

**CITY OF WEST DES MOINES
STAFF REPORT COMMUNICATION**

Meeting Date: June 14, 2021

ITEM: Microsoft DSM 40, 11100 Booneville Road – Approve a Full Site Plan to allow construction of a data center building – Microsoft Corporation – SP-005041-2021

Resolution: Approval of Full Site Plan

Background: Ryan Hardisty with Civil Design Advantage, on behalf of the applicant and property owner, Microsoft Corporation, requests approval of the full site plan for the approximately 188-acre property generally located at the southeast corner of S. 115th Street and Booneville Road. The applicant proposes to construct an approximately 250,000 square foot data center building and associated site improvements. On June 7, 2021, the City Council approved a preliminary plat to create 2 lots on the property, one for the data center buildings and the second for a MidAmerican Energy substation. Also, at the June 7th meeting, the City Council approved a phased site plan to allow footing and foundations and private utility construction to begin for the data center building.

Staff Review & Comment:

- **Financial Impact:** As a part of a development agreement approved by City Council on April 19, 2021 for this site, the City will undertake the following proposed public use improvements:
 - Reconstruction of Booneville Road from S. 100th Street to S. 115th Street;
 - Construction of S. Grand Prairie Parkway from Mills Civic Parkway to Raccoon River Drive; and
 - Extension of Grand Avenue from its current terminus just west of S. 88th Street to just west of Johnson Creek to provide for a south access to the Microsoft site while Booneville Road is under reconstruction.

Although it is undetermined at this time, the City may also extend Grand Avenue to S. 115th Street and S. 115th Street south of Booneville Road to connect to this extension of Grand Avenue. The proposed street improvements will include the installation of the associated utilities, streetlights and sidewalks.

- **Key Development Aspects:**
 - **Plat of Survey Condition of Approval:** The plat of survey approved by the City Council on November 2, 2020 for the transfer of ownership of this property to the applicant had a condition of approval that no development may occur on the site until the property is platted through the City's subdivision process. At the May 17, 2021 City Council meeting, the City Council modified this condition of approval to allow phased site plan approval to facilitate construction of footings and foundations and implementation of private utilities prior to completion of the subdivision process. As a means to ensure the subdivision process is completed, full site plan approval and allowance of above ground construction of the building was not to be allowed until the associated final plat for the site had been approved by the City Council. The associated Final plat is anticipated to be presented to the City Council at the June 21st meeting. In the event the Final Plat is not ready for City Council consideration by the 21st meeting, the approval request to the City Council of this full site plan will be delayed accordingly until the Final Plat is ready.
 - **Water Tower Agreement:** West Des Moines Water Works (WDMWW) is negotiating an agreement with Microsoft related to the construction of a 2 million gallon elevated tower that will primarily serve the South Pressure Zone including the new data center called Ginger East/DSM 14 (at IA-5 and Veterans Parkway). The tower will also provide support to Ginger West (the subject site) in the event of an emergency such as a fire or large water

main break. WDMWW, the City of West Des Moines, and the Des Moines Water Works (DMWW) have entered into a Memorandum of Understanding (MOU) that agrees that the elevated tower will be constructed as a condition, among other items, for DMWW to provide the necessary water to serve BOTH data centers hence the importance of making sure this contract is in place. DMWW and WDMWW have already executed the MOU and anticipate the City signing at the next city council meeting. WDMWW believes the recommended conditional approval requiring full execution prior to any occupancy being issued for the first building and/or the issuance of water meters provides adequate protection to ensure the agreement is executed while allowing Microsoft to move forward with the first data center building construction.

- **Traffic Impact Study Findings:** The site is expected to generate significantly less traffic than previously estimated in full-build traffic modeling for the area. Since the anticipated trip generation is less than previously analyzed, there is no additional loading on the planned roadway network.
- **Developer Responsibilities:** Unless otherwise provided in a development agreement with the City, the developer will be responsible for construction and/or installation of all required public and private infrastructure improvements necessary to support development. The following items are known improvements; additional improvements may be required in response to development proposals:
 - **Dedication of Right of Way:** Unless provided separately via an acquisition plat, as a part of the final plat for the property, the developer will dedicate right of way for Booneville Road, Grand Avenue and S. 115th Street.
 - **Future Traffic Signals:** Pro-rata share of cost of future traffic signals, when warranted, at S. 115th Street/V Place and Booneville Road and S. 115th Street/V Place and Grand Avenue.
- **Vesting of Entitlement:** Per City Code, entitlement (approval to construct or implement) shall remain in effect so long as substantial site work has progressed beyond grading and completion of structural foundations and twenty-five percent (25%) of the total building area has occurred above grade within twenty-four (24) months of the effective date of the approval, unless a greater time period is authorized at time of the original entitlement, or by approval of an extension of the original entitlement. It is the responsibility of the developer to be aware of this deadline and request an extension of the approval prior to the expiration date.

Outstanding Issues: There are no outstanding issues.

Plan and Zoning Commission Action:

Date:

Vote:

Recommendation:

Recommendation: Approve the Site Plan request, subject to the applicant meeting all City Code requirements, and the following conditions of approval:

1. Full site plan approval and allowance of above ground construction of the data center building shall not be allowed until the associated final plat for the site has been approved by the City Council.
2. The applicant acknowledging and agreeing that no occupancy permits, including temporary occupancy, as well as no water meters will be provided for the site until such time that West Des Moines Water Works determines the Water Tower Agreement with West Des Moines Water Works has been successfully executed.

Lead Staff Member: Brian Portz

Approval Meeting Dates:

Plan and Zoning Commission	June 14, 2021
City Council	

Staff Report Reviews:

Plan & Zoning Commission	<input checked="" type="checkbox"/> Development Coordinator (or) <input checked="" type="checkbox"/> Director	<input checked="" type="checkbox"/> Legal Department
City Council	<input type="checkbox"/> Director <input type="checkbox"/> Appropriations/Finance	<input type="checkbox"/> Legal Department <input type="checkbox"/> Agenda Acceptance

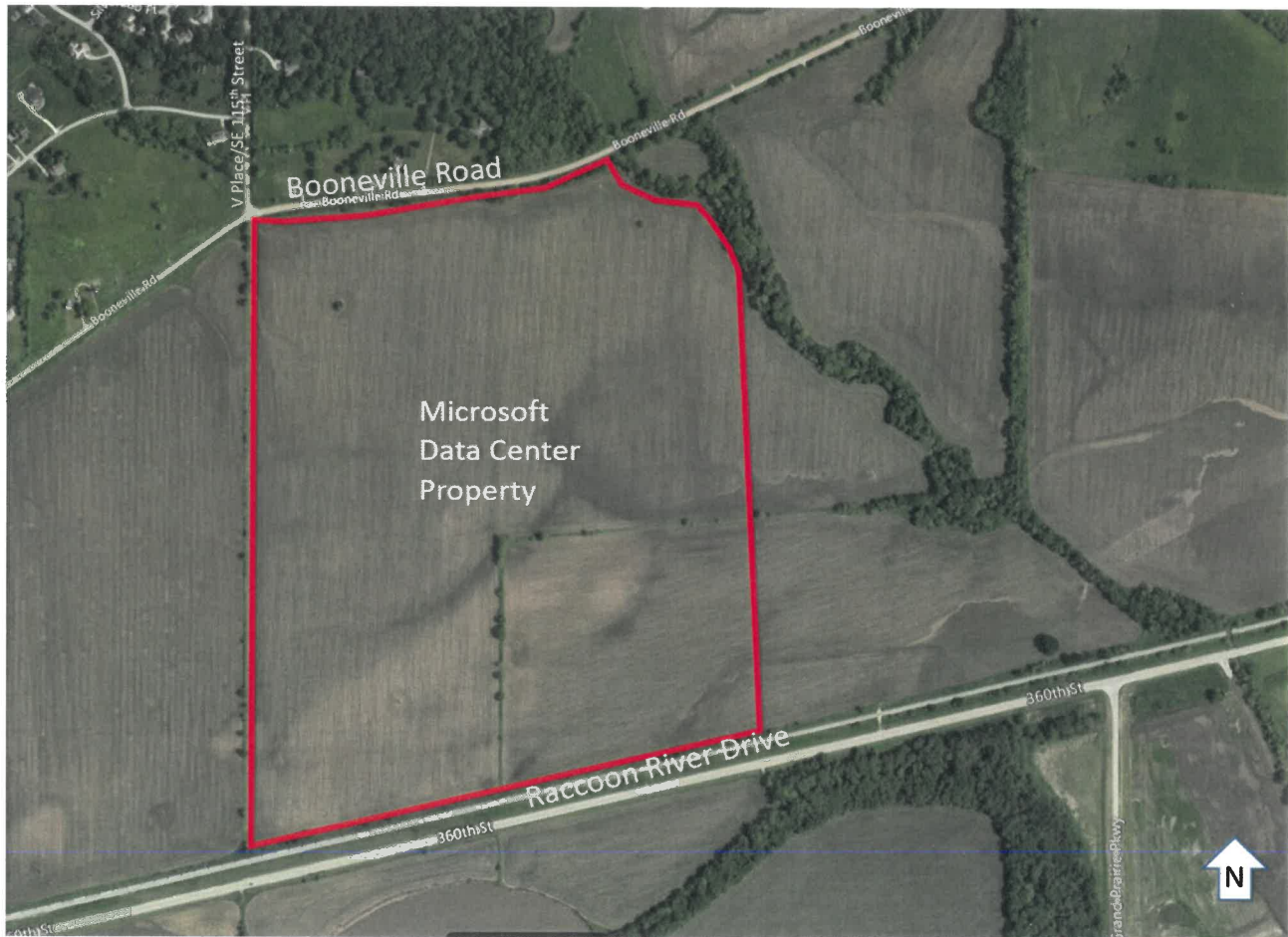
Publications (if applicable)

