

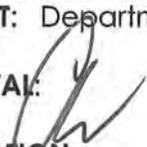


## CITY of NOVI CITY COUNCIL

Agenda Item 6  
January 28, 2013

**SUBJECT:** Consideration of a request from Darren Yanke for a variance from Section 11-278(a) of the Design and Construction Standards, which requires pedestrian safety paths to be constructed of concrete, to allow the use of brick pavers for a sidewalk within the public right-of-way. (The subject property occupies parcel number 22-35-280-001 and is located at 41621 Hampshire Street).

**SUBMITTING DEPARTMENT:** Department of Public Services, Engineering Division <sup>AS</sup> <sub>BTC</sub>

**CITY MANAGER APPROVAL:** 

**BACKGROUND INFORMATION:**

Darren Yanke, the property owner at 41621 Hampshire, is requesting a Design and Construction Standards Variance to allow the use of brick pavers as a paving material for a public pedestrian safety path (sidewalk) within the public right-of-way, specifically for the portion of sidewalk that traverses Mr. Yanke's drive approach. The variance is being requested in response to a right-of-way violation issued on October 8, 2012 for work completed within the right-of-way without a permit. The property owner subsequently filed a right-of-way permit application for the work, which included a residential drive approach and a portion of the sidewalk. The use of brick pavers for a sidewalk is not permitted by Section 11-278(a) of the Design and Construction Standards (see attached ordinance), which specifically requires the use of concrete for sidewalks. The applicant has requested the variance to receive a permit for the completed work, including the public sidewalk constructed of brick pavers (see attached photos).

In the attached letter, the applicant contends that that the brick paver sidewalk will be stable and references other locations in Novi with a similar installation of brick pavers for sidewalks within the public right-of-way. However, the referenced locations are either outside of the public right-of-way and therefore not germane; or within the right-of-way as a design feature (such as in the Town Center Area) where they are used as a decorative border rather than a replacement for a sidewalk.

The use of concrete as a construction material for pedestrian safety paths functions to provide lasting durability and minimize the future maintenance of sidewalks. The use of brick pavers as a construction material for a public pedestrian safety path substantially deviates from the performance of the concrete sidewalk cross-section because brick pavers are more prone to settlement and heaving, both of which will impact the uniformity of the surface and increase the potential for trip hazards. Plus, the proposed material provides significantly more likelihood that a vertical obstacle (i.e. a trip hazard) may occur over time. In addition, the City of Novi's adopted Americans with Disabilities Act Compliance and Transition Plan looks to minimize the number of existing or potential deficiencies related to cross-slope and vertical obstacles, therefore the request would be in conflict with the plan. For these reasons, the Engineering Division is recommending denial of this request for variance from the Design and Construction Standards.

The variance request was reviewed by other City departments in addition to DPS's Engineering Division. Both Community Development and DPS's Field Operations Division recommend denial of the DCS Variance Request. Community Development recommends denial on the basis that the installation may be detrimental to the public because it was not approved or inspected prior to installation and is more susceptible to displacement and heaving than standard concrete. DPS's Field Operations Division recommends denial because of additional maintenance concerns associated with abating hazards associated with non-standard construction materials such as brick.

While the City Attorney has noted that there is no legal impediment to granting the DCS variance, they concur with the Engineering Division's evaluation of the potential future issues regarding increased maintenance and liability concerns to the City. Their letter notes that if a variance is granted, the applicant must enter into a hold harmless agreement with the City stating that the applicant will indemnify and hold harmless the City for any damages or injuries to third parties resulting from the use of alternative construction materials, and for any damage to the brick pavers caused by any maintenance work performed in the right-of-way. The hold harmless agreement would include a requirement to add the City as an additionally insured on the homeowners insurance and the agreement would need to run with the land—requirements that could affect the transfer of the land in the future and leave future homeowners otherwise unaware of this deviation and associated insurance requirements.

The City's Landscape Architect, and Fire Department all take no exception to the DCS Variance Request.

**RECOMMENDED ACTION:** Denial of a request from Darren Yanke for a variance from Section 11-278(a) of the Design and Construction Standards, which requires pedestrian safety paths to be constructed of concrete, to allow the use of brick pavers for a sidewalk within the public right-of-way for the following reasons:

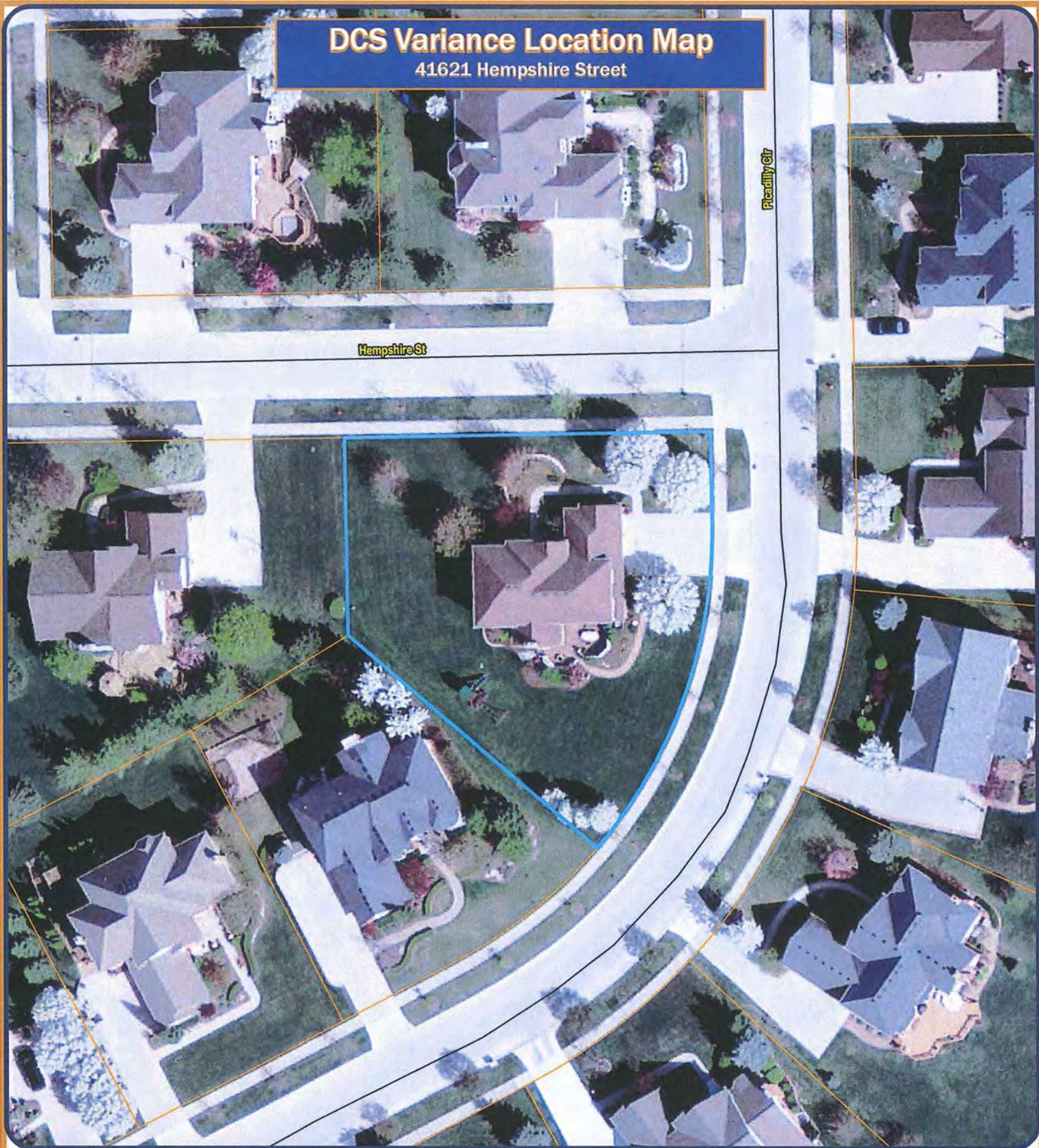
1. The performance of brick pavers as an alternative to concrete substantially deviates from the performance that would be obtained by strict enforcement of the standards related to heaving and settling of the sidewalk, compliance with the Americans with Disabilities Act Compliance and Transition Plan, and required long-term maintenance,
2. The use of brick pavers could be detrimental to public safety should heaving and settling occur that would create potential trip hazards,
3. The requirement for sidewalks to be constructed of concrete will not result in an exceptional, practical difficulty to the applicant as it has been applied uniformly throughout the City.

	1	2	Y	N
<b>Mayor Gatt</b>				
<b>Mayor Pro Tem Staudt</b>				
<b>Council Member Casey</b>				
<b>Council Member Fischer</b>				

	1	2	Y	N
<b>Council Member Margolis</b>				
<b>Council Member Mutch</b>				
<b>Council Member Wrobel</b>				

# DCS Variance Location Map

41621 Hampshire Street

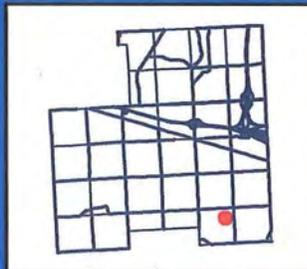


Map Author: A. Wayne  
Date:  
Project:  
Version #:

Amended By:  
Date:  
Department:

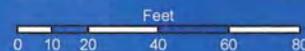
#### MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.



## City of Novi

Engineering Division  
Department of Public Services  
26300 Lee BeGole Drive  
Novi, MI 48375  
cityofnovi.org



1 inch = 54 feet

Photos of Installed Brick Pavers through the Sidewalk  
41621 Hampshire St



**Sec. 11-278. - Design considerations.**

- (a) *Materials.* Pedestrian safety paths shall be constructed in concrete. The materials shall meet the requirements specified in the sections of the state department of transportation's "Standard Specifications for Construction" designated as follows:
- (1) Portland Cement Concrete;
  - (2) Granular Material Class II;
  - (3) Premolded Joint Fillers;
  - (4) Concrete Curing Materials.
- (b) *General.*
- (1) Pedestrian safety path grades shall be set to match the general profile on the traveled road, and elevations shall blend in with the general grading plan of the abutting property and shall not impede drainage to presently established storm structures, ditch drainage, or site drainage swales.
  - (2) Pedestrian safety path construction shall include grading of the existing land parallel to the sidewalk. Drainage on the street side shall be provided by slope grading to the existing ditch or to the back of curb. Typical cross sections shall detail the work in these areas.
  - (3) At street intersections where open ditch drainage prevails, a 12-inch minimum size or larger sixteen-gauge corrugated metal culvert pipe shall be installed and backfilled with Granular Material Class II (MDOT specification) prior to the walk construction. The culvert pipe shall have sufficient length to provide a walk five (5) feet wide with a grass area two and one-half (2 ½) feet wide each side at top, and a maximum slope of one (1) foot vertical on three (3) feet horizontal to the ditch flow line. The entire area of the filled ditch section, from the ditch bottom to the edges of the new safety path, shall be protected with sod. The safety path shall terminate at the shoulder point, eight (8) feet from the edge of the traveled roadway, or at the back of curb.
  - (4) At drive or street crossings (residential, commercial or otherwise), the pedestrian safety path shall be sloped to meet the drive or street entrance grade. Detectable warning surfaces are required at all barrier free ramps and hazardous vehicular ways. Detectable warning surfaces must be manufactured of a material approved by the city engineer. The barrier-free ramps shall comply with current MDOT specifications for ADA Sidewalk Ramps and the Americans with Disabilities Act.
  - (5) Pedestrian safety paths shall be located within one (1) foot of future rights-of-way lines, unless otherwise directed by the city engineer, for the enhancement of natural resources, or when the topography, existing landscaping, or an existing residence warrants an alternate location. Pedestrian safety paths shall be located a minimum of five (5) feet from back of curb for a curbed roadway, or twelve (12) feet from edge of pavement of an uncurbed roadway. Pedestrian safety paths should be constructed no closer than three (3) feet from fences, trees or other permanent above grade obstruction, except as otherwise approved by the city engineer.
  - (6) Pedestrian walk cross-overs. Pedestrian walk cross-overs shall be provided at the intersections to public residential streets in accordance with Figure VIII-J, within article VIII of this chapter.

## MEMORANDUM



**TO:** BRIAN COBURN, ENGINEERING MANAGER  
**FROM:** ADAM WAYNE, STAFF ENGINEER  
**SUBJECT:** 41621 HEMPSHIRE BRICK PAVERS THROUGH SIDEWALK  
**DATE:** JANUARY 14, 2012

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The applicant has filed a Design and Construction Standards Variance Request for the use of brick pavers as a paving material for a public pedestrian safety path within the Right-of-Way. The Variance Request proposed an 18-inch composite cross-section consisting of brick pavers placed on  $\frac{3}{4}$  inches of sand on top of 5 inches of 21AA Crushed Stone and 10 inches of 1" x 3" crushed concrete with geotextile fabric in between the each base layer. The Design and Construction Standards (DCS) Section 11-278(a) that Pedestrian safety paths shall be constructed in concrete. The applicant has requested the variance in response to a ROW violation issued on October 8, 2012 for work completed within the ROW without a permit. Part of the work completed was a brick paver driveway that removed the existing concrete pedestrian safety path.

On March 7, 2011, City Council voted to approve the Resolution adopting the Americans with Disabilities Act Compliance Transition Plan for public sidewalks and pathways. This Transition Plan functions to guide the City in efforts to bring public facilities in compliance with the ADA. One of the compliance characteristics referenced in the Transition Plan is the absence of vertical barriers. Section 303.2 Vertical of the 2010 ADA Standards for Accessible Design states that "Changes in level of 1/4 inch (6.4 mm) high maximum shall be permitted to be vertical." This standard applies to all changes in level on floor and ground surfaces.

The use of Portland Cement Concrete as a construction material for pedestrian safety paths functions to minimize both the locations where a change in level occurs and effort required to correct changes in level that fall out of compliance. The use of brick pavers as a construction material for a public pedestrian safety path is in direct contrast with the Americans with Disabilities Act Compliance Transition Plan for public sidewalks and pathways. Brick pavers deviate substantially from the performance of required DCS cross-section. The proposed material provides significantly more points where a vertical obstacle may occur over time. Requiring the applicant to maintain the brick pavers through a license agreement is difficult to enforce, consuming City resources that could otherwise be allocated to bring existing ADA deficiencies into compliance. In addition, the applicant has not demonstrated how complying with the DCS would result in a substantial hardship. For these reasons, the Engineering Division is recommending denial of the request for variance from the Design and Construction Standards.



JOHNSON ROSATI SCHULTZ JOPPICH PC

34405 W. Twelve Mile Road, Suite 200 ~ Farmington Hills, Michigan 48331-5627  
Phone: 248.489.4100 | Fax: 248.489.1726

Elizabeth Kudla Saarela  
esaarela@jrsjlaw.com

www.johnsonrosati.com

January 14, 2013

Adam Wayne, Engineering  
City of Novi  
45175 Ten Mile Road  
Novi, Michigan 48375

Re: **41621 Hampshire – Sidewalk and Driveway Apron Construction Materials**  
Variance from Design and Construction Standards

Dear Mr. Wayne:

Our office has reviewed the proposed request for a variance from the City's Design and Construction Standards which would permit the property owner to maintain a sidewalk and driveway apron within the public road right-of-way made of brick pavers. In order to keep the brick pavers, the applicant requires a waiver from Sections 11-278 (a) and 11-239 (b) of the City of Novi Code, which states in relevant part:

**Sec. 11-278. - Design considerations.**

- (a) Materials. Pedestrian safety paths shall be constructed in concrete. The materials shall meet the requirements specified in the sections of the state department of transportation's "Standard Specifications for Construction" designated as follows:
- (1) Portland Cement Concrete;
  - (2) Granular Material Class II;
  - (3) Premolded Joint Fillers;
  - (4) Concrete Curing Materials.

**Sec. 11-239. - Driveways and parking lots**

- (b) Design standards.

- (1) Driveway and parking lot surfacing requirements. The entire parking area including parking spaces and maneuvering lanes are required to be hard-surfaced and curbed. Exceptions will be made for private utility service driveways for facilities providing an accessory use. Minimum pavement standards include: For asphalt pavement, three (3) inches asphalt over eight (8) inches aggregate base; for concrete pavement, six (6) inches concrete over properly compacted subgrade. Core reports are required to be provided by the contractor for asphalt paving at the direction of the city engineer. All curbing must be concrete; no asphalt curbs will be allowed.

The applicant indicates that the need for the waiver results from aesthetic concerns that the brick pavers look better and still have adequate structural integrity to meet the intent of the ordinance.

Section 11-10 of the Ordinance Code permits the City Council to grant a variance from the Design and Construction Standards when a property owner shows all of the following:

- (c) A variance may be granted when all of the following conditions are satisfied:
  - (1) A literal application of the substantive requirement would result in exceptional, practical difficulty to the applicant;
  - (2) The alternative proposed by the applicant shall be adequate for the intended use and shall not substantially deviate from the performance that would be obtained by strict enforcement of the standards; and
  - (3) The granting of the variance will not be detrimental to the public health, safety or welfare, nor injurious to adjoining or neighboring property.

