

**CITY OF GRAHAM
REGULAR SESSION AGENDA
TUESDAY, AUGUST 1, 2017
7:00 P.M.**

Meeting called to order by the Mayor
Invocation and Pledge of Allegiance

1. Consent Agenda:

- a. Approval of Minutes – July 11, 2017 Special Session

2. Old Business:

- a. Public Hearing: Disash Business (RZ1701). Request by Frank Longest to rezone property located at 602 East Harden Street from Residential Multifamily R-MF to General Business B-2
- b. Second Reading Code of Ordinances Amendment: Amend Code of Ordinances to require Encroachment Permit for Permanent Improvements
- c. Request by Juanita Ray to tap on to the City's water system for property located at 1342 Jimmie Kerr Road

3. Requests and Petitions from Citizens:

- a. Public Hearing: Petition for Voluntary Contiguous Annexation for property located at 1004 Woody Drive (AN1702):
 - i. Approve Annexation Ordinance

4. Recommendations from Planning Board:

- a. Public Hearing: Subdivision Exemptions (AM1705): Updating the definition of a subdivision as required by the North Carolina General Assembly
- b. Public Hearing: Floodplain Regulations (AM1706). Updating the article and adopting new maps as required by the Federal Emergency Management Agency (tabled by Planning Board)

5. Resolution Amending Water Agreement with Town of Swepsonville

6. Governor's Highway Safety Program Grant:

- a. Approve Resolution

7. Emergency Personnel Radios:

- a. Approve Budget Ordinance Amendment

8. Closed Session Pursuant to the Terms of N.C.G.S. §. 143-318-11 (a) (6): to consider the performance of the City Attorney

9. Issues Not on Tonight's Agenda

**CITY OF GRAHAM
SPECIAL SESSION
TUESDAY, JULY 11, 2017
7:00 P.M.**

The City Council of the City of Graham met in regular session at 7:00 p.m. on Tuesday, July 11, 2017, in the Council Chambers of the Municipal Building located at 201 South Main Street.

Council Members Present:

Mayor Jerry Peterman
Mayor Pro Tem Jimmy Linens
Council Member Griffin McClure
Council Member Chip Turner
Council Member Lee Kimrey

Also Present:

Frankie Maness, City Manager
Aaron Holland, Assistant City Manager
Darcy Sperry, City Clerk
Frank Glover, Planning Intern
Ryan Allshouse, Administrative Intern
Duane Flood, Lieutenant Graham Police Department

Mayor Jerry Peterman called the meeting to order and presided at 7:00 p.m. Council Member Chip Turner gave the invocation and everyone stood to recite the Pledge of Allegiance.

Consent Agenda:

- a. Approval of Minutes – June 6, 2017 Regular Session*
- b. Tax Collector Year End Report*
- c. 2016 Outstanding Tax Listing*
- d. Approve Project Quarter Capital Budget Closeout*
- e. Approve D/DBP Water Plant Improvements Capital Project Budget Closeout*
- f. Appoint Robert Parris to the ABC Board. This appointment will fulfill the unexpired term of Larry Brooks*

Peterman asked the Council Members if they would like to pull any of the items from the Consent Agenda. Council Member Lee Kimrey asked to pull items “d” and “f”.

Council Member Turner made a motion to approve items “a”, “b”, “c” and “e” on the Consent Agenda, seconded by Council Member Griffin McClure. All voted in favor of the motion.

Council Member Kimrey asked City Manager to explain the City’s part in the \$2.2 million roadway being built in the Hawfields area. Mr. Maness advised part of the incentive package with Lidl for the distribution center built in the North Carolina Commerce Park (NCCP) was to construct the balance of the roadway that NCDOT started. This connects Trollingwood-Hawfields Road to Governor Scott Farm Road. Mr. Maness added that Graham pays one-third of this cost, splitting it evenly with Alamance County and the City of Mebane and that we were able to secure grant assistance of approximately \$750,000. The City will manage the roadway for three years and then turn the roadway over to NCDOT.

With no further discussion, Council Member Kimrey made a motion to approve item “d”, seconded by Council Member Turner. All voted in favor of the motion.

Council Member Kimrey asked City Clerk Darcy Sperry when the term expires on the ABC Board appointment before them. Ms. Sperry advised this term will expire in 2019.

With no further questions, Council Member Kimrey made a motion to approve item “F”, seconded by Council Member McClure. All voted in favor of the motion.

Consider Authorizing Participation to Fund a Federal Drug, Gun & Violent Crimes Prosecutor:

Mayor Peterman introduced Alamance County Sheriff Terry Johnson, Alamance County District Attorney Pat Nadolski and Alamance County Assistant District Attorney Jenna Early. Mr. Nadolski explained that the Alamance County District Attorney’s Office is seeking financial assistance from Alamance County, the City of Burlington, the City of Graham and the City of Mebane to create a position that will allow a State prosecutor to work as a dually-sworn prosecutor in the U.S. Attorney’s Office for the Middle District of North Carolina. He added that besides saving the community from more crime, this would save local money in the long run because violent offenses require a lot of the paid time for police and lawyers to investigate and prosecute. Repeat offenders demand a lot of these investigations, so it saves money, at least locally, to keep them in prison.

Council Members engaged in a lengthy discussion with Mr. Nadolski about this proposal. Among items discussed were the number of violent crimes committed in Graham in 2016, State and Federal funding for prosecutors, benefits to the citizens of Graham and other municipalities who may be participating in a program of this nature.

Graham Police Lieutenant Duane Flood asked Council for their support on behalf of his department. He informed Council that hardened criminals are not afraid of the State sentences handed out. Lt. Flood stated violent crime is here and we need a way to get criminals off the street.

Council Member Kimrey stated it is difficult for him to go back to the citizens of Graham and ask them to pay for something their tax dollars are already paying for, adding that this issue should be handled at the State and Federal level.

With no further discussion forthcoming, Mayor Peterman made a motion to authorize the City Manager to enter into an agreement with the NC Administrative Office of the Courts (AOC) to fund a Federal Drug, Gun and Violent Crimes Prosecutor and be provided with quarterly statements and an annual review, seconded by Council Member McClure. Ayes: Mayor Peterman, Council Member McClure, Mayor Pro Tem Jimmy Linens and Council Member Turner. Nays: Council Member Kimrey. Motion carried 4:1.

Old Business:

- a. Public Hearing: Disash Business (RZ1701). Request by Frank Longest to rezone property located at 602 East Harden Street from Residential Multifamily R-MF to General Business B-2***

Planning Intern Frank Glover explained that this property is surrounded by two development types; a large multi-family tract and suburban residential across Harden Street. This request is to rezone a portion of the property from R-MF to all B-2. The lot is currently occupied by a duplex. The stated reason for this rezoning request is to “...permit use of the property for any use permitted by right in a B-2 zone.” There is concern for how this property will be served by sewer.

Mayor Peterman informed Council that he lives one block from this rezoning but doesn't feel it will affect his decision. By consensus Council agreed that Mayor Peterman did not have to recuse himself. Following a brief discussion between Council and Staff, Mayor Peterman opened the Public Hearing.

Mr. Frank Longest of the law firm Holt, Longest, Wall, Blaetz & Moseley stepped forward on behalf of the applicant. Mr. Longest stated that there have been some concerns that have come up after the Planning Board gave a favorable recommendation for approval and therefore requested that Council table this item to the August 1, 2017 Council meeting.

Mr. Travers Webb stepped forward and stated that if Council chooses to table this item, it may hold up the closing for a project he is currently working on in the same area.

Mr. Mike Conklin of Johnson Avenue Graham, Mr. Kevin Hinton of 603 East Harden Street Graham and Jan Searls of 526 East Pine Street Graham all stepped forward to share their concerns with this rezoning request. With no further comments forthcoming, Mayor Peterman closed the Public Hearing.

Council Member Kimrey made a motion to continue the Public Hearing to the August 1, 2017 regularly scheduled meeting, seconded by Council Member Turner. All voted in favor of the motion.

Requests and Petitions of Citizens:

a. Public Hearing: Petition for Voluntary Contiguous Annexation at Lacy Holt Road (AN1701):

i. Approve Annexation Ordinance

Assistant City Manager Aaron Holland explained that at last month's Council meeting, Council directed the City Clerk to investigate sufficiency of a petition received as well as set the date for a Public Hearing for this annexation request. The attached petition seeks the Council's approval for an extension of the corporate limits to include the subject property. The area being considered for annexation is the six parcels located off Lacy Holt Road (approximately 3.3 acres). This area is proposed to be within the Lacy Ridge Subdivision. The Annexation Petition was filed while there were two lots in this area, but the developer has subdivided the area into six lots for their first phase of development, as approved by City Council on September 6th, 2016.

With no comments forthcoming, Mayor Peterman opened and closed the Public Hearing. Council Member Kimrey made a motion to approve the Annexation Ordinance to Extend the Corporate limits of the City of Graham, North Carolina, for the six lots on Lacy Holt Road, seconded by Council Member Turner. All voted in favor of the motion.

ANNEXATION ORDINANCE
TO EXTEND THE CORPORATE LIMITS
OF THE
CITY OF GRAHAM, NORTH CAROLINA
FOR SIX LOTS ON LACY HOLT ROAD

WHEREAS, the Graham City Council has been petitioned under G.S. 160A-31 to annex the area described below; and

WHEREAS, the Graham City Council has by resolution directed the City Clerk to investigate the sufficiency of the petition; and

WHEREAS, the City Clerk has certified the sufficiency of the petition and a public hearing on the question of this annexation was held at City Hall, 201 South Main Street, Graham at 7:00 P.M. on July 11, 2017, after due notice by publication on June 29, 2017; and

WHEREAS, the Graham City Council finds that the petition meets the requirements of G.S. 160A-31;

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Graham, North Carolina that:

Section 1. By virtue of the authority granted by G.S. 160A-31, the following described territory is hereby annexed and made part of the City of Graham as of July 11, 2017:

ALL of that certain piece, parcel or tract of land lying and being in the City of Graham, Graham Township, Alamance County, North Carolina, and being more particularly described as follows:

BEGINNING AT A NEW IRON PIPE ON THE WESTERN RIGHT OF WAY OF LACY HOLT ROAD, THENCE ALONG SAID RIGHT OF WAY, S 42° 48' 18" W, A DISTANCE OF 554.94' TO A NEW IRON PIPE, THENCE WITH THE NORTHERN RIGHT OF WAY OF KNIGHTDALE DRIVE, S 54° 17' 27" W, A DISTANCE OF 250.20' TO A NEW IRON STAKE, THENCE N 41° 48' 18" W, A DISTANCE OF 608.14 TO A NEW IRN PIPE, THENCE 65° 54' 29", A DISTANCE OF 262.14' TO A NEW IRON PIPE, BEING THE POINT AND PLACE OF BEGINNING AND CONTAINING 3.31± ACRES, (0.0052 SQUARE MILES) AS SHOWN ON SURVEY BY CAROLINA CORNERSTONE SURVEYING, TITLES CORPORATE LIMITS EXTENSIONS OF CITY OF GRAHAM, GATED 05/15/17, JOB# 160512ANNEXATION.

b. Petition for Voluntary Contiguous Annexation for property located at 1004 Woody Drive (AN1702):

- i. Approve Resolution Requesting City Clerk to Investigate Sufficiency***
- ii. Approve Resolution Fixing Date of Public Hearing on Question of Annexation***

Mr. Holland explained that the annexation process has multiple steps with this being the first step in the annexation process. He added this petition seeks the Council's approval for an extension of the corporate limits to include the subject property. The area being considered for annexation is a parcel located at 1004 Woody Drive, as well as five adjacent lots (approximately 14.3 acres).

With no comments forthcoming, Council Member McClure made a motion to approve the Resolution Directing the Clerk to Investigate a Petition Received Under G.S. 160A-31 for Property at 1004 Woody Drive, seconded by Mayor Pro Tem Linens. All voted in favor of the motion.

Council Member Turner made a motion to approve the Resolution Fixing Date of Public Hearing on Question of Annexation Pursuant to G.S. 160A-31 for Property at 1004 Woody Drive, the date being August 1, 2017. Council Member McClure seconded the motion and all voted in favor of the motion.

c. Request by Juanita Ray to tap on to the City's water system for property located at 1342 Jimmie Kerr Road

Mr. Holland explained that on rare occasions, the City of Graham has allowed properties outside the City limits to connect to the water/sewer systems. This is normally reserved for non-contiguous properties while contiguous properties have required annexation. This authorization comes through the Code of Ordinances, Section 13-41. With the extension of the waterline along Jimmie Kerr Road, Ms. Juanita Ray has requested permission to tap onto the City's water line without annexation. At this time, the City does have a garbage truck which operates in the vicinity and the capacity to provide water but not sewer to 1342 Jimmie Kerr Road. Police and Fire currently patrol and respond to Alamance Community College. Ms. Ray's property is considered contiguous to the existing city limits. Mr. Holland advised that Staff has recommended denial for this request.

With Ms. Ray not in attendance at this meeting, Council Members were reluctant to proceed with this request, as some had questions for Ms. Ray. Council Member McClure made a motion to table this item to the August 1, 2017 Council meeting and requested that Staff reach out to Ms. Ray and request she attend the August meeting. Council Member Kimrey seconded the motion and all voted in favor of the motion.

Recommendations from Planning Board:

a. Public Hearing: Watercourse Phase II (CR1703). Request by Kirk Bradley of Eco Watercourse to rezone 14.3 acres in the vicinity of 1000 Woody Drive from General Business B-2, Low Density Residential R-19 and High Density Residential R-9 to Conditional Residential C-R

Mr. Holland stated this is a request to rezone the subject property from B-2, R-7 and R-18 to C-R, with a proposed use classified as Dwelling, Multi-Family. The project will include nine apartment buildings with 240 residential units, one maintenance building, three garage buildings and an amenity swimming pool complex. He added buildings will be three stories with an eave height of 32'±. The developer is requesting alternative compliance for building spacing as shown on the preliminary site plan. The request is also to add approximately 0.27 acres so that 20 additional parking spaces can be provided for the existing apartments. Access to the site will be provided via Woody Drive and Nelson Lane. Mr. Holland advised that Staff is recommending conditional approval.

A brief discussion between Council Members and Staff ensued. Council Member Kimrey referenced The Graham 2035 Comprehensive Plan and expressed concern with the lack of mixed use the Plan calls for with this request. Mayor Peterman opened the Public Hearing.

Mr. Joe Faulkner of 301 Glenwood Avenue Raleigh stepped forward to address Council on behalf of the applicant. Mr. Faulkner gave a brief overview of the project and fielded questions from Council Members. Mr. Faulkner was asked about buffer areas, the number of apartments, emergency exits, sign location, sidewalks and whether or not the applicant has given any consideration to mixed use commercial development. Mr. Faulkner stated that a monument sign along Harden Street is proposed and added that they would like to change the name of this complex to Waterside. He added that based on the traffic impact analysis prepared on site, it would be very expensive to add commercial development.

Mr. Kirk Bradley of 603 Carthage Street Sanford stepped forward to address Council on behalf of the applicant. Mr. Sanford is one of the managers of Eco Group and stated that they had a great experience with the Watercourse Phase I project and is looking forward to bringing another project to Graham. Council Member Kimrey asked Mr. Bradley what his thoughts are about mixed use development. Mr. Bradley stated that the cost to add commercial to this site is high and he does not see commercial development as a good fit for this particular site.

Ms. Kathy Hall of 1202 Noah Road Graham, Mr. Paul Keller of 410 Stonehedge Drive Graham and Mr. Mike Matteson of 1104 Castle Drive all stepped forward and encouraged Council to deny this request. With no further comments forthcoming, Mayor Peterman closed the Public Hearing.

Following a brief discussion between Council Members, Council Member Kimrey made a motion that the application be denied, that the application is not fully consistent with The Graham 2035 Comprehensive Plan and this action is reasonable and in the public interest for the following reasons: It does not provide any mixed uses that are designated in our Comprehensive Plan and in Commercial Mixed Use Districts. Being no second, Mayor Peterman stated that the motion dies for lack of a second. Mayor Pro Tem Linens made a motion that the application be approved with the following conditions:

- Two hydrants to be installed on Woody Drive, as requested by Fire Chief
- Landscaping on Nelson Lane to be Type B, to increase buffer from interstate traffic;

And the application is consistent with The Graham 2035 Comprehensive Plan. Council Member Turner seconded the motion. Ayes: Mayor Pro Tem Linens, Council Member Turner, Mayor Peterman and Council Member McClure. Nays: Council Member Kimrey. Motion carried 4:1.

First Reading: Code of Ordinances Amendment:

a. Amend Code of Ordinances to require Encroachment Permit for Permanent Improvements

Mr. Holland explained that per Council's directive, Staff has looked at language for Encroachment Permits within the public right-of-way. The City currently has an ordinance that addresses temporary dining within the public right-of-way. What is brought before Council at this meeting is a draft ordinance that would allow for individuals to encroach legally in the City's right-of-way areas within the Central Business District B-1. Mr. Holland advised that Staff's recommendation is to receive input and conduct secondary legal review and to schedule a second reading for August 1, 2017. He concluded by stating this ordinance will require a 4/5ths vote to pass during the first reading.

Council Member Kimrey asked to be recused due to a current project he has on file with the City that may result in direct financial gain. Mayor Peterman made a motion to recuse Council Member Kimrey, seconded by Council Member Turner. All voted in favor of the motion.

By consensus, the remaining Council Members agreed to schedule a second reading of this ordinance amendment. Council Member McClure made a motion to move a second reading of the Ordinance amendment to Chapter 18, Article I., (Streets, Sidewalks, and Other Public Places) of the Code of Ordinances to require an Encroachment Permit for permanent improvements be scheduled for August 1, 2017, seconded By Mayor Pro Tem Linens. All voted in favor of the motion. Without objection, Council Member Kimrey rejoined the Council.

Issues Not Included on Tonight's Agenda:

Mr. Brad Monbie of 625 New Street Graham, Ms. Shannon Craddock, Mr. Denne Craddock and Mr. Craig Cather of 626 New Street Graham and Ms. Katherine Caudell-Graves of 622 New Street Graham expressed concern with a neighbor. Complaints of people living inside a trailer on the property located at 623 New Street and allegations of illegal activity at that same property were brought to Council's attention. Mayor Peterman advised that Staff would look into the allegations.

Ms. Jennifer Talley of 808 Sideview Street Graham stepped forward to express concerns with the Encroachment Agreement as written. City Manager Frankie Maness and Mayor Peterman advised that this was a first reading and Ms. Talley's concerns will be taken into consideration before the second reading on August 1, 2017.

Closed Session Pursuant to the Terms of N.C.G.S. §. 143-318-11 (a) (6): to consider the performance of the City Manager and City Attorney:

Mayor Peterman explained that Council would be going into closed session to review the performance of the City Manager. He added that due to City Attorney Keith Whited being absent from this meeting, Council would review his performance at a later date.

At 10:24 p.m., Council Member Kimrey made a motion to go into Closed Session to Consider the Performance of the City Manager Pursuant to the Terms of N.C.G.S. §. 143-318-11 (a) (6), seconded by Council Member Turner. All voted in favor of the motion.

At 10:38 p.m., Council Members returned from Closed Session and Mayor Peterman reconvened the Regular Session meeting.

Council Members took turns expressing their appreciation for the exceptional job Mr. Maness has done for the City. They stated that they are proud of what Mr. Maness has accomplished his five years as Graham's City Manager and couldn't be more pleased with his performance.

Mayor Peterman made a motion to increase Mr. Maness' salary by 3.4% effective July 1, 2017, seconded by Council Member Kimrey. All voted in favor of the motion.

Issues Not Included on Tonight's Agenda (Continued):

Mr. Maness thanked Council for their support, adding that he is proud of what the City has been able to accomplish. He briefly updated Council on the progress of a secondary access at the Wastewater Treatment Plant.

Council Member Kimrey asked Mr. Maness and Council to consider upgrading technology to allow for the live streaming of meetings. Mayor Peterman stated that we would look into this during next year's budget cycle.

Council Member Turner reminded Council of former Mayor Vic Euliss' funeral to be held on July 13, 2017.

Council Member McClure encouraged Council Members to reach out to former Appearance Commission Chair Elaine Murrin and thank her for her service to that Commission.

Mayor Pro Tem Linens expressed concern with the comments made from the residents on New Street and asked Staff to address those tomorrow. Mr. Maness assured Council that would happen.

At 10:50 p.m. Council Member McClure made a motion to adjourn, seconded by Council Member Turner. All voted in favor of the motion.

Darcy Sperry, City Clerk



STAFF REPORT

Prepared by Nathan Page, Planning Director

Disash Business (RZ1701)

Type of Request: Rezoning

Meeting Dates

Planning Board on May 16, 2017

City Council on June 6, July 11, August 1, 2017

Contact Information

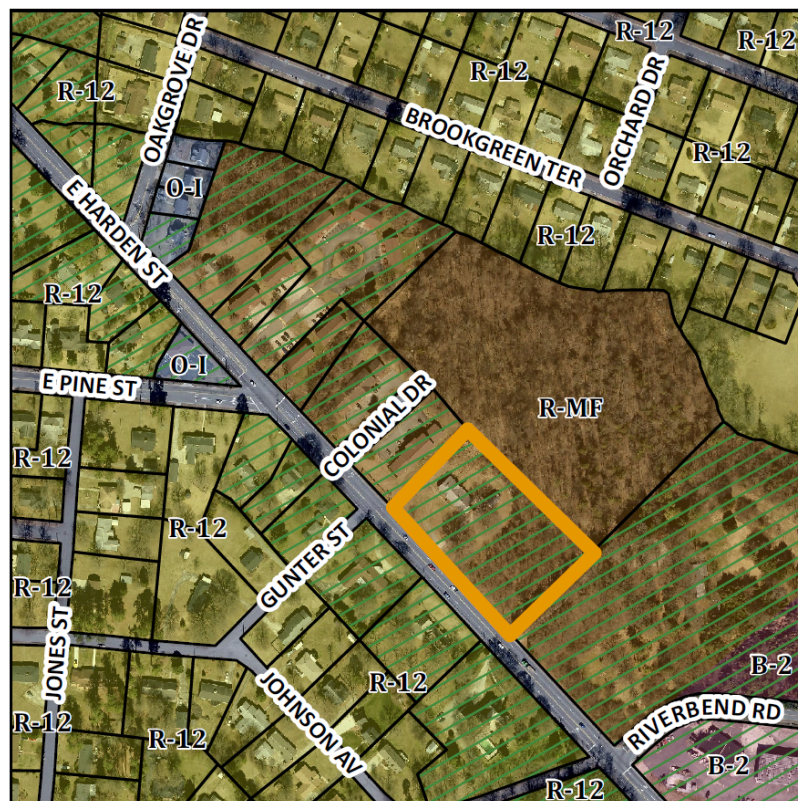
Frank Longest

3453 Forestdale Drive, Burlington NC 27215

336-227-7461, flongest@hlwbmlaw.com

Summary

This property is surrounded by two development types; a large multi-family tract, and suburban residential across Harden Street. This request is to rezone a portion of the property from R-MF to all B-2. The lot is currently occupied by a duplex. The stated reason for this rezoning request is to "...permit use of the property for any use permitted by right in a B-2 zone." There is concern for how this property will be served by sewer.



Location

602 E Harden St

GPIN: 8884537331

Current Zoning

Multifamily Residential R-MF

Proposed Zoning

General Business B-2

Overlay District

East Harden St Highway 54
Overlay District

Surrounding Zoning

R-12, R-MF

Surrounding Land Uses

Single Family Homes,
Multi-Family Homes

Size

2.44 acres

Public Water & Sewer

Water on Harden St
Sewer only on Gunter St

Floodplain

No

Staff Recommendation

Approval

Conformity to the *Graham 2035 Comprehensive Plan (GCP)* and Other Adopted Plans

Planning District: Mixed Use Commercial

Applicable Policies;

- 3.1.2 Safe Access to Businesses and Homes.**
 Limit direct highway access or the number of curb cuts to commercial activities by directing development to proposed regional and village centers and requiring internal connectivity between commercial uses, uniformity in design standards, and rear alley access where feasible. *This property is an identified regional center, and the rezoning would allow for a land use which could support the proposed and existing multifamily homes.*

Applicable Strategies;

- 1.1.5 Discourage Strip Development.** Discourage strip development along transportation arteries and proposed interstate interchanges by directing these commercial activities to proposed activity centers. *This parcel is in the vicinity of an Interchange Regional Node, on a high volume traffic route. The proposed residential density in the vicinity also lends itself to additional retail and service industries.*
- 2.3.1 Facilitate focused development.** Incentivize pedestrian-oriented nodal development consistent with this plan by incentivizing smart growth development. *Rezoning this property lot to B-2 would reinforce the goals of pedestrian-oriented nodal development and smart growth development while discouraging commercial strip developments.*

Development Type

Mixed Use Commercial

Buildings located no further than 15 feet from the front lot line

3-5 story building heights

Sidewalks, small block lengths, on-street parking, transparent windows on >50% of front façade

A mix of uses is desirable, including retail, commercial, office, multifamily residential, and institutional uses

Built to a human scale

Staff Recommendation

Based on *The Graham 2035 Comprehensive Plan*, staff recommends **approval** of the rezoning. The following supports this recommendation:

- The adjacent multifamily developments, the quantity of vehicle traffic, and the size of the Highway 54 corridor suggest that a business may be better suited to this site than additional apartments.



Application for REZONING or CONDITIONAL REZONING

P.O. Drawer 357
201 South Main Street
Graham, NC 27253
(336) 570-6705
Fax (336) 570-6703
www.cityofgraham.com

This application is for both general district rezonings and conditional rezonings. Applications are due on the 25th of each month. Applicants are encouraged to consult with the *City of Graham Development Ordinances* and the City Planner.

Site

Street Address: 602 E Harden St
Tax Map#: 147007 GPIN: 898453 7331

Current Zoning District(s):

☐ R-7 ☐ R-9 ☐ R-12 ☐ R-15 ☐ R-18
☒ R-MF ☐ R-G ☐ C-R ☐ C-MXR
☐ B-1 ☐ B-2 ☐ B-3 ☐ C-B ☐ C-MXC
☐ O-I ☐ C-O-I ☐ I-1 ☐ I-2 ☐ C-I

Overlay District, if applicable:

☐ Historic ☐ S Main St/Hwy 87 ☒ E Harden St/Hwy 54

Current Use: Residential/Duplex

Total Site Acres: 2.29 acres, more or less

Property Owner: Disash, LLC

c/o Frank A. Longest, Jr.
Mailing Address: 3453 Forestdale Drive

City, State, Zip: Burlington, NC 27215

Applicant

☒ Property Owner ☐ Other

Application for Conditional Rezoning may only be initiated by the owner of a legal interest in all affected property, any person having an interest in the property by reason of written contract with owner, or an agent authorized in writing to act on the owner's behalf. If the applicant for Conditional Rezoning is other than the Property Owner, documentation in compliance with the preceding statement must be provided in order for this application to be complete.

Disash, LLC

Name: By: Frank A. Longest, Jr., its Attorney

Mailing Address: 3453 Forestdale Drive

City, State, Zip: Burlington, NC 27215

Phone #: (336) 227-7461

Email: flongest@hlwbmlaw.com

I have completed this application truthfully and to the best of my ability.

Frank A. Longest, Jr. 4/24/17
Signature of Applicant Frank A. Longest, Jr. Date
Sherri Hamlett, sherri@hamlettlaw.com

Proposed Rezoning or Conditional Rezoning

Proposed Zoning District(s):

☐ R-7 ☐ R-9 ☐ R-12 ☐ R-15 ☐ R-18
☐ R-MF ☐ R-G ☐ C-R ☐ C-MXR
☐ B-1 ☒ B-2 ☐ B-3 ☐ C-B ☐ C-MXC
☐ O-I ☐ C-O-I ☐ I-1 ☐ I-2 ☐ C-I

Describe the purpose of this rezoning request. *For Conditional Rezonings*, also specify the actual use(s) intended for the property (from Sec. 10.135 Table of Permitted Uses) along with other descriptive or pertinent information, such as number of dwelling units, type of multifamily development, square footage and number of buildings:

B-2 Rezoning Request in order to permit use of the property for any use permitted by right in a B-2 zone, ~~except the following: which subject property will not be used: ABC Store; ambulance, etc.; athletic fields; vehicle body repair; vehicle repair shops; bars; billiard hall, etc.; game room amusements; municipal facilities; night club; or school (elementary or secondary)~~ *MAE*

For Conditional Rezonings, this application must be accompanied by a Preliminary Site Plan and supporting information specifying the actual use(s) and any rules, regulations or conditions that, in addition to predetermined ordinance requirements, will govern the development and use of the property.

☐ Site Plan Review Application *must be attached to this application for Conditional Rezonings*

Office Use Only: DEVID#

R21701



PLANNING BOARD Recommendation & Statement of Consistency

Per NCGS 160A-383, zoning regulations shall be made in accordance with an adopted comprehensive plan and any other officially adopted plan that is applicable. The Planning Board shall advise and comment on whether the proposed amendment is consistent with "The Graham 2035 Comprehensive Plan" and any other officially adopted plan that is applicable. The Planning Board shall provide a written recommendation to the City Council that addresses plan consistency and other matters as deemed appropriate by the Planning Board, but a comment by the Planning Board that a proposed amendment is inconsistent with "The Graham 2035 Comprehensive Plan" shall not preclude consideration or approval of the proposed amendment by the City Council.

**Disash Business
(RZ1701)**

Type of Request
Rezoning

Meeting Dates

Planning Board on May 16, 2017
City Council on June 6, 2017

☒ I move to **recommend APPROVAL** of the application as presented.

☐ I move to **recommend DENIAL**.

☒ The application is **consistent** with *The Graham 2035 Comprehensive Plan*.

☐ The application is **not fully consistent** with *The Graham 2035 Comprehensive Plan*.

The action is reasonable and in the public interest for the following reasons:

This report reflects the recommendation of the Planning Board, this the 16th day of May, 2017.

Attest:


Ricky Hall, Planning Board Chairman


Martha Johnson, Secretary



City Council Decision & Statement of Consistency

Per NCGS 160A-383, zoning regulations shall be made in accordance with an adopted comprehensive plan and any other officially adopted plan that is applicable. When adopting or rejecting any zoning amendment, the City Council shall also approve a statement describing whether its action is consistent with the "The Graham 2035 Comprehensive Plan" and briefly explaining why the City Council considers the action taken to be reasonable and in the public interest. The Planning Board shall provide a written recommendation to the City Council, but a comment by the Planning Board that a proposed amendment is inconsistent with the "The Graham 2035 Comprehensive Plan" shall not preclude consideration or approval of the proposed amendment by the City Council.

Choose one...

☐ I move that the application be **APPROVED**.

☐ I move that the application be **DENIED**.

Choose one...

☐ The application is **consistent** with *The Graham 2035 Comprehensive Plan*.

☐ The application is **not fully consistent** with *The Graham 2035 Comprehensive Plan*.

State reasons...

This action is reasonable and in the public interest for the following reasons:

This report reflects the decision of the City Council, this the 1st day of August, 2017.

Attest:

Gerald R. Peterman, Mayor

Darcy L. Sperry, City Clerk

**Disash Business
(RZ1701)**

Type of Request
Rezoning

Meeting Dates

Planning Board on May 16, 2017
City Council on June 6, July 11 &
August 1, 2017



STAFF REPORT

SUBJECT:	CODE OF ORDINANCES AMENDMENTS – ENCROACHMENT PERMIT FOR PERMANENT IMPROVEMENTS
PREPARED BY:	AARON HOLLAND – ASSISTANT CITY MANAGER

REQUESTED ACTION:

Amend Code of Ordinances to require Encroachment Permits for permanent improvements within the public right-of-way in the Central Business District (B-1).

BACKGROUND/SUMMARY:

The City of Graham owns or holds an interest in various properties throughout the city. The City, on occasion, receives requests from property owners and businesses within the central business district (B-1) to install improvements on public right-of-way. The City currently does not allow for the placement of improvements within the public right-of-way of the central business district other than for temporary purposes as described in Article VII of the Code of Ordinances- *Downtown Outdoor Displays, Dining and Other Temporary Encroachment*.

