Attachment D

VANTRUST COMMERCE CENTER
PRELIMINARY PLAN SET

SECTION 22, TOWNSHIP 75 NORTH, RANGE 43 WEST
COUNCIL BLUFFS, POTTAWATTAMIE, IA

PROJECT TEAM & UTILITY CONTACT LIST

OWNER:
COUNCIL BLUFFS INDUSTRIAL FOUNDATION INC
149 W BROADWAY
SUITE 1
COUNCIL BLUFFS, IA 51503

DEVELOPER:
VITRE DEVELOPMENT, LLC
4900 MAIN STREET
SUITE 400
KANSAS CITY, MO 64112
PHONE: 816.569.1467

ARCHITECT:
TBD

ENGINEER:
OLSSON
2111 S. 67TH STREET
SUITE 200
OMAHA, NE 68106
CONTACT: JONATHAN MCCARVILLE
PHONE: 402.341.1116

SURVEYOR:
OLSSON
2111 S. 67TH STREET
SUITE 200
OMAHA, NE 68106
PHONE: 402.341.1116

GEOTECHNICAL ENGINEER:
OLSSON
11627 VIRGINIA PLAZA,
SUITE 103
LA VISTA, NE 68128
PHONE: 402.827.7220

WATER:
COUNCIL BLUFFS WATER WORKS
2000 N. 25TH STREET
P.O. BOX 309
COUNCIL BLUFFS, IA 51502
CONTACT: BRIAN CADY
PHONE: 712.328.1006 EXT. 1006

GAS:
BLACK HILLS ENERGY
CONTACT: AMY MCDERMOTT
PHONE: 712.325.3001

ELECTRIC:
MIDAMERICAN ENERGY
CONTACT: DAVID FITCH
PHONE: 712.366.5669

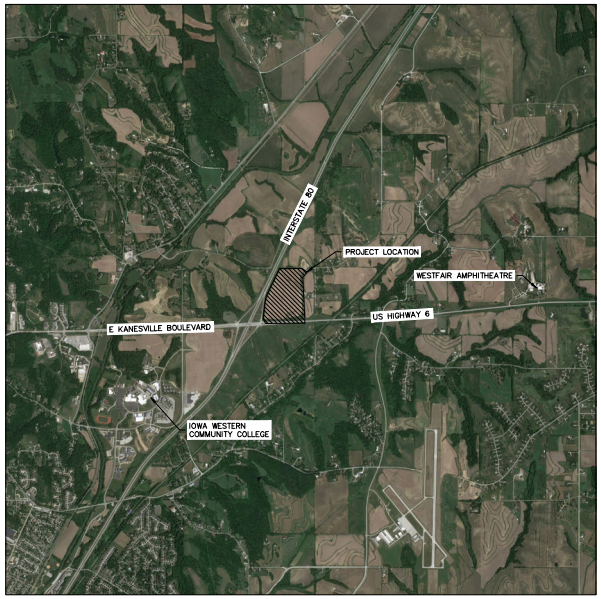
SANITARY SEWER:
CITY OF COUNCIL BLUFFS,
PUBLIC WORKS OPERATIONS
1001 10TH AVE.
COUNCIL BLUFFS, IA 51501
PHONE: 712.328.4641

TELEPHONE:
CENTURY LINK
3001 SOUTH 144TH ST.
OMAHA, NE 68144
CONTACT: JON HENDRICKS
PHONE: 402.572.5873

COX COMMUNICATIONS
401 N. 117TH STREET, SUITE 101
OMAHA, NE 68154
CONTACT: JOE HYLAND
PHONE: 402.934.0454

FIRE DEPARTMENT:
CITY OF COUNCIL BLUFFS
FIRE DEPARTMENT
200 S 4TH STREET
COUNCIL BLUFFS, IA 51503
PHONE: 712.328.4646

DEPARTMENT OF ENVIRONMENTAL PROTECTION:
IOWA DEPARTMENT OF
NATURAL RESOURCES
502 EAST 9TH STREET
4TH FLOOR
DES MOINES, IA 50319
PHONE: 515.725.8200



LOCATION MAP

N

0' 1000' 2000' 4000'
SCALE IN FEET

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
C0.0	COVER SHEET
C1.0	SITE PLAN
C2.0	GRADING PLAN
C2.1	CUT AND FILL PLAN
C3.0	UTILITY PLAN
C4.0	HUNTER AVE PLAN AND PROFILE
C4.1	HUNTER AVE PLAN AND PROFILE
C5.0	ROADWAY CROSS SECTIONS
L1.0	LANDSCAPE PLAN
L1.1	LANDSCAPE NOTES
L1.2	LANDSCAPE DETAILS

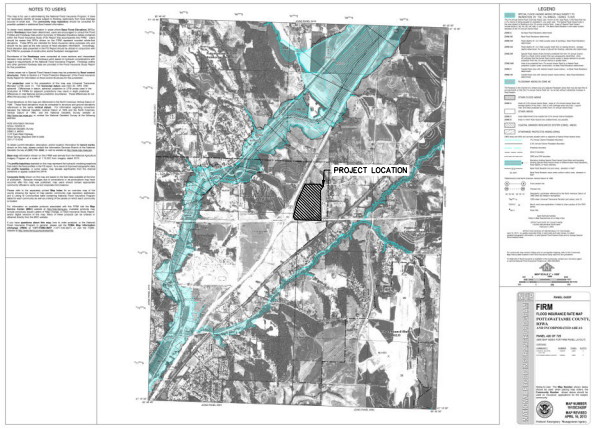
TITLE COMMITMENT LEGAL DESCRIPTION
FIRST AMERICAN TITLE INSURANCE COMPANY
NATIONAL COMMERICAL SERVICES
FILE NO. NCS-1155591-KCTY
EFFECTIVE DATE: NOVEMBER 29, 2022 AT 7:30 A.M.

A TRACT OF LAND LOCATED IN PART OF LOT 1, AUDITOR'S SUBDIVISION OF THE SW 1/4 NW 1/4; PART OF THE SE 1/4 NW 1/4; PART OF LOTS 1, 2 AND 3, AUDITOR'S SUBDIVISION OF THE NW 1/4 SW 1/4; AND PART OF THE NE 1/4 SW 1/4, ALL LOCATED IN SECTION 22, TOWNSHIP 75 NORTH, RANGE 43 WEST OF THE 5TH PRINCIPAL MERIDIAN, POTTAWATTAMIE COUNTY, IOWA, MORE FULLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE CENTER OF SAID SECTION 22; THENCE N 01°15'01" W ALONG THE EAST LINE OF THE NW 1/4 OF SAID SECTION 22 A DISTANCE OF 1322.57 FEET TO THE NORTHEAST CORNER OF SAID SE 1/4 NW 1/4; THENCE S 88°38'09" W ALONG THE NORTH LINE, OF SAID SE 1/4 NW 1/4 A DISTANCE OF 543.75 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING S 88°38'09" W ALONG SAID NORTH LINE A DISTANCE OF 820.34 FEET TO A POINT 200.00 FEET NORMALLY DISTANT SOUTHEASTERLY FROM THE CENTERLINE OF INTERSTATE ROUTE NO. 80; THENCE S 24°15'36" W ALONG THE EASTERLY RIGHT OF WAY LINE OF SAID INTERSTATE ROUTE NO. 80 A DISTANCE OF 360.43 FEET TO A POINT 200.00 FEET NORMALLY DISTANT SOUTHEASTERLY FROM STATION 258+00; THENCE S 24°35'22" ALONG SAID RIGHT OF WAY LINE A DISTANCE OF 868.14 FEET TO A POINT 195.00 FEET NORMALLY DISTANT SOUTHEASTERLY FROM STATION 245+00; THENCE S 17°50'36" W ALONG SAID RIGHT PF WAY LINE A DISTANCE OF 270.28 FEET TO A POINT 65.00 FEET NORMALLY DISTANT EASTERLY FROM E.S. RAMP "D" STATION 4542+00; THENCE S 05°12'25" W ALONG SAID RIGHT OF WAY LINE A DISTANCE OF 575.01 FEET TO A POINT 75.00 FEET NORMALLY DISTANT EASTERLY FROM STATION 4536+25; THENCE S 27°27'06" E ALONG SAID RIGHT OF WAY LINE A DISTANCE OF 123.61 FEET TO A POINT 155.00 FEET NORMALLY DISTANT NORTHERLY FROM PRIMARY ROAD NO. U.S. 6 STATION 1245+50; THENCE N 89°09'41" E ALONG THE NORTHERLY RIGHT OF WAY LINE OF PRIMARY ROAD NO. U.S. 6 A DISTANCE OF 551.50 FEET TO A POINT 120.00 FEET NORMALLY DISTANT NORTHERLY FROM STATION 1251+00; THENCE N 82°16'50" E ALONG SAID NORTHERLY RIGHT OF WAY LINE A DISTANCE OF 401.64 FEET TO A POINT 145.00 FEET NORMALLY DISTANT NORTHERLY FROM STATION 1255+00; THENCE N 65°30'17" E ALONG SAID NORTHERLY RIGHT OF WAY LINE A DISTANCE OF 170.96 FEET TO A POINT 205.00 FEET NORMALLY DISTANT NORTHERLY FROM STATION 1256+60; THENCE N 86°03'16" E ALONG SAID NORTHERLY RIGHT OF WAY LINE A DISTANCE OF 240.00 FEET TO A POINT TO A POINT 205.00 FEET NORMALLY DISTANT NORTHERLY FROM STATION 1259+00; THENCE N 49°47'09" E ALONG SAID NORTHERLY RIGHT OF WAY LINE A DISTANCE OF 185.44 FEET TO A POINT 70.00 FEET NORMALLY DISTANT WESTERLY FROM RELOCATED SECONDARY ROAD STATION 4264+25; THENCE N 03°56'42" W ALONG THE WESTERLY RIGHT OF WAY LINE OF SAID RELOCATED SECONDARY ROAD A DISTANCE OF 275.00 FEET TO A POINT 70.00 FEET NORMALLY DISTANT WESTERLY FROM STATION 4267+00; THENCE N 10°35'58" W ALONG SAID WESTERLY RIGHT OF WAY LINE A DISTANCE OF 302.03 FEET, TO A POINT 105.00 FEET NORMALLY DISTANT WESTERLY FROM STATION 4270+00; THENCE N 02°54'12"W ALONG SAID WESTERLY RIGHT OF WAY LINE A DISTANCE OF 550.09 FEET TO A POINT 95.00 FEET NORMALLY DISTANT WESTERLY FROM STATION 4275+50; THENCE N 00°45'53" W ALONG SAID WESTERLY RIGHT OF WAY LINE A DISTANCE OF 348.18 FEET TO A POINT 110.00 FEET RADIALLY DISTANT WESTERLY FROM STATION 4278+65; THENCE N 35°02'56" E ALONG SAID WESTERLY RIGHT OF WAY LINE A DISTANCE OF 276.50 FEET TO A POINT 75.00 FEET RADIALLY DISTANT NORTHWESTERLY FROM STATION 4281+00; THENCE N 49°06'54"W ALONG A RADIAL LINE A DISTANCE OF 172.46 FEET TO THE POINT OF BEGINNING.

(NOTE: THE EAST LINE OF THE NW 1/4 OF SAID SECTION 22 IS ASSUMED TO BEAR N 01°15'01" W FOR THIS DESCRIPTION.)

