



**CPED STAFF REPORT**  
 Prepared for the Board of Adjustment

BOA Agenda Item #4  
 April 9, 2015  
 BZZ-7074

**LAND USE APPLICATION SUMMARY**

*Property Location:* 4312 Beard Avenue South  
*Project Name:* 4312 Beard Avenue South – Variance for Construction of a New Single-Family Dwelling  
*Prepared By:* [Andrew Liska](#), City Planner, 612.673.2264  
*Applicant:* Landmark Building Contractors, LLC  
*Project Contact:* Mark Schaefer  
*Request:* Variance to increase maximum permitted floor area ratio.  
*Required Applications:*

<b>Variance</b>	To increase the maximum permitted floor area ratio for the construction of a new single-family dwelling
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**SITE DATA**

<b>Existing Zoning</b>	RIA
<b>Lot Area</b>	5,598 square feet
<b>Ward(s)</b>	13
<b>Neighborhood(s)</b>	Linden Hills
<b>Designated Future Land Use</b>	Urban Neighborhood
<b>Land Use Features</b>	N/A
<b>Small Area Plan(s)</b>	N/A

**BACKGROUND**

**SITE DESCRIPTION AND PRESENT USE.** The subject property is zoned RIA and is approximately 42 feet by 134 feet (5,598 square feet). The proposed project is a two story single-family dwelling and is currently under construction and is unoccupied. A new two car garage is also under construction and is located to the rear of the property and is accessed off of Beard Avenue South as there is no alley serving this parcel.

**SURROUNDING PROPERTIES AND NEIGHBORHOOD.** The neighbor to the north, 4308 Beard Avenue South, is a two and one-half story duplex. The neighbor to the south, 4314 Beard Avenue South, is a one and one-half story single-family dwelling.

This area of Linden Hills is composed of predominantly older single-family and two-family dwellings. There are new homes in the general vicinity but as a whole, homes in this area have been updated

<b>Date Application Deemed Complete</b>	March 17, 2015	<b>Date Extension Letter Sent</b>	N/A
<b>End of 60-Day Decision Period</b>	May 16, 2015	<b>End of 120-Day Decision Period</b>	N/A

through smaller additions and remodeling permits rather than demolishing existing homes and constructing new structures.

**PROJECT DESCRIPTION.** The applicant applied for an Administrative Site Plan Review (BZZ-6724) on August 4, 2014, to construct a new single-family dwelling. Zoning staff reviewed plans and provided comments regarding necessary revisions to the applicant. Following resubmissions, the plans for the new single-family dwelling were approved on September 18, 2014.

The approved plans broken down by floor:

BASEMENT	1,227.68 sq. ft.
1 <sup>st</sup> FLOOR	1,267.68 sq. ft.
2 <sup>nd</sup> FLOOR	1,328.84 sq. ft.
LOT AREA	5,598 sq. ft.

At the time of approval, the Zoning Code Chapter 546.300 regulating building bulk stated that the basement floor area is not included in gross floor area calculations as long as the finished floor elevation of the first story is 4 feet or less from natural grade for more than 50 percent of the total perimeter. Had the structure been constructed with the finished floor elevation of the first story at 4 feet for 50 percent of the perimeter, the FAR would have been in compliance. This chapter was amended and new regulations have been in place since October 1, 2014. The new regulations reduce the elevation of the finished floor from 4 feet to 2.5 feet.

The natural grade at the proposed corners of the dwelling is elevations of 868.0, 869.0, 869.1, and 869.6; the proposed/approved first floor elevation of 874.55'. Due to the varying grade, the height of the finish floor elevation of the first story ranges from 4.95 feet to 6.55 feet. Due to this height of the basement above natural grade, the basement is included in the gross floor area and thus, the floor area ratio (FAR) is .683.

The applicant began construction and submitted a top-of-block survey per the Constriction Management Agreement guidelines and on October 17, 2014, zoning staff erroneously approved the top-of-block survey allowing the construction to continue. During a routine land-use permit inspection, it was discovered that the building on the site was in violation as the basement height above natural grade exceeded the permitted four feet and thus, was in violation of the Zoning Code maximum permitted FAR of .5. The zoning inspector mailed the notice of non-compliance on January 28, 2015. Soon after, the applicant met with staff to begin the process of obtaining a variance to allow the plans as approved.

The applicant is seeking a variance to the maximum FAR from .50 to .683 to allow for the structure as constructed.

**RELATED APPROVALS.**

Planning Case #	Application	Description	Action
BZZ-6724	Administrative Site Plan Review	New S.F.D	Approved
BZZ-6725	Administrative Garage Size Increase	Detached Garage	Approved

**PUBLIC COMMENTS.** Staff has not received correspondence from the Linden Hills Neighborhood Association. If any correspondence is received prior to the public meeting, it will be forwarded on to the Board of Adjustment for consideration.

**ZONING ANALYSIS.** Since the time of approval, the Design Standard points in Chapter 530.280 have been changed and the new point system has been in place since October 1, 2014. At the time of approval, this project was awarded 19 out of 24 Design Standard Points. Below are the Design Standard points this proposal was awarded:

- Not less than one (1) off-street parking space per dwelling unit is provided in an enclosed structure that is detached from the principal structure (5 points);
- The structure includes a basement as defined by the Building Code (5 points);
- The primary exterior building material is masonry, brick, stone, stucco, wood, cement-based siding, and/or glass (4 points);
- Not less than twenty (20) percent of the walls on each floor facing a public street are windows (3 points);
- The pitch of the primary roof line is 6/12 or steeper (2 points);

## ANALYSIS

### VARIANCE

The Department of Community Planning and Economic Development has analyzed the application for a variance of Chapter 525, Article IX Variances, specifically Section 525.520(3) “to vary the gross floor area, floor area ratio, and seating requirements of a structure or use,” based on the following [findings](#):

1. *Practical difficulties exist in complying with the ordinance because of circumstances unique to the property. The unique circumstances were not created by persons presently having an interest in the property and are not based on economic considerations alone.*

The geotechnical report demonstrates that the water table is on average only 7 feet below natural grade. This high water table is unique to this site and creates a practical difficulty in complying with the ordinance. The engineering firm that provided said report recommended keeping at least a 4 foot separation between the lowest floor slab and the groundwater.

The average grade on site is approximately 868 feet and the water table is at 861 feet. In keeping with the engineering recommendation of a 4 foot separation, this leaves the low floor at 865 feet, and only 3 feet below the average natural grade. This height of the water table present was not created by the applicant but is due to the topography and hydrology on this site and in the area.

2. *The property owner or authorized applicant proposes to use the property in a reasonable manner that will be in keeping with the spirit and intent of the ordinance and the comprehensive plan.*

The applicant has proposed to use the property in a reasonable manner. This area is composed of single and two-family dwellings and the proposed use is a single-family dwelling. This use is consistent with future land-use maps as a part of the comprehensive plan.

The spirit and intent of the ordinance regulating bulk is to encourage orderly development and to discourage enormous homes that would consume much of the space on the lot. The proposed home adheres to all other zoning standards including height and setbacks. As proposed, this project is keeping with the spirit and intent of the ordinance regulating bulk and all other ordinances regulating uniform development. The proposed dwelling is has a finished floor elevation that exceeds the allotted maximum per Code however, the finished floor elevation of this project compared to surrounding dwellings is very similar due to the water table below.

3. *The proposed variance will not alter the essential character of the locality or be injurious to the use or enjoyment of other property in the vicinity. If granted, the proposed variance will not be detrimental to the health, safety, or welfare of the general public or of those utilizing the property or nearby properties.*

The high water table in this area creates a very uniform built environment. A built environment in which the first floor elevation is elevated above the natural grade – not for aesthetics but rather to keep the structures sound and separated from the water table beneath the basement floor. The proposed structure is very much aligned with the character of this area. Also, with any new construction, the building code requires that the finished grade around the structure to be slightly increased to drain water away from the foundation. This finished grade combined with landscaping will bend with the neighborhood. Granting this variance will not compromise the health, safety, and welfare of the general public.

## RECOMMENDATIONS

The Department of Community Planning and Economic Development recommends that the Zoning Board of Adjustment adopt staff findings for the application by Landmark Building Contractors, LLC for the property located at 4312 Beard Avenue South:

**A. Variance to increase the maximum permitted floor area ratio (FAR) from .5 to .683 for the construction of a new single-family dwelling.**

Recommended motion: Approve, subject to the following conditions:

1. Approval of the final site, landscaping, elevation, and floor plans by the Department of Community Planning and Economic Development.
2. All site improvements shall be completed by September 18th, 2016 unless extended by the Zoning Administrator, or the permit may be revoked for non-compliance.

## ATTACHMENTS

1. Zoning Map
2. Written findings and description submitted by applicant
3. Site Plan
4. Survey of Existing Conditions
5. As-Built Survey
6. Floor Plans
7. Building Elevations
8. Floor plans
9. Garage Elevation
10. Photos from Zoning Inspection
11. Copy of Notice of Non-Compliance Letter
12. Communication with Zoning Inspector
13. Approval Letter of New I-4
14. Communication with Staff
15. Photos of Surrounding Properties
16. Soil Compaction Report
17. Geotechnical Report
18. Correspondence



Mark Schaefer  
Landmark Building Contractors  
952-221-7177  
[mark@landmarkbuildco.com](mailto:mark@landmarkbuildco.com)



**F.A.R. VARIANCE:**

*(1) Practical difficulties exist in complying with the ordinance because of circumstances unique to the property. The unique circumstances were not created by persons presently having an interest in the property and are not based on economic considerations alone.*

After reviewing the soils reports it was discovered that the water table was exceptionally high on this property. There are two ordinance difficulties we faced in the design of the property. The first challenge was keeping the full basement which is desired and awarded through the design criteria points system. The second challenge was the four foot separation between the high water mark and low slab elevation required by the city. The effect of the two challenges is the first floor elevation is pushing the maximum first floor elevation allowance of four feet. We have proposed an average 870 elevation for the perimeter home to provide proper storm water management which both protects the home and adjacent properties.

*(2) The property owner or authorized applicant proposes to use the property in a reasonable manner that will be in keeping with the spirit and intent of the ordinance and the comprehensive plan.*

In keeping with the spirit and intent of the ordinance only slight modifications are needed on the first floor elevations. This allows for the desirable basement preferred by the city and protection for possible future water intrusion.

*(3) The proposed variance will not alter the essential character of the locality or be injurious to the use or enjoyment of other property in the vicinity. If granted, the proposed variance will not be detrimental to the health, safety, or welfare of the general public or of those utilizing the property or nearby properties.*

The design of the proposed home is to compliment neighboring properties which are similar in elevation and size. Our intentions are to blend in with a tudor style home which matches the theme and charm of adjacent properties and not to cause harm to the neighbors. We have provided photos the neighboring properties as well as the current home under construction to show the similarities between the properties.



February 27th, 2015

4312 Beard Ave S  
Minneapolis, MN 55410

City Required Floor Area Ratio (FAR), variance request  
for new home project under construction.

Dear Members,

It was discovered after permit approval and the commencement of construction that the Community Planning & Economic Development (CPED) made errors in their interpretation of the Zoning Ordinance 546.240b. As a result, we are required now to apply for a Floor Area Ratio (FAR) variance for this nearly-completed home. The elevation and design of the home are consistent with the neighboring properties. I have included pictures of the surrounding properties for your reference. I will also make electronic copies of the approved construction documents available to all parties.

4312 Beard Ave was reviewed on 9/15/14 and initially rejected because our FFE did not comply with the ordinance. We lowered the proposed elevation per the city request's and resubmitted. The project was reviewed again, approved and construction commenced. A pre-backfill as-built survey was submitted and shows that the elevation and placement matched the proposed and approved permit. The as-built was approved by the CPED and construction continued. We were notified several weeks later that we were not in compliance with the ordinance and that a variance was required. It was established by the CPED the original reviewer had misinterpreted the ordinance and that our FFE was too high. Construction would not have commenced had we known this. The home is 80% complete at this time.

As no reasonably viable method exists to bring the home into compliance with the ordinance, and given the CPED's prior approval of our FFE we continue construction based upon our assumption that we will have a resolution of this issue, and approval of the now-required variance.

I have met with Christy Prediger with the Linden Council and provided hardcopies of the approved plans and surveys and asked they be available for Board and Public review. Below is my contact information should you have any comments or require additional information. We look forward to your timely response and attention to this matter.

Respectfully,

Mark Schaefer  
Landmark Building Contractors LLC.

General Contractor:

Landmark Building Contractor LLC.  
Mark Schaefer  
952-221-7177  
[mark@landmarkbuildco.com](mailto:mark@landmarkbuildco.com)  
2116 2nd Ave S  
Minneapolis, MN 55404

Homeowner:

Cedar Creek Capital LLC.  
Josh Taylor  
952-239-0966  
[Joshstaylor@yahoo.com](mailto:Joshstaylor@yahoo.com)  
19018 Vogel Farm Trail  
Eden Prairie, MN 55347



### Statement of Proposed Use

**3-9-14**

City of Minneapolis  
Community Planning & Economic Development  
Development Services Division  
250 South 4th Street, Room 300  
Minneapolis, MN 55415-1316

Property Owner:  
Cedar Creek Capital LLC.  
19018 Vogel Farm Trail  
Eden Prairie, MN 55347

Representative:  
Landmark Building Contractors LLC.  
2116 2nd Ave S  
Minneapolis, MN 55404

Dear Members,

The project consists of demolition of the existing home and construction of a new home. The home design is a two story period style Tudor which will compliment the neighboring properties.

The home will be constructed in accordance with the IRC and Minneapolis zoning regulations.

Respectfully,

  
Mark Schaefer  
Landmark Building Contractors, LLC.



3-9-2015

**Variance Request and Findings Statement:**

City of Minneapolis  
Community Planning & Economic Review  
Development Services Division  
250 South 4th St, Room 300  
Minneapolis, MN 55415

Property Address: 4312 Beard Ave S Minneapolis, MN

Property Owner: Cedar Creek Capital LLC. Director, Josh Taylor 952-239-0966

Owner Representative: Landmark Building Contractors LLC., Mark Schaefer 952-221-7177

**Findings:**

Permit Submittal took place on 8-4-2014 and was first reviewed on 8-20-14. The project was rejected citing insufficient window percentage, Radon pipe identification and spray foam insulation information needed. Revisions were made to the plan and resubmitted on 8-29-14 for a second review. The development Coordinator copied us on an email on 9-4-14 about a pending revision request. We received the formal revision request 9-15-16. The quote below was in the 9-4-14 email. **(See Attached Email Copy dated 9-4-14)**

- The proposed house plan exceeds the maximum floor area ratio (FAR) of .5. This is likely because the basement is included in the gross floor area calculation for the structure, which did not appear to be factored into the calculation on your application form. The basement is included because the first floor area of the first story is 4 feet or more above natural grade for more than 50% of the total perimeter (See section 546.240(b) of the Zoning Code.) You will need to adjust the project so that it meets the FAR standards or apply for a variance to the maximum FAR limit.
- o Sheet A4: The section drawings help illustrate that the first floor area of the first story is exposed 5 feet above natural grade.
- o Please note that the proposed FAR excluding the basement is approximately 46%.
- The maximum height for all single or two-family dwellings located in the R1A District shall be two and one-half (2.5) stories or thirty (30) feet, whichever is less. Proposed height is approximately 29.5 feet based on the tallest pitch. Please be mindful of the height"

Revisions were again made to the plan lowering the structure to meet the above requirements requested by the City Planner. A third revised plan and survey was submitted on 9-16-14. We were notified on 9-18-14 that the construction documents were reviewed, the project was approved and permit was awarded. The permit was issued on 10-01-14 and construction commenced the following week.

**Attached is a copy of the letter of approval from the CPED dated 9-18-14.**

During construction we submitted the required as-built survey showing top foundation and placement on 10-17-14. It was approved the same day and returned for review by the field inspector.

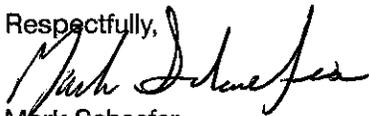
We received a phone call on 11-20-14 from the Zoning Inspector stating there was an issue regarding the overall floor elevation not being in compliance with the ordinance. It was discovered that a clerical error was on the proposed survey that did not reflect the changes made. Initially the design was for 20" floor trusses and was changed to 11-7/8" floor joist which lowered the over FFE and Roof Midpoint to accommodate the revision request. The revised survey reflecting the current conditions was submitted on 11-21-14 and receipt was confirmed on 11-26-14. **(See attached email dated 11-26-14)**. With no immediate response, construction continued under the assumption that the revised/corrected survey submitted was accepted. On 1-26-15 we received a phone message that they had not received the survey. I returned the call stating that we had sent the survey 11-21-14 followed by an email. Receipt was confirmed a second time that day. A follow up email dated 1-26-15 stating basically that our FFE is not compliant and that it was being review. **(See Attached Email)**

In a secondary email dated 3-2-15, from the intake reviewer, it was stated that our highlighted and approved mid point roof elevation was over the allowed maximum. At the time of permit submittal this number was 30' and we are currently built at 28'-4" per plan. This items here noted on the plan revision request for the plan reviewer, (line Item 4), "The maximum height for all single or two-family dwellings located in the R1a District shall be two and one-half (2.5) stories or thirty (30) feet, whichever is less. Proposed height is approximately 29.5 feet based on the tallest pitch. Please be mindful of the height."

**Variance Request:**

The structure was constructed in accordance with the approved permit set of plans and survey. As no reasonably viable method exists to bring the home into the new and current interpretation and compliance with ordinance we ask that a variance be approved addressing ordinance 546.300 Bulk Building Requirements, Table 564-5, allowing the Floor Area Ratio of .62% and the Maximum Building Height mid point elevation of thirty feet (30').

Respectfully,



Mark Schaefer  
Landmark Building Contractors LLC.

# ADVANCE SURVEYING & ENGINEERING CO.

5308 S Hwy, No. 101 Minneapolis, MN 55345

Phone (952) 474-7964

www.advance.com

SURVEY FOR:

**LANDMARK BUILDERS**

DRAPPERT: April 25, 2014

REVISION: August 1, 2014 to add addition to the dimensions.

REVISION: September 11, 2014 to adjust floor elevation per new plans.

LEGAL DESCRIPTION:

Lot 4, Block 9, Waveland Park, Hennepin County, Minnesota.

SCOPE OF WORK:

1. Showing the length and direction of boundary lines of the above legal description. The scope of our survey does not include determining what you own, which is a legal matter. Please check the legal description with your records with competent legal counsel, if you would like to ensure that it is correct, and that any matters of record, such as easements, that you would show on the survey, have been shown.
2. Showing the location of existing improvements we deemed important.
3. Setting new monuments or verifying old monuments to mark the corners of the property.
4. Showing elevations on the site at selected locations to give some indication of the topography of the site. The elevations shown relate only to the benchmark provided on this survey. Use that benchmark and check at least one other feature shown on the map when determining other elevations for use on this site.

STANDARD SYMBOLS & CONVENTIONS:

• ID pipe with plastic plug bearing State License Number 9235, set, unless otherwise noted.

CERTIFICATION:

I hereby certify that this plan, specification, report or survey was prepared by me or under my direct supervision and that I am a Licensed Professional Engineer and Professional Surveyor under the laws of the State of Minnesota.

Signature: James H. Parker Typed Name: James H. Parker

Date: August 1, 2014

Reg. No. 9235

## LEGEND

EXISTING CONTOUR	---
PROPOSED CONTOUR	---
PROPOSED ELEVATION/SPOT ELEVATION	---
DRAINAGE ARROW - FLOW	---
SIZE PENCE/SERIAL LOGS	---

## SHOWINGS REQUIRED

Shoring is required to be installed whenever the 1:1 slope (excavation depth: dimension of base of excavation to property line) is exceeded, or when unstable soils or other hazards are observed.

Separate permits are required for electrical, plumbing and mechanical work. In multi-unit buildings, this work must be done by a licensed contractor.

SEE ATTACHED FOR  
REMOVAL, OPENINGS AND  
ROOF EAVES REPAIR WORKS.

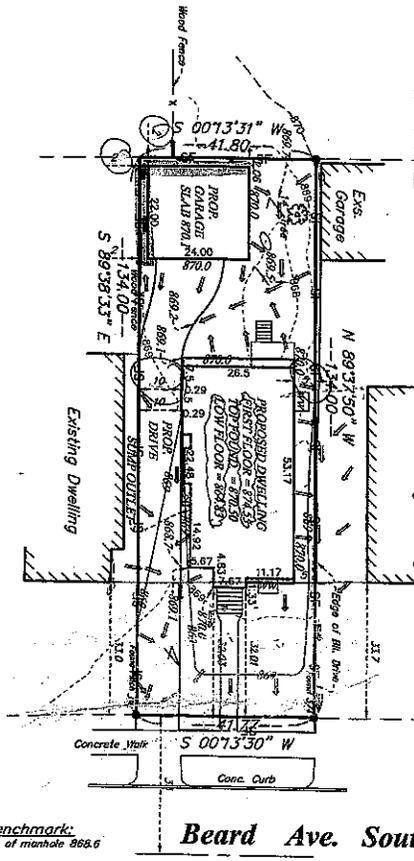
CITY OF MINNEAPOLIS  
CITY PLANNING  
210 CITY HALL  
**APPROVED**

As to requirement of the City of Minneapolis, the proposed work at 2100 Beard Ave. S. is in accordance with the City of Minneapolis Ordinance 120.05.

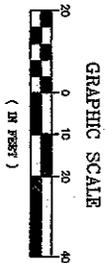
DATE: 5/18/14  
DIRECTOR OF PLANNING OR AUTHORIZED AGENT: [Signature]

Minnesota Building Code, Title 5 85.00  
Minnesota Maintenance of Buildings (M) Data water shall be obtained or not or cause damage in walls, ceilings or floors in any portion of the building or in any adjacent building or structure. Investigations and repairs shall be maintained in a state of professional repair as defined in Minnesota Code of Ordinances Section 24A.50.

PROTECTION OF ADJACENT PROPERTY  
The contractor shall be responsible for protecting the adjacent property from damage during construction and demolition activities. The contractor shall be responsible for providing for the protection of adjacent property. The contractor shall be responsible for providing for the protection of adjacent property. The contractor shall be responsible for providing for the protection of adjacent property.



PROPERTY LINES AND MONUMENTS  
MUST BE RECHECKED AT THE TIME OF FOOTING INSPECTION



140188 2014 09 11 A JP GD

**ADVANCE SURVEYING & ENGINEERING CO.**

5300 S. Hwy. No. 101, Minneapolis, MN 55345 Phone: (652) 414-7964 www.advsear.com

**SURVEY FOR: LANDMARK BUILDERS**

**SURVEYED: April 25, 2014 DRAFTED: April 25, 2014**

**LEGAL DESCRIPTION:**  
Lot 4, Block 9, Waverland Park, Hennepin County, Minnesota.

**SCOPE OF WORK:**

1. Showing the length and direction of boundary lines of the above legal description. The scope of our services does not include determining what you own, which is a legal matter. Please check the legal description with your records or consult with competent legal counsel, if necessary, to make sure that it is correct, and that any matters of record, such as easements, that you wish shown on the survey, have been shown.
2. Showing the location of existing improvements we deemed important.
3. Setting new monuments or verifying old monuments to mark the corners of the property.
4. Showing existing topography of the site. We have shown a project benchmark for your use in establishing elevations on this project. Use that benchmark and nothing else to establish elevations and check the elevation established against the convenience benchmark shown as a check on your work and on ours.

