ITEM # 53b
DATE: 04-26-16

Staff Report

CAMPUSTOWN URBAN REVITALIZATION AREA
NATURAL DAYLIGHT CRITERIA EQUIVALENCY REQUEST
FOR PROPERTY AT 122 HAYWARD AVENUE

April 26, 2016

BACKGROUND:

Dean Jensen, RES Development, Ames, as the property owner and developer, has submitted applications for approval of a Minor Site Development Plan and Plat of Survey to combine two lots into a single parcel for redevelopment of the property located at 122 Hayward Avenue (currently addressed as 118 and 120 Hayward Avenue, *see Attachment A: Location Map)*. The developer intends to demolish the existing one-story commercial building and construct a new mixed-use, seven story, structure with commercial uses on the first floor, amenities for apartment tenants above the commercial, two levels of structured parking, and five levels of apartment units. Nine apartments are planned for each residential level. The apartment layouts include (3) two-bedroom, (1) three-bedroom and (5) four-bedroom units on each level. A total of 45 units, 145 bedrooms; and, 45 parking spaces will be located inside the structure. Six additional parking spaces are planned outside the building, on the ground level north of the building.

(*See Attachment D: Preliminary Plans, not yet approved, including the "Cover Sheet", "Lower Parking Plan", "Upper Parking Plan", "Typical Floor Plan", "North & South Building Elevations"; and, "East & West Building Elevations.")*

The Developer has put forward a request to have the City Council determine if their approach to provide natural lighting for the apartment unit living areas is equivalent to the criterion of the Campustown Urban Revitalization Area (URA) *(see Attachment C: Campustown URA Criteria)*. The developer desires to construct the project as proposed and intends to seek property tax abatement once the project is constructed. The specific criterion that is related to this request is:

Criteria #10 "provide for natural daylight requirements of applicable codes with exterior windows."

Specifically, the developer asks that the Council determine that the although approximately 1/3 of the bedrooms within the project do not have exterior windows, that due to the degree of glazing on the residential facades and the proposed level of artificial lighting within each living area that the project can be found to be equivalent to the standard as described in the URA Plan. *(see Attachment B: Developer's Request)*.

The Campustown URA has always included conditions that are mandatory for receiving property tax abatement. The Campustown URA criteria are expectations that exceed the basic standards of the City's codes and rely on the incentive of receiving property tax to abatement to have such features included within the design of a project. The current language for requirements applied to residential uses was added to the Campustown Criteria in 2009. The residential requirements were described in the February 2009 reports as a means to address the City's experiences with large and intense developments and to increase safety and security and access to light and air for these intense developments.

The language at question relates to a building code standard that articulates a requirement that occupied space must meet minimum lighting levels, either through the use of windows or artificial lighting, within each room (*see IBC Excerpt Attachment F)*. A building must provide natural light for habitable spaces, with the net glazed area to be not less than 8% of the floor area of the room served by the window. The other approach is to use artificial light that is adequate to provide an average illumination of 10 footcandles over the area of the room at a height of 30 inches above the floor level.

Staff has interpreted the URA criterion for natural daylight requirements to mean that natural lighting, through the use of window glazing, is to be incorporated into the design of new buildings for all habitable spaces e.g. bedrooms, living/dining rooms and kitchens, but not to bathrooms and hallways as would be included within the meaning of the Building Code. Staff sees the use of natural daylight as a higher design standard than artificial lighting and in most circumstances viewed as an enhanced living environment.

The developer proposes that natural light does not have to be provided to all habitable spaces in the building to meet the URA criteria for lighting. The developer proposes that artificial light can be provided in place of exterior windows for some of the rooms, provided the rooms that do have exterior windows exceed the minimum glazed area for the entire apartment units that would be required by the IBC. **They believe this approach achieves a higher standard for the building design than is required by the IBC, and satisfies the URA criteria for natural daylight with exterior windows.**

On *Attachment E: Lighting*, the developer has shown the square footage of glazing provided for rooms that have exterior windows, and the ratio of glazing to floor area of the room being provided with natural light. The percentage of floor area provided as glazing exceeds the minimum IBC requirement of 8% for all habitable rooms provided with windows. All living rooms, dining areas and kitchens in the building receive natural light. All living room windows include 46 square feet of glazing (8'-0" wide by 5'-9" tall) Ninety-five of the 145 bedrooms have windows; whereas, the other 50 bedrooms are lighted with artificial light, and will not have windows. All bedroom windows include 19 square feet of glazing (3'-4" wide by 5'-9" tall). Ten of the 29 bedrooms on each of the five levels will be lighted with artificial light, only. *Attachment D: Lighting*, also shows the percentage of exterior wall surface for all four building elevations that is devoted to glazing. The percentage of glazing on the exterior facades ranges from 20% on the south elevation to 30.7 % on the west elevation.

Another code related to lighting is the City of Ames Rental Housing Code *(see Attachment G: Rental Housing Code).* The Rental Housing Code requires that each habitable room be provided with natural light by means of one or more exterior glazed openings. The window openings are to have a total minimum area of at least 10 square feet per apartment. However, it expressly states that in lieu of window openings for natural light in habitable rooms, adequate light may be a system of artificial light capable of producing an average illumination of six footcandles over the area of the room at a height of 30 inches above the floor level. This Rental Code standard is a lower bar than that of the current building code adopted by the City. **The developers proposed artificial lighting provided in each of the 50 interior bedrooms is equal to 18 footcandles, which exceeds the minimum required for rooms with artificial light, and no natural daylight.**

Options

1. The City Council can approve the developer's proposal of an equivalent alternative to meet the Campustown Urban Revitalization Criteria #10 for natural daylight requirements for the proposed mixed-use building at 122 Hayward Avenue.

   The City Council is asked to exercise their discretion and determine that the proposed approach to window glazing and artificial lighting for 1/3 of the bedrooms in the 122 Hayward project meets the equivalency language of the URA Plan. City Council could determine that the proposal does meet the equivalency expectation and approve the developer's approach to designing the building. With this option, acceptance of the developer's proposal would allow the developer to proceed with the project with the assurance that tax abatement would be available upon completion of the project if it meets all other requirements of the Campustown URA Plan.

2. The City Council can direct staff to prepare an amendment to the Campustown Urban Revitalization Criteria for natural daylight requirements to allow the developer's proposal to comply with the standards.

   In the event the City Council does not believe the proposal is equivalent to the standards, but is supportive of the developer's request, the City Council could initiate an amendment to the Campustown URA criteria that revises the natural day-lighting requirement. A change could be made to reflect the intent of increased glazing on residential facades or a glazing requirement based upon the apartment unit area. Such a change would then apply to all future projects. The developer would likely continue with their project while the City pursues an amendment to the criteria.

3. The City Council can deny approval of the developer's proposal of an equivalent alternative to meet the Campustown Urban Revitalization Criteria for natural daylight requirements for the proposed mixed-use building at 122 Hayward Avenue.

   If the City Council does not believe the approach by the developer meets the intent of the URA criteria it can choose to deny the request. The developer would then

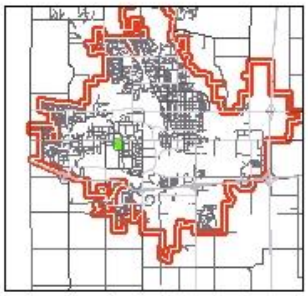
need to decide whether to construct the project as proposed and not seek property tax abatement or to redesign the project to be eligible for tax abatement with all habitable rooms having an exterior window.

4. The City Council can refer this request back to City staff and/or the applicant for additional information prior to making this determination.

STAFF COMMENTS:

The intent of the natural light criterion can be found to have two purposes. The first is to enhance the living environment of each habitable room with access to natural light. Staff believes the second outcome from the natural light criterion is that there would likely be a higher percentage of glazing on residential facades due to the requirement that each room have access to an exterior window rather than meeting lighting requirements solely with artificial light. The increase in glazing creates a higher degree of architectural interest than blank facades with non-transparent materials.

Attachment A
Location Map



Location Map
122 Hayward Avenue

N

0 20 40 80 120
Feet

Attachment B
Developer's Request – Page 1

RES DEVELOPMENT

April 20, 2016

Honorable Mayor and City Council
515 5th Street
Ames, IA 50010

Re: 122 Hayward Avenue, Ames, IA
Clarification Request of Council for
Campustown Urban Revitalization
Criteria (C) 10.

Honorable Mayor and Council,

By this letter, we are respectfully requesting clarification as to the intent of Campustown Urban Revitalization Criteria (C) and its criteria application to our project in seeking Council's approval:

10. Provide for natural daylight requirements of applicable codes with exterior windows.

The applicable building code is the 2012 International Building Code (IBC), Chapter 12 – Interior Environment, Section 1205 Lighting and the City of Ames Municipal Code, Division V, Chapter 13 – Rental Housing, Section 13.501 Light – Natural Light Requirements. Both of these code sections are attached. Both of these codes allow for minimum Lighting requirements to be met with either Natural Light or Artificial Light. The Rental Housing code does require a minimum total of 10 square feet of windows per apartment.

Please also find attached a typical overall residential floor plan and exterior wall elevation(s) showing the window openings, their glazed area, the room served area and the ratio of the glazed area to the room served area:

1. Note the window glazed area to floor area ratio in all living rooms and perimeter bedrooms significantly exceed the IBC Natural Light code requirement of 8% minimum.
2. Note the artificial lighting in all interior bedrooms significantly exceeds the IBC Artificial Light code requirement of an average of 10 footcandles or more at 30" above the finish floor.

2519 CHAMBERLAIN ST, STE 101 AMES, IA 50014
Phone: (515) 268.5485 Fax: (515) 268.8181

RES DEVELOPMENT

3. Note that each Apartment Unit total window glazed area to Apartment Unit habitable (Living, Sleeping, Cooking and Eating) space area ratio exceeds the IBC Natural Light requirement of 8% minimum.
4. The Rental Housing Code states that each Habitable Room shall be provided with Natural Light by means of one or more glazed window opening OR Artificial Light capable of producing an average illumination of 6 footcandles over the area served at a height of 30" above the floor level. The lighting in the 10 interior bedrooms meet this code requirement with 18 footcandles of artificial light, 3 times greater than required.
5. Note that each Apartment Unit total window glazed area (between 65 sf and 122 sf) significantly exceeds the Rental Code minimum requirement of 10 square feet.
6. Note that on each exterior wall face, the ratio of window glazed area to overall wall area is 20% or greater.

It is apparent the minimum Natural Daylight required by the International Building Code (IBC) and the City of Ames Rental Housing Code is provided in excess. It is apparent the exterior walls of the building demonstrate a significant percentage of window openings relative to the wall surface available. All Bedroom windows(19 sf) are 3'-4"wide x 5'-9" tall and all Living Room windows (46 sf) are 8'-0" wide and 5'-9" tall, both sized substantially greater than a typical apartment window.

We trust you will agree item (C) 10.'s intent of incentivizing a developer to provide Natural Light over Artificial Light which would result in a sizeable amount of exterior window openings on the exterior elevations is met. Your approval of our correctly applying this criteria to our 122 Hayward Avenue project will be greatly appreciated.

Respectfully submitted,

Dean W. Jensen,
Campus Plaza, LC Property Owner and Developer

2519 CHAMBERLAIN ST, STE 101 AMES, IA 50014
Phone: (515) 268.5485 Fax: (515) 268.8181

CAMPUSTOWN URBAN REVITALIZATION PLAN - Criteria for Renovation or New Construction

(A)

Project must meet one criterion of three options from Column (A).

(1) Slum and Blighted
Properties where a majority of the assessed valuation has been determined to be substantially unsafe or to have an unsafe use by the City Council.

-OR-

(2) Parking & Mixed Use

- A minimum of 70% of the total required parking is provided in a structure. If utilizing a parking deck, the restrictions in Chapter 29.406(12) of the Municipal Code must be adhered to.

and

- The first floor must be used for permitted commercial and retail uses as shown in Table 29.809 (2) of the Municipal Code or for a small production facility. The second floor must be used for either commercial or retail uses as shown in Table 29.809 (2) or for household living. All floors above the second floor must be used for household living.

-OR-

(3) Adaptive Reuse

- The building on the site is at least 50 years or older .

and

- 70% of the area of existing walls of the structure will remain.

and

- Historic materials and designs are preserved and/or restored.

(B)

Project must meet one criterion of two options from Column (B).

(1) Underrepresented
Properties that are to include a business use where that actual sales of the business use is below the expected sales for the business use as determined by the City Council to be of benefit to the City.

-OR-

(2) Design Standards

- Retail and office uses on the first floor adjacent to a public sidewalk must have direct access to the public sidewalk.

and

- Buildings greater than 3-stories shall include architectural features that create visual interest and variation in building design by differentiating building façade elements and include visual relief for long facades.

and

- Approval of master sign program by the Planning and Housing Director with signage designs that are complimentary to the building design and supports business identity

and

- Limit driveways along Lincoln Way and Welch Avenue if alternative means of access are available. No drive-troughs are allowed along the Lincoln Way and Welch Avenue.

and

- 100% of the front facades and 80% of the remaining sides of the structure shall be faced with clay brick for the first four stories. On stories five through seven any other building materials except vinyl will be allowed.

–OR–

An adaptive reuse project (A3) may use siding materials that are historically significant for all stories of a building.

(C)

All projects with residential uses shall also meet the following criteria or equivalent as approved by City Council.

1. Limit commercial space in the same building to the ground floor.
2. Provide separate entrances for commercial and residential uses.
3. Residential entrances are visible from the street and provide secure access.
4. Prevent access from the exterior to the interior through doors that serve only as fire exits.
5. Prohibit public access to structured parking, using overhead door and secure access control.
6. Provide transparent glass windows into all stairwells.
7. Provide camera monitoring of all pedestrian and vehicle entrances and areas.
8. Minimum widths of all exit routes: 48" for halls, 42" for doors, 60" between rails for stairs.
9. No balconies are permitted.
10. Provide for natural daylight requirements of applicable codes with exterior windows.
11. On facades facing any street use only fixed windows, note modified tamper resistant windows do not comply.
12. Design of all other windows to pre- vent passing of sphere larger than 4" diameter.
13. Prevent by physical means access to all roofs.
14. Where access is not required, pro- vide security fencing controlling access to all areas between new or existing buildings.
15. Provide a minimum of four 100w metal halide or LED 6,500 lumens light fixtures on each building façade: two at elevation between first and second floors and two at elevation between third and fourth floor.

Campustown URA Criteria Appendix

1. All Projects must comply with an option from both column A and column B. Additionally, projects with residential uses must also comply with all requirements of column C.

2. Projects requesting final tax abatement approval must be compliant with an approved Site Development Plan and have received a certificate of building occupancy from the City of Ames Inspection Division.

3. All features incorporated into a project to meet URA criteria must be maintained for the life of the tax abatement.

4. Applications for final tax abatement approval must include supporting documentation for each of the relevant criteria.

5. **Architectural Design Guidelines:**
   The intent of this criterion is to promote building variation appearance within Campustown. The relative scale of new buildings can lead to similar building appearances due to construction techniques, uniform roof lines, and long building lengths; whereas, Campustown historically had diversity in building appearance and scale.

   Visual interest of a building means incorporating architectural features that define buildings elements, such as the base, middle, and top of a building. Appropriate architectural features can include window details, brick and material color variations that highlight building elements and support building identity, parapets, or expressive storefront glazing systems.

   Variation and Relief means building offsets that affect the apparent massing of the building at the ground level or for upper stories. For example, a uniform storefront at the base of building may have upper floor relief with a courtyard or changes in façade planes, alternatively, the lower levels of the building may have the appearance of multiple facades with a building offset that differentiates the façades and has a minimum depth of 6 inches. Recessed storefronts creating outdoor usable space at the ground floor can also provide variation and relief. The degree of needed facade relief will correspond to the scale of the building and length of the facade to achieve the desired effect of the URA criteria. Long facades are generally in excess of 60 feet, substantially longer façades may necessitate additional elements of relief.

6. **Master Sign Program**
   Sign program details in the plan shall include the style of signs (blade, channel letters, etc.) location of signs, size and scale, lighting details, method of attachment to buildings.

   Signage shall be orientated to the pedestrian level, internal illuminated cabinet signs with white or light color backgrounds are prohibited, channel letters should be affixed directly to the building without a visible raceway or have a backing panel that covers a creating the appearance of an overall sign face. Preferred signage would be decorative in appearance through its use of sign face materials, design, lighting, and style of signage.

   In consideration of approval of the Sign Program, the Planning Director will review the Campustown Idea Book signage guidelines, scale of signage and location in relation to the building features, and lighting type. Once a sign program is approved, individual sign permits must be consistent with the sign program.

Attachment D
Preliminary Plans – Cover Sheet

Hayward Mixed Use
45 Unit Building

122 Hayward Ave. Ames, IA 50014

Owner:
Campus Plaza LC
Ames, IA 50014

Architect/Construction Manager:
JCorp, Inc.
P.O. Box 159, Huxley, IA 50124 Phone (515) 597-5457 Fax (515) 597-5461

Structural Engineer:
Raker Rhodes
4717 Grand Avenue, Des Moines, IA 50312 Phone: (515) 277-0275

MEP Engineer:
TBD
Structural Contact Info

Civil Engineer:
Fox Engineering
414 South 17th Street, Suite 107, Ames, IA 50010 Phone (515) 233-0009 Fax: (515) 233-0103

RECEIVED
APR 21 2016
CITY OF AMES, IOWA
DEPT. OF PLANNING & HOUSING

AREA BREAKDOWN

Name	Area
1st Level	11471 SF
2nd Level	11454 SF
3rd Level	11454 SF
4th Level	11454 SF
5th Level	11452 SF
Ground Level - Commercial	4782 SF
Upper Level - Commercial	2465 SF
Grand Total: 7	64523 SF

PARKING AREA BREAKDOWN

Type	Area
Lower Parking	19676 SF
Upper Parking	13353 SF
Grand Total: 2	33039 SF

PARKING BREAKDOWN

Description	Count	Percentage of Total
Compact Parking Stall	9	19%
Handicap Parking Stall	3	6%
Standard Parking Stall	33	75%
Total Parking: 51		

UNIT BREAKDOWN

Comments	Count
2 BED	15
3 BED	5
4 BED	25
Total Units: 45	

BEDBATH BREAKDOWN

Type	Count
BATH (FULL)	145
BEDROOM	145

PARKING REQUIREMENT: 1 STALL PER UNIT
45 STALLS REQUIRED
54 STALLS PROVIDED

Legal Description

I certify that this or drawings was prepared by me or under my direct personal supervision and that I am a duly registered Architect under the laws of the State of Iowa

Printed Name: Date:
My license renewal date is December 31, 2015
Pages or sheets covered by this seal:

Abbreviations

A/C	AIR CONDITIONING
ACOUST	ACOUSTICAL
ADJ	ADJUSTABLE
ALUM	ALUMINUM
ARCH	ARCHITECTURAL
BD	BOARD
BLDG	BUILDING
BLK	BLOCK
BM	BEAM
BOT	BOTTOM
CAB	CABINET
CEM	CEMENT
CER	CERAMIC
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CPT	CARPET
CT	CERAMIC TILE
DBL	DOUBLE
DEPT	DEPARTMENT
DET	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DR	DOOR
DWG	DRAWING
EA	EACH
EJ	EXPANSION JOINT
ELEC	ELECTRICAL
ELEV	ELEVATION
EQ	EQUAL
EQUIP	EQUIPMENT
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FD	FLOOR DRAIN
FDN	FOUNDATION
FIN	FINISH
FLR	FLOOR
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GC	GENERAL CONTRACTOR
GYP BD	GYPSUM BOARD
HB	HOSE BIBB
HDWD	HARDWOOD
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HOUR
HVAC	HEATING, VENTILATING & AIR CONDITIONING
INSUL	INSULATION
INT	INTERIOR
JT	JOINT
LAM	LAMINATE
LAV	LAVATORY
MAX	MAXIMUM
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MTL	METAL
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
OPNG	OPENING
OPP	OPPOSITE
PERF	PERFORATED
PL	PLATE
PLAM	PLASTIC LAMINATE
PLYWD	PLYWOOD
PR	PAIR
PREFAB	PREFABRICATED
RCP	REFLECTED CEILING PLAN
REF	REFERENCE
REINF	REINFORCED
REQD	REQUIRED
RM	ROOM
SCHED	SCHEDULE
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SPEC	SPECIFICATION
SQ	SQUARE
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENDED
T&G	TONGUE & GROOVE
THK	THICK
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL
TYP	TYPICAL
UNF	UNFINISHED
VERT	VERTICAL
VIF	VERIFY IN FIELD
W/	WITH
W/O	WITHOUT

Drawing Symbols

- WALL TYPE: SEE SHEET G108
- DOOR TAG: SEE DOOR SCHEDULE SHEET A601
- WINDOW TAG: SEE SHEET A601
- REVISED NOTE
- INTERIOR ELEVATION: SEE A & E SHEETS
- DROPPED CEILING HEIGHT PER RCP & SECTIONS

General Notes

1. Refer to Structural, Civil, Mechanical, Electrical and Plumbing plans for additional information or requirements.
2. Verify existing conditions before fabrication or prior to proceeding with the work and notify the Architect / Structural Engineer immediately of significant discrepancies.
3. All thru wall masonry flashing to be above grade/sloped paving.
4. Caulk & seal all control/expansion joints at all interior/exterior masonry/concrete.
5. Owner/CM to install all flashing, doors, windows & exterior wall coverings per 2006 IBC, and manufacturers installation specifications. ALL FLASHING TO BE INSTALLED BY ROOFING CONTRACTOR. ALL COVERINGS
6. Gyp board expansion joints shall be used where required per standard gyp board practice to prevent cracking of drywall.
7. Owner/CM to install backing as necessary for handrails, grab bars, gas termination, fire dept terminations, exterior hose bibs, etc.
8. Fire-blocking to be provided at all floors per Sect. 717 CONCEALED SPACES, 2006 IBC.
9. Draftstopping to be installed per Sect. 717 CONCEALED SPACES, 2006 IBC.
10. Floor and roof truss manufacturer to coordinate truss layout w/ draftstopping requirements.
11. Owner/CM to coordinate floor & roof truss layout with Mechanical, Electrical & Plumbing contractors.
12. Floor truss manufacturer to coordinate truss web layout w/ Architect & Structural engineer to allow for HVAC duct returns.
13. Plumbing & Mechanical contractors to coordinate locations of equipment, meters & floor drains with Owner/CM.
14. Owner/CM to verify compliance of dryer vent distance & elbows with manufacturer recommendations.
15. All dimensions are to rough framing U.N.O.

Drawing Index

Sheet Number	Sheet Name	Issue Number 1	2	3
	General			
G000	Cover Sheet			
G100	Wall Types			
G200	Code Review			
G201	Code Review Plan			
G202	Code Review Plan			
G300	Accessibility Standards			
G301	Accessibility Standards	x		
A000	Lower Parking Plan	x		
A001	Upper Parking Plan			
A101	Typical Floor Plan			
A102	Second Fifth Floor Plan			
A200	Unit Plans			
A201	Unit Plans			
A300	Roof Plan			
A301	Elevations			
A500	Elevations, Door & Window Schedules			
A502	Elevation Details			
A503	Dry Siding			
A600	Building Sections			
A601	Sections			
A602	Sections			
A603	Sections			
A604	Sections			
A605	Sections			
A700	Details			
A701	Details			
S100	Foundation Plan, Foundation Sections			
S101	Second Floor Framing Plan, Roof Framing Sections			

Issue No.	Date	Purpose
1	04/15/16	Planning Submittal
2		
3		

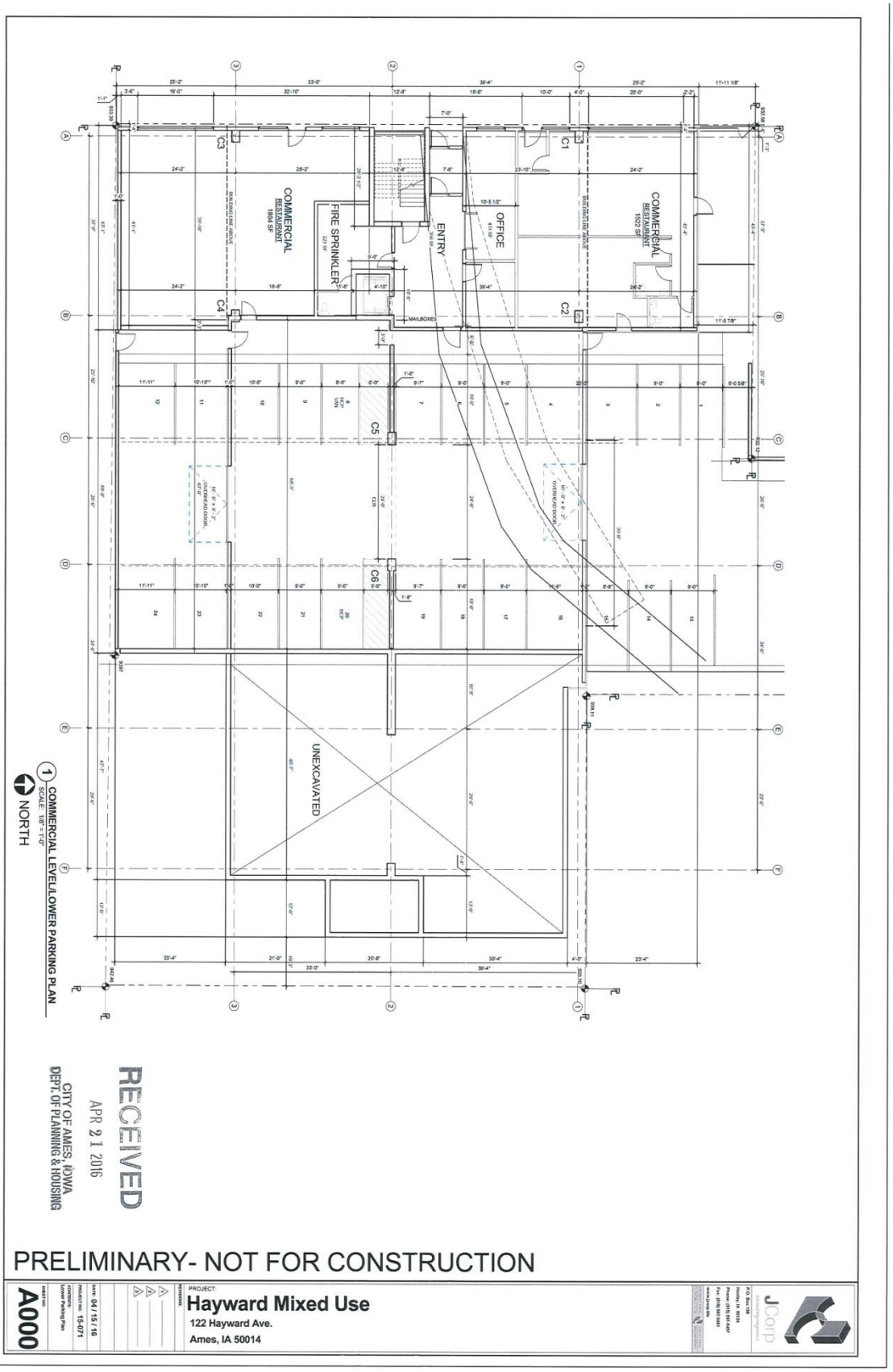
PRELIMINARY- NOT FOR CONSTRUCTION

PROJECT:
Hayward Mixed Use
122 Hayward Ave.
Ames, IA 50014

issue: 04 / 15 / 16
project no: 15-071
contents: Cover Sheet

sheet no: **G000**

Attachment D
Preliminary Plans – Lower Parking Plan



RECEIVED
APR 21 2016
CITY OF AMES, IOWA
DEPT. OF PLANNING & HOUSING

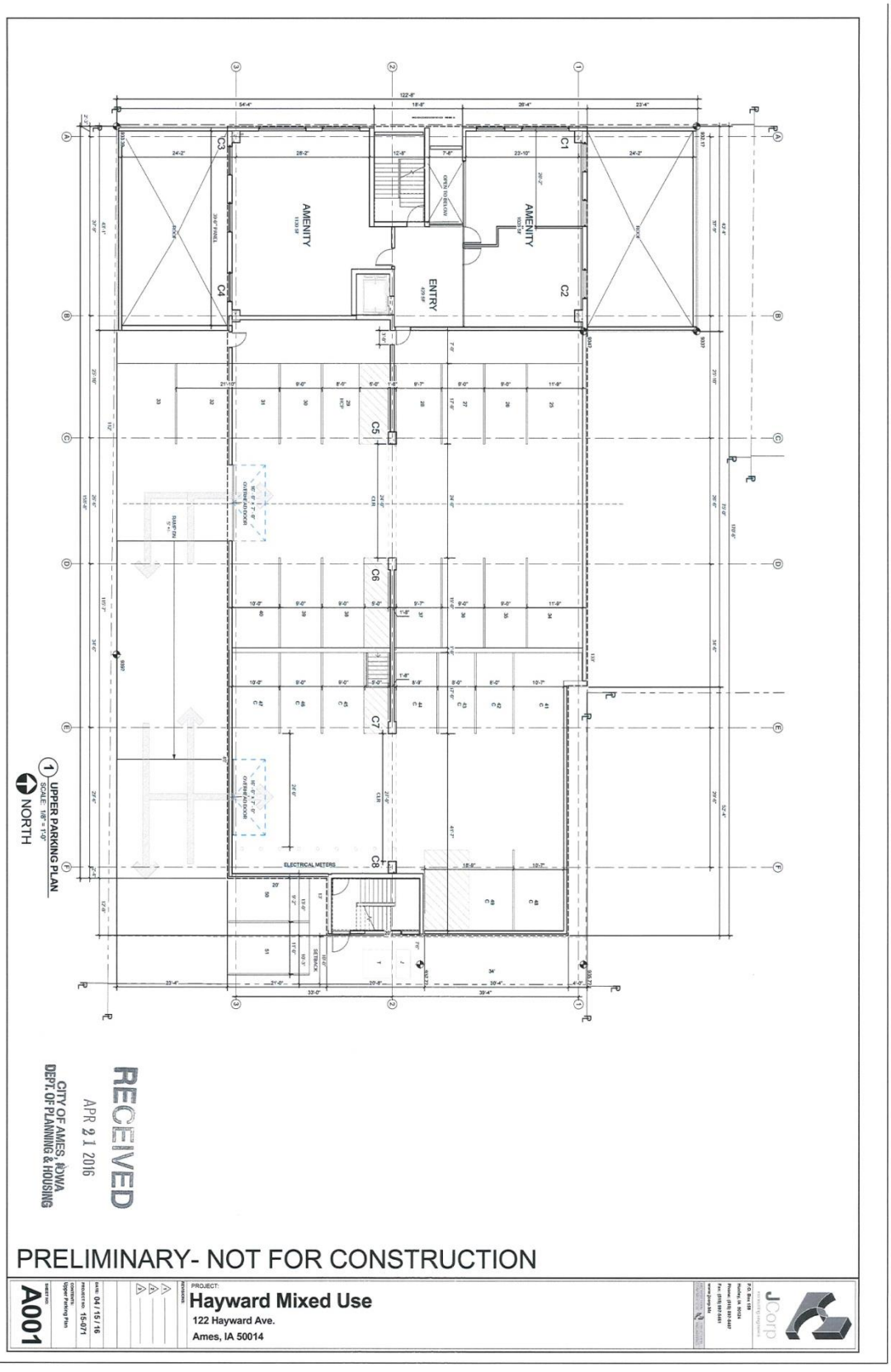
PRELIMINARY- NOT FOR CONSTRUCTION

PROJECT:
Hayward Mixed Use
122 Hayward Ave.
Ames, IA 50014

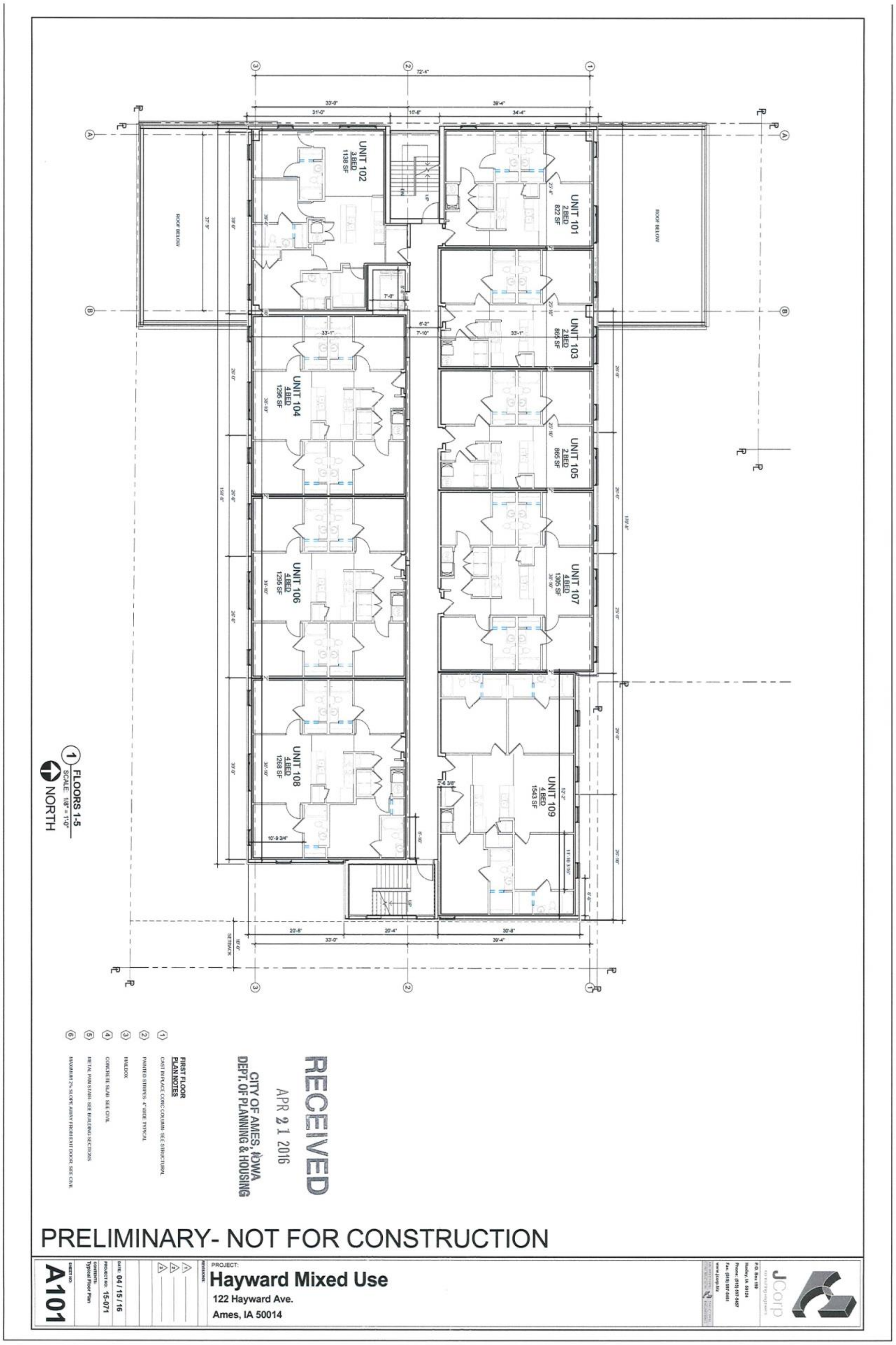
SHEET NO.
A000

DATE: 04/15/16
PROJECT NO. 15-071
SHEET TITLE
Lower Parking Plan

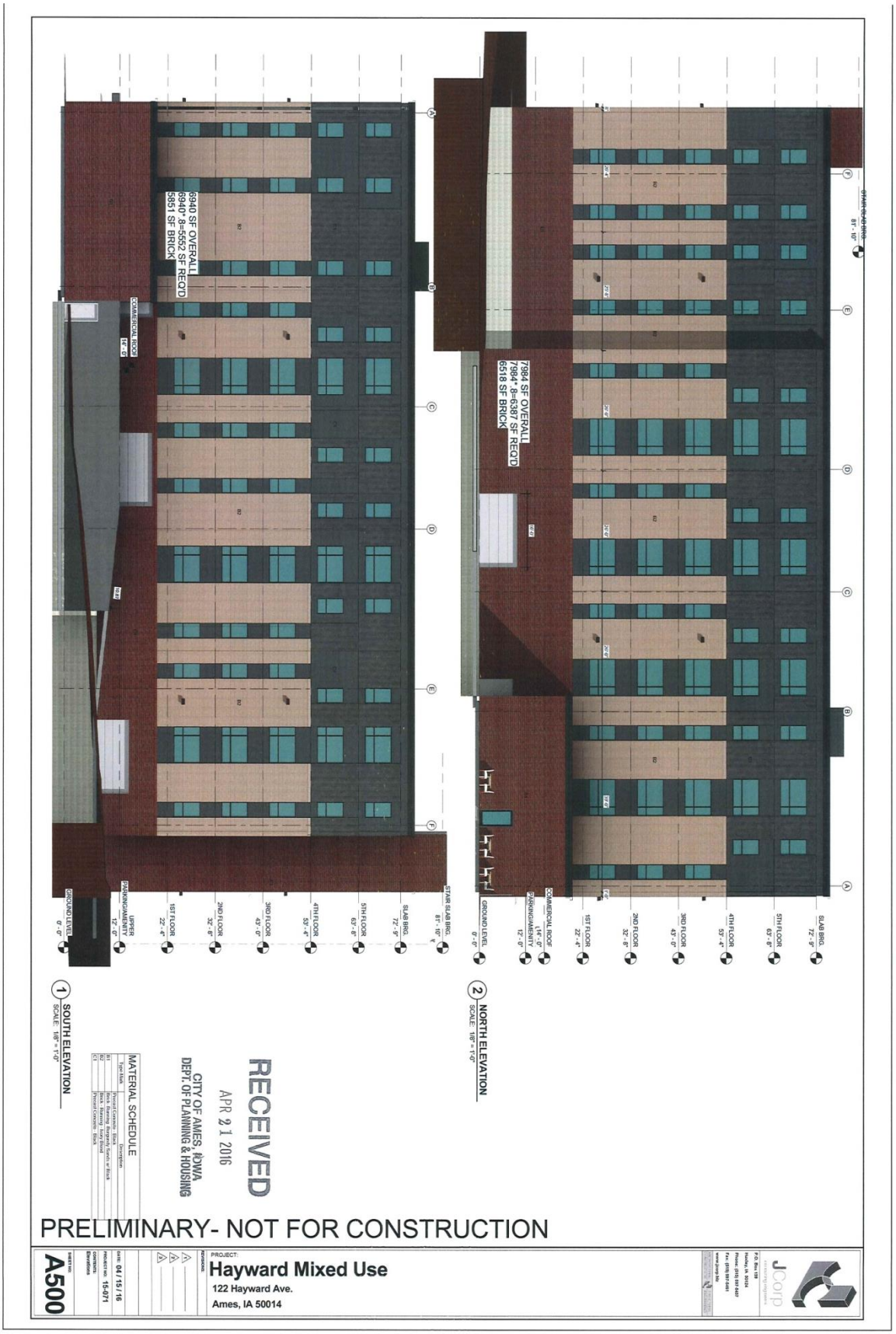
Attachment D
Preliminary Plans – Upper Parking Plan



Attachment D
Preliminary Plans – Typical Floor Plan


UNIT 101
2 BED
822 SF
UNIT 102
4 BED
1138 SF
UNIT 103
2 BED
865 SF
UNIT 104
4 BED
1295 SF
UNIT 105
2 BED
865 SF
UNIT 106
4 BED
1295 SF
UNIT 107
4 BED
1305 SF
UNIT 108
4 BED
1268 SF
UNIT 109
4 BED
1543 SF
FLOORS 1-5
SCALE: 1/8" = 1'-0"
NORTH
FIRST FLOOR PLAN NOTES
RECEIVED
APR 21 2016
CITY OF AMES, IOWA
DEPT. OF PLANNING & HOUSING
PRELIMINARY- NOT FOR CONSTRUCTION
PROJECT:
Hayward Mixed Use
122 Hayward Ave.
Ames, IA 50014
DATE: 04/15/16
PROJECT NO: 15-071
Typical Floor Plan
A101
JCorp

Attachment D
Preliminary Plans – North & South Building Elevations



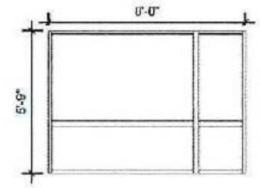
Attachment D

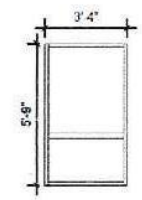
Preliminary Plans – East & West Building Elevations

Attachment D
Preliminary Plans – Natural Daylight Percentages

Typical Floor Natural Daylight Percentages

Name	Area	Window Area	Percentage Glazing
BEDROOM	122 SF	0 SF	0.0%
BEDROOM	122 SF	0 SF	0.0%
BEDROOM	122 SF	0 SF	0.0%
BEDROOM	122 SF	0 SF	0.0%
BEDROOM	165 SF	0 SF	0.0%
BEDROOM	122 SF	0 SF	0.0%
BEDROOM	122 SF	0 SF	0.0%
BEDROOM	122 SF	0 SF	0.0%
BEDROOM	122 SF	0 SF	0.0%
BEDROOM	122 SF	0 SF	0.0%
BEDROOM	112 SF	19 SF	17.0%
BEDROOM	122 SF	19 SF	15.6%
BEDROOM	122 SF	19 SF	15.6%
BEDROOM	122 SF	19 SF	15.6%
BEDROOM	122 SF	19 SF	15.6%
BEDROOM	164 SF	19 SF	11.6%
BEDROOM	171 SF	19 SF	11.1%
BEDROOM	150 SF	19 SF	12.7%
BEDROOM	122 SF	19 SF	15.6%
BEDROOM	122 SF	19 SF	15.6%
BEDROOM	122 SF	19 SF	15.6%
BEDROOM	122 SF	19 SF	15.6%
BEDROOM	122 SF	19 SF	15.6%
BEDROOM	140 SF	19 SF	13.6%
BEDROOM	100 SF	19 SF	19.0%
BEDROOM	139 SF	19 SF	13.7%
BEDROOM	107 SF	38 SF	35.4%
BEDROOM	122 SF	38 SF	31.2%
BEDROOM	105 SF	38 SF	36.1%
LIVING ROOM	154 SF	48 SF	31.2%
LIVING ROOM	166 SF	48 SF	28.9%
LIVING ROOM	169 SF	48 SF	28.4%
LIVING ROOM	184 SF	48 SF	26.1%
LIVING ROOM	184 SF	48 SF	26.1%
LIVING ROOM	184 SF	48 SF	26.1%
LIVING ROOM	184 SF	48 SF	26.1%
LIVING ROOM	188 SF	48 SF	25.5%
LIVING ROOM	215 SF	48 SF	22.3%

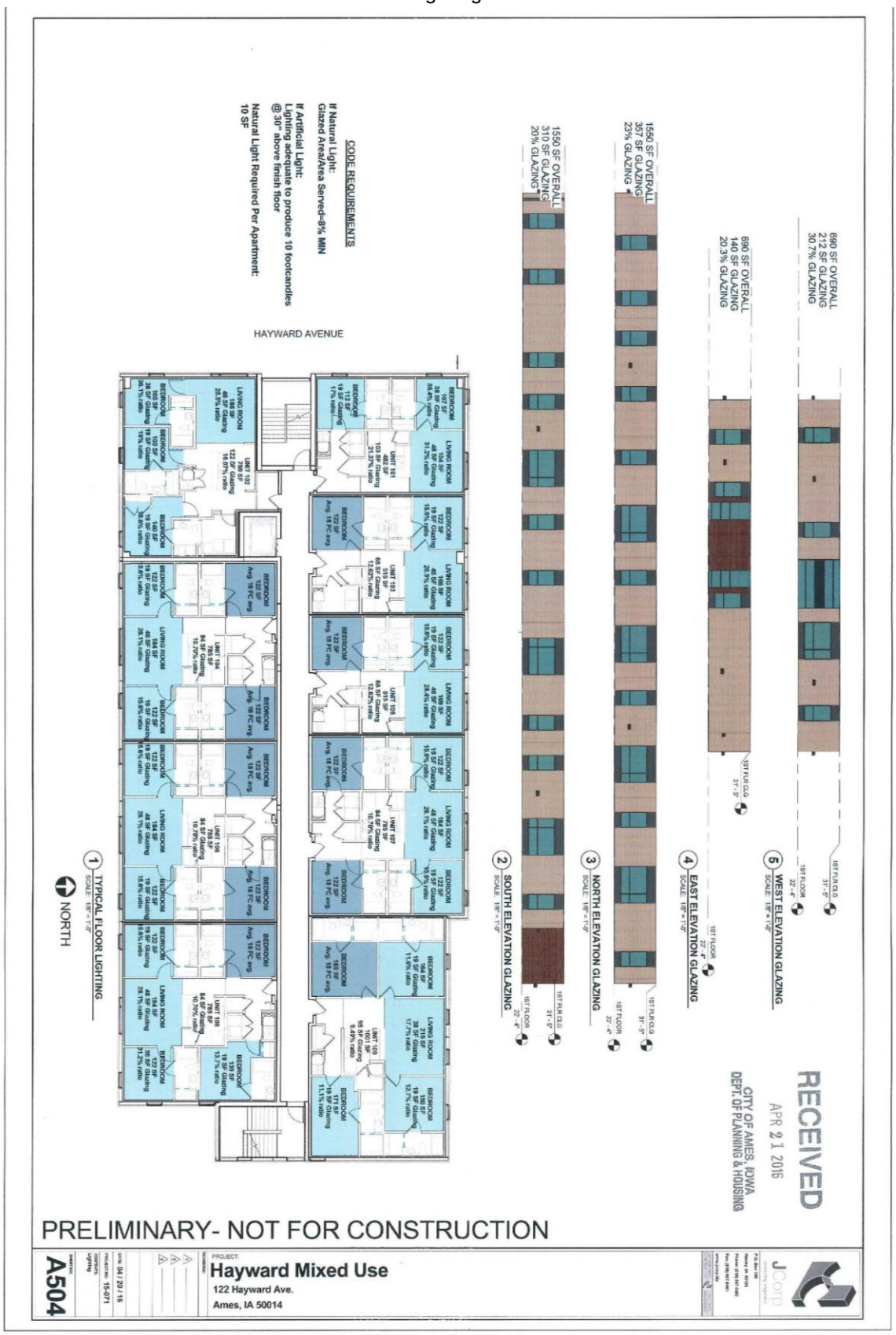




JCorp, inc

Hayward Mixed Use | Daylighting 04 / 15 / 16

Attachment E
Lighting



D of the IPC. It would be unreasonable to expect any heating system to maintain a desired indoor temperature when the outdoor temperature is below the design temperature. When the 97.5-percent column in Appendix D of the IPC is used, it can be assumed that the actual outdoor temperature will be at or below the design temperature for roughly 54 hours of the total of 2,160 hours in the months of December through February (2.5 percent of 2,160 hours = 54).

The exception recognizes that not all interior spaces are associated with human comfort by the nature of their uses, such as a commercial cooler or freezer. These and similar spaces would not require heating systems.

SECTION 1205
LIGHTING

1205.1 General. Every space intended for human occupancy shall be provided with natural light by means of exterior glazed openings in accordance with Section 1205.2 or shall be provided with artificial light in accordance with Section 1205.3. Exterior glazed openings shall open directly onto a *public way* or onto a *yard* or *court* in accordance with Section 1206.

❖ This section establishes that an option can be exercised on a room-by-room or space-by-space basis. The option allows the designer to provide either natural light in accordance with this chapter or equivalent levels of artificial lighting.

1205.2 Natural light. The minimum net glazed area shall be not less than 8 percent of the floor area of the room served.

❖ This section establishes the minimum glazed area required based on the floor area served by the window. This is required only for spaces that are not provided with artificial light in accordance with Section 1205.3. It is the intent of the code to establish this ratio as the minimum glazed opening onto yards or courts, in accordance with Section 1205.1.

Early codes set this standard at 10 percent of the floor area served. This ratio was derived from certain architectural styles that yielded adequate light and ventilation; however, this is a more than adequate amount and has been reduced to the current levels because of energy conservation issues. Openings in excess of that minimum area are permitted to open onto areas other than a complying court or yard. In Figure 1203.4.1, the room dimensions are 15 feet by 20 feet (4572 mm by 6096 mm), or 300 square feet (27.9 m^2) of area. If windows B and C are double hung, with a combined glazed area of 24 square feet (2.23 m^2), they provide the minimum area required of 8 percent of the floor area (24/300 = 0.08). In this example, glazing unit A is not required for natural light; therefore, it need not face onto a required yard or court.

1205.2.1 Adjoining spaces. For the purpose of natural lighting, any room is permitted to be considered as a portion of an adjoining room where one-half of the area of the common

wall is open and unobstructed and provides an opening of not less than one-tenth of the floor area of the interior room or 25 square feet (2.32 m^2), whichever is greater.

Exception: Openings required for natural light shall be permitted to open into a sunroom with *thermal isolation* or a patio cover where the common wall provides a glazed area of not less than one-tenth of the floor area of the interior room or 20 square feet (1.86 m^2), whichever is greater.

❖ In a case where a space (or room) has no glazed area open to the required courts or yards but is adjacent to one that does, it may "borrow" natural lighting from the adjacent space if: (1) the wall between the adjoining spaces is at least one-half open and unobstructed; (2) the opening equals at least 10 percent of the floor area of the interior space and (3) the opening is not less than 25 square feet (2.33 m^2). The required glazed area facing the required court or yard must not be less than 8 percent of the total floor area of all rooms served. For example, in Figure 1205.2.1, the glazed area in Space B is required to be equal to or greater than 0.08 (floor area of Space A + floor area of Space B).

In the figure, the opening between the adjacent spaces must meet all three criteria: the wall must be at least half open and unobstructed, it must be a minimum of 25 square feet (2.33 m^2) and it must be not less than one-tenth of the floor area of space A.

The exception deals with a very common circumstance, especially in residential construction. As long as the sunroom is large enough and is thermally isolated, the building owner need not move openings for lighting when installing an addition that falls within the definition of "Sunroom." Note that sunrooms can also be part of the initial construction of a building.

1205.2.2 Exterior openings. Exterior openings required by Section 1205.2 for natural light shall open directly onto a *public way*, *yard* or *court*, as set forth in Section 1206.

Exceptions:

1. Required exterior openings are permitted to open into a roofed porch where the porch:
   1.1. Abuts a *public way*, *yard* or *court*;
   1.2. Has a ceiling height of not less than 7 feet (2134 mm); and
   1.3. Has a longer side at least 65 percent open and unobstructed.
2. Skylights are not required to open directly onto a *public way*, *yard* or *court*.

❖ In order that enough light will be provided through openings to naturally lit rooms, the openings must open onto yards or courts with the minimum dimensions specified in Section 1206. Skylights admit light directly from above and, therefore, are not required to face a court or yard in accordance with Exception 2. Exception 1 gives the criteria by which a roofed porch may be located directly outside required openings without significantly obstructing the entrance of light to the space.

1205.3 Artificial light. Artificial light shall be provided that is adequate to provide an average illumination of 10 footcandles (107 lux) over the area of the room at a height of 30 inches (762 mm) above the floor level.

❖ The section establishes the minimum required illumination for rooms without the minimum required natural light (see Figure 1205.3). Please note that Section 1006.2 requires 1 footcandle (11 lux) of light at the walking surface of all means of egress.

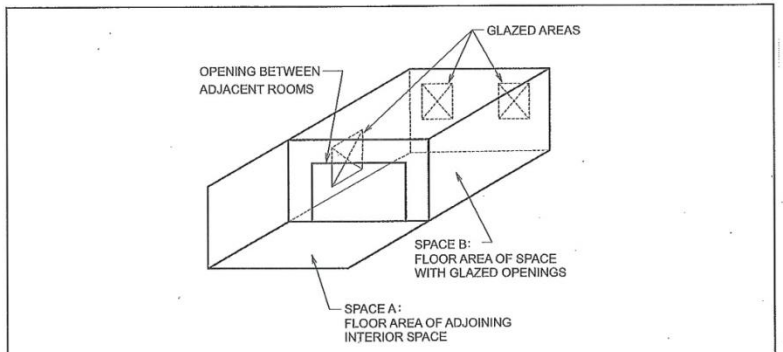


Figure 1205.2.1
NATURAL LIGHT FROM ADJACENT SPACE

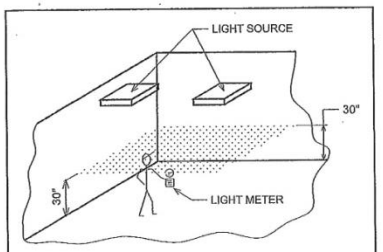


Figure 1205.3
ARTIFICIAL LIGHTING IN A ROOM

1205.4 Stairway illumination. *Stairways* within *dwelling units* and *exterior stairways* serving a *dwelling unit* shall have an illumination level on tread runs of not less than 1 footcandle (11 lux). *Stairs* in other occupancies shall be governed by Chapter 10.

❖ Illumination is essential for stairway safety during normal use, as well as during egress in an emergency. The lighting must be operable by switches in the vicinity of the stairway, located as required by the *National Electrical Code*® (NEC). Emergency egress lighting, also referred to as "means of egress illumination," is required in occupancies other than dwelling units at a lower rate of illumination (see commentary, Sections 1006 and 1205.5).

1205.4.1 Controls. The control for activation of the required *stairway* lighting shall be in accordance with NFPA 70.

❖ The NEC provides for controls at the top and bottom of stairways within dwelling units, allowing an occupant to illuminate the stairways before traversing any stairways, regardless of the direction of travel. Illuminated switches, where required, allow an occupant to quickly find the switches when the stairways are dark.

Illumination controls for exterior stairways that are operable from the inside of a dwelling unit allow an occupant to safely egress by activating exterior stairway illumination prior to leaving the building. Exterior stairways must be provided with the minimum illumination level specified in Section 1205.4.

1205.5 Emergency egress lighting. The *means of egress* shall be illuminated in accordance with Section 1006.1.

❖ Means of egress illumination is required in all buildings to allow occupants enough light to negotiate the exit access (such as corridors) and exits (such as enclosed stairways) at all times the building is occupied (see commentary, Section 1006.1).

DIVISION V
LIGHT, VENTILATION AND OCCUPANCY LIMITATIONS

Sec. 13.500. GENERAL

(1) **Scope.**

The provisions of this chapter shall govern the minimum conditions and standards for light, ventilation and space for occupying a structure.

(2) **Responsibility.**

The owner of the structure shall provide and maintain light, ventilation and space conditions in compliance with these requirements. A person shall not occupy as owner-occupant, or permit another person to occupy, any premises that do not comply with the requirements of this chapter.

(3) **Alternative devices.**

In lieu of the means for natural light and ventilation herein prescribed, artificial light or mechanical ventilation complying with the International Building Code shall be permitted.

Sec. 13.501. LIGHT - NATURAL LIGHT REQUIREMENTS

(1) **Window Space.**

Each habitable room shall be provided with natural light by means of one or more exterior glazed openings. Such window openings shall have a total minimum area of at least ten (10) square feet per apartment. In lieu of window openings for natural light in habitable rooms, adequate light may be a system of artificial light. Artificial light must be capable of producing an average illumination of 6 footcandles over the area of the room at a height of 30 inches above the floor level.

(2) **For the purpose of determining light and ventilation requirements:**

(a) Any room may be considered as a portion of an adjoining room when the common wall has an unobstructed opening of at least 25 square feet.

(b) Openings of less than 1½ square feet shall not be included in computation.

(c) Pre-existing conditions:

Approval of this pre-existing condition is transferable from one owner to another, provided compliance with all conditions of this section is maintained continuously. Failure to maintain continuous compliance with this section may result in termination of approval, and require compliance with current code provisions, following appropriate notification and hearing procedures of this Code.

Sec. 13.502. VENTILATION.

(1) **Natural Ventilation Requirements** (formerly Section 13.39(2)(g)(ii) and (iii))

(a) All habitable rooms and bathrooms shall have natural ventilation provided by easily openable exterior openings. Such openings shall be equal to at least fifty (50) percent of the minimum window area as required in (1) above.

(b) In lieu of openable windows for natural ventilation in dwellings, adequate ventilation may be an installed mechanical ventilation system capable of producing 0.35 air change per hour in the room or a whole-house mechanical ventilation system installed capable of supplying outdoor ventilation air of 15 cubic feet per minute (cfm) per occupant computed on the basis of two occupants for the first bedroom and one occupant for each additional bedroom.

(2) **Pre-existing conditions:**

Approval of this pre-existing condition is transferable from one owner to another, provided compliance with all conditions of this section is maintained continuously. Failure to maintain continuous compliance with this section may result in termination of approval, and require compliance with current code provisions, following appropriate notification and hearing procedures of this Code.

(3) **Clothes dryer exhaust.**

Clothes dryer exhaust systems shall be independent of all other systems and shall be exhausted in accordance with the manufacturer's instructions.