

REQUEST FOR BOARD ACTION

Henderson County Board of Commissioners

Meeting Date: June 1, 2009

Subject: Water Line Extension – Etowah Town Square

Attachments: Vicinity Map
Engineer's Report
Project Summary
Project Map
County Review Sheet

Summary of Request:

The City of Hendersonville has requested that the County comment on the proposed water line extension for Etowah Town Square. The proposed water line is 1285 linear feet. The project is located within the Rural Transition Area and a Commercial Service Center. This is consistent with the Henderson County 2020 Comprehensive Plan. A City of Hendersonville Project Summary Sheet, with backup documents and County Review Sheet with Staff comments, are attached for Board review and action.

Board Action Request:

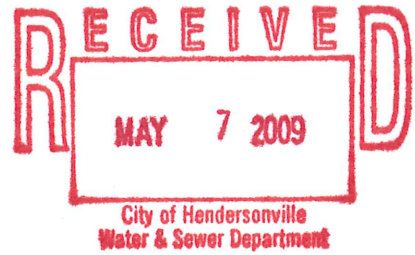
Action by the Board of Commissioners is needed to either grant or deny this request. If the Board decides to approve the requested extension the following motion has been provided.

Suggested Motion:

I move that the Board approve the Etowah Town Square water line extension and direct Staff to convey the County's comments to the City of Hendersonville.

**ETOWAH TOWN PLACE
WATER MAIN EXTENSION**

ENGINEER'S REPORT



APPLICANT NAME ADDRESS

CITY OF HENDERSONVILLE
P.O. Box 1670
Hendersonville, NC 28793

PROJECT DESCRIPTION and NARRATIVE

Etowah Town Place shall be a(n) retail / office space for small businesses. The proposed retail / office facility is located just past the intersection of Highway 64 and Brickyard Road in Etowah, North Carolina.

The proposed plan and permit provides for the development of two retail / office facilities on the proposed property site.

CURRENT PROJECT NARRATIVE

The proposed water main extension which includes 2", 6", and 8" water mains with valves, tees, and other appurtenances will serve only Etowah Town Place.

WATER PROJECT SUMMARY

FIRE HYDRANT ASSEMBLY	2 EA
2" SDR 13.5 WATER MAIN	270 LF
6" DIP WATER MAIN	225 LF
8" DIP WATER MAIN	790 LF

IDENTIFICATION AND DESCRIPTION of the SERVICE AREA

The service area is for the proposed Etowah Town Place retail / office space.

FUTURE SERVICE AREAS

The proposed water main extension shall be "stubbed out" at or near the western property line for additional connection beyond the entrance for future use.

PRESENT AND ANTICIPATED WATER DEMAND

The proposed water demand for the proposed subdivision is approximately 3500 GPD

CHARACTER of the WATER SUPPLY SOURCE

The water supply of the is project shall be the City of Hendersonville Water Treatment Plant.

AGREEMENTS TO PURCHASE WATER

Not applicable.

FACILITIES USEFUL LIFE

For this project, the expected useful life is at least thirty (30) years.

MAXIMUM DAILY TREATED WATER SUPPLY AND MAXIMUM DAILY DEMAND

The maximum daily treated water supply for the City of Hendersonville WTP is 12 MGD. The average demand is approximately 7.2 MGD with a daily peak of 9.5 MGD.

CONSIDERATION of ALTERNATIVES to CONSTRUCTING A NEW WATER SYSTEM.

Not Applicable

POPULATION RECORDS AND TRENDS

In 1998 the population of Hendersonville was 9538, and the growth rate from 1990 to 1998 was approximately 31%. According to the Office of State Planning in Raleigh, the population of the City is 12,237.

PRESENT AND FUTURE YIELD FROM the SOURCE of SUPPLY

The Hendersonville WTP draws water from the Mills River. This supply of water source is expected to be adequate for the future needs of the City.

