



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Resources

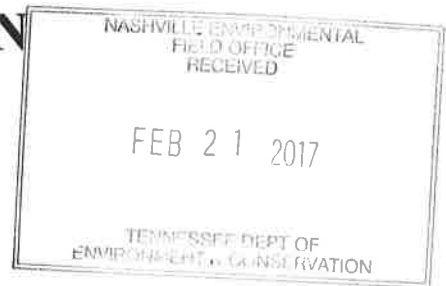
William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243
1-888-891-8332 (TDEC)

Notice of Intent (NOI) for General NPDES Permit for Stormwater Discharges from Construction Activities (TNR100000)

Form containing site information: Site or Project Name: Shoppes at Northgate Lot 3; NPDES Tracking Number: TNR 240004; Street Address: Memorial Boulevard & Wendelwood Drive; Site Description: Construct 6,237 SF Multi-Tenant Building; County: Rutherford; MS4 Jurisdiction: Murfreesboro; Construction Start Date: March 2017; Estimated End Date: August 2017; Site Owner/Developer: CHM Murfreesboro, LLC; Site Owner Contact: Mike McGuffin; Contractor Certification: Mike McGuffin, dated 3/3/17; Signature: MAR - 6 2017; Received Date: 2-21-17; Reviewer: AVG; Field Office: 04; Permit Tracking Number: 240004.01; Fee(s): 100; Notice of Coverage Date: 3-7-17



**STORM WATER POLLUTION  
PREVENTION PLAN**



**Prepared for**

**PROPOSED MULTI-TENANT BUILDING**

**Memorial Boulevard**

**Murfreesboro, Rutherford County, Tennessee**

**Prepared By**

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**January 26, 2016**

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(Owner to Supply NOC once received)
  
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## 1.0 Site Description

The project is a proposed 6,237 s.f. multi-tenant building consisting of a 4,237 s.f. restaurant and a 2,000 retail building. The project site is zoned CH, Commercial Highway District, which allows commercial use and construction along highways and transportation centers. The project site for the proposed building is located at the intersection of Memorial Boulevard and Wendellwood drive in Murfreesboro, Rutherford County, Tennessee. The development property is approximately 1.53 acres. This construction development consists of a new 6,237 s.f. multi-tenant building, stormwater facilities and utility infrastructure for the proposed building, 74 parking spaces, and other appurtenances to support the facility.

**1.1 Nature of Construction Activity:** As is typical for construction of any project of this magnitude; there are several types of construction. In order to accomplish the construction of the facility, the following types of construction will occur:

- Grading;
- Infrastructure (parking, drives, sidewalks, etc.);
- Excavation;
- Water, sewer, gas, overhead and underground electric, storm sewer installation; and
- Building construction.

**1.2 Construction Sequence:** This construction development consists of a new 6,237 s.f. multi-tenant building, stormwater facilities and utility infrastructure for the proposed building, 74 parking spaces, and other appurtenances to support the facility.

The first element of construction will be to provide the construction entrance necessary for the vehicles to access the site. This will help to alleviate any tracking of vehicle debris.

The second element of construction will be the installation of the proposed silt fence, erosion eels, inlet protection, and stone filter ring. Once these measures have been installed, the construction of any remaining erosion and sediment control devices will occur. These measures are shown on Sheet C2.0, C2.1, & C2.2, included in Appendix 1. Once these devices are installed, clearing, excavation and general grading can begin.

The intent of the erosion control plan will be to minimize the disturbance to the site and the surrounding areas.

Subsequent to grading the site, site utility work may begin. All construction shall be in accordance with the storm water runoff controls presented in Section 2 (Sheet C5.0 & C5.1) of this Plan.