Published In:	Des Moines Register Community Section
Date(s) Published	n/a
Date(s) of Mailed Notices	n/a

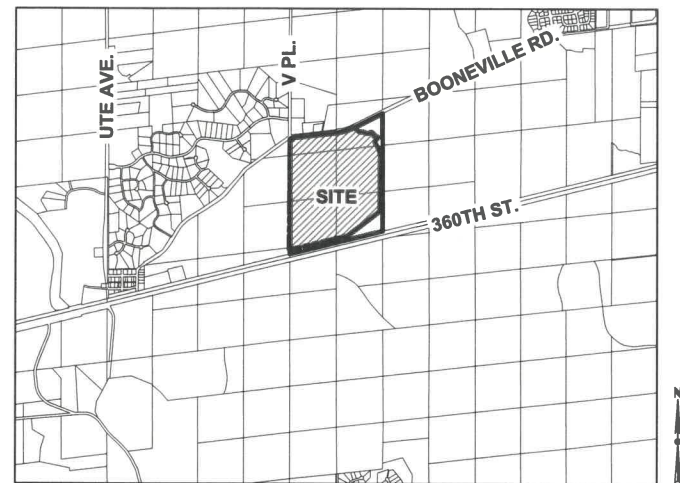
Council Subcommittee Review (if applicable)

Subcommittee	Development & Planning
Date Reviewed	3/15/21
Recommendation	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Split

Location Map



VICINITY MAP
NOT TO SCALE



DSM40 DATA CENTER SITE PLAN

CITY OF WEST DES MOINES CASE NO. SP-005041-2021

Plans included are for illustrative purposes only.
Approve plans on file with the City.



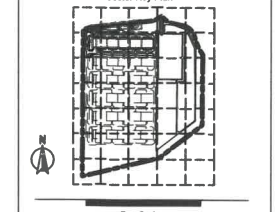
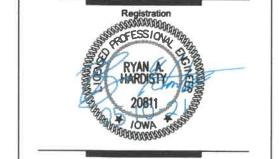
DSM 40
DATA CENTER
11100 BOONEVILLE ROAD
WEST DES MOINES, IA

Design: NM / TC
Draw: NM / TC
Checked: RSR
Date: 28 MAR 2021
B&M Project No.: 12028
M.S. Project No.: P-1759

DESIGNER: MICROSOFT
Design Manager: GREG DENNEY
Civil Site Survey: LINDSEY RYAN
Architectural & Structural: TODOR NIKOLOV
Mechanical, Plumbing & Fire Protection: TERRY TOUHY
Building Automation Systems: BARRY TROTT
Electrical Technical Lead: AC COULTY
Electrical Power Management System (EPMS) Technical Lead: GREG DENNEY
Telecommunications / Network Technical Lead: BARRY CHAMBERLAIN
Security Design Manager: FRED HARRIS

DESIGN TEAM
Civil Engineering Lead: RYAN HARDISTY / NAVIX ENGINEERING
Structural Engineering Lead: BRYAN JEMAL / B&M
Architectural Lead: NEAL CLEMENTS / B&M
Mechanical Engineering Lead: KYLE GRICE / B&M
Plumbing Engineering Lead: EDDIE ORNDORF / B&M
Fire Protection Engineering Lead: ADAM GREGORY / B&M
B&M Engineering Lead: HAROLD MCMAINS / B&M
Electrical Engineering Lead: CARSON LINES / B&M
Telecommunications / Network Engineering Lead: CHRIS STEWELL / B&M
Security Systems Engineering Lead: DANIEL PUTNAM / ROSSBAR

Revisions
1. 18 MAR 2021 20% ISSUED FOR REVIEW
2. 15 MAR 2021 ISSUED FOR PERMIT
3. 05 APR 2021 CITY OF WEST DES MOINES SUBMIT #2
4. 22 APR 2021 CITY OF WEST DES MOINES SUBMIT #3
5. 16 MAY 2021 CITY OF WEST DES MOINES SUBMIT #4



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Package: CORE & SHELL
Sheet Title/Number: DSM40-C-A-01

CIVIL COVER SHEET
DSM40-C-A-01

CONSULTANTS

CIVIL:
NAVIX ENGINEERING, INC.
11235 SE 6TH STREET, SUITE 150
BELLEVUE, WA 98004
PH: (425) 453-9501
CONTACT: SPENCER HUMPHREY

GEOTECHNICAL:
TERRACON
600 SW 7TH STREET, SUITE M
DES MOINES, IA 50309
PH: (515) 244-3184
CONTACT: TED BECHTUM

OWNER/APPLICANT

MICROSOFT CORPORATION
ONE MICROSOFT WAY
REDMOND, WA 98052

GOVERNING AGENCIES

REVIEW AGENCY:
CITY OF WEST DES MOINES
4200 MILLS CIVIC PARKWAY, SUITE 2D
WEST DES MOINES, IA 50265
PH: (515) 222-3620
CONTACT: LYNNE TWEDT

FIRE DISTRICT:
CITY OF WEST DES MOINES
3421 ASHWORTH ROAD
WEST DES MOINES, IA 50265
PH: (515) 222-3420
CONTACT: MIKE WHITSELL

UTILITIES

WATER:
WEST DES MOINES WATER WORKS
1505 RAILROAD AVENUE
WEST DES MOINES, IA 50265
PH: (515) 222-3510
CONTACT: WILLIAM MABUCE, P.E.

SANITARY SEWER:
CITY OF WEST DES MOINES
560 SOUTH 16TH STREET
WEST DES MOINES, IA 50265
PH: (515) 222-3480
CONTACT: CLINT CARPENTER

BENCHMARKS

WDM_BM_084:
CITY OF WDM STANDARD BENCHMARK LOCATED ALONG 9100 BLOCK OF RACCOON RIVER DRIVE, INTERSECTION OF RACCOON RIVER DRIVE AND WINDSOR COURT, 3 FEET NORTH OF SOUTH FENCE, 25 FEET WEST OF FENCE CORNER, STA 1124 ± STAMPED IN PCC PAVEMENT ON THE SOUTH SIDE.
ELEVATION = 841.07 (DATUM: NAVD 88, FEET)

WDM_BM_130:
CITY OF WDM STANDARD BENCHMARK LOCATED AT SOUTHWEST CORNER OF BOONEVILLE ROAD AND "Y" PLACE, 3 FEET NORTH OF SOUTH RIGHT OF WAY FENCE ON BOONEVILLE ROAD AND IN LINE WITH EAST EDGE OF "Y" PLACE. WEST SIDE OF FIELD ENTRANCE.
ELEVATION = 873.86 (DATUM: NAVD 88, FEET)

LEGAL DESCRIPTION

THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 28, TOWNSHIP 78 NORTH, RANGE 26 WEST OF THE 5TH P.M., WEST DES MOINES, DALLAS COUNTY, IOWA, EXCEPT THE RIGHT OF WAY OF CHICAGO, ROCK ISLAND AND PACIFIC RAIL ROAD COMPANY AND SUBJECT TO ROADS AND HIGHWAY EASEMENTS, SUBJECT TO EASEMENTS, COVENANTS, CONDITIONS AND RESTRICTIONS OF RECORD.

AND

PARCEL 20-83 OF THAT CERTAIN PLAT OF SURVEY DATED OCTOBER 23, 2020, RECORDED NOVEMBER 5, 2020 IN BOOK 2020 AT PAGE 31138 OF THE RECORDS OF THE RECORDER FOR DALLAS COUNTY, IOWA DESCRIBED AS FOLLOWS:

THAT PART OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 78 NORTH, RANGE 28 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN THE CITY OF WEST DES MOINES, DALLAS COUNTY, IOWA LYING SOUTH OF LOT 1, JOHNSON CREEK ADDITION TO DALLAS COUNTY, IOWA, AN OFFICIAL PLAT, AND LYING NORTH OF THE CENTERLINE OF BOONEVILLE ROAD;

AND

THAT PART OF THE SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 78 NORTH, RANGE 26 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN THE CITY OF WEST DES MOINES, DALLAS COUNTY, IOWA LYING SOUTH OF THE CENTERLINE OF BOONEVILLE ROAD AND WEST OF THE CENTERLINE OF JOHNSON CREEK AS SHOWN ON THE BOUNDARY SURVEY RECORDED IN BOOK 2010, PAGE 6060;

AND

THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 28, TOWNSHIP 78 NORTH, RANGE 26 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN THE CITY OF WEST DES MOINES, DALLAS COUNTY, IOWA;

AND

THAT PART OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 28, TOWNSHIP 78 NORTH, RANGE 26 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN THE CITY OF WEST DES MOINES, DALLAS COUNTY, IOWA LYING WEST OF THE CENTERLINE OF JOHNSON CREEK AS SHOWN ON THE BOUNDARY SURVEY RECORDED IN BOOK 2010, PAGE 6060;

AND

THAT PART OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER AND NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 28, TOWNSHIP 78 NORTH, RANGE 26 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN THE CITY OF WEST DES MOINES, DALLAS COUNTY, IOWA LYING NORTH OF THE CHICAGO, ROCK ISLAND AND PACIFIC RAILROAD RIGHT OF WAY.
PROPERTY CONTAINS 188.14 ACRES (8,195,193 SQUARE FEET).

PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.

NOTES

- SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED THE PROJECT SPECIFICATIONS AND THE CURRENT CITY OF WEST DES MOINES STANDARD SPECIFICATIONS FOR SUBDIVISIONS AND ADDENDUMS.
- THE DESIGN SHOWN IS BASED UPON THE ENGINEER'S UNDERSTANDING OF THE EXISTING CONDITIONS. THIS PLAN DOES NOT REPRESENT A DETAILED FIELD SURVEY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING FIELD CONDITIONS PRIOR TO BIDDING THE PROPOSED SITEWORK IMPROVEMENTS. IF CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITEWORK WHICH WOULD BE AFFECTED. IF CONTRACTOR DOES NOT ACCEPT EXISTING SURVEY, INCLUDING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL MAKE, AT HIS/HER OWN EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
- CAUTION - NOTICE TO CONTRACTOR**
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
- ALL CONSTRUCTION WITHIN PUBLIC ROW/EASEMENTS, AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS SHALL COMPLY WITH THE WEST DES MOINES STANDARD CONSTRUCTION SPECIFICATIONS FOR SUBDIVISIONS, DSM METRO DESIGN STANDARDS, AND WDM ADDENDUMS.
- AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC ROW/EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, THE CONTRACTOR SHALL CONTACT THE WDM ENGINEERING SERVICES 515-222-3475 TO SCHEDULE ANY REQUIRED INSPECTIONS. IT IS IMPORTANT TO NOTE CITY APPROVAL OF THIS PLAN IS SUBJECT TO THE APPLICANT OBTAINING ALL NECESSARY EASEMENTS/AGREEMENTS AND APPLICABLE PERMITS.

SITE DATA

EXISTING COMPREHENSIVE PLAN	OFFICE/BUSINESS PARK
PROPOSED COMPREHENSIVE PLAN	LIGHT INDUSTRIAL
EXISTING ZONING	UNZONED
PROPOSED ZONING	LIGHT INDUSTRIAL
SURROUNDING LAND USES:	
NORTH: EXISTING LAND USE	AGRICULTURE
EXISTING ZONING	UNZONED
COMPREHENSIVE PLAN DESIGNATION	OFFICE/BUSINESS PARK
EAST: EXISTING LAND USE	AGRICULTURE
EXISTING ZONING	UNZONED
COMPREHENSIVE PLAN DESIGNATION	BUSINESS PARK
SOUTH: EXISTING LAND USE	AGRICULTURE
EXISTING ZONING	UNZONED
COMPREHENSIVE PLAN DESIGNATION	MED. DENSITY RESIDENTIAL/OPEN SPACE
WEST: EXISTING LAND USE	AGRICULTURE
EXISTING ZONING	UNZONED
COMPREHENSIVE PLAN DESIGNATION	SINGLE FAMILY RESIDENTIAL

PARKING SUMMARY

TOTAL ADMIN AREA	= 9,896 SF
PARKING REQUIRED	= 50 SPACES (1 SPACE/200 SF)

DSM40:	
TOTAL REQUIRED	= 50 SPACES
TOTAL PROVIDED	= 54 SPACES

UTILITY WARNING

THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY AND RECORDS OBTAINED BY THIS SURVEYOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL THE UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION SHOWN.

SITE AREA DATA

LOT 1:			
EXISTING:	IMPERVIOUS	0.00 ACRES (0 SF)	(0.00%)
	PERVIOUS	153.08 ACRES (6,667,355 SF)	(100.00%)
PROPOSED:	IMPERVIOUS	36.21 ACRES (1,577,369 SF)	(23.66%)
	PERVIOUS	116.85 ACRES (5,089,986 SF)	(76.34%)
TOTAL LAND AREA		153.08 ACRES (6,667,355 SF)	
OPEN SPACE AREA: REQUIRED		30.61 ACRES (1,333,471 SF)	(20.00%)
PROVIDED		116.85 ACRES (5,089,986 SF)	(76.34%)

SHEET INDEX

DSM40-C-A-01	CIVIL COVER SHEET	DSM40-C-02-01	CIVIL SITE FINISHED GRADING PLAN OVERALL
DSM40-C-02-01	CIVIL SITE FINISHED GRADING PLAN	DSM40-C-02-A01	CIVIL SITE FINISHED GRADING PLAN
DSM40-C-02-A02	CIVIL SITE FINISHED GRADING PLAN	DSM40-C-02-A03	CIVIL SITE FINISHED GRADING PLAN
DSM40-C-02-A04	CIVIL SITE FINISHED GRADING PLAN	DSM40-C-02-A05	CIVIL SITE FINISHED GRADING PLAN
DSM40-C-02-B01	CIVIL SITE FINISHED GRADING PLAN	DSM40-C-02-B02	CIVIL SITE FINISHED GRADING PLAN
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DSM40-C-02-C03	CIVIL SITE FINISHED GRADING PLAN	DSM40-C-02-C04	CIVIL SITE FINISHED GRADING PLAN
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DSM40-C-02-D03	CIVIL SITE FINISHED GRADING PLAN	DSM40-C-02-D04	CIVIL SITE FINISHED GRADING PLAN
DSM40-C-02-D05	CIVIL SITE FINISHED GRADING PLAN	DSM40-C-02-E01	CIVIL SITE FINISHED GRADING PLAN
DSM40-C-02-E03	CIVIL SITE FINISHED GRADING PLAN	DSM40-C-02-E04	CIVIL SITE FINISHED GRADING PLAN
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DSM40-C-02-F02	CIVIL SITE FINISHED GRADING PLAN	DSM40-C-02-F04	CIVIL SITE FINISHED GRADING PLAN
DSM40-C-03-A04	CIVIL SITE FINAL PERIMETER BERM GRADING PLAN	DSM40-C-03-A05	CIVIL SITE FINAL PERIMETER BERM GRADING PLAN
DSM40-C-03-B04	CIVIL SITE FINAL PERIMETER BERM GRADING PLAN	DSM40-C-03-B05	CIVIL SITE FINAL PERIMETER BERM GRADING PLAN
DSM40-C-03-D05	CIVIL SITE FINAL PERIMETER BERM GRADING PLAN	DSM40-C-03-E05	CIVIL SITE FINAL PERIMETER BERM GRADING PLAN
DSM40-C-E1-01	CIVIL WATER PLAN OVERALL	DSM40-C-E1-A03	CIVIL WATER PLAN
DSM40-C-E1-B01	CIVIL WATER PLAN	DSM40-C-E1-B02	CIVIL WATER PLAN
DSM40-C-E1-B03	CIVIL WATER PLAN	DSM40-C-E1-C01	CIVIL WATER PLAN
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DSM40-C-E1-F01	CIVIL WATER PLAN	DSM40-C-E1-G01	CIVIL WATER PLAN
DSM40-C-E2-01	CIVIL CLEAR WATER DISCHARGE AND SANITARY SEWER PLAN OVERALL	DSM40-C-E2-A04	CIVIL CLEAR WATER DISCHARGE AND SANITARY SEWER PLAN
DSM40-C-E2-B01	CIVIL CLEAR WATER DISCHARGE AND SANITARY SEWER PLAN	DSM40-C-E2-B02	CIVIL CLEAR WATER DISCHARGE AND SANITARY SEWER PLAN
DSM40-C-E2-B03	CIVIL CLEAR WATER DISCHARGE AND SANITARY SEWER PLAN	DSM40-C-E2-B04	CIVIL CLEAR WATER DISCHARGE AND SANITARY SEWER PLAN
DSM40-C-E2-B05	CIVIL CLEAR WATER DISCHARGE AND SANITARY SEWER PLAN	DSM40-C-E2-C04	CIVIL CLEAR WATER DISCHARGE AND SANITARY SEWER PLAN
DSM40-C-E2-D04	CIVIL CLEAR WATER DISCHARGE AND SANITARY SEWER PLAN	DSM40-C-E3-01	CIVIL WATER PROFILES
DSM40-C-E3-02	CIVIL WATER PROFILES	DSM40-C-E3-03	CIVIL WATER PROFILES
DSM40-C-E3-04	CIVIL WATER PROFILES	DSM40-C-E3-05	CIVIL WATER PROFILES
DSM40-C-E3-06	CIVIL WATER PROFILES	DSM40-C-E3-07	CIVIL WATER PROFILES
DSM40-C-E3-08	CIVIL WATER PROFILES	DSM40-C-E3-09	CIVIL WATER PROFILES
DSM40-C-F-01	CIVIL SITE DETAILS	DSM40-C-F-02	CIVIL SITE DETAILS
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DSM40-C-F-11	CIVIL WATER DETAILS	DSM40-C-F-12	CIVIL WATER DETAILS
DSM40-C-F-13	CIVIL WATER DETAILS	DSM40-C-F-14	CIVIL WATER DETAILS
DSM40-L-A1-01	LANDSCAPE PLAN OVERALL	DSM40-L-A1-02	LANDSCAPE PLAN
DSM40-L-A1-03	LANDSCAPE PLAN	DSM40-L-A1-04	LANDSCAPE PLAN