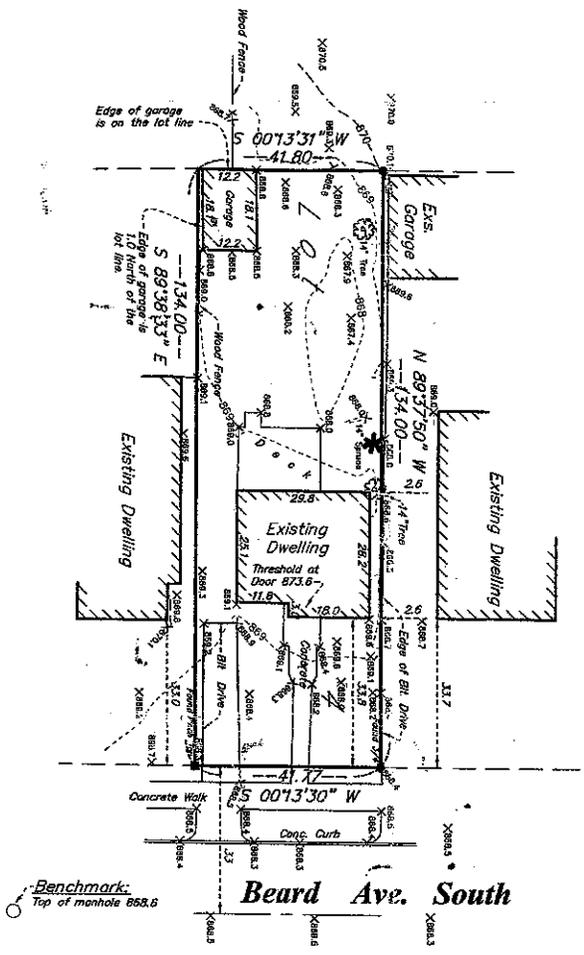
**STANDARD SYMBOLS & CONVENTIONS:**

- Denotes 1/2" ID pipe with plastic plug bearing State License Number 9235, set, unless otherwise noted.

**CERTIFICATION:**

I hereby certify that this plan, specification, report or survey was prepared by me or under my direct supervision and that I am a Licensed Professional Engineer and Professional Surveyor under the laws of the State of Minnesota.

Signature: James H. Parker Typed Name: James H. Parker  
Date: June 29, 2014 Reg. No. 9235



⊕ NOTE ALL COMMENTS ON PLANS & PLANS REVIEWED LETTER.  
 ⊕ CONTACT DAN BAUER @ 612-673-2420 FOR SIDEWALK PERMIT.  
 ⊕ CALL Gopher State ONE CALL 48 HOURS BEFORE DIGGING @ 651-454-0002.

CERTIFICATE OF SURVEY EXISTING 140402 2014 06 29 A JP

**ADVANCE SURVEYING & ENGINEERING CO.**

5300 S Hwy. No. 101 Minneapolis, MN 55445

Phone (612) 424-7864 www.advance.com

**SURVEY FOR: LANDMARK BUILDERS**

**DRAFTED: April 23, 2014**

**SURVEYED: April 23, 2014**

**REVISED: August 1, 2014 to add addition to dimensions.**

**REVISED: October 16, 2014 to show foundation as-built.**

**LEGAL DESCRIPTION:**  
Lot 4, Block 5, Woodland Park, Hennepin County, Minnesota

**SCOPE OF WORK:**

1. Showing the length and direction of boundary lines of the above legal description. The scope of our services does not include determining what you own, which is a legal matter. Please check the legal description with your records or consult with competent legal counsel. If necessary, to make sure that it is correct, and that any restrictions of record, such as easements, that you wish shown on the survey, please inform us of them as early as possible.
2. Setting new monuments or verifying old monuments to mark the corners of the property.
3. Setting new monuments or verifying old monuments to give some indication of the topography of the site. The elevations shown relate only to the benchmark provided on this survey. Use that benchmark and check at least one other feature shown on the map when determining other elevations for use on this site.

**STANDARD SYMBOLS & CONVENTIONS:**

See Minnesota 127 ID paper with plastic ring bearing State License Number 9235, set, unless otherwise noted.

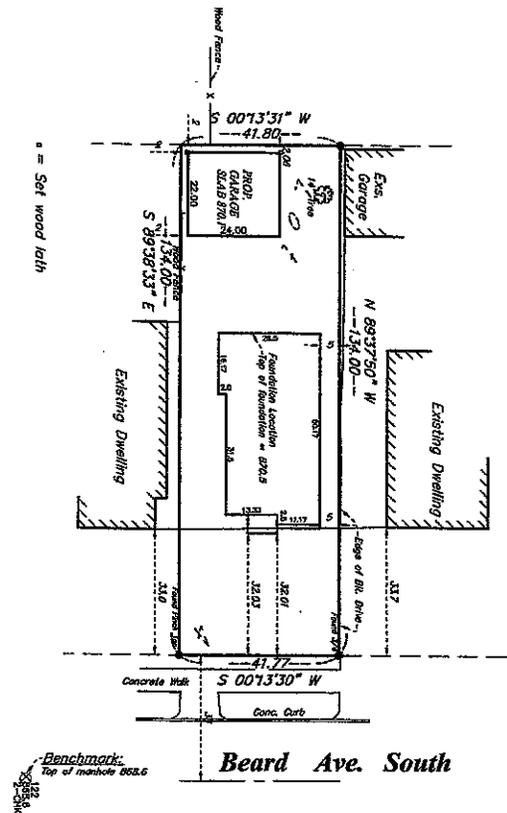
**CERTIFICATION:**

I hereby certify that this plan, specification, report or survey was prepared by me or under my direct supervision and that I am a Licensed Professional Engineer and Professional Surveyor under the laws of the State of Minnesota.

Signature: *James M. Parker* Typed Name: James H. Parker

Date: October 16, 2014

Reg. No. 9235



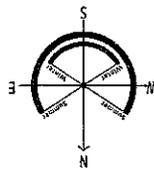
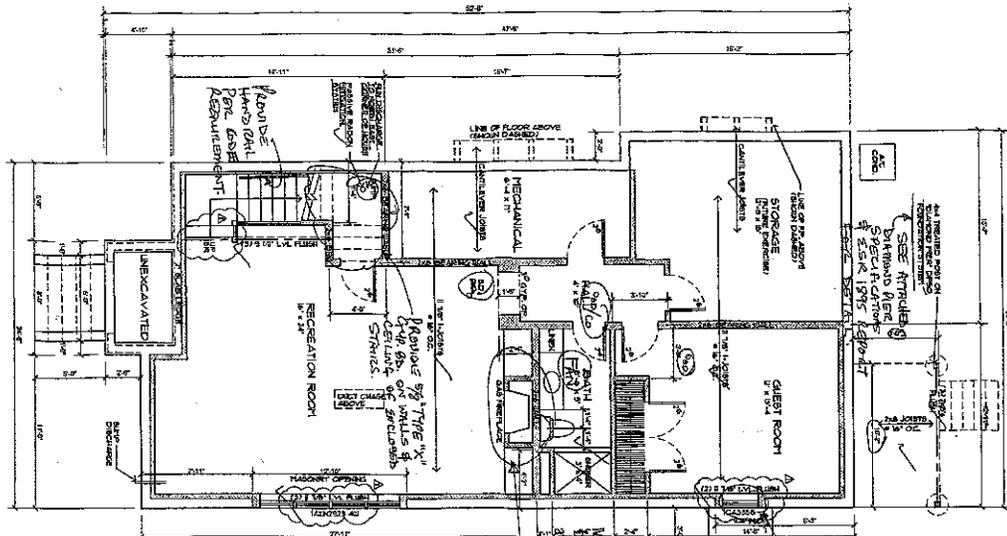
OPED - Planning  
Zoning Section  
Date 10/17/14  
Initials SNA  
Approving Top of Foundation

Drw. No. 140831 TB

T2286

BINB 2003357

LOWER LEVEL PLAN APPROX. FIN. 50' FOOTAGE • 0394



- FLOOR PLAN GENERAL NOTES:**
1. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF MINNEAPOLIS ORDINANCES AND SPECIFICATIONS.
  2. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF MINNEAPOLIS ORDINANCES AND SPECIFICATIONS.
  3. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF MINNEAPOLIS ORDINANCES AND SPECIFICATIONS.
  4. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF MINNEAPOLIS ORDINANCES AND SPECIFICATIONS.
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  8. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF MINNEAPOLIS ORDINANCES AND SPECIFICATIONS.
  9. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF MINNEAPOLIS ORDINANCES AND SPECIFICATIONS.
  10. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF MINNEAPOLIS ORDINANCES AND SPECIFICATIONS.

Floor Area to Lot Area Ratio	1.0% Allowable
Main Level Area	1243 s.f.
Upper Level Area	1398 s.f.
Total Floor Area	2641 s.f.
Total Lot Area	5598 s.f.
Floor Area to Lot Area Ratio	46 %

Points Available	Points Obtained	Design Standard	Proposed Design
5	5	Not less than one (1) off-street parking space in an enclosed structure that is DETACHED from the principle structure.	New (2) car detached garage at rear of property
5	5	The structure includes a basement as defined by code	Lower Level floor slab is set 3'-4" below grade.
4	4	Upper Level Window Surface Area	James Hurdal cement board horizontal lap siding, James Hurdal cement, stucco panels w/ wood battens.
3	3	Not less than twenty (20) percent of the walls on each floor that face a rear or interior side lot line, not including half stories, face a rear or interior side lot line not including half stories, are window.	Main Level has 23%, Upper Level has 34%.
2	2	The pitch of the primary roof line is 6/12 or steeper.	The main roof of the home have 14/12 or 12/12 pitches.
1	0	The structure includes an open, covered front porch of at least seventy (70) square feet, not enclosed window, screen, or wall.	
1	0	The development includes at least one (1) deciduous tree in the front yard.	
24	18	Total Points (Minimum (15) Points Minimum)	

Require Finish  
Kitchen Area  
Cabinetry  
Resilient

**Window Ratio Calculations**

Window to Wall Ratio	East Elevation (Front)	Main Level Window Surface Area	Upper Level Window Surface Area	Window to Wall Ratio	South Elevation (Side)	Main Level Window Surface Area	Upper Level Window Surface Area	Window to Wall Ratio	North Elevation (Back)	Main Level Window Surface Area	Upper Level Window Surface Area	Window to Wall Ratio
	13% Minimum	184 s.f.	42 s.f.	13%	13% Minimum	391 s.f.	52 s.f.	13%	13% Minimum	426 s.f.	22 s.f.	13%
	13% Minimum	184 s.f.	42 s.f.	13%	13% Minimum	391 s.f.	52 s.f.	13%	13% Minimum	426 s.f.	22 s.f.	13%
	13% Minimum	184 s.f.	42 s.f.	13%	13% Minimum	391 s.f.	52 s.f.	13%	13% Minimum	426 s.f.	22 s.f.	13%
	13% Minimum	184 s.f.	42 s.f.	13%	13% Minimum	391 s.f.	52 s.f.	13%	13% Minimum	426 s.f.	22 s.f.	13%
	13% Minimum	184 s.f.	42 s.f.	13%	13% Minimum	391 s.f.	52 s.f.	13%	13% Minimum	426 s.f.	22 s.f.	13%
	13% Minimum	184 s.f.	42 s.f.	13%	13% Minimum	391 s.f.	52 s.f.	13%	13% Minimum	426 s.f.	22 s.f.	13%
	13% Minimum	184 s.f.	42 s.f.	13%	13% Minimum	391 s.f.	52 s.f.	13%	13% Minimum	426 s.f.	22 s.f.	13%
	13% Minimum	184 s.f.	42 s.f.	13%	13% Minimum	391 s.f.	52 s.f.	13%	13% Minimum	426 s.f.	22 s.f.	13%
	13% Minimum	184 s.f.	42 s.f.	13%	13% Minimum	391 s.f.	52 s.f.	13%	13% Minimum	426 s.f.	22 s.f.	13%
	13% Minimum	184 s.f.	42 s.f.	13%	13% Minimum	391 s.f.	52 s.f.	13%	13% Minimum	426 s.f.	22 s.f.	13%

Require Finish  
Kitchen Area  
Cabinetry  
Resilient

PROPOSED NEW CONSTRUCTION FOR:  
**LANDMARK**  
4312 BEARD AVENUE  
MINNEAPOLIS, MINNESOTA

DESIGN COMPANY  
**HOH**  
P: 952.280.4218  
MINNEAPOLIS, MN 55408

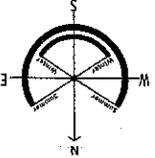
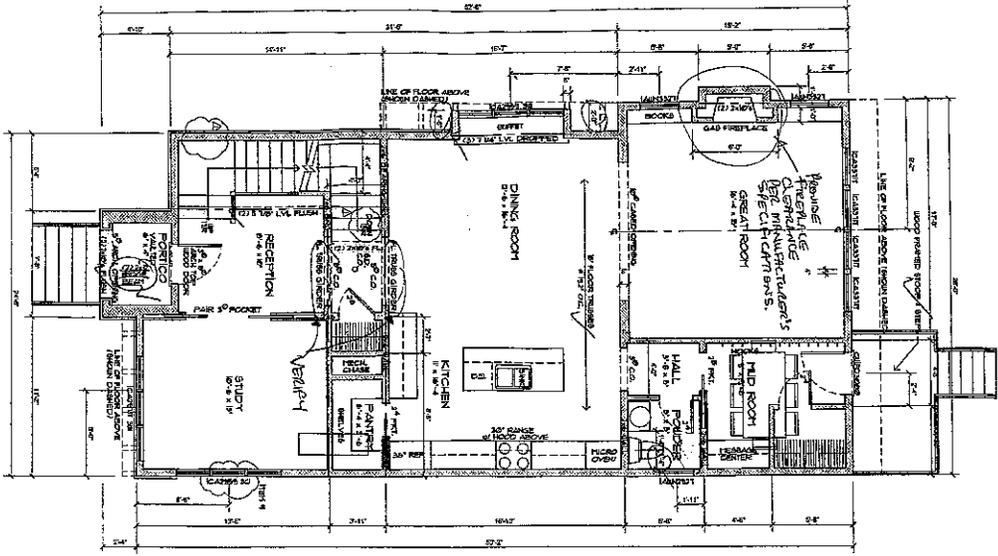
DESIGN COMPANY  
**LANDMARK**  
BUILDING CONTRACTORS

DESIGN COMPANY  
**HOH**  
P: 952.280.4218  
MINNEAPOLIS, MN 55408

136085

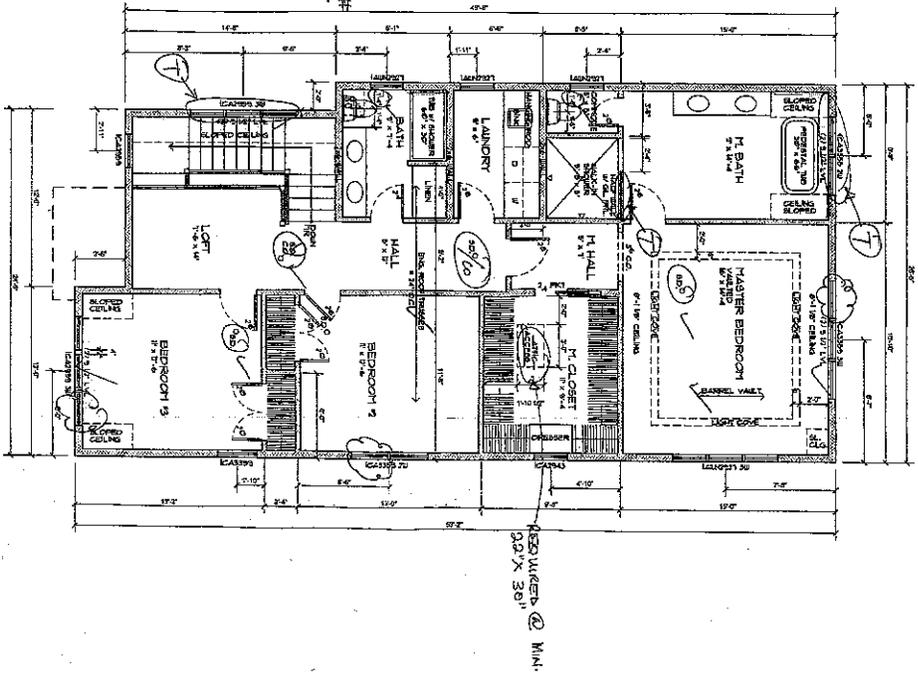
72286

1 MAIN LEVEL PLAN APPROX. FIN. SQ. FOOTAGE = 12434



SEE PLAN SHEET # 2 FOR ALL FIRE COMMENTS.  
 Smoke and Carbon Monoxide Detectors shall be installed and operable at time of final inspection.

2 UPPER LEVEL PLAN APPROX. FIN. SQ. FOOTAGE = 13374



JOB W27114  
 SHEET #  
**A2**  
 OF 3

ISSUE  
 REVISIONS  
 REVISIONS  
 REVISIONS

PROPOSED NEW CONSTRUCTION FOR:  
**LANDMARK**  
 4312 BEARD AVENUE  
 MINNEAPOLIS, MINNESOTA

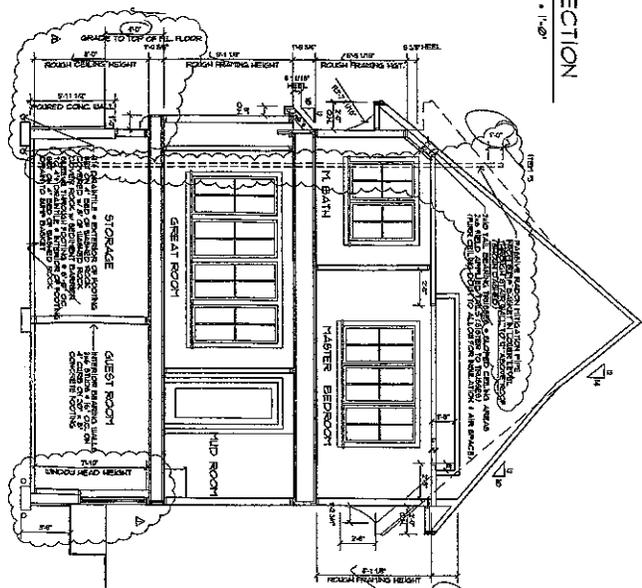
**LANDMARK**  
 BUILDING CONTRACTORS

INDISPENSIBLE FOR  
 ALL CONTRACTORS  
 TO BE AWARE OF THE  
 REQUIREMENTS OF THE  
 MINNESOTA BUILDING  
 CODE AND THE  
 MINNESOTA FIRE  
 CODE.

**HOH**  
 DESIGN COMPANY  
 P: 952.250.4215  
 1000 W. WASHINGTON, MN 55408



1 SECTION  
1/4" = 1'-0"



**TYPICAL ROOF CONSTRUCTION**  
 ROOFING SYSTEM SHALL BE:  
 1. 1/2" ASPHALT/FLUTE SHINGLES  
 2. 1" INSULATED ROOF BOARDING  
 3. 1" POLYSTYRENE INSULATION  
 4. 1/2" GYP. BOARD  
 5. 1" 2x4 VANGUE RAFTERS  
 6. 1" 2x6 VANGUE PURLINS

**TYPICAL SOFFIT CONSTRUCTION**  
 SOFFIT SHALL BE:  
 1. 1/2" GYP. BOARD  
 2. 1" POLYSTYRENE INSULATION  
 3. 1" 2x4 VANGUE RAFTERS  
 4. 1" 2x6 VANGUE PURLINS

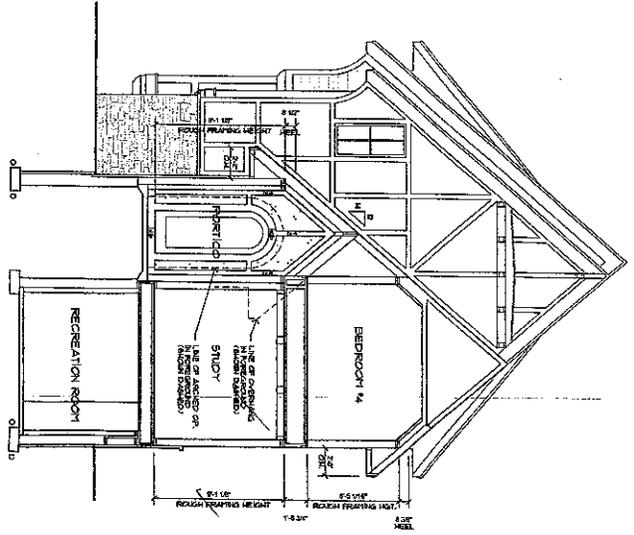
**UPPER LEVEL ROOF CONSTRUCTION**  
 UPPER LEVEL ROOF SHALL BE:  
 1. 1/2" ASPHALT/FLUTE SHINGLES  
 2. 1" INSULATED ROOF BOARDING  
 3. 1" POLYSTYRENE INSULATION  
 4. 1/2" GYP. BOARD  
 5. 1" 2x4 VANGUE RAFTERS  
 6. 1" 2x6 VANGUE PURLINS

**TYPICAL EXTERIOR WALL CONSTRUCTION**  
 EXTERIOR WALL SHALL BE:  
 1. 1/2" GYP. BOARD  
 2. 1" POLYSTYRENE INSULATION  
 3. 1" 2x4 VANGUE RAFTERS  
 4. 1" 2x6 VANGUE PURLINS

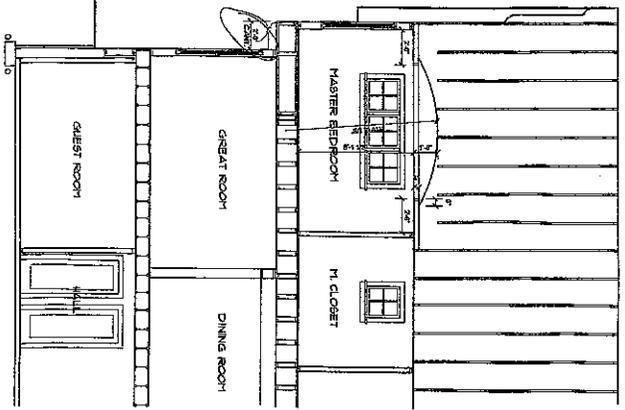
**MAIN LEVEL ROOF CONSTRUCTION**  
 MAIN LEVEL ROOF SHALL BE:  
 1. 1/2" ASPHALT/FLUTE SHINGLES  
 2. 1" INSULATED ROOF BOARDING  
 3. 1" POLYSTYRENE INSULATION  
 4. 1/2" GYP. BOARD  
 5. 1" 2x4 VANGUE RAFTERS  
 6. 1" 2x6 VANGUE PURLINS

**TYPICAL FLOOR SLAB CONSTRUCTION**  
 FLOOR SLAB SHALL BE:  
 1. 1" 12" REINFORCED CONCRETE SLAB  
 2. 1" POLYSTYRENE INSULATION  
 3. 1" 2x4 VANGUE RAFTERS  
 4. 1" 2x6 VANGUE PURLINS

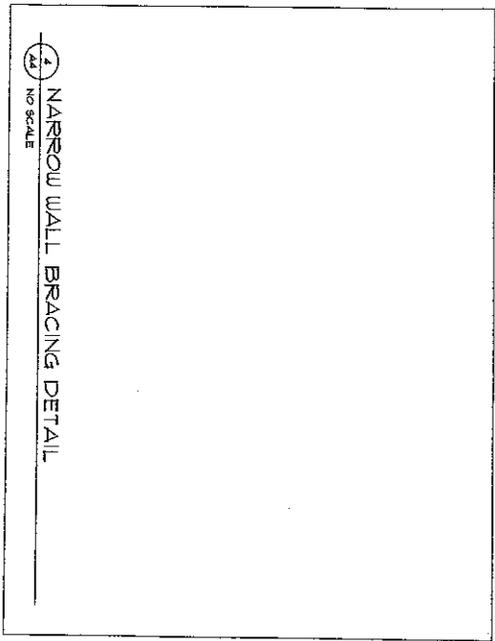
2 SECTION  
1/4" = 1'-0"



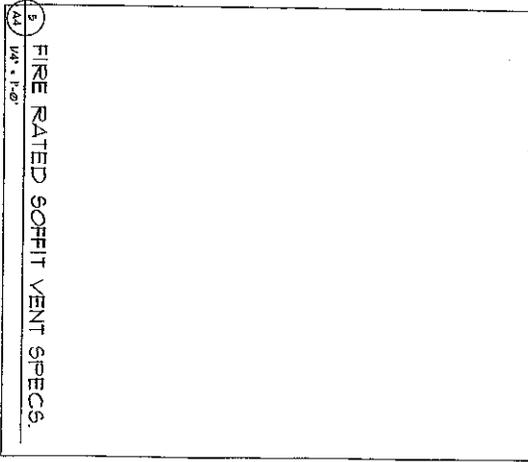
3 SECTION  
1/4" = 1'-0"