- 1.3 Area of Disturbance** The total area of this portion of the site is approximately 1.53 acres. As part of these improvements, excavation, grading, or other activities will disturb approximately 1.54 acres. See Sheets C5.0 & C5.1 in Appendix 2 details these activities.
- 1.4 Site Soils** The project site is located within the Central Basin Physiographic Province of Middle Tennessee. Bedrock is primarily Ordovician limestone, shale and dolomite in the outer basin. The inner basin is generally covered with limestone with patches of bare platy rock and thin topsoil with glade area supporting red cedar trees. The region is moderate in karst development with many sinkholes and some large caves present, notably in the glade areas. Published geologic information also indicates the site lies within the Ridley Limestone of the Stones River Group. The Ridley Limestone formation is typically a brownish-gray, thick bedded limestone with minor mottlings of magnesian limestone and slightly cherty. Since the bedrock underlying the site consists of carbonate rock, the site is susceptible to the typical carbonate hazards of irregular weathering, cave and cavern conditions, and overburden sinkholes. Carbonate rock, while appearing very hard and resistant, is soluble in slightly acidic water. This characteristic, plus differential weathering of the bedrock mass, is responsible for the hazards. Of these hazards, the occurrence of sinkholes is potentially the most damaging to overlying soil-supported structures. In Middle Tennessee, sinkholes occur primarily due to differential weathering of the bedrock and “flushing” or “raveling” of overburden soils into the cavities in the bedrock. The loss of Solids creates a cavity or “dome” in the overburden. Growth of the dome over time or excavation over the dome can create a condition in which rapid, local subsidence or collapse of the roof of the dome occurs.
- 1.5 Runoff Coefficients** Currently, a majority of this site is undeveloped only consisting of access drives at the southern and eastern portion of the site. The existing runoff coefficient is approximately 0.36. Upon completion of the site, the runoff coefficient will increase to approximately 0.76.
- 1.6 Location and Site Map** A copy of the location and site map is included as Appendix 3 at the back of this Plan.
- 1.7 Outfall Points** The site primarily drains in a southerly and easterly directions towards a proposed drainage system. The proposed system will tie into an existing system which daylight into nearby regional detention located behind the multi-tenant center to the west. The drainage system during initial construction and some silt fence and erosion eel will control the runoff. These items are shown on the Sediment and Erosion Control Plans in Appendix 1 (C2.0, C2.1, & C2.2) and the Grading and Drainage Plans included in Appendix 2 (Sheet C5.0 & C5.1).

**1.8 Industrial Activities** There are currently no industrial activities taking place at this site. In addition, there are no industrial activities planned for the facility.

**1.9 Receiving Stream and Wetlands** Once developed, the sight will flow in southern, northern, and western directions towards a proposed and existing drainage system. The proposed system will tie into an existing system which daylight into nearby regional detention. The regional detention pond appears to flows to the Sinking Creek, which is a tributary of the West Fork Stone River. Both the Sinking Creek and West Fork Stone River are listed on TDEC 303d list as an unavailable and exceptional stream due to land development, MS4 discharge, siltation, habitat alteration, and sulfides and odors. There are no known wetlands identified or delineated within the immediate vicinity on the project site to our knowledge

## **2.0 Storm Water Runoff Controls**

### **2.1 Erosion and Sediment Controls**

#### **2.1.1 General Criteria and Requirements**

- The construction-phase erosion and sediment controls have been designed to retain sediment on site.
- All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections or other information indicates a control has been inappropriately or incorrectly used, the permittee must replace or modify the control for the site situation. Revisions to the BMP Plan based on the results of the inspection shall be implemented within (7) days.
- If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts (e.g., fugitive sediment that has escaped the construction site and has collected in a street must be removed so that it is not subsequently washed into storm sewers and streams by the next rain and/or so that it does not pose a safety hazard to users of public streets.) The contractor shall not initiate remediation/restoration of a stream without consulting the Division of Water Pollution Control first. This document does not authorize access to private property.
- Sediment should be removed from sediment traps, silt fences, the sedimentation pond, rock check dams, and other erosion prevention and sediment control measures as necessary, and must be removed when design capacity has been reduced by 33%.