In the event that Community Development and the Department of Public Safety review and approve the proposed plan from an access and public safety standpoint, and City Council finds that the standards for a variance or waiver have been met, our office sees no legal impediment to granting the variance, ***subject to our recommendation that the Applicant enter into a hold harmless agreement with the City stating that the Applicant will indemnify and hold harmless the City for (1) any damages or injuries to third parties resulting from the use of alternative construction materials, and (2) for any damage to the brick pavers caused by the City maintenance of roads or sidewalk.***

Adam Wayne, Engineering  
January 9, 2013  
Page 3

If you have any questions regarding the above, please call me.

Very truly yours,

JOHNSON, ROSATI, SCHULTZ & JOPPICH, P.C.



Elizabeth Kudla Saarela

EKS

Enclosure

C: Maryanne Cornelius, Clerk (w/Enclosure)  
Charles Boulard, Community Development Director (w/Enclosure)  
Matt Wiktorowski, Field Operations (w/Enclosure)  
Brian Coburn, Engineering Manager (w/Enclosure)  
David Beschke, Landscape Architect (w/Enclosure)  
Jeff Johnson, Fire Department (w/Enclosure)  
Thomas R. Schultz, Esquire (w/Enclosure)



cityofnovi.org

**CITY OF NOVI  
Engineering Department**

**MEMORANDUM**

**To:** Charles Boulard, Community Development  
David Beschke, Landscape Architect  
Beth Saarela, Attorney  
Jeff Johnson, Fire Department  
Matt Wiktorowski, Filed Ops

**From:** Adam Wayne, Engineering

**Date:** January 7, 2013

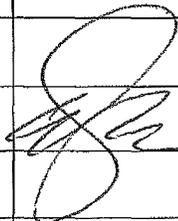
**Re:** Variance from Design & Construction Standards  
41621 Hampshire

Attached is a request for a Variance from the Design and Construction Standards. Please review for a future City Council Agenda. In accordance with Section 11-10 of the Ordinance, the following three conditions **must be met** for a variance to be granted by Council:

- 1) A literal application of the substantive requirement would result in exceptional, practical difficulty to the applicant;
- 2) The alternative proposed by the applicant would be adequate for the intended use and would not substantially deviate from the performance that would be obtained by strict enforcement of the standards; and,
- 3) The granting of the variance would not be detrimental to the public health, safety or welfare, nor injurious to adjoining or neighboring property.

Following review of the variance, check the appropriate box below and provide your signature. If you have no basis for recommending either approval or denial, please check the "No Exceptions Taken" box. If you are recommending approval or denial of the request, **please also complete the matrix on the reverse of this form.** Please return to my attention by **January 14, 2013.**

**ROUTING**

Delivered To	Returned On	RECOMMENDED ACTION			Signature
		Approval*	Denial*	No Exceptions Taken	
Brian Coburn (Engineering)					
Charles Boulard (Comm Dev.)					
David Beschke (Landscape Arch)					
Beth Saarela (City Attorney)				✓	
Jeff Johnson (Fire Department)					
Matt Wiktorowski (Field Ops)					

To: City of Novi Engineering Division  
26300 Lee BeGole Dr.  
Novi MI 48375

January 4, 2013

From: Darren Yanke  
41621 Hampshire St.  
Novi MI 48375

To whom it may concern,

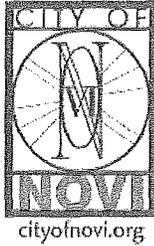
We have an issue that needs to be resolved. We have not been told whether the ordinance violation of our continuous brick driveway is a matter of aesthetics or a matter of 'method of construction'.

In regards to this matter, the Novi Building Department has approved our driveway apron and now the only issue remaining is the continuous brick through the city sidewalk.

Aesthetically speaking, the driveway looks better as a continuous material throughout. As far as the method of construction, I have provided a detailed drawing of the excavation, base preparation, leveling pad, and brick. This method was approved by our engineer, Jeff Anagnostou. Mr. Anagnostou was present during the construction and approved the process. I have used this method for fifteen years for driveways and approaches and have great results with the stability. I have attached some pictures of different locations in Novi that utilize brick for city sidewalks, wheelchair entries, roadways and driveways. There are also numerous homes around Novi that have used continuous brick for driveways and front walkways (also attached).

Please feel free to contact me with any further questions. Thank you for your time and I look forward to your response.

Darren Yanke  
248-730-2881



## Request for Variance Design and Construction Standards

### Applicant Information

Name: DARREN YANKE  
Address: 41621 HEMPSHIRE  
NOVI, MI, 48375  
Phone No: 248-730-2881

### Engineer Information

Name: JEFF ANAGNOSTOU  
Address: 15798 RIVERSIDE  
LIVONIA, MI 48154  
Phone No: 734-293-5077

### Applicant Status (please check one):

- Property Owner       Developer       Developer / Owner Representative  
 Other \_\_\_\_\_

Project Name DARREN & BRIDGET YANKE  
41621 HEMPSHIRE NOVI, MI 48375  
Project Address/Location

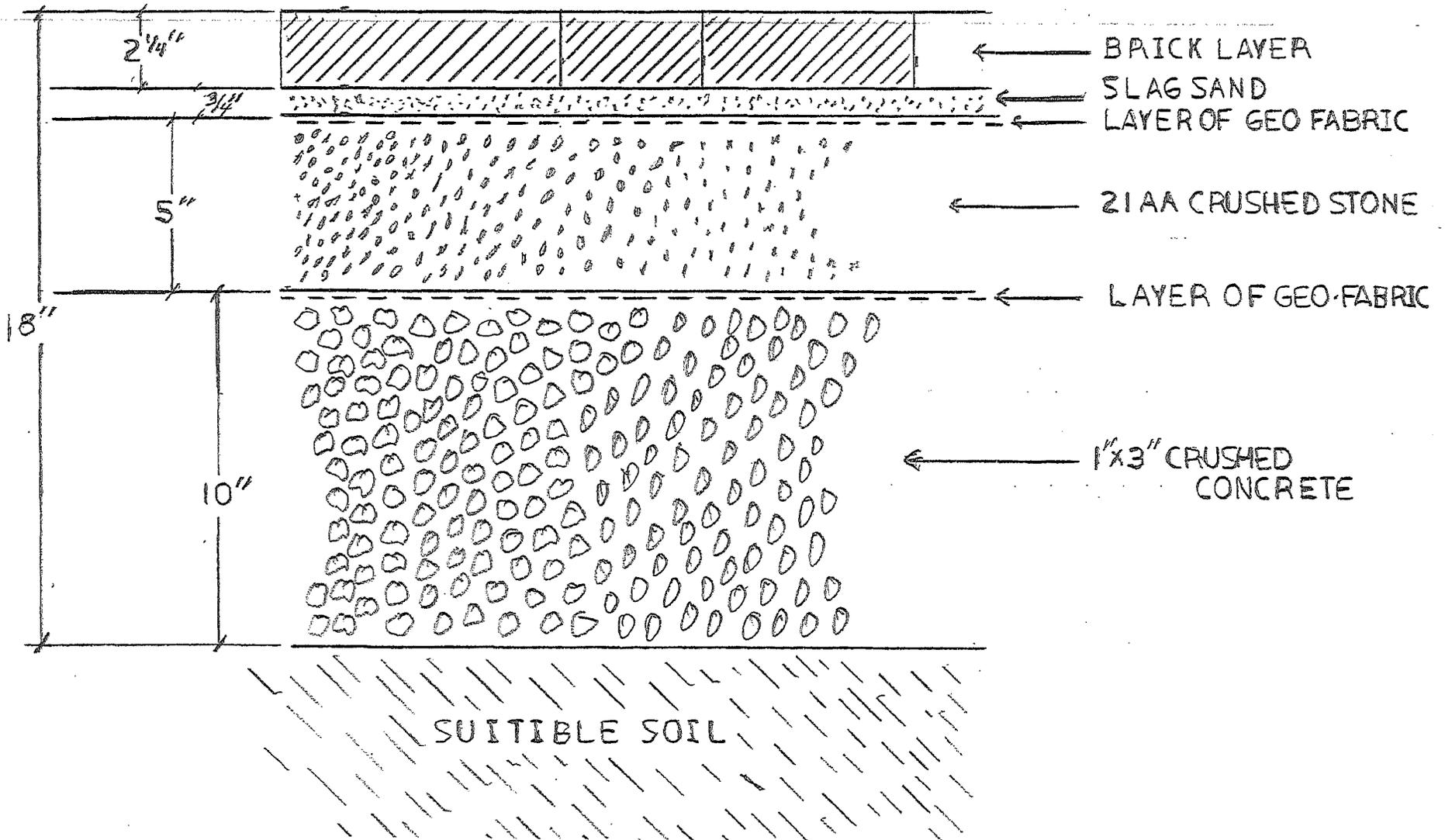
Variance Request ALLOW BRICK PAVEMENT SIDEWALK TO REMAIN  
Justification (attach additional pages if necessary) IN PLACE

### INTERNAL USE

Date Submitted: \_\_\_\_\_  
Code Section from which variance is sought: \_\_\_\_\_  
Submittal Checklist:  Twelve (12) sets of plans (folded and to scale)  
 One (1) copy of plan on 8.5 x 11 size paper  
 \$100 Filing Fee

# YANKE RESIDENCE

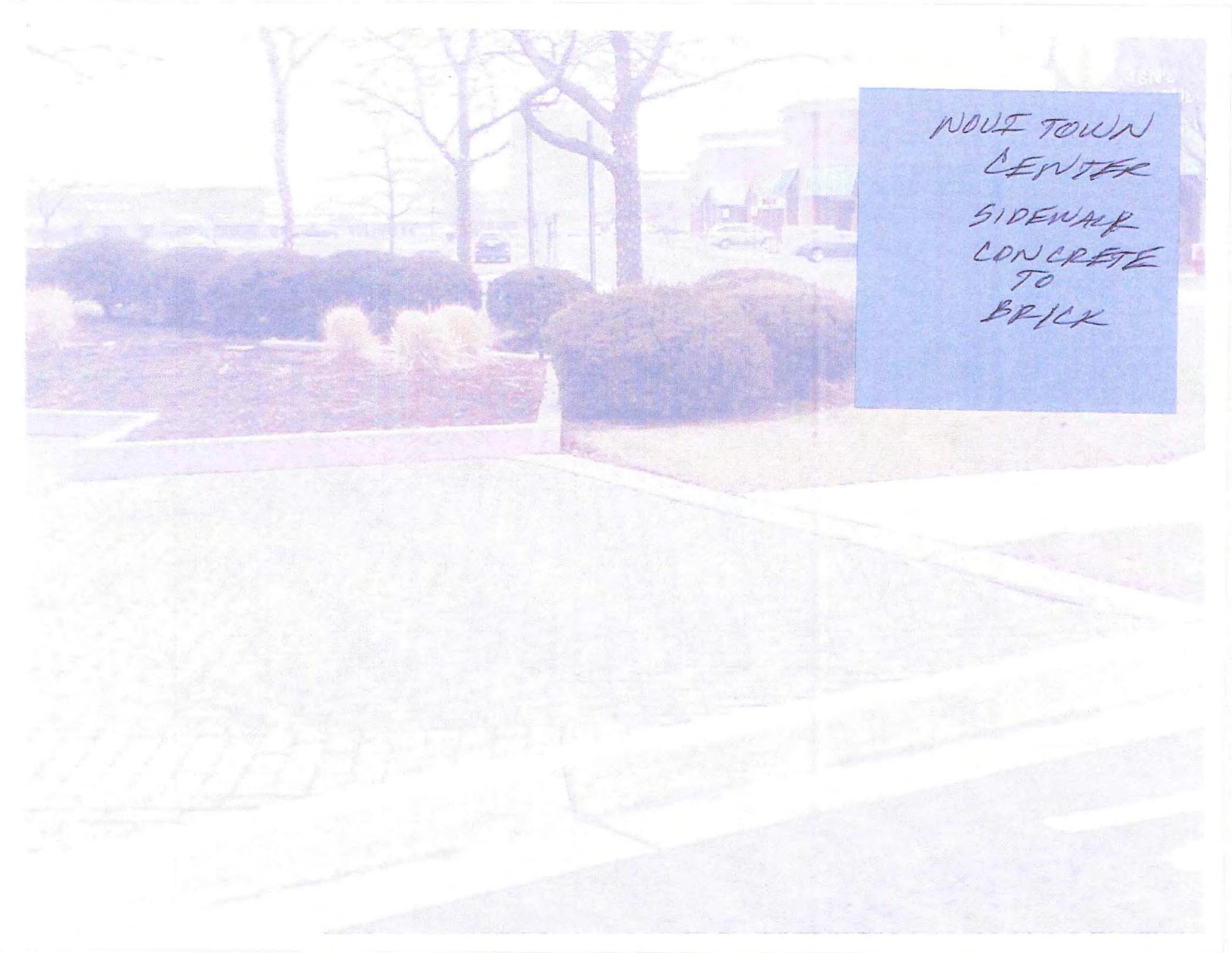
## METHOD OF CONSTRUCTION





41570  
COMELCT



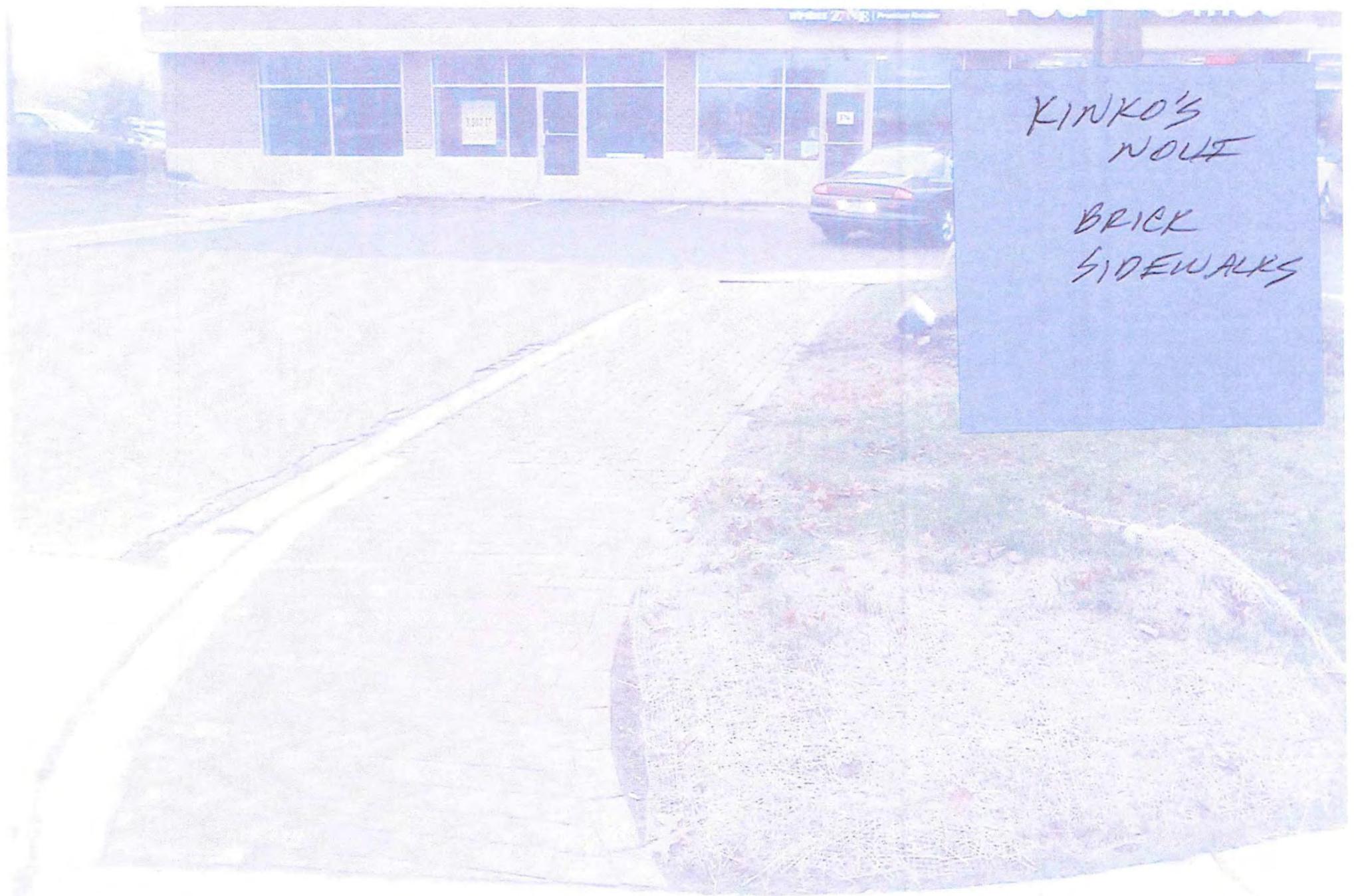


NOURI TOWN  
CENTER  
SIDEWALK  
CONCRETE  
TO  
BRICK



A photograph of a building entrance. The building has a brick wall on the left and a glass entrance with a central door. A blue vertical post is in the center of the entrance. In the foreground, there is a concrete sidewalk and a brick-paved area. A blue rectangular box with handwritten text is overlaid on the right side of the image.

NOVI TOWN  
CENTER  
CONCRETE  
TO  
BRICK



KINKO'S  
NOW

BRICK  
SIDEWALKS



MEADOW BEER STAND  
DALEY QUEEN  
BRICK SIDEWAYS  
+ ROADWAY



GRAND  
RIVER AVE

CONCRETE  
WALKWAY  
TO  
BRICK