



Date May 22, 2023

RECEIVE AND FILE COMMUNICATION FROM THE PLAN AND ZONING COMMISSION REGARDING PRELIMINARY PLAT "HABITAT - E 46TH STREET" ON PROPERTY LOCATED AT 4320 E. 46TH STREET

WHEREAS, on April 20, 2023, the City of Des Moines Plan and Zoning Commission voted 11-0 to APPROVE a request from Greater Des Moines Habitat of Humanity (owner), represented by Ryan Doyle (officer), for Preliminary Plat "Habitat - E 46th Street" on property located at 4320 E. 46th Street, to allow subdivision and development of approximately 4.2 acres with fifteen (15) residential lots accessible, subject to the condition that a sewer easement be provided within the lots to ensure future development upon the parcel to the south (Parcel #792321278015) could connect to the sanitary sewer within the proposed cul-de-sac; and

WHEREAS, the final subdivision plat will be submitted for City Council approval when completed.

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Des Moines, Iowa, that the attached communication from the City Plan and Zoning Commission is hereby received and filed.

MOVED BY _____ to receive and file. SECOND BY _____

FORM APPROVED:

/s/ Chas M. Cahill
Chas M. Cahill
Assistant City Attorney

(PLAT-2023-000005)

Table with 5 columns: COUNCIL ACTION, YEAS, NAYS, PASS, ABSENT. Rows include COWNIE, BOESEN, GATTO, SHEUMAKER, MANDELBAUM, VOSS, WESTERGAARD, and TOTAL.

MOTION CARRIED APPROVED

Mayor

CERTIFICATE

I, LAURA BAUMGARTNER, City Clerk of said City hereby certify that at a meeting of the City Council of said City of Des Moines, held on the above date, among other proceedings the above was adopted.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal the day and year first above written.

City Clerk

Date 5/22/23

Agenda Item 19

Roll Call # _____

May 2, 2023

Communication from the City Plan and Zoning Commission advising that at their April 20, 2023 meeting, the following action was taken regarding a request from Greater Des Moines Habitat for Humanity (owner), represented by Ryan Doyle (officer), regarding property located at 4320 East 46th Street, for the following:

- A) Review and approval of a Preliminary Plat "Habitat – E 46th Development" to allow for development of fifteen (15) one-household residential lots.
- B) ~~Review and approval of a Type 2 Design Alternative in accordance with City Code Sections 135-9.2.4.A.2 and 135-9.3.1.B, to waive public sidewalk along the east frontage of Lot 15 and Outlot Y, as defined in the above referenced preliminary plat, where required per City Code Section 135-8.5.2.A. (Withdrawn by Applicant)~~

COMMISSION RECOMMENDATION:

After public hearing, the members voted 11-0 as follows.

Commission Action:	Yes	Nays	Pass	Abstain	Absent
Francis Boggus	X				
Dan Drendel	X				
Leah Rudolphi	X				
Carol Maher	X				
Abby Chungath	X				
Kayla Berkson	X				
Chris Draper	X				
Todd Garner					X
Johnny Alcivar					X
Justyn Lewis	X				
Carolyn Jenison	X				
William Page	X				
Andrew Lorentzen	X				
Emily Webb					X
Katie Gillette					X

APPROVAL of the Preliminary Plat "Habitat – E 46th Development," subject to the condition that a sewer easement be provided within the lots ensure future development upon the parcel to the south (Parcel #792321278015) could connect to the sanitary sewer within the proposed cul-de-sac.

STAFF RECOMMENDATION TO THE P&Z COMMISSION

- A) Staff recommends approval of the Preliminary Plat "Habitat – E 46th Development," subject to the condition that a street stub connection be provided to the parcel to the southwest (Parcel #792321278015).

STAFF REPORT TO THE PLANNING COMMISSION

I. GENERAL INFORMATION

1. **Purpose of Request:** The applicant is proposing to subdivide a parcel into fifteen (15) one-household residential lots and two (2) outlots.
2. **Size of Site:** 4.2 acres.
3. **Existing Zoning (site):** "N2b" Neighborhood District.
4. **Existing Land Use (site):** An undeveloped parcel.
5. **Adjacent Land Use and Zoning:**

North - "MX3" and "N2b"; Uses are an undeveloped parcel and one-household dwelling units.

South - "N2b"; Uses are an undeveloped parcel and one-household dwelling units.

East - "P2"; Uses are a community school and East 46th Street.

West - "MX3" and "N2b"; Uses are commercial and one-household dwelling units.

6. **General Neighborhood/Area Land Uses:** The subject site is located along the west side of East 46th Street just south of the Hubbell Avenue intersection. The East 46th Street corridor contains primarily one-household residential uses, as well as a community school and religious assembly. Undeveloped parcels and one-household residential uses largely define areas adjacent to the corridor in this area of the City.
7. **Applicable Recognized Neighborhood(s):** The subject property is not located within a recognized neighborhood association. All neighborhood associations were notified of the Commission meeting by emailing of the Preliminary Agenda on March 31, 2023 and emailing of the Final Agenda on April 14, 2023. Notifications of the hearing for this specific item were mailed on April 10, 2023 (10 days prior to the public hearing) to the primary titleholder on file with the Polk County Assessor for each property within 250 feet of the site.

All agendas and notices are mailed to the primary contact(s) designated by the recognized neighborhood association to the City of Des Moines Neighborhood Development Division.

8. **Relevant Zoning History:** None.
9. **PlanDSM Land Use Plan Designation:** Low Density Residential.

10. Applicable Regulations: Taking into consideration the criteria set forth in Chapter 18B of the Iowa Code, the Commission shall determine if such Preliminary Plat conforms to the standards and requirements outlined in Chapter 354 of the Iowa Code, and the City Subdivision Ordinance and shall approve, conditionally approve or reject such plat within 45 days after the date of submission to the City Permit and Development Center. Unless the applicant agrees in writing to an extension of time, the Preliminary Plat shall be deemed approved if the Commission does not act within such 45-day period. The Commission's action for approval or conditional approval shall be null and void unless the final plat is submitted to the City Permit and Development Center within 270 days after the date of such action; provided, however, that the Permit and Development Administrator may grant, upon written request of the applicant, up to a 90-day extension for submittal of the final plat to the City Permit and Development Center.

Pursuant to Section 135-9.1.1.B of the Planning and Design Ordinance, the site plan review requirements of Chapter 135 are designed to ensure the orderly and harmonious development of property in a manner that shall:

- Promote the most beneficial relation between present and proposed future uses of land and the present and proposed future circulation of traffic throughout the city;
- Permit present development of property commensurate with fair and orderly planning for future development of other properties in the various areas of the city with respect to the availability and capacity, present and foreseeable, of public facilities and services. The factors to be considered in arriving at a conclusion concerning proposed present development of property shall include the following:
 - The maximum population density for the proposed development, the proposed density of use, and consideration of the effect the proposal will have on the capacity of existing water and sanitary sewer lines to the end that existing systems will not become overloaded or capacity so substantially decreased that site use will inhibit or preclude planned future development;
 - Zoning restrictions at the time of the proposal;
- The city's comprehensive plan;
- The city's plans for future construction and provision for public facilities and services; and
- The facilities and services already available to the area which will be affected by the proposed site use;
- Encourage adequate provision for surface and subsurface drainage, in order to ensure that future development and other properties in various areas of the city will not be adversely affected;

- Provide suitable screening of parking, truck loading, refuse and recycling disposal, and outdoor storage areas from adjacent residential districts;
- Encourage the preservation of canopied areas and mature trees and require mitigation for the removal of trees; and
- Consider the smart planning principles set forth in Iowa Code Chapter 18B.

Based on Chapter Section 135-9.2.4 and 135-9.3.1.B of the Planning and Design Ordinance, Type 2 Design Alternatives are to be considered by the Plan and Zoning Commission after a public hearing whereby the following criteria are considered:

- The design alternative provisions of Section 135-9.2.4 are intended to authorize the granting of relief from strict compliance with the regulations of this chapter as part of the site plan or alternate design documentation review process when specific site features or characteristics of the subject property, including the presence of existing buildings, creates conditions that make strict compliance with applicable regulations impractical or undesirable. The design alternative provisions are also intended to recognize that alternative design solutions may result in equal or better implementation of the regulation's intended purpose and greater consistency with the comprehensive plan.
- Consideration of requested design alternatives through the administrative and public hearing review processes will be evaluated on the merits of the applicable request and independently of prior requests from the same applicant, and may include the following criteria:
 - An evaluation of the character of the surrounding neighborhood, such as:
 - Whether at least 50% of the developed lots within 250 feet of the subject property are designed and constructed consistently with the requested design alternative(s); and
 - Whether the directly adjoining developed lots are designed and constructed consistently with the requested design alternative(s);
 - For purposes of this subsection, if the lots that exist within 250 feet of the subject property are undeveloped, then the neighborhood character determination will be based upon the assumption that such lots, as if developed, comply with the applicable requirements of this chapter for which a design alternative(s) has been requested;
 - The totality of the number and extent of design alternatives requested compared to the requirements of this chapter for each site plan or alternate design documentation reviewed;
 - Whether the requested design alternative(s) is consistent with all relevant purpose and intent statements of this design ordinance and with the general purpose and intent of the comprehensive plan;

- Whether the requested design alternative(s) will have a substantial or undue adverse effect upon adjacent property, the character of the surrounding area or the public health, safety and general welfare;
- Whether any adverse impacts resulting from the requested design alternative(s) will be mitigated to the maximum extent feasible; and
- Other factors determined relevant by the Development Services director, Plan and Zoning commission, or City Council as applicable.

II. ADDITIONAL APPLICABLE INFORMATION

- 1. Site Conditions and Layout:** The subject property is a mix of wooded and scrub areas that are in an undeveloped condition. The site's stormwater management detention basin would be located in the northwest corner of the site to take advantage of the site's topography. Sanitary sewer service is currently proposed to be extended from the north along East 46th Street to the proposed development. The adjacent 2.863-acre parcel to the southwest is also in an undeveloped condition.

Planning, Traffic and Transportation, as well as Fire Department staff support through streets over cul-de-sacs for street connectivity and eliminating potential complications for emergency vehicle access. Additionally, public access to the school should be considered when evaluating future development potential of the adjacent undeveloped parcel of land and its connection to the surrounding neighborhood.

Allowing the currently proposed development concept would eliminate the potential connectivity to the adjacent undeveloped parcel to the southwest. Additionally, as sanitary sewer is being extended from the north for the proposed development, extending further access to the adjacent undeveloped parcel would likely be preferable over extending sanitary sewer access from Hubbell Avenue to the west. As stated within both PlanDSM and the Planning and Design Ordinance, site development should be pursued in a thoughtful manner that considers future land uses and encourages infill-style development patterns.

Staff supports the preliminary plat with the condition that a street stub connection be provided to the undeveloped parcel to the southwest to promote infill-style development and connectivity with the surrounding neighborhood.

- 2. Building Design:** The site is zoned "N2b" Neighborhood District. Any future house must be built in accordance with the standards for the House Type A building typology pursuant to Chapter 135 of the City Code.

SUMMARY OF DISCUSSION

Shawna Beron presented staff report and recommendation.

Carol Maher asked where the stubbed street would be located.

Shawna Beron showed that the recommended stub would extend from the proposed cul-de-sac to the undeveloped lot immediately south of the subject property.

Bert Drost stated if the stubbed street would provide access to allow the undeveloped land to be developed and would also create a sidewalk connection to Delaware Elementary School.

Chris Draper asked if the topography along the northwest would prevent the full 15 lots if the stub were provided.

Shawna Beron stated that the northwest corner of the site is where they're proposing their storm water detention basin.

Chris Draper clarified the stubbed street would remove one lot from the proposed plan.

Bert Drost stated it would likely eliminate "lot 5" shown on the proposed plat.

Abby Chungath asked if a stubbed street would make it harder for emergency vehicles to turn around.

Shawna Beron stated in conversation with the fire department, they would prefer more ways to turn around.

Abby Chungath asked if a fire truck was able to turn around within a cul-de-sac.

Shawn Beron stated yes.

Chris Draper asked if a through street could be constructed north to Hubbell Avenue.

Shawna Beron stated they haven't had conversation with that property owner.

Lance Henning, Habitat for Humanity, 2200 E. Euclid Avenue, stated the proposed development would follow the general program with homeowners receiving education and financing through Habitat for Humanity. These houses would be built slab-on-grade with the provision of a garage. He also reminded the Commission that this property was in front of the Commission back in 2019, where they approved the use of a cul-de-sac. They would need to develop all 15 lots as there are financial challenges due to the cost of bringing sewer and water into the development. The south parcel is accessible from East 44th Street and Habitat would be willing to provide an easement for sewer connectivity.

Carol Maher asked if they considered multi-family residential.

Lance Henning stated they have not considered higher density. They are building to what the zoning allows and the context of the neighborhood being single-family residential.

Chris Draper asked if the topography hinders the detention basin being placed on the southwest side of the development.

Tim West, Snyder and Associates, 2727 SW Snyder Blvd, Ankeny, IA. stated that the lowest portion of the property is in the northwest corner and that they're required to follow ISWIM guidelines set by Iowa Storm Water Management.

CHAIRPERSON OPENED THE PUBLIC HEARING

Robert Livers, 2346 E. 29th Street, stated he owns the property north of this development and has concerns with additional storm water runoff, privacy, and trespassing.

Kirk Whitlach, 4360 E 46th Street, stated he shares concerns with storm water runoff and wants to know if the utility access will come through his property.

Bert Drost stated the utilities would be constructed within right-of-way and that the city engineering department has approved the storm water management plan for this development.

Marvin Cole, 4350 E. 46th Street, noted concerns of the proposed house size and no basements.

Bert Drost stated the previous owner was in the rezoning phase when it came before the commission in early 2019. Since the previous request was before the form-based code was adopted, City staff recommended minimum house sizes. Now that the property is zoned N2b, there are minimum house size requirements in Chapter 135 of the city Code.

Jose Alvarez, 4300 E. 46th Street, stated he has concerns about the size of homes being proposed and potentially devaluing his property. He would like to know what mitigation plan is in place for trees being removed.

Ryan Doyle, Habitat for Humanity, 2200 E. Euclid Avenue, stated the storm water management that is proposed would mitigate any adverse effects to the surrounding area. They will be working with City staff to identify exact square footages and making sure the homes fit into the character of the surrounding neighborhood.

Abby Chungath asked Mr. Doyle to address their tree mitigation plan.

Ryan Doyle stated they will be compliant with the city's tree mitigation requirements.

Leah Rudolphi asked if they are required to detain all storm water from the site so there is no net impact to surrounding properties.

Tim West stated they're required to bring the stie back to predeveloped release rates.

CHAIRPERSON CLOSED THE PUBLIC HEARING

Chris Draper stated he wouldn't be in favor of the stubbed street as it would create more problems.

COMMISSION ACTION:

Carolyn Jenison made a motion for approval of the Preliminary Plat "Habitat – E 46th Development," subject to the condition that a sewer easement be provided within the lots ensure future development upon the parcel to the south (Parcel #792321278015) could connect to the sanitary sewer within the proposed cul-de-sac.

Motion passed: 11-0

23/9

Respectfully submitted,

Bert Drost

Bert Drost, AICP
Planning & Urban Design Administrator

BAD:tjh



Greater Des Moines Habitat for Humanity, 4320 East 46th Street

PLAT-2023-000005



Updated on: 3/30/2023

1 inch = 131 feet

2319





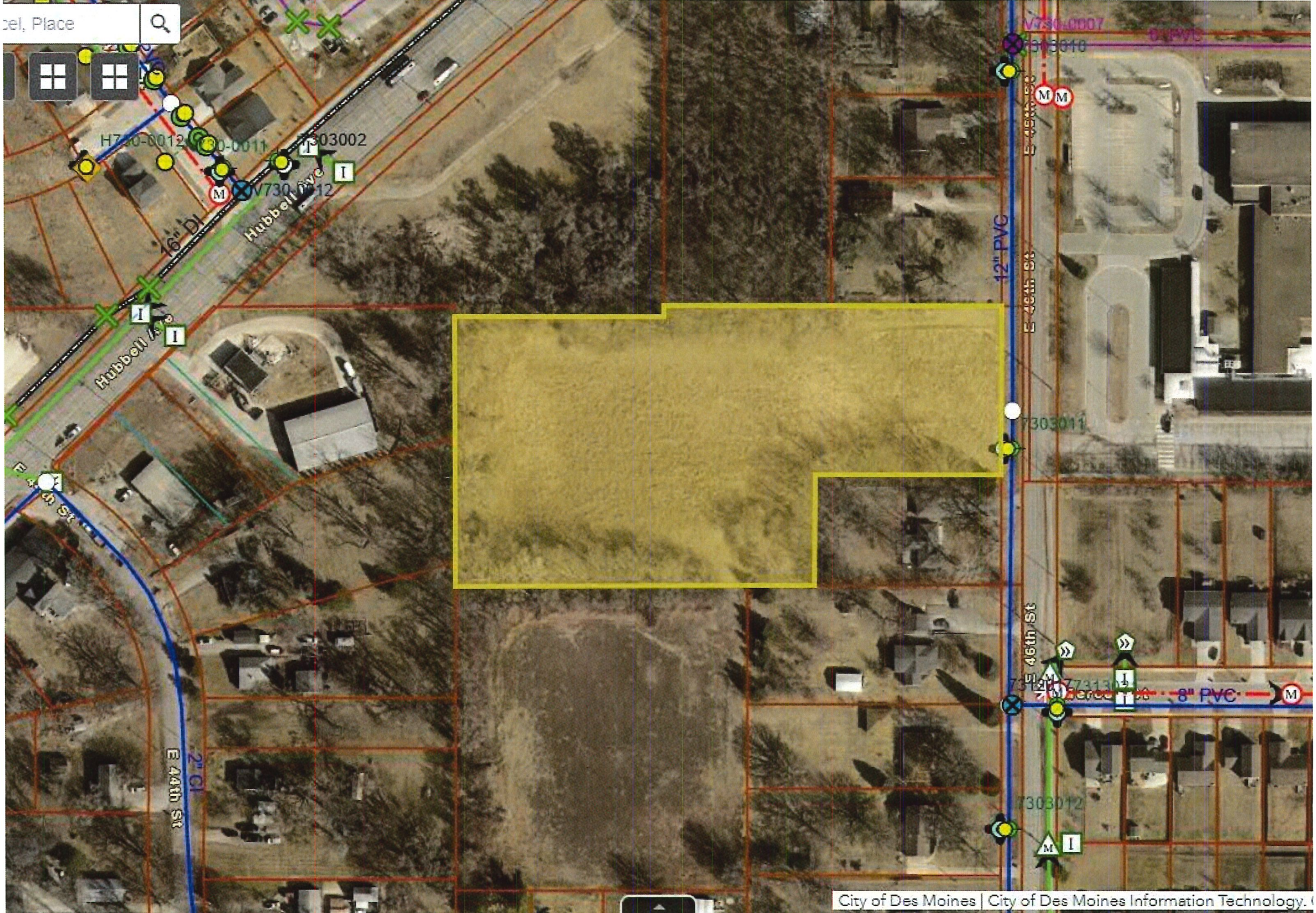
2319

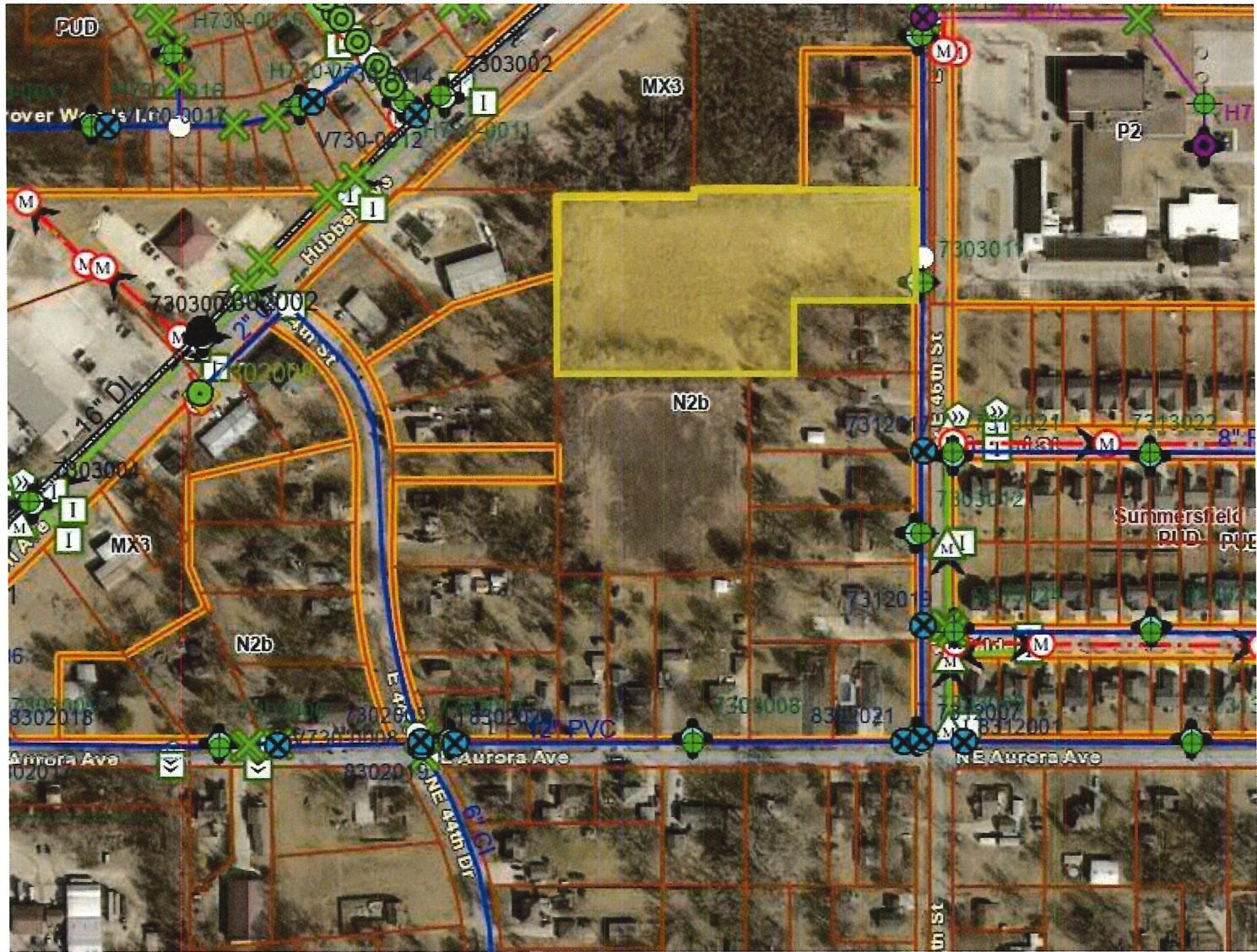






del, Place





73
79

PRELIMINARY PLAT - 2023 FOR HABITAT - EAST 46TH DEVELOPMENT CITY OF DES MOINES, IOWA

PER CITY COMMENTS	03/02/23 JRC
REVISION	DATE
MARK	DATE
Engineer: MBS	Checked By: CHD
Technician: JRC	Date: 01-26-2023
	Scale: 1" =
	T-R-S: TTH-HRW-SS
	Project No: 122-1536.01
	Sheet C100

- ### Index of Sheets
- C100 PRELIMINARY PLAT - TITLE SHEET
 - C200 PRELIMINARY PLAT - DEMO AND TREE MITIGATION PLAN
 - C201 PRELIMINARY PLAT - SITE LAYOUT AND DIMENSION PLAN
 - C300 PRELIMINARY PLAT - GRADING PLAN
 - C400 PRELIMINARY PLAT - UTILITY PLAN
 - C500 PRELIMINARY PLAT - PLANTING PLAN

- ZONING**
N2b
- BUILDING TYPE**
HOUSE A
- BULK REGULATIONS**
YARD SETBACKS:
FRONT = 25'
SIDE = 15' TOTAL, 7.5' MIN
STREET SIDE = 15'
REAR = 30'
- CONTROL POINTS**
IOWA STATE PLANE SOUTH COORDINATE SYSTEM
NAD83(2011) (EPSG: 20110200) HRTN DERIVED - US SURVEY FEET
- CP10 N=596973.00 E=1634342.83 Z=168.13
1/2" REBAR WITH RED PLASTIC CAP +/- 1" NORTH OF SCHOOL SPEED SIGN,
NORTHEAST CORNER OF NE 46TH STREET AND E MERGED STREET. (AS
SHOWN ON SURVEY)
 - CP11 N=597703.77 E=1634345.59 Z=151.55
1/2" REBAR WITH RED PLASTIC CAP +/- 1" WEST OF FIRST POWER POLE
NORTH OF NORTH ENTRANCE OF DELAWARE ELEMENTARY SCHOOL. (AS
SHOWN ON SURVEY)
 - CP12 N=597186.05 E=1634286.17 Z=159.93
1/2" REBAR WITH RED PLASTIC CAP +/- 1" WEST OF HYDRANT, WEST SIDE
OF NE 46TH STREET. (AS SHOWN ON SURVEY)
 - CP13 N=597313.47 E=1633710.45 Z=152.98
1/2" REBAR WITH RED PLASTIC CAP NORTHWEST CORNER OF FIELD. (AS
SHOWN ON SURVEY)
 - CP14 N=597039.46 E=1633653.58 Z=163.34
1/2" REBAR WITH RED PLASTIC CAP SOUTHWEST CORNER OF SITE, +/- 5'
EAST OF FENCE CORNER, +/- 2" NORTH OF FENCE. (AS SHOWN ON SURVEY)
- BENCHMARKS**
CITY OF DES MOINES VERTICAL DATUM
HRTN DERIVED - US SURVEY FEET
- CITY OF DES MOINES ELEV=975.41
 - BM2298 NW BOLT ON HYDRANT, NORTH OF HOUSE #300 ON
NE 46TH STREET ON THE WEST SIDE OF THE STREET.
(AS SHOWN ON SURVEY)



VICINITY MAP

PROPERTY LEGAL DESCRIPTION
PARCEL 2018-159 AS SHOWN IN PLAT OF SURVEY RECORDED IN BOOK 17493 PAGE 343, BEING A PART OF THE E 1/2 OF THE NE 1/4 OF SECTION 21, TOWNSHIP 79, RANGE 23, WEST OF THE 5TH P.M., NOW INCLUDED IN AND FORMING A PART OF THE CITY OF DES MOINES, POLK COUNTY, IOWA.
SUBJECT TO ALL COVENANTS, RESTRICTIONS, AND EASEMENTS OF RECORD.

PLAT DESCRIPTION
Section 21 Twp 79 Range 23 Qtr Section NE
E 1/2 - CONC PARCEL 2018-159

OWNER / DEVELOPER
GREATER DES MOINES HABITAT FOR HUMANITY
2200 EAST EUCLID AVE
DES MOINES, IA 50317
RYAN DOYLE
RDYOYLE@GDMHABITAT.ORG
515-710-9495

ENGINEER / SURVEYOR
SNYDER AND ASSOCIATES, INC.
2727 SW SNYDER BLVD.
ANKENY, IA 50023
ERIC D. CANNON, P.E.
ERIN D. GRIFFIN, P.L.S.
515-964-2020

- GENERAL NOTES**
- A. SIDEWALKS SHALL BE PROVIDED ALONG BOTH SIDES OF ALL PUBLIC STREETS.
 - B. STREET LOT A TO BE DEDICATED TO THE CITY OF DES MOINES FOR ROADWAY PURPOSES.
 - C. NEW LOTS WILL BE DEVELOPED IN COMPLIANCE WITH THE BUILDING TYPE REGULATIONS FOR HOUSE TYPE A.
 - D. MINIMUM OF ONE TREE SHALL BE PROVIDED FOR EACH LOT.
 - E. PROPERTY TO BE DEVELOPED IN COMPLIANCE WITH SECTION 106-13B OF CHAPTER 106 OF DES MOINES CITY CODE REQUIRING ALL NEW UTILITIES TO BE INSTALLED UNDERGROUND.

PRELIMINARY PLAT APPROVAL:

APPROVED APPROVED WITH CONDITIONS - SEE EXHIBIT "A"

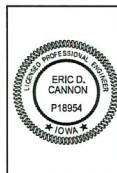
IN ACCORDANCE WITH CHAPTER 106, DES MOINES MUNICIPAL CODE, AS AMENDED.

DEVELOPMENT SERVICES DIRECTOR _____ DATE _____



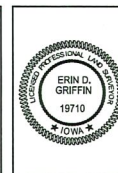
I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly licensed Professional Landscape Architect under the laws of the State of Iowa.

Timothy L. West, PLA _____ Date _____
License Number 412
Pages or sheets covered by this set: _____



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Eric D. Cannon, P.E. _____ Date _____
License Number P18954
My License Renewal Date is December 31, 2023
Pages or sheets covered by this set: _____



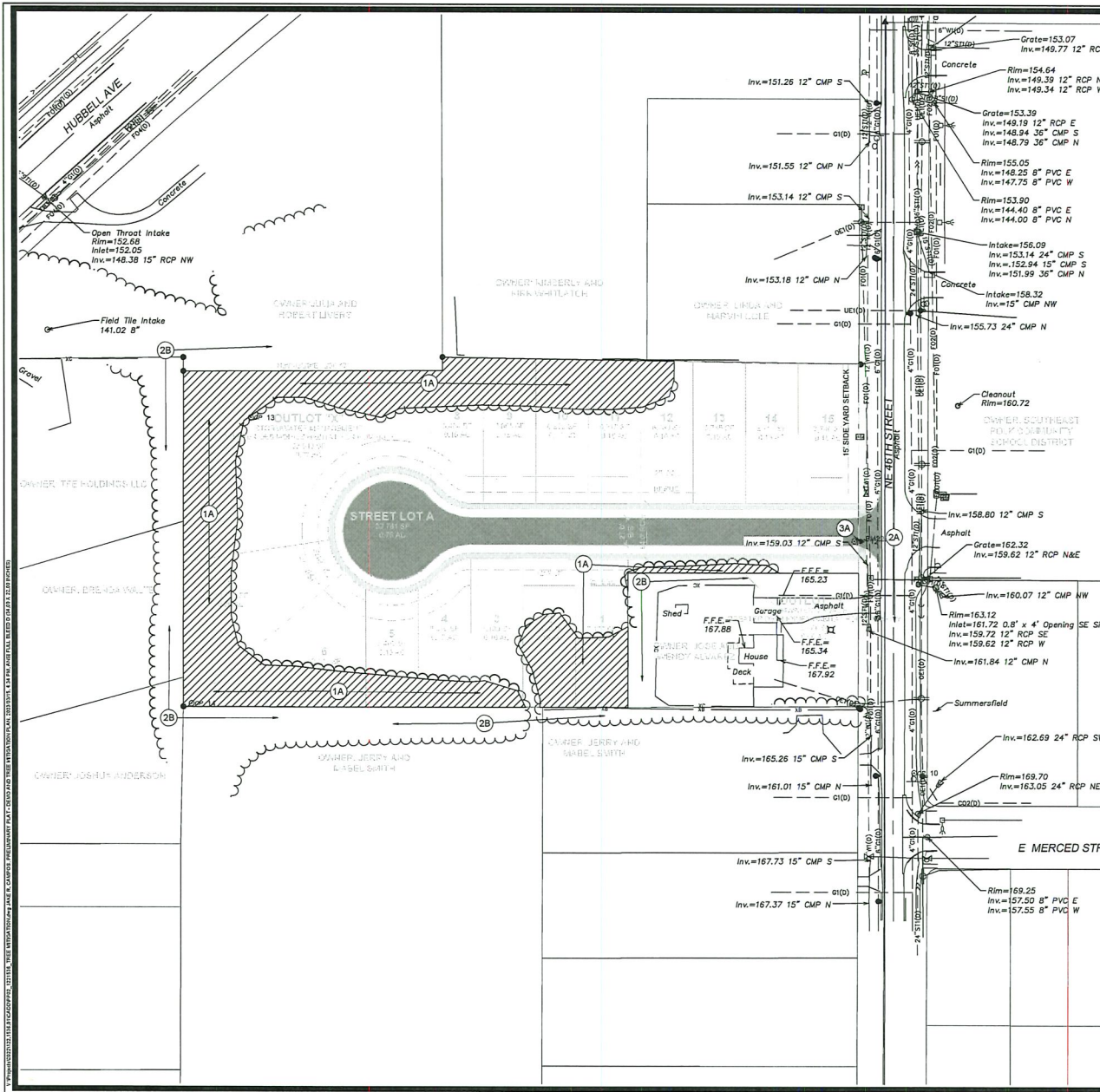
I hereby certify that this land surveying document was prepared and the related survey work was performed by me or under my direct personal supervision and that I am a duly licensed Professional Land Surveyor under the laws of the State of Iowa.

Erin D. Griffin, PLS _____ Date _____
License Number 19710
My License Renewal Date is December 31, 2023
Pages or sheets covered by this set: _____

HABITAT - EAST 46TH DEVELOPMENT
 PRELIMINARY PLAT - TITLE SHEET
 SNYDER & ASSOCIATES, INC.

SNYDER & ASSOCIATES

Project No: 122.1536.01
Sheet C100



TREE MITIGATION GENERAL NOTES

- TREE LOCATIONS SURVEYED ARE SHOWN ON THE PLAN, THE GENUS AND TRUNK DIAMETER AT BREAST HEIGHT (DBH) ARE INDICATED.
- REMOVED TREES THAT ARE NOT BEING REPLACED MEET THE FOLLOWING CRITERIA:
 - EXISTING TREE IS DEAD.
 - TREE MEASURES LESS THAN 12" DBH.
 - THE SPECIES IS DEEMED UNDESIRABLE.
- TREES OUTSIDE OF SITE BOUNDARY LIMITS WILL BE PROTECTED.

TREE MITIGATION PLAN CONSTRUCTION NOTES

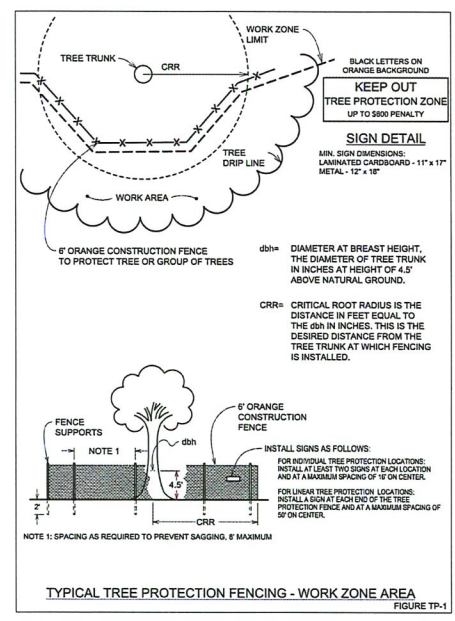
- REMOVE TREES OR VEGETATIVE AREA AND USE THE FOLLOWING MITIGATION METHOD:
 - CANOPY METHOD
 - 49,760 SF OF TREE REMOVAL
 - 49,760 / 2,000 SF = 24.88 REQUIRED MITIGATED TREES
 - 25 TREES PROVIDED (25 DECIDUOUS)

LEGEND

 PROPOSED TREE REMOVAL
 CANOPY METHOD

DEMOLITION PLAN CONSTRUCTION NOTES

- EXISTING FEATURES, PROTECT THE FOLLOWING:
 - PAVEMENTS TO REMAIN. SAW CUT ALL PAVEMENTS TO FULL DEPTH AT REMOVAL LIMITS TO AVOID DAMAGE TO ADJACENT PAVEMENTS. ANY DAMAGE TO PAVEMENT SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
 - PROTECT EXISTING TREES.
- DEMOLITION, REMOVE AND RELOCATE THE FOLLOWING:
 - HYDRANT



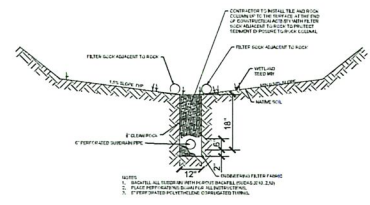
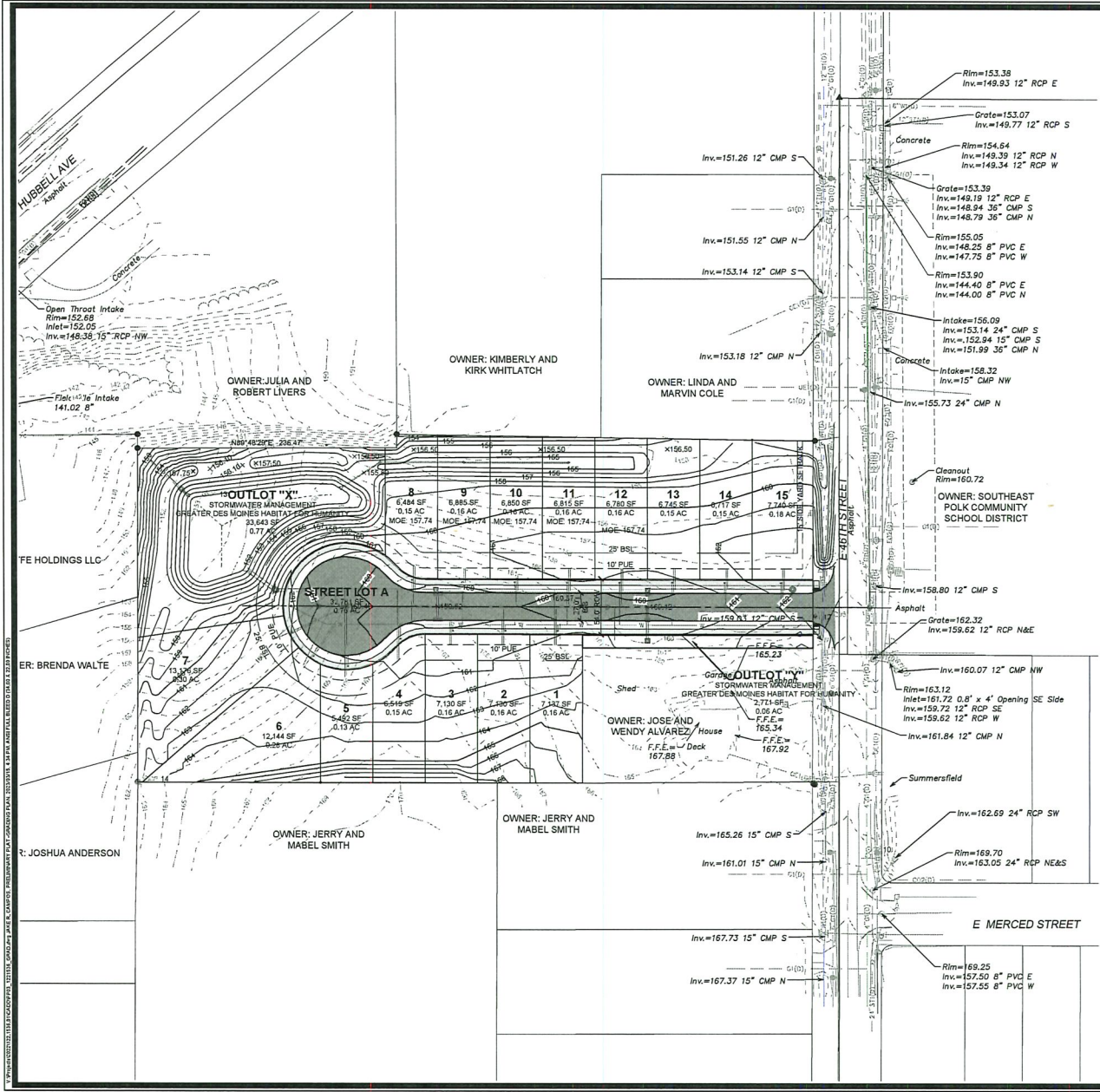
REV	DATE	BY	DESCRIPTION
1	03/02/2023	JRC	PER CITY COMMENTS
2	03/02/2023	JRC	REVISION
3	03/02/2023	JRC	REVISION

MARK: JRC
 Engineer: MS
 Technician: JRC
 Project No: 122-1536.01
 Sheet C200

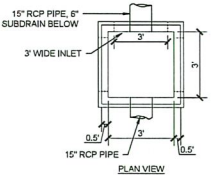
HABITAT - EAST 46TH DEVELOPMENT
PRELIMINARY PLAN - DEMO AND TREE MITIGATION PLAN
DES MOINES, IOWA
SNYDER & ASSOCIATES, INC.
 2727 S.W. SNYDER BLVD
 ANKENY, IOWA 50023
 515-966-2000 | info@snyderandassociates.com

SNYDER & ASSOCIATES

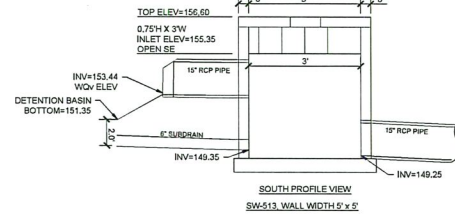
Project No: 122-1536.01
 Sheet C200



1 DETENTION BASIN DETAIL
NO SCALE



PLAN VIEW



SOUTH PROFILE VIEW
SW-513 WALL WIDTH 9' x 9'

2 OUTLET CONTROL STRUCTURE DETAIL
NO SCALE

RMP Table 2		
WQ*	Required	Provided
Water Quality Volume*	15,760 cf	15,760 cf
Max. Storage - site watershed total (CF)	2.13 cfs	1.80 cfs
10-year		
High Water Elevation within Stormwater BMP	24.78 cfs	4.2 cfs
Max. Storage - site watershed total (CF)	23,144 cf	15,420 cf
100-year		
High Water Elevation within Stormwater BMP	48.40 cfs	12.70 cfs
Max. Storage - site watershed total (CF)	40,956 cf	15,575 cf
Auxiliary Spillway Elevation	156.10'	156.10'
crest of Dam Elevation	157.50'	157.50'

* includes un-detained storm outside of Basin



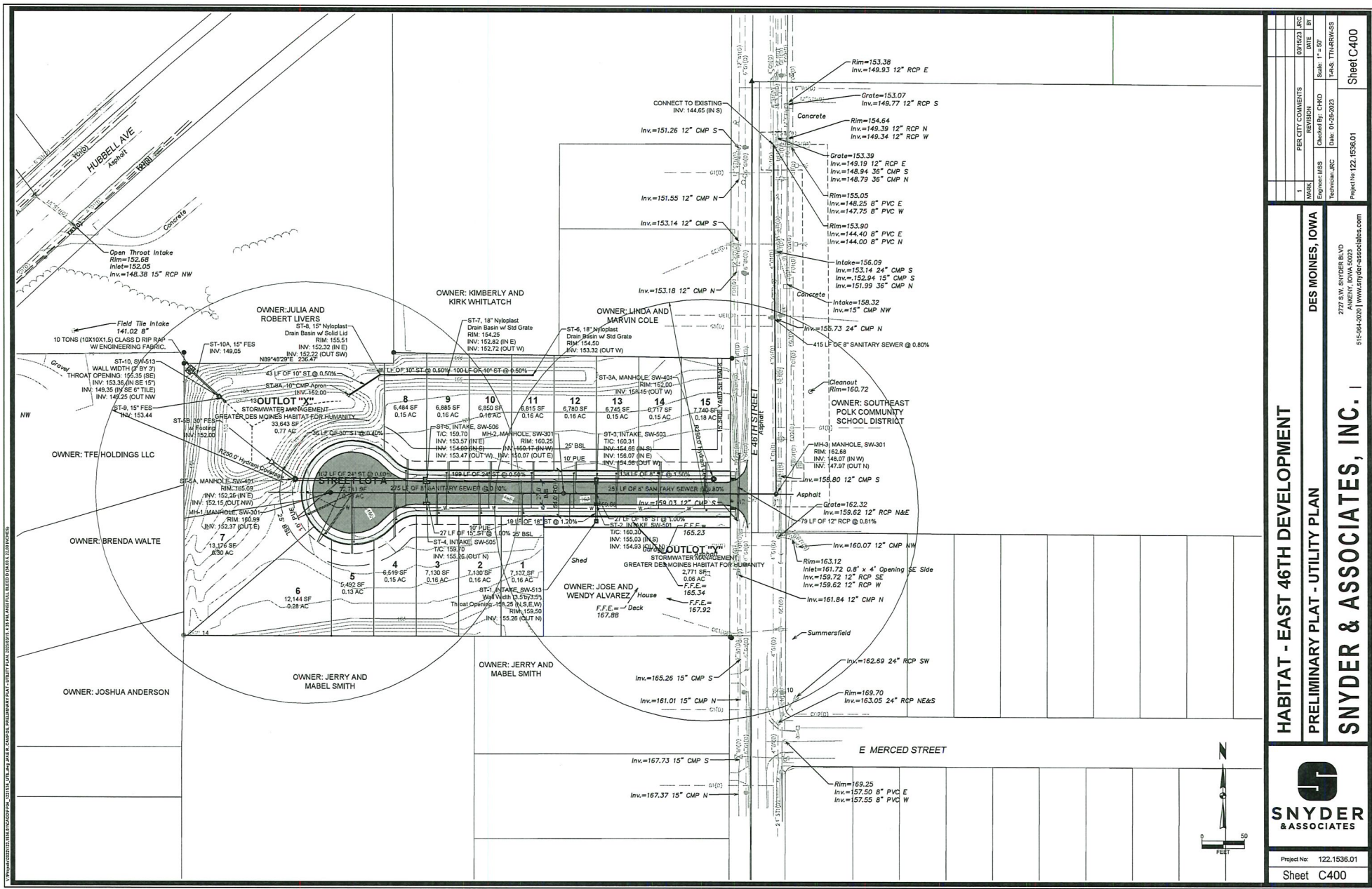
REV	DATE	BY	CHK
1	01/26/2023	JRC	MB

PER CITY COMMENTS
 REVISION
 Checked By: CHM
 Engineer: MBS
 Technician: JRC
 Scale: 1" = 50'
 Date: 01/26/2023
 File: TTH-RW-SS
 Project No: 122.1536.01
 Sheet C300

DES MOINES, IOWA
 2727 S.W. SNYDER BLVD
 515-964-2000 | www.snyder-associates.com

HABITAT - EAST 46TH DEVELOPMENT
PRELIMINARY PLAT - GRADING PLAN
SNYDER & ASSOCIATES, INC.





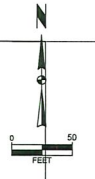
REV	DATE	BY	DESCRIPTION
1	03/15/23	JRC	PER CITY COMMENTS
2	03/15/23	JRC	REVISION
3	03/15/23	JRC	REVISION
4	03/15/23	JRC	REVISION
5	03/15/23	JRC	REVISION
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8	03/15/23	JRC	REVISION
9	03/15/23	JRC	REVISION
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48	03/15/23	JRC	REVISION
49	03/15/23	JRC	REVISION
50	03/15/23	JRC	REVISION

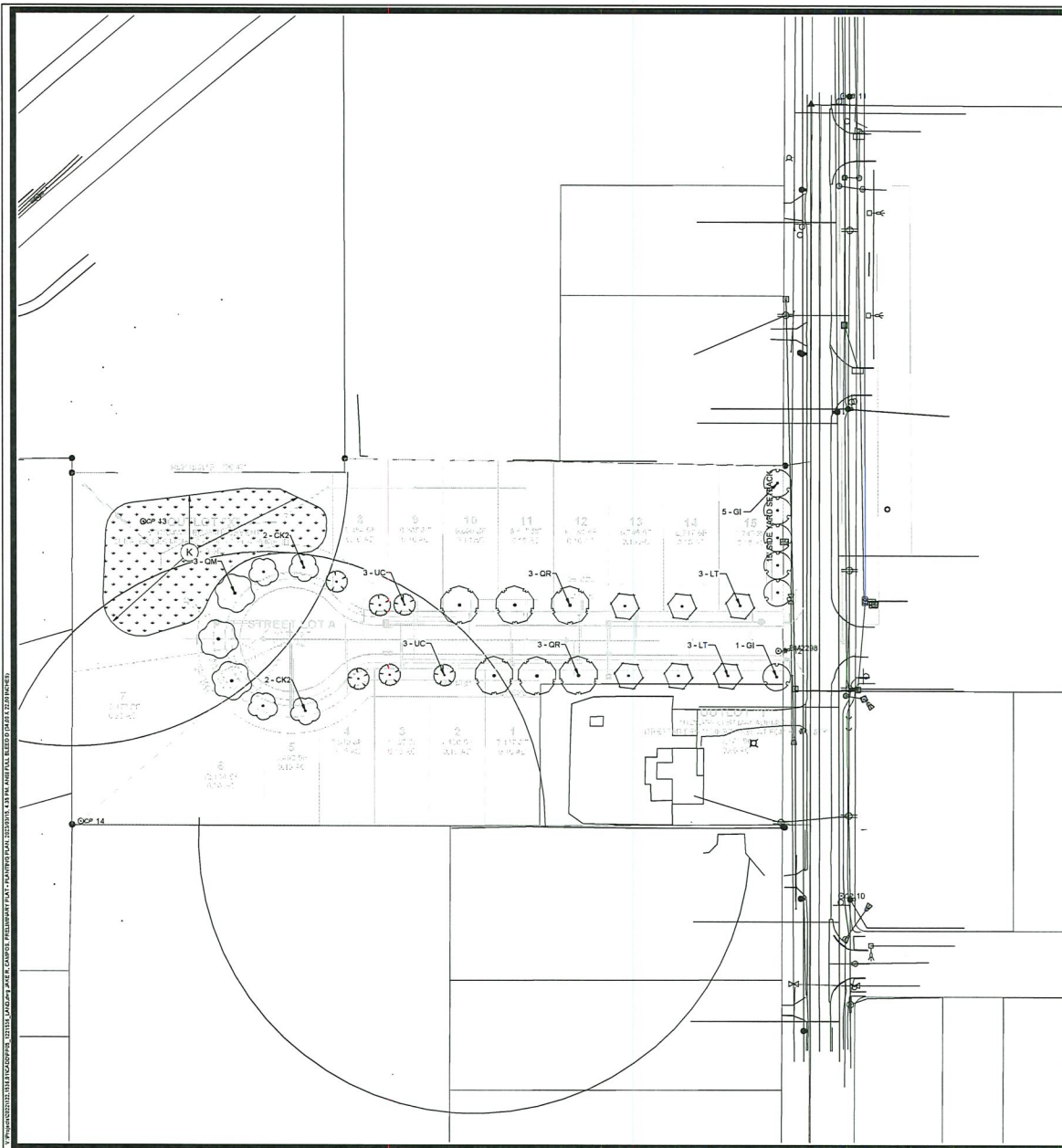
DES MOINES, IOWA
 2727 S.W. SNYDER BLVD
 DES MOINES, IOWA 50319
 515-964-2021 | www.snyder-associates.com

HABITAT - EAST 46TH DEVELOPMENT
PRELIMINARY PLAT - UTILITY PLAN
SNYDER & ASSOCIATES, INC. I



Project No: 122.1536.01
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PLANTING PLAN GENERAL NOTES

- A. UTILITY WARNING.
THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR RECORDS OBTAINED. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEY FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.
- B. NOTIFY UTILITY OWNERS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXISTENCE, EXACT LOCATION AND DEPTH OF ALL UTILITIES. AVOID DAMAGE TO UTILITIES AND SERVICES DURING CONSTRUCTION. ANY DAMAGE DUE TO THE CONTRACTOR'S CARELESSNESS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. COORDINATE AND COOPERATE WITH UTILITY COMPANIES DURING CONSTRUCTION.
- C. ALL PLANT MATERIAL SHALL AT LEAST MEET MINIMUM REQUIREMENTS SHOWN IN THE "AMERICAN STANDARDS FOR NURSERY STOCK" (ANSI Z60.1-LATEST EDITION).
- D. CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF INSTALLATION.
- E. PROVIDE A MIN 3-FOOT PERIMETER RING OF SHREDDED HARDWOOD MULCH AROUND ALL TREES, PROVIDE VERTICAL CUT NATURAL EDGE TO A DEPTH OF 4-INCHES.
- F. ALL DISTURBED AREAS SHOULD BE RESTORED WITH TYPE 1 LAWN SEED.
- G. CONTACT THE MUNICIPAL FORESTRY DIVISION PRIOR TO PLANTING IN THE PUBLIC R.O.W. AT 283-4105.
- H. ALL WIRE, TWINE AND BURLAP SHALL BE REMOVED FROM THE ROOTBALL OF STREET TREES PRIOR TO PLANTING.
- I. NO STAKING OF TREES IS ALLOWED.
- K. FURNISH AND INSTALL STORM DETENTION BASIN SEED MIX BY PRAIRIE MOON NURSERY, WWW.PRAIRIEMOON.COM, 32115 PRAIRIE LAKE, WINONA, MN 55967, OR APPROVED EQUAL. SEEDING RATE: 11.48 LBS/ACRE. INSTALL AS PER SUDAS SPECIFICATIONS 9010 SEEDING.
- L. FURNISH AND INSTALL REGREEN, *Trichum aestivum*, SHORT-LIVED STERILE PERENNIAL WHEAT/WHEAT GRASS HYBRID OR APPROVED EQUAL AS A COVER CROP, TO BE INSTALLED AT THE SAME TIME WITH THE STORM DETENTION BASIN SEED MIX. APPLY AT 30 LBS/ACRE. APPLY HYDROMULCH OVER ALL SEEDED AREAS TO PRODUCT AND MANUFACTURERS REQUIREMENTS.
- M. SITE TREE REQUIREMENT PLANT MATERIAL FINAL LOCATION TO BE CONTRACTOR COORDINATED TO AVOID FUTURE DRIVEWAYS AND SITE UTILITY CONFLICTS (25 TREES).
- N. A MINIMUM OF ONE STREET TREE SHALL BE PROVIDED FOR EACH LOT.

PLANTING PLAN REQUIREMENTS

LANDSCAPE REQUIREMENTS AND CALCULATIONS:
(AS PER CITY OF DES MOINES SITE PLAN LANDSCAPE AND STREETScape REQUIREMENTS)

OPEN SPACE REQUIREMENTS:
20% OPEN SPACE REQUIRED
47,394 S.F. OPEN SPACE PROVIDED / 182,952 LOT AREA
31.37% OPEN SPACE PROVIDED

TREE MITIGATION REQUIREMENTS:
49,760 SF OF TREE REMOVAL
49,760 / 2,000 SF = 24.88 REQUIRED MITIGATED TREES, 25 TREES PROVIDED

SITE TREE REQUIREMENTS:
A MINIMUM 15% OF LOT AREA OF EACH LOT SHALL HAVE MATURE CANOPY COVERAGE.
147,396 SF x 15% = 22,109 SF REQ.
25 OVERSTORY TREES x 1000 SF = 25,000 SF CANOPY PROVIDED
16.90% MATURE TREE COVERAGE PROVIDED ON SITE

PER SEC. 42-555 (F)
CREDIT FOR REQUIRED TREES. TREES REQUIRED TO BE PLANTED BY THE LANDSCAPE STANDARDS IN THE CHAPTER 135 OF THIS CODE, INCLUDING THOSE PLANTED AS REQUIRED STREET TREES, MAY BE COUNTED TOWARDS SATISFACTION OF THE MITIGATION REQUIREMENTS SET FORTH ABOVE.

STREET TREE REQUIREMENT:
STREET TREES PROVIDED ALONG NEW STREET AND NE 46TH STREET
STREET TREES PLANTED 30 LINEAR FEET APART
160 LF / 30 = 5.3 = 6
(6 TOTAL STREET TREES)

TOTAL TREES PROVIDED:
31 TREES

PLANT SCHEDULE

DECIDUOUS TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
CKZ	4	<i>Cladrastis kentuckea</i>	American Yellowwood	1.5" Cal.	B&B
GI	6	<i>Gleditsia triacanthos inermis</i>	Thornless Honey Locust	1.5" Cal.	B&B
LT	6	<i>Lindernia tulipifera</i>	Tulip Poplar	1.5" Cal.	B&B
CM	3	<i>Quercus macrocarpa</i>	Burr Oak	1.5" Cal.	B&B
OR	6	<i>Quercus rubra</i>	Red Oak	1.5" Cal.	B&B
UC	6	<i>Ulmus x 'Frontier'</i>	Frontier Elm	1.5" Cal.	B&B



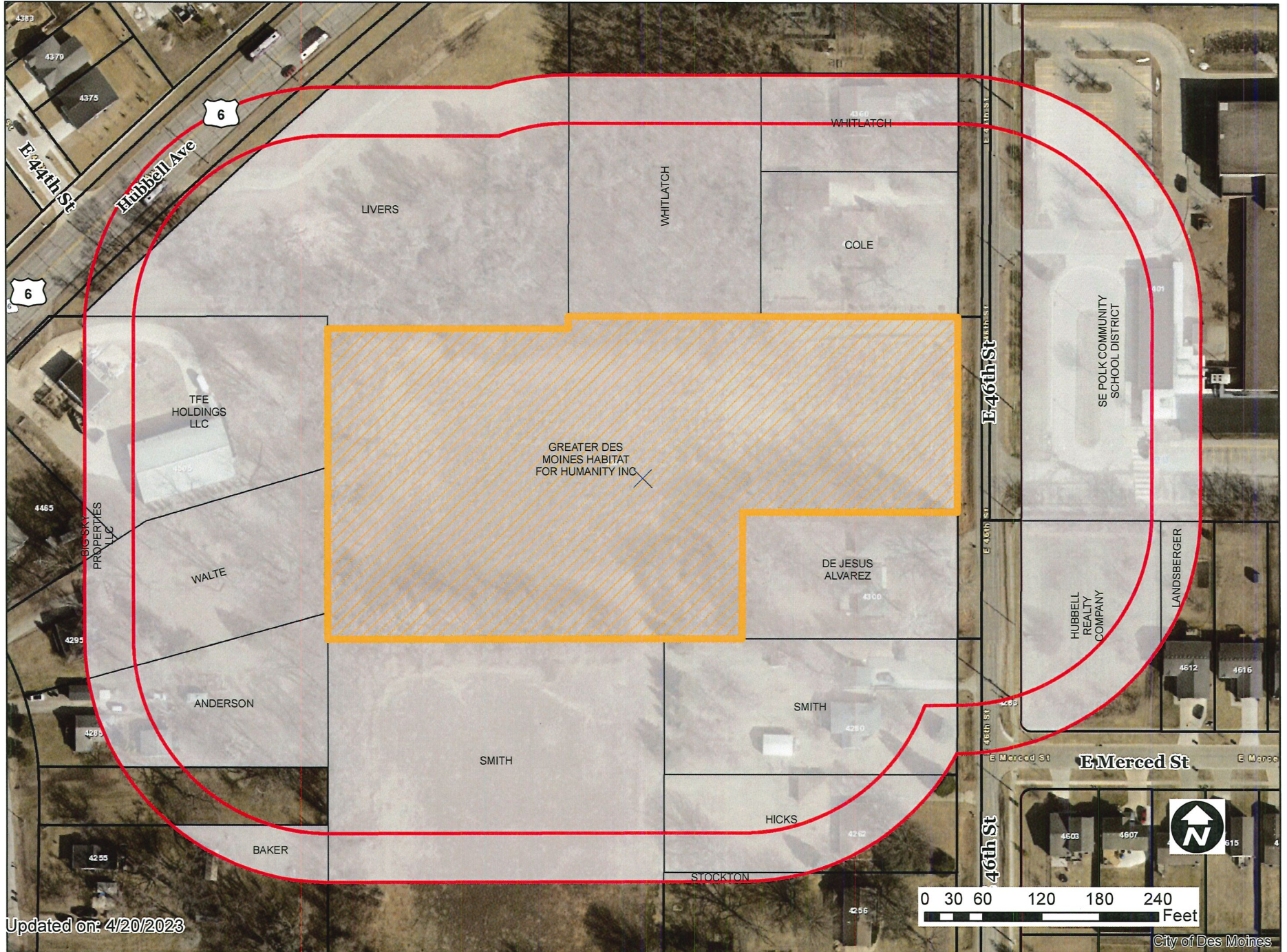
PER CITY COMMENTS	03/10/23 JRC	DATE	1/2
REVISION		SCALE	1" = 50'
MARKS		CHECKED BY	CHD
ENGINEER/ISS		DATE	01/26/2023
TECHNICIAN/JRC		DRAWN BY	TTH-RW/SJS
		PROJECT NO.	122-1536.01
		SHEET	C500

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1 inch = 131 feet

23
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