PROJECT PROPERTY LAND USE	
EXISTING	A-2
PROPOSED	PI
ADJACENT PROPERTIES EXISTING LAND USE	
NORTH	A-2
EAST	A-2
SOUTH	A-2
WEST	A-2/R-3



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REVISIONS

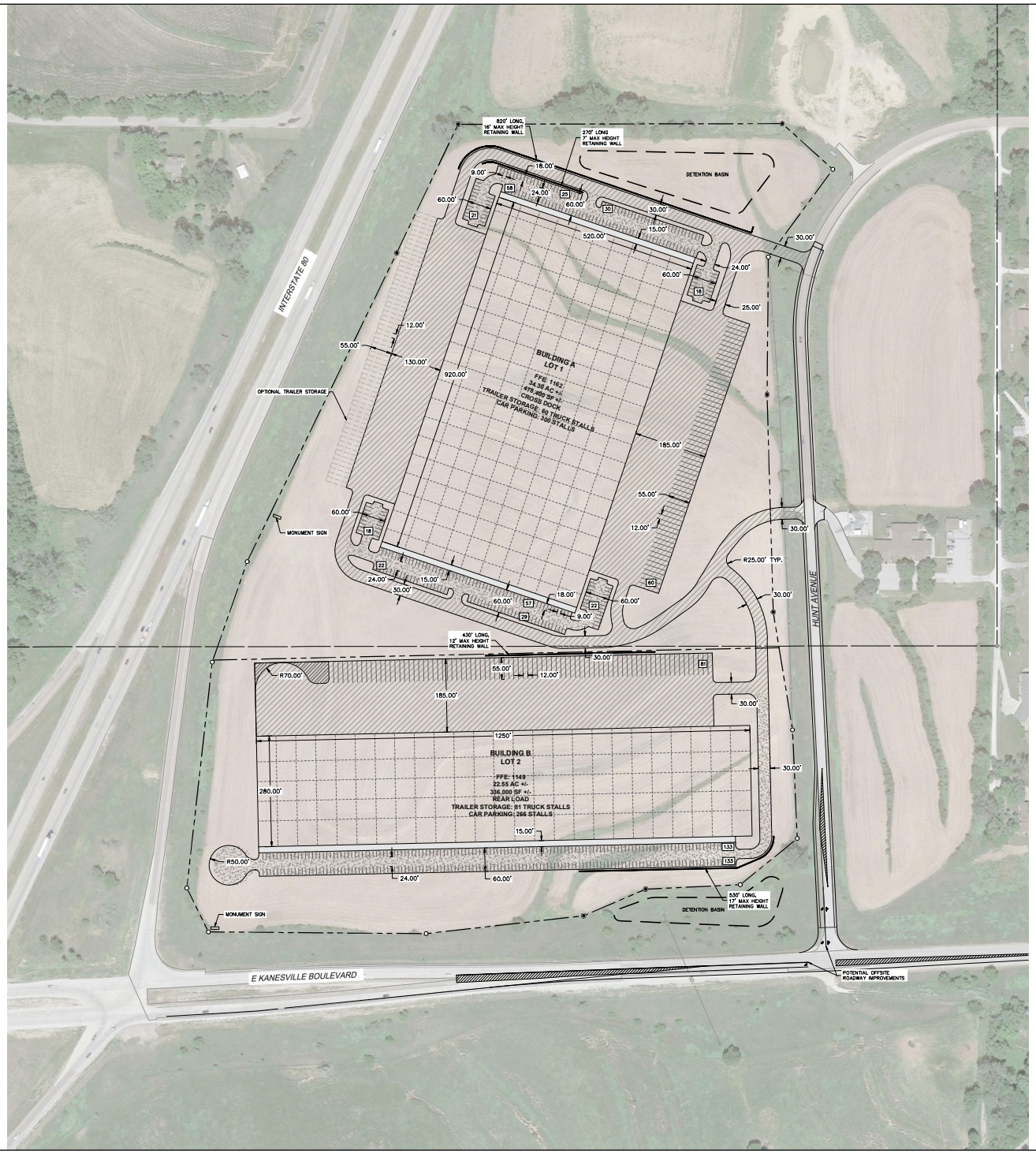
REV. NO.	DATE	REVISIONS DESCRIPTION

COVER SHEET
VANTRUST COMMERCE CENTER
COUNCIL BLUFFS, IA
2023

drawn by: JM
checked by: JB
approved by: JB
QA/QC by:
project no.: 022-04834
drawing no.:
date: 5/16/23

SHEET
C0.0

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DATE: May 16, 2023 10:23am XREFS: C_PREL_022004834



PAVING LEGEND

- SIDEWALK
- STANDARD DUTY PAVEMENT
- HEAVY DUTY PAVEMENT
- PROPERTY LINE
- QUARTER SECTION LINE
- SECTION CORNER

SITE INFORMATION TABLE	
LEGAL DESCRIPTION:	
PROPOSED ZONING:	PI
PROPOSED USE:	COMMERCE CENTER
BUILDING A PARKING REQUIREMENTS:	
REQUIRED:	96
PROVIDED:	300 PASSENGER CAR, 60 TRAILER (OPTIONAL 60 ADDITIONAL TRAILER)
BUILDING A ACCESSIBLE PARKING:	
REQUIRED:	7
PROVIDED:	TBD
BUILDING B PARKING REQUIREMENTS:	
REQUIRED:	68
PROVIDED:	268 PASSENGER CAR, 81 TRAILER
BUILDING B ACCESSIBLE PARKING:	
REQUIRED:	7
PROVIDED:	TBD

SITE DEVELOPMENT REGULATIONS	
LOT AREA:	TBD
LOT WIDTH:	TBD
FLOOR AREA RATIO:	TBD
FRONT YARD:	TBD
STREET SIDE YARD:	TBD
INTERIOR SIDE YARD:	TBD
REAR YARD:	TBD
HEIGHT:	TBD
BUILDING COVERAGE	TBD
IMPERVIOUS COVERAGE	TBD
LANDSCAPE STREET YARD:	TBD

N

0' 50' 100' 200'
SCALE IN FEET

SCHEMATIC SITE PLANS FOR CONCEPT BUDGETING ONLY NOT FOR CONSTRUCTION

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SITE PLAN

VANTRUST COMMERCE CENTER

COUNCIL BLUFFS, IA

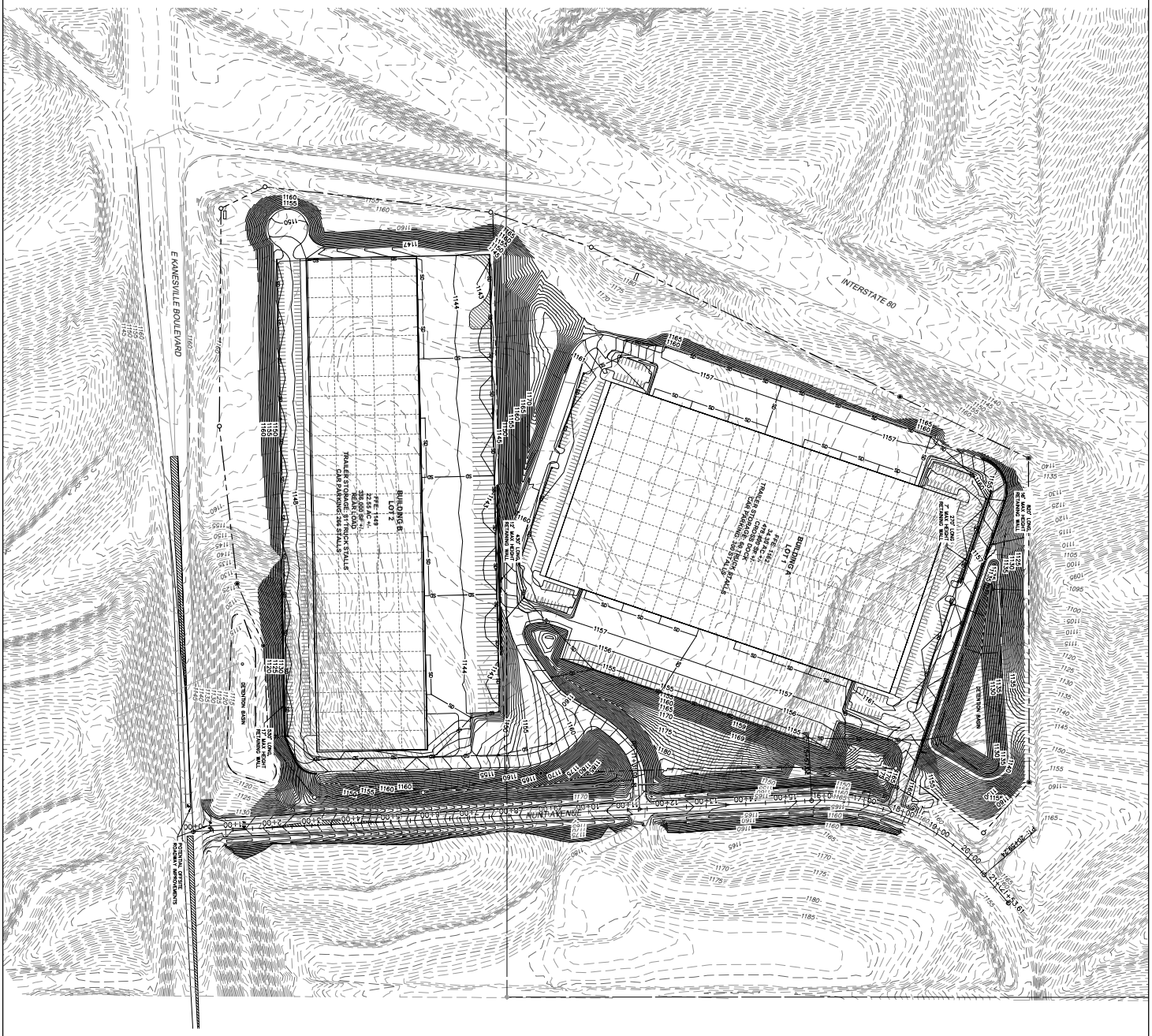
2023

drawn by:	JM
checked by:	JB
approved by:	JB
QA/QC by:	
project no:	022-04834
drawing no:	
date:	5/16/23

SHEET
C1.0

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LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED STORM SEWER
- PROPOSED STORM STRUCTURE

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0 40 80 160
SCALE IN FEET

N

SHEET
C2.0

GRADING PLAN

VANTRUST COMMERCE CENTER

COUNCIL BLUFFS, IA 2023

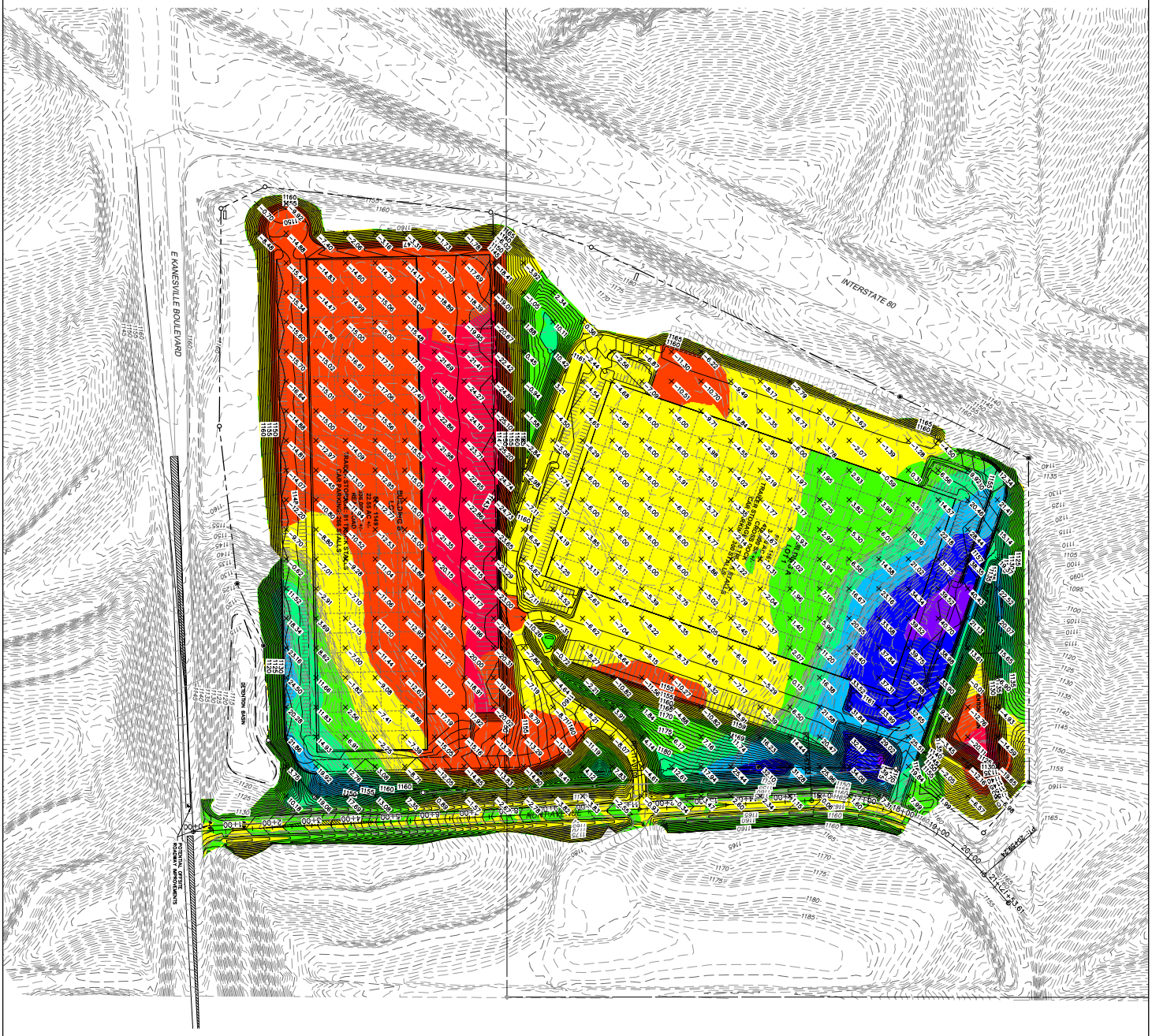
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ELEVATIONS			
NUMBER	COLOR	MIN. ELEV.	MAX. ELEV.
1		-30.00	-20.00
2		-20.00	-10.00
3		-10.00	0.00
4		0.00	10.00
5		10.00	20.00
6		20.00	30.00
7		30.00	40.00
8		40.00	50.00

LEGEND
- 11XX — EXISTING MAJOR CONTOUR
- 11XX — EXISTING MINOR CONTOUR
- 11XX — PROPOSED MAJOR CONTOUR
- 11XX — PROPOSED MINOR CONTOUR

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0 50 100' 200'
SCALE IN FEET

N

SHEET C2.1

CUT AND FILL PLAN

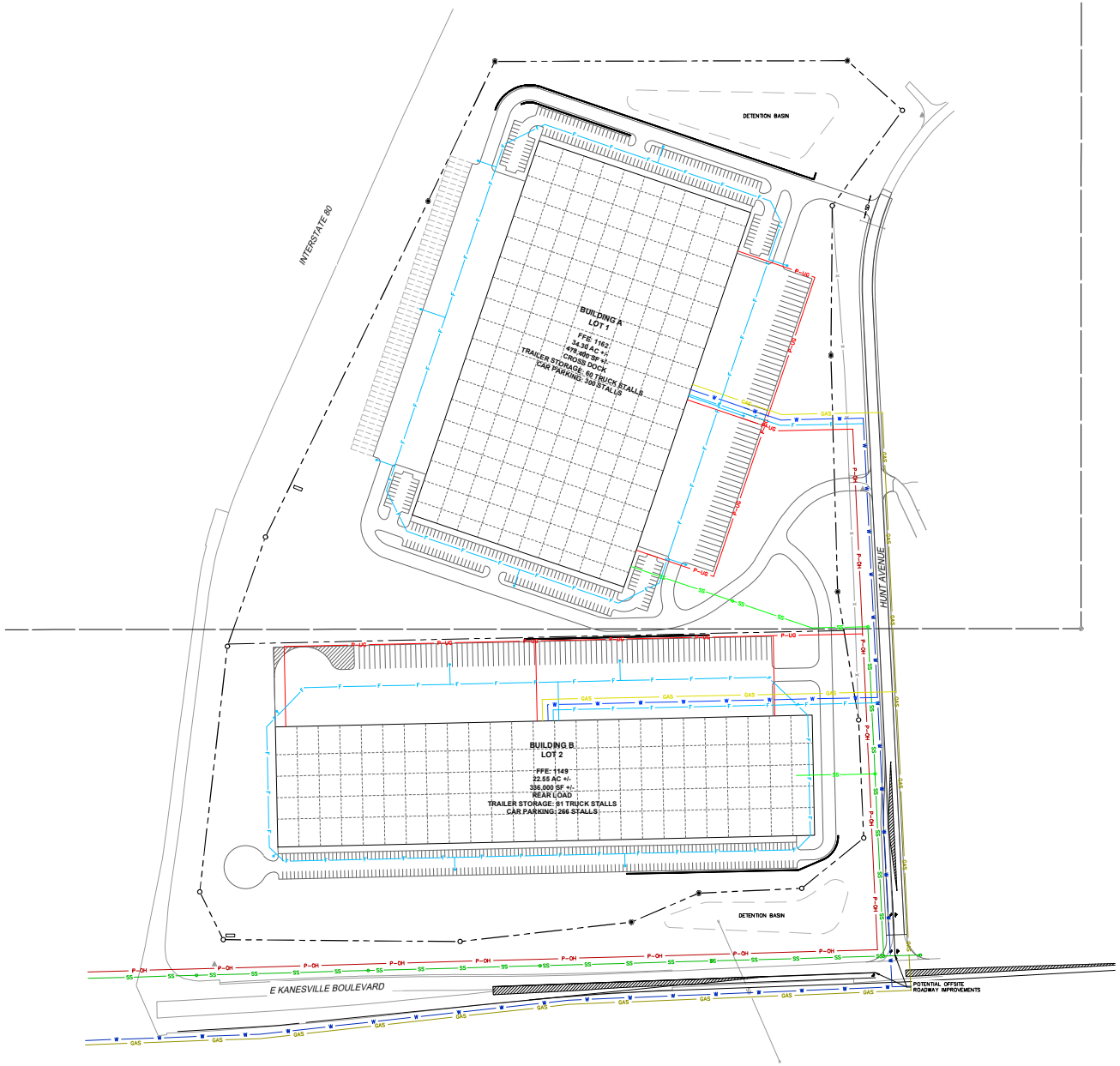
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COUNCIL BLUFFS, IA 2023

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LEGEND

- PROPERTY LINE
- PROPOSED PRIVATE SANITARY SEWER
- PROPOSED PRIVATE SANITARY SEWER MANHOLE
- PROPOSED PUBLIC SANITARY SEWER
- PROPOSED PUBLIC SANITARY SEWER MANHOLE
- PROPOSED PRIVATE WATER SERVICE
- PROPOSED PRIVATE FIRE WATER SERVICE
- PROPOSED FIRE HYDRANT
- PROPOSED PUBLIC WATER MAIN
- PROPOSED PRIVATE UNDERGROUND POWER LINE
- PROPOSED PUBLIC OVERHEAD POWER LINE
- PROPOSED PRIVATE NATURAL GAS LINE
- PROPOSED PUBLIC NATURAL GAS LINE
- PROPOSED PUBLIC STORM CULVERT

N

0' 50' 100' 200'
SCALE IN FEET

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UTILITY PLAN

VANTRUST COMMERCE CENTER

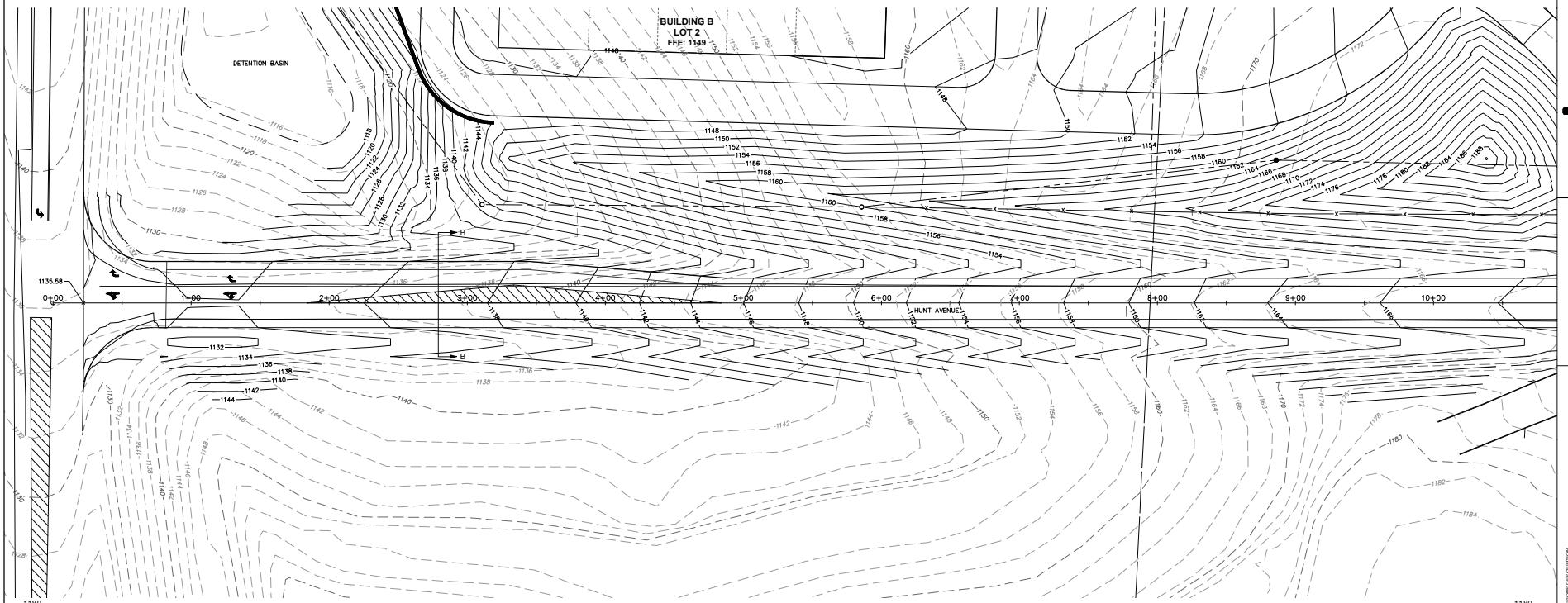
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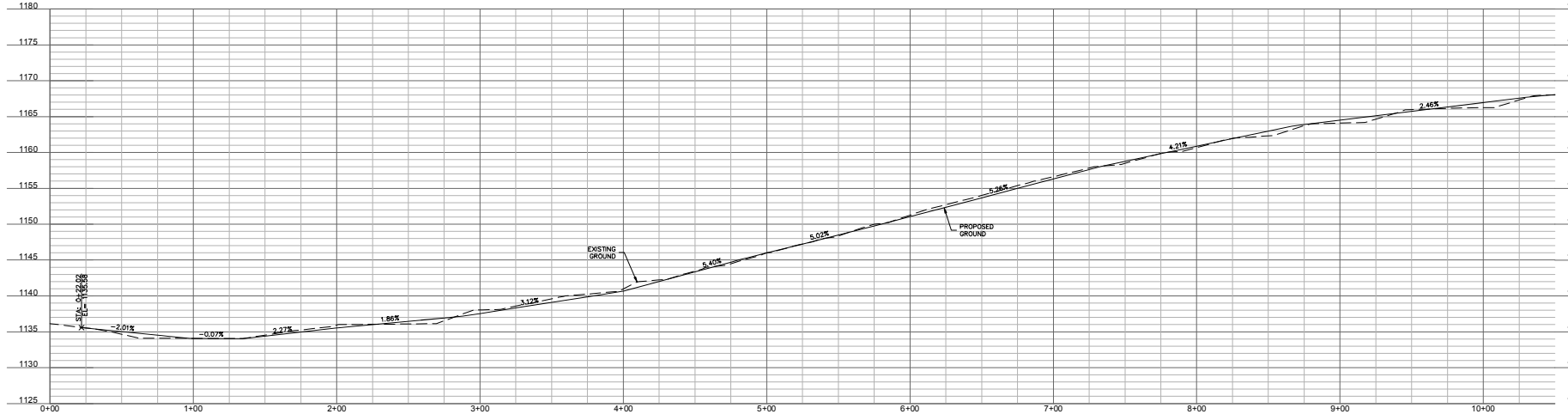
2023

drawn by: JM
checked by: JB
approved by: JB
QA/QC by:
project no.: 022-04834
drawing no.:
date: 5/16/23

SHEET
C3.0

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USER: jtoccarelle





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HUNTER AVE PLAN AND PROFILE

VANTRUST COMMERCE CENTER

COUNCIL BLUFFS, IA

2023

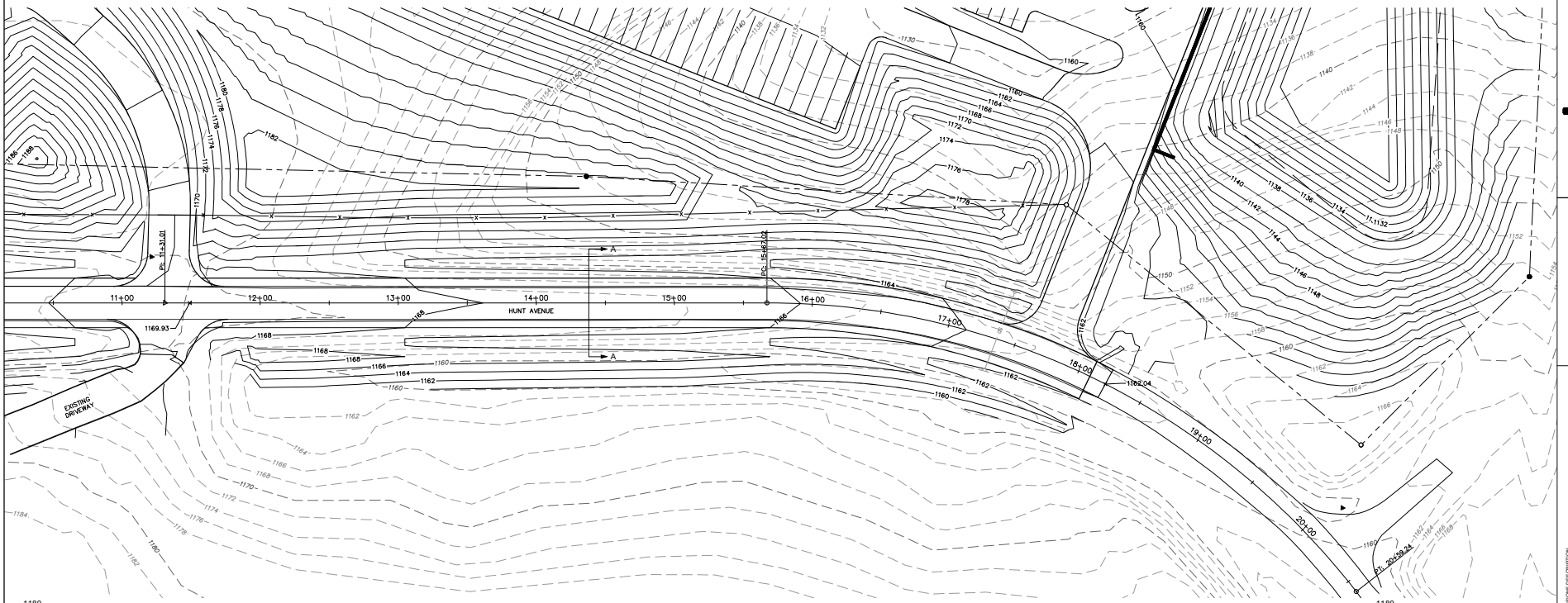
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checked by: JB
approved by: JH
QA/QC by:
project no.: 022-04834
drawing no.:
date: 5/16/23

SCALE IN FEET
0' 15' 30' 60'
10'
5'
2.5'
0'

SCHEMATIC SITE PLANS
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SHEET
C4.0

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HUNTER AVENUE PROFILE
STATION: 0+50 - 20+00

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HUNTER AVE PLAN AND PROFILE

VANTRUST COMMERCE CENTER

COUNCIL BLUFFS, IA

2023

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checked by:	JB
approved by:	JB
QA/QC by:	
project no.:	022-04834
drawing no.:	
date:	5/16/23

SHEET
C4.1

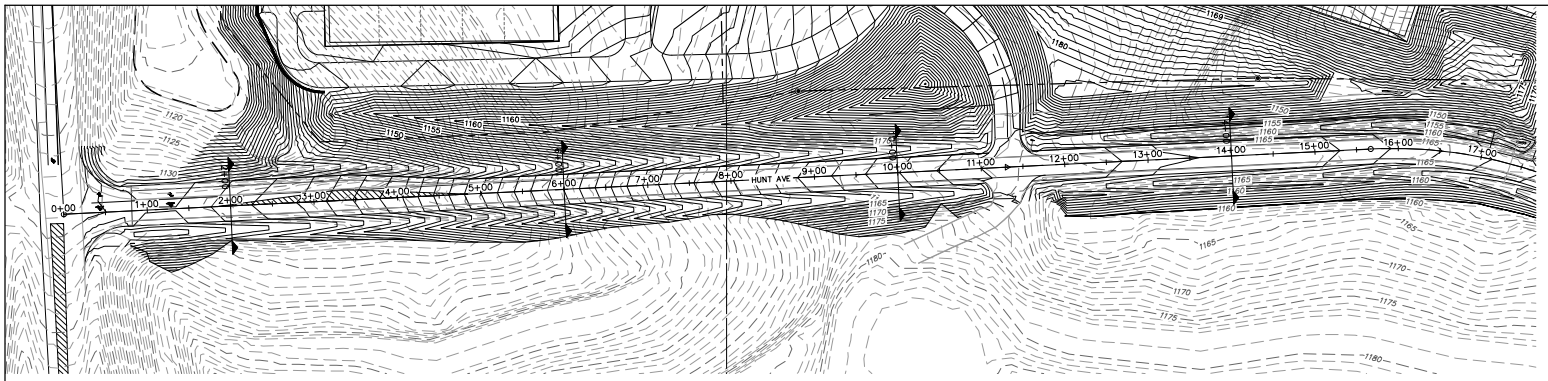
N

0' 15' 30' 60'
SCALE IN FEET

10'
5'
2.5'
0'

SCHEMATIC SITE PLANS
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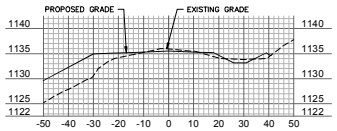


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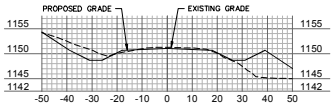
- 11XX — EXISTING MAJOR CONTOUR
- 11XX — EXISTING MINOR CONTOUR
- 11XX — PROPOSED MAJOR CONTOUR
- 11XX — PROPOSED MINOR CONTOUR

N

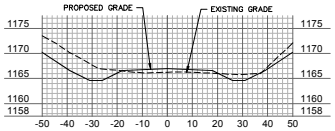
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SCALE IN FEET



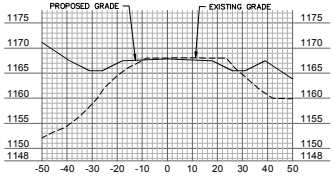
2+00



6+00

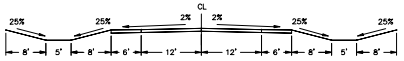


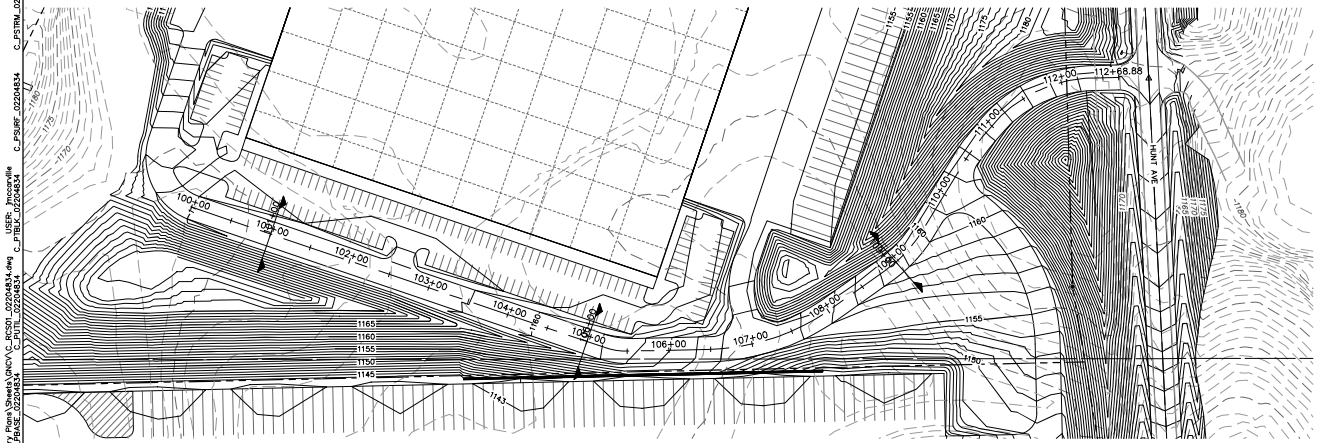
10+00



14+00

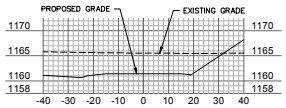
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VERTICAL SCALE: 1"=10'



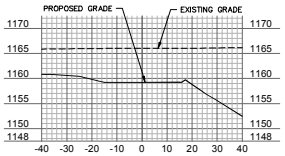


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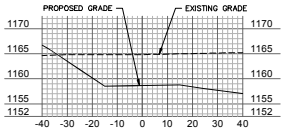
0' 30' 60' 120'
SCALE IN FEET



101+00



105+00



109+00

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=10'

SCHEMATIC SITE PLANS
FOR CONCEPT BUDGETING ONLY
NOT FOR CONSTRUCTION

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REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION

ROADWAY CROSS SECTIONS

VANTRUST COMMERCE CENTER

COUNCIL BLUFFS, IA

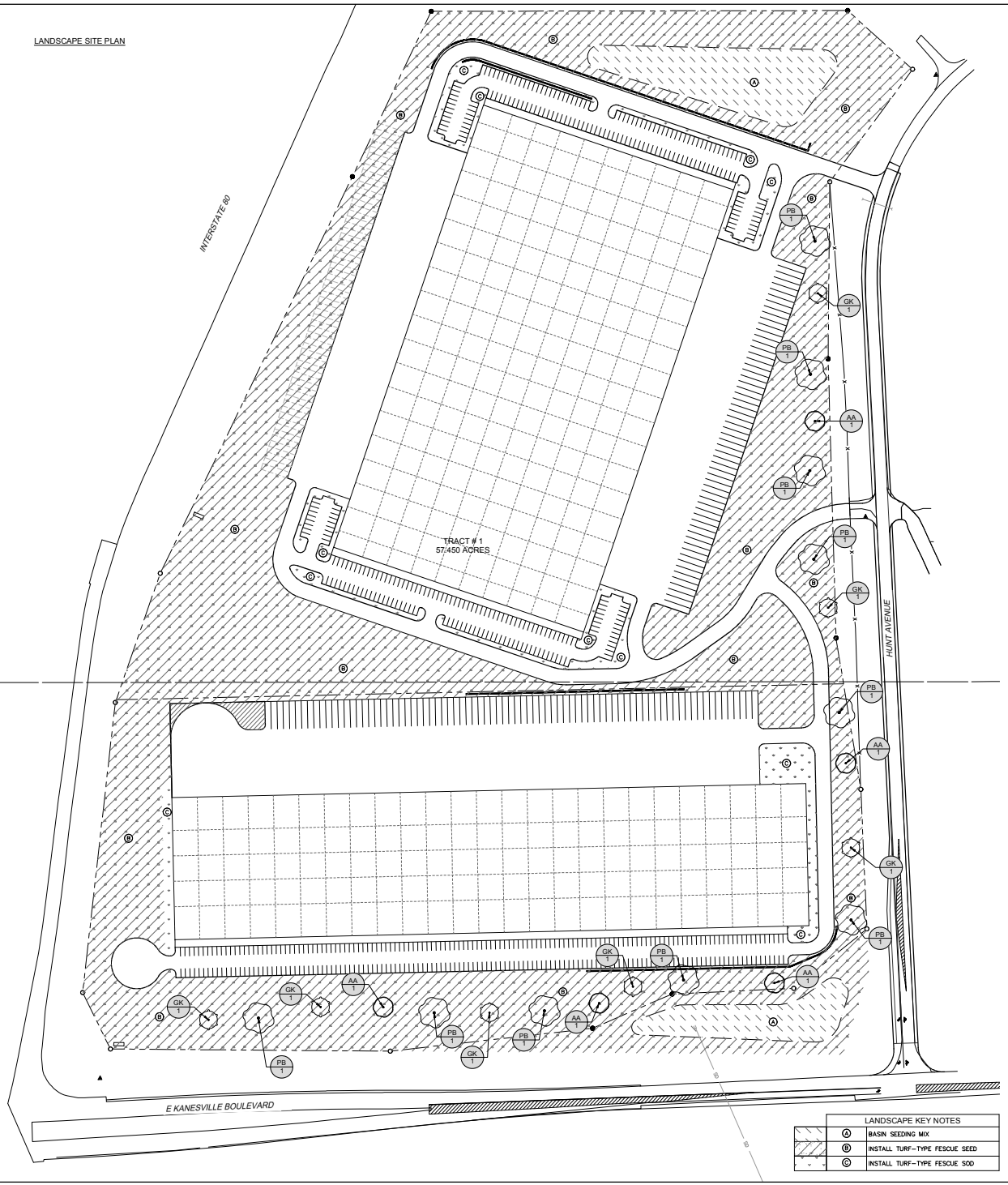
2023

drawn by:	JM
checked by:	JB
approved by:	JB
QA/QC by:	JM
project no:	022-04834
drawing no:	
date:	5/16/23

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C5.0

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DATE: May 16, 2023 10:25am
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USER: jhccarville

LANDSCAPE SITE PLAN

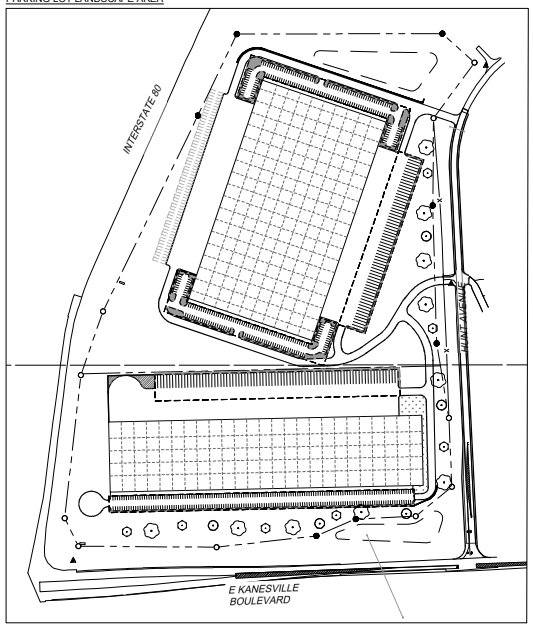


PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL / COMMON NAME	CAL/HT	CONTAINER	PLNT. HT.	M. HT.	M. SPR.
	AA	5	ACER X FREEMANII 'JEFFSRED' TM AUTUMN BLAZE FREEMAN MAPLE	2" CAL.	B&B		45'	40'
	GK	7	GYMNOCLADUS DIOICA KENTUCKY COFFEETREE	2" CAL.	B&B	6'	60'	40'
	PB	10	PLATANUS X ACERIFOLIA 'BLOODGOOD' BLOODGOOD LONDON PLANE TREE	2" CAL.	B&B	6'	60'	60'

SOD / SEED	CODE	QTY	BOTANICAL / COMMON NAME	CONTAINER	M.HT.
	A	77,778 SF	SEEDING MIX DROUGHT TOLERANT BASIN BLEND	SEED	
	B	851,810 SF	TURF SEED DROUGHT TOLERANT FESCUE BLEND	SEED	
	C	60,575 SF	TURF SOD DROUGHT TOLERANT FESCUE BLEND	SOD	

PARKING LOT LANDSCAPE AREA



LANDSCAPE KEY NOTES	
A	BASIN SEEDING MIX
B	INSTALL TURF-TYPE FESCUE SEED
C	INSTALL TURF-TYPE FESCUE SOD

N

0' 40' 80' 160'
SCALE IN FEET

GREEN SPACE AREA CALCULATION

TOTAL LOT AREA	2,502,524 S.F.	
MAXIMUM ALLOWABLE IMPERVIOUS AREA	2,252,272 S.F.	90%
SITE IMPERVIOUS AREA	1,588,296 S.F.	63.47%

PARKING LOT LANDSCAPE AREA CALCULATION

PARKING LOT AREA	389,072 S.F.	
REQ'D LANDS AREA	38,907 S.F.	10%
PARKING LOT LANDSCAPE AREA	8,330 S.F.	2.14%
PARKING LOT PERIMETER LANDSCAPE AREA	36,934 S.F.	9.49%
TOTAL LANDSCAPE AREA	45,264 S.F.	11.63%

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LANDSCAPE PLAN
VANTRUST COMMERCE CENTER
COUNCIL BLUFFS, IA
2023

drawn by:	ZM
checked by:	ZM
approved by:	JM
QA/QC by:	
project no.:	022-04834
drawing no.:	
date:	5/16/23

SHEET
L1.0

DWG: F:\2022\04501-05000\022-04834\4b-Design\AutoCAD\Preliminary Plans\Sheets\GNCV\C_LS01_022048434.dwg USER: jmccardle
DATE: May 16, 2023 10:25am XREFs: c_PLSD_022048434 c_PBASE_022048434 c_CBASE_022048434 c_UTBK_022048434

PLANT NOTES

1. PRIOR TO ANY PLANTING OR BREAKING OF GROUND, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALL/LOCATE ALL UTILITY LINES WITHIN THE VICINITY.

2. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS DURING EXCAVATION OPERATIONS TO NOT DISTURB EXISTING UTILITY LINES. DAMAGE TO ANY EXISTING UTILITY LINES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.

3. FINISH GRADES ESTABLISHED PRIOR TO INSTALLATION OF IRRIGATION SYSTEM SHALL BE MAINTAINED AND ANY EXCESS SOIL SHALL EITHER BE WASTED ON SITE AT THE DISCRETION OF THE GENERAL CONTRACTOR OR DISPOSED OF OFF-SITE. ALL CONSTRUCTION DEBRIS FROM IRRIGATION OPERATIONS SHALL BE DISPOSED OF OFF-SITE.

4. ALL DAMAGE TO EXISTING SITE IMPROVEMENTS RESULTING FROM EXCAVATION, PLANTING, BACKFILLING, ETC. SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS INCLUDING CONSTRUCTION ACCESS OUTSIDE PROJECT LIMITS. SURFACES OTHER THAN THE PLANTING AREA SHALL BE RESTORED BY THE CONTRACTOR TO THE CONDITION EXISTING PRIOR TO THE PLANTING OPERATION.

5. PLANT LIST IS PROVIDED FOR CONVENIENCE ONLY. IN THE CASE OF DISCREPANCIES BETWEEN THE PLAN AND THE PLANT LIST QUANTITIES, THE PLAN WILL TAKE PRECEDENCE. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL FINAL QUANTITIES PER DRAWINGS AND SPECIFICATIONS.

6. ALL PLANT MATERIAL INSTALLED SHALL BE "NURSERY GROWN" MEETING THE FOLLOWING CRITERIA:
   A. PLANT MATERIAL GROWN BY ESTABLISHED COMMERCIAL NURSERIES AND SOLD TO LICENSED AND CERTIFIED NURSERIES AND/OR LANDSCAPE ARCHITECTS.
   B. GROWN AND SOLD ACCORDING TO AMERICAN STANDARD FOR NURSERY STOCK SPECIFICATION.
   C. PLANT MATERIALS ARE SIZED ACCORDING CONTAINER/BALLSIZE AND PHYSICAL SIZE OF TRUNK OR CANOPY. CROWN/CALIPER SIZES MUST BE MET OR EXCEEDED.

7. THE LANDSCAPE ARCHITECT AND/OR OWNER RESERVES THE RIGHT TO INSPECT AND APPROVE ALL PLANT MATERIAL AT THE NURSERY/PLACE OF GROWTH, PRIOR TO INSTALLATION. PLANT MATERIAL WHICH HAS BECOME DAMAGED OR DISEASED OR WHICH IS UNACCEPTABLE TO THE LANDSCAPE ARCHITECT MAY BE REJECTED UPON DELIVERY TO THE SITE. WHEN TYPICAL, TREES WITHOUT A CENTRAL LEADER WILL NOT BE ACCEPTED.

8. ALL PLANT SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT.

9. IT IS RECOMMENDED THAT PLANTING OF TREES AND SHRUBS AREAS SHALL BE COMMENCED DURING THE SPRING (MARCH 15–JUNE 15) OR FALL (SEPTEMBER 1–OCTOBER 15) PLANTING SEASON. ANY PLANTING OPERATION NOT PERFORMED DURING THESE PERIODS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT AND ARE PERFORMED AT THE CONTRACTOR'S RISK. REFER TO WARRANTY CHART BELOW.

10. ALL PLANTING OPERATIONS AND LAYOUT SHALL BE COORDINATED WITH THE LANDSCAPE ARCHITECT. THE ACTUAL LOCATION OF PLANT MATERIALS MAY VARY DUE TO FIELD CONDITIONS. IF INITIAL PLACEMENT IS NOT SATISFACTORY, PLANTS SHALL BE RELOCATED AT THE DIRECTION OF THE LANDSCAPE ARCHITECT OR THEIR REPRESENTATIVE, AT NO ADDITIONAL COST TO THE OWNER.

11. ALL TREES IN SAME PLANTING AREA SHALL BE PLACED AND PLANTED AT THE SAME TIME. IF ANY PLANTS REMAIN ON THE SITE FOR MORE THAN 8 HOURS, THAT PLANT MATERIAL SHALL BE HEELED–IN ON SITE TO MAINTAIN THE MATERIAL'S HEALTH AND VITALITY. PLANTS SHALL BE PROTECTED AND MAINTAINED, INCLUDING BUT NOT LIMITED TO WATER AND SHADE. WHILE ON–SITE, ANY PLANTS DEEMED NOT IN SATISFACTORY HEALTH OR CONDITION AT THE TIME OF PLANTING BY THE LANDSCAPE ARCHITECT OR THEIR REPRESENTATIVE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

12. CONTRACTOR SHALL NOT STOCKPILE ANY MATERIALS UNDER THE DRIP LINE OF EXISTING TREES.

13. ALL TREES, SHRUB MASS PLANTINGS, AND ANNUAL AND ORNAMENTAL PLANTING BEDS SHALL RECEIVE 4" SHREDDED HARDWOOD MULCH INSTALLED OVER LANDSCAPE FABRIC UNLESS OTHERWISE NOTED ON THE PLAN.

14. LANDSCAPE FABRIC TO BE A UV STABILIZED, 3 OZ./YD, POLYPROPOLENE, WOVEN, NEEDLE–PUNCHED FABRIC WITH A 20 YEAR WARRANTY.

15. LIMIT OF SEEDING/SODDING SHOWN IS BASED ON THE ESTIMATED GRADING LIMIT. REFER TO EROSION CONTROL PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR SODDING/SEEDING ALL AREAS THAT ARE DISTURBED BEYOND GRADING LIMITS DURING THE CONSTRUCTION PROCESS.

16. FOR ALL IRRIGATED TURF AREAS, REFER TO IRRIGATION PERFORMANCE SPECIFICATION.

17. CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING ALL PLANT MATERIALS UNTIL THE TIME THE PERMANENT IRRIGATION SYSTEM IS FULLY FUNCTIONAL AND SUBSTANTIAL COMPLETION OF THE PROJECT HAS BEEN GRANTED. ANY MATERIAL WHICH DIES, OR DEFOLIATES PRIOR TO SUBSTANTIAL COMPLETION OF THE WORK WILL BE PROMPTLY REMOVED AND REPLACED.

18. PRIOR TO GRANTING SUBSTANTIAL COMPLETION, THE OWNER AND/OR LANDSCAPE ARCHITECT SHALL COMPILE A FINAL PUNCHLIST OF UNSATISFACTORY OR INCOMPLETE ITEMS. CONTRACTOR SHALL BE NOTIFIED IN WRITING OF SUBSTANTIAL COMPLETION WHEN THE FINAL PUNCHLIST HAS BEEN COMPLETED.

19. THE CONTRACTOR WILL COMPLETELY GUARANTEE ALL WORK FOR THE PERIOD SPECIFIED BY THE WARRANTY CHART BELOW.

20. 1–YEAR PLANT WARRANTY TO INCLUDE TREES AND SHRUBS FROM DATE OF FINAL ACCEPTANCE.

WARRANTY CHART

SUBSTANTIAL COMPLETION DATE	DURATION	WARRANTY EXPIRATION
DECEMBER	19 MONTHS	JULY
JANUARY	18 MONTHS	JULY
FEBRUARY	17 MONTHS	JULY
MARCH	16 MONTHS	JULY
APRIL	15 MONTHS	JULY
MAY	14 MONTHS	JULY
JUNE	13 MONTHS	JULY
JULY	12 MONTHS	JULY
AUGUST	12 MONTHS	AUGUST
SEPTEMBER	12 MONTHS	SEPTEMBER
OCTOBER	12 MONTHS	OCTOBER
NOVEMBER	12 MONTHS	NOVEMBER

SOD NOTES

1. CONTRACTOR SHALL COMPLY WITH AMERICAN SOD PRODUCERS ASSOCIATION CLASSES OF SOD MATERIALS.

2. THE LANDSCAPE ARCHITECT AND/OR OWNER RESERVES THE RIGHT TO INSPECT SOD AT SITE BEFORE PLANTING, FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, AND QUALITY. THE LANDSCAPE ARCHITECT MAY REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. REJECTED MATERIALS MUST BE REMOVED FROM THE PROJECT SITE.

3. SOD SHALL BE A FIRST CLASS REPRESENTATION OF NORMAL CULTIVARS OF TURF–TYPE FESCUE FROM A LOCAL NEBRASKA SOURCE. ALL SOD SUBSTITUTIONS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT, IF SPECIFIED MATERIALS ARE NOT OBTAINABLE.

4. IT IS RECOMMENDED PLANTING OF SOD AREAS SHALL BE COMMENCED DURING THE SPRING (MARCH 15–JUNE 15) OR FALL (SEPTEMBER 1–OCTOBER 15) PLANTING SEASONS UNLESS OTHERWISE SPECIFIED.

5. SOD SHALL BE MOWED AND RAKED TO REMOVE STEMS, STICKS, AND GRASS CLIPPINGS PRIOR TO CUTTING. SOD SHALL NOT HAVE DRY EDGES.

6. SOD SHALL BE MACHINE STRIPPED AT A UNIFORM SOIL THICKNESS OF APPROXIMATELY ONE INCH (PLUS OR MINUS 1/4–INCH). SOD SHALL BE CUT AT A MINIMUM WIDTH OF 18" TO AVOID UNNECESSARY DAMAGE TO THE ROOT MASS.

7. EXTREME CARE SHALL BE TAKEN IN CUTTING, HANDLING, TRANSPORTING, AND LAYING SOD TO AVOID UNNECESSARY DAMAGE TO AND LOSS OF EARTH FROM ROOTS OF THE SOD. HANDLING OF SOD SHALL BE DONE IN A MANNER THAT WILL PREVENT TEARING, BREAKING, DRYING AND OTHER DAMAGE. PROTECT EXPOSED ROOTS FROM DEHYDRATION. DO NOT DELIVER MORE SOD THAN CAN BE LAID WITHIN ONE WORK DAY.

8. LOOSEN SUBGRADE TO A DEPTH OF 4" AND GRADE TO SMOOTH, EVEN SURFACE WITH LOOSE UNIFORM SOIL TEXTURE. REMOVE STONES AND DEBRIS OVER 1" IN ANY DIMENSION. LIGHTLY COMPACT SOIL TO LIMIT SETTLING.

9. MOISTEN PREPARED SURFACE IMMEDIATELY PRIOR TO LAYING SOD. WATER THOROUGHLY AND ALLOW SURFACE TO DRY BEFORE INSTALLING SOD.

10. FERTILIZER

    BONEMEAL: COMMERCIAL, RAW, FINELY GROUND; MINIMUM OF 4 PERCENT NITROGEN AND 20 PERCENT PHOSPHORIC ACID.

    SUPERPHOSPHATE: COMMERCIAL PHOSPHATE MIXTURE, SOLUBLE, MINIMUM OF 20 PERCENT AVAILABLE PHOSPHORIC ACID.

    COMMERCIAL FERTILIZER: COMMERCIAL–GRADE COMPLETE FERTILIZER OF NEUTRAL CHARACTER, CONSISTING OF FAST– AND SLOW–RELEASED NITROGEN, 50 PERCENT DERIVED FROM NATURAL ORGANIC SOURCES, PHOSPHOROUS, AND POTASSIUM IN THE FOLLOWING COMPOSITION:

    GENERAL: FOR TREES, SHRUBS AND GROUND COVER, PROVIDE A HOMOGENEOUS FERTILIZER COMPLETE WITH MICRO NUTRIENTS HAVING AN ANALYSIS OF 12_4_8 (12 POUNDS OF NITROGEN, 4 POUNDS OF AVAILABLE PHOSPHORIC ACID, AND 8 POUNDS OF WATER SOLUBLE POTASH RESPECTIVELY FOR EACH 100 POUNDS OF MIXTURE).

    FOR TREES, SHRUBS, AND GROUND COVER PROVIDE FERTILIZER WITH ADJUSTED ANALYSIS IN ACCORDANCE WITH RESULTS AND RECOMMENDATIONS OF PLANTING SOIL MIX TEST REPORTS.

    FOR LAWNS, PROVIDE FERTILIZER IN ACCORDANCE WITH RESULTS AND RECOMMENDATIONS OF EXISTING ON SITE SURFACE SOIL REPORT RELATIVE TO LAWN INSTALLATION. PROVIDE NITROGEN IN A FORM THAT WILL BE AVAILABLE TO LAWN DURING INITIAL PERIOD OF GROWTH.

    SLOW–RELEASE FERTILIZER: GRANULAR OR PELLETED FERTILIZER CONSISTING OF 50 PERCENT WATER–INSOLUBLE NITROGEN, PHOSPHORUS, AND POTASSIUM IN THE FOLLOWING COMPOSITION:

    COMPOSITION: NITROGEN, PHOSPHOROUS, AND POTASSIUM IN AMOUNTS RECOMMENDED IN EXISTING ON SITE SURFACE SOIL REPORTS FROM A QUALIFIED SOIL–TESTING LABORATORY.

11. SOD SHALL BE LAID TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. DO NOT OVERLAP BUTT ENDS OR EDGES. STAGGER JOINTS. SOD SHALL BE CAREFULLY PLACED IN THE DIRECTION PARALLEL WITH THE SLOPE OF THE AREA TO BE SODDED. SOD EDGES AT PLANTING BEDS AND PAVED SURFACES ARE TO BE CUT WITH A KNIFE OR OTHER SHARP IMPLEMENT.

12. ALL SOD ON SLOPES GREATER THAN 3:1 AND WITHIN DETENTION AREAS SHALL BE STAKED.

13. TAMP AND ROLL SOD LIGHTLY TO ENSURE FULL CONTACT WITH SUBGRADE. WORK SIFTED SOIL INTO MINOR CRACKS.

14. SATURATE SOD WITH FINE WATER SPRAY WITHIN TWO HOURS OF PLANTING. DURING FIRST WEEK AFTER PLANTING, WATER DAILY OR MORE FREQUENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A MINIMUM DEPTH OF FOUR INCHES BELOW SOD.

15. CONTRACTOR SHALL PROVIDE FULL MAINTENANCE FOR SODDED TURF GRASS FOR A PERIOD OF 30 DAYS AFTER THE DATE OF SUBSTANTIAL COMPLETION, OR BUILDING OCCUPANCY, WHICHEVER IS GREATER. AT THE END OF THE MAINTENANCE PERIOD, A HEALTHY, WELL–ROOTED, EVEN–COLORED, VIABLE TURF MUST BE ESTABLISHED. THE TURF GRASS SHALL BE FREE OF WEEDS, OPEN JOINTS, BARE AREAS, AND SURFACE IRREGULARITIES.

SOIL NOTES

1. PLANTING SOIL: A UNIFORM SOIL MIX, FREE OF PLANT RESIDUE, STONES, STUMPS ROOTS OR SIMILAR OBJECTS LARGER THAN 1 INCH. PLANTING SOIL MIXTURE SHALL BE OF TOPSOIL, ORGANIC COMPOST AND SAND CONSISTING OF THE FOLLOWING:
   A. 15% BY VOLUME ORGANIC COMPOST
   B. 15% BY VOLUME SAND
   C. 70% BY VOLUME TOPSOIL

2. CONTRACTOR SHALL BE REQUIRED TO PERFORM pH TESTS ON EXISTING PLANTING BEDS TO DETERMINE THE NECESSARY AMOUNT OF COMPOST TO BE ADDED TO ADJUST pH TO BETWEEN SIX (6) AND SEVEN (7).

3. ORGANIC COMPOST: WELL DECOMPOSED, STABLE, WEED FREE ORGANIC MATTER SOURCE. IT SHALL BE DERIVED FROM; AGRICULTURE, FOOD, OR INDUSTRIAL RESIDUALS; BIOSOLIDS (TREATED SEWAGE SLUDGE); YARD TRIMMINGS AND LEAF RAKINGS; SOURCE–SEPARATED OR MIXED SOLID WASTE MEETING THE FOLLOWING CRITERIA;
   A. 100 PERCENT SHALL PASS THROUGH A 3/8 INCH SCREEN.
   B. PH OF 6.0 TO 8.5.
   C. MOISTURE CONTENT OF 30% TO 60% BY WEIGHT.
   D. NO SUBSTANCES TOXIC TO PLANTS.
   E. 1% OR LESS BY WEIGHT MANUFACTURED FOREIGN MATTER.
   F. NO OBJECTIONABLE ODOR.
   G. SHALL NOT RESEMBLE THE RAW MATERIAL FROM WHICH IT IS DERIVED.

4. TOPSOIL: SOIL CLASSIFICATION OF SANDY LOAM OR LOAMY SAND MEETING THE FOLLOWING CRITERIA:
   A. 50 TO 85 PERCENT BY WEIGHT SAND (2.0 TO 0.050MM) ACCORDING TO AASHTO T88.
   B. 5 TO 50 PERCENT BY WEIGHT SILT (0.050 TO 0.002MM) ACCORDING TO AASHTO T88.
   C. 2 TO 5 PERCENT BY WEIGHT CLAY (LESS THAN 0.002MM) ACCORDING TO AASHTO T88.
   D. 3 TO 10 PERCENT BY WEIGHT ORGANIC MATTER ACCORDING TO AASHTO T194.
   E. TEXTURAL ANALYSIS:
      i. MINIMUM 100% BY WEIGHT PASSING THE 2" SIEVE PER ASTM E11.
      ii. MINIMUM 90% BY WEIGHT PASSING THE NO, 4 PER ASTM E11.
      iii. MINIMUM 80% BY WEIGHT PASSING THE NO. 10 SIEVE PER ASTM E11.

IRRIGATION PERFORMANCE SPECIFICATION

1. IRRIGATION DESIGN TO BE PREPARED BY IRRIGATION CONTRACTOR AND PROVIDED TO THE OWNER OR THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION. THE IRRIGATION DESIGN SHALL BE PREPARED BY AN IRRIGATION DESIGNER WITH A MINIMUM OF FIVE (5) YEARS OF DESIGN EXPERIENCE AND MAY BE SUBJECT TO A WATER AUDIT.

2. FINISH GRADES ESTABLISHED PRIOR TO INSTALLATION OF IRRIGATION SYSTEM SHALL BE MAINTAINED AND ANY EXCESS SOIL SHALL EITHER BE WASTED ON SITE AT THE DISCRETION OF THE GENERAL CONTRACTOR OR DISPOSED OF OFF–SITE. ALL CONSTRUCTION DEBRIS FROM IRRIGATION OPERATIONS SHALL BE DISPOSED OF OFF–SITE.

3. TURF AREAS SHALL BE IRRIGATED USING TURF SPRAY HEADS. THE IRRIGATION DESIGN SHALL BE PREPARED TO PROVIDE A 50% SPACING OR HEAD TO HEAD LAYOUT.

4. IRRIGATION TAP(S) LOCATIONS SHALL BE COORDINATED BETWEEN THE CONTRACTOR, CITY, AND LANDSCAPE ARCHITECT. INSTALL IRRIGATION TAP(S), METER(S) AND BACKFLOW PREVENTION DEVICE(S) AS REQUIRED BY THE CITY, PERFORMED BY A LICENSED PLUMBER. IRRIGATION TAP(S), METER(S) AND BACKFLOW PREVENTER(S) SIZE TO BE DETERMINED BY IRRIGATION CONTRACTOR AND SHALL BE LISTED ON THE IRRIGATION SHOP DRAWING SUBMITTED FOR REVIEW AND THE AS–BUILT PLANS SUBMITTED UPON COMPLETION.

5. IRRIGATION CONTRACTOR TO DETERMINE AVAILABLE WATER PRESSURE AND FLOW AT TAP LOCATION(S). IRRIGATION CONTRACTOR TO DESIGN IRRIGATION SYSTEM BASED ON AVAILABLE WATER PRESSURE. IRRIGATION CONTRACTOR TO PROVIDE ALL DESIGN CALCULATIONS FOR REVIEW BY THE OWNER OR OWNER'S REPRESENTATIVE INCLUDING FLOW RATES AND PRESSURE LOSSES CALCULATIONS OF THE SYSTEM.

6. THE IRRIGATION EQUIPMENT SHALL BE MANUFACTURED BY HUNTER INDUSTRIES, RAIN BIRD CORPORATION, OR TORO OR APPROVED EQUAL AND SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. IRRIGATION EQUIPMENT SHALL HAVE A MANUFACTURER'S FIVE (5) YEAR WARRANTY.

7. IRRIGATION CONTROLLER SHALL BE A MODULAR SYSTEM EXPANDABLE IN EITHER 4 OR 8 STATION MODULES OR AN EXPANDABLE DECODER SYSTEM. THE IRRIGATION CONTROLLER SHALL HAVE THE CAPACITY TO OPERATE A MASTER VALVE DURING SYSTEM RUN TIME. THE IRRIGATION CONTROLLER SHALL HAVE 4 PROGRAMS WITH INDEPENDENT STARTS, 365 DAY CALENDAR, EVEN, ODD, ODD 31, CYCLICAL, CUSTOM AND MANUAL WATER DAY SCHEDULES. THE CONTROLLER SHALL HAVE A MINIMUM SEASONAL ADJUST CAPABILITY OF 10% – 150%. THE IRRIGATION CONTROLLER TO BE INSTALLED IN A LOCKABLE, METAL PEDESTAL IN A LOCATION APPROVED BY THE OWNER OR OWNER'S REPRESENTATIVE.

8. THE IRRIGATION SYSTEM DESIGN SHALL INCLUDE A WIRELESS RAIN SENSOR. INSTALL RAIN SENSOR IN LOCATION APPROVED BY THE OWNER AND PER THE MANUFACTURER'S SPECIFICATIONS.

9. IRRIGATION CONTROL VALVES ARE TO BE A PLASTIC GLOBE VALVE CONFIGURATION WITH PRESSURE RATING OF 15 – 150 PSI AND FLOW RANGE FROM 2 – 150 GPM. THE SOLENOID SHALL BE HEAVY DUTY ONE PIECE CONSTRUCTION. THE CONTROL VALVES SHALL HAVE THE ABILITY TO ADJUST AND REGULATE PRESSURE FROM 20 –100 PSI. THE CONTROL VALVE SIZE SHALL BE 1", 1.5"AND 2" CONFIGURATIONS. THE CONTROL VALVES SHALL HAVE A MANUFACTURER'S THREE (5) YEAR WARRANTY.

10. THE IRRIGATION SPRAY BODY SHALL BE UV–RESISTANT PLASTIC WITH A CO–MOLDED OR RUBBER SEALS AND HEAVY DUTY SPRING. THE SPRAY BODY SHALL HAVE BOTH A BOTTOM AND SIDE IN–LET FEATURE. SPRAY NOZZLES SHALL BE VARIABLE ARC SPRAY NOZZLES.

11. ALL IRRIGATION MAINLINE PIPES SHALL BE PVC CLASS 200 IPS PLASTIC PIPE. ALL PIPE SHALL BE SIZED NOT TO EXCEED A VELOCITY OF FIVE (5) FEET PER SECOND

11 ALL IRRIGATION LATERAL PIPES SHALL BE POLYETHYLENE PIPE. ALL PIPE SHALL BE SIZED NOT TO EXCEED A VELOCITY OF FIVE (5) FEET PER SECOND.

12. ALL IRRIGATION PIPE OR WIRE SHALL BE INSTALLED IN SLEEVES BELOW ANY PAVEMENT OR HARD SURFACE. ALL IRRIGATION SLEEVES SHALL BE PVC SCHEDULE 40. ALL SLEEVES ARE TO EXTEND 24" BEYOND AND SIZED A MINIMUM OF TWO (2) TIMES THE DIAMETER OF THE MAINLINE OR LATERAL. COORDINATE INSTALLATION OF ALL SLEEVES WITH THE GENERAL CONTRACTOR AND THE CONCRETE CONTRACTOR PRIOR TO GRADING AND PLACEMENT OF CONCRETE.

13. IRRIGATION CONTRACTOR SHALL SUPPLY MAINTENANCE AND OPERATION MANUALS AND A SCALED AS–BUILT DRAWING OF THE SYSTEM TO THE OWNER. IRRIGATION CONTRACTOR SHALL DEMONSTRATE THE PROGRAMMING OF THE CONTROLLER FOR THE OWNER.

14. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR THE FIRST WINTERIZATION AND SPRING STARTUP UNLESS THE OWNER AGREES TO USE THEIR OWN CONTRACTOR.

SEEDING NOTES

1. THE LANDSCAPE ARCHITECT AND/OR OWNER RESERVES THE RIGHT TO INSPECT SEED AT THE SITE BEFORE SEEDING OPERATIONS COMMENCE. THE LANDSCAPE ARCHITECT MAY REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. REJECTED MATERIALS MUST BE REMOVED FROM THE PROJECT SITE.

2. REFER TO SEEDING SPECIFICATION(S) FOR SEED MIXTURE(S).

3. ALL 'NON–TURF' SEED SHALL BE A COMMERCIALLY AVAILABLE MIX, EITHER PRE–CATEGORIZED OR CUSTOMIZED. ANY SEEDING SUBSTITUTIONS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.

4. ALL MATERIALS USED SHALL MEET OR EXCEED APPLICABLE FEDERAL, STATE, COUNTY AND LOCAL LAWS AND REGULATIONS.

5. ALL SEED SHALL BE FREE FROM INSECTS AND DISEASE. SPECIES SHALL BE TRUE TO THEIR SCIENTIFIC NAME AS SPECIFIED.

6. ALL GRASS SPECIES SHALL BE SUPPLIED AS PURE LIVE SEED.

7. SEED OF ALL SPECIES NATIVE TO NEBRASKA SHALL BE FROM WITHIN A 150 MILE RADIUS OF THE PROJECT SITE. SEED NOT AVAILABLE WITHIN A 150 MILE RADIUS SHALL BE APPROVED BY THE OWNER PRIOR TO INSTALLATION.

8. SEEDS SHALL HAVE PROPER STRATIFICATION AND/OR SCARIFICATION TO BREAK SEED DORMANCY FOR SPRING PLANTING.

9. PLANTING OF SEED AREAS SHALL BE COMMENCED DURING THE SPRING (APRIL 15–MAY 30) OR FALL (SEPTEMBER 1–OCTOBER 15) PLANTING SEASONS UNLESS SPECIFICALLY SPECIFIED. AFTER OCTOBER, DORMANT SEEDING MAY BE DONE AT CONTRACTOR'S DESCRETION WITH GUARANTEE THAT RE–SEEDING WILL BE DONE AT NO ADDITIONAL COST TO ACHIEVE ACCEPTABLE COVERAGE. GRADE TO SMOOTH, EVEN SURFACE WITH LOOSE UNIFORM SOIL TEXTURE. REMOVE STONES AND DEBRIS OVER 1" IN ANY DIMENSION.

10. ALL SEEDED AREAS SHALL BE PROTECTED FROM EROSION BY MULCH, EROSION CONTROL BLANKET OR HYDROMULCH.

11. EROSION CONTROL BLANKET SHALL BE A SHORT TERM, SINGLE NET, MACHINE–PRODUCED MAT OF 100% AGRICULTURAL STRAW WITH A FUNCTION LONGEVITY OF 12 MONTHS. EROSION CONTROL BLANKET SHALL MEET TYPE 2.C SPECIFICATION ESTABLISHED BY EROSION CONTROL TECHNOLOGY COUNCIL, NORTH AMERICAN GREEN S75 OR EQUAL.

12. STRAW MULCH SHALL BE OAT, WHEAT, OR RICE STRAW MULCH. HAY MULCH SHALL BE PRAIRIE GRASS OR OTHER HAY AS APPROVED BY THE OWNER. THE MULCH SHALL BE FREE OF JOHNSON GRASS OR OTHER NOXIOUS WEEDS AND FOREIGN MATERIALS. IT SHALL BE KEPT IN A DRY CONDITION AND SHALL NOT BE MOLDED OR ROTTED. STRAW OR HAY FOR EROSION CONTROL SHALL BE CLEAN, SEED–FREE HAY OR THRESHED STRAW OF WHEAT, RYE, OATS, OR BARLEY.

13. STRAW MULCH SHALL COVER A MINIMUM OF 80% OF THE SOIL SURFACE AREA THAT IS SEEDED. MULCH SHALL BE PLACED LOOSE AND OPEN ENOUGH TO ALLOW SOME SUNLIGHT TO PENETRATE AND AIR TO CIRCULATE BUT STILL COVER A MINIMUM OF 70% OF THE SOIL SURFACE.

14. STRAW MULCH SHALL BE APPLIED AT THE RATE OF 1½ TO 2 TONS PER ACRE FOR SITES THAT ARE SEEDED. THIS APPLICATION SHOULD RESULT IN A LAYER OF ½ TO 1½ INCHES THICK FOR SEEDED SITES.

15. IMMEDIATELY AFTER SPREADING, THE MULCH SHALL BE ANCHORED BY A MULCH CRIMPER AND/OR TACKIFIER.

16. THE CRIMPER SHALL CONSIST OF A SERIES OF DULL FLAT DISCS WITH NOTCHED EDGES SPACED APPROXIMATELY 8 INCHES APART. THE MULCH SHALL BE IMPRESSED IN THE SOIL TO A DEPTH OF 1 TO 3 INCHES.

17. IF TACKIFIER IS USED, TACKIFIER SHALL BE SPRAYED IN CONJUNCTION WITH MULCH OR IMMEDIATELY AFTER THE MULCH HAS BEEN PLACED. TACKIFIERS SHALL BE MIXED AND APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS.

18. SEEDING SHALL BE COMPLETED WHEN A MINIMUM OF 1/4 INCH OF NATURAL RAINFALL IS EXPECTED OR WHEN A MINIMUM OF 1/4 INCH OF IRRIGATION WILL BE RECEIVED WITHIN 10 DAYS AFTER SEEDING. IF SUFFICIENT NATURAL RAINFALL IS NOT RECEIVED WITHIN 10 DAYS, THE NEW SEEDING SHALL BE IRRIGATED WITH A MINIMUM OF 1/4 INCH OF WATER, OR SO THAT WATER PENETRATES THE SOIL TO A UNIFORM MINIMUM DEPTH OF 4.0 INCHES.

19. A TEMPORARY ABOVE–GROUND IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED BY THE CONTRACTOR UPON COMPLETION OF FINISH GRADING FOR ALL NON–IRRIGATED SEED AREAS AND FOR ALL IRRIGATED AREAS OF SEED AND SOD, PRIOR TO INSTALLATION OF PLANTINGS, UNLESS OR UNTIL THE PERMANENT SYTEM IS FUNCTIONAL. ALL GRADED AREAS SHALL RECEIVE HEAD–TO–HEAD IRRIGATION COVERAGE, EXCEPT FOR PERMANENTLY PONDED AREAS.

20. PROVIDE WRITTEN VERIFICATION TO THE OWNER THAT BACKFLOW PREVENTION PER CODE EXISTS ON THE LINE TO BE USED AS A POINT OF CONNECTION FOR THE IRRIGATION SYSTEM. IF VERIFICATION CANNOT BE MADE, PROVIDE BACKFLOW PREVENTION PER CODE AS A PART OF THE INSTALLATION.

21. CONTRACTOR SHALL PROVIDE WATER AND ELECTRICITY FOR THE SYSTEM IN THE EVENT THAT NEITHER IS AVAILABLE FOR IMMEDIATE USE. CONTRACTOR SHALL PROVIDE ISOLATION VALVE AND CONNECTION TO WATER AND CONTROLLER.

22. THE IRRIGATION SYSTEM SHALL BE SET BY CONTRACTOR TO PROVIDE PRECIPITATION 2 TIMES PER WEEK BETWEEN JUNE 15TH AND OCTOBER 31ST OF THE FIRST YEAR AFTER PLANTING. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING PROPER FUNCTION AND CONNECTION OF THE IRRIGATION SYSTEMS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE IRRIGATION SYSTEM FOR THE DURATION OF FIRST FULL GROWING SEASON. AT THE END OF THE IRRIGATION PERIOD, AND IF PLANT ESTABLISHMENT IS SUCCESSFUL, AS DETERMINED BY THE SEEDING WARRANTY CRITERIA, THE CONTRACTOR SHALL PERMANENTLY CAP PIPE DOWNSTREAM OF ISOLATION VALVE, AND THEN DISASSEMBLE AND REMOVE THE IRRIGATION SYSTEM.

23. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL TEMPORARY SIGNS, FLAGGING, ETC. AT THE PERIMETER OF ALL SEEDING SITES IMMEDIATELY AFTER THEIR COMPLETION, WHICH SHALL SERVE TO NOTIFY FOOT AND VEHICULAR TRAFFIC THAT A SENSITIVE AREA MAY BE DAMAGED BY THEIR ENTRY.

24. THE WORK AREA SHALL BE KEPT FREE OF DEBRIS BY THE CONTRACTOR. AFTER SEED INSTALLATION IS COMPLETE, CLEAN UP ANY REMAINING MATERIALS, DEBRIS, TRASH, ETC. AVOID DRIVING OVER SEEDED AREAS TO MINIMIZE DISTURBANCE. GRADING STAKES, STONES, TRASH, AND OTHER DEBRIS WHICH MAY DETRACT FROM THE APPEARANCE OR HINDER MAINTENANCE OF THE SEEDING SITE SHALL BE REMOVED FROM THE SITE WHEN SEEDING OPERATIONS ARE COMPLETED. SOIL, STRAW, HAY, HYDRAULIC FIBER MULCH, FERTILIZER, COMPOST, LIMESTONE, ELEMENTAL SULFUR, GYPSUM, AND OTHER DEBRIS SHALL BE REMOVED FROM PAVED AREAS SOON AS POSSIBLE AFTER SPREADING AND SEEDING OPERATIONS ARE COMPLETED. CLEAN UP OPERATIONS SHALL BE COMPLETED BEFORE ACCEPTANCE IS GIVEN.

25. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY EFFECTIVE SEEDING AND EROSION CONTROL MULCH MATERIALS, AND TO ENSURE THAT SUCH MATERIALS ARE SECURED TO THE SOIL SO THAT THEY ARE NOT BLOWN, WASHED, OR OTHERWISE REMOVED FROM THE SEEDING SITE, AND SO THAT NEARBY STREAMS AND OTHER AREAS SHALL BE PROTECTED FROM SOIL, FERTILIZER, COMPOST, AND THE INCURSION OF UNWANTED GRASS SEED.

26. GUARANTEE SEEDED/SOODED LAWN/ROUGH OR NATIVE SEEDED AREAS FOR THE FOLLOWING:
    A. PROVIDE A RELATIVELY UNIFORM, ACCEPTABLE STAND OF GRASS
    B. NO BARE SPOTS OVER 3–INCH SQUARE FOR SEEDED/SOODED LAWN, AND NO BARE SPOTS OVER 12–INCH SQUARE FOR ROUGH/NATIVE SEEDED AREAS
    C. RE–INSTALL ANY AREA(S) WHICH FAIL TO ESTABLISH A UNIFORM STAND FOR ANY REASON

TURF–TYPE TALL FESCUE MIX

(PERCENT OF MIX BASED ON BULK POUNDS)

TALL FESCUE VARIETIES	86.00%
KENTUCKY BLUEGRASS	7.00%
KENTUCKY BLUEGRASS	3.50%
PERENNIAL RYEGRASS	3.50%

SEEDING RATE: 10# PER 1,000 SF
SEEDING DATES: MARCH – MAY
DORMANT SEED: DECEMBER – MARCH

BASIN SEEDING MIX

(PERCENT OF MIX BASED ON BULK POUNDS)

CREEPING FOXTAIL	25.00%
SWITCH GRASS	25.00%
REED CANARY GRASS	25.00%
WESTERN WHEAT GRASS	25.00%

SEEDING RATE: 15# PER ACRE
SEEDING DATES: APRIL–JULY
DORMANT SEED: DECEMBER – MARCH

SCHEMATIC SITE PLANS
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REVISIONS

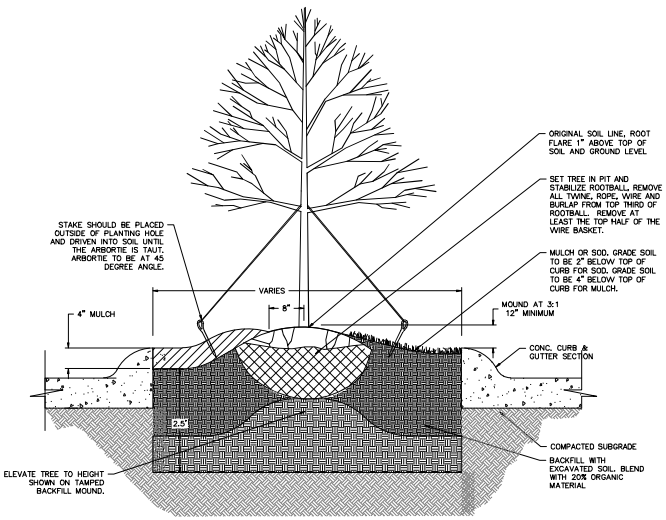
REV. NO.	DATE	REVISIONS DESCRIPTION

LANDSCAPE NOTES
VANTRUST COMMERCE CENTER
COUNCIL BLUFFS, IA
2023

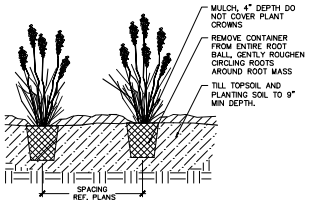
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checked by: JM
approved by: JM
QA/QC by:
project no.: 022-04834
drawing no.:
date: 5/16/23

SHEET
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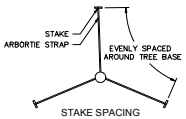
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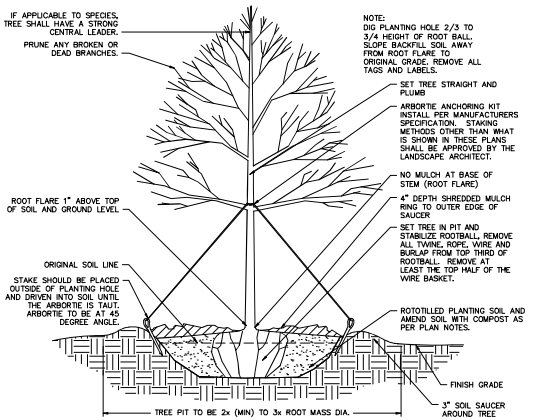
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NOT TO SCALE



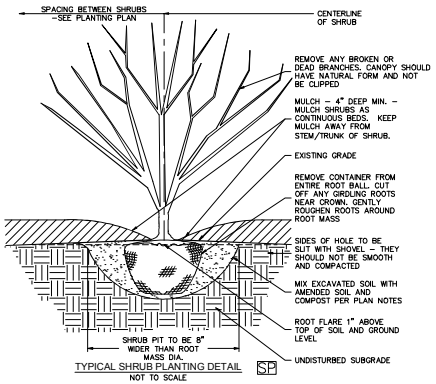
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STAKE SPACING



B&B DECIDUOUS AND EVERGREEN TREE PLANTING WITH ARBORTIE STAKES TS
NOT TO SCALE



TYPICAL SHRUB PLANTING DETAIL SP
NOT TO SCALE

SCHEMATIC SITE PLANS FOR CONCEPT BUDGETING ONLY NOT FOR CONSTRUCTION

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REVISIONS

REV NO	DATE	REVISIONS DESCRIPTION

LANDSCAPE DETAILS
VANTRUST COMMERCE CENTER
COUNCIL BLUFFS, IA
2023

drawn by:	ZM
checked by:	JB
approved by:	JM
QA/QC by:	
project no.:	022-04834
drawing no.:	
date:	5/16/23

SHEET
L1.2

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