PROPOSED WATER TREATMENT PROCESSES

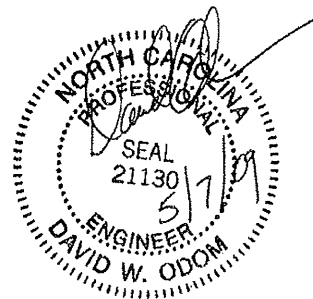
Not Applicable

DESIGN BASIS

The design basis for this project is to meet or exceed minimum pressure and flow requirements as stated in the Rules Governing Public Water Systems.(RGPWS).

PRIORITIZED LIST of INFRASTRUCTURE IMPROVEMENTS

Not applicable.



**PROJECT SUMMARY
WATER UTILITY EXTENSION
Etowah Town Square**

May 11, 2009

To: Honorable Mayor and Members of City of Council

From: Water & Sewer Department Staff

RE: STAFF RECOMMENDATION FOR ACCEPTANCE OF
WATER UTILITY EXTENSION AGREEMENT (WUEA)

This is a project to extend lines to provide water service to a **proposed office / retail shop development**. This project is located **near the intersection of Hwy 64 and Brickyard Road**. This project is under the reviewing jurisdiction of **Henderson County** and is located within the **USA – Urban Services Area**. This project **will not** involve an IBT (Interbasin Transfer) from the French Broad River Basin. The entire cost of the proposed water line extension is to be paid for by **TJJO LLC of Horse Shoe, NC**.

This project requires approximately **1285** linear feet of water line sized as following:

Approximate Length:	Description:
790 lf	8" DIP
225 lf	6" DIP
270 lf	2" PVC SDR 13.5

Fire Protection will be provided by the installation of **one (1)**-fire hydrant(s).

The Reviewing Jurisdiction, listed below, has completed their review of this utility extension request in regard to their adopted land use plan or in terms of its future impact on existing land uses for that local government.