4 NARROW WALL BRACING DETAIL  
NO SCALE



5 FIRE RATED SOFFIT VENT SPECS.  
1/4" = 1'-0"



**HOH**  
 DESIGN COMPANY  
 P. 952.250.4215  
 421 EAST WENWATER  
 MINNETONKA, MINNESOTA

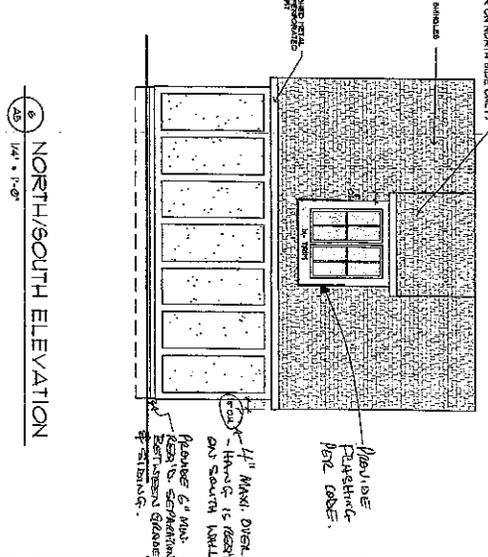
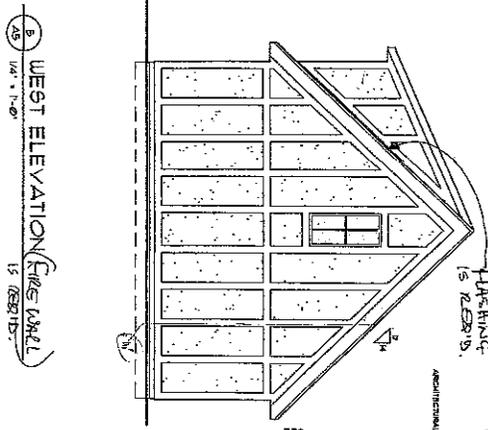
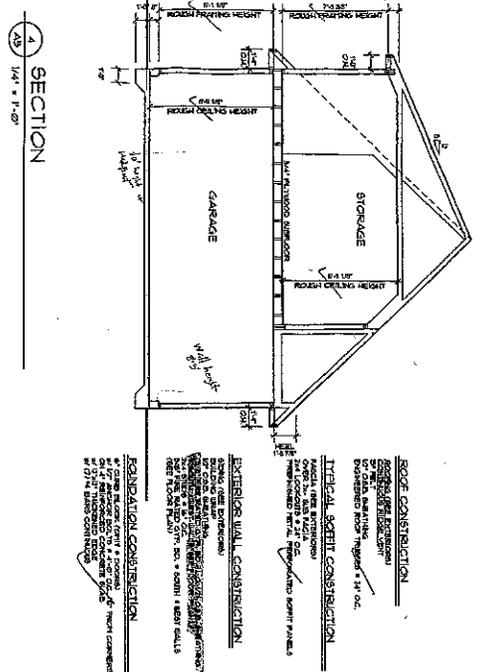
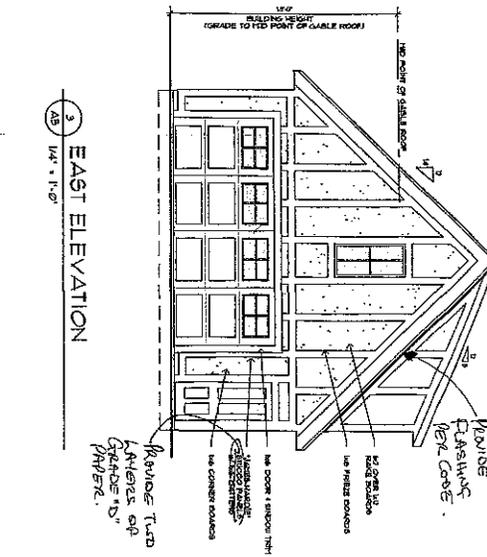
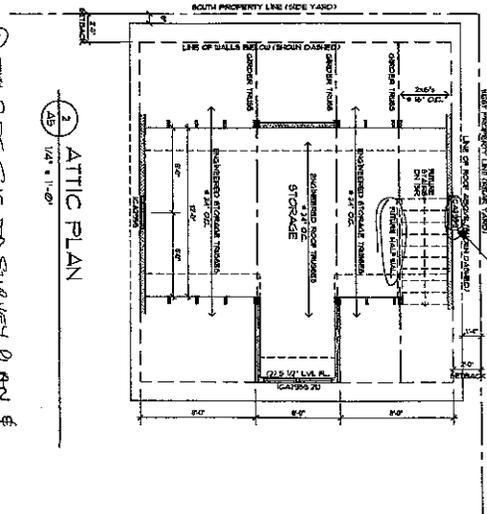
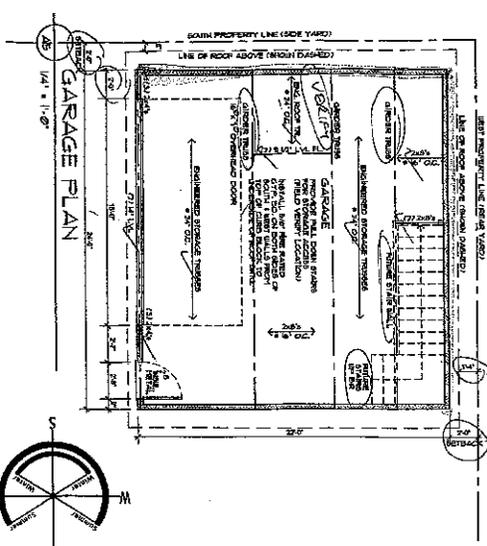
**IMPORTANT NOTE FOR SUBCONTRACTORS**  
 1. The contractor shall be responsible for obtaining all necessary permits.  
 2. The contractor shall be responsible for coordinating all trades.  
 3. The contractor shall be responsible for maintaining the site in a safe condition at all times.

**MARK**  
 BUILDING CONTRACTORS

PROPOSED NEW CONSTRUCTION FOR:  
**LANDMARK**  
 4312 BEARD AVENUE  
 MINNEAPOLIS, MINNESOTA

ISSUE  
 REVISIONS  
 DATE: 10/10/2014

JOB: 07/14  
 SHEET: 8  
**A2**



**ROOF CONSTRUCTION**  
 ROOFING: 1/2" OSB SHEATHING  
 INSULATION: 1" R-19 CELLULOSE INSULATION  
 FINISH: 1/2" GYP BOARD  
 FLASHING: 3" ALUMINUM FLASHING

**EXTERIOR WALL CONSTRUCTION**  
 FINISH: 1/2" GYP BOARD  
 INSULATION: 1" R-19 CELLULOSE INSULATION  
 STRUCTURE: 2" X 4" STUDS @ 16" O.C.

**FOUNDATION CONSTRUCTION**  
 FOUNDATION: 12" CONCRETE ON GRADE  
 WALLS: 8" CMU WITH 1" R-10 INSULATION  
 FINISH: 1/2" GYP BOARD

SEE SIGNED SURVEY PLAN & ATTACHED GARAGE WALL PROTECTION INTERVENTION BULLETIN FOR FIRE WALL SIZING & ROOF EAVES RESURFACING.

APPROXIMATE RAFTER SPACING  
 APPROXIMATE TRUSS SPACING  
 APPROXIMATE STUD SPACING  
 APPROXIMATE JOIST SPACING  
 APPROXIMATE GABLE END STUD SPACING

FLASHING IS REQUIRED ON NORTH SIDE ONLY

FLASHING IS REQUIRED ON SOUTH SIDE ONLY

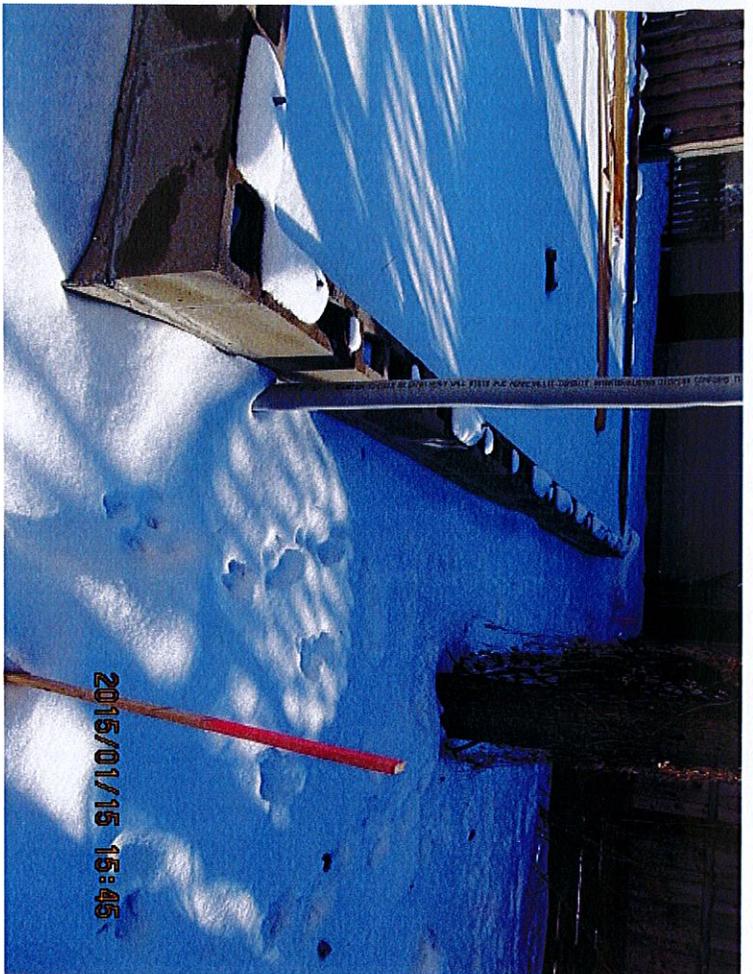
FLASHING IS REQUIRED ON WEST SIDE ONLY

FLASHING IS REQUIRED ON EAST SIDE ONLY

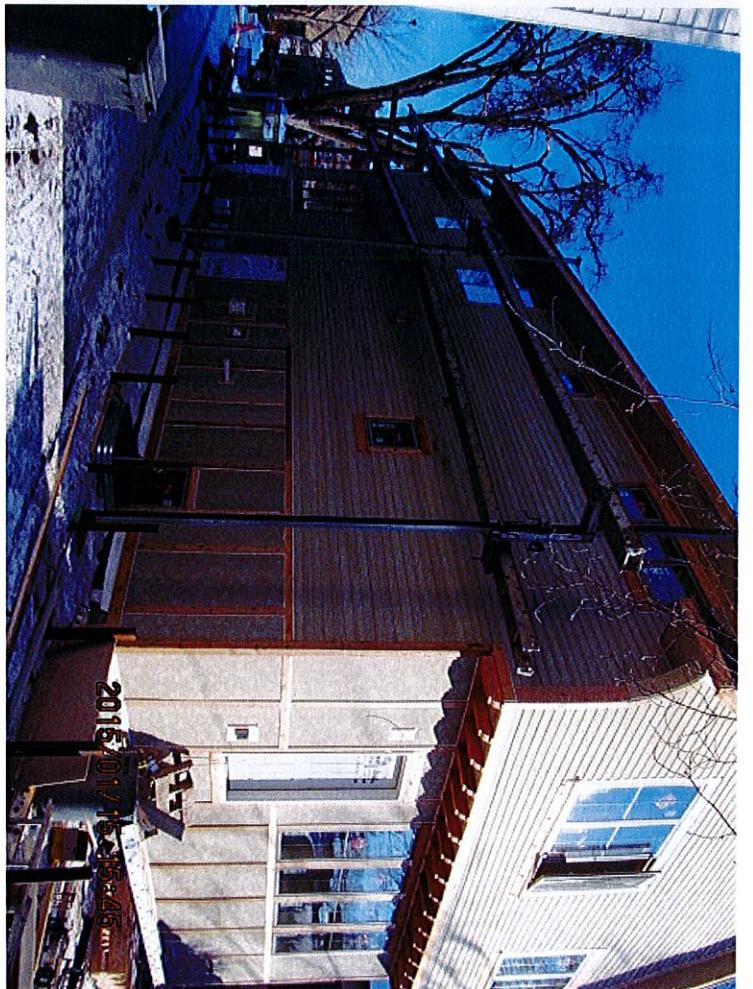
<b>HOH</b> DESIGN COMPANY P: 952.290.4215 451 LEXINGTON AVENUE MINNEAPOLIS, MN 55404	<b>LANDMARK</b> BUILDING CONTRACTORS	SHEET NO. 013 JOB # 27114 SHEET # 1	PROPOSED NEW CONSTRUCTION FOR: <b>LANDMARK</b> 4312 BEARD AVENUE MINNEAPOLIS, MINNESOTA	DATE: 08/27/2013 DRAWN BY: [Name] CHECKED BY: [Name] APPROVED BY: [Name]
		REVISIONS	1. [Description] 2. [Description] 3. [Description]	1. [Description] 2. [Description] 3. [Description]



4312 Beard Ave. S.

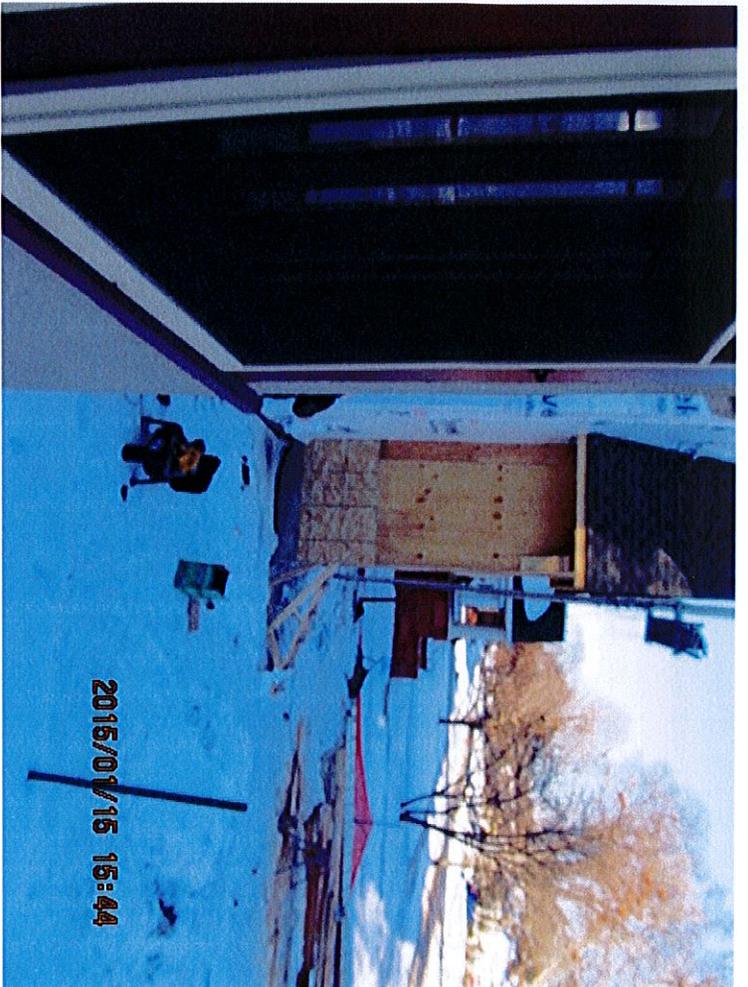


SJW

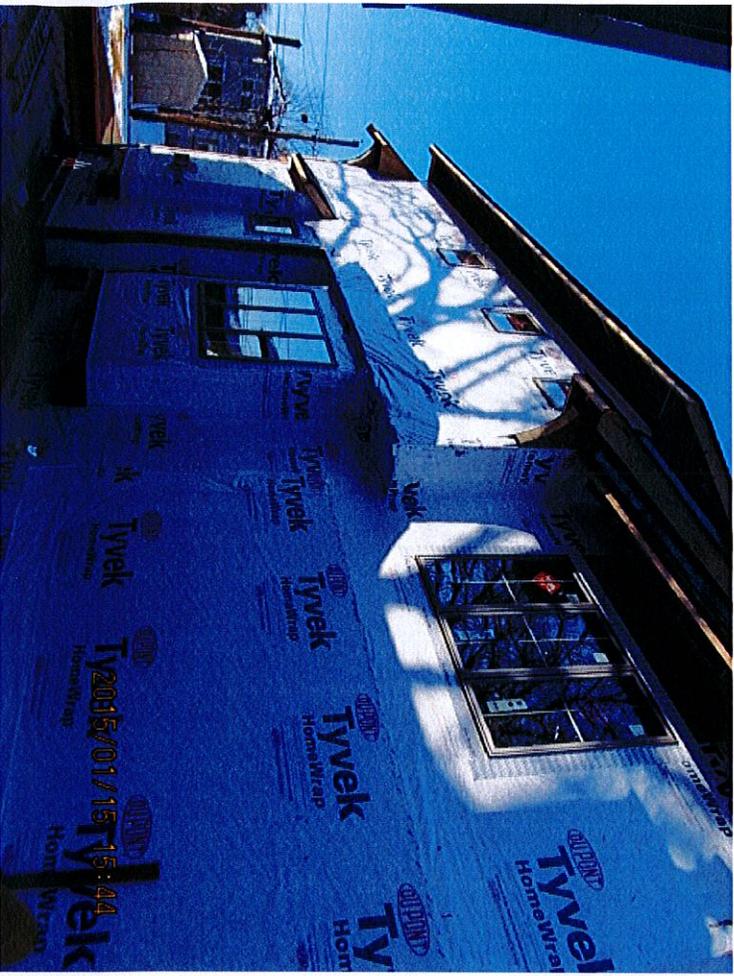




4312 Beard Ave. S.

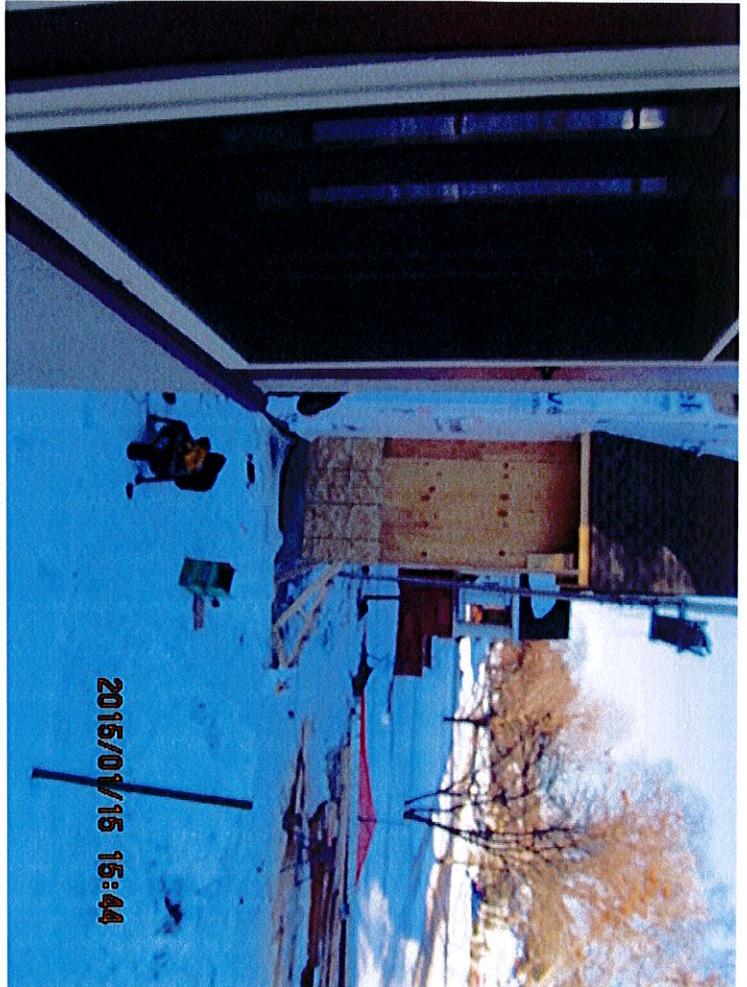
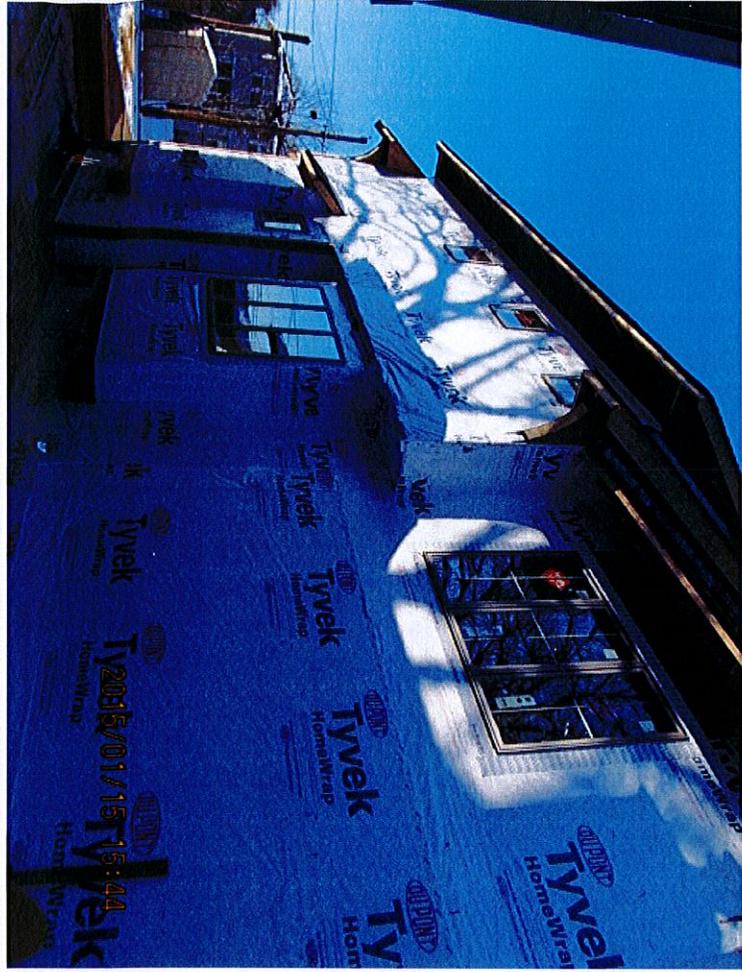


