

CITY OF DUBLIN

Building Standards • 5800 Shier Rings Road • Dublin, Ohio 43016

Phone: (614) 410-4670 • Inspection Line: (614) 410-4680

Residential Swimming Pools & Pool Barriers

Building permits are required for all residential swimming pools and pool barriers in the City of Dublin.

The construction of all new residential swimming pools, pool barriers and the replacement, modification or maintenance of existing residential swimming pools and pool barriers is governed by two separate codes. The **Residential Code of Ohio** is a state building code that contains specific design requirements related to the use and construction of all residential swimming pools and pool barriers. The **Dublin Zoning Code** also contains specific information regarding the use, location and design of all residential swimming pools and pool barriers, a.k.a. "swimming pool fences." However, the residential building code and the zoning code govern the design, installation and use of swimming pools and pool barriers from two different perspectives. The requirements of both codes must be met when designing a new swimming pool or barrier, replacing an existing swimming pool or pool barrier or effecting repairs to an existing pool barrier fence or wall.

The following information must be submitted to Building Standards for the review and approval of a residential swimming pool and/or a pool barrier building permit:

- **One (1) completed Residential Building Permit Application Form**
- **Two (2) Scaled and Dimensioned Site Plans** - 8 1/2" X 14" or 11" X 17" site plans are preferred. Faxed copies of drawings and site plans are not accepted for review of building permit applications.
- **Two (2) complete sets of Swimming Pool and/or Pool Barrier Construction Drawings**
- **Evidence of a current City of Dublin Contractor Registration.** A signed Homeowner Affidavit form is acceptable provided a City of Dublin registered contractor is not performing work related to the swimming pool and pool barrier.

Application Forms - The required building permit application form for a residential swimming pool or pool barrier is available at the permit window of Building Standards located at 5800 Shier Rings Road. Please contact a Residential Plans Examiner at (614) 410-4613 regarding any questions concerning the specific requirements of the building code. Please contact an Office Assistant at (614) 410-4670 if you have general questions related to the building permit application process.

Building permit applications for swimming pools will not be accepted or approved without all required pool barrier information. The swimming pool contractor is responsible for the completion of the pool barrier.

Construction Drawing Requirements for Swimming Pools and Pool Barriers - The following information must be shown on the construction drawings for all residential swimming pools and swimming pool barriers and any existing swimming pools or pool barriers that are to be modified:

- **The proposed swimming pool design and dimensions** - All drawings must be to scale and show all related dimensions).
- **All proposed electrical components, grounding and bonding**
- **The proposed (or existing) pool barrier design** – The barrier detail must include the barrier type/height/open space dimensions, access gates and any required door alarms. (See "**New and Existing Swimming Pool Barriers**" below) If an existing pool barrier is to remain the plans must identify any proposed modifications to the barrier that are associated with the proposed construction. Pool barrier details are required elements for all residential swimming pool building permit applications. Separate fence permits are not required for fences or walls used as swimming pool barriers.
- **A scaled and dimensioned site plan** – The site plan must show the property lines of the lot or parcel, all existing structures built upon it, and all proposed structures and improvements including swimming pools and pool barriers. All site plan information submitted for review must be drawn to scale and dimensioned. (See attached sample site plan)

Building Permit Application Reviews – All building permit applications and construction drawings for swimming pools, pool barriers and hot tubs will be reviewed for compliance with the 2006 Residential Code of Ohio, the Dublin Zoning Code and all applicable civil engineering requirements. When the review is complete the applicant will be notified of the plan approval or disapproval by Building Standards by telephone. Disapproved plans must be picked up by the applicant, revised and resubmitted for review before a building permit application can be approved for a swimming pool or pool barrier.

Plan Approval and Issuance of Building Permit - All required building permit fees must be paid in full when the approved building permit is issued. The stamped and approved building permit and construction drawings must be posted on-site before any construction can begin and must remain on-site through all phases of construction.

Required Building Inspections – With the exception of plumbing, all inspections are scheduled by calling the Building Standards Automated Inspection Line at (614) 410-4680 prior to 6:00 a.m. of the business day of the inspection. All required plumbing inspections are scheduled by calling Franklin County at (614) 462-3865. An approved occupancy card must be obtained by the owner/contractor before a swimming pool can be filled with water. Final occupancy (and permission to fill and use the swimming pool) will not be approved unless the required pool barrier is complete. Please contact a Building Inspector at (614) 410-4670 with any questions related to required building inspections, final authorization to fill the swimming pool and receipt of the required Occupancy Card.

New and Existing Swimming Pool Barriers

New swimming pool barriers must meet the requirements of “APPENDIX G SWIMMING POOLS, SPAS AND HOT TUBS” of the building code (see attached) and the current fence requirements of the zoning code. Described as “swimming pool fences” in the zoning code, the zoning requirements for swimming pool barriers are summarized as follows:

Location and Setback Requirements

- Pool barriers are not to be located forward of any part of the residence or within a required side yard, rear yard, or other restricted area of the lot, such as a No Build Zone, No Disturb Zone, conservation zone, floodway, floodplain, drainage easement.
- Existing residential swimming pools that are nonconforming to the zoning code by reason of location and setback may be secured by means of a new open ornamental or solid fence (no more than four feet high) that is in addition to any pre-existing pool barrier located on the property. In this instance the new pool barrier may be located within a required building setback area, provided that the new pool barrier is located at least 10 feet from the existing pool barrier on the property and is no further than 10 feet from the edge of the existing swimming pool.

Prohibited Types of Barrier Fences – Chain link, stockade and vinyl fences are not permitted.

Permitted Pool Barrier Fences and Walls

- **Pool barriers are to be “open ornamental fence ” or “solid fences”** (as defined by the zoning code) If the pool barrier (“swimming pool fence”) requirements of the Dublin Zoning Code conflict with the requirements of any planned development zoning text, the more restrictive standard will apply. Pool barrier and fencing standards of the zoning code applicable to matters not covered in the planned development zoning text will apply.
- **The required height for all new residential pool barriers is 4'-0** measured from the established grade line outside of the enclosed perimeter to the highest point of the barrier (including any posts and finials.) The height of the pool barrier fence or wall may not be artificially increased by the use of mounding.
- **All openings, doorways and entrances are to have latches and permanent locks.**
- **Supporting members for fences used as pool barriers must be identical in appearance on both sides** or be designed and located so that the structural members are not to be visible from the adjoining property.

Replacement of Existing Swimming Pool Barriers

Existing Swimming Pool Barriers Installed April 2000 or Later – Existing swimming pool barriers legally installed in April 2000 or later are subject to the requirements of the zoning code. An existing swimming pool barrier legally installed after that date may be modified or replaced in its entirety with a new pool barrier of the same design material and location. The modified /replacement pool barrier must comply with all applicable requirements of the zoning code and all requirements of the current building code.

Swimming Pool Barriers Installed Prior To April 2000 – Existing swimming pool barriers legally installed prior to April 2000 pre-date the requirements of the current zoning code. Qualifying pool barriers may be replaced with a new pool barrier of the same design in the same location. At the owner's discretion, the replacement pool barrier may be replaced at the same height or a reduced height of no less than four feet (4'-0.) If the pool barrier to be replaced is made of a material that is currently prohibited by the zoning code (i.e. chain link, stockade and vinyl fencing, etc) the replacement pool barrier must be made of a currently permitted fence material. The design of the replacement pool barrier must comply with all applicable requirements of the building code. If any portion of the existing pool barrier is to be moved from its existing location, that portion of the replacement pool barrier must be brought into conformance with all of the requirements of the current zoning and building code.

Replacement Of An Existing Pool Barrier - When replacing an existing pool barrier with A) an identical replacement barrier B) an identical pool barrier except for use of a new zoning code compliant pool barrier material or C) a replacement pool barrier with a reduced top height, a detail of the existing pool barrier and the proposed pool barrier design must be submitted with the required building permit application. The swimming pool barrier details must include the following information:

- The design of the existing and proposed pool barriers
- The overall height of the existing and proposed pool barriers measured from the top of the barrier to grade
- The material(s) of the existing and proposed pool barriers

The corresponding site plan must confirm that the location of the existing pool barrier is to remain unchanged or must clearly identify the proposed location and setback of any part of the barrier that is to be relocated. Contact a Development Review Specialist at (614) 410-4600 regarding any proposed changes to an existing swimming pool barrier design or location.

Maintenance of Existing Swimming Pool Barriers

All pool barriers must be maintained in a structurally sound condition and completely finished at all times. Any grounds located between the pool barrier and all property lines must be properly maintained at all times. Routine maintenance and minor repairs needed to strengthen or correct an unsafe condition of any existing pool barrier are allowed and generally will not require a building permit. However, all maintenance collectively performed over a 12 month period that results in the replacement of more than 10% of the surface area of an existing pool barrier, and that is made of a material that does not conform to the current zoning code, shall require the reconstruction of the entire pool barrier with a barrier material permitted by the zoning code. (If this results in the total replacement of the existing pool barrier the entire swimming pool barrier design must conform to all requirements of the current building code.)

Depending on the scope of the work being performed, structural changes or alterations required for maintenance or repair of an existing pool barrier may trigger the need for a building permit. Contact Building Standards at (614) 410-4670 for additional information or clarification regarding any planned maintenance of a pool barrier other than routine maintenance and minor repairs.

APPENDIX G

SWIMMING POOLS, SPAS AND HOT TUBS

SECTION AG101 GENERAL

AG101.1 GENERAL. The provisions of this appendix shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lot of a one-and two-family dwelling.

SECTION AG102 DEFINITIONS

AG102.1 General. For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2.

ABOVE-GROUND/ON-GROUND POOL. See “Swimming Pool.”

BARRIER. A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

HOT TUB. See “Swimming Pool.”

IN GROUND POOL. See “Swimming Pool.”

RESIDENTIAL. That which is situated on the premises of a detached one-or two family dwelling or a one family town house not more than three stories in height.

SPA, NONPORTABLE. See “Swimming Pool.”

SPA, PORTABLE. A nonpermanent structure intended for recreational bathing, in which all controls, water heating and water circulating equipment are an integral part of the product.

SWIMMING POOL. Any structure intended for swimming or recreational bathing that contains water over 24 inches (610 mm) deep. This includes in-ground, aboveground, and on ground swimming pools, hot tubs and spas.

SWIMMING POOL, INDOOR. A swimming pool which is totally contained within a structure and surrounded on all four sides by walls of said structure.

SWIMMING POOL, OUTDOOR. Any swimming pool which is not an indoor pool.

SECTION AG103 SWIMMING POOLS

AG103.1 INGROUND POOLS. In-ground pools shall be designed and constructed in conformance with ANSI/NSPI-5 as listed in Section AG107.

AG103.2 ABOVE-GROUND AND ON-GROUND POOLS. Above ground and on-ground pools shall be designed and constructed in conformance with ANSI/NSPI-4 as listed in Section AG107.

SECTION AG104 SPAS AND HOT TUBS

AG104.1 PERMANENTLY INSTALLED SPAS AND HOT TUBS. Permanently installed spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-3 as listed in Section AG107.

AG104.2 PORTABLE SPAS AND HOT TUBS. Portable spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-6 as listed in Section AG107.

SECTION AG105 BARRIER REQUIREMENTS

AG105.1 APPLICATION. The provisions of this chapter shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drownings and near-drownings by restricting access to swimming pools, spas and hot tubs.

AG105.2 OUTDOOR SWIMMING POOL. An outdoor swimming pool, including an in-ground, aboveground or on-ground pool, hot tub or spa shall be provided with a barrier which shall comply with the following:

1. The top of the barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an

- aboveground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).
2. Openings in the barrier shall not allow passage of a 4-inch diameter (102 mm) sphere.
 3. Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
 4. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1.75 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.
 5. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.
 6. Maximum mesh size for chain link fences shall be a 2.25-inch (57 mm) square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than 1.75 inches (44 mm).
 7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1.75 inches (44 mm).
 8. Access gates shall comply with the requirements of Section AG105.2, Items 1 through 7, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Gates other than pedestrian access gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, the release mechanism and openings shall comply with the following:
 - 8.1 The release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate, and
 - 8.2 The gate and barrier shall have no opening greater than .05 inch (1.27 mm) within 18 inches (457 mm) of the release mechanism.
 9. Where a wall of a dwelling serves as part of the barrier one of the following conditions shall be met:
 - 9.1 The pool shall be equipped with a powered safety cover in compliance with ASTM F1346; or
 - 9.2 All doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and its screen, if present, are opened. The alarm shall sound continuously for a minimum of 30 seconds immediately after the door is opened and capable of being heard throughout the house during normal household activities. The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as touchpad or switch, to temporarily deactivate the alarm for a single opening. Such deactivation shall last for not more than 15 seconds. The deactivation switch (es) shall be located at least 54 inches (1372 mm) above the threshold of the door; or
 - 9.3 Other means of protection, such as self-closing doors with self-latching devices, which are approved by the governing body, shall be acceptable so long as the degree of protection afforded is not less than the protection afforded by item 9.1 or 9.2 described above.
 10. Where an aboveground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then:
 - 10.1 The ladder or steps shall be self-closing and have a self-latching device.

- 10.1 The ladder or steps shall be capable of being secured, locked or removed to prevent access, or
- 10.2 The ladder or steps shall be surrounded by a barrier which meets the requirements of Section AG105.2, Items 1 through 9. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

AG105.3 INDOOR SWIMMING POOL. All walls surrounding an indoor swimming pool shall comply with Section AG105.2, Item 9.

AG105.4 PROHIBITED LOCATIONS. Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.

AG105.5 BARRIER EXCEPTIONS. Spas or hot tubs with a safety cover which complies with ASTM F 1346, as listed in Section AG107, shall be exempt from the provisions of this appendix.

SECTION AG106 ENTRAPMENT PROTECTION FOR SWIMMING POOL AND SPA SUCTION OUTLETS

AG106.1 GENERAL. Suction outlets shall be designed to produce circulation throughout the pool or spa. Single outlet systems, such as automatic vacuum cleaner systems, or other such multiple suction outlets whether isolated by valves or otherwise shall be protected against user entrapment.

AG106.2 SUCTION FITTINGS. All Pool and Spa suction outlets shall be provided with a cover that conforms with ANSI/ASME A112.19.8M, or a 12" x 12" drain grate or larger, or an approved channel drain system.

Exception: Surface Skimmers

AG106.3 ATMOSPHERIC VACUUM RELIEF SYSTEM REQUIRED. All pool and spa single or multiple outlet circulation systems shall be equipped with atmospheric vacuum relief should grate covers located therein become missing or broken. Such vacuum relief systems shall include at least one approved or engineered method of the type specified herein, as follows:

1. Safety vacuum release system conforming to ASME A112.19.17, or
2. An approved gravity drainage system

AG106.4 DUAL DRAIN SEPARATION.

Single or multiple pump circulation systems shall be provided with a minimum of two (2) suction outlets of the approved type. A minimum horizontal or vertical distance of three (3) feet shall separate such outlets. These suction outlets shall be piped so that water is drawn through them simultaneously through a vacuum relief-protected line to the pump or pumps.

AG106.5 POOL CLEANER FITTINGS.

Where provided, vacuum or pressure cleaner fitting(s) shall be located in an accessible position(s) at least (6) inches and not greater than twelve (12) inches below the minimum operational water level or as an attachment to the skimmer(s).

SECTION AG107 ABBREVIATIONS

AG107.1 GENERAL.

ANSI- American National Standards Institute
11 West 42nd Street, New York, NY
10036

ASTM-American Society for Testing and Materials
1916 Race Street, Philadelphia, PA
19103

NSPI-National Spa and Pool Institute
2111 Eisenhower Avenue, Alexandria, VA
22314

SECTION AG108 STANDARDS

AG108.1 GENERAL.

ANSI/NSPI

ANSI/NSPI-3-99 Standard for Permanently Installed Residential Spas - AG104.1

ANSI/NSPI-4-99 Standard for Above-ground/On-ground Residential Swimming Pools – AG103.2

ANSI/NSPI-5-99 Standard for Residential In-ground Swimming Pools – AG103.1

ANSI/NSPI-6-99 Standard for Residential
Portable Spas – AG104.2

ANSI/ASME A112.19.8M – Suction Fittings for
Use in Swimming Pools, Wading Pools,
Spas, Hot Tubs and Whirlpool Bathing
Appliances – AG106.2

ASTM

ASTM F 1346-91 (1996) Performance
Specification for Safety Covers and
Labeling Requirements for All covers for
Swimming Pools, Spas and Hot Tubs –
AG105.2, AG105.5

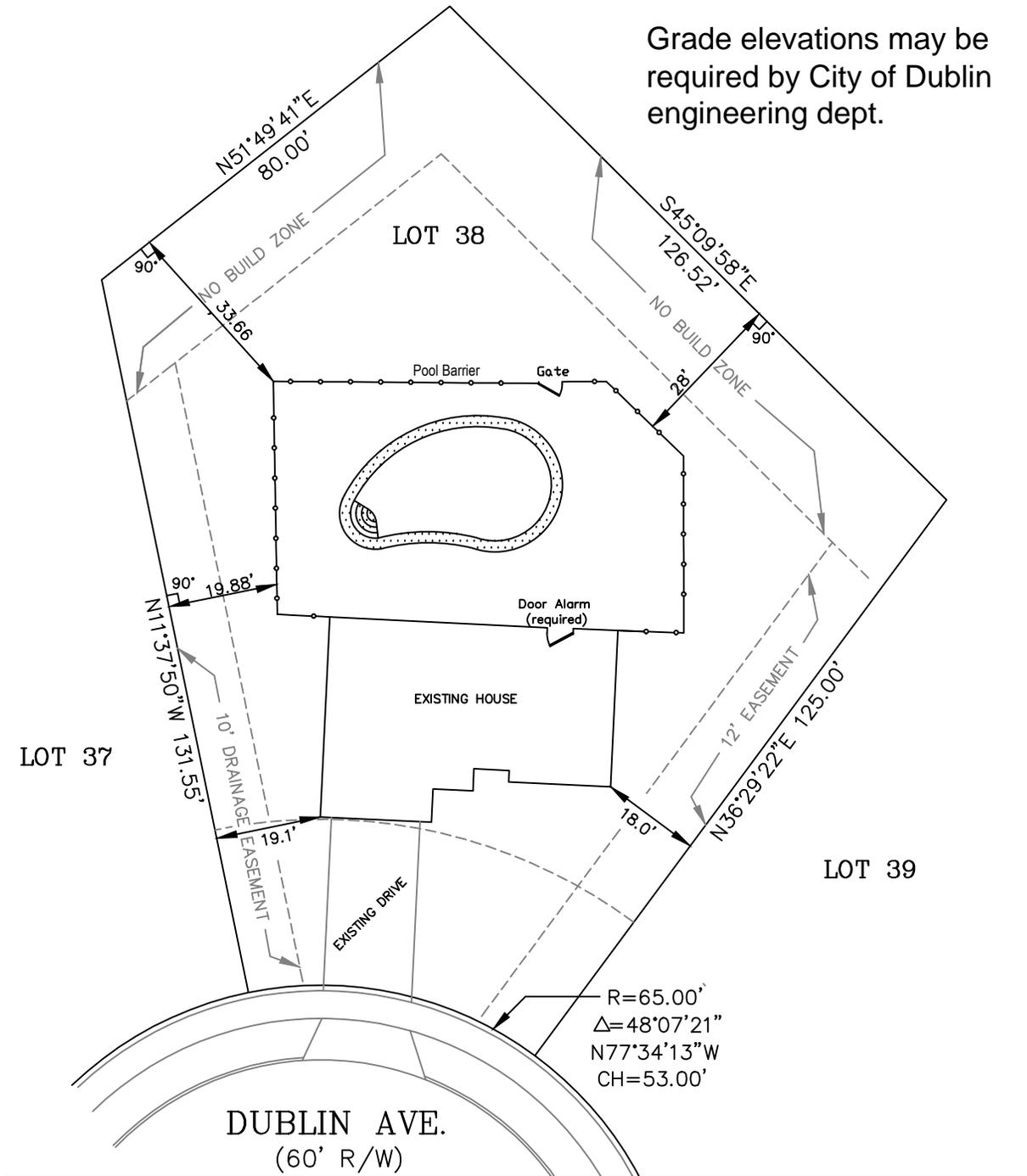
ASME

ASME A112.19.17 Manufacturers Safety
Vacuum Release Systems (SVRS) for
Residential and Commercial Swimming
Pools, Spa, Hot Tub, and Wading Pool –
AG1

Swimming Pool Site Plan

1. Provide the gross floor area of the principal use.
(livable area for residential use)
2. Provide the dimensions and area of the swimming pool water surface only.
3. Provide the cumulative area of existing accessory structures.
4. Provide lot coverage calculations.

Grade elevations may be required by City of Dublin engineering dept.



THIS SHEET SHOULD BE ON
A 8 1/2" X 14" AND TO SCALE

SAMPLE SITE PLAN



SCALE: 1" = 30'





Application For Residential Building Permit

Building Standards
5800 Shier Rings Road
Dublin Ohio 43016-1236
Phone: (614) 410-4670
Fax: (614) 410-6566

Property	Auditors Taxing District _____ Parcel Number _____ Subdivision _____ Lot Number _____ Address of Property _____		
Applicant	Applicant Name: _____ Phone: _____ _____ E-Mail: _____ Owner Name: _____ Phone: _____ Owner Address: _____ Contractor Name: _____ Phone: _____ Contractor Address: _____		
Property Information	Type of Improvement: <input type="checkbox"/> New House <input type="checkbox"/> Addition <input type="checkbox"/> Remodel <input type="checkbox"/> Deck <input type="checkbox"/> Basement Finish <input type="checkbox"/> Pool <input type="checkbox"/> Screened Porch <input type="checkbox"/> Other _____ Description of Work: _____ _____		
Property Information	Estimated Cost of Construction: _____ Number of Bedrooms: _____ Number of Baths: _____ Building Height: _____ Fire Sprinkler: <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, NFPA Ref. No. _____	HVAC System Type: <input type="checkbox"/> New <input type="checkbox"/> Existing Fuel Type: <input type="checkbox"/> Oil <input type="checkbox"/> Natural Gas <input type="checkbox"/> L.P. Gas <input type="checkbox"/> Electric <input type="checkbox"/> Solar <input type="checkbox"/> Other _____ No. of Gas Appliances/Unit _____	Electric <input type="checkbox"/> Less than 200 Amp <input type="checkbox"/> 200 Amp to less than 400 Amp <input type="checkbox"/> 400 Amp to less than 600 Amp Water <input type="checkbox"/> Public Water <input type="checkbox"/> Private Water Sewer <input type="checkbox"/> Public Sewer <input type="checkbox"/> Private Sewer
Signature	<p>The owner of this building and the undersigned, do hereby covenant and agree to comply with all the laws of the State of Ohio and the Ordinances of this jurisdiction, pertaining to the building and the buildings, and to construct the proposed building or structure or make the proposed change or alteration in accordance with the plans and specifications submitted herewith, and certify that the information and statements given on this application, drawings and specifications are to the best of their knowledge, true and correct.</p> <p>_____</p> <p style="display: flex; justify-content: space-between;"> Applicant's Printed Name Applicant's Signature </p>		
Office Use	Area: Basement: _____ 1 st Floor: _____ 2 nd Floor: _____ Garage: _____ Deck: _____ Other: _____	Application Number: _____ Issuing Authority: _____ Issuing Date: _____ Edition of the Residential Code: _____	Date Received: _____