- Litter, construction debris, and construction chemicals exposed to storm water shall be picked up prior to anticipated storm events (e.g. forecasted by local weather reports), or otherwise prevented from becoming a pollutant source for storm water discharges (e.g., screening outfalls, daily pick-up, etc.). After use, silt fences should be removed or otherwise prevented from becoming a pollutant source for storm water discharges.
- Offsite material storage and/or borrow areas (also including overburden and stockpiles of dirt, etc.) used solely for this project are considered part of the project and are hereby governed by this Plan shall be stabilized at the end of each workday.
- Pre-construction vegetative ground cover shall not be destroyed, removed, or disturbed more than 10 calendar days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.
- Clearing and grubbing must be held to the minimum necessary for grading and equipment operation.
- Construction must be sequenced to minimize the exposure time of graded or denuded areas. See the attached grading plans for details. Areas where grading is completed shall be stabilized within the time limits established below.
- Erosion and sediment control measures must be in place and functional before earth moving operations begin, and must be constructed and maintained throughout the construction period. Temporary measures may be removed at the beginning of the day but must be replaced at the end of the workday.
- The following records must be kept on site: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; and the dates when stabilization measures are initiated. (Site Inspection Reports & BMP)

### **2.1.2 Stabilization Practices**

- Stabilization measures shall be as shown on the drawings. Any deviation from these plans should be discussed with the design team and enforcement agencies. The contractor may propose the use of any erosion control protection and sediment control techniques in a final EPSC Plan, provided such techniques are proven to be as or more efficient than the equivalent BMP as contained within the TDEC Erosion Prevention and Sediment Control Field Guide.
- Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 7 days after the construction activity in that portion of the site has temporarily or



permanently ceased, except in the following two situations: 1) where the initiation of stabilization measures by the seventh day is precluded by snow cover or frozen ground conditions, stabilization measures shall be initiated as soon as possible; or 2) where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the site.

- Temporary or permanent soil stabilization shall be accomplished within 14 days after final grading or other earthwork. Permanent stabilization, as specified on the drawings and specifications shall replace any temporary measures as soon as practicable.

### **2.1.3 Structural Practices**

The attached drawings depict several structural practices to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. These practices should control storm water runoff generated by a 5-year, 24-hour storm event include, but are not limited to the following:

- Silt fences;
- Temporary Construction Entrance/Exit;
- Sediment Stop/Erosion Eels;
- Subsurface culverts; and
- Storm drainage inlet protection.

Muddy water to be pumped from excavation and work areas must be held in settling basins or filtered prior to its discharge into surface waters. Water must be discharged through a pipe, well grassed or lined channel or other equivalent means so that the discharge does not cause erosion and the transportation of sediment.

## **2.2 Storm Water Management**

This portion of the Plan addresses measures that are installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have completed. The general permit only addresses the installation of storm water management measures, and not the ultimate operation and maintenance of such measures after the construction activities have been completed and the site has undergone final stabilization.

The planned storm water management measures for the proposed Multi-Tenant Retail Center project include the final stabilization of graded areas. All graded areas shall receive sod or seeding for all disturbed areas in accordance with the landscaping drawings and specifications. Upon notice of termination and

approval by City Inspectors, temporary erosion control measures shall be removed.

### **2.3 Other Items Needing Control**

Construction and waste materials that are expected to be stored on site include those typically found at a building construction site. These may include:

- Lumber for forming and construction;
- Stockpiled piping and headwalls;
- Stockpiled rock and gravel;
- Structural steel and reinforcing bars;
- Building materials, such as studs, roof trusses, wiring, conduits, mortar, rock for veneer, shingles, sand, etc.; and
- Construction equipment and vehicles.

All materials shall be stored in such a manner that the materials containing potential pollutants (e.g. machine oils) cannot come in contact with rainwater. No solid materials shall be discharged to the tributary, except as authorized by a section 404 permit and/or an Aquatic Resource Alteration Permit.

Off-site vehicle tracking of sediments and the generation of dust shall be minimized.

