



CITY OF TYBEE ISLAND
Application for a New Construction Permit
 P.O. Box 2749 · 403 Butler Ave., Tybee Island, GA 31328
 Phone 912.472.5030 · Fax 912.786.9539

- Required submittals: _____ pages 1 – 7 of permit application
 _____ 2 sets building plans
 _____ 1 copy REScheck or COMcheck
 _____ 1 copy certified survey showing existing ground elevations, flood zone(s), and trees
 _____ 2 sets certified hydrology, drainage and erosion control plans
 _____ \$250 plan deposit (*will be forfeited if project is abandoned*) check # _____

Street address _____ PIN # _____

	NAME	MAILING ADDRESS	PHONE
Owner			Home: Cell:
Architect or Engineer			Office: Cell:
Contractor			Office: Cell:

- Check all that apply:
- | | |
|---|---|
| <input type="checkbox"/> New Construction | <input type="checkbox"/> Residential |
| <input type="checkbox"/> Other _____ | <input type="checkbox"/> Single Family |
| <input type="checkbox"/> Commercial | <input type="checkbox"/> Duplex |
| | <input type="checkbox"/> Multi-Family _____ units |

Details of project: _____

Estimated cost of construction: \$ _____ *A copy of the contract may be requested.*

- Construction type: _____ (*select appropriate number below*)
- | | | |
|-------------------|-----------------|--------------------|
| 1. wood frame | 3. brick veneer | 5. steel & masonry |
| 2. wood & masonry | 4. masonry | 6. other: _____ |

Lot area _____ sq. ft. # buildings _____ # units _____
 # floors _____ # bedrooms _____ # bathrooms _____
 # of egresses _____ *An elevator is not an accepted means of egress.*

Height _____ *Vertical distance is measured from the average adjacent grade of the lot to the extreme high point of the building (roof ridge, handrail, etc.), exclusive of chimneys, HVAC units, elevators, and similar appurtenances.*

Total heated/cooled square footage _____ Flood Zone _____ (*AE or VE*)
 Base Flood Elevation _____ Design Flood Elevation (BFE + 1-foot) _____

As-built setbacks: Front _____ Rear _____ Sides (L) _____ (R) _____

Total driveway(s) width _____ feet # of openings _____ Culvert? _____ Swale? _____

Number of off-street parking spaces _____ Number of trees to be removed _____
A separate tree removal permit is required.

During construction on-site restrooms will be provided by _____
 Construction debris will be disposed by _____ by means of _____
 Section 22-169 – When active work ceases on the project for the day a SECURE COVER shall be placed over the dumpster or container so as to prevent trash or construction debris from being blown out.

I understand that I must comply with zoning, erosion control, building, fire, shore protection, and wetland ordinances, FEMA regulations, and all other applicable codes and regulations. I understand a foundation survey and certification letter are required as soon as the foundation is in place to ensure that the setback requirements will be met. I understand an Elevation Certificate – Building Under Construction is required immediately after lowest floor or flood proofing is completed. I realize that an as-built survey, Elevation Certificate – Finished Construction, Breakaway Wall Certification, Recorded Nonconversion Agreement, Energy Code Compliance Certificate, tree mitigation, height certification, drainage certification, and site acceptance by the City will be required. I accept financial responsibility for any expenses the city incurs for third-party engineering services related to this project.

I agree to construct/place all equipment such as air conditioning compressors, ducts, water heaters, furnaces, electrical outlets, etc., at or above the required Design Flood Elevation (Base Flood Elevation + 1-foot).

Projects must demonstrate they are in compliance with the City of Tybee Island Stormwater Management requirements as outlined in Article 16 of the Land Development Code. As part of the approval process, applicants must illustrate how these requirements will be met, including how stormwater naturally flowed on the property prior to any development activity, and what changes in stormwater flow will occur.

A permit normally requires 7 to 10 business days to process.

Signature of applicant: _____ Date: _____

Printed name: _____

The following will be completed by City of Tybee Island personnel.

Zoning District _____ Flood Zone _____ BFE _____ DFE _____

Approved zoning action? _____

Verified street address _____ New ___ Existing ___

If new, has it been reported to MPC, CRC, etc.? _____

Number of egresses? _____

Average adjacent grade _____ feet

Drainage and Erosion Control plans approved? _____

Approval	Signature	Date
Building Official	_____	_____
Water/Sewer	_____	_____
Public Works	_____	_____
Fire Chief	_____	_____
Planning & Zoning	_____	_____

FEES	
Permit	_____
Inspections	_____
___ Water Tap ___"	_____
CC Recovery	_____
___ Sewer Stub ___"	_____
Aid to Construction	_____
Engineering	_____
_____	_____
Plan deposit refund	_____
TOTAL	_____



The following deficiencies are the most common on the projects in the City of Tybee Island. While the deficiencies are not necessarily the fault of the owner or his agent, they are their responsibilities. The two most common areas of deficiencies are for the two most basic BMPs on projects:

- Co – Construction Exit
- Sd1 – Sediment Barrier

Correct installation information can be found in the *Green Book* and in the *Field Manual for Erosion and Sediment Control in Georgia*, which is available at: http://www.gaswcc.org/docs/field_manual_4ed.pdf. The Georgia Soil and Water Conservation Commission is located at 4310 Lexington Road, P.O. Box 8024, Athens, Georgia, 30603. The telephone number is 706.542.3065. Their website is: <http://gaswcc.georgia.gov/>. Also see pages 9 through 12 of this packet.

Attention to the Construction Exit is not limited to the installation, but must also include the material. Specifically, job site personnel are not checking to ensure the stone delivered is the 1.5-inch to 3.5-inch stone they requested. Gradations that are obviously smaller will not be tolerated. The smaller stone allows for a smoother surface with smaller voids, thereby reducing the function of the Construction Exit.

Type A sediment barriers are not allowed where Type C is required as shown on the approved permit drawings. Where two rows are called for they will be installed with a separation that allows for the first one to fail (fall over) without impacting the second one. The complete assembly and installation must be compliant: steel or wood posts, post spacing, Type C or A, etc.

Past violations have resulted in:

- 1) Sediment discharge from the site which causes unsightliness, inconvenience to others, unnecessary cleanup, and Violation Notices.
- 2) Increased maintenance efforts by the Department of Public Works on downstream lines.
- 3) Due to item 2, higher costs to island taxpayers.

While these deficiencies are not the only ones, they are the most common. Heeding the above cautions should result in fewer infractions.

Downer Davis
City of Tybee Island Consulting Engineer

February 2013

SIGNATURE OF ACKNOWLEDGEMENT

Signature of contractor: _____

Date: _____

Printed name: _____



CITY OF TYBEE ISLAND
 P.O. Box 2749 · 403 Butler Ave., Tybee Island, GA 31328
 Phone 912.472.5030 · Fax 912.786.9539

Water Tap and Sewer Stub Application

Street address of project _____

Plumbing company _____

Plumbing contact person & phone numbers _____
office cell

Name of property owner(s) _____

Phone numbers of property owner(s) _____
office cell

Details of project _____

Residential _____ Commercial _____

Enter the required number of water taps/meters and sewer stubs:

WATER TAP/METER

SEWER STUB

<u>Number of Taps</u>	<u>Meter Size</u>	<u>Number of Stubs</u>	<u>Stub Size</u>
_____	3/4"	_____	4"
_____	1"	_____	6"
_____	1-1/2"	_____	8"
_____	2"	_____	
_____	_____	_____	

Unauthorized use of water prior to installation of a water meter is prohibited.

Installation of lines and meters are the responsibility of the owner/contractor. Contact the Water/Sewer Department at 912.472.5051 for line and tie-in locations and for inspections.

Contact the Planning & Zoning Department at 912.472.5030 to arrange for water meter pick up.

It is the responsibility of the owner to establish a water/sewer account with the City. An application and deposit are required. Contact 912.472.5025.

Signature of owner: _____

Date: _____

Printed name: _____

Signature of contractor: _____

Date: _____

Printed name: _____

A SEPARATE PERMIT IS REQUIRED FOR INFRASTRUCTURE ALTERATIONS

Any alteration to City owned streets, curbs, sidewalks, waterlines, sewer lines, drainage pipes, catch basins, or other elements of the City's infrastructure, requires a separate permit from the City, and an acknowledgement by the individual seeking to accomplish the alteration, that:

- a. The City's infrastructure will not be degraded in any way.
- b. All necessary safety precautions will be undertaken.
- c. The City will inspect the work in process and upon completion.
- d. The work will be accomplished to the City's satisfaction.
- e. The City shall be held harmless of any liability or damages of any variety.
- f. The individual has read applicable portion of the City's Code of Ordinance dealing with the alteration, and agrees to fully comply with such provisions.

Will the proposed project at _____ require an infrastructure alteration permit?
street address of project

Yes No

Description of alteration: _____

A site plan must be provided illustrating the planned alteration.

City Design Standards and Specifications: Any alteration to the City's infrastructure shall be accomplished in such a fashion so as to restore the infrastructure to essentially the same condition that existed prior to the alteration, or to an improved condition, as determined by the City.

Certification: I hereby acknowledge the above requirements, and certify that I will obtain a separate permit prior to performing any alteration in accordance with these provisions.

Signature of contractor: _____

Date: _____

Printed name: _____

CITY OF TYBEE ISLAND

Temporary Electrical Service Affidavit

Street address of project: _____

This notice is to confirm the understanding of the owner and contractor of the compliance requirement of the Georgia State Minimum Construction Codes.

It is understood and agreed by the undersigned that the requested temporary electrical power is intended for the completion of the construction process and the testing of equipment installed within the structure.

It is understood and agreed by the undersigned that the issuance of temporary power DOES NOT constitute the approval to occupy the structures. A Certificate of Occupancy must be issued by the City of Tybee Island prior to the structure being furnished and/or occupied.

The owner and contractor are hereby held responsible for any violations to this policy. A violation of this policy may result in discontinuance of the electrical service.

Temporary electrical service will be granted as an aid to complete construction only. It may be revoked as circumstances dictate.

Means shall be provided to disconnect all conductors from the service-entrance conductors.
NEC 230.70

State Energy Code Affidavit

I hereby declare that the design and construction of the above referenced project is in compliance with the Georgia State Energy Code for Buildings, 2009 Edition, with Georgia Amendments.

A Georgia Energy Code Compliance Certificate will be required at project completion.

It is understood and agreed by the undersigned owner and contractor (if applicable) that the approval of the permit does not constitute a privilege to violate the Code and that any omission of or misrepresentation of fact, with or without intention, of the permit issued which was based on the approval of this application. The owner will be held responsible for insuring that all permits have been obtained and that all required inspections have been made. The owner will be held legally liable for any violations which may occur with or without his knowledge. The owner shall be allowed to request a Certificate of Occupancy when all inspections (building and site) have been approved.

SIGNATURES for Temporary Electrical Service and State Energy Code AFFIDAVITS

Signature of owner: _____

Date: _____

Printed name: _____

Signature of contractor: _____

Date: _____

Printed name: _____

Subcontractor List

Street address of project: _____

Provide the company name, business type, address, contact person, and phone numbers of all subcontractors. The City of Tybee Island requires annual Contractor Registration for all contractors.

1. **Company** _____ Business type _____
Address _____ Cell number _____
Contact person _____ Office number _____

2. **Company** _____ Business type _____
Address _____ Cell number _____
Contact person _____ Office number _____

3. **Company** _____ Business type _____
Address _____ Cell number _____
Contact person _____ Office number _____

4. **Company** _____ Business type _____
Address _____ Cell number _____
Contact person _____ Office number _____

5. **Company** _____ Business type _____
Address _____ Cell number _____
Contact person _____ Office number _____

6. **Company** _____ Business type _____
Address _____ Cell number _____
Contact person _____ Office number _____

Attach additional sheets if needed.



NONCONVERSION AGREEMENT FOR STRUCTURES IN THE FLOODPLAIN

Building Permit Number _____ Address of Property _____

PIN _____

FIRM Zone _____ BFE _____ feet (NAVD) Panel Number _____, effective date _____

Property Owner(s) _____ Contractor _____

In accordance with the Flood Damage Prevention Ordinance of the City of Tybee Island, Georgia, the Property Owner agrees to the following:

1. That the enclosed area below the Base Flood Elevation shall be used solely for parking of vehicles, limited storage, or access to the building, and will never be used for human habitation without first becoming fully compliant with the Flood Damage Prevention Ordinance in effect at the time of conversion.
2. That all interior walls, ceilings, and floors below the Base Flood Elevation shall be unfinished or constructed of flood-resistant materials.
3. That mechanical, electrical, or plumbing devices shall not be installed below the Base Flood Elevation.
4. That the walls of the enclosed area below the Base Flood Elevation shall be equipped with at least two vents which permit the automatic entry and exit of floodwater with total openings of at least one square inch for every square foot of enclosed area below flood level. The vents shall be on at least two different walls, and the bottoms of the vents shall be no more than one foot above grade. If located in a V-zone, breakaway walls are required.
5. That the requested structure may be subject to increased premium rates for flood insurance available from the National Flood Insurance Program due to its location in a Special Flood Hazard Area.
6. That any variation in construction beyond what is permitted shall constitute a violation and be abatable as such.

