

# FALCON DRIVE MIXED USE DEVELOPMENT

## URBAN DESIGN REVIEW BOARD DES MOINES, IA

NOVEMBER 4, 2021



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SE AERIAL



NE AERIAL



NW AERIAL



SW PERSPECTIVE



SE PERSPECTIVE



NE PERSPECTIVE



E PERSPECTIVE

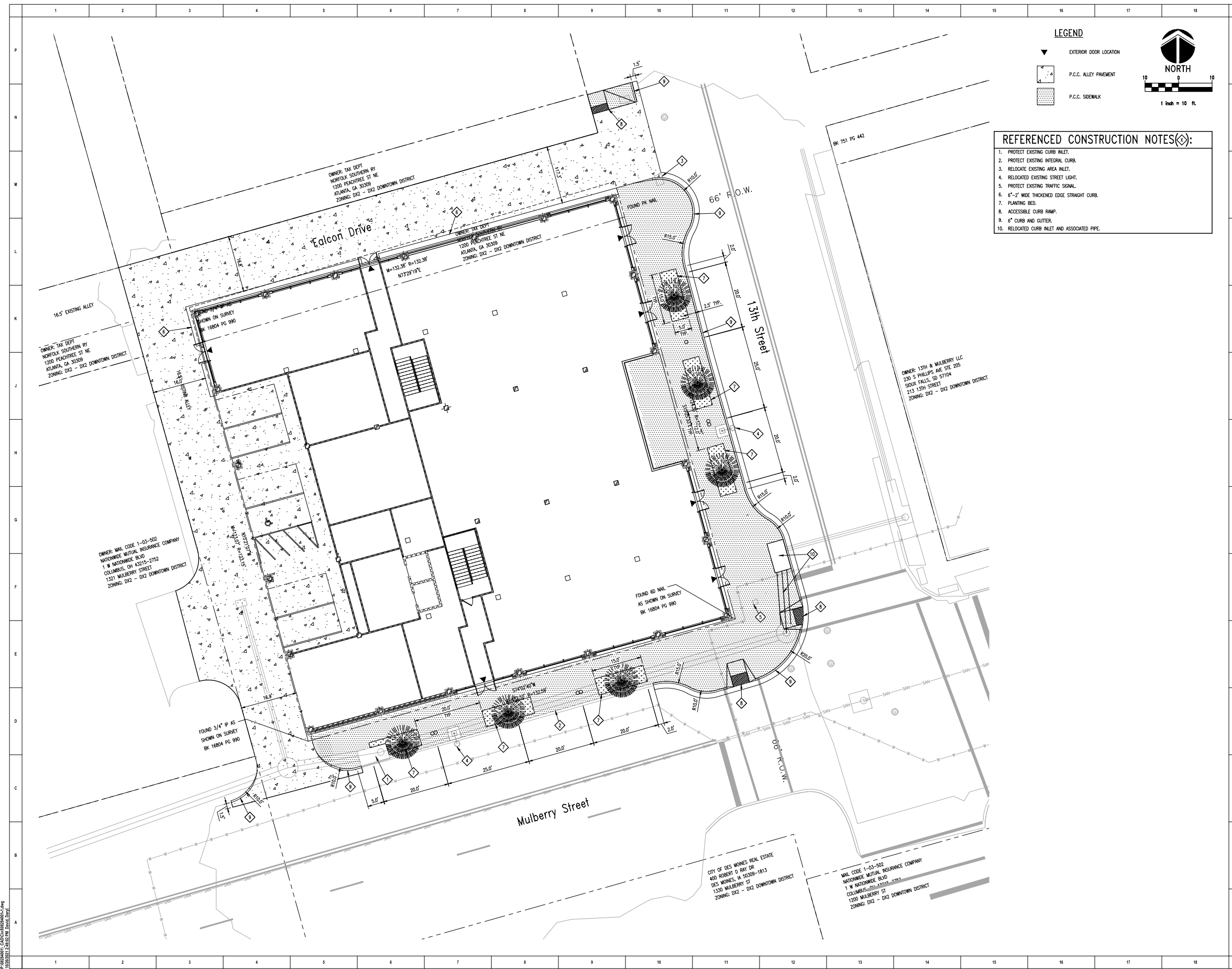


E PERSPECTIVE

# FALCON DRIVE MIXED USE DEVELOPMENT

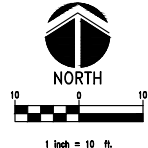
## FLOOR PLANS





**LEGEND**

- ▼ EXTERIOR DOOR LOCATION
- [Pattern] P.C.C. ALLEY PAVEMENT
- [Pattern] P.C.C. SIDEWALK

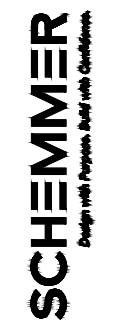


**REFERENCED CONSTRUCTION NOTES**

1. PROTECT EXISTING CURB INLET.
2. PROTECT EXISTING INTEGRAL CURB.
3. RELOCATE EXISTING AREA INLET.
4. RELOCATED EXISTING STREET LIGHT.
5. PROTECT EXISTING TRAFFIC SIGNAL.
6. 6"-2" WIDE THICKENED EDGE STRAIGHT CURB.
7. PLANTING BED.
8. ACCESSIBLE CURB RAMP.
9. 4" CURB AND GUTTER.
10. RELOCATED CURB INLET AND ASSOCIATED PIPE.

