



Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

| COMMUNITY AND REVISION INFORMATION | | PROJECT DESCRIPTION | BASIS OF REQUEST |
|--|--|---|--|
| COMMUNITY | Town of Huntersville Mecklenburg County North Carolina | STREAM RESTORATION | FLOODWAY HYDRAULIC ANALYSIS UPDATED TOPOGRAPHIC DATA |
| | COMMUNITY NO.: 370478 | | |
| IDENTIFIER | Torrence Creek Stream Restoration | APPROXIMATE LATITUDE AND LONGITUDE: 35.401, -80.862 SOURCE: Precision Mapping Streets DATUM: NAD 83 | |
| ANNOTATED MAPPING ENCLOSURE | | ANNOTATED STUDY ENCLOSURES | |
| TYPE: FIRM* NO.: 3710464000K DATE: September 2, 2015 | | DATE OF EFFECTIVE FLOOD INSURANCE STUDY: September 2, 2015 PROFILE: 262P FLOODWAY DATA TABLE: 22 | |

Enclosures reflect changes to flooding sources affected by this revision.

* FIRM - Flood Insurance Rate Map

FLOODING SOURCE AND REVISED REACH

Torrence Creek - from approximately 50 feet downstream of McCoy Road to approximately 100 feet upstream of Reese Boulevard

SUMMARY OF REVISIONS

| Flooding Source | Effective Flooding | Revised Flooding | Increases | Decreases |
|-----------------|--------------------|-------------------|-----------|-----------|
| Torrence Creek | Zone AE | Zone AE | YES | YES |
| | BFEs* | BFEs | YES | YES |
| | Floodway | Floodway | YES | YES |
| | Zone X(shaded) | Zone X (unshaded) | NONE | YES |

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 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. Sacbbit, 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.

NFIP regulations Subparagraph 60.3(b)(7) requires communities to ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained. This provision is incorporated into your community's existing floodplain management ordinances; therefore, responsibility for maintenance of the altered or relocated watercourse, including any related appurtenances such as bridges, culverts, and other drainage structures, rests with your community. We may request that your community submit a description and schedule of maintenance activities necessary to ensure this requirement.

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.

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)

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.

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 are currently processing a Physical Map Revision (PMR) that will revise the FIRM and FIS report for a portion of Mecklenburg County, not including the area impacted by this LOMR. We will not physically revise and republish the FIRM and FIS report for your community to incorporate the modifications made by this LOMR at this time. Preliminary copies of the revised FIRM and FIS report, which have been updated by the PMR, were submitted to your community for review on August 30, 2016. We will incorporate the modifications made by this LOMR into the new FIS report before they become effective.

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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Engineering Services Branch
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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: *Huntersville Herald Weekly*

Dates: December 28, 2017 and January 4, 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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Patrick "Rick" F. Sacbibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

| 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 |
| Torrence Creek | | | | | | | | |
| 007 | 749 | 710 | 4,180 | 1.5 | 675.0 | 671.3 ² | 671.8 | 0.5 |
| 013 | 1,290 | 571 | 3,358 | 1.9 | 675.0 | 671.9 ² | 672.4 | 0.5 |
| 022 | 2,246 | 496 | 2,820 | 2.2 | 675.0 | 673.5 ² | 674.0 | 0.5 |
| 030 | 3,034 | 573 | 2,776 | 2.3 | 675.0 | 674.8 ² | 675.3 | 0.5 |
| 039 | 3,876 | 546 | 3,802 | 1.3 | 678.3 | 678.3 | 678.6 | 0.4 |
| 048 | 4,762 | 724 | 3,144 | 1.6 | 679.2 | 679.2 | 679.6 | 0.4 |
| 054 | 5,405 | 337 | 1,479 | 2.5 | 680.9 | 680.9 | 681.4 | 0.5 |
| 063 | 6,256 | 190 | 979 | 3.8 | 684.5 | 684.5 | 685.0 | 0.5 |
| 068 | 6,782 | 176 | 1,124 | 3.3 | 686.8 | 686.8 | 687.3 | 0.5 |
| 075 | 7,465 | 121 | 1,013 | 3.7 | 689.1 | 689.1 | 689.6 | 0.5 |
| 080 | 7,991 | 325 | 2,616 | 1.3 | 691.1 | 691.1 | 691.5 | 0.4 |
| 085 | 8,492 | 260 | 1,964 | 1.7 | 691.2 | 691.2 | 691.6 | 0.4 |
| 093 | 9,373 | 298 | 1,097 | 3.0 | 692.0 | 692.0 | 692.4 | 0.4 |
| 102 | 10,288 | 75 | 653 | 5.0 | 696.6 | 696.6 | 697.0 | 0.4 |
| 110 | 11,086 | 57 | 349 | 8.5 | 698.1 | 698.1 | 698.4 | 0.3 |
| 118 | 11,845 | 233 | 946 | 3.2 | 702.7 | 702.7 | 703.1 | 0.4 |
| 126 | 12,632 | 119 | 629 | 2.9 | 706.7 | 706.7 | 706.8 | 0.1 |
| 134 | 13,415 | 205 | 671 | 2.1 | 708.1 | 708.1 | 708.5 | 0.5 |
| 139 | 13,864 | 172 | 367 | 3.8 | 710.2 | 710.2 | 710.7 | 0.4 |
| 143 | 14,326 | 187 | 510 | 2.7 | 713.2 | 713.2 | 713.6 | 0.5 |
| 147 | 14,660 | 26 | 156 | 8.9 | 715.2 | 715.2 | 715.6 | 0.5 |
| 152 | 15,205 | 60 | 683 | 2.0 | 725.6 | 725.6 | 725.6 | 0.0 |

¹ Feet above confluence with McDowell Creek

² Elevation computed without consideration of backwater effects

↓
REVISED DATA

TABLE 22

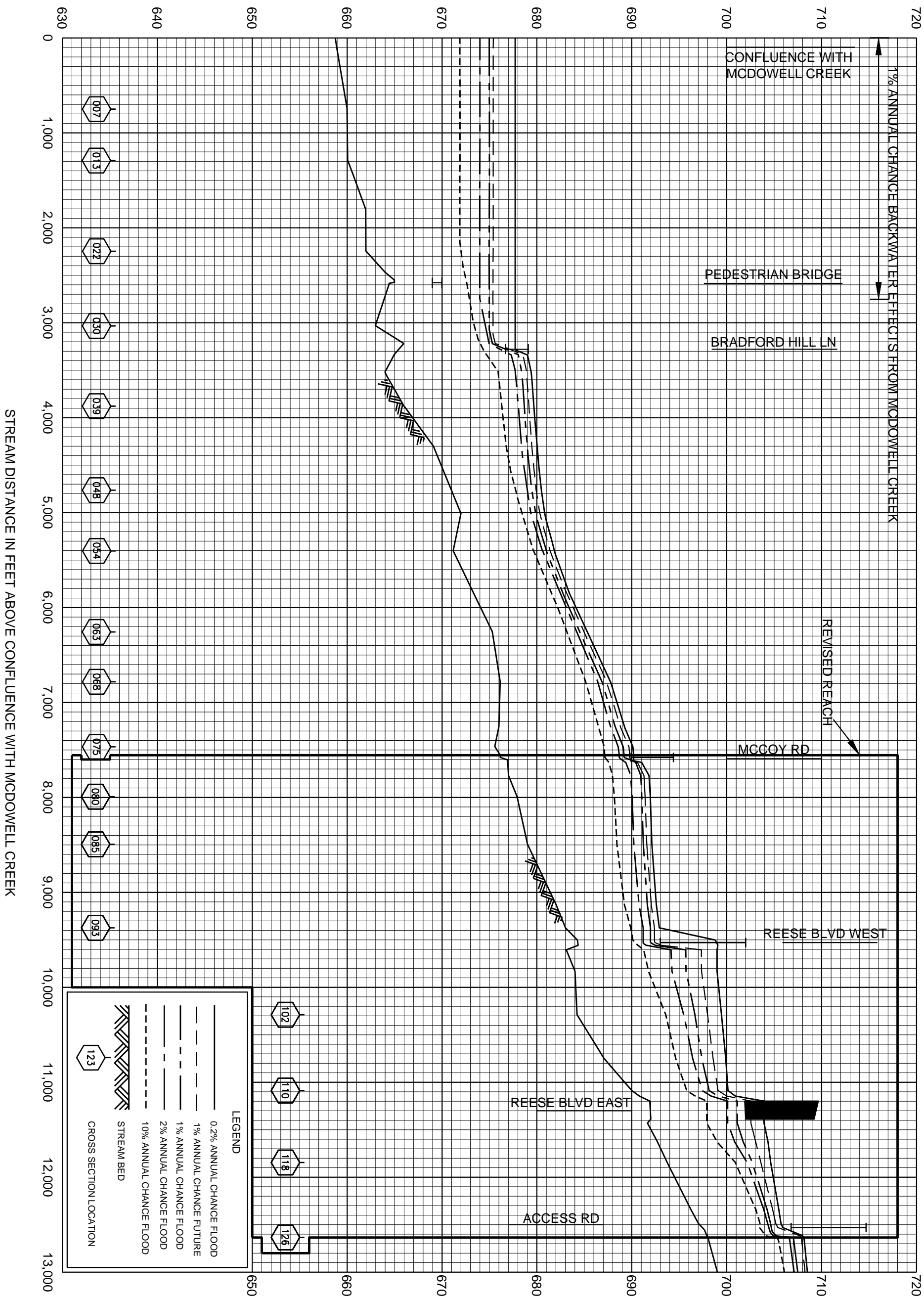
FEDERAL EMERGENCY MANAGEMENT AGENCY
MECKLENBURG COUNTY, NC
AND INCORPORATED AREAS

FLOODWAY DATA

TORRENCE CREEK

REVISED TO
REFLECT LOMR
EFFECTIVE: May 4, 2018

ELEVATION IN FEET (NAVD 88)



REVISED TO
REFLECT LOMR
EFFECTIVE: May 4, 2018

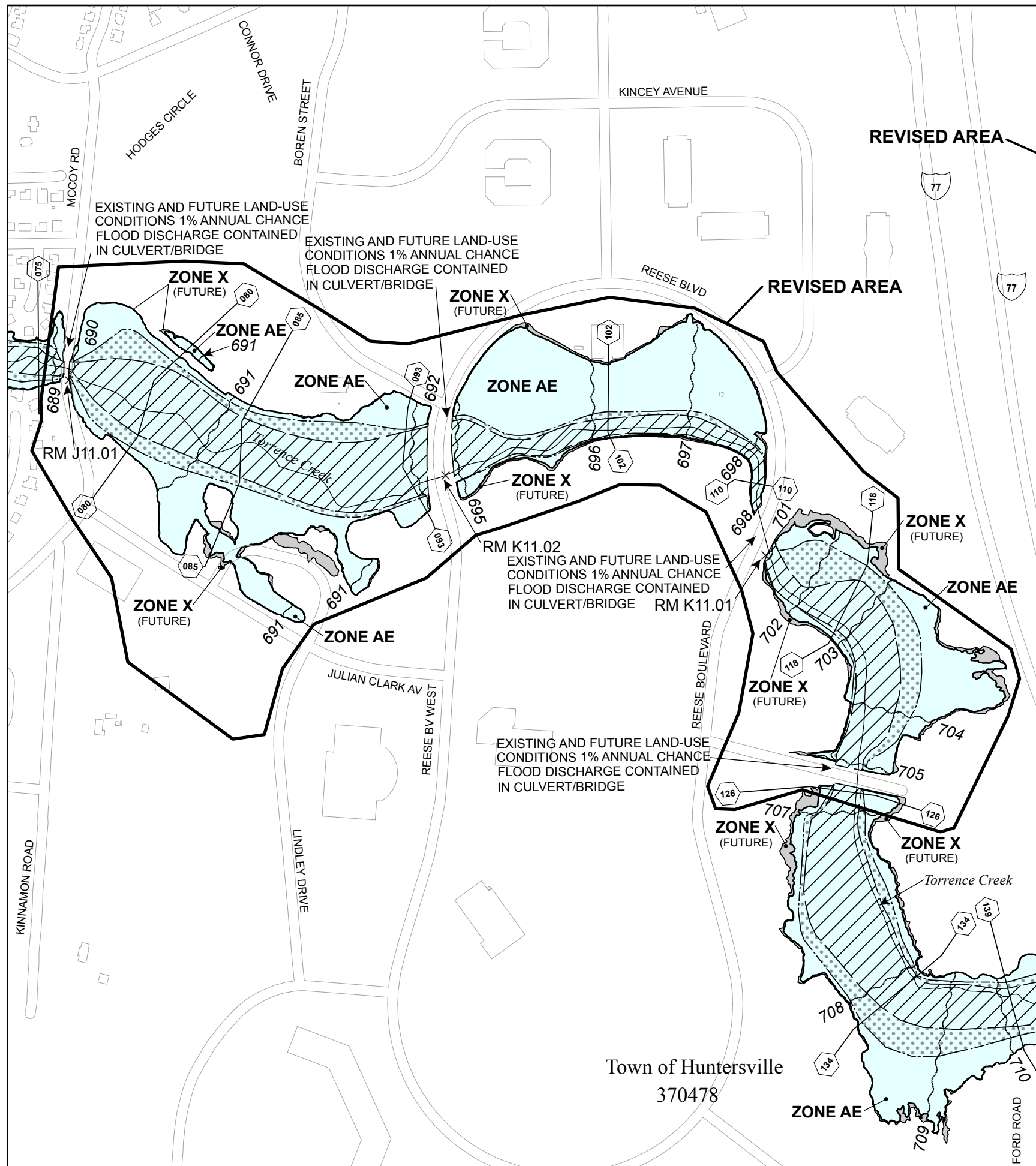
FEDERAL EMERGENCY MANAGEMENT AGENCY

MECKLENBURG COUNTY, NC
AND INCORPORATED AREAS

FLOOD PROFILES

TORRENCE CREEK

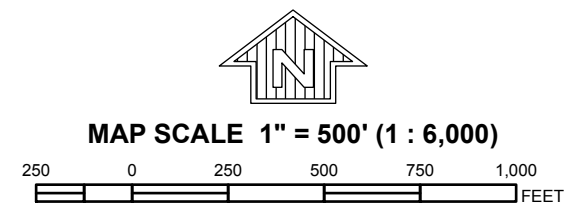
262P



| FLOOD HAZARD DATA TABLE | | | | 1% Annual Chance (100-year) Water-Surface Elevation (feet NAVD88) | | Floodway | Community Encroachment Line |
|-------------------------|---------------------|---------------------------------|-------------------------------|--|-------------------------------|---|--------------------------------|
| Cross Section | Stream Station | Flood Discharge (cfs) | | Existing Land Use Conditions | Future Land Use Conditions | Distance in Feet From Center of Stream to Encroachment Boundary (Looking Downstream) | |
| | | Existing Land Use Conditions | Future Land Use Conditions | | | Left / Right | Left / Right |
| TORRENCE CREEK | | | | | | | |
| 075 | 7465 ¹ | 3,761 | 4,350 | 689.1 | 690.0 | 68 / 53 | 88 / 73 |
| 080 | 7991 ¹ | 3,260 | 3,785 | 691.1 | 691.4 | 113 / 212 | 173 / 251 |
| 085 | 8492 ¹ | 3,260 | 3,785 | 691.2 | 691.6 | 143 / 118 | 181 / 154 |
| 093 | 9329 ¹ | 3,260 | 3,785 | 692.0 | 692.4 | 46 / 252 | 56 / 263 |
| 102 | 10215 ¹ | 3,260 | 3,785 | 696.6 | 698.0 | 34 / 41 | 42 / 71 |
| 110 | 11009 ¹ | 2,976 | 3,552 | 698.1 | 699.1 | 30 / 27 | 31 / 28 |
| 118 | 11766 ¹ | 2,976 | 3,552 | 702.7 | 703.6 | 32 / 201 | 53 / 273 |
| 126 | 12632 ¹ | 1,807 | 2,166 | 706.7 | 707.6 | 99 / 21 | 111 / 32 |
| 134 | 13,415 ¹ | 1,391 | 1,513 | 708.1 | 709.0 | 190 / 14 | 298 / 18 |
| 139 | 13,864 ¹ | 1,391 | 1,513 | 710.2 | 710.0 | 139 / 32 | 180 / 59 |

¹ Feet above confluence with McDowell Creek.

- Legend**
- 1% annual chance (100-Year) Floodplain
 - 1% annual chance (100-Year) Floodway
 - Community Encroachment Area
 - 1% annual chance Future Conditions (100-Year) Floodplain



PANEL 4640K

FIRM
FLOOD INSURANCE RATE MAP
NORTH CAROLINA

PANEL 4640
(SEE LOCATOR DIAGRAM OR MAP INDEX FOR FIRM
PANEL LAYOUT)

CONTAINS:

| | | | |
|--------------------------|------------------------|----------------------|-----------------------|
| <small>COMMUNITY</small> | <small>CID No.</small> | <small>PANEL</small> | <small>SUFFIX</small> |
| HUNTERSVILLE, TOWN OF | 370478 | 4640 | K |
| MECKLENBURG COUNTY | 370158 | 4640 | K |

**REVISED TO
REFLECT LOMR
EFFECTIVE: May 4, 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.

**MAP REVISED
SEPTEMBER 2, 2015**

**MAP NUMBER
3710464000K**

State of North Carolina
Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM