

CITY OF ALBUQUERQUE

Planning Department
Suzanne Lubar, Director



Mayor ~~Richard J. Berry~~

November 20, 2015

Catherine Otis, P.E.
GreenbergFarrow Engineering
19000 MacArthur Suite 250
Irvine, CA 92612

RE: **Texas Roadhouse**
10030 Coors Bypass Blvd NW
Grading and Drainage Plan
Engineers Stamp Date 11/5/15 (B13D014)

Dear Ms. Otis,

Based upon the information provided in your submittal received 11/16/2015, the above referenced Grading and Drainage Plan cannot be approved for Grading Permit or Building Permit until the following comments are addressed.

- All flows must run through a pond or swale before running into the storm sewer system. Remove the inlets in the parking areas. Daylight roof drains in the ponding areas. The areas west of the buildings can be graded as ponds with an elevated grate.
- The dumpster area must contain a drain connected to the SAS, with a grease trap.
- The south pond requires an emergency overflow.
- The northeast pond cannot be used for first flush volume if the bioswales bottom is set 18" below existing flowline (which would set the outfall for the pond at the pond's bottom).
- The elevation difference along the bioswale will make it difficult to contain 625cf of volume unless cutoff walls/terracing is called out.
- Pond volumes shown on sheet C4.2 do not match those displayed on sheet C101.

Additional comments may be given if the revised plan differs significantly from the current submittal, if you have any questions please contact me at 924-3986 or Rudy Rael at 924-3977.

Sincerely,

Abiel Carrillo, P.E.
Principal Engineer, Hydrology
Planning Department

RR/CC
C: File



City of Albuquerque

Planning Department

Development & Building Services Division

FAST TRACK

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: Texas Roadhouse **Building Permit #:** T201591999 **City Drainage** _____

#: DRB#: 96496 **EPC#:** _____ **Work Order#:** _____

Legal Description: Tract C-7A of the Cottonwood Mall, Volume 96C, Folio 490, filed December 16, 1996

City Address: 10030 Coors Bypass Boulevard

Engineering Firm: GreenbergFarrow **Contact:** Catherine Otis

Address: 19000 MacArthur Suite 250 Irvine, CA 92612

Phone#: 949-296-0450 **Fax#:** _____ **E-mail:** cotis@greenbergfarrow.com

Owner: Texas Roadhouse Holdings LLC **Contact:** Caitlin Kincaid

Address: 4050 Dutchmans Lane Louisville KY 40205

Phone#: 502-855-5556 **Fax#:** _____ **E-mail:** caitlin.kincaid@texasroadhouse.com

Architect: GreenbergFarrow **Contact:** _____

Address: _____

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

Other Contact: Catherine Otis cotis@greenbergfarrow.com **Contact:** _____

Address: _____

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

Check all that Apply:

DEPARTMENT:

- ☒ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ ARCHITECT CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☒ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☒ 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) _____

IS THIS A RESUBMITTAL?: ☐ Yes ☒ No

DATE SUBMITTED: 11/13/15 By: Catherine Otis

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____

EXISTING LEGEND:

- EXISTING LOT LINE
- EXISTING EASEMENT LINE
- EXISTING BUILDING SETBACK LINE
- ===== EXISTING CONCRETE CURB AND GUTTER
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- ===== NEW CONCRETE CURB AND GUTTER (BY LANDLORD)
- NEW STORM SEWER STRUCTURE (BY LANDLORD)
- NEW SANITARY SEWER STRUCTURE (BY LANDLORD)
- NEW FIRE HYDRANT (BY LANDLORD)
- NEW WATER VALVE AND BOX (BY LANDLORD)

PROPOSED LEGEND:

- PROPERTY LINE
- GENERAL SCOPE OF WORK LIMITS
- ===== PROPOSED CONCRETE BARRIER CURB
- ===== PROPOSED CONCRETE CURB AND GUTTER
- ===== PROPOSED REVERSE PITCH CURB AND GUTTER
- ===== PROPOSED DEPRESSED CONCRETE CURB AND GUTTER
- ===== PROPOSED PARKING STALL COUNT
- ===== PROPOSED CONCRETE WHEEL STOP
- ===== PROPOSED SIGN
- ===== PROPOSED STOP BAR
- ===== PROPOSED LIGHT POLE
- ===== PROPOSED STORM SEWER STRUCTURES
- ===== PROPOSED SANITARY SEWER STRUCTURES
- ===== PROPOSED FIRE HYDRANT
- ===== PROPOSED FIRE DEPARTMENT CONNECTION (FDC)
- ===== PROPOSED TRANSFORMER

PROJECT INFORMATION:

TEXAS ROADHOUSE SITE AREA: ±1.749 ACRES

ZONED: SU-1 (SPECIAL USE DISTRICT)
RC SU (REGIONAL SHOPPING CENTER)

TEXAS ROADHOUSE BUILDING AREA: 7,163 SQ. FT.
RETAIL BUILDING AREA: 5,000 SQ. FT.
TOTAL BUILDING AREA: 12,163 SQ. FT.
PROPOSED USE: TEXAS ROADHOUSE: RESTAURANT
RETAIL A & B: RETAIL

BUILDING HEIGHT: 27'-6"
SEATING CAPACITY: 281 SEATS
EMPLOYEE COUNT: 40 EMPLOYEES

PARKING REQUIRED: 107 STALLS (SEE NOTE #2)
PARKING PROVIDED: 107 STALLS (INCLUDING 6 ADA STALLS)
ACCESSIBLE REQUIRED: 5 STALLS
ACCESSIBLE PROVIDED: 6 STALLS
BICYCLE PARKING REQUIRED: 6 SPACES (SEE NOTE #3)
BICYCLE PARKING PROVIDED: 6 SPACES
MOTORCYCLE PARKING REQUIRED: 4 SPACES (SEE NOTE #4)
MOTORCYCLE PARKING PROVIDED: 4 SPACES

NOTES:

- SEE ARCHITECTURAL PLANS FOR ADDITIONAL BUILDING INFORMATION
- PARKING REQUIREMENTS ARE BASED ON 1 SPACE PER 3 PEOPLE OF OCCUPANCY LOAD FOR THE TEXAS ROADHOUSE BUILDING. FOR RETAIL A & B, PARKING IS BASED ON 1 SPACE PER 200 SQ. FT. 119 SPACES ARE REQUIRED PER ABOVE REQUIREMENTS. WITH A 10% TRANSIT REDUCTION, 107 SPACES ARE REQUIRED.
- BICYCLE PARKING REQUIREMENTS ARE BASED ON 1 SPACE PER 20 VEHICULAR SEATS
- MOTORCYCLE PARKING REQUIREMENTS ARE BASED ON 4 SPACES FOR 101-150 REQUIRED PARKING SPACES

LEGAL DESCRIPTION:

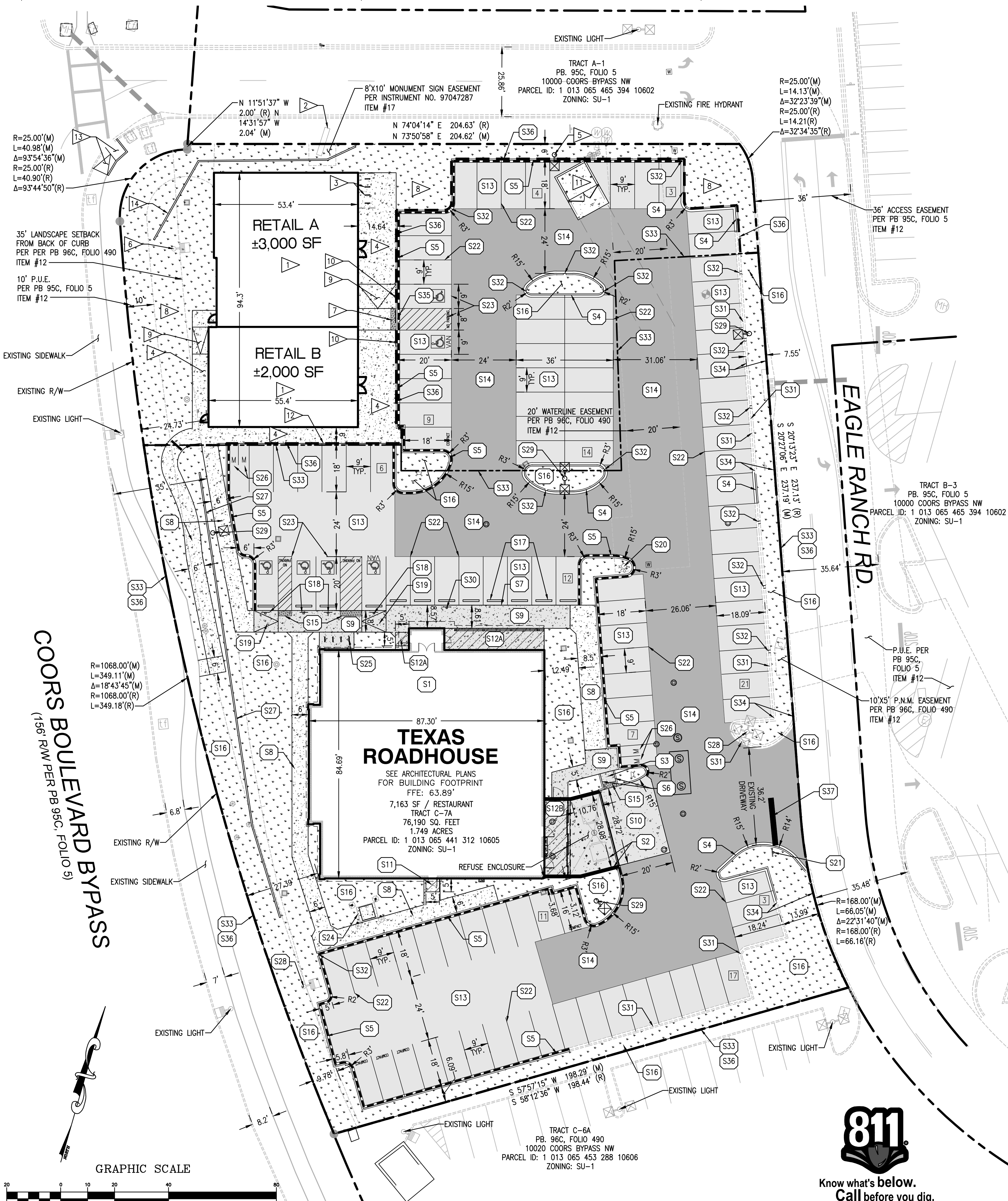
THAT CERTAIN PARCEL OF LAND SITUATE WITHIN THE TOWN OF ALAMEDA GRANT IN PROJECTED SECTION 8, TOWNSHIP 11 NORTH, RANGE 3 EAST, NEW MEXICO PRINCIPAL MERIDIAN, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, COMPRISING ALL OF TRACT C-7A OF THE COTTONWOOD MALL, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT ENTITLED "TRACTS C-6A AND C-7A COTTONWOOD MALL (BEING A REPLAT OF TRACTS C-6 AND C-7, COTTONWOOD MALL) CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON DECEMBER 16, 1996 IN VOLUME 96C, FOLIO 490.

ADDRESS:

10030 COORS BOULEVARD BYPASS NW
ALBUQUERQUE, NM 87104

SITE PLAN NOTES:

- REFER TO THE GEOTECHNICAL ENGINEERING REPORT PREPARED BY TERRACON CONSULTANTS, INC. AND DATED DECEMBER 10, 2014 FOR ADDITIONAL INFORMATION REGARDING THE EXISTING SOIL CONDITIONS AND PROPOSED SUBGRADE PREPARATION RECOMMENDATIONS (TERRACON PROJECT NO. 66145081).
- SEE CONSTRUCTION DETAILS SHEET C7.0 FOR PAVEMENT SECTION DETAILS.
- SEE SHEET 1.0 FOR GENERAL SITE NOTES



PAVEMENT HATCH LEGEND:

- S8 PROPOSED CONCRETE SIDEWALK
5" PORTLAND CEMENT CONCRETE
4" AGGREGATE BASE COURSE
- S9 PROPOSED INTEGRAL BLACK COLORED CONCRETE SIDEWALK
5" PORTLAND CEMENT CONCRETE
4" AGGREGATE BASE COURSE
- S10 PROPOSED HEAVY DUTY INTEGRAL BLACK COLORED CONCRETE PAVEMENT
6" PORTLAND CEMENT CONCRETE
WITH #3 BARS AT 12" O.C. EACH WAY
COMPACTED SUBGRADE
(SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION AND DETAILS)
- S11 PROPOSED CONCRETE LANDING
6" PORTLAND CEMENT CONCRETE WITH 6X6 W2.9XW2.9 WWF
COMPACTED SUBGRADE
(SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION AND DETAILS)
- S12A PROPOSED INTEGRAL BLACK COLORED CONCRETE LANDING
6" PORTLAND CEMENT CONCRETE WITH 6X6 W2.9XW2.9 WWF
COMPACTED SUBGRADE
(SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION AND DETAILS)
- S12B PROPOSED INTEGRAL BLACK COLORED CONCRETE LANDING
5" PORTLAND CEMENT CONCRETE WITH 6X6 W2.9XW2.9 WWF
COMPACTED SUBGRADE
(SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION AND DETAILS)
- S13 PROPOSED ASPHALT PAVEMENT
2-1/2" HMA SURFACE COURSE
6" AGGREGATE BASE COURSE
- S14 PROPOSED HEAVY DUTY ASPHALT PAVEMENT
3-1/2" HMA SURFACE COURSE
6" AGGREGATE BASE COURSE
- S15 PROPOSED DETECTABLE WARNING PLATE
- S16 PROPOSED LANDSCAPE AREA
(SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION AND DETAILS)

SITE KEY NOTES:

- PROPOSED TEXAS ROADHOUSE BUILDING (SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR ADDITIONAL INFORMATION AND DETAILS)
- PROPOSED TRASH ENCLOSURE (SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR ADDITIONAL INFORMATION AND DETAILS)
- PROPOSED HANDICAP ACCESSIBLE LOADING/DELIVERY RAMP AT 12:1 MAXIMUM SLOPE PER LOCAL CODES. SEE DETAIL ON SHEET C7.1
- PROPOSED CONCRETE CURB AND GUTTER
- PROPOSED REVERSE PITCH CONCRETE CURB AND GUTTER
- PROPOSED CONCRETE BARRIER CURB
- PROPOSED MONOLITHIC CONCRETE CURB AND SIDEWALK
- PROPOSED 5" CONCRETE SIDEWALK
- PROPOSED 5" INTEGRAL BLACK COLORED CONCRETE SIDEWALK
- PROPOSED 6" HEAVY DUTY INTEGRAL BLACK COLORED CONCRETE PAVEMENT (SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION AND DETAIL). CONCRETE SHALL HAVE 4000 PSI STRENGTH AND SHALL INCLUDE 3/4" AGGREGATE CONFORMING TO NEW MEXICO DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
- PROPOSED 6" CONCRETE LANDING (SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION AND DETAIL)
- PROPOSED 6" INTEGRAL BLACK COLORED CONCRETE LANDING (SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION AND DETAIL)
- PROPOSED 5" INTEGRAL BLACK COLORED CONCRETE LANDING (SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION AND DETAIL)
- PROPOSED ASPHALT PAVEMENT
- PROPOSED HEAVY DUTY ASPHALT PAVEMENT
- PROPOSED DETECTABLE WARNING PLATE
- PROPOSED LANDSCAPE AREA (SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION AND DETAILS)
- PROPOSED PRECAST CONCRETE WHEEL STOP (TYP. OF 12)
- PROPOSED HANDICAP ACCESSIBLE PARKING SIGN PER LOCAL CODE (TYP. OF 6)
- PROPOSED HANDICAP ACCESSIBLE CURB RAMP AT 12:1 MAXIMUM SLOPE PER LOCAL CODES
- PROPOSED FIRE HYDRANT
- PROPOSED 30" R1-1 STOP SIGN
- PROPOSED 4" PAVEMENT STRIPING PER LOCAL CODE
- PROPOSED HANDICAP ACCESSIBLE PARKING STALL STRIPING AND SYMBOL PER LOCAL CODE (TYP.)
- EXISTING CONCRETE TRANSFORMER PAD TO REMAIN WITH PROPOSED STEEL BOLLARD PROTECTION (CONTRACTOR SHALL COORDINATE CONCRETE TRANSFORMER CONFIGURATION WITH ELECTRIC COMPANY)
- PROPOSED MAGLIN MBR501 BIKE RACKS WITH BLACK POWDER COATED FINISH.
- PROPOSED MOTORCYCLE PARKING
- PROPOSED BLOCK RETAINING WALL. SEE GRADING PLAN FOR ELEVATIONS. SEE SHEET C7.0 FOR DETAIL.
- EXISTING LIGHT POLE (SEE PHOTOMETRIC PLAN)
- PROPOSED LIGHT POLE (SEE PHOTOMETRIC PLAN)
- PROPOSED VETERAN PARKING SIGN
- EXISTING CURB AND GUTTER TO REMAIN
- PROPOSED 1" WIDE CURB CUT. SEE DETAIL ON SHEET C7.1.
- LIMITS OF PREMISES
- MAINTAIN EXISTING CURB CUTS AT AREA OF FLUME REMOVAL.
- PROPOSED DEPRESSED CONCRETE CURB AND GUTTER
- GENERAL SCOPE OF WORK LIMITS. SCOPE MAY INCLUDE ITEMS OUTSIDE GENERAL LIMITS OR EXCLUDE ITEMS WITHIN. SEE KEY NOTES ON PLAN FOR ADDITIONAL INFORMATION.
- PROPOSED 24" WIDE WHITE STRIPE (STOP BAR). SEE SHEET C7.0 FOR DETAIL.