SJW





4312 Beard Ave. S.



SJW



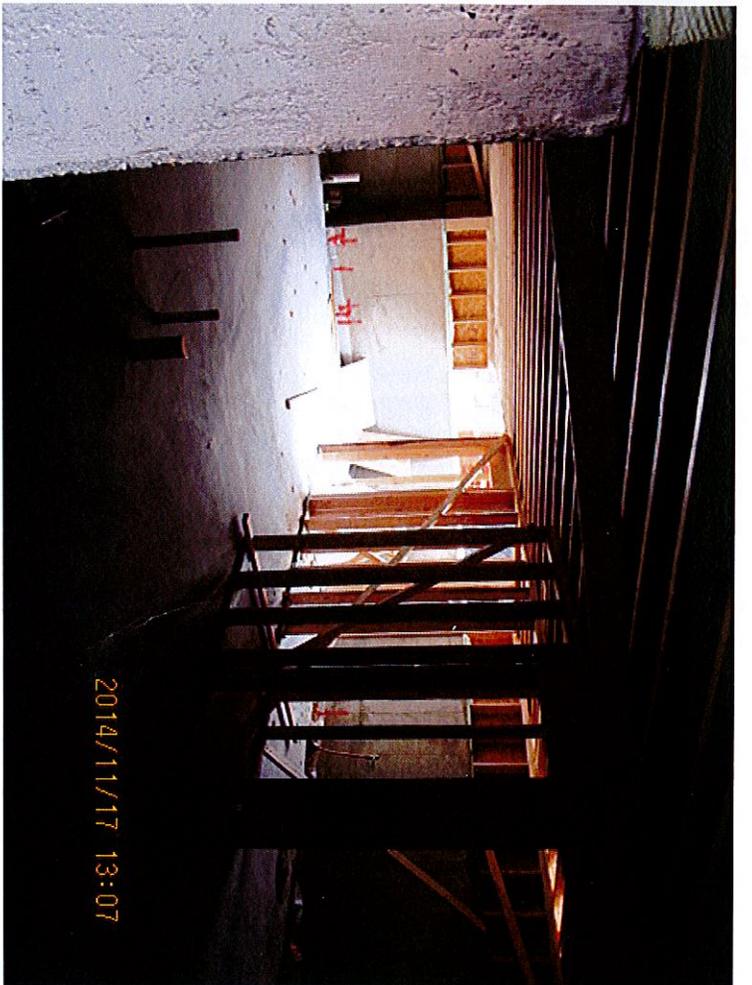


2014/11/17 13:06

4312 Beard Ave. S.



2014/11/17 13:07



2014/11/17 13:07

SW



2014/11/17 13:07



4312 Beard Ave. S.



SW





4312 Beard Ave. S.



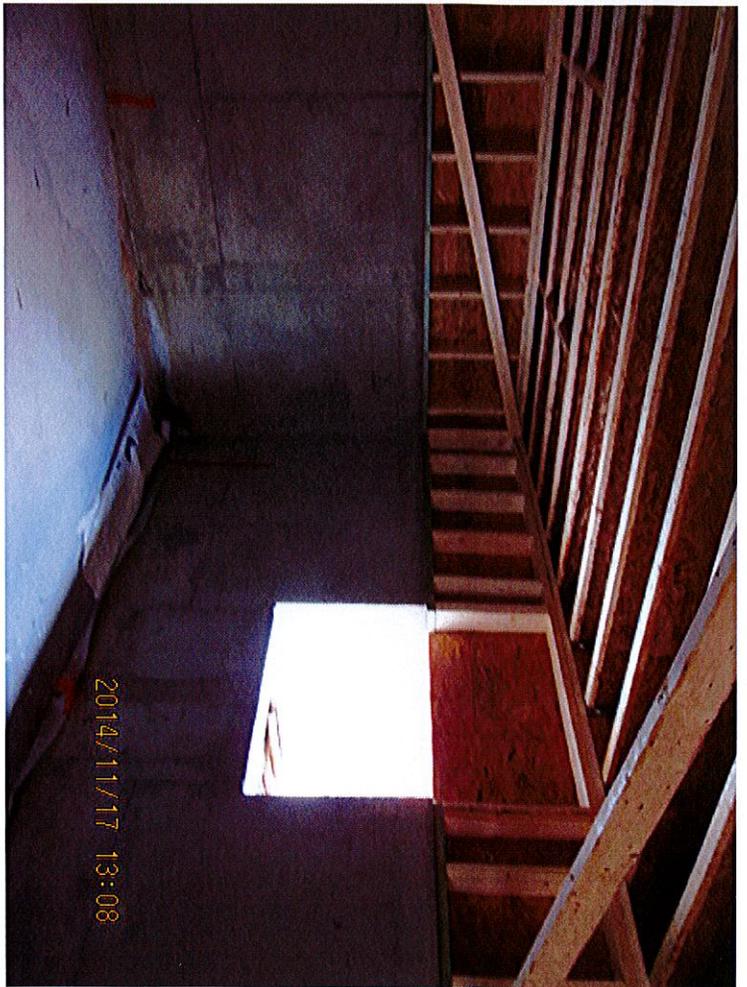
SIW





2014/11/17 13:08

4312 Beard Ave. S.



2014/11/17 13:08

SW



2014/11/17 13:13



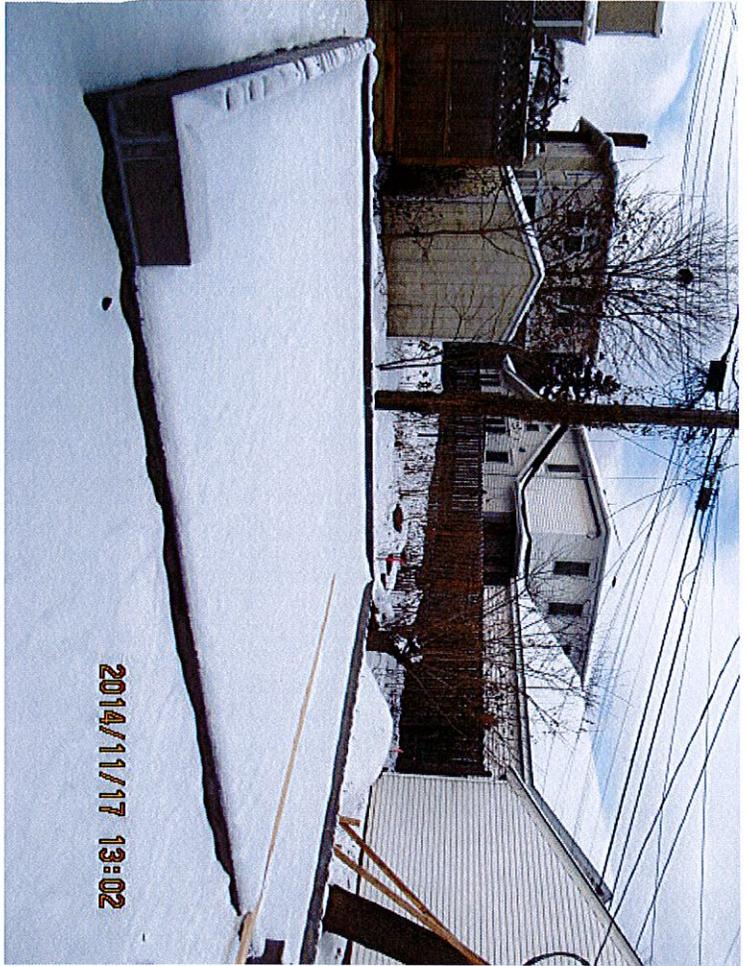
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4312 Beard Ave. S.

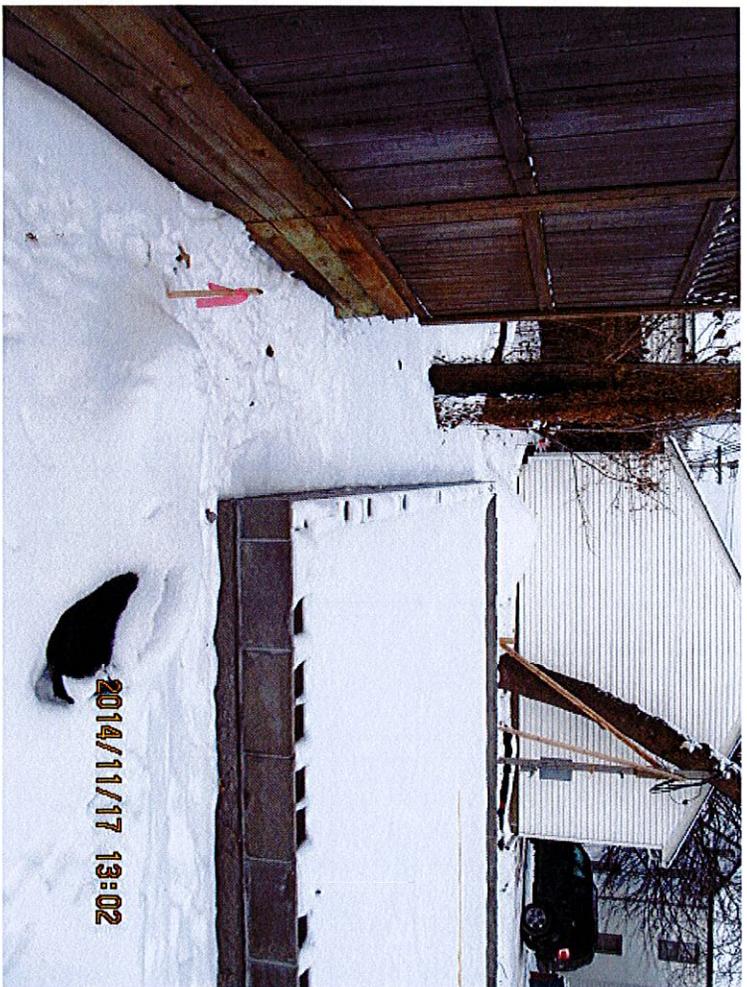


2014/11/17 13:01

SW



2014/11/17 13:02



2014/11/17 13:02

Recd 2/3/15

CITY OF MINNEAPOLIS  
COMMUNITY PLANNING AND ECONOMIC DEVELOPMENT  
PLANNING DIVISION, ZONING ENFORCEMENT SECTION  
300 PUBLIC SERVICE CENTER  
250 SOUTH 4TH STREET  
MINNEAPOLIS, MINNESOTA 55415

CEDAR CREEK CAPITAL LLC  
19018 VOGEL FARM TRL  
EDEN PRAIRIE, MN 55347

Copy

LANDMARK BUILDING CONTRACTORS LLC  
ATTN: MARK V SCHAEFER  
PO BOX 1027  
LAKEVILLE, MN 55044

**NOTICE OF NON-COMPLIANCE**

28-JAN-15  
Request Number: 14-1074710

**RE: 4312 BEARD AVE S**

On 15-JAN-15 an inspection of the premises at the above address disclosed conditions that are in non-compliance with the Minneapolis Code of Ordinances. Please make the corrections listed below by the due dates. A re-inspection will be conducted after the due date to assure all non-compliant issues have been corrected.

If all non-compliant items listed below have been corrected, no re-inspection fee will be charged. If the non-compliant items are not corrected you will be required to pay a two hundred dollar (\$200.00) fee for any subsequent inspection per Sections 525.570 (a) and (b).

The following corrections are required:

*The maximum building height and/or bulk must be reduced to comply with regulations of the zoning district. Minneapolis Code of Ordinances 546.240, 546.300, 546.360, 546.420, 546.480, 546.530, 546.580, 546.630, 547.240, 547.310, 547.350, 548.230, 548.290, 548.350, 548.410, 548.470, 549.400, 549.450, and 549.500.*

**Inspector's Comments: BECAUSE THE HEIGHT OF THE FIRST STORY IS GREATER THAN 4 FEET ABOVE NATURAL GRADE FOR MORE THAN 50% OF THE FOUNDATION, THE BASEMENT FLOOR AREA IS ADDED TO THE FIRST AND SECOND FLOORS FOR THE FLOOR AREA RATIO (FAR) DETERMINATION. THE RESIDENCE EXCEEDS THE**

**ALLOWABLE BULK WITH 3,467 SQUARE FEET OF FLOOR AREA AND A FLOOR AREA RATIO OF .62 (.5 FAR MAXIMUM).. THE BUILDING'S FIRST FLOOR ELEVATION MUST BE REDUCED OR A VARIANCE MUST BE APPROVED TO ALLOW THE RESIDENCE TO REMAIN.**

**Due Date: 27-FEB-2015**

This order may be appealed to the Board of Adjustment in accordance with the provisions of Section 525.170 of the City of Minneapolis Zoning Code within ten (10) calendar days of the date of this order, i.e., no later than 3:30 p.m. **07-FEB-15** or the first business day after if **07-FEB-15** is a weekend or city holiday. If you wish to appeal this order or have questions about the appeal process, please call 612-673-3000 ('311' if within the City of Minneapolis) **and ask for a service request to be created for "Zoning"** or visit the Zoning Office, located at 250 South 4<sup>th</sup> Street, Room 300, between the hours of 8:00-3:30 p.m.

**Please be aware that any appeal of this order to the Board of Adjustment will include (at minimum):** (1) submittal of a complete appeal application by the date outlined in the paragraph above (including mailing labels from Hennepin County Taxpayer Services), (2) full payment of appeal application fee (currently \$365 + \$25 publication fee + first class postage for notification of all property owners within 350 feet of the affected property), and (3) a public hearing in front of the Board of Adjustment.

Per MCO 259.15 and MCO 360.140, failure to pay all financial claims associated with zoning compliance orders (including but not limited to unpaid administrative citations and/or re-inspection fees) may result in adverse license action for any City of Minneapolis licensed business at this location. Adverse license action may include denial or revocation of any business license application.

If you have any questions or concerns regarding this order, please call me:

**STEVE WECKMAN (SJW), ZONING INSPECTOR II, Phone: (612)673-5849**

**Code Information:**

The Minneapolis Code of Ordinances is available on computer terminals at:

- ◆ Minneapolis Public Library, Government Documents Section
- ◆ City Clerk's Office, Room 304 City Hall, 350 South 5<sup>th</sup> Street

The code is also available through the Internet using the Minneapolis home page, [www.ci.minneapolis.mn.us](http://www.ci.minneapolis.mn.us)

Below are the steps to guide you through the web page:

- ◆ Go to How do I find out about...
- ◆ Select Minneapolis Ordinances
- ◆ Click the GO button

- ◆ Click on Minneapolis Code of Ordinances
- ◆ Enter your subject or ordinance code and click on Send Query

**English- Attention. If you want help translating this information, call**

**Spanish- Atención. Si desea recibir asistencia gratuita para traducir esta información, llama 612-673-2700**

**Somali- Ogow. Haddii aad dooneyso in lagaa kaalmeeyo tarjamadda macluumaadkani oo lacag la' aan wac 612-673-3500**

**Hmong-Ceeb toom. Yog koj xav tau kev pab txhais cov xov no rau koj dawb, hu 612-673-2800**

**Sign Language Interpreter- 612-673-3220 TTY: 612-673-2626**

From: **Weckman, Stephen J.** Steve.Weckman@minneapolismn.gov  
Subject: RE: 4312 beard ave s revised survey.  
Date: January 26, 2015 at 1:41 PM  
To: Mark Schaefer mark@landmarkbuildco.com

---

Mark,

Based on the natural grade prior to construction, over 50% of the perimeter of the building is greater than 4 feet above grade. Your proposed final grade is exactly at 4 feet below the finished first floor elevation. Plans will not be approved like this in the future, but the disposition of this case is being evaluated by the zoning administrator. I will let you know the status by tomorrow afternoon.

Steve Weckman  
Zoning Inspector II

City of Minneapolis - Community Planning and Economic Development  
250 S. Fourth Street - Room 300  
Minneapolis, MN 55415

Office: 612-673-5849

Steve.Weckman@minneapolismn.gov  
www.minneapolismn.gov/cped

-----Original Message-----

From: Mark Schaefer [mailto:mark@landmarkbuildco.com]  
Sent: Monday, January 26, 2015 1:26 PM  
To: Weckman, Stephen J.  
Subject: Re: 4312 beard ave s revised survey.

Are we good?

Mark Schaefer  
Landmark Building Contractors  
P: 952-221-7177  
Mark@landmarkbuildco.com

**From:** Weckman, Stephen J. [Steve.Weckman@minneapolismn.gov](mailto:Steve.Weckman@minneapolismn.gov)  
**Subject:** RE: 4312 beard ave s revised survey.  
**Date:** January 26, 2015 at 9:56 AM  
**To:** Mark Schaefer [mark@landmarkbuildco.com](mailto:mark@landmarkbuildco.com)

---

Mark,

You did send the survey to me directly. Thanks.

Steve Weckman  
Zoning Inspector II

City of Minneapolis - Community Planning and Economic Development  
250 S. Fourth Street - Room 300  
Minneapolis, MN 55415

Office: 612-673-5849

[Steve.Weckman@minneapolismn.gov](mailto:Steve.Weckman@minneapolismn.gov)  
[www.minneapolismn.gov/cped](http://www.minneapolismn.gov/cped)

-----Original Message-----

**From:** Mark Schaefer [<mailto:mark@landmarkbuildco.com>]  
**Sent:** Wednesday, November 26, 2014 8:38 AM  
**To:** Weckman, Stephen J.  
**Subject:** 4312 beard ave s revised survey.

**From:** Weckman, Stephen J. Steve.Weckman@minneapolismn.gov  
**Subject:** 4312 Beard Ave. S. - Revised Top of First Floor Elevation  
**Date:** November 26, 2014 at 7:51 AM  
**To:** mark@landmarkbuildco.com  
**Cc:** Poor, Steve Steve.Poor@minneapolismn.gov, Abdi, Suado M. Suado.Abdi@minneapolismn.gov

---

Mark,

Per our conversation last week, you were going to *submit revised plans showing a lower top of first floor elevation in compliance with zoning ordinances*. Please let me know when this will be arriving. Thank you

Steve Weckman  
Zoning Inspector II

City of Minneapolis - Community Planning and Economic Development  
250 S. Fourth Street - Room 300  
Minneapolis, MN 55415

Office: 612-673-5849

Steve.Weckman@minneapolismn.gov  
[www.minneapolismn.gov/cped](http://www.minneapolismn.gov/cped)

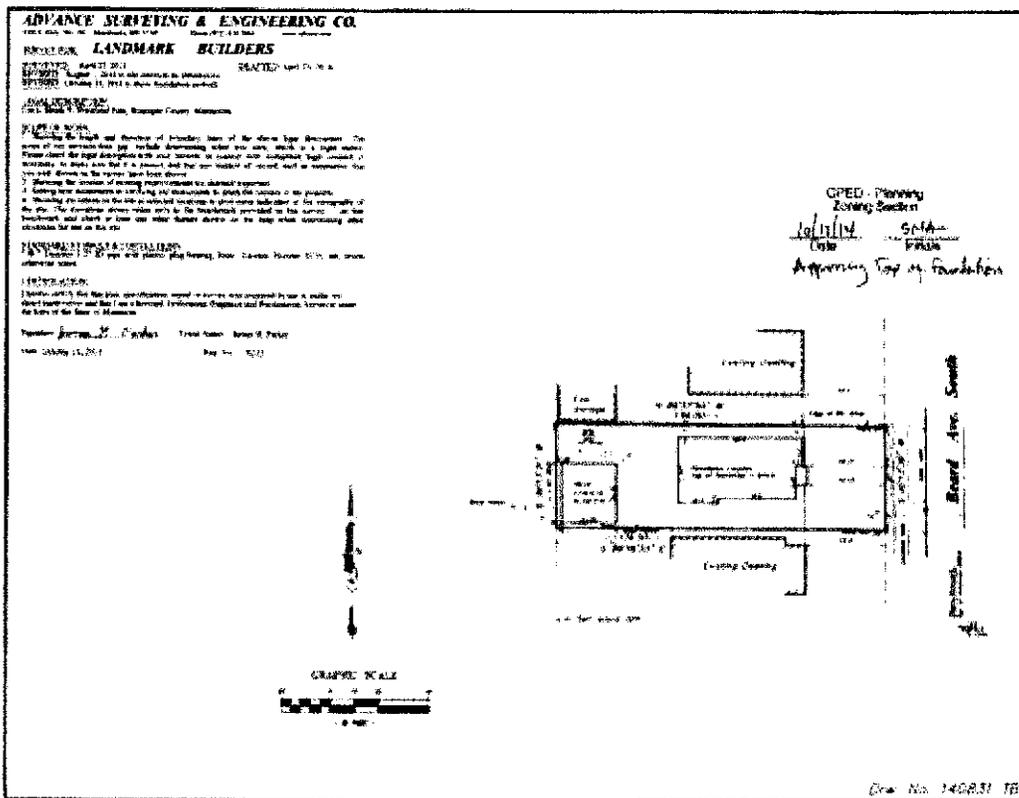
From: Campagna, Kesha D. Kesha.Campagna@minneapolismn.gov  
 Subject: approved top of block  
 Date: October 17, 2014 at 2:55 PM  
 To: Mark Schaefer mark@landmarkbuildco.com  
 Cc: Bach, Marlene B. Marlene.Bach@minneapolismn.gov

Mark, I have the hard copy at my desk- pick it up when you come in. Have a great weekend.

-----Original Message-----

From: QUEUENAME [mailto:noreply@minneapolismn.gov]  
 Sent: Friday, October 17, 2014 2:48 PM  
 To: Campagna, Kesha D.  
 Subject: Send data from MFP07921844 10/17/2014 14:48

Scanned from MFP07921844  
 Date: 10/17/2014 14:48  
 Pages: 1  
 Resolution: 200x200 DPI



**From:** Campagna, Kesha D. Kesha.Campagna@minneapolismn.gov   
**Subject:** 4312 Beard Ave  
**Date:** September 18, 2014 at 4:14 PM  
**To:** Mark Schaefer mark@landmarkbuildco.com

---

Hi Mark,

4312 Beard is ready to go- the amount is \$5,790.46- I'll be out of the office tomorrow so I'll forward it to the front counter for you. Have a great weekend.

Kesha

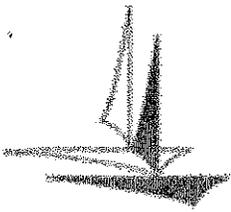
---

**Kesha Campagna**  
*Development Coordinator I*

**City of Minneapolis – Community Planning and Economic Development**  
250 S. Fourth Street – Room 300  
Minneapolis, MN 55415

Office: 612-673-2854  
[kesha.campagna@minneapolismn.gov](mailto:kesha.campagna@minneapolismn.gov)  
[www.minneapolismn.gov/cped](http://www.minneapolismn.gov/cped)





City of Minneapolis  
 Department of Community Planning  
 & Economic Development - CP&ED

**Community Planning and  
 Economic Development (CP&ED)  
 Development Review Cus**

250 South 4<sup>th</sup> Street – Room  
 Minneapolis, MN 55402  
 Office 612-673-3000  
 Fax 612-370-1400  
 TTY 612-673-2157  
 www.minneapolismn.gov/mc

For Office Use Only	
CPCI Intake #	
Date:	September 15, 2014
Division	Reviewer
CCS Plan Review	AAJ
LUDP	Choose an item
Zoning - HPC	SMA
Health	Choose an item
Public Works	Choose an item

**Plan Revision**

*Note – ALL revisions to original plan submission MUST  
 be accompanied by a written explanation of each modification.*

Permit issued? Yes  No  Permit # BINB T2286 Assign

Property Address: 4312 Beard Ave S

Permit Applicant: Landmark Building Contractors LLC  
 Contact: Mark Schaefer

Phone: 952-221-7177  
 Phone: 952-221-7177

Email: mark@landmarkbuildco.com  
 Email: mark@landmarkbuildco.com

*(Note: All correspondence will be sent to the person named as Project Contact)*

Designer Contact: \_\_\_\_\_ Phone: \_\_\_\_\_ Email: \_\_\_\_\_  
 Project Description: \_\_\_\_\_

Were the revisions requested by City staff? Yes  No  Requester(s) Name: \_\_\_\_\_

Dollar Amount for Revision Only \$ \_\_\_\_\_ 0.00 \_\_\_\_\_ Dollar Amount for (New) Total Project \$ \_\_\_\_\_

➤ Please attach a copy of original correction request checksheet(s) and describe changes to each plan sheet below.

Explain the nature of these changes, including any exterior changes (e.g., elevations, footprint, etc.): \_\_\_\_\_

**NOTE:** Please number all changes on each plan sheet and identify individual items in the '#' column below. Include a brief description of each change and plan sheet #'s in the appropriate column. Each change must be clouded on all plan sheets. Use as many lines and/or attach additional sheets as necessary to describe your changes.

#	Description of changes, revisions, additions, etc.	Plan sheet #(s)	Checked by: (staff use only)
1	Foundation elevation and window Calculation change	A1,2,3,4 Site plan	
2	First Floor elevation reduction	a3, a4, site plan	
3	Basement calculations and definition compliance	a3, a4, site plan	
4	Home roof elevation change	a3, a4, site plan	

(See reverse side for additional information)

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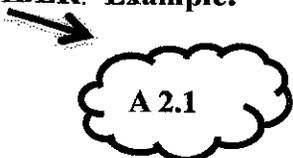
## Instructions for Submitting Plan Revisions and Additional Information

---

You have submitted an application that requires review by one or more of our review staff. The following is information about submitting *revised and/or additional information*.

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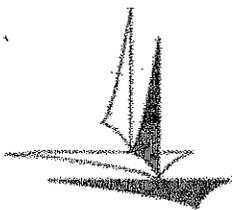
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- **Read and sign the “Applicant Agreement and Signature” section of this form below.**

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### **APPLICANT AGREEMENT AND SIGNATURE**

I declare that the information provided herein is true and correct to the best of my knowledge. I acknowledge that any false, misleading, or incomplete information will constitute grounds for denial of the application for the permit or, if the permit is issued in reliance on information that is false or misleading, then such information will constitute grounds for revocation and cancellation of the permit issued.



City of Minneapolis  
 Department of Community Planning  
 & Economic Development - CPED

**Community Planning and  
 Economic Development (CPED)  
 Development Review Customer Service**

250 South 4<sup>th</sup> Street – Room 500  
 Minneapolis, MN 55402  
 Office 612-673-3000  
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**CITY OF MINNEAPOLIS • COMMUNITY PLANNING & ECONOMIC DEVELOPMENT**

250 South Fourth Street, Room 300, Minneapolis, MN 55415  
 because the basement is included in the gross floor area calculation for the structure, which did not appear to be factored into the calculation on your application form. The basement is included because the first floor area of the first story is 4 feet or more above natural grade for more than 50% of the total perimeter (See section 546.240(b) of the Zoning Code.) You will need to adjust the project so that it meets the FAR standards or apply for a variance to the maximum FAR limit.

2. Sheet A4: The section drawings help illustrate that the first floor area of the first story is exposed 5 feet above natural grade.
3. Please note that the proposed FAR excluding the basement is approximately 46%.
4. The maximum height for all single or two-family dwellings located in the R1A District shall be two and one-half (2.5) stories or thirty (30) feet, whichever is less. Proposed height is approximately 29.5 feet based on the tallest pitch. Please be mindful of the height.

CCS PLAN REVIEW	ADEDOJA JINADU	Phone	612-673-2681
		Fax	612-673-2638
		Email	Adedoja.Jinadu@minneapolismn.gov

Based on the plans and specifications submitted, the following items appear to be missing or not in conformance with the building, plumbing, mechanical and/or elevator code requirements.

Item #	Clarification/Correction Required Code or Policy Reference
--------	---

No further revisions needed.

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**You are required to complete the attached Plan Revision Submittal Form and include it with your re-submittal.**

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**CITY OF MINNEAPOLIS • COMMUNITY PLANNING & ECONOMIC DEVELOPMENT**

250 South Fourth Street, Room 300 • Minneapolis, MN 55415 • [www.minneapolismn.gov/cped](http://www.minneapolismn.gov/cped)

**PLAN EXAMINATION CHECKSHEET**

Application # **BINB T2286**

Review Date **September 15, 2014**

<b>To:</b>  Applicant	<b>Landmark Building Contractors</b> <b>PO Box 1027</b> <b>Lakeville MN 55004</b>	Work	Phone # 952-221-7177
		Fax	Fax #
		Email	mark@landmarkbuildco.com

<b>From:</b>  Development Coordinator	  <b>Kesha Campagna</b>	Phone	612-673-2854
		Fax	612-673-5819
		Email	kesha.campagna@minneapolismn.gov

<b>cc:</b>  Property Owner	<b>Cedar Creek Capital LLC</b>		

**PROJECT INFORMATION**

Street Address:	<b>4312 Beard Ave S</b>
Description of Work:	<b>Single family Dwelling</b>

**REVIEWER COMMENTS AND RESUBMITTAL REQUIREMENTS**

<b>PLANNING &amp; ZONING</b>	<b>SUADO ABDI</b>	Phone	612-673-2467
		Fax	612-673-2526
		Email	Suado.Abdi@minneapolismn.gov

Based on the plans and specifications submitted, the following items appear to be missing or not in conformance with planning and zoning requirements.

Item #	Clarification/Correction Required Code or Policy Reference
--------	--

**CITY OF MINNEAPOLIS • COMMUNITY PLANNING & ECONOMIC DEVELOPMENT**

250 South Fourth Street, Room 300, Minneapolis, MN 55415 - are a variance (FAR) is in this case likely because the basement is included in the gross floor area calculation for the structure, which did not appear to be factored into the calculation on your application form. The basement is included because the first floor area of the first story is 4 feet or more above natural grade for more than 50% of the total perimeter (See section 546.240(b) of the Zoning Code.) You will need to adjust the project so that it meets the FAR standards or apply for a variance to the maximum FAR limit.

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CCS PLAN REVIEW	ADEDJOJA JINADU	Phone	612-673-2681
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September 18, 2014

Mark Schaefer  
2116 2<sup>nd</sup> Avenue S  
Minneapolis, MN 55404

**RE: Administrative Site Plan Review for a single-family dwelling at 4312 Beard Avenue S (BZZ-6724)**

Community Planning &  
Economic Development

Development Services

250 South 4th Street - Room 300  
Minneapolis MN 55415

Office 612 673-3000 or 311  
Fax 612 370-1416  
TTY 612 673-2157

Dear Applicant:

This letter is in regard to your application for Administrative Site Plan Review (BZZ-6724) for construction of a new single-family dwelling. Your application has been approved, subject to the conditions listed below.

1. Staff has evaluated the design for compliance with the minimum points criteria contained in Chapter 530, Site Plan review and determined the applicant has achieved 19 points, which meets the site plan review requirement of 15 points minimum. The points were achieved by the provision of the following elements of the design in the project:
  - Not less than one (1) off-street parking space per dwelling unit is provided in an enclosed structure that is detached from the principal structure (5 points);
  - The structure includes a basement as defined by the building code (5 points);
  - The primary exterior building material is masonry, brick, stone, stucco, wood, cement-based siding, and/or glass (4 points);
  - Not less than twenty (20) percent of the walls on each floor that face a public street, not including walls on half stories, are windows (3 points);
  - The pitch of the primary roof line is 6/12 or steeper (2 points);
2. The driveway shall be surfaced with a dustless all-weather hard surface material (Zoning Code section 541.300(b)).
3. The improvements required by Chapter 530 must be completed within two years from the date of this letter. The zoning administrator, upon written request, may for good cause shown grant up to a one (1) year extension to this time limit.

If you have any questions regarding this application or the conditions listed above, please contact the Development Coordinator assigned to this project. Thank you for your cooperation with the Minneapolis Department of Community Planning and Economic Development.

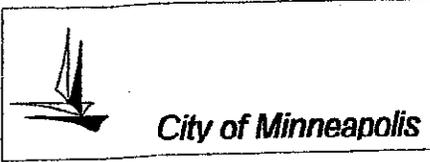
Sincerely,

Suado Abdi  
City Planner  
612.673.2467  
[suado.abdi@minneapolismn.gov](mailto:suado.abdi@minneapolismn.gov)



## Residential Plan Review Letter

8/20/2014



Reviewed By: ADEDOJA A. JINADU

Phone: 612-673-2681

Page 1 of 3

4312 BEARD AVENUE SOUTH

### Introduction

The plans for this project have been reviewed. The purpose of this review is to verify that the plans meet the requirements of the 2000 IRC, effective April 1, 2003, State Building Code and local ordinances. It is our intention to make you are aware of the code requirements and maintain a good working relationship. This will help avoid any unnecessary delays caused by lack of communication. The comments section of this plan review, while not all inclusive, should be used by the job superintendent as a checklist of code items. Also, note additional comments on the plans returned with the building permit. Please review these comments carefully. If there are any comments that you do not fully understand, please call me for a complete explanation.

### Building Data

#### Exterior Finish

The exterior shall be completed within one (1) year of the date of permit per Minneapolis Ordinance Section 89.165

#### Foundation Drainage

A foundation drainage system must be installed complying with IRC R405

#### Inspection Responsibility

It is the responsibility of the builder to call for inspections and verify that inspections have been approved before proceeding. When inspections are not approved, a correction notice will be posted on the jobsite or workmen will be told. Make corrections as indicated. Call for reinspection as noted on correction notice. No work shall be done on any part of the building or structure beyond the point indicated in each successive inspection without first obtaining an inspection and the approval of the building inspector. IRC R108.3

#### Inspections

Call for inspections at the times and in the proper order as noted on the inspection record card. The inspection record card must be returned to the Building Inspection Department when job is complete. Footing inspection: To be made after forms are in place and before concrete is poured or the soil is covered. Mechanical inspections: Plumbing, Electrical and HVAC inspections are to be made per their respective codes. Frame inspection: Plumbing, electrical and HVAC roughins must be approved and inspection record card signed before frame inspection. To be made after the roof, all framing, fire blocking and bracing are in place and all pipes, chimneys and vents are complete and the rough electrical, plumbing, and heating wires, pipes and ducts are approved. Insulation inspection: To be made after all required insulation is in place but before any covering material is in place. Gypsum Board inspection: To be made after all lathing and gypsum board, interior and exterior, is in place but before any plastering is applied or before gypsum board joints and fasteners are taped and finished. Final inspection: To be made after final electrical, plumbing and HVAC inspections, finish grading and the building is completed and ready for occupancy. The building shall not be occupied until all inspections have been made and approved and a Certificate of Occupancy has been issued. IRC R108.5.

### Building Code

### Approved Plans

Reviewed plans must not be changed, modified or altered without authorization of Building Inspector. Building permit is for the work shown on the reviewed plans and building permit application. Finished basements, porches, fireplaces, decks and other extras not on the reviewed plans require a separate building permit.

MSBC  
1300

This plan review does not relieve the builder of the requirements of the code. Plans have been reviewed for general conformance and design concept only. Actual compliance can only be determined by performance and field inspection. Issuance of this permit shall not be construed to give permission to violate any provisions of the code.

### Attic Access

Provide 22x30 minimum attic access that is readily accessible to all spaces with more than 30" headroom. IRC R807.

### Attic Ventilation

Vent attic with at least one square foot of vent for every 150 square feet of attic area. Attic may be vented 1/300 if 50 percent of the venting is in the soffit and 50 percent is near the roof peak. NOTE: Enclosed garage attics must be vented. IRC R806

### Building House Number

Provide house numbers, 4" min. height and mounted on the building at least 5 feet above the threshold and within 2 feet of main entry. Numbers must be reflective and a color clearly contrasting the background. Ordinance Section 17-40.

### Carbon Monoxide

Carbon Monoxide is required with 10 feet of each room lawfully used for sleeping purposes. It must be either hardwired into electrical wiring, directly plugged into an electrical outlet without a switch, or battery powered.

### Caulking and Flashing

Caulk and flash all exterior openings. Metal flashing shall be installed behind all exterior concrete steps and landings. IRC 703

### Decks

All wooden members of decks shall be treated, redwood or cedar. Deck beams bolted to posts must be bolted with at least two - 1/2" diameter bolts per post. Bolt rim joist of deck to house.

### Draftstops

Draft stops shall be installed in the attics, mansards, overhangs, false fronts set out from walls and similar concealed spaces of buildings containing more than one dwelling unit. Such draft stops shall be above and in line with the walls separating individual dwelling units. IRC R502.12

### Eave Ice Protection

Roof eaves must have at least 1 layer of No. 40 coated roofing applied to the eaves to a point a minimum of 24 inches inside the exterior wall line, or equivalent ice protection. IRC R509.8.3

### Egress Windows

Provide at least one escape window in each bedroom with a

## 312 BEARD AVENUE SOUTH

Minimum net clear opening of 5.7 square feet, a clear opening height of 24 inches, a clear opening width of 20 inches and finished sill height not more than 44 inches above the floor. It is the builders responsibility to verify, prior to installation, the clear opening of bedroom windows meets the escape window opening requirements. Escape windows are subject to field inspections. IRC R310.1.

### Escape Windows

Provide at least one escape window in the basement and each bedroom with a minimum net clear opening of 5.7 sq.ft. and clear opening height of 24 inches and clear opening width of 20 inches and finished sill height not more than 44 inches above the floor. It is the builders responsibility to verify, prior to installation, the clear opening of the basement and bedroom windows meets the escape window opening requirements. Escape windows are subject to field inspection. Minimum accessible clear opening of nine (9) square feet with minimum dimension of 36 inches. Provide approved fixed ladder or stairs when well height exceeds 44 inches. MSBC 309.0310, SECTION R310.

### Fiberboard Sheathing

Fiberboard sheathing must be nailed 3 inches O.C. on the edges, 6 inches O.C. in the field. Provide solid blocking at horizontal joints. RC TABLE R602.3(1)

### Fireplace Clearances

Maintain proper clearances of combustible insulation and materials to chimneys, gas vents, etc. Combustion air shall be provided to fireplaces for proper fuel combustion. (per mechanical code) IRC R1003.12

### Fireplace Fabricated

Call for inspection when fabricated fireplace unit is secured in opening with all framing and draftstopping complete, before covering. Call for final inspection when fireplace is complete. Factory built chimneys and fireplaces shall be installed in accordance with manufacturers instructions. Verify clearances to combustible material with manufacturers instructions. NOTE: Framing and mantle clearances vary per manufacturer. IRC R1004.1.

### Fireplace Hearth Size

Hearths must extend at least 16 inches in front of and at least 8 inches beyond each side of the fireplace opening. Where the fireplace opening is 6 sq. ft. or larger, the hearth must be at least 20 inches in front of, and at least 12 inches beyond each side of opening. IRC R1003.10

### Floor level at doors

There shall be a floor or a landing on each side of a door. A door may open at the top step of an interior flight of stairs, provided the door does not swing over the top step. A door may open at a landing that is not more than 8 inches (203 mm) lower than the floor level, provided the door does not swing over the landing. IRC R312.1

### Foam Insulation for Foundation

Foam insulation used below grade must be made for such use. RC R318.3.

### Foam Insulation Protection

Interior of the building must be separated from foam insulation with 1/2 inch gypsum board, securely nailed or screwed. Aluminum-foiled polyisocyanurate foam insulation shall be protected from damage by abrasion by covering with gypsum board or other approved materials unless specifically approved by an ICBO report. IRC R318.1.2

### Footings - Frost

All appurtenant structures (i.e. walks, stoops, garage floors...) subject to potential frost heave shall not be anchored or tied to the foundation. IRC R403.3

### Footings - Heated

Footings must be at least 42 inches minimum below finished grade. MSBC 1300.5500

### Footings Soil

The Building Inspector reserves the right to request a soils engineers approval of soil conditions at footing area after excavation. Footing soils must be approved by the building inspector and/or soils engineer before placement of footing materials. If questionable soils are encountered, the building inspector may approve reinforcing rods in footings, wider footings, questionable soil to be removed or soil tests. Reinforcing rods should be available. UBC 1804.

### Foundation Dampproofing

Foundation walls enclosing a basement below finished grade must be dampproofed. IRC R406.1

### Foundation Drainage System

A foundation drainage system must be installed, consisting of a foundation drain complying with IRC R401.3

### Foundation Reinforcement

Vertical foundation wall reinforcement - 1 #4 bar at 5' wall height, 1 #5 bar at 6'-7' wall height, 1 #5 bar at 8' wall height installed at a maximum of 6' on center. Anchor bolts must align with vertical reinforcing. If foundation walls are parallel to floor framing, solid blocking or diagonal bracing must be installed at anchor bolt locations in the first two joist or truss spaces. In addition, approved metal angle clips must be used to fasten floor joist or blocking to the sill at the anchor bolt locations. SBC 1300.6100.

### Foundation Thickness

Foundation walls must be at least 6" in thickness. Foundation walls in buildings of more than one story shall be a minimum of 8". IRC R404

### Framing Requirements

Fabricated building components (i.e. trusses, TJI's, micro-lams...) must be installed per manufacturers installation instructions. All post ends must be anchored to prevent sliding. Fireblock all kitchen soffits, under bath tubs and other locations such as holes for pipes and similar places which could afford a passage for flames. Firestop material must be gypsum board. Firestop may be solidly packed fiberglass insulation where gypsum board is not possible.

Joist hangers are required wherever joists do not have at least 1-1/2 inches of bearing.

Joist hangers when required shall be of proper size (i.e. 2x8 joist requires 2x8 joist hanger). Joist hangers shall be installed with one nail per hole as designed.

Holes bored in joists must not be within 2" of top or bottom of the joist. The diameter of any such hole must not exceed one-third of the depth of the joist.

Concrete blocks under beam ends must be filled solid. Wood beam ends must have a one-half inch air space at the sides and ends. Steel beam ends must be cemented solid.

Plates which rest on concrete floors must be treated wood. Posts on concrete floors shall be of rot resistant material.

Brace trusses with diagonal bracing.

Gable end walls with cathedral ceilings usually require special framing procedures to achieve adequate stiffness to meet wind load requirements.

Provide continuous bearing support beneath girder trusses, beams and headers, from bearing location to foundation (i.e. double studs, blocking at rim joist areas).

## 312 BEARD AVENUE SOUTH

### Glazing at Whirlpools

Windows adjacent to bathtub or whirlpool and less than 60 inches above standing surface shall be safety glazed. Safety glazing shall be properly labeled. IRC Section R308.4.

### Glazing at Windows

Safety glass is required in windows and glazed areas in excess of 9 square feet and the lowest edge is less than 18 inches above the finished floor. Please check all large windows for safety glazing before installation. IRC Section R308.4.

### Handrails

Handrails must be at least 36 inches high, and built so that a four inch diameter object cannot pass through. The triangle openings formed by the riser, tread and bottom element of a handrail at the open side of a stairway may be of a size that a six inch sphere cannot pass through. IRC Section R316.

### Landings at doors

Landings shall have a width not less than the width of the door or the width of the stairway served, whichever is greater. Landing shall have a length measured in the direction of travel of not less than 36 inches (1118mm). UBC. 1003.3.1.7

### Minimum Roof Slope

Roof systems shall be sloped a minimum of 1/4 unit vertical in twelve (12) units horizontal (2%) for drainage. IRC Section R905.

### Modification of Slope Location

The building official may approve alternate setbacks. The building official may require an investigation and recommendation by a qualified engineer or engineering geologist to demonstrate that the intent of this section has been satisfied. UBC 3314.4.

### Patio Doors

Patio doors 30 inches or more above finished grade must be locked so that a 4 inch diameter object cannot pass through. Locking must be out of childrens reach. IRC Section R316.

### Smoke Detectors

Smoke detectors shall be installed in each sleeping room and at a point centrally located in the corridor to each sleeping area. A smoke detector shall be installed in the basement and all other levels. When ceiling height of a room open to the hallway serving a bedroom exceed that of the hallway by 24 inches or more, smoke detectors shall be installed in the hallway and the adjacent room. In new construction, power shall be from building wiring and equipped with a battery backup. IRC Section R317.

### Stair Construction

Stairs may have a maximum rise of 7 3/4" and a minimum run of 10". Individual stair treads shall be designed to support a 300 pound concentrated load placed in a position which would cause maximum stress. Handrails must be 34-38 inches above the nosing of the tread. Handrails on open stairs must be built so that a four inch diameter object cannot pass through. Handrails shall be continuous the full length of the stairs and ends shall be returned to wall.

The handgrip portion of hand rails shall not be less than 1 1/4 inches or more than 2 inches in cross sectional dimension. Builders are encouraged to meet the building inspector at the jobsite prior to the installation of handrails for winding and other intricate stairways to ensure proper code compliance. Every stairway must have a headroom clearance of not less than 6'8". IRC Section R314.

### Stair/Protection

Fire protect enclosed usable space under the stairs with 5/8 type X gypsum board. IRC Section R314.8.

### Toe of Fill Slope

Where a fill slope is to be located near the site boundary and the adjacent off-site property is developed, special precautions shall be incorporated in the work as the building official deems necessary to protect the adjoining property from damage as a result of such grading. These precautions may include but not limited to: (1) Additional setbacks, (2) Provision for retaining or slough walls, (3) Mechanical or chemical treatment of the fill slope surface to minimize erosion, (4) Provision for the control of surface waters. UBC Appendix 3314.3

### Vapor Barrier at Gyp. Bd.

Water-resistant gypsum board shall not be used over a vapor retarder.

## Electric Code

### Whirlpool Access Panels

Provide 14" x 14" minimum readily accessible access to motors for whirlpools, spas, etc. NEC 430 (h).

## Ordinance

### Drainage

Rainwater shall be drained so as not to cause dampness in walls, ceilings or floors in any portion of the building or in any adjacent building or structure. Downspouts and gutters shall be maintained in a state of professional repair as defined in Minneapolis Code of Ordinances Section 244.520.

Hi Mark,

I'm forwarding this to you instead of waiting to send the letter because I think Doja is done with revisions for her review... you can give her a call to make sure before you make the Zoning changes, you'll still need to submit on the submittal form, we can take care of that when you come in.

**From:** Abdi, Suado M.

**Sent:** Thursday, September 04, 2014 11:29 AM

**To:** Campagna, Kesha D.

**Cc:** Jinadu, Adedoja A.

**Subject:** Zoning Revision Review for 4312 Beard Ave S (BINB 2286, BZZ 6724)

Hi,

- The proposed house plan exceeds the maximum floor area ratio (FAR) of .5. This is likely because the basement is included in the gross floor area calculation for the structure, which did not appear to be factored into the calculation on your application form. The basement is included because the first floor area of the first story is 4 feet or more above natural grade for more than 50% of the total perimeter (See section 546.240(b) of the Zoning Code.) You will need to adjust the project so that it meets the FAR standards or apply for a variance to the maximum FAR limit.
  - Sheet A4: The section drawings help illustrate that the first floor area of the first story is exposed 5 feet above natural grade.
  - Please note that the proposed FAR excluding the basement is approximately 46%.
- The maximum height for all single or two-family dwellings located in the R1A District shall be two and one-half (2.5) stories or thirty (30) feet, whichever is less. Proposed height is approximately 29.5 feet based on the tallest pitch. Please be mindful of the height.

---

**Suado Abdi**  
*City Planner,*  
*Development Services Division*

**City of Minneapolis – Community Planning and Economic Development**  
250 S. Fourth Street – Room 300  
Minneapolis, MN 55414

Office: 612-673-2467  
[suado.abdi@minneapolismn.gov](mailto:suado.abdi@minneapolismn.gov)  
[www.minneapolismn.gov/cped](http://www.minneapolismn.gov/cped)

MARK SCHAEFER  
LANDMARK BUILDING CONTRACTORS  
952-221-7177  
[MARK@LANDMARKBUILDCO.COM](mailto:MARK@LANDMARKBUILDCO.COM)



Begin forwarded message:

**From:** Mark Schaefer <[mark@landmarkbuildco.com](mailto:mark@landmarkbuildco.com)>  
**Subject:** Fwd: Zoning revision submittal form, 4312 Beard ave s  
**Date:** January 28, 2015 at 5:45:08 PM CST  
**To:** Jim Parker <[jim@advsur.com](mailto:jim@advsur.com)>

MARK SCHAEFER  
LANDMARK BUILDING CONTRACTORS  
952-221-7177  
[MARK@LANDMARKBUILDCO.COM](mailto:MARK@LANDMARKBUILDCO.COM)



Begin forwarded message:

**From:** "Campagna, Kesha D." <[Kesha.Campagna@minneapolismn.gov](mailto:Kesha.Campagna@minneapolismn.gov)>  
**Subject:** RE: Zoning revision submittal form, 4312 Beard ave s  
**Date:** September 16, 2014 at 1:48:57 PM CDT  
**To:** Mark Schaefer <[mark@landmarkbuildco.com](mailto:mark@landmarkbuildco.com)>

Can you sign that revision letter and send it again please? Thanks.

---

**From:** Mark Schaefer [<mailto:mark@landmarkbuildco.com>]  
**Sent:** Tuesday, September 16, 2014 11:49 AM  
**To:** Campagna, Kesha D.  
**Subject:** Re: Zoning revision submittal form, 4312 Beard ave s

Keasha,

Attached are the submittal docs for the files on you desk.

thanks,

**From:** Mark Schaefer mark@landmarkbuildco.com   
**Subject:** Fwd: Zoning revision submittal form, 4312 Beard ave s  
**Date:** January 28, 2015 at 6:16 PM  
**To:** Jim Parker jim@advsur.com

---

**From:** Mark Schaefer mark@landmarkbuildco.com  
**Subject:** Re: Zoning revision submittal form, 4312 Beard ave s  
**Date:** September 16, 2014 at 11:48 AM  
**To:** Campagna, Kesha D. Kesha.Campagna@minneapolismn.gov

Keasha,

Attached are the submittal docs for the files on you desk.

thanks,



4312 Beard Ave S Plan  
Revision Su...2.docx (6)



4312 Beard ave s  
Reviewer C...document2

**MARK SCHAEFER**  
**LANDMARK BUILDING CONTRACTORS**  
**952-221-7177**  
[MARK@LANDMARKBUILDCO.COM](mailto:MARK@LANDMARKBUILDCO.COM)



On Sep 15, 2014, at 9:38 AM, Campagna, Kesha D. <[Kesha.Campagna@minneapolismn.gov](mailto:Kesha.Campagna@minneapolismn.gov)> wrote:

Hi Mark,

I checked with Doja this morning and she said she is fine with her set of plans- if you will complete the attached forms per the revised plans you left with me last week, I will get them routed to Suado. Thanks

<image001.png>

**Kesha Campagna**  
*Development Coordinator I*

**City of Minneapolis – Community Planning and Economic Development**  
250 S. Fourth Street – Room 300  
Minneapolis, MN 55415

Office: 612-673-2854  
[kesha.campagna@minneapolismn.gov](mailto:kesha.campagna@minneapolismn.gov)  
[www.minneapolismn.gov/cped](http://www.minneapolismn.gov/cped)

<image002.jpg> <image003.jpg>

<Reviewer Checksheet document2.docx (3).docx> <Plan Revision Submittal Form2.docx (6).docx>

**Development Review Customer  
Service Center**

250 South 4<sup>th</sup> Street – Room 300  
Minneapolis, MN 55415-1316

August 20, 2014

Landmark Building Contractors LLC  
po box 1027  
Lakeville, MN 55004

Re: Review comments for BINB #T2286

## **PLAN REVISIONS REQUIRED**

The construction plan submittal for New single family dwelling at 4312 Beard Ave S has been reviewed by City staff. The comments from this review are contained in the attached Plan Examination Checksheet document. Please review all of the attachments and call me if you have any questions.

You are required to submit three (3) copies (2 full-size and 1 8½" x 11") of the updated plans to my attention, at which time I will ensure that all comments from the Plan Examination Checksheet have been incorporated into the revised plans.

It is recommended that any revisions be incorporated into the construction documents and resubmitted in a manner consistent with original document issuance so that replacement plans, plans issued to subcontractors, homeowners, and others are consistent.

In addition to the revised plans, please complete the attached Plan Revision Submittal Form, which must include a written response to all comments as explained in the instructions of this document. **Revised plans that do not include a completed Plan Revision Submittal Form and address each comment in the format explained in this document will not be accepted for review.**

Because of the nature of the process, plan revisions may result in additional or modified comments; note however, that efforts will be made to limit additional comments to only those areas that are subject to revision.

Thank you,

**From:** Campagna, Kesha D. Kesha.Campagna@minneapolismn.gov  
**Subject:** Resubmittal documents for 4312 Beard Ave S  
**Date:** August 20, 2014 at 2:31 PM  
**To:** mark@landmarkbuildco.com  
**Cc:** Jinadu, Adedoja A. Adedoja.Jinadu@minneapolismn.gov, Abdi, Suado M. Suado.Abdi@minneapolismn.gov

Hi Mark,

Here you go. See you soon.

**Kesha Campagna**  
*Development Coordinator I*

**City of Minneapolis – Community Planning and Economic Development**  
250 S. Fourth Street – Room 300  
Minneapolis, MN 55414

Office: 612-673-3734  
[kesha.campagna@minneapolismn.gov](mailto:kesha.campagna@minneapolismn.gov)  
[www.minneapolismn.gov/cped](http://www.minneapolismn.gov/cped)



  
Plan Revision Letter.doc  
(2).doc

  
Reviewer Checksheet  
document.d...cx (3).docx



### Spray Foam Insulation Application & Information

**APPLICANT INFORMATION**

Date: \_\_\_\_\_  
Contact Person/ Applicant Name: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Property Owner's Name: \_\_\_\_\_  
Project Address: \_\_\_\_\_

**JOB SITE PRODUCT INFORMATION**

Manufacturer of Spray Foam Product: \_\_\_\_\_  
Product Name: \_\_\_\_\_  
ICC ES report number: \_\_\_\_\_  
Closed cell \_\_\_\_\_ Open cell \_\_\_\_\_  
Job Site Address: \_\_\_\_\_

Job Site Address: \_\_\_\_\_

Company Installing Insulation: \_\_\_\_\_ Phone: \_\_\_\_\_

Date Installed: \_\_\_\_\_

Ambient temperature:\* \_\_\_\_\_ Check dew point:\* \_\_\_\_\_ Humidity: \_\_\_\_\_

*\* Check dew point every hour. Do not spray within 5 degrees of the dew point.*

Mixing ratio of component A & B: \_\_\_\_\_

Installers Name: \_\_\_\_\_

Product was installed per manufacturers installation instructions. Any corrections that were required due to being outside the manufacturers specifications are noted in the comments listed.

Comments: \_\_\_\_\_

\_\_\_\_\_

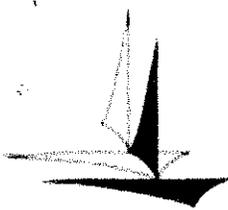
\_\_\_\_\_

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Please attach manufacturer's installation instructions and ICC ES report**

The manufacturers published installation instructions and reports shall be followed and a copy of the instructions available at the jobsite during installation.

CPCI Intake # 135869  
 Date: August 29, 2014  
8/29/14  
 Division Reviewer  
 CCS Plan Review AAJ  
 LUDP Choose an item.  
 Zoning - HPC SMA  
 Health Choose an item.  
 Public Works Choose an item.



**Community Planning and  
 Economic Development (CPED)  
 Development Review Customer Service Center**  
 250 South 4<sup>th</sup> Street – Room 300  
 Minneapolis, MN 55415 – 1316  
 Office 612-673-3000 or 311  
 Fax 612-370-1416  
 TTY 612-673-2157  
 www.minneapolismn.gov/mdr

City of Minneapolis  
 Department of Community Planning  
 & Economic Development - CPED

## Plan Revision Submittal Form

**Note – ALL revisions to original plan submission MUST be clouded and accompanied by a written explanation of each modification**

Permit issued? Yes  No  Permit # BINB T2286 Assigned DC: KDC

Property Address: 4312 Beard Ave S

Permit Applicant: Landmark Building Contractors LLC Phone: 952-221-7177 Email: mark@landmarkbuildco.com  
 Contact: Mark Schaefer Phone: 952-221-7177 Email: mark@landmarkbuildco.com

(Note: All correspondence will be sent to the person named as Project Contact)

Designer Contact: \_\_\_\_\_ Phone: \_\_\_\_\_ Email: \_\_\_\_\_  
 Project Description: \_\_\_\_\_

Were the revisions requested by City staff? Yes  No  Requester(s) Name: \_\_\_\_\_

Dollar Amount for Revision Only \$ \_\_\_\_\_ Dollar Amount for (New) Total Project \$ \_\_\_\_\_

➤ Please attach a copy of original correction request checksheet(s) and describe changes to each plan sheet below.

Explain the nature of these changes, including any exterior changes (e.g., elevations, footprint, etc.): \_\_\_\_\_

**NOTE:** Please number all changes on each plan sheet and identify individual items in the '#’ column below. Include a brief description of each change and plan sheet #'s in the appropriate column. Each change must be clouded on all plan sheets. Use as many lines and/or attach additional sheets as necessary to describe your changes.

#	Description of changes, revisions, additions, etc.	Plan sheet #(s)	Checked by: (staff use only)
1	Additional Window Adds	A2, A3	PS
2	Separate Sheet From Permit	Emailed Per Request	
3	Radon pipe location & Emailed as well	A 4	PS

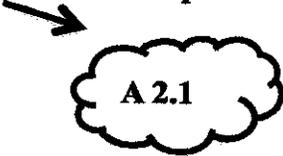
(See reverse side for additional information)

# Instructions for Submitting Plan Revisions and Additional Information

You have submitted an application that requires review by one or more of our review staff. The following is information about submitting *revised and/or additional information*.

- **This application will be delayed if responses to all requests for revisions/additional information from a specific reviewer are not included.**
- ***Where signed plans are a submittal requirement, revisions to original plans must also be signed by the appropriate licensed professional.***

Submit the same number of revised, hard copy plans or documents that you originally submitted. For example, if you are making a change to the site plan and you originally submitted two copies, submit two revised copies.

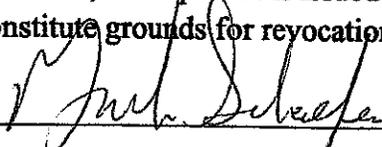
- Address ***ALL*** plan revisions to the Development Coordinator assigned to your project.
- Reference project permit number and address in all correspondence with your Development Coordinator.
- Provide a copy of the correction request(s) and your **itemized response** to each correction.
- Identify all revised or additional information by **CLOUDING** the affected area. If the entire sheet has been revised or is new, then **CLOUD THE SHEET NUMBER**. Example:
- Complete and return the "Plan Revision Submittal Form" on reverse side of this document. 
- Turn in your revision submittal to the assigned Development Coordinator at the Development Review Customer Service Center, NOT to the reviewer requesting the revisions.
- Read and sign the "Applicant Agreement and Signature" section of this form below.

## ***Process for review of revisions and/or submittal of additional information:***

- The revisions/additional information are reviewed by various City departments, depending on the nature of the revision. When the initial plans and additional revisions or new information have been reviewed and approved by all necessary departments, your Development Coordinator will notify you that your permit is ready to pick up. At this time you will also be informed of any fees that are due.
- Standard resubmittal review timelines range from five (5) to ten (10) business days depending on the scope of the project. See <http://www.minneapolismn.gov/mdr/> for more information.

## **APPLICANT AGREEMENT AND SIGNATURE**

I declare that the information provided herein is true and correct to the best of my knowledge. I acknowledge that any false, misleading, or incomplete information will constitute grounds for denial of the application for the permit or, if the permit is issued in reliance on information that is false or misleading, then such information will constitute grounds for revocation and cancellation of the permit issued.



8/26/14

Landmark Building  
Contractor



**CITY OF MINNEAPOLIS • COMMUNITY PLANNING & ECONOMIC DEVELOPMENT**

250 South Fourth Street, Room 300, Minneapolis, MN 55415 or [development@minneapolis.gov](mailto:development@minneapolis.gov)  
two (2) and ten (10) feet above the adjacent grade. Minimum window area on walls above the first floor shall be measured between the upper surface of a floor and the upper surface of the floor above. Thus, first floor windows on the North and South elevations do not meet the 5% minimum window to gain design points. Please revise this.

CCS PLAN REVIEW	ADEDJOJA JINADU	Phone	612-673-2681
		Fax	612-673-2538
		Email	<a href="mailto:Adedoja.Jinadu@minneapolismn.gov">Adedoja.Jinadu@minneapolismn.gov</a>

Based on the plans and specifications submitted, the following items appear to be missing or not in conformance with the building, plumbing, mechanical and/or elevator code requirements.

Item #

Clarification/Correction Required  
Code or Policy Reference

2. Kindly fill out only the top section of attached Spray Foam Insulation Application and Information Form and send it back via email attachment in form of PDF.
3. Radon Pipe Location is missing on wall section drawings shown on plan sheet # A4. Kindly indicate Radon Pipe up to 12" above roof line and send it back via email attachment. \*\*\*Note: Do not revised entire plan sheet # A4. Only indicate the radon pipe on one of the wall section drawing shown on plan sheet# A4\*\*\*

To respond to this checksheet, come to Development Review Customer Service Center (250 South 4<sup>th</sup> Street, Room 300, between the hours of 8:00 a.m. - 3:30 p.m. Monday-Wednesday and Friday (9:00 a.m - 3:30 p.m Thursdays)) and update all sets of the originally submitted drawings.

**You are required to complete the attached Plan Revision Submittal Form and include it with your re-submittal.**

If you have specific questions concerning this Checksheat, please call me or email me at the contact information listed above. To check the status of your project, please contact the assigned Development Coordinator (Choose an item., Choose an item., Choose an item.).



IMG\_0057



IMG\_0058



IMG\_0059



IMG\_0060



IMG\_0061



IMG\_0062



IMG\_0063



IMG\_0064



IMG\_0065



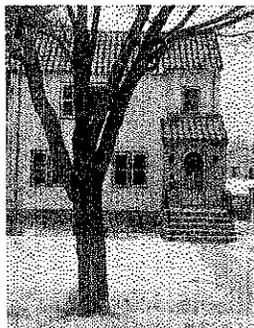
IMG\_0067



IMG\_0068



IMG\_0069



IMG\_0070



IMG\_0071



IMG\_0072



IMG\_0073



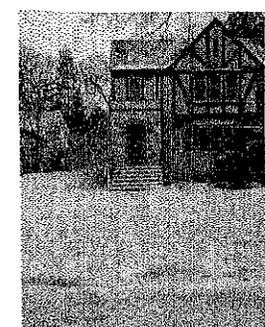
IMG\_0074



IMG\_0075



IMG\_0076



IMG\_0077

















↙ 4312 Beard Ave S



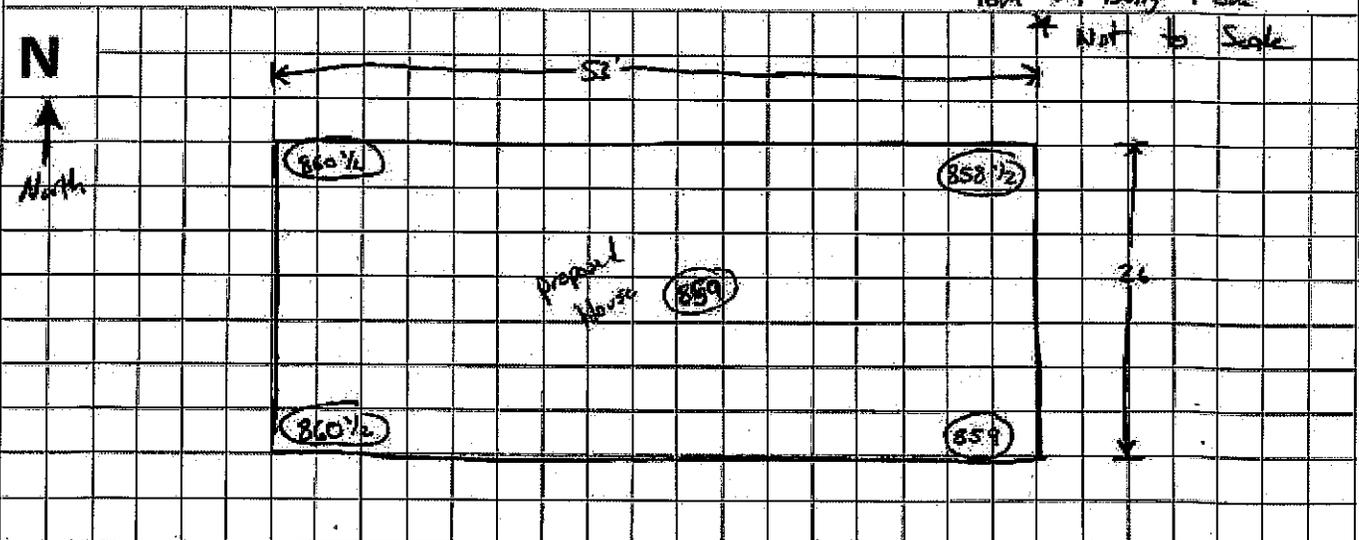




## Daily Soil Observation Notes

Project No: 14-263 Date: 10/2 to 10/9, 2014 Report No: \_\_\_\_\_  
 Project Name: 4512 Beard Ave S Project Location: Midvale, UT  
 Client: Landmark Building Contractor Temp/Weather: 40°-60° Clear  
 Project Manager: Joe Westphal Time Arrived: \_\_\_\_\_ Departed: \_\_\_\_\_

Soil Observation			
Areas Observed:	<input type="checkbox"/> Building Pad	<input checked="" type="checkbox"/> House Pad	<input type="checkbox"/> Roadway
<input type="checkbox"/> Proof Roll	<input type="checkbox"/> Other (describe): _____		
Soil report available?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Report reviewed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Report prepared by: <u>HGTS</u>			
Finish floor elevation:	<u>864.83</u>	Bottom of footing elevation:	<u>863.8</u>
Approved plans available?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Specified compaction:	<u>95% STD</u>
Bottom of excavation elevation:		Fill source: <u>Import Sand</u>	
Oversizing appears adequate?	<input type="checkbox"/> NA <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Soils observed agree with Soils report?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Soils appear adequate for design loads?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Proposed project bearing capacity (psf):	<u>2000</u>
Contractor notified of results?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Name of person notified: <u>Tom w/ Bolly + Sun</u>	
Was a copy of this report left on site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	if so, whom was it submitted to? <u>Tom w/ Bolly + Sun</u>	



Notes/Comments: Observed Excavation for Proposed House. Contractor Excavated out old Fill, buried Topsoil, and loose silt to suitable bottom. Performed Random hand auger probes along Excavation bottom, which encountered Gray with Brown Red stained silt with sand lenses. Bottom appeared suitable for fill placement.

Performed By: Joe Westphal Reviewed By: \_\_\_\_\_ Date: \_\_\_\_\_  
 612-269-4627

This is a preliminary report and is provided solely as evidence that field observations and/or testing was performed. Observations and/or conclusions and/or recommendation conveyed in the final report may vary from, and shall take precedence over, those indicated in a preliminary report.



# Daily Field Notes

**Project No:** 14-263

**Date:** Wednesday, 10/8/14

**Project Name:** 4312 Beard Ave

**Project Location:** Minneapolis, Minnesota

**Client:** Landmark Building Cont

**Temp/Weather:** 55/ Sunny

**Project Manager:** Joe Westphal

**Time Arrived:** 1:30 PM **Departed:** 2:00 PM

Services Performed									
<input checked="" type="checkbox"/> Compaction Testing		<input type="checkbox"/> Concrete Testing		<input type="checkbox"/> Cylinder Pickup		<input checked="" type="checkbox"/> Proctor Pickup		<input type="checkbox"/> Masonry Pickup	
<input type="checkbox"/> DCP		<input type="checkbox"/> Rebar Inspection		<input type="checkbox"/> Other (describe)					
Density Testing									
<b>Areas Tested:</b> <input type="checkbox"/> Mass Grading			<input checked="" type="checkbox"/> Building Pad		<input type="checkbox"/> Wall Backfill		<input type="checkbox"/> Slab Subgrade		<input type="checkbox"/> Parking/Walks
<input type="checkbox"/> Utilities		<input type="checkbox"/> Roadways		<input type="checkbox"/> Bituminous		<input type="checkbox"/> Other (describe)			
Method: <input checked="" type="checkbox"/> Nuclear <input type="checkbox"/> Sandcone			Number of tests: 1			Fill Source: <input type="checkbox"/> On-site <input checked="" type="checkbox"/> Imported			
Tests taken met specifications? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Waiting for Proctor results									
Contractor notified of test results? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				Name of person notified: Tom w/ Bollig & Sons					
Concrete Testing Information									
<b>Areas Tested:</b> <input type="checkbox"/> Footing			<input type="checkbox"/> Slab on Grade		<input type="checkbox"/> Deck		<input type="checkbox"/> Columns/Piers		<input type="checkbox"/> Walls
<input type="checkbox"/> Pile Cap/Pile Fill		<input type="checkbox"/> Pavement		<input type="checkbox"/> Curb & Gutter		<input type="checkbox"/> Other (describe)			
Number of Placements:			Yards per placement:			Method of placement:			
Set #	Cylinder Size	Air %	Slump	Temp	Mix	Supplier	Spec. Strength	Truck / Ticket #	
Contractor notified of test results? <input type="checkbox"/> Yes <input type="checkbox"/> No Name of person notified:									
Comments/Remarks (Explain any concerns, problems or unusual occurrences)									
Was everything available to test/observe? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					Were there any delays? (Explain below if yes) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Was a copy of this report left on site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					If so whom was it submitted to: Tom				
<b>Comments/Remarks:</b> Arrived on site to take compaction tests on the building pad fill. Took 1 test and obtained a proctor sample (P-1). Proctor results showed that the test passed job specifications.									

**Performed By:** Ben Bakk

**Reviewed By:**

**Date:**

This is a preliminary report and is provided solely as evidence that field observations and/or testing was performed. Observations and/or conclusions and/or recommendation conveyed in the final report may vary from, and shall take precedence over, those indicated in a preliminary report.



# Daily Field Notes

**Project No:** 14-263

**Date:** Thursday, 10/9/14

**Project Name:** 4312 Beard Ave

**Project Location:** Minneapolis, Minnesota

**Client:** Landmark Building Cont

**Temp/Weather:** 57/ Sunny

**Project Manager:** Joe Westphal

**Time Arrived:** 2:20 PM **Departed:** 2:50 PM

Services Performed										
<input checked="" type="checkbox"/> Compaction Testing		<input type="checkbox"/> Concrete Testing		<input type="checkbox"/> Cylinder Pickup		<input type="checkbox"/> Proctor Pickup		<input type="checkbox"/> Masonry Pickup		
<input type="checkbox"/> DCP		<input type="checkbox"/> Rebar Inspection		<input type="checkbox"/> Other (describe)						
Density Testing										
<b>Areas Tested:</b> <input type="checkbox"/> Mass Grading			<input checked="" type="checkbox"/> Building Pad			<input type="checkbox"/> Wall Backfill		<input type="checkbox"/> Slab Subgrade		<input type="checkbox"/> Parking/Walks
<input type="checkbox"/> Utilities		<input type="checkbox"/> Roadways		<input type="checkbox"/> Bituminous		<input type="checkbox"/> Other (describe)				
Method: <input checked="" type="checkbox"/> Nuclear			<input type="checkbox"/> Sandcone			Number of tests:3		Fill Source: <input type="checkbox"/> On-site		<input checked="" type="checkbox"/> Imported
Tests taken met specifications?			<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No		<input type="checkbox"/> Waiting for Proctor results			
Contractor notified of test results?			<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No		Name of person notified: Tom w/ Bollig			
Concrete Testing Information										
<b>Areas Tested:</b> <input type="checkbox"/> Footing			<input type="checkbox"/> Slab on Grade		<input type="checkbox"/> Deck		<input type="checkbox"/> Columns/Piers		<input type="checkbox"/> Walls	
<input type="checkbox"/> Pile Cap/Pile Fill		<input type="checkbox"/> Pavement		<input type="checkbox"/> Curb & Gutter		<input type="checkbox"/> Other (describe)				
Number of Placements:			Yards per placement:			Method of placement:				
Set #	Cylinder Size	Air %	Slump	Temp	Mix	Supplier	Spec. Strength	Truck / Ticket #		
Contractor notified of test results?			<input type="checkbox"/> Yes		<input type="checkbox"/> No		Name of person notified:			
Comments/Remarks (Explain any concerns, problems or unusual occurrences)										
Was everything available to test/observe?			<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No		Were there any delays? (Explain below if yes)			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Was a copy of this report left on site?			<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No		If so whom was it submitted to: Tom			
<p><b>Comments/Remarks:</b> Arrived on site to take compaction tests on the building pad fill. Took 3 tests and all tests passed job specifications. The soils appear suitable for footing placement.</p>										

**Performed By:** Ben Bakk

**Reviewed By:**

**Date:**

This is a preliminary report and is provided solely as evidence that field observations and/or testing was performed. Observations and/or conclusions and/or recommendation conveyed in the final report may vary from, and shall take precedence over, those indicated in a preliminary report.



# Report of Field Compaction Tests

Nuclear Method - ASTM D 6938-10

Standard Proctor - ASTM D 698-07

Project No: 14-263

Project Title: 4312 Beard Ave

Client: Landmark Building Contractors

Test No.	1	2	3	4						
Technician Initials	BFB	BFB	BFB	BFB						
Gauge Serial Number	33276	33276	33276	33276						
Probe Depth	12"	12"	12"	12"						
Wet Density (pcf)	124.8	125.1	129.8	127.2						
Moisture (pcf)	6.7	6.1	7.4	6.7						

Test No.	Date	Soil ID No.	Classification	Optimum Moisture %	Max Lab Dry Density (pcf)	In Place Moisture (pcf)	In Place Dry Density (pcf)	Compaction %	Specified Compaction %	Comments
1	10/08/14	P-1	SP	9.1	119.7	6	118	99%	95%	A
2	10/09/14	P-1	SP	9.1	119.7	5	119	99%	95%	A
3	10/09/14	P-1	SP	9.1	119.7	6	122	102%	95%	A
4	10/09/14	P-1	SP	9.1	119.7	6	121	101%	95%	A

Test No.	Location:	Material Tested	Elevation
1	20' W, 2' N of SE Building Corner	Building Pad Fill	97
2	11' E, 3' S of NW Building Corner	Building Pad Fill	100
3	9' E, 4' N of SW Building Corner	Building Pad Fill	99 1/2
4	45' E of SW Building Corner	Building Pad Fill	98 1/2

Elevation Reference: Bottom of footing = 100.0

- A Test results comply with specifications.
- B Test results do not comply with specifications.
- C Test results meet zero air void specifications.

Signature: \_\_\_\_\_

Joe Westphal P.E.  
Project Engineer

# PROCTOR TEST REPORT



Test specification: ASTM D 698-07 Method A Standard  
 ASTM D 4718-87 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > #4	% < No.200
	USCS	AASHTO						
	SP			2.65			7.0	4.7

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 119.7 pcf	117.3 pcf	Poorly Graded SAND, Brown
Optimum moisture = 9.1 %	9.6 %	

<b>Project No.</b> 14-263 <b>Client:</b> Landmark Building Contractors <b>Project:</b> 4312 Beard Ave S  ○ <b>Sample Number:</b> P-1	<b>Remarks:</b> Assumed Specific Gravity 2.65
<b>Haugo GeoTechnical Services, LLC</b>  <b>Maple Grove, Minnesota</b>	

Figure

Tested By:           Matt Sandhoefner

# HAUGO GEO TECHNICAL SERVICES

May 15, 2014

Project Number: 14-263

Mr. Dan Schaefer  
Landmark Building Contractors  
4037 Heritage Lane SE  
Prior Lake, MN 55372

Re: **Geotechnical Exploration Report**  
**Proposed Single Family Residence**  
**4312 Beard Ave S**  
**Minneapolis, MN 55410**

Dear Mr. Schaefer:

We have completed the geotechnical exploration report for the proposed single family residence at 4312 Beard Ave South in Minneapolis, Minnesota. A brief summary of our results and recommendations is presented below. Additional details regarding our procedures, results and recommendations follow in the attached geotechnical exploration report.

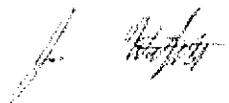
Two soil borings were completed for this project that extended to a depth of about 21 feet below the ground surface. The borings encountered topsoil, previously placed fill, organic silt, and loose silt that extended to depths ranging from 7 ½ to 9 feet below the ground surface. Below the organic silt the borings encountered native glacially deposited soils that extended to the termination depth of the borings. Groundwater was encountered in the borings during and after drilling between 6 ½ and 10 feet below the ground surface.

The topsoil, previously placed fill, organic silt, and loose silt encountered in the borings in our opinion are not suitable for foundation support and will need to be removed and replaced with suitable compacted engineered fill. Further, with soil corrections completed as recommended, it is our opinion the footings for the proposed single family residence can be supported on the native soils or compacted engineered fill designed for a net allowable soil bearing pressure up to 2,000 pounds per square foot.

Thank you for the opportunity to assist you on this project. If you have any questions or need additional information please contact Joe Westphal at 612-269-4027 or Paul Gionfriddo at 763-954-1101.

Sincerely,

Haugo GeoTechnical Services



Joe Westphal P.E.  
Project Engineer



Paul S. Gionfriddo P.E.  
Consulting Engineer

# GEOTECHNICAL EXPLORATION REPORT

## PROJECT:

Proposed Single Family Residences  
4312 Beard Avenue South  
Minneapolis, Minnesota

## PREPARED FOR:

Landmark Building Contractors  
4037 Heritage Lane SE  
Prior Lake, MN 55372

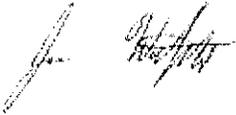
## PREPARED BY:

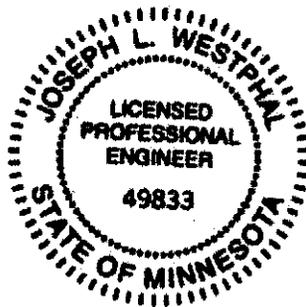
Haugo GeoTechnical Services  
13570 Grove Drive #278  
Maple Grove, MN 55311

Haugo GeoTechnical Services Project: 14-263

May 15, 2014

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

  
Joe Westphal, P.E.  
Project Engineer  
License Number 49833  
May 15, 2014



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## 1.0 INTRODUCTION

### 1.1 Project Description

Landmark Building Contractors is proposing to redevelop the residential property at 4312 Beard Avenue South in Minneapolis, Minnesota and retained Haugo GeoTechnical Services (HGTS) to perform a geotechnical exploration to evaluate the suitability of site soil conditions to support the proposed construction. Redevelopment plans include removing the existing single family home and constructing a new single family home on the property.

### 1.2 Purpose

The purpose of this geotechnical exploration was to characterize subsurface soil and groundwater conditions and provide recommendations for design and construction of the proposed single family residence.

### 1.3 Site Description

The project site is generally located about a 1 ¼ mile east of State Highway 100 and about 2 ½ miles north of State Highway 62 at 4312 Beard Ave S in Minneapolis, MN. The site is identified as Lot 4 of Block 9 in the Waveland Park Addition of Minneapolis.

A single family home with a detached garage currently exists on the property. The ground surface of the lot is relatively flat with a surface elevation of approximately 868 feet mean sea level. The ground surface areas not occupied by the existing home are generally landscaped.

### 1.4 Scope of Services

Our services were performed as requested and authorized by Mr. Dan Schafer in conversations with Mr. Joe Westphal, Haugo GeoTechnical Services.

Our scope of services was performed under the terms of our General Conditions and limited to the following tasks:

- Completing two (2) standard penetration test borings, each boring to a nominal depth of 20 feet.
- Visually/manually classifying samples recovered from the soil borings.
- Performing laboratory tests on selected samples.
- Preparing soil boring logs describing the materials encountered and the results of groundwater level measurements.
- Preparing an engineering report describing soil and groundwater conditions, and providing recommendations for foundation support.

## 1.5 Documents Provided

We understand that the home is still in the design phase. Specific structural drawings or plans were not available at the time of this report. Likewise a site survey was not complete at the time of this report.

## 1.6 Locations and Elevations

The soil boring locations were selected by Haugo GeoTechnical Services (HGTS) based on the anticipated construction and site access. The ground surface elevations at the boring locations were estimated from topographic information provided on an aerial photograph obtained from Google Earth. As such the surface elevation shown on the boring log should be considered approximate.

The approximate location of the borings is shown on the "Soil Boring Location Sketch" in the appendix. The sketch was prepared by HGTS using information measured on-site and an aerial photograph obtained from the Hennepin County GIS website as a background.

## 2.0 FIELD PROCEDURES

Two standard penetration test borings were advanced on April 25, 2014 by HGTS with a rotary drilling rig, using continuous flight augers to advance the borehole. Representative samples were obtained from the boring, using the split-barrel sampling procedures in general accordance with ASTM Specification D-1586. In the split-barrel sampling procedure, a 2-inch O.D. split-barrel spoon is driven into the ground with a 140-pound hammer falling 30 inches. The number of blows required to drive the sampling spoon the last 12 inches of an 18-inch penetration is recorded as the standard penetration resistance value, or "N" value. The results of the standard penetration tests are indicated on the boring log. The samples were sealed in containers and provided to HGTS for testing and soil classification.

A field log of the borings was prepared by the HGTS drill crew. The logs contained visual classifications of the soil materials encountered during drilling, as well as the driller's interpretation of the subsurface conditions between samples and water observation notes. The final boring logs included with this report represent an interpretation of the field logs and include modifications based on visual/manual method observation of the samples.

The soil boring logs, general terminology for soil description and identification, and classification of soils for engineering purposes are also included in the appendix. The soil boring logs identify and describe the materials encountered, the relative density or consistency based on the Standard Penetration resistance (N-value, "blows per foot") and groundwater observations.

The strata changes were inferred from the changes in the samples and auger cuttings. The depths shown as changes between strata are only approximate. The changes are likely transitions, variations can occur beyond the location of the borings.

## **3.0 RESULTS**

### **3.1 Soil Conditions**

The soil borings encountered about 1 foot of topsoil at the surface consisting of silty sand that was black in color which contained roots and fibers. Underlying the topsoil, the borings encountered previously placed fill that extended to depths ranging from about 4 to 6 feet below the ground surface. This previously placed fill consisted of poorly graded sand with silt as well as clay lenses. Beneath the previously placed fill the borings encountered swamp deposits of organic silt containing peat and fibers ranging from about 7 to 7 ½ feet below the ground surface.

Beneath the topsoil, previously placed fill, and organic silt the borings encountered native glacially deposited soil consisting of poorly graded sand with silt. This native soil extended to the termination depth of the borings at about 21 feet below the ground surface.

The penetration resistance value (N-Value), shown as blows per foot (bpf) on the boring logs, within the native granular soil (poorly graded sand with silt) ranged from 4 to 11 bpf indicating these soils had a very loose to medium dense relative density.

### **3.2 Groundwater**

Groundwater was encountered in the soil boring while drilling at a depth of about 10 feet below the ground surface. After removing the augers from the bore hole ground water depths were measured and ranged between about 6 ½ and 7 feet below the ground surface. Groundwater monitoring wells or piezometers would be required to more accurately determine water levels. Seasonal and annual fluctuations in the groundwater levels should be expected.

### **3.3 OSHA Soil Classification**

The soil encountered in the borings consisted mainly of granular material consisting of poorly graded sand with silt corresponding to the ASTM Classifications SP-SM overlying organic material composed of organic silt which corresponds to the ASTM Classifications of OH as well as granular material consisting of poorly graded sand with silt corresponding to the ASTM Classifications SP-SM. The soils identified in the borings will generally be Type C soils under Department of Labor Occupational Safety and Health Administration (OSHA) guidelines.

## **4.0 DISCUSSION AND RECOMMENDATIONS**

### **4.1 Proposed Construction**

The project will consist of demolishing the existing home on the lot and constructing a new single family residence. We further understand that the project is in the preliminary design stages and specific design information is not yet available. The new home will likely be centrally located on the lot and will likely be constructed at or near existing site grades.

We understand that house style has not been chosen, but anticipate the foundations will be full basement style below grade, with one to two stories above grade and a detached garage. We assume the new home will likely consist of cast-in-place concrete or masonry block foundation walls supported on concrete spread footings. We anticipate above grade construction to consist of wood framing, a pitched roof and asphalt shingles.

Based on the assumed construction we estimate wall loadings will range from about 1 to 2 kips (1,000 to 2,000 pounds) per lineal foot and column loads, if any will be less than 50 kips (50,000 pounds).

If the proposed loads exceed these values, the proposed grades differ by more than 3 feet from the assumed values or if the design or location of the proposed building changes, we should be informed. Additional analyses and revised recommendations may be necessary.

#### **4.2 Discussion**

The soil borings completed for this project encountered topsoil, previously placed fill, organic silt, and silt that extended to depths ranging from about 7 ½ to 9 feet below the ground surface. The topsoil and organic silt is compressible and not suitable for foundation support. We were not provided with any documentation of the fill placed. The issue with undocumented fill is it may not have been placed in a controlled manner (compacted) and it has the potential for containing unsuitable materials within it. Poorly compacted fill material could settle unfavorably under the anticipated structural loads associated with the new home. Unsuitable materials within the fill could include but not be limited to buried topsoil, construction debris associated with construction of the existing home or organic material which can also settle unfavorably under the anticipated structural loads. Fill depths likely extend deeper adjacent to the existing house to the depth of the existing basement/foundation.

Because of their compressibility, possible lack of compaction and the potential for unsuitable materials to be encountered within the fill it is our opinion that the topsoil, previously placed fill, and organic silt should not be relied upon for foundation support. We recommend removing these materials from within the building and oversize areas and replacing them with suitable compacted engineered fill.

The underlying native soil beneath the topsoil, previously placed fill, and organic silt, in our opinion, is directly suitable for foundation support.

Groundwater was encountered while drilling and sample between 6 ½ and 10 feet below the ground surface. We anticipated groundwater will be encountered during construction, but will likely be controllable with sumps or pumps.

#### **4.3 Building Pad Preparation**

**Excavation** We understand that the existing home and detached garage will be demolished to make way for the new home. We recommend all remnants of the building including footings, floor slabs, foundation walls and underground utilities be removed from within the proposed building and oversize areas. Likewise we recommend that all vegetation, topsoil, previously placed fill, organic silt, and any other soft or loose soil, if encountered, be

removed from the proposed building and oversize area. Based on the soil borings we anticipate excavation depths of about 7 ½ to 9 feet across the proposed building pad area. Since the new home will likely include a basement, removal of most of these materials will likely be incidental to construction. Excavation depths may vary and could be deeper.

**Table 1. Anticipated Excavation Depths**

Boring Number	Approximate Surface Elevation (feet)†	Anticipated Excavation Depth (feet)*	Anticipated Excavation Elevation (feet)†*	Approximate groundwater Elevation (feet)*
ST-1	868	7 ½	860 ½	861
ST-2	868	9	859	861

NE = Not Encountered † Elevation Reference Google Earth

\* = Excavation elevations and groundwater elevations were rounded to nearest ½ foot.

**Oversizing** If the excavation extends below the proposed footing elevation, the excavation requires oversizing. We recommend the perimeter of the excavation be extended a foot outside the proposed footprint for every foot below footing grade (1H:1V oversizing). The purpose of the oversizing is to provide lateral support of the foundation.

The excavation for the soil correction/lower level is anticipated to extend to a depth of about 7 to 9 feet below the ground surface. At typical 1:1 backslope, the excavation will extend about 9 feet beyond the edge of the proposed home. The excavation will likely extend into/onto adjacent properties posing a significant risk of undermining structures on those properties. In addition the soils could slough as they are excavated resulting in side slopes flatter than 1:1 further increasing the horizontal limits of the excavation. If site constraints will limit the excavation, temporary shoring may be required.

We understand the current City of Minneapolis building codes require an engineered temporary shoring system for excavation within 10 feet of a property line. Therefore, we anticipate shoring will be required for this new construction. We can provide design services for shoring systems, if requested.

**Backfilling** We recommend that backfill placed to attain site grades be compacted to a minimum of 95 percent of its standard Proctor density (ASTM D 698), except the upper 3 feet of pavement areas, where the compaction level should be increased to a minimum of 100 percent. Clean granular fill (with less than 12% passing the #200 sieve) should be placed within 65 percent to 105 percent of its optimum moisture content as determined by the standard Proctor. Remaining fill soils should be placed within 3 percentage points above and 1 percentage point below its optimum moisture content as determined by the standard Proctor. All fill should be placed in thin lifts and be compacted with a large self-propelled vibratory compactor operating in vibratory mode.

Additional fill required to attain site grades may consist of any debris-free, non organic mineral soil. The on-site poorly graded sand with silt excavated for construction of the basement/lower level appears to be suitable for reuse as fill or backfill provided it is free of organic material or other deleterious material. However, the granular soils may be above their optimum moisture content and may need to moisture conditioned (dried) in order meet the recommended soil compaction levels.

Organic soils such as topsoil, organic silt or organic clay, if encountered, should not be reused as structural fill.

**Foundations** We recommend the perimeter footings bear a minimum of 42 inches below the exterior grade for frost protection. Interior footings may be placed immediately below the slab provided construction does not occur during below freezing weather conditions. Foundation elements in unheated areas (i.e. deck or porch footings) should bear at least 5 feet below exterior grade for frost protection.

We anticipate the foundations and floor slabs will bear on compacted engineered fill or native glacially deposited soils.

It is our opinion the footings can be designed for a net allowable bearing pressure up to 2,000 psf.

We anticipate total and differential settlement of the foundations will be less than 1 inch and ½ inch, respectively.

#### **4.4 Interior Slabs**

The anticipated floor subgrade is gravel fill overlying the native glacially deposited soils or compacted engineered fill. It is our opinion a modulus of subgrade reaction,  $k$ , of 200 pounds per square inch of deflection (psi) may be used to design the floor.

If floor coverings or coatings less permeable than the concrete slab will be used, we recommend that a vapor retarder or vapor barrier be placed immediately beneath the slab. Some contractors prefer to bury the vapor barrier or vapor retarder beneath a layer of sand to reduce curling and shrinkage, but this practice often traps water between the slab and vapor retarder or barrier. Regardless of where the vapor retarder or vapor barrier is placed, we recommend consulting the floor covering manufacturer regarding the appropriate type, use and installation of the vapor retarder or vapor barrier to preserve the warranty.

We recommend following all state and local building codes in regards to a radon mitigation plan beneath interior slabs.

#### **4.5 Below Grade Walls**

Foundation walls or below grade (basement) walls will have lateral loads from the surrounding soil transmitted to them. The site soils are predominantly granular soils in composition. We recommend general waterproofing of the below grade walls. We recommend either placing drainage composite against the backs of the exterior walls or backfilling adjacent to the walls with sand having less than 50 percent of the particles by weight passing the #40 sieve and less than 5 percent of the particles by weight passing the #200 sieve. The sand backfill should be placed within 2 feet horizontally of the wall. We recommend the balance of the backfill for the walls consist of sand however the sand may contain up to 20 percent of the particles by weight passing the #200 sieve.

Clay may be used to make up the balance of the wall backfill. However consolidation of the clay under its own weight can be expected to continue even after construction. If not

accommodated for, structures supported on the clay backfill could settle unfavorably or be damaged.

We recommend installing drain tile behind the below grade walls, adjacent to the wall footing and below the slab elevation. Preferably the drain tile should consist of perforated pipe embedded in gravel. A geotextile filter fabric should encase the pipe and gravel. The drain tile should be routed to a storm sewer, sump pump or other suitable disposal site.

Active earth pressures can be used to design the below grade walls if the walls are allowed to rotate slightly. If wall rotation cannot be tolerated then below grade wall design should be based on at-rest earth pressures. We recommend soil parameters found below in Table 2, be used for below grade/retaining wall design. These design parameters are based on the assumptions that the walls are drained, there are no surcharge loads within a horizontal distance equal to the height of the wall and the backfill is level.

**Table 2. Soil Parameters**

Soil Type	Estimated Unit Weight (pcf)	Estimated Friction Angle (degrees)	At-Rest Pressure (pcf)	Active Soil Pressure (pcf)	Passive Soil Pressure (pcf)
Sand	125	32	60	40	405

Resistance to lateral earth pressures will be provided by passive resistance against the wall footings and by sliding resistance along the bottom of the wall footings. We recommend a sliding coefficient of 0.35. This value does not include a factor of safety.

#### 4.6 Exterior Slabs

Exterior slabs will likely be underlain by predominantly granular soil. However clayey soils were encountered on the property. Clayey soils are considered highly frost susceptible. If these soils become saturated and freeze, heave may occur. This heave can be a nuisance in front of doors and at other critical grade areas. One way to help reduce the potential for heaving is to remove the frost-susceptible soils below the slabs down to bottom of footing grades, and replace them with non-frost-susceptible backfill consisting of sand having less than 5 percent of the particles by weight passing the number 200 sieve. Sand meeting this gradation is likely available on-site.

If this approach is used and the excavation bottoms terminate in non-free draining granular soil we recommend a drain tile be installed along the bottom outer edges of the excavation to collect and remove any water that may accumulate within the sand. The bottom of the excavation should be graded away from the building.

If the banks of the excavations to remove the frost-susceptible soils are not sloped, abrupt transitions between the frost-susceptible and non-frost-susceptible backfill will exist along which unfavorable amounts of differential heaving may occur. Such transitions could exist between exterior slabs and sidewalks, between exterior slabs and pavements and along the slabs themselves if the excavations are confined to only the building entrances. To address this issue we recommend sloping the excavations to remove frost-susceptible soils at a minimum 3:1 (horizontal:vertical) gradient.

An alternative method of reducing frost heave is to place a minimum of 2 inches of extruded polystyrene foam insulation beneath the slabs and extending it about 4 feet beyond the slabs. The insulation will reduce frost penetration into the underlying soil and reduce heave. Six to 12 inches of granular soil is typically placed over the insulation to protect it during construction.

Another alternative for reducing frost heave is to support the slabs on frost depth footings. A void space of at least 4 inches should be provided between the slab and the underlying soil to allow the soil to heave without affecting the slabs.

#### **4.7 Groundwater Separation Consideration**

We recommend the basement floor grades be constructed to maintain at least a 4-foot separation between the lowest floor slab and the groundwater and at least a 2-foot separation between the lowest floor slab and the 100 year flood levels of any nearby surface water feature(s) or wetlands, if any. It appears that these recommended separation distances will likely not be met based on the existing grades, the observed groundwater levels, and the desired full basement. The lowest floor elevation of the proposed basement should be reconsidered using the observed groundwater information contained in this report.

#### **4.8 Site Grading and Drainage**

We recommend the site be graded to provide positive run-off away from the proposed building. We recommend landscaped areas be sloped a minimum of 6 inches within 10 feet of the building and slabs be sloped a minimum of 2 inches. In addition we recommend downspouts with long splash blocks or extensions.

#### **4.9 Utilities**

We anticipate that new utilities will be installed (water and sanitary sewer services) as part of this project. We further anticipate that new utilities will bear at depths ranging from about 7 to 10 feet below the ground surface. At these depths special care must be taken to ensure that all previously placed fill and organic silt is removed so that the pipe will bear on native glacially deposited soils which in our opinion are generally suitable for pipe support.

We recommend bedding material be thoroughly compacted around the pipes. We recommend trench backfill above the pipes be compacted to a minimum of 95 percent beneath slabs and pavements, the exception being within 3 feet of the proposed pavement subgrade, where 100 percent of standard Proctor density is required. In landscaped areas we recommend a minimum compaction of 90 percent.

Groundwater was encountered in the soil borings between about 6 ½ and 10 feet below the ground surface, therefore we anticipate that groundwater will be encountered during utility installations but will likely be controllable with sumps or pumps.

## 5.0 CONSTRUCTION CONSIDERATIONS

### 5.1 Excavation

The borings indicated that at the anticipated excavation depths the soils in the sidewalls of the excavations will be Type C soil under Department of Labor Occupational Safety and Health Administration (OSHA) guidelines. Temporary excavations should be constructed at a minimum of 1½ foot horizontal to every 1 foot vertical within excavations. Slopes constructed in this manner may still exhibit surface sloughing. If site constraints do not allow the construction of slopes with these dimensions then temporary shoring may be required.

### 5.2 Observations

A geotechnical engineer should observe the excavation subgrade to evaluate if the subgrade soils are similar to those encountered in the borings and adequate to support the proposed construction.

### 5.3 Backfill and Fills

Site soils classified as SP-SM that will be excavated and reused as backfill and fill appear to be at or below their assumed optimum moisture content. We anticipate it may be necessary to moisture condition (wet) these soils to achieve the recommended compaction. In general we do not recommend mixing the clay soils with the granular material. We recommend that fill and backfill be placed in lifts not exceeding 4 to 12 inches, depending on the size of the compactor and materials used.

### 5.4 Testing

We recommend density tests of backfill and fills placed for the proposed house foundation. Samples of the proposed materials should be submitted to our laboratory prior to placement for evaluation of their suitability and to determine their optimum moisture content and maximum dry density (Standard Proctor).

### 5.5 Winter Construction

If site grading and construction is anticipated to proceed during cold weather, all snow and ice should be removed from cut and fill areas prior to additional grading and placement of fill. No fill should be placed on frozen soil and no frozen soil should be used as fill or backfill.

Concrete delivered to the site should meet the temperature requirements of ASTM and/or ACI. Concrete should not be placed on frozen soil. Concrete should be protected from freezing until the necessary strength is obtained. Frost should not be permitted to penetrate below the footings.

## **6.0 PROCEDURES**

### **6.1 Soil Classification**

The drill crew chief visually and manually classified the soils encountered in the borings in general accordance with ASTM D 2488, "Description and Identification of Soils (Visual-Manual Procedure)". Soil terminology notes are included in the Appendix. The samples were returned to our laboratory for review of the field classification by a soils engineer. Samples will be retained for a period of 30 days.

### **6.2 Groundwater Observations**

Immediately after taking the final samples in the bottom of the boring, the hole was checked for the presence of groundwater. Immediately after removing the augers from the borehole the hole was once again checked and the depth to water and cave-in depths were noted.

## **7.0 GENERAL**

### **7.1 Subsurface Variations**

The analyses and recommendations presented in this report are based on data obtained from a limited number of soil borings. Variations can occur away from the borings, the nature of which may not become apparent until additional exploration work is completed or construction is conducted. A reevaluation of the recommendations in this report should be made after performing on-site observations during construction to note the characteristics of any variations. The variations may result in additional foundation costs and it is suggested that a contingency be provided for this purpose.

It is recommended that we be retained to perform the observation and testing program during construction to evaluate whether the design is as expected, if any design changes have affected the validity of our recommendations, and if our recommendations have been correctly interpreted and implemented in the designs, specifications and construction methods. This will allow correlation of the soil conditions encountered during construction to the soil borings and will provide continuity of professional responsibility.

### **7.2 Review of Design**

This report is based on the design of the proposed structure as related to us for preparation of this report. It is recommended that we be retained to review the geotechnical aspects of the design and specifications. With the review we will evaluate whether any changes have affected the validity of the recommendations and whether our recommendations have been correctly interpreted and implemented in the design and specifications.

### **7.3 Groundwater Fluctuations**

We made water level measurements in the borings at the times and under the conditions stated on the boring logs. The data was interpreted in the text of this report. The period of

observation was relatively short and fluctuations in the groundwater level may occur due to rainfall, flooding, irrigation, spring thaw, drainage, and other seasonal and annual factors not evident at the time the observations were made. Design drawings and specifications and construction planning should recognize the possibility of fluctuations.

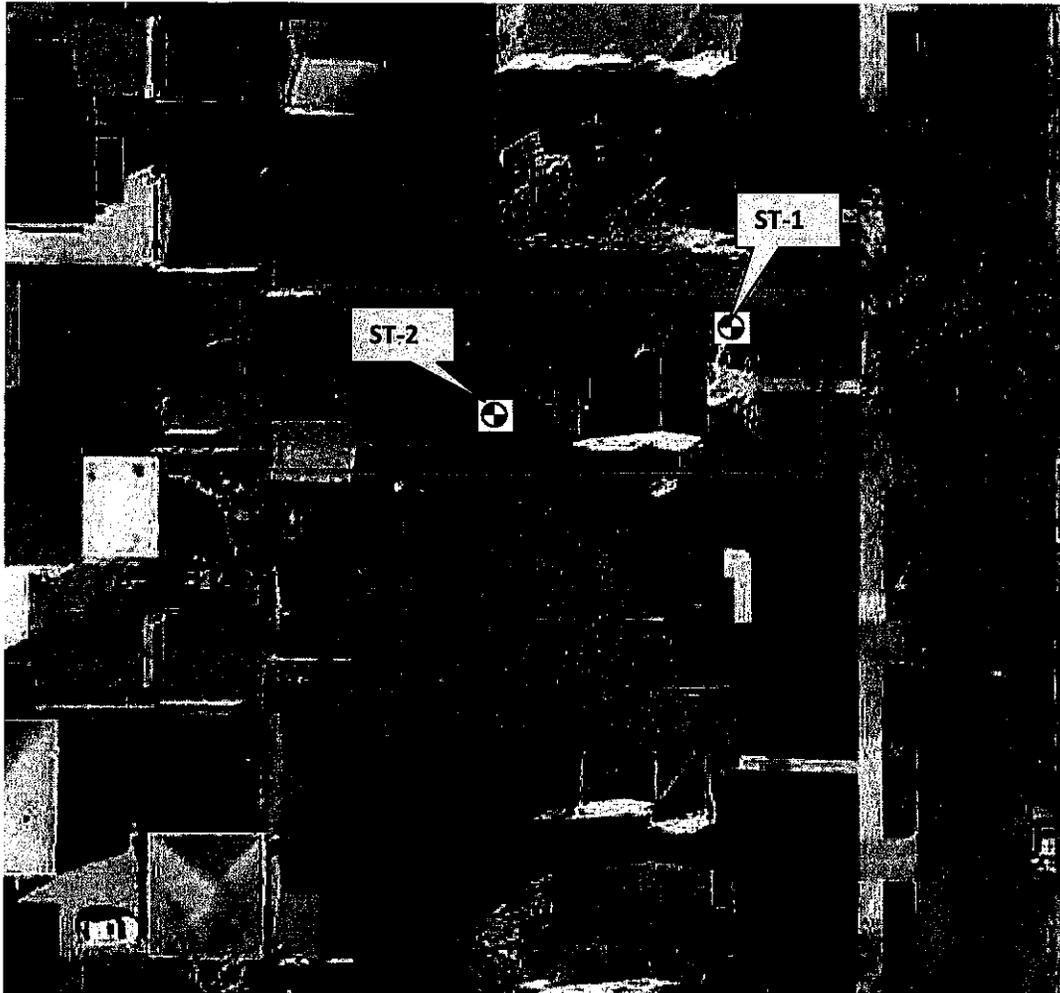
#### **7.4 Use of Report**

This report is for the exclusive use of Landmark Building Contractors to use to design the proposed structure and prepare construction documents. In the absence of our written approval, we make no representation and assume no responsibility to other parties regarding this report. The data, analysis and recommendations may not be appropriate for other structures or purposes. We recommend that parties contemplating other structures or purposes contact us.

#### **7.5 Level of Care**

Haugo GeoTechnical Services, LLC has used the degree of skill and care ordinarily exercised under similar circumstance by members of the profession currently practicing in this locality. No warranty expressed or implied is made.

## **APPENDIX**



 = Approximate Soil Boring Location



Haugo GeoTechnical  
Services.  
13570 Grove Drive #278  
Maple Grove, MN

**Soil Boring Location Sketch**  
**Proposed Single Family Home**  
**4312 Beard Avenue South**  
**Minneapolis, Minnesota**

Figure #: 1  
Drawn By: BFB  
Date: 4/30/14  
Scale: None  
Project #: 14-263



Haugo GeoTechnical Services, LLC  
 13570 Grove Drive, #278  
 Maple Grove, Minnesota 55311

# BORING NUMBER ST-1

PAGE 1 OF 1

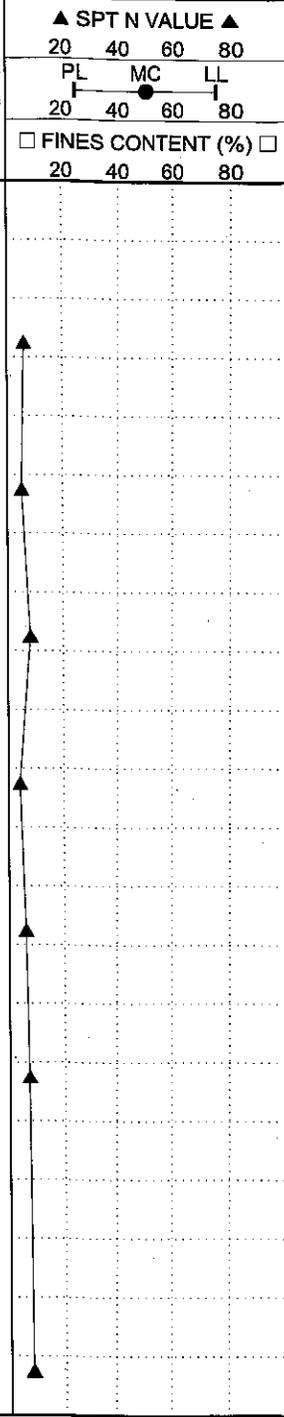
**CLIENT** Landmark Building Contractors  
**PROJECT NUMBER** 14-263  
**DATE STARTED** 4/25/14 **COMPLETED** 4/25/14  
**DRILLING CONTRACTOR** HGTS  
**DRILLING METHOD** Hollow Stem Auger/Split Spoon  
**LOGGED BY** CP **CHECKED BY** JLW  
**NOTES** 3' N, 3' E of Existing NE House Cr, Elevation is Approx

**PROJECT NAME** 4312 Beard Ave S  
**PROJECT LOCATION** Minneapolis, Minnesota  
**GROUND ELEVATION** 868 ft MSL **HOLE SIZE** 3 1/4 inches  
**GROUND WATER LEVELS:**  
 ▽ **AT TIME OF DRILLING** 10.00 ft / Elev 858.00 ft  
 ▼ **AT END OF DRILLING** 12.00 ft / Elev 856.00 ft  
 ▼ **AFTER DRILLING** 7.00 ft / Elev 861.00 ft Cave-In Depth of 8 Feet

GEOTECH BH PLOTS - GINT STD US LAB.GDT - 4/30/14 08:47 - C:\USERS\PUBLIC\DOCUMENTS\BENTLEY\GINT\PROJECTS\14-263 4312 BEARD AVE.GPJ

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (ROD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲					
								20	40	60	80		
0		Silty Sand with Roots and Fibers, black, moist. (Topsoil/FILL)	AU 1										
		(SP-SM) Poorly Graded Sand with Silt, with Clay lenses, brown, damp. (FILL)	SS 2		3-3-3 (6)								
		(OH) Organic Silt with Peat Fibers, black, wet. (Swamp Deposit)	SS 3		2-2-3 (5)								
		(SP-SM) Poorly Graded Sand with Silt, trace Gravel to with Gravel, fine to coarse grained, brown to grey, wet to waterbearing, very loose to loose. (Glacial Outwash)	SS 4		3-4-4 (8)								
			SS 5		3-2-2 (4)								
			SS 6		2-3-3 (6)								
			SS 7		3-3-4 (7)								
			SS 8		3-4-4 (8)								

Bottom of borehole at 21.0 feet.





Haugo GeoTechnical Services, LLC  
 13570 Grove Drive, #278  
 Maple Grove, Minnesota 55311

# BORING NUMBER ST-2

PAGE 1 OF 1

**CLIENT** Landmark Building Contractors **PROJECT NAME** 4312 Beard Ave S  
**PROJECT NUMBER** 14-263 **PROJECT LOCATION** Minneapolis, Minnesota  
**DATE STARTED** 4/25/14 **COMPLETED** 4/25/14 **GROUND ELEVATION** 868 ft MSL **HOLE SIZE** 3 1/4 inches  
**DRILLING CONTRACTOR** HGTS **GROUND WATER LEVELS:**  
**DRILLING METHOD** Hollow Stem Auger/Split Spoon **▽ AT TIME OF DRILLING** 10.00 ft / Elev 858.00 ft  
**LOGGED BY** CP **CHECKED BY** JLW **▼ AT END OF DRILLING** 11.00 ft / Elev 857.00 ft  
**NOTES** 3' S, 6' W of Existing SW House Cr, Elevation is Approx **▼ AFTER DRILLING** 6.50 ft / Elev 861.50 ft Cave-In Depth of 8 Feet

GEO TECH BH PLOTS - GINT STD US LAB.GDT - 4/30/14 08:47 - C:\USERS\PUBLIC\DOCUMENTS\BENTLEY\GINT\PROJECTS\14-263 4312 BEARD AVE.GPJ

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (ROD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲			
								20	40	60	80
								PL	MC	LL	
								20	40	60	80
								□ FINES CONTENT (%) □			
								20	40	60	80
0		Silty Sand with Roots and Fibers, black, moist to wet. (Topsoil/FILL)	AU 9								
		(SP-SM) Poorly Graded Sand with Silt, brown, damp. (FILL)									
			SS 10		2-2-2 (4)						
5			SS 11		1-1-1 (2)						
		▼ (OH) Organic Silt with Fibers, black, wet. (Swamp Deposit)									
		(ML) Silt, grey, wet, loose. (Glacial Outwash)	SS 12		2-2-3 (5)						
10		▽ (SP-SM) Poorly Graded Sand with Silt, trace Gravel, medium to coarse grained, brown to light brown, waterbearing, loose to medium dense. (Glacial Outwash)	SS 13		2-2-3 (5)						
			SS 14		4-5-6 (11)						
15			SS 15		3-4-5 (9)						
20			SS 16		4-5-6 (11)						

Bottom of borehole at 21.0 feet.

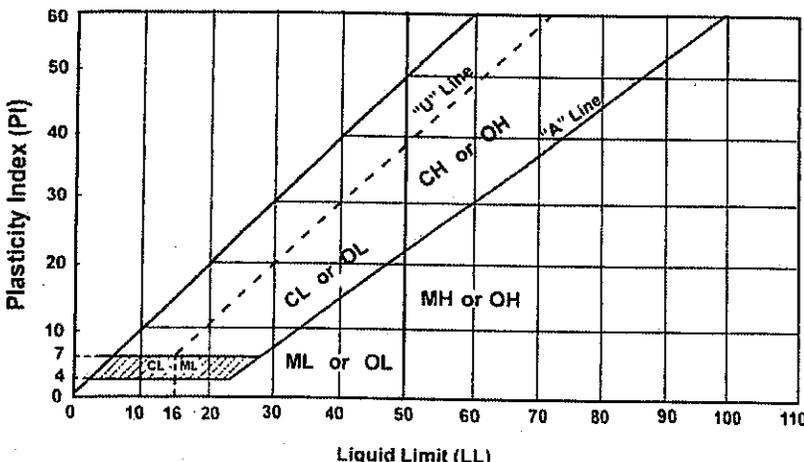
# Descriptive Terminology of Soil



Standard D 2487 - 00  
Classification of Soils for Engineering Purposes  
(Unified Soil Classification System)

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests <sup>a</sup>				Soils Classification		
				Group Symbol	Group Name <sup>b</sup>	
Coarse-grained Soils more than 50% retained on No. 200 sieve	Gravels More than 50% of coarse fraction retained on No. 4 sieve	Clean Gravels 5% or less fines <sup>e</sup>	$C_u \geq 4$ and $1 \leq C_c \leq 3$ <sup>c</sup>	GW	Well-graded gravel <sup>g</sup>	
		Gravels with Fines More than 12% fines <sup>e</sup>	$C_u < 4$ and/or $1 > C_c > 3$ <sup>c</sup>	GP	Poorly graded gravel <sup>g</sup>	
		Sands 50% or more of coarse fraction passes No. 4 sieve	Clean Sands 5% or less fines <sup>f</sup>	$C_u \geq 6$ and $1 \leq C_c \leq 3$ <sup>c</sup>	SW	Well-graded sand <sup>h</sup>
			Sands with Fines More than 12% <sup>f</sup>	$C_u < 6$ and/or $1 > C_c > 3$ <sup>c</sup>	SP	Poorly graded sand <sup>h</sup>
	Fine-grained Soils 50% or more passed the No. 200 sieve	Silt and Clays Liquid limit less than 50	Inorganic	PI $> 7$ and plots on or above "A" line <sup>i</sup>	CL	Lean clay <sup>h, i, m</sup>
			Organic	Liquid limit - oven dried $< 0.75$	OL	Organic clay <sup>h, i, m, n</sup>
		Silt and clays Liquid limit 50 or more	Inorganic	PI plots on or above "A" line	CH	Fat clay <sup>h, i, m</sup>
			Organic	Liquid limit - oven dried $< 0.75$	OH	Elastic silt <sup>h, i, m, n</sup>
Highly Organic Soils		Primarily organic matter, dark in color and organic odor		PT	Peat	

- a Based on the material passing the 3-in (75mm) sieve
- b If field sample contained cobbles or boulders, or both, add "with cobbles or boulders or both" to group name
- c  $C_u = D_{60}/D_{10}$ ,  $C_c = (D_{30})^2 / (D_{10} \times D_{60})$
- d If soil contains  $\geq 15\%$  sand, add "with sand" to group name
- e Gravels with 5 to 12% fines require dual symbols  
GW-GM well-graded gravel with silt  
GW-GC well-graded gravel with clay  
GP-GM poorly graded gravel with silt  
GP-GC poorly graded gravel with clay
- f If fines classify as CL-ML, use dual symbol GC-GM or SC-SM
- g If fines are organic, add "with organic fines" to group name
- h If soil contains  $\geq 15\%$  gravel, add "with gravel" to group name
- i Sands with 5 to 12% fines require dual symbols  
SW-SM well-graded sand with silt  
SW-SC well-graded sand with clay  
SP-SM poorly graded sand with silt  
SP-SC poorly graded sand with clay
- j If Atterberg limits plot in hatched area, soil is a CL-ML silty clay.
- k If soil contains 10 to 25% plus No. 200, add "with sand" or "with gravel" whichever is predominant.
- l If soil contains  $\geq 30\%$  plus No. 200, predominantly sand, add "sandy" to group name
- m If soil contains  $\geq 30\%$  plus No. 200, predominantly gravel, add "gravelly" to group name
- n PI  $\geq 4$  and plots on or above "A" line
- o PI  $< 4$  or plots below "A" line
- p PI plots on or above "A" line
- q PI plots below "A" line



Laboratory Tests

DD	Dry density, pcf	OC	Organic content, %
WD	Wet density, pcf	S	Percent of saturation, %
MC	Natural moisture content, %	SG	Specific gravity
LL	Liquid limit, %	C	Cohesion, psf
PL	Plastic limit, %	$\phi$	Angle of internal friction
PI	Plasticity index, %	qu	Unconfined compressive strength, psf
P200	% passing 200 sieve	qp	Pocket penetrometer strength, tsf

## Particle Size Identification

Boulders	.....	over 12"
Cobbles	.....	3" to 12"
Gravel	.....	
Coarse	.....	3/4" to 3"
Fine	.....	No. 4 to 3/4"
Sand	.....	
Coarse	.....	No. 4 to No. 10
Medium	.....	No. 10 to No. 40
Fine	.....	No. 40 to No. 200
Silt	.....	< No. 200, PI < 4 or below "A" line
Clay	.....	< No. 200, PI $\geq 4$ and on or above "A" line

## Relative Density of Cohesionless Soils

Very loose	.....	0 to 4 BPF
Loose	.....	5 to 10 BPF
Medium dense	.....	11 to 30 BPF
Dense	.....	31 to 50 BPF
Very dense	.....	over 50 BPF

## Consistency of Cohesive Soils

Very soft	.....	0 to 1 BPF
Soft	.....	2 to 3 BPF
Rather soft	.....	4 to 5 BPF
Medium	.....	6 to 8 BPF
Rather stiff	.....	9 to 12 BPF
Stiff	.....	13 to 16 BPF
Very stiff	.....	17 to 30 BPF
Hard	.....	over 30 BPF

## Drilling Notes

Standard penetration test borings were advanced by 3 1/4" or 6 1/4" ID hollow-stem augers unless noted otherwise. Jetting water was used to clean out auger prior to sampling only where indicated on logs. Standard penetration test borings are designated by the prefix "ST" (Split Tube). All samples were taken with the standard 2" OD split-tube sampler, except where noted.

Power auger borings were advanced by 4" or 6" diameter continuous-flight, solid-stem augers. Soil classifications and strata depths were inferred from disturbed samples augered to the surface and are, therefore, somewhat approximate. Power auger borings are designated by the prefix "B."

Hand auger borings were advanced manually with a 1 1/2" or 3 1/4" diameter auger and were limited to the depth from which the auger could be manually withdrawn. Hand auger borings are indicated by the prefix "H."

BPF: Numbers indicate blows per foot recorded in standard penetration test, also known as "N" value. The sampler was set 6" into undisturbed soil below the hollow-stem auger. Driving resistances were then counted for second and third 6" increments and added to get BPF. Where they differed significantly, they are reported in the following form: 2/12 for the second and third 6" increments, respectively.

WH: WH indicates the sampler penetrated soil under weight of hammer and rods alone; driving not required.

WR: WR indicates the sampler penetrated soil under weight of rods alone; hammer weight and driving not required.

TW indicates thin-walled (undisturbed) tube sample

Note: All tests were run in general accordance with applicable ASTM standards

## Liska, Andrew

---

**From:** Stephanie Avalon <savalon@bwjp.org>  
**Sent:** Saturday, March 28, 2015 6:17 PM  
**To:** Liska, Andrew  
**Subject:** Request to allow variance at 4312 Beard Avenue South

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

Hello Mr. Liska

I own a home at 4241 Beard Avenue South. I am concerned this variance would simply set a precedent to continue building ever larger homes on these city lots. Linden Hills is an extremely fine neighborhood. I grew up here in the 60s and the neighborhood was affordable and varied. Where homes are torn down, new homes are built that are clearly taller than previous dwellings and they seem to take up more of the yards as well. What the variance could do beyond this seems completely unnecessary. This plan would designate a lovely affordable area of town to the uber rich. Who have plenty of other choices.

Plenty of huge homes are located on the Lakes. If they want a mansion they should move to where the mansions already are established instead of taking over the neighborhood like an evil corporation. Please don't allow this variance.

Stephanie Avalon  
4241 Beard Avenue South,  
Minneapolis, MN 55410



*Stephanie M. Avalon*

Resource Specialist, Battered Women's Justice Project  
1801 Nicollet Avenue South, Suite 102, Minneapolis, MN 55403  
800.903.0111 prompt 1, x102, 612.824.8768 x102  
612.824.8965 fax

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## **Liska, Andrew**

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**From:** James Lipscomb <jameslipscomb7@gmail.com>  
**Sent:** Monday, March 30, 2015 6:48 PM  
**To:** Liska, Andrew  
**Subject:** Re: Question about hearing Re- 4312 Beard Ave S BZZ-7074

Okay, thanks, Andrew. That sheds a bit more light on it, and makes for a more reasonable understanding of the situation. Staff told them they could do something they probably couldn't, but here we are. So ... having allowed it to get to this point, it would be pretty unfair to go back to the rules that should have obtained. I wouldn't fight that.

Jim

On Mon, Mar 30, 2015 at 1:49 PM, Liska, Andrew <[Andrew.Liska@minneapolismn.gov](mailto:Andrew.Liska@minneapolismn.gov)> wrote:

Jim,

The variance stems from a high water table present under natural grade. It is located 7' below grade and this posed difficulties in constructing a dwelling with a basement and two floors.

The variance application is to allow the structure to remain as constructed.

The applicant worked with staff in getting a single-family dwelling approved however, the structure was approved by staff in error as the height of the finished floor is exceeding maximums.

Please let me know if you have any questions,

Andrew

**From:** James Lipscomb [<mailto:jameslipscomb7@gmail.com>]  
**Sent:** Monday, March 30, 2015 1:35 PM  
**To:** Liska, Andrew  
**Subject:** Question about hearing Re- 4312 Beard Ave S BZZ-7074

We got a Notice of Public Hearing related to a new single-family dwelling at 4312 Beard Ave S. Evidently Landmark Building Construction wants a variance to increase the maximum permitted floor area ratio. This is scheduled for April 9, according to the notice we received.

I have a question: What exactly are the issues here? You do realize, don't you, that the house has already been built, except perhaps for the drawbridge and moat. Are they proposing to ADD on to it, which would exceed the permissible limits without a variance? Are they looking to get forgiven for what they've already built? What's actually under consideration here?

Thx,

--

*Jim Lipscomb*

*4245 Beard Ave S  
[jameslipscomb7@gmail.com](mailto:jameslipscomb7@gmail.com)  
cell 612.310.7151*

--

*Jim Lipscomb  
[jameslipscomb7@gmail.com](mailto:jameslipscomb7@gmail.com)  
cell 612.310.7151*