Eighth Amendment to the Regulating Plan (Approved May 24th, 2012)

BlueStone Commons, LLC Village Center Development, LLC

May 27, 2015

1. Purpose

This amendment is for the purpose of updating the BlueStone Regulating Plan approved May 24, 2012, amended by that certain First Amendment dated August 27, 2012, that certain Second Amendment dated December 21, 2012, that certain Third Amendment dated June 19, 2013, that certain Fourth Amendment dated June 5, 2014, that certain Fifth Amendment dated September 30, 2014, that certain Sixth Amendment dated October 3, 2014, that certain Seventh Amendment dated March 18, 2015 and as ratified by City of Duluth Ordinance No. 10271 dated December 16, 2013 (collectively, the "Regulating Plan") to update the Uses and Dimensional Standards to reflect a boundary line adjustment of Tracts H, I, J, P, Q and R, as approved by the City of Duluth on May______, 2015.

The Applicant desires to update the Regulating Plan with the reconfigured parcels as a result of the Woodland School building demolition.

2. Amendment to the Regulating Plan - Addition of Higher Education Parcels

The following attachments shall supplement and update the original phasing and site plans included in the Regulating Plan:

Exhibit A – BlueStone Commons, clarification of permitted uses by reconfigured parcel Exhibit B – Reconfiguration of UDC Map Amendment, Woodland Middle School Site, R-2 to RP Zoning, by parcels.

(SIGNATURES APPEAR FOLLOWING PAGE)

3. Authority

The alterations do not alter major elements of the approved Regulating Plan and do not constitute a variance from the provisions of Chapter 50 of the Unified Development Chapter.

BlueStone Commons, LLC, a Minnesota Limited liability company

By: Mark W. Lambert Its: Chief Manager

Village Center Development, LLC, a Minnesota limited liability company

By: Mark W. Lambert Its: Chief Manager

By order of the Gity Planning and Land Use Supervisor

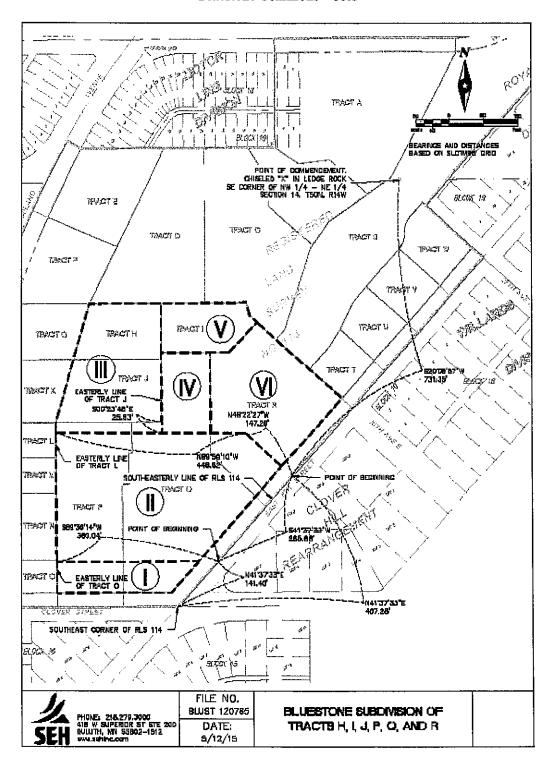
Charles Froseth, Land Use Supervisor

Keith Hamre, Director of Planning and Construction Services

(SIGNATURE PAGE TO EIGHTH AMENDMENT TO THE REGULATING PLAN)

EXHIBIT A

Bluestone Commons - Uses



Due to changing market conditions and the expected duration of the development timeline, the applicant is unable to predict the exact uses within the development site. The applicant proposes that the uses stated below be approved within the proposed development tracts.

Tract Letter

A.

- a. Dwelling Multifamily
- b. University or college
- c. Retail Store Not Listed, Small
- d. Dwelling, Townhouse
- e. Residential Care Facility/ Assisted Living (7 or more)
- f. Rooming House (Dorm/Live-Learn)
- g. Accessory recycling collection point
- h. Accessory Sidewalk Dining Area
- i. Accessory Solar or Geothermal Power Equipment
- j. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- k. Temporary construction office or yard
- l. Temporary real estate sales office (rental leasing)

В.

- a. Dwelling Multifamily
- b. Grocery Store, Small (50,000 sq. ft. or less)
- c. Hotel or Motel
- d. Medical or Dental clinic
- e. Office
- f. Offices; Bank
- g. Personal Service, small
- h. Retail Store Not Listed, Small
- i. Restaurant (no drive-in/drive-through)
- j. Retail Store Not Listed; Large
- k. Rooming House (Dorm/Live-Learn)
- I. Vehicle related; Automobile and light vehicle sales, rental or storage (*Planning Review by Planning Commission required*)
- m. Accessory recycling collection point
- n. Accessory Sidewalk Dining Area

- o. Accessory Solar or Geothermal Power Equipment
- p. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- q. Accessory uses and structures not listed elsewhere
- r. Temporary construction office or yard
- s. Temporary real estate sales office (rental leasing)

C.

- a. Dwelling Multifamily
- b. Grocery Store, Small (50,000 sq. ft. or less)
- c. Hotel or Motel
- d. Medical or Dental clinic
- e. Office
- f. Offices; Bank
- g. Personal Service, small
- h. Retail Store Not Listed. Small
- i. Restaurant (no drive-in/drive-through)
- j. Retail Store Not Listed; Large
- k. Rooming House (Dorm/ Live-Learn)
- l. Vehicle related; Automobile and light vehicle sales, rental or storage
- m. Accessory recycling collection point
- n. Accessory Sidewalk Dining Area
- o. Accessory Solar or Geothermal Power Equipment
- p. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- q. Accessory uses and structures not listed elsewhere
- r. Temporary construction office or yard
- s. Temporary real estate sales office (rental leasing)

D.

- a. Dwelling Multifamily
- b. Grocery Store, Small (50,000 sq. ft. or less)
- c. Hotel or Motel
- d. Medical or Dental clinic
- e. Office
- f. Offices; Bank
- g. Personal Service, small
- h. Retail Store Not Listed, Small
- i. Restaurant (no drive-in/drive-through)

- j. Retail Store Not Listed; Large
- k. Rooming House (Dorm/Live-Learn)
- I. Vehicle related; Automobile and light vehicle sales, rental or storage (*Planning Review by Planning Commission required*)
- m. Accessory recycling collection point
- n. Accessory Sidewalk Dining Area
- o. Accessory Solar or Geothermal Power Equipment
- p. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- q. Accessory uses and structures not listed elsewhere
- r. Temporary construction office or yard
- s. Temporary real estate sales office (rental leasing)

E.

- a. Dwelling Multifamily
- b. Grocery Store, Small (50,000 sq. ft. or less)
- c. Hotel or Motel
- d. Medical or Dental clinic
- e. Office
- f. Offices; Bank
- g. Personal Service, small
- h. Retail Store Not Listed, Small
- i. Restaurant (no drive-in/drive-through)
- j. Retail Store Not Listed; Large
- k. Rooming House (Dorm/Live-Learn)
- 1. Vehicle related; Automobile and light vehicle sales, rental or storage (*Planning Review by Planning Commission required*)
- m. Accessory recycling collection point
- n. Accessory Sidewalk Dining Area
- o. Accessory Solar or Geothermal Power Equipment
- p. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- q. Accessory uses and structures not listed elsewhere
- r. Temporary construction office or yard
- s. Temporary real estate sales office (rental leasing)
- t. Coffee drive-through (per Regulating Plan Amendment 6/19/13)

- a. Dwelling Multifamily
- b. Grocery Store, Small (50,000 sq. ft. or less)
- c. Hotel or Motel
- d. Medical or Dental clinic
- e. Office
- f. Offices; Bank
- g. Personal Service, small
- h. Retail Store Not Listed, Small
- Restaurant (no drive-in/ drive-through)
- j. Retail Store Not Listed; Large
- k. Rooming House (Dorm/Live-Learn)
- 1. Vehicle related; Automobile and light vehicle sales, rental or storage
- m. Accessory recycling collection point
- n. Accessory Sidewalk Dining Area
- o. Accessory Solar or Geothermal Power Equipment
- p. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- q. Accessory uses and structures not listed elsewhere
- r. Temporary construction office or yard
- s. Temporary real estate sales office (rental leasing)
- t. Coffee drive-through (per Regulating Plan Amendment 6/19/13)

G.

- a. Dwelling Multifamily
- b. Grocery Store, Small (50,000 sq. ft. or less)
- c. Hotel or Motel
- d. Medical or Dental clinic
- e. Office
- f. Offices; Bank
- g. Personal Service, small
- h. Retail Store Not Listed, Small
- i. Restaurant (no drive-in/drive-through)
- j. Retail Store Not Listed; Large
- k. Rooming House (Dorm/Live-Learn)
- I. Vehicle related; Automobile and light vehicle sales, rental or storage (*Planning Review by Planning Commission required*)
- m. Accessory recycling collection point
- n. Accessory Sidewalk Dining Area

- o. Accessory Solar or Geothermal Power Equipment
- p. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- q. Accessory uses and structures not listed elsewhere
- r. Temporary construction office or yard
- s. Temporary real estate sales office (rental leasing)
- t. Coffee drive-through (per Regulating Plan Amendment 6/19/13)

H. Reconfigured - See Below

- a. Dwelling Multifamily
- b. Grocery Store, Small (50,000 sq. ft. or less)
- c. Hotel or Motel
- d. Medical or Dental clinic
- e. Office
- f. Offices; Bank
- g. Personal Service, small
- h. Retail Store Not Listed, Small
- i. Restaurant (no drive-in/drive-through)
- j. Retail Store Not Listed; Large
- k. Rooming House (Dorm/Live-Learn)
- I. Vehicle related; Automobile and light vehicle sales, rental or storage (Planning Review by Planning Commission required)
- m. Accessory recycling collection point
- n. Accessory Sidewalk Dining Area
- o. Accessory Solar or-Geothermal Power Equipment
- p. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- q. Accessory uses and structures not listed elsewhere
- r. Temporary construction office or yard
- s. Temporary real estate sales office (rental leasing)

Reconfigured - See Below

- a. Dwelling Multifamily
- b. Grocery Store, Small (50,000 sq. ft. or less)
- c. Hotel or Motel
- d. Medical or Dental clinic
- e. Office

- f. Offices; Bank
- g. Personal Service, small
- h. Retail Store Not-Listed, Small
- i. Restaurant (no drive-in/drive-through)
- j. Retail Store Not Listed; Large
- k. Rooming House (Dorm/Live Learn)
- I. Vehicle related; Automobile and light vehicle sales, rental or storage (Planning Review by Planning Commission required)
- m. Accessory recycling collection point
- n. Accessory Sidewalk Dining Area
- o. Accessory Solar or Geothermal Power Equipment
- p. Accessory-Minor Utility-and accessory-wireless antennas attached to existing structure
- q. Accessory uses and structures not listed elsewhere
- r. Temporary construction office or yard
- s. Temporary real estate sales office (rental leasing)

J. Reconfigured - See Below

- a. Dwelling Multifamily
- b. Grocery Store, Small (50,000 sq. ft. or less)
- c. Hotel or Motel
- d. Medical or Dental clinic
- e. Office
- f. Offices; Bank
- g. Personal Service, small
- h. Retail Store Not Listed, Small
- i. Restaurant (no drive-in/drive-through)
- j. Retail Store Not Listed; Large
- k. Rooming House (Dorm/ Live-Learn)
- 1. Vehicle-related; Automobile and light-vehicle sales, rental or storage (Planning Review by Planning Commission required)
- m. Accessory recycling collection point
- n. Accessory Sidewalk Dining Area
- o. Accessory Solar or Geothermal Power Equipment
- p. Accessory Minor Utility and accessory-wireless antennas attached to existing structure
- q. Accessory uses and structures not listed elsewhere

- r. Temporary construction office or yard
- s. Temporary real estate sales office (rental leasing)

K.

- a. Dwelling Multifamily
- b. Grocery Store, Small (50,000 sq. ft. or less)
- c. Hotel or Motel
- d. Medical or Dental clinic
- e. Office
- f. Offices; Bank
- g. Personal Service, small
- h. Retail Store Not Listed, Small
- i. Restaurant (no drive-in/drive-through)
- j. Retail Store Not Listed; Large
- k. Rooming House (Dorm/Live-Learn)
- 1. Vehicle related; Automobile and light vehicle sales, rental or storage (*Planning Review by Planning Commission required*)
- m. Accessory recycling collection point
- n. Accessory Sidewalk Dining Area
- o. Accessory Solar or Geothermal Power Equipment
- p. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- q. Accessory uses and structures not listed elsewhere
- r. Temporary construction office or yard
- s. Temporary real estate sales office (rental leasing)
- t. Coffee drive-through (per Regulating Plan Amendment 6/19/13)

L.

- a. Dwelling Multifamily
- b. Grocery Store, Small (50,000 sq. ft. or less)
- c. Hotel or Motel
- d. Medical or Dental clinic
- e. Office
- f. Offices; Bank
- g. Personal Service, small
- h. Retail Store Not Listed, Small
- i. Restaurant (no drive-in/drive-through)
- j. Retail Store Not Listed; Large
- k. Rooming House (Dorm/Live-Learn)

- Vehicle related; Automobile and light vehicle sales, rental or storage (Planning Review by Planning Commission required)
- m. Accessory recycling collection point
- n. Accessory Sidewalk Dining Area
- o. Accessory Solar or Geothermal Power Equipment
- Accessory Minor Utility and accessory wireless antennas attached to existing structure
- q. Accessory uses and structures not listed elsewhere
- r. Temporary construction office or yard
- s. Temporary real estate sales office (rental leasing)
- t. Coffee drive-through (per Regulating Plan Amendment 6/19/13)

M.

- a. Dwelling Multifamily
- b. Grocery Store, Small (50,000 sq. ft. or less)
- c. Hotel or Motel
- d. Medical or Dental clinic
- e. Office
- f. Offices; Bank
- g. Personal Service, small
- h. Retail Store Not Listed, Small
- i. Restaurant (no drive-in/drive-through)
- j. Retail Store Not Listed; Large
- k. Rooming House (Dorm/Live-Learn)
- I. Vehicle related; Automobile and light vehicle sales, rental or storage (*Planning Review by Planning Commission required*)
- m. Accessory recycling collection point
- n. Accessory Sidewalk Dining Area
- o. Accessory Solar or Geothermal Power Equipment
- p. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- q. Accessory uses and structures not listed elsewhere
- r. Temporary construction office or yard
- s. Temporary real estate sales office (rental leasing)

N.

- a. Dwelling Multifamily
- b. Grocery Store, Small (50,000 sq. ft. or less)
- c. Hotel or Motel

- d. Medical or Dental clinic
- e. Office
- f. Offices; Bank
- g. Personal Service, small
- h. Retail Store Not Listed, Small
- i. Restaurant (no drive-in/drive-through)
- j. Retail Store Not Listed; Large
- k. Rooming House (Dorm/Live-Learn)
- I. Vehicle related; Automobile and light vehicle sales, rental or storage (*Planning Review by Planning Commission required*)
- m. Accessory recycling collection point
- n. Accessory Sidewalk Dining Area
- o. Accessory Solar or Geothermal Power Equipment
- p. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- q. Accessory uses and structures not listed elsewhere
- r. Temporary construction office or yard
- s. Temporary real estate sales office (rental leasing)

O.

- a. Dwelling Multifamily
- b. Grocery Store, Small (50,000 sq. ft. or less)
- c. Hotel or Motel
- d. Medical or Dental clinic
- e. Office
- f. Offices; Bank
- g. Personal Service, small
- h. Retail Store Not Listed, Small
- i. Restaurant (no drive-in/drive-through)
- j. Retail Store Not Listed; Large
- k. Rooming House (Dorm/ Live-Learn)
- 1. Vehicle related; Automobile and light vehicle sales, rental or storage (*Planning Review by Planning Commission required*)
- m. Accessory recycling collection point
- n. Accessory Sidewalk Dining Area
- o. Accessory Solar or Geothermal Power Equipment
- p. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- q. Accessory uses and structures not listed elsewhere

- r. Temporary construction office or yard
- s. Temporary real estate sales office (rental leasing)
- P. Reconfigured See Below
 - a. School, middle or high (until June, 2013)
 - b. Daycare facility, large (15 or more)
 - c. Dwelling Multifamily
 - d. Food Beverage, and Indoor Entertainment; Theater
 - e. Grocery Store, Small (50,000 sq. ft. or less)
 - f. Medical or Dental clinic
 - g. Office
 - h.-Offices; Bank
 - i. Parking Lot or Parking Structure (Primary Use)
 - j. Personal Service, small
 - k. Personal Services and repair, Large
 - I. Rooming House (Dorm/Live Learn)
 - m. Retail Store Not-Listed; Large
 - n. Retail Store Not-Listed, Small
 - or Restaurant (no drive in/ drive through)
 - p. Theater
 - q. University or college
 - r. Vehicle related; Automobile and light vehicle sales, rental or storage (Planning Review by Planning Commission required)
 - s. Accessory day care facility
 - t. Accessory Solar or Geothermal Power Equipment
 - u. Accessory Sidewalk Dining Area
 - v. Accessory uses and structures not listed elsewhere
 - w. Accessory recycling-collection-point
 - x. Accessory Minor Utility and accessory wireless antennas attached to existing structure
 - y. Temporary real estate sales office (rental leasing)
 - z. Temporary construction office or yard
 - aa. Temporary moveable storage container
- Q. Reconfigured See Below
 - a. School, middle or high (until June, 2013)
 - b. Daycare facility, large (15 or more)
 - c. Dwelling Multifamily

- d. Food Beverage, and Indoor Entertainment; Theater
- e. Grocery Store, Small (50,000 sq. ft. or less)
- f. Medical or Dental clinic
- g. Office
- h. Offices; Bank
- i. Parking Lot or Parking Structure (Primary Use)
- j. Personal Service, small
- k. Personal Services and repair, Large
- I. Rooming House (Dorm/ Live Learn)
- m. Retail Store Not Listed; Large Retail Store Not Listed, Small
- n. Restaurant (no drive in/ drive through)
- o. Theater
- p. University or college
- q. Vehicle related; Automobile and light vehicle sales, rental or storage (Planning Review by Planning Commission required)
- r. Accessory day care facility
- s. Accessory Solar or Geothermal Power Equipment
- t. Accessory Sidewalk Dining Area
- u. Accessory uses and structures not listed-elsewhere
- v. Accessory recycling collection point
- w. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- x. Temporary real estate sales office (rental leasing)
- y. Temporary construction office or vard
- z. Temporary moveable storage container
- R. Reconfigured See Below
 - a. School, middle or high (until June, 2013)
 - b. Daycare facility, large (15 or more)
 - c. Dwelling Multifamily
 - d. Food-Beverage, and Indoor Entertainment; Theater
 - e. Grocery Store, Small (50,000 sq. ft. or less)
 - f. Medical or Dental clinic
 - g. Office
 - h. Offices: Bank
 - i. Parking Lot or Parking Structure (Primary Use)
 - j. Personal Service, small
 - k. Personal Services and repair, Large

- Rooming House (Dorm/ Live Learn)
- m. Retail Store Not Listed; Large
- n. Retail Store Not Listed, Small
- o. Restaurant (no drive in/drive through)
- p. Theater
- q. University or college
- r. Vehicle related; Automobile and light vehicle sales, rental or storage (Planning Review by Planning Commission required)
- 5. Accessory day-care facility
- t. Accessory Solar-or-Geothermal Power-Equipment
- u. Accessory Sidewalk Dining Area
- v. Accessory uses and structures not listed elsewhere
- w. Accessory recycling collection point
- x. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- y. Temporary real estate sales office (rental leasing)
- z. Temporary construction office or yard
- aa. Temporary moveable storage container

S.

a. None

Τ.

- a. Dwelling, One Family
- b. Dwelling, Two-Family
- c. Dwelling, Townhouse
- d. Accessory recycling collection point
- e. Accessory Solar or Geothermal Power Equipment
- f. Accessory uses and structures not listed elsewhere

U.

- a. Dwelling, One Family
- b. Dwelling, Two-Family
- c. Dwelling, Townhouse
- d. Accessory recycling collection point
- e. Accessory Solar or Geothermal Power Equipment
- f. Accessory uses and structures not listed elsewhere

- a. Dwelling, One Family
- b. Dwelling, Two-Family
- c. Dwelling, Townhouse
- d. Accessory recycling collection point
- e. Accessory Solar or Geothermal Power Equipment
- f. Accessory uses and structures not listed elsewhere

W.

- a. Dwelling, One Family
- b. Dwelling, Two-Family
- c. Dwelling, Townhouse
- d. Accessory recycling collection point
- e. Accessory Solar or Geothermal Power Equipment
- f. Accessory uses and structures not listed elsewhere

RECONFIGURED WOODLAND SCHOOL PARCELS

Parcel I (Formerly comprised of part of Tracts P and Q)

- a. School, middle or high (until June, 2013)
- b. Daycare facility, large (15 or more)
- c. Dwelling Multifamily
- d. Food Beverage, and Indoor Entertainment; Theater
- e. Grocery Store, Small (50,000 sq. ft. or less)
- f. Medical or Dental clinic
- g. Office
- h. Offices; Bank
- i. Parking Lot or Parking Structure (Primary Use)
- j. Personal Service, small
- k. Personal Services and repair, Large
- I. Rooming House (Dorm/Live-Learn)
- m. Retail Store Not Listed; Large
- n. Retail Store Not Listed, Small
- Restaurant (no drive-in/ drive-through)
- p. Theater
- q. University or college

- r. Vehicle related; Automobile and light vehicle sales, rental or storage (*Planning Review by Planning Commission required*)
- s. Accessory day care facility
- t. Accessory Solar or Geothermal Power Equipment
- u. Accessory Sidewalk Dining Area
- v. Accessory uses and structures not listed elsewhere
- w. Accessory recycling collection point
- x. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- y. Temporary real estate sales office (rental leasing)
- z. Temporary construction office or yard
- aa. Temporary moveable storage container

Parcel II (Formerly comprised of part of Tracts P,Q and R)

- a. School, middle or high (until June, 2013)
- b. Daycare facility, large (15 or more)
- c. Dwelling Multifamily
- d. Food Beverage, and Indoor Entertainment; Theater
- e. Grocery Store, Small (50,000 sq. ft. or less)
- f. Medical or Dental clinic
- g. Office
- h. Offices: Bank
- i. Parking Lot or Parking Structure (Primary Use)
- j. Personal Service, small
- k. Personal Services and repair, Large
- I. Rooming House (Dorm/Live-Learn)
- m. Retail Store Not Listed; Large
- n. Retail Store Not Listed, Small
- o. Restaurant (no drive-in/drive-through)
- p. Theater
- q. University or college
- r. Vehicle related; Automobile and light vehicle sales, rental or storage (*Planning Review by Planning Commission required*)
- s. Accessory day care facility
- t. Accessory Solar or Geothermal Power Equipment
- u. Accessory Sidewalk Dining Area
- v. Accessory uses and structures not listed elsewhere
- w. Accessory recycling collection point

- x. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- y. Temporary real estate sales office (rental leasing)
- z. Temporary construction office or yard
- aa. Temporary moveable storage container

Parcel III (Formerly comprised of Tracts H, J, and part of P and Q)

- a. Dwelling Multifamily
- b. Grocery Store, Small (50,000 sq. ft. or less)
- c. Hotel or Motel
- d. Medical or Dental clinic
- e. Office
- f. Offices; Bank
- g. Personal Service, small
- h. Retail Store Not Listed, Small
- i. Restaurant (no drive-in/drive-through)
- j. Retail Store Not Listed; Large
- k. Rooming House (Dorm/Live-Learn)
- 1. Vehicle related; Automobile and light vehicle sales, rental or storage (*Planning Review by Planning Commission required*)
- m. Accessory recycling collection point
- n. Accessory Sidewalk Dining Area
- o. Accessory Solar or Geothermal Power Equipment
- p. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- q. Accessory uses and structures not listed elsewhere
- r. Temporary construction office or yard
- s. Temporary real estate sales office (rental leasing)

Parcel IV (Formerly comprised of part of Tract Q)

- a. School, middle or high (until June, 2013)
- b. Daycare facility, large (15 or more)
- c. Dwelling Multifamily
- d. Food Beverage, and Indoor Entertainment; Theater
- e. Grocery Store, Small (50,000 sq. ft. or less)
- f. Medical or Dental clinic
- g. Office
- h. Offices; Bank

- i. Parking Lot or Parking Structure (Primary Use)
- j. Personal Service, small
- k. Personal Services and repair, Large
- Rooming House (Dorm/Live-Learn)
- m. Retail Store Not Listed; Large
- n. Retail Store Not Listed, Small
- o. Restaurant (no drive-in/drive-through)
- p. Theater
- q. University or college
- r. Vehicle related; Automobile and light vehicle sales, rental or storage (*Planning Review by Planning Commission required*)
- s. Accessory day care facility
- t. Accessory Solar or Geothermal Power Equipment
- u. Accessory Sidewalk Dining Area
- v. Accessory uses and structures not listed elsewhere
- w. Accessory recycling collection point
- x. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- y. Temporary real estate sales office (rental leasing)
- z. Temporary construction office or yard
- aa. Temporary moveable storage container

Parcel V (Formerly Tract I)

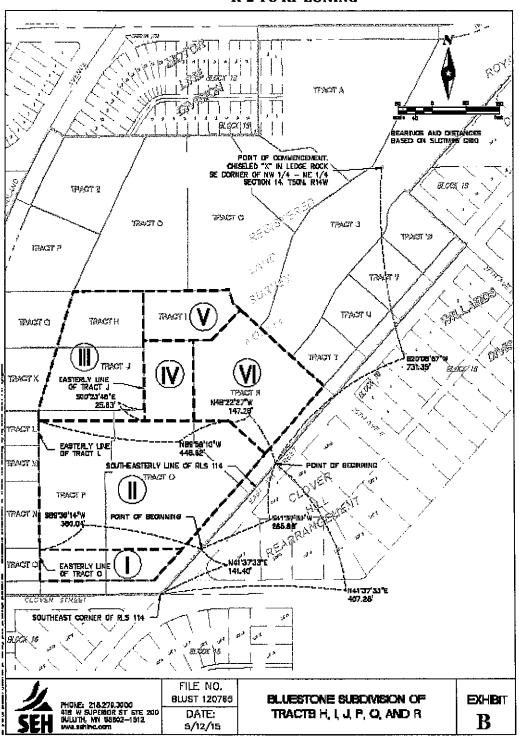
- a. Dwelling Multifamily
- b. Grocery Store, Small (50,000 sq. ft. or less)
- c. Hotel or Motel
- d. Medical or Dental clinic
- e. Office
- f. Offices; Bank
- g. Personal Service, small
- h. Retail Store Not Listed, Small
- i. Restaurant (no drive-in/drive-through)
- j. Retail Store Not Listed; Large
- k. Rooming House (Dorm/Live-Learn)
- 1. Vehicle related; Automobile and light vehicle sales, rental or storage (*Planning Review by Planning Commission required*)
- m. Accessory recycling collection point
- n. Accessory Sidewalk Dining Area

- o. Accessory Solar or Geothermal Power Equipment
- p. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- q. Accessory uses and structures not listed elsewhere
- r. Temporary construction office or yard
- s. Temporary real estate sales office (rental leasing)

Parcel Vi (Formerly Tract R)

- a. School, middle or high (until June, 2013)
- b. Daycare facility, large (15 or more)
- c. Dwelling Multifamily
- d. Food Beverage, and Indoor Entertainment; Theater
- e. Grocery Store, Small (50,000 sq. ft. or less)
- f. Medical or Dental clinic
- g. Office
- h. Offices; Bank
- i. Parking Lot or Parking Structure (Primary Use)
- j. Personal Service, small
- k. Personal Services and repair, Large
- I. Rooming House (Dorm/Live-Learn)
- m. Retail Store Not Listed; Large
- n. Retail Store Not Listed, Small
- o. Restaurant (no drive-in/ drive-through)
- p. Theater
- q. University or college
- r. Vehicle related; Automobile and light vehicle sales, rental or storage (*Planning Review by Planning Commission required*)
- s. Accessory day care facility
- t. Accessory Solar or Geothermal Power Equipment
- u. Accessory Sidewalk Dining Area
- v. Accessory uses and structures not listed elsewhere
- w. Accessory recycling collection point
- x. Accessory Minor Utility and accessory wireless antennas attached to existing structure
- y. Temporary real estate sales office (rental leasing)
- z. Temporary construction office or yard
- aa. Temporary moveable storage container

EXHIBIT B UDC MAP AMENDMENT - WOODLAND MIDDLE SCHOOL SITE R-2 TO RP ZONING



Per UDC 50-14.7(B) governing the rezoning of land to RP zoning, the Applicant has included the following project specific Dimensional Standards which will guide the redevelopment of the land within the RP zone:

Tract

A.

- 1. Height: 75 Feet
- 2. Lot Size: 2.25 acres/ 97,804 sqft.
- 3. Width along Elizabeth Street: 429.8 Feet
- 4. Building Setback:
 - i. Front Yard: Elizabeth (N) 20 Feet
 - ii. Side Yard: (W) 20 Feet
 - iii. Side Yard: (E) O Feet
 - iv. Rear Yard: (S) 0 Feet

В.

- 1. Height: 75 Feet
- 2. Lot Size: .72 Acres/ 31,505 sqft.
- 3. Width: (None-Interior Tract)
- 4. Building Setback:
 - i. Front Yard: (SE) 20 Feet
 - ii. Side Yard: (NE) O Feet
 - iii. Side Yard: (SW) 0 Feet
 - iv. Rear Yard: (NW) 0 Feet

C.

- 1. Height: 75 Feet
- 2. Lot Size: 1.70 Acres/ 73,919 sqft.
- 3. Width: (None-Interior Tract)
- 4. Building Setback:
 - i. Front Yard: (S) 20 Feet
 - ii. Side Yard: (W) 0 Feet
 - iii. Side Yard: (E) O Feet
 - iv. Rear Yard: (N) 20 Feet

- 1. Height: 75 Feet
- 2. Lot Size: 1.51 Acres/ 65,830 sqft.
- 3. Width: (None-Interior Tract)
- 4. Building Setback:
 - i. Front Yard: (S) 20 Feet
 - ii. Side Yard: (W) O Feet
 - iii. Side Yard: (E) O Feet
 - iv. Rear Yard: (N) 0 Feet

E.

- 1. Height: 75 Feet
- 2. Lot Size: .88 Acres/ 38,170 sqft.
- 3. Width along Woodland Avenue: 178.5 Feet
- 4. Building Setback:
 - i. Front Yard: (Woodland Ave. W) 0 Feet
 - ii. Side Yard: (N) 0 Feet
 - iii. Side Yard: (S) 0 Feet
 - iv. Rear Yard: (E) 0 Feet

F.

- 1. Height: 75 Feet
- 2. Lot Size: .72 Acres/ 31,256 sqft.
- 3. Width along Woodland Avenue: 215.6 Feet
- 4. Building Setback:
 - i. Front Yard: (Woodland Ave.- W) 0 Feet
 - ii. Side Yard: (N) O Feet
 - iii. Side Yard: (S) 0 Feet
 - iv. Rear Yard: (E) O Feet

G.

- 1. Height: 75 Feet
- 2. Lot Size: .52 Acres/ 22,831 sqft.
- 3. Width along Woodland Avenue: 134.7 Feet
- 4. Building Setback:
 - i. Front Yard: (Woodland Ave.- W) 0 Feet
 - ii. Side Yard: (N) O Feet
 - iii. Side Yard: (S) 0 Feet
 - iv. Rear Yard: (E) O Feet

- 1. Height: 75 Feet
- 2. Lot Size: .30 Acres/ 13,249 sqft.
- 3. Width along Woodland Avenue: 81.6 Feet
- 4. Building Setback:
 - i. Front Yard: (Woodland-W) 0 Feet
 - ii. Side Yard: (N) O Feet
 - iii. Side Yard: (S) 0 Feet
 - iv. Rear Yard: (E) 0 Feet

M.

- 1. Height: 75 Feet
- 2. Lot Size: .33 Acres/ 14,311 sqft.
- 3. Width along Woodland Avenue: 83 Feet
- 4. Building Setback:
 - i. Front Yard: (Woodland-W) 0 Feet
 - ii. Side Yard: (N) O Feet
 - iii. Side Yard: (S) 0 Feet
 - iv. Rear Yard: (E) 0 Feet

N.

- 1. Height: 75 Feet
- 2. Lot Size: .64 Acres/ 27,944 sqft.
- 3. Width along Woodland Avenue: 154.6 Feet
- 4. Building Setback:
 - i. Front Yard: (Woodland-W) 0 Feet
 - ii. Side Yard: (N) 0 Feet
 - iii. Side Yard: (S) 0 Feet
 - iv. Rear Yard: E) 0 Feet

0.

- 1. Height: 75 Feet
- 2. Lot Size: .32 Acres/ 13,856 sqft.
- 3. Width: (Woodland) 77 Feet / (Clover) 182.3 Feet
- 4. Building Setback:
 - i. Front Yard: (Woodland-W) 0 Feet
 - ii. Side Yard: (N) O Feet
 - iii. Side Yard: (S) 0 Feet
 - iv. Rear Yard: (E) O Feet

P. See Below

- 1. Height: 75 Feet
- 2. Lot Size: 1.49 Acres/ 64,717 sqft.
- 3. Width along Clover Street: 157.6 Feet
- 4.—Building Setback:
 - i. Front Yard: (Clover-S) 20-Feet
 - ii. Side Yard: (W) O Feet
 - iii. Side Yard: (E) O Feet
 - iv. Rear Yard: (N) 0 Feet

Q. See Below

- 1. Height: 75 Feet
- 2. Lot Size: 2.40 Acres/ 104,420 sqft.
- 3. Width: (Clover) 114 Feet / (E. 8th Street) 298.8 Feet
- 4.—Building Setback:
 - i. Front Yard: (Clover) 20 Feet/ (£ 8th Street) 20 Feet
 - ii. Side Yard: (W) 0 Feet
 - iii. Side Yard: (E) O Feet
 - iv. Rear Yard: (N) 0 Feet

R. See Below

- 1. Height: 75 Feet
- 2. Lot Size: 1.69 Acres/-73,786 sqft.
- 3. Width along Clover Street: 304.8 Feet
- 4.—Building Setback:
 - i. Front Yard: (SE) 20 Feet
 - ii. Side Yard: (SW) O Feet
 - iii. Side Yard: (NE) O Feet
 - iv. Rear Yard: (NW) O Feet

S. (Tree Preservation Area)

- 1. Height: 0 Feet
- 2. Lot Size: 2.99 Acres/ 130,050 sqft.
- 3. Width: (None-Interior Tract)
- 4. Building Setback:
 - i. Front Yard: None
 - ii. Side Yard: None
 - iii. Side Yard: None
 - iv. Rear Yard: None

- 1. Height: 35 Feet
- 2. Lot Size: .28 Acres/ 12,109 sqft.
- 3. Width along East 8th Street: 116.7 Feet
- 4. Building Setback:
 - i. Front Yard: (SE) 20 Feet
 - ii. Side Yard: (NE) 10 Feet
 - iii. Side Yard: (SW) 10 Feet
 - iv. Rear Yard: (NW) 20 Feet

U.

- 1. Height: 35 Feet
- 2. Lot Size: .33 Acres/ 14,304 sqft.
- 3. Width along East 8th Street: 116.5 Feet
- 4. Building Setback:
 - i. Front Yard: (SE) 20 Feet
 - ii. Side Yard: (NE) 10 Feet
 - iii. Side Yard: (SW) 10 Feet
 - iv. Rear Yard: (NW) 20 Feet

٧.

- 1. Height: 35 Feet
- 2. Lot Size: .34 Acres/ 14,999 sqft.
- 3. Width along East 8th Street: 116.6 Feet
- 4. Building Setback:
 - i. Front Yard: (SE) 20 Feet
 - ii. Side Yard: (NE) 10 Feet
 - iii. Side Yard: (SW) 10 Feet
 - iv. Rear Yard: (NW) 20 Feet

W.

- 1. Height: 35 Feet
- 2. Lot Size: .40 Acres/ 17,500 sqft.
- 3. Width along East 8th Street: 116.5 Feet
- 4. Building Setback:
 - i. Front Yard: (SE) 20 Feet
 - ii. Side Yard: (NE) 10 Feet
 - iii. Side Yard: (SW) 10 Feet
 - iv. Rear Yard: (NW) 20 Feet

PARCELS

Parcel I (Formerly comprised of part of Tracts P and Q)

1. Height: 75 Feet

2. Lot Size: 0.50 Acres/ 21,842 sqft.

3. Width along Clover Street: 270.70

4. Building Setback:

i. Front Yard: (Clover-S) 0 Feet

ii. Side Yard: (W) 0 Feet

iii. Side Yard: (E) 20 Feet

iv. Rear Yard: (N) 0 Feet

Parcel II (Formerly comprised of part of Tracts P,Q and R)

1. Height: 75 Feet

2. Lot Size: 3.07 Acres/ 133,719 sqft.

3. Width along East 8th Street: 295.62

4. Building Setback:

i. Rear Yard: (East 8th Street) 20 Feet

ii. Side Yard: (N) 0 Feet iii. Side Yard: (S) 0 Feet

iv. Front Yard: (W) 0 Feet

Parcel III (Formerly comprised of Tracts H, J, and part of P and Q)

1. Height: 75 Feet

Lot Size: 1.46 Acres/ 63,755 sqft
 Width: (None-Interior Parcel)

4. Building Setback:

i. Front Yard: (W) 0 Feet
ii. Side Yard: (N) 0 Feet
iii. Side Yard: (S) 0 Feet
iv. Rear Yard: (E) 0 Feet

PARCEL IV (Formerly comprised of part of Tract Q)

1. Height: 75 Feet

Lot Size: .49 Acres/ 21,508 sqft.
 Width: (None-Interior Parcel)

4. Building Setback:

v. Front Yard: (N) 0 Feet
vi. Side Yard: (W) 0 Feet
vii. Side Yard: (E) 0 Feet
viii. Rear Yard: (S) 0 Feet

PARCEL V (Formerly Tract I)

1. Height: 75 Feet

Lot Size: .53 Acres/ 22,932 sqft.
 Width: (None- Interior Parcel)

4. Building Setback:

ix. Front Yard: (N) 0 Feet
 x. Side Yard: (W) 0 Feet
 xi. Side Yard: (E) 0 Feet
 xii. Rear Yard: (S) 0 Feet

PARCEL VI (Part of Tract R)

1. Height: 75 Feet

Lot Size: 1.53 Acres/ 59,653 sqft.
 Width along East 8th Street: 211.04

4. Building Setback:

v. Front Yard: (SE) 20 Feetvi. Side Yard: (SW) 0 Feetvii. Side Yard: (NE) 0 Feetviii. Rear Yard: (NW) 0 Feet

Ninth Amendment to the Regulating Plan (Approved May 24th, 2012)

BlueStone Commons, LLC Village Center Development, LLC

May 27, 2015

1. Purpose

This amendment is for the purpose of updating the BlueStone Regulating Plan approved May 24, 2012, amended by that certain First Amendment dated August 27, 2012, that certain Second Amendment dated December 21, 2012, that certain Third Amendment dated June 19, 2013, that certain Fourth Amendment dated June 5, 2014, that certain Fifth Amendment dated September 30, 2014, that certain Sixth Amendment dated October 3, 2014, that certain Seventh Amendment dated March 18, 2015, that certain Eighth Amendment dated May 27, 2015, and as ratified by City of Duluth Ordinance No. 10271 dated December 16, 2013 (collectively, the "Regulating Plan") to incorporate completed phases and updated site plans.

The Applicant desires to update the Regulating Plan with the current concept phasing plan as is currently known to Applicant

2. Amendment to the Regulating Plan - Phasing Site Plans

The following attachments shall supplement and update the original phasing and site plans included in the Regulating Plan:

Exhibit A – BlueStone Phasing Site Plan – Option A Exhibit B – BlueStone Phasing Site Plan – Option B

Applicant is approved to use either 'Option A' or 'Option B', for Phase 4C and/or Phase 3R, with future surface parking or deck, as set forth in the exhibits above.

(SIGNATURES APPEAR FOLLOWING PAGE)

3. Authority

The alterations do not alter major elements of the approved Regulating Plan and do not constitute a variance from the provisions of Chapter 50 of the Unified Development Chapter.

BlueStone Commons, LLC, a Minnesota Limited liability company

By: Mark W. Lambert Its: Chief Manager

Village Center Development, LLC, a Minnesota limited liability company

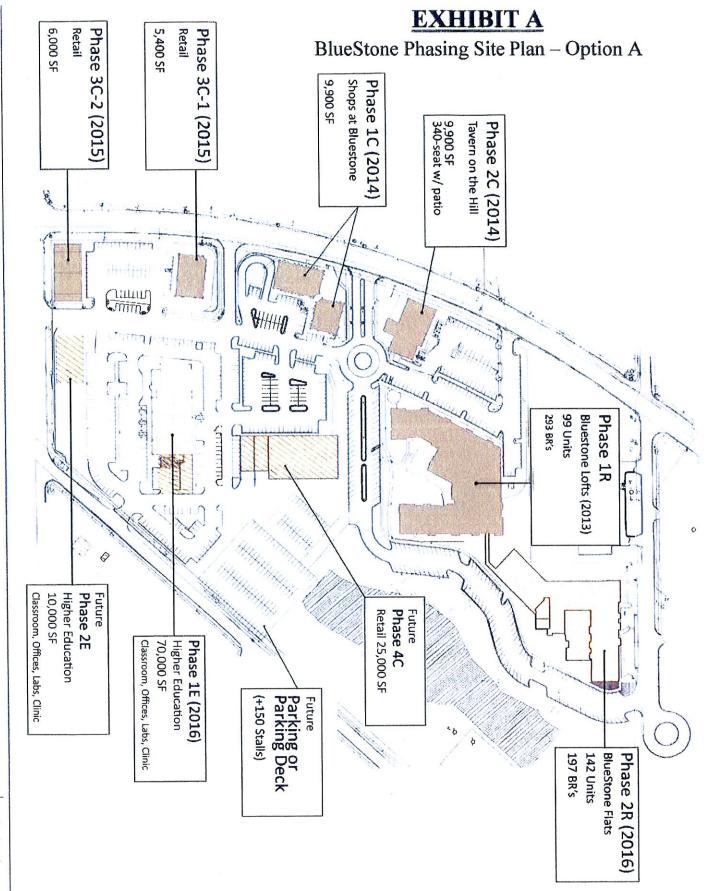
By: Mark W. Lambert Its: Chief Manager

By order of the City Planning and Land Use Supervisor

Charles Froseth, Land Use Supervisor

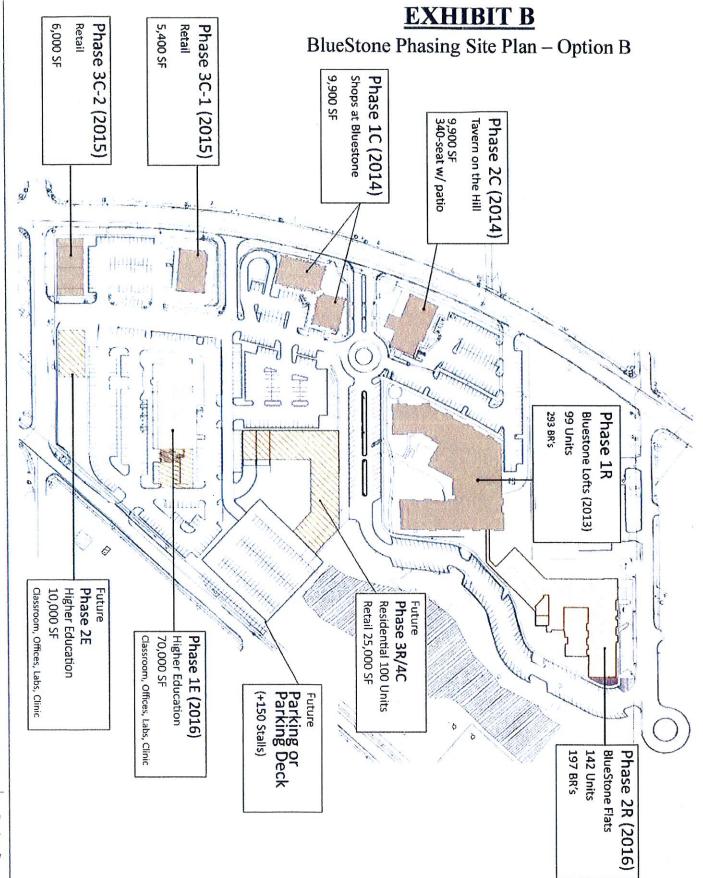
Keith Hamre, Director of Planning and Construction Services

(SIGNATURE PAGE TO NINTH AMENDMENT TO THE REGULATING PLAN)



BLUESTONE COMMONS Duluth, Minnesota

Option A



BLUESTONE COMMONS Duluth, Minnesota

Phasing Plan

Option B

Tenth Amendment to the Regulating Plan (Approved May 24th, 2012)

BlueStone Commons, LLC Village Center Development, LLC

May 27, 2015

1. Purpose

This amendment is for the purpose of updating the BlueStone Regulating Plan approved May 24, 2012, amended by that certain First Amendment dated August 27, 2012, that certain Second Amendment dated December 21, 2012, that certain Third Amendment dated June 19, 2013, that certain Fourth Amendment dated June 5, 2014, that certain Fifth Amendment dated September 30, 2014, that certain Sixth Amendment dated October 3, 2014, that certain Seventh Amendment dated March 18, 2015, that certain Eighth Amendment dated May 27, 2015, that certain Ninth Amendment dated May 27, 2015 and as ratified by City of Duluth Ordinance No. 10271 dated December 16, 2013 (collectively, the "Regulating Plan") to incorporate completed phases and updated site plans.

The Applicant desires to update the Regulating Plan with the current site and phasing plan as is currently known to Applicant.

2. Amendment to the Regulating Plan - Name Change

The area designated as "Higher Education Summary" or "Higher Education Phase" on the Regulating Plan shall now be referred to and referenced as "Phase 1E – Higher Education" and "Phase 2E – Higher Education".

3. Amendment to the Regulating Plan - Lighting Plan, Landscaping Plan and Underground Storm Water Plan

The following attachments shall replace their original counterparts included in the Regulating Plan.

Exhibit A - Lighting plans and drawings for Phase 1E - Higher Education

Exhibit B - Landscaping plan for Phase 1E - Higher Education

Exhibit C - Update underground storm water plan for Phases 1E, 2E, 3R and 4C.

3. Amendment to the Regulating Plan -Phasing Site Plans

The following attachments shall supplement and update the original phasing and site plans included in the Regulating Plan:

Exhibit D - Phase 1E - Higher Education (College of St. Scholastica) site plan

(SIGNATURES APPEAR FOLLOWING PAGE)

3. Authority

The alterations do not alter major elements of the approved Regulating Plan and do not constitute a variance from the provisions of Chapter 50 of the Unified Development Chapter.

BlueStone Commons, LLC, a Minnesota Limited liability company

By: Mark W. Lambert Its: Chief Manager

Village Center Development, LLC, a Minnesota limited liability company

By: Mark W. Lambert Its: Chief Manager

By order of the City Planning and Land Use Supervisor

Charles Froseth, Land Use Supervisor

Keith Hamre, Director of Planning and Construction Services

(SIGNATURE PAGE TO TENTH AMENDMENT TO THE REGULATING PLAN)

<u>EXHIBIT A</u> <u>Lighting Plan - Phase 1E</u>

CSS SITE PLAN

Orawn By: SANDY Checked By: FIOSS Date:4/21/2015

Scale: AS NOTED



EXHIBIT B LANDSCAPING PLAN - PHASE 1E

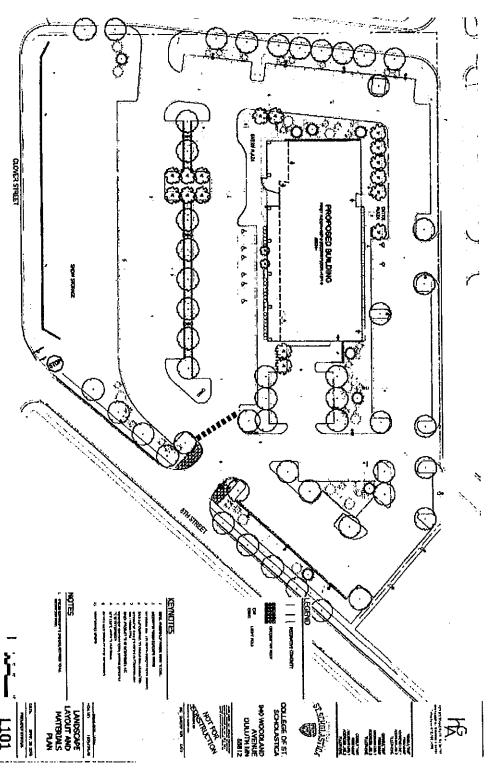


EXHIBIT CUnderground Storm Water Plan for Phase 1E

Redevelopment Through Final Phases (Retail 4 and CSS)

Drainage Report Duluth, Minnesota

SEH No. BLUST 120765

May 8, 2015



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Redevelopment Through Final Phases (Retail 4 and CSS)

Drainage Report

Prepared for BlueStone Commons LLC

1.0 Introduction

The proposed BlueStone Commons development consists of commercial buildings, multi-unit housing, streets, trails, and parking areas located north of Clover Street between Woodland Avenue and East 8th Street. The development will create a friendly environment for students to live, work, and shop. The project was broken into multiple phases with hydrologic studies currently completed for:

- Overail Development Reports (7/17/13, 8/8/13, 10/16/14)
- Phase 1, Lofts 1 & Retail Phase 2 (7/10/12)
- Phase 2, Retail Phase 1 (10/28/13)
- Phase 3, Retail Phase 3 (10/16/14)
- Phase 4, Lofts 2 (3/15/15)

The information provided within this Drainage Report includes a summary of existing conditions and redevelopment through the final phases, herein known as Retail 4 and CSS, located in the eastern and southern sections of the development.

2.0 Project Narrative

Construction of the overall proposed BlueStone Commons Development will require the removal of seven existing residential homes and an existing school building. Approximately 40% of the existing wooded area will be preserved and overall drainage patterns of the site will be retained. Runoff will be treated and detained on-site through the use of filtration basins and other BMPs, as necessary, to meet requirements.

The Retail 4 and CSS portion of the development will consist of a new residential building, an educational building, commercial retail space, the addition of parking adjacent to Clover Street and East 8th Street, and various pathways and trails. Additionally, the Retail 4 and CSS portion of the development will include directing flow to an underground detention system.

3.0 Pre and Post-Redevelopment Conditions

The existing and proposed conditions were analyzed using HydroCAD and WinSLAMM software. Models will be submitted to the City upon request. A summary of the results through the final phase are provided within this report.

3.1 Pre-Redevelopment Conditions

The pre-redeveloped overall site includes a school, residential homes, open green space, and undeveloped wooded areas. The site soils include Barto-Greysolon-Rock outcrop complex, Urban land-Cultre-Rock outcrop complex, and bedrock. The site slopes to the southwest at 0-18% grades. The majority of the site runoff flows overland to on-site catch basins or adjacent street catch basins which are routed to the City's storm sewer system located at the intersection of Clover Street and East 8th Street. This storm sewer travels south ultimately reaching Oregon Creek. A small amount of drainage from the northwest corner of the site drains northwest, ultimately reaching Tischer Creek. Tischer Creek is a designated trout stream.

The Retail 4 and CSS phases of the site are located in the east and south portions, respectively. These areas of the site currently drain overland to the City storm sewer system and ultimately end up in Oregon Creek. Soil in these areas of the site consist of bedrock with a small amount of topsoil and vegetation.

Table 1 describes the hydrologic parameters of the site prior to any redevelopment. An existing basin map corresponding to the drainage areas listed is shown in Figure 2. It should be noted that the time of concentration values have been modified from previous reports to more accurately reflect existing conditions. The modifications involve using a calculated time of concentration while still incorporating a 7-minute minimum time of concentration as is consistent with MnDOT guidance.

Table 1
Pre-Redevelopment Hydrologic Parameter Summary

Drainage Area	Total Acres	CN	Тс
E1.4	0.8	81	12.8
E1.5	6.6	85	25.6
E1.6	0.4	97	7.0
EX1	4.7	94	12.0
EX2	2.4	86	13.9
EX3.1	0.7	86	14.5
EX3.2	6.4	81	14.5
TOTALS	22.0		

3.2 Post-Redevelopment Conditions

Table 2 describes the hydrologic parameters of the site based on the improvements to the site through the final phases, Retall 4 and CSS. Retail 4 and CSS portions of the site will be split in two drainage basins, E1 and S1, respectively. These basins and all other post-redevelopment drainage basins are shown in Figure 1. Post-redevelopment drainage basins are designed to mimic pre-redevelopment drainage patterns to the maximum extent practicable.

Retail 4, contained in basin £1, is comprised of residential areas, commercial retail areas and additional parking areas. Drainage from this basin will mimic pre-redevelopment drainage patterns and will be collected by a proposed storm sewer system and directed towards a proposed underground detention system located in Basin S1.

CSS, contained in basin S1, includes a proposed educational building with associated parking and a future retail building with parking. Drainage from this basin will mimic pre-redevelopment drainage patterns and be collected in a proposed storm sewer system and directed towards a proposed underground detention system in the southern portion of Basin S1. The proposed underground detention system will discharge to the existing City storm sewer system and ultimately end up in Oregon Creek, similar to the existing condition.

The Retail 4 and CSS phases are still in design development stages. Therefore, all proposed areas within basins E1 and S1 were considered to be impervious within the models.

Table 2
Post-Redevelopment Hydrologic Parameter Summary

Drainage Area	Total Acres	CN	Tc	Notes
P1.4	0.3	82	11.1	Construction Complete
DEV1	4.3	93	12	Construction Complete
NE1	2.4	92	9.3	Under Construction
NE2.1	0.6	93	7	Under Construction
NE2.2	0.2	98	7	Under Construction
RD1	0.4	96	7	Construction Complete
RD2.1	0.9	91	7	Construction Complete
RD2.2	0.9	96	7	Proposed Construction
FD1	1.5	95	8.2	Under Construction
E1	2.2	98	7	Proposed Construction
S1	3.6	98	7	Proposed Construction
PR3	4.7.	78	14.5	To Remain Undeveloped
TOTALS	22:0			

4.0 Permanent Water Quality and Peak Discharge Rate Control

The overall proposed development will be a combination of new development and redevelopment. To establish the City TSS removal requirement, a weighted calculation was completed and is shown in the previous overall development report. A required TSS removal efficiency of 66% was determined for the entire development. The peak flow rates from the site will be maintained and/or reduced from the existing conditions.

A summary of the stormwater water quality and rate control requirements are shown in Table 3.

Table 3
Stormwater Water Quality and Rate Control Requirement Summary

Type of Requirement	Development Trigger	Required Treatment
Disturbed Area	New and Redevelopment > 1 Acre	66% TSS Removal (Weighted Average)
Stormwater Flow Volume Reduction or Pollutant Removal	Bedrock and heavy clay soil limitations.	66% TSS Removal (Weighted Average)
Runoff Rate Control	New and Redevelopment	Match or reduce predevelopment peak flow rates for all storm events.

4.1 Treatment and Pollutant Removal Requirements

WinSLAMM v10 modeling software was used to model and verify the treatment and pollutant removal requirement of 66% TSS removal. To meet this requirement a combination of filtration basins, underground systems and catch basin cleaning are proposed throughout the overall site. Modeling data is available for review by the City upon request.

Flow from the Retail 4 and CSS portion of the site, contained in basins E1 and S1, with be directed to and treated by a proposed underground detention system. The underground detention system is designed to capture and store stormwater facilitating stormwater rate control and improving water quality. The system includes 600 linear feet of 9 foot diameter pipe with an outlet configuration including a 6-inch orifice 4 feet from the pipe invert and a broad crested weir 6 feet from the pipe invert.

As summarized in Table 4, the overall removal efficiency through the final phases of the project results in a treatment of 66.0%. This removal efficiency satisfies the City's TSS requirement.

Table 4
WinSLAMM Water Quality Modeling Results

Type of Treatment	Underground & CB Cleaning	Filtration Basin	None	Underground	Overail
Contributing Area	DEV1, E1, S1	NE1, NE2.1	P1.4, RD1, NE2.2	RD2, FD1	All
Contributing Acres	10.1	3.0	0.9	3.3	17.3
TSS Load (lbs/yr)	3253	655	225	1238	5371
TSS Removed (lbs/yr)	2080	554	0	910	3544
TSS Leaving Site (lbs/yr)	1023	101	225	328	1828
% Removal Efficiency	63.9%	84.6%	0.0%	73.5%	66.0%

4.2 Runoff Rate Control

HydroCAD Version 10.0 modeling software was utilized in the analysis, using the SCS method to estimate peak flows and verify the runoff rate control requirement. Modeling data is available for review by the City upon request.

The following Type II 24-hour storm events were modeled:

- 2 year storm event 2.55"
- 10 year storm event 3.80"
- 100 year storm event ~ 5.30"

Peak flow results through the final phases are shown in Table 5. Peak flows were reduced for all storm events from existing to developed conditions.

Table 5
HydroCAD Peak Flow Results Summary

Modeling results reflect the total peak flow (cfs) leaving the site

	Existing Conditions			Developed Conditions		
	Oregon Creek	Tischer Creek	Site Total	Oregon Creek	Tischer Creek	Site Total
2-Year Event	32.6	1.1	33.7	30.0	0.8	30.5
10-Year Event	60.3	2.1	62.4	60.8	1.3	61.9
100-Year Event	95.1	3.3	98.4	92.1	1.9	93.8

5.0 Conclusion

In conclusion, the final phases, Retail 4 and CSS, complete the larger plan of development known as Bluestone Commons. The Bluestone Commons development meets all drainage requirements identified by the City and summarized within this report. This is accomplished

edevelopment	Through Final Phases	(Retail 4 and CSS)	BLUST 120765
	cleaning.	n basins, underground detention systems, and catch	basin
	through the use of filtratio	n basing underground detention quetoms, and getab	haein

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Figure 1 – Overall Stormwater Plan Figure 2 – Existing Conditions Drainage Map

EXHIBIT D PHASE IE - HIGHER EDUCATION

