

Before the D.C. Zoning Commission

September 28, 2017

Case 17-11: Proposed Rezoning of Penn-Branch Shopping Center Statement of O Street Neighbors and Friends in Opposition to Proposed Rezoning Based on Groundwater and Unstable Soil Conditions

O Street Neighbors and Friends is an unincorporated association of homeowners who live within 200 feet of the proposed property proposed to be rezoned or in the immediately surrounding neighborhood. This statement in opposition is based on the unsuitability of the Penn-Branch site for development at the level allowed in MU-4 owing to underground water and unstable soil conditions in and around the site. As of this date, at last three commenters, residents of O Street, have stated the existence of persistent flooding and other water problems and have requested an environmental assessment of the area before any decision is made on rezoning. We believe the site should be rezoned as a Neighborhood Overlay (NC) parcel that takes into account and avoids its particular environmental characteristics.

Ground water and soil instability problems are too significant to wait to be addressed when a building permit is sought. At that point the focus will be on getting the project done. This is the appropriate time for the Commission to consider appropriate zoning in light of all relevant factors, including the geological environment.

Water issues on the site and in the surrounding neighborhood are of long-standing. A 1995 Washington Post article noted, for example, "Penn-Branch and Hillcrest have joined with other neighborhoods surrounding them to create a stronger lobbying coalition to deal with common problems, such as the underground water flow that is wearing away the infrastructure of the sewage system and gas lines."¹

As they will testify, the O Street residents generally suffer from wet basements and consequently use sump pumps. The front parking lot of the Penn-Branch shopping center (along Pennsylvania Avenue) was rebuilt within the last year to address cracks and leaking following years of persistent flooding and standing water. The Penn-Branch shopping center site is separated by a low retaining wall: the homes on the south side of O Street are several feet lower than the Penn-Branch site. MU-4 zoning will allow an owner to build 15 feet away from the edge of the retaining wall. Given the amount of

¹ Deneen L. Brown, *Discovering the Pleasure of Living in Southeast*, Washington Post (May 20, 1995) (quoting area resident Paul Savage) < <http://www.washingtonpost.com/wp>>.-

water problems present with the very low existing density in Penn-Branch, the adverse impact of a 65-foot building (including penthouse) is a foregone conclusion.

The most serious example of instability is the O Street Wall, immediately behind the Penn-Branch shopping center. The following excerpt from the D.C. Zoning Map shows the proximity of O Street to the Penn-Branch site.



A 2016 report prepared for the DC Department of Transportation describes soil and water conditions in and around O Street, beginning with a historical overview.² The report states in part:

Residential development on Highwood Drive SE (Highwood Drive) began in the 1940s, with majority of the residences being completed by the 1950s. Backyards of the residences on the south side of Highwood Drive initially terminated at a drainage creek that followed the general layout of the existing O Street SE (O Street) right-of way. O Street was constructed during the 1950s. It was graded to follow the natural slope that ran from Highwood Drive to the creek. The

² Somat Engineering, Inc. Report to District Department of Transportation, Transportation Operations Administration, Asset Management Division (Oct. 11, 2016) at p.12 ("Somat Engr. Report").

creek was redirected and filled in prior to the construction of O Street, which adversely impacted the drainage of the surrounding area.

Slope instabilities along O Street initiated almost coincidental with the construction of O Street. During the late 1970s, the District of Columbia decided that permanent stabilization of the unstable slopes was required; and had an anchored slurry wall constructed in 1978 to retain the earth from further movement. A new drainage system was also installed both above and below the slurry wall to aid in redirecting groundwater and surface runoff from the surrounding areas....

During construction, however, the ground anchor bearing plates were visually showing signs of failures once they were stressed. Eventually, the initial bearing plates were replaced with larger ones soon after construction. Corrosion protection was also applied to the anchor heads after they were installed and stressed. During 1985, however, excessive ground movements were noted along an approximately 150-foot stretch of the slurry wall. Those movements continued until maximum deflections in the order of 13 feet were recorded during the spring of 1996. Ground anchors in the movement areas became overloaded and failed causing a global stability failure with a distinct slide plane reaching completely under the toe of the slurry wall.

Somat Engr. Report, p.12.

In 1999, after protracted efforts by neighborhood residents -- and suggestions by some members of the D.C. City Council that houses affected by the Wall's failure should be condemned -- the Council appropriated \$3.5 million to rebuild the O Street Wall. See Emergency Council Resolution 13-111, submitted as Attachment A. To forestall future such problems, a related piece of legislation, authorized the Mayor "to prohibit activities in Square S-5542, S.E. which may contribute to the soil erosion and sedimentation problems in Square S-5542, S.E." See O Street Wall Restoration Temporary Act of 1999", sec. 3, submitted as Attachment B. The firm that designed and built the O Street Wall following the 1996 collapse advised the District that no building permits should be issued for land immediately below the wall without DCRA technical review. In 2006 permits were issued, without prior view, to build a two-unit duplex. DCRA issued stop-work orders and ultimately revoked the permits.³

³ The 2016 DDOT Report states in this regard:

Approximately five years following the completion of the replacement wall, an excavation was made at 3204 and 3206 O Street, SE for a proposed two-story residential duplex. Despite the fact that the Design-Builder had requested DCRA titles for new construction on

This incident demonstrates the instability of the soil in Square 5542. If DCRA refused to permit a duplex for fear of disturbing the soil, what could be the impact of an MU-4 building constructed to its maximum permissible input less than one block away?

The O Street Wall is the most prominent, but far from the only place, where water and erosion problems have occurred. Pennsylvania Avenue Baptist Church, at 30th St. and Pennsylvania Ave. -- two blocks away -- had to make additional repairs soon after resurfacing its parking lot. The Church of Jesus Christ, at 3456 Pennsylvania Avenue SE, built a large addition several years ago and subsequently was unable to use its parking lot for more than a year because of several inches of standing water.

In light of the known issues of soil instability and storm and groundwater issues prevalent in this area, it is irresponsible -- without further information -- to approve a map amendment authorizing development at an intensity that the land simply may not bear. Before the Commission makes its decision, we ask for assessments from DC Department of the Environment and DC Regulation Administration regarding how full build-out at MU-4 will affect O Street and adjoining properties. We believe you will conclude that an NC zone with -- at a minimum -- greater rear setbacks is called for here.

Additional photographs follow.

properties fronting O Street beneath the wall to be flagged such that **all future excavation is subject for technical review prior to any building permits being issued for construction**, such was not the case. Concerned neighborhood residents contacted Mr. Tom Brown (now with Somat) of Thomas L. Brown Associates, PC (TLB), DDOT's O St wall project geotechnical consultant, to alert him of the incident.

TLB, in turn, notified DDOT and DCRA representatives of the incident, and DCRA, in turn, requested GeoConcepts Engineering, Inc. (i.e.: the then site developer's engineer) to review and explain the situation. A considerable portion of the two lots in question was undercut to depths approaching 25-feet below existing grades in front of the wall. This excavation remained opened, essentially unprotected and exposed, for nearly a full year before DCRA ultimately rescinded their permits and directed the lots be restored to post construction conditions. While TLB did maintain contact with several of the residents throughout, they did not witness any backfilling or regrading activities.

DDOT Report, p. 13.

O STREET SE RETAINING WALL LOCATION MAP

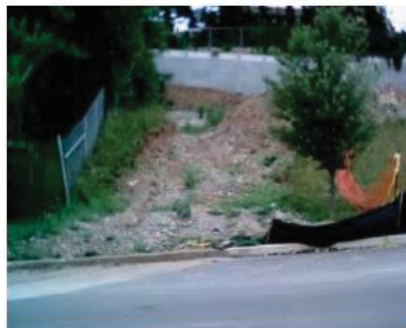
RETAINING WALL: O Street SE Retaining Wall

LOCATION: Between Highwood Drive SE and O Street SE, Washington, DC





Page 15 of DDOT Inspection Report



062706 Street View @ 3204 O St SE



062706 Street View @ 3206 O St SE

Excavations for subsequently revoked building permits.



082707 West View of 3206 O St SE

Page 15 of DDOT Inspection Report. Excavations for subsequently revoked building permits at the foot of the Wall.

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