

139 S. Kirkwood Rd. Kirkwood, MO 63122

For the Zoning Regulations and Architectural Guidelines please see Kirkwood Zoning and Subdivision Code, Chapter 25. For the manuals and checklists for Stormwater Management Regulations please visit www.kirkwoodmo.org/stormwater.

MUNICIPALITY WORKSHEET - KIRKWOOD, MO 63122

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Building Commissioner:	Jack Schenck, Jr.(314-822-5814)	Current Building Code:	2015 IBC/IRC (amendments)
Planning and Zoning:	Commercial: Amy Lowry (314-984-	Current Electrical Code:	1&2 Family 2015
	5926)		IRC(amendments)
	Residential: Lauren Hoerr (314-822-		Multi & Commercial-St. Louis
	5899)		County
Plan Reviewer:	Russell Todd (314-822-5817)	Current Plumbing Code:	2015 IPC (amendments)
Fire Marshal	Fire Department (314-822-5883)	Current Mechanical Code:	2015 IMC (amendments)
Notes/Special Instructions:	CODES		

REQUIRED APPLICATIONS, WORKSHEETS, & PERMITS

ARB Application:	Yes- All exterior	Site Coverage and FAR Calcs:	Yes
Tree Permit or Study:	Yes- see below	Municipal Inspections:	Bldg., Plumb., Mech.,
			(Electrical for one
			& two family residential only)
Land Disturbance/Grading:	Yes- over 1 foot of grade change	STLCO inspections:	Electrical only- on Three
			Family residential or more and
			Commercial
Site plan	Yes	Contractor License Required	Yes- plus insurance req.
Notes/Special Instructions: A	RB BOA PERMITS		_

BOARD OF ADJUSTMENT

Meeting Frequency:	2 nd Monday of every month	Site Coverage and FAR Calcs:	Yes
Submission Lead Time:	24 calendar days before mtg.	Submittal Format	Site plan scale 1"=20'
Pre-Submittal Meeting	Required	Copies Required	12
City Liaison:	Lauren Hoerr 314-822-5899	Historical Districts:	Yes
			Amy Lowry-Landmark Liaison
			314-822-5815
Notes/Special Instructions:	Board of Adjustment website	_	_

ARCHITECTURAL REVIEW BOARD

Meeting Frequency:	1 st and 3 rd Mondays	Submission Lead Time:	14 calendar days before mtg. by 2 p.m.		
Color Rendering:	Required- see examples	Submittal Format	11" X 17" all documents		
Photos & Streetscape:	Required- see examples	Existing and Proposed Surveys:	Yes		
Historical Districts:	Yes- Local and National	Sign Rules and Requirements:	Yes- Kirkwood Sign Ordinance		
Special Reqd. Demolition	Historic districts				
Design Restrictions & Requirements: ARB website					

SURVEY REQUIREMENTS

Existing:	Shall be submitted at demolition including grade contours, FFFH and "spot grade" and structures to	Proposed:	Shall be submitted at Single-Family Site Plan Review/ Architectural Review submission
	be removed		
Topo:	Yes		
FFFH-Finished first floor	Yes	Foundation "Spot"/ FFFH	Yes
height averaged	See example herein or on	Survey:	Specific ordinance on finish floor height
requirements	website.		
Demolition Plan:	Yes- details site setup	Lot Consolidation:	Yes- if applicable
		Storm water drainage Req.	Yes -site specific
Notes/Special Instructions: 0	Contact Amy Lowry at 314-822-5815 for	or FFFH & Front Setback Calculat	ion Examples

TREE PROTECTION

Tree Study Required:	Yes	Tree Protection Specifications:	Yes-specific requirements		
When Required:	Prior to issuance of	Prior to issuance of Protection Fence Type:			
·	permits				
Approved Arborist List:	Contact Public Services	Signage Required	Yes- specific design and type		
Notes/Special Instructions: Requirements are in ARB submittal packet or Contact City Forester at 314-984-5907					

SILTATION CONTROL/ MISCELLANEOUS ITEMS

Plan Requirements:	Indicate on demolition plan	Portable Restroom	Shall be screened and setback 15 feet from front
Fence Type:	Woven fabric type fencing	Material Storage	Shall be on either paved or rock surface
Site entry	Shall be rocked or paved surface	Debris/Trash	Shall be disposed of in dumpster- tarped
Excavation Req.	All excavations shall be protected with min. 4 foot fencing	Right Of Way	Sidewalk closed max. 72 hours NO MUD SHALL BE TRACKED OFF SITE
Notes/Special Instruction	s: Requirements are in ARB submittal pa	acket or Demolition packet	



SUMMARY OF SINGLE-FAMILY ZONING REGULATIONS

Requirements for Primary Structures (Z&S Code §25-48)

This is general information only – the Zoning Code applies in all situations or conflicts.

Special conditions may apply – subdivision plats, community unit plans, Board of Adjustment variances, or special zoning provisions.

Corner lots have front yards on each street with the primary front yard on the narrower street dimension and the secondary front yard on the wider street dimension. The rear yard is the side opposite the primary front yard – no matter the orientation of the house.

Maximum building height for primary structures is 35' and 2½ stories.

	LOT SIZE AND YARD SETBACK REQUIREMENTS					
Zoning	Minimum	Minimum Lot		Minimum Setback Lines		Side Setback if Less than Code Width
District	Lot Size	Width	Front Notes 1-4	Rear Notes 2 & 3	Side Note 2	(at Minimum Front Setback)
R-1	43,560 ft ²	150'	60'	50'	25'	1/6 of Lot Width, but not less than 12'
R-2	25,000 ft ²	125'	50'	45'	20'	1/6 of Lot Width, but not less than 12'
R-3	15,000 ft ²	100'	40'	35'	12'	12' or 20% of Lot Width, whichever is smaller
R-4	7,500 ft ²	60'	35'	30'	8'	5'
R-5	7,500 ft ²	60'	35'	30'	8'	5'

NOTES:

- (1) If block is more than 40% developed, the front yard setback for new structures is the average of the front yard setbacks of abutting lots. Corner lot secondary front yard setbacks in R-3 and R-4 are 20% and 30% of the lot width respectively. Generally, new construction is not permitted in the front of an existing residence.
- (2) For existing single-family residences that contain setbacks not meeting present code provisions, the existing setback may be used for additions and alterations, except the setbacks shall not be less than 5 feet.
- (3) Unenclosed porches and uncovered decks not more than 1 story in height may encroach up to 10' from the conforming front or rear setback line.
- (4) An attached garage with a front-facing entrance shall not exceed 55% of the overall width of the façade, nor project more than 8' beyond the front face of the house with an attached porch.

	LOT COVERA	AGE AND FAR REQUIREMENTS	
Zoning District	(Area of building footprint including accessory structure)	Coverage to fall structures under a roof res and covered porches/decks greater ft² shall apply)	Floor Area Ratio (Area of 1st and 2nd floors of the house, plus ½ of attached garage divided by lot area – greater ft² shall apply)
R-1 R-2	Lot Area ≤7500 ft² (1 story) = 35%	Lot Area ≤7500 ft² (1½ & 2 stories) = 30% or 1750 ft²	≤10,000 ft² = 35% or 2250 ft²
R-3 R-4	Lot Area >7500 ft ² (1 story) Lot Area >7500 ft ² (1½ & 2 stories) = 30% or 2625 ft ² = 25% or 2250 ft ²		10,001-19,999 ft ² = 30% or 3500 ft ² \geq 20,000 ft ² = 25% or 6000 ft ²
R-5		40%	N/A



SUMMARY OF SINGLE-FAMILY ZONING REGULATIONS

Requirements for Detached Accessory Structures (Z&S Code §25-41)

Accessory structures must align with or be behind the front line of the existing residence, not including a front porch. For corner lots, this applies to each frontage.

Accessory structures may not contain basements, cooking facilities, sleeping areas, and shower or bathing fixtures.

Only one detached garage is permitted on a single-family lot.

Above-ground swimming pools must meet same setback requirements as the primary structure.

i. HEIGHT, SETBACK AND LOT COVERAGE REQUIREMENTS (garages, sheds, gazebos, in-ground swimming pools, etc.)				
Maximum Height	Minimum Setback Lines Notes A - C		Maximum Total Coverage of	
	from Principal Building	Side	Rear	all Accessory Structures
24' and 1½ Stories (& less than house height)	10'	5'	5'	7% of Lot or 1,500 ft ^{2,} (whichever is less)!

NOTES:

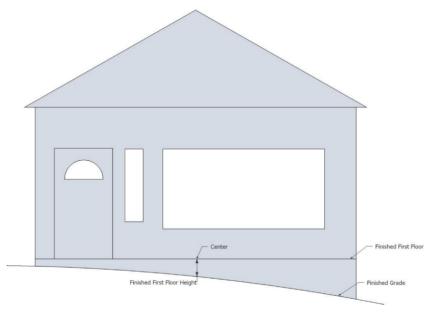
- (A) Accessory structures with any one wall 25' or longer must be set back from the side and rear property lines the same distance as the side yard setback of the primary structure. In-ground pools are exempt from this requirement.
- (B) Accessory structures shall not be located on a utility easement.
- (C) Patios, terraces and decks, including those surrounding a swimming pool, must be set back a minimum of 2' from all lot lines.



FINISHED FIRST FLOOR HEIGHT

Zoning Code Section 25-46(m):

The finished first floor height is calculated as the height of a finished first floor measured at the existing finished grade to the finished first floor at the horizontal center of the front foundation wall as depicted in illustration below.



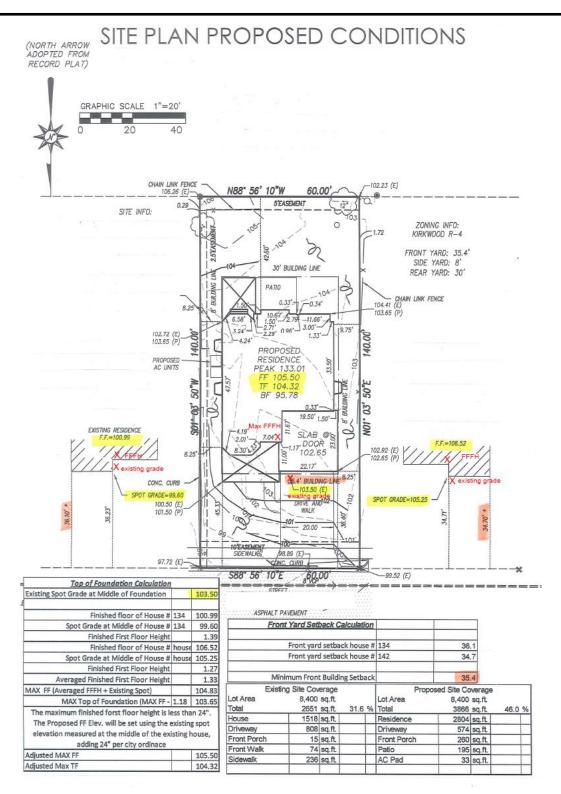
Finished first floor height measurement

Zoning Code Section 25-48(c)(3)(i):

- b. The maximum finished first floor height for new residential structures for an interior lot located between two improved lots shall be determined by averaging the two existing finished floor heights of the structures on either side of the subject lot.
- c. The maximum finished first floor height for new residential structures located between an improved lot on one side and vacant lot on the other side or between an improved lot and a street or between a vacant lot and a street shall be determined by averaging the existing finished first floor heights of every improved lot within 200 feet, beginning from the property line of subject lot, in the same block and on the same street frontage. For corner lots, the measurement shall be taken along both frontages and the more restrictive of the two averages shall apply.
- d. When the maximum finished first floor height for a new residential structure is calculated to be less than 24 inches, the maximum finished first floor height for the new residential structure may be set to 24 inches. If the maximum first floor height for the new residential structure would still result in any portion of the new foundation being below the minimum requirements of the adopted Building Code, a grade adjustment of up to 12 inches may be added to the maximum finished first floor height, as determined by the Building Commissioner.



FINISHED FIRST FLOOR HEIGHT AND FRONT SETBACK CALCULATION EXAMPLE





HALF-STORY REGULATIONS

Zoning Code Section 25-48(c)(2):

- (i) A half-story is a space under a sloping roof that has the line of intersection of roof decking and exterior wall face not more than three feet above the top floor level, and in which space not more than two-thirds of the floor area of the story immediately below is used for residential living purposes.
- (ii) All areas with a ceiling height of five feet or greater, whether finished floor space or not, shall be included in the calculation of the maximum floor area allowed. See illustrations below.
- (iii) A half-story may only be permitted in a structure with a hip or gable roof.
- (iv) A half-story shall not contain cantilevered areas, or more than 25 percent open dormer floor area measured where the dormer ceiling intersects the roof line.
- (v) In single-family dwellings, a half-story shall not contain independent apartment or living quarters, or it will be deemed a full story.

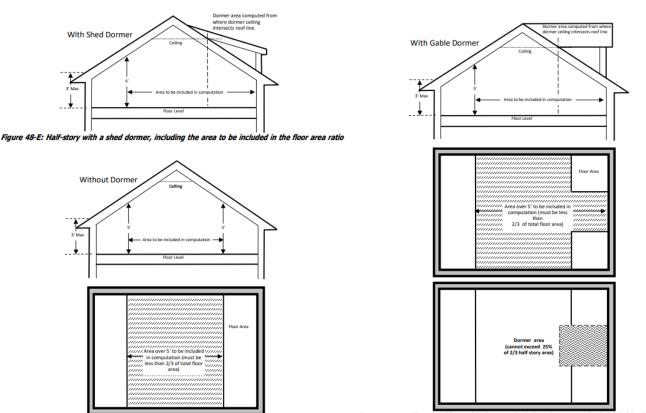


Figure 48-F: Half-story without a dormer, including the area to be included in the floor area ratio

Figure 48-G: Half-story with a gable dormer, including the area to be included in the floor are ratio



INFILL DEVELOPMENT STORMWATER MANAGEMENT

Municipal Code Chapter 5, Article VI Kirkwood Engineering Department 314-822-5822

Land development permanently alters the way in which stormwater flows across a site due to grading, compaction, and the installation of impervious cover. In an attempt to reduce these impacts, the City requires that stormwater management measures (BMPs) be utilized on major development projects.

Applicable Projects

Regulated Infill Development subject to review for stormwater management in accordance with Chapter 5, Article VI include, but are not limited to new construction and redevelopment, building additions, accessory structures, swimming pools, driveway expansions or additions, and parking lot reconstruction

MSD Review

All commercial and multi-family projects or any projects disturbing 1 acre or more are required to submit development plans to the Metropolitan St. Louis Sewer District (MSD). The City may also require MSD review of residential projects.

Regulated Infill Development with the following conditions are required to provide stormwater

Stormwater Management Requirements

	anagement BMPs in accordance with the City of Kirkwood Green Intrastructure Techniques for
	ormwater Management Manual:
	Developments creating 1,000 square feet or more of net additional impervious area.
	Developments causing the total impervious area on a lot to be greater than 25% of the total lot
	area.
ทร	spections (Maintenance of the BMPs is the responsibility of the property owner.)
Γh	e City will inspect the BMPs during construction and provide maintenance inspections at the
oll	lowing intervals:
	1-year post construction
	Every 3 years
	At change of occupancy

Sump Pumps

All projects which include the installation of sump pumps or existing sump pumps with discharges causing a nuisance per Chapter 16 Section 2 of this code must discharge to one of the following BMPs per the Infill Development Storm Water Guidance Document:

Drywell sized to treat a minimum of 175 square feet of contributing area and located a minimum of
10' from any property line, or

□ Vegetated filter strip sized to treat a minimum of 175 square feet of contributing area and sump pump discharge located a minimum of 20' from any property line.

These are minimum requirements and property owners are encouraged to engage professionals to adequately size their systems. If a nuisance develops or continues to exist, the homeowner will be required to correct the issue.

Fees and Escrows

No additional permit fees are required. A \$1,000 construction deposit is required for projects that don't require the \$5,000 site restoration deposit.

Manuals and Checklists

The City has developed manuals and checklists to aid property owners in the design, installation and maintenance of required stormwater BMPs. They can be found on the City's website at http://www.kirkwoodmo.org/stormwater.



TREE PROTECTION PLAN REQUIREMENTS

Municipal Code Chapter 24, Article II Kirkwood Urban Forester 314-984-5907

For questions or more detail please refer to the Tree Ordinance and Tree Manual. These can be found at https://www.kirkwoodmo.org/government/boards-and-commissions/urban-forestry-commission

Tree Protection Plan

- Tree Study (See Tree Manual for more details)
- Canopy Coverage Requirements
 - All Single family lots shall have minimum tree canopy coverage of 350 square feet per 1000 square feet of lot coverage (35% coverage)
 - o A canopy coverage map shall be provided showing the following:
 - Current Canopy coverage (this can be done with an aerial photo and a simple polygon)
 - Proposed Site Plan (building location, driveway, utilities, etc.)
 - Proposed canopy coverage post site disturbance: including all trees that are to be planted to reach minimum coverage requirements
 - Trees are to be marked and numbered
 - Species of tree
 - Numerical indicators

All trees to be protected or included in the canopy requirements shall be of an approved species listed in the Tree Manual. Existing Trees shall be live, healthy trees over 8 inches in diameter and in good or fair condition of health.

If you have a tree located in the City Right of Way you MUST have approval from the City prior to any maintenance of this tree. This includes removal or pruning. Tree Protection must be set up around all City Right of Way trees.

Removal of a Public Tree as Part of Development Plan

Removal of a tree from the City's Right of Way (ROW) requires a permit to filed with the City Forester and approval.

- If the Permit is denied the Removal request will be sent to the Kirkwood Urban Forestry Council for approval.
- The Commission meets on the **fourth Tuesday** of the month at 7:00 p.m. The agenda is prepared no later than the prior Thursday. All requests sent to the Commission must have a Permit submitted to the Urban Forester no later than the 3rd Monday of the month.
 - Submittal information:
 - A Tree Survey and/or preliminary site plan
 - A written statement expressing the reason why the tree(s) must be removed. Trees are important City assets and provide many advantages to the public.
- Trees shall be protected during all phases of development, until the Permit or Request to remove has been approved.
 - All damage, destruction, or failure to protect the trees will be considered a violation of the City Code of Ordinances.

Replacement trees planted in the ROW shall conform to the Tree Manual found on the City's website, or be an approved species by the Urban Forester.



TREE STUDY & SITE PLAN REVIEW

PROPERTY LOCATION:								
*TREE/LANDSCAPE LOCATIONS SHALL BE INDICATED ON SITE SURVEY (SCALED) AND ATTACHED TO THIS STUDY SHEET								
List all significant trees (live, healthy trees, of a species suitable for the urban environment having a diameter of eight inches or greater) on premises, on abutting public rights-of-way, and on private property within ten feet of all property lines.								
KEY TO DRAWING	TREE SPECIES	DIAMETER	SAVE YES/NO IF NO, EXPLAIN IN NOTES	PROTECTION METHODS EXPLAIN IN NOTES, PROVIDE DRAWINGS	DOLLAR VALUE FROM GUIDE FOR TREE APPRAISAL	NOTES		
А								
В								
С								
D								
Е								
F								
G								
Н								
I								
J								
*NOTE: Public trees abutting the site shall not be removed and require tree protection fencing. I hereby certify that I have viewed the premises and provide this professional opinion regarding the survivability of significant trees on the site and abutting the site and the appropriateness of proposed tree replacement and landscaping. Attached is a landscape plan prepared by me or under my								
Name/Signature/Certification/Date								

Copy this form as needed for additional trees.



TREE PROTECTION SPECIFICATIONS

For additional information please contact Urban Forester, Cory Meyer at 984-5907

General – Tree protection has three primary functions: (1) to keep the foliage canopy and branching structure clear from contact by equipment, materials, and activities; (2) to preserve roots and soil conditions in an intact and non-compacted state; and (3) to identify the Tree Protection Zone (TPZ) in which no soil disturbance is permitted and activities are restricted.

Trees to be Protected – All public trees on City right-of-way and all trees designated to be saved in tree study for site.

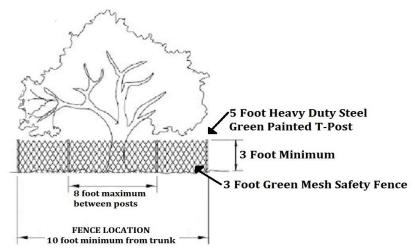
Materials

- a. The Tree Protection Zone (TPZ) is a restricted area around the base of the tree at the drip line with a minimum radius of ten (10) feet or as shown in the Tree Study, whichever is greater, enclosed by fencing. No work, storage, or equipment operation shall be performed in this area.
- b. Tree Protection: The fence shall enclose the entire area of the TPZ of the tree(s) to be protected throughout the life of the construction project. In some parking areas, if fencing is located on paving or concrete that will not be demolished, then the posts may be supported by an appropriate grade level concrete base, if approved. For trees situated within a planting strip or near a sidewalk or driveway, only the planting strip and yard side of the TPZ shall be enclosed with the required protective fencing in order to keep the sidewalk and street open for public use.
- c. Size, type, and area to be fenced: All trees to be preserved shall be protected with three (3) foot high green mesh fencing. Fencing is to be mounted on five (5) feet heavy duty steel green painted T-post driven into the ground to a depth of at least one (1) foot, six (6) inches (18" minimum) and no more than eight (8) foot spacing.
- d. Warning Sign: A warning sign shall be weatherproof (no holes through the paper signage) and prominently displayed on each fence at 20-foot intervals on the tree protection fencing. The sign shall be a minimum 8.5 inches by 11 inches and clearly state: "WARNING Tree Protection Zone". See exhibit A-S.
- e. Duration. Tree fencing shall be erected before demolition or construction begins and shall remain in place until final inspection of the project, except for work specifically allowed in the TPZ.
- f. During Demolitions or Construction.
 - 1. All neighbors' trees that overhang the project site or are within **ten** feet of the property line shall be protected from impact and protection fencing shall be required.
 - 2. The damage, removal, or failure to protect the trees designated to be preserved shall result in a violation of the Code of Ordinances.
 - 3. The applicant shall be responsible for the repair or replacement of any publicly-owned trees that are damaged during the course of construction.
 - 4. The following tree preservation measures apply to all trees to be saved:
 - (a) No storage of material, topsoil, vehicles, or equipment shall be permitted within the TPZ.
 - (b) The ground under and around the tree canopy area shall not be altered
 - (c) Trees to be retained shall be irrigated, aerated, and maintained as necessary to ensure survival.

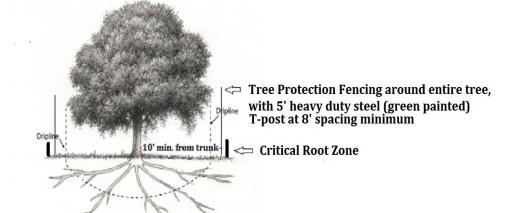


TREE PROTECTION FENCING

Revised October 2014

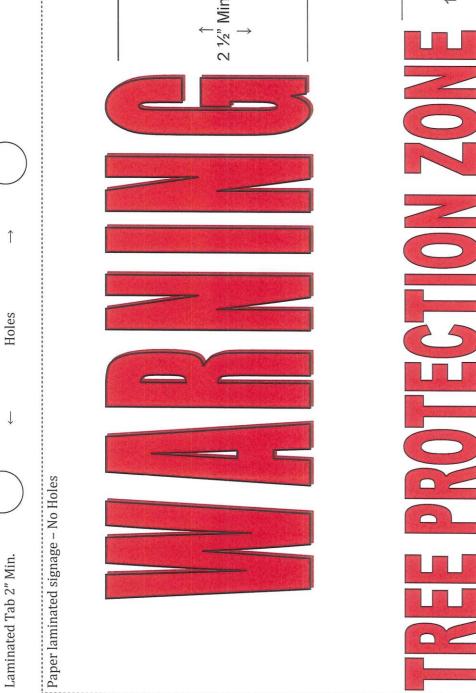


NOTE: 8.5" x 11" Warning signs are required on fenceing a minimum of 20' intervals, with a minimum of one sign on each elevation of fence. Sign shall be moisture protected as in Exhibit A-S.



Distance from trunk shall be as shown in tree study or 10' minimum.





SAMPLE ONLY - RED LETTERING REQUIRED

EXHIBIT A-S

Revised October 2013 tp Y: Demo Permit Information-2013



PARKING PLAN REQUIREMENTS

The applicant securing permits in the City of Kirkwood will be required to submit a parking plan for their employees, sub-contractors and delivery vehicles. This plan will be comprised of an aerial view of the project site, including one city block in each direction of the location. The size of the pictorial plan shall be 11" X 17" and shall indicate where the employees, sub-contractors and delivery vehicles will be parking or unloading.

- This plan will be reviewed by the building department and no-parking areas will be indicated.
- Once approved, the parking plan is required to be laminated and posted on the job site visible to all persons involved with the project.
- The applicant/permit holder shall be responsible for the instruction, adherence and direction of the parking plan.

It is key to inform all persons that there shall not be any parking in the following zones:

- No Parking Zones
- Driveways
- Public Sidewalks
- Unimproved ground, i.e. yard areas or tree lawns.

Additionally, if the project requires the blockage of the street(s), public sidewalks, or alley the following applies:

- The blocking or closing of street or lanes of and alleys require the Engineering Dept. to be given notice at 314-822-5822 and proper safety measures taken as directed by them, i.e. flagman, signage, barricades, etc.
- The closing of public walks by ordinance is limited to 72 hours unless they have a larger project and make application to Engineering Dept. The Engineering Dept. reviews and develops the requirements for the extended closing.
- Where the sidewalk is closed, barricades shall be placed to safely block off the closure area of the
 walk and signage directing the pedestrians to use the sidewalks on the other side of street shall be
 as follows: "closed sidewalk ahead- cross here and/or- use sidewalk on other side of street". See
 "Closing Public Sidewalks" sheet herein.

Violations will be investigated by the City of Kirkwood Police Department and/or Stop Work Orders may be issued.







CLOSING PUBLIC SIDEWALKS

In accordance with the following Section of the General Code of Ordinances:

Sect. 20-27. Closing of public sidewalks for construction of infill.

Existing sidewalks along the public right-of-way shall be maintained throughout the demolition and construction process of single-family infill residences and remain open for public use at all times except for temporary reconstruction of utilities, driveways, and sidewalks not exceeding 72 hours except with appropriate permits and authorization of the Public Works Director, Police Chief, or their authorized representative.

However, if authorization is given to close a sidewalk, the following requirements of the Missouri on Uniform Traffic Control Devices for Streets and Highways.

Section 6F.13 SIDEWALK CLOSED Signs (R9-9, R9-10, R9-11, R9-11a)



SIDEWALK CLOSED signs (R9-9) should be used where pedestrian flow is restricted. Signs should be installed at the beginning of the closed sidewalk, at the intersections preceding the closed sidewalk, and elsewhere along the closed sidewalk as needed. Bicycle/Pedestrian Detour (M4-9a) signs or Pedestrian Detour (M4-9b) signs should be used where pedestrian flow is rerouted (See MUTCD Section 6F.53).

SIDEWALK CLOSED (ARROW) USE OTHER SIDE (R9-10) sign should be installed at the beginning of the restricted sidewalk when a parallel sidewalk exists on the other side of the roadway.

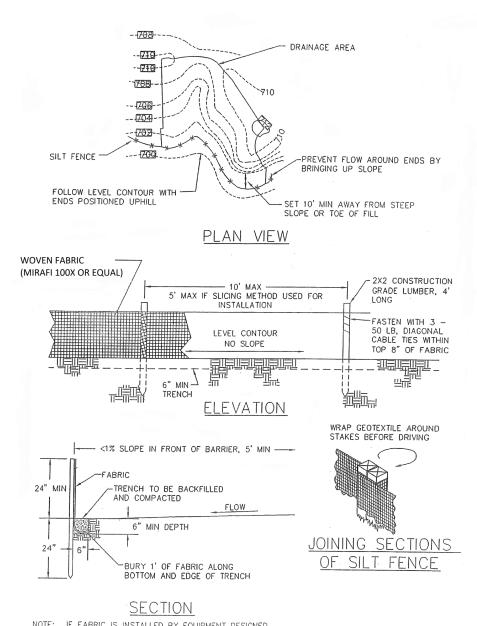
SIDEWALK CLOSED AHEAD (ARROW) CROSS HERE (R9-11) signs should be used to indicate to pedestrians that sidewalks beyond the sign are closed and to direct them to open crosswalks, sidewalks, or other travel paths.

SIDEWALK CLOSED (ARROW) CROSS HERE (R9-11a) signs should be installed just beyond the point to which pedestrians are being redirected.

These signs are typically mounted on a detectable barricade to encourage compliance and to communicate with pedestrians that the sidewalk is closed. Printed signs are not useful to many pedestrians with visual disabilities. A barrier or barricade detectable by a person with a visual disability is sufficient to indicate that a sidewalk is closed. If the barrier is continuous with detectable channelizing devices for an alternate route, accessible signage might not be necessary. An audible information device is needed when the detectable barricade or barrier for an alternate channelized route is not continuous.



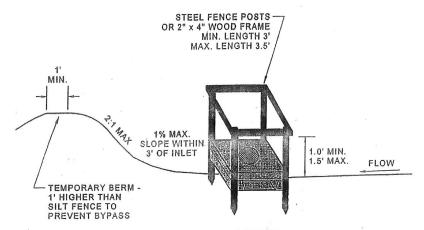
SILT FENCE REQUIREMENTS



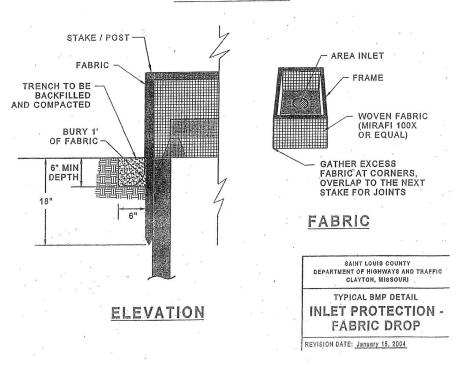
NOTE: IF FABRIC IS INSTALLED BY EQUIPMENT DESIGNED TO SLICE INTO THE GROUND, THE TRENCH IS NOT NEEDED

INLET PROTECTION SPECIFICATIONS





PERSPECTIVE





INFORMATIONAL SIGN MINIMUM STANDARDS

After demolition is complete and prior to the issuance of the building permit, this required sign shall be installed. The picture shall be a color rendering of the actual house to be constructed.

ADDRESS OF PROJECT
HOUSE BUILDER'S NAME
TELEPHONE NUMBER

Color rendering of house

12"

Maximum:
5' in height

Grade