This ordinance amendment would require any interested party who wishes to encroach within the right-of-way with a permanent improvement to obtain an encroachment permit (license) from the City Manager or his designee. The Encroachment Permit will provide the permit-holder permission to use a specific portion of the right-of-way until such time as that portion of the right-of-way is needed by the City of Graham for public purposes. Encroachment Permits will be revocable at any time in the interest of public safety.

FISCAL IMPACT:

Undetermined.

STAFF RECOMMENDATION:

Approval. This ordinance amendment would provide language that allows a potential permit-holder permission to utilize a portion of right-of-way adjacent to their property while also providing language to protect the City of Graham.

SUGGESTED MOTION(S):

I move to approve the Ordinance amendment to Chapter 18, Article I., (*Streets, Sidewalks, and Other Public Places*) of the Code of Ordinances to require an Encroachment Permit for permanent improvements.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF GRAHAM, ADDING CHAPTER 18, ARTICLE I, SEC. 18.8, SEC. 18.9 & SEC. 18-10 TO THE CODE OF ORDINANCES OF THE CITY OF GRAHAM, NORTH CAROLINA

The City Council of the City of Graham, North Carolina, does ORDAIN:

Sec. 1. That the Code of Ordinances, City of Graham, North Carolina, is hereby amended by adding a section, to be numbered 18-8, 18-9, and 18-10, which said section read as follows:

Sec. 18-8. – Encroachment Prohibited without License; Permit required.

1. No person shall encroach upon any public right of way owned by the City without first complying with this Ordinance. “Encroach” as used in this Ordinance shall mean the construction, modification, disruption, or otherwise use either the surface of the public right of way, or the subterranean soils beneath the right of way, or the airspace above the right of way. A violation of this Ordinance is a Class 3 Misdemeanor.
2. Permissive Use of Public Rights of Way may be granted by the City Manager or his designee under the following conditions:
 - (a) Any person who wishes to encroach over, under or upon the public right-of-way with a permanent improvement within the central business district (B-1) shall apply for and obtain an encroachment permit [License] from the City Manager or his designee according to an established application process. Licenses shall be revocable and may be subject to a term as determined by the City Manager or his designee to ensure that the encroachment remains appropriate for its setting and compliant with the terms of the permit. Licenses shall be written in a manner suitable for Recording in the Alamance County Register of Deeds, and shall not be a property right that runs with the lands of the applicant. All uses permitted by the License must maintain a minimum sidewalk clearance as required by the City and comply with all building codes as applicable. All Licenses granted hereunder shall be kept on the premises.
 - (b) The City Manager may establish review guidelines and application submittal requirements and may also impose conditions on any permit to ensure that Licensed Uses comply with this Code and enhance the proposed location.
 - (c) The construction of any use allowed by the license shall be completed within the time period established thereby, which shall in no event exceed one (1) year, or the license will automatically expire.
 - (d) A reasonable fee for an application for an encroachment permit may be established to cover the City's costs associated with processing and monitoring such permit, which fee may be amended from time to time.
 - (e) The City Manager may require the applicant to produce evidence of ownership sufficient to establish the applicant's authority for the use of any person or entity other than the signatory.
 - (f) Whenever any Licensee desires to change the use or location of the use authorized by the license, the Licensee shall follow the review and approval process required of a new applicant.

Sec. 18-9. - Mandatory insurance.

(a) All Licensees shall provide proof of adequate insurance before a License may be issued and shall maintain during the period of the use comprehensive general public liability and property damage insurance naming the City, its officers, employees and agents as insureds in an amount equal to the limits approved by the City Attorney, plus the costs of defense, provided that the insurance is primary insurance and that no other insurance maintained by the City will be called upon to contribute to loss covered by the policy and providing for thirty (30) days' notice of cancellation or material change to the City. All insurance policies maintained pursuant to this Article shall contain the following endorsement:

It is hereby understood and agreed that this insurance policy may not be cancelled by the surety until thirty (30) days have expired after notice to the City of Graham by certified mail of the proposed cancellation or decision not to renew.

(b) The City Manager may waive the mandatory insurance requirement for uses of a minor nature or short duration of time.

(c) The City Manager has discretion to increase insurance limits for major encroachments.

Sec. 18-10. - Indemnification of City by users of public rights-of-way and property.

All Licenses shall provide for indemnification of the City of Graham, its officers, and employees from any loss, liability or damage, including expenses and costs, for bodily or personal injury, and for property damage sustained by any person as a result of such activities, including their costs of defense and reasonable attorney's fees.

All persons (1) placing any encroachment, obstruction, or object, (2) undertaking any repairs or construction activity, or (3) making any excavation over, under, or upon any of the streets, sidewalks, or other public places in the city shall indemnify and hold harmless the City of Graham, its officers, and employees, from any loss, liability or damage, including expenses and costs, for bodily or personal injury, and for property damage sustained by any person as a result of such activities.

Sec. 2. That this Ordinance shall be in full force and effect from and after its passage, approval and publication, as provided by law

This the _____ day of _____, 2017.

Mayor

ATTEST:

City Clerk



STAFF REPORT

SUBJECT:	WATER TAP REQUEST FOR 1342 JIMMIE KERR ROAD
PREPARED BY:	NATHAN PAGE, PLANNING DIRECTOR

REQUESTED ACTION:

Permit Juanita Ray, a resident of Graham's Extraterritorial Jurisdiction, to tap on to the City's water system.

BACKGROUND/SUMMARY:

On rare occasions the City of Graham has allowed properties outside City limits to connect to the water/sewer systems. This is normally reserved for a non-contiguous property and contiguous properties have required annexation. This authorization comes through the Code of Ordinances, Section 13-41. With the extension of the waterline along Jimmie Kerr Road, Juanita Ray has requested permission to tap onto the City's water line without annexation. At this time, the City does have a garbage truck which operates in the vicinity, and the capacity to provide water but not sewer to 1342 Jimmie Kerr Rd. Police and Fire currently patrol and respond to ACC. Mrs. Ray's property is considered contiguous to the existing city limits.



FISCAL IMPACT:

Due to the proximity of the property to existing city limits, the additional service demands upon the City of Graham pursuant to annexation are negligible. Depending on water consumption, approving this request without annexation could result in a negative fiscal outcome for both the City and the property owner.

STAFF RECOMMENDATION:

Deny the request for a water tap. The property is contiguous to the existing corporate limits and thus in proximity to urban services. The City has a longstanding practice of requiring annexation of contiguous properties that desire City services. In an effort to expedite matters, a compromise could be to allow connection upon petition for annexation rather than completion of the entire annexation process.

SUGGESTED MOTION(S):

I move to permit the property at 1342 Jimmie Kerr Road to tap City of Graham water lines upon receipt of a valid petition for annexation.

I move to permit the property at 1342 Jimmie Kerr Road to tap City of Graham water lines without annexation.

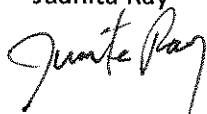
6-28-2017

Graham City Council,

My name is Juanita B Ray and I live at 1342 Jimmie Kerr Rd across from the Alamance Community College. My son in law talked to several people from the town about inquiring about tapping on to the new water line that was installed across the street last year from the college. My house was lost to fire about 2 ½ years ago and my well water has had a red tint to it ever since. I priced a filter system (2500.00\$ TO 3800.00\$) and would rather connect to city's water for about the same price. I understand that I will pay the tapping fee and for the meter and that the monthly rates will be double due to not being a city resident. I also understand that sanitary sewer is unavailable and I will continue to use our existing septic system.

Best Regards,

Juanita Ray

A handwritten signature in black ink, appearing to read "Juanita Ray", written in a cursive style.



STAFF REPORT

SUBJECT:	ANNEXATION OF PROPERTY AT 1004 WOODY DRIVE
PREPARED BY:	NATHAN PAGE, PLANNING DIRECTOR

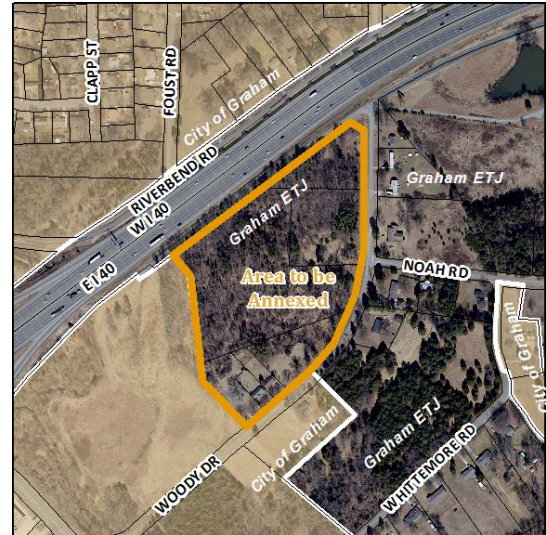
REQUESTED ACTION:

Approve the Annexation Ordinance to Extend the Corporate Limits of the City of Graham, North Carolina, for 14.3 acres at 1004 Woody Drive.

BACKGROUND/SUMMARY:

The attached petition seeks the Council's approval for an extension of the corporate limits to include the subject property. The area being considered for annexation is a parcel located at 1004 Woody Drive, as well as five adjacent lots (Approx 14.3 acres).

The annexation process has multiple steps. Following a public hearing, approval of the Annexation Ordinance is the final step for Council in the annexation process.



FISCAL IMPACT:

The City will likely receive an increase in annual revenue associated with the development of this property, including property taxes, water and sewer fees, and other revenues. If developed as currently proposed, staff estimates an increase in annual revenue of approximately \$320,000 as well as approximately \$350,000 in one-time fees. There is a small extension of a sewer line which is proposed to serve the property. There will also be expenditures associated with providing City services to any new development.

STAFF RECOMMENDATION:

Approval. Annexation of the subject property will afford the property access to City services.

SUGGESTED MOTION(S):

I move we approve the Annexation Ordinance to Extend the Corporate limits of the City of Graham, North Carolina for the parcels consisting of 14.3 acres including 1004 Woody Drive.

ANNEXATION ORDINANCE
TO EXTEND THE CORPORATE LIMITS
OF THE
CITY OF GRAHAM, NORTH CAROLINA
FOR PROPERTY AT 1004 WOODY DRIVE (AN1702)

WHEREAS, the Graham City Council has been petitioned under G.S. 160A-31 to annex the area described below; and

WHEREAS, the Graham City Council has by resolution directed the City Clerk to investigate the sufficiency of the petition; and

WHEREAS, the City Clerk has certified the sufficiency of the petition and a public hearing on the question of this annexation was held at City Hall, 201 South Main Street, Graham at 7:00 P.M. on August 1, 2017, after due notice by publication on July 20, 2017; and

WHEREAS, the Graham City Council finds that the petition meets the requirements of G.S. 160A-31;

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Graham, North Carolina that:

Section 1. By virtue of the authority granted by G.S. 160A-31, the following described territory is hereby annexed and made part of the City of Graham as of August 31, 2017:

ALL of that certain piece, parcel or tract of land lying and being in the City of Graham, Graham Township, Alamance County, North Carolina, and being more particularly described as follows:

COMMENCING AT A POINT, SAID POINT BEING PUBLISHED IN THE NATIONAL GEODETIC SURVEY AS "CASTLE" (PID: DG7052) AND HAVING NC GRID COORDINATES OF NORTHING: 841,524.06' & EASTING: 1,890,628.36'; THENCE N79°22'08"W A GRID DISTANCE OF 2737.34' TO A 5/8" IRON REBAR FOUND 0.1 FEET, ABOVE THE ADJACENT GRADE; SAID IRON LYING ON THE NORTHERN MARGIN OF WOODY DRIVE (NCSR 2106) HAVING A 60 FOOT PUBLIC RIGHT OF WAY, BEING THE SOUTHWESTERN MOST CORNER OF LUTHER SHOFFNER FAMILY, LLC PROPERTY AND A COMMON CORNER WITH ECO WATERCOURSE, LLC AND SAID IRON REBAR IS HEREBY KNOW AS THE POINT OF BEGINNING.

THENCE FROM THE SAID POINT OF BEGINNING ALONG THE COMMON LINE WITH ECO WATERCOURSE, LLC N43°06'17"W FOR A DISTANCE OF 266.17 FEET TO A 5/8" IRON REBAR FOUND; THENCE, N 07°32'57"W FOR A DISTANCE OF 76.82 FEET TO AN IRON REBAR FOUND; THENCE, N07°21'21"W FOR A DISTANCE OF 381.74 FEET TO AN IRON REBAR FOUND; THENCE, N 37°09'58"W FOR A DISTANCE OF 103.90 FEET TO AN IRON REBAR FOUND, SAID IRON LYING ON THE SOUTHERN RIGHTS OF WAY TO INTERSTATES 40 AND 85; THENCE ALONG THE MARGIN OF NELSON DRIVE, AN INTERSTATE SERVICE ROAD, N 52°39'37" E FOR A DISTANCE OF 462.29 FEET TO AN IRON PIPE FOUND; THENCE, N 52°41'54"E FOR A DISTANCE OF 324.71 FEET TO A NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY DISK; THENCE, N 53°49'19" E FOR A DISTANCE OF 143.56 FEET TO A NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY DISK, SAID DISK BEING AT THE INTERSECTION OF NELSON DRIVE AND WOODY DRIVE; THENCE, S 61°39'56"E FOR A DISTANCE OF 74.91 FEET TO A NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY DISK, SAID DISK LYING ON THE NORTHERN MARGIN OF WOODY DRIVE(NCSR 2106); THENCE ALONG WOODY DRIVE, S 00°44'50"W FOR A DISTANCE OF 18.58 FEET TO A CONCRETE RIGHT OF WAY MONUMENT FOUND; THENCE S 00°44'50"W A DISTANCE OF 221.35 FEET TO A ¾"

IRON PIPE FOUND; THENCE, S 01°38'34"W A DISTANCE OF 329.90 FEET TO A 5/8" IRON REBAR FOUND; THENCE WITH A CURVE TO THE RIGHT HAVING A RADIUS OF 799.52 FEET A CHORD BEARING OF S14°00'13"W FOR A DISTANCE OF 201.73 FEET TO A 5/8" IRON REBAR FOUND; THENCE WITH A CURVE TO THE RIGHT HAVING A RADIUS OF 799.52 FEET A CHORD BEARING OF S36°23'38"W FOR A DISTANCE OF 418.33 FEET TO AN IRON PIPE SET; THENCE, S 51°30'31"W FOR A DISTANCE OF 22.28 FEET TO AN IRON PIPE SET, SAID IRON BEING THE COMMON CORNER WITH JODY B. CHILDERS PROPERTY ; THENCE, S 51°30'33"W FOR A DISTANCE OF 65.16 FEET TO AN IRON PIPE SET; THENCE, S 51°49'33"W FOR A DISTANCE OF 64.88 FEET TO IRON PIPE FOUND; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 3,265 FEET A CHORD BEARING OF S50°36'17"W FOR A DISTANCE OF 97.03 FEET TO AN IRON REBAR FOUND, SAID IRON BEING THE POINT AND PLACE OF BEGINNING, HAVING AN AREA OF 623,063 SQUARE FEET, 14.304 ACRES MORE OR LESS.

Section 2. Upon and after August 31, 2017, the above-described territory and its citizens and property shall be subject to all debts, laws, ordinances and regulations in force in the City of Graham and shall be entitled to the same privileges and benefits as other parts of the City of Graham. Said territory shall be subject to municipal taxes according to G.S. 160A-58.10.

Section 3. The Mayor of the City of Graham shall cause to be recorded in the office of the Register of Deeds of Alamance County, and in the office of the Secretary of State at Raleigh, North Carolina, an accurate map of the annexed territory described in Section 1 above, together with a duly certified copy of this Ordinance. Such a map shall also be delivered to the Alamance County Board of Elections, as required by G.S. 163-288.1.

Adopted this, the 1st day of August, 2017.

Gerald R. Peterman, Mayor

ATTEST:

APPROVED AS TO FORM:

Darcy L. Sperry, City Clerk

Keith Whited, City Attorney



Petition for ANNEXATION

P.O. Drawer 357
201 South Main Street
Graham, NC 27253
(336) 570-6705
Fax (336) 570-6703
www.cityofgraham.com

To the City Council of the City of Graham, NC:

1. We, the undersigned owners of real property, respectfully request that the area described in paragraph 2 below be annexed into the City of Graham.

☒ If applicable as "income-based": We believe that this petition meets the requirements of G.S. 160A-31(b1).

☐ If applicable as "distressed": We believe that this petition meets the requirements of G.S. 160A-31(j).

2. The area to be annexed is ☒ contiguous ☐ non-contiguous to the City of Graham and the boundaries of such territory are as follows:

General description of area to be annexed


14.267 acres consisting of 6 parcels with the following GPIN#'s 8884728137, 8884821366, 8884729623, 8884822878, 8884832196, and 8884729296.

Attach the following:

☒ Annexation Plat – 1 paper copy, 2 mylars and 1 pdf. In addition to standard plat information, also include tax map numbers of all parcels and total square miles and acreage of area to be annexed.

☒ Metes and Bounds Description – 1 paper and 1 digital copy

3. We acknowledge that any zoning vested rights acquired pursuant to G.S. 160A-385.1 or G.S. 153A-344.1 must be declared and identified on this petition. We further acknowledge that failure to declare such rights on this petition shall result in a termination of vested rights previously acquired for the property. (If zoning vested rights are claimed, indicate yes below and attach proof.)

Name	Address	Vested rights?	Signature
Kirk Bradley, Registered Agent	PO Drawer 9 Sanford, NC 27331		
Eco Watercourse Apartments II, LLC			

attach additional sheets if necessary...

PLANNING ZONING BOARD

Tuesday, July 18, 2017

The Planning & Zoning Board held their regular meeting on Tuesday, July 18, 2017 in the Council Chambers of the Graham Municipal Building at 7:00 p.m. Board members present were Ricky Hall, Bonnie Blalock, Nate Perry, Dean Ward, Michael Benesch, Justin Moody and Eric Crissman. Staff members present were Nathan Page, Planning Director, Aaron Holland, Assistant City Manager, Frank Glover, Planning Intern, and Martha Johnson Zoning & Inspection Technician. Chair Hall called the meeting to order, gave the Overview of the Board, general meeting rules and gave the invocation. Martha Johnson, notary, swore in the two new members, Eric Crissman and Justin Moody.

1. Approval of the June 20, 2017 meeting minutes. Michael Benesch made a motion for approval, second by Ricky Hall. All voted in favor.

2. New Business:

a. AM1705 Subdivision Exemptions. Updating the definition of a subdivision as required by the North Carolina General Assembly. Nathan Page explained the updates to the definition of a subdivision. Dean Ward made a motion for approval to be adopted as read and is consistent with the 2035 Comprehensive Plan, second by Ricky Hall. All voted aye.

b. AM1706 Floodplain Regulations. Updating the article and adopting new maps as required by the Federal Emergency Management Agency. This item was tabled, Nate Perry made a motion, second by Ricky Hall. All voted aye.

3. Old Business:

a. Comprehensive Plan Update. Discussion regarding ideas and procedure for subsequent meetings. There was no public comment at this time and Mr. Hall stated the next update would be their meeting August 15th, 2017.

At this time the Board was opened for discussion and addressed the following items:

1. Addressed the future land use map
2. Interactivity between parking lots, commercial only
3. Possibly creating Overlay District on Jimmie Kerr Rd to Haw River and out West Highway 54 to Burlington
4. Address junk in yards and on porches

4. Public comment on non-agenda items: there were none

No further business the meeting was adjourned.

Respectfully Submitted,
Martha Johnson



STAFF REPORT

Prepared by Nathan Page, Planning Director

Text Amendment for: Section 10.366 (b)
Subdivision Exemptions
Type of Request: Text Amendment

Meeting Dates

Planning Board on July 18, 2017
 City Council on August 1, 2017

Contact Information

N/A

Summary

The North Carolina General Assembly has changed the definition of a Subdivision to be more inline with recent court decisions. As the General Assembly writes our enabling statutes, we must adopt their new definition.

The following amendments to the Development Ordinance are proposed:

Existing Language;

Section 10.336 Applicability; exemptions

- (a) Except as expressly exempted below, no land located either partially or wholly within the territorial jurisdiction of the City of Graham shall be subdivided until a final plat, approved in accordance with the procedures set out in this ordinance, shall have been approved by the City and filed and recorded with the Alamance County Register of Deeds.
- (b) The following are exempt from the provisions of this article, unless otherwise provided:
 - (1) The combination or recombination of portions of previously subdivided and recorded lots where the total number of lots is not increased and the resultant lots are equal to or exceed the standards of the applicable zoning district.
 - (2) The division of land into parcels greater than ten (10) acres where no street right-of-way dedication is involved.
 - (3) The public acquisition by purchase of strips of land for the widening or opening of streets or for public transportation system corridors.
 - (4) The division of a tract in single ownership whose entire area is no greater than two acres into not more than three (3) lots, where no street right-of-way dedication is involved and where the resultant lots are equal to or exceed the standards of the applicable zoning district.

Project Name

Subdivision Exemptions
 (AM1705)

Location

city-wide

Current Zoning

not applicable

Proposed Zoning

not applicable

Overlay District

not applicable

Staff Recommendation

Approval

Proposed Language;**Section 10.336 Applicability; exemptions**

- (a) Except as expressly exempted below, no land located either partially or wholly within the territorial jurisdiction of the City of Graham shall be subdivided until a final plat, approved in accordance with the procedures set out in this ordinance, shall have been approved by the City and filed and recorded with the Alamance County Register of Deeds.
- (b) The following are exempt from the provisions of this article, unless otherwise provided:
- (1) The combination or recombination of portions of previously subdivided and recorded lots if the total number of lots is not increased and the resultant lots are equal to or exceed the standards of the City as shown in its subdivision regulations.
 - (2) The division of land into parcels greater than 10 acres if no street right-of-way dedication is involved.
 - (3) The public acquisition by purchase of strips of land for widening or opening streets or for public transportation system corridors.
 - (4) The division of a tract in single ownership the entire area of which is no greater than two acres into not more than three lots, if no street right-of-way dedication is involved and if the resultant lots are equal to or exceed the standards of the City as shown by its subdivision regulations.
 - (5) The division of a tract into parcels in accordance with the terms of a probated will or in accordance with intestate succession under Chapter 29 of the General Statutes.
- (c) The City may require only a plat for recordation for the division of a tract or parcel of land in single ownership if all of the following criteria are met:
- (1) The tract or parcel to be divided is not exempted under subdivision (2) of subsection (a) of this section.
 - (2) No part of the tract or parcel to be divided has been divided under this subsection in the 10 years prior to division.
 - (3) The entire area of the tract or parcel to be divided is greater than five acres.
 - (4) After division, no more than three lots result from the division.
 - (5) After division, all resultant lots comply with all of the following:
 - a. Any lot dimension size requirements of the applicable land-use regulations, if any.
 - b. The use of the lots is in conformity with the applicable zoning requirements, if any.
 - c. A permanent means of ingress and egress is recorded for each lot."

Conformity to The Graham 2035 Comprehensive Plan and Other Adopted Plans

Not applicable.

Applicable Planning District Policies and Recommendations

- Not applicable; city-wide.

Planning District

All

Development Type

All

Staff Recommendation

Based on the comprehensive plan, staff **recommends approval** of the text amendment. The following supports this recommendation:

- The proposed amendment brings us into alignment with the new subdivision definition of S.L. 2017-10.



PLANNING BOARD

Recommendation & Statement of Consistency

Per NCGS 160A-383, zoning regulations shall be made in accordance with an adopted comprehensive plan and any other officially adopted plan that is applicable. The Planning Board shall advise and comment on whether the proposed amendment is consistent with "The Graham 2035 Comprehensive Plan" and any other officially adopted plan that is applicable. The Planning Board shall provide a written recommendation to the City Council that addresses plan consistency and other matters as deemed appropriate by the Planning Board, but a comment by the Planning Board that a proposed amendment is inconsistent with "The Graham 2035 Comprehensive Plan" shall not preclude consideration or approval of the proposed amendment by the City Council.

Subdivision Exemptions (AM1705)

Type of Request

Text Amendment

Meeting Dates

Planning Board on July 18, 2017

City Council on August 1, 2017

☒ I move to **recommend APPROVAL** of the application as presented.

☐ I move to **recommend DENIAL**.

☒ The application is **consistent** with *The Graham 2035 Comprehensive Plan*.

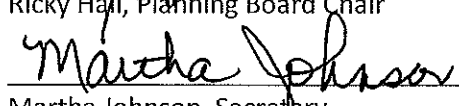
☐ The application is **not fully consistent** with *The Graham 2035 Comprehensive Plan*.

The action is reasonable and in the public interest for the following reasons:

This report reflects the recommendation of the Planning Board, this the 18th day of July, 2017.

Attest:


Ricky Hall, Planning Board Chair


Martha Johnson, Secretary



City Council Decision & Statement of Consistency

Per NCGS 160A-383, zoning regulations shall be made in accordance with an adopted comprehensive plan and any other officially adopted plan that is applicable. When adopting or rejecting any zoning amendment, the City Council shall also approve a statement describing whether its action is consistent with the "The Graham 2035 Comprehensive Plan" and briefly explaining why the City Council considers the action taken to be reasonable and in the public interest. The Planning Board shall provide a written recommendation to the City Council, but a comment by the Planning Board that a proposed amendment is inconsistent with the "The Graham 2035 Comprehensive Plan" shall not preclude consideration or approval of the proposed amendment by the City Council.

Subdivision Exemptions (AM1705)

Type of Request

Text Amendment

Meeting Dates

Planning Board on July 18, 2017

City Council on August 1, 2017

Choose one...

☐ I move that the text amendment be **APPROVED**.

☐ I move that the text amendment be **DENIED**.

Choose one...

☐ The text amendment is **consistent** with *The Graham 2035 Comprehensive Plan*.

☐ The text amendment is **not fully consistent** with *The Graham 2035 Comprehensive Plan*.

State reasons...

This action is reasonable and in the public interest for the following reasons:

This report reflects the decision of the City Council, this the 1st day of August, 2017.

Attest:

Gerald R. Peterman, Mayor

Darcy L. Sperry, City Clerk



STAFF REPORT

Prepared by Nathan Page, Planning Director

Text Amendment for: Article IX. Flood Damage Prevention

Type of Request: Text Amendment

Meeting Dates

Planning Board on July 18, 2017

City Council on August 1, 2017

Contact Information

N/A

Summary

The Federal Government has changed the existing floodplain maps, and requires us to update our Flood Damage Prevention Ordinances.

Please note- the elevation certificate during construction [10.374 (3) (a) (ii)] has been softened to a recommendation from a requirement. The State allows us this option, and it permits the use of judgement on the part of the surveyor and review staff to determine the validity of an intermediary elevation certificate depending on circumstances.

The following amendments to the Development Ordinance are proposed:

Due to the length of this amendment, a separate copy of the current and proposed language is attached. The “track changes” version supplied from the state of North Carolina are also included.

Project Name

Floodplain Regulations (AM1706)

Location

city-wide

Current Zoning

not applicable

Proposed Zoning

not applicable

Overlay District

not applicable

Staff Recommendation

Approval

Conformity to The Graham 2035 Comprehensive Plan and Other Adopted Plans

Not applicable.

Applicable Planning District Policies and Recommendations

- Not applicable; city-wide.

Staff Recommendation

Based on the comprehensive plan, staff **recommends approval** of the text amendment. The following supports this recommendation:

- Given the requirement of the National Flood Insurance Program to adopt these new maps on or before November 17, 2017, the City of Graham must do so in order to save money for our citizens on their flood insurance premiums.

Planning District

All

Development Type

All

ARTICLE IX. FLOOD DAMAGE PREVENTION

Section 10.360 Statutory authorization; findings of fact

The Legislature of the State of North Carolina has in Part 6, Article 21 of Chapter 143; Parts 3, 5, and 8 of Article 19 of Chapter 160A; and Article 8 of Chapter 160A of the North Carolina General Statutes, delegated to local governmental units the responsibility to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry.

Therefore, the City Council of the City of Graham, North Carolina, does ordain as follows:

Section 10.361 Findings of fact

- (1) The flood prone areas within the jurisdiction of the City of Graham are subject to periodic inundation which results in loss of life, property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures of flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
- (2) These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities and by the occupancy in flood prone areas of uses vulnerable to floods or other hazards.

Section 10.362 Statement of purpose

It is the purpose of this ordinance to promote public health, safety, and general welfare and to minimize public and private losses due to flood conditions within flood prone areas by provisions designed to:

- (1) restrict or prohibit uses that are dangerous to health, safety, and property due to water or erosion hazards or that result in damaging increases in erosion, flood heights or velocities;
- (2) require that uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at the time of initial construction;
- (3) control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters;
- (4) control filling, grading, dredging, and all other development that may increase erosion or flood damage; and
- (5) prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or which may increase flood hazards to other lands.

Section 10.363 Objectives

The objectives of this ordinance are:

- (1) to protect human life and health;

- (2) to minimize expenditure of public money for costly flood control projects;
- (3) to minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) to minimize prolonged business losses and interruptions;
- (5) to minimize damage to public facilities and utilities (i.e. water and gas mains, electric, telephone, cable and sewer lines, streets, and bridges) that are located in flood prone areas;
- (6) to help maintain a stable tax base by providing for the sound use and development of flood prone areas; and
- (7) to ensure that potential buyers are aware that property is in a Special Flood Hazard Area.

Section 10.364 Definitions

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

“Accessory Structure (Appurtenant Structure)” means a structure located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Garages, carports and storage sheds are common urban accessory structures. Pole barns, hay sheds and the like qualify as accessory structures on farms, and may or may not be located on the same parcel as the farm dwelling or shop building.

“Addition (to an existing building)” means an extension or increase in the floor area or height of a building or structure.

“Appeal” means a request for a review of the floodplain administrator's interpretation of any provision of this ordinance.

“Area of Shallow Flooding” means a designated Zone AO on a community's Flood Insurance Rate Map (FIRM) with base flood depths determined to be from one (1) to three (3) feet. These areas are located where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

“Area of Special Flood Hazard” see “Special Flood Hazard Area (SFHA)”

“Basement” means any area of the building having its floor subgrade (below ground level) on all sides.

“Base Flood” means the flood having a one (1) percent chance of being equaled or exceeded in any given year.

“Base Flood Elevation (BFE)” means a determination of the water surface elevations of the base flood as published in the Flood Insurance Study. When the BFE has not been provided in a “Special Flood Hazard Area”, it may be obtained from engineering studies available from a Federal or State or other source

using FEMA approved engineering methodologies. This elevation, when combined with the “Freeboard”, establishes the “Regulatory Flood Protection Elevation”.

“Building” see “Structure”

“Chemical Storage Facility” means a building, portion of a building, or exterior area adjacent to a building used for the storage of any chemical or chemically reactive products.

“Development” means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.

“Disposal” means, as defined in NCGS 130A-290(a)(6), the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste into or on any land or water so that the solid waste or any constituent part of the solid waste may enter the environment or be emitted into the air or discharged into any waters, including groundwaters.

“Elevated Building” means a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

“Encroachment” means the advance or infringement of uses, fill, excavation, buildings, permanent structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

“Existing Manufactured Home Park or Manufactured Home Subdivision” means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) was completed before the original effective date of the floodplain management regulations adopted by the community.

“Expansion to an existing manufactured home park or subdivision” means the preparation of the additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete slabs.)

“Flood” or “Flooding” means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (1) the overflow of inland or tidal waters; and/or
- (2) the unusual and rapid accumulation of runoff of surface waters from any source.

“Flood Boundary and Floodway Map (FBFM)” means an official map of a community, issued by the Federal Emergency Management Agency, on which the Special Flood Hazard Areas and the floodways are delineated. This official map is a supplement to and shall be used in conjunction with the Flood Insurance Rate Map (FIRM).

“Flood Hazard Boundary Map (FHBM)” means an official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the Special Flood Hazard Areas have been defined as Zone A.

