AREAWAY OR VAULT CONSTRUCTION POLICY

Chapter 134 of the Saint Paul Legislative Code, entitled, "Projections and Encroachments" provides for the authorizing and issuing of permits to any person, firm or corporation desiring to construct an areaway, tunnel, coal-hole, trap-door, etc. on or under any of the public streets, alleys or public property of the City of Saint Paul. The Director of Public Works is therein authorized to issue a permit or permits for any of the structures above mentioned upon the applicant complying with certain conditions, among which it is required that the work shall be done under the supervision and direction of said Director and to his/her entire satisfaction and that construction of all area ways, trap-doors, tunnels or other openings on public streets, alleys or other public property must be constructed, installed and maintained or removed in each instance according to plans and specifications as required and approved by the Department of Public Works.

All applicants for permits to construct, reconstruct or remove areaways, trap-doors, tunnels or other openings on public streets or alleys are urged to read and acquaint themselves thoroughly with the Department of Public Works requirements as stated below, before submitting any applications.

1. The applicant shall submit a letter agreeing to pay for inspection and review costs along with the plans and specifications for the proposed construction to the Department of Public Works; Traffic Operations; 899 N. Dale St.; St Paul, MN 55103. Telephone No. (651) 487-7250.

2. The plans submitted shall include the following:

   a. Six sets of site plans drawn to an engineer's scale, showing the relation of the proposed construction to property lines, buildings, curbs, adjacent streets, utilities, existing light standards or any other facility that will be affected by the proposed construction, all to be properly dimensioned.

   b. Three sets of structural plans showing all details of any existing supporting structures, properly dimensioned, showing type and sizes of any structural steel, concrete beams (with existing reinforcing if possible),
shape and type of material in arches, type, thickness and heights of any
walls and condition of the existing structure.

c. Complete detailed plans, dimensioned and drawn to scale, for all
new structural work showing span length, bearing widths, thickness
of slabs, size and spacing of reinforcement bars, cover on
reinforcement bars and size and weight of any structural steel
members.

d. Plans submitted which make use of prefabricated steel or concrete
beams, trusses, purlins, doors, frames, etc. shall be accompanied by
drawings or data giving complete information on the prefabricated
members.

e. Design Data: Design Specification, including year of adoption.
Loading used, including any allowances for future additions. Maximum
allowable design stresses.

3. All structures shall be designed by or under the direction of a Registered
Structural Engineer or Registered Civil Engineer, experienced and proficient in
structural design, in accordance with 1981 Minnesota Statutes, Section
326.12, Subdiv. 3 and the following:

a. The latest addition of “Standard Specifications for Highway Bridges”
as adopted by the American Association of State Highway and
Transportation Officials, along with any interim specifications that have
been approved by the Committee on Bridges and Structures.

b. The Live Load to be applied to all structures located within public
street or alley rights-of-way shall be HS 25.

c. The Live Load to be applied to areaway or manhole emergency
escape covers having exposed area of 8 sq. ft. or less and which are
located within public sidewalks separated from the roadway surfaces
by a curb having a minimum height of 6 inches, may be a wheel load
having a minimum weight of 10,000 pounds instead of the HS 25
wheel load.

d. Reinforcing bars on the top slab of structures shall be epoxy coated.

e. It is highly recommended that waterproofing be applied to the top of the
structural slab especially where the vault is part of or directly below a
sidewalk. Where waterproofing is used a 2" minimum concrete topcoat is
required for sidewalks. No concrete topcoat is required where the
waterproofing has a layer of soil over it with the sidewalk or pavement
bearing directly on the soil.
4. All structure design calculations shall be submitted along with the drawings for the proposed construction.

5. The prints will be checked and stamped, “Approved”, or needed corrections and changes will be shown in red on all prints and the prints will be stamped, “Approved, except as shown in red”, after which one set of prints will be returned to the applicant.

6. The applicant shall submit three sets of prints of the drawings (corrected, if so required) for final approval.

7. After confirmation that the contractor is licensed, permit fees are paid, permit application is signed by the property owner and final drawings are approved, one set of prints stamped, “Approved”, will be returned to the applicant along with the permit for construction.

NO CONSTRUCTION SHALL START UNLESS THE ABOVE FORMAT IS FOLLOWED AND UNTIL FINAL APPROVAL AND THE PERMIT HAS BEEN ISSUED.

NOTE: In some instances, the design of sidewalks, areaways or structures which are proposed will depend on existing structures for a portion of their design capacity. Wherever the condition of the existing structure cannot be determined until a portion of the old structure has been removed, drawings might be approved and permits issued with the provisions that, after the existing structure which is to be reused has been exposed and examined by the Bridge Division, if the old structure is not in a condition to be relied upon or adaptable for proposed work, new plans will be submitted in the same manner as stated above.

Closure walls inside the private property line and some work such as electrical, plumbing, heating/ventilating in public right-of-way will be under the jurisdiction of the Department of Safety and Inspections (DSI) and additional permits and associated costs will be handled by them. In the event that Public Works issues a Contract, Sidewalk Permit or an Ordinance Permit, DSI permits and costs will be noted and the Contractor or Permittee will be responsible for them. Public Works will inform the Contractor of subsequent DSI directives.

In instances where areaways, trap-doors, tunnels or other openings are being constructed by a Utility Company wherein standard plates for manhole, roofs, walls and floors are used, it will not be necessary to submit plans and design calculations for the structures after they have once been checked and approved as to meeting the requirements of Paragraph 3.
To avoid any unnecessary delay in obtaining permit approval, the above requirements numbered 1, 2, 3 and 4 should be strictly followed; and in instances where unusual or non-standard designs are to be applied, it is suggested that the applicant contact and confer with the Bridge Division at (651) 266-6180 prior to completing their design.

Vault construction by public utility companies requires a utility permit rather than an encroachment permit. Utility permit applications shall be submitted to the Department of Public Works; Traffic Operations; 899 N. Dale St.; St. Paul, MN Tel. No. (651) 487-7250.

Bruce Beese
Director

Date: 1-29-10