

- LEGEND:**
- PROPERTY LINE
 - PARKING LOT PONDING LIMITS
 - 5555 PROPOSED MAJOR CONTOUR
 - 5555 PROPOSED MINOR CONTOUR
 - 5555 EXISTING MAJOR CONTOUR
 - 5555 EXISTING MINOR CONTOUR
 - DRAINAGE E BASIN BOUNDARY LINE
 - DESIGN POINT
 - FLOW ARROWS
 - EXISTING FLOW ARROWS
 - EXISTING LIGHT POLE
 - EXISTING TRAFFIC SIGN
 - EXISTING TREES
 - EXISTING STORM MANHOLE
 - EXISTING STORM LINE
 - PROPOSED TRAFFIC SIGN
 - PROPOSED INLET
- Basin Identification:**
- A-1 BASIN IDENTIFICATION
 - 1.94 BASIN Q10
 - 0.83 BASIN Q100
 - 0.91 BASIN AREA (ACRES)

EXISTING IMPERVIOUSNESS = 83.63%

DEVELOPED IMPERVIOUSNESS = 81.12%

PEAK DISCHARGE FOR CHICK-FIL-A SITE - SEE NOTE 1

AREAS (ACRES)	$QP = (Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D)$
$A_B = 0.07$	2 YEAR STORM = $(Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D) = 1.548$ CFS
$A_C = 0.16$	10 YEAR STORM = $(Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D) = 2.742$ CFS
$A_D = 0.69$	100 YEAR STORM = $(Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D) = 4.190$ CFS

NOTE: ALL CONSTANTS, COEFFICIENTS, FORMULAS, AND STANDARDS USED TO CALCULATE THE PEAK DISCHARGES FOR THE CHICK-FIL-A PROJECT SITE DERIVED FROM CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, CHAPTER 22 - DRAINAGE, FLOOD CONTROL & EROSION CONTROL.

DRAINAGE NARRATIVE DESCRIPTION

THE SITE IS CURRENTLY A PAVED PARKING LOT WITH NUMEROUS LANDSCAPE ISLANDS. THE SITE GENERALLY SLOPES FROM WEST TO EAST TOWARDS THE EXISTING GRATE INLET LOCATED IN THE DRIVE AISLE IMMEDIATELY EAST OF THE PROJECT SITE. EXISTING SLOPES WITHIN THE PARKING LOT ARE LESS THAN 2%. EXISTING SIDEWALK SURROUNDS THE SITE TO THE WEST AND SOUTH. THESE SIDEWALK ELEVATIONS ARE CONSIDERABLY LOWER THAN THE PARKING LOT, WITH A 2-3 FOOT DIFFERENCE IN ELEVATION. THE MAJOR TOPOGRAPHIC ITEM LOCATED WITHIN 100 FEET OF THE SITE IS THE EXISTING GRATE INLET LOCATED IN THE DRIVE AISLE DIRECTLY EAST OF THE SITE. THE EXISTING CONDITIONS ALLOW FOR CONSIDERABLE PARKING LOT PONDING AROUND THIS INLET, ENCROACHING APPROXIMATELY 85 FEET ONTO THE SITE. THE CURRENT PONDING VOLUME LOCATED ON SITE IS APPROXIMATELY 17,766 CUBIC FEET. THERE IS ALSO AN EXISTING INLET ALONG THE EAST CURBLINE OF EUBANK BOULEVARD LOCATED IN THE SOUTHWEST CORNER OF THE SITE.

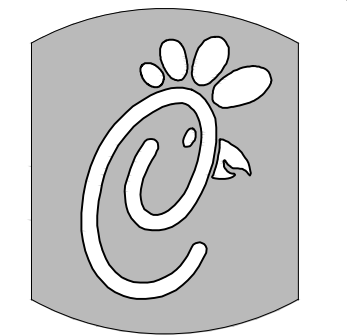
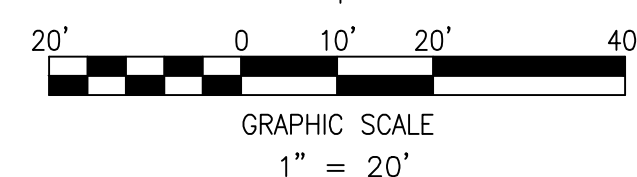
THE PROPOSED GRADING WILL IMPROVE THE EXISTING DRAINAGE CONDITIONS FOR THE PROJECT SITE. AN ON-SITE STORM SEWER SYSTEM WILL BETTER ROUTE RUNOFF TO THE EXISTING STORM SEWER SYSTEM. A SERIES OF PVC PIPES & STORM STRUCTURES WILL BE UTILIZED TO CAPTURE DEVELOPED RUNOFF. MOST IMPORTANTLY, THE PROPOSED GRADING CONCEPT WILL INCREASE THE AMOUNT OF PONDING FOR THE PROPOSED CONDITION. THE PARKING LOT PONDING WILL BE CENTERED AROUND THE PROPOSED STORM INLET, LOCATED AT LOW POINT OF THE PROPOSED CONCRETE PAN. THIS WILL ALLOW FOR A MAJORITY OF THE PONDING VOLUME TO BE CONTAINED IN THE PARKING LOT, AS WELL AS ALLOW FOR INCREASED SLOPES ON SITE. LOCALIZED INLET PONDING AROUND THE OTHER PROPOSED STORM INLETS, WITH A MAXIMUM DEPTH OF 12 INCHES, WILL ADD ADDITIONAL PONDING VOLUME FOR THE PROPOSED CONDITION. THE AMOUNT OF PONDING VOLUME PROVIDED WILL BE APPROXIMATELY 18,350 CUBIC FEET, WHILE SIMULTANEOUSLY DECREASING THE 100 YEAR PONDING ELEVATION. PER THE APPROVED DRAINAGE REPORT, A DISCHARGE RATE OF 0.3 CFS PER ACRE WILL BE MAINTAINED FOR THE SITE. THE EXISTING ORIFICE PLATE WILL BE UTILIZED, AS THE PROPOSED STORM SEWER WILL CONNECT TO THE EXISTING SYSTEM UPSTREAM OF THIS ORIFICE PLATE. WITH THESE PROPOSED ENHANCEMENTS, WITH AN EMPHASIS ON AT A MINIMUM MAINTAINING A PONDING VOLUME NEUTRAL CONCEPT, THE PROPOSED CHICK-FIL-A WILL IMPROVE THE EXISTING DRAINAGE CONDITIONS FOR THE PROJECT SITE.

BENCHMARK

VERTICAL DATUM IS NAVD 88, BENCHMARK IS BH 14-285-02
ELEVATION = 5470.52 (NAVD 88)

LEGAL DESCRIPTION

A CERTAIN TACT OF LAND WITHIN SECTION 28, TOWNSHIP 10 NORTH, RANGE 4 EAST, N.M.P.M, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, BEING AND COMPRISING TRACT B-1-A-2, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT OF TRACTS B-1-A-1 AND B-1-A-2, VIDEO ADDITION FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON AUGUST 5, 2014 IN BOOK 2014C, PAGE 80, AS DOCUMENT NO. 2014061733.



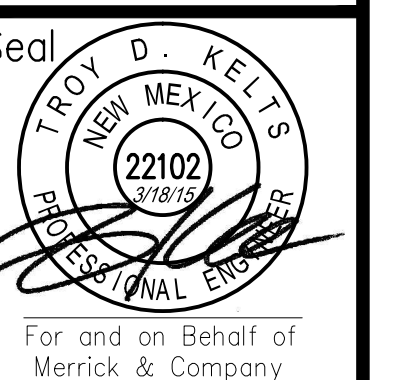
5200 Buffington Rd.
Atlanta, Georgia
30349-2998

Revisions:

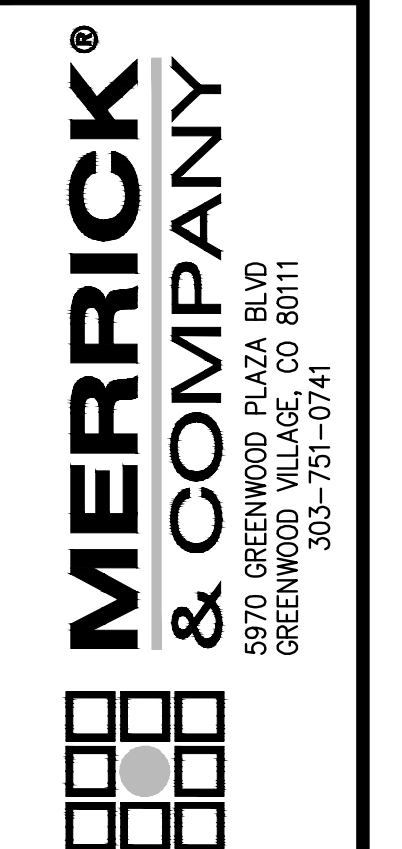
Mark	Date	By
1	12/29/14	EF
AGENCY REV.		

Mark	Date	By
2	03/20/15	EF

Mark	Date	By



For and on Behalf of
Merrick & Company



STORE
CHICK-FIL-A
FSU #03235
CENTRAL & EUBANK

100-200 EUBANK
BOULEVARD SE
ALBUQUERQUE, NM
87123

SHEET TITLE

DRAINAGE MAP

DWG EDITION ---

Job No. : 65118257
Store : 03235
Date : 11/10/14
Drawn By : EF
Checked By : TDK

Sheet

C-3.4