



AGENDA OF THE PLANNING  
COMMISSION  
CITY OF BIRCHWOOD VILLAGE  
WASHINGTON COUNTY, MINNESOTA  
December 27, 2016  
7:00 P.M.

**CALL TO ORDER**

**APPROVE AGENDA**

**Regular Agenda**

- A. City Code 300.020: Definition 23: Impervious Surface \*
- B. City Code 302.050: Impervious Surfaces \*

**ADJOURN**

\* Denotes items that have supporting documentation provided



## MEMORANDUM

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**TO:** Birchwood City Council & Planning Commission  
**FROM:** Tobin Lay, City Administrator  
**DATE:** December 23, 2016  
**SUBJECT:** Impervious Surface Ordinance

The purpose of this meeting is to consider proposed changes to section 300.020 and 302.050 of the City's zoning ordinance related to Impervious Surfaces. During the December 1, 2016 meeting, the Commission considered recommendations put forward by TKDA's Sherri Buss and Commissioner John Lund. Commissioners asked Ms. Buss to incorporate the considerations for presentation at December 27, 2016 Commission meeting. The Commission has invited Mayor and Council to attend this meeting, along with the public, to fine-tune the proposed ordinance language before a recommendation is provided.

Included in this packet are revised recommendations from Ms. Buss and a few sample variance requests that can be used to test the recommendations for completeness and workability. Please review all of the attachments and prepare for a good discussion.

If you have any questions, please contact Tobin Lay at 651-426-3403 or [Tobin.Lay@cityofbirchwood.com](mailto:Tobin.Lay@cityofbirchwood.com)

Thanks,  
Tobin Lay

300.020. DEFINITIONS.

For the purpose of Chapters 300 through 399 certain terms and words are hereby defined as follows: ...

23. Impervious Surface. A ground surface covered or compacted with material so as to substantially retard the entry of water into the soil, and to cause water to remain on the surface or to run off the surface in greater quantities or at an increased rate of flow than would occur if there was a natural soil surface.

Impervious surfaces shall include improvements utilizing concrete, asphalt, gravel, or other non-porous materials. Examples of impervious surfaces include, but are not limited to, roads, driveways, parking areas, sidewalks, patios, rooftops, and covered decks. Examples of impervious surfaces resulting from compacting are unpaved or ungraveled driveways and parking areas.

EXCEPTIONS: Open decks and walkways with open joints at least ¼ inch wide per 8 inch wide board, and areas beneath overhangs less than 2 feet wide, if bare or vegetated soil is beneath the decks or walkways or overhangs, shall not be considered impervious surfaces.

302.050 IMPERVIOUS SURFACES.

Impervious surface coverage of lots must not exceed twenty-five (25) percent of the lot area.

**City of Birchwood Village**

**Draft Ordinance with Planning Commission comments from 12/1/16 and 12/7/16  
Impervious Cover Standard and Variance Standards**

302.050      IMPERVIOUS SURFACES

1. Impervious surface coverage of lots shall not exceed twenty-five (25) percent of the lot area unless the applicant obtains a variance and the following conditions are satisfied, and in no case, shall the impervious surface area exceed thirty-five (35) percent:
  - a. The applicant shall submit a stormwater management plan for the site that analyzes the proposed development including the area(s) of impervious surfaces, direction of runoff, proposed best management practices to manage runoff, and stormwater retention that the best management practices will achieve.
  - b. The stormwater management plan shall include structures and/or best management practices for the mitigation of stormwater impacts on receiving waters in compliance with the City's Surface Water Management Plan, or as approved by the City Engineer, so that the site design includes stormwater management practices that control the stormwater runoff volumes, and the post-construction runoff volume shall be retained on site for 1.1 inches of runoff from impervious surfaces.
  - c. The applicant shall utilize the most recent version of the Minnesota MIDS (Minimum Impact Design Standards) Calculator (available on the Minnesota Pollution Control Agency's website), the U.S. Environmental Protection Agency's National Stormwater Calculator, or another similar stormwater design calculator approved by the city to complete the plan and show that the proposed stormwater management practices meet the required infiltration standard. The applicant shall submit the calculator results to the City with the stormwater management plan.
  - d. The applicant shall provide documentation that the proposed stormwater management methods meet the required standard, will be designed and installed consistent with the City's Surface Water Management Plan, NPDES stormwater standards, and the Minnesota Pollution Control Agency's Minnesota Stormwater Manual.
  - e. No permeable pavement system is permitted in the Shore Impact Zone. (The Shore Impact Zone is the land located between the ordinary high water level of a public water and a line parallel to it at a setback of 50 percent of the required structure setback. The required structure setback from the OHWL in the City of Birchwood Village is 50 feet, and the Shore Impact Zone is 25 feet.)
  - f. Site design shall comply with the City's Tree Ordinance, and shall minimize changes in ground cover, loss of natural vegetation, and grade change as much as possible.

- g. The base of installed infiltration structures or practices must be a minimum of three (3) feet above the established ground water table or the Ordinary High Water Level of White Bear Lake, whichever is higher.
- h. The stormwater management practices shall be designed in accord with the Minnesota Stormwater Manual, American Concrete Pavement Association design criteria, Center for Watershed Protection, *Stormwater BMP Design Supplement for Cold Climates*, or other design guidance provided by the City.
- i. The stormwater management plan shall include the applicant's description of how the practices shall be maintained to function as designed for the long-term. The City may inspect the installation of the stormwater management system at the site.
- j. The applicant shall include the maintenance plan and a maintenance schedule for the approved stormwater management practices with the building permit application.
- k. The applicant shall record the variance with the property records at Washington County.

# Minnesota MIDS Calculator -- Version 2: June 2014

**Notes:**  
 1) Make sure macros are enabled. If not, click Microsoft Office Button in upper left hand corner. Click "Excel Options". Click "Trust Center", click "Trust Center Settings" and then click "Macro Settings". Set Macro Settings to "Enable All Macros" and restart Excel.  
 2) Enter Site Information in blue cells below  
 3) Go to MIDS BMP Calculator tab and follow instruction on top of that page

<b>Project Name:</b>	
<b>User Name / Company Name:</b>	
<b>Date:</b>	
<b>Project Description:</b>	

**Legend**

Constant values
-----------------

## Site Information

Retention Requirement (inches):	1.1
Site's Zip code:	
Annual Rainfall (inches):	
Phosphorus EMC (mg/L):	0.3
TSS EMC (mg/L):	54.5
Fraction of annual rainfall events that produce runoff:	0.9

## Total Watershed Area

Land Cover (acres)	A soils	B Soils	C Soils	D Soils	Totals (acres)
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested land					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed					0.00
Impervious Cover (acres)					0.00
<b>Total:</b>					<b>0.00</b>

## Watershed Area Routed to BMPs (Summary of "MIDS BMP Calculator" Tab)

Land Cover (acres)	A soils	B Soils	C Soils	D Soils	Totals (acres)
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested land					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed					0.00
Impervious Cover (acres)					0.00
<b>Total:</b>					<b>0.00</b>

## Summary Information

Total impervious cover (acres)	0.00
Total watershed area (acres)	0.00
Site runoff coefficient, Rv	
% Impervious	
<b>Development volume retention requirement (cubic feet)</b>	
Volume removed by BMPs (cubic feet)	
Additional volume removal needed to meet requirement (cubic feet)	
Percent volume removed	
<b>Post-development annual volume (acre-ft)</b>	
Annual volume removed by BMPs (acre-ft)	
Percent annual volume removed	
<b>Post-development annual Particulate P load (lb/yr)</b>	
Annual Particulate load removed by BMPs (lb/yr)	
<b>Post-development annual Dissolved P load (lb/yr)</b>	
Annual Dissolved P load removed by BMPs (lb/yr)	
Percent annual TP removed	
<b>Post-development annual TSS load (lb/yr)</b>	
Annual TSS load removed by BMPs (lb/yr)	
Percent annual TSS removed	

**Note:**  
 Green cells will fill in when MIDS BMP Calculator tab is complete  
 Grey Cells are calculated using Site Information entered above

## Tobin Lay

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**From:** Sherri A. Buss [sherri.buss@tkda.com]  
**Sent:** Monday, December 19, 2016 2:53 PM  
**To:** Tobin Lay  
**Subject:** comments on McKKeown application  
**Attachments:** League Variances.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Tobin,

I have taken a look at the application this morning, and have a few questions and comments. This is a very challenging application given the City's current code and what he is requesting related to impervious surface. In many ways, it would be better for the City to complete the ordinance amendment discussion they are considering, adopt an amendment with specific stormwater management criteria for approving a variance, and then have this applicant come back, because it is going to be difficult to approve a variance for this without some more specific standards and a way to determine if the applicant can meet the standards. If the City decides to go ahead with the application, I think we need some additional information from the applicant based on your current ordinance:

You may need to discuss these questions below with the mayor and/or chair of the planning commission. Some of the questions are about the City's past practice in determining whether applications are complete and the review process can start.

1. **Application completeness.** The first step in the review of a planning and zoning application is to determine whether it is complete. By state law the City has 15 days from the date that the application was submitted to determine if it is complete, and must send a notice to the applicant about whether it is complete or not. If it is complete, the 60-day review clock starts to run on the date when the application was complete. If it is not complete, the City needs to inform the applicant of that within 15 days of the submittal so that the 60-day review clock does not start.

The City has 15 days from the date it was submitted ( Dec. 15) to get a letter completed and emailed or mailed to the applicant about whether it is complete—so until December 30.

If we determine it is complete, the City has 60 days from December 15 to complete the review. If it's not complete, we need to let the applicant know what he needs to provide. When he provides everything & we determine the application is complete, the City has 60 days to complete the review from the date the complete info was submitted.

### **So Question #1: Does this application meet the City's requirements to be complete?**

- The city's ordinance #304.040 says that the applicant must submit a "plot plan" drawn to scale that shows the existing and proposed/changed structures on the lot and on adjacent lots. This applicant submitted sketches, not an electronic plot, and the sketches don't show the structures on adjacent lots. He also did not include a scale on the drawings.

304.020 in the City code says that the City may require a petitioner to submit a certificate of survey by a registered professional land survey to verify the location of all buildings, setbacks, and building coverage. Most of the Cities I work with would require that he submit such a survey for a variance request from setbacks and for impervious cover, but I don't know if this has been Birchwood's practice.

Please find out from the mayor or Planning Commission chair if your City has usually required the certificate of survey for applications like this, or if the type of sketch he submitted has usually been accepted. In this case, a Certificate of Survey would be very helpful for both the impervious cover information and the setbacks, but if your city has been willing to use such sketch plans in the past we may need to accept this one.

- The variance criteria say that the applicant needs to show that the granting the variance will not increase the amount of water draining from the property. He has not included any analysis of the existing and post-project drainage in the application. This would be another reason to find the application incomplete.

2. **When the City has decided that the application is complete, you can then start the analysis of the variance. The legal standards for granting a variance are discussed in the literature from the League of Minnesota Cities (attached) and the criteria in the City's ordinance, 304.040, item 2. You or the Planning Commission will need to put a report together that includes findings for why the request does or does not meet the City's criteria for granting a variance.**

The applicant is requesting 2 variances:

- 1) For a location that is 20 feet from the roadway rather than the 40 required by the ordinance. I think this request would meet some of the criteria, but issues that need more information from the applicant are:  
Criteria b: Is there somewhere he could put the garage so it could use the existing driveway, and not need additional impervious surface, or less new impervious surface?  
Criteria c.: Can he prove that granting the variance will result in no increase in the amount of water draining from the property? He has suggested he would install some are of pervious surface and a rain garden, but there are no calculations showing that these practices would be adequate to prevent new runoff. Usually the applicant is required to provide the calculations that show he can meet the requirement.

I think you can craft the findings for the variance to support the proposed building meeting the criteria. If you want to walk through them to discuss how it does or does not meet the criteria, we can do that. The first two items in his "practical difficulties" analysis in the application can be accepted as practical difficulties, but not the 3<sup>rd</sup> item about needing a place away from the active family.

- 2) Variance from impervious cover requirement.

His analysis here is faulty. He is actually proposing to increase the impervious surface area on the parcel, not decrease it. He wants the city to consider "pervious" pavement as 100% pervious. I don't think the city has any standards that do that, because pervious pavements are not 100% pervious. Birchwood would need an objective standard for determining how much "credit" the City would give this applicant for using pervious pavement.

- I discussed this briefly with the Rice Creek Watershed District. They said that Cities in their district have different approaches to this. Some cities consider "pervious" pavement to be 50% or pervious or a smaller percentage than 50%. He did not know of any city that considers pervious pavers as 100% pervious, as the applicant is requesting.
  - The Watershed District's approach would be to consider the pervious pavements as impervious surface, and require the applicant to model the impervious surface and proposed best management practices for stormwater that are proposed (such as the pervious pavement and

rain garden), show that they meet an adopted standard for the volume of water that will be infiltrated, or to show that with the BMP's the project would not increase runoff. The design could be approved for a variance if the applicant can prove that he can meet the standard or that he will not increase runoff with the additional surfaces.

The Watershed District's approach is very similar to the one that is recommended in the Ordinance Amendment for Impervious cover that the Planning Commission reviewed in December. This has not been adopted by the City yet as an approach for reviewing potential variances, but it does provide an objective standard that the applicant can model and the city could use to decide if his proposed new impervious area could meet the stormwater standard with the best management practices he has proposed.

This is all more difficult for this application because his property is already nonconforming because it exceeds the 25% impervious standard now, and he is proposing to add impervious which would increase the nonconformity of the parcel. State law and the City's ordinance prohibit increasing a nonconforming situation (in your ordinance it is section 301.050, item #1). Applicants can get a variance for that, but the variance criteria need to be very carefully applied.

Without some analysis about whether he meets the ordinance criteria to not increase runoff, and based on the request to make a current nonconforming situation even more so, I think it would be very difficult to write findings to approve the impervious cover variance.

My recommendation at this point would be:

- Determine that this application is not complete
- Require the applicant to submit a certificate of survey as described in 304.020 in the code that includes all of the existing and proposed buildings, existing and proposed setbacks, and existing and proposed coverage, so we can accurately determine the proposed coverage and setbacks.
- Require the applicant to submit a stormwater analysis that shows that he meets the criteria in 304.040 2.d. that with the proposed best management practices his plan will result in no increase in the amount of water draining from the property from the current conditions. ( as a part of this analysis he could also consider whether there is another location for the garage that would allow him to use as much of the existing driveway as possible and minimize the need for more impervious surface.)

He could use the MIDS calculator or one of the other stormwater calculators that was referenced in the ordinance amendment materials.

- With this information, the Planning Commission can consider whether he really meets the criteria for a variance.

The City could also recommend to him at this point that he hold off on the application until the City has a chance to further discuss the ordinance amendment, as it may result in something that will be easier for him to analyze and achieve.

Please review this—call if you have questions.

If the City decides to go ahead with the discussion on December 27, it might be a good chance to talk about this application with the Planning Commission and Council members and whether the proposed changes would help to deal with this type of application better than the current code.

Thanks, Sherri

1. Date of Application: \_\_\_\_\_

(Requests for variances submitted prior to the 15th of the month will be considered by the Planning Commission at its next meeting on the first Tuesday of the month. Requests submitted after the 15th will be considered at the following meeting. All final decisions on variance applications are made by the city council, which meets on the second Tuesday of every month.)

2. Name of Applicant(s) \_\_\_\_\_

Address 441 Lake Avenue

City Birchwood Village

Business Phone \_\_\_\_\_ Home Phone \_\_\_\_\_

3. Address of Property Involved if different from above \_\_\_\_\_

N/A

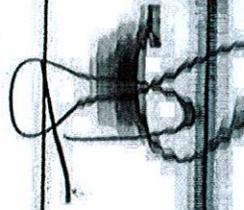
4. Name of Property Owner(s) if different from above and describe applicant's interest in the property. \_\_\_\_\_

N/A

5. Specific Code Provision from which Variance is Requested 302.020, 302.050

6. Describe in narrative form what the applicant is proposing to do that requires a variance. \_\_\_\_\_

See attached



SIGNATURE OF APPLICANT(S)

Variance Application  
Page 2

7. Type of Project

New Construction (empty lot)

Addition

Densification

Landscaping

Repair or removal of nonconforming structure

Other (describe)

_____
_____
_____ <input checked="" type="checkbox"/>
_____
_____
_____

8. Type of Structure Involved

Single Dwelling

Garage

Tennis Court

Grading/Filling

_____
_____ <input checked="" type="checkbox"/>
_____
_____

Double Dwelling

Addition

Pool

Other Accessory (describe)

9. Using the criteria in the city code for a variance (set forth in the attached sheet), explain why a variance is justified in this situation and describe what landscaping would result from denial of the variance.

See attached

10.

Describe any measures the applicant is proposing to undertake if the variance is granted, including measures to decrease the amount of water draining from the property.

See attached

11.

Describe any alternatives the applicant considered (if any) that do not require a variance.

Variance Application  
Page 3

12. Can an emergency vehicle (Fire Truck or Ambulance) access all structures on the property after the proposed change?  Yes  No
13. Does the proposed change bring any other nonconforming use into conformity with the city building code?  Yes  No  
If yes, explain \_\_\_\_\_

14. Are there other governmental regulations that apply to the proposed action, including requirements of the Rice Creek Watershed District?  Yes  No  
If yes, please identify the regulations. \_\_\_\_\_

15. Please provide the applicable information in the following Table

	Existing	Proposed	Change
1. Total Square Footage of Lot	19,236	19,236	0
2. Maximum impervious surface (25% of item 1)	4,809.50	4,809.50	0
3. Roof Surface	3,448	3,282	186
4. Sidewalks	220	220	0
5. Driveways	5,000	2,450	550
6. Other impervious surface	150	150	0
7. Total of items 3-6	6,818	6,102	736
8. Percent impervious surface	35.5%	31.7%	3.8%

16. Please attach the following:  
 a. Legal description of property  
 b. Plot Plan drawn to scale showing existing and proposed structures on the lot. Also show structures on adjacent lots.

## Request for Variance

441 Lake Avenue  
Birchwood Village, MN 55110  
PIN: 30.030.21.13.0018

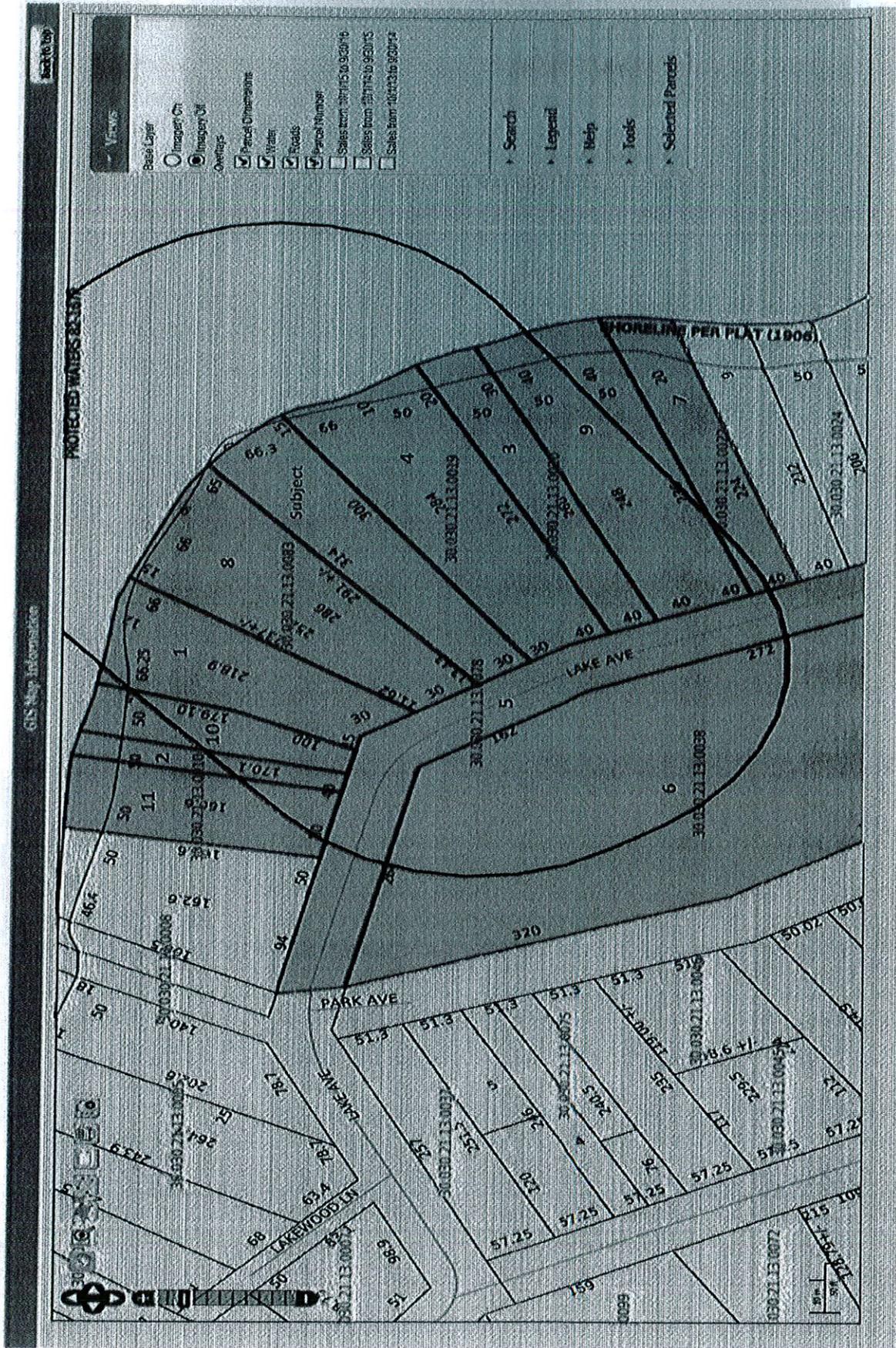
### **Narrative response(s):**

6) There are two items in our proposal which will require a variance. The first one is the setback (302.020) from the road which per code is set at 40 feet. Our current garage is about 3 feet from the road and we are proposing to build our new building with a 20-foot setback. The second variance request is regarding the Impervious surface (302.050) coverage of the lot. We are currently over the 25% and our proposal will lower the Impervious surface from 35.5% to 31.7% impervious on our lot.

9) There are a few hardships that will be caused by not granting this variance. The first is to extend the garage length, which would allow me to store my boat indoors, and not have it stored on the outside in the driveway or away from my house. Secondly, if we were to place the new structure 40 feet off of Lake Ave. it would continue to increase the amount of driveway needed which can increase the amount of impervious surface as well as limit the amount of space available for a rain garden. The 3<sup>rd</sup>, is that this space is needed for me to have a home office which is away from the hustle and bustle of my family. I need space and quiet for me to continue to work and have a balanced life and maintain my work.

10) If the variance is granted, I am willing to install a pervious driveway between the new structure and the public roadway. I am also willing to create and integrate a rain garden and/or a Cistern or rain barrels to collect rain water from my new structure and keep it from running off my lot.

Map showing properties within 200' buffer of the subject property (see detailed list pg. 3)



Corresponding properties within 200' buffer (see Map pg. 2)

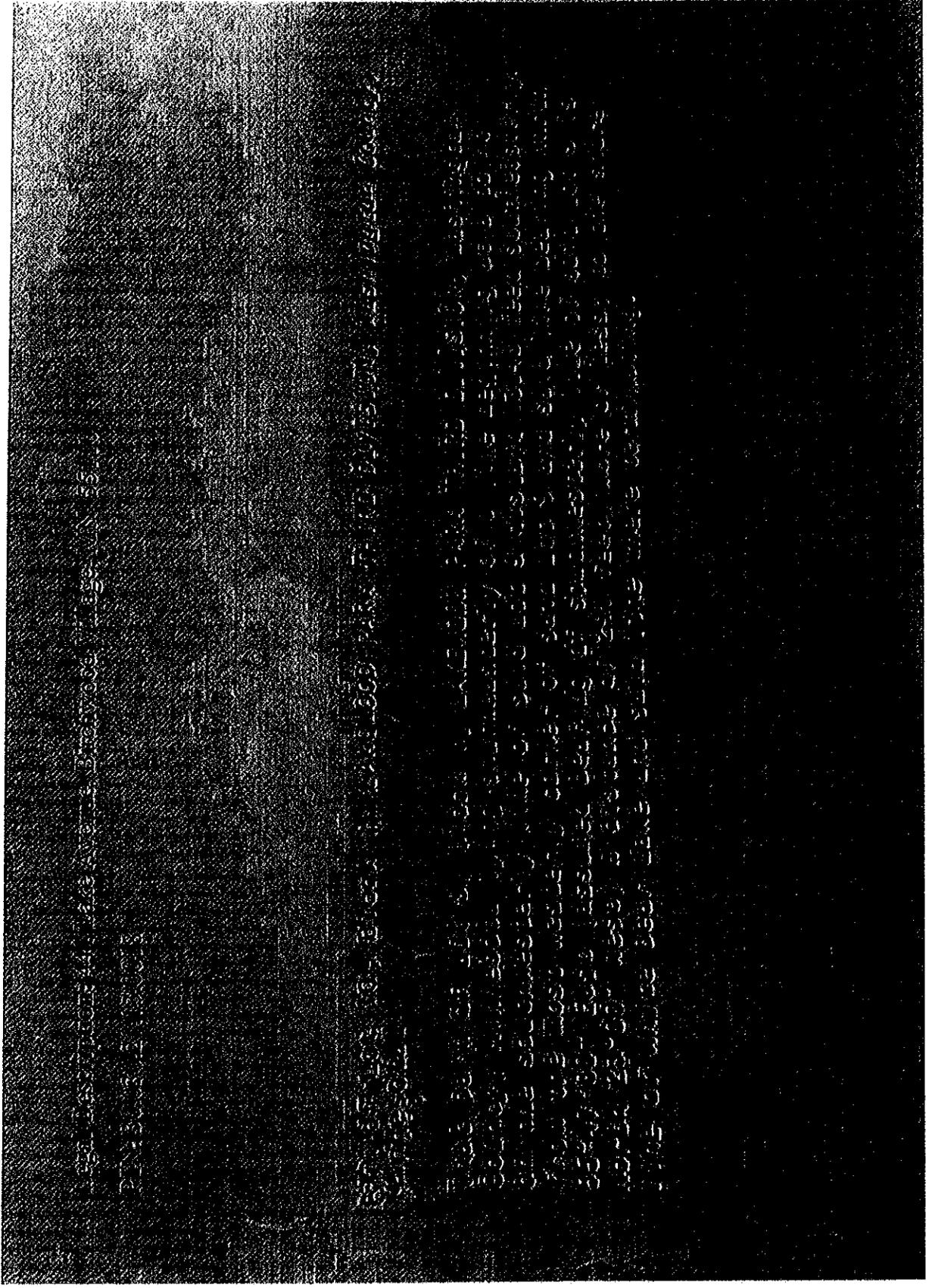
SUBJECT PROPERTY

3003021130018	MCKEOWN THOMAS D & LISA A JR	441	LAKE AVE	BIRCHWOOD	MN	55110
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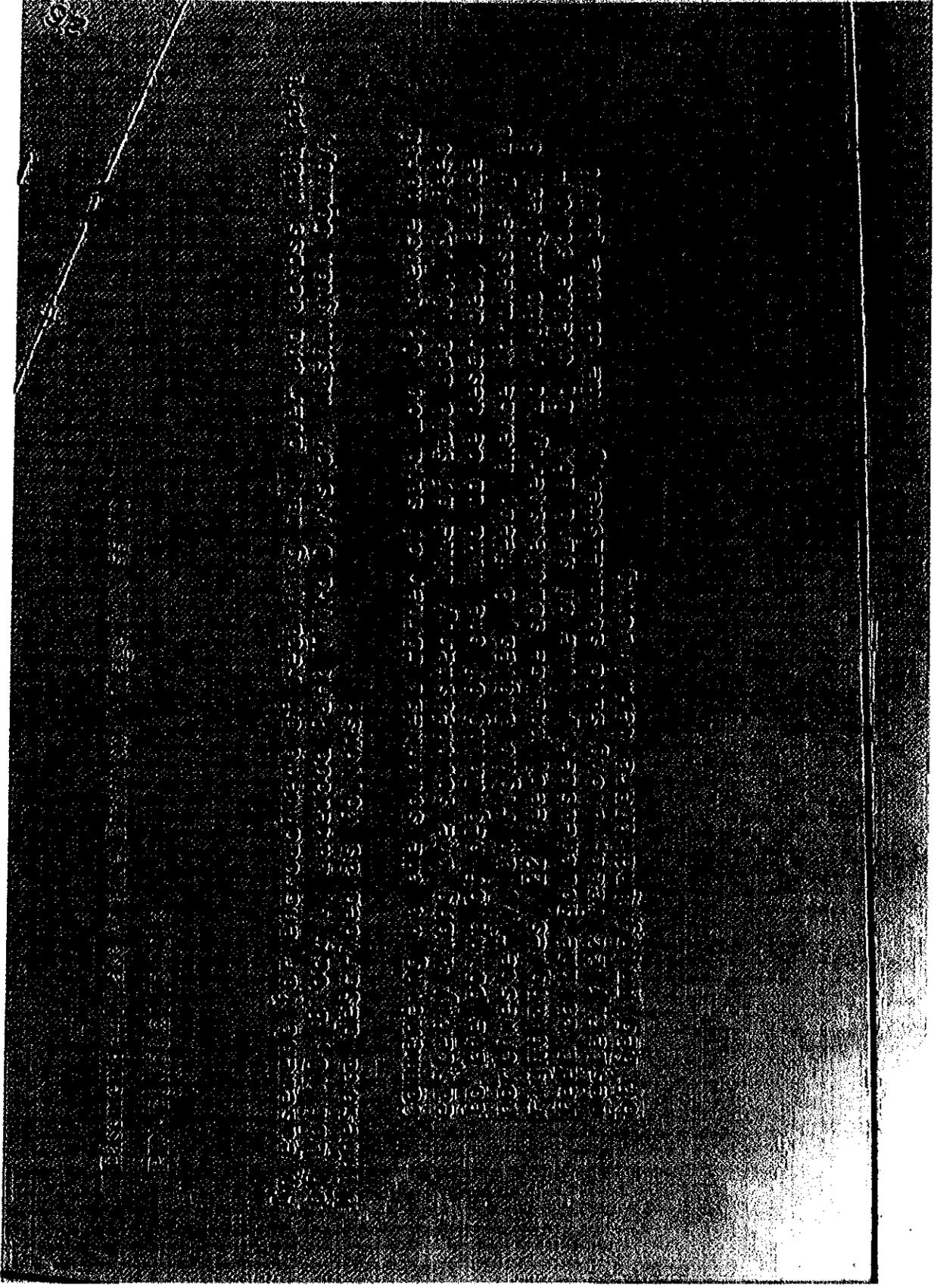
PROPERTIES WITHIN 200' OF SUBJECT PROPERTY

	PIN	OWNER	HOUSE	STREET	CITY	STATE	ZIP
1	3003021130014	BARBARA A WINTERS TRS	429	LAKE AVE	BIRCHWOOD	MN	55110
2	3003021130011	DAVIDSON COYLEEN H			BIRCHWOOD		
3	3003021130020	SCHREINER MARGARET M & DOLORES SCHREINER	453	LAKE AVE	BIRCHWOOD	MN	55110
4	3003021130019	TRS AGR TOADD & DENELLE A HAWKINS	445	LAKE AVE	BIRCHWOOD	MN	55110
5	3003021130078	CITY OF BIRCHWOOD			BIRCHWOOD		
6	3003021130038	CITY OF BIRCHWOOD			BIRCHWOOD		
7	3003021130022	BARTHEL JAMES H	469	LAKE AVE	BIRCHWOOD	MN	55110
8	3003021130083	WICKUM DAREN & JESSICA	433	LAKE AVE	BIRCHWOOD	MN	55110
9	3003021130021	ANDERSON KENNETH L ETAL	461	LAKE AVE	BIRCHWOOD	MN	55110
10	3003021130012	DAVIDSON COYLEEN H	425	LAKE AVE	BIRCHWOOD	MN	55110
11	3003021130010	MADORE DONALD R & KATHLEEN E	413	LAKE AVE	BIRCHWOOD	MN	55110

Date of Application: :

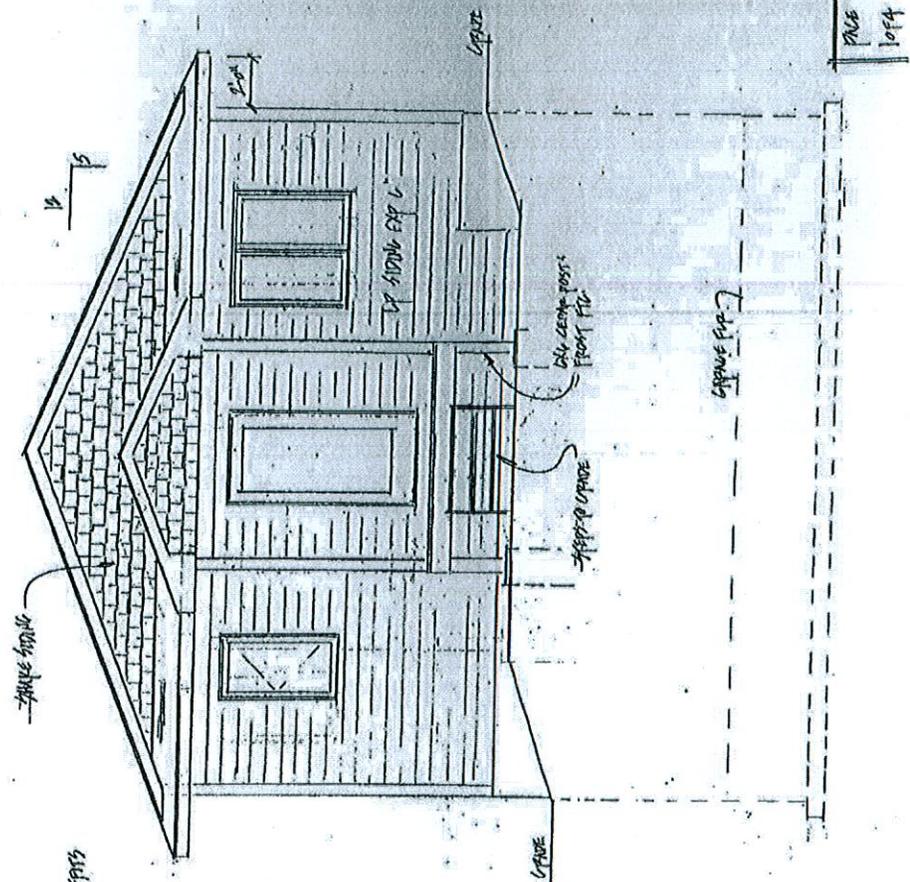


Date of Application

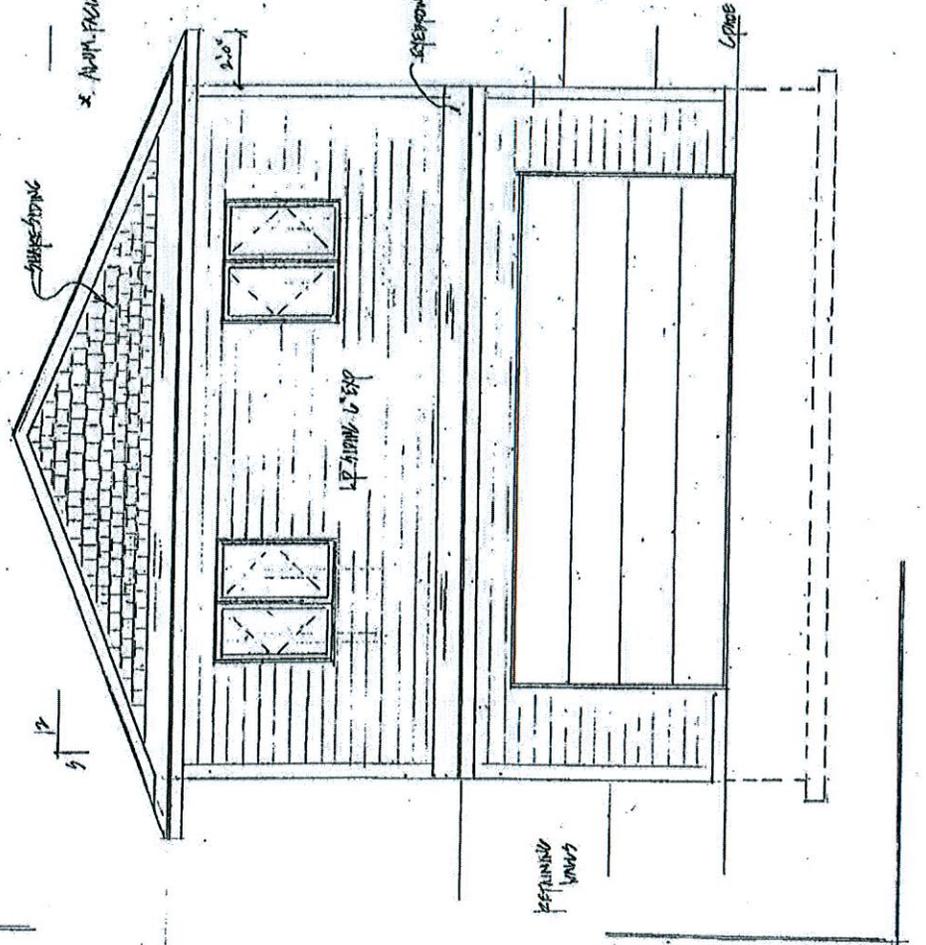


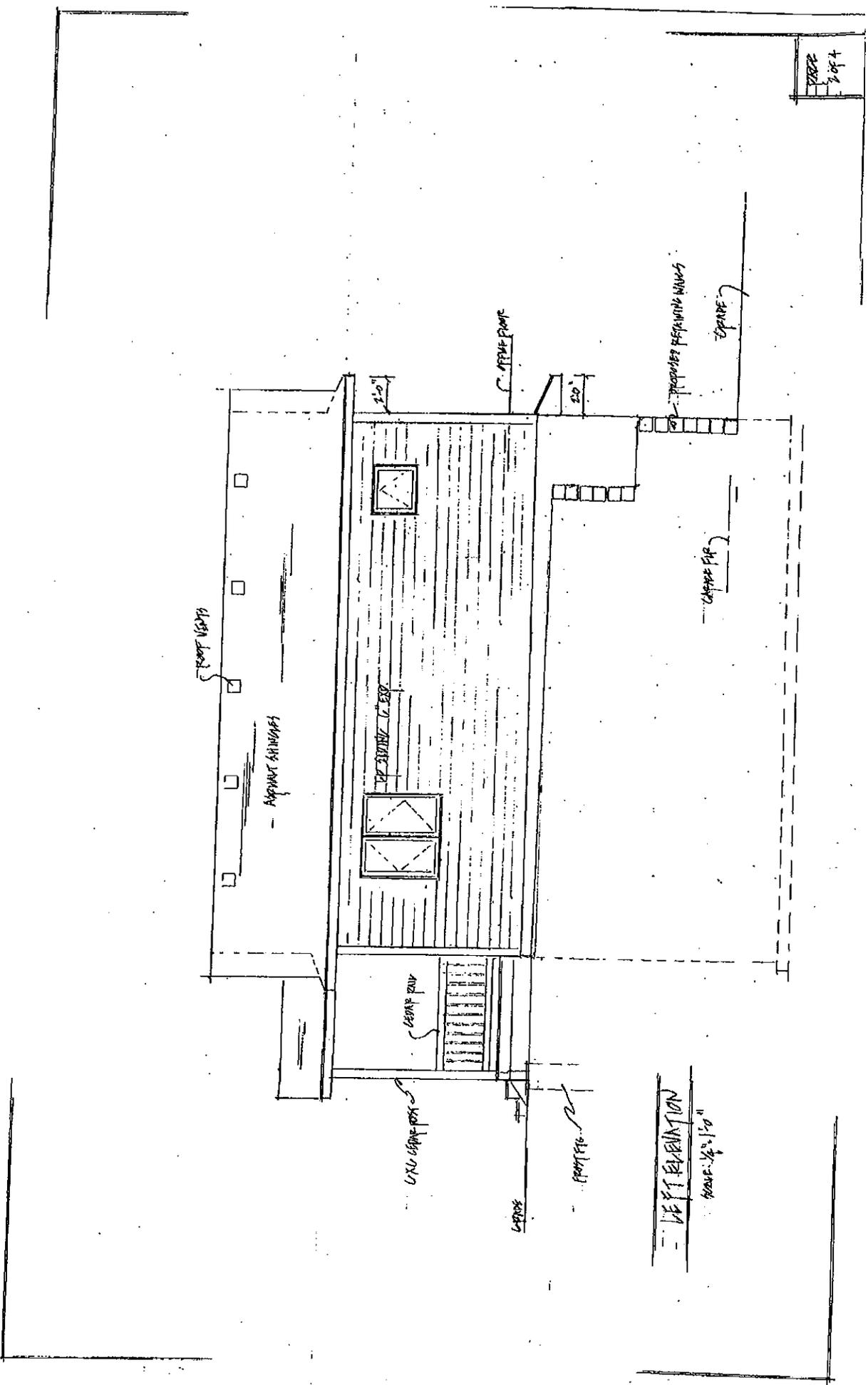
OWNER: TOM McKEOWN  
 ADDRESS: 421 LAKE VIEW AVE  
 BIRMINGHAM, ALABAMA, MI. 35110

REAR ELEVATION  
 SCALE: 1/4" = 1'-0"



FRONT ELEVATION (STREET SIDE)  
 SCALE: 1/4" = 1'-0"

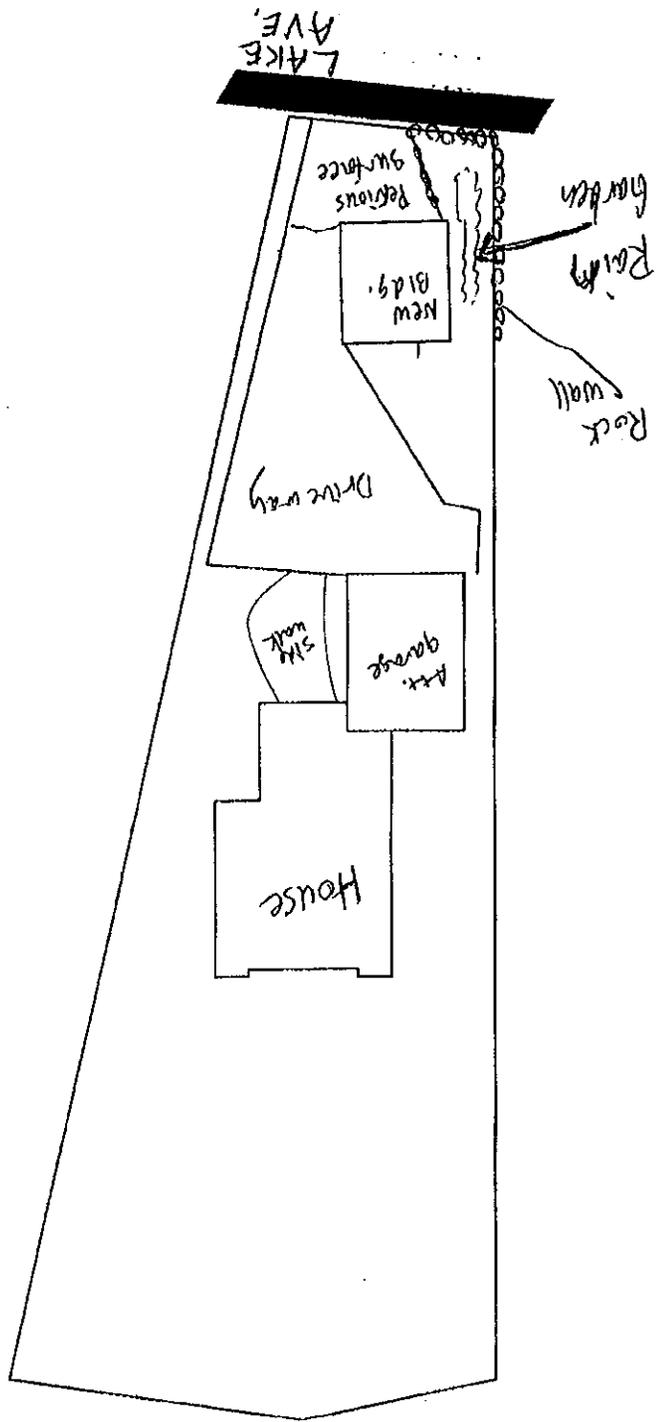




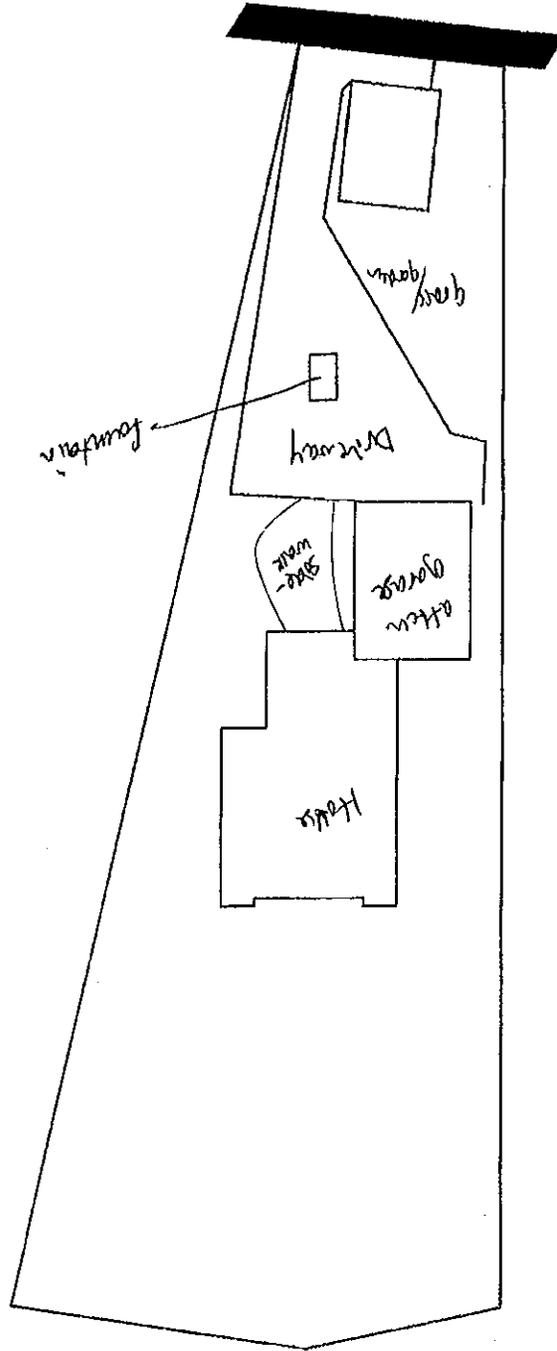
KEY ELEVATION  
SCALE: 1/8" = 1'-0"







PROPOSED -  
 Thomas Madson  
 447 Lake Avenue  
 Dunsmuir Village, MN 55110  
 PLS: 2020.213.0018



EXISTING -  
 TOURS A. MARRAS  
 4111 1/2 Avenue  
 Richmond Virginia, ZIP 23110  
 P: 804.271.0018  
 F: 804.271.0018

# CITY OF BIRCHWOOD VILLAGE MEMORANDUM

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**TO:** Birchwood Village Planning Commission  
**FROM:** Samantha Crosby, Staff Planner  
**DATE:** May 22, 2014 for the June 3, 2014 Planning Commission Meeting  
**CASE NO.:** 14-10-VB  
**APPLICANT:** Thomas Stangle  
**LOCATION:** 14 White Pine Lane

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## **REQUEST**

The applicant is requesting a variance from the 25% impervious area limit, per Code Section 302.050, in order to convert 534 square feet of an existing deck into a porch, which would increase the impervious area to 34%. The applicant is proposing to off-set the increase by constructing a french drain to infiltrate stormwater on site.

## **SITE CHARACTERISTICS**

The subject site is 12,000-square feet in size. The lot contains a two-story, single-family residence with a two-car attached garage. The site is currently 29.4% impervious. The soil has a high clay content and as such is not very permeable.

## **PRACTICAL DIFFICULTY**

The applicant desires to convert part of an existing deck into an unenclosed porch and another part into a screen porch. The applicant is proposing to mitigate the additional impervious area by constructing a stormwater infiltration feature on site.

## **ANALYSIS**

The applicant is proposing to construct a french drain that, according to the Washington County Conservation District, is sized to accommodate twice the amount of run-off that will be generated by the new impervious area created by the porch. The over-sizing of the system brings a non-conforming property back into compliance with the code. Similar to the standard that is applied to porous pavers or rain gardens, staff is granting a credit for the system based on the design capacity.

The applicant's proposed plan is to have water from:

- the back half of the roof of the house,
- the shed in back of the house, and
- the patio in the back of the house

run into an outside floor drain that connects to a 4-inch pipe which outlets into the French drain. The location of the French drain was chosen based on the existing topography of the site. Most all of the land already slopes towards this area except for a small area in the northwest corner which will be slightly regarded to re-route run-off towards the drain.

The City Engineer has not reviewed the either the proposed design or the request in general.

### **SUMMARY**

The City has a high level of discretion when approving or denying a variance because the burden of proof is on the applicant to show that they meet the standards of the ordinance. If the proposal is deemed reasonable (meaning that it does not have an adverse effect on neighboring properties, it is consistent with the Comprehensive Plan, and it is harmony with the intent of the Zoning Code) then the criteria have been met.

Staff would still support the request if the design solution accommodated only the new impervious area being created at this time. However, since the infiltration is designed to bring the property back into compliance with code, staff strongly and enthusiastically supports the request, subject to the review and approval by the City Engineer.

### **RECOMMENDATION**

Staff recommends approval of the requested variances, subject to the following conditions:

1. All application materials, maps, drawings and descriptive information submitted with this application shall become part of this permit.
2. Per Section 304.090, the variance shall become null and void if the project has not been completed or utilized within one (1) year after the date it was granted, subject to petition for extension by the City Council.
3. The applicant shall obtain a building permit prior to beginning construction of the porches.
4. Prior to the issuance of a building permit, the City Engineer shall review and approve the design of the infiltration feature.
5. The applicant shall verify their property lines and have the property pins exposed at the time of inspection.
6. The applicant shall maintain the French drain, pipe and gutters to preserve design capacity.

**ATTACHMENTS**

1. Draft resolution of approval
2. Location map
3. Application form, including impervious area calculations (3 pgs)
4. Evidence of surrounding neighbor's support
5. Site plan
6. French drain details and infiltration calculations (2 pgs)
7. Photos
8. Construction plans (5 pgs.)

**RESOLUTION NO. \_\_\_\_\_**

**RESOLUTION APPROVING A VARIANCE FROM  
THE CITY OF BIRCHWOOD VILLAGE ZONING CODE  
FOR 14 WHITE PINE LANE**

**WHEREAS**, a proposal (14-10-VB) has been submitted by Thomas Stangle to the City Council requesting a variance from the City of Birchwood Village at the following site:

**ADDRESS:** 14 White Pine Lane

**LEGAL DESCRIPTION:** Lot 18, Block 1, Bacchus Birchwood Ridge No. 2,  
Washington County, MN (PID # 30.030.21.24.0020)

**WHEREAS, THE APPLICANT SEEKS THE FOLLOWING:** a variance from the 25% impervious area limit per Code Section 302.050, in order to convert 534 square feet of an existing deck into a porch, which would increase the impervious area to 34%.

**WHEREAS**, the Planning Commission has held a public hearing as required by the City Zoning Code on June 3; and

**WHEREAS**, the applicant is proposing to off-set the increase by constructing a french drain to infiltrate stormwater on site; and

**WHEREAS**, the french drain will be large enough to bring the property back into conformance with code (ie: level of porosity of 25% impervious area); and

**WHEREAS**, the City Council has considered the advice and recommendations of the Planning Commission regarding the effect of the proposed conditional use permit upon the health, safety, and welfare of the community and its Comprehensive Plan, as well as any concerns related to compatibility of uses, traffic, property values, light, air, danger of fire, and risk to public safety in the surrounding areas;

**NOW, THEREFORE, BE IT RESOLVED** by the City Council of the City of Birchwood Village after reviewing the proposal, that the City Council accepts and adopts the following findings of the Planning Commission:

1. That granting the variance will be in harmony with the general purpose and intent of this Code.
2. That granting the variance will not impair an adequate supply of light or air to adjacent property, or unreasonably diminish or impair established property values within the surrounding area, or in any other respect impair the public health, safety, or welfare of the residents of the City.
3. That the non-conforming use of neighboring lands, structures, or buildings is not the sole grounds for issuance of the variance.

**FURTHER, BE IT RESOLVED**, that the City Council of the City of Birchwood Village hereby approves the requested variance subject to the following conditions:

1. All application materials, maps, drawings and descriptive information submitted with this application shall become part of this permit.
2. Per Section 304.090, the variance shall become null and void if the project has not been completed or utilized within one (1) year after the date it was granted, subject to petition for extension by the City Council.
3. The applicant shall obtain a building permit prior to beginning construction of the porches.
4. Prior to the issuance of a building permit, the City Engineer shall review and approve the design of the infiltration feature.
5. The applicant shall verify their property lines and have the property pins exposed at the time of inspection.
6. The applicant shall maintain the French drain, pipe and gutters to preserve design capacity.

The foregoing resolution, offered by Council member \_\_\_\_\_ and supported by Council Member \_\_\_\_\_, was declared carried on the following vote:

Ayes:  
Nays:  
Absent:

\_\_\_\_\_  
Mary Wingfield, Mayor

**ATTEST:**

\_\_\_\_\_  
Chris Mickelson, City Clerk

\*\*\*\*\*

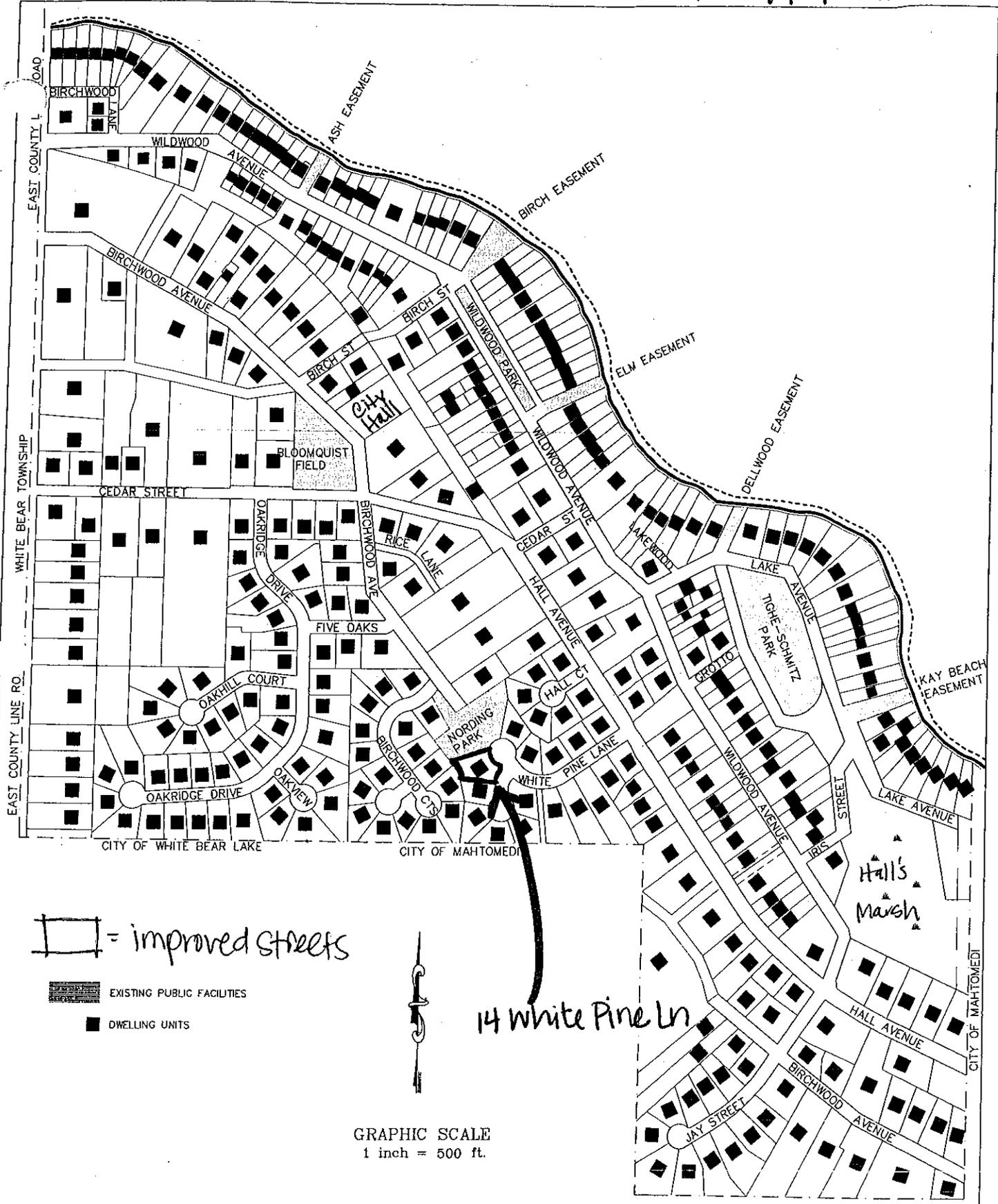
Approval is contingent upon execution and return of this document to the City Clerk.

I have read and agree to the conditions of this resolution as outlined above.

\_\_\_\_\_  
Applicant's Signature

\_\_\_\_\_  
Date

# LOCATION MAP



= improved streets

EXISTING PUBLIC FACILITIES

DWELLING UNITS



GRAPHIC SCALE  
1 inch = 500 ft.

# REQUEST FOR VARIANCE

14-10-VB

1. Date of Application: 5/12/14

(Requests for variances submitted prior to the 15th of the month will be considered by the Planning Commission at its next meeting on the first Tuesday of the month. Requests submitted after the 15th will be considered at the following meeting. All final decisions on variance applicants are made by the city council, which meets on the second Tuesday of every month.)

2. Name of Applicant(s) Thomas Stangl

Address 14 White Pine Lane

City Birchwood, MN

Business Phone \_\_\_\_\_ Home Phone \_\_\_\_\_

3. Address of Property Involved if different from above  
Same

4. Name of Property Owner(s) if different from above and describe applicant's interest in the property.

Thomas J Stangl  
Barbara J Stangl

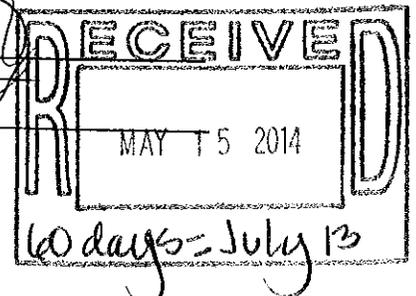
5. Specific Code Provision from which Variance is Requested. \_\_\_\_\_

6. Describe in narrative form what the applicant is proposing to do that requires a variance.

Build screen porch on existing deck with  
impervious surface exceeding 25% of  
total property

SIGNATURE OF APPLICANT(S)

[Handwritten Signatures]



7. Type of Project

- New Construction (empty lot) \_\_\_\_\_
- Addition \_\_\_\_\_
- Demolition \_\_\_\_\_
- Landscaping \_\_\_\_\_
- Repair or removal of nonconforming structure \_\_\_\_\_
- Other (describe) Screen porch with roof

8. Type of Structure Involved

- |                 |                                     |                            |       |
|-----------------|-------------------------------------|----------------------------|-------|
| Single Dwelling | <input checked="" type="checkbox"/> | Double Dwelling            | _____ |
| Garage          | _____                               | Addition                   | _____ |
| Tennis Court    | _____                               | Pool                       | _____ |
| Grading/Filling | _____                               | Other Accessory (describe) | _____ |

9. Using the criteria in the city code for a variance (set forth in the attached sheet), explain why a variance is justified in this situation and describe what hardship would result from denial of the variance.

Variance is justified for two reasons. Current  
land is clay soil. Solution provided more  
than compensates for water run off.  
Hardship - ability to enjoy MN Summers with  
our aggressive mosquitoes.

10. Describe any measures the applicant is proposing to undertake if the variance is granted, including measures to decrease the amount of water draining from the property.

Washington County Conservation District  
proposal attached.

11. Describe any alternatives the applicant considered (if any) that do not require a variance.

(none)

12. Can an emergency vehicle (Fire Truck or Ambulance) access all structures on the property after the proposed change?  Yes  No
13. Does the proposed change bring any other nonconforming use into conformity with the city building code?  Yes  No

If yes, explain Proposed solution returns 1067 square feet of run off

14. Are there other governmental regulations that apply to the proposed action, including requirements of the Rice Creek Watershed District?  Yes  No  
If yes, please identify the regulations.

(Rice Creek watershed has provided solutions)

15. Please provide the applicable information in the following Table

	Existing	Proposed	Change
1. Total Square Footage of Lot	12000	12000	0
2. Maximum impervious surface (25% of item 1)	3000	3000	<del>0</del>
3. Roof Surface	1452	1986	+534
4. Sidewalks	369	369	0
5. Driveways	1210	1210	0
6. Other impervious surface patio in front of shed	500	500	0
7. Total of items 3-6	3531	4065	+534
8. Percent impervious surface	29.4% 11617/4000	33.9% 4065/12000	+4.5% -1067/2498

16. Please attach the following: 11617/4000 4065/12000  
 a. Legal description of property  
 b. Plot Plan drawn to scale showing existing and proposed structures on the lot. Also show structures on adjacent lots.

I have reviewed Tom and Barbara Stangl's deck and porch plans and have no issue with their requested variance and support the proposed mitigation of the infiltration bed recommended by Washington County Conservation District.

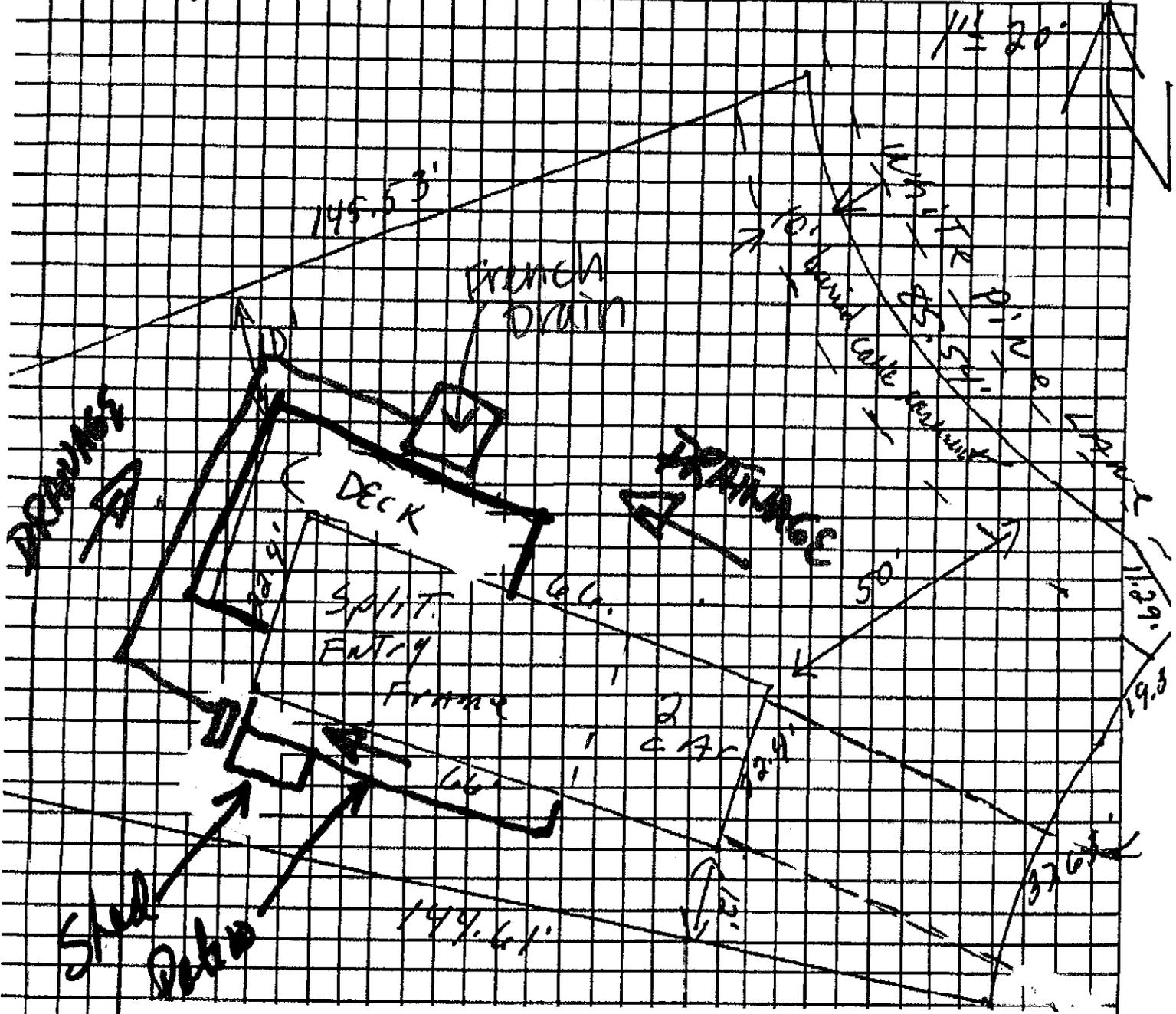
Map	Address	Signature and Date
1	Jeff & Terri Aleckson 8 White Pine Lane <i>11/13/14</i>	<i>Christy Aleckson</i> 5/13/14
2	Tyler and Gretchen Johnson 10 White Pine Lane	<i>Gretchen Johnson</i> 5/13/14
3	Pat and Karisa Nigon 16 White Pine Lane	<i>Pat Nigon</i> 5/13/14
4	Didier Telier 18 White Pine Lane	<i>Didier Telier</i> 5/22/14
5	Gene & Sandy Bower 11 White Pine Lane	<i>Gene Bower</i> 5/13/14
6	<del>6 Birch</del> Ray Hunter 433 Birchwood Court <i>433 Birch</i>	<i>Brian Hunter</i> 5/14/14
7	Sandra <del>Brough</del> McTavish 429 Birchwood Ct	<i>Sandra McTavish</i>
8	Marleen Sembel 475 Birchwood Ct	<i>M. Sembel</i>
9	Linda and Charlie Moore 421 Birchwood Ct	<i>Linda Moore</i>
10	Donald & Marita Husnik 417 Birchwood Ct	<i>Don Husnik</i> 5/13/14
11	415 Birchwood Ave	VACANT



universal title  
insurance company

PLAT DRAWING  
(THIS IS NOT A SURVEY)

ORDER NO.: A 22-08212 INSP. DATE: 10-20-88 INSP. BY: DON OWEN  
STREET ADDRESS: 14 White Pine Lane Birchwood  
LEGAL DESCRIPTION: Lot 18 Bk 1 Barhus Birchwood #2  
BUYER: STANGI & JOHNSON



The red line is an existing 4 inch pipe from the back of the house that will be rerouted to the filtration trench. The rest of the water will flow into the trench as it will be downhill from the roofline and any landscaping needed to route the water properly will be done as well.  
regrading

TOM STANGL  
 14 WHITE PINE LANE  
 BIRCHWOOD VILLAGE

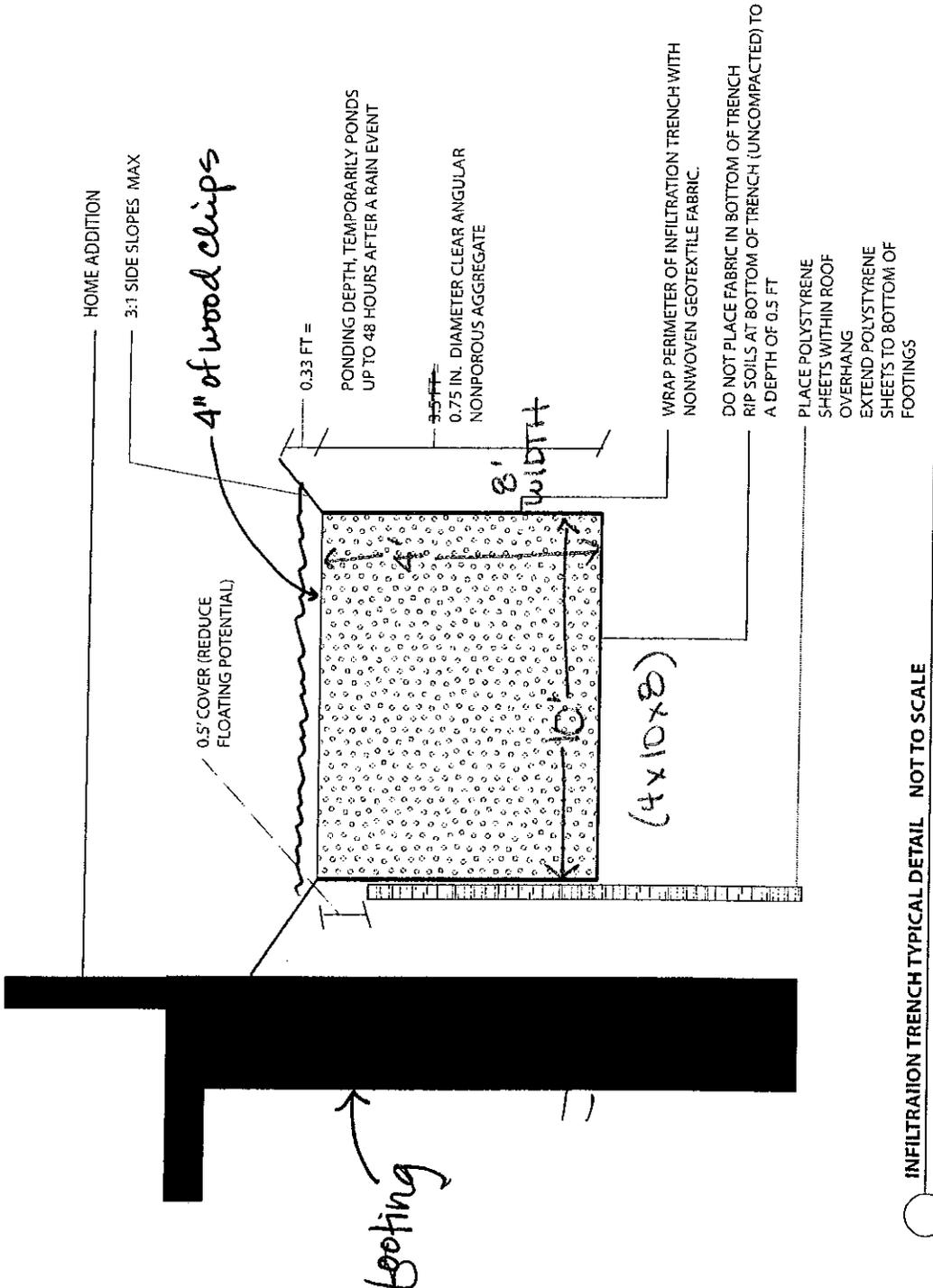
RUNOFF CAPTURE CONCEPT FOR BUILDING ADDITION

- WASHINGTON CONSERVATION DISTRICT  
 05/09/2014

**CALCULATIONS:**

AREA OF NEW IMPERVIOUS: 503 SQFT  
 VOLUME NEEDED TO CAPTURE: 46.1 CUFT  
 (503 SQFT X 1.1" RAIN EVENT) ~~80~~

PROPOSED INFILTRATION TRENCH: ~~80~~ SQFT  
 OVERALL DEPTH = 4 FT (~~80~~ BACK-FILLED WITH  
 CLEAR AGGREGATE, 0.33 FT OF TEMPORARY PONDING)  
 PROPOSED INFILTRATION TRENCH VOLUME CAPTURE:  
 CLEAR AGGREGATE VOLUME = ~~80~~ CUFT (80 FT X 40  
 SQFT X 0.3 VOID VOLUME) ~~96~~  
 TEMPORARY PONDING = 13 CUFT (0.33 FT X 40 SQFT)



### Washington County Conservation District Recommended Solution

The proposed solution by Washington County Conservation District using the dimensions of 10' width x 8' length x 4' depth produces an empty 320 cubic foot Infiltration Trench. When filled with aggregate, the trench captures 96 Cubic Feet of rainwater runoff (This assumes a 0.3 void volume calculation for the aggregate).

This 96 cubic feet of captured rainwater is the equivalent of 1067 square feet during a 1.1 inch rainfall.

### Calculations

$$10 \times 8 \times 4 = 320 \text{ cu ft}$$

$$320 \text{ cu ft} \times 0.3 = 96 \text{ cu ft}$$

(Note a 1.1 inch rainfall is 0.09 feet)

$$96 \text{ cubic feet} / 0.09 \text{ depth returns } 1067 \text{ SQ FT of captured rainwater}$$

Note in addition to the Infiltration Trench recommended above, water will be channeled from the back of the property to the front and along the new porch to the basin.