SITE KEY NOTES (BY LANDLORD):

- NEW RETAIL BUILDINGS
- EXISTING MONUMENT SIGN TO REMAIN
- NEW BIKE RACK
- NEW CONCRETE SIDEWALK
- PROPOSED LIGHT POLE (SEE PHOTOMETRIC PLAN)
- EXISTING LIGHT POLE (SEE PHOTOMETRIC PLAN)
- NEW DETECTABLE WARNING PLATE
- NEW LANDSCAPE AREA (SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION AND DETAILS)
- NEW PROPOSED HANDICAP ACCESSIBLE CURB RAMP AT 12:1 MAXIMUM SLOPE PER LOCAL CODES
- NEW HANDICAP ACCESSIBLE PARKING SIGN PER LOCAL CODE
- NEW DUMPSTER ENCLOSURE AND ASSOCIATED CONCRETE PAVEMENT
- NEW MONOLITHIC CONCRETE CURB AND SIDEWALK
- EXISTING RAMP TO BE REMOVED AND REPLACED WITH NEW HANDICAP ACCESSIBLE RAMP PER LOCAL CODES
- NEW RETAINING WALL

19000 MacArthur Blvd, Suite 250
Irvine, CA 92612
t: 949 296 0450 f: 949 296 0479

PROJECT TEAM

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ISSUE/REVISION RECORD	
DATE	DESCRIPTION
04/03/15	COORDINATION SET
04/06/15	PERMIT SET
07/28/15	BID SET
09/14/15	PERMIT RESPONSE
10/19/15	CONSTRUCTION SET
11/02/15	PERMIT RESPONSE

PROFESSIONAL SEAL



PROFESSIONAL IN CHARGE
FARMAN SHIR, P.E.
PROFESSIONAL ENGINEER
LICENSE NO. 21307

PROJECT MANAGER
MIKE HOLMES

QUALITY CONTROL
LARRY DIEHL

DRAWN BY
MIKE HOLMES

PROJECT NAME

TEXAS ROADHOUSE

ALBUQUERQUE NEW MEXICO

10030 COORS BOULEVARD BYPASS NW



PROJECT NUMBER
20130487.0

SHEET TITLE
SITE PLAN

SHEET NUMBER
C3.0



EXISTING LEGEND:

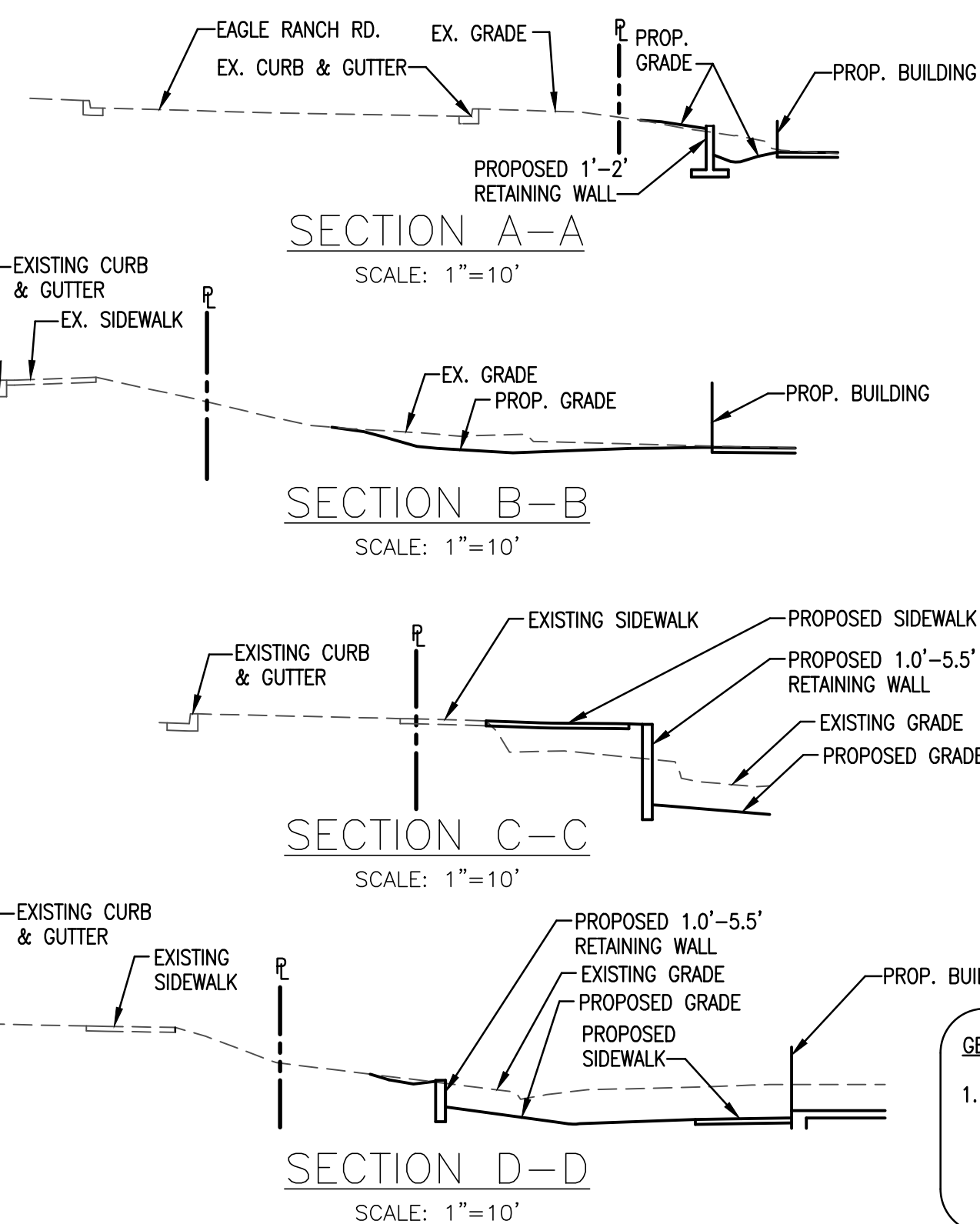
- EXISTING LOT LINE
- EXISTING EASEMENT LINE
- EXISTING BUILDING SETBACK LINE
- EXISTING CONCRETE CURB AND GUTTER
- EXISTING STORM SEWER
- EXISTING FIRE HYDRANT

GENERAL GRADING NOTES:

- ALL GRADING AND SITE PREPARATION WORK SHALL CONFORM WITH THE RECOMMENDATIONS AND SPECIFICATIONS CONTAINED IN THE GEOTECHNICAL REPORT.
- CONTRACTOR SHALL CAREFULLY PRESERVE ALL SITE BENCHMARKS AND REFERENCE POINTS DURING CONSTRUCTION OPERATIONS.
- CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST FORTY-EIGHT (48) HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED SITE IMPROVEMENTS SHOWN ON THE PLANS.
- CONTRACTOR SHALL INSTALL APPROPRIATE TREE PROTECTION MEASURES PRIOR TO COMMENCEMENT OF SITE GRADING OPERATIONS.
- ALL PROPOSED GRADING, PAVEMENT, APRONS, CURBS, WALKS, ETC. SHALL MATCH EXISTING GRADES FLUSH.
- CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TO ALL STORM DRAINAGE STRUCTURES. AREAS OF SURFACE PONDING SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
- ALL EXISTING AND PROPOSED TOP OF FRAME ELEVATIONS FOR STORM, SANITARY, WATER AND OTHER UTILITY STRUCTURES SHALL BE ADJUSTED TO MEET FINISHED GRADE WITHIN THE PROJECT LIMITS.
- CONTRACTOR SHALL UTILIZE CARE WHEN WORKING NEAR EXISTING UTILITIES TO REMAIN. ANY DAMAGE TO EXISTING UTILITIES NOT NOTED TO BE REMOVED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
- CONTRACTOR SHALL REPAIR AT HIS EXPENSE ANY DAMAGE TO EXISTING ASPHALT, CONCRETE, CURBS, SIDEWALKS, ETC. RESULTING FROM CONSTRUCTION TRAFFIC AND/OR OPERATIONS. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.
- CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS TO ORIGINAL CONDITION OR BETTER.
- MAXIMUM CROSS SLOPES AND LONGITUDINAL SLOPES FOR ALL CONCRETE SIDEWALKS AND HANDICAP ACCESSIBLE ROUTES SHALL NOT EXCEED 2% AND 5%, RESPECTIVELY.
- MAXIMUM SLOPES WITHIN THE HANDICAP ACCESSIBLE PARKING AREAS SHALL NOT EXCEED 2% IN ANY DIRECTION.
- MAXIMUM GRADE DIFFERENCE BETWEEN PAVEMENT SURFACES AND ADJACENT CONCRETE SIDEWALKS FOR THE ACCESSIBLE ROUTE TO THE BUILDING SHALL NOT EXCEED 1/4" VERTICAL OR 1/2" WHEN BEVELED.
- ALL HANDICAP ACCESSIBLE EXTERIOR DOORWAY LOCATIONS REQUIRE AN EXTERIOR LANDING THAT IS A MINIMUM OF FIVE (5) FEET IN LENGTH WITH A SLOPE NOT EXCEEDING 2% IN ANY DIRECTION.
- EXCAVATION SHORING SHALL BE DONE AS NECESSARY FOR THE PROTECTION OF THE WORK AND FOR THE SAFETY OF PERSONNEL. SHORING SHALL BE IN ACCORDANCE WITH ALL O.S.H.A AND LOCAL REGULATIONS.
- SEE GENERAL NOTES SHEET FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

NARRATIVE:

THE SUBJECT PROPERTY IS A FULLY DEVELOPED SITE WITHIN THE COTTONWOOD SHOPPING CENTER. THE SITE SLOPES FROM THE WEST PROPERTY LINE (COORS BOULEVARD) TO THE EAST PROPERTY LINE (EAGLE RANCH ROAD). THE EXISTING SITE HAS A DISCHARGE OF 6.99 CFS. THE PROPOSED REDEVELOPMENT WILL MAINTAIN THE EXISTING DRAINAGE PATTERNS AND WILL DISCHARGE 6.86 CFS, WHICH IS LESS THAN EXISTING. WATER QUALITY MEASURES INCLUDED IN THE LANDSCAPE AREAS WILL CAPTURE 0.34" OF RAINFALL FOR THE IMPERVIOUS AREAS. THE PROJECT SITE DOES NOT LIE WITHIN A 100-YEAR FLOOD HAZARD AREA AND IS LOCATED IN ZONE "X" AS SHOWN ON FEMA FIRM 35001C0108G, EFFECTIVE SEPTEMBER 26, 2008.



COORS BOULEVARD BYPASS
(156 RW PER PB 96C, FOLIO 5)

GEOTECHNICAL ENGINEERING REPORT NOTES:

- REFER TO THE GEOTECHNICAL ENGINEERING REPORT PREPARED BY TERRACON CONSULTANTS, INC. AND DATED DECEMBER 10, 2014 FOR ADDITIONAL INFORMATION REGARDING THE EXISTING SOIL CONDITIONS AND PROPOSED SUBGRADE PREPARATION RECOMMENDATIONS (TERRACON PROJECT NO. 66145081).

PROPOSED LEGEND:

- PROPERTY LINE
- GENERAL SCOPE OF WORK LIMITS
- PROPOSED CONCRETE BARRIER CURB
- PROPOSED CONCRETE CURB AND GUTTER
- PROPOSED REVERSE PITCH CURB AND GUTTER
- PROPOSED DEPRESSED CONCRETE CURB AND GUTTER
- PROPOSED BLOCK RETAINING WALL
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- FFE: FINISHED FLOOR ELEVATION
TC: TOP OF CURB ELEVATION
FL: CURB FLOWLINE ELEVATION
C: TOP OF CONCRETE ELEVATION
P: TOP OF PAVEMENT ELEVATION
FG: FINISHED GRADE ELEVATION
ME: MATCH EXISTING ELEVATION
TW: TOP OF WALL ELEVATION
BW: BOTTOM OF WALL ELEVATION
- PROPOSED GRADING RIDGE LINE
- PROPOSED DRAINAGE FLOW DIRECTION
- PROPOSED OVERLAND FLOOD ROUTE
- PROPOSED STORM SEWER INLET
- PROPOSED STORM SEWER CATCH BASIN
- PROPOSED HEAVY DUTY AREA DRAIN
- PROPOSED STORM SEWER GREASE INTERCEPTOR
- PROPOSED STORM SEWER CLEAN OUT
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER GREASE INTERCEPTOR
- PROPOSED SANITARY SEWER CLEANOUT
- PROPOSED SANITARY SEWER SAMPLING WELL
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE AND BOX
- PROPOSED FIRE DEPARTMENT CONNECTION (FDC)

GRADING & DRAINAGE KEY NOTES:

- PROPOSED ZURN Z505 HEAVY DUTY AREA DRAIN (SEE UTILITY AND PLUMBING PLANS FOR ADDITIONAL INFORMATION)
- FIELD VERIFY AND MATCH EXISTING ELEVATION AT PROJECT SCOPE OF WORK LIMITS (TYP.)
- PROPOSED 4" BUILDING ROOF DRAIN CONNECTION (COORDINATE EXACT LOCATIONS AND PIPE SIZES WITH ARCHITECTURAL AND PLUMBING PLANS). SCOPE OF WORK SHALL INCLUDE STORM DRAIN FROM LANDLORD LIMIT OF WORK 5' FROM BUILDING TO ROOF DRAIN AT BUILDING.
- REMOVE EXISTING CONCRETE CHANNEL, MAINTAIN EXISTING CURB CUTS
- PAVEMENT SAWCUT LINE. PROPOSED PAVEMENT TO MATCH EXISTING
- PROPOSED POND
- 1" CURB CUT
- PROPOSED 6" CURB
- PROPOSED 2" SIDEWALK CULVERT
- BIO SWALE. DIVERT 18" BELOW FLOW LINE. ROCK CHECK DAMS EVERY 20'.
- LIMITS OF PREMISES
- GENERAL SCOPE OF WORK LIMITS. SCOPE MAY INCLUDE ITEMS OUTSIDE GENERAL LIMITS OR EXCLUDE ITEMS WITHIN. SEE KEY NOTES ON PLAN FOR ADDITIONAL INFORMATION.
- PROPOSED BLOCK RETAINING WALL

GRADING & DRAINAGE KEY NOTES (BY LANDLORD) :

- NEW NYLOPLAST JUNCTION GRATE
- NEW NYLOPLAST 12" INLINE DRAIN GRATE
- NEW NYLOPLAST JUNCTION TRAFFIC RATED CLEAN OUT
- NEW POND
- NEW BIO SWALE DIVERT 18" BELOW FLOW LINE, ROCK CHECK DAMS EVERY 20'
- NEW RETAINING WALL
- NEW HPDE N12WT STORM SEWER LINE
- PROPOSED BUILDING ROOF DRAIN CONNECTION (CONTRACTOR SHALL COORDINATE EXACT DOWNSPOUT LOCATIONS AND PIPE SIZES WITH ARCHITECTURAL AND PLUMBING PLANS). SCOPE OF WORK SHALL INCLUDE STORM DRAIN TO A POINT 5' FROM THE EDGE OF BUILDING. CONTRACTOR SHALL INSTALL NEW WYE FITTING AT PROPOSED STORM SEWER CONNECTION POINTS.
- CONNECT TO BACK OF EXISTING INLET

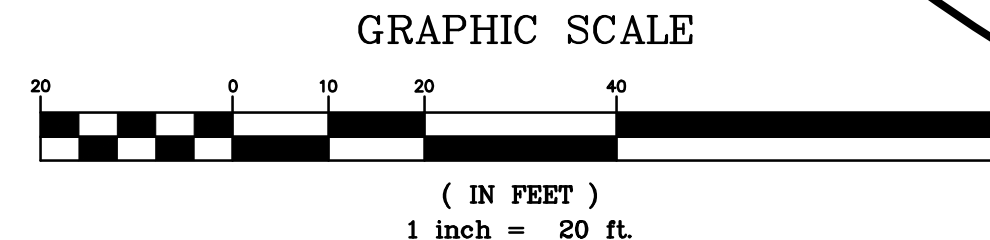
PROJECT BENCHMARKS:

NOTE:

ELEVATIONS SHOWN ARE BASED ON A CITY OF ALBUQUERQUE BENCHMARK, ID "9_813", ELEVATION 5072.491. (NAVD88).

FLOOD NOTE:

PROJECT SITE DOES NOT LIE WITHIN A 100-YEAR FLOOD HAZARD AREA AND IS LOCATED IN ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD) AS LOCATED ON FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP NUMBER 35001C0108G, DATED SEPTEMBER 9, 2008.



PROJECT TEAM

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ISSUE/REVISION RECORD

DATE	DESCRIPTION
04/03/15	COORDINATION SET
04/06/15	PERMIT SET
07/28/15	BID SET
09/14/15	PERMIT RESPONSE
10/19/15	CONSTRUCTION SET
11/02/15	PERMIT RESPONSE

PROFESSIONAL SEAL



PROFESSIONAL IN CHARGE
FARMAN SHIR, P.E.
PROFESSIONAL ENGINEER
LICENSE NO. 21307

PROJECT MANAGER
MIKE HOLMES

QUALITY CONTROL
LARRY DIEHL

DRAWN BY
MIKE HOLMES

PROJECT NAME

TEXAS ROADHOUSE

ALBUQUERQUE NEW MEXICO

10030 COORS BOULEVARD BYPASS NW

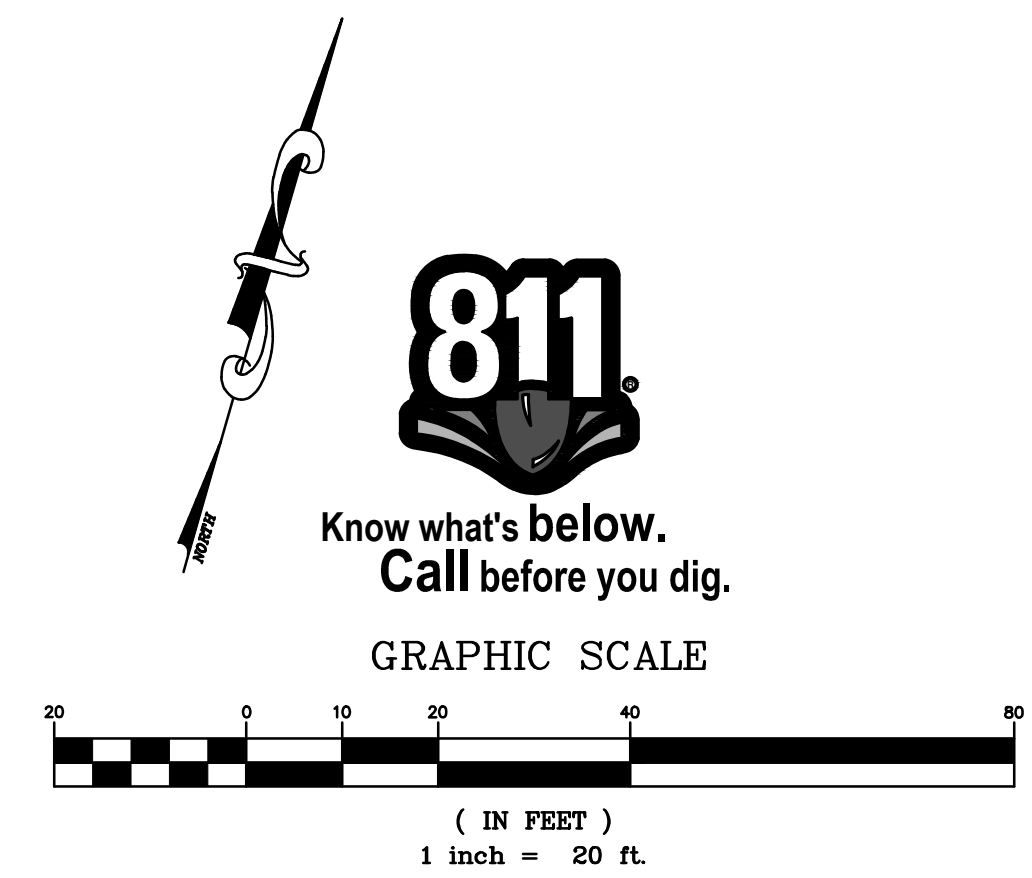
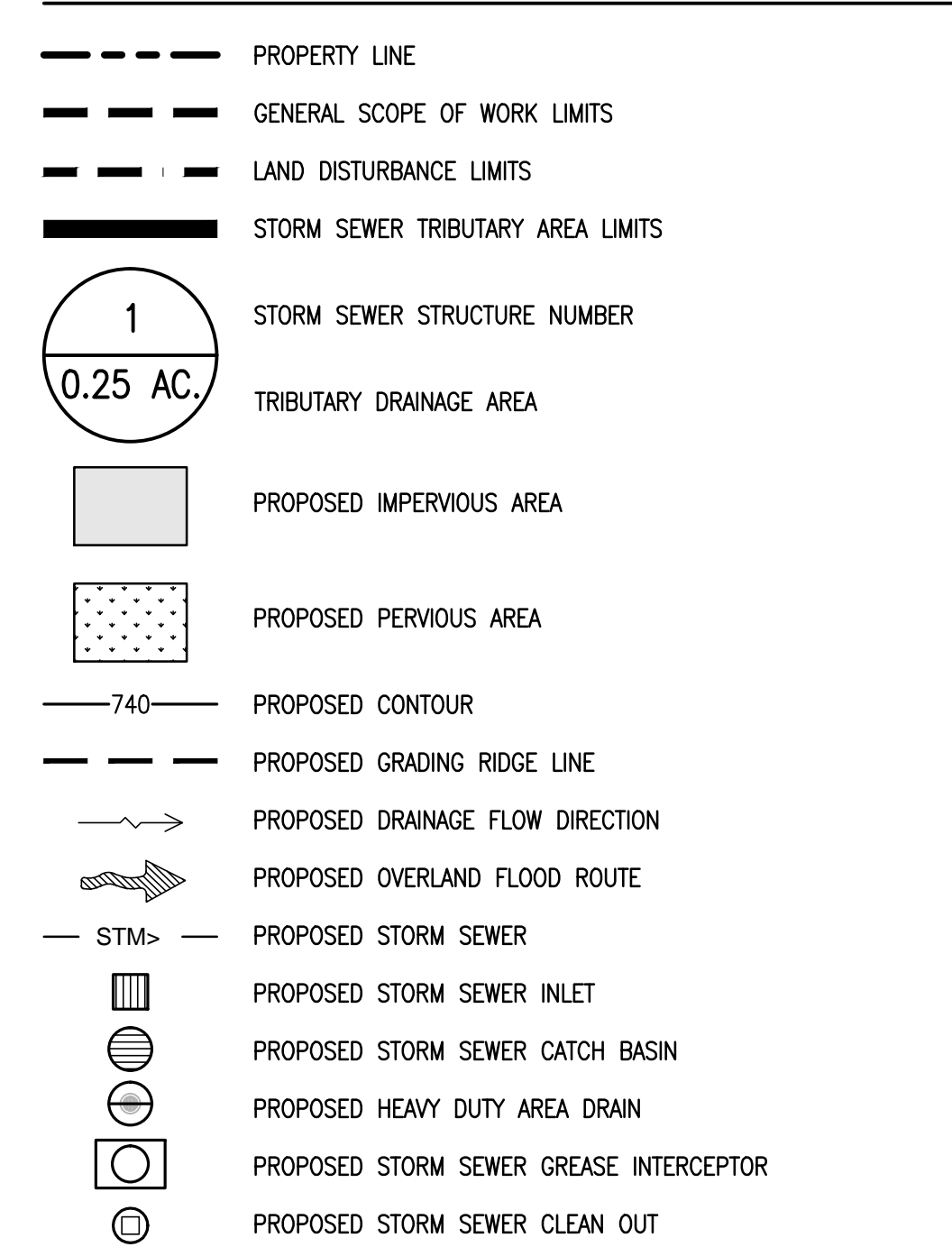


PROJECT NUMBER
20130487.0

SHEET TITLE
GRADING AND DRAINAGE PLAN

SHEET NUMBER

C4.0



100-YEAR CAPACITY CALCULATIONS														
NODE	Conduit								Surface Elevations		Invert Elevations			
	Runoff (cfs)	Pipe Diam. (in)	Slope (%)	Mann. "n"	Design Flow (cfs)	Velocity (ft/sec)	Length (ft)	Node Drop (ft)	Flow Time (min)	Upper Rim	Lower Rim	Upper Invert	Lower Invert	
	1-2	0.13	6	0.40	0.011	0.42	2.12	96	0.38	0.75	62.58	62.64	60.42	60.04
	2-3	0.50	8	0.65	0.011	1.15	3.29	85	0.55	0.43	62.64	62.64	60.04	59.49
	3-7	0.67	8	0.53	0.011	1.04	2.98	47	0.25	0.26	62.64	63.71	59.49	59.24
	4-8	0.53	6	0.73	0.011	0.57	2.88	70	0.51	0.40	62.89	63.00	59.25	58.74
	5-6	0.46	6	2.90	0.011	1.13	5.76	73	2.12	0.21	66.00	64.64	63.56	61.44
	6-7	0.90	6	3.55	0.011	1.25	3.66	62	2.20	0.16	64.64	63.71	61.44	59.24
	7-8	1.57	12	0.52	0.011	3.04	3.87	96	0.50	0.41	63.71	63.00	59.24	58.74
	8-9	2.10	12	0.30	0.011	2.31	2.94	93	0.28	0.53	63.00	61.30	58.74	58.46

100-YEAR HYDROLOGY CALCULATIONS																
Location	Area (sf)	Area (acres)	Treatment A			Treatment B			Treatment C			Treatment D			Op Node	Qp Total (includes upstream)
			%	(acres)	Qpa	%	(acres)	Qpb	%	(acres)	Qpc	%	(acres)	Qpd		
1	1297	0.03	0.00	0.00	1.29	0.00	0.00	2.03	0.00	0.00	2.87	100.00	0.03	4.37	0.13	0.13
2	4749	0.11	0.00	0.00	1.29	0.00	0.00	2.03	62.83	0.07	2.87	37.17	0.04	4.37	0.37	0.50
3	1941	0.04	0.00	0.00	1.29	0.00	0.00	2.03	47.45	0.02	2.87	52.55	0.02	4.37	0.16	0.67
4	5593	0.13	0.00	0.00	1.29	0.00	0.00	2.03	13.73	0.02	2.87	86.27	0.11	4.37	0.53	0.53
5	5385	0.12	0.00	0.00	1.29	0.00	0.00	2.03	42.99	0.05	2.87	57.01	0.07	4.37	0.46	0.46
6	5182	0.12	0.00	0.00	1.29	0.00	0.00	2.03	43.86	0.05	2.87	56.14	0.07	4.37	0.44	0.90
Total Pipe Flow																2.10

COORS BOULEVARD BYPASS



Know what's below.
Call before you dig.

PROJECT INFORMATION

PROJECT NAME: TEXAS ROADHOUSE
ADDRESS: 10030 COORS BOULEVARD NW
PARCEL ID: 1 013 065 441 312 10605
ZONING: SU-1 SPECIAL USE DISTRICT
RC SU FOR A REGIONAL SHOPPING CENTER
PARCEL INFO: TRACT C-7A OF THE COTTONWOOD MALL, VOLUME 96C, FOLIO 490,
FILED DECEMBER 16,1996
PROPOSED USE: RESTAURANT AND RETAIL
BENCHMARK: CITY OF ALBUQUERQUE BENCHMARK, ID "9_B13",
ELEVATION 5072.491 (NAVD88)

NARRATIVE

INTRODUCTION

THE PROPOSED PROJECT WILL INCLUDE THE DEMOLITION OF AN EXISTING 16,915± BUILDING AND RELATED APPURTANANCES AND THE CONSTRUCTION OF A 7,163 SQUARE FOOT TEXAS ROADHOUSE AND ADDITIONAL RETAIL SPACES APPROXIMATELY 3,000 SQUARE FEET AND 2,000 SQUARE FEET IN SIZE. THE PROJECT WILL ENTAIL THE REMOVAL AND RECONSTRUCTION OF SITE PAVEMENTS AND UTILITIES. STORM DRAINAGE FLOWS FROM BUILDING ROOF TOP AREAS WILL BE CARRIED THROUGH UNDERGROUND PIPING TO THE EXISTING CURB INLET ALONG THE DRIVE ON THE EAST SIDE OF THE SITE. INFILTRATION PONDS AND A BIOSWALE HAVE BEEN INCORPORATED INTO THE DESIGN IN ORDER TO CAPTURE AND INFILTRATE THE FIRST FLUSH VOLUMES FROM IMPERVIOUS SITE AREAS.

PROJECT DESCRIPTION

THE PROPOSED PROJECT IS LOCATED AT 10030 COORS BOULEVARD NW IN THE CITY OF ALBUQUERQUE. THE PROPERTY IS DESCRIBED AS TRACT C-7A OF THE COTTONWOOD MALL IN VOLUME 96C, FOLIO 490 AS FILED ON DECEMBER 16, 1996. THE SITE IS INCLUDED ON ZONE ATLAS PAGE B-13-Z AS SHOWN ON THE RIGHT SIDE OF THIS SHEET. THE PROJECT SITE LIES WITHIN AND ALONG THE WESTERN SIDE OF THE EXISTING COTTONWOOD MALL DEVELOPMENT. THE PROJECT SITE DOES NOT LIE WITHIN A 100-YEAR FLOOD HAZARD AREA ACCORDING TO FEMA FIRM NUMBER 35001C01086, EFFECTIVE SEPTEMBER 26, 2008. THE EXISTING SITE WAS APPROVED BY THE DEVELOPMENT REVIEW BOARD ON DECEMBER 13, 1996. THE EXISTING SITE CASE NUMBER IS DRB-96-496. AN ADMINISTRATIVE AMENDMENT FOR THE PROPOSED DEVELOPMENT WAS APPROVED ON JUNE 25, 2015 FILE # 15 AA-10039, PROJECT # 1007500, DESCRIPTION "AMENDMENT TO EXISTING SITE D. PLAN FOR BUILDING PERMIT (DRB-96-496)".

EXISTING CONDITIONS

THE EXISTING SITE INCLUDES AN EXISTING 16,915± SQUARE FOOT BUILDING, PARKING AREAS AND DRIVE AISLES, A LOADING DOCK, A REFUSE ENCLOSURE, AND RELATED LANDSCAPE AND LANDSCAPE AREAS. EXISTING STORM WATER FALLING ON THE PROPERTY SHEET FLOWS FROM WEST TO EAST WHERE IT PASSES THROUGH SHORT FLUMES TO THE GUTTER FLOW LINE ALONG EAGLE RANCH ROAD. STORM WATER THEN TRAVELS ALONG THE GUTTER TO WHERE IT ENTERS CURB INLETS THAT DISCHARGE INTO THE COTTONWOOD MALL STORM DRAINAGE SYSTEM. THE SITE RECEIVES A SMALL AMOUNT OF STORM WATER RUN-ON FROM THE EASTERNMOST SECTIONS OF COORS BOULEVARD BYPASS RIGHT-OF-WAY. GRADES ALONG THE WESTERNMOST, LANDSCAPED PORTIONS OF THE SITE CONTAIN SLOPES OF UP TO 20% TO 30%. GRADES ALONG THE NORTH AND SOUTH SIDE OF THE BUILDING GENERALLY RANGE FROM 1% TO 5%. GRADES EAST OF THE BUILDING FALL APPROXIMATELY 5% FROM WEST TO EAST. ADJACENT PROPERTIES AND RIGHT-OF-WAY ARE FULLY DEVELOPED AND ARE IN GOOD CONDITION. THE EXISTING SITE DOES NOT INCLUDE STORM WATER RETENTION OR INFILTRATION FACILITIES.

DEVELOPED CONDITIONS

THE PROPOSED DEVELOPMENT INCLUDES THE DEMOLITION OF THE EXISTING BUILDING AND SURROUNDING PAVEMENT AND THE CONSTRUCTION OF A 7,163 SQUARE FOOT TEXAS ROADHOUSE BUILDING, 5,000 SQUARE FEET OF RETAIL BUILDING SPACE, AND ASSOCIATED PARKING AND DRIVE AREAS, SIDEWALKS, UTILITIES AND ADDITIONAL SITE APPURTENANCES. TREATMENT OF THE 0.34" FIRST FLUSH VOLUME FOR IMPERVIOUS AREAS WILL BE PROVIDED BY THE INCORPORATION OF 4 PONDING AREAS ON THE EASTERN PORTIONS OF THE SITE AND BY THE INCLUSION OF A BIOSWALE ALONG AN ISLAND ON THE EAST SIDE OF THE SITE THAT SEPARATES THE SITE PARKING AREAS FROM EAGLE RANCH ROAD TO THE EAST. STORM WATER FLOWS ABOVE THE FIRST FLUSH VOLUME WILL EXIT THE SITE AS SURFACE FLOWS, WHERE THEY WILL FOLLOW EXISTING DRAINAGE PATTERNS TO THE CURB AND CUTTER ALONG EAGLE RANCH ROAD AND THEN ENTER THE COTTONWOOD MALL STORM DRAINAGE SYSTEM THROUGH CURB INLETS. STORM DRAIN LINES WILL BE UTILIZED TO CARRY STORM DRAINAGE FROM BUILDING ROOF TOPS TO THE EXISTING CURB INLET ALONG EAGLE RANCH ROAD ON THE EAST SIDE OF THE SITE. THE PROPOSED SITE WILL MAINTAIN THE OVERALL DRAINAGE PATTERN OF STORM WATER FLOW FROM THE WEST SIDE OF THE SITE TO THE EAST. GRADES ALONG THE WESTERN PORTIONS OF THE SITE WILL VARY FROM APPROXIMATELY 20% TO 33%. AREAS ADJACENT TO THE WEST SIDES OF THE PROPOSED BUILDINGS WILL BE SLOPED AWAY FROM THE BUILDINGS AND WILL HAVE FLATTER GRADES BETWEEN 2% TO 10%. SURFACE AREAS TO THE NORTH AND SOUTH OF THE PROPOSED RESTAURANT BUILDING WILL GENERALLY RANGE FROM 1% TO 5%. THE PAVED AREAS ALONG THE EAST SIDE OF THE PARKING AND DRIVE AISLES WILL VARY FROM APPROXIMATELY 2% TO 5%.

CALCULATIONS

AS SHOWN IN THE "100-YEAR HYDROLOGY CALCULATIONS" TABLE BELOW, THE PROPOSED SITE WILL DECREASE STORM WATER FLOWS FROM THE SITE. A FIRST FLUSH TREATMENT VOLUME OF 1,685 CUBIC FEET IS REQUIRED FOR THE 59,485 SQUARE FEET OF IMPERVIOUS AREA PROPOSED FOR THE PROJECT. THE INCLUSION OF 4 PONDING AREAS WITHIN THE PARKING AREAS AND ALONG THE EASTERN PORTIONS OF THE PROPERTY, ALONG WITH THE INCORPORATION OF A BIOSWALE TO THE EAST OF THE PARKING AND DRIVE AREA WILL PROVIDE A TOTAL TREATMENT VOLUME OF 1,733 CUBIC FEET.

CONCLUSION

THE PROPOSED PROJECT WILL MAINTAIN THE OVERALL, EXISTING DRAINAGE PATTERNS FOR THE SITE, WILL REDUCE PEAK STORM WATER FLOWS, AND WILL PROVIDE THE REQUIRED FIRST FLUSH TREATMENT VOLUME REQUIRED BY THE CITY OF ALBUQUERQUE MUNICIPAL CODE.

PROPOSED LEGEND:

--- PROPERTY LINE
LAND TREATMENT D - IMPERVIOUS AREA

STORM WATER TREATMENT INFORMATION:

PROPERTY AREA: 76,190 SF
IMPERVIOUS AREA (LAND TREATMENT D): 59,485 SF
90TH PERCENTILE STORM EVENT: 0.44 INCHES
LAND TREATMENT D INITIAL ABSTRACTION: 0.1 INCHES
FIRST FLUSH DEPTH (0.44"-0.1"): 0.34 INCHES
FIRST FLUSH VOLUME ((0.34IN/12)*59,485SF): 1,685 CF

STORM WATER BMP VOLUME:

NORTH POND: 349 CF
SOUTH POND: 704 CF
NORTH ISLAND: 56 CF
SOUTH ISLAND: 57 CF
BIO SWALE: 567 CF
TOTAL: 1,733 CF

100-YEAR HYDROLOGY CALCULATIONS

Basin	Area (sf)	Area (acres)	Treatment A				Treatment B				Treatment C				Treatment D				Weighted E (inches)	Volume (ac-ft)	Flow (cfs)
			%	(acres)	Ea	Qpa	%	(acres)	Eb	Qpb	%	(acres)	Ec	Qpc	%	(acres)	Ed	Qpd			
Existing Site	76190	1.75	0	0.00	0.44	1.29	0	0.00	0.67	2.03	25	0.44	0.99	2.87	75	1.31	1.97	4.37	1.725	0.251	6.99
Proposed Site	76190	1.75	0	0.00	0.44	1.29	14	0.24	0.67	2.03	8	0.14	0.99	2.87	78	1.36	1.97	4.37	1.710	0.249	6.86
Comparison	0	0.00		0.00				0.24				-0.30				0.05				-0.002	-0.13

Equations:

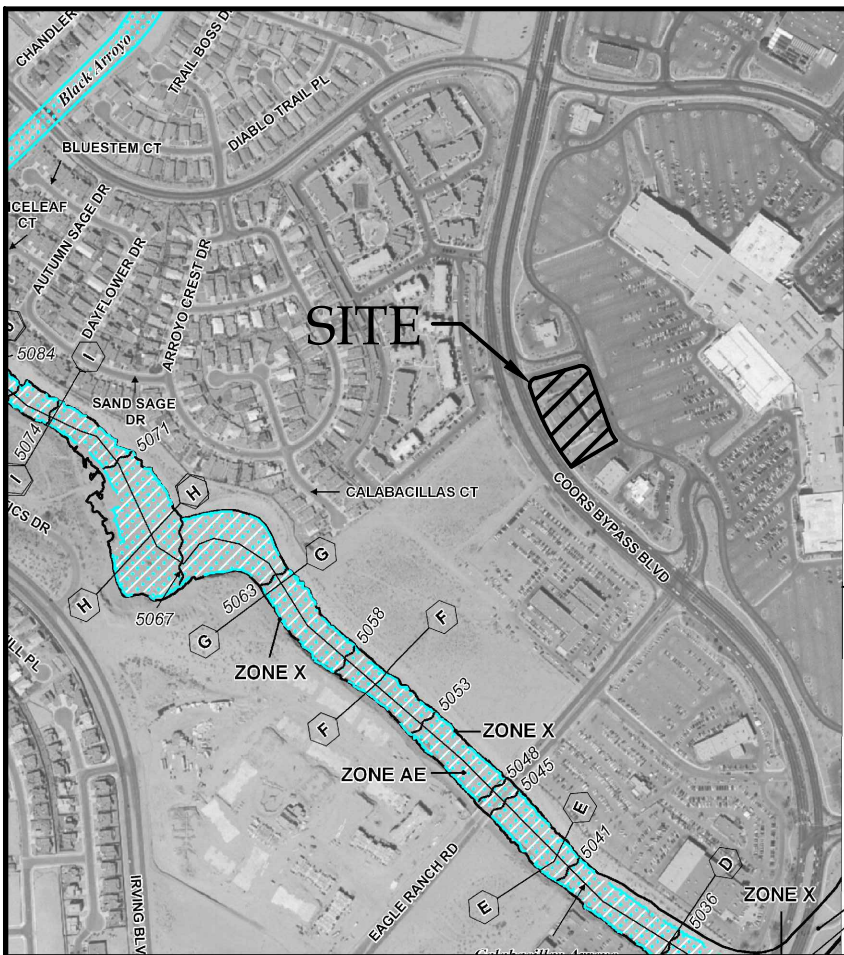
Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

Volume = Weighted E * Total Area

Flow = Qa*Aa + Qb*Ab + Qc*Ac + Qd*Ad

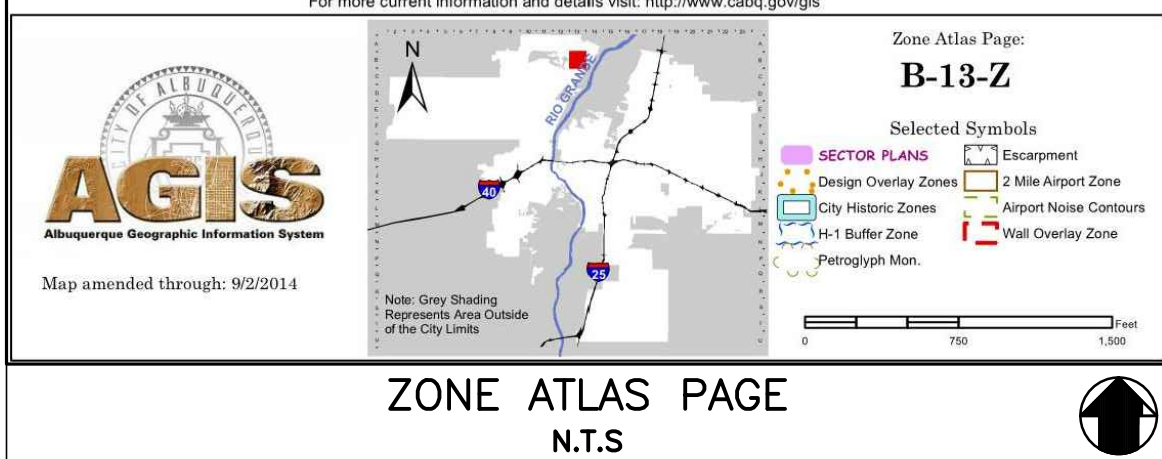
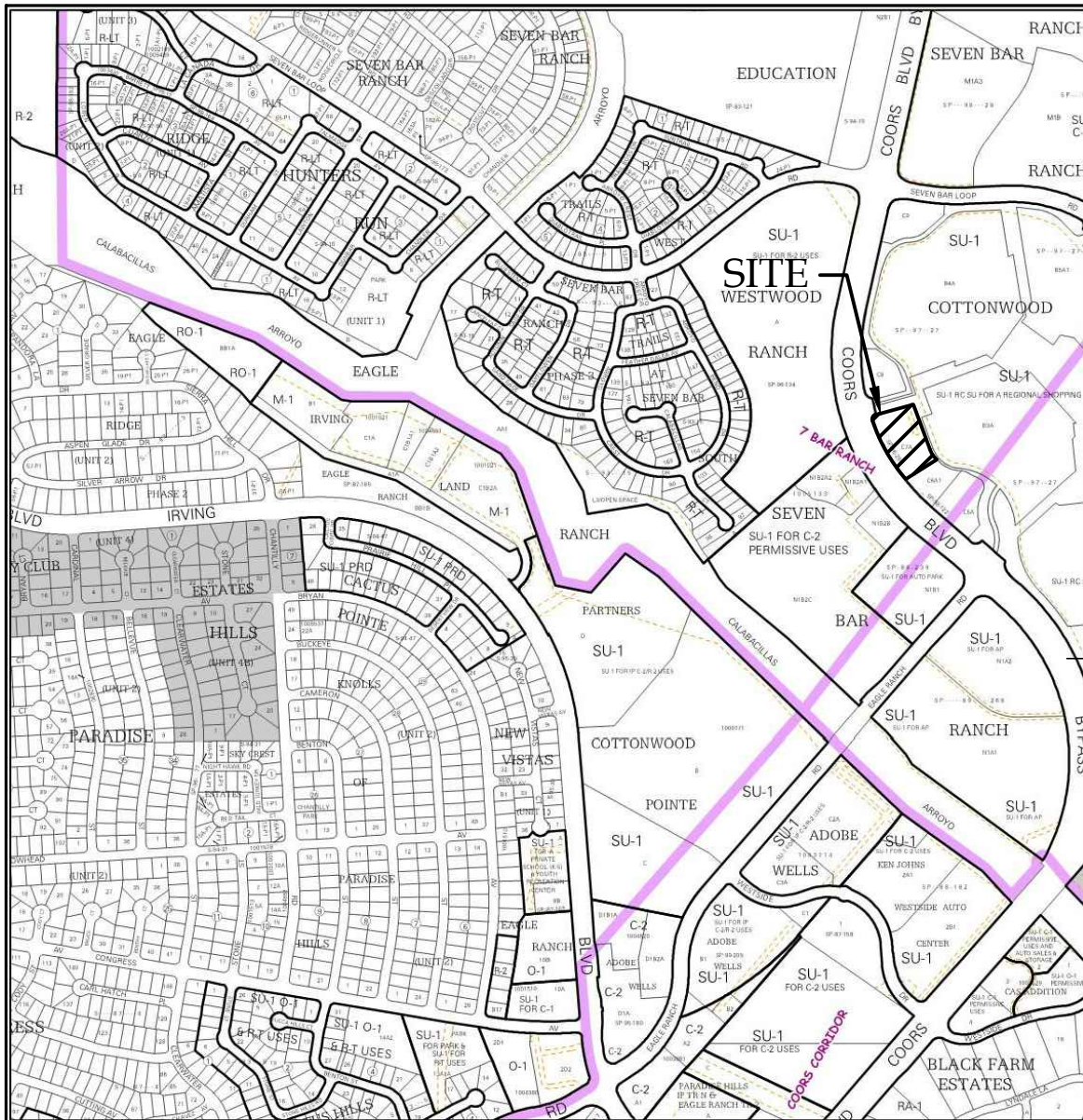
Where for 100-year, 6-hour storm (zone 1)

Ea= 0.44
Eb= 0.67
Ec= 0.99
Ed= 1.97
Qa= 1.29
Qb= 2.03
Qc= 2.87
Qd= 4.37



PROJECT SITE DOES NOT LIE WITHIN A 100-YEAR FLOOD HAZARD AREA AND IS LOCATED IN ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD) AS LOCATED ON THE ABOVE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP NUMBER 35001C01086, EFFECTIVE ON SEPTEMBER 26, 2008.

FLOOD INSURANCE RATE MAP
N.T.S.



GreenbergFarrow

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PROJECT TEAM

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ISSUE/REVISION RECORD

DATE	DESCRIPTION
04/03/15	COORDINATION SET
04/06/15	PERMIT SET
07/28/15	BID SET
09/14/15	PERMIT RESPONSE
10/19/15	CONSTRUCTION SET
11/02/15	PERMIT RESPONSE

PROFESSIONAL SEAL



PROFESSIONAL IN CHARGE
FARMAN SHIR, P.E.
PROFESSIONAL ENGINEER
LICENSE NO. 21307

PROJECT MANAGER
MIKE HOLMES

QUALITY CONTROL
LARRY DIEHL

DRAWN BY
MIKE HOLMES

PROJECT NAME

TEXAS
ROADHOUSE

ALBUQUERQUE
NEW MEXICO

10030 COORS BOULEVARD
BYPASS NW



PROJECT NUMBER

20130487.0

SHEET TITLE

DRAINAGE PLAN

SHEET NUMBER

C4.2