Signature of Property Owner Date

Printed Name of Property Owner

Signature of Property Owner Date

Printed Name of Property Owner

STATE OF GEORGIA
COUNTY OF CHATHAM

I hereby certify that on this _____ day of _____, 20_____, before me, a Notary Public of the State of Georgia, personally appeared _____, known to me, or satisfactorily proven to be the person whose name is subscribed to the foregoing instrument, who acknowledged that he/she has executed it for the purposes therein set forth, and that it is his act and deed.

In witness whereof, I have set my hand and Notarial Seal.

NOTARY _____
My Commission expires on _____

(Seal)

WITNESS SIGNATURE _____

Printed Name _____
Address _____

Note: A Nonconversion Agreement must be used whenever an enclosed structure or portion of a structure is built or substantially improved within the 100-year Floodplain below the Base Flood Elevation. A Nonconversion Agreement must satisfy all of the above conditions and requires proper recordation in the land records of Chatham County, Georgia.

CERTIFICATE OF OCCUPANCY REQUIREMENTS

Permit # _____

Job Address _____

Job Name _____

By Owner/Contractor

_____ post house number (and unit numbers if applicable)

_____ no attic storage signs, if applicable

_____ Energy Code Compliance Certificate

_____ pass Final Building inspection

_____ Elevation Certificate, Finished Construction

_____ As-built Survey

_____ Height Certification, if required

_____ Drainage Certification from Project Engineer

_____ Nonconversion Agreement (attached) –must be recorded with Chatham County

_____ Breakaway Wall Certificate (V-Zone only)

_____ Mitigation of Trees

_____ Payment of outstanding fees, if applicable

By City of Tybee Island

City staff will coordinate these items when the needed documents from the list above have been submitted. Please do not contact the engineer or director.

_____ Drainage Certification from the City's Consulting Engineer

_____ Drainage Certification from the Director of Public Works Department

_____ FEMA Inspection from Planning & Zoning Manager

City of Tybee Island
CODE ENFORCEMENT NOTICE

The State of Georgia and the City of Tybee Island enforce the following Codes for construction:

International Building Code, 2012 Edition and State Amendments
International Residential Code, 2012 Edition and State Amendments
International Fire Code, 2012 Edition and State Amendments
International Plumbing Code, 2012 Edition and State Amendments
International Mechanical Code, 2012 Edition and State Amendments
International Fuel Gas Code, 2012 Edition and State Amendments
International Energy Conservation Code, 2009 Edition and State Amendments
National Electrical Code, 2011 Edition and State Amendments
ICC 600 Standard for Residential Construction in High Wind Regions

The following design provisions became effective January 1, 2014:

3-SECOND WIND GUST	140 MPH
FASTEST MILE BASIC WIND SPEED	104 MPH
SEISMIC DESIGN CATEGORY	"B"
WIND EXPOSURE	"C"
CLIMATE ZONE	"2"

The following are requirements for new windows, glazed doors and skylights:

DESIGN PRESSURE	DP 45 or higher
SOLAR HEAT GAIN COEFFICIENT	0.30 or lower
U-Factor	0.65 or lower / skylights 0.75 or lower
WINDOW PROTECTION	7/16-inch minimum plywood or approved alternate method

All work shall conform to the City of Savannah Technical Specifications except as stated in the Special Conditions on the following pages. The City of Savannah Technical Specifications is available online at:
<http://www.savannahga.gov/index.aspx?nid=914>.

ALL ROOF INSTALLATIONS MUST ADHERE TO THE FOLLOWING:

Asphalt shingles shall comply with Section R905 of the IRC and Section 504 of the ICC 600. All shingles must be wind rated and tested in accordance with ASTM D 3161, Class F or ASTM D 7158 Class H. Asphalt shingle wrappers must bear a label indicating compliance. Special fastening is required. A minimum of six fasteners are required unless otherwise directed by the manufacturer. Fasteners must be **non-corrosive**, minimum 12 gauge shank with a minimum 3/8" diameter head, of a length to penetrate through the roofing material and a minimum of 3/4" into, or through, the roof sheathing. Underlayment must be 30# felt or as an alternative adhered underlayment complying with ASTM D 1970 shall be permitted (IRC R905.2.7.2 / IBC 1507.2.8.1). Drip edge must be provided.

Metal Roofing – Materials for metal roofing shall be naturally corrosion resistant or provided with corrosion resistance in accordance with this table - IRC Table R905.10.3(2):

55% Aluminum-zinc alloy coated steel	ASTM A 792 AZ 50
5% Aluminum Alloy-coated steel	ASTM A 875 GF60
Aluminum-coated steel	ASTM A 463 T2 65
Galvanized steel	ASTM A 653 G-90
Prepainted steel	ASTM A 755 (Paint systems shall be applied over steel products with corrosion-resistant coatings complying with ASTM A 792, ASTM A 875, ASTM A 463, or ASTM A 653.

For panel systems, two rows of fasteners shall be used along the eaves, hips, and ridges. The first row should be within two to three inches of the edge and the next row three to four inches from the first. Other fastening to be per the IRC, IBC, ICC 600, or Manufacturer's installation instructions. All screws and other fasteners to be corrosion resistant. Underlayment must be 30# felt or as an alternative adhered underlayment complying with ASTM D 1970 shall be permitted. Drip edge must be provided.

TABLE R905.10.3(1) - METAL ROOF COVERING STANDARDS

ROOF COVERING TYPE	STANDARD APPLICATION RATE/THICKNESS
Galvanized steel	ASTM A 653 G90 Zinc coated
Stainless steel	ASTM A 240, 300 Series alloys
Steel	ASTM A 924
Lead-coated copper	ASTM B 101
Cold-rolled copper	ASTM B 370 minimum 16 oz/sq ft and 12 oz/sq ft high-yield copper for metal-sheet roof-covering systems; 12 oz/sq ft for preformed metal shingle systems.
Hard lead	2 lb/sq ft
Soft lead	3 lb/sq ft
Aluminum	ASTM B 209, 0.024 minimum thickness for roll-formed panels and 0.019-inch minimum thickness for pressformed shingles.
Terne (tin) and terne-coated stainless	Terne coating of 40 lb per double base box, field painted where applicable in accordance with manufacturer's installation instructions.
Zinc	0.027 inch minimum thickness: 99.995% electrolytic high-grade zinc with alloy additives of copper (0.08 – 0.20%), titanium (0.07% - 0.12%) and aluminum (0.015%).

For SI: 1 ounce per square foot = 0.305 kg/m², 1 pound per square foot = 4.214 kg/m², 1 inch = 25.4 mm, 1 pound = 4.454 kg.



Erosion Control for Builders



This handout includes instructions and diagrams needed by builders on most construction sites to control erosion. Additional controls may especially be needed for sites that have steep slopes; are adjacent to lakes, streams, and marshlands; are larger than an acre; or are not owner-occupied.

For more information within the jurisdictional area of the City of Tybee Island please contact the Planning and Zoning Department at (912) 472-5030.

The Erosion and Sedimentation Act of 1975 (O.C.G.A. § 12-7-1) regulates land disturbing activities in Georgia. Some projects require a Land Disturbing Activity (LDA) permit. Depending upon the scope of the project, a Shore Protection Act permit or a Buffer Encroachment Permit from the Georgia Department of Natural Resources may also be necessary. Even if the project does not require an LDA or a DNR permit, you must follow the best management practices (BMPs) as outlined in the *Manual for Erosion and Sediment Control in Georgia* (also known as the “*Green Book*”). The most common BMPs are explained in this handout.

EROSION IS A COSTLY PROBLEM

Eroding construction sites are a leading cause of water quality problems in Georgia. Soil washes into nearby lakes, streams, estuaries, or marshlands unless the builder uses erosion controls. Problems caused by sediment include:

- ✓ **Taxes** - Cleaning up sediment in streets, sewers, and ditches adds extra costs to government budgets.
- ✓ **Dredging** - The expense of dredging sediment from lakes, harbors and navigation channels is a heavy burden for taxpayers.
- ✓ **Lower Property Values** - Property values are damaged when a lake, creek, stream, or marsh fills with sediment. Shallow areas encourage weed growth and create boating hazards.
- ✓ **Poor Fishing** - Muddy water drives away fish like spotted sea trout that rely on sight to feed. As it settles, sediment smothers fish eggs and shellfish such as clams and oysters. Sediments can also clog fish gills and kill the fish.
- ✓ **Nuisance Growth of Weeds and Algae** - Sediment carries fertilizers that fuel algae and weed growth. Growing algae uses oxygen from the water that fish need to survive.

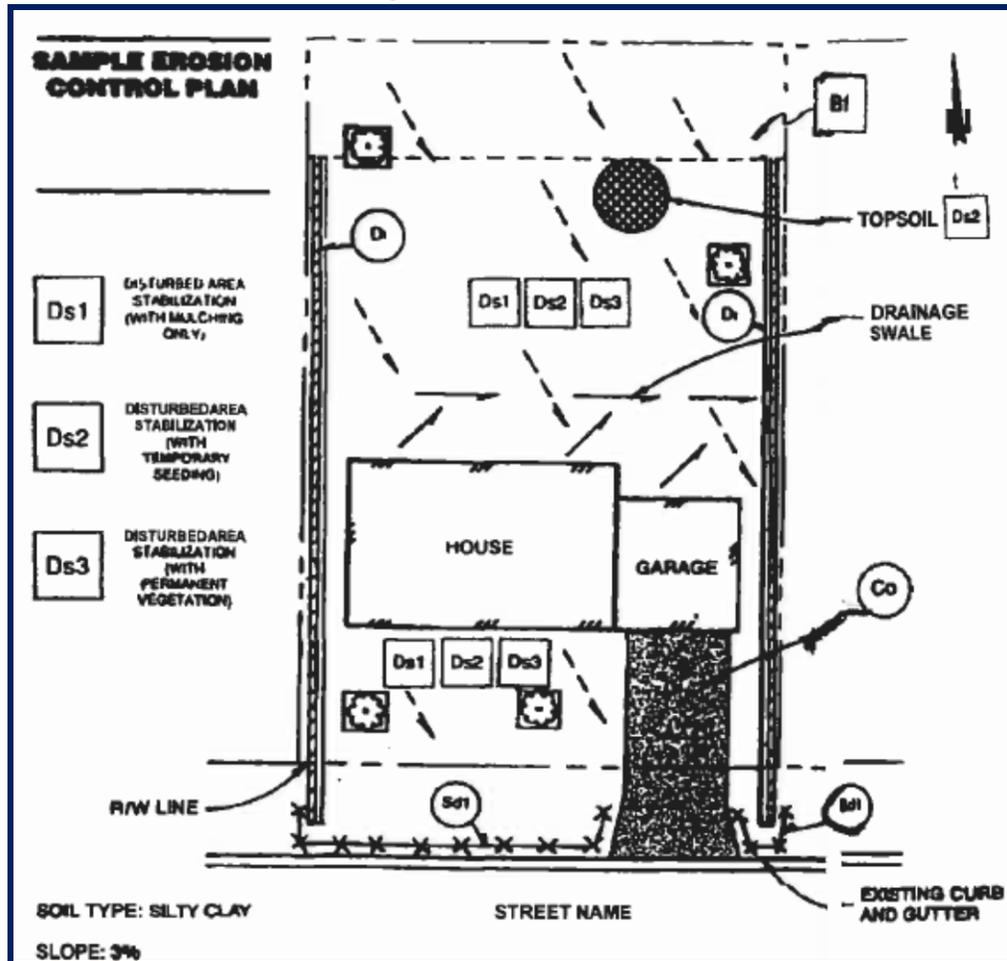
CONTROLLING EROSION IS EASY

Erosion control is important even for sites of an acre or less. The materials needed are easy to find and relatively inexpensive - straw bales or silt fence, stakes, rock, plastic tubes, and grass seed. Only a few controls are needed on most sites:

- ✓ **Preserving** existing trees and grass where possible to prevent erosion.
- ✓ **Re-vegetating** the site as soon as possible.
- ✓ **Installing silt fence and/or straw bales** to trap sediment on the downslope sides of the lot.
- ✓ **Locating soil piles** away from roads or waterways.
- ✓ **Installing a construction exit** used by all vehicles to limit tracking of soil onto streets.
- ✓ **Removing** sediment carried off-site by vehicles or storms.
- ✓ **Installing downspout** extenders to prevent erosion from roof runoff.

This handout was adapted from “Erosion Control for Home Builders” which was produced in part with funds from NOAA NA87OZ0115 through the Georgia Coastal Management Program.

Sample Erosion Control Plan



Erosion Control Practices

Sd - SEDIMENT BARRIERS

- Slows the velocity of runoff to filter out sediments.
- Install within 24 hours of land disturbance.
- Install on downslope sides of the site parallel to the contour of the land.
- Bury 8-inches of fabric in the trench with flap toward the runoff flow.
- Stake on the opposite side of the sediment barrier from the runoff flow. If using straw bales, use 2 stakes per bale.
- Extend ends upslope enough to allow water to pond behind fence or bales.
- Leave no gaps. Overlap sections of silt fence or stuff straw between bales.
- Inspect and repair once a week and after every 1/2-inch rain. Remove sediment if deposits reach 8-inches.
- Replace bales every 3 months.
- Maintain until a lawn is established.

Co - CONSTRUCTION EXIT

- Reduces or eliminates the transport of soil from the construction area.
- Install construction exit using 1-1/2 to 3-1/2 inch aggregate prior to placing first floor decking on foundation.
- Install a geotextile liner under the entire pad in clay soils.
- Lay stones 6-inches deep and at least 20-feet wide from the foundation to the street, or a minimum of 50-feet.
- Maintain throughout construction.

Di - TEMPORARY DIVERSIONS

- Intercepts and diverts storm runoff to keep sediments onsite.
- Excavate 8- to 12-inch channels along the downsloping perimeter of the site. Mound up excavated soil to form a berm 3- to 6-feet wide depending on slope.
- Direct the downslope ends of the diverters into sediment barriers.

Bf - BUFFER ZONES

- Filters sediments, chemicals, and nutrients before reaching State waters; reduces runoff velocities; stabilizes streambanks; improves aesthetics; improves fish and wildlife habitat; reduces construction noise; and increases flood protection.
- A 25-foot natural vegetative buffer area must be left undisturbed near a stream bank, lake, or marshland.
- Consult the Georgia Department of Natural Resources Coastal Resource Division at (912) 264-7218 for information on buffer variances.
- No soil may be disturbed in the buffer area, but landscaping and overseeding is permitted.

PRESERVE VEGETATION

- Preserve existing trees, shrubs, and other vegetation wherever possible.
- To prevent root damage, do not grade, place soil piles, or park vehicles near trees marked for preservation.
- Place plastic mesh or snowfence barriers around trees to protect the area below the branches.

Ds1 Ds2 Ds3 - REVEGETATION

- Vegetation is the most effective way to control erosion.
- Seed, sod or mulch bare soil as soon as possible.
- Locate soil piles away from any downslope street, driveway, stream, lake, creek, marshland, ditch, or drainageway.
- Temporarily seed stockpiled soil as soon as possible.

Ds1 Ds2 - SEEDING AND MULCHING

- Spread 4- to 6-inches of topsoil.
- Fertilize according to soil test or apply 25 pounds of 6-12-12 per 1,000 square feet.
- Lime according to soil test or apply 15 pounds per 1,000 square feet. Seed with appropriate mix for the site.
- Rake lightly to cover seed with 1/4-inch of soil. Roll lightly.
- Mulch with straw (one bale per 1,000 square feet).
- Anchor mulch by punching into the soil, watering or using netting or other measures on steep slopes.
- Water gently every day or two to keep soil moist. Less watering is needed once grass is 2-inches tall.

Ds2 - Temporary Vegetation		
Species	Seeding Rates per 1,000 sq. ft.	Planting Dates
Rye and Annual Lespedeza	0.6 lb	2/1 – 3/1
Weeping Lovegrass	0.1 lb	3/1 – 6/1
Sudangrass	1.0 lb	4/1 – 8/1
Browntop Millet	1.1 lbs	4/15 – 7/1
Ryegrass	0.9 lb	9/15 – 1/1
Wheat	4.1 lbs	10/15 – 1/1
Rye (grain)	3.9 lbs	10/1 – 11/1

Ds3 - SODDING

- Spread topsoil, fertilize and lime the same as if seeding.
- Lightly water the soil.
- Lay sod. Tamp or roll lightly.
- On slopes, lay sod starting at the bottom and work toward the top, laying a brickwork pattern. Pat each piece down in several places.
- Initial watering should wet soil 6-inches deep (or until water stands 1-inch deep in a straight sided container).

Ds3 - Permanent Vegetation		
Species	Seeding Rates per 1,000 sq. ft.	Planting Dates
Maidencane sprigs	650 sprigs	2/1 – 3/31
Bahia, Pensacola	1.4 lbs	3/1 – 5/31
Lespedeza (scarified)	1.4 lbs	3/1 – 5/15
Weeping Lovegrass	0.1 lb	3/1 – 5/31
Panicgrass	0.5 lb	3/1 – 4/30
Bermuda (hulled)	0.2 lb	3/15 – 5/31
Bermuda sprigs	585 sprigs	4/1 – 5/3
Sunflower	0.2 lb	4/1 – 5/31
Lespedeza (unscarified)	1.7 lbs	9/1 – 2/28
Bermuda (unhulled)	0.2 lb	11/1 – 1/31

DOWNSPOUT EXTENDERS

- Not required, but highly recommended.
- Install as soon as gutters and downspouts are completed to prevent erosion from roof runoff.
- Use plastic drainage pipe to route water to a grassed or paved area.
- Maintain until a lawn is established.

SEDIMENT CLEANUP

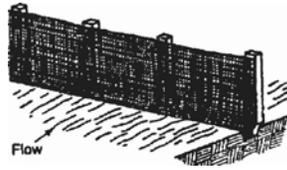
- By the end of each work day, scrape or sweep the soil tracked onto the road.
- By the end of the next work day after a storm, scrape or sweep the soil washed off-site.

Commonly Used Erosion Controls

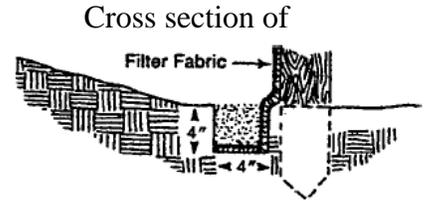
How to Install a Silt Fence



Excavate a 4-inch by 4-inch trench along the contour.



Stake the silt fence on the downslope side of the trench. Extend 8-inches of fabric into the trench. Overlap sections 3-feet when joining rolls.



Backfill and compact

How to Install a Straw Bale Fence

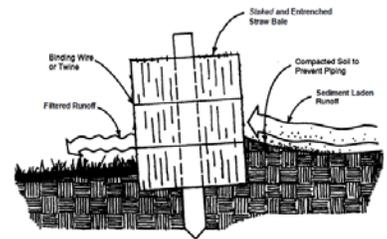


Excavate a 4-inch deep trench along the contour.



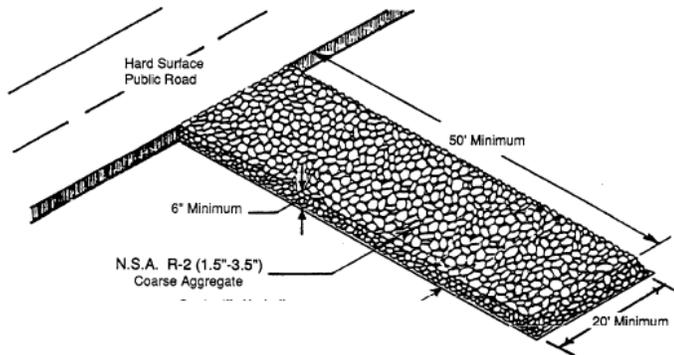
Place bales in trench with bindings around sides away from the ground. Anchor with two steel rebar or 2-inch by 2-inch wood stakes per bale. Drive stakes 8-inches into the ground.

Cross section of straw bale:



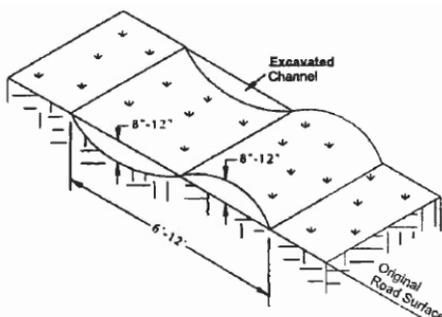
Backfill and compact

How to Install a Construction Exit



Install as soon as possible after start of grading. Use geotextile liner on clay soils. Use 1-1/2 inch to 3-1/2 inch aggregate stone. Drive must be at least 50-feet long or the distance to the foundation. Replace as needed to maintain a 6-inch depth.

How to Construct a Temporary Diversion



Excavate a 3-foot to 6-foot wide by 8-inch to 12-inch deep channel to divert runoff onto/off of site. Use narrow, deep channels on steep slopes and broad, shallow channels on gentle slopes. Stabilize with vegetation.

City of Tybee Island
Special Conditions

All work shall conform to the City of Savannah Technical Specifications except as stated in these City of Tybee Island Special Conditions. The City of Savannah Technical Specifications are available online at the City of Savannah website (<http://www.savannahga.gov/index.aspx?nid=914>). Where in conflict, these Special Conditions shall govern.

GENERAL

Engineer refers to both the Engineer for the project and the City of Tybee Island's Engineer. Justifications of the Engineer's approval, including but not limited to, required testing shall be submitted to the City of Tybee Island prior to the City issuing concurrence.

Where requirements differ from those stated in the GASWCC "Green Book", the stricter will govern.

All communications required of the departments referenced in the City of Savannah ordinances will be submitted to the City of Tybee Island Planning and Zoning, Public Works, and Water and Sewer Departments.

Time of notification to the City of Tybee Island excludes any and all federal, state, county, and city holidays; weekends, and times of community alerts or disasters including, but not limited to, tropical storm and hurricane alerts, periods of rainfall exceeding the 25-year storm as determined by the City of Tybee Island and the following two weekdays. Time of notification to the State Department of Transportation and other departments is the minimum. Such time of notification may be greater if required by those agencies.

All text for signage and markings shall be submitted to the City of Tybee Island for approval.

All materials will be domestic. Imported materials shall be allowed only after the City of Tybee Island approves a written request from the Owner's agent.

Section 02100 - Clearing / Part 2 – Execution / 2.05 Existing Tree Protection / A. Site Development Projects

Tree Quality Points as defined in the City of Savannah Specifications are not required.

Section 02100 - Clearing / Part 2 – Execution / 2.05 Existing Tree Protection / A. Site Development Projects

The following requirements pertain to all projects.

Section 02270 – Erosion and Sedimentation Control

Where requirements differ from those stated in the GASWCC "Green Book", the stricter will govern.

Section 02400 - Storm Drainage - 2.18 Televising

After the completion of cleaning, all constructed storm lines must be televised prior to acceptance. Accordingly, all storm lines that are installed will be televised. Details and procedures of this program are included in the "Televising Procedures Manual" developed by the City's Water Department. Contractors will be responsible for becoming familiar with this manual and for the costs of televising. The City may waive the televising requirement if the lines are short enough and of a diameter that allows visual inspection by lamping.

Section 02550 – Water Distribution System / Part 1 – Products

1.01 Pipe

A. Ductile Iron Pipe – Shall conform to ANSI/AWWA C150/A21.50 latest revision and ANSI/AWWA C151/A21.51 latest revision for laying condition two. All pipe shall be cement lined in accordance with ANSI/AWWA C104/A21.4 latest revision. All pipe larger than 12-inches shall be ductile iron unless PVC is specifically allowed by the City.

1.09 Gates Valves

D. Valve Manhole – Gates valves 10" and larger shall be installed in a manhole. Gates valves 8" and larger within pavement shall be installed in a manhole.

2.01 Installation

4. Depth of Pipe – The Contractor shall perform excavation of whatever substances are encountered to a depth that will provide a minimum cover over the top of the pipe of 36-inches from the existing or proposed finished grade, for pipe 12-inches and smaller. Pipe larger than 12-inches in diameter shall have 36-inches of cover from the finished grade. A minimum cover of 33-inches and a maximum cover of 39-inches from finished grade shall be accepted as within tolerance unless approved by the City to avoid a conflict. If the design cover will be less than 36-inches, duct iron pipe may be required by the City. Bedding shall be per specifications, industry association standards or manufacturers recommendations, whichever is greater.

2.05 Procedures for Connection of Water Mains

B. Procedure

6. If a wet tap is required, the contractor will be responsible for preparing the site. This preparation includes the excavation and installation of the tapping sleeve. The contractor will make available a lifting device for the tapping machine and at least a 100 CFM Air Compressor to power the tapping machine. The Contractor will provide the tapping machine and personnel to operate the unit. All taps will be made under the supervision of the City of Tybee Island Water Department.

Section 02554 – Wastewater Collection System - 2.12 Manholes

The drop through manholes shall be equal to the steepest percentage of the upstream and downstream lines may be used at the discretion of the City of Tybee Island. Horizontal alignment changes greater than 90 degrees at a single manhole shall not be allowed. A wide sweep invert shall be required for all manholes where the horizontal alignment change is 90 degrees.

Section 03300 Cast-in-Place Concrete

Chapter 1 – General; – Scope

1.3– Design of Concrete Structures shall be performed and stamped by a Professional Engineer registered in the State of Georgia. In no instance shall a concrete sidewalk be less than 4” thick nor a driveway less than 6” thick. The Engineer shall refer to City of Savannah Standard Construction Details for minimum design requirements of various structures.

Chapter 3 – Proportioning; 3.2 – Strength

The specified compressive strength of the concrete (f'c) for each portion of sidewalks and curb and gutters shall be a minimum of 4,000 psi unless a greater strength requirement is indicated on the contract drawings or herein. Driveway and road paving shall have a compressive strength of not less than 5,000 psi. Strength requirements shall be based on 28-day compressive strength unless a different test age is specified. The compressive strength of the concrete shall be determined by ASTM C39.

Chapter 5 - Reinforcement

5.7-Sidewalks shall be reinforced by one of the following methods:

5.7.1-Minimum size of mesh shall be 6"x6" - W2.9 x W2.9.

5.7.2-Concrete shall be fiber reinforced.

5.7.3-Deformed reinforcing bars providing no less than 0.25 square inches per foot (each way).

Section 11100 – Submersible Wastewater Pumps

5-25 Horse Power Duplex Across the Line Magnetic

Part III – Final Inspection

3.01 Final Inspection / Acceptance

B. Dry Pumping Test: The pump will be tested by both a Facility Test and a Site Test.

ARTICLE IV. NOISES

Sec. 22-112. Noise disturbance prohibited.

- (a) *Prohibited.* No person shall make, continue, or cause to be made or continued, except as permitted, any noise disturbance, or any noise in excess of the limits for such noise established in this section.
- (b) *Maximum permissible sound levels.* With the exception of sound levels elsewhere specifically authorized by this article, table 1 sets forth the maximum permissible sound levels allowed at or within the real property boundary of a receiving land use. Any activity or use that produces a sound in excess of such noise levels for a receiving land use shall be deemed a noise disturbance and is in violation of this article.
- (c) *Measurement of sound.* The measurement of sound or noise shall be made with a sound level meter meeting the standards prescribed by the American National Standards Institute or its successor body. The instrument shall be maintained in calibration and good working order. Octave band corrections may be employed in meeting the response specification. A calibration check shall be made of the system at the time of any noise measurement. Measurements recorded shall be taken so as to provide a proper representation of the noise source. The microphone used during measurement shall be positioned so as not to create any unnatural enhancement or diminution of the measured noise. A windscreen for the microphone shall be used when required. Traffic, other transportation noise sources and other background noises shall not be considered in taking measurements except where such background noise interferes with the primary noise being measured. It is the intention that this sound to be measured is what is being created by the sound complained of excluding intruding noises from isolated identifiable sources, but including ambient sound level. The measure of all sound levels shall be made as close to the property line of the receiving land use as is practical.

TABLE 1

Zoning Category of Receiving Land	Sound Levels by Receiving Land Use	
	Time ⁽³⁾ Use ⁽¹⁾	Sound Level Limit, dBA ⁽⁴⁾
Residential ⁽²⁾	At all times	60
Commercial	At all times	75
Noise Sensitive Area	At all times	55

(1) As set forth in the Land Development Code.

(2) Any zoning district containing the letter "R."

(3) Unless otherwise stated in this article.

(4) For any source of sound which emits a pure tone, the maximum sound level limits set shall be reduced by five dBA.

(d) *Equipment use restrictions.* Regardless of decibel levels, the following **equipment may not be operated between the hours of 8:00 p.m. and 7:00 a.m.: Monday-Friday and on Saturday and Sunday 8:00 p.m. to 10:00 a.m.:**

- (1) Electrical power tools.
- (2) Motor powered, muffler equipped lawn, garden, and tree trimming equipment except residential lawn mowers.
- (3) Construction equipment, which includes landscaper's lawn mowers and other landscaping motorized equipment.

FLOOD INSURANCE RATE MAPS and FLOOD DAMAGE PREVENTION ORDINANCE

The Federal Emergency Management Association (FEMA) mandated the City of Tybee Island's adoption of new Flood Insurance Rate Map (FIRM) and a new Flood Damage Prevention Ordinance (FDPO) on September 26, 2008. It was required that the FDPO meet or exceed the minimum standards outlined by FEMA.

There were significant changes in the new ordinance. Some of the more significant changes are outlined below, however, please be aware that this outline does not address all of the changes. The ordinance in its entirety is available at the City's website, www.cityoftybee.org or in the Planning and Zoning Department at City Hall. The ordinance and the September 26, 2008, FIRM are available at the Planning and Zoning Department at City Hall.

AE ZONES

- **SURVEY REQUIREMENT** – All new construction/substantial improvement projects are required to submit an as-built certification immediately after the lowest floor or flood-proofing is completed.
- **FINISHED FLOOR ELEVATION** – All new construction/substantial improvement projects are required to be elevated at least **one foot above** the base flood elevation. The following are included in the requirement and must be elevated:
 - All heating and air conditioning equipment and components, including ductwork;
 - All electrical;
 - All plumbing fixtures;
 - All other service facilities.
- **NON-RESIDENTIAL** – New construction/substantial improvement for non-residential projects may elect to floodproof the project in lieu of elevation.

VE ZONES

- **SURVEY REQUIREMENT** – All new construction/substantial improvement projects are required to submit an as-built certification after placement of the lowest horizontal structural members.
- **FINISHED FLOOR ELEVATION** – All new construction/substantial improvement of existing structures shall be elevated so that the bottom of the lowest supporting horizontal structural member (excluding pilings or columns) is located no lower than **one foot above** the base flood elevation level.

*Substantial Improvement means any combination of repair, reconstruction, alteration, or improvement to a structure taking place during a **5-year period**, in which the cumulative cost equals or exceeds 50% of the market value before the start of construction of the improvement.*

Please call 912.472.5030 for more information.

March 2013

City of Tybee Island Water and Sewer Requirements

All requirements are taken from the City of Tybee Island Code of Ordinances, which are available at: <http://library.municode.com/index.aspx?clientId=14104>.

- The cost of laying water pipes from the mains to the property line will be borne by the applicant, as herein provided. (Section 70-29)
- Water tapping and sewer stubbing fees for a water consumer will be based on the following formula. The fee shall cover the cost of the meter and inspection of installation of same. Actual installation of both lines and meter shall be the responsibility of the applicant. This tapping stubbing fee is payable in advance. (Section 70-33)
- *Meter costs.* The cost for a water meter for sprinkler systems, swimming pools, etc., shall be based on the size of the meter deemed necessary by the water and sewer department supervisor and/or his designee. The following rates cover the cost of the meter only. The property owner is responsible for both installation of meter and running of necessary lines. (Section 70-33)
- *Location of installation.* Meters shall be installed as close to the property line of the customer as possible. All connections shall be inspected by a designated city employee from the water department. Only those properties where meters have been installed will be furnished water from the city water system. (Section 70-34)
- *Access to premises.* The duly authorized employee of the city shall have at all times free access to the premises for the purpose of readying the meter or removing the same for the purpose of testing its accuracy. (Section 70-34)
- *Permanent fixture upon property.* Each meter shall become a permanent fixture upon the property or premises where installed and may be transferred upon the transfer of ownership of the property or premises to provide for continued water service to that property.
- *Meter size.* The size of the water meter shall be in accordance with the decision of the department director. (Section 70-34)
- *Responsibility of property owner.* Water laterals are to be maintained by the property owner. The owner of the property serviced by city water service shall be responsible for maintaining the water pipes between the plumbing fixtures on the property to the property line or the water meter keeping them in good operating condition and free from all internal obstructions. (Section 70-34)
- *Separate meters for multiple units.* Duplexes, multiple-family dwellings and structures divided into several apartments, offices, or separate businesses, excluding hotels and motels, shall be so equipped that each unit can be supplied with a separate meter. The rate for each meter shall be based on the service rate schedule; provided, however, that in the case of existing buildings the city may allow one meter of the proper size to continue to be utilized. The rates for that meter shall be based on a standby minimum base charge for each dwelling unit or business unit. The actual water usage shall be computed on the primary unit, according to the meter reading, and so billed. In all such instances of multiple units, the property owner shall be billed for all service charges for all units. (Section 70-34)
- *Circumstances for water service.* Water meters shall be installed upon issuance of a building permit so that water may be available during the construction process. After a certificate of occupancy is issued by the city, normal occupancy-billing occurs. In the event a structure is unfit for habitation or use, due either to the absence of a certificate of occupancy or by condemnation, and the owner thereof nevertheless effects occupancy of the premises, the city shall not provide water and sewer services to the premises. (Section 70-34)
- The city shall have the right to shut off the water supply for the purpose of making any additions and repairs as may be desired or necessary to the water system, and the city shall not be liable to any customer for any damage resulting from that shutoff. (Section 70-42)
- *Permit required prior to use.* No unauthorized person shall uncover, make any connection with or opening into, use, alter or disturb any public sewer or appurtenances thereof without first obtaining a written permit from the superintendent. (Section 70-75)
- *Costs.* All cost and expense incident to the connection of the building sewer from the owner's building to the public sewer shall be borne by the owner. Any connection from the owner's property into the public sewer shall be made by the owner, and inspected by a designated employee of the sewer department, and no connection into the public sewer shall be covered until approval of the superintendent of the department is granted. The owner shall pay the city a standard sewer tap fee for each tap into the public sewer. (Section 70-75)
- *Connection with public sewer.* The connection of the building sewer into the public sewer shall be made at the Y branch, if that branch is available at a suitable location. If the public sewer is 12 inches in diameter or less and no properly located Y branch is available, a Y branch shall be installed by the owner in the public sewer at the location specified by the superintendent. Where the public sewer is greater than 12 inches in diameter, and no properly located Y is available, a neat hole may be cut into the public sewer to receive the building sewer when used with a flexible saddle and stainless steel bands to fasten to the main sewer, and concrete shall not be used. Special fittings may be used for the connection only when approved by the superintendent. (Section 70-75)

ARTICLE II. EXCAVATIONS AND REPAIRS

Sec. 54-34. Permit to dig in public places; exception.

No person shall make any excavations or openings or dig any ditch, trench, tunnel or hole in, along, across or under any street, sidewalk or other public place for the purpose of laying or placing therein any pipes, wires, or poles for any purpose, unless a written permit therefor has been issued by the city. A permit shall not be required where that work is performed under a contract with the city but in the event that work requires a sidewalk or street to be wholly or partially obstructed, the person shall notify the city and the police department at least two hours before obstructing the sidewalk or street, unless prevented by sudden emergency. (Code 1983, § 5-1-11)

Sec. 54-35. Application for permit.

All persons desiring a permit in order to make an opening in any street or sidewalk, as set forth in section 54-34, shall make written application therefor, which application shall show the location of the proposed opening, the purpose therefor and the approximate number of square yards of surface to be cut. (Code 1983, § 5-1-12)

Sec. 54-36. City indemnification.

Any person obtaining a permit as provided for in sections 54-34 and 54-35 agrees, as a condition of the issuance of the permit to indemnify and hold harmless the city against any claims or expenses, including attorney's fees for bodily injury or property damage for accidents or occurrences arising out of the person's operations. (Code 1983, § 5-1-13)

Sec. 54-37. Street repair; violation.

When any part of any street, sidewalk, alley or other public place of the city shall be torn or dug up for any purpose, the person making that excavation or opening shall have the duty of refilling the excavation or opening to restore it to essentially the same condition that existed prior to the excavation or opening, and such refilling shall be done in accordance with the standards and specifications issued by the city. Any person neglecting, refusing or failing to comply with any provisions of this section shall be guilty of a violation thereof; and where such neglect, refusal or failure is continued, after notice from the city, every day's continuance thereafter shall constitute a separate and distinct offense. (Code 1983, § 5-1-14)

Sec. 54-38. Leaving excavations unprotected prohibited.

It shall be unlawful for any person who obtains a permit under the sections of this article to do any excavation of any kind which may create or cause a dangerous condition in or near any street, alley, sidewalk or public place of the city without placing and maintaining proper guard rails and signal lights or other warnings at, in or around the work, sufficient to warn the public of any excavation or work and to protect all persons using reasonable care from injuries on account of same. (Code 1983, § 5-1-15)

Sec. 54-39. Supervision; final inspection; violation.

All excavations and work in the streets, sidewalks, alleys or public places of the city shall be under the supervision and control of the superintendent of public works-sanitation, whose duty it shall be to inspect the same from time to time during the progress thereof. Upon the completion thereof, he shall make a final inspection and see that the street, sidewalk or public place is restored to a condition as good in all respects as before the excavation or work was made or done, and that all debris, materials, tools and equipment are removed therefrom. Any person refusing or failing to comply with any provision of this section shall be guilty of a violation thereof; and where any failure or refusal is continued after notice from the city, every day's continuance shall constitute a separate and distinct offense. (Code 1983, § 5-1-16)

Sec. 54-40. Sidewalk construction; permit required.

No sidewalk of any description shall be built by any person of any brick, wood or other material without a written permit from the city. (Code 1983, § 5-1-17)

Sec. 54-41. Streets and sidewalks not to be damaged.

It shall be unlawful for any person to drag, or run, or cause to be dragged or run any harrow or other implements, engine, machine tool upon any asphalt, batholithic, warrenite or other type of permanently paved street or sidewalk of the city which shall be liable in any way to injure or cut the surface thereof. It shall also be unlawful to injure any dirt street in the same manner. (Code 1983, § 5-1-18)

Sec. 54-42. Sidewalks, parking areas, not to be obstructed or damaged.

It shall be unlawful for any person to obstruct or damage in any manner any sidewalk, parking lane or parking area in the city by allowing landscaping, trees, shrubbery, hedges, branches, roots or other debris to interfere therewith. Uncontained yard trash or other debris placed in city rights-of-way, including parking lanes or spaces, is specifically prohibited. Trees shall be pruned to a minimum height of ten feet above the sidewalk. (Code 1983, § 5-1-19)

Sec. 54-43. Violation.

All persons found guilty of a violation of this article shall be punished as provided in section 1-8. (Code 1983, § 5-1-20)