Area	Volume
5203.50	318	
5203.00	190	127 CF
5202.50	95	71 CF
TOTAL VOL.		**198** CF



PERCOLATION PIT

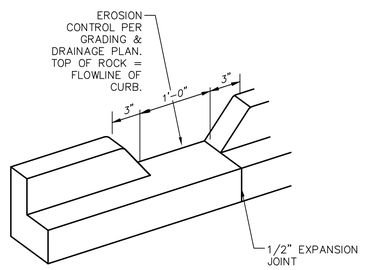
SCALE: N.T.S.



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.).

EROSION PROTECTION

SCALE: N.T.S.



GENERAL NOTES

1. EDGES NOT SPECIFICALLY DIMENSIONED SHALL BE SHAPED WITH A 3/8" EDGING TOOL.

CURB OPENING

SCALE: N.T.S.

Know what's below. Call before you dig.

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87108
Ph. 505-268-8828 www.iacivil.com

2116 CG-101.dwg May 19,2015

MARTIN FM GRUMMER ARCHITECT
331 WELLESLEY PLACE NE
ALBUQUERQUE, NEW MEXICO 87106
(505) 265-2507

ALL DIMENSIONS ARE TO BE FIELD VERIFIED. IF THERE ARE DISCREPANCIES, PLEASE NOTIFY THE ARCHITECT. DRAWING ARE NOT TO BE SCALED. USE DIMENSIONS FOR ACCURACY.

UNSER & VISTA ORIENTE
...
SHELL BUILDING
ALBUQUERQUE, NM 87114
GRADING & DRAINAGE DETAILS

FRED C. ARFMAN NEW MEXICO 7322 LICENSED PROFESSIONAL ENGINEER
05-14-15

DATE: 18 MAY 2015
DRAWN BY: BJB
CHECKED BY: ANW
VERIFIED BY: FCA

REVISIONS

SHEET NO: CG-501

BOUNDARY AND TOPOGRAPHIC SURVEY

LOTS 1-B-1 THRU 1-B-4

LADERA INDUSTRIAL CENTER

WITHIN

THE TOWN OF ATRISCO GRANT

IN

PROJECTED SECTION 9,

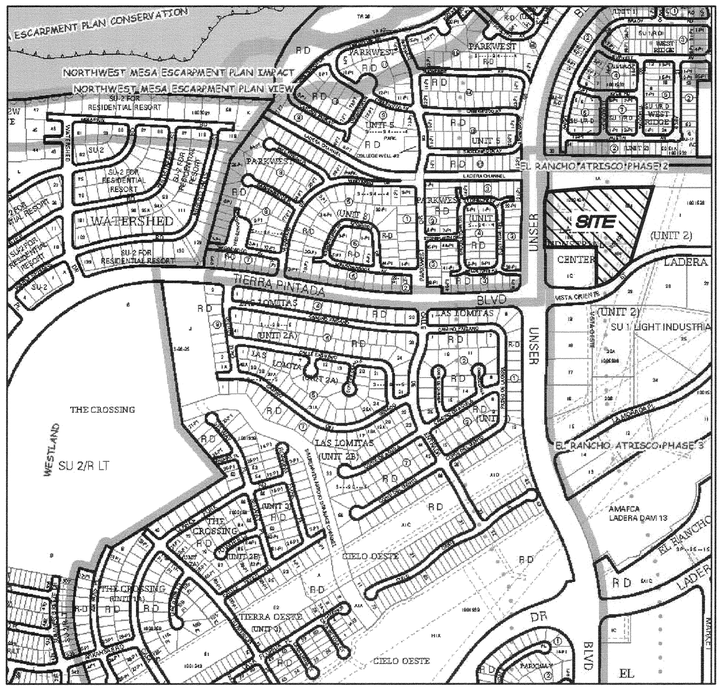
TOWNSHIP 10 NORTH, RANGE 2 EAST

NEW MEXICO PRINCIPAL MERIDIAN

CITY OF ALBUQUERQUE

BERNALILLO COUNTY, NEW MEXICO

AUGUST, 2012



VICINITY MAP

N.T.S.

GENERAL NOTES

1. Bearings are New Mexico State Plane Grid Bearings (Central Zone – NAD83).
2. Distances are ground.
3. Distances along curved lines are arc lengths.
4. Record Plat or Deed bearings and distances, where they differ from those established by this field survey, are shown in parenthesis ( ).
5. All corners found in place and held were tagged with a brass disk stamped "HUGG L.S. 9750" unless otherwise indicated hereon.
6. 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.
7. Vertical datum shown hereon was derived from the Albuquerque Control Survey Monument "4–H9" having a published elevation of 5209.315 feet (NAVD 88).
8. Contour interval shown hereon is one (1') foot.
9. Field surveys were performed during the month of August, 2012
10. This property is subject to the exceptions listed in SCHEDULE B – SECTION II of the Proforma Title Policy prepared for this property by LandAmerica Albuquerque Title, File No. 6217000586, dated January 17, 2008.
11. The above described Proforma Title Policy was used in defining easements as shown hereon. Circled numbers by the easement description correspond to the Proforma Title Policy's SCHEDULE B – SECTION II item number. Where possible, said easements have been plotted.
12. Existing utility line locations are shown in an approximate manner only, and such lines may or may not exist where shown or not shown. The location of any such existing lines is based on information provided by visual surface indications and the information may be incomplete or may be obsolete by the time this survey is completed. All utilities should be field verified and spotted by the contractor(s) prior to commencement of any construction.
13. City of Albuquerque Zone Atlas Page: H–9–Z

DOCUMENTS USED IN THE PREPARATION OF THIS SURVEY:

A. Plat entitled "PLAT OF LOTS 1 AND 2, LADERA INDUSTRIAL CENTER, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, DECEMBER 1992", filed February 12, 1993, in Volume 93C, Folio 39, records of Bernalillo County, New Mexico.

B. Plat entitled "EL RANCHO ATRISCO, PHASE II, TRACTS A–1 AND B–1, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, NOVEMBER, 1986", filed February 12, 1987, in Volume C32, Folio 185, records of Bernalillo County, New Mexico.

C. Plat entitled "EL RANCHO ATRISCO, PHASE III, TRACTS 5–A, 6–A AND THE BIKE AND JOGGING TRAIL, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, NOVEMBER, 1986", filed February 12, 1987, in Volume C32, Folio 184, records of Bernalillo County, New Mexico.

D. Plat entitled "SUBDIVISION PLAT OF LOTS 1–A, 1–B, 1–C AND 1–D, LADERA INDUSTRIAL CENTER, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, SEPTEMBER, 2003", filed June 24, 2004, in Volume 2004C, Folio 194, records of Bernalillo County, New Mexico.

E. Proforma Title Policy prepared for this property by LandAmerica Albuquerque Title, File No. 6217000586, dated January 17, 2008.

EASEMENT NOTES

Existing Mutual Cross Lot Vehicular Access easement for the benefit of Lots 1–B–1 thru 1–B–4 granted by plat filed January 26, 2012. Said easement shall run over the surface of vehicular drive aisles if and as they may exist from time to time and at any applicable time. Maintenance of said easement shall be the responsibility of the respective lot owners as to the portion contained within their respective lot.

Existing Mutual Cross Lot Drainage easement for the benefit of Lots 1–B–1 thru 1–B–4 granted by plat filed January 26, 2012. Said easement shall run over, under and across the Common Areas (meaning those areas of lot not occupied by a building from time to time and at any applicable time). Maintenance of said easement shall be the responsibility of the respective lot owners as to the portion contained within their respective lot.

EASEMENT LEGEND

(A) = Proposed 20' Driveway Access Permit From N.M.D.O.T. as Shown on Plat Filed 6–24–04, Vol. 2004C, Folio 194

(B) = Existing 20' Public Waterline Easement granted to the Albuquerque Bernalillo County Water Utility Authority by plat filed January 26, 2012.

(C) = Existing 10' Private Storm Sewer Easement granted by plat filed January 26, 2012 for the benefit of Lots 1–C and 1–B–1. Maintence shall be the responsibility of the owners of Lot 1–B–1.

LEGAL DESCRIPTION

Lots 1–B–1, 1–B–2, 1–B–3 and 1–B–4, Ladera Industrial Center as the same are shown and designated on the plat entitled "LOTS 1–B–1, 1–B–2, 1–B–3 AND 1–B–4, LADERA INDUSTRIAL CENTER. (BEING A REPLAT OF LOTS 1–B AND 1–D, LADERA INDUSTRIAL CENTER) WITHIN THE TOWN OF ATRISCO GRANT IN PROJECTED SECTION 9, TOWNSHIP 10 NORTH, RANGE 2 EAST. NEW MEXICO PRINCIPAL MERIDIAN. CITY OF ALBUQUERQUE, NEW MEXICO". filed in the office of the County Clerk of Bernalillo County, New Mexico, on January 26, 2012, in Plat Book 2012C, page 7.

FLOOD ZONE DETERMINATION

This property appears to lie within "Zone X" (Areas determined to be outside the 0.2% annual chance flood plain), with "ZONE A" (No Base Flood Elevations determined) adjacent to the northerly boundary along the Ladera Diversion Channel, as shown on National Flood Insurance Program Flood Insurance Rate Map Number 35001C0326G, Map Revised September 26, 2008.

SURVEYORS CERTIFICATION

I, Russ P. Hugg, New Mexico Professional Surveyor Number 9750, hereby certify that this Boundary and Topographic Survey Plat was prepared from an actual ground survey performed by me or under my supervision; that I am responsible for this survey; that this survey is true and correct to the best of my knowledge and belief; and that this Boundary and Topographic Survey Plat and the field survey upon which it is based meet the Minimum Standards for Surveying in New Mexico; and that this survey is not a land division or subdivision as defined in the New Mexico Subdivision Act and that this is a Boundary and Topographic Survey Plat of four existing lots.

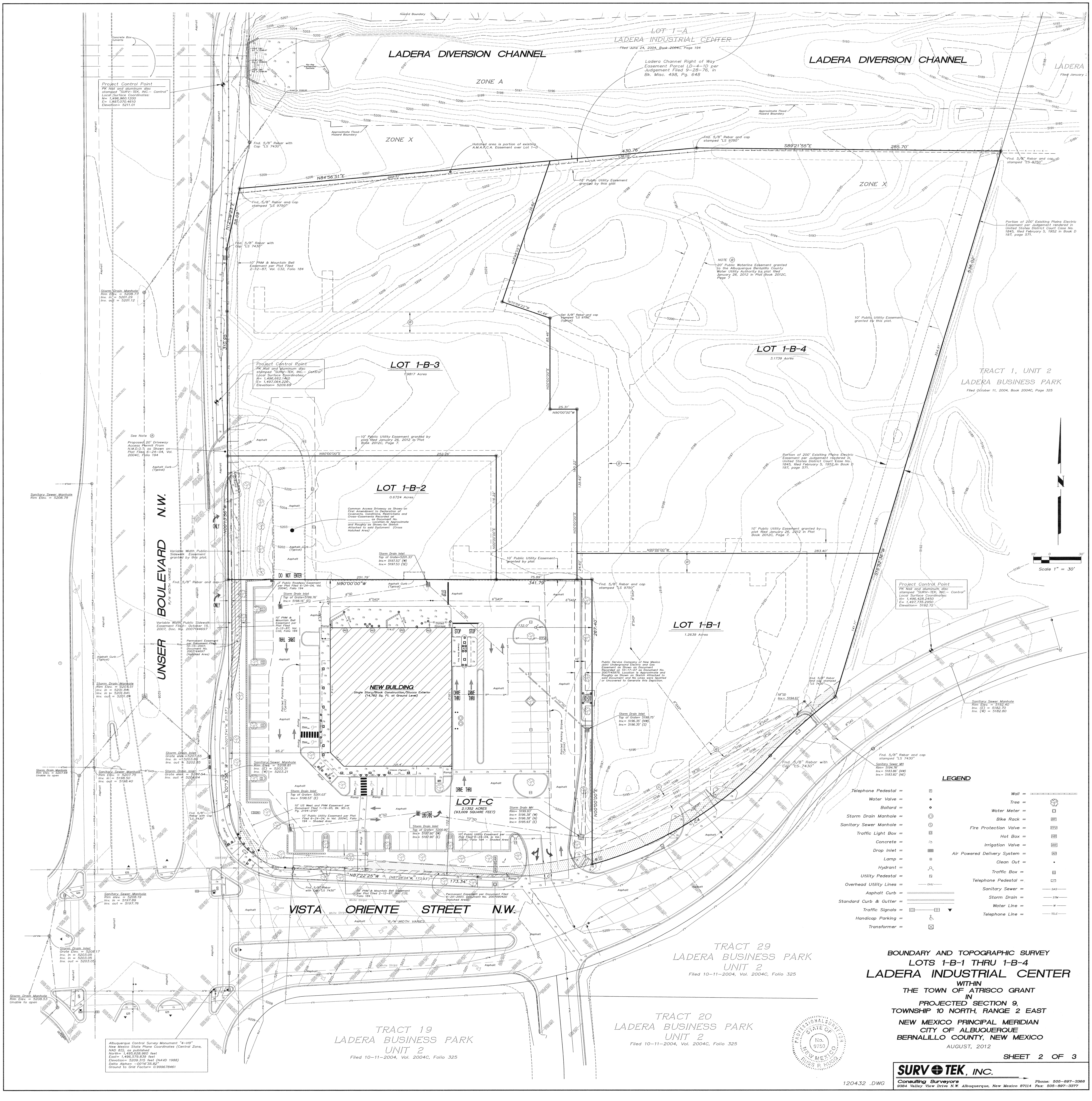
IN WITNESS WHEREOF, this certificate is executed at Albuquerque, New Mexico, on this 30th day of August, 2012.

Russ P. Hugg
NMPS No. 9750

120432 . DWG

SURV TEK, INC.
Consulting Surveyors
9384 Valley View Drive N.W. Albuquerque, New Mexico 87114
Phone: 505–897–3366
Fax: 505–897–3377

P:\Robbie\120432\DWG\120432.dwg



P:\Robbie\120432\DWG\120432.dwg

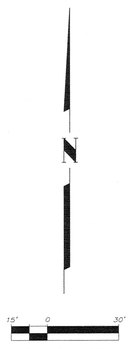
TOPOGRAPHIC DESIGN SURVEY

INTERSECTION OF

UNSER BOULEVARD AND LADERA DRIVE N.W.

CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

AUGUST, 2012



Scale 1" = 30'

LEGEND

- Concrete =
- Drop Inlet =
- Asphalt Curb =
- Standard Curb & Gutter =
- Traffic Signals =
- Traffic Box =

GENERAL NOTES

1. Bearings are New Mexico State Plane Grid Bearings (Central Zone – NAD83).
2. Distances are ground.
3. Distances along curved lines are arc lengths.
4. No property corners were set or established by this survey.
5. Vertical datum shown hereon was derived from the Albuquerque Control Survey Monument "4-H9" having a published elevation of 5209.315 feet (NAVD 88).
6. Contour interval shown hereon is one (1') foot.
7. Field surveys were performed during the month of August, 2012
8. City of Albuquerque Zone Atlas Page: H-9-Z

SURVEYORS CERTIFICATION

I, Russ P. Hugg, New Mexico Professional Surveyor Number 9750, hereby certify that this Topographic Survey was prepared from an actual ground survey performed by me or under my supervision; that I am responsible for this survey; that this survey is true and correct to the best of my knowledge and belief; and that this Topographic Survey and the field survey upon which it is based meet the Minimum Standards for Surveying in New Mexico; this is not a boundary survey, apparent property corners and property lines are shown for orientation only and that this survey is not a land division or subdivision as defined in the New Mexico Subdivision Act.

IN WITNESS WHEREOF, this certificate is executed at Albuquerque, New Mexico, on this 10th day of August, 2012.

Russ P. Hugg
NMPS No. 9750

PROFESSIONAL SURVEYOR
STATE OF
No. 9750
NEW MEXICO
RUSS P. HUGG

120432 .DWG

SURV TEK, INC.
Consulting Surveyors
9384 Valley View Drive N.W. Albuquerque, New Mexico 87114 Fax: 505-897-3377
Phone: 505-897-3366

P:\Robbie\120432\DWG\120432.dwg