If a release containing a hazardous substance in an amount equal to or in excess of a reporting quantity established under either 40 CFR 117 or 40 CFR 302 occurs during a 24 hour period, the Contractor will immediately notify the permittee who shall then do the following: notify the National Response Center (NRC) at 1-800-424-8802 and the Tennessee Department of Environment and Conservation (TDEC) at 1-888-891-8332 as well as the local Environmental Assistance Center. Also, the Owner will arrange to have prepared a revision of this document to identify measures to prevent the reoccurrence of such releases.

There are no known legally protected state or federally listed threatened or endangered aquatic fauna and/or critical habitat within the site.

### **2.4 Approved Local Government Sediment and Erosion Control Requirements**

The grading and drainage plans included in Appendix 2 (Sheet C5.0 & C5.1) are being reviewed by the City of Murfreesboro Engineering Department - Stormwater Division and are to be included as part of this Plan. All sediment and erosion control measures must be maintained throughout the life of the project. The site is subject to inspection by said Department at any time. The grading permit issued by said Department must be displayed at the project trailer.

This Plan may be amended to reflect any change that is instituted by the local government to sediment and erosion site plans or site permits, or storm water management site plans or site permits for which the owner (or any of its agents) receives written notice.

### **3.0 Maintenance**

CHM Murfreesboro, LLC as the site Operator, is responsible that all vegetation, erosion, and sediment control measures as well as other protective measures shown on the drawings are kept in good and effective operating condition. The maintenance needs identified by inspections or other means shall be accomplished before the next storm event if possible, but in no case more than seven days after the need is identified. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable.

### **4.0 Inspections**

#### **4.1 Inspector Training and Certification**

The qualified inspector has been defined for work within the City of Murfreesboro Engineering Department – Stormwater Division and is to inspect the ERC items per their requirements.

##### **4.1.1 Site Assessment**

Quality assurance of erosion prevention and sediment controls shall be done by performing site assessment at a construction site. The site assessment shall be conducted at each outfall involving drainage totaling 10 or more acres (see subsection 3.5.3.3 below) or 5 or more acres if draining to an impaired or exceptional quality waters (see subsection 5.4.1 below), within a month of construction commencing at each portion of the site that drains the qualifying acreage of such portion of the site. The site assessment shall be performed by individuals with following qualifications:

- a licensed professional engineer or landscape architect;
- a Certified Professional in Erosion and Sediment Control (CPESC) or
- a person that successfully completed the “Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites” course.

As a minimum, site assessment should be performed to verify the installation, functionality and performance of the EPSC measures described in the SWPPP. The site assessment should be performed with the inspector (as defined in part 10 below – Definitions), and should include a review and update (if applicable) of the SWPPP. Modifications of plans and specifications for any building or structure, including the design of sediment basins or other sediment controls involving structural, hydraulic, hydrologic or other engineering calculations shall

be prepared by a licensed professional engineer or landscape architect and stamped and certified in accordance with the Tennessee Code Annotated, Title 62, Chapter 2 (see part 10 below) and the rules of the Tennessee Board of Architectural and Engineering Examiners.

The site assessment findings shall be documented and the documentation kept with the SWPPP at the site. At a minimum, the documentation shall include information included in the inspection form provided in Appendix C of this permit. The documentation must contain the printed name and signature of the individual performing the site assessment and the following certification:

“I certify under penalty of law that this report and all attachments are, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

The site assessment can take the place of one of the twice weekly inspections requirement from subsection 3.5.8.2 below. The division may require additional site assessment(s) to be performed if site inspection by division’s personnel reveals site conditions that have potential of causing pollution to the waters of the state.

#### **4.2 Schedule of Inspections**

Inspections shall be done before anticipated storm events (or series of storm events such as intermittent showers over one or more days), and within 24 hours after the end of a storm event of 0.5 inches or greater, and at least once every seven calendar days. The project site does not discharge directly into TDEC 303(d) protected waters, however, since the project site will ultimately discharge into 303(d) protected streams, inspections should occur twice a week but must be at least 72 hours apart. When the site has been finally or temporarily stabilized, or runoff is unlikely due to winter conditions (e.g. site covered with snow, ice, or frozen ground), such inspection only has to be conducted once per month. Inspections and associated, necessary repairs done 60 hours before a rain event constitute compliance with “before anticipated storm events,” and inspections and repairs on a Friday meet the requirement for rain events over the weekend.

The qualified inspector shall inspect disturbed areas of the construction site that have not been fully stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, and locations where vehicles enter or exit the site.

Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in this Plan shall be observed to ensure that they are operating properly.

Outfalls identified in Section 1.7 shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to the receiving waters. Where discharge points are inaccessible, nearby downstream locations shall be inspected if possible. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.

Based on the results of the inspection, any inadequate control measures or control measures in disrepair shall be replaced or modified, or repaired as necessary, before the next rain if possible, but in no case more than seven days after the need is identified. If maintenance prior to the next rain is impracticable, maintenance must be scheduled and accomplished as soon as practicable.

Based on the results of the inspection, the site description in Section 1.0 (Sheets C2.0, C2.1, & C2.2) and the pollution prevention measures identified in Section 2.0 (Sheet C5.0 & C5.1) shall be revised as appropriate, but in no case later than 14 calendar days following the inspection. Such modifications shall provide for timely implementation of any changes to the Plan in no case later than 21 calendar days following the inspection.

Inspections shall be documented and include the following:

- The scope of the inspection;
- Name(s) and title or qualification of personnel making the inspection;
- The date(s) of the inspection;
- Dates of major construction work completed, such as grading, stabilization, and cease work dates;
- Rain gauge records and inspection records;
- Major observations relating to the implementation of the storm water pollution prevention plan (including the location(s) of discharges of sediment or other pollutants from the site and of any control device that failed to operate as designed or proved inadequate for a particular location); and
- Actions taken in accordance with Section 4.2 of this Plan.

Should any deviations from the SWPPP be completed, it is the Contractor's responsibility to mark up those changes in red on the attached plans and date when the changes occurred. The contractor should also maintain a current copy of this SWPPP on-site at all times for local inspectors to review as needed. There should also be a current copy of the NOI and NOC kept inside this document in the locations shown.

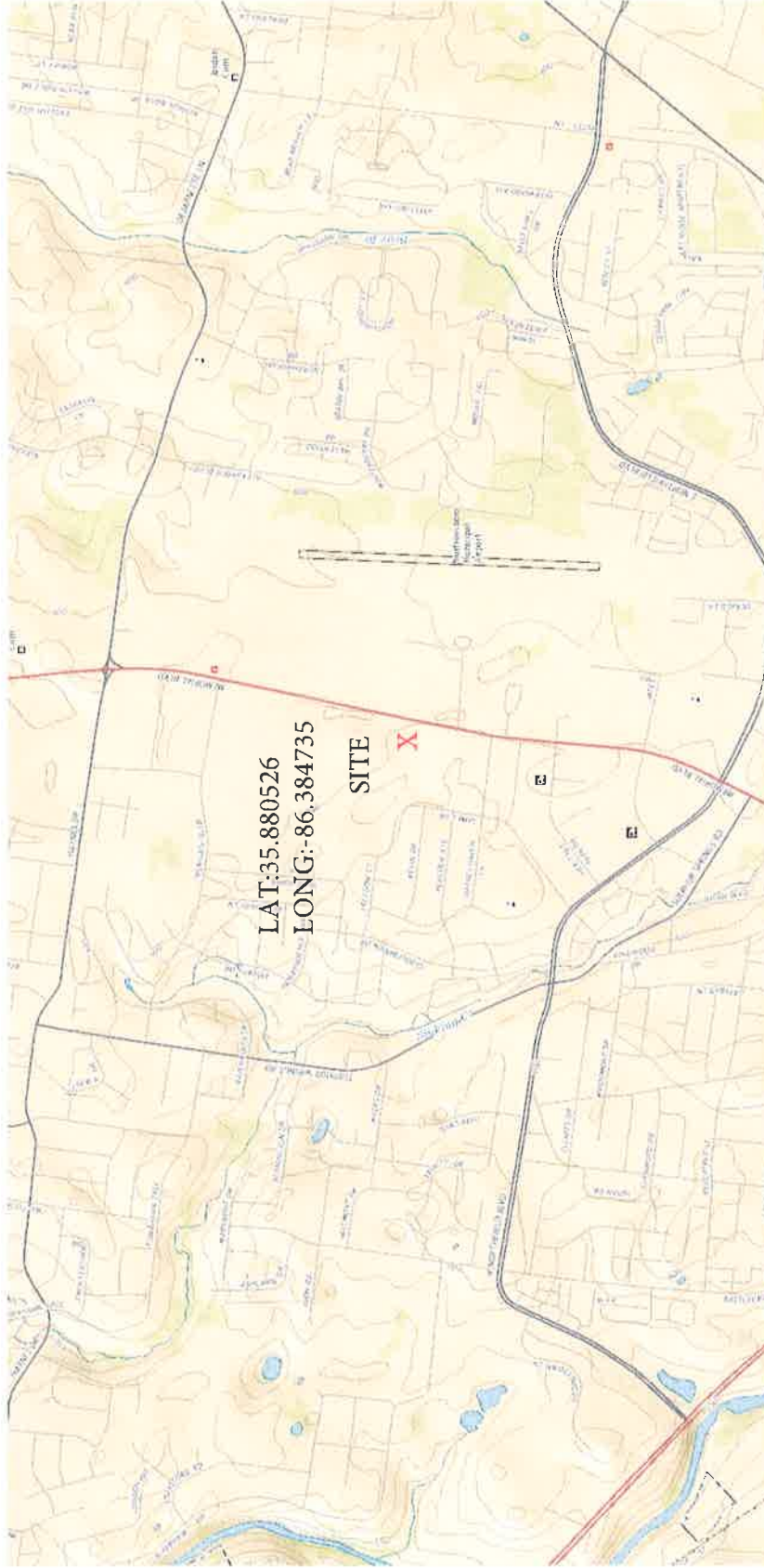
## **5.0 Non-Storm Water Discharges**

The following non-storm water discharges are authorized under the general permit and are anticipated during the construction of the campus:

- Dewatering of work areas of collected storm water and ground water;
- Water used for dust control;
- Potable water sources including waterline flushings;
- Routine external building wash down which does not use detergents;
- Uncontaminated ground water or spring water; and
- Foundation or footing drains where flows are not contaminated with process materials such as solvents.

All non-storm water discharges, not limited to those identified above shall be discharged through stable discharge structures. These would include the temporary sedimentation basins or the subsurface drainage system shown on the attached grading plans.