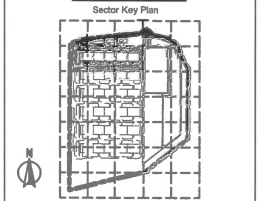
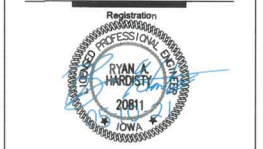


1-800-292-8989
www.iowaonecall.com

Design	MM/TC
Drawn	MM/TC
Checked	SMK
Date	25 MAR 2021
Sheet Project No.	12355A
M.S. Project No.	p 1000

MICROSOFT	
Design Manager	GREG DEENEY
Layout Manager	
Client	Microsoft
Site	11100 Booneville Road, West Des Moines, IA
Project	DSM 40 Data Center
Phase	Site Base Conditions Map
Scale	As Shown
North Arrow	North
Sheet Title	DSM40-C-B-01
Sheet Number	1 of 1
Revision	
Date	
Description	
By	
Checked	
Approved	

DESIGN TEAM	
Chief Engineer	RYAN HARKNEY / NAVIX ENGINEERING
Structural Engineering Lead	BRYAN JEMAL / BMGD
Architectural Lead	NEAL CLEMENTS / BMGD
Mechanical Engineering Lead	KYLE GRICE / BMGD
Plumbing Engineering Lead	SCOTT ORDONEZ / BMGD
Fire Protection Engineering Lead	KEVIN DISOROFF / BMGD
SAE Engineering Lead	BARROD MCMAINS / BMGD
Electrical Engineering Lead	CARSON LARSEN / BMGD
Telecommunications / Network Engineering Lead	CHAD STANWELL / BMGD
Security Systems Engineering Lead	DANIEL PUTNAM / ROSSBAR

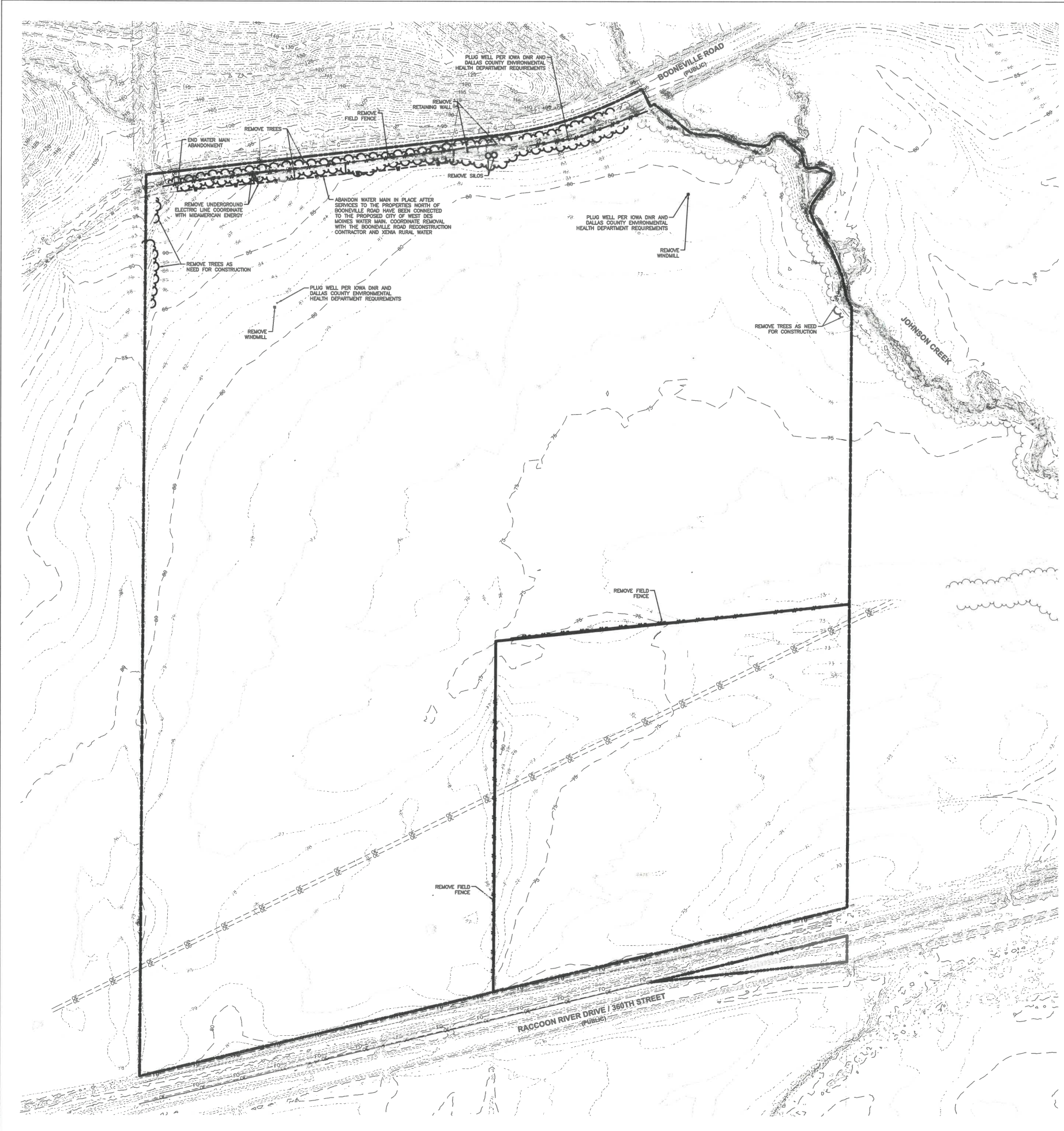


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Package
CORE & SHELL
Sheet Title/Number

**CIVIL
SITE BASE
CONDITIONS MAP**

DSM40-C-B-01



DEMOLITION NOTES

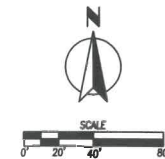
- PRIOR TO ANY WORK AT THE SITE, CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER OR ENGINEER AND CONSULT WITH OWNER'S PERSONNEL AND UTILITY COMPANY REPRESENTATIVES. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
- PRIOR TO DEMOLITION, CONTRACTOR SHALL NOTIFY IN WRITING (48 HRS NOTICE) THE FOLLOWING:
 - CITY
 - APPROPRIATE UTILITY COMPANIES
 - OWNER
 - CIVIL DESIGN ADVANTAGE
 - ARCHITECT
- DO NOT DISTURB EXISTING UTILITIES UNLESS OTHERWISE NOTED. COORDINATE REMOVAL OR ABANDONMENT OF ALL UTILITIES WITH THE APPROPRIATE UTILITY SUPPLIER AND REGULATORY AGENCIES.
- PROTECT EXISTING UTILITIES THAT ARE TO REMAIN. THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLAN MAY BE PRESENT.
- BACKFILL ALL EXCAVATIONS WITH COHESIVE MATERIAL COMPACTED TO 95% MAXIMUM STANDARD PROCTOR DENSITY AND MOISTURE RANGE OF OPTIMUM MOISTURE TO 4% ABOVE OPTIMUM MOISTURE. TESTING OF BACKFILL TO BE BY A GEOTECHNICAL ENGINEER EMPLOYED BY THE OWNER. IN THE EVENT OF A TEST FAILURE, ANY RETESTING SHALL BE PAID FOR BY THE CONTRACTOR.
- FIELD VERIFY EXISTING GRADES AND LOCATION OF EXISTING UTILITIES, CONDUIT, LINES, POLES, TREES, PAVING, BUILDING AND OTHER SITE FEATURES PRIOR TO DEMOLITION AND IMMEDIATELY INFORM THE ENGINEER AND/OR OWNER OF ANY DISCREPANCIES.
- DEMOLITION NOTES AS SHOWN ON THE PLAN ARE NOT ALL INCLUSIVE. CONTRACTOR TO ABANDON IN PLACE OR REMOVE AND DISPOSE OF ALL EXISTING SITE IMPROVEMENTS ABOVE AND BELOW GROUND TO COMPLY WITH THE GENERAL INTENT OF THIS DOCUMENT.
- ALL CONSTRUCTION/DEMOLITION DEBRIS SHALL BE DISPOSED OFFSITE IN FULL COMPLIANCE WITH CURRENT ENVIRONMENTAL REGULATIONS.
- CONSTRUCTION LIMITS SHALL BE CONFINED TO THE SITE BOUNDARY AS NOTED. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- ALL WORK SHALL BE IN ACCORDANCE WITH OSHA STANDARDS. NOTHING INDICATED ON THE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
- ALL ABANDONED WELLS SHALL BE PLUGGED AS REQUIRED BY RULE 567-39.8 OF THE IOWA ADMINISTRATIVE CODE. CONTRACTOR SHALL FOLLOW THE PROCEDURES IN THE IOWA ADMINISTRATIVE CODE ENVIRONMENTAL (567), CHAPTER 39 REQUIREMENTS FOR PROPERLY PLUGGING ABANDONED WELLS. CONTRACTOR SHALL SUBMIT ABANDONED WATER WELL PLUGGING RECORD TO LOCAL COUNTY AGENT OR IOWA DEPARTMENT OF NATURAL RESOURCES.

LEGEND

FEATURES	
GROUND SURFACE CONTOUR	---
SANITARY MANHOLE	⊙
WATER VALVE BOX	⊕
FIRE HYDRANT	⊕
WATER CURB STOP	⊕
WELL	⊕
STORM SEWER MANHOLE	⊙
STORM SEWER SINGLE INTAKE	⊕
STORM SEWER DOUBLE INTAKE	⊕
FLARED END SECTION	⊕
DECIDUOUS TREE	⊙
CONIFEROUS TREE	⊙
DECIDUOUS SHRUB	⊙
CONIFEROUS SHRUB	⊙
ELECTRIC POWER POLE	⊕
GUY ANCHOR	⊕
STREET LIGHT	⊕
POWER POLE W/ TRANSFORMER	⊕
ELECTRIC BOX	⊕
ELECTRIC TRANSFORMER	⊕
ELECTRIC MANHOLE OR VAULT	⊕
TRAFFIC SIGN	⊕
TELEPHONE JUNCTION BOX	⊕
TELEPHONE MANHOLE/VAULT	⊕
TELEPHONE POLE	⊕
GAS VALVE BOX	⊕
CABLE TV JUNCTION BOX	⊕
CABLE TV MANHOLE/VAULT	⊕
MAIL BOX	⊕
BENCHMARK	⊕
SOL BORING	⊕
UNDERGROUND TV CABLE	---TV---
GAS MAIN	---G---
FIBER OPTIC	---FO---
UNDERGROUND TELEPHONE	---T---
OVERHEAD ELECTRIC	---OE---
UNDERGROUND ELECTRIC	---E---
FIELD TILE	---TLE---
SANITARY SEWER W/ SIZE	---8"---
STORM SEWER W/ SIZE	---15"ST---
WATER MAIN W/ SIZE	---6"W---

NOTES:

- NO STANDPIPES ARE BEING SHOWN ON THE TEMPORARY SEDIMENT BASINS. WATER RELEASES FROM THE PONDS FROM THE SURFACE. THE LENGTH AND DEPTHS OF THE PONDS AND THE DISTANCE FROM INLET TO OUTLET STRUCTURES WILL ALLOW SEDIMENT TO SETTLE TO THE BOTTOM PRIOR TO LEAVING THE PONDS.
- PROPERLY TREAT WATER TO REMOVE SUSPENDED SEDIMENT BEFORE IT RE-ENTERS A WATERBODY OR DISCHARGES OFF-SITE.
- WATER TAKEN FROM ANY DEWATERING ACTIVITIES SHALL BE DISCHARGED INTO A TEMPORARY SEDIMENT BASIN OR SHALL RUN THROUGH A DEWATERING SILT SACK PRIOR TO LEAVING THE SITE. MEASURES ARE ALSO TO BE TAKEN TO PREVENT SCOUR EROSION AT DEWATERING DISCHARGE POINT. DISTURBED AREAS SHALL BE TEMPORARILY SEEDING OR MULCHED PRIOR TO THE SITE SHUTTING DOWN FOR WINTER CONDITIONS.
- STORM SEWERS AND DRAINAGE WAYS SHALL BE PROTECTED FROM CONCRETE SLURRY PRODUCED BY SANDBLASTING AND CONCRETE GRINDING.
- PREPARATION OF SEED BED SHALL FOLLOW SECTION 3 OF PART 9-SURFACE RESTORATION OF THE CITY OF WEST DES MOINES STANDARD CONSTRUCTION SPECIFICATIONS MANUAL.
- PERVIOUS SURFACE RESTORATION SHALL FOLLOW SECTIONS 1-7 OF PART 9-SURFACE RESTORATION OF THE CITY OF WEST DES MOINES STANDARD CONSTRUCTION SPECIFICATIONS MANUAL.



LEGEND

- DRAINAGE ARROW
- GRADING LIMITS
- FILTER SOCK
- SILT FENCE
- INLET PROTECTION
- PORTABLE RESTROOM
- CONCRETE WASHOUT PIT
- PERMANENT SEEDING
- TEMPORARY SEEDING
- UNDISTURBED AREA
- RIP-RAP
- TURF REINFORCEMENT MATTING (TRM)
- GRAVEL ENTRANCE
- STAGING AREA
- TEMPORARY SEDIMENT BASIN

SEE SHEET C-B1-02 FOR CONTINUATION

STABILIZATION QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	SILT FENCE	LF	16,236
2	FILTER SOCK	LF	144
3	SEEDING, FERTILIZING, AND MULCHING	AC	42.97
4	INLET PROTECTION DEVICES	EA	48
5	CONCRETE WASHOUT PIT	EA	1

DISCHARGE POINT SUMMARY

DISCHARGE POINT #	DISCHARGE POINT	84.2 ACRES
1	DIRECTLY TO JOHNSON CREEK	
TOTAL AREA DISTURBED TO DISCHARGE POINT		84.2 ACRES
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT)		303,120 CU FT
VOLUME IN SILT FENCE (19231 LF @ 4.5 CU FT/LF OF FENCE)		86,540 CU FT
VOLUME PROVIDED IN FILTER SOCK (144 LF @ 2.0 CU FT/LF OF SOCK)		288 CU FT
TOTAL VOLUME PROVIDED		1,739,082 CU FT
TOTAL VOLUME REQUIRED		1,825,895 CU FT

LEGAL DESCRIPTION:

THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 28, TOWNSHIP 78 NORTH, RANGE 26 WEST OF THE 5TH P.M., WEST DES MOINES, DALLAS COUNTY, IOWA, EXCEPT THE RIGHT OF WAY OF CHICAGO, ROCK ISLAND AND PACIFIC RAILROAD COMPANY AND SUBJECT TO ROADS AND HIGHWAY EASEMENTS, SUBJECT TO EASEMENTS, COVENANTS, CONDITIONS AND RESTRICTIONS OF RECORD.

AND

PARCEL 20-83 OF THAT CERTAIN PLAT OF SURVEY DATED OCTOBER 23, 2020, RECORDED NOVEMBER 5, 2020 IN BOOK 2020 AT PAGE 31138 OF THE RECORDS OF THE RECORDER FOR DALLAS COUNTY, IOWA DESCRIBED AS FOLLOWS:

THAT PART OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 78 NORTH, RANGE 26 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN THE CITY OF WEST DES MOINES, DALLAS COUNTY, IOWA LYING SOUTH OF LOT 1, JOHNSON CREEK ADDITION TO DALLAS COUNTY, IOWA, AN OFFICIAL PLAT, AND LYING NORTH OF THE CENTERLINE OF BOONEVILLE ROAD;

AND

THAT PART OF THE SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 78 NORTH, RANGE 26 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN THE CITY OF WEST DES MOINES, DALLAS COUNTY, IOWA LYING SOUTH OF THE CENTERLINE OF JOHNSON CREEK AS SHOWN ON THE BOUNDARY SURVEY RECORDED IN BOOK 2010, PAGE 6060;

AND

THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 28, TOWNSHIP 78 NORTH, RANGE 26 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN THE CITY OF WEST DES MOINES, DALLAS COUNTY, IOWA;

AND

THAT PART OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 28, TOWNSHIP 78 NORTH, RANGE 26 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN THE CITY OF WEST DES MOINES, DALLAS COUNTY, IOWA LYING WEST OF THE CENTERLINE OF JOHNSON CREEK AS SHOWN ON THE BOUNDARY SURVEY RECORDED IN BOOK 2010, PAGE 6060;

AND

THAT PART OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 28, TOWNSHIP 78 NORTH, RANGE 26 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN THE CITY OF WEST DES MOINES, DALLAS COUNTY, IOWA LYING NORTH OF THE CHICAGO, ROCK ISLAND AND PACIFIC RAILROAD RIGHT OF WAY.

PROPERTY CONTAINS 188.14 ACRES (8,195,193 SQUARE FEET).
PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.

EA
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Grimes, IA 50111

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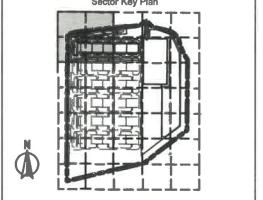
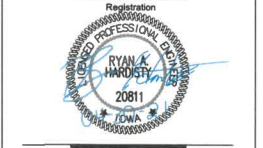
Microsoft
DSM 40
DATA CENTER

11100 BOONEVILLE ROAD
WEST DES MOINES, IA

Design	NM/TC
Drawn	NM/TC
Checked	RHM
Date	30 APR 2021
BIMD Project No.	120200
M.S. Project No.	P17200

MICROSOFT	
Design Manager	GREG DEENEY
LAYOUT Manager	
Civil Site Survey, Landmarking, Technical Lead	SCOTT DICKER
Architectural & Structural Technical Lead	TYSON MCKELVY
Mech, Plumbing & Fire Protection Technical Lead	STEVEN TOLPIN
Building Automation Systems (BAS) Technical Lead	PAUL HULSE
Electrical Technical Lead	AC COOTY
Electrical Power Management System Technical Lead	BOB REDDING
Telecommunications / Network Technical Lead	SARA CHASE
Security Design Manager	FRED HARRIS
Civil Engineering Lead	RYAN HARDISTY / NAVIX ENGINEERING
Structural Engineering Lead	BRYAN JEMAL / BIMD
Architectural Lead	NEAL CLEMENTS / BIMD
Mechanical Engineering Lead	JOE GRICE / BIMD
Planning Engineering Lead	SCOTT ORDONEZ / BIMD
Fire Protection Engineering Lead	MIAMI DROGFF / BIMD
BAS Engineering Lead	JARROD MCMAHON / BIMD
Electrical Engineering Lead	CAROL LUSTEAD & JASON PHAM / BIMD
Telecommunications / Network Engineering Lead	CHAD STEWELL / BIMD
Security Systems Engineering Lead	DANIEL PUTNAM / ROSSBAR

Revisions		
No.	Date	Description
0	21 JAN 2021	EARLY GRADING
1	25 JAN 2021	80% ISSUED FOR REVIEW
2	18 FEB 2021	90% ISSUED FOR REVIEW
3	12 MAR 2021	ISSUED FOR PERMIT
4	24 MAR 2021	CITY OF WEST DES MOINES SUBMITTAL #2
5	30 APR 2021	FINAL GRADING PACKAGE - APPROVED PERMIT #2

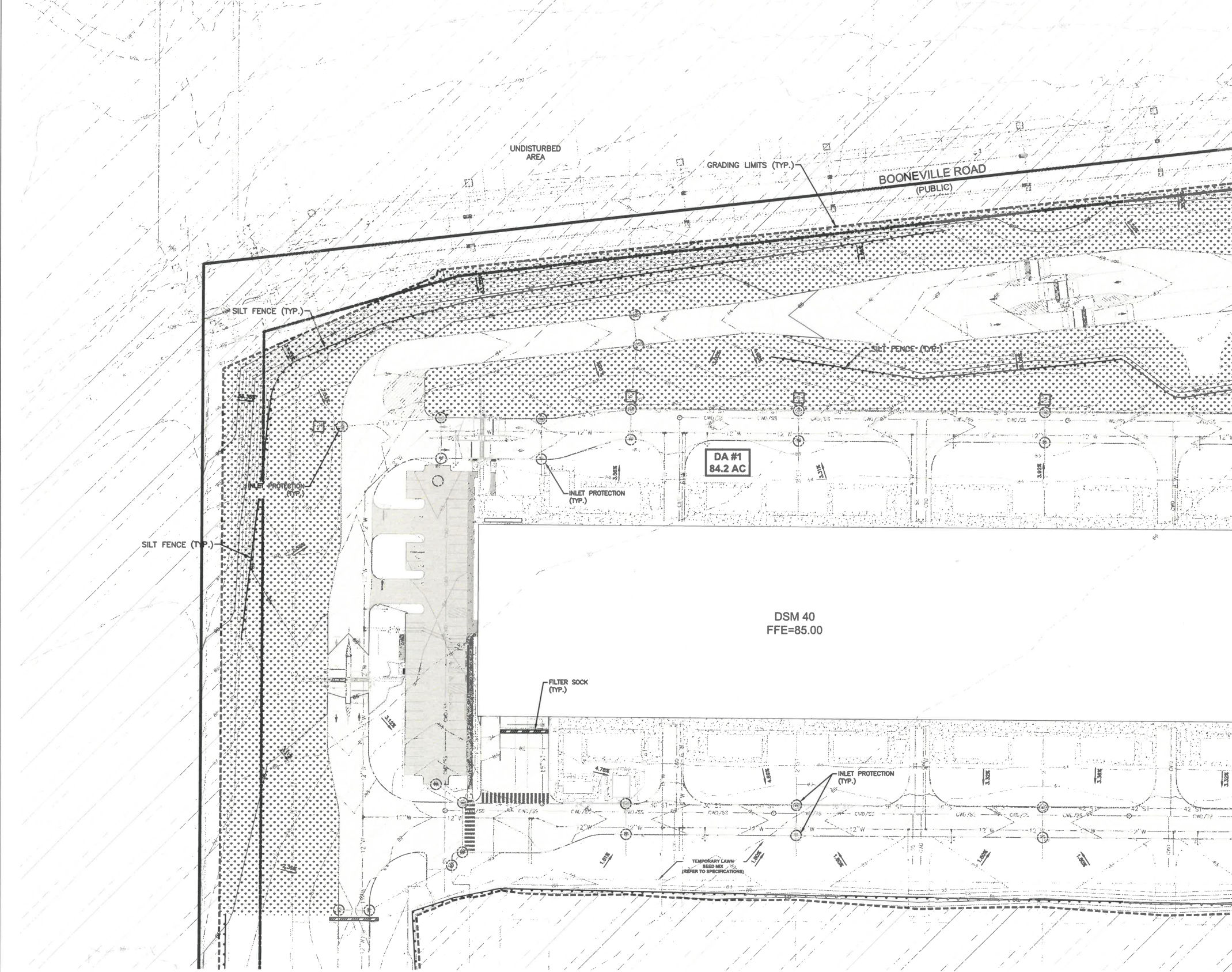


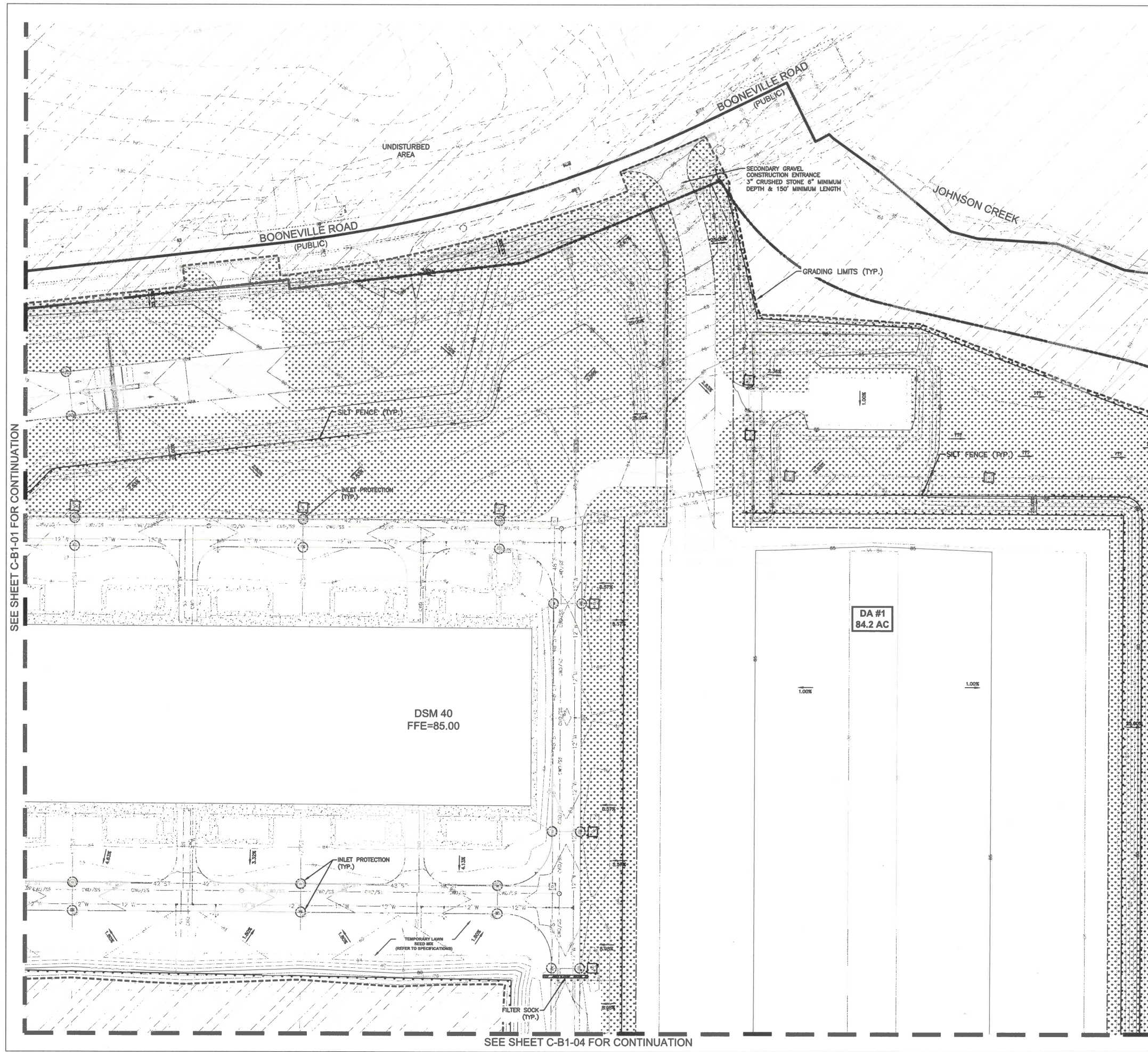
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Package
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Sheet Title/Number

**EROSION AND
SEDIMENT
CONTROL PLAN**

DSM40-C-B1-01





LEGEND

- DRAINAGE ARROW
- GRADING LIMITS
- FILTER SOCK
- SILT FENCE
- INLET PROTECTION
- PORTABLE RESTROOM
- CONCRETE WASHOUT PIT
- PERMANENT SEEDING
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- RIP-RAP
- TURF REINFORCEMENT MATTING (TRM)
- GRAVEL ENTRANCE
- STAGING AREA
- TEMPORARY SEDIMENT BASIN

SEE SHEET C-B1-01 FOR CONTINUATION

SEE SHEET C-B1-03 FOR CONTINUATION

SEE SHEET C-B1-04 FOR CONTINUATION

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11100 BOONEVILLE ROAD
WEST DES MOINES, IA

Design	MM/TC
Drawn	MM/TC
Checked	RAH
Date	30 APR 2021
Block Project No.	20208
M.S. Project No.	1-10208

MICROSOFT

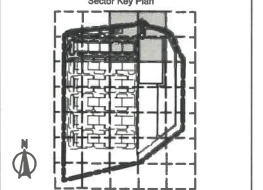
Design Manager	OSIE DEENEY
Layout Manager	
Civil Site Survey, Landmarking Technical Lead	SCOTT WILSON
Architectural & Structural Technical Lead	TYSON WICKLOV
Mech. Plumbing & Fire Protection Technical Lead	STEVEN COLPERS
Building Automation Systems (BAS) Technical Lead	
Electrical Technical Lead	AC COLVIT
Electrical Power Management Systems (EPMS) Technical Lead	ERIC ROE LORENZ
Telecommunications / Network Technical Lead	SARA CHASE
Security Design Manager	FRED HARRIS

DESIGN TEAM

Civil Engineering Lead	RYAN HARDSY / NAVIX ENGINEERING
Structure Engineering Lead	BRYAN JEMAL / BM&D
Mechanical Engineering Lead	NEAL CLEMENTS / BM&D
Electrical Engineering Lead	OTIS GRICE / BM&D
Plumbing Engineering Lead	SCOTT GIRONNEZ / BM&D
Fire Protection Engineering Lead	ADAM DEGROFF / BM&D
BAS Engineering Lead	BRIGGID MCHAMBERS / BM&D
Electrical Engineering Lead	CHRISTOPHER LEAD & JASON PHAM / BM&D
Telecommunications / Network Engineering Lead	CHRIS STEINEL / BM&D
Security Systems Engineering Lead	DANIEL PUTNAM / ROSSBAR

Revisions

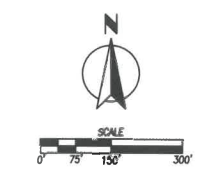
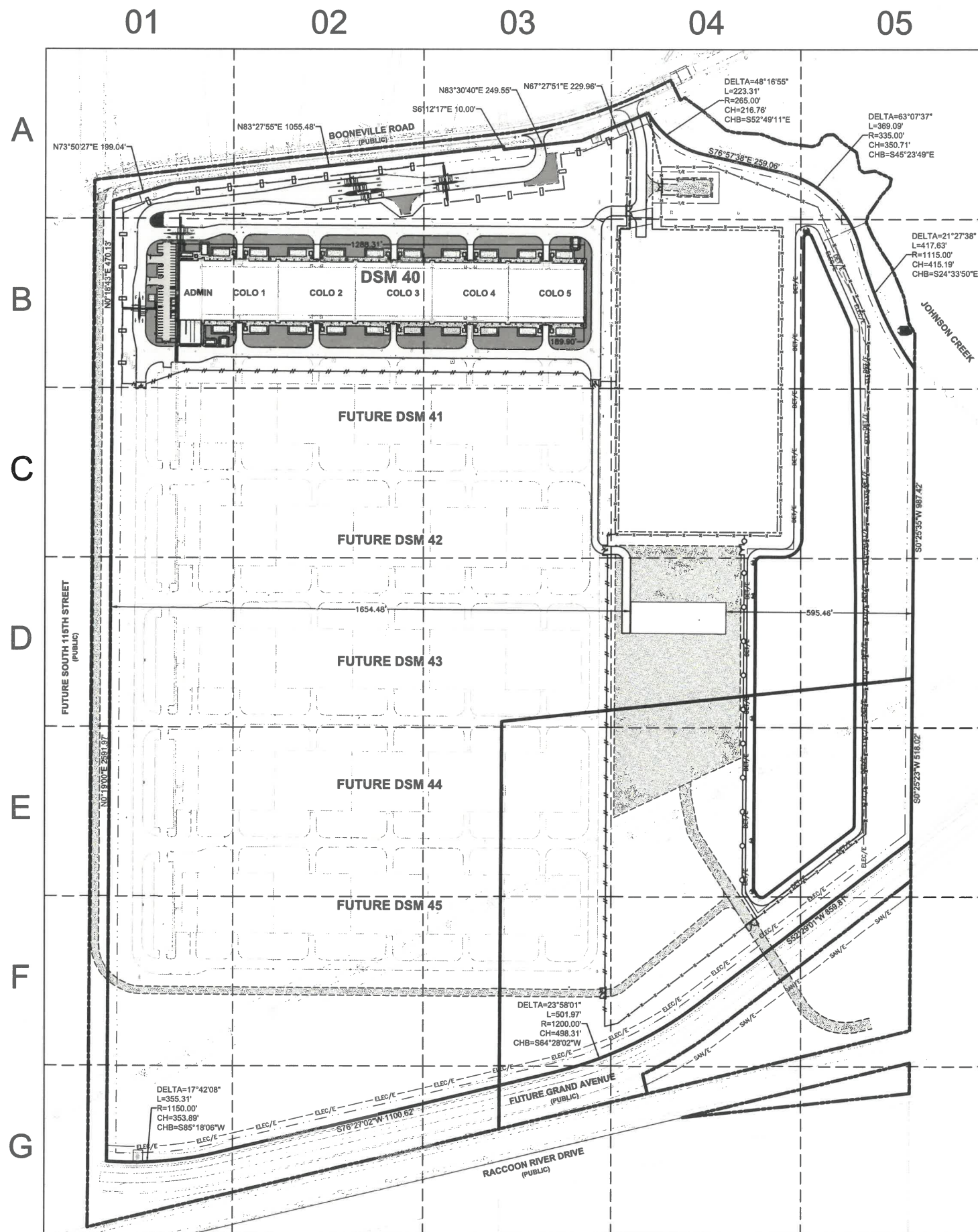
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0	21 JAN 2021	EARLY GRADING
1	24 JAN 2021	20% ISSUED FOR REVIEW
2	18 FEB 2021	30% ISSUED FOR REVIEW
3	18 MAR 2021	ISSUED FOR PERMIT
4	24 MAR 2021	CITY OF WEST DES MOINES SUBMITAL #2
5	30 APR 2021	FINAL GRADING PACKAGE - APPROVED PERMIT



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**EROSION AND
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CONTROL PLAN**
DSM40-C-B1-02



GENERAL NOTES

- ALL WORK SHALL COMPLY WITH ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES.
- ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
- PRIOR TO ANY WORK AT THE SITE, CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER, ENGINEER, AND/OR ARCHITECT, AND CONSULT WITH OWNER'S PERSONNEL AND UTILITY COMPANY REPRESENTATIVES. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
- ONE WEEK PRIOR TO CONSTRUCTION WITHIN CITY R.O.W. OR ANY CONNECTION TO PUBLIC SEWERS CONTRACTOR SHALL NOTIFY THE CITY'S CONSTRUCTION DIVISION.
- ALL CONSTRUCTION WITHIN PUBLIC R.O.W./ EASEMENTS, AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH THE CITY'S STANDARDS.
- ALL DIMENSIONS ARE TO BACK OF CURB, BUILDING FACE OR PROPERTY LINE UNLESS OTHERWISE NOTED.
- CONTRACTOR TO VERIFY BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS. PLACE 3/4 INCH EXPANSION JOINT BETWEEN ALL P.C.C. PAVEMENT/SIDEWALKS AND BUILDING. PLACE 1/2 INCH EXPANSION JOINT BETWEEN SIDEWALKS AND P.C.C. PAVEMENT.
- REMOVE ALL DEBRIS SPILLED INTO R.O.W. AT THE END OF EACH WORK DAY. ALL PROPERTY PINS SHALL BE PROTECTED FROM GRADING OR OTHER OPERATIONS. ANY PINS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.
- DO NOT STORE CONSTRUCTION MATERIALS AND EQUIPMENT IN THE RIGHT OF WAY.
- THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR WILL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OF MATERIALS. STORAGE, PARKING AND SERVICE AREAS WILL BE SUBJECT TO THE APPROVAL OF THE OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY AREAS OF PAVEMENT OR SIDEWALK NOT TO BE REMOVED THAT IS DAMAGED DUE TO OPERATING EQUIPMENT ON THE PAVEMENT OR SIDEWALK.
- THE CONTRACTOR MAY BE REQUIRED TO PLACE TEMPORARY WARNING DEVICES AND SAFETY FENCE AT CERTAIN LOCATIONS WHERE REPLACEMENT FEATURES ARE NOT INSTALLED THE SAME DAY, AS DIRECTED BY THE ENGINEER OR THE CITY.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK BETWEEN SUPPLIERS AND SUBCONTRACTORS INVOLVED IN THE PROJECT, INCLUDING STAGING OF CONSTRUCTION DETAILS.
- CONCRETE REMOVAL FOR DRIVEWAY APPROACHES SHALL BE REMOVED TO THE NEAREST TRANSVERSE JOINT. CONTRACTOR SHALL VERIFY REMOVAL LIMITS WITH CITY'S CONSTRUCTION INSPECTOR PRIOR TO ANY CONCRETE REMOVAL.
- ALL PERMITS AND ADDITIONAL FEES REQUIRED TO COMPLETE THE WORK SHALL BE INCLUDED IN THE CONTRACTOR BID.
- COORDINATE FINAL KNOX BOX LOCATIONS WITH MICROSOFT SECURITY AND CITY OF WEST DES MOINES FIRE DEPARTMENT.
- PERIMETER FENCING ADJACENT TO JOHNSON CREEK SHALL NOT BE INSTALLED UNTIL AFTER THE CITY OF WEST DES MOINES JOHNSON CREEK STREAM BANK IMPROVEMENTS HAVE BEEN PERMITTED AND COMPLETED. FENCING SHOWN ADJACENT TO JOHNSON CREEK IS FOR INSTALLATION POST CITY OF WEST DES MOINES JOHNSON CREEK CONVEYANCE IMPROVEMENT COMPLETION.

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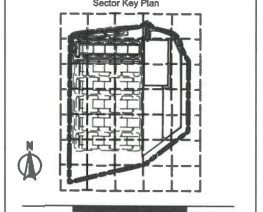
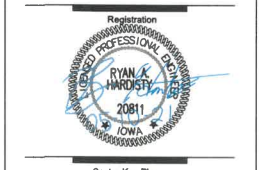
11100 BOONEVILLE ROAD
WEST DES MOINES, IA

Design	MM/TC
Drawn	MM/TC
Checked	MM
Date	21 MAY 2021
Sheet No.	120258
U.S. Project No.	P-17259

MICROSOFT	
Design Manager	GREG DENNEY
Layout Manager	
CAD Site Survey / Landscaping Technical Lead	SCOTT DUNN
Architectural & Electrical Technical Lead	TRACY HANCOCK
Mech. Plumbing & Fire Protection Technical Lead	ETHEL HARRIS
Building Automation Systems (BAS) Technical Lead	PAUL HILDE
Electrical Technical Lead	AC COULTY
Electrical Power Management System (EPMS) Technical Lead	JOSSIE REDDING
Telecommunications / Network Technical Lead	SARA CHASE
Security Design Manager	FRED HARRIS

DESIGN TEAM	
Civil Engineering Lead	RYAN HARDESTY / NAVIX ENGINEERING
Structural Engineering Lead	SHYAM JEMAL / BMCD
Architectural Lead	NEAL CLEMENTS / BMCD
Mechanical Engineering Lead	KYLE GRICE / BMCD
Plumbing Engineering Lead	KEVIN ORDONOFF / BMCD
Fire Protection Engineering Lead	KEVIN ORDONOFF / BMCD
SAS Engineering Lead	JARROLD MCMANUS / BMCD
Electrical Engineering Lead	CARSON LITTLEHEAD & JASON PLYAM / BMCD
Telecommunications / Network Engineering Lead	CHAD STEWELL / BMCD
Security System Engineering Lead	DANIEL PUTNAM / ROSSBAR

No.	Date	Description
0	21 JAN 2021	50% ISSUED FOR REVIEW
1	19 FEB 2021	30% ISSUED FOR REVIEW
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3	22 APR 2021	CITY OF WEST DES MOINES SUBMITTAL #1
4	22 APR 2021	CITY OF WEST DES MOINES SUBMITTAL #2
5	22 MAY 2021	CITY OF WEST DES MOINES SUBMITTAL #4



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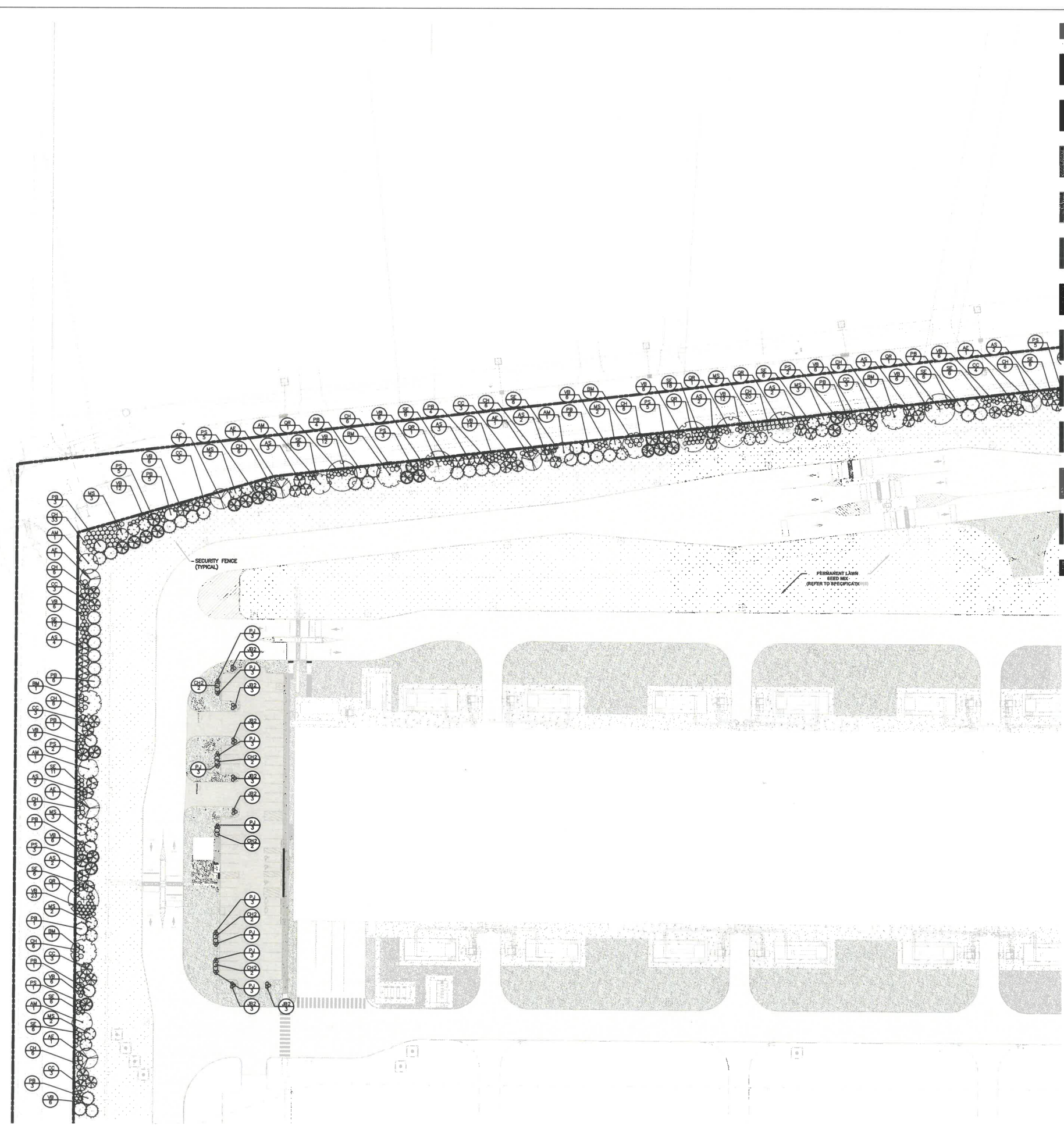
Package
CORE & SHELL

Sheet Title/Number
**CIVIL
SITE
IMPROVEMENTS
PLAN OVERALL
DSM40-C-C1-01**

LANDSCAPE KEY (ALL CALLOUTS ARE TYPICAL)

- Ⓟ BLACK HILLS SPRUCE
 - Ⓠ WHITE PINE
 - Ⓡ SERVICEBERRY
 - Ⓢ EASTERN REDBUD
 - Ⓣ SPRING SNOW CRABAPPLE
 - Ⓤ CRESCENDO MAPLE
 - Ⓥ BLACK MAPLE
 - Ⓦ RED OAK
 - Ⓧ IVORY HALO DOGWOOD
 - Ⓨ ELDERBERRY
 - Ⓩ BLACKHAW VIBURNUM
- FULL PLANT MATERIAL SCHEDULE ON SHEET L-A1-01

SEE SHEET L-A1-03 FOR CONTINUATION



-SECURITY FENCE (TYPICAL)

PERMANENT LAWN SEED MIX. (REFER TO SPECIFICATION)

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11100 BOONEVILLE ROAD
WEST DES MOINES, IA

Design	MM/TC
Drawn	MM/TC
Checked	MM
Date	25 MAR 2021
Block Project No.	102020
M.S. Project No.	P-17209

MICROSOFT

Design Manager	GREG DEENEY
Landscape Manager	
Civil, Site Survey, Landscaping	Technical Lead
Structural & Structural	Technical Lead
Mech, Plumbing & Fire Protection	Technical Lead
Building Automation Systems (BAS)	Technical Lead
Electrical	Technical Lead
Electrