CITY OF ALBUQUERQUE

Richard J. Berry, Mayor

November 25, 2015

Jeffrey Mortensen, PE
HIGH MESA CONSULTING GROUP
6010-B Midway Park Blvd. NE
Albuquerque, NM 87109

RE: **Jaguar Land Rover Expansion and Renovation (File: C17D103)**
5010 Alameda Blvd. NE
Grading Plan and Drainage Report
Engineer's Stamp Date – 10/08/15

Dear Mr. Mortensen:

Based upon the information provided in your submittal received 10-08-15 and additional information provided, the above referenced Grading Plan/ Drainage Report 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 924-3994.

Sincerely,

Rudy Archuleta, P.E.
Senior Engineer, Planning Dept.
Development Review Services

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

Orig: Drainage file
c.pdf Addressee via Email

C17D103_ BP_Appr

DRAINAGE PLAN UPDATE (2015)

I. INTRODUCTION AND EXECUTIVE SUMMARY

THIS PROJECT, LOCATED IN THE NORTH I-25 CORRIDOR, REPRESENTS A MODIFICATION TO AN EXISTING COMMERCIAL SITE WITHIN AN INFILL AREA. THE PROPOSED CONSTRUCTION CONSISTS OF TWO MINOR BUILDING ADDITIONS WITHIN AREAS THAT ARE ALREADY IMPERVIOUS. THIS PLAN REPRESENTS THE SECOND UPDATE TO A PREVIOUSLY APPROVED PLAN, C17 – D103. THE DRAINAGE CONCEPT WILL BE THE CONTINUED DISCHARGE OF ONSITE RUNOFF TO EXISTING DETENTION PONDING WITHIN THE EXISTING PARKING LOT. NEITHER BUILDING ADDITION WILL ENCROACH UPON THE PREVIOUSLY APPROVED AND CERTIFIED PONDING AREA. FURTHERMORE, THE GRADES WITHIN THE EXISTING DETENTION POND WILL NOT BE ALTERED.

THIS SUBMITTAL IS MADE IN SUPPORT OF BUILDING PERMIT APPROVAL WITHIN THE JURISDICTION OF THE CITY OF ALBUQUERQUE.

II. PROJECT DESCRIPTION

AS SHOWN BY THE VICINITY MAP, THE SITE IS LOCATED ON THE SOUTH SIDE OF ALAMEDA BLVD. NE BETWEEN SAN MATEO BLVD. NE AND JEFFERSON NE. AS SHOWN BY PANEL 137 OF 825 OF THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS PUBLISHED BY FEMA FOR BERNALILLO COUNTY, NEW MEXICO, AUGUST 16, 2012, THIS SITE DOES NOT LIE WITHIN A DESIGNATED FLOOD HAZARD ZONE. THE SITE DOES, HOWEVER, LIE ADJACENT TO AN AO (DEPTH 1') FLOOD HAZARD ZONE ASSOCIATED WITH ALAMEDA BLVD. NE. IN RECOGNITION OF THIS DOWNSTREAM CONDITION, THE PROPOSED IMPROVEMENTS WILL CONTINUE THE CONTROLLED DISCHARGE OF RUNOFF FROM THE SITE TO ALAMEDA BLVD. NE.

III. BACKGROUND DOCUMENTS

THE PREPARATION OF THIS PLAN RELIED UPON THE FOLLOWING DOCUMENTS:

- GRADING AND DRAINAGE PLAN FOR LAND ROVER CENTRE PREPARED BY HIGH MESA CONSULTING GROUP (FORMERLY JEFF MORTENSEN & ASSOCIATES, INC.), NMPE 8547, DATED 02-05-97 AND REVISED 03-06-97 AND 05-30-97. THIS 1997 PLAN IDENTIFIED THE NEED FOR DETENTION PONDING AND ESTABLISHED THE CRITERIA FOR THE DETENTION POND CONSTRUCTED ON THE SITE.
- GRADING AND DRAINAGE PLAN FOR LAND ROVER CENTRE ABQ REFRESH AND EXPANSION PREPARED BY HIGH MESA CONSULTING GROUP, NMPE 8547, DATED 11-16-2011 AND CERTIFIED 06-05-2012. THE 2012 CERTIFICATION PROVIDES THE EXISTING CONDITIONS AND DRAINAGE CONCEPT FOR THIS SUBMITTAL.

IV. EXISTING CONDITIONS

THE EXISTING SITE PRESENTLY DRAINS TO PRIVATE STORM INLETS LOCATED IN SUMP CONDITIONS WITHIN THE EXISTING PARKING LOT. DEVELOPED RUNOFF GENERATED BY THE SITE DRAIN TO THE EXISTING INLETS WHERE THE RUNOFF IS COLLECTED BY A PRIVATE STORM DRAIN. THE PRIVATE STORM DRAIN DISCHARGES TO THE BACK OF AN EXISTING PUBLIC STORM INLET WITHIN THE SOUTH CURB LINE OF ALAMEDA BLVD. NE. FROM THIS POINT, RUNOFF FLOWS WEST WITHIN THE ALAMEDA BLVD. NE RIGHT-OF-WAT TO ENTER THE AMAFCA NORTH DIVERSION CHANNEL.

THERE ARE MINOR OFFSITE FLOWS IMPACTING THE PROJECT SITE AS DETERMINED BY PRIOR SUBMITTAL AND CONFIRMED BY VISUAL SITE INSPECTIONS CONDUCTED NOVEMBER 04, 2011 AND SEPTEMBER 27, 2015.

V. DEVELOPED CONDITIONS

THE PROPOSED CONSTRUCTION CONSISTS OF TWO MINOR BUILDING ADDITIONS WITHIN EXISTING PAVED AREAS. AS SUCH, NO ADDITIONAL IMPERVIOUS AREA IS BEING CREATED. MORE IMPORTANTLY, THE PROPOSED ADDITIONS WILL NOT ENCROACH UPON THE EXISTING DETENTION POND LIMITS. RUNOFF GENERATED BY THE SITE WILL CONTINUE TO DRAIN TO THE EXISTING PRIVATE STORM INLETS AND EXIT INTO THE PUBLIC STORM DRAINAGE IMPROVEMENTS WITHIN ALAMEDA BLVD. NE AND EVENTUALLY OUTFALL TO THE AMAFCA NORTH DIVERSION CHANNEL AS PREVIOUSLY DESCRIBED ABOVE.

AS IN THE EXISTING CONDITION, THERE ARE MINOR OFFSITE FLOWS ENTERING THE SITE FROM THE EAST IN THE FORM OF SHEETFLOW. OFSITE FLOWS WILL NOT BE BLOCKED AND WILL CONTINUE TO BE ACCEPTED AND CONVEYED THROUGH THE SITE.

VI. GRADING PLAN

THE GRADING PLANS SHOW 1.) EXISTING GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'-0" INTERVALS TAKEN FROM THE 1997 ENGINEER'S DRAINAGE CERTIFICATION, 2.) PROPOSED GRADES INDICATED BY SPOT ELEVATIONS, 3.) THE LIMIT AND CHARACTER OF THE EXISTING IMPROVEMENTS TAKEN FROM THE 1997 AND 2012 ENGINEER'S DRAINAGE CERTIFICATIONS, 4.) THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS, AND 5.) CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES. AS SHOWN BY THIS PLAN, THE PROPOSED GRADING WILL MAINTAIN THE CURRENT DRAINAGE PATTERN OF DISCHARGE TO THE EXISTING ONSITE DETENTION POND.

VIII. CALCULATIONS

THE CALCULATIONS CONTAINED HEREON ANALYZE THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT FOR THE 1997 SUBMITTAL. THE PROCEDURE FOR 40 ACRE AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY 1993, WAS USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUNOFF GENERATED. AS DEMONSTRATED BY THESE CALCULATIONS, THE ORIGINAL PROJECT RESULTED IN AN INCREASE IN DEVELOPED RUNOFF GENERATED BY THE SITE. THE CALCULATIONS FURTHER DEMONSTRATED THE REQUIREMENTS FOR ONSITE DETENTION PONDING. CALCULATIONS HAVE NOT BEEN PROVIDED FOR THE PROPOSED ADDITIONS COVERED BY THIS SUBMITTAL BECAUSE NO INCREASE IN IMPERVIOUS AREA IS PROPOSED.

IX. CONCLUSIONS

THE FOLLOWING CONCLUSIONS HAVE BEEN ESTABLISHED AS A RESULT OF THE EVALUATIONS CONTAINED HEREIN:

1. THE EXISTING SITE DOES NOT LIE WITHIN A FEMA DESIGNATED FLOOD HAZARD ZONE
2. THE SITE LIES ADJACENT TO AN AO (DEPTH 1) FLOOD HAZARD ZONE AND AS SUCH DETENTION PONDING WAS AND STILL IS REQUIRED.
3. THE PROPOSED PROJECT REPRESENTS THE MODIFICATION OF AN EXISTING SITE WITHIN AN INFILL AREA.
4. THE PROPOSED IMPROVEMENTS WILL MAINTAIN THE EXISTING DRAINAGE PATTERN OF THE SITE
5. THE PROPOSED ADDITIONS WILL NOT INCREASE OR DECREASE THE AMOUNT OF RUNOFF GENERATED BY THE SITE
6. THE DEVELOPED RUNOFF GENERATED BY THE PROJECT SITE WILL CONTINUE TO BE MANAGED BY THE EXISTING PRIVATE ONSITE DETENTION POND
7. THE PROPOSED IMPROVEMENTS WILL NOT ADVERSELY IMPACT OR ENCROACH UPON THE EXISTING DETENTION POND LIMITS
8. THE PROPOSED IMPROVEMENTS WILL NOT ADVERSELY IMPACT DOWNSTREAM PROPERTIES OR DOWNSTREAM DRAINAGE CONDITIONS
9. THE PROPOSED ADDITIONS LIE WITHIN EXISTING IMPERVIOUS AREAS THEREBY ELIMINATING THE POTENTIAL FOR PERVIOUS AREAS IN WHICH TO CAPTURE AND TREAT THE FIRST FLUSH ON THIS INFILL SITE. FURTHERMORE, THE FOOTPRINTS OF THE PROPOSED ADDITIONS ARE QUITE SMALL AND WILL PRIMARILY BE ROOF AREA WHERE THE POTENTIAL FOR CONTAMINANTS IS MINIMAL.
10. THE PROJECT WILL DISTURB LESS THAN ONE ACRE OF LAND, HENCE AN EROSION AND SEDIMENT CONTROL PLAN IS NOT REQUIRED AS A CONDITION FOR BUILDING PERMIT APPROVAL.

CONSTRUCTION NOTES:

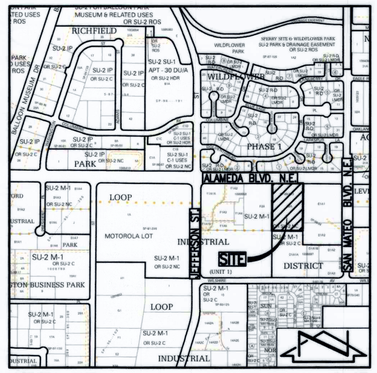
1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM 260-1990 (ALBUQUERQUE AREA), 1-800-321-ALERT(2537) (STATEWIDE), FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.
3. 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.
4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
5. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE 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. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
6. THE DESIGN OF PLANTERS AND LANDSCAPED AREAS IS NOT PART OF THIS PLAN. ALL PLANTERS AND LANDSCAPED AREAS ADJACENT TO THE BUILDING(S) SHALL BE PROVIDED WITH POSITIVE DRAINAGE TO AVOID ANY PONDING ADJACENT TO THE STRUCTURE. FOR CONSTRUCTION DETAILS, REFER TO LANDSCAPING PLAN.

EROSION CONTROL MEASURES:

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
3. WHEN APPLICABLE, CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY AND/OR FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BEGINNING CONSTRUCTION.

LEGEND:

TC	TOP OF CURB
FL	FLOWLINE
TA	TOP OF ASPHALT
TSW	TOP OF SIDEWALK
INV	INVERT ELEVATION
48.40	EXISTING SPOT ELEVATION
47.70	PROPOSED SPOT ELEVATION
	EXISTING FLOWLINE
	PROPOSED FLOWLINE
5150	EXISTING CONTOUR
51	PROPOSED CONTOUR
	EXISTING DIRECTION OF FLOW
	PROPOSED DIRECTION OF FLOW
	HIGH POINT / DIVIDE
	EXISTING STORM DRAIN
	PROPOSED CONCRETE
	PROPOSED ASPHALT PAVING
	PAINTED WALK
TA50.50 ✓	*AS-BUILT = AS DESIGNED (CERT.)*
TC51.90 .75	*AS-BUILT ELEVATION (CERT.)*
TA50.00	*2015 ADDITION INFORMATION*



VICINITY MAP C-17
SCALE: 1" = 750'±

FIRM PANEL 137 OF 825
SCALE: 1" = 500'± AUGUST 16, 2012

LEGAL DESCRIPTION

TRACT E-2A, UNIT I, LOOP INDUSTRIAL SUBDIVISION
FILED 09-29-1985; C39, 198

PROJECT BENCHMARK

AN AMAFCA BRASS TABLET STAMPED "NDC 7", SET ON A CONCRETE POST PROJECTING 0.3 FEET ABOVE GROUND. STATION IS LOCATED AT THE RICHFIELD ROAD BRIDGE OVER THE AMAFCA NORTH DIVERSION CHANNEL ELEVATION =- 5062.6 FEET (M.S.L.D.)

T.B.M.

RIM OF STORM DRAIN MANHOLE LOCATED WITHIN ALAMEDA BLVD. N.E. MEDIAN JUST NORTH OF SITE.
ELEVATION = 5145.75 FEET (M.S.L.D.)

NOTES:

1. THIS DRAINAGE SUBMITTAL IS AN UPDATE TO THE 1997 (ORIGINAL) GRADING AND DRAINAGE PLAN, CERTIFIED 10-30-1997, UPDATED FOR A SHOWROOM ADDITION 11-16-2011, AND CERTIFIED FOR CERTIFICATE OF OCCUPANCY 06-05-2012.
2. REFER TO SHEET C-101 FOR PRIOR AS-APPROVED DRAINAGE PLAN, 2011 DRAINAGE PLAN UPDATE AND CALCULATIONS.
3. REFER TO SHEET C-102 FOR UPDATED GRADING PLAN TO ADDRESS AN EXPANSION OF THE EXISTING BUILDING WITH A 600 SF ADDITION WITHIN AN EXISTING IMPERVIOUS AREA.

HIGH MESA Consulting Group
FORMERLY JEFF MORTENSEN AND ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. NE • ALBUQUERQUE, NEW MEXICO 87109
PHONE: 505.345.4250 • FAX: 505.345.4254 • www.highmesacg.com

2015.054.1

VIGIL & ASSOCIATES
ARCHITECTURAL GROUP P.C.
4477 Irving NW, Suite A • Albuquerque, NM 87114 • 505.890.5030
PO Drawer Z, 1730 Tierra De Mesilla • Mesilla, NM 88046 • 575.527.0400
www.VA-architects.com

JEFFREY G. MORTENSEN
NEW MEXICO
8547
REGISTERED PROFESSIONAL ENGINEER
10-08-2015

JAGUAR LAND ROVER EXPANSION & RENOVATION

JLR ALBUQUERQUE

date:
drawn by: S.C.C.
checked by: J.G.M.
revisions:

C-100

File Path: P:\DATA\2015\2015.054.1\DWG Date: 10-08-2015
File Name: 150541_C-100.DWG Plot Time: 1:08 pm

ORIGINAL DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING THE LAND ROVER CENTRE DRAINAGE PLAN ARE CONTAINED HEREON:

1. VICINITY MAP
2. GRADING PLAN
3. CALCULATIONS

AS SHOWN BY THE VICINITY MAP, THE SITE IS LOCATED ON THE SOUTH SIDE OF ALAMEDA BOULEVARD N.E. BETWEEN JEFFERSON STREET N.E. AND SAN MATEO N.E. AT PRESENT, THE SITE IS UNDEVELOPED.

AS SHOWN BY PANEL 136 OF 825 OF THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS PUBLISHED BY F.E.M.A. FOR THE COUNTY OF BERNALILLO, NEW MEXICO DATED SEPTEMBER 20, 1996, THIS SITE DOES NOT LIE WITHIN A DESIGNATED FLOOD HAZARD ZONE. DUE TO THE FACT THAT THIS SITE IS LOCATED UPSTREAM OF THE AMAFCA NORTH DIVERSION CHANNEL AND DUE TO THE PRESENCE OF A PUBLIC STORM DRAIN WITHIN ALAMEDA BOULEVARD N.E., DOWNSTREAM FLOODING IS NOT A CONCERN.

THE GRADING PLAN SHOWS: 1) EXISTING GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'0" INTERVALS AS SHOWN ON THE SURVEY PREPARED BY TYREE SURVEYING BEARING THE DATE OF NOVEMBER 17, 1996, 2) PROPOSED GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'0" INTERVALS, 3) THE LIMIT AND CHARACTER OF THE EXISTING IMPROVEMENTS AS SHOWN ON THE ABOVE REFERENCED SURVEY BY TYREE SURVEYING, 4) THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS, AND 5) CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES. AS SHOWN BY THIS PLAN, THE PROPOSED IMPROVEMENTS CONSIST OF THE DEVELOPMENT OF A SALES AND MAINTENANCE FACILITY FOR LAND ROVER. THIS WILL CONSIST OF A LARGE BUILDING ALONG WITH ASSOCIATED PAVING AND LANDSCAPING. THE DEVELOPED RUNOFF FROM THE SITE WILL BE DISCHARGED DIRECTLY INTO THE ALAMEDA BOULEVARD STORM DRAIN VIA THE BACK OF AN EXISTING STORM INLET. THE DISCHARGE RATE WILL BE LIMITED TO THE EXISTING DISCHARGE RATE FROM THE SITE. THIS WILL BE ACCOMPLISHED THROUGH ONSITE DETENTION PONDING. DETENTION PONDING WILL ALSO FACILITATE THE ABILITY TO DRAIN THE SITE. THE DETENTION POND HAS BEEN PROVIDED WITH A CAPACITY THAT EXCEEDS THE 100-YEAR, 6-HOUR RAINFALL EVENT, INCLUDING OFFSITE FLOWS. IN AN EFFORT TO BE CONSERVATIVE. THIS EVALUATION DOES NOT TAKE INTO ACCOUNT THE FACT THAT THE POND DISCHARGES AT A RATE OF APPROXIMATELY 2.3 CFS, HENCE THE FULL POND VOLUME WILL NOT BE NEEDED.

THE CALCULATIONS WHICH APPEAR HEREON ANALYZE BOTH THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT. THE PROCEDURE FOR 40-ACRE AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY, 1993, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUNOFF GENERATED. AS SHOWN BY THESE CALCULATIONS, AN INCREASE IN RUNOFF IS ANTICIPATED DUE TO THE PROPOSED DEVELOPMENT. THIS INCREASE WILL BE MITIGATED THROUGH ONSITE DETENTION PONDING. THE DISCHARGE RATE OF THE PRIVATE STORM DRAIN HAS BEEN ANALYZED USING THE FEILD'S HYDRAULIC CALCULATOR FOR GRAVITY FLOW IN PIPE WHICH IS BASED UPON THE MANNING FORMULA. THE AVERAGE END AREA HAS BEEN USED TO CALCULATE THE POND VOLUME. A SMALL OFFSITE BASIN, DELINEATED ON THE GRADING PLAN, PRODUCES OFFSITE FLOWS OF APPROXIMATELY 0.8 CFS SHEETFLOW. THESE OFFSITE FLOWS WILL NOT EXCEED DETENTION POND CAPACITY.

DRAINAGE PLAN UPDATE (2011)

I. INTRODUCTION AND EXECUTIVE SUMMARY

THIS PROJECT, LOCATED IN THE NORTH I-25 CORRIDOR, REPRESENTS A MODIFICATION TO AN EXISTING COMMERCIAL SITE WITHIN AN INFILL AREA. THE PROPOSED CONSTRUCTION CONSISTS OF TWO BUILDING ADDITIONS WITHIN AREAS THAT ARE ALREADY IMPERVIOUS. THIS PLAN REPRESENTS AN UPDATE TO A PREVIOUSLY APPROVED PLAN, C17 – D103. THE DRAINAGE CONCEPT WILL BE THE CONTINUED DISCHARGE OF ONSITE RUNOFF TO EXISTING DETENTION PONDING WITHIN THE EXISTING PARKING LOT. NEITHER BUILDING ADDITION WILL ENCROACH UPON THE PREVIOUSLY APPROVED AND CERTIFIED PONDING AREA. FURTHERMORE, THE GRADES WITHIN THE EXISTING DETENTION POND WILL NOT BE ALTERED.

THIS SUBMITTAL IS MADE IN SUPPORT OF BUILDING PERMIT APPROVAL WITHIN THE JURISDICTION OF THE CITY OF ALBUQUERQUE.

II. PROJECT DESCRIPTION

AS SHOWN BY THE VICINITY MAP, THE SITE IS LOCATED ON THE SOUTH SIDE OF ALAMEDA BLVD. NE BETWEEN SAN MATEO BLVD. NE AND JEFFERSON NE. AS SHOWN BY PANEL 137 OF 825 OF THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS PUBLISHED BY FEMA FOR BERNALILLO COUNTY, NEW MEXICO, SEPTEMBER 26, 2008, THIS SITE DOES NOT LIE WITHIN A DESIGNATED FLOOD HAZARD ZONE. THE SITE DOES, HOWEVER, LIE ADJACENT TO AN AO (DEPTH 1) FLOOD HAZARD ZONE ASSOCIATED WITH ALAMEDA BLVD. NE. IN RECOGNITION OF THIS DOWNSTREAM CONDITION, THE PROPOSED IMPROVEMENTS WILL CONTINUE THE CONTROLLED DISCHARGE OF RUNOFF FROM THE SITE TO ALAMEDA BLVD. NE.

III. BACKGROUND DOCUMENTS

THE PREPARATION OF THIS PLAN RELIED UPON THE FOLLOWING DOCUMENTS:

- GRADING AND DRAINAGE PLAN LAND ROVER CENTRE PREPARED BY HIGH MESA CONSULTING GROUP (FORMERLY JEFF MORTENSEN & ASSOCIATES, INC.), NMPE 8547, DATED 02-05-97 AND REVISED 03-06-97 AND 05-30-97. THIS 1997 PLAN IDENTIFIED THE NEED FOR DETENTION PONDING AND ESTABLISHED THE CRITERIA FOR THE DETENTION POND CONSTRUCTED ON THE SITE.
- ENGINEER'S DRAINAGE CERTIFICATION FOR LAND ROVER CENTRE PREPARED BY HIGH MESA CONSULTING GROUP (FORMERLY JEFF MORTENSEN & ASSOCIATES, INC.), NMPE 8547, DATED 10-30-97. THE 1997 CERTIFICATION PROVIDES THE EXISTING CONDITIONS FOR THIS SUBMITTAL.

IV. EXISTING CONDITIONS

THE EXISTING SITE PRESENTLY DRAINS TO PRIVATE STORM INLETS LOCATED IN SUMP CONDITIONS WITHIN THE EXISTING PARKING LOT. DEVELOPED RUNOFF GENERATED BY THE SITE DRAIN TO THE EXISTING INLETS WHERE THE RUNOFF IS COLLECTED BY A PRIVATE STORM DRAIN. THE PRIVATE STORM DRAIN DISCHARGES TO THE BACK OF AN EXISTING PUBLIC STORM INLET WITHIN THE SOUTH CURB LINE OF ALAMEDA BLVD. NE. FROM THIS POINT, RUNOFF FLOWS WEST WITHIN THE ALAMEDA BLVD. NE RIGHT-OF-WAY TO ENTER THE AMAFCA NORTH DIVERSION CHANNEL.

THERE ARE MINOR OFFSITE FLOWS IMPACTING THE PROJECT SITE AS DETERMINED BY PRIOR SUBMITTAL AND CONFIRMED BY VISUAL SITE INSPECTION CONDUCTED NOVEMBER 04, 2011.

V. DEVELOPED CONDITIONS

THE PROPOSED CONSTRUCTION CONSISTS OF TWO BUILDING ADDITIONS WITHIN EXISTING PAVED AREAS. AS SUCH, NO ADDITIONAL IMPERVIOUS AREA IS BEING CREATED. MORE IMPORTANTLY, THE PROPOSED ADDITIONS WILL NOT ENCROACH UPON THE EXISTING DETENTION POND LIMITS. RUNOFF GENERATED BY THE SITE WILL CONTINUE TO DRAIN TO THE EXISTING PRIVATE STORM INLETS AND EXIT INTO THE PUBLIC STORM DRAINAGE IMPROVEMENTS WITHIN ALAMEDA BLVD. NE AND EVENTUALLY OUTFALL TO THE AMAFCA NORTH DIVERSION CHANNEL AS PREVIOUSLY DESCRIBED ABOVE.

AS IN THE EXISTING CONDITION, THERE ARE MINOR OFFSITE FLOWS ENTERING THE SITE FROM THE EAST IN THE FORM OF SHEET FLOW. OFFSITE FLOWS WILL NOT BE BLOCKED AND WILL CONTINUE TO BE ACCEPTED AND CONVEYED THROUGH THE SITE.

VI. GRADING PLAN

THE GRADING PLANS SHOW 1.) EXISTING GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'-0" INTERVALS TAKEN FROM THE 1997 ENGINEER'S DRAINAGE CERTIFICATION, 2.) PROPOSED GRADES INDICATED BY SPOT ELEVATIONS, 3.) THE LIMIT AND CHARACTER OF THE EXISTING IMPROVEMENTS TAKEN FROM THE 1997 ENGINEER'S DRAINAGE CERTIFICATION, 4.) THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS, AND 5.) CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES. AS SHOWN BY THIS PLAN, THE PROPOSED GRADING WILL MAINTAIN THE CURRENT DRAINAGE PATTERN OF DISCHARGE TO THE EXISTING ONSITE DETENTION POND.

VIII. CALCULATIONS

THE CALCULATIONS CONTAINED HEREON ANALYZE THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT FOR EACH OF THE PROJECT SITES. THE PROCEDURE FOR 40 ACRE AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY 1993, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUNOFF GENERATED. AS DEMONSTRATED BY THESE CALCULATIONS, THE ORIGINAL PROJECT RESULTED IN AN INCREASE IN DEVELOPED RUNOFF GENERATED BY THE SITE. THE CALCULATIONS FURTHER DEMONSTRATED THE REQUIREMENTS FOR ONSITE DETENTION PONDING. CALCULATIONS HAVE NOT BEEN PROVIDED FOR THE PROPOSED ADDITIONS BECAUSE NO ADDITIONAL IMPERVIOUS AREA IS PROPOSED.

IX. CONCLUSIONS

THE FOLLOWING CONCLUSIONS HAVE BEEN ESTABLISHED AS A RESULT OF THE EVALUATIONS CONTAINED HEREIN:

1. THE EXISTING SITE DOES NOT LIE WITHIN A FEMA DESIGNATED FLOOD HAZARD ZONE
2. THE SITE LIES ADJACENT TO AN AO (DEPTH 1) FLOOD HAZARD ZONE AND AS SUCH DETENTION PONDING WAS AND STILL IS REQUIRED.
3. THE PROPOSED IMPROVEMENTS WILL MAINTAIN THE EXISTING DRAINAGE PATTERN OF THE SITE
4. THE PROPOSED ADDITIONS WILL NEITHER INCREASE OR DECREASE THE AMOUNT OF RUNOFF GENERATED BY THE SITE
5. THE DEVELOPED RUNOFF GENERATED BY THE PROJECT SITE WILL CONTINUE TO BE MANAGED BY THE EXISTING PRIVATE ONSITE DETENTION POND
6. THE PROPOSED IMPROVEMENTS WILL NOT ADVERSELY IMPACT OR ENCROACH UPON THE EXISTING DETENTION POND LIMITS
7. THE PROPOSED IMPROVEMENTS WILL NOT ADVERSELY IMPACT DOWNSTREAM PROPERTIES OR DOWNSTREAM DRAINAGE CONDITIONS

ORIGINAL CALCULATIONS

Site Characteristics

1. Precipitation Zone = 2
2. $P_{6,100} = P_{360} = 2.35$ in.
3. Total Area (A_T) = 156,900 sf; 3.60 ac
4. Existing Land Treatment

Treatment	Area (sf/ac)	%
C	156,900/3.60	100

5. Developed Land Treatment

Treatment	Area (sf/ac)	%
C	63,660/1.46	41
D	93,240/2.14	59

Existing Condition

1. Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$$

$$E_W = (1.13)(3.60)/3.60 = 1.13 \text{ in.}$$

$$V_{100} = (E_W/12)A_T$$

$$V_{100} = (1.13/12)3.60 = 0.34 \text{ ac.ft.; } 14{,}810 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$$

$$Q_p = Q_{100} = (3.14)(3.60) = 11.30 \text{ cfs}$$

Developed Condition

1. Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$$

$$E_W = (1.13)(1.46) + (2.12)(2.14)/3.60 = 1.72 \text{ in.}$$

$$V_{100} = (E_W/12)A_T$$

$$V_{100} = (1.72/12)3.60 = 0.52 \text{ ac.ft.; } 22{,}650 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$$

$$Q_p = Q_{100} = (3.14)(1.46) + (4.70)(2.14) = 14.64 \text{ cfs}$$

Comparison

1. $\Delta V_{100} = 22{,}650 - 14{,}810 = 7{,}840$ cf (increase)
2. $\Delta Q_{100} = 14.64 - 11.30 = 3.34$ cfs (increase)?

Pond Volume Calculations
(Average End Area Method)

Elev (ft)	Area (sf)	Vol (cf)	Σ Vol (cf)
5144	0		
		330	330
5144.5	1,320		
		2,135	2,465
5145.0	7,220		
		5,125	7,590
5145.5	13,280		
		8,493	16,083
5146.0	20,690		
		14,215	30,298
5146.5	36,170		

Pond Volume = 30,298 cf

$V_{100} = 22{,}650$ cf < 30,298

Therefore Pond Volume Sufficient

100 Yr. W.S.L. = 5146.3

Pipe Discharge Capacity (Using Manning's Equation)

Q = 2.25 cfs

OFFSITE FLOW CALCULATIONS

Site Characteristics

1. Precipitation Zone = 2
2. $P_{6,100} = P_{360} = 2.35$ in.
3. Total Area (A_T) = 11,290 sf; 0.26 ac
4. Existing Land Treatment

Treatment	Area (sf/ac)	%
C	11,290/0.26	100

Existing Condition

1. Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$$

$$E_W = (1.13)(0.26)/0.26 = 1.13 \text{ in.}$$

$$V_{100} = (E_W/12)A_T$$

$$V_{100} = (1.13/12)0.26 = 0.02 \text{ ac.ft.; } 1{,}070 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$$

$$Q_p = Q_{100} = (3.14)(0.26) = 0.82 \text{ cfs}$$

CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM 260-1990 (ALBUQUERQUE AREA), 1-800-321-ALERT(2537) (STATEWIDE), FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.
3. 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.
4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
5. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND/OR THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE 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. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
6. THE DESIGN OF PLANTERS AND LANDSCAPED AREAS IS NOT PART OF THIS PLAN. ALL PLANTERS AND LANDSCAPED AREAS ADJACENT TO THE BUILDING(S) SHALL BE PROVIDED WITH POSITIVE DRAINAGE TO AVOID ANY PONDING ADJACENT TO THE STRUCTURE. FOR CONSTRUCTION DETAILS, REFER TO LANDSCAPING PLAN.

APPROVALS	NAME	DATE
HYDROLOGY	*LISA MANWILL*	*03-17-1997*
SIDEWALK INSPECTOR		
STORM DRAIN MAINTENANCE	*S.D. MAINT.*	*10-30-1997*

EROSION CONTROL MEASURES:

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
3. WHEN APPLICABLE, CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY AND/OR FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BEGINNING CONSTRUCTION.

⚠ *RECORD INFORMATION LEGEND (2012)*

CONSTRUCT	*RECORD INFORMATION (VERIFIED BY ENGINEER)*
✓	*AS-CONSTRUCTED = AS-DESIGNED (VERIFIED BY ENGINEER)*
36' 42"	*RECORD INFORMATION (VERIFIED BY ENGINEER)*
+25.2	*RECORD INFORMATION (VERIFIED BY ENGINEER)*
@ 28,98.92	*RECORD INFORMATION (VERIFIED BY ENGINEER)*

⚠ ENGINEER'S DRAINAGE CERTIFICATION (2012)

I, JEFFREY G. MORTENSEN, NMPE 8547, OF THE FIRM HIGH MESA CONSULTING GROUP, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND DRAINED IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 11-16-2011. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY THE UNDERSIGNED AS SUPPLEMENTAL SITE DATA, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR ISSUANCE OF A PERMANENT CERTIFICATE OF OCCUPANCY.

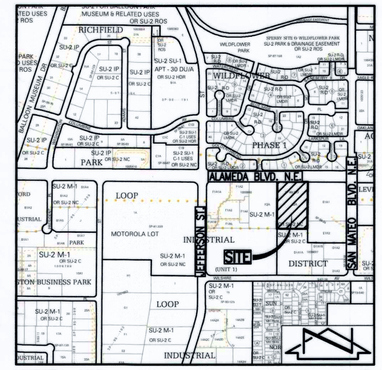
THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THIS CERTIFICATION DOES NOT ADDRESS ADA COMPLIANCE WHICH IS BEYOND THE SCOPE OF GRADING AND DRAINAGE. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

JEFFREY G. MORTENSEN, NMPE 8547

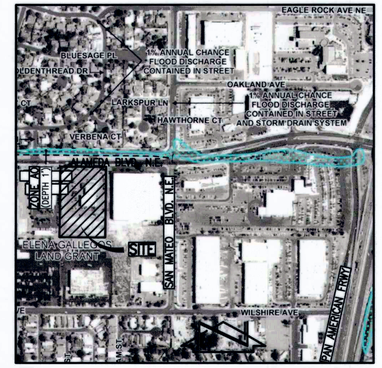
06 05-30-97

DATE

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER



VICINITY MAP — C-17
SCALE: 1" = 750'±



FIRM — PANEL 137 OF 825
SCALE: 1" = 500'± — AUGUST 16, 2012

LEGAL DESCRIPTION

TRACT E-2A, UNIT I, LOOP INDUSTRIAL SUBDIVISION
FILED 09-29-1985; C39, 198

PROJECT BENCHMARK

AN AMAFCA BRASS TABLET STAMPED "NDC 7", SET ON A CONCRETE POST PROJECTING 0.3 FEET ABOVE GROUND. STATION IS LOCATED AT THE RICHFIELD ROAD BRIDGE OVER THE AMAFCA NORTH DIVERSION CHANNEL ELEVATION =- 5062.6 FEET (M.S.L.D.)

T.B.M.

RIM OF STORM DRAIN MANHOLE LOCATED WITHIN ALAMEDA BLVD. N.E. MEDIAN JUST NORTH OF SITE.
ELEVATION = 5145.75 FEET (M.S.L.D.)

NO.	DATE	BY	REVISIONS
1	06/12	J.G.M.	*DRAINAGE CERTIFICATION*
2	10/15	J.G.M.	*SHOWROOM ADDITION (2015)*

(1997) CERTIFICATION

AS INDICATED BY THE AS-BUILT INFORMATION SHOWN HEREON, THIS PROJECT HAS BEEN CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN WITH THE EXCEPTION OF THE 12" DIAMETER STORM DRAIN BETWEEN STORM INLETS ⑦ AND ⑨ WHERE PVC WAS SUBSTITUTED FOR DIP. DIP WAS SPECIFIED FOR CONSTRUCTABILITY. THE CONTRACTOR WAS ABLE TO INSTALL THE PVC PIPE WITHOUT DIFFICULTY OBTAINING COMPACTION. THE SUBSTITUTION WAS APPROVED DURING CONSTRUCTION BY THE OWNER. IT IS BASED UPON THIS EVALUATION OF AS-CONSTRUCTED CONDITIONS THAT ISSUANCE OF A PERMANENT CERTIFICATE OF OCCUPANCY IS HEREBY RECOMMENDED. THE AS-BUILT INFORMATION SHOWN HEREON HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

JEFFREY G. MORTENSEN, NMPE 8547

10-30-97

DATE

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

HIGH MESA Consulting Group
FORMERLY JEFF MORTENSEN AND ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. NE • ALBUQUERQUE, NEW MEXICO 87109
PHONE: 505.345.4250 • FAX: 505.345.4254 • www.highmesacg.com

2015.054.1

VIGIL & ASSOCIATES
ARCHITECTURAL GROUP, P.C.
www.VA-architects.com
4477 Irving NW, Suite A • Albuquerque, NM 87114 • 505.890.5030
PO Drawer Z, 1730 Tierra De Mesilla • Mesilla, NM 88046 • 575.527.0400

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER
10-08-2015

JAGUAR LAND ROVER EXPANSION & RENOVATION
JLR ALBUQUERQUE

date:
drawn by: S.C.C.
checked by: J.G.M.
revisions:

C-101

File Path: P:\DATA\2015\2015.054.1\DWG
File Name: 150541_C-101.DWG
Date: 10-08-2015
Plot Time: 1:06 pm

TRACT F-2, UNIT 1, LOOP INDUSTRIAL SUBDIVISION
Filed 01-06-1988, C35-109

TRACT F-1A1, UNIT 1, LOOP INDUSTRIAL SUBDIVISION
Filed 03-05-1993, 93C-63

TRACT F-1A, UNIT 1, LOOP INDUSTRIAL SUBDIVISION
Filed 09-29-1989, C39-198

S00°22'52"W 489.92'

S89°37'36"E 320.26'

N89°37'53"W 320.19'

N00°22'22"E 489.95'

CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM 260-1990 (ALBUQUERQUE AREA), 1-800-321-ALERT(2537) (STATEWIDE), FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.
3. 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.
4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
5. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE 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. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
6. THE DESIGN OF PLANTERS AND LANDSCAPED AREAS IS NOT PART OF THIS PLAN. ALL PLANTERS AND LANDSCAPED AREAS ADJACENT TO THE BUILDING(S) SHALL BE PROVIDED WITH POSITIVE DRAINAGE TO AVOID ANY PONDING ADJACENT TO THE STRUCTURE. FOR CONSTRUCTION DETAILS, REFER TO LANDSCAPING PLAN.
7. NEW LANDSCAPED ISLANDS IN PARKING LOT SHALL BE DEPRESSED TO CONTAIN THE RUNOFF THAT LANDS WITHIN THAT AREA.

EROSION CONTROL MEASURES:

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
3. WHEN APPLICABLE, CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY AND/OR FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BEGINNING CONSTRUCTION.

NOTE:
THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY. BOUNDARY DATA SHOWN IS BASED UPON THE PLAT PREPARED BY TYREE SURVEYING, INC. ON NOV. 17, 1976 EXISTING IMPROVEMENTS AND GRADES TAKEN FOR ENGINEERS DRAINAGE CERTIFICATION PREPARED BY HIGH MESA CONSULTING GROUP (FORMERLY JEFF MORTENSEN & ASSOCIATES, INC), NMPE 8547, DATED 10-30-97. (961394)

NO.	DATE	BY	REVISIONS
1	06/12	J.G.M.	DRAINAGE CERTIFICATION
2	10/15	J.G.M.	2015 ADDITION

KEYED NOTES:

1. 1 - DRAIN LINE CONNECTION TO EXISTING STORM INLET INV. @ 5139.82.
2. 12" (SCH. 40 PVC) STORM DRAIN @ S = 0.0040.
3. 1 - SINGLE 'D' STORM INLET, GRATE @ 5146.13, INV. @ 5140.48.
4. 12" (SCH 40 PVC) STORM DRAIN @ S = 0.0040.
5. 1 - SINGLE 'D' STORM INLET, GRATE @ 5145.93; INV. @ 5140.88.
6. 12" (SCH 40 PVC) STORM DRAIN @ S = 0.0040.
7. 1 - DOUBLE 'D' STORM INLET, GRATE @ 5144.04; INV. @ 5141.14.
8. 12" (PVC) STORM DRAIN @ S = 0.0040.
9. 1 - DOUBLE 'D' STORM INLET, GRATE @ 5144.03; INV. @ 5141.57.

	TC	FL
1	46.45	45.78
2	-	46.25
3	47.12	46.62

	TC	FL
1	47.85	47.35
2	-	47.00
3	47.80	47.13

SCALE: 1" = 20'

HIGH MESA Consulting Group
FORMERLY JEFF MORTENSEN AND ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. NE • ALBUQUERQUE, NEW MEXICO 87109
PHONE: 505.345.4250 • FAX: 505.345.4254 • www.highmesacg.com

2015.054.1

VIGIL & ASSOCIATES
ARCHITECTURAL GROUP, P.C.
www.VA-architects.com
4477 Irving NW, Suite A • Albuquerque, NM 87114 • 505.890.5030
PO Drawer Z, 1730 Tierra De Mesilla • Mesilla, NM 88046 • 575.527.0400

JEFFREY G. MORTENSEN
NEW MEXICO
8547
REGISTERED PROFESSIONAL ENGINEER

11-16-2011
06-05-2012
10-08-2015

JAGUAR LAND ROVER EXPANSION & RENOVATION

JLR ALBUQUERQUE

date:
drawn by: S.C.C.
checked by: J.G.M.
revisions:

C-102

File Path: P:\DATA\2015\2015.054.1\DWG Date: 10-08-2015
File Name: 150541_C-102.DWG Plot Time: 1:05 pm

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: JAGUAR LAND ROVER SHOWROOM ADDITION Building Permit #: _____ City Drainage #: C17/D103

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

Legal Description: TRACT E-2A, LOOP INDUSTRIAL SUBDIVISION

City Address: 5010 ALAMEDA BLVD. NE, ALBUQUERQUE, NM

Engineering Firm: HIGH MESA CONSULTING GROUP Contact: JEFF MORTENSEN

Address: 6010B MIDWAY PARK BLVD. NE, ALBUQUERQUE, NM 87109

Phone#: 505-345-4250 Fax#: 505-345-4254 E-mail: jmortensen@highmesacg,com

C- 249-8604

Owner: JAGUAR LAND ROVER (JLR ALBUQUERQUE) Contact: ARCHITECT

Address: 5010 ALAMEDA BLVD. NE, ALBUQUERQUE, NM

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

Architect: VIGIL & ASSOCIATES ARCHITECTURAL GROUP Contact: JOE MUHLBERGER

Address: 4477 IRVING BLVD NW, SUITE A, ALBUQUERQUE, NM 87114

Phone#: 505-890-5030 Fax#: _____ E-mail: jmuhlberger@va-architects.com

Other Contact: _____ Contact: _____

Address: _____

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

Check all that Apply:

DEPARTMENT:

X HYDROLOGY/ DRAINAGE
_____ TRAFFIC/ TRANSPORTATION
_____ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

_____ ENGINEER/ ARCHITECT CERTIFICATION

_____ CONCEPTUAL G & D PLAN
X GRADING PLAN
_____ DRAINAGE MASTER PLAN
X DRAINAGE REPORT
_____ CLOMR/LOMR

_____ TRAFFIC CIRCULATION LAYOUT (TCL)
_____ TRAFFIC IMPACT STUDY (TIS)
_____ EROSION & SEDIMENT CONTROL PLAN (ESC)

_____ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: X Yes _____ No

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

X BUILDING PERMIT APPROVAL
_____ CERTIFICATE OF OCCUPANCY

_____ PRELIMINARY PLAT APPROVAL
_____ SITE PLAN FOR SUB'D APPROVAL
_____ SITE PLAN FOR BLDG. PERMIT APPROVAL
_____ FINAL PLAT APPROVAL
_____ SIA/ RELEASE OF FINANCIAL GUARANTEE
_____ FOUNDATION PERMIT APPROVAL
_____ GRADING PERMIT APPROVAL
_____ SO-19 APPROVAL
_____ PAVING PERMIT APPROVAL
_____ GRADING/ PAD CERTIFICATION
_____ WORK ORDER APPROVAL
_____ CLOMR/LOMR

_____ PRE-DESIGN MEETING
_____ OTHER (SPECIFY) _____

RECEIVED
OCT 08 2015
LAND DEVELOPMENT SECTION

DATE SUBMITTED: 10-08-2015 By: JEFF MORTENSEN (HMCG 2015.054.1)

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: ___