Reviewing Jurisdiction: **Henderson County**

Approved Disapproved

Narrative Comments Provided: Yes No

Signing of Official: _____
Printed Name: _____

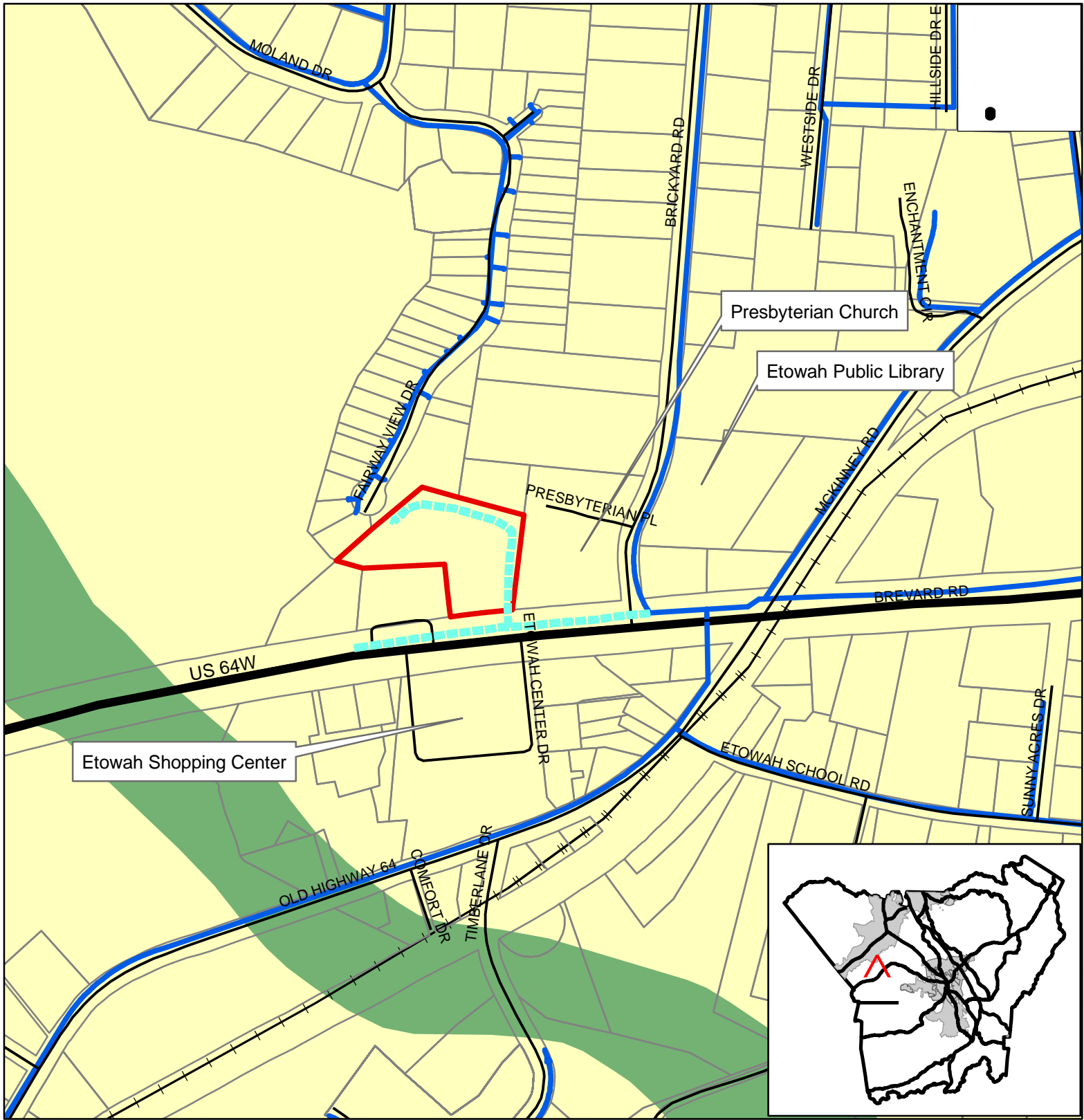
Date: _____

Based on the above information, the Water & Sewer Department has the capacity to support this additional infrastructure and associated connections and hereby recommends approval of said project contingent upon final approval of construction plans and specifications by the Water & Sewer Department.

A motion is needed to approve and accept this project. Suggested wording for motion is as follows:

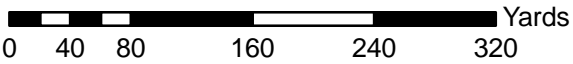
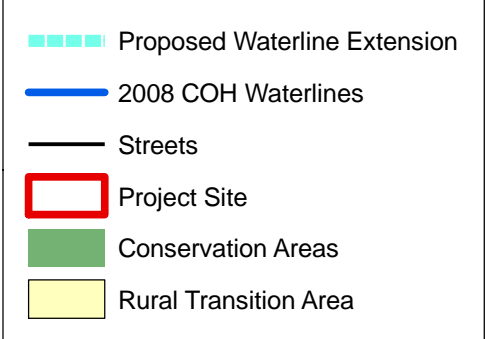
"I move to accept this Water Utility Extension Project and to authorize the City Manager to execute the associated Water Utility Extension Agreement on behalf of the City."

Water and Sewer Department:	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	Date: 05-01-09
Henderson Co. Commissioners:	<input type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	Date: _____
Hendersonville City Council:	<input type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	Date: _____



Etowah Town Square

DEVELOPER: TJJO LLC of Horse Shoe, NC



HENDERSON COUNTY REVIEW OF CITY WATER LINE EXTENSIONS

Project Name: Etowah town Square
 Size of Water Line (Main & Distribution Pipe Size): 790 LF of 8" DIP ; 225 LF of 6" DIP; 270 LF of 2" PVC SDR 13.5
 County Staff Reviewing Extension: Rocky Hyder, Fire Marshal; Parker Sloan, Planner; Autumn Radcliff, Senior Planner

Has the project been reviewed under the **County Subdivision Regulations of the Land Development Code?** Yes No N/A