REVISIONS	NO.	DATE	BY	DESCRIPTION
ISSUE DATE:	SEPTEMBER 17, 2021			
DESIGNED BY:	MM			
DRAWN BY:	DD			
CHECKED BY:	MM			

**DESIGN DEVELOPMENT PHASE**

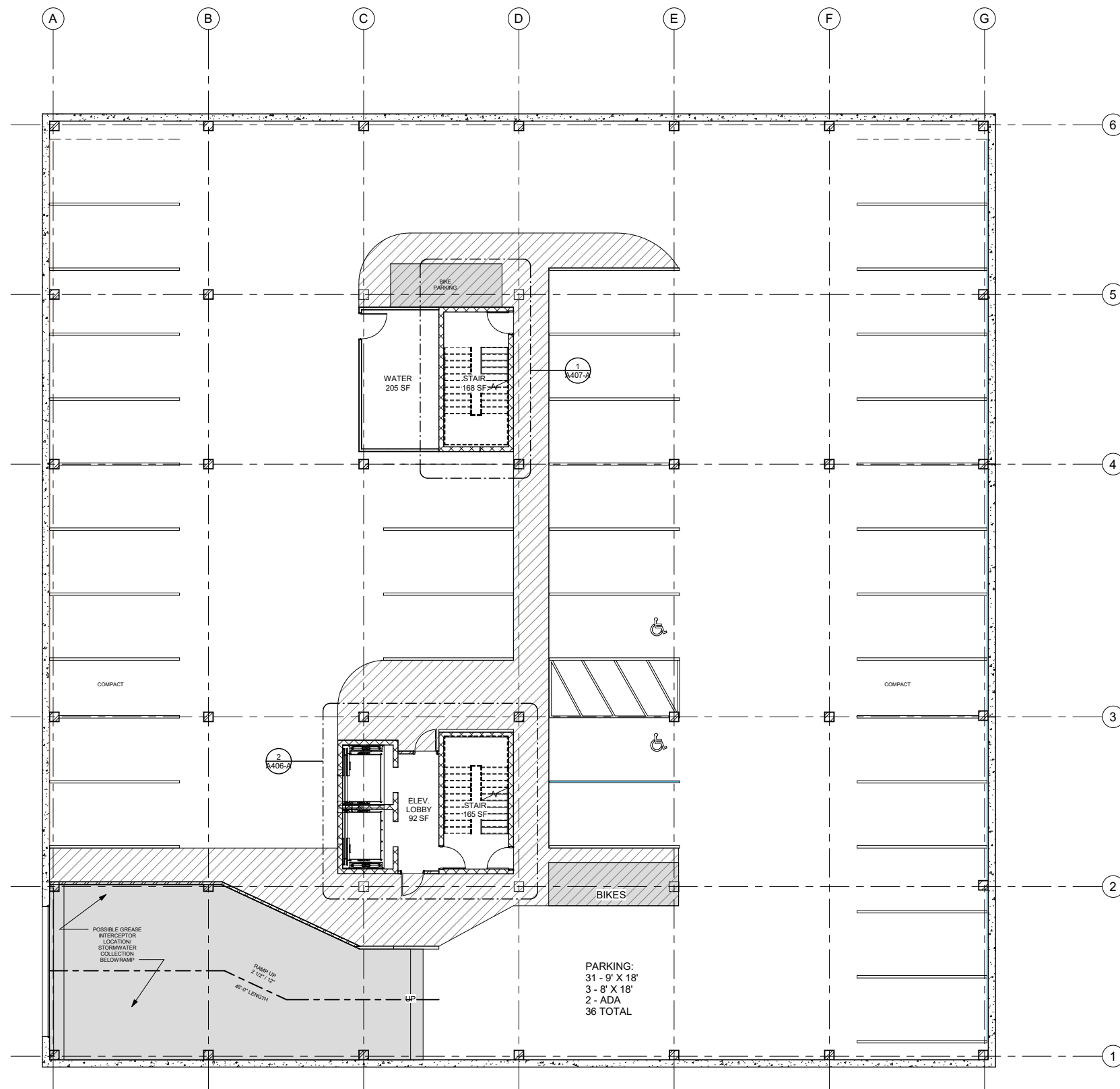


**GREEN ACRE COMPANIES**  
 MIXED USE BUILDING  
 13TH & MULBERRY  
 DES MOINES, IA 50309  
**SITE LAYOUT & PAVING PLAN**

PROJECT NO.: 08284.001

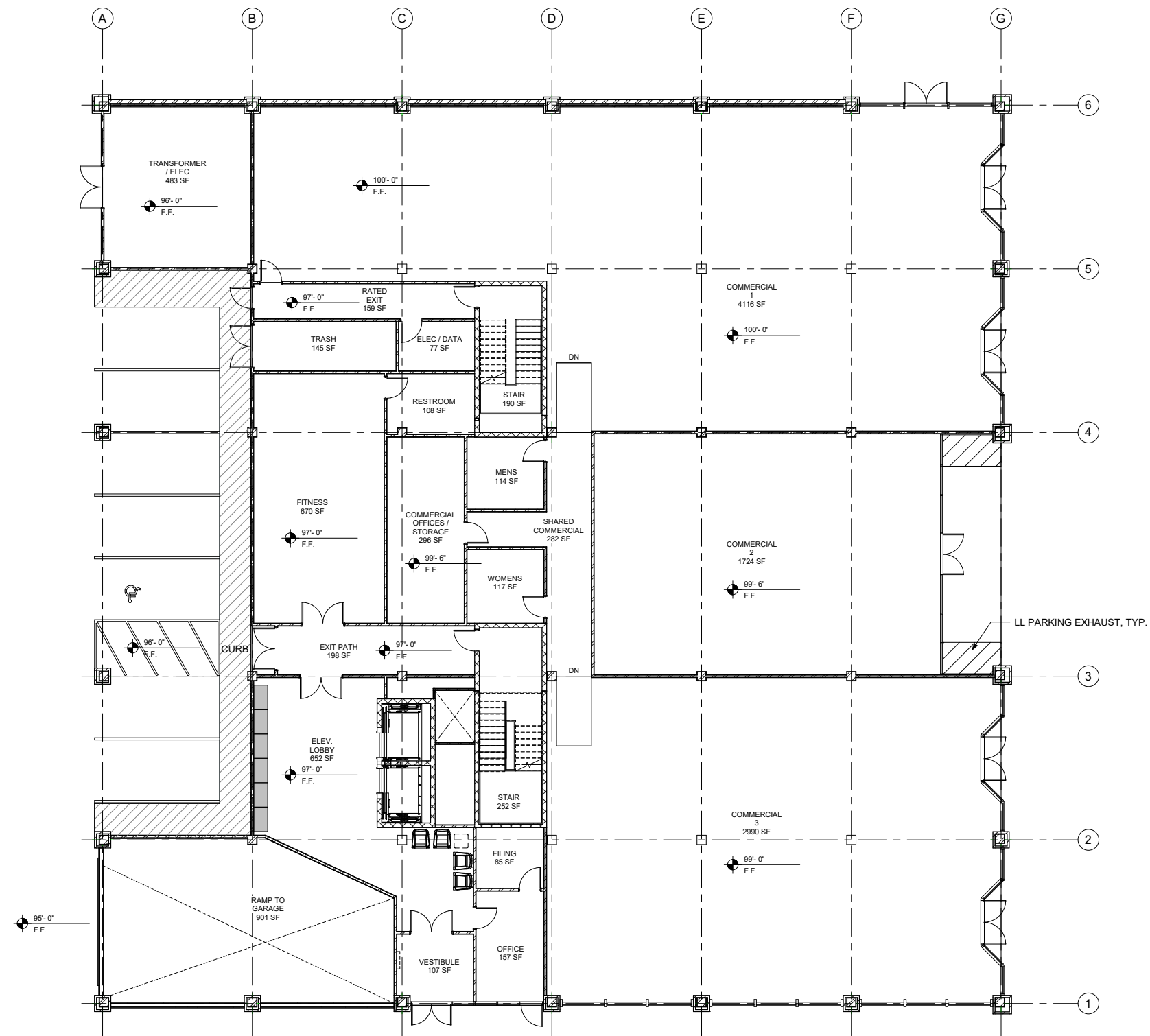
**C101**

P:\PROJECTS\08284\08284.DWG  
 13TH & MULBERRY SITE PLAN



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 FALCON DRIVE  
 LEVEL 01 AREA PLANS





**Rentable Area Legend**

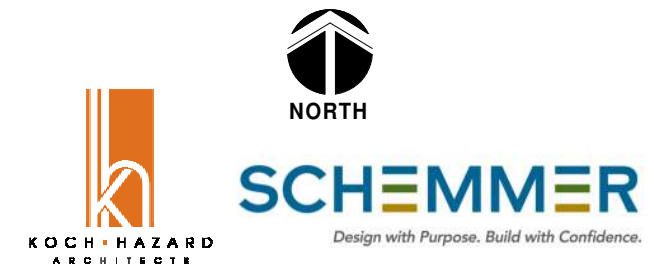
- AMENITY
- CIRCULATION
- ONE BEDROOM
- STUDIO
- THREE BEDROOM
- TWO BEDROOM

Area Schedule Level 02

Area	Name	Level	Unit type
1878 SF	CIRC.	SECOND FLOOR	CIRCULATION
885 SF	COMMUNITY	SECOND FLOOR	AMENITY
291 SF	GUEST	SECOND FLOOR	AMENITY
31 SF	JAN	SECOND FLOOR	AMENITY
41 SF	MECH.	SECOND FLOOR	AMENITY
2253 SF	PRIVATE PATIO.TYP	SECOND FLOOR	AMENITY
54 SF	RR	SECOND FLOOR	AMENITY
54 SF	RR	SECOND FLOOR	AMENITY
58 SF	TRASH	SECOND FLOOR	AMENITY
373 SF	UNIT A3	SECOND FLOOR	STUDIO
373 SF	UNIT A3	SECOND FLOOR	STUDIO
373 SF	UNIT A3	SECOND FLOOR	STUDIO
373 SF	UNIT A3	SECOND FLOOR	STUDIO
511 SF	UNIT B1	SECOND FLOOR	ONE BEDROOM
511 SF	UNIT B1	SECOND FLOOR	ONE BEDROOM
485 SF	UNIT B3	SECOND FLOOR	ONE BEDROOM
477 SF	UNIT B3	SECOND FLOOR	ONE BEDROOM
485 SF	UNIT B3	SECOND FLOOR	ONE BEDROOM
477 SF	UNIT B3	SECOND FLOOR	ONE BEDROOM
536 SF	UNIT B4	SECOND FLOOR	ONE BEDROOM
536 SF	UNIT B4	SECOND FLOOR	ONE BEDROOM
756 SF	UNIT C3	SECOND FLOOR	TWO BEDROOM
748 SF	UNIT C3	SECOND FLOOR	TWO BEDROOM
756 SF	UNIT C3	SECOND FLOOR	TWO BEDROOM
748 SF	UNIT C3	SECOND FLOOR	TWO BEDROOM
1106 SF	UNIT D1	SECOND FLOOR	THREE BEDROOM
1104 SF	UNIT D1	SECOND FLOOR	THREE BEDROOM

1 SECOND FLOOR  
SCALE: 1/8" = 1'-0"

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FALCON DRIVE  
LEVEL 02 AREA PLANS





Rentable Area Legend

- AMENITY
- CIRCULATION
- ONE BEDROOM
- STUDIO
- THREE BEDROOM
- TWO BEDROOM

Area Schedule Level 03			
Area	Name	Level	Unit type
1861 SF	CIRC.	THIRD FLOOR	CIRCULATION
275 SF	FLEX/TENANT STORAGE	THIRD FLOOR	AMENITY
41 SF	MECH.	THIRD FLOOR	AMENITY
58 SF	TRASH	THIRD FLOOR	AMENITY
373 SF	UNIT A3	THIRD FLOOR	STUDIO
373 SF	UNIT A3	THIRD FLOOR	STUDIO
373 SF	UNIT A3	THIRD FLOOR	STUDIO
373 SF	UNIT A3	THIRD FLOOR	STUDIO
373 SF	UNIT A3	THIRD FLOOR	STUDIO
511 SF	UNIT B1	THIRD FLOOR	ONE BEDROOM
539 SF	UNIT B2	THIRD FLOOR	ONE BEDROOM
539 SF	UNIT B2	THIRD FLOOR	ONE BEDROOM
482 SF	UNIT B3	THIRD FLOOR	ONE BEDROOM
476 SF	UNIT B3	THIRD FLOOR	ONE BEDROOM
475 SF	UNIT B3	THIRD FLOOR	ONE BEDROOM
491 SF	UNIT B3	THIRD FLOOR	ONE BEDROOM
536 SF	UNIT B4	THIRD FLOOR	ONE BEDROOM
536 SF	UNIT B4	THIRD FLOOR	ONE BEDROOM
756 SF	UNIT C3	THIRD FLOOR	TWO BEDROOM
748 SF	UNIT C3	THIRD FLOOR	TWO BEDROOM
756 SF	UNIT C3	THIRD FLOOR	TWO BEDROOM
748 SF	UNIT C3	THIRD FLOOR	TWO BEDROOM
1107 SF	UNIT D1	THIRD FLOOR	THREE BEDROOM
1105 SF	UNIT D1	THIRD FLOOR	THREE BEDROOM

1 THIRD FLOOR  
SCALE: 1/8" = 1'-0"

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LEVEL 03 AREA PLANS





Rentable Area Legend

- AMENITY
- CIRCULATION
- ONE BEDROOM
- STUDIO
- THREE BEDROOM
- TWO BEDROOM

Area Schedule Level 04			
Area	Name	Level	Unit type
1858 SF	CIRC.	FOURTH FLOOR	CIRCULATION
Redundant Area	CIRC.	FOURTH FLOOR	CIRCULATION
Redundant Area	CIRC.	FOURTH FLOOR	CIRCULATION
275 SF	FLEX/TENANT STORAGE	FOURTH FLOOR	AMENITY
41 SF	MECH.	FOURTH FLOOR	AMENITY
58 SF	TRASH	FOURTH FLOOR	AMENITY
373 SF	UNIT A3	FOURTH FLOOR	STUDIO
373 SF	UNIT A3	FOURTH FLOOR	STUDIO
373 SF	UNIT A3	FOURTH FLOOR	STUDIO
511 SF	UNIT B1	FOURTH FLOOR	ONE BEDROOM
539 SF	UNIT B2	FOURTH FLOOR	ONE BEDROOM
539 SF	UNIT B2	FOURTH FLOOR	ONE BEDROOM
467 SF	UNIT B3	FOURTH FLOOR	ONE BEDROOM
491 SF	UNIT B3	FOURTH FLOOR	ONE BEDROOM
491 SF	UNIT B3	FOURTH FLOOR	ONE BEDROOM
491 SF	UNIT B3	FOURTH FLOOR	ONE BEDROOM
536 SF	UNIT B4	FOURTH FLOOR	ONE BEDROOM
536 SF	UNIT B4	FOURTH FLOOR	ONE BEDROOM
756 SF	UNIT C3	FOURTH FLOOR	TWO BEDROOM
748 SF	UNIT C3	FOURTH FLOOR	TWO BEDROOM
756 SF	UNIT C3	FOURTH FLOOR	TWO BEDROOM
748 SF	UNIT C3	FOURTH FLOOR	TWO BEDROOM
1109 SF	UNIT D1	FOURTH FLOOR	THREE BEDROOM
1085 SF	UNIT D1	FOURTH FLOOR	THREE BEDROOM

1 FOURTH FLOOR  
SCALE: 1/8" = 1'-0"

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LEVEL 04 AREA PLANS





Rentable Area Legend

- AMENITY
- CIRCULATION
- ONE BEDROOM
- STUDIO
- THREE BEDROOM
- TWO BEDROOM

Area Schedule Level 05			
Area	Name	Level	Unit type
1862 SF	CIRC.	FIFTH FLOOR	CIRCULATION
Redundant Area	CIRC.	FIFTH FLOOR	CIRCULATION
275 SF	FLEX/TENANT STORAGE	FIFTH FLOOR	AMENITY
41 SF	MECH.	FIFTH FLOOR	AMENITY
58 SF	TRASH	FIFTH FLOOR	AMENITY
373 SF	UNIT A3	FIFTH FLOOR	STUDIO
373 SF	UNIT A3	FIFTH FLOOR	STUDIO
373 SF	UNIT A3	FIFTH FLOOR	STUDIO
373 SF	UNIT A3	FIFTH FLOOR	STUDIO
511 SF	UNIT B1	FIFTH FLOOR	ONE BEDROOM
511 SF	UNIT B1	FIFTH FLOOR	ONE BEDROOM
539 SF	UNIT B2	FIFTH FLOOR	ONE BEDROOM
539 SF	UNIT B2	FIFTH FLOOR	ONE BEDROOM
482 SF	UNIT B3	FIFTH FLOOR	ONE BEDROOM
477 SF	UNIT B3	FIFTH FLOOR	ONE BEDROOM
491 SF	UNIT B3	FIFTH FLOOR	ONE BEDROOM
491 SF	UNIT B3	FIFTH FLOOR	ONE BEDROOM
536 SF	UNIT B4	FIFTH FLOOR	ONE BEDROOM
536 SF	UNIT B4	FIFTH FLOOR	ONE BEDROOM
756 SF	UNIT C3	FIFTH FLOOR	TWO BEDROOM
748 SF	UNIT C3	FIFTH FLOOR	TWO BEDROOM
756 SF	UNIT C3	FIFTH FLOOR	TWO BEDROOM
748 SF	UNIT C3	FIFTH FLOOR	TWO BEDROOM
1108 SF	UNIT D1	FIFTH FLOOR	THREE BEDROOM
1085 SF	UNIT D1	FIFTH FLOOR	THREE BEDROOM

1 FIFTH FLOOR  
SCALE: 1/8" = 1'-0"

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LEVEL 05 AREA PLANS



# FALCON DRIVE MIXED USE DEVELOPMENT

## NARRATIVE



## I. BUILDING/PROPERTY SYSTEMS

### A. General Overview

1. New 5 story mixed-use building with underground parking. The ground level will house commercial space and residential amenities. The upper 4 floors to house approx. 78 residential units and amenity spaces. Building construction below 2<sup>nd</sup> floor to be type IA and above second floor to be type VA and fully sprinkled. The 2<sup>nd</sup> floor assembly to have a 3 hour fire rating.

### B. Applicable Codes and Authorities Having Jurisdiction (AHJ)

1. City of Des Moines
  - a. Contact: Cody Christensen, (515) 283-4989.
  - b. 2018 IBC, 2018 IMC, 2018 NFGC, 2018 IFC, 2020 NEC, 2018 UPC, 2015 IECC, SUDS
  - c. Zoning: Existing DX2 (mixed-use)

### C. Mixed-use Building Systems

#### 1. Substructure

- a. Foundations: Shallow reinforced concrete footings (pending geotechnical report).
  - 1) Exterior Footings:
    - a) Trenched strip footings supporting garage retaining basement walls.
    - b) Perimeter insulation.
  - 2) Interior Footings:
    - a) Mat slab foundations below elevator shaft and stair wells.
    - b) Reinforced pad footings below interior precast columns.
- b. Garage slab on Grade: 5" concrete slab with #3 bars @ 12" O.C. ea. way on 15 mil vapor barrier over 4" granular fill. Below slabs - replace 2' of existing soils with low plasticity clay/soil to avoid shrinking/swelling under slab. Soil replacement requirements may change based on final geotechnical recommendations.

#### 2. Superstructure

- 1) First and second floor framing:
  - a) Precast inverted tee beams will support both precast double tees and/or precast hollow-core planks with a reinforced concrete

topping. Further coordination is required with a precast supplier to determine preliminary sizes.

- b) Precast columns (16" x 16") will support the inverted tee beams, as well as the columns above.

#### 2) Third and fourth floor framing:

- a) 20" wood floor trusses supported by 2x6 wood stud bearing walls.
- b) Min. 3/4" gypsum floor topping over 3/4" plywood sheathing.
- c) Type 'C' gypsum board and resilient channels at ceilings.

#### 3) Roof framing:

- a) Flat wood roof trusses supported by 2x6 wood stud bearing walls.
- b) 5/8" plywood sheathing.
- c) 5/8" Type 'X' gypsum wall board on 7/8" hat channels at 12" o.c. at underside of bottom truss chord.

### 3. Lateral System

- 1) First floor: exterior garage retaining walls as well as the elevator and stair shaft walls will serve as the lateral load resisting elements at the first floor.
  - 2) Second floor: elevator and stair shaft walls will serve as the lateral load resisting elements at the second floor.
- b. Third and fourth floor, roof: exterior and interior wood shear walls with plywood sheathing will serve as the lateral load resisting elements for the wood framed construction.

### 4. SHELL: Type V-A Construction (wood, 1-hour rated)

#### a. Exterior Closure

##### 1) Exterior Walls, Typical:

- a) 1-hour rated bearing walls.
- b) Floors Basement thru 1: 20 gauge 6" metal studs
- c) Floors 2 thru 5: 2x6 wood stud framing at 16" o.c. with batt insulation. 2" Rigid insulation on exterior side of sheathing over air barrier.
- d) Exterior face: Plywood sheathing with weather barrier.
- e) Fiber cement composite and brick masonry veneer.

2) Storefront System:

- a) Entry: thermally-broken aluminum framing (Kawneer 451T) with low E, 1" insulated clear glazing; aluminum doors with full height insulated clear glazing.

5. Interiors

a. Interior Construction

1) Corridor Bearing Walls:

- a) 2x6 wood stud with 5-1/2" thick fiberglass acoustical sound batts and 5/8" gypsum wall board each side, resilient channel on corridor side. Alternate to resilient channel: Sound-break acoustically enhanced gwb.

2) Stair/elevator shaft construction: 8" cmu walls. Metal pan stair with steel stringers, handrails, and guardrails.

3) Partitions:

- a) Interior unit walls: 2x4 wood stud with 3-1/2" thick fiberglass acoustical sound batts and 5/8" gypsum board each side.
- b) Unit demising walls: 2x4 studs staggered at 8" o.c. on 6" plates with 3-1/2" thick fiberglass acoustical sound batts and 5/8" gypsum wall board each side at resident room demising partitions.
  - i. Demising partitions may function as shear walls. At shear walls provide plywood sheathing one side of wall.

4) Interior Doors:

- a) Five-ply premium grade solid core wood doors, veneer faced with factory transparent stain finish.

5) Specialties:

- a) Plastic laminate countertops at unit kitchens. Granite counters in "juiced" 3 bedrooms.
- b) Soft-close cabinet doors (not drawers) in unit kitchens
- c) Vinyl graphic backsplash in unit kitchens. Tile in "juiced" units.

b. Interior Finishes

1) Wall Finishes:

- a) Drywall, painted.

2) Floor Finishes:

- a) Luxury vinyl tile in living areas and restrooms with painted wood base
- b) Carpet in unit bedrooms with painted wood base.
- c) Ceramic tile with inset carpet mat at entry vestibule.
- d) Corridors: carpet tile with rubber base.
- e) Common Space: carpet tile with painted wood base.

3) Ceiling Finishes:

- a) 2' x 2' suspended acoustical tile with gypsum wall board soffits, typical in public areas.
- b) Gypsum wall board ceiling to structure in residential units. Provide gypsum wall board soffits where required to conceal ductwork.

6. Utilities

- a. Plumbing: Wet pipe fire sprinkler system throughout, designed utilizing NFPA 13. Schemmer to determine whether a fire pump is required. Domestic cold water service will be provided via connection to city water and routed throughout to each apartment and commercial space. Domestic hot water provided to each apartment unit with individual electric water heater in unit. Hot water in the commercial spaces to be provided by properly sized gas water heater. Sanitary sewer collection from plumbing fixtures will be connected to the nearest sanitary main of adequate size, with a potential for a concrete grease interceptor provided for future restaurant. Stormwater retention will be designed to allow for internal drainage of rooftop stormwater via roof drains, possibly with a sump pump, in a yet to be determined location. Provide mid-grade plumbing fixtures in residential units.
- b. Heating, Ventilation and Air Conditioning (HVAC): Each apartment unit will be heated and cooled via an electric split-system furnace with direct expansion (DX) cooling. The commercial spaces will be conditioned via gas heat and DX cooling, utilizing either split system furnaces or rooftop units (RTU). If a future commercial kitchen is to be installed in the space, makeup air unit(s) (MAU) will be provided on the roof as required. A vertical shaft will be provided to accommodate code required outside air ventilation to the space, as well as future commercial kitchen grease ducts and code required exhaust. The below grade garage will be heated via gas fired unit heaters (UH), with a winter setpoint temp of no lower than 40° F.
- c. Electrical service to be 120/208V three-phase, location of the main transformer will be coordinated with the utility.



- 1) A 120/208V single-phase output meter center to serve the apartment unit load centers, and service-rated disconnects as needed for the commercial occupants.
- 2) All branch wiring to include a 'green' ground and each circuit to have its own neutral. Power distribution to include wiring and connections for HVAC and miscellaneous equipment as well as disconnects and starting accessories. Conduit type will be EMT where not subject to damage indoors, RSC where subject to damage, and PVC when installed underground. Will be THHN indoors in dry locations, THWN indoors in wet locations, and XHHW outdoors.
- 3) Transformer provided in 3hr rated enclosure at NW corner or in sidewalk vault if allowed by city and utility company. Enclosure to be constructed using 8" cmu.

d. Lighting

- 1) Luminaires shall be LED. Parking lot lighting placed for the lower level, temporary strip-style luminaires for the first-floor future commercial tenant spaces, and conventional mid-grade residential-style luminaires for the residential units.
- 2) Lighting occupancy sensors shall be used to control the luminaires in the lower-level parking area and the first-floor future commercial spaces in accordance with the International Energy Conservation Code (IECC). Standard lighting controls shall be designed for the residential units.
- 3) Luminaires marked for emergency use and exit signs shall have emergency battery packs to activate in the event of loss of building power.

e. Communication and Security Systems

- 1) Data: One data jack in each residential living room, one in each study if applicable. Cable routed from an RF-45 jack in each outlet to the nearest data rack with a separate homerun. Each jack to have one 4-pair copper cable or as required.
- 2) Security: Provide rough-in boxes for any access control systems at the building entrances. Rough-in boxes also provided for cameras, equipment, and other systems requested by owner.
- 3) Cable Television (CATV): CATV jack in each residential unit and other areas where required. Coaxial cable routed from an F-connector at each outlet to the nearest telecom rack using RG-11 coax. CATV signal amplified and programmed as required at the telecom rack. RG-6 quad-shielded coax unless noted otherwise. In residential units with more than one outlet, the cable to terminate in a telecom panel in the unit and one coax shall be routed to the nearest telecom rack.

f. Special Electrical Systems

- 1) Fire Alarm: Fire alarm control panel provided in the main electrical room. Fire alarm annunciator provided at building fire entrance. Devices include detection and A/V devices along the path of egress, A/V devices in common use spaces, detection in normally unoccupied spaces, residential bedrooms, and detection for mechanical equipment, fire protection monitoring, and elevator recall as required. The FA function shall include automatic and manual activation and automatic annunciation.

D. Building Site Work

1. Site Improvements

- a. Pavement for ground floor drop-off area and improvements to alley.
- b. Sidewalks and plazas at building street frontages and at entry by ground floor drop-off area.
- c. Storm water detention facilities will be required so that the rate of storm water discharge does not exceed that of existing conditions per Iowa SUDAS requirements. Detention will be provided on the property, either on the roof or below the parking level.
- d. Utility services will be brought to the building from the public utilities and mains in the adjacent rights-of-way.
- e. Designated bicycle parking will be provided.

2. Site Electrical

- a. Any site luminaires shall be black, LED type.
- b. Exterior lights to be cut-off fixtures with max of 2 foot-candles at property line.

3. Landscaping

- a. Streetscaping to meet City requirements. Regularly-spaced landscape beds along street curbs, each containing one tree and additional shrubs.



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