The Board of Supervisors of Shelby County, Iowa, met pursuant to law and rules of said board in regular session at 9:00 a.m. in the Supervisors Chambers of the Shelby County Courthouse with the following members present:, Roger Schmitz, Chairman; Richard Ferry, Vice-Chairman; Gayle Petersen, and Marsha J. Carter, Clerk.

It was moved by Ferry, seconded by Petersen, to approve the agenda AND the following items contained in the Consent Agenda:

- A. Minutes of July 20, 2004
- B. Office Reports None
- C. Committee Reports

AYES: Schmitz, Ferry, Petersen

NAYES: None

It was moved by Petersen, seconded by Ferry, to approve the Claims of July 30, 2004, as listed in the Claims Register. AYES: Schmitz, Ferry, Petersen NAYES: None

The Board attended a multi-county Bio Terriorism Exercise at the Vets Auditorium from 9 to 10:30 a.m.

Now being the time for the public hearing on the 1st reading of Shelby County Ordinance No. 2004-3, RADON CONTROL METHODS, the Chairman did open the hearing. There were no written or oral comments. It was moved by Ferry, seconded by Petersen, to suspend the future readings of this ordinance. AYES: Schmitz, Ferry, Petersen NAYES: None. It was moved by Petersen, seconded by Ferry, to close the hearing and approve the following:

SHELBY COUNTY ORDINANCE NO. 2004-3 **RADON CONTROL METHODS**

AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF SHELBY COUNTY, IOWA, BY ADDING A NEW ORDINANCE TO BE CODIFIED AS TITLE V - PUBLIC ORDER, SAFETY AND HEALTH IN THE CODE OF ORDINANCES AND ENTITLED "RADON CONTROL METHODS"

BE IT ORDAINED BY THE BOARD OF SUPERVISORS, OF SHELBY COUNTY, IOWA:

That the Code of Ordinances of Shelby County, Iowa, be and the same is hereby amended by adding thereto a new Title V – Public Order, Safety and Health, to be entitled "Radon Control Methods" and to read as follows:

Title V – Public Order, Safety and Health

Radon Control Methods

SECTION ONE SCOPE

1.1 General. This ordinance contains requirements for new construction in Shelby County regarding radon-resistant construction.

SECTION TWO **DEFINITIONS**

2.1 General. For the purpose of these requirements, the terms used shall be defined as follows:

2.1.1 SUB-SLAB DEPRESSURIZATION SYSTEM (Passive). A system designed to achieve lower sub-slab air pressure relative to indoor air pressure by use of a vent pipe routed through the conditioned space of a building and connecting the sub-slab area with outdoor air, thereby relying on the convective flow of air upward in the vent to draw air from beneath the slab.

2.1.2 SUB-SLAB DEPRESSURIZATION SYSTEM (Active). A system designed to achieve lower sub-slab air pressure relative to indoor air pressure by use of a fan-powered vent drawing air from beneath the slab.

2.1.3 **DRAIN TILE LOOP.** A continuous length of drain tile or perforated pipe extending around all or part of the internal or external perimeter of a basement or crawl space footing.

2.1.4 **RADON GAS.** A naturally-occurring, chemically inert, radioactive gas that is not detectable by human senses. As a gas, it can move readily through particles of soil and rock and can accumulated under the slabs and foundations of homes where it can easily enter into the living space through construction cracks and openings.

2.1.5 **SOIL-GAS-RETARDER.** A continuous membrane of 6-mil (0.15 mm) polyethylene or other equivalent material used to retard the flow of soil gases into a building.

2.1.6 **SUB-MEMBRANE DEPRESSURIZATION SYSTEM.** A system designed to achieve lowersub-membrane air pressure relative to crawl space air pressure by use of a vent drawing air from beneath the soil-gas-retarder membrane.

SECTION THREE REQUIREMENTS

3.1 **General.** The following construction techniques are intended to resist radon entry and prepare the building for post construction radon mitigation, if necessary. These techniques are required in Shelby County.

3.2 **Subfloor preparation.** A layer of gas-permeable material shall be placed under all concrete slabs and other floor systems that directly contact the ground and are within the walls of the living spaces of the building, to facilitate future installation of a sub-slab depressurization system, if needed. The gas-permeable layer shall consist of one of the following:

- 1. A uniform layer of clean aggregate, a minimum of 4 inches (102 mm) thick. The aggregate shall consist of material that will pass through a 2-inch (51 mm) sieve and be retained by a ¹/₄-inch (6.4 mm) sieve.
- 2. A uniform layer of sand (native or fill), a minimum of 4 inches (102 mm) thick, overlain by a layer of strips of geotextile drainage matting designed to allow the lateral flow of soil gases.
- 3. Other materials, systems or floor designs with demonstrated capability to permit depressurization across the entire sub-floor area.

3.3 **Soil-gas-retarder.** A minimum 6-mil (0.15 mm) [or 3-mil (0.075 mm) cross-laminated] polyethylene or equivalent flexible sheeting material shall be placed on top of the gas-permeable layer prior to casting the slab or placing the floor assembly to serve as a soil-gas-retarder by bridging any cracks that develop in the slab or floor assembly and to prevent concrete from entering the void spaces in the aggregate base material. The sheeting shall cover the entire floor area with separate sections of sheeting lapped at least 12 inches (305 mm). The sheeting shall fit closely around any pipe, wire or other penetrations of the material. All punctures or tears in the material shall be sealed or covered with additional sheeting.

3.4 **Entry routes.** Potential radon entry routes shall be closed in accordance with Sections 3.4.1 through 3.4.10.

3.4.1 **Floor openings.** Openings around bathtubs, showers, water closets, pipes, wires or other objects that penetrate concrete slabs or other floor assemblies shall be filled with a polyurethane caulk or equivalent sealant applied in accordance with the manufacturer's recommendations.

3.4.2 **Concrete joints.** All control joints, isolation joints, construction joints and any other joints in concrete slabs or between slabs and foundation walls shall be sealed with a caulk or sealant. Gaps and joints shall be cleared of loose material and filled with polyurethane caulk or other elastometric sealant applied in accordance with the manufacturer's recommendations.

3.4.3 **Condensate drains.** Condensate drains shall be trapped or routed through nonperforated pipe to daylight.

3.4.4 **Sumps.** Sump pits open to soil or serving as the termination point for sub-slab or exterior drain tile loops shall be covered with a gasketed or otherwise sealed lid. Sumps used as the suction point in a

sub-slab depressurization system shall have a lid designed to accommodate the vent pipe. Sumps used as a floor drain shall have a lid equipped with a trapped inlet.

3.4.5 **Foundation walls.** Hollow block masonry foundation walls shall be constructed with either a continuous course of solid masonry, one course of masonry grouted solid, or a solid concrete beam at or above finished ground surface to prevent passage of air from the interior of the wall into the living space. Where a brick veneer or other masonry ledge is installed, the course immediately below that ledge shall be sealed. Joints, cracks or other openings around all penetrations of both exterior and interior surfaces of masonry block or wood foundation walls below the ground surface shall be filled with polyurethane caulk or equivalent sealant. Penetrations of concrete walls shall be filled.

3.4.6 **Dampproofing.** The exterior surfaces of portions of concrete and masonry block walls below the ground surface shall be damp proofed in accordance with Section R406 of the International Residential Code.

3.4.7 **Air-handling units.** Air-handling units in crawl spaces shall be sealed to prevent air from being drawn into the unit.

Exception: Units with gasketed seams or units that are otherwise sealed by the manufacturer to prevent leakage.

3.4.8 **Ducts.** Ductwork passing through a crawl space or beneath a slab shall be of seamless material unless the air-handling system is designed to maintain continuous positive pressure within such ducting. Joints in such ductwork shall be sealed to prevent air leakage.

3.4.9 **Crawl space floors.** Openings around all penetrations through floors above crawl spaces shall be caulked or otherwise filled to prevent air leakage.

3.4.10 **Crawl space access.** Access doors and other openings or penetrations between basements and adjoining crawl spaces shall be closed, gasketed or otherwise filled to prevent air leakage.

3.5 **Passive sub-membrane depressurization system.** In buildings with crawl space foundations, the following components of a passive sub-membrane depressurization system shall be installed during construction.

Exception: Buildings in which an approved mechanical crawl space ventilation system or other equivalent system is installed.

3.5.1 **Ventilation.** Crawl spaces shall be provided with vents to the exterior of the building. The minimum net area of ventilation openings shall comply with Section R408.1 of the International Residential Code.

3.5.2 **Soil-gas-retarder.** The soil in crawl spaces shall be covered with a continuous layer of minimum 6-mil (0.15 mm) polyethylene soil-gas-retarder. The ground cover shall be lapped a minimum of 12 inches (305 mm) at joints and shall extend to all foundation walls enclosing the crawl space area.

3.5.3 **Vent pipe.** A plumbing tee or other approved connection shall be inserted horizontally beneath the sheeting and connected to a 3 or 4 inch diameter (76 mm or 102 mm) fitting with a vertical vent pipe installed through the sheeting. The vent pipe shall be extended up through the building floors, terminate at least 12 inches (305 mm) above the roof in a location at least 10 feet (3048 mm) away from any window or other opening into the conditioned spaces of the building that is less than 2 feet (610 mm) below the exhaust point, and 10 feet (3048 mm) from any window or other opening in adjoining or adjacent buildings.

3.5.4 **Passive sub-slab depressurization system.** In basement or slab-on-grade buildings, the following components of a passive sub-slab depressurization system shall be installed during construction.

3.6.1 **Vent pipe.** A minimum 3 inch diameter (76 mm) ABS, PVC or equivalent gas-tight pipe shall be embedded vertically into the sub-slab aggregate or other permeable material before the slab is cast. A "T" fitting or equivalent method shall be used to ensure that the pipe opening remains within the sub-slab permeable material. Alternatively, the 3 inch (76 mm) pipe shall be inserted directly into an interior perimeter drain tile loop or through a sealed sump cover where the sump is exposed to the sub-slab aggregate or connected to it through a drainage system.

The pipe shall be extended up through the building floors, terminate at least 12 inches (305 mm) above the surface of the roof in a location at least 10 feet (3048 mm) away from any window or other opening into the conditioned spaces of the building that is less than 2 feet (610 mm) below the exhaust point, and 10 feet (3048 mm) from any window or other opening in adjoining or adjacent buildings.

3.6.2. **Multiple vent pipes**. In buildings where interior footings or other barriers separate the sub-slab aggregate or other gas-permeable material, each area shall be fitted with an individual vent pipe. Vent pipes shall connect to a single vent that terminates above the roof or each individual vent pipe shall terminate separately above the roof.

3.7 **Vent pipe drainage.** All components of the radon vent pipe system shall be installed to provide positive drainage to the ground beneath the slab or soil-gas-retarder.

3.8 **Vent pipe accessibility.** Radon vent pipes shall be accessible for future fan installation through an attic or other area outside the habitable space.

Exception: The radon vent pipe need not be accessible in an attic space where an approved roof-top electrical supply is provided for future use.

3.9 **Vent pipe identification.** All exposed and visible interior radon vent pipes shall be identified with at least one label on each floor and in accessible attics. The label shall read: "Radon Reduction System."

3.10 **Combination foundations.** Combination basement/crawl space or slab-on-grade/crawl space foundations shall have separate radon vent pipes installed in each type of foundation area. Each radon vent pipe shall terminate above the roof or shall be connected to a single vent that terminates above the roof.

3.11 **Building depressurization.** Joints in air ducts and plenums in unconditioned spaces shall meet the requirements of Section M1601 of the International Residential Code. Thermal envelope air infiltration requirements shall comply with the energy conservation provisions in Chapter 11. Firestopping shall meet the requirements contained in Section R602.8 of the International Residential Code.

3.12 **Power source.** To provide for future installation of an active sub-membrane or sub-slab depressurization system, an electrical circuit terminated in an approved box shall be installed during construction in the attic or other anticipated location of vent pipe fans. An electrical supply shall also be accessible in anticipated locations of system failure alarms.

SECTION FOUR IMPLEMENTATION

4.1 **General.** The Shelby County Board of Health is hereby granted the authority to enact policies, regulations and provide for the penalties in relation to this Title.

Passed this 3rd day of August, 2004.

AYES: Schmitz, Ferry, Petersen NAYES: None

The Shelby County Zoning Administrator, Charlie Trailer, presented a corrected plat of Schomers Subdivision" located in Section 31, Douglas Township, and proposed by Don Schomers as approved by the Shelby County Planning and Zoning Commission at its meeting Monday, August 2, 2004. The Auditor's staff found the errors on the plat as they were processing it. After discussion, it was moved by Ferry, seconded by Petersen, to give tentative approval to the corrected plat and direct Trailer to submit it to the City of Harlan for consideration as per the Shelby County Subdivision Ordinance with final approval contingent upon approval by the City. AYES: Schmitz, Ferry, Petersen NAYES: None

It was moved by Ferry, seconded by Petersen, to approve the following resolution:

RESOLUTION NO. 2004-27 WEED DESTRUCTION COSTS

BE IT RESOLVED that the Shelby County Board of Supervisors is going to assess \$550.00 in weed destruction costs against property located in Section 8 of Center Township, AKA the old dump ground.

WHEREAS, a hearing will be held on September 7, 2004, at 9 a.m. in the Supervisors Chambers of the Shelby County Courthouse. Anyone having objections or comments on this matter should appear at this time.

Passed and approved this 3rd day of August, 2004.

AYES: Schmitz, Petersen, Ferry NAYES: None

It was moved by Ferry, seconded by Petersen, to approve the following resolution:

SHELBY COUNTY RESOLUTION NO. 2004-28

RESOLUTION OF THE SHELBY COUNTY ADOPTING CERTAIN POLICIES, RULES AND REGULATIONS DURING THE PERFORMANCE OF THE COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM.

WHEREAS: Shelby County proposes a job creation through a startup business, Shelby County Cookers, LLC; and,

WHEREAS: Shelby County was awarded \$537,500 through the Iowa - Community Development Block Grant Program, Project #04-ED-004, in which to complete this work; and,

WHEREAS: Shelby County must adopt certain policies and abide by certain rules and laws during the performance of this project.

NOW THEREFORE BE IT RESOLVED BY THE BOARD OF SUPERVISORS OF SHELBY COUNTY

THAT: The Board of Supervisors of Shelby County hereby adopts the following policies and statements, and authorizes and directs the Mayor to sign the same:

- National Environment Policy Act of 1969
- Shelby County Code of Conduct
- Shelby County Procurement Policy
- Shelby County Drug Free Workplace Act of 1988
- Shelby County Anti-Lobbying Act of 1990
- Shelby County Equal Opportunity Policy
- Shelby County Excessive Force Requirements
- Shelby County Affirmative Fair Housing Policy
- Shelby County Residential Anti-Displacement and Relocation Assistance Plan
- Shelby County Real Property Acquisition Assurances

Adopted this 3rd day of August, 2004.

AYES: Schmitz, Petersen, Ferry NAYES: None

It was moved by Petersen, seconded by Ferry, to approve the proposal of Westlaw Publishing to continue to furnish the hard copies of the books we currently purchase for our Law Library and include an electronic version to be used by the County Attorney plus three other users at a savings of several hundred dollars, as recommended by the County Auditor. AYES: Schmitz, Ferry, Petersen NAYES: None

It was moved by Ferry, seconded by Petersen, to approve the following resolution:

ROAD VACATION RESOLUTION NO. 2004-29

The Board took final action on the road vacating hearing of October 7, 2003, Items 1,2 and 3, and heard a report from the County Engineer that all crossings, fences and banks were removed and section lines established.

IT IS THEREFORE ordered that the following sections of the Shelby County Secondary Road system are hereby vacated, the crossings abandoned and all right of way abandoned.

ITEM NO. 1 GROVE

A highway, the centerline of which is described as follows;

A section of road #75 as established December 9, 1871 the centerline of which is described as follows: Commencing at a point 1309.7 feet east along the section line east of the NE Corner Section 32-81-40 (Grove Township, Shelby County, Iowa) and running easterly along the section line and terminating at a point 169.9 feet west of the NE Corner 33-81-40.

ITEM NO. 2 GROVE

A highway, the centerline of which is described as follows

A section of road #752 as established November 9, 1903 the centerline of which is described as follows: Commencing at a point 1383.2 feet east of the NE Corner 33-81-40 (Grove Township, Shelby County, Iowa) thence running south distance of 2136.12 to the point of termination.

ITEM NO. 3 GROVE

A highway, the centerline of which is described as follows;

A section of road #824 as established March 4, 1925 the centerline of which is described as follows: Commencing at a point 1873.77 feet west and 185.94 north of the E1/4 Corner 33-81-40(Grove Township, Shelby County, Iowa) thence running north easterly a distance of 627.5 feet to the point of termination.

The Board took final action on the road vacating hearing of October 21, 2003 and heard a report from the County Engineer that all crossings, fences and banks were removed and section lines established.

IT IS THEREFORE ordered that the following sections of the Shelby County Secondary Road system hereby vacated, the crossings abandoned and all right of way abandoned.

A section of a highway part of road #306 as established April 7, 1879, the centerline of which is described as follows:

Beginning at a point on the west section line being 102.9 feet south of the NW Corner of Section 7, T-80N, R-40W and continuing southerly along said west section line a distance of 2554.5 feet, terminating at the W1/4 Corner of said section 7.

AYES: Schmitz, Ferry, Petersen NAYES: None

A secondary road project update was given by the Assistant to the County Engineer.

There being no further business appearing, the Chairman declared the meeting adjourned at 11:11 a.m.

Roger Schmitz, Chairman

ATTEST:

Marsha J. Carter Clerk to the Board of Supervisors

NOTE: These minutes are as recorded by the Clerk to the Board of Supervisors and are subject to Board approval at the next regular meeting.