Date reviewed: _____
 Action: _____
 Conditions: _____
 Comments: _____

Has the project been reviewed under the **County Manufactured Park Regulations of the Land Development Code?** Yes No N/A

Date reviewed: _____
 Action: _____
 Conditions: _____
 Comments: _____

Has the project been reviewed under the **County Zoning Regulations (i.e. Special-Use or Conditional-Use Permit) of the Land Development Code?** Yes No N/A

Date reviewed: _____
 Action: _____
 Conditions: _____
 Comments: _____

Is the project subject to **any other County Land Use Regulations?** Yes No N/A

If yes, explain: _____

Does the project conform with the **2020 Henderson County Comprehensive Plan (CCP)?** Yes No N/A

Does the project have **adequate hydrant location and spacing?** Yes No N/A

Description of **hydrant type and thread:** Mueller Centurion – National Standard Thread

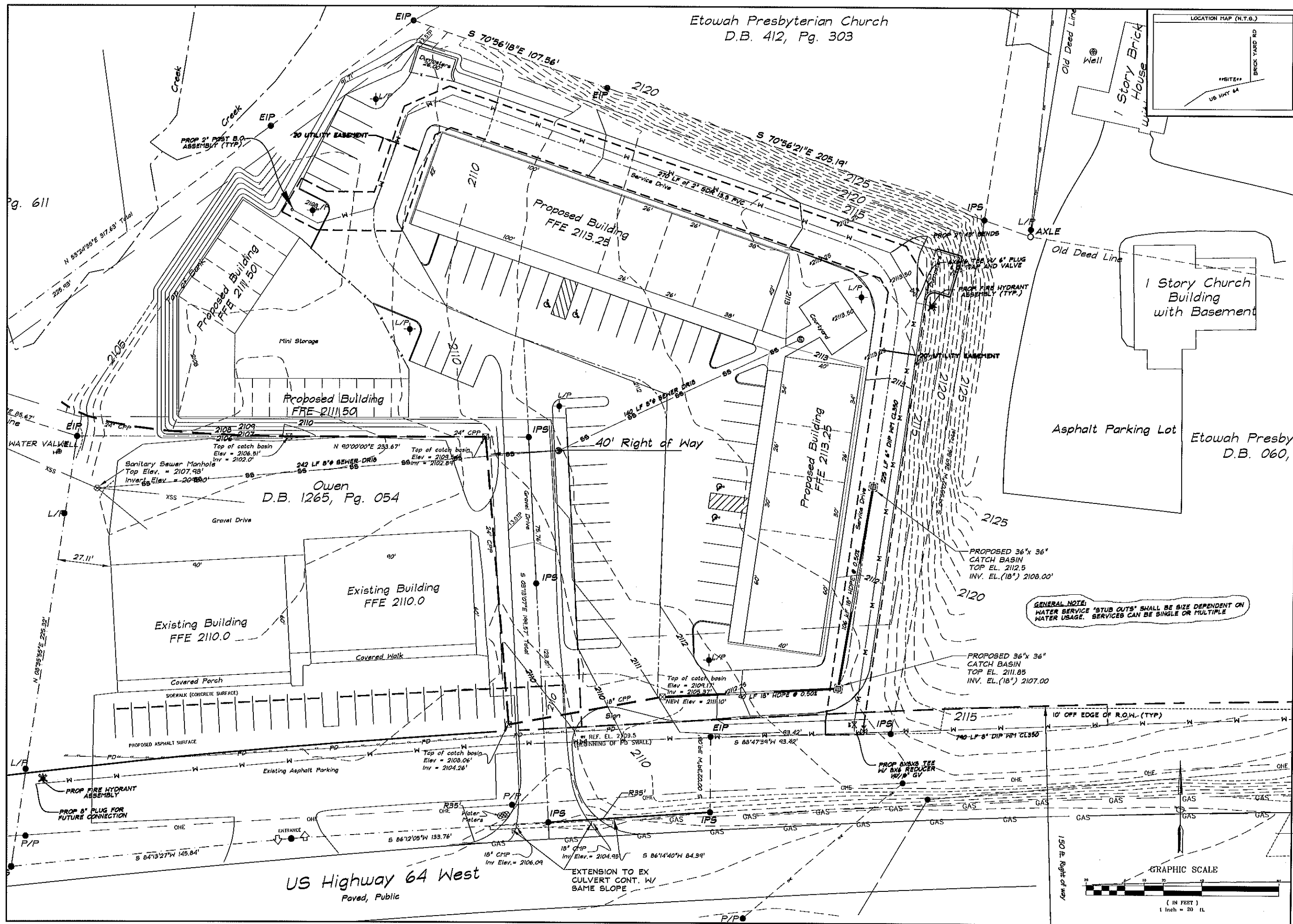
Does the estimated flow rate (gpm) meet **fire protection standards?** Yes No N/A

BOARD OF COMMISSIONERS APPROVAL

- | | | |
|--------------------------|-------------------------------------|-----------------------------|
| <input type="checkbox"/> | Approved | Date of Board Review: _____ |
| <input type="checkbox"/> | Not Approved | Comments: _____ |
| <input type="checkbox"/> | Conditional Approval (See Comments) | |

Etowah Presbyterian Church
D.B. 412, Pg. 303

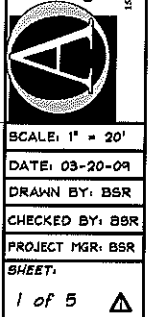
Pg. 611

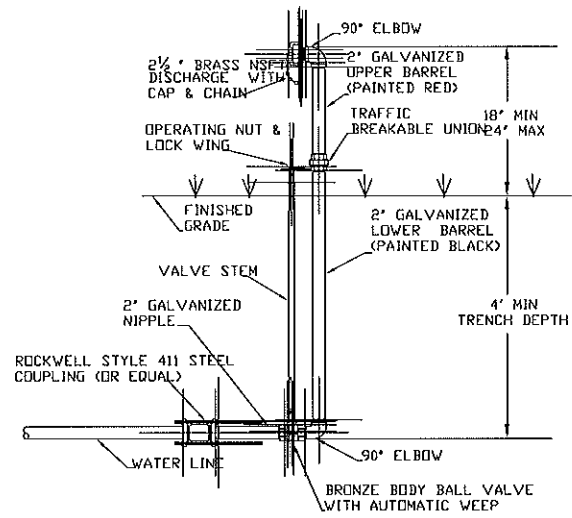


JOB NUMBER: 09007	
DATE	
BY	
DESCRIPTION	
REV	
<p>WE HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT OR ENGINEER UNDER THE LAWS OF THE STATE OF NORTH CAROLINA AS SIGNIFIED BY MY HAND AND SEAL.</p>	
<p>GENERAL NOTE: WATER SERVICE "STUB OUTS" SHALL BE SIZE DEPENDENT ON WATER USAGE. SERVICES CAN BE SINGLE OR MULTIPLE.</p>	
<p>SCALE: 1" = 20'</p> <p>DATE: 03-20-09</p> <p>DRAWN BY: BSR</p> <p>CHECKED BY: BSR</p> <p>PROJECT MGR: BSR</p> <p>SHEET: 1 of 5</p>	

ETOWAH TOWN SQUARE
GRADING & UTILITY LAYOUT

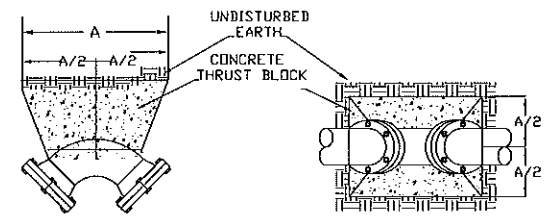
Odom & Associates
Engineering Inc.





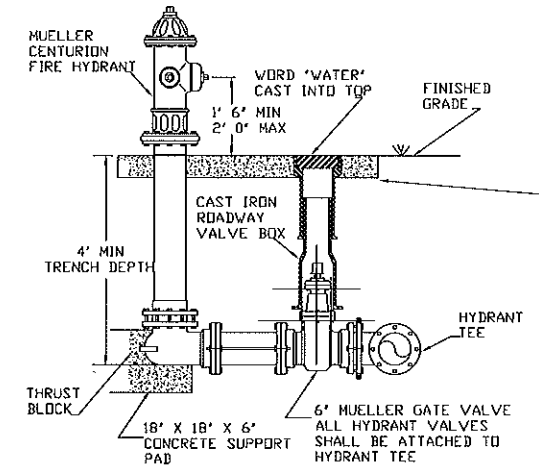
NOTE:
 1. PLACEMENT SHALL BE IN FRONT OF PROPERTY CORNERS IN CUL-DE-SACS
 2. 14 GA., TYPE "THIN" SOLID COPPER TRACER WIRE SHALL BE INSTALLED, BROUGHT TO SURFACE & END WITH 3' COIL ON TOP OF THE BLOW-OFF VALVE.

BLOW OFF VALVE
 NTS



NOTE: INSTALL A LAYER OF 4 MIL POLYETHYLENE BETWEEN THE CONCRETE AND THE FITTING.
 TYPICAL THRUST BLOCK FOR BENDS
 NTS

SIZE	VALUES FOR "A"				
	11 1/4" BEND	22 1/2" BEND	45" BEND	90" BEND	TEE
6"	12	12	12	16	16
8"	12	12	16	22	22
10"	12	14	20	28	28
12"	12	18	24	32	32
14"	14	20	28	38	38
16"	16	22	32	42	42
18"	18	26	36	48	48
20"	20	28	40	52	52
24"	24	34	46	64	64



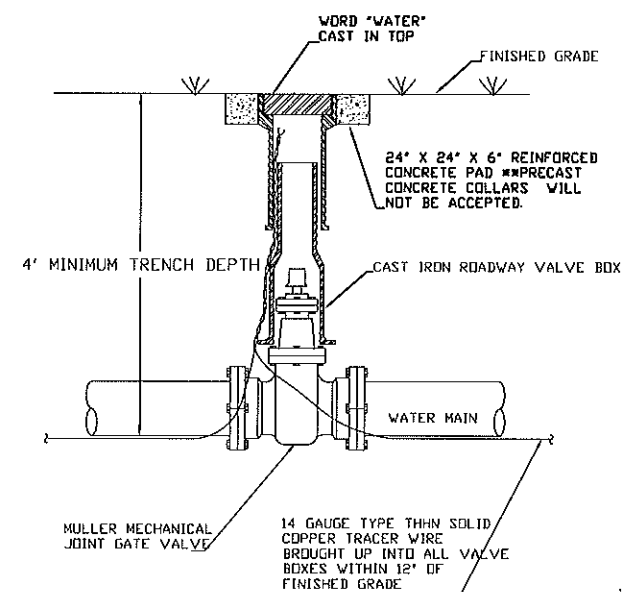
FIRE HYDRANT INSTALLATION
 NTS

NOTE 1
 CONTRACTOR IS REQUIRED TO POUR ONE 24" WIDE 6" THICK MONOLITHIC CONCRETE PAD REINFORCED WITH NUMBER 5 REBAR SPACED 8" APART BOTH WAYS BEGINNING 4" FROM EDGE. THE PAD SHALL EXTEND A MIN OF 8" BEYOND VALVE BOX & HYDRANT BARREL.
 THIS INSTALLATION IS REQUIRED ONLY WHEN VALVE & HYDRANT ARE WITHIN 3 FEET OF EACH OTHER.

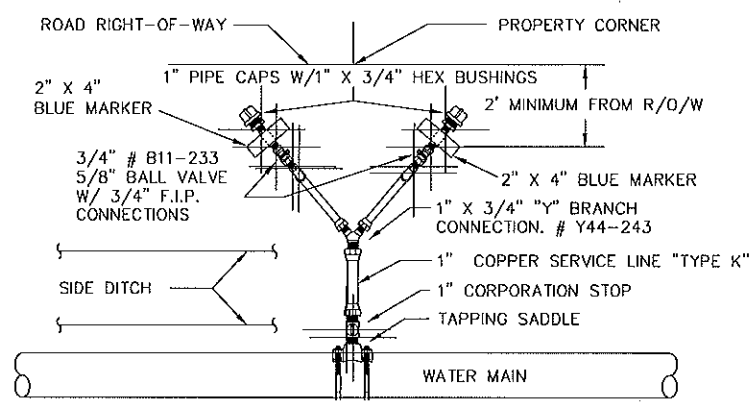
NOTE 2
 WHEN VALVE & HYDRANTS ARE SEPARATED BY A ROAD, A 24" X 24" X 6" WIRE REINFORCED CONCRETE PAD SHALL BE INSTALLED AROUND EACH. PRE CAST CONCRETE COLLARS ARE NOT ACCEPTABLE.

NOTE 3
 ALL HYDRANTS SHALL BE GIVEN A FRESH COAT OF MANUFACTURES STANDARD YELLOW PAINT AFTER INSTALLATION.

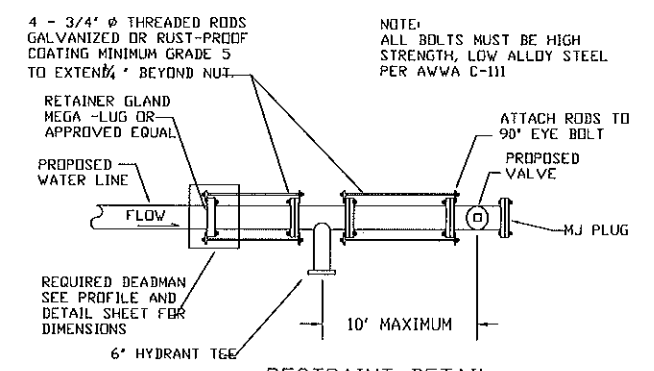
NOTE 4
 BACK FILL SHALL BE COMPACTED IN MAXIMUM 4" LIFTS AROUND VALVE BOX & HYDRANT BARREL.



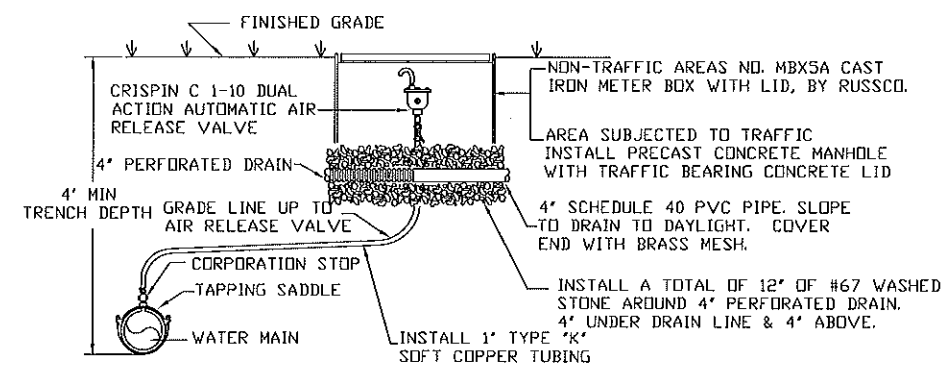
IN GROUND GATE VALVE DETAIL
 NTS



TYPICAL "Y" BRANCH CONNECTION
 N.T.S.



RESTRAINT DETAIL
 AT HYDRANT STUBOUT AND PLUG
 NTS



TYPICAL AIR RELEASE VALVE
 NTS



SITE DEVELOPMENT FOR
 ETOWAH TOWN PLACE
 ETOWAH, NC
 WATER DETAILS

Odom & Associates, Inc.
 Engineering, Inc.
 152 East Main Street, Fayetteville, N.C. 28404
 Phone: 704-341-4400 Fax: 704-341-4408