“Flood Insurance” means the insurance coverage provided under the National Flood Insurance Program.

“Flood Insurance Rate Map (FIRM)” means an official map of a community, issued by the Federal Emergency Management Agency, on which both the Special Flood Hazard Areas and the risk premium zones applicable to the community are delineated.

“Flood Insurance Study (FIS)” means an examination, evaluation, and determination of flood hazards, corresponding water surface elevations (if appropriate), flood hazard risk zones, and other flood data in a community issued by the Federal Emergency Management Agency. The Flood Insurance Study report includes Flood Insurance Rate Maps (FIRMs) and Flood Boundary and Floodway Maps (FBFMs), if published.

“Flood Prone Area” see “Floodplain”

“Floodplain” means any land area susceptible to being inundated by water from any source.

“Floodplain Administrator” is the individual appointed to administer and enforce the floodplain management regulations.

“Floodplain Development Permit” means any type of permit that is required in conformance with the provisions of this ordinance, prior to the commencement of any development activity.

“Floodplain Management” means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including, but not limited to, emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

“Floodplain Management Regulations” means this ordinance and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, and other applications of police power which control development in flood-prone areas. This term describes federal, state or local regulations, in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

“Floodproofing” means any combination of structural and nonstructural additions, changes, or adjustments to structures, which reduce or eliminate flood damage to real estate or improved real property, water and sanitation facilities, structures, and their contents.

“Floodway” means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.

“Flood Zone” means a geographical area shown on a Flood Hazard Boundary Map or Flood Insurance Rate Map that reflects the severity or type of flooding in the area.

“Floor” means the top surface of an enclosed area in a building (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

“Freeboard” means the height added to the Base Flood Elevation (BFE) to account for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization on the watershed. The Base Flood Elevation plus the freeboard establishes the “Regulatory Flood Protection Elevation”.

“Functionally Dependent Facility” means a facility which cannot be used for its intended purpose unless it is located in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, or ship repair. The term does not include long-term storage, manufacture, sales, or service facilities.

“Hazardous Waste Facility” means, as defined in NCGS 130A, Article 9, a facility for the collection, storage, processing, treatment, recycling, recovery, or disposal of hazardous waste.

“Highest Adjacent Grade (HAG)” means the highest natural elevation of the ground surface, prior to construction, immediately next to the proposed walls of the structure.

“Historic Structure” means any structure that is:

- (a) listed individually in the National Register of Historic Places (a listing maintained by the US Department of Interior) or preliminarily determined by the Secretary of Interior as meeting the requirements for individual listing on the National Register;
- (b) certified or preliminarily determined by the Secretary of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (c) individually listed on a local inventory of historic landmarks in communities with a “Certified Local Government (CLG) Program”; or
- (d) certified as contributing to the historical significance of a historic district designated by a community with a “Certified Local Government (CLG) Program”

Certified Local Government (CLG) Programs are approved by the US Department of the Interior in cooperation with the North Carolina Department of Cultural Resources through the State Historic Preservation Officer as having met the requirements of the National Historic Preservation Act of 1966 as amended in 1980.

“Levee” means a manmade structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

“Levee system” means a flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

“Lowest Adjacent Grade (LAG)” means the elevation of the ground, sidewalk or patio slab immediately next to the building, or deck support, after completion of the building.

“Lowest Floor” means lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or limited storage in an area other than a basement area is not considered a building's lowest floor, provided that such an enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

“Manufactured Home” means a structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term “manufactured home” does not include a “recreational vehicle”.

“Manufactured Home Park or Subdivision” means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

“Market Value” means the building value, not including the land value and that of any accessory structures or other improvements on the lot. Market value may be established by independent certified appraisal; replacement cost depreciated for age of building and quality of construction (Actual Cash Value); or adjusted tax assessed values.

“Mean Sea Level” means, for purposes of this ordinance, the National Geodetic Vertical Datum (NGVD) as corrected in 1929, the North American Vertical Datum (NAVD) as corrected in 1988, or other vertical control datum used as a reference for establishing varying elevations within the floodplain, to which Base Flood Elevations (BFEs) shown on a FIRM are referenced. Refer to each FIRM panel to determine datum used.

“National Geodetic Vertical Datum (NGVD)” as corrected in 1929 is a vertical control used as a reference for establishing elevations within the floodplain.

“New Construction” means structures for which the “start of construction” commenced on or after the effective date of the original version of the community’s Flood Damage Prevention Ordinance and includes any subsequent improvements to such structures.

“New manufactured home park or subdivision means a manufactured” home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction. of streets, and either final site grading or the pouring of concrete slabs) is completed on or after August 5, 1980.

“Non-Encroachment Area” means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot as designated in the Flood Insurance Study report.

“Post-FIRM” means construction or other development for which the “start of construction” occurred on or after the effective date of the initial Flood Insurance Rate Map for the area.

“Pre-FIRM” means construction or other development for which the “start of construction” occurred before the effective date of the initial Flood Insurance Rate Map for the area.

“Principally Above Ground” means that at least 51% of the actual cash value of the structure is above ground.

“Public Safety” and/or “Nuisance” means anything which is injurious to the safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

“Recreational Vehicle (RV)” means a vehicle, which is:

- (a) built on a single chassis;
- (b) 400 square feet or less when measured at the largest horizontal projection;
- (c) designed to be self-propelled or permanently towable by a light duty truck; and
- (d) designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use.

“Reference feature” is the receding edge of a bluff or eroding frontal dune or, if such a feature is not present, the normal high water line or the seaward line of permanent vegetation if high water line cannot be identified.

“Reference Level” is the top of the lowest floor for structures within Special Flood Hazard Areas designated as Zone A1-A30, AE, A, A99 or AO. It can also be the bottom of the lowest horizontal structural member of the lowest floor, excluding the foundation system, for structures within all Special Flood Hazard Areas.

“Regulatory Flood Protection Elevation” means the “Base Flood Elevation” plus the “Freeboard”. In “Special Flood Hazard Areas” where Base Flood Elevations (BFEs) have been determined, this elevation shall be the BFE plus two (2) feet of freeboard. In “Special Flood Hazard Areas” where no BFE has been established, this elevation shall be at least two (2) feet above the highest adjacent grade.

“Remedy a Violation” means to bring the structure or other development into compliance with State and community floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing Federal financial exposure with regard to the structure or other development.

“Riverine” means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

“Salvage Yard” means any non-residential property used for the storage, collection, and/or recycling of any type of equipment, and including but not limited to vehicles, appliances and related machinery.

“Solid Waste Disposal Facility” means, as defined in NCGS 130A-290(a)(35), any facility involved in the disposal of solid waste.

“Solid Waste Disposal Site” means, as defined in NCGS 130A-290(a)(36), any place at which solid wastes are disposed of by incineration, sanitary landfill, or any other method.

“Special Flood Hazard Area (SFHA)” means the land in the floodplain subject to a one (1%) percent or greater chance of being flooded in any given year, as determined in Section 10.365 (b) of the *City of Graham Development Ordinances*.

“Start of Construction” includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

“Structure” means a walled and roofed building, a manufactured home, or a gas, liquid, or liquefied gas storage tank that is principally above ground.

“Substantial Damage” means damage of any origin sustained by a structure during any one-year period whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. See definition of “substantial improvement”. Substantial damage also means flood-related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.

“Substantial Improvement” means any combination of repairs, reconstruction, rehabilitation, addition, or other improvement of a structure, taking place during any one-year period for which the cost equals or exceeds 50 percent of the market value of the structure before the “start of construction” of the improvement. This term includes structures which have incurred “substantial damage”, regardless of the actual repair work performed. The term does not, however, include either:

- (a) any correction of existing violations of State or community health, sanitary, or safety code specifications which have been identified by the community code enforcement official and which are the minimum necessary to assure safe living conditions; or,
- (b) any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

“Substantially improved existing manufactured home park” means where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

“Variance” is a grant of relief from the requirements of this ordinance.

“Violation” means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in Sections 10.366, 10.367, 10.368, 10.369, 10.370, 10.371, 10.372, 10.373, 10.374, 10.375, 10.376, 10.377, and 10.378 of the *City of Graham Development Ordinances* is presumed to be in violation until such time as that documentation is provided.

“Water Surface Elevation (WSE)” means the height, in relation to mean sea level, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

“Watercourse” means a lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

Section 10.365 General provisions

- (a) ***LANDS TO WHICH THIS SECTION APPLIES.*** This ordinance shall apply to all Special Flood Hazard Areas within the jurisdiction, including Extra-Territorial Jurisdictions (ETJs) if applicable, of the City of Graham and within the jurisdiction of any other community whose governing body agrees, by resolution, to such applicability.
- (b) ***BASIS FOR ESTABLISHING THE SPECIAL FLOOD HAZARD AREAS.*** The Special Flood Hazard Areas are those identified under the Cooperating Technical State (CTS) agreement between the State of North Carolina and FEMA in its Flood Insurance Study (FIS) and its accompanying Flood Insurance Rate Maps (FIRM), for Alamance County September 6, 2006 which are adopted by reference and declared to be a part of this ordinance.
- (c) ***ESTABLISHMENT OF FLOODPLAIN DEVELOPMENT PERMIT.*** A Floodplain Development Permit shall be required in conformance with the provisions of this ordinance prior to the commencement of any development activities within Special Flood Hazard Areas determined in accordance with Section 10.365 (b) of the *City of Graham Development Ordinance*.
- (d) ***COMPLIANCE.*** No structure or land shall hereafter be located, extended, converted, altered, or developed in any way without full compliance with the terms of this ordinance and other applicable regulations.
- (e) ***ABROGATION AND GREATER RESTRICTIONS.*** This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
- (f) ***INTERPRETATION.*** In the interpretation and application of this ordinance, all provisions shall be:
 - (1) considered as minimum requirements;
 - (2) liberally construed in favor of the governing body; and
 - (3) deemed neither to limit nor repeal any other powers granted under State statutes.

- (g) **WARNING AND DISCLAIMER OF LIABILITY.** The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur. Actual flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the Special Flood Hazard Areas or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the City of Graham or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.
- (h) **PENALTIES FOR VIOLATION.** Violation of the provisions of this ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a misdemeanor. Any person who violates this ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$50.00 or imprisoned for not more than thirty (30) days, or both. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the City of Graham from taking such other lawful action as is necessary to prevent or remedy any violation.

Section 10.366 ADMINISTRATION; Designation of Local Floodplain Administrator

The City Planner, hereinafter referred to as the “Floodplain Administrator”, is hereby appointed to administer and implement the provisions of ARTICLE IX. FLOOD DAMAGE PREVENTION in the *City of Graham Development Ordinances*.

Section 10.367 Floodplain Development Application, Permit and Certification Requirements

- (1) **Application Requirements.** Application for a Floodplain Development Permit shall be made to the floodplain administrator prior to any development activities located within Special Flood Hazard Areas. The following items shall be presented to the floodplain administrator to apply for a floodplain development permit:
- (a) A plot plan drawn to scale which shall include, but shall not be limited to, the following specific details of the proposed floodplain development:
 - i) the nature, location, dimensions, and elevations of the area of development/disturbance; existing and proposed structures, utility systems, grading/pavement areas, fill materials, storage areas, drainage facilities, and other development;
 - ii) the boundary of the Special Flood Hazard Area as delineated on the FIRM or other flood map as determined in Section 10.365 (b) of the *City of Graham Development Ordinances*, or a statement that the entire lot is within the Special Flood Hazard Area;
 - iii) flood zone(s) designation of the proposed development area as determined on the FIRM or other flood map as determined in Section 10.365 (b) of the *City of Graham Development Ordinances*;
 - iv) the boundary of the floodway(s) or non-encroachment area(s) as determined in Section 10.365 (b) of the *City of Graham Development Ordinances*;

- v) the Base Flood Elevation (BFE) where provided as set forth in Section 10.365 (b) of the *City of Graham Development Ordinances*; Section 10.368 (11 & 12) of the *City of Graham Development Ordinances*; or Section 10.373 of the *City of Graham Development Ordinances*;
 - vi) the old and new location of any watercourse that will be altered or relocated as a result of proposed development;
 - vii) certification of the plot plan by a registered land surveyor or professional engineer.
- (b) Proposed elevation, and method thereof, of all development within a Special Flood Hazard Area including but not limited to:
- i) Elevation in relation to mean sea level of the proposed reference level (including basement) of all structures;
 - ii) Elevation in relation to mean sea level to which any non-residential structure in Zone AE, A or AO will be flood-proofed; and
 - iii) Elevation in relation to mean sea level to which any proposed utility systems will be elevated or floodproofed;
- (c) If floodproofing, a Floodproofing Certificate (*FEMA Form 81-65*) with supporting data and an operational plan that includes, but is not limited to, installation, exercise, and maintenance of floodproofing measures.
- (d) A Foundation Plan, drawn to scale, which shall include details of the proposed foundation system to ensure all provisions of this ordinance are met. These details include but are not limited to:
- i) The proposed method of elevation, if applicable (i.e., fill, solid foundation perimeter wall, solid backfilled foundation, open foundation on columns/posts/piers/piles/shear walls);
 - ii) Openings to facilitate equalization of hydrostatic flood forces on walls in accordance with Section 10.372(4)(c) of the *City of Graham Development Ordinances*, when solid foundation perimeter walls are used in Zones A, AO, AE, and A1-30;
- (e) Usage details of any enclosed areas below the regulatory flood protection elevation.
- (f) Plans and/or details for the protection of public utilities and facilities such as sewer, gas, electrical, and water systems to be located and constructed to minimize flood damage;
- (g) Copies of all other Local, State and Federal permits required prior to floodplain development permit issuance (Wetlands, Endangered Species, Erosion and Sedimentation Control, Riparian Buffers, Mining, etc.)
- (h) Documentation for placement of Recreational Vehicles and/or Temporary Structures, when applicable, to ensure Section 10.372 (6 & 7) of the *City of Graham Development Ordinances* are met.

- (i) A description of proposed watercourse alteration or relocation, when applicable, including an engineering report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map (if not shown on plot plan) showing the location of the proposed watercourse alteration or relocation.

(2) Permit Requirements. The Floodplain Development Permit shall include, but not be limited to:

- (a) description of the development to be permitted under the floodplain development permit.
- (b) The Special Flood Hazard Area determination for the proposed development per available data specified in Section 10.365 (b) of the *City of Graham Development Ordinances*.
- (c) The regulatory flood protection elevation required for the reference level and all attendant utilities.
- (d) The regulatory flood protection elevation required for the protection of all public utilities.
- (e) All certification submittal requirements with timelines.
- (f) A statement that no fill material or other development shall encroach into the floodway or non-encroachment area of any watercourse, as applicable.
- (g) The flood openings requirements, if in Zones A, AO, AE or A1-30.
- (h) Limitations of below BFE enclosure uses (if applicable). (i.e., Parking, Building Access and Limited Storage only).

(3) Certification Requirements.

(a) Elevation Certificates

- i) An Elevation Certificate (FEMA Form 81-31) is required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the floodplain administrator a certification of the elevation of the reference level, in relation to mean sea level. The floodplain administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder prior to the beginning of construction. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit.
- ii) A final as-built Elevation Certificate (FEMA Form 81-31) is required after construction is completed and prior to Certificate of Compliance/Occupancy issuance. It shall be the duty of the permit holder to submit to the floodplain administrator a certification of final as-built construction of the elevation of the reference level and all attendant utilities. The floodplain administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to Certificate of Compliance/Occupancy issuance. In some instances, another certification may be required to certify corrected as-built construction. Failure to submit the certification or failure to

make required corrections shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy.

(b) Floodproofing Certificate

If non-residential floodproofing is used to meet the regulatory flood protection elevation requirements, a Floodproofing Certificate (FEMA Form 81-65), with supporting data and an operational plan, is required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the floodplain administrator a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to mean sea level. Floodproofing certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. The floodplain administrator shall review the certificate data and plan. Deficiencies detected by such review shall be corrected by the applicant prior to permit approval. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit. Failure to construct in accordance with the certified design shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy.

- (c) If a manufactured home is placed within Zone A, AO, AE, or A1-30 and the elevation of the chassis is more than 36 inches in height above grade, an engineered foundation certification is required per Section 10.372 (3) of the *City of Graham Development Ordinances*.
- (d) If a watercourse is to be altered or relocated, a description of the extent of watercourse alteration or relocation; a professional engineer's certified report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map showing the location of the proposed watercourse alteration or relocation shall all be submitted by the permit applicant prior to issuance of a floodplain development permit.
- (e) Certification Exemptions. The following structures, if located within Zone A, AO, AE or A1-30, are exempt from the elevation/floodproofing certification requirements specified in items (a) and (b) of this subsection:
 - i) Recreational Vehicles meeting requirements of Section 10.372 (6) of the City of Graham Development Ordinances;
 - ii) Temporary Structures meeting requirements of Section 10.372 (7) of the City of Graham Development Ordinances; and
 - iii) Accessory Structures less than 150 square feet meeting requirements of 10.372 (8) of the City of Graham Development Ordinances.

Section 10.368 Duties and Responsibilities of the Floodplain Administrator

The Floodplain Administrator shall perform, but not be limited to, the following duties:

- (1) Review all floodplain development applications and issue permits for all proposed development within Special Flood Hazard Areas to assure that the requirements of this ordinance have been satisfied.

- (2) Advise permittee that additional Federal or State permits (Wetlands, Endangered Species, Erosion and Sedimentation Control, Riparian Buffers, Mining, etc.) may be required, and require that copies of such permits be provided and maintained on file with the floodplain development permit.
- (3) Notify adjacent communities and the North Carolina Department of Crime Control and Public Safety, Division of Emergency Management, State Coordinator for the National Flood Insurance Program prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency (FEMA).
- (4) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
- (5) Prevent encroachments into floodways and non-encroachment areas unless the certification and flood hazard reduction provisions of Section 10.374 of the *City of Graham Development Ordinances* are met.
- (6) Obtain actual elevation (in relation to mean sea level) of the reference level (including basement) and all attendant utilities of all new or substantially improved structures, in accordance with Section 10.367 (3) of the *City of Graham Development Ordinances*.
- (7) Obtain actual elevation (in relation to mean sea level) to which all new and substantially improved structures and utilities have been floodproofed, in accordance with Section 10.367 (3) of the *City of Graham Development Ordinances*.
- (8) Obtain actual elevation (in relation to mean sea level) of all public utilities in accordance with Section 10.367 (3) of the *City of Graham Development Ordinances*.
- (9) When floodproofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect in accordance with Section 10.367 (3) and Section 10.372 (2) of the *City of Graham Development Ordinances*.
- (10) Where interpretation is needed as to the exact location of boundaries of the Special Flood Hazard Areas (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Sections 10.366, 10.367, 10.368, 10.369, and 10.370 of the *City of Graham Development Ordinances*.
- (11) When Base Flood Elevation (BFE) data has not been provided in accordance with Section 10.365 (b) of the *City of Graham Development Ordinances*, obtain, review, and reasonably utilize any Base Flood Elevation (BFE) data, along with floodway data or non-encroachment area data available from a Federal, State, or other source, including data developed pursuant to Section 10.373 (2)(b) of the *City of Graham Development Ordinances*, in order to administer the provisions of this ordinance.
- (12) When Base Flood Elevation (BFE) data is provided but no floodway nor non-encroachment area data has been provided in accordance with Section 10.365 (b) of the *City of Graham Development Ordinances*, obtain, review, and reasonably utilize any floodway data or non-encroachment area data available from a Federal, State, or other source in order to administer the provisions of this ordinance.

- (13) When the lowest ground elevation of a parcel or structure in a Special Flood Hazard Area is above the Base Flood Elevation, advise the property owner of the option to apply for a Letter of Map Amendment (LOMA) from FEMA. Maintain a copy of the Letter of Map Amendment (LOMA) issued by FEMA in the floodplain development permit file.
- (14) Permanently maintain all records that pertain to the administration of this ordinance and make these records available for public inspection.
- (15) Make on-site inspections of work in progress. As the work pursuant to a floodplain development permit progresses, the floodplain administrator shall make as many inspections of the work as may be necessary to ensure that the work is being done according to the provisions of the local ordinance and the terms of the permit. In exercising this power, the floodplain administrator has a right, upon presentation of proper credentials, to enter on any premises within the jurisdiction of the community at any reasonable hour for the purposes of inspection or other enforcement action.
- (16) Issue stop-work orders as required. Whenever a building or part thereof is being constructed, reconstructed, altered, or repaired in violation of this ordinance, the floodplain administrator may order the work to be immediately stopped. The stop-work order shall be in writing and directed to the person doing the work. The stop-work order shall state the specific work to be stopped, the specific reason(s) for the stoppage, and the condition(s) under which the work may be resumed. Violation of a stop-work order constitutes a misdemeanor.
- (17) Revoke floodplain development permits as required. The floodplain administrator may revoke and require the return of the floodplain development permit by notifying the permit holder in writing stating the reason(s) for the revocation. Permits shall be revoked for any substantial departure from the approved application, plans, or specifications; for refusal or failure to comply with the requirements of State or local laws; or for false statements or misrepresentations made in securing the permit. Any floodplain development permit mistakenly issued in violation of an applicable State or local law may also be revoked.
- (18) Make periodic inspections throughout all special flood hazard areas within the jurisdiction of the community. The floodplain administrator and each member of his or her inspections department shall have a right, upon presentation of proper credentials, to enter on any premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action.
- (19) Follow through with corrective procedures of Section 10.369 of the *City of Graham Development Ordinances*.
- (20) Review, provide input, and make recommendations for variance requests.
- (21) Maintain a current map repository to include, but not limited to, the FIS Report, FIRM and other official flood maps and studies adopted in accordance with Section 10.365 of the *City of Graham Development Ordinances*, including any revisions thereto including Letters of Map Change, issued by FEMA. Notify State and FEMA of mapping needs.
- (22) Coordinate revisions to FIS reports and FIRMs, including Letters of Map Revision Based on Fill (LOMR-F) and Letters of Map Revision (LOMR).

Section 10.369 Corrective Procedures

- (1) Violations to be Corrected: When the floodplain administrator finds violations of applicable State and local laws, it shall be his or her duty to notify the owner or occupant of the building of the violation. The owner or occupant shall immediately remedy each of the violations of law cited in such notification.
- (2) Actions in Event of Failure to Take Corrective Action: If the owner of a building or property shall fail to take prompt corrective action, the floodplain administrator shall give the owner written notice, by certified or registered mail to the owner's last known address or by personal service, stating:
 - (a) that the building or property is in violation of the Flood Damage Prevention Ordinance;
 - (b) that a hearing will be held before the floodplain administrator at a designated place and time, not later than ten (10) days after the date of the notice, at which time the owner shall be entitled to be heard in person or by counsel and to present arguments and evidence pertaining to the matter; and,
 - (c) that following the hearing, the floodplain administrator may issue an order to alter, vacate, or demolish the building; or to remove fill as appears appropriate.
- (3) Order to Take Corrective Action: If, upon a hearing held pursuant to the notice prescribed above, the floodplain administrator shall find that the building or development is in violation of the Flood Damage Prevention Ordinance, they shall issue an order in writing to the owner, requiring the owner to remedy the violation within a specified time period, not less than sixty (60) calendar days. Where the floodplain administrator finds that there is imminent danger to life or other property, they may order that corrective action be taken in such lesser period as may be feasible.
- (4) Appeal: Any owner who has received an order to take corrective action may appeal the order to the local elected governing body by giving notice of appeal in writing to the floodplain administrator and the clerk within ten (10) days following issuance of the final order. In the absence of an appeal, the order of the floodplain administrator shall be final. The local governing body shall hear an appeal within a reasonable time and may affirm, modify and affirm, or revoke the order.
- (5) Failure to Comply with Order: If the owner of a building or property fails to comply with an order to take corrective action for which no appeal has been made or fails to comply with an order of the governing body following an appeal, the owner shall be guilty of a misdemeanor and shall be punished at the discretion of the court.

Section 10.370 Variance Procedures

- (1) The Board of Adjustment as established by the City of Graham), hereinafter referred to as the "appeal board", shall hear and decide requests for variances from the requirements of this ordinance.
- (2) Any person aggrieved by the decision of the appeal board may appeal such decision to the Court, as provided in Chapter 7A of the North Carolina General Statutes.

(3) Variances may be issued for:

- (a) the repair or rehabilitation of historic structures upon the determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and that the variance is the minimum necessary to preserve the historic character and design of the structure.
- (b) functionally dependent facilities if determined to meet the definition as stated in Section 10.364 of the *City of Graham Development Ordinances*, provided provisions of Section 10.370 (9) (b, c, and e) of the *City of Graham Development Ordinances* have been satisfied, and such facilities are protected by methods that minimize flood damages.
- (c) any other type of development, provided it meets the requirements stated in this section.

(4) In passing upon variances, the appeal board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and:

- (a) the danger that materials may be swept onto other lands to the injury of others;
- (b) the danger to life and property due to flooding or erosion damage;
- (c) the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- (d) the importance of the services provided by the proposed facility to the community;
- (e) the necessity to the facility of a waterfront location as defined under Section 10.364 of the *City of Graham Development Ordinances* as a functionally dependent facility, where applicable;
- (f) the availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
- (g) the compatibility of the proposed use with existing and anticipated development;
- (h) relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
- (i) safety of access to the property in times of flood for ordinary and emergency vehicles;
- (j) the expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
- (k) the costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.

(5) A written report addressing each of the above factors shall be submitted with the application for a variance.

- (6) Upon consideration of the factors listed above and the purposes of this ordinance, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.
- (7) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the Base Flood Elevation (BFE) and the elevation to which the structure is to be built and that such construction below the Base Flood Elevation increases risks to life and property, and that the issuance of a variance to construct a structure below the Base Flood Elevation will result in increased premium rates for flood insurance up to \$25 per \$100 of insurance coverage. Such notification shall be maintained with a record of all variance actions, including justification for their issuance.
- (8) The floodplain administrator shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency and the State of North Carolina upon request.
- (9) Conditions for Variances:
 - (a) Variances shall not be issued when the variance will make the structure in violation of other Federal, State, or local laws, regulations, or ordinances.
 - (b) Variances shall not be issued within any designated floodway or non-encroachment area if the variance would result in any increase in flood levels during the base flood discharge.
 - (c) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - (d) Variances shall only be issued prior to development permit approval.
 - (e) Variances shall only be issued upon:
 - i) a showing of good and sufficient cause;
 - ii) a determination that failure to grant the variance would result in exceptional hardship; and
 - iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- (10) A variance may be issued for solid waste disposal facilities, hazardous waste management facilities, salvage yards, and chemical storage facilities that are located in Special Flood Hazard Areas provided that all of the following conditions are met.
 - (a) The use serves a critical need in the community.
 - (b) No feasible location exists for the use outside the Special Flood Hazard Area.
 - (c) The reference level of any structure is elevated or floodproofed to at least the regulatory flood protection elevation.

- (d) The use complies with all other applicable Federal, State and local laws.
- (e) The City of Graham has notified the Secretary of the North Carolina Department of Crime Control and Public Safety of its intention to grant a variance at least thirty (30) calendar days prior to granting the variance.

Section 10.371 Provisions for Flood Hazard Reduction

GENERAL STANDARDS. In all Special Flood Hazard Areas the following provisions are required:

- (1) All new construction and substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse, and lateral movement of the structure.
- (2) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- (3) All new construction and substantial improvements shall be constructed by methods and practices that minimize flood damages.
- (4) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. These include, but are not limited to, HVAC equipment, water softener units, bath/kitchen fixtures, ductwork, electric/gas meter panels/boxes, utility/cable boxes, appliances (washers, dryers, refrigerators, freezers, etc.), hot water heaters, and electric outlets/switches.
- (5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- (6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into flood waters.
- (7) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- (8) Any alteration, repair, reconstruction, or improvements to a structure, which is in compliance with the provisions of this ordinance, shall meet the requirements of "new construction" as contained in this ordinance.
- (9) Nothing in this ordinance shall prevent the repair, reconstruction, or replacement of a building or structure existing on the effective date of this ordinance and located totally or partially within the floodway, non-encroachment area, or stream setback, provided there is no additional encroachment below the regulatory flood protection elevation in the floodway, non-encroachment area, or stream setback, and provided that such repair, reconstruction, or replacement meets all of the other requirements of this ordinance.
- (10) New solid waste disposal facilities and sites, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted, except by variance as specified in Section 10.370 (10) of the *City of Graham Development Ordinances*. A structure or tank for chemical or fuel

storage incidental to an allowed use or to the operation of a water treatment plant or wastewater treatment facility may be located in a Special Flood Hazard Area only if the structure or tank is either elevated or floodproofed to at least the regulatory flood protection elevation and certified according to Section 10.367 (3) of the *City of Graham Development Ordinances*.

- (11) All subdivision proposals and other development proposals shall be consistent with the need to minimize flood damage.
- (12) All subdivision proposals and other development proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
- (13) All subdivision proposals and other development proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- (14) All subdivision proposals and other development proposals shall have received all necessary permits from those governmental agencies for which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.

Section 10.372 Specific Standards

In all Special Flood Hazard Areas where Base Flood Elevation (BFE) data has been provided, as set forth in Section 10.365 or Section 10.368 (11 & 12) of the *City of Graham Development Ordinances*, the following provisions, in addition to Section 10.371 of the *City of Graham Development Ordinances*, are required:

- (1) Residential Construction. New construction and substantial improvement of any residential structure (including manufactured homes) shall have the reference level, including basement, elevated no lower than the regulatory flood protection elevation, as defined in Section 10.364 of the *City of Graham Development Ordinances*.
- (2) Non-Residential Construction. New construction and substantial improvement of any commercial, industrial, or other non-residential structure shall have the reference level, including basement, elevated no lower than the regulatory flood protection elevation, as defined in Section 10.364 of the *City of Graham Development Ordinances*. Structures located in A, AE and A1-30 Zones may be floodproofed to the regulatory flood protection elevation in lieu of elevation provided that all areas of the structure, together with attendant utility and sanitary facilities, below the regulatory flood protection elevation are watertight with walls substantially impermeable to the passage of water, using structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. For AO Zones, the floodproofing elevation shall be in accordance with Section 10.376 of the *City of Graham Development Ordinances*. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the Floodplain Administrator as set forth in Section 10.367 (3) of the *City of Graham Development Ordinances*, along with the operational and maintenance plans.
- (3) Manufactured Homes.
 - (a) New or replacement manufactured homes shall be elevated so that the reference level of the manufactured home is no lower than the regulatory flood protection elevation, as defined in Section 10.364 of the *City of Graham Development Ordinances*.

- (b) Manufactured homes shall be securely anchored to an adequately anchored foundation to resist flotation, collapse, and lateral movement, either by engineer certification, or in accordance with the most current edition of the State of North Carolina Regulations for Manufactured Homes adopted by the Commissioner of Insurance pursuant to NCGS 143-143.15. Additionally, when the elevation would be met by an elevation of the chassis thirty-six (36) inches or less above the grade at the site, the chassis shall be supported by reinforced piers or engineered foundation. When the elevation of the chassis is above thirty-six (36) inches in height, an engineering certification is required.
 - (c) All enclosures or skirting below the lowest floor shall meet the requirements of Section 10.372 (4) (a, b, & c) of the *City of Graham Development Ordinances*..
 - (d) An evacuation plan must be developed for evacuation of all residents of all new, substantially improved or substantially damaged manufactured home parks or subdivisions located within flood prone areas. This plan shall be filed with and approved by the floodplain administrator and the local Emergency Management coordinator.
- (4) Elevated Buildings. Fully enclosed area, of new construction and substantially improved structures, which is below the lowest floor:
- (a) shall not be designed or used for human habitation, but shall only be used for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator). The interior portion of such enclosed area shall not be finished or partitioned into separate rooms, except to enclose storage areas;
 - (b) shall be constructed entirely of flood resistant materials below the regulatory flood protection elevation;
 - (c) shall include, in Zones A, AO, AE, and A1-30, flood openings to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a professional engineer or architect or meet or exceed the following minimum design criteria;
 - i) A minimum of two flood openings on different sides of each enclosed area subject to flooding;
 - ii) The total net area of all flood openings must be at least one (1) square inch for each square foot of enclosed area subject to flooding;
 - iii) If a building has more than one enclosed area, each enclosed area must have flood openings to allow floodwaters to automatically enter and exit;
 - iv) The bottom of all required flood openings shall be no higher than one (1) foot above the adjacent grade;
 - v) Flood openings may be equipped with screens, louvers, or other coverings or devices, provided they permit the automatic flow of floodwaters in both directions; and

- vi) Enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require flood openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires flood openings as outlined above.

(5) Additions/Improvements.

- (a) Additions and/or improvements to pre-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are:
 - i) not a substantial improvement, the addition and/or improvements must be designed to minimize flood damages and must not be any more non-conforming than the existing structure.
 - ii) a substantial improvement, both the existing structure and the addition and/or improvements must comply with the standards for new construction.
- (b) Additions to post-FIRM structures with no modifications to the existing structure other than a standard door in the common wall shall require only the addition to comply with the standards for new construction.
- (c) Additions and/or improvements to post-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are:
 - i) not a substantial improvement, the addition and/or improvements only must comply with the standards for new construction.
 - ii) a substantial improvement, both the existing structure and the addition and/or improvements must comply with the standards for new construction.

(6) Recreational Vehicles. Recreational vehicles shall either:

- (a) be on site for fewer than 180 consecutive days and be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities, and has no permanently attached additions); or
- (b) meet all the requirements for new construction.

(7) Temporary Non-Residential Structures. Prior to the issuance of a floodplain development permit for a temporary structure, the applicant must submit to the floodplain administrator a plan for the removal of such structure(s) in the event of a hurricane, flash flood or other type of flood warning notification. The following information shall be submitted in writing to the floodplain administrator for review and written approval;

- (a) a specified time period for which the temporary use will be permitted. Time specified may not exceed three months, renewable up to one year;

- (b) the name, address, and phone number of the individual responsible for the removal of the temporary structure;
 - (c) the time frame prior to the event at which a structure will be removed (i.e., minimum of 72 hours before landfall of a hurricane or immediately upon flood warning notification);
 - (d) a copy of the contract or other suitable instrument with the entity responsible for physical removal of the structure; and
 - (e) designation, accompanied by documentation, of a location outside the Special Flood Hazard Area, to which the temporary structure will be moved.
- (8) Accessory Structures. When accessory structures (sheds, detached garages, etc.) are to be placed within a Special Flood Hazard Area, the following criteria shall be met:
- (a) Accessory structures shall not be used for human habitation (including working, sleeping, living, cooking or restroom areas);
 - (b) Accessory structures shall not be temperature-controlled;
 - (c) Accessory structures shall be designed to have low flood damage potential;
 - (d) Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;
 - (e) Accessory structures shall be firmly anchored in accordance with Section 10.371 (1) of the *City of Graham Development Ordinances*;
 - (f) All service facilities such as electrical shall be installed in accordance with Section 10.371 (4) of the *City of Graham Development Ordinances*; and
 - (g) Flood openings to facilitate automatic equalization of hydrostatic flood forces shall be provided below regulatory flood protection elevation in conformance with Section 10.372 (4) (c) of the *City of Graham Development Ordinances*.

An accessory structure with a footprint less than 150 square feet that satisfies the criteria outlined above does not require an elevation or floodproofing certificate. Elevation or floodproofing certifications are required for all other accessory structures in accordance with Section 10.367 (3) of the *City of Graham Development Ordinances*.

(Section 10.372 amended by City Council 11/7/2006)

Section 10.373 Standards for Floodplains Without Established Base Flood Elevations

Within the Special Flood Hazard Areas designated as Approximate Zone A and established in Section 10.365 (b) of the *City of Graham Development Ordinances*, where no Base Flood Elevation (BFE) data has been provided by FEMA, the following provisions, in addition to Section 10.371 and Section 10.372 of the *City of Graham Development Ordinances*, shall apply:

- (1) No encroachments, including fill, new construction, substantial improvements or new development shall be permitted within a distance of twenty (20) feet each side from top of bank or five times the width of the stream, whichever is greater, unless certification with supporting technical data by a registered professional engineer is provided demonstrating that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- (2) The BFE used in determining the regulatory flood protection elevation shall be determined based on one of the following criteria set in priority order:
 - (a) If Base Flood Elevation (BFE) data is available from other sources, all new construction and substantial improvements within such areas shall also comply with all applicable provisions of this ordinance and shall be elevated or floodproofed in accordance with standards in Section 10.368 (11 & 12) of the *City of Graham Development Ordinances*.
 - (b) All subdivision, manufactured home park and other development proposals shall provide Base Flood Elevation (BFE) data if development is greater than five (5) acres or has more than fifty (50) lots/manufactured home sites. Such Base Flood Elevation (BFE) data shall be adopted by reference per Section 10.365 (b) of the *City of Graham Development Ordinances* to be utilized in implementing this ordinance.
 - (c) When Base Flood Elevation (BFE) data is not available from a Federal, State, or other source as outlined above, the reference level shall be elevated to or above the regulatory flood protection elevation, as defined in Section 10.364 of the *City of Graham Development Ordinances*.

Section 10.374 Standards for Riverine Floodplains with BFE but Without Established Floodways or Non-Encroachment Areas

Along rivers and streams where BFE data is provided but neither floodway nor non-encroachment areas are identified for a Special Flood Hazard Area on the FIRM or in the FIS report, the following requirements shall apply to all development within such areas:

- (1) Standards outlined in Section 10.371 and Section 10.372 of the *City of Graham Development Ordinances*; and
- (2) Until a regulatory floodway or non-encroachment area is designated, no encroachments, including fill, new construction, substantial improvements, or other development, shall be permitted unless certification with supporting technical data by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

Section 10.375 Floodways and Non-Encroachment Areas

Areas designated as floodways or non-encroachment areas are located within the Special Flood Hazard Areas established in Section 10.365 (b) of the *City of Graham Development Ordinances*. The floodways and non-encroachment areas are extremely hazardous areas due to the velocity of floodwaters that have erosion potential and carry debris and potential projectiles. The following provisions, in addition to standards outlined in Section 10.371 and Section 10.372 of the *City of Graham Development Ordinances*, shall apply to all development within such areas:

- (1) No encroachments, including fill, new construction, substantial improvements and other developments shall be permitted unless it has been demonstrated that:
 - (a) the proposed encroachment would not result in any increase in the flood levels during the occurrence of the base flood, based on hydrologic and hydraulic analyses performed in accordance with standard engineering practice and presented to the floodplain administrator prior to issuance of floodplain development permit, or
 - (b) a Conditional Letter of Map Revision (CLOMR) has been approved by FEMA. A Letter of Map Revision (LOMR) must also be obtained upon completion of the proposed encroachment.
- (2) If Section 10.375 (1) of the *City of Graham Development Ordinances* is satisfied, all development shall comply with all applicable flood hazard reduction provisions of this ordinance.
- (3) No manufactured homes shall be permitted, except replacement manufactured homes in an existing manufactured home park or subdivision, provided the following provisions are met:
 - (a) the anchoring and the elevation standards of Section 10.372 (3) of the *City of Graham Development Ordinances*; and
 - (b) the no encroachment standard of Section 10.375 (1) of the *City of Graham Development Ordinances*.

(Section 10.375 amended by City Council 11/7/2006)

Section 10.376 Standards for Areas of Shallow Flooding (Zone AO)

Located within the Special Flood Hazard Areas established in Section 10.365 (b) of the *City of Graham Development Ordinances*, are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate. In addition to Section 10.371 of the *City of Graham Development Ordinances*, all new construction and substantial improvements shall meet the following requirements:

- (1) The reference level shall be elevated at least as high as the depth number specified on the Flood Insurance Rate Map (FIRM), in feet, plus a freeboard of two (2) feet, above the highest adjacent grade; or at least two feet above the highest adjacent grade plus a freeboard of two (2) feet if no depth number is specified.
- (2) Non-residential structures may, in lieu of elevation, be floodproofed to the same level as required in Section 10.376 (1) of the *City of Graham Development Ordinances* so that the structure, together with attendant utility and sanitary facilities, below that level shall be watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Certification is required as per Section 10.367 (3) and Section 10.372 (2) of the *City of Graham Development Ordinances*.
- (3) Adequate drainage paths shall be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

**Section 10.377 Legal Status Provisions, Effect on Rights and Liabilities Under the Existing
Flood Damage Prevention Ordinance**

This ordinance in part comes forward by re-enactment of some of the provisions of the flood damage prevention ordinance enacted August 5, 1980 as amended, and it is not the intention to repeal but rather to re-enact and continue to enforce without interruption of such existing provisions, so that all rights and liabilities that have accrued thereunder are reserved and may be enforced. The enactment of this ordinance shall not affect any action, suit or proceeding instituted or pending. All provisions of the flood damage prevention ordinance of the City of Graham enacted on August 5, 1980, as amended, which are not reenacted herein are repealed.

Section 10.378 Effect Upon Outstanding Building Permits

Nothing herein contained shall require any change in the plans, construction, size, or designated use of any development or any part thereof for which a building permit has been granted by the Chief Building Inspector before the time of passage of this ordinance; provided, however, that when construction is not begun under such outstanding permit within a period of six (6) months subsequent to the date of issuance of the outstanding permit, construction or use shall be in conformity with the provisions of this ordinance.

Sections 10.379 – 10.389 Reserved

ARTICLE IX. FLOOD DAMAGE PREVENTION ORDINANCE

ARTICLE 9.1 STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND OBJECTIVES.

SECTION 10.361 STATUTORY AUTHORIZATION.

Municipal: The Legislature of the State of North Carolina has in Part 6, Article 21 of Chapter 143; Parts 3, 5, and 8 of Article 19 of Chapter 160A; and Article 8 of Chapter 160A of the North Carolina General Statutes, delegated to local governmental units the responsibility to adopt regulations designed to promote the public health, safety, and general welfare.

County: The Legislature of the State of North Carolina has in Part 6, Article 21 of Chapter 143; Parts 3 and 4 of Article 18 of Chapter 153A; and Part 121, Article 6 of Chapter 153A of the North Carolina General Statutes, delegated to local governmental units the responsibility to adopt regulations designed to promote the public health, safety, and general welfare.

Therefore, the City Council of the City of Graham, North Carolina, does ordain as follows:

SECTION 10.362 FINDINGS OF FACT.

- (1) The flood prone areas within the jurisdiction of the City of Graham are subject to periodic inundation which results in loss of life, property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures of flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
- (2) These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities and by the occupancy in flood prone areas of uses vulnerable to floods or other hazards.

SECTION 10.363 STATEMENT OF PURPOSE.

It is the purpose of this ordinance to promote public health, safety, and general welfare and to minimize public and private losses due to flood conditions within flood prone areas by provisions designed to:

- (1) Restrict or prohibit uses that are dangerous to health, safety, and property due to water or erosion hazards or that result in damaging increases in erosion, flood heights or velocities;
- (2) Require that uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at the time of initial construction;
- (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters;
- (4) Control filling, grading, dredging, and all other development that may increase erosion or flood damage; and
- (5) Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or which may increase flood hazards to other lands.

SECTION 10.364 OBJECTIVES.

The objectives of this ordinance are to:

- (1) Protect human life, safety, and health;

- (2) Minimize expenditure of public money for costly flood control projects;
- (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) Minimize prolonged business losses and interruptions;
- (5) Minimize damage to public facilities and utilities (i.e. water and gas mains, electric, telephone, cable and sewer lines, streets, and bridges) that are located in flood prone areas;
- (6) Minimize damage to private and public property due to flooding;
- (7) Make flood insurance available to the community through the National Flood Insurance Program;
- (8) Maintain the natural and beneficial functions of floodplains;
- (9) Help maintain a stable tax base by providing for the sound use and development of flood prone areas; and
- (10) Ensure that potential buyers are aware that property is in a Special Flood Hazard Area.

ARTICLE 9.2 DEFINITIONS.

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance it's most reasonable application.

"Accessory Structure (Appurtenant Structure)" means a structure located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Garages, carports and storage sheds are common urban accessory structures. Pole barns, hay sheds and the like qualify as accessory structures on farms, and may or may not be located on the same parcel as the farm dwelling or shop building.

"Addition (to an existing building)" means an extension or increase in the floor area or height of a building or structure.

"Alteration of a watercourse" means a dam, impoundment, channel relocation, change in channel alignment, channelization, or change in cross-sectional area of the channel or the channel capacity, or any other form of modification which may alter, impede, retard or change the direction and/or velocity of the riverine flow of water during conditions of the base flood.

"Appeal" means a request for a review of the Floodplain Administrator's interpretation of any provision of this ordinance.

"Area of Shallow Flooding" means a designated Zone AO on a community's Flood Insurance Rate Map (FIRM) with base flood depths determined to be from one (1) to three (3) feet. These areas are located where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

"Area of Special Flood Hazard" see "Special Flood Hazard Area (SFHA)".

"Base Flood" means the flood having a one (1) percent chance of being equaled or exceeded in any given year.

"Base Flood Elevation (BFE)" means a determination of the water surface elevations of the base flood as published in the Flood Insurance Study. When the BFE has not been provided in a "Special Flood Hazard Area", it may be obtained from engineering studies available from a Federal, State, or other source using FEMA approved engineering methodologies. This elevation, when combined with the "Freeboard", establishes the "Regulatory Flood Protection Elevation".

"Basement" means any area of the building having its floor subgrade (below ground level) on all sides.

"Building" see "Structure".

"Chemical Storage Facility" means a building, portion of a building, or exterior area adjacent to a building used for the storage

of any chemical or chemically reactive products.

“Design Flood”: See “Regulatory Flood Protection Elevation.”

“Development” means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.

“Development Activity” means any activity defined as Development which will necessitate a Floodplain Development Permit. This includes buildings, structures, and non-structural items, including (but not limited to) fill, bulkheads, piers, pools, docks, landings, ramps, and erosion control/stabilization measures.

“Digital Flood Insurance Rate Map (DFIRM)” means the digital official map of a community, issued by the Federal Emergency Management Agency (FEMA), on which both the Special Flood Hazard Areas and the risk premium zones applicable to the community are delineated.

“Disposal” means, as defined in NCGS 130A-290(a)(6), the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste into or on any land or water so that the solid waste or any constituent part of the solid waste may enter the environment or be emitted into the air or discharged into any waters, including groundwaters.

“Elevated Building” means a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

“Encroachment” means the advance or infringement of uses, fill, excavation, buildings, structures or development into a special flood hazard area, which may impede or alter the flow capacity of a floodplain.

“Existing building and existing structure” means any building and/or structure for which the “start of construction” commenced before the 5th day of August, 1980.

“Existing Manufactured Home Park or Manufactured Home Subdivision” means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) was completed before the initial effective date of the floodplain management regulations adopted by the community.

“Flood” or “Flooding” means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (a) The overflow of inland or tidal waters; and/or
- (b) The unusual and rapid accumulation or runoff of surface waters from any source.

“Flood Boundary and Floodway Map (FBFM)” means an official map of a community, issued by the FEMA, on which the Special Flood Hazard Areas and the floodways are delineated. This official map is a supplement to and shall be used in conjunction with the Flood Insurance Rate Map (FIRM).

“Flood Hazard Boundary Map (FHBM)” means an official map of a community, issued by the FEMA, where the boundaries of the Special Flood Hazard Areas have been defined as Zone A.

“Flood Insurance” means the insurance coverage provided under the National Flood Insurance Program.

“Flood Insurance Rate Map (FIRM)” means an official map of a community, issued by the FEMA, on which both the Special Flood Hazard Areas and the risk premium zones applicable to the community are delineated. (see also DFIRM)

“Flood Insurance Study (FIS)” means an examination, evaluation, and determination of flood hazards, corresponding water surface elevations (if appropriate), flood hazard risk zones, and other flood data in a community issued by the FEMA. The Flood Insurance Study report includes Flood Insurance Rate Maps (FIRMs) and Flood Boundary and Floodway Maps (FBFMs), if published.

“Flood Prone Area” see “Floodplain”

“Flood Zone” means a geographical area shown on a Flood Hazard Boundary Map or Flood Insurance Rate Map that reflects the severity or type of flooding in the area.

“Floodplain” means any land area susceptible to being inundated by water from any source.

“Floodplain Administrator” is the individual appointed to administer and enforce the floodplain management regulations.

“Floodplain Development Permit” means any type of permit that is required in conformance with the provisions of this ordinance, prior to the commencement of any development activity.

“Floodplain Management” means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including, but not limited to, emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

“Floodplain Management Regulations” means this ordinance and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, and other applications of police power. This term describes federal, state or local regulations, in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

“Floodproofing” means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitation facilities, structures, and their contents.

“Flood-resistant material” means any building product [material, component or system] capable of withstanding direct and prolonged contact (minimum 72 hours) with floodwaters without sustaining damage that requires more than low-cost cosmetic repair. Any material that is water-soluble or is not resistant to alkali or acid in water, including normal adhesives for above-grade use, is not flood-resistant. Pressure-treated lumber or naturally decay-resistant lumbers are acceptable flooring materials. Sheet-type flooring coverings that restrict evaporation from below and materials that are impervious, but dimensionally unstable are not acceptable. Materials that absorb or retain water excessively after submergence are not flood-resistant. Please refer to Technical Bulletin 2, *Flood Damage-Resistant Materials Requirements*, and available from the FEMA. Class 4 and 5 materials, referenced therein, are acceptable flood-resistant materials.

“Floodway” means the channel of a river or other watercourse, including the area above a bridge or culvert when applicable, and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.

“Floodway encroachment analysis” means an engineering analysis of the impact that a proposed encroachment into a floodway or non-encroachment area is expected to have on the floodway boundaries and flood levels during the occurrence of the base flood discharge. The evaluation shall be prepared by a qualified North Carolina licensed engineer using standard engineering methods and models.

“Freeboard” means the height added to the BFE to account for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, blockage of bridge or culvert openings, and the hydrological effect of urbanization of the watershed. The BFE plus the freeboard establishes the “Regulatory Flood Protection Elevation”.

“Functionally Dependent Facility” means a facility which cannot be used for its intended purpose unless it is located in close proximity to water, limited to a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, or ship repair. The term does not include long-term storage, manufacture, sales, or service facilities.

“Hazardous Waste Management Facility” means, as defined in NCGS 130A, Article 9, a facility for the collection, storage, processing, treatment, recycling, recovery, or disposal of hazardous waste.

“Highest Adjacent Grade (HAG)” means the highest natural elevation of the ground surface, prior to construction, immediately next to the proposed walls of the structure.

“Historic Structure” means any structure that is:

- (a) Listed individually in the National Register of Historic Places (a listing maintained by the US Department of Interior) or preliminarily determined by the Secretary of Interior as meeting the requirements for individual listing on the National Register;
- (b) Certified or preliminarily determined by the Secretary of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (c) Individually listed on a local inventory of historic landmarks in communities with a “Certified Local Government (CLG) Program”; or
- (d) Certified as contributing to the historical significance of a historic district designated by a community with a “Certified Local Government (CLG) Program.”

Certified Local Government (CLG) Programs are approved by the US Department of the Interior in cooperation with the North Carolina Department of Cultural Resources through the State Historic Preservation Officer as having met the requirements of the National Historic Preservation Act of 1966 as amended in 1980.

“Letter of Map Change (LOMC)” means an official determination issued by FEMA that amends or revises an effective Flood Insurance Rate Map or Flood Insurance Study. Letters of Map Change include:

- (a) Letter of Map Amendment (LOMA): An official amendment, by letter, to an effective National Flood Insurance Program map. A LOMA is based on technical data showing that a property had been inadvertently mapped as being in the floodplain, but is actually on natural high ground above the base flood elevation. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property, portion of a property, or structure is not located in a special flood hazard area.
- (b) Letter of Map Revision (LOMR): A revision based on technical data that may show changes to flood zones, flood elevations, special flood hazard area boundaries and floodway delineations, and other planimetric features.
- (c) Letter of Map Revision Based on Fill (LOMR-F): A determination that a structure or parcel of land has been elevated by fill above the BFE and is, therefore, no longer located within the special flood hazard area. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community’s floodplain management regulations.
- (d) Conditional Letter of Map Revision (CLOMR): A formal review and comment as to whether a proposed project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective Flood Insurance Rate Map or Flood Insurance Study; upon submission and approval of certified as-built documentation, a Letter of Map Revision may be issued by FEMA to revise the effective FIRM.

“Light Duty Truck” means any motor vehicle rated at 8,500 pounds Gross Vehicular Weight Rating or less which has a vehicular curb weight of 6,000 pounds or less and which has a basic vehicle frontal area of 45 square feet or less as defined in 40 CFR 86.082-2 and is:

- (a) Designed primarily for purposes of transportation of property or is a derivation of such a vehicle, or
- (b) Designed primarily for transportation of persons and has a capacity of more than 12 persons; or
- (c) Available with special features enabling off-street or off-highway operation and use.

“Lowest Adjacent Grade (LAG)” means the elevation of the ground, sidewalk or patio slab immediately next to the building, or deck support, after completion of the building.

“Lowest Floor” means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or limited storage in an area other than a basement area is not considered a building’s lowest floor, provided that such an enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

“Manufactured Home” means a structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term “manufactured home” does not include a “recreational vehicle”.

“Manufactured Home Park or Subdivision” means a parcel (or contiguous parcels) of land divided into two or more

manufactured home lots for rent or sale.

“Market Value” means the building value, not including the land value and that of any accessory structures or other improvements on the lot. Market value may be established by independent certified appraisal; replacement cost depreciated for age of building and quality of construction (Actual Cash Value); or adjusted tax assessed values.

“New Construction” means structures for which the “start of construction” commenced on or after the effective date of the initial floodplain management regulations and includes any subsequent improvements to such structures.

“Non-Conversion Agreement” means a document stating that the owner will not convert or alter what has been constructed and approved. Violation of the agreement is considered a violation of the ordinance and, therefore, subject to the same enforcement procedures and penalties. The agreement must be filed with the recorded deed for the property. The agreement must show the clerk’s or recorder’s stamps and/or notations that the filing has been completed.

“Non-Encroachment Area (NEA)” means the channel of a river or other watercourse, including the area above a bridge or culvert when applicable, and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot as designated in the Flood Insurance Study report.

“Post-FIRM” means construction or other development for which the “start of construction” occurred on or after the 5th of August, 1980, the effective date of the initial Flood Insurance Rate Map.

“Pre-FIRM” means construction or other development for which the “start of construction” occurred before the 5th of August, 1980, the effective date of the initial Flood Insurance Rate Map.

“Principally Above Ground” means that at least 51% of the actual cash value of the structure is above ground.

“Public Safety” and/or “Nuisance” means anything which is injurious to the safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

“Recreational Vehicle (RV)” means a vehicle, which is:

- (a) Built on a single chassis;
- (b) 400 square feet or less when measured at the largest horizontal projection;
- (c) Designed to be self-propelled or permanently towable by a light duty truck;
- (d) Designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use, and
- (e) Is fully licensed and ready for highway use.

“Reference Level” is the top of the lowest floor for structures within Special Flood Hazard Areas designated as Zones A, AE, AH, AO, A99. The reference level is the bottom of the lowest horizontal structural member of the lowest floor for structures within Special Flood Hazard Areas designated as Zone VE.

(Alternative acceptable language for Reference Level) “Reference Level” is the bottom of the lowest horizontal structural member of the lowest floor for structures within all Special Flood Hazard Areas.

“Regulatory Flood Protection Elevation” means the “Base Flood Elevation” plus the “Freeboard”. In “Special Flood Hazard Areas” where Base Flood Elevations (BFEs) have been determined, this elevation shall be the BFE *plus* two (2) feet *freeboard*. In “Special Flood Hazard Areas” where no BFE has been established, this elevation shall be at least two (2) feet above the highest adjacent grade.

“Remedy a Violation” means to bring the structure or other development into compliance with state and community floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing federal financial exposure with regard to the structure or other development.

“Riverine” means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

“Salvage Yard” means any non-residential property used for the storage, collection, and/or recycling of any type of equipment, and including but not limited to vehicles, appliances and related machinery.

“Solid Waste Disposal Facility” means any facility involved in the disposal of solid waste, as defined in NCGS 130A-290(a)(35).

“Solid Waste Disposal Site” means, as defined in NCGS 130A-290(a)(36), any place at which solid wastes are disposed of by incineration, sanitary landfill, or any other method.

“Special Flood Hazard Area (SFHA)” means the land in the floodplain subject to a one percent (1%) or greater chance of being flooded in any given year, as determined in Article 3, Section B of this ordinance.

“Start of Construction” includes substantial improvement, and means the date the building permit was issued provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

“Structure” means a walled and roofed building, a manufactured home, or a gas, liquid, or liquefied gas storage tank that is principally above ground.

“Substantial Damage” means damage of any origin sustained by a structure during any one-year period whereby the cost of restoring the structure to it's before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. See definition of “substantial improvement”.

“Substantial Improvement” means any combination of repairs, reconstruction, rehabilitation, addition, or other improvement of a structure, taking place during any one-year period for which the cost equals or exceeds 50 percent of the market value of the structure before the “start of construction” of the improvement. This term includes structures which have incurred “substantial damage”, regardless of the actual repair work performed. The term does not, however, include either:

- (a) Any correction of existing violations of state or community health, sanitary, or safety code specifications which have been identified by the community code enforcement official and which are the minimum necessary to assure safe living conditions; or
- (b) Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure and the alteration is approved by variance issued pursuant to Article 4 Section E of this ordinance.

“Technical Bulletin and Technical Fact Sheet” means a FEMA publication that provides guidance concerning the building performance standards of the NFIP, which are contained in Title 44 of the U.S. Code of Federal Regulations at Section 60.3. The bulletins and fact sheets are intended for use primarily by State and local officials responsible for interpreting and enforcing NFIP regulations and by members of the development community, such as design professionals and builders. New bulletins, as well as updates of existing bulletins, are issued periodically as needed. The bulletins do not create regulations; rather they provide specific guidance for complying with the minimum requirements of existing NFIP regulations.

It should be noted that Technical Bulletins and Technical Fact Sheets provide guidance on the minimum requirements of the NFIP regulations. State or community requirements that exceed those of the NFIP take precedence. Design professionals should contact the community officials to determine whether more restrictive State or local regulations apply to the building or site in question. All applicable standards of the State or local building code must also be met for any building in a flood hazard area.

“Temperature Controlled” means having the temperature regulated by a heating and/or cooling system, built-in or appliance.

“Variance” is a grant of relief from the requirements of this ordinance.

“Violation” means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in Articles 4 and 5 is presumed to be in violation until such time as that documentation is provided.

“Water Surface Elevation (WSE)” means the height, in relation to NAVD 1988, of floods of various magnitudes and frequencies in the floodplains of riverine areas.

“Watercourse” means a lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

ARTICLE 9.3 GENERAL PROVISIONS.

SECTION 10.365 LANDS TO WHICH THIS ORDINANCE APPLIES.

This ordinance shall apply to all Special Flood Hazard Areas within the jurisdiction, *including Extra-Territorial Jurisdictions (ETJs),[if applicable]* of the City of Graham.

SECTION 10.366 BASIS FOR ESTABLISHING THE SPECIAL FLOOD HAZARD AREAS.

The Special Flood Hazard Areas are those identified under the Cooperating Technical State (CTS) agreement between the State of North Carolina and FEMA in its FIS dated November 17, 2017 for Alamance County and associated DFIRM panels, including any digital data developed as part of the FIS, which are adopted by reference and declared a part of this ordinance. Future revisions to the FIS and DFIRM panels that do not change flood hazard data within the jurisdictional authority of the City of Graham are also adopted by reference and declared a part of this ordinance. Subsequent Letter of Map Revisions (LOMRs) and/or Physical Map Revisions (PMRs) shall be adopted within 3 months.

SECTION 10.367 ESTABLISHMENT OF FLOODPLAIN DEVELOPMENT PERMIT.

A Floodplain Development Permit shall be required in conformance with the provisions of this ordinance prior to the commencement of any development activities within Special Flood Hazard Areas determined in accordance with the provisions of Article 3, Section B of this ordinance.

SECTION 10.368 COMPLIANCE.

No structure or land shall hereafter be located, extended, converted, altered, or developed in any way without full compliance with the terms of this ordinance and other applicable regulations.

SECTION 10.369 ABROGATION AND GREATER RESTRICTIONS.

This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

SECTION 10.370 INTERPRETATION.

In the interpretation and application of this ordinance, all provisions shall be:

- (a) Considered as minimum requirements;
- (b) Liberally construed in favor of the governing body; and
- (c) Deemed neither to limit nor repeal any other powers granted under State statutes.

SECTION 10.371 WARNING AND DISCLAIMER OF LIABILITY.

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur. Actual flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the Special Flood Hazard Areas or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the City of Graham or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

SECTION 10.372 PENALTIES FOR VIOLATION.

Violation of the provisions of this ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a Class 1 misdemeanor pursuant to NC G.S. § 143-215.58. . Any person who violates this ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$100.00 or imprisoned for not more than thirty (30) days, or both. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the City of Graham from taking such other lawful action as is necessary to prevent or remedy any violation.

ARTICLE 9.4 ADMINISTRATION.

SECTION 10.373 DESIGNATION OF FLOODPLAIN ADMINISTRATOR.

The Planning Director, hereinafter referred to as the “Floodplain Administrator”, is hereby appointed to administer and implement the provisions of this ordinance. In instances where the Floodplain Administrator receives assistance from others to complete tasks to administer and implement this ordinance, the Floodplain Administrator shall be responsible for the coordination and community’s overall compliance with the National Flood Insurance Program and the provisions of this ordinance.

SECTION 10.374 FLOODPLAIN DEVELOPMENT APPLICATION, PERMIT AND CERTIFICATION REQUIREMENTS.

- (1) **Application Requirements.** Application for a Floodplain Development Permit shall be made to the Floodplain Administrator prior to any development activities located within Special Flood Hazard Areas. The following items shall be presented to the Floodplain Administrator to apply for a floodplain development permit:
 - (a) A plot plan drawn to scale which shall include, but shall not be limited to, the following specific details of the proposed floodplain development:
 - (i) The nature, location, dimensions, and elevations of the area of development/disturbance; existing and proposed structures, utility systems, grading/pavement areas, fill materials, storage areas, drainage facilities, and other development;
 - (ii) The boundary of the Special Flood Hazard Area as delineated on the FIRM or other flood map as determined in Article 3, Section B, or a statement that the entire lot is within the Special Flood Hazard Area;
 - (iii) Flood zone(s) designation of the proposed development area as determined on the FIRM or other flood map as determined in Article 3, Section B;

- (iv) The boundary of the floodway(s) or non-encroachment area(s) as determined in Article 3, Section B;
 - (v) The Base Flood Elevation (BFE) where provided as set forth in Article 3, Section B; Article 4, Section C; or Article 5, Section D;
 - (vi) The old and new location of any watercourse that will be altered or relocated as a result of proposed development; and
 - (vii) *The certification of the plot plan by a registered land surveyor or professional engineer. (OPTIONAL)*
- (b) Proposed elevation, and method thereof, of all development within a Special Flood Hazard Area including but not limited to:
- (i) Elevation in relation to NAVD 1988 of the proposed reference level (including basement) of all structures;
 - (ii) Elevation in relation to NAVD 1988 to which any non-residential structure in Zones A, AE, AH, AO, A99 will be floodproofed; and
 - (iii) Elevation in relation to NAVD 1988 to which any proposed utility systems will be elevated or floodproofed.
- (c) If floodproofing, a Floodproofing Certificate (FEMA Form 086-0-34) with supporting data, an operational plan, and an inspection and maintenance plan that include, but are not limited to, installation, exercise, and maintenance of floodproofing measures.
- (d) A Foundation Plan, drawn to scale, which shall include details of the proposed foundation system to ensure all provisions of this ordinance are met. These details include but are not limited to:
- (i) The proposed method of elevation, if applicable (i.e., fill, solid foundation perimeter wall, solid backfilled foundation, open foundation on columns/posts/piers/piles/shear walls); and
 - (ii) Openings to facilitate automatic equalization of hydrostatic flood forces on walls in accordance with Article 5, Section B(4)(d) when solid foundation perimeter walls are used in Zones A, AE, AH, AO, A99.
- (e) Usage details of any enclosed areas below the lowest floor.
- (f) Plans and/or details for the protection of public utilities and facilities such as sewer, gas, electrical, and water systems to be located and constructed to minimize flood damage.
- (g) Certification that all other Local, State and Federal permits required prior to floodplain development permit issuance have been received.
- (h) Documentation for placement of Recreational Vehicles and/or Temporary Structures, when applicable, to ensure that the provisions of Article 5, Section B, subsections (6) and (7) of this ordinance are met.
- (i) A description of proposed watercourse alteration or relocation, when applicable, including an engineering report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map (if not shown on plot plan) showing the location of the proposed watercourse alteration or relocation.
- (2) **Permit Requirements.** The Floodplain Development Permit shall include, but not be limited to:
- (a) A complete description of all the development to be permitted under the floodplain development permit (e.g. house, garage, pool, septic, bulkhead, cabana, pier, bridge, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials, etc.).

- (b) The Special Flood Hazard Area determination for the proposed development in accordance with available data specified in Article 3, Section B.
- (c) The Regulatory Flood Protection Elevation required for the reference level and all attendant utilities.
- (d) The Regulatory Flood Protection Elevation required for the protection of all public utilities.
- (e) All certification submittal requirements with timelines.
- (f) A statement that no fill material or other development shall encroach into the floodway or non-encroachment area of any watercourse unless the requirements of Article 5, Section F have been met.
- (g) The flood openings requirements, if in Zones A, AE, AH, AO, A99.
- (h) *Limitations of below BFE enclosure uses (if applicable). (i.e., parking, building access and limited storage only).*
- (i) *A statement, that all materials below BFE/RFPE must be flood resistant materials.*

(3) **Certification Requirements.**

(a) Elevation Certificates

- (i) *An Elevation Certificate (FEMA Form 086-0-33) is required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the elevation of the reference level, in relation to NAVD 1988. The Floodplain Administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder prior to the beginning of construction. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit.*
- (ii) *An Elevation Certificate (FEMA Form 086-0-33) is **recommended** after the reference level is established. Within seven (7) calendar days of establishment of the reference level elevation, it shall be **an option for** the permit holder to submit to the Floodplain Administrator a certification of the elevation of the reference level, in relation to NAVD 1988. Any work done within the seven (7) day calendar period and prior to submission of the certification shall be at the permit holder's risk. The Floodplain Administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further work being permitted to proceed. Failure to make required corrections shall be cause to issue a stop-work order for the project.*
- (iii) *A final Finished Construction Elevation Certificate (FEMA Form 086-0-33) is required after construction is completed and prior to Certificate of Compliance/Occupancy issuance. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of final as-built construction of the elevation of the reference level and all attendant utilities. The Floodplain Administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to Certificate of Compliance/Occupancy issuance. In some instances, another certification may be required to certify corrected as-built construction. Failure to submit the certification or failure to make required corrections shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy. The Finished Construction Elevation Certificate certifier shall provide at least 2 photographs showing the front and rear of the building taken within 90 days from the date of certification. The photographs must be taken with views confirming the building description and diagram number provided in Section A. To the extent possible, these photographs should show the entire building including foundation. If the building has split-level or multi-level areas, provide at least 2 additional photographs showing side views of the building. In addition, when applicable, provide a photograph of the foundation showing a representative example of the flood openings or vents. All photographs must be in color and measure at least 3" x 3". Digital photographs are acceptable.*

(b) Floodproofing Certificate

- (i) A final Finished Construction Floodproofing Certificate (FEMA Form 086-0-34), with supporting data, an operational plan, and an inspection and maintenance plan are required prior to the issuance of a Certificate of Compliance/Occupancy. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to NAVD 1988. Floodproofing certificate shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. The Floodplain Administrator shall review the certificate data, the operational plan, and the inspection and maintenance plan. Deficiencies detected by such review shall be corrected by the applicant prior to Certificate of Occupancy. Failure to submit the certification or failure to make required corrections shall be cause to deny a Floodplain Development Permit. Failure to construct in accordance with the certified design shall be cause to deny a Certificate of Compliance/Occupancy.
- (c) If a manufactured home is placed within Zones A, AE, AH, AO, A99 and the elevation of the chassis is more than 36 inches in height above grade, an engineered foundation certification is required in accordance with the provisions of Article 5, Section B(3)(b).
- (d) If a watercourse is to be altered or relocated, a description of the extent of watercourse alteration or relocation; a professional engineer's certified report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map showing the location of the proposed watercourse alteration or relocation shall all be submitted by the permit applicant prior to issuance of a floodplain development permit.
- (e) Certification Exemptions. The following structures, if located within Zones A, AE, AH, AO, A99, are exempt from the elevation/floodproofing certification requirements specified in items (a) and (b) of this subsection:
 - (i) Recreational Vehicles meeting requirements of Article 5, Section B(6)(a);
 - (ii) Temporary Structures meeting requirements of Article 5, Section B(7); and
 - (iii) Accessory Structures that are 150 square feet or less or \$3,000 or less and meeting requirements of Article 5, Section B(8).

(4) **Determinations for existing buildings and structures.**

For applications for building permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the Floodplain Administrator, in coordination with the Building Official, shall:

- (a) Estimate the market value, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made;
- (b) Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure;
- (c) Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; and
- (d) Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the NC Building Code and this ordinance is required.

SECTION 10.375 DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR.

The Floodplain Administrator shall perform, but not be limited to, the following duties:

- (1) Review all floodplain development applications and issue permits for all proposed development within Special Flood Hazard Areas to assure that the requirements of this ordinance have been satisfied.
- (2) Review all proposed development within Special Flood Hazard Areas to assure that all necessary local, state and federal permits have been received, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
- (3) Notify adjacent communities and the North Carolina Department of Public Safety, Division of Emergency Management, State Coordinator for the National Flood Insurance Program prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency (FEMA).
- (4) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is maintained.
- (5) Prevent encroachments into floodways and non-encroachment areas unless the certification and flood hazard reduction provisions of Article 5, Section F are met.
- (6) Obtain actual elevation (in relation to NAVD 1988) of the reference level (including basement) and all attendant utilities of all new and substantially improved structures, in accordance with the provisions of Article 4, Section B(3).
- (7) Obtain actual elevation (in relation to NAVD 1988) to which all new and substantially improved structures and utilities have been floodproofed, in accordance with the provisions of Article 4, Section B(3).
- (8) Obtain actual elevation (in relation to NAVD 1988) of all public utilities in accordance with the provisions of Article 4, Section B(3).
- (9) When floodproofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect in accordance with the provisions of Article 4, Section B(3) and Article 5, Section B(2).
- (10) Where interpretation is needed as to the exact location of boundaries of the Special Flood Hazard Areas, floodways, or non-encroachment areas (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.
- (11) When BFE data has not been provided in accordance with the provisions of Article 3, Section B, obtain, review, and reasonably utilize any BFE data, along with floodway data or non-encroachment area data available from a federal, state, or other source, including data developed pursuant to Article 5, Section D(2)(c), in order to administer the provisions of this ordinance.
- (12) When BFE data is provided but no floodway or non-encroachment area data has been provided in accordance with the provisions of Article 3, Section B, obtain, review, and reasonably utilize any floodway data or non-encroachment area data available from a federal, state, or other source in order to administer the provisions of this ordinance.
- (13) *When the lowest floor and the lowest adjacent grade of a structure or the lowest ground elevation of a parcel in a Special Flood Hazard Area is above the BFE, advise the property owner of the option to apply for a Letter of Map Amendment (LOMA) from FEMA. Maintain a copy of the LOMA issued by FEMA in the floodplain development permit file. (OPTIONAL)*
- (14) Permanently maintain all records that pertain to the administration of this ordinance and make these records available for public inspection, recognizing that such information may be subject to the Privacy Act of 1974, as amended.
- (15) Make on-site inspections of work in progress. As the work pursuant to a floodplain development permit progresses, the Floodplain Administrator shall make as many inspections of the work as may be necessary to ensure that the work

is being done according to the provisions of the local ordinance and the terms of the permit. In exercising this power, the Floodplain Administrator has a right, upon presentation of proper credentials, to enter on any premises within the jurisdiction of the community at any reasonable hour for the purposes of inspection or other enforcement action.

- (16) Issue stop-work orders as required. Whenever a building or part thereof is being constructed, reconstructed, altered, or repaired in violation of this ordinance, the Floodplain Administrator may order the work to be immediately stopped. The stop-work order shall be in writing and directed to the person doing or in charge of the work. The stop-work order shall state the specific work to be stopped, the specific reason(s) for the stoppage, and the condition(s) under which the work may be resumed. Violation of a stop-work order constitutes a misdemeanor.
- (17) Revoke floodplain development permits as required. The Floodplain Administrator may revoke and require the return of the floodplain development permit by notifying the permit holder in writing stating the reason(s) for the revocation. Permits shall be revoked for any substantial departure from the approved application, plans, and specifications; for refusal or failure to comply with the requirements of State or local laws; or for false statements or misrepresentations made in securing the permit. Any floodplain development permit mistakenly issued in violation of an applicable State or local law may also be revoked.
- (18) Make periodic inspections throughout the Special Flood Hazard Areas within the jurisdiction of the community. The Floodplain Administrator and each member of his or her inspections department shall have a right, upon presentation of proper credentials, to enter on any premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action.
- (19) Follow through with corrective procedures of Article 4, Section D.
- (20) Review, provide input, and make recommendations for variance requests.
- (21) Maintain a current map repository to include, but not limited to, historical and effective FIS Report, historical and effective FIRM and other official flood maps and studies adopted in accordance with the provisions of Article 3, Section B of this ordinance, including any revisions thereto including Letters of Map Change, issued by FEMA. Notify State and FEMA of mapping needs.
- (22) Coordinate revisions to FIS reports and FIRMs, including Letters of Map Revision Based on Fill (LOMR-Fs) and Letters of Map Revision (LOMRs).

SECTION 10.376 CORRECTIVE PROCEDURES.

- (1) Violations to be corrected: When the Floodplain Administrator finds violations of applicable state and local laws; it shall be his or her duty to notify the owner or occupant of the building of the violation. The owner or occupant shall immediately remedy each of the violations of law cited in such notification.
- (2) Actions in Event of Failure to Take Corrective Action: If the owner of a building or property shall fail to take prompt corrective action, the Floodplain Administrator shall give the owner written notice, by certified or registered mail to the owner's last known address or by personal service, stating:
 - (a) That the building or property is in violation of the floodplain management regulations;
 - (b) That a hearing will be held before the Floodplain Administrator at a designated place and time, not later than ten (10) days after the date of the notice, at which time the owner shall be entitled to be heard in person or by counsel and to present arguments and evidence pertaining to the matter; and
 - (c) That following the hearing, the Floodplain Administrator may issue an order to alter, vacate, or demolish the building; or to remove fill as applicable.
- (3) Order to Take Corrective Action: If, upon a hearing held pursuant to the notice prescribed above, the Floodplain Administrator shall find that the building or development is in violation of the Flood Damage Prevention Ordinance, he or she shall issue an order in writing to the owner, requiring the owner to remedy the violation within a specified

time period, not less than sixty (60) calendar days, nor more than least one-hundred-eighty (180) calendar days. Where the Floodplain Administrator finds that there is imminent danger to life or other property, he or she may order that corrective action be taken in such lesser period as may be feasible.

- (4) **Appeal:** Any owner who has received an order to take corrective action may appeal the order to the local elected governing body by giving notice of appeal in writing to the Floodplain Administrator and the clerk within ten (10) days following issuance of the final order. In the absence of an appeal, the order of the Floodplain Administrator shall be final. The local governing body shall hear an appeal within a reasonable time and may affirm, modify and affirm, or revoke the order.
- (5) **Failure to Comply with Order:** If the owner of a building or property fails to comply with an order to take corrective action for which no appeal has been made or fails to comply with an order of the governing body following an appeal, the owner shall be guilty of a Class 1 misdemeanor pursuant to NC G.S. § 143-215.58 and shall be punished at the discretion of the court.

SECTION 10.377 VARIANCE PROCEDURES.

- (1) The Board of Adjustment as established by the City of Graham, hereinafter referred to as the “appeal board”, shall hear and decide requests for variances from the requirements of this ordinance.
- (2) Any person aggrieved by the decision of the appeal board may appeal such decision to the Court, as provided in Chapter 7A of the North Carolina General Statutes.
- (3) Variances may be issued for:
 - (a) The repair or rehabilitation of historic structures upon the determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and that the variance is the minimum necessary to preserve the historic character and design of the structure;
 - (b) Functionally dependent facilities if determined to meet the definition as stated in Article 2 of this ordinance, provided provisions of Article 4, Section E(9)(b), (c), and (e) have been satisfied, and such facilities are protected by methods that minimize flood damages during the base flood and create no additional threats to public safety; or
 - (c) Any other type of development provided it meets the requirements of this Section.
- (4) In passing upon variances, the appeal board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and:
 - (a) The danger that materials may be swept onto other lands to the injury of others;
 - (b) The danger to life and property due to flooding or erosion damage;
 - (c) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - (d) The importance of the services provided by the proposed facility to the community;
 - (e) The necessity to the facility of a waterfront location as defined under Article 2 of this ordinance as a functionally dependent facility, where applicable;
 - (f) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
 - (g) The compatibility of the proposed use with existing and anticipated development;

- (h) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 - (i) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (j) The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
 - (k) The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.
- (5) A written report addressing each of the above factors shall be submitted with the application for a variance.
- (6) Upon consideration of the factors listed above and the purposes of this ordinance, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purposes and objectives of this ordinance.
- (7) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the BFE and the elevation to which the structure is to be built and that such construction below the BFE increases risks to life and property, and that the issuance of a variance to construct a structure below the BFE may result in increased premium rates for flood insurance up to \$25 per \$100 of insurance coverage. Such notification shall be maintained with a record of all variance actions, including justification for their issuance.
- (8) The Floodplain Administrator shall maintain the records of all appeal actions and report any variances to the FEMA and the State of North Carolina upon request.
- (9) Conditions for Variances:
- (a) Variances shall not be issued when the variance will make the structure in violation of other federal, state, or local laws, regulations, or ordinances.
 - (b) Variances shall not be issued within any designated floodway or non-encroachment area if the variance would result in any increase in flood levels during the base flood discharge.
 - (c) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - (d) Variances shall only be issued prior to development permit approval.
 - (e) Variances shall only be issued upon:
 - (i) A showing of good and sufficient cause;
 - (ii) A determination that failure to grant the variance would result in exceptional hardship; and
 - (ii) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- (10) A variance may be issued for solid waste disposal facilities or sites, hazardous waste management facilities, salvage yards, and chemical storage facilities that are located in Special Flood Hazard Areas provided that all of the following conditions are met.
- (a) The use serves a critical need in the community.
 - (b) No feasible location exists for the use outside the Special Flood Hazard Area.
 - (c) The reference level of any structure is elevated or floodproofed to at least the Regulatory Flood Protection

Elevation.

- (d) The use complies with all other applicable federal, state and local laws.
- (e) The City of Graham has notified the Secretary of the North Carolina Department of Public Safety of its intention to grant a variance at least thirty (30) calendar days prior to granting the variance.

ARTICLE 9.5 PROVISIONS FOR FLOOD HAZARD REDUCTION.

SECTION 10.378 GENERAL STANDARDS.

In all Special Flood Hazard Areas the following provisions are required:

- (1) All new construction and substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse, and lateral movement of the structure.
- (2) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage in accordance with the FEMA Technical Bulletin 2, *Flood Damage-Resistant Materials Requirements*.
- (3) All new construction and substantial improvements shall be constructed by methods and practices that minimize flood damages.
- (4) All new electrical, heating, ventilation, plumbing, air conditioning equipment, and other service equipment shall be located at or above the RFPE or designed and installed to prevent water from entering or accumulating within the components during the occurrence of the base flood. These include, but are not limited to, HVAC equipment, water softener units, bath/kitchen fixtures, ductwork, electric/gas meter panels/boxes, utility/cable boxes, hot water heaters, and electric outlets/switches.
 - (a) Replacements part of a substantial improvement, electrical, heating, ventilation, plumbing, air conditioning equipment, and other service equipment shall also meet the above provisions.
 - (b) Replacements that are for maintenance and not part of a substantial improvement, may be installed at the original location provided the addition and/or improvements only comply with the standards for new construction consistent with the code and requirements for the original structure.
- (5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- (6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into flood waters.
- (7) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- (8) Nothing in this ordinance shall prevent the repair, reconstruction, or replacement of a building or structure existing on the effective date of this ordinance and located totally or partially within the floodway, non-encroachment area, or stream setback, provided there is no additional encroachment below the Regulatory Flood Protection Elevation in the floodway, non-encroachment area, or stream setback, and provided that such repair, reconstruction, or replacement meets all of the other requirements of this ordinance.
- (9) New solid waste disposal facilities and sites, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted, except by variance as specified in Article 4, Section E(10). A structure or tank for chemical or fuel storage incidental to an allowed use or to the operation of a water treatment plant or wastewater treatment facility may be located in a Special Flood Hazard Area only if the structure or tank is either elevated or floodproofed to at least the Regulatory Flood Protection Elevation and certified in accordance with the provisions of

Article 4, Section B(3).

- (10) All subdivision proposals and other development proposals shall be consistent with the need to minimize flood damage.
- (11) All subdivision proposals and other development proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
- (12) All subdivision proposals and other development proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- (13) All subdivision proposals and other development proposals shall have received all necessary permits from those governmental agencies for which approval is required by federal or state law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
- (14) When a structure is partially located in a Special Flood Hazard Area, the entire structure shall meet the requirements for new construction and substantial improvements.
- (15) When a structure is located in multiple flood hazard zones or in a flood hazard risk zone with multiple base flood elevations, the provisions for the more restrictive flood hazard risk zone and the highest BFE shall apply.

SECTION 10.379 SPECIFIC STANDARDS.

In all Special Flood Hazard Areas where BFE data has been provided, as set forth in Article 3, Section B, or Article 5, Section D, the following provisions, in addition to the provisions of Article 5, Section A, are required:

- (1) Residential Construction. New construction and substantial improvement of any residential structure (including manufactured homes) shall have the reference level, including basement, elevated no lower than the Regulatory Flood Protection Elevation, as defined in Article 2 of this ordinance.
- (2) Non-Residential Construction. New construction and substantial improvement of any commercial, industrial, or other non-residential structure shall have the reference level, including basement, elevated no lower than the Regulatory Flood Protection Elevation, as defined in Article 2 of this ordinance. Structures located in Zones A, AE, AH, AO, A99 may be floodproofed to the Regulatory Flood Protection Elevation in lieu of elevation provided that all areas of the structure, together with attendant utility and sanitary facilities, below the Regulatory Flood Protection Elevation are watertight with walls substantially impermeable to the passage of water, using structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. For AO Zones, the floodproofing elevation shall be in accordance with Article 5, Section I (2). A registered professional engineer or architect shall certify that the floodproofing standards of this subsection are satisfied. Such certification shall be provided to the Floodplain Administrator as set forth in Article 4, Section B(3), along with the operational plan and the inspection and maintenance plan.
- (3) Manufactured Homes.
 - (a) New and replacement manufactured homes shall be elevated so that the reference level of the manufactured home is no lower than the Regulatory Flood Protection Elevation, as defined in Article 2 of this ordinance.
 - (b) Manufactured homes shall be securely anchored to an adequately anchored foundation to resist flotation, collapse, and lateral movement, either by certified engineered foundation system, or in accordance with the most current edition of the State of North Carolina Regulations for Manufactured Homes adopted by the Commissioner of Insurance pursuant to NCGS 143-143.15. Additionally, when the elevation would be met by an elevation of the chassis thirty-six (36) inches or less above the grade at the site, the chassis shall be supported by reinforced piers or engineered foundation. When the elevation of the chassis is above thirty-six (36) inches in height, an engineering certification is required.
 - (c) All enclosures or skirting below the lowest floor shall meet the requirements of Article 5, Section B(4).
 - (d) An evacuation plan must be developed for evacuation of all residents of all new, substantially improved or

substantially damaged manufactured home parks or subdivisions located within flood prone areas. This plan shall be filed with and approved by the Floodplain Administrator and the local Emergency Management Coordinator.

- (4) Elevated Buildings. Fully enclosed area, of new construction and substantially improved structures, which is below the lowest floor:
- (a) Shall not be designed or used for human habitation, but shall only be used for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator). The interior portion of such enclosed area shall not be finished or partitioned into separate rooms, except to enclose storage areas;
 - (b) Shall not be temperature-controlled or conditioned;
 - (c) Shall be constructed entirely of flood resistant materials at least to the Regulatory Flood Protection Elevation; and
 - (d) Shall include, in Zones A, AE, AH, AO, A99 flood openings to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a professional engineer or architect or meet or exceed the following minimum design criteria:
 - (i) A minimum of two flood openings on different sides of each enclosed area subject to flooding;
 - (ii) The total net area of all flood openings must be at least one (1) square inch for each square foot of enclosed area subject to flooding;
 - (iii) If a building has more than one enclosed area, each enclosed area must have flood openings to allow floodwaters to automatically enter and exit;
 - (iv) The bottom of all required flood openings shall be no higher than one (1) foot above the higher of the interior or exterior adjacent grade;
 - (v) Flood openings may be equipped with screens, louvers, or other coverings or devices, provided they permit the automatic flow of floodwaters in both directions; and
 - (vi) Enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require flood openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires flood openings as outlined above.
 - (e) Property owners shall be required to execute and record a non-conversion agreement prior to issuance of a building permit declaring that the area below the lowest floor shall not be improved, finished or otherwise converted to habitable space; the City of Graham will have the right to inspect the enclosed area. This agreement shall be recorded with the Alamance County Register of Deeds and shall transfer with the property in perpetuity.
- (5) Additions/Improvements.
- (a) Additions and/or improvements to pre-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are:
 - (i) Not a substantial improvement, the addition and/or improvements must be designed to minimize flood damages and *must not be any more non-conforming than the existing structure.*
 - (ii) A substantial improvement, with modifications/rehabilitations/improvements to the existing structure or the common wall is structurally modified more than installing a doorway, both the existing structure and the addition must comply with the standards for new construction.

- (b) Additions to pre-FIRM or post-FIRM structures that are a substantial improvement with no modifications/rehabilitations/improvements to the existing structure other than a standard door in the common wall, shall require only the addition to comply with the standards for new construction.
 - (c) Additions and/or improvements to post-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are:
 - (i) Not a substantial improvement, the addition and/or improvements only must comply with the standards for new construction consistent with the code and requirements for the original structure.
 - (ii) A substantial improvement, both the existing structure and the addition and/or improvements must comply with the standards for new construction.
 - (d) Any combination of repair, reconstruction, rehabilitation, addition or improvement of a building or structure taking place during a one (1) year period, the cumulative cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started must comply with the standards for new construction. For each building or structure, the one (1) year period begins on the date of the first improvement or repair of that building or structure subsequent to the effective date of this ordinance. Substantial damage also means flood-related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The requirement does not, however, include either:
 - (i) Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the building official and that are the minimum necessary to assume safe living conditions.
 - (ii) Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.
- (6) Recreational Vehicles. Recreational vehicles shall either:
- (a) Temporary Placement
 - (i) Be on site for fewer than 180 consecutive days; or
 - (ii) Be fully licensed and ready for highway use. (A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities, and has no permanently attached additions.)
 - (b) Permanent Placement. Recreational vehicles that do not meet the limitations of Temporary Placement shall meet all the requirements for new construction.
- (7) Temporary Non-Residential Structures. Prior to the issuance of a floodplain development permit for a temporary structure, the applicant must submit to the Floodplain Administrator a plan for the removal of such structure(s) in the event of a hurricane, flash flood or other type of flood warning notification. The following information shall be submitted in writing to the Floodplain Administrator for review and written approval:
- (a) A specified time period for which the temporary use will be permitted. Time specified may not exceed three (3) months, renewable up to one (1) year;
 - (b) The name, address, and phone number of the individual responsible for the removal of the temporary structure;
 - (c) The time frame prior to the event at which a structure will be removed (i.e., minimum of 72 hours before landfall of a hurricane or immediately upon flood warning notification);

- (d) A copy of the contract or other suitable instrument with the entity responsible for physical removal of the structure; and
 - (e) Designation, accompanied by documentation, of a location outside the Special Flood Hazard Area, to which the temporary structure will be moved.
- (8) Accessory Structures. When accessory structures (sheds, detached garages, etc.) are to be placed within a Special Flood Hazard Area, the following criteria shall be met:
- (a) Accessory structures shall not be used for human habitation (including working, sleeping, living, cooking or restroom areas);
 - (b) Accessory structures shall not be temperature-controlled;
 - (c) Accessory structures shall be designed to have low flood damage potential;
 - (d) Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;
 - (e) Accessory structures shall be firmly anchored in accordance with the provisions of Article 5, Section A(1);
 - (f) All service facilities such as electrical shall be installed in accordance with the provisions of Article 5, Section A(4); and
 - (g) Flood openings to facilitate automatic equalization of hydrostatic flood forces shall be provided below Regulatory Flood Protection Elevation in conformance with the provisions of Article 5, Section B(4)(d).

An accessory structure with a footprint less than 150 or that is a minimal investment of \$3,000 or less and satisfies the criteria outlined above is not required to meet the elevation or floodproofing standards of Article 5, Section B (2). Elevation or floodproofing certifications are required for all other accessory structures in accordance with Article 4, Section B(3).

- (9) Tanks. When gas and liquid storage tanks are to be placed within a Special Flood Hazard Area, the following criteria shall be met:
- (a) Underground tanks. Underground tanks in flood hazard areas shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty;
 - (b) Above-ground tanks, elevated. Above-ground tanks in flood hazard areas shall be elevated to or above the Regulatory Flood Protection Elevation on a supporting structure that is designed to prevent flotation, collapse or lateral movement during conditions of the design flood. Tank-supporting structures shall meet the foundation requirements of the applicable flood hazard area;
 - (c) Above-ground tanks, not elevated. Above-ground tanks that do not meet the elevation requirements of Section B (2) of this ordinance shall be permitted in flood hazard areas provided the tanks are designed, constructed, installed, and anchored to resist all flood-related and other loads, including the effects of buoyancy, during conditions of the design flood and without release of contents in the floodwaters or infiltration by floodwaters into the tanks. Tanks shall be designed, constructed, installed, and anchored to resist the potential buoyant and other flood forces acting on an empty tank during design flood conditions.
 - (d) Tank inlets and vents. Tank inlets, fill openings, outlets and vents shall be:
 - (i) At or above the Regulatory Flood Protection Elevation or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tanks during conditions of the design flood; and
 - (ii) Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the

effects of buoyancy, during conditions of the design flood.

(10) Other Development.

- (a) Fences in regulated floodways and NEAs that have the potential to block the passage of floodwaters, such as stockade fences and wire mesh fences, shall meet the limitations of Article 5, Section F of this ordinance.
- (b) Retaining walls, sidewalks and driveways in regulated floodways and NEAs. Retaining walls and sidewalks and driveways that involve the placement of fill in regulated floodways shall meet the limitations of Article 5, Section F of this ordinance.
- (c) Roads and watercourse crossings in regulated floodways and NEAs. Roads and watercourse crossings, including roads, bridges, culverts, low-water crossings and similar means for vehicles or pedestrians to travel from one side of a watercourse to the other side, that encroach into regulated floodways shall meet the limitations of Article 5, Section F of this ordinance.

SECTION 10.380 RESERVED.

SECTION 10.381 STANDARDS FOR FLOODPLAINS WITHOUT ESTABLISHED BASE FLOOD ELEVATIONS.

Within the Special Flood Hazard Areas designated as Approximate Zone A and established in Article 3, Section B, where no BFE data has been provided by FEMA, the following provisions, in addition to the provisions of Article 5, Section A, shall apply:

- (1) No encroachments, including fill, new construction, substantial improvements or new development shall be permitted within a distance of twenty (20) feet each side from top of bank or five times the width of the stream, whichever is greater, unless certification with supporting technical data by a registered professional engineer is provided demonstrating that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- (2) The BFE used in determining the Regulatory Flood Protection Elevation shall be determined based on the following criteria:
 - (a) When BFE data is available from other sources, all new construction and substantial improvements within such areas shall also comply with all applicable provisions of this ordinance and shall be elevated or floodproofed in accordance with standards in Article 5, Sections A and B.
 - (b) When floodway or non-encroachment data is available from a Federal, State, or other source, all new construction and substantial improvements within floodway and non-encroachment areas shall also comply with the requirements of Article 5, Sections B and F.
 - (c) All subdivision, manufactured home park and other development proposals shall provide BFE data if development is greater than five (5) acres or has more than fifty (50) lots/manufactured home sites. Such BFE data shall be adopted by reference in accordance with Article 3, Section B and utilized in implementing this ordinance.
 - (d) When BFE data is not available from a Federal, State, or other source as outlined above, the reference level shall be elevated or floodproofed (nonresidential) to or above the Regulatory Flood Protection Elevation, as defined in Article 2. All other applicable provisions of Article 5, Section B shall also apply.

SECTION 10.382 STANDARDS FOR RIVERINE FLOODPLAINS WITH BASE FLOOD ELEVATIONS BUT WITHOUT ESTABLISHED FLOODWAYS OR NON-ENCROACHMENT AREAS.

Along rivers and streams where BFE data is provided by FEMA or is available from another source but neither floodway nor

non-encroachment areas are identified for a Special Flood Hazard Area on the FIRM or in the FIS report, the following requirements shall apply to all development within such areas:

- (1) Standards of Article 5, Sections A and B; and
- (2) Until a regulatory floodway or non-encroachment area is designated, no encroachments, including fill, new construction, substantial improvements, or other development, shall be permitted unless certification with supporting technical data by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point within the community.

SECTION 10.383 FLOODWAYS AND NON-ENCROACHMENT AREAS.

Areas designated as floodways or non-encroachment areas are located within the Special Flood Hazard Areas established in Article 3, Section B. The floodways and non-encroachment areas are extremely hazardous areas due to the velocity of floodwaters that have erosion potential and carry debris and potential projectiles. The following provisions, in addition to standards outlined in Article 5, Sections A and B, shall apply to all development within such areas:

- (1) No encroachments, including fill, new construction, substantial improvements and other developments shall be permitted unless:
 - (a) It is demonstrated that the proposed encroachment would not result in any increase in the flood levels during the occurrence of the base flood discharge, based on hydrologic and hydraulic analyses performed in accordance with standard engineering practice and presented to the Floodplain Administrator prior to issuance of floodplain development permit; or
 - (b) A Conditional Letter of Map Revision (CLOMR) has been approved by FEMA. A Letter of Map Revision (LOMR) must also be obtained within six months of completion of the proposed encroachment.
- (2) If Article 5, Section F(1) is satisfied, all development shall comply with all applicable flood hazard reduction provisions of this ordinance.
- (3) Manufactured homes may be permitted provided the following provisions are met:
 - (a) The anchoring and the elevation standards of Article 5, Section B(3); and
 - (b) The encroachment standards of Article 5, Section F(1).

SECTION 10.384 STANDARDS FOR AREAS OF SHALLOW FLOODING (ZONE AO).

Located within the Special Flood Hazard Areas established in Article 3, Section B, are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate. In addition to Article 5, Sections A and B, all new construction and substantial improvements shall meet the following requirements:

- (1) The reference level shall be elevated at least as high as the depth number specified on the Flood Insurance Rate Map (FIRM), in feet, plus a freeboard of two (2) feet, above the highest adjacent grade; or at least a minimum of two (2) feet is required and four (4) feet is recommended where a depth is not provided feet above the highest adjacent grade if no depth number is specified.
- (2) Non-residential structures may, in lieu of elevation, be floodproofed to the same level as required in Article 5, Section I(1) so that the structure, together with attendant utility and sanitary facilities, below that level shall be watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Certification is required in accordance with Article 4,

Section B(3) and Article 5, Section B(2).

- (3) Adequate drainage paths shall be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

SECTION 10.385 STANDARDS FOR AREAS OF SHALLOW FLOODING (ZONE AH).

Located within the Special Flood Hazard Areas established in Article 3, Section B, are areas designated as shallow flooding areas. These areas are subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are one (1) to three (3) feet. Base Flood Elevations are derived from detailed hydraulic analyses are shown in this zone. In addition to Article 5, Sections A and B, all new construction and substantial improvements shall meet the following requirements:

- (1) Adequate drainage paths shall be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

ARTICLE 9.6 LEGAL STATUS PROVISIONS.

SECTION 10.386 EFFECT ON RIGHTS AND LIABILITIES UNDER THE EXISTING FLOOD DAMAGE PREVENTION ORDINANCE.

This ordinance in part comes forward by re-enactment of some of the provisions of the Flood Damage Prevention Ordinance enacted the 5th of August, 1980 as amended, and it is not the intention to repeal but rather to re-enact and continue to enforce without interruption of such existing provisions, so that all rights and liabilities that have accrued thereunder are reserved and may be enforced. The enactment of this ordinance shall not affect any action, suit or proceeding instituted or pending. All provisions of the Flood Damage Prevention Ordinance of the City of Graham enacted on the 5th of August, 1980, as amended, which are not reenacted herein are repealed.

The date of the initial Flood Damage Prevention Ordinance for Alamance County is the 15th day of August, 1994.

SECTION 10.387 EFFECT UPON OUTSTANDING FLOODPLAIN DEVELOPMENT PERMITS.

Nothing herein contained shall require any change in the plans, construction, size, or designated use of any development or any part thereof for which a floodplain development permit has been granted by the Floodplain Administrator or his or her authorized agents before the time of passage of this ordinance; provided, however, that when construction is not begun under such outstanding permit within a period of six (6) months subsequent to the date of issuance of the outstanding permit, construction or use shall be in conformity with the provisions of this ordinance.

SECTION 10.388 SEVERABILITY.

If any section, clause, sentence, or phrase of the Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this Ordinance.

SECTION 10.389 EFFECTIVE DATE.

This ordinance shall become effective upon adoption.
(Article 9 amended 9/5/2017)

ADOPTION CERTIFICATION.

I hereby certify that this is a true and correct copy of the Flood Damage Prevention Ordinance as adopted by the City Council of the City of Graham, North Carolina, on the 5th day of September, 2017.

WITNESS my hand and the official seal of Darcy Sperry, City Clerk, this the 5th day of September, 2017.

(signature)

FLOOD DAMAGE PREVENTION ORDINANCE SUMMARY OF CHANGES

The following colored text identifies the changes from the 2007 model Flood Damage Prevention Ordinance to the Current 2017 model Flood Damage Prevention Ordinance:

- Blue text = Changes from 2007 version to 2017 version
- Green text = Additions that are new to the 2017 version
- Red text = Deleted from the 2017 version

FLOOD DAMAGE PREVENTION ORDINANCE

Non-Coastal Regular Phase

ARTICLE 1. STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND OBJECTIVES.

SECTION A. STATUTORY AUTHORIZATION.

Municipal: The Legislature of the State of North Carolina has in Part 6, Article 21 of Chapter 143; Parts 3, 5, and 8 of Article 19 of Chapter 160A; and Article 8 of Chapter 160A of the North Carolina General Statutes, delegated to local governmental units the responsibility to adopt regulations designed to promote the public health, safety, and general welfare.

County: The Legislature of the State of North Carolina has in Part 6, Article 21 of Chapter 143; Parts 3 and 4 of Article 18 of Chapter 153A; and Part 121, Article 6 of Chapter 153A of the North Carolina General Statutes, delegated to local governmental units the responsibility to adopt regulations designed to promote the public health, safety, and general welfare.

Therefore, the Governing Body of Community Name, North Carolina, does ordain as follows:

SECTION B. FINDINGS OF FACT.

- (1) The flood prone areas within the jurisdiction of Community Name are subject to periodic inundation which results in loss of life, property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures of flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
- (2) These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities and by the occupancy in flood prone areas of uses vulnerable to floods or other hazards.

SECTION C. STATEMENT OF PURPOSE.

It is the purpose of this ordinance to promote public health, safety, and general welfare and to minimize public and private losses due to flood conditions within flood prone areas by provisions designed to:

- (1) Restrict or prohibit uses that are dangerous to health, safety, and property due to water or erosion hazards or that result in damaging increases in erosion, flood heights or velocities;
- (2) Require that uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at

the time of initial construction;

- (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters;
- (4) Control filling, grading, dredging, and all other development that may increase erosion or flood damage; and
- (5) Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or which may increase flood hazards to other lands.

SECTION D. OBJECTIVES.

The objectives of this ordinance are to:

- (1) Protect human life, safety, and health;
- (2) Minimize expenditure of public money for costly flood control projects;
- (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) Minimize prolonged business losses and interruptions;
- (5) Minimize damage to public facilities and utilities (i.e. water and gas mains, electric, telephone, cable and sewer lines, streets, and bridges) that are located in flood prone areas;
- (6) Minimize damage to private and public property due to flooding;
- (7) Make flood insurance available to the community through the National Flood Insurance Program; *yes*
- (8) Maintain the natural and beneficial functions of floodplains;
- (9) Help maintain a stable tax base by providing for the sound use and development of flood prone areas; and
- (10) Ensure that potential buyers are aware that property is in a Special Flood Hazard Area. *important*

ARTICLE 2. DEFINITIONS.

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance it's most reasonable application.

"Accessory Structure (Appurtenant Structure)" means a structure located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Garages, carports and storage sheds are common urban accessory structures. Pole barns, hay sheds and the like qualify as accessory structures on farms, and may or may not be located on the same parcel as the farm dwelling or shop building.

"Addition (to an existing building)" means an extension or increase in the floor area or height of a building or structure.

"Alteration of a watercourse" means a dam, impoundment, channel relocation, change in channel alignment, channelization, or change in cross-sectional area of the channel or the channel capacity, or any other form of modification which may alter, impede, retard or change the direction and/or velocity of the riverine flow of water during conditions of the base flood.

"Appeal" means a request for a review of the Floodplain Administrator's interpretation of any provision of this ordinance.

"Area of Shallow Flooding" means a designated Zone AO on a community's Flood Insurance Rate Map (FIRM) with base flood depths determined to be from one (1) to three (3) feet. These areas are located where a clearly defined channel does not

exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

“Area of Special Flood Hazard” see “Special Flood Hazard Area (SFHA)”.

“Area of Future Conditions Flood Hazard” means the land area that would be inundated by the 1-percent-annual-chance (100- year) flood based on future-conditions hydrology (OPTIONAL).

“Base Flood” means the flood having a one (1) percent chance of being equaled or exceeded in any given year.

“Base Flood Elevation (BFE)” means a determination of the water surface elevations of the base flood as published in the Flood Insurance Study. When the BFE has not been provided in a “Special Flood Hazard Area”, it may be obtained from engineering studies available from a Federal, State, or other source using FEMA approved engineering methodologies. This elevation, when combined with the “Freeboard”, establishes the “Regulatory Flood Protection Elevation”.

“Basement” means any area of the building having its floor subgrade (below ground level) on all sides.

“Building” see “Structure”.

“Chemical Storage Facility” means a building, portion of a building, or exterior area adjacent to a building used for the storage of any chemical or chemically reactive products.

“Design Flood”: See “Regulatory Flood Protection Elevation.”

“Development” means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.

“Development Activity” means any activity defined as Development which will necessitate a Floodplain Development Permit. This includes buildings, structures, and non-structural items, including (but not limited to) fill, bulkheads, piers, pools, docks, landings, ramps, and erosion control/stabilization measures.

“Digital Flood Insurance Rate Map (DFIRM)” means the digital official map of a community, issued by the Federal Emergency Management Agency (FEMA), on which both the Special Flood Hazard Areas and the risk premium zones applicable to the community are delineated.

“Disposal” means, as defined in NCGS 130A-290(a)(6), the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste into or on any land or water so that the solid waste or any constituent part of the solid waste may enter the environment or be emitted into the air or discharged into any waters, including groundwaters.

“Elevated Building” means a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

“Encroachment” means the advance or infringement of uses, fill, excavation, buildings, structures or development into a special flood hazard area, which may impede or alter the flow capacity of a floodplain.

“Existing building and existing structure” means any building and/or structure for which the “start of construction” commenced before date the community’s first floodplain management ordinance was adopted.

“Existing Manufactured Home Park or Manufactured Home Subdivision” means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) was completed before the initial effective date of the floodplain management regulations adopted by the community.

“Flood” or “Flooding” means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (a) The overflow of inland or tidal waters; and/or
- (b) The unusual and rapid accumulation or runoff of surface waters from any source.

“Flood Boundary and Floodway Map (FBFM)” means an official map of a community, issued by the FEMA, on which the Special Flood Hazard Areas and the floodways are delineated. This official map is a supplement to and shall be used in conjunction with the Flood Insurance Rate Map (FIRM).

“Flood Hazard Boundary Map (FHBM)” means an official map of a community, issued by the FEMA, where the boundaries of the Special Flood Hazard Areas have been defined as Zone A.

“Flood Insurance” means the insurance coverage provided under the National Flood Insurance Program.

“Flood Insurance Rate Map (FIRM)” means an official map of a community, issued by the FEMA, on which both the Special Flood Hazard Areas and the risk premium zones applicable to the community are delineated. (see also DFIRM)

“Flood Insurance Study (FIS)” means an examination, evaluation, and determination of flood hazards, corresponding water surface elevations (if appropriate), flood hazard risk zones, and other flood data in a community issued by the FEMA. The Flood Insurance Study report includes Flood Insurance Rate Maps (FIRMs) and Flood Boundary and Floodway Maps (FBFMs), if published.

“Flood Prone Area” see “Floodplain”

“Flood Zone” means a geographical area shown on a Flood Hazard Boundary Map or Flood Insurance Rate Map that reflects the severity or type of flooding in the area.

“Floodplain” means any land area susceptible to being inundated by water from any source.

“Floodplain Administrator” is the individual appointed to administer and enforce the floodplain management regulations.

“Floodplain Development Permit” means any type of permit that is required in conformance with the provisions of this ordinance, prior to the commencement of any development activity.

“Floodplain Management” means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including, but not limited to, emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

“Floodplain Management Regulations” means this ordinance and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, and other applications of police power. This term describes federal, state or local regulations, in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

“Floodproofing” means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitation facilities, structures, and their contents.

“Flood-resistant material” means any building product [material, component or system] capable of withstanding direct and prolonged contact (minimum 72 hours) with floodwaters without sustaining damage that requires more than low-cost cosmetic repair. Any material that is water-soluble or is not resistant to alkali or acid in water, including normal adhesives for above-grade use, is not flood-resistant. Pressure-treated lumber or naturally decay-resistant lumbers are acceptable flooring materials. Sheet-type flooring coverings that restrict evaporation from below and materials that are impervious, but dimensionally unstable are not acceptable. Materials that absorb or retain water excessively after submergence are not flood-resistant. Please refer to Technical Bulletin 2, *Flood Damage-Resistant Materials Requirements*, and available from the FEMA. Class 4 and 5 materials, referenced therein, are acceptable flood-resistant materials.

“Floodway” means the channel of a river or other watercourse, including the area above a bridge or culvert when applicable, and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.

“Floodway encroachment analysis” means an engineering analysis of the impact that a proposed encroachment into a floodway or non-encroachment area is expected to have on the floodway boundaries and flood levels during the occurrence of the base flood discharge. The evaluation shall be prepared by a qualified North Carolina licensed engineer using standard

engineering methods and models.

“Freeboard” means the height added to the BFE to account for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, blockage of bridge or culvert openings, and the hydrological effect of urbanization of the watershed. The BFE plus the freeboard establishes the “Regulatory Flood Protection Elevation”.

“Functionally Dependent Facility” means a facility which cannot be used for its intended purpose unless it is located in close proximity to water, limited to a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, or ship repair. The term does not include long-term storage, manufacture, sales, or service facilities.

“Hazardous Waste Management Facility” means, as defined in NCGS 130A, Article 9, a facility for the collection, storage, processing, treatment, recycling, recovery, or disposal of hazardous waste.

“Highest Adjacent Grade (HAG)” means the highest natural elevation of the ground surface, prior to construction, immediately next to the proposed walls of the structure.

“Historic Structure” means any structure that is:

- (a) Listed individually in the National Register of Historic Places (a listing maintained by the US Department of Interior) or preliminarily determined by the Secretary of Interior as meeting the requirements for individual listing on the National Register;
- (b) Certified or preliminarily determined by the Secretary of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (c) Individually listed on a local inventory of historic landmarks in communities with a “Certified Local Government (CLG) Program”; or
- (d) Certified as contributing to the historical significance of a historic district designated by a community with a “Certified Local Government (CLG) Program.”

Certified Local Government (CLG) Programs are approved by the US Department of the Interior in cooperation with the North Carolina Department of Cultural Resources through the State Historic Preservation Officer as having met the requirements of the National Historic Preservation Act of 1966 as amended in 1980.

“Letter of Map Change (LOMC)” means an official determination issued by FEMA that amends or revises an effective Flood Insurance Rate Map or Flood Insurance Study. Letters of Map Change include:

- (a) **Letter of Map Amendment (LOMA):** An official amendment, by letter, to an effective National Flood Insurance Program map. A LOMA is based on technical data showing that a property had been inadvertently mapped as being in the floodplain, but is actually on natural high ground above the base flood elevation. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property, portion of a property, or structure is not located in a special flood hazard area.
- (b) **Letter of Map Revision (LOMR):** A revision based on technical data that may show changes to flood zones, flood elevations, special flood hazard area boundaries and floodway delineations, and other planimetric features.
- (c) **Letter of Map Revision Based on Fill (LOMR-F):** A determination that a structure or parcel of land has been elevated by fill above the BFE and is, therefore, no longer located within the special flood hazard area. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community’s floodplain management regulations.
- (d) **Conditional Letter of Map Revision (CLOMR):** A formal review and comment as to whether a proposed project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective Flood Insurance Rate Map or Flood Insurance Study; upon submission and approval of certified as-built documentation, a Letter of Map Revision may be issued by FEMA to revise the effective FIRM.

“Light Duty Truck” means any motor vehicle rated at 8,500 pounds Gross Vehicular Weight Rating or less which has a vehicular curb weight of 6,000 pounds or less and which has a basic vehicle frontal area of 45 square feet or less as defined in 40 CFR 86.082-2 and is:

- (a) Designed primarily for purposes of transportation of property or is a derivation of such a vehicle, or
- (b) Designed primarily for transportation of persons and has a capacity of more than 12 persons; or
- (c) Available with special features enabling off-street or off-highway operation and use.

"Lowest Adjacent Grade (LAG)" means the elevation of the ground, sidewalk or patio slab immediately next to the building, or deck support, after completion of the building.

"Lowest Floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or limited storage in an area other than a basement area is not considered a building's lowest floor, provided that such an enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

"Manufactured Home" means a structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term "manufactured home" does not include a "recreational vehicle".

"Manufactured Home Park or Subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

"Market Value" means the building value, not including the land value and that of any accessory structures or other improvements on the lot. Market value may be established by independent certified appraisal; replacement cost depreciated for age of building and quality of construction (Actual Cash Value); or adjusted tax assessed values.

~~"Mean Sea Level" means, for purposes of this ordinance, the North American Vertical Datum (NAVD) as corrected in 1988, to which Base Flood Elevations (BFEs) shown on a DFIRM are referenced. North Carolina uses NAVD 1988.~~

"New Construction" means structures for which the "start of construction" commenced on or after the effective date of the initial floodplain management regulations and includes any subsequent improvements to such structures.

"Non-Conversion Agreement" means a document stating that the owner will not convert or alter what has been constructed and approved. Violation of the agreement is considered a violation of the ordinance and, therefore, subject to the same enforcement procedures and penalties. The agreement must be filed with the recorded deed for the property. The agreement must show the clerk's or recorder's stamps and/or notations that the filing has been completed. (OPTIONAL) *adopt — Agreed, should adopt.*

"Non-Encroachment Area (NEA)" means the channel of a river or other watercourse, including the area above a bridge or culvert when applicable, and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot as designated in the Flood Insurance Study report.

"Post-FIRM" means construction or other development for which the "start of construction" occurred on or after insert date of community's first FIRM (OPTIONAL), the effective date of the initial Flood Insurance Rate Map.

"Pre-FIRM" means construction or other development for which the "start of construction" occurred before insert date of community's first FIRM (OPTIONAL), the effective date of the initial Flood Insurance Rate Map.

"Principally Above Ground" means that at least 51% of the actual cash value of the structure is above ground.

"Public Safety" and/or "Nuisance" means anything which is injurious to the safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

"Recreational Vehicle (RV)" means a vehicle, which is:

- (a) Built on a single chassis;
- (b) 400 square feet or less when measured at the largest horizontal projection;
- (c) Designed to be self-propelled or permanently towable by a light duty truck;
- (d) Designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use, and
- (e) Is fully licensed and ready for highway use.

(OPTIONAL For the purpose of this ordinance, "Tiny Homes/Houses" and Park Models that do not meet the items listed above are not considered Recreational Vehicles and should meet the standards of and be permitted as Residential Structures.)

Mobile Homes? => I would think

"Reference Level" is the top of the lowest floor for structures within Special Flood Hazard Areas designated as Zones A, AE, AH, AO, A99. The reference level is the bottom of the lowest horizontal structural member of the lowest floor for structures within Special Flood Hazard Areas designated as Zone VE.

(Alternative acceptable language for Reference Level) "Reference Level" is the bottom of the lowest horizontal structural member of the lowest floor for structures within all Special Flood Hazard Areas.

"Regulatory Flood Protection Elevation" means the "Base Flood Elevation" plus the "Freeboard". In "Special Flood Hazard Areas" where Base Flood Elevations (BFEs) have been determined, this elevation shall be the BFE *plus* Insert freeboard [two (2) feet (Two feet is the state recommended minimum)] feet *freeboard*). In "Special Flood Hazard Areas" where no BFE has been established, this elevation shall be at least Insert feet [Two (2) feet is a state-recommended minimum, greater than two (2) feet is OPTIONAL] feet above the highest adjacent grade.

"Remedy a Violation" means to bring the structure or other development into compliance with state and community floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing federal financial exposure with regard to the structure or other development.

"Riverine" means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

"Salvage Yard" means any non-residential property used for the storage, collection, and/or recycling of any type of equipment, and including but not limited to vehicles, appliances and related machinery.

"Solid Waste Disposal Facility" means any facility involved in the disposal of solid waste, as defined in NCGS 130A-290(a)(35).

"Solid Waste Disposal Site" means, as defined in NCGS 130A-290(a)(36), any place at which solid wastes are disposed of by incineration, sanitary landfill, or any other method.

"Special Flood Hazard Area (SFHA)" means the land in the floodplain subject to a one percent (1%) or greater chance of being flooded in any given year, as determined in Article 3, Section B of this ordinance.

"Start of Construction" includes substantial improvement, and means the date the building permit was issued provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

"Structure" means a walled and roofed building, a manufactured home, or a gas, liquid, or liquefied gas storage tank that is principally above ground.

"Substantial Damage" means damage of any origin sustained by a structure during any one-year period whereby the cost of

restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. See definition of "substantial improvement". *[CRS communities are eligible for up to 20 CRS points for adopting OPTIONAL Text for Substantial Damage that could include one or more of the following higher standards:]*

- ~~1.) By choosing a timeframe that includes cumulative damages sustained over a period of time exceeding one year period. (5 or 10 year period recommended)~~
- ~~2.) By choosing a percent damaged that is less than 50% of the market value of the structure (CRS recommends 30 %.)~~
- ~~3.) By adding the following text for eligibility for Increased Cost of Compliance (ICC) benefits for repetitive losses: Substantial damage also means flood-related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.]~~

"Substantial Improvement" means any combination of repairs, reconstruction, rehabilitation, addition, or other improvement of a structure, taking place during any one-year period for which the cost equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include either:

- (a) Any correction of existing violations of state or community health, sanitary, or safety code specifications which have been identified by the community code enforcement official and which are the minimum necessary to assure safe living conditions; or
- (b) Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure and the alteration is approved by variance issued pursuant to Article 4 Section E of this ordinance.

~~*[CRS communities are eligible for up to 20 CRS points for adopting OPTIONAL Text for Substantial Damage that could include one or more of the following higher standards:]*~~

- ~~1.) By choosing a timeframe that includes cumulative damages sustained over a period of time exceeding one year period. (5 or 10 year period recommended)~~
- ~~2.) By choosing a percent damaged that is less than 50% of the market value of the structure (CRS recommends 30 %.)~~

"Technical Bulletin and Technical Fact Sheet" means a FEMA publication that provides guidance concerning the building performance standards of the NFIP, which are contained in Title 44 of the U.S. Code of Federal Regulations at Section 60.3. The bulletins and fact sheets are intended for use primarily by State and local officials responsible for interpreting and enforcing NFIP regulations and by members of the development community, such as design professionals and builders. New bulletins, as well as updates of existing bulletins, are issued periodically as needed. The bulletins do not create regulations; rather they provide specific guidance for complying with the minimum requirements of existing NFIP regulations.

It should be noted that Technical Bulletins and Technical Fact Sheets provide guidance on the minimum requirements of the NFIP regulations. State or community requirements that exceed those of the NFIP take precedence. Design professionals should contact the community officials to determine whether more restrictive State or local regulations apply to the building or site in question. All applicable standards of the State or local building code must also be met for any building in a flood hazard area. (OPTIONAL) ← removes from exception in ETJ. =? Should we adopt the optional language if it removes the exception?

"Temperature Controlled" means having the temperature regulated by a heating and/or cooling system, built-in or appliance.

"Variance" is a grant of relief from the requirements of this ordinance.

"Violation" means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in Articles 4 and 5 is presumed to be in violation until such time as that documentation is provided.

"Water Surface Elevation (WSE)" means the height, in relation to NAVD 1988, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

“Watercourse” means a lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

ARTICLE 3. GENERAL PROVISIONS.

SECTION A. LANDS TO WHICH THIS ORDINANCE APPLIES.

This ordinance shall apply to all Special Flood Hazard Areas within the jurisdiction, *including Extra-Territorial Jurisdictions (ETJs), [if applicable]* of Community Name.

SECTION B. BASIS FOR ESTABLISHING THE SPECIAL FLOOD HAZARD AREAS.

The Special Flood Hazard Areas are those identified under the Cooperating Technical State (CTS) agreement between the State of North Carolina and FEMA in its FIS dated Insert effective date shown on FIS for County Name County and associated DFIRM panels, including any digital data developed as part of the FIS, which are adopted by reference and declared a part of this ordinance. Future revisions to the FIS and DFIRM panels that do not change flood hazard data within the jurisdictional authority of Community Name are also adopted by reference and declared a part of this ordinance. Subsequent Letter of Map Revisions (LOMRs) and/or Physical Map Revisions (PMRs) shall be adopted within 3 months.

SECTION C. ESTABLISHMENT OF FLOODPLAIN DEVELOPMENT PERMIT.

A Floodplain Development Permit shall be required in conformance with the provisions of this ordinance prior to the commencement of any development activities within Special Flood Hazard Areas determined in accordance with the provisions of Article 3, Section B of this ordinance.

SECTION D. COMPLIANCE.

No structure or land shall hereafter be located, extended, converted, altered, or developed in any way without full compliance with the terms of this ordinance and other applicable regulations.

SECTION E. ABROGATION AND GREATER RESTRICTIONS.

This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

SECTION F. INTERPRETATION.

In the interpretation and application of this ordinance, all provisions shall be:

- (a) Considered as minimum requirements;
- (b) Liberally construed in favor of the governing body; and
- (c) Deemed neither to limit nor repeal any other powers granted under State statutes.

SECTION G. WARNING AND DISCLAIMER OF LIABILITY.

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur. Actual flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the Special Flood Hazard Areas or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of Community Name or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or

any administrative decision lawfully made hereunder.

SECTION H. PENALTIES FOR VIOLATION.

Violation of the provisions of this ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a Class 1 misdemeanor pursuant to NC G.S. § 143-215.58. . Any person who violates this ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$100.00 or imprisoned for not more than thirty (30) days, or both. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent Community Name from taking such other lawful action as is necessary to prevent or remedy any violation.

ARTICLE 4. ADMINISTRATION.

SECTION A. DESIGNATION OF FLOODPLAIN ADMINISTRATOR.

The Staff Title, hereinafter referred to as the "Floodplain Administrator", is hereby appointed to administer and implement the provisions of this ordinance. In instances where the Floodplain Administrator receives assistance from others to complete tasks to administer and implement this ordinance, the Floodplain Administrator shall be responsible for the coordination and community's overall compliance with the National Flood Insurance Program and the provisions of this ordinance.

SECTION B. FLOODPLAIN DEVELOPMENT APPLICATION, PERMIT AND CERTIFICATION REQUIREMENTS.

- (1) **Application Requirements.** Application for a Floodplain Development Permit shall be made to the Floodplain Administrator prior to any development activities located within Special Flood Hazard Areas. The following items shall be presented to the Floodplain Administrator to apply for a floodplain development permit:
 - (a) A plot plan drawn to scale which shall include, but shall not be limited to, the following specific details of the proposed floodplain development:
 - (i) The nature, location, dimensions, and elevations of the area of development/disturbance; existing and proposed structures, utility systems, grading/pavement areas, fill materials, storage areas, drainage facilities, and other development;
 - (ii) The boundary of the Special Flood Hazard Area as delineated on the FIRM or other flood map as determined in Article 3, Section B, or a statement that the entire lot is within the Special Flood Hazard Area;
 - (iii) Flood zone(s) designation of the proposed development area as determined on the FIRM or other flood map as determined in Article 3, Section B;
 - (iv) The boundary of the floodway(s) or non-encroachment area(s) as determined in Article 3, Section B;
 - (v) The Base Flood Elevation (BFE) where provided as set forth in Article 3, Section B; Article 4, Section C; or Article 5, Section D;
 - (vi) The old and new location of any watercourse that will be altered or relocated as a result of proposed development; and
 - (vii) *The certification of the plot plan by a registered land surveyor or professional engineer. (OPTIONAL)*
 - (b) Proposed elevation, and method thereof, of all development within a Special Flood Hazard Area including but not limited to:
 - (i) Elevation in relation to **NAVD 1988** of the proposed reference level (including basement) of all

structures;

- (ii) Elevation in relation to [NAVD 1988](#) to which any non-residential structure in Zones A, AE, AH, AO, A99 will be floodproofed; and
- (iii) Elevation in relation to [NAVD 1988](#) to which any proposed utility systems will be elevated or floodproofed.
- (c) If floodproofing, a Floodproofing Certificate (FEMA Form 086-0-34) with supporting data, an operational plan, and an inspection and maintenance plan that include, but are not limited to, installation, exercise, and maintenance of floodproofing measures.
- (d) A Foundation Plan, drawn to scale, which shall include details of the proposed foundation system to ensure all provisions of this ordinance are met. These details include but are not limited to:
 - (i) The proposed method of elevation, if applicable (i.e., fill, solid foundation perimeter wall, solid backfilled foundation, open foundation on columns/posts/piers/piles/shear walls); and
 - (ii) Openings to facilitate automatic equalization of hydrostatic flood forces on walls in accordance with Article 5, Section B(4)(d) when solid foundation perimeter walls are used in Zones A, AE, AH, AO, A99.
- (e) Usage details of any enclosed areas below the lowest floor.
- (f) Plans and/or details for the protection of public utilities and facilities such as sewer, gas, electrical, and water systems to be located and constructed to minimize flood damage.
- (g) Certification that all other Local, State and Federal permits required prior to floodplain development permit issuance have been received.
- (h) Documentation for placement of Recreational Vehicles and/or Temporary Structures, when applicable, to ensure that the provisions of Article 5, Section B, subsections (6) and (7) of this ordinance are met.
- (i) A description of proposed watercourse alteration or relocation, when applicable, including an engineering report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map (if not shown on plot plan) showing the location of the proposed watercourse alteration or relocation.

(2) **Permit Requirements.** The Floodplain Development Permit shall include, but not be limited to:

- (a) [A complete description of all the development to be permitted under the floodplain development permit \(e.g. house, garage, pool, septic, bulkhead, cabana, pier, bridge, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials, etc.\).](#)
- (b) The Special Flood Hazard Area determination for the proposed development in accordance with available data specified in Article 3, Section B.
- (c) The Regulatory Flood Protection Elevation required for the reference level and all attendant utilities.
- (d) The Regulatory Flood Protection Elevation required for the protection of all public utilities.
- (e) All certification submittal requirements with timelines.
- (f) [A statement that no fill material or other development shall encroach into the floodway or non-encroachment area of any watercourse unless the requirements of Article 5, Section F have been met.](#)
- (g) The flood openings requirements, if in Zones A, AE, AH, AO, A99.

- (h) Limitations of below BFE enclosure uses (if applicable). (i.e., parking, building access and limited storage only). (OPTIONAL) *clearly defines restrictions*
- (i) A statement, that all materials below BFE/RFPE must be flood resistant materials. (OPTIONAL) *Life ✓*

(3) **Certification Requirements.**

(a) Elevation Certificates

one of these is good
two restrictions
not necessary

(i) An Elevation Certificate (FEMA Form 086-0-33) is required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the elevation of the reference level, in relation to NAVD 1988. The Floodplain Administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder prior to the beginning of construction. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit. (STATE RECOMMENDED BUT OPTIONAL)

(ii) An Elevation Certificate (FEMA Form 086-0-33) is required after the reference level is established. Within seven (7) calendar days of establishment of the reference level elevation, it shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the elevation of the reference level, in relation to NAVD 1988. Any work done within the seven (7) day calendar period and prior to submission of the certification shall be at the permit holder's risk. The Floodplain Administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further work being permitted to proceed. Failure to submit the certification or failure to make required corrections shall be cause to issue a stop-work order for the project. (STATE RECOMMENDED BUT OPTIONAL)

✓ (iii) A final Finished Construction Elevation Certificate (FEMA Form 086-0-33) is required after construction is completed and prior to Certificate of Compliance/Occupancy issuance. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of final as-built construction of the elevation of the reference level and all attendant utilities. The Floodplain Administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to Certificate of Compliance/Occupancy issuance. In some instances, another certification may be required to certify corrected as-built construction. Failure to submit the certification or failure to make required corrections shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy. The Finished Construction Elevation Certificate certifier shall provide at least 2 photographs showing the front and rear of the building taken within 90 days from the date of certification. The photographs must be taken with views confirming the building description and diagram number provided in Section A. To the extent possible, these photographs should show the entire building including foundation. If the building has split-level or multi-level areas, provide at least 2 additional photographs showing side views of the building. In addition, when applicable, provide a photograph of the foundation showing a representative example of the flood openings or vents. All photographs must be in color and measure at least 3" x 3". Digital photographs are acceptable. (OPTIONAL) (THE FEMA ELEVATION CERTIFICATE IS OPTIONAL FOR FLOODPLAIN MANAGEMENT ELEVATION DATA, BUT RECOMMENDED. THE USE OF THE FEMA ELEVATION CERTIFICATE IS REQUIRED FOR THE PURCHASE OF FLOOD INSURANCE AND MANDATORY FOR CRS PARTICIPATION, AND THIS LANGUAGE SHOULD BE INCLUDED IN ITS ENTIRETY.)

(b) Floodproofing Certificate

- Why are you not wanting this included?*
- (i) If non-residential floodproofing is used to meet the Regulatory Flood Protection Elevation requirements, a Floodproofing Certificate (FEMA Form 086-0-34), with supporting data, an operational plan, and an inspection and maintenance plan are required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to NAVD 1988. Floodproofing certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. The Floodplain Administrator shall review the certificate data, the

operational plan, and the inspection and maintenance plan. Deficiencies detected by such review shall be corrected by the applicant prior to permit approval. Failure to submit the certification or failure to make required corrections shall be cause to deny a Floodplain Development Permit. Failure to construct in accordance with the certified design shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy. *(OPTIONAL) (THE FEMA FLOODPROOFING CERTIFICATE IS OPTIONAL AT THE TIME OF PERMITTING THE STRUCTURE BUT RECOMMENDED TO ENSURE COMPLIANCE WITH THIS ORDINANCE AND PROPERLY PERMIT THE STRUCTURE.)*

*Approved
to I-1*

(ii) A final Finished Construction Floodproofing Certificate (FEMA Form 086-0-34), with supporting data, an operational plan, and an inspection and maintenance plan are required prior to the issuance of a Certificate of Compliance/Occupancy. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to NAVD 1988. Floodproofing certificate shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. The Floodplain Administrator shall review the certificate data, the operational plan, and the inspection and maintenance plan. Deficiencies detected by such review shall be corrected by the applicant prior to Certificate of Occupancy. Failure to submit the certification or failure to make required corrections shall be cause to deny a Floodplain Development Permit. Failure to construct in accordance with the certified design shall be cause to deny a Certificate of Compliance/Occupancy.

- (c) If a manufactured home is placed within Zones A, AE, AH, AO, A99 and the elevation of the chassis is more than 36 inches in height above grade, an engineered foundation certification is required in accordance with the provisions of Article 5, Section B(3)(b).
- (d) If a watercourse is to be altered or relocated, a description of the extent of watercourse alteration or relocation; a professional engineer's certified report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map showing the location of the proposed watercourse alteration or relocation shall all be submitted by the permit applicant prior to issuance of a floodplain development permit.
- (e) Certification Exemptions. The following structures, if located within Zones A, AE, AH, AO, A99, are exempt from the elevation/floodproofing certification requirements specified in items (a) and (b) of this subsection:
 - (i) Recreational Vehicles meeting requirements of Article 5, Section B(6)(a);
 - (ii) Temporary Structures meeting requirements of Article 5, Section B(7); and
 - (iii) Accessory Structures that are Insert square foot (150 recommended) square feet or less or Insert Cost of Structure ((\$3,000 recommended) or less and meeting requirements of Article 5, Section B(8).

(4) Determinations for existing buildings and structures.

For applications for building permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the Floodplain Administrator, in coordination with the Building Official, shall:

- (a) Estimate the market value, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made;
- (b) Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure;
- (c) Determine and document whether the proposed work constitutes substantial improvement or repair of

substantial damage; and

- (d) Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the NC Building Code and this ordinance is required.

SECTION C. DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR.

The Floodplain Administrator shall perform, but not be limited to, the following duties:

- (1) Review all floodplain development applications and issue permits for all proposed development within Special Flood Hazard Areas to assure that the requirements of this ordinance have been satisfied.
- (2) Review all proposed development within Special Flood Hazard Areas to assure that all necessary local, state and federal permits have been received, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
- (3) Notify adjacent communities and the North Carolina Department of Public Safety, Division of Emergency Management, State Coordinator for the National Flood Insurance Program prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency (FEMA).
- (4) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is maintained.
- (5) Prevent encroachments into floodways and non-encroachment areas unless the certification and flood hazard reduction provisions of Article 5, Section F are met.
- (6) Obtain actual elevation (in relation to NAVD 1988) of the reference level (including basement) and all attendant utilities of all new and substantially improved structures, in accordance with the provisions of Article 4, Section B(3).
- (7) Obtain actual elevation (in relation to NAVD 1988) to which all new and substantially improved structures and utilities have been floodproofed, in accordance with the provisions of Article 4, Section B(3).
- (8) Obtain actual elevation (in relation to NAVD 1988) of all public utilities in accordance with the provisions of Article 4, Section B(3).
- (9) When floodproofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect in accordance with the provisions of Article 4, Section B(3) and Article 5, Section B(2).
- (10) Where interpretation is needed as to the exact location of boundaries of the Special Flood Hazard Areas, floodways, or non-encroachment areas (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.
- (11) When BFE data has not been provided in accordance with the provisions of Article 3, Section B, obtain, review, and reasonably utilize any BFE data, along with floodway data or non-encroachment area data available from a federal, state, or other source, including data developed pursuant to Article 5, Section D(2)(c), in order to administer the provisions of this ordinance.
- (12) When BFE data is provided but no floodway or non-encroachment area data has been provided in accordance with the provisions of Article 3, Section B, obtain, review, and reasonably utilize any floodway data or non-encroachment area data available from a federal, state, or other source in order to administer the provisions of this ordinance.

- (13) *When the lowest floor and the lowest adjacent grade of a structure or the lowest ground elevation of a parcel in a Special Flood Hazard Area is above the BFE, advise the property owner of the option to apply for a Letter of Map Amendment (LOMA) from FEMA. Maintain a copy of the LOMA issued by FEMA in the floodplain development permit file. (OPTIONAL)*
- (14) Permanently maintain all records that pertain to the administration of this ordinance and make these records available for public inspection, recognizing that such information may be subject to the Privacy Act of 1974, as amended.
- (15) Make on-site inspections of work in progress. As the work pursuant to a floodplain development permit progresses, the Floodplain Administrator shall make as many inspections of the work as may be necessary to ensure that the work is being done according to the provisions of the local ordinance and the terms of the permit. In exercising this power, the Floodplain Administrator has a right, upon presentation of proper credentials, to enter on any premises within the jurisdiction of the community at any reasonable hour for the purposes of inspection or other enforcement action.
- (16) Issue stop-work orders as required. Whenever a building or part thereof is being constructed, reconstructed, altered, or repaired in violation of this ordinance, the Floodplain Administrator may order the work to be immediately stopped. The stop-work order shall be in writing and directed to the person doing or in charge of the work. The stop-work order shall state the specific work to be stopped, the specific reason(s) for the stoppage, and the condition(s) under which the work may be resumed. Violation of a stop-work order constitutes a misdemeanor.
- (17) Revoke floodplain development permits as required. The Floodplain Administrator may revoke and require the return of the floodplain development permit by notifying the permit holder in writing stating the reason(s) for the revocation. Permits shall be revoked for any substantial departure from the approved application, plans, and specifications; for refusal or failure to comply with the requirements of State or local laws; or for false statements or misrepresentations made in securing the permit. Any floodplain development permit mistakenly issued in violation of an applicable State or local law may also be revoked.
- (18) Make periodic inspections throughout the Special Flood Hazard Areas within the jurisdiction of the community. The Floodplain Administrator and each member of his or her inspections department shall have a right, upon presentation of proper credentials, to enter on any premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action.
- (19) Follow through with corrective procedures of Article 4, Section D.
- (20) Review, provide input, and make recommendations for variance requests.
- (21) *Maintain a current map repository to include, but not limited to, historical and effective FIS Report, historical and effective FIRM and other official flood maps and studies adopted in accordance with the provisions of Article 3, Section B of this ordinance, including any revisions thereto including Letters of Map Change, issued by FEMA. Notify State and FEMA of mapping needs.*
- (22) Coordinate revisions to FIS reports and FIRMs, including Letters of Map Revision Based on Fill (LOMR-Fs) and Letters of Map Revision (LOMRs).

SECTION D. CORRECTIVE PROCEDURES.

- (1) Violations to be corrected: When the Floodplain Administrator finds violations of applicable state and local laws; it shall be his or her duty to notify the owner or occupant of the building of the violation. The owner or occupant shall immediately remedy each of the violations of law cited in such notification.
- (2) Actions in Event of Failure to Take Corrective Action: If the owner of a building or property shall fail to take prompt corrective action, the Floodplain Administrator shall give the owner written notice, by certified or registered mail to the owner's last known address or by personal service, stating:
- (a) That the building or property is in violation of the floodplain management regulations;
 - (b) That a hearing will be held before the Floodplain Administrator at a designated place and time, not later than ten

(10) days after the date of the notice, at which time the owner shall be entitled to be heard in person or by counsel and to present arguments and evidence pertaining to the matter; and

(c) That following the hearing, the Floodplain Administrator may issue an order to alter, vacate, or demolish the building; or to remove fill as applicable.

(3) Order to Take Corrective Action: If, upon a hearing held pursuant to the notice prescribed above, the Floodplain Administrator shall find that the building or development is in violation of the Flood Damage Prevention Ordinance, he or she shall issue an order in writing to the owner, requiring the owner to remedy the violation within a specified time period, not less than sixty (60) calendar days, nor more than least Insert Calendar Days (One-hundred-eighty (180) calendar days or less is recommended) calendar days. Where the Floodplain Administrator finds that there is imminent danger to life or other property, he or she may order that corrective action be taken in such lesser period as may be feasible.

(4) Appeal: Any owner who has received an order to take corrective action may appeal the order to the local elected governing body by giving notice of appeal in writing to the Floodplain Administrator and the clerk within ten (10) days following issuance of the final order. In the absence of an appeal, the order of the Floodplain Administrator shall be final. The local governing body shall hear an appeal within a reasonable time and may affirm, modify and affirm, or revoke the order.

730 harsh?? (5) if I like it

Failure to Comply with Order: If the owner of a building or property fails to comply with an order to take corrective action for which no appeal has been made or fails to comply with an order of the governing body following an appeal, the owner shall be guilty of a Class 1 misdemeanor pursuant to NC G.S. § 143-215.58 and shall be punished at the discretion of the court.

SECTION E. VARIANCE PROCEDURES.

(1) The Insert appeal board name (The Board of Adjustment is the recommended appeal board) as established by Community Name, hereinafter referred to as the "appeal board", shall hear and decide requests for variances from the requirements of this ordinance.

(2) Any person aggrieved by the decision of the appeal board may appeal such decision to the Court, as provided in Chapter 7A of the North Carolina General Statutes.

(3) Variances may be issued for:

(a) The repair or rehabilitation of historic structures upon the determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and that the variance is the minimum necessary to preserve the historic character and design of the structure;

(b) Functionally dependent facilities if determined to meet the definition as stated in Article 2 of this ordinance, provided provisions of Article 4, Section E(9)(b), (c), and (e) have been satisfied, and such facilities are protected by methods that minimize flood damages during the base flood and create no additional threats to public safety; or

(c) Any other type of development provided it meets the requirements of this Section.

(4) In passing upon variances, the appeal board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and:

(a) The danger that materials may be swept onto other lands to the injury of others;

(b) The danger to life and property due to flooding or erosion damage;

(c) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

- (d) The importance of the services provided by the proposed facility to the community;
 - (e) The necessity to the facility of a waterfront location as defined under Article 2 of this ordinance as a functionally dependent facility, where applicable;
 - (f) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
 - (g) The compatibility of the proposed use with existing and anticipated development;
 - (h) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 - (i) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (j) The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
 - (k) The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.
- (5) A written report addressing each of the above factors shall be submitted with the application for a variance.
- (6) Upon consideration of the factors listed above and the purposes of this ordinance, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purposes and objectives of this ordinance.
- (7) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the BFE and the elevation to which the structure is to be built and that such construction below the BFE increases risks to life and property, and that the issuance of a variance to construct a structure below the BFE may result in increased premium rates for flood insurance up to \$25 per \$100 of insurance coverage. Such notification shall be maintained with a record of all variance actions, including justification for their issuance.
- (8) The Floodplain Administrator shall maintain the records of all appeal actions and report any variances to the FEMA and the State of North Carolina upon request.
- (9) Conditions for Variances:
- (a) Variances shall not be issued when the variance will make the structure in violation of other federal, state, or local laws, regulations, or ordinances.
 - (b) Variances shall not be issued within any designated floodway or non-encroachment area if the variance would result in any increase in flood levels during the base flood discharge.
 - (c) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - (d) Variances shall only be issued prior to development permit approval.
 - (e) Variances shall only be issued upon:
 - (i) A showing of good and sufficient cause;
 - (ii) A determination that failure to grant the variance would result in exceptional hardship; and
 - (iii) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

- (10) A variance may be issued for solid waste disposal facilities or sites, hazardous waste management facilities, salvage yards, and chemical storage facilities that are located in Special Flood Hazard Areas provided that all of the following conditions are met.
- (a) The use serves a critical need in the community.
 - (b) No feasible location exists for the use outside the Special Flood Hazard Area.
 - (c) The reference level of any structure is elevated or floodproofed to at least the Regulatory Flood Protection Elevation.
 - (d) The use complies with all other applicable federal, state and local laws.
 - (e) The Community Name has notified the Secretary of the North Carolina Department of Public Safety of its intention to grant a variance at least thirty (30) calendar days prior to granting the variance.

ARTICLE 5. PROVISIONS FOR FLOOD HAZARD REDUCTION.

SECTION A. GENERAL STANDARDS.

In all Special Flood Hazard Areas the following provisions are required:

- ✓ (1) All new construction and substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse, and lateral movement of the structure.
- ✓ (2) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage in accordance with the FEMA Technical Bulletin 2, *Flood Damage-Resistant Materials Requirements*.
- ✓ (3) All new construction and substantial improvements shall be constructed by methods and practices that minimize flood damages.
- ✓ (4) All new electrical, heating, ventilation, plumbing, air conditioning equipment, and other service equipment shall be located at or above the RFPE or designed and installed to prevent water from entering or accumulating within the components during the occurrence of the base flood. These include, but are not limited to, HVAC equipment, water softener units, bath/kitchen fixtures, ductwork, electric/gas meter panels/boxes, utility/cable boxes, hot water heaters, and electric outlets/switches.
 - ✓ (a) Replacements part of a substantial improvement, electrical, heating, ventilation, plumbing, air conditioning equipment, and other service equipment shall also meet the above provisions.
 - (b) Replacements that are for maintenance and not part of a substantial improvement, may be installed at the original location provided the addition and/or improvements only comply with the standards for new construction consistent with the code and requirements for the original structure.
- ✓ (5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- ✓ (6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into flood waters.
- ✓ (7) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- ~~(8) Any alteration, repair, reconstruction, or improvements to a structure, which is in compliance with the provisions of this ordinance, shall meet the requirements of "new construction" as contained in this ordinance.~~

- (8) Nothing in this ordinance shall prevent the repair, reconstruction, or replacement of a building or structure existing on the effective date of this ordinance and located totally or partially within the floodway, non-encroachment area, or stream setback, provided there is no additional encroachment below the Regulatory Flood Protection Elevation in the floodway, non-encroachment area, or stream setback, and provided that such repair, reconstruction, or replacement meets all of the other requirements of this ordinance.
- (9) New solid waste disposal facilities and sites, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted, except by variance as specified in Article 4, Section E(10). A structure or tank for chemical or fuel storage incidental to an allowed use or to the operation of a water treatment plant or wastewater treatment facility may be located in a Special Flood Hazard Area only if the structure or tank is either elevated or floodproofed to at least the Regulatory Flood Protection Elevation and certified in accordance with the provisions of Article 4, Section B(3).
- (10) All subdivision proposals and other development proposals shall be consistent with the need to minimize flood damage.
- (11) All subdivision proposals and other development proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
- (12) All subdivision proposals and other development proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- (13) All subdivision proposals and other development proposals shall have received all necessary permits from those governmental agencies for which approval is required by federal or state law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
- (14) When a structure is partially located in a Special Flood Hazard Area, the entire structure shall meet the requirements for new construction and substantial improvements.
- (15) When a structure is located in multiple flood hazard zones or in a flood hazard risk zone with multiple base flood elevations, the provisions for the more restrictive flood hazard risk zone and the highest BFE shall apply.
- (16) Fill is prohibited in the SFHA, including construction of buildings on fill. This includes not approving Conditional Letters or Letters of Map Revision - Based on Fill (CLOMR-F or LOMR-F). (maximum 280 CRS points possible) (OPTIONAL) Note: This should be consistent with Article 5, Section G (11)(e) in coastal areas.

SECTION B. SPECIFIC STANDARDS.

In all Special Flood Hazard Areas where BFE data has been provided, as set forth in Article 3, Section B, or Article 5, Section D, the following provisions, in addition to the provisions of Article 5, Section A, are required:

- (1) Residential Construction. New construction and substantial improvement of any residential structure (including manufactured homes) shall have the reference level, including basement, elevated no lower than the Regulatory Flood Protection Elevation, as defined in Article 2 of this ordinance.
- (2) Non-Residential Construction. New construction and substantial improvement of any commercial, industrial, or other non-residential structure shall have the reference level, including basement, elevated no lower than the Regulatory Flood Protection Elevation, as defined in Article 2 of this ordinance. Structures located in Zones A, AE, AH, AO, A99 may be floodproofed to the Regulatory Flood Protection Elevation in lieu of elevation provided that all areas of the structure, together with attendant utility and sanitary facilities, below the Regulatory Flood Protection Elevation are watertight with walls substantially impermeable to the passage of water, using structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. For AO Zones, the floodproofing elevation shall be in accordance with Article 5, Section I (2). A registered professional engineer or architect shall certify that the floodproofing standards of this subsection are satisfied. Such certification shall be provided to the Floodplain Administrator as set forth in Article 4, Section B(3), along with the operational plan and the inspection and maintenance plan.

(3) Manufactured Homes.

- (a) New and replacement manufactured homes shall be elevated so that the reference level of the manufactured home is no lower than the Regulatory Flood Protection Elevation, as defined in Article 2 of this ordinance.
- (b) Manufactured homes shall be securely anchored to an adequately anchored foundation to resist flotation, collapse, and lateral movement, either by certified engineered foundation system, or in accordance with the most current edition of the State of North Carolina Regulations for Manufactured Homes adopted by the Commissioner of Insurance pursuant to NCGS 143-143.15. Additionally, when the elevation would be met by an elevation of the chassis thirty-six (36) inches or less above the grade at the site, the chassis shall be supported by reinforced piers or engineered foundation. When the elevation of the chassis is above thirty-six (36) inches in height, an engineering certification is required.
- (c) All enclosures or skirting below the lowest floor shall meet the requirements of Article 5, Section B(4).
- (d) An evacuation plan must be developed for evacuation of all residents of all new, substantially improved or substantially damaged manufactured home parks or subdivisions located within flood prone areas. This plan shall be filed with and approved by the Floodplain Administrator and the local Emergency Management Coordinator.

(4) Elevated Buildings. Fully enclosed area, of new construction and substantially improved structures, which is below the lowest floor:

- ✓ (a) Shall not be designed or used for human habitation, but shall only be used for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator). The interior portion of such enclosed area shall not be finished or partitioned into separate rooms, except to enclose storage areas;

good idea ...

- ✓ (b) Shall not be temperature-controlled or conditioned; (*OPTIONAL, strongly encouraged*)
- (c) Shall be constructed entirely of flood resistant materials at least to the Regulatory Flood Protection Elevation; and
- (d) Shall include, in Zones A, AE, AH, AO, A99 flood openings to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a professional engineer or architect or meet or exceed the following minimum design criteria:
 - (i) A minimum of two flood openings on different sides of each enclosed area subject to flooding;
 - (ii) The total net area of all flood openings must be at least one (1) square inch for each square foot of enclosed area subject to flooding;
 - (iii) If a building has more than one enclosed area, each enclosed area must have flood openings to allow floodwaters to automatically enter and exit;
 - (iv) The bottom of all required flood openings shall be no higher than one (1) foot above the higher of the interior or exterior adjacent grade;
 - (v) Flood openings may be equipped with screens, louvers, or other coverings or devices, provided they permit the automatic flow of floodwaters in both directions; and
 - (vi) Enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require flood openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires flood openings as outlined above.

(f) Fill/Grading (*OPTIONAL*)

(i) Fill is prohibited in the SFHA (maximum 280 CRS points possible) (OPTIONAL) Note: this should be consistent with Article 5, Section A(17).

(g) ^{yes} Property owners shall be required to execute and record a non-conversion agreement prior to issuance of a building permit declaring that the area below the lowest floor shall not be improved, finished or otherwise converted to habitable space (30 CRS points); Community Name will have the right to inspect the enclosed area (30 CRS points). Community Name will conduct annual inspections. (30 CRS points). This agreement shall be recorded with the County Name County Register of Deeds and shall transfer with the property in perpetuity. (OPTIONAL for a maximum total of 90 CRS points)

(h) Release of restrictive covenant. If a property which is bound by a non-conversion agreement is modified to remove enclosed areas below BFE, then the owner may request release of restrictive covenant after staff inspection and submittal of confirming documentation. (OPTIONAL)

(5) Additions/Improvements.

(a) Additions and/or improvements to pre-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are:

(i) Not a substantial improvement, the addition and/or improvements must be designed to minimize flood damages and *must not be any more non-conforming than the existing structure.* (*non-conforming language is OPTIONAL*). *probably a good idea - permits equal non-conf.*

(ii) A substantial improvement, with modifications/rehabilitations/improvements to the existing structure or the common wall is structurally modified more than installing a doorway, both the existing structure and the addition must comply with the standards for new construction.

(b) Additions to pre-FIRM or post-FIRM structures that are a substantial improvement with no modifications/rehabilitations/improvements to the existing structure other than a standard door in the common wall, shall require only the addition to comply with the standards for new construction.

(c) Additions and/or improvements to post-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are:

(i) Not a substantial improvement, the addition and/or improvements only must comply with the standards for new construction consistent with the code and requirements for the original structure.

(ii) A substantial improvement, both the existing structure and the addition and/or improvements must comply with the standards for new construction.

(d) Any combination of repair, reconstruction, rehabilitation, addition or improvement of a building or structure taking place during a Insert number of years (One (1) year minimum is required) year period, the cumulative cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started must comply with the standards for new construction. For each building or structure, the Insert number of years (One (1) year minimum is required) year period begins on the date of the first improvement or repair of that building or structure subsequent to the effective date of this ordinance. Substantial damage also means flood-related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred. (The repetitive loss portion is OPTIONAL, but will be required for flood insurance policy holders to be eligible for Increased Cost of Compliance (ICC) benefits for repetitive losses.) If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The requirement does not, however, include either:

(i) Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the building official and that are the minimum necessary to assume safe living conditions.

✓ *yes*

- (ii) Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

(6) Recreational Vehicles. Recreational vehicles shall either:

(a) Temporary Placement

- (i) Be on site for fewer than 180 consecutive days; or
- (ii) Be fully licensed and ready for highway use. (A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities, and has no permanently attached additions.)

(b) Permanent Placement. Recreational vehicles that do not meet the limitations of Temporary Placement shall meet all the requirements for new construction.

(7) Temporary Non-Residential Structures. Prior to the issuance of a floodplain development permit for a temporary structure, the applicant must submit to the Floodplain Administrator a plan for the removal of such structure(s) in the event of a hurricane, flash flood or other type of flood warning notification. The following information shall be submitted in writing to the Floodplain Administrator for review and written approval:

- (a) A specified time period for which the temporary use will be permitted. Time specified may not exceed three (3) months, renewable up to one (1) year;
- (b) The name, address, and phone number of the individual responsible for the removal of the temporary structure;
- (c) The time frame prior to the event at which a structure will be removed (i.e., minimum of 72 hours before landfall of a hurricane or immediately upon flood warning notification);
- (d) A copy of the contract or other suitable instrument with the entity responsible for physical removal of the structure; and
- (e) Designation, accompanied by documentation, of a location outside the Special Flood Hazard Area, to which the temporary structure will be moved.

(8) Accessory Structures. When accessory structures (sheds, detached garages, etc.) are to be placed within a Special Flood Hazard Area, the following criteria shall be met:

- (a) Accessory structures shall not be used for human habitation (including working, sleeping, living, cooking or restroom areas);
- (b) Accessory structures shall not be temperature-controlled;
- (c) Accessory structures shall be designed to have low flood damage potential;
- (d) Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;
- (e) Accessory structures shall be firmly anchored in accordance with the provisions of Article 5, Section A(1);
- (f) All service facilities such as electrical shall be installed in accordance with the provisions of Article 5, Section A(4); and
- (g) Flood openings to facilitate automatic equalization of hydrostatic flood forces shall be provided below Regulatory Flood Protection Elevation in conformance with the provisions of Article 5, Section B(4)(d).

An accessory structure with a footprint less than Insert square foot (150 recommended) or that is a minimal investment

of Insert Cost of Structure ((\$3,000 recommended) or less and satisfies the criteria outlined above is not required to meet the elevation or floodproofing standards of Article 5, Section B (2). Elevation or floodproofing certifications are required for all other accessory structures in accordance with Article 4, Section B(3).

(9) Tanks. When gas and liquid storage tanks are to be placed within a Special Flood Hazard Area, the following criteria shall be met:

- (a) Underground tanks. Underground tanks in flood hazard areas shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty;
- (b) Above-ground tanks, elevated. Above-ground tanks in flood hazard areas shall be elevated to or above the Regulatory Flood Protection Elevation on a supporting structure that is designed to prevent flotation, collapse or lateral movement during conditions of the design flood. Tank-supporting structures shall meet the foundation requirements of the applicable flood hazard area;
- (c) Above-ground tanks, not elevated. Above-ground tanks that do not meet the elevation requirements of Section B (2) of this ordinance shall be permitted in flood hazard areas provided the tanks are designed, constructed, installed, and anchored to resist all flood-related and other loads, including the effects of buoyancy, during conditions of the design flood and without release of contents in the floodwaters or infiltration by floodwaters into the tanks. Tanks shall be designed, constructed, installed, and anchored to resist the potential buoyant and other flood forces acting on an empty tank during design flood conditions.
- (d) Tank inlets and vents. Tank inlets, fill openings, outlets and vents shall be:
 - (i) At or above the Regulatory Flood Protection Elevation or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tanks during conditions of the design flood; and
 - (ii) Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the design flood.

(10) Other Development.

- (a) Fences in regulated floodways and NEAs that have the potential to block the passage of floodwaters, such as stockade fences and wire mesh fences, shall meet the limitations of Article 5, Section F of this ordinance.
- (b) Retaining walls, sidewalks and driveways in regulated floodways and NEAs. Retaining walls and sidewalks and driveways that involve the placement of fill in regulated floodways shall meet the limitations of Article 5, Section F of this ordinance.
- (c) Roads and watercourse crossings in regulated floodways and NEAs. Roads and watercourse crossings, including roads, bridges, culverts, low-water crossings and similar means for vehicles or pedestrians to travel from one side of a watercourse to the other side, that encroach into regulated floodways shall meet the limitations of Article 5, Section F of this ordinance.

SECTION C. RESERVED.

SECTION D. STANDARDS FOR FLOODPLAINS WITHOUT ESTABLISHED BASE FLOOD ELEVATIONS.

Within the Special Flood Hazard Areas designated as Approximate Zone A and established in Article 3, Section B, where no BFE data has been provided by FEMA, the following provisions, in addition to the provisions of Article 5, Section A, shall apply:

- (1) No encroachments, including fill, new construction, substantial improvements or new development shall be permitted within a distance of twenty (20) feet each side from top of bank or five times the width of the stream, whichever is greater, unless certification with supporting technical data by a registered professional engineer is provided

demonstrating that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

- (2) The BFE used in determining the Regulatory Flood Protection Elevation shall be determined based on the following criteria:
 - (a) When BFE data is available from other sources, all new construction and substantial improvements within such areas shall also comply with all applicable provisions of this ordinance and shall be elevated or floodproofed in accordance with standards in Article 5, Sections A and B.
 - (b) When floodway or non-encroachment data is available from a Federal, State, or other source, all new construction and substantial improvements within floodway and non-encroachment areas shall also comply with the requirements of Article 5, Sections B and F.
 - (c) All subdivision, manufactured home park and other development proposals shall provide BFE data if development is greater than five (5) acres or has more than fifty (50) lots/manufactured home sites. Such BFE data shall be adopted by reference in accordance with Article 3, Section B and utilized in implementing this ordinance.
 - (d) When BFE data is not available from a Federal, State, or other source as outlined above, the reference level shall be elevated or floodproofed (nonresidential) to or above the Regulatory Flood Protection Elevation, as defined in Article 2. All other applicable provisions of Article 5, Section B shall also apply.

SECTION E. STANDARDS FOR RIVERINE FLOODPLAINS WITH BASE FLOOD ELEVATIONS BUT WITHOUT ESTABLISHED FLOODWAYS OR NON-ENCROACHMENT AREAS.

Along rivers and streams where BFE data is provided by FEMA or is available from another source but neither floodway nor non-encroachment areas are identified for a Special Flood Hazard Area on the FIRM or in the FIS report, the following requirements shall apply to all development within such areas:

- (1) Standards of Article 5, Sections A and B; and
- (2) Until a regulatory floodway or non-encroachment area is designated, no encroachments, including fill, new construction, substantial improvements, or other development, shall be permitted unless certification with supporting technical data by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point within the community.

SECTION F. FLOODWAYS AND NON-ENCROACHMENT AREAS.

Areas designated as floodways or non-encroachment areas are located within the Special Flood Hazard Areas established in Article 3, Section B. The floodways and non-encroachment areas are extremely hazardous areas due to the velocity of floodwaters that have erosion potential and carry debris and potential projectiles. The following provisions, in addition to standards outlined in Article 5, Sections A and B, shall apply to all development within such areas:

- (1) No encroachments, including fill, new construction, substantial improvements and other developments shall be permitted unless:
 - (a) It is demonstrated that the proposed encroachment would not result in any increase in the flood levels during the occurrence of the base flood discharge, based on hydrologic and hydraulic analyses performed in accordance with standard engineering practice and presented to the Floodplain Administrator prior to issuance of floodplain development permit; or
 - (b) A Conditional Letter of Map Revision (CLOMR) has been approved by FEMA. A Letter of Map Revision (LOMR) must also be obtained within six months of completion of the proposed encroachment.

- (2) If Article 5, Section F(1) is satisfied, all development shall comply with all applicable flood hazard reduction provisions of this ordinance.
- (3) Manufactured homes may be permitted provided the following provisions are met:
 - (a) The anchoring and the elevation standards of Article 5, Section B(3); and
 - (b) The encroachment standards of Article 5, Section F(1).

SECTION G. STANDARDS FOR AREAS OF SHALLOW FLOODING (ZONE AO).

Located within the Special Flood Hazard Areas established in Article 3, Section B, are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate. In addition to Article 5, Sections A and B, all new construction and substantial improvements shall meet the following requirements:

- (1) The reference level shall be elevated at least as high as the depth number specified on the Flood Insurance Rate Map (FIRM), in feet, plus a freeboard of Insert freeboard [two (2), (feet of freeboard selected for Regulatory Flood Protection Elevation definition)] feet, above the highest adjacent grade; or at least Insert feet [Two (2), (A minimum of two (2) feet is required and four (4) feet is recommended where a depth is not provided)] feet above the highest adjacent grade if no depth number is specified.
- (2) Non-residential structures may, in lieu of elevation, be floodproofed to the same level as required in Article 5, Section I(1) so that the structure, together with attendant utility and sanitary facilities, below that level shall be watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Certification is required in accordance with Article 4, Section B(3) and Article 5, Section B(2).
- (3) Adequate drainage paths shall be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

SECTION H. STANDARDS FOR AREAS OF SHALLOW FLOODING (ZONE AH).

Located within the Special Flood Hazard Areas established in Article 3, Section B, are areas designated as shallow flooding areas. These areas are subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are one (1) to three (3) feet. Base Flood Elevations are derived from detailed hydraulic analyses are shown in this zone. In addition to Article 5, Sections A and B, all new construction and substantial improvements shall meet the following requirements:

- (1) Adequate drainage paths shall be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

ARTICLE 6. LEGAL STATUS PROVISIONS.

SECTION A. EFFECT ON RIGHTS AND LIABILITIES UNDER THE EXISTING FLOOD DAMAGE PREVENTION ORDINANCE.

This ordinance in part comes forward by re-enactment of some of the provisions of the Flood Damage Prevention Ordinance enacted insert adoption date of the community's initial Flood Damage Prevention Ordinance as amended, and it is not the intention to repeal but rather to re-enact and continue to enforce without interruption of such existing provisions, so that all rights and liabilities that have accrued thereunder are reserved and may be enforced. The enactment of this ordinance shall not affect any action, suit or proceeding instituted or pending. All provisions of the Flood Damage Prevention Ordinance of Community Name enacted on insert adoption date of the community's initial Flood Damage Prevention Ordinance, as amended, which are not reenacted herein are repealed.

Municipal: The date of the initial Flood Damage Prevention Ordinance for County Name County is insert adoption date of the community's initial Flood Damage Prevention Ordinance.

County: The date of the initial Flood Damage Prevention Ordinance for each municipal jurisdiction within County Name County is as follows:

List each municipality within the County with its initial ordinance date. ✓✓

SECTION B. EFFECT UPON OUTSTANDING FLOODPLAIN DEVELOPMENT PERMITS.

Nothing herein contained shall require any change in the plans, construction, size, or designated use of any development or any part thereof for which a floodplain development permit has been granted by the Floodplain Administrator or his or her authorized agents before the time of passage of this ordinance; provided, however, that when construction is not begun under such outstanding permit within a period of six (6) months subsequent to the date of issuance of the outstanding permit, construction or use shall be in conformity with the provisions of this ordinance.

SECTION C. SEVERABILITY.

If any section, clause, sentence, or phrase of the Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this Ordinance.

SECTION D. EFFECTIVE DATE.

This ordinance shall become effective insert upon adoption or a specific date.

SECTION E. ADOPTION CERTIFICATION.

I hereby certify that this is a true and correct copy of the Flood Damage Prevention Ordinance as adopted by the governing body of Community Name, North Carolina, on the Day (number or text) day of Month, Year.

WITNESS my hand and the official seal of insert Name, Title, this the Day (number or text) day of Month, Year.

(signature)



STAFF REPORT

SUBJECT:	RESOLUTION AMENDING WATER SERVICE UTILITY CONTRACT WITH THE TOWN OF SWEPSONVILLE
PREPARED BY:	FRANKIE MANESS, CITY MANAGER

REQUESTED ACTION:

Adopt the Resolution Amending the Water Service Utility Contract with the Town of Swepsonville.

BACKGROUND/SUMMARY:

The Town of Swepsonville has purchased water from the City of Graham for resale through its distribution system following a joint effort to extend a water line along Highway 54 in 2003. The City of Graham also provides the Town of Swepsonville with storage of finished water equal to a one-half day's supply of the average annual daily demand pursuant to Title 15A .0805 (c) of the Rules Governing Public Water Supplies.

The original agreement with the Town of Swepsonville was approved in March of 2003 and renewed in April 2013. Currently the Town of Swepsonville is allocated 6,000,000 gallons per month (200,000 GPD) and their consumption has increased to an average of 5,462,260 gallons per month (182,000 GPD). The amendment to the agreement seeks an additional allocation of 3,000,000 gallons per month (100,000 GPD), bringing the total allocation to 9,000,000 gallons per month (300,000 GPD). Accordingly, the City would also allocate 150,000 gallons per day of finished water storage.

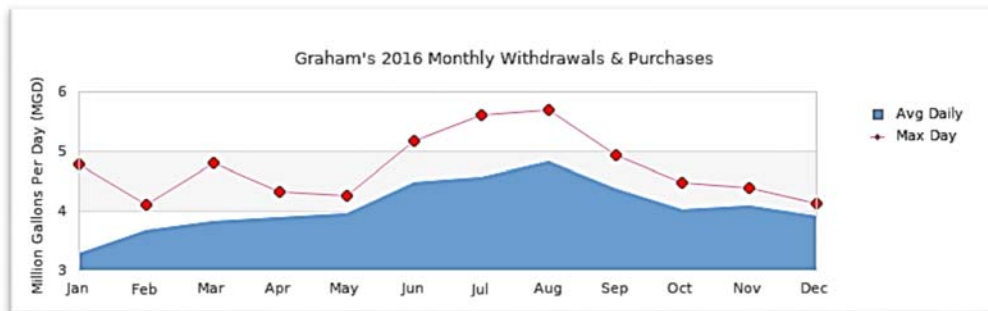
FISCAL IMPACT:

The Town of Swepsonville represents one of the largest demand users for the City of Graham and thus a major source of revenue for the Water/Sewer Fund. In the past 12-months, sale to the Town of Swepsonville has generated \$319,661 in revenue, which equates to roughly 11.5% of total water revenue anticipated in FY 17-18.

STAFF RECOMMENDATION:

Approval. The amendment furthers the longstanding relationship with the Town of Swepsonville and helps solidify a major source of revenue. While the agreement sets aside additional capacity, the allocation is still less than the 15,000,000 gallons per month previously provided by the agreement of 2003. The City has ample supply to afford an increase in the contract.

In 2016, the water plant had an average daily withdrawal (water taken into the plant for processing) of 4.12 MGD or 34.33% of capacity. Also, our required finished water storage is only 32% of our actual storage capacity.



SUGGESTED MOTION(S):

I move we adopt the Resolution Amending the Water Service Utility Contract with the Town of Swepsonville.

RESOLUTION AMENDING WATER SERVICE UTILITY CONTRACT WITH THE TOWN OF SWEPSONVILLE

WHEREAS, The City of Graham and the Town of Swepsonville originally engaged in a water service utility contract in 2003 following a joint effort to extend a water line along Highway 54;

WHEREAS, the agreement was renewed in 2013;

WHEREAS, The Town of Swepsonville represents one the largest demand users for the City of Graham and thus a major source of revenue for the Water/Sewer Fund;

WHEREAS, The Town of Swepsonville's consumption has increased and is nearing the allocation limit.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Graham that:

The City of Graham approves that the agreement be amended to provide a total allocation of 9,000,000 gallons per month and finished water storage of 150,000 gallons per day.

BE IT FURTHER RESOLVED THAT the Mayor, City Manager and City Clerk are hereby authorized to execute the contract on behalf of the City.

Adopted this 1st day of August 2017.

Mayor Jerry Peterman

Attest:

CITY OF GRAHAM

HISTORY LISTING FOR 06/30/2016 - 07/24/2017

Date: 07/24/2017

Time: 10:12:32

110701.00 98

TOWN OF SWEPSONVILLE

ACTIVE

Cycle: 11

Start Date:

10/8/2003

1915 E HWY 54

TRANSACTION	DATE	SVC	RATE	READING	MTR/CHK	DESCRIPTION	AMOUNT	REFERENCE	USAGE	BALANCE
BEGIN BAL										.00
BILLING	06/30/2016	WA	SWP			sweepsBYPASS	Rate: SWP		53380.0000	25,675.78
BILLING	06/30/2016	WS	WS				Rate: WS			25,705.78
PAYMENT	07/13/2016				007538	CHECK IN MAIL	25,705.78	11998		.00
READING	07/14/2016	WA	SWP	967200	sweepsHIGH	ITRON RDG		542		.00
READING	07/14/2016	WA	SWP	726225	sweepsBYPASS	ITRON RDG		542		.00
BILLING	07/31/2016	WA	SWP			sweepsBYPASS	Rate: SWP		49290.0000	23,708.49
BILLING	07/31/2016	WS	WS				Rate: WS			23,738.49
PAYMENT	08/12/2016				0000000055	D24 CK IN MAIL	23,738.49	12163		.00
READING	08/19/2016	WA	SWP	1002950	sweepsHIGH	ITRON RDG		552		.00
READING	08/19/2016	WA	SWP	747050	sweepsBYPASS	ITRON RDG		552		.00
BILLING	08/31/2016	WA	SWP			sweepsBYPASS	Rate: SWP		56575.0000	27,212.58
BILLING	08/31/2016	WS	WS				Rate: WS			27,242.58
PAYMENT	09/14/2016				0000000062	D24 CK IN MAIL	27,242.58	12332		.00
READING	09/15/2016	WA	SWP	1040000	sweepsHIGH	ITRON RDG		562		.00
READING	09/15/2016	WA	SWP	768085	sweepsBYPASS	ITRON RDG		562		.00
BILLING	09/30/2016	WA	SWP			sweepsBYPASS	Rate: SWP		58085.0000	27,938.89
BILLING	09/30/2016	WS	WS				Rate: WS			27,968.89
PAYMENT	10/13/2016				0000000083	D24 CK IN MAIL	27,968.89	12481		.00
READING	10/14/2016	WA	SWP	1075200	sweepsHIGH	ITRON RDG		572		.00
READING	10/14/2016	WA	SWP	787550	sweepsBYPASS	ITRON RDG		572		.00
BILLING	10/31/2016	WA	SWP			sweepsBYPASS	Rate: SWP		54665.0000	26,293.87
BILLING	10/31/2016	WS	WS				Rate: WS			26,323.87
PAYMENT	11/11/2016				0000000037	D24 CK IN MAIL	26,323.87	12621		.00
READING	11/10/2016	WA	SWP	1106100	sweepsHIGH	ITRON RDG		582		.00
READING	11/10/2016	WA	SWP	805515	sweepsBYPASS	ITRON RDG		582		.00
BILLING	11/30/2016	WA	SWP			sweepsBYPASS	Rate: SWP		48865.0000	23,504.07
BILLING	11/30/2016	WS	WS				Rate: WS			23,534.07
PAYMENT	12/14/2016				0000000107	D24 CK IN MAIL	23,534.07	12775		.00
READING	12/16/2016	WA	SWP	1129500	sweepsHIGH	ITRON RDG		595		.00
READING	12/16/2016	WA	SWP	823160	sweepsBYPASS	ITRON RDG		595		.00
BILLING	12/31/2016	WA	SWP				Rate: SWP		41045.0000	19,742.65
BILLING	12/31/2016	WS	WS				Rate: WS			19,772.65
PAYMENT	01/18/2017				0000000114	D24 CK IN MAIL	19,772.65	12927		.00
READING	01/20/2017	WA	SWP	1157750	sweepsHIGH	ITRON RDG		607		.00
READING	01/20/2017	WA	SWP	840660	sweepsBYPASS	ITRON RDG		607		.00
BILLING	01/31/2017	WS	WS				Rate: WS			30.00
BILLING	01/31/2017	WA	SWP				Rate: SWP		45750.0000	22,035.75
PAYMENT	02/15/2017				0000000077	D24 CK IN MAIL	22,035.75	13068		.00
READING	02/17/2017	WA	SWP	1186650	sweepsHIGH	ITRON RDG		623		.00
READING	02/17/2017	WA	SWP	858455	sweepsBYPASS	ITRON RDG		623		.00
BILLING	02/28/2017	WA	SWP				Rate: SWP		46695.0000	22,460.30
BILLING	02/28/2017	WS	WS				Rate: WS			22,490.30
PAYMENT	03/14/2017				0000000003	D24 CK IN MAIL	22,490.30	13199		.00
READING	03/17/2017	WA	SWP	1216900	sweepsHIGH	ITRON RDG		633		.00
READING	03/17/2017	WA	SWP	874770	sweepsBYPASS	ITRON RDG		633		.00
BILLING	03/31/2017	WS	WS				Rate: WS			30.00
BILLING	03/31/2017	WA	SWP				Rate: SWP		46565.0000	22,427.77
PAYMENT	04/12/2017				0000000029	D24 CK IN MAIL	22,427.77	13342		.00
READING	04/13/2017	WA	SWP	1259510	sweepsHIGH	ITRON RDG		643		.00
READING	04/13/2017	WA	SWP	890970	sweepsBYPASS	ITRON RDG		643		.00
BILLING	04/30/2017	WA	SWP				Rate: SWP		58810.0000	28,287.61
BILLING	04/30/2017	WS	WS				Rate: WS			28,317.61
PAYMENT	05/11/2017				008046	CHECK IN MAIL	28,317.61	13480		.00
READING	05/19/2017	WA	SWP	1294700	sweepsHIGH	ITRON RDG		654		.00
READING	05/19/2017	WA	SWP	909000	sweepsBYPASS	ITRON RDG		654		.00
BILLING	05/31/2017	WS	WS				Rate: WS			30.00
BILLING	05/31/2017	WA	SWP				Rate: SWP		53220.0000	25,628.82
PAYMENT	06/13/2017				0000000059	D24 CK IN MAIL	25,628.82	13648		.00
READING	06/16/2017	WA	SWP	1329350	sweepsHIGH	ITRON RDG		673		.00
READING	06/16/2017	WA	SWP	925980	sweepsBYPASS	ITRON RDG		673		.00
BILLING	06/30/2017	WA	SWP				Rate: SWP		51630.0000	24,834.03
BILLING	06/30/2017	WS	WS				Rate: WS			24,864.03
PAYMENT	07/12/2017				0000000119	D24 CK IN MAIL	24,864.03	13792		.00

Current Balance:

TRANSACTION	SVC	DESCRIPTION	CODE	DESCRIPTION	TOTAL USAGE	TOTAL AMOUNT	NUMBER	AVERAGE USAGE	AVERAGE AMOUNT
READINGS	WA	WATER	1	ITRON RDG			24		
PAYMENTS			4	CHECK IN MAIL		54,023.39	2		27,011.70
PAYMENTS			22	D24 CK IN MAIL		266,027.22	11		24,184.29
BILLINGS	WA	WATER			664575.0000	319,660.61	13	51121	24,589.28
BILLINGS	WS	WA SAMPLING				390.00	13		30.00

**STATE OF NORTH CAROLINA
ALAMANCE COUNTY**

FIRST AMENDMENT TO WATER SERVICE UTILITY CONTRACT

This FIRST AMENDMENT TO WATER SERVICE UTILITY CONTRACT made and entered the _____ day of _____ 2017, between the City of Graham, a North Carolina Municipality, hereinafter, referred to as the "Provider" and the Town of Swepsonville, a North Carolina ~~Municipality~~Municipality, hereinafter, referred to as the "Customer".

W I T N E S S E T H:

WHEREAS, the Customer is chartered by the State of North Carolina as a Municipality and provides for its citizens a water supply system within its corporate limits and areas adjoining such limits as described in plans now on file with the Purchaser and to accomplish this service, the Customer will require a supply of treated water; and

WHEREAS, the Provider owns and operates a water supply distribution system with a capacity currently capable of providing its citizens, residents, and industries with treated drinking water and the estimated number of water users to be served by the said Customer as shown in the plans of the system now on file in the office of the Customer; and

WHEREAS, by Resolution enacted on the 3rd day of April, 2013, by the Provider, the sale of water to the Customer in accordance with the provisions of the said contract was approved, the execution of the contract carrying out of the said provisions by the City of Graham and attested by the City Clerk, was duly authorized; and

WHEREAS, by Resolution enacted on the _____ day of _____, 2013 by the Customer, the purchase of water from the Seller in accordance with the terms set forth in said contract was approved, the execution of the contract by the Town of Swepsonville and attested by the Town Clerk; and

WHEREAS, the Customer requests an additional allocation of water due to added demand and growth.

NOW, THEREFORE, in consideration of the foregoing and the mutual agreements hereinafter set forth,

1. **Purpose.** The purpose of this Agreement is to set forth the terms and conditions by which Customer shall purchase and the Provider shall sell, treated

drinking water for re-sale by Customer to its constituents, citizens, residents and industries.

2. **Purchase and Sale.** CUSTOMER agrees to buy from PROVIDER, and PROVIDER agrees to sell and deliver to CUSTOMER, treated drinking water on the terms hereinafter set forth. The water being sold by PROVIDER shall at all times meet the standards for safe drinking water as those standards are established by the SAFE DRINKING WATER ACT, and according to the rules set forth in 40 CFR 140-143, all as may be amended from time to time, which said standards have been adopted by the State of North Carolina, Department of the Environment and Natural Resources, and under which standards PROVIDER produces water at its water treatment plant.

3. **Delivery.** PROVIDER shall furnish the CUSTOMER, at the point of delivery hereinafter specified, during the term of this contract or any renewal or extension thereof, properly treated water meeting applicable standards of the State of North Carolina in such quantity as is considered by the Seller to be surplus water available at the time of need, but not to exceed ~~Four-Six~~ Million (49,000,000) Gallons per month. PROVIDER shall also provide storage of finished water equal to a one-half day's supply of the average annual daily demand pursuant to Title 15A .0805 (c) of the Rules Governing Public Water Supplies, not to exceed 150,000 gallons per day.

4. **Point of Delivery and Pressure.** PROVIDER shall provide water CUSTOMER at a reasonably constant pressure calculated at 60 PSI from an existing 12 inch main supply at a point located at the intersection of NC Highway 54 and State Road Number _____, 2135, also known as Jim Minor Road. If a greater pressure than that normally available at the point of delivery is required by the CUSTOMER, the cost of providing such greater pressure shall be borne by the CUSTOMER. Emergency failures of pressure or supply due to main supply line breaks, power failure, flood, fire and use of water to fight fire, earthquake or other

catastrophe shall excuse the PROVIDER from this provision for such reasonable period of time as may be necessary to restore service. It is understood, however, that the PROVIDER shall not be liable to any person firm or corporation for any damages suffered from any cause arising from its failure to provide water to the CUSTOMER under the terms hereof.

5. **Billing.** PROVIDER shall furnish the CUSTOMER not later than the 5th day of each month, with an itemized statement of the amount of water furnished to the CUSTOMER during the preceding monthly calendar period. CUSTOMER shall pay the PROVIDER, not later than the 18th day of each month, for water delivered in accordance with the schedule of rates as may be established from time to time by the City Council of the PROVIDER. The rate for the treated water sold herein will be equal to the PROVIDER'S residential inside rate per thousand gallons delivered.

6. **Equipment.** CUSTOMER shall furnish, install, operate, and maintain at its own expense at point of delivery, the necessary metering equipment, including a meter house or pit, and required devices of standard type for properly measuring the quantity of water delivered to the CUSTOMER and to calibrate such metering equipment whenever requested by the PROVIDER but not more frequently than once every twelve (12) months. A meter registering not more than two percent (2%) above or below the test result shall be deemed to be accurate. The previous readings of any meter disclosed by test to be inaccurate shall be corrected for the three (3) months previous to such test in accordance with the percentage of inaccuracy found by such tests. If any meter fails to register for any period, the amount of water furnished during such period shall be deemed to be the amount of water delivered in the corresponding period immediately prior to the failure, unless PROVIDER and CUSTOMER shall agree upon a different amount. The metering equipment shall be read on or about the 15th day of each month. An appropriate official of the CUSTOMER at all reasonable times shall have access to the meter for the purpose of verifying its readings.

In the event that CUSTOMER desires to have delivery at a different location, then CUSTOMER, following the issuance of all permits by the State of North Carolina, shall at its own expense, connect its water delivery system to that of the PROVIDER, in accordance with sound engineering practices, and with the prior approval of the PROVIDER.

7. **Term.** This contract shall extend for a term beginning on the date of last approval by both PROVIDER AND CUSTOMER, and continuing thereafter for ten (10) years, inclusive of the day of last approval. IN THE EVENT THAT all water bills have been paid and all other conditions of this contract have been properly complied with by the CUSTOMER, said CUSTOMER may extend this CONTRACT at the same rate established herein for an additional period of ten (10) years, with the WRITTEN consent of the PROVIDER, by giving to the Seller at least sixty (60) days notice before the end of the initial ten (10) year period. The Contract may be terminated at any time prior to the initial ten (10) year term by mutual agreement of both parties. Upon approval and adoption of the annual budget by both PROVIDER AND CUSTOMER, this Contract is deemed ratified for and during the identified budget year.

8. **Breach.** In the event that either party to this contract shall breach this contract, the other party shall give notice of the alleged breach. Upon notice, the alleged offending party shall have 30 days to cure the alleged breach. Upon failure to cure, the damaged party shall have the right to immediately terminate this contract. Such termination of performance hereunder is without prejudice to any right of either party to recover damages through legal action or otherwise.

9. **Interruption of Service, Water Shortage or Drought.** Temporary or partial failures to deliver water shall be remedied with all possible dispatch. Whenever practical, PROVIDER will notify CUSTOMER with at least twenty-four (24) hours notice prior to any interruption of service necessary due to planned maintenance, repairs, or other foreseeable interruption. In the event of an extended shortage of water, or the supply of water available to the PROVIDER is otherwise diminished over an extended period of time, the supply of water to

CUSTOMER shall be reduced or diminished no more than is absolutely necessary to maintain a reasonable water supply in the corporate limits. In the event of declared drought conditions, CUSTOMER agrees to abide by the restrictions established by PROVIDER'S declaration.

10. **Long-term per Capita Reduction.** In accordance with the laws of the State of North Carolina, all PROVIDERS, including this PROVIDER, must include a plan for the reduction of long-term per capita demand on potable water. PROVIDER has implemented a "Best Management Practices" (BMP) plan to meet this requirement. CUSTOMER must supply to PROVIDER a BMP plan that addresses the following:

- A mechanism to provide per capita water audits
- A plan to abate water loss to the system found in the audits
- A practice that inspects and repairs the metering system
- A Plan to encourage and upgrade residential fixtures
- A Public Information plan on the importance of water conservation
- School Education and Outreach
- Irrigation supervision and control
- Landscaping regulations
- Other plans to address Rainwater Harvesting, Condensate Reuse, and Gray Water Use

The PROVIDER shall be entitled to review and audit the performance under the CUSTOMER'S BMP plan at least annually as a condition to the continuation of this contract.

11. **State Regulatory Authority.** This contract is subject to such rules, regulations, or laws as may be applicable to similar agreements in the State of North Carolina. The PROVIDER and CUSTOMER will cooperate in obtaining such permits; certificates, or the like, as may be required to comply with the terms of this contract.

12. **Impossibility.** In the event performance hereunder by the CUSTOMER becomes an impossibility and the CUSTOMER is incapable of performing under

this contract, any successor of the CUSTOMER, whether the result of legal process, assignment, or otherwise, shall succeed to the right of the Purchaser hereunder.

In witness whereof, the parties hereto, acting under authority of their respective governing bodies, have caused this contract to be duly executed in duplicate counterparts, each of which shall constitute an original.

Provider: City of Graham

By: _____
Jerry Peterman, Mayor, City of Graham

Attest:

Darcy Sperry, City Clerk

Customer: Town of Swepsonville

By: _____
Raymond Herring, Mayor, Town of Swepsonville

Attest:

_____, Town Clerk

STATE OF NORTH CAROLINA
COUNTY OF ALAMANCE

I, _____, a Notary Public in the aforesaid County and State, hereby certify that Darcy Sperry, City Clerk of the City of Graham, personally appeared before me this date and acknowledged that she is the City Clerk, duly appointed by the Graham City Council, and that by authority duly given and as an act of the City of Graham, the foregoing instrument was signed by the Mayor in its name, sealed with the corporate seal, and attested to by her as its City Clerk.

This the ____ day of _____, 2017.

Notary Public

My commission expires: _____

STATE OF NORTH CAROLINA

COUNTY OF ALAMANCE

I, _____, a Notary Public in the aforesaid County and State, hereby certify that _____, City Clerk of the Town of Swepsonville, personally appeared before me this date and acknowledged that she is the City Clerk, duly appointed by the Swepsonville Town Council, and that by authority duly given and as an act of the Town of Swepsonville, the foregoing instrument was signed by the Mayor in it name, sealed with the corporate seal, and attested to by the her as its City Clerk.

This the ____ day of _____, 2017.

Notary Public

My commission expires: _____



STAFF REPORT

SUBJECT:	RESOLUTION TO CREATE DEDICATED TRAFFIC ENFORCEMENT UNIT WITH FUNDING FROM GOVERNOR'S HIGHWAY SAFETY PROGRAM
PREPARED BY:	RYAN ALLSHOUSE, ADMINISTRATIVE INTERN

REQUESTED ACTION:

Adopt the Resolution allowing the City to enter into contract with the Governor's Highway Safety Program to create a dedicated traffic enforcement unit.

BACKGROUND/SUMMARY:

As the County seat and with the close proximity to I-40, I-85, as well as NC-49, NC-54, and NC-87 Graham experiences a high volume of traffic on a daily basis. The Graham Police Department has no special unit or traffic enforcement team to address the growing traffic. Alamance County is ranked 26th within the state in the number of fatal crashes; we have experienced an increase of crashes causing injury, as well as an increase in young drivers (15-24 years of age) involved in crashes. The Graham Police Department is seeking funds to create a dedicated traffic enforcement unit to focus on reduction of young driver crashes, occupant injuries, and speed related crashes in the City of Graham and surrounding areas. This unit will work closely with the Burlington Police Department as well as the Alamance County Sheriff's special operations unit and other agencies as deemed necessary. All county Law enforcement agencies supports GPD and their efforts to make the streets safer.

FISCAL IMPACT:

The City of Graham is required to appropriate \$19,574.00 or 15%, as a match to the \$110,921.00 in Federal funding through the Governor's Highway Safety Program to cover the personnel and direct costs in establishing a dedicated highway safety unit. The City of Graham is required to maintain the personnel in subsequent years with declining support from the grant. Year 2 will require a 30% match and year 3 will require a 50% match while year 4 and beyond is 100% the responsibility of the City. No budget amendment is required.

STAFF RECOMMENDATION:

Approval. Based on the growing nature of the City of Graham, this would be a valuable resource to the Police Department in the eye of public safety.

SUGGESTED MOTION(S):

I move we adopt the Resolution allowing the City of Graham to enter into contract with the Governors Highway Safety Program.

RESOLUTION TO ENTER INTO CONTRACT WITH THE GOVERNOR'S HIGHWAY SAFETY PROGRAM

WHEREAS, The Graham Police Department has completed an application contract for traffic funding: and

WHEREAS, The City of Graham has thoroughly considered the problem identified and has reviewed the project as described in the contract;

THEREFORE, NOW BE IT RESOLVED by the City of Graham in open meeting assembled in the City of Graham, North Carolina, this 1st day of August, 2017 as follows:

1. That the project referenced above is in the best interests of the Governing Body and the general public; and
2. That B.T. Edwards (Sergeant) is authorized to file, on behalf of the Governing Body, an application contract in the form prescribed by the Governor's Highway Safety Program for federal funding in the amount of \$110,921.00 to be made to the Governing Body to assist in defraying the cost of the project described in the contract application; and
3. That the Governing Body has formally appropriated the cash contribution of \$19,574.00 as required by the project contract; and
4. That the Project Director designated in the application contract shall furnish or make arrangement for other appropriate persons to furnish such information, data, documents and reports as required by the contract, if approved, or as may be required by the Governor's Highway Safety Program; and
5. That certified copies of this resolution be included as part of the contract referenced above; and
6. That this resolution shall take effect immediately upon its adoption.

DONE AND ORDERED in an open meeting by

Mayor Jerry Peterman

Attest:



STAFF REPORT

SUBJECT:	EMERGENCY PERSONNEL RADIOS BUDGET AMENDMENT
PREPARED BY:	FRANKIE MANESS, CITY MANAGER & JEFF PRICHARD, POLICE CHIEF

REQUESTED ACTION:

Approve a 2017-2018 Budget Ordinance Amendment to appropriate funds to purchase portable and mobile radios for Police and Fire Departments.

BACKGROUND/SUMMARY:

The current 800 mhz radio system and components are nearing or have exceeded their expected useful life. As the equipment ages, the performance decreases and personnel routinely experience problems transmitting from the field. This increasingly common occurrence of not being able to communicate with dispatch or fellow officers creates a potentially significant safety issue for the police officers in the field. Currently there is an opportunity to join in with several other agencies to get a “bulk” price discount. This offer is currently valid and may not be available during FY 2018-2019.

The current radio system “VIPER” and related equipment has proven less than reliable. In researching recent communication issues, it was concluded that the ability to utilize the VHF system could fill in gaps where the VIPER system fails to communicate. Therefore, the radios proposed for purchase will have the capability to transmit on a dual band system, thus improving communications.

The current equipment was purchased in March 2009.

FISCAL IMPACT:

Significant. Replacement costs for all public safety personnel is nearly \$500,000. No funds are available in the FY 2017-2018 operating budget and as a result an amendment and appropriation from fund balance is required. The cash balance in the General Fund at June 30th was \$8,100,000.

STAFF RECOMMENDATION:

Approval. A replacement strategy has been discussed for some time now with the initial goal of considering an appropriation in FY 18-19. However, recent communications problems associated with equipment age and the ability to capitalize on favorable pricing through a group purchasing effort brings expediency to the matter.

SUGGESTED MOTION(S):

I move we Approve the 2017-2018 Budget Ordinance Amendment to appropriate funds to purchase portable and mobile radios for Police and Fire Departments.

BE IT ORDAINED BY THE CITY COUNCIL of the City of Graham that the 2017 - 2018 Budget Ordinance shall be and is hereby amended as follows:

Section 1: General Fund Expenditures		
	APPROVED	AMENDED
10-5100-7400 Capital Outlay	154,000	509,000
10-5300-7400 Capital Outlay	30,000	175,000
Section 2: General Fund Revenues		
10-3900-0000 Fund Balance	842,500	1,342,500

This the 1st day of August, 2017.

Jerry Peterman Mayor

ATTEST:

Darcy Sperry, City Clerk

FIRM QUOTE-REVISED

DATE: July 27, 2017

Graham Police Dept.
216 S. Maple St.
Graham, NC 27253

Attention: Chief Jeff Prichard

CONTRACT #: NC STATE 725-G WITH BULK PURCHASE DISCOUNT AND TRADE-IN

Item	Quantity	Model Nomenclature	Description	Unit Cost	Extended
1	38	APX8000 Portable	Model 2.5	\$ 4,651.80	\$176,768.40
		“Dual Band (VIPER and VHF);Includes antenna, clip, battery”			
2	4	APX8000 Portable	Model 2.5	\$ 5,209.20	\$ 20,836.80
		“Includes antenna, clip, battery, encryption with multi key”			
3	42	NNTN8860	Charger iMPRES 2	\$ 112.50	\$ 4,725.00
4	42	NMN6271	Remote Mic iMPRES	\$ 243.75	\$ 10,237.50
5	15	NNTN7624	Vehicular Charger	\$ 321.75	\$ 4,826.25
6	22	APX8500 Mobile	05 Control Head	\$ 4,692.60	\$103,237.20
		“Remote mount; Dual Band”			
7	22	H1919	Mobile Multiplexer	\$ 219.00	\$ 4,818.00
8	1	APX7500 Consolette	Base Station	\$ 5,015.20	\$ 5,015.20
		“Includes desk mic, power supply”			
		Total Equipment Cost (before tax)			\$329,976.85
		Programming and Installation			\$ 23,700.00
		TOTAL REPLACEMENT COST			\$353,676.85

Notes:

1. Prices do not include sales tax. Tax will be added to any invoice.
2. Prices in accordance with North Carolina State Contract #725G and Alamance bulk purchase pricing.
3. Invoices for this quote will come from Motorola Solutions.
4. Lease-Purchase terms are no longer applicable.
5. Trade-ins are on a “one-for-one” basis. Any lack of a trade-in will require a re-quote.
6. Warranty on radios is five years.

FIRM QUOTE**DATE:** July 27, 2017Graham Fire Dept.
Graham, NC 27253

Attention: John Andrews

CONTRACT #: NC STATE 725-G WITH BULK PURCHASE DISCOUNT/TRADE-IN

Item	Quantity	Model Nomenclature	Description	Unit Cost	Extended
1	20	APX8000XE Portable	Model 2.5	\$ 5,236.80	\$ 83,788.80
		“Dual band, impact green, digital tone signaling; antenna, clip, battery”			
2	20	NNTN8860	Charger iMPRES 2	\$ 112.50	\$ 1,800.00
3	20	PMMN4106	Remote Mic XE500 green	\$ 412.50	\$ 6,600.00
4	4	APX8500 Mobile	05 Control Head	\$ 4,692.60	\$ 18,770.40
		“Dual band (VHF, 800), remote mount”			
5	4	H1919	Mobile Multiplexer	\$ 219.00	\$ 876.00
Equipment Total					\$134,882.40
Installation and Programming					\$ 3,800.00
TOTAL COST					\$138,682.40

Notes:

1. Prices do not include sales tax. Tax will be added to any invoice.
2. Prices in accordance with North Carolina State Contract #725G and Alamance bulk purchase pricing.
3. Invoices for this quote will come from Motorola Solutions.
4. Warranty is five years on radios only.
5. Trade-in is only on a “one-for-one” basis. Price will need to be changed if this stipulation is not met.

I make a motion to go into Closed Session to Consider the Performance of the City Attorney Pursuant to the Terms of *N.C.G.S. §. 143-318-11 (a) (6)*.