



Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	City of Charlotte Mecklenburg County North Carolina	STREAM RESTORATION	FLOODWAY HYDRAULIC ANALYSIS UPDATED TOPOGRAPHIC DATA
	COMMUNITY NO.: 370159		
IDENTIFIER	NC-17-582 - McAlpine Creek Stream Restoration Capital Improvement Project	APPROXIMATE LATITUDE & LONGITUDE: 35.132, 80.774 SOURCE: Other DATUM: NAD 83	
ANNOTATED MAPPING ENCLOSURES		ANNOTATED STUDY ENCLOSURES	
TYPE: FIRM* NO.: 3710456000K DATE: February 19, 2014 TYPE: FIRM* NO.: 3710457000K DATE: February 19, 2014		DATE OF EFFECTIVE FLOOD INSURANCE STUDY: September 02, 2015 PROFILE(S): 156P and 157P FLOODWAY DATA TABLE: 22	

Enclosures reflect changes to flooding sources affected by this revision.

* FIRM - Flood Insurance Rate Map

FLOODING SOURCE AND REVISED REACH

McAlpine Creek - From the upstream side of Providence Road to the downstream side of Monroe Road

SUMMARY OF REVISIONS

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
McAlpine Creek	Zone AE	Zone AE	YES	YES
	Floodway	Floodway	YES	NONE
	BFEs*	BFEs*	YES	YES
	Zone X (shaded)	Zone X (shaded)	YES	YES

* BFEs - Base Flood Elevations

DETERMINATION

This document provides the determination from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) report and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue Suite 500, Alexandria, VA 22304-6426. Additional information about the NFIP is available on our website at <https://www.fema.gov/national-flood-insurance-program>.

Patrick "Rick" F. Sacbibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration



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LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

COMMUNITY INFORMATION

APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS report and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State/Commonwealth or local requirements to which the regulations apply.

We provide the floodway designation to your community as a tool to regulate floodplain development. Therefore, the floodway revision we have described in this letter, while acceptable to us, must also be acceptable to your community and adopted by appropriate community action, as specified in Paragraph 60.3(d) of the NFIP regulations.

COMMUNITY REMINDERS

We based this determination on the 1-percent-annual-chance flood discharges computed in the FIS for your community without considering subsequent changes in watershed characteristics that could increase flood discharges. Future development of projects upstream could cause increased flood discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on flood discharges subsequent to the publication of the FIS report for your community and could, therefore, establish greater flood hazards in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State/Commonwealth law have been obtained. State/Commonwealth or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State/Commonwealth or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/national-flood-insurance-program>.

A handwritten signature in black ink, appearing to read "Rick F. Sacibit".

Patrick "Rick" F. Sacibit, P.E., Branch Chief
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**LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)**

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Mr. Jesse Munoz
Director, Mitigation Division
Federal Emergency Management Agency, Region IV
Koger Center - Rutgers Building, 3003 Chamblee Tucker Road
Atlanta, GA 30341
(770)-220-5406

STATUS OF THE COMMUNITY NFIP MAPS

We will not physically revise and republish the FIRM and FIS report for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panel(s) and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/national-flood-insurance-program>.

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**LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)**

PUBLIC NOTIFICATION OF REVISION

A notice of changes will be published in the *Federal Register*. This information also will be published in your local newspaper on or about the dates listed below, and through FEMA's Flood Hazard Mapping website at https://www.floodmaps.fema.gov/fhm/bfe_status/bfe_main.asp

LOCAL NEWSPAPER

Name: *The South Charlotte Weekly*

Dates: February 23, 2018 and March 2, 2018

Within 90 days of the second publication in the local newspaper, any interested party may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. Therefore, this letter will be effective only after the 90-day appeal period has elapsed and we have resolved any appeals that we receive during this appeal period. Until this LOMR is effective, the revised flood hazard determination presented in this LOMR may be changed.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/national-flood-insurance-program>.

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FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD 88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
McAlpine Creek (continued)								
705	70,500	260	3,549	2.9	569.6	569.6	570.0	0.4
718	71,760	400	4,212	2.5	570.1	570.1	570.6	0.5
732	73,200	995	11,867	0.9	570.6	570.6	571.1	0.5
744	74,400	405	4,522	2.3	570.8	570.8	571.3	0.5
762	76,200	670	8,189	1.3	574.0	574.0	574.4	0.4
780	78,000	1,260	13,072	0.8	574.2	574.2	574.7	0.5
792	79,175	1,325	11,795	0.9	574.4	574.4	574.9	0.5
805	80,500	800	6,140	1.7	574.8	574.8	575.3	0.5
817	81,700	625	5,093	2.1	576.1	576.1	576.6	0.5
829	82,900	435	3,360	3.1	577.2	577.2	577.7	0.5
843	84,300	290	4,187	2.5	581.0	581.0	581.3	0.3
853	85,300	762	6,337	0.8	582.4	582.4	582.8	0.4
865	86,500	580	4,606	1.1	582.5	582.5	582.9	0.4
878	87,828	395	2,193	2.4	582.7	582.7	583.2	0.5
886	88,600	150	855	6.0	583.3	583.3	583.6	0.3
902	90,150	220	1,516	3.4	588.6	588.6	588.7	0.1
913	91,300	55	423	6.7	594.2	594.2	594.4	0.2
925	92,460	50	359	7.9	598.4	598.4	598.9	0.5
937	93,700	310	1,233	2.3	601.9	601.9	602.4	0.5
949	94,900	250	937	3.0	604.9	604.9	605.3	0.4
963	96,300	160	783	3.6	609.1	609.1	609.5	0.4
975	97,500	65	385	7.3	614.8	614.8	615.3	0.5

¹Feet above mouth

**REVISED TO REFLECT LOMR
EFFECTIVE: JUNE 30, 2018**

REVISED DATA

TABLE 22

FEDERAL EMERGENCY MANAGEMENT AGENCY

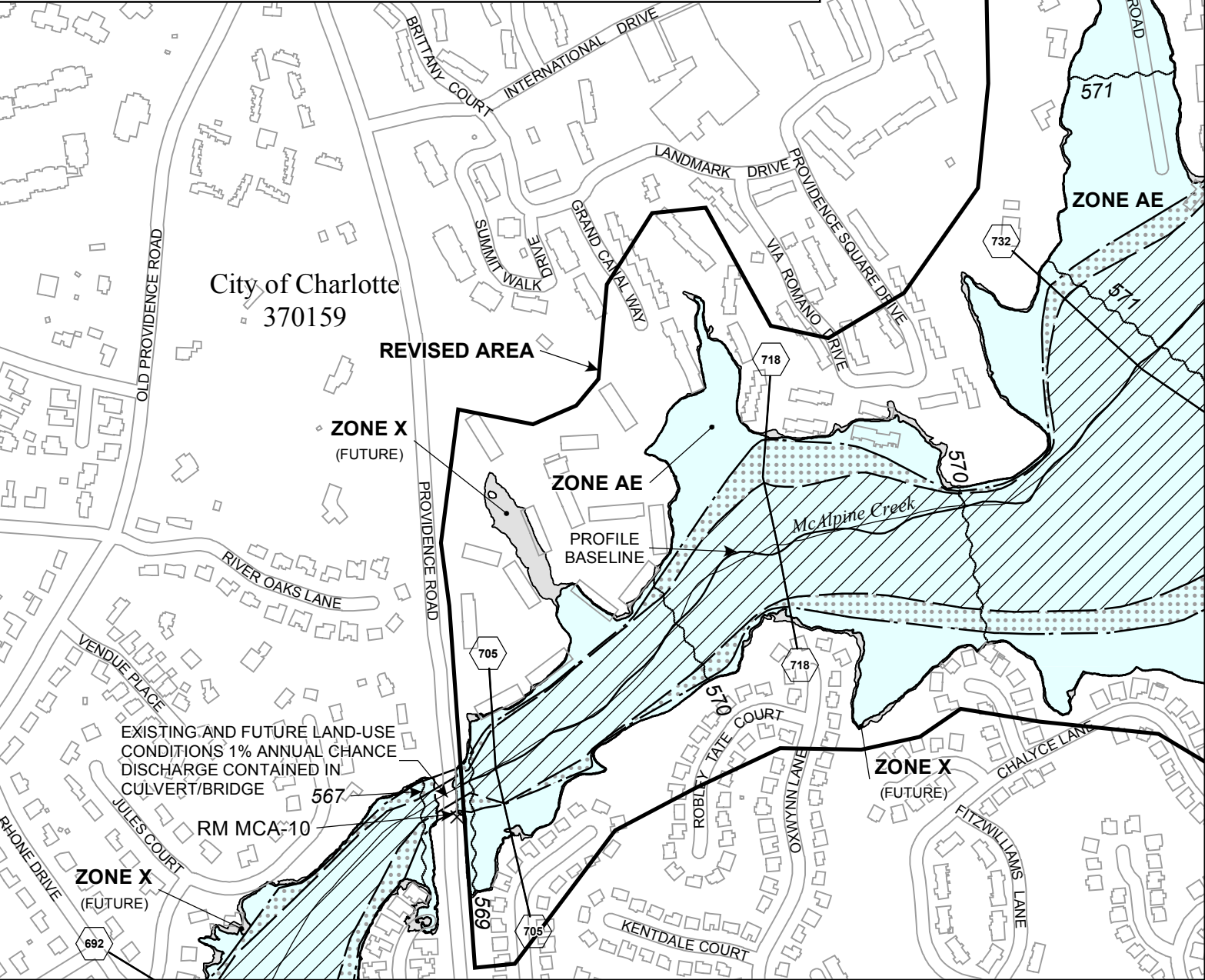
**MECKLENBURG COUNTY, NC
AND INCORPORATED AREAS**

FLOODWAY DATA

MCALPINE CREEK

FLOOD HAZARD DATA TABLE

Cross Section	Stream Station ¹	Flood Discharge (cfs)				1% Annual Chance (100-year) Water-Surface Elevation (feet NAVD88)		Floodway	Community Encroachment Line
		Existing Land Use Conditions		Future Land Use Conditions		Existing Land Use Conditions	Future Land Use Conditions	Distance in Feet From Center of Stream to Encroachment Boundary (Looking Downstream)	
		Left / Right	Left / Right	Left / Right	Left / Right	Left / Right	Left / Right		
McALPINE CREEK									
705	70,500	10,433	11,879	569.6	570.3	121 / 139	124 / 155		
718	71,760	10,433	11,879	570.1	570.9	161 / 239	189 / 387		
732	73,200	10,433	11,879	570.6	571.4	646 / 349	661 / 414		
¹ Feet above mouth									
REVISED DATA									



Legend

- 1% annual chance (100-Year) Floodplain
- 1% annual chance (100-Year) Floodway
- Zone X (Future Conditions)
- Community Encroachment Areas (Mecklenburg County)

GRID NORTH
MAP SCALE 1" = 500' (1 : 6,000)

500 0 500

FEET

150 0 150

METERS

PANEL 4560K

FIRM

**FLOOD INSURANCE RATE MAP
NORTH CAROLINA**

PANEL 4560
(SEE LOCATOR DIAGRAM OR MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	CID No.	PANEL	SUFFIX
CHARLOTTE, CITY OF	370159	4560	K
MECKLENBURG COUNTY	370158	4560	K

REVISED TO REFLECT LOMR EFFECTIVE: June 30, 2018

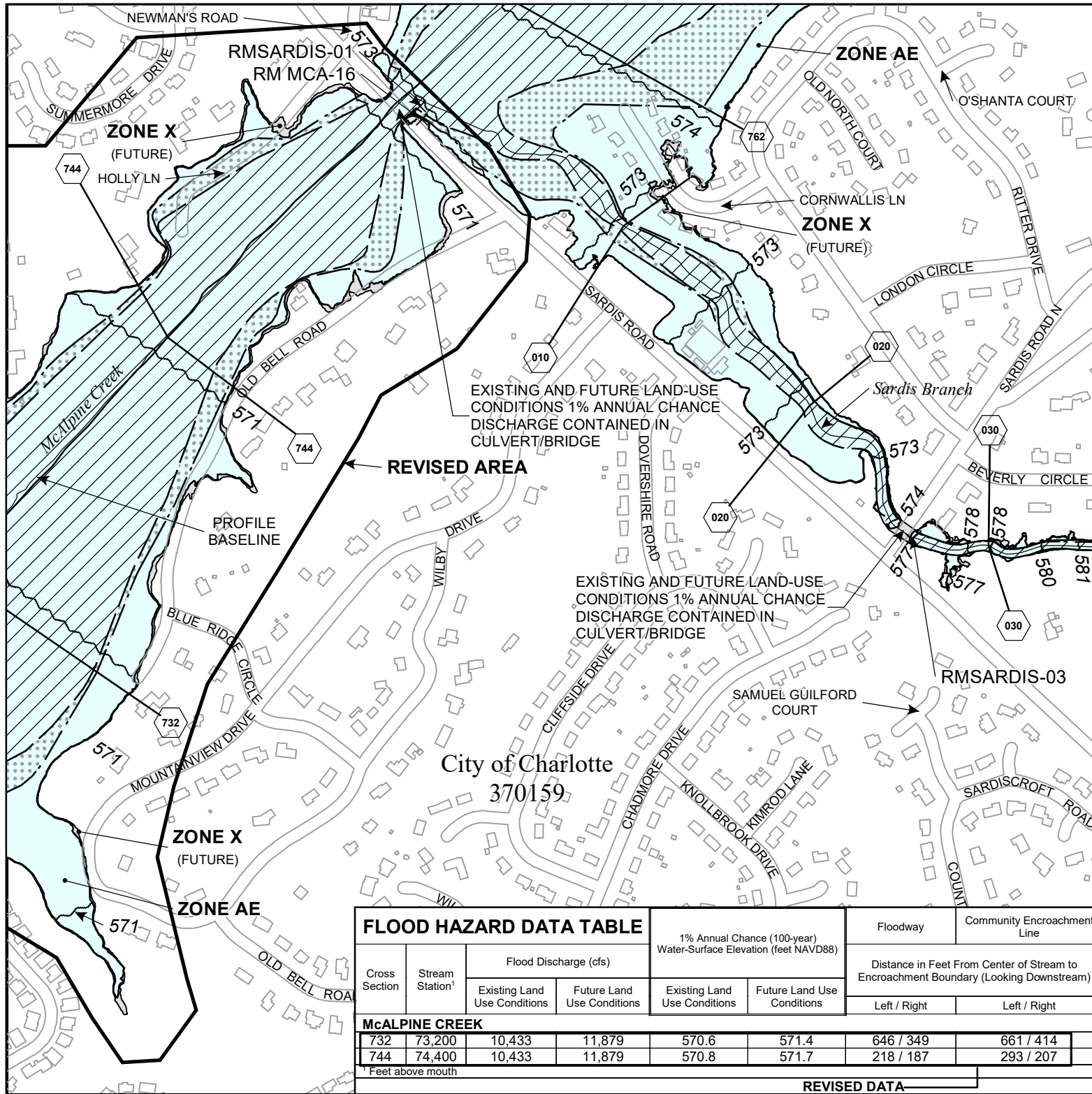
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

NATIONAL FLOOD INSURANCE PROGRAM

MAP NUMBER
371045600K

EFFECTIVE DATE
FEBRUARY 19, 2014

State of North Carolina
Federal Emergency Management Agency



FLOOD HAZARD DATA TABLE						1% Annual Chance (100-year) Water-Surface Elevation (feet NAVD88)		Floodway	Community Encroachment Line
Cross Section	Stream Station ¹	Flood Discharge (cfs)		Distance in Feet From Center of Stream to Encroachment Boundary (Looking Downstream)		Left / Right	Left / Right		
		Existing Land Use Conditions	Future Land Use Conditions	Existing Land Use Conditions	Future Land Use Conditions				
McALPINE CREEK									
732	73,200	10,433	11,879	570.6	571.4	646 / 349	661 / 414		
744	74,400	10,433	11,879	570.8	571.7	218 / 187	293 / 207		
¹ Feet above mouth									

REVISED DATA

Legend

- 1% annual chance (100-Year) Floodplain
- 1% annual chance (100-Year) Floodway
- Zone X (Future Conditions)
- Community Encroachment Areas (Mecklenburg County)



GRID NORTH
MAP SCALE 1" = 500' (1 : 6,000)

500 0 500 FEET
 150 0 150 METERS

PANEL 4570K

FIRM

**FLOOD INSURANCE RATE MAP
NORTH CAROLINA**

PANEL 4570
 (SEE LOCATOR DIAGRAM OR MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	CID No.	PANEL	SUFFIX
CHARLOTTE, CITY OF	370159	4570	K
MATTHEWS, TOWN OF	370310	4570	K
MECKLENBURG COUNTY	370158	4570	K

**REVISED TO REFLECT LOMR
EFFECTIVE: June 30, 2018**

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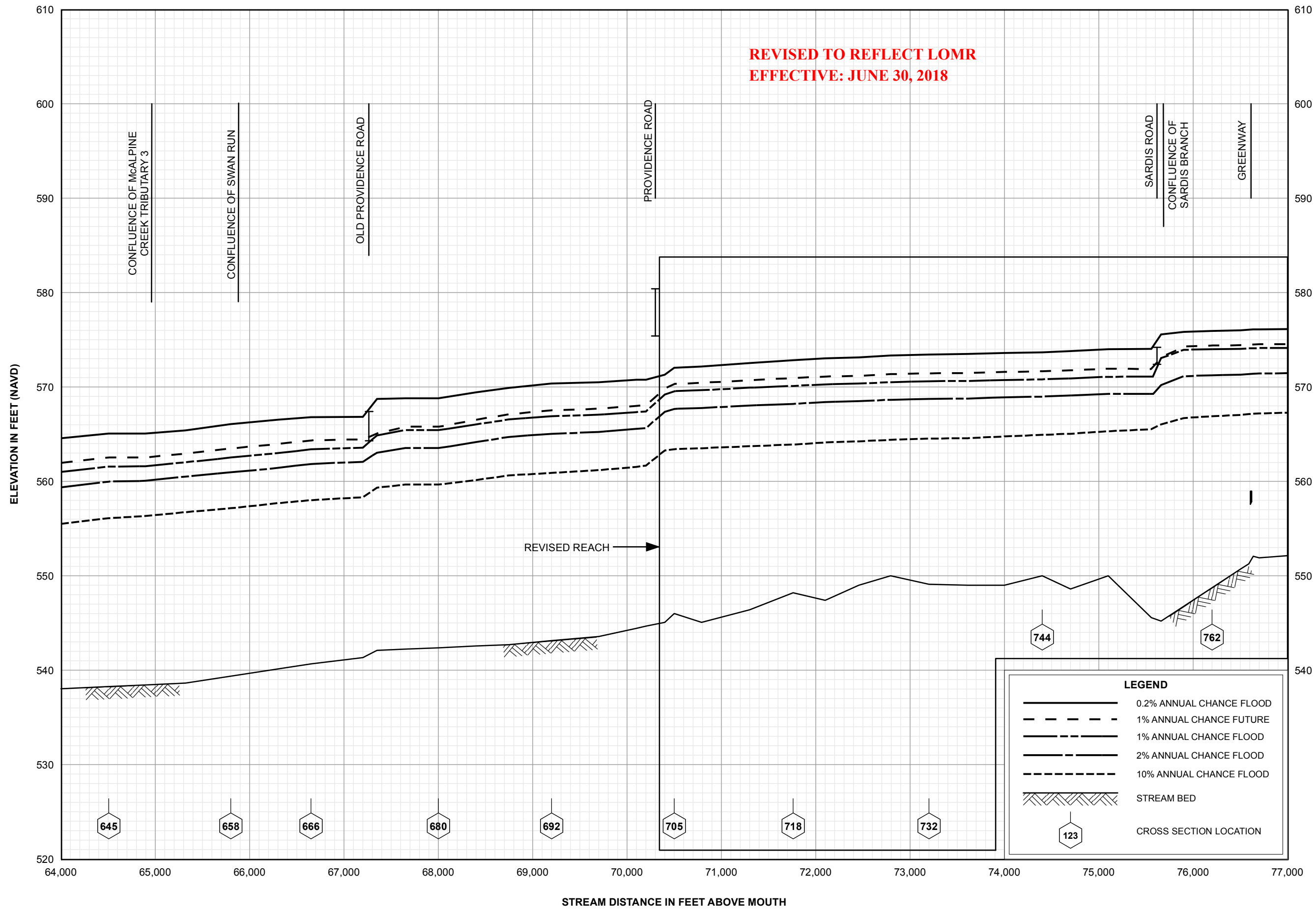
MAP NUMBER
3710457000K

EFFECTIVE DATE
FEBRUARY 19, 2014

State of North Carolina
Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM

**REVISED TO REFLECT LOMR
EFFECTIVE: JUNE 30, 2018**



**FLOOD PROFILES
MCALPINE CREEK**

FEDERAL EMERGENCY MANAGEMENT AGENCY
**MECKLENBURG COUNTY, NC
AND INCORPORATED AREAS**