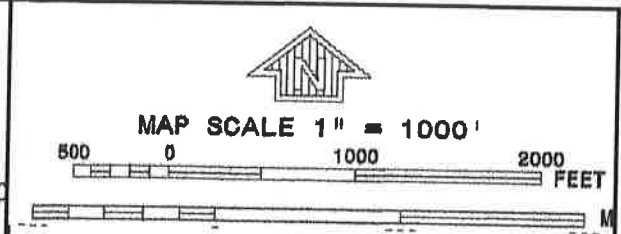
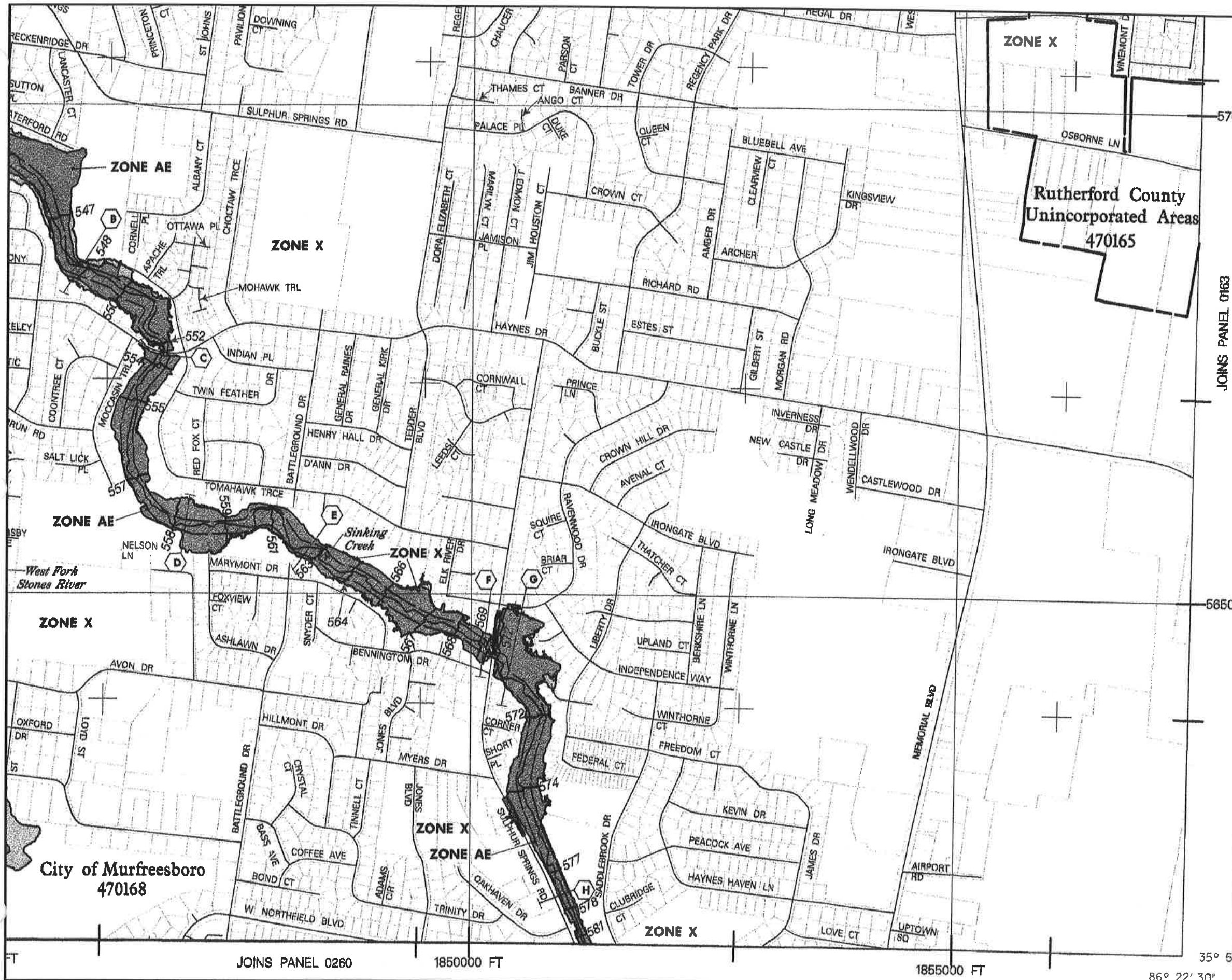
Vicinity Map



Site Map







JOINS PANEL 0163

56500

35° 5'

PANEL 0145H

**FIRM  
FLOOD INSURANCE RATE MAP  
RUTHERFORD COUNTY,  
TENNESSEE  
AND INCORPORATED AREAS**

PANEL 145 OF 457  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MURFREESBORO, CITY OF	470168	0148	H
RUTHERFORD COUNTY	470165	0148	H

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

**MAP NUMBER  
47148C0145H  
MAP REVISED  
JANUARY 5, 2007**

Federal Emergency Management Agency

JOINS PANEL 0260

185000 FT

185500 FT

86° 22' 30"

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov