

New House Application Requirements.

PLEASE PROVIDE THE FOLLOWING INFORMATION AND DOCUMENTS WHEN APPLYING FOR A SINGLE FAMILY DWELLING PERMIT:

- 1. A completed "Application for Permit / Plan Approval" application. Fill in all data, sign, and date application.
- 2. Two (2) complete sets of detailed house plans, which must include a minimum of all four elevations, floor plans for all levels and a typical wall section.
- 3. A completed "System Description Form".
- 4. A completed RES check signed and dated **or** energy code compliance information.
- 5. Six (6) copies of the Topo and two (2) copies of the tree savings plan. AC shall be depicted on the topo and shown in the rear of the house.

******<u>Note: A \$500 Deposit is required at the time of submittal.</u>******
Any unencumbered funds will be returned.

When all of the above are submitted, the 10-day waiting period begins. The applicant will be given a sign to post. The Building Department will verify the sign is posted. At the end of the waiting period and when the plans have been approved, the general contractor or owner pays the permit fees. The excavator then needs to stop by the Building Department for a letter to take to the Cuyahoga County Sanitary Engineers office authorizing the installation of the sanitary sewers for the particular location.

Office of the Building Department

APPLICATION FOR PERMIT / PLAN APPROVAL

DATE:	20	Permit/Approval Number:
	☐ RESIDENTIAL	☐ COMMERCIAL
	approval to erect, build, a	(OWNER OR COMPANY NAME) hereby alter, renovate, etc as described in this application and the is application.
LOCATION:		
Scope of work:		
Square Footage:		Estimated Cost: \$
General Contractor:		
Company:		Ohio Registration #:
E-mail:		
Other Contractors:		
Company:		Phone #
		Phone #
Company:		Phone #
by all of the condition	ns herein contained and to	r shall constitute an agreement on OUR - MY part to abide comply with Ordinances of the City of Brecksville and the o be done thereunder; and said agreement is a condition of
Owner OF	R Contractor's Signature	Date

Rev: 1/2014

9069 Brecksville Road ^a Brecksville, Ohio 44141 ^a (440)526-2630 ^a Fax: (440)526-6322

CITY OF BRECKSVILLE 2014 CONTRACTOR REGISTRATION 9069 BRECKSVILLE ROAD BRECKSVILLE, OHIO 44141 440-526-2630

PLEASE READ THE FOLLOWING CAREFULLY:

- ◆ Provide an original, <u>SIGNED</u>, \$25,000 Surety Bond which must expire December 31, 2014. <u>IT SHOULD BE ON THE CITY OF BRECKSVILLE'S BOND FORM, ALONG WITH POWER OF ATTORNEY.</u> NO CONTINUATION CERTIFICATES.
- ◆ Provide a Certificate of Insurance General liability, property damage and automobile liability including hired and non-owned automobile liability insurance with coverage of each at least \$500,000.00. We do not have to be named "additional insured".
- ◆ Include a check for \$75.00 payable to "City of Brecksville"
- ♦ ELECTRICAL, PLUMBING, and HVAC CONTRACTORS ONLY, must provide a copy of a license from the State.
- ◆ Your company name must appear **EXACTLY** the same on the **APPLICATION**, **SURETY BOND**, and **CERTIFICATE OF INSURANCE**. It will be returned to you if not correct. (Example: ABC Co., Inc. and ABC Company, Incorporated, are not considered the same company.)
- ♦ Dual trades may be on the same bond using one application and having one fee.
- ◆ Submit the SIGNED AND COMPLETED APPLICATION, SIGNED SURETY BOND, CERTIFICATE OF INSURANCE, COPY OF LICENSE (if applicable), AND FEE <u>ALL</u> <u>TOGETHER</u>. Your application will be returned if anything is missing.
- ◆ Any contractor who performs renovation, repairs, or painting (including window replacement) projects that disturb paint in homes, child care facilities, and schools built before 1978 must be certified by the EPA and must follow specific work practices as required by EPA to prevent lead contamination. Board of Health letter is attached. Links to the EPA website and brochure can be obtained on our website: http://www.brecksville.oh.us/Depts/building.html



CITY OF BRECKSVILLE BUILDING DEPARTMENT

9069 BRECKSVILLE ROAD, BRECKSVILLE, OHIO 44141 TELEPHONE: 440-526-2630 FAX: 440-526-6322

APPLICANT NAME	COMPANY NAM	ИЕ	
COMPANY STREET ADDRESS	FAX NUMBER		
CITY/STATE/ZIP CODE	CELL NUMBER		
PHONE NUMBER	FEDERAL ID NU	UMBER/SOCIAL SECURITY NUME	BER
EMAIL ADDRESS			
OFFICERS OR PARTNERS OF COMPANY			
(1) (2)		(3)	
TYPE OF CONTRACTOR			
MUNICUDA	I THE DECISEDED	A TAI	
MUNICIPA	<u>LITIES REGISTERED</u>	<u> </u>	
Municipality	Number	Date	
Municipality	Number	Date	
Municipality	Number	Date	
Has your license or registration ever been suspended or revoked?	If so, give d	ate and locality	
GIVE THREE REFERENCES WHO	O ARE NOT RELATED	TO YOU: (Name, Add	dress, Occupation).
		OFFICE USE ONLY	
Signature of Applicant	Date of Application	License Number Issued	Date Issued
		Receipt	Number

PLEASE BE SURE YOU ARE USING <u>OUR BOND FORM</u> AND THAT THE APPLICATION AND BOND ARE SIGNED AND DATED. BE SURE THE COMPANY NAME APPEARS <u>EXACTLY</u> THE SAME ON YOUR <u>BOND, CERTIFICATE OF INSURANCE, & APPLICATION.</u> MAKE YOUR \$75.00 CHECK PAYABLE TO "CITY OF BRECKSVILLE". CONTINUATION CERTIFICATES <u>WILL NOT</u> BE ACCEPTED.

CONTRACTORS'S BOND CITY OF BRECKSVILLE

Bond No.		

KNOW ALL MEN BY THESE PRESENTS, THAT

(Contractor)	as principal,
and	as surety, are held and firmly bound
such principal shall contract to construct, alter, structure or appurtenance thereto or any part the Codified Ordinances of the City of Brecksville at of Twenty-Five Thousand Dollars (\$25,000.00) la	ers, for the use of any person, persons, firm or corporation with whom repair, add to, subtract from, reconstruct or remodel any building ereof, in accordance with the provisions and the requirements of the and any building codes adopted therein by reference, in the penal sum awful money of the United States, for the payment of which sum well heirs, executors, administrators, successors and assigns, jointly and
Signed and Sealed and dated thisday	y of, 20
of Building for a Certificate of Registration as a subtract from, reconstruct or remodel any building Brecksville as required by the Building of Brecksville has submitted a certificate of insurational damage and automobile liability including hired at least \$500,000.00, with a valid commitment from	has made application to the Commissioner a contractor to engage in business to construct, alter, repair, add to g, structure or appurtenance thereto or any part thereof in the City of ling Code of Brecksville during the year beginning December 31, 20, and each contractor registering with the City ance showing that the contractor is carrying general liability, property and non-owned automobile liability insurance with coverage of each om the applicant's insurance carrier (which must be authorized to decksville shall be given thirty days' written notice before cancellation.
indemnify, keep and save harmless the City of B persons, firm or corporation with whom such co such person, firms or corporations for damage s complete the work so contracted for or the failure of the Building Code of Brecksville and any other all lawful rules and regulations promulgated unanything done under and by virtue of each and a required to be done in the construction, alteration,	shall well and truly trecksville, or any of its agents or officials for the use of any person, ontractor shall contract to do work, and shall indemnify and pay any sustained on account of the failure of such contractor to perform on to perform the work contracted for in accordance with the provisions are code adopted by reference by the City of Brecksville, and any and ader the authority thereof, and from or by reason or on account of all permits issued under such registration for the doing of any work, repair, addition to, subtraction from, reconstruction or remodeling of or any part thereof, then this obligation shall be void; otherwise, the
PRINCIPAL:	SURETY:
Contractor Signature	Printed Name
Printed Name	City, State, Zip
Street Address	By:Power of Attorney Signature
City, State, Zip	
(Undated 10/2008)	(Seal)



CUYAHOGA COUNTY BOARD OF HEALTH 5550 VENTURE DRIVE PARMA, OHIO 44130 (216) 201-2000 www.ccbh.nei



TERRENCE M. ALLAN, R.S., M.P.H. Health Commissioner

US EPA's Renovation, Repair and Paint Program synopsis

Beginning April 22, 2010, contractors performing renovation, repair and painting projects that disturb paint in homes, child care facilities, and schools built before 1978 must be certified by the EPA and must follow specific work practices to prevent lead contamination.

Contractors must use lead-safe work practices and follow these three simple procedures: contain the work area, minimize dust and clean up thoroughly. Also, there are pre-renovation education requirements as well. Individuals can become certified renovators by taking an eight-hour training course from an EPA-approved training provider.

Requirements

- Anyone who receives financial compensation for work that disturbs paint in housing and child-occupied facilities built before 1978, this may include, but is not limited to:
 - o Residential rental property owners/managers
 - o Building service professionals
 - o General contractors
 - o Special trade contractors (Painters, Plumbers, Carpenters, Electricians)
- All individuals performing the activities are either EPA certified contractor or working under an EPA certified contractor
- All activities are performed in a lead safe fashion
- Distribute lead pamphlet prior to work starting
- Post proper signage

Exemptions

- Residential units or child occupying facilities built after 1978
- Dedicated senior housing or group housing for adults only
- Houses declared lead-free by a stated licensed lead risk assessor or paint inspector
- Minor work that disturbs less then 6 ft² of paint/room or less then 20 ft² of paint
 on the outside (window replacement is not considered minor maintenance/repair)
- Homeowners doing work on their own occupied residential unit
- Emergency renovations (imminent threat to the health and/or safety of the occupants or adjacent properties)



City of Brecksville System Description Form

<u> </u>	te Addre	2SS					
KSVILLE PP						_	
	lder					_	
Estimated cost: Finished sq/ft.:	1st floor		2nd 4	loor			
Lower level/			2 J Oth	er	Tot	tal	
# Of fireplaces		Security system Deck (yes) (no)	(yes) (n		cuum system ice (yes) (no		
Heating, Ventila							
1. Furnace(s) Nur		_ Location: Ba	sement_		ge Attio	cOthe	er
2. Furnace AFUE		80%		90%+			
3. Furnace(s) BT	<i>U's:</i>						
4. Fuel type:		Natural gas		Electric		Other	
5. Duct work type.		Sheet metal				r	_
6. Air conditioner	• • •	' — 			Ton M		
7. AC(s) SEER ra					(Note: Musi		in rear)
8. Location of gas		Front yard_	_			Side yard	
9. Gas piping type	•	Steel	Coppe	<u>r</u>	CSST	_ Other	
Plumbing System	n Descrij	otion					
Description	_	Description	,	Count	Descripti	on	Count
Bath tub		Hot water disp	enser		Shower		
Backflow device		Kitchen/ Bar s			Sump pump	י	
Dishwasher		Laundry tray			Washer aut		
Expansion tank		Lavatory sink			Water close		
Floor drains		Pressure reducing	valve		Water heat	er	
Garbage disposal		Sewage grinde			Whirlpool t	ub	
Building drain s	ize:	4 inch		inch			
Water service siz			inch	1 ½ in	ch 2	? inch	other
Water service m		copper		<u> </u>			other
", will service mi	<u> </u>	сорреі		propiusii	<u> </u>		
Electrical Syst	em Desc	rintion					
	ndergrou		() Ov	erhead			
Service size in a		100) (125)			00) ()othe	er
Service conduct			<u>''\</u>	-/ \	/ \		: =
Service conduct		() alum	(copper			
Grounding elect			()#)#4 (othe	r)
Grounding elect			<u> </u>	rebar	() rod		
*****Attach loa		· · · · · · · · · · · · · · · · · · ·					
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() RCO – sections	onal Energ s 1101 thro	gy Conservation C	•	ŕ			



City of Brecksville Residential Building Codes <u>Effective January 1, 2013:</u>

- 2013 Residential Building Code of Ohio
- 2011 Ohio Plumbing Code
- 2011 National Electrical Code

Additional City Requirements

- Check with the Building Dept for required setbacksvaries by Zoning District. 1151.24
- Brick or stone required on exposed portions of foundations- stamped concrete is allowed. 1119.09e
- Chimney & vents stone or brick is required on the exterior- simulated materials are allowed. 1119.09f
- Air conditioning units & generators shall be located in the rear of the house- side yard not allowed. 1326.01-.02
- Public sidewalks are required. 1119.09d
- Hard surface driveway to attached and detached garages is required. 1183.15a
- Driveways- Minimum 8 ft, max 20 ft wide. Located a minimum of 3 ft. from lot lines. Maximum slope is 12%. 1119
- Maximum detached garage area is 660 sq/ft. All other detached structures limited to 144 sq/ft.
 1151.25d
- Maximum fence height is 4 ft. 1185..03a
- Height limitations vary by zoning district see included Brecksville City Ordinance 1181.

BRECKS VILLE

NEW RESIDENTIAL CONSTRUCTION INSPECTIONS

PLEASE CALL THE BUILDING DEPARTMENT 24 HOURS IN ADVANCE AT 440-526-2630 TO SCHEDULE INSPECTIONS. INSPECTIONS WILL BE SCHEDULED BY PERSONNEL ANSERWING THE PHONE. PLEASE HAVE THE PROJECT ADDRESS WHEN CALLING. INSPECTON REQUESTS WILL BE ASSIGNED TO THE BEST AVAILABLE TIME SLOT.

TREE PROTECTION

Required tree protection measures are in place prior to building permit being issued.

TEMPORARY ELECTRIC POLE

Verify conductors, ground rod and GFCI. Address must be posted on temporary pole.

SILT FENCE:

Proper silt fence installation per approved topographic survey The silt fence is to be installed prior to excavation & maintained throughout construction.

FOOTER:

Conducted just prior to concrete being poured. Temporary construction driveway must be in place at this time. City Engineer will verify location and elevation.

FOUNDATIONS WALLS:

*Poured walls-A pre-pour inspection is necessary to inspect rebar installation prior to pouring and after forms are set.

**Masonry walls require a rebar inspection to verify size, location and spacing of vertical reinforcement. AKA – Mid wall inspection.

DRAIN TILE:

Rigid 1500 lbs. crush or heavier. Elbows primed and glued. Cleanouts per Ohio Plumbing Code.

FOUNDATION:

Prior to backfill - check parging, tarring, anchor bolts and insulation.

DOWNSPOUT:

Schedule 40 or 3034 is acceptable. Cleanouts per Ohio Plumbing Code.

GRAVEL:

Minimum 3/4" size with filter fabric or carried to within 12" of grade.

UNDERGROUND PLUMBING:

Pipes to be water or air tested prior to pouring concrete with 10' head or 5 PSI on all drains and waste and a minimum 50 PSI on copper supply lines

ROUGH HEATING:

All duct work sealed, insulated and cold air returns installed. Bath fans vented to outside air.

ROUGH PLUMBING:

Pipes to be water or air tested as above. Mid-story supports and nail plates to be installed.

ROUGH ELECTRIC:

All wiring of boxes, lights and smoke detectors before concealing per National Electric Code.

FRAMING

Conducted after rough mechanicals are approved.

INSULATION:

After all rough inspections are approved.

ELECTRIC SERVICE & UNDERGROUND:

Verify lateral depth & conductor protection, electrode connection to footer rebar, bonding. Provide CEI work order # if available.

CONCRETE:

Pre-pour - Driveways minimum 4", 6" apron to back of sidewalk. Sidewalk to be 5' wide with 3/8" slope over a minimum of 3" stone base. Basement & garage floors 4" of concrete over 6 mill visqueen.

FINAL INSPECTION:

Carpentry, heating, electrical and plumbing completely installed and operational.

BUILDERS GRADE:

City Engineer will verify grading in <u>strict</u> accordance with the approved Topo. Deviation from the approved topography shall require a resubmission to the City Engineer for re-approval. A re-inspection fee will be charged for each inspection after the initial meeting.

LANDSCAPING:

Permit to be obtained by person performing work including sprinkler system after Builder's Grade is approved.

FINAL GRADE:

Conducted after landscaper has completed work. Landscaper must not alter direction of overland flow of storm water or fill in, to any extent, any drainage swale.

SPECIAL INSPECTIONS:

3rd. Party may be required- check with the Building Dept. (Soils, Geo tech, blower test, duct test)

Update 1-2014

w:\guides-hand outs\new house\new house - required inspections jan 2014 .doc

§ 1151.24 SCHEDULE OF YARD REGULATIONS FOR ONE-FAMILY LOTS.

	MINIMUM FRONT YARD * DISTANCE (in feet) FROM:		SIDE YARDS (in feet)		MINIMUM	
DISTRICT	Arterial or Collector	Local	Minimum Yard	Total 2 Yards	REAR YARD (in feet)	
R-60	125	60 °	20 d	40	80	
R-40	125	60 °	20 d	40	80	
R-30	125	60 °	20 ^d	40	70	
R-20	125	60 °	10	30	60	
R-16	125 b	60 °	10	30	60	
R-8	125 b	50 °	5	20	50	
R-8A	125 b	25	5	20	50	

Notes to schedule:

- A side yard adjacent to a street shall comply with the front yard requirements for the district in which the lot is located.
- A front yard shall not abut an arterial or collector street; the setback requirement applies to a side yard adjacent to such street.
- Unless established otherwise according to § 1151.23(a); and provided the maximum front yard complies with § 1151.23(a).
- Required only on lots having a lot width of at least one hundred twenty-five (125) feet. Lots having a reduced non-conforming lot width shall maintain a minimum side yard of ten (10) feet and a total side yard of thirty (30) feet.

(Ord. 3443, approved by voters 11-7-95; Am. Ord. 3741, passed 7-20-99)



CHAPTER 1181: HEIGHT DISTRICT REGULATIONS

Section

1181.01 Establishment of height districts

1181.02 - 1181.10 [Reserved]

1181.11 Class One Height Districts

1181.12 [Reserved]

1181.13 Class Two Height Districts

1181.14 [Reserved]

1181,15 Class Three Height Districts

Cross-reference:

Building and structures defined, see § 1113.06 Height of building defined, see § 1113.10 Zone Map established, Ch. 1135

§ 1181.01 ESTABLISHMENT OF HEIGHT DISTRICTS.

- (a) In order to carry out the purposes of this Zoning Code, the city is hereby divided into height districts which are either related to the use district enumerated elsewhere in this code, or are designated on the Zone Map by symbols and boundaries.
- (b) Main and accessory buildings shall be erected, altered, moved or maintained only in accordance with the maximum height of building regulations established for each height district. ('64 Code, § 1181.01) (Ord. 2042, passed 12-20-72)

65 1161,02 - 1181.10 [RESERVED].

§ 1181.11 CLASS ONE HEIGHT DISTRICTS.

(a) The height of any main building or structure in a Class One Height District shall not exceed thirty (30) feet, except that not more than ten percent (10%) of the ground floor area may have a height not exceeding forty (40) feet, except as provided below.

In a R-30 District, residential dwellings shall not exceed thirty (30) feet in height except that not more than twenty percent (20%) of the ground floor area may have a height not exceeding forty (40) feet. In a R-40 District, residential dwellings shall not exceed thirty (30) feet in height except that not more than twenty-five percent (25%) of the ground floor area may have a height not exceeding forty (40) feet. In a R-60 District, residential dwellings shall not exceed thirty (30) feet in height except that not more than thirty percent (30%) of the ground floor area may have a height not exceeding forty (40) feet.

- (b) The height of any accessory building shall not exceed fifteen (15) feet.
- (c) All dormers, stairwells, elevator shafts, air conditioning units or other similar structures or equipment extending above the roof line of a building shall be provided with a solid cover with design conforming to the architectural style and materials of the building, and shall extend no more than ten (10) feet above the height of the building.

('64 Code, § 1181.11) (Ord. 2042, passed 12-20-72; Am. Ord. 4185, passed 7-5-05)

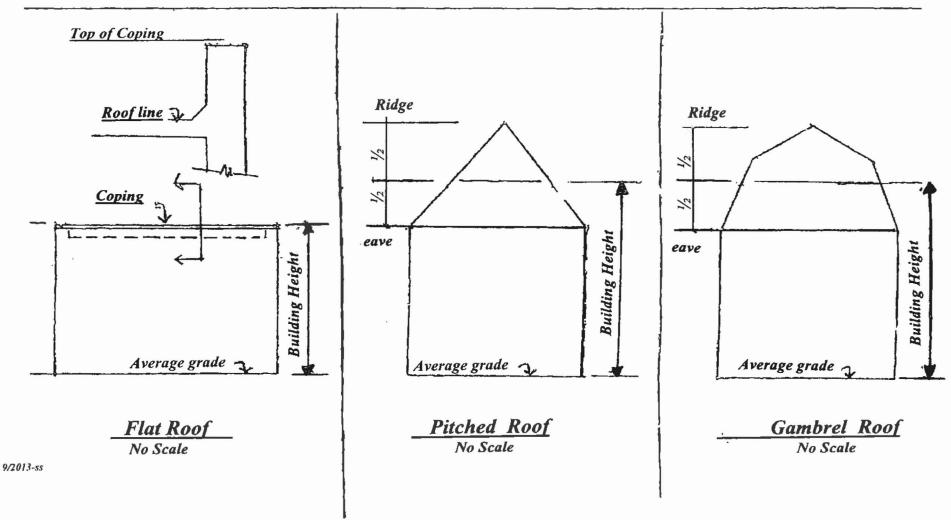
All Single family dwellings are Class One

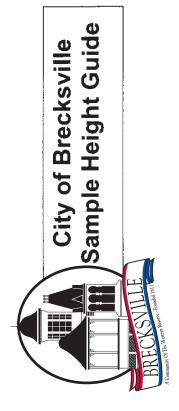
§ 1113.10 HEIGHT OF BUILDING.

HEIGHT OF BUILDING. The vertical distance measured from the highest point of the coping of a flat roof, or the vertical distance measured from the average level between the eaves and ridge of a pitched roof, to the average finished grade.

('64 Code, § 1113.10) (Ord. 2043, passed 12-20-72)







Zoning district. See the following from average grade- is limited by Area of roof over 30'- measured

Max Area over 30' height By Zoning classification

R-40 = 25% R-30 = 20%

R-60 = 30%

page for sample information.

All others = 10%

ebsig agsiavs moit baiuasam '04 -<u>MaiaH mumixsM</u>

Equal

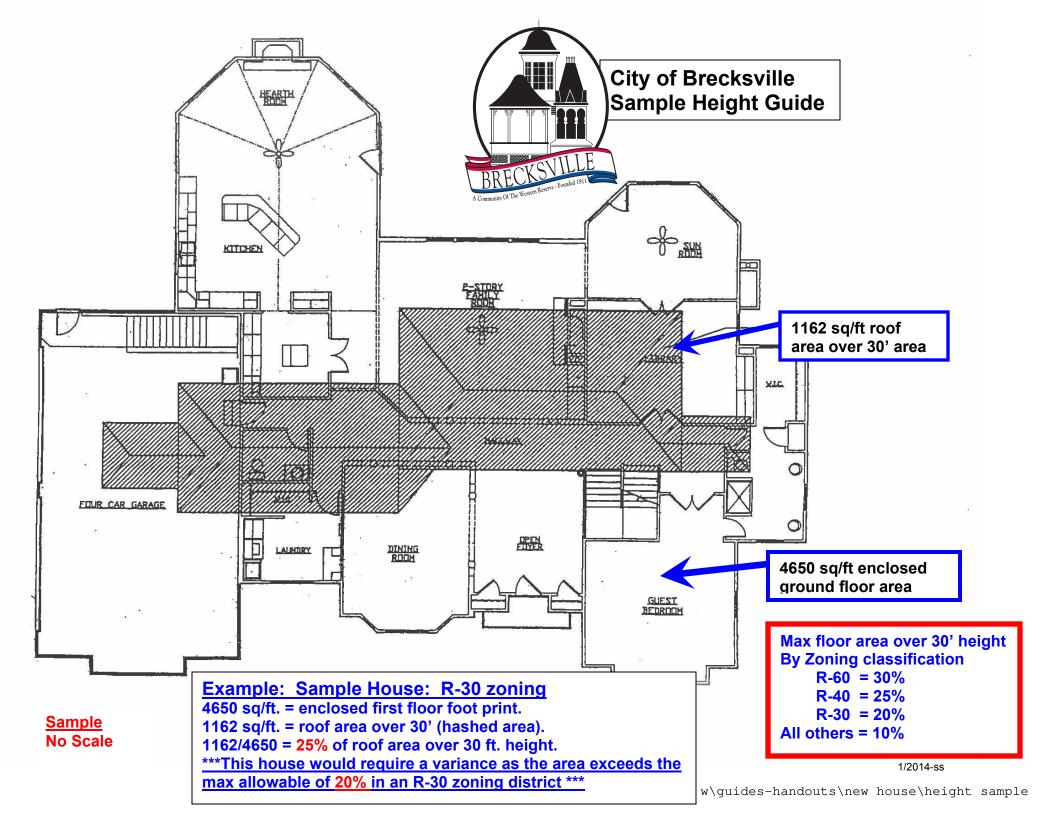
Equal

using front, sides & rear elevations as shown on the approved grading Average grade determined by

> No Scale Sample

30, ot less.

Building Height- measured from average grade to Must be grade to mid-point of took area.





- (a) No land shall be cleared of trees or shall trees with a D.B.H. of six inches (6") or greater be cleared and/or removed without conformance to the provisions contained in this chapter.
- (b) No building permit, grading plan, or erosion and sediment control permit shall be issued for the construction, alteration or addition to any building, or the grading or alteration of the land surface without conformance to the provisions contained in this chapter.
- (c) All Development Plans and new construction shall comply with the requirements of this chapter.
- (d) All single family subdivision and development shall comply with the requirements of this chapter.
- (e) No tree with a D.B.H. of six inches (6") or greater shall be cleared or removed without a Tree Removal Permit issued by the Tree Warden/City Arborist unless otherwise provided in this chapter.
- (f) No Tree Clearing Permit shall be issued for any parcel of land or development which requires a Subdivision Plan approval, until such time as the Final Subdivision Plans are approved by City Council.

(Ord. 3754, passed 7-6-99) Penalty, see § 915.99

§ 915.04 EXEMPTIONS.

The following are exempt from the regulations of this chapter and no permission from the Tree Warden and/or City Arborist is required for the following:

- (a) The removal of dead, diseased or damaged trees.
- (b) The removal of trees necessary for the construction, operation and maintenance of drainage facilities, sanitary and storm sewers if the plans for such have been approved by the city.

- (c) The removal of trees for construction of public roadways and improvements if the plans for such have been approved by the city.
- (d) The removal of trees in time of an emergency or that pose an imminent danger to life or property.
- (e) Removal of trees by an individual homeowner on their single family dwelling lot, excluding the treelawn area, after the lot is initially developed and an unconditional, permanent occupancy permit is granted.

(Ord. 3754, passed 7-6-99)

§ 915.05 TREE SAVINGS PLAN.

All developments shall be designed to preserve healthy trees and woodland, especially trees providing natural buffering, specimen trees and trees with a D.B.H. of six inches (6") or greater. Buildings and parking areas shall be located so as to compliment the existing topography and preserve the natural amenities of the site.

A Tree Savings Plan shall be required for, and submitted with, final development plans for all major subdivisions and developments requiring approval in accordance with Chapters 1121, 1193 and 1195 of the Codified Ordinances of the City of Brecksville. For residential subdivisions, the developer shall have the option of first preparing a plan which is limited to the area to be cleared and graded for the construction of the infrastructure. In the event the developer chooses this option, or in the event there is no approved Tree Savings Plan for a residential lot of record, a Tree Savings Plan shall be required for each individual lot prior to any clearing, grading or construction.

- (a) Plan submission requirements applying to all Zoning Districts:
- (1) Master grading and drainage topographic plan at a scale of not less than 1" = 50", which shows the street and ROW grades, finished floor house or building elevations, driveways and lot or sublot grading.

Brecksville - Streets and Public Services



- (2) Tree preservation drawing prepared at a scale of not less than 1" = 50", (The same scale as the master grading plan) and shall include the following:
- A. The location, common name and size of all trees with a D.B.H. of six inches (6") or greater outside of street ROW and utility easements within the area to be cleared or graded.
- B. The location and outline of all easements, proposed buildings, parking areas, streets, sidewalks, drainage ways, retention basins and underground facilities.
- C. Location of all existing trees with D.B.H. of six inches (6") or greater which will remain on the site after construction. The Commission may require the replacement of any trees of six inches (6") D.B.H. or greater which are not preserved.
- D. A specific list of all existing trees to be saved including their species and size and the details on how the trees will be marked, protected, and the area restricted during construction as detailed in § 915.04(c) of this chapter.
- E. Limits of change in grade which will affect any trees and the methods proposed to protect those trees.
- F. Locations of areas to remain undisturbed.
- G. Location of all specimen trees or trees of eighteen inches (18") D.B.H. or greater. The proposed development's parking areas or the landscaped portions of the parking areas or other landscaped areas shall accommodate the preservation of these trees with islands adequate to protect the tree and root system unless otherwise approved for removal by the City Arborist.
- (b) Additional plan requirements and guidelines pertaining to the development in Residential Districts:
- (1) Existing trees outside of the building area, driveways, street ROW, drainage ways and utility easements should be preserved, wherever

- possible, to provide desired shading and screening for the dwelling occupants and to provide perimeter buffers to surrounding lots.
- (2) Storm and sanitary sewers should be located and elevations set in order to require a minimum of re-grading and tree removal.
- (3) (House elevations and street elevations shall be designed to minimize changing the existing natural grade of yards.
- (4) Tree wells, aeration systems, retaining walls and other methods shall be utilized to preserve existing tree root systems in perimeter landscape areas.
- (c) Tree protection. The following methods are to be implemented for any trees which have been required to be preserved on the development sites:
- (1) All trees or groups of trees to be preserved shall be marked with a blue colored ribbon or paint strip prior to any clearing.
- (2) Prior to any construction or grading, a protective barrier, fence, posts, and/or signs shall be placed around the trees to be preserved.
- (3) Protection barriers against equipment and materials shall be located no closer than the tree dripline distance from the tree trunk.
- (4) No soil, building material, equipment vehicles or chemicals shall be stored or placed in the protection area of the tree dripline.
- (5) Surface grade shall not be changed more than six inches (6") within the protected area without the installation of aeration system, wells, or retaining walls as approved by the City Arborist.
- (6) No wires, boards, nails, signs, fences or other devices shall be attached to any tree to be preserved.
- (d) Plan Review. The City Arborist and City Engineer shall review and approve the Tree Savings Plan. They will identify any tree locations and species which might be saved and areas around trees which



should not be disturbed or will require special treatment or restrictions. The City Arborist and City Engineer shall make their recommendations in letter form to the Planning Commission which may be adopted as part of the subdivision or development final approval recommendation. In the case of undeveloped one-family residential lots of record, the City Arborist and City Engineer shall review and approve the Tree Savings Plan without further review by the Planning Commission. Plan review fees for new residential and commercial subdivisions and new commercial development shall be charged as provided Plan review fees for existing in § 1101.04. undeveloped one-family lots of record shall be charged as provided in § 1314.18.

(e) Plan approval. The Tree Savings Plan shall be incorporated into the subdivision or development project review and approval by the Planning Commission. In the case of undeveloped residential lots of record, plan approval of the Tree Savings Plan shall be required from the Building Department, after receipt of the review and approval as provided in § 915.05(d) above, prior to a building permit being issued.

(Ord. 3754, passed 7-6-99; Am. Ord. 3764, passed 9-21-99) Penalty, see § 915.99

§ 915.06 TREE WARDEN.

- (a) Position. The Mayor is authorized to appoint a Tree Warden, subject to the approval by Council, whose duties shall be to inspect all public places of this city, determine whether any illegal trees have been planted, and notify residents as to the type of trees permitted on their streets under the Master Street Plan as recommended by the Planning Commission and adopted by Council.
- (b) Authority. The Tree Warden is hereby granted, subject to the approval of the Mayor, the authority, control and supervision of all trees which exist now and which may exist in the future located on any public property within the city, and over all trees which exist on any private property when, in his or her opinion, such trees constitute a threat to the public's safety or property.

(c) Trimming of trees. The Tree Warden shall keep all trees located on any public property in the city trimmed so that the branches of such trees projecting over any public sidewalk, private driveway or into any public street beyond the curb line, shall not conflict with the safety of the public.

(d) Interference with Tree Warden.

- (1) No person shall interfere with the Tree Warden or his or her assistants or agents while engaged in the duties prescribed in this chapter or the performance of any work ordered by the Tree Warden to be undertaken.
- (2) The Tree Warden shall have the right to trim any tree existing on any public property in the city so as to insure the public safety or to preserve the function or beauty of such public property, and he or she shall further have the right to remove any such tree, or any part thereof, which is in an unsafe condition or which, by reason of its location or nature, is injurious or detrimental to other public improvements in the city, or is infected with any injury, fungus, insect or other pest or disease which cannot otherwise be controlled.

§ 915.07 PRIVATE CARE OF TREES ON PUBLIC PROPERTY.

(Ord. 3754, passed 7-6-99)

(a) Permission required to care for. No person shall plant, remove, destroy, cut, prune, fertilize, mulch, treat, break, climb, injure or spray any tree existing on any public property in the city, or authorize or procure any person to do so, or remove or tamper with any device placed for the protection of any such tree, or attach any rope, wire, chain, sign or other device whatsoever either to the tree or to any device placed for the protection of the tree, or authorize or cause the same to be done, without having first obtained written permission from the Tree Warden.

(b) Prohibited treatments.

(1) No deleterious substance such as salt, brine, gasoline, oil, or any other substance deleterious

The City of Brecksville Engineering Department CHECKLIST FOR REVIEW OF SUBLOT TOPOGRAPHIC PLANS



Deve	elopment:				
Address:					S/L
				Phone:	
Plan	Preparer:			Cellular:	
				Fax:	
Date	2:		Reviewed Da	ite:	
Revi	iewed By:	Gerald Wise P.E. – l	DGB & Asso	oc.	
Note:	Items with em	apty boxes are incomplete	and must be ad	ldressed wit	th resubmittal.
		<u> </u>			
Title B	lock Informatio	on			
\boxtimes	Owner Name				
$\overline{\square}$	Sublot Numbe	r			
Ħ	Permanent Par	cel Number			
Ħ	Name of Subd	ivision			
Ħ	Volume & Pag	ge Number of Recorded Subdi	vision		
Ħ	Name of Build				
$\overline{\boxtimes}$	Name of Plan	Preparer			
\square		f Plan Preparer			
$\overline{\boxtimes}$	_	ing all Symbols			
$\overline{\boxtimes}$	Scale & North	Arrow			
$\overline{\boxtimes}$	Date and/or re-	vision date			
Requir	ed Plan Conten	nt – Survey Information			
\boxtimes	Survevor's Cla	ause with Signature			
Ħ	-	U.S.G.S Datum (Top of the N	Nearest Hydrant &	On-site Tem	porary BM)
$\overline{\square}$		stance Information on all Prope			• •
$\overline{\boxtimes}$		Set / Found / Size / Condition	•		
$\overline{\boxtimes}$	Lot Size – Squ	are Feet & Acreage			
$\overline{\boxtimes}$	_	on (Centerline Distances from)	Property Lines to	Monuments)	
$\overline{\boxtimes}$	Date of Survey	y			
Requir	ed Plan Conten	nt – Existing / Proposed Info	rmation		
	Existing & Pro	oposed Contour Lines at 1' Int	erval		
$\overline{\boxtimes}$	Existing & Pro	oposed Elevations at all House	Corners		
$\overline{\boxtimes}$	Existing & Pro	oposed Elevations on Property	Lines Opposite a	ll House Corr	iers
$\overline{\boxtimes}$	Existing Drain	age Courses & Proposed Swal	les with Grades (2	2% Minimum)
	_	ovements on Adjoining Proper			
\boxtimes	Setbacks of Ex	xisting Structures (front, side a	nd rear)	_	
	Set backs of P	roposed Structures (front, side	and rear) - State	if a variance	was obtained
\boxtimes		n Sewer – Size, Location, Inve			

The City of Brecksville Engineering Department CHECKLIST FOR REVIEW OF SUBLOT TOPOGRAPHIC PLANS

\boxtimes	Existing Sanitary Sewer – Size, Location, Inverts (show straddling manholes)					
\boxtimes	Connection to Storm Sewer with Slope of Connection (1% Minimum)					
\boxtimes	Connection of Sanitary Sewer with Slope of Connection (1% Minimum)					
\boxtimes	Building Dimensions					
\boxtimes	Proposed Finished First Floor Elevation					
	Proposed Basement Floor Elevation (Indicate # of Courses of Block)					
\boxtimes	Proposed Top of Footer Elevation					
\boxtimes	Proposed Garage Floor Elevation					
\boxtimes	Proposed Garage Footer Elevation					
\boxtimes	Proposed Drive Location & Composition					
\boxtimes	List Elevations & Grade of Proposed Drive Apron & Driveway					
\boxtimes	Proposed Walk Location & Composition					
\boxtimes	List Elevations of Proposed Walk					
\boxtimes	Existing Easements – If none exists, State as such					
\boxtimes	Existing Pavement with Grades at Centerline, Gutter & Top of Curb					
\boxtimes	Top of Curb, Gutter, and Back of Walk at Proposed Drive Cut (walk x-slope at drive - max 2%)					
\boxtimes	Sidewalk and curb ramps were necessary (walk x-slope max 2%)					
\boxtimes	Existing Casting Elevations					
\boxtimes	Existing Trees Over 6" in Diameter Within 25' of Proposed House					
\boxtimes	Existing 100-Year Flood Plain Information (If Applicable) – If none exists, State as such					
Require	ed Plan Content – Sediment & Erosion Control					
	Note requiring a 30' min. Construction Drive be installed prior to any major grading activities					
\boxtimes	Location of all Erosion Control Measures (silt fence, diversion swales, etc.)					
\boxtimes	Provisions for Temporary Seeding & Mulching After Backfilling Foundation					
\boxtimes	Note stating that all pertinent Erosion Control BMP's will be followed throughout construction					
	List Individual Lot or Overall Development NPDES Permit Number					
	Show all Wetlands & Streams – If none exists, State as such					

Comments:

SITE AND GRADING PLAN for ALL BMP'S SHALL BE ROUTINELY MAINTAINED AND CHECKED/REPAIRED AFTER **CURVE TABLE** SYMBOL LEGEND: PETROS HOMES, INC. EACH RAIN EVENT AND/OR WEEKLY CURVE ARC RADIUS CHORD BEARING DEL TA GRAVEL CONSTRUCTION ENTRANCE: STORM MANHOLE Situated in the City of Brecksville, County of Cuyahoga and State of Ohio and known as being Sublot No. 1 in C1 102.89 430.00 102.65 N17"28'32"W 13"42'35" 1. CONSTRUCT DRIVE AT LEAST 30 FEET LONG OR THE DISTANCE TO THE the One Chippewa Trail Subdivision of part of Original Brecksville Township Lot No. 23, as recorded in Volume C2 103.03 400.00 102.75 N16'58'58"W 14'45'31" SANITARY MANHOLE 2. PLACE 2-3 INCH STONE OVER A STABLE SUBGRADE. 3. ADD STONE AS NEEDED TO MAINTAIN 6 INCHES OF CLEAN DEPTH. 4. TO IMPROVE STABILITY OR IF WET CONDITIONS ARE ANTICIPATED, PLACE 343, Page 86 of Cuyahoga County Map Records. C3 38.04 400.00 38.03 N27°05'12"W 5°26'56" 7.89 400.00 7.89 N09°02'18"W 1°07'51" FIRE HYDRANT Based on field survey performed Tuesday, January 24, 2012. C5 148.97 400.00 148.11 N19°08'31"W 21°20'17" GEOTEXTILE FABRIC ON THE GRADED FOUNDATION. WATER VALVE Monuments were found or set as indicated hereon. Dimensions are expressed in feet and decimal parts thereof. Bearings are to an assumed meridian and are used to describe the relative angular value between CATCH BASINS lines only, all of which I certify to be correct to the best of my professional knowledge and belief. IRON PIN IN MONUMENT BOX Siferal V. Sole Richard J. Kole, P.S. 7889 IRON PIN FOUND 34.50 FOUNDATION N23'54'23'V IRON PIN SET 105.00 north TE OF OH UTILITY BOXES VOOD OFFSET * RICHARD J. . HUB SET (TYP.) NOTE: 30' 02 KOLE THIS PLAN INTENDED FOR LOCATION Prepared by: AND GRADING PURPOSES ONLY. 7889 7.33 N66*05*37*E, ONAL SUN REFER TO HOUSE PLANS FOR STONE RMK⊕L FOUNDATION DETAILS AND DIMENSIONS. & ASSOC. CORP. 5316 Ridge Road - Cleveland, Ohio 44129 18.67 Phone 440.885.7137 - Fax 440.885.7139 LEGEND: -4.50 BUILDER/LANDSCAPER TO MAINTAIN www.kolesurvey.com Positivé drainage away from House. Petros Homes 1193.5* PROPOSED GRADE 1192.0 EXISTING ELEVATION 10474 Broadview Road - Broadview Heights, Ohio 44147 125' Min. Bldg. Line (from STORM & SAN. CONNECTION DATA Phone 440.546.9000 - Fax 440.546.900 INDICATES DIRECTION OF Chippewa Road R/W) 34,33 SURFACE WATER FLOW STONE (A) 29 LF PROP. 6" SAN. 0 18.0%± AFTER FINAL GRADING R=430.00, A=102.89 C=102.65, A=13.42.35. N17.28.32.W (B) 29 LF PROP. 6" STM. @ 1.0%± MIN. -1192--- EXISTING CONTOUR (C) 12 LF PROP. 6" STM. @ 45.5%± N6675'37"E 30.00 1194 → PROPOSED CONTOUR R=400.00, A=103.03 C=102.75, A=14.45.31 -N16.58.58.W 505'37"E 30.89 SCALE: 1" = 20' DATE: JANUARY 20, 2012 Block "A" REVISED: JANUARY 25, 2012 (Vacant Land) REVISED: FEBRUARY 3, 2012 (PER CITY ENGINEER) PPN 601-35-029 REVISED: FEBRUARY 10, 2012 (PER CITY ENGINEER) EXCAVATION STAKING DETAIL SCALE: 1' = 30' BENCH MARK: TOP OF HYDRANT OPPOSITE BLOCK "A", ELEVATION 838.40 N26°15'42"W 102.09 CONTRACTOR MUST CHECK BENCH MARK WITH PAVEMENT GRADE BEFORE ANY EXCAVATION OR WORK IS STARTED. **- 5.00** -824------825-15.00 FLOOR ELEVATIONS: 13 COURSE BASEMENT; 20" GAR FLR to --- 826-- -- -1st FLR, 9'-4" 1st FLR to BASMT FLR (VERIFY BEFORE 20' Utility Easement to _ -- 827- --- -CONSTRUCTION) --- B28- --the City of Brecksville THE PART WITH THE PART WHEN TH -829-843.00 FIRST FLOOR ELEV. 825-842.00 TOP OF BASMT FOUNDATION -856-. -831- -- -841.33 GARAGE FLOOR ELEV. 838.33 TOP/GARAGE FOOTER ELEV.* 837.67 BOT/GARAGE FOOTER ELEV.* 83A-833.67 BASEMENT FLOOR ELEV 833.33 TOP OF FOOTER ELEV. BOTTOM OF FOOTER ELEV.** -836-PPN 601-35-030 Sublet * MAY HAVE TO BE ADJUSTED DEPENDING ON EXISTING SOIL -837-125' Min. Bldg. Line (from Chippewa Road R/W) OWNER: MAURER 18,982 Sq. Ft. CONDITIONS. APPROX. LIMITS. III. PROPISCI SII I FENCE PROPISCI SIII I FENCE P BUILDER: PETROS HOMES **ADJUST AS NECESSARY TO MAINTAIN MINIMUM DEPTH. ESTIMATED INVERT OF STORM CONN. (FRONT/DOWNSPOUTS) 185 50 10' Utility Easement to the City of Brecksville the City of Brecksville $G C.O. = 833.9 \pm$ ESTIMATED INVERT OF STORM CONN. (SIDE/FTR. DRAIN) -831-8" Storm Θ C.O. = 827.2± __832--@ 3.40% ESTIMATED INVERT OF SANITARY CONN. --833--@ C.O. = 826.4± -8" Storm @ 0.50% Bottom of Slope WOODEN STAKES FOUND (NO CLEANOUTS) AT STORM AND FOUNDATION DRAINS DNLY, SANITARY CONNECTIONS - UNABLE TO OBTAIN ACTUAL DOWNSPOUTS TO CONNECT (Footer Drain Conn.) TID FRONT/STREET SYSTEM NOTE: ALL DISTURBED AREA TO BE SEEDED & MULCHED WITHIN 7 DAYS OF BACKFILLING FOUNDATION. Landscaping REVISED Application No. 12020008 Address: \$500 Chiepewa Trall RP # 601;26-030 Owner: Retros Homes Date: February 14, 2012 APPROX. 1,780 SQUARE FEET OF CONCRETE AS SHOWN. - DRIVE PAD = **826** SF 34.50 FOUNDATION - DRIVE = 487 SF 13 COURSE BLOCK - APRON = 190 SF/ BASEMENT_-- SERVICE WALK = 277 SF NOTE STONE VENEER AT VARIOUS LOCATIONS APPROX. VOLUME OF BASEMENT EXCAVATION (INCLUDING Sublot 2 (SEE FOUNDATION PLAN) FOOTER) = 328 CUBIC YARDS± (Existing Dwelling) Block "A" PPN 601-35-009 CONTRACTOR TO VERIFY STORM AND SANITARY CONNECTION UNEXC./ (Vacant Land) Ex. FF 847.02 7.33 (PDRCH) 267-DEPTHS AND TYPE OF CONNECTION (I.E. STM or SAN) PPN 601-35-029 Ex. GF 845.36 STONE BEFORE BASEMENT EXCAVATION. 7.67 CONTRACTOR TO VERIFY HOUSE DIMENSIONS BEFORE GRADING OVER PROPERTY LINE DO BE 12.67 CONSTRUCTION. DONE WITH PERMISSION FROM ADJACENT 27.0 DRIVE PROPERTY OWNER - ATTACHED ANY SLOPES 4:1 AND STEEPER MUST HAVE EROSION UNEXCAVATED Landscaping CONTROL MATTING APPLIED ("NORTH AMERICAN GREEN S75 (GARAGE) **¥**-837_ SINGLE NET STRAW EROSION CONTROL BLANKET" OR APPROVED EQUAL.) 34.33 STONE 22.00 NO PLATTED, PROTECTED JURISDICTIONAL WETLANDS EXIST ON PROPOSED SWALE 6 2.8% THIS SUBLOT. PROP. CONC. VALK ALL PERTINENT EROSION CONTROL BMP's WILL BE FOLLOWED 25' Min. Bldg. Line THROUGHOUT CONSTRUCTION. (⊗) 841 NPDES PERMIT # 3GC01636*AG (MAY 19, 2005). Sanitary Sewer Util's -8" Storm! @ 0.50% Easement to the City 100 YEAR FLOOD PLAIN INFO: SUBLOT 1 LIES WITHIN ZONE X of Brecksville 21° Saniar @ 0.70° (308.6 MI-MI) (AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL 12' Utility CHANCE FLOODPLAIN) COMMUNITY PANEL NO. 0328E (ISSUED INSTALL\ 30' CONSTRUCTION 12-3-2010). ACCESS DRIVE BEFORE ANY MAJOR GRADING ACTIVITIES NO CITY SIDEWALK PER IMPROVEMENT PLANS. 16605'37'E 30.89 INLET PROTECTION Chippe REPORTED PROTECTION 63 N29"48'39"W C5. Chippewa Trail 60' **∑** Road 8" Water TBM: Top of Hydrant Flevation 838.40 12° Stom @ 0.50% (S.R. 15" Storm @ 3.00% *82)* APPROVED 60

CITY OF BRECKSVILLE ENGINEER

The City of Brecksville Engineering Department CHECKLIST FOR BUILDER'S GRADE



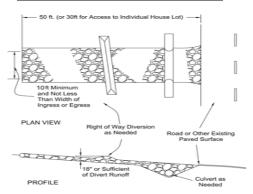
Address: Builder: Cellular: Fax: Date: Corner Pins Exposed Sidewalk Backfilled Drive Backfilled No debris, concrete, etc. Graded per plan Yard drains/storm sewers per plan Drainage swales per plan Graded away from the house Driveway and Sidewalk per plan Erosion control measures in place Erosion control matting as per plan Water box to grade Additional drainage needed (french drain, additional yard drain) Additional grading needed Proposed Garage Floor Elevation	Dev	elopment:				
Date: Checked By: Corner Pins Exposed Sidewalk Backfilled Drive Backfilled No debris, concrete, etc. Graded per plan Yard drains/storm sewers per plan Drainage swales per plan Graded away from the house Driveway and Sidewalk per plan Erosion control measures in place Erosion control matting as per plan Water box to grade Additional drainage needed (french drain, additional yard drain) Additional grading needed Proposed Finished First Floor Elevation	Add	ress:				S/L
Date: Checked By: Corner Pins Exposed Sidewalk Backfilled Drive Backfilled No debris, concrete, etc. Graded per plan Yard drains/storm sewers per plan Drainage swales per plan Graded away from the house Driveway and Sidewalk per plan Erosion control measures in place Erosion control matting as per plan Water box to grade Additional drainage needed (french drain, additional yard drain) Additional grading needed Proposed Finished First Floor Elevation	Ruil	dore				1
Corner Pins Exposed Sidewalk Backfilled Drive Backfilled No debris, concrete, etc. Graded per plan Yard drains/storm sewers per plan Drainage swales per plan Graded away from the house Driveway and Sidewalk per plan Erosion control measures in place Erosion control matting as per plan Water box to grade Additional drainage needed (french drain, additional yard drain) Additional grading needed Proposed Finished First Floor Elevation	Duli	uci.				
Sidewalk Backfilled Drive Backfilled No debris, concrete, etc. Graded per plan Yard drains/storm sewers per plan Drainage swales per plan Graded away from the house Driveway and Sidewalk per plan Erosion control measures in place Erosion control matting as per plan Water box to grade Additional drainage needed (french drain, additional yard drain) Additional grading needed Proposed Finished First Floor Elevation	Date	2:	Checked By:		Fax:	
Drive Backfilled No debris, concrete, etc. Graded per plan Yard drains/storm sewers per plan Drainage swales per plan Graded away from the house Driveway and Sidewalk per plan Erosion control measures in place Erosion control matting as per plan Water box to grade Additional drainage needed (french drain, additional yard drain) Additional grading needed Proposed Finished First Floor Elevation	\boxtimes	Corner Pins Ex	kposed			
No debris, concrete, etc. Graded per plan Yard drains/storm sewers per plan Drainage swales per plan Graded away from the house Driveway and Sidewalk per plan Erosion control measures in place Erosion control matting as per plan Water box to grade Additional drainage needed (french drain, additional yard drain) Additional grading needed Proposed Finished First Floor Elevation	\boxtimes	Sidewalk Back	filled			
Graded per plan Yard drains/storm sewers per plan Drainage swales per plan Graded away from the house Driveway and Sidewalk per plan Erosion control measures in place Erosion control matting as per plan Water box to grade Additional drainage needed (french drain, additional yard drain) Additional grading needed Proposed Finished First Floor Elevation	\boxtimes	Drive Backfill	ed			
Yard drains/storm sewers per plan Drainage swales per plan Graded away from the house Driveway and Sidewalk per plan Erosion control measures in place Erosion control matting as per plan Water box to grade Additional drainage needed (french drain, additional yard drain) Additional grading needed Proposed Finished First Floor Elevation	\boxtimes	No debris, concrete, etc.				
	\boxtimes	Graded per plan				
	\boxtimes	Yard drains/storm sewers per plan				
	\boxtimes	Drainage swal	es per plan			
	\boxtimes	Graded away f	from the house			
	\boxtimes	Driveway and Sidewalk per plan				
	X	Erosion control measures in place				
	X	Erosion control matting as per plan				
	X	•				
	\boxtimes					
	X	_	•			
	X	_				
	\boxtimes	Proposed Gara	ge Floor Elevation			

Comments:

STORM DRAIN INLET **PROTECTION**

- 1. Inlet protection shall be constructed either before upslope land disturbance begins or before the inlet becomes functional
- 2. Construct an earth dike on the down slope side to prevent by-pass flow. The top of the earth dike shall be at least 6 inches higher than the top of the frame. The earth around the inlet shall be excavated completely to a depth at least 18 inches.
- 3. Space support posts evenly against the inlet perimeter a minimum of 3ft. apart and drive them about 1 1/2 ft. into the ground. The top of the frame shall be at least 6 inches below adjacent roads if ponded water would pose a safety hazard to traffic.
- 4. Cut enough filter fabric from a single roll to eliminate joints. Stretch tightly around the frame over wire mesh. Fasten securely.
- 5. Bury the bottom of the fabric at least 1 foot deep; then backfill and compact the backfill.
- 6. Cross brace the corners to prevent collapse.
- 7. Inspect and repair as needed and remove accumulated sediment after every storm.

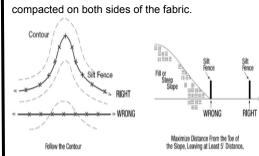
CONSTRUCTION ENTRANCE



- 1. ODOT # 2 (1.5-2.5 inch) stone shall be used, or recycled concrete equivalent.
- 2. The Construction entrance shall be as long as required to stabilize high traffic areas but not less than 50 ft. (exception: apply 30 ft. minimum to single
- 3. The stone layer shall be at least 6 inches thick for light duty entrances or at least 10 inches for heavy duty use.
- 4. The entrance shall be at least 10 feet wide, but not less than the full width at points where ingress or
- 5. To improve stability or if wet conditions are anticipated a geotextile shall be laid over the entire area prior to placing stone
- 6. A pipe or culvert shall be constructed under the entrance if needed to prevent surface water from flowing across the entrance or to prevent runoff from being directed out onto paved surfaces.

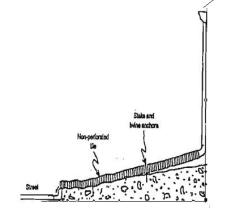
SILT FENCE

- 1. Silt fence shall be constructed before upslope land disturbance begins.
- 2. All silt fence shall be placed as close to the contour as possible so that water will not concentrate at low points in the fence and so that small swales or depressions that may carry small concentrated flows to the silt fence are dissipated along its length.
- 3. Ends of the silt fences shall be brought upslope and effectiveness. If damaged, the silt fence slightly so that water ponded by the silt fence will be prevented from flowing around the ends.
- 4. The height of the silt fence shall be a minimum of 16 inches above the original ground surface. The length of the fence posts shall be 32 inches long.
- 5. The silt fence shall be placed in an excavated or sliced trench cut a minimum of 6 inches deep. The silt fence shall be placed with the stakes on the down slope side of the geotextile. A minimum of 8 inches of geotextile must be below the ground surface. The trench shall be backfilled and compacted on both sides of the fabric.



TEMPORARY DOWNSPOUT **EXTENDERS**

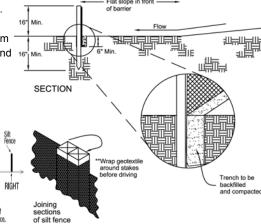
- 1. Install extenders as soon as gutters and down-spouts are installed to prevent erosion from roof run-off.
- 2. Use non-perforated (unslotted) drainage
- 3. Route water to a stable grassed or paved area or to the storm sewer.
- 4. Remove only after adequate vegetative cover is established.
- 5. Get approval from the City of Massillon Engineering Department before discharging water into a street.



6. Seams between sections of silt fence shall be spliced together only at a support post with a minimum 6-in. overlap prior to driving into the

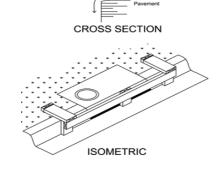
7. Silt fences shall be inspected after each rainfall and at least daily during a prolonged rainfall. The location of existing silt fence shall be reviewed daily to ensure its proper location shall be repaired immediately.

(Note: Silt fence has a life expectancy 6 months - 1 year, whereas straw bale barriers have a limited life of 3 months or less)



CURB INLET PROTECTION

- 1. Construct wooden frame using 2-by 4in. lumber. The end spacers shall be at least 1 ft. beyond both ends of the opening. The anchors shall be nailed to 2-by 4in. stakes driven on opposite side of the curb.
- 2. Install wire mesh in one continuous piece with minimum width of 30in. and 4ft. longer than the length of the inlet, 2ft. on each side.
- 3. Geotextile EOS of 20-40 sieve shall be the same size as wire mesh and be resistant to
- 4. Wire mesh and geotextile should be formed to the concrete gutter and against the face of curb on both sides of the inlet and securely fastened to the frame.
- 5. Place 2in. stone over the wire mesh and geotextile to prevent water from entering the inlet under or around the geotextile.
- 6. Inspect and repair as needed and remove any accumulated sediments after every storm.







EROSION CONTROL FOR THE HOME BUILDER

Soil erosion and the resulting sedimentation are a leading cause of water quality problems in Ohio. Every phase of a construction project has the potential of contributing significant quantities of 'sedimentladen runoff. Therefore, as a site is developed, all who are associated with the project must do their part to control erosion.

Why the Concern About **Erosion and Sediment** Control?

Water quality - Sediment is the number one pollutant, by volume, of surface waters in the state of Ohio. It impacts water quality by degrading the habitat of aquatic organisms and fish, by decreasing recreational value, and by promoting the growth of nuisance weeds and algae.

Local taxes - Cleaning up sediment in streets, sewers and ditches increases costs to local government budgets and subsequently to taxpayers.

Flooding - Sediment accumulation in ditches, streams, lakes, and rivers reduces their capacity, which can result in increased flooding.

Property values - Sediment deposits not only impair water quality but also damage property, thus reducing its use and value.



Principles for Controlling Lot Erosion and Sedimentation

Erosion control is important on any building site regardless of its size. Usually, the principles and methods for controlling erosion and reducing off-site sedimentation are relatively simple and inexpensive. Here are event. When a problem is four principles to be followed when developing a building site:

Evaluate site – Inventory and evaluate the resources on the lot before building. Location of structures should be based, in large part, on the lot's natural features. Identify trees that you want to save and vegetation that will remain during construction. Also, identify areas where you want to limit construction traffic. Where ever possible, preserve existing vegetation to help control erosion and off-site sedimentation.

Select and install practices -Determine the specific practices needed, and install them before clearing the site. Among the more commonly used practices are vegetative filter strips, silt fence, gravel drives, and storm water inlet protection.

Develop a maintenance **program** - Maintenance of all practices is essential for them to function properly. They should be inspected once a week and after each significant rainfall identified, repair the practice immediately. Also, any sediment that is tracked onto the street should be scraped and deposited in a stable area. DO NOT flush sediment from the street into the storm sewer system.

Revegetate the site - Do so as soon as possible. Any area to be left bare for more than 21 days should be seeded immediately to a temporary cover of annual rye grass.





Construction Sequence Lot and Erosion Control Sediment

Step # 1. Evaluate the Site.

Before construction begins, evaluate the entire site, marking for protection, any important trees and associated rooting zones, unique areas to be preserved, and vegetation suitable for filter strips, especially in perimeter areas.

Identify Vegetation To Be Saved – Select and identify the trees, shrubs and other vegetation that you want to save.

Protect Trees and Sensitive Areas –

To prevent root damage, do not grade, burn, place top soil piles, or park vehicles near trees or in areas marked for preservation.

 Place plastic mesh or snow fence barriers around trees' drip line to protect the area below their branches.

Step # 2. Install Perimeter Controls.

Identify the areas where sediment laden runoff could leave the construction site, and install perimeter controls to minimize the potential for off-site sedimentation. It's important that perimeter controls are in place before any earth moving activities begin.

Protect Down-Slope Areas – (with Vegetative Filter Strips)

- On slopes of less than 6%, preserve a 20-30 foot wide vegetative buffer strip around the perimeter of the property and use it as a filter strip for trapping sediment.
- Do not mow filter strip vegetation shorter than 4 inches.

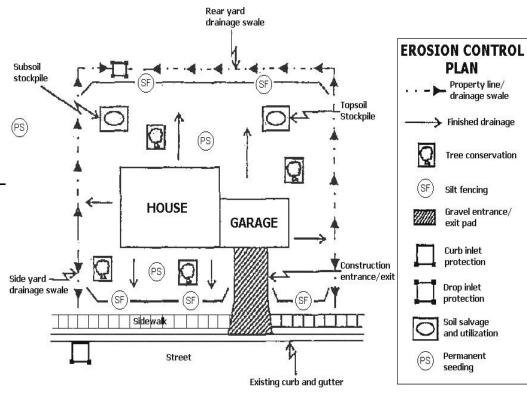
(With Silt Fence)

Use silt fencing along the perimeter of the lot's down slope side(s) to trap sediment.

(Install Gravel Drive)

 Restrict all lot access – to this drive to prevent vehicles from tracking mud onto the roadways (See Construction Entrance).

Example of Erosion & Sediment Control on a Building Lot



Notes: 1. Erosion/sediment control measures must be functional and be maintained throughout construction

Maintain positive drainage away from the sturcture(s)

Protect Storm Sewer Inlets -

- Protect nearby storm sewer curb inlets with stone-filled or gravel filled geotextile bags (See Curb Inlet Protection), or equivalent measures before disturbing soil.
- Protect on site storm sewer drop inlets with silt fence material (See Strom Drain Inlet Protection), or equivalent measures before disturbing soil.

Step # 3. Prepare The Site For Construction.

Prepare the site for construction and for installation of utilities.

Make sure all contractors (especially the excavating contractors) are aware of areas to be protected.

Salvage and Stockpile the Topsoil/Subsoil -

Remove topsoil (typically the upper 4-6 inches of soil material) and stockpile

 Remove subsoil and stockpile separately from the topsoil.

- Locate the stockpiles away from any down slope streets, driveway, branches, stream, lake, wetland, ditch, or drainage way.
- Immediately after stockpiling, temporary seed the stockpiles with annual rye or winter wheat and/or place sediment barriers around the perimeter of the piles.

Step # 4. Build The Structures and Install the Utilities.

Construct the home and install the utilities; also install the sewage disposal system, then consider the following:

Install Downspout Extenders -

- Downspout extenders are highly recommended as a means of preventing lot erosion from roof runoff. Add the, extenders as soon as the gutters and downspouts are installed (See Down Spout Extenders).
- Be sure the extenders have a stable outlet, such as the street, sidewalk, or a well vegetated area.

Step # 5. Maintenance

Maintain all erosion and sediment control practices until construction is completed and the lot is stabilized.

- Inspect the control practices a minimum of once a week and after each storm event, making any needed repairs immediately.
- Toward the end of each work day, sweep or scrape up any soil tracked onto roadways.
 Do not flush areas with water.
- By the end of the next work day after a storm event, clean up any soil washed off-site.

Step # 6. Revegetate The Site.

Immediately after all outside construction activities are completed, stabilize the lot with sod, or seed and mulch.

Redistribute the Stockpiled Subsoil and Topsoil.

- Spread the stockpiled subsoil torough grade.
- Spread the stockpiled topsoil to a depth of 4-6 inches over the rough graded areas.
- Fertilize & lime according to soil test results or recommendations of a seed supplier or a professional landscaping contractor.

Seed or Sod Bare Areas -

- Contact local seed suppliers or professional landscaping contractors or recommended seeding mixtures and rates.
- Follow recommendations of a professional landscaping contractor for installation and rates.
- Water newly seeded/sodded areas every day or two to keep the soil moist; soak to 2 inches. Less watering is needed once grass is 2 inches tall.

Mulch Newly Seeded Areas -

- Spread straw mulch on newly seeded areas, using 2 - 3 bales of straw per 1,000 square feet.
- On, flat or gently sloping land, anchor the mulch by crimping it 2

 4 inches into the soil. On steep slopes, anchor the mulch with netting or tackifiers. An alterative to anchored mulch would be the use erosion control blankets.

Step # 7. Remove Remaining Temporary Control Measures.

Once the sod and/or vegetation is well established, remove any remaining temporary erosion and sediment control practices such as:

- Downspout extenders. (or shorten to outlet onto the vegetated areas, allowing for maximum infiltration)
- Storm sewer inlet protection measures.

Building Lot Drainage

The best time to provide for adequate, lot drainage is before construction begins. With proper planning, most drainage problems can be avoided, and that is important because correcting a problem after it occurs is usually much more difficult and costly. Here's what it takes to ensure good lot surface and subsurface drainage.

Surface DrainagePosition the structure a minimum of 18

inches above street level.

Divert storm water runoff away from the structure by grading the lawn to provide at least 6 inches of vertical fall in the first

10 feet of horizontal distance.

Avoid filling in existing drainage channels and roadside ditches, since that could result in wetness problems on someone else's property and/or damage to adjacent road surfaces.

Subsurface Drainage

Provide an outlet for foundation or footer drains and for general lot drainage by using storm sewers (where permitted), or obtain drainage easements if you must cross adjoining properties.

If you accidentally cut through an existing field tile, assume that it carries water even if it is currently dry; therefore, reroute it (using the same size field tile) around the structure, then reconnect it.

Reference Materials



Every building is unique and poses its own potential erosion hazards. In many instances, additional or alterative control methods may be necessary if the lot is:

- Adjacent to a creek, river, lake or wetland.
- Has slopes in' excess of 6%.
- Receives runoff from adjacent areas.
- Has more than one acre of disturbed ground.
- Poor soil conditions.

This pamphlet provides installation instructions on five of the more commonly used building site erosion control practices.

For information on other related practices, refer to the ODNR, Division of Soil and Water Conservation Handbook, "Rainwater & Land Development" – Ohio's Standards for Storm Water Management, Land Development & Urban stream Protection.



It is the responsibility of every developer, contractor and property owner to see that they are in compliance with all laws, regarding construction site erosion/sediment control.



FINAL INSPECTION FOR A RESIDENTIAL STRUCTURE INSPECTOR: DATE: TIME: LOCATION:

	ONTRACTOR: PHONE:							
NAI	JAME:							
YES	NO	NA	CHECK LIST	COMMENTS				
			BUILDER'S GRADE APPROVED BY CITY ENGINEER.					
			ADDRESS - 4" NUMBERS POSTED					
			LOT CLEANED OF BUILDING MATERIALS					
			TEMPORARY ELECTRIC REMOVED					
			DRIVEWAY COMPLETE - SIDE WALKS INSTALLED					
			OUTSIDE PAINTING COMPLETED					
			GAS LINE PAINTED/ PROTECTED					
			GUTTERS/ DOWNSPOUTS COMPLETED					
			CAPS ON CLEANOUTS					
			PROVIDE STEPS AT DOORS-MAX RISORS 8 1/4" EQUAL					
			AIR CONDITIONER IN REAR- FUSE PER NAME PLATE					
			TR/WR OUTLET WITHIN 25 FT. OF AC UNIT					
			VENTS IN OVERHANGS - HOUSE WEATHER TIGHT					
			DECK COMPLETE - GUARD 36" HEIGHT					
			ELECTRIC SERVICE W/ INTER-SYSTEM BOND					
			GFI/TR/WR OUTLET FRONT & REAR					
			GARAGE DRYWALL SEPARATION COMPLETE					
			STEEL/ WOOD DOOR HOUSE TO GARAGE					
			BACK FLOW PROTECTION ON SILCOCKS					
			FOUNDATION DRY/FREE OF CRACKS					
			DIRT LEGS ON GAS APPLIANCES - CSST BONDED					
			BRIDGING INSTALLED/ NAILED IN PLACE					
			DUCT WORK INSTALLED PROPERLY -JOINTS SEALED					
			WATER SHUT-OFF VALVES - LABELED					
			HOT WATER RELIEF VALVE INSTALLED					
			DISCHARGE PIPED TO 6" ABOVE FLOOR					
			GROUND JUMPER ON WATER METER					
			ELECTRIC SERVICE PANEL INDEXED					
			INSULATION VALUES POSTED AT ELECTRIC PANEL					
			SECURITY SYSTEM					
			VACUUM SYSTEM					
			GRILLS/ DIFFUSERS INSTALLED ON HVAC DUCTS					
			FIRE PLACE WITH HEARTH- DOORS W/ GASKETS					
			TR/GFI-KITCHEN, BATH, BASEMENT					
			STOVE INSTALLED PROPERLY					
			DISPOSAL, DISHWASHER, SINK INSTALLED					
			SINK, WATER CLOSET, FAN & FIXTURES					
			BATHROOM TUB, SHOWER- MAX TEMP 120F.					
			LIGHT CLEARANCE IN CLOSET STORAGE SPACE					
			HANDRAILS INSTALLED-RETURN AT ENDS					
			INTERIOR CLEANED AND PAINTING COMPLETED					
			FINISH ELECTRICAL- WIRING CONCEALED					
			SMOKE DETECTORS					
			CARBON MONOXIDE DETECTOR(S)					
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		FINISH ELECTRICAL- WIRING CONCEALED	
		SMOKE DETECTORS	
		CARBON MONOXIDE DETECTOR(S)	
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Inspe	ctor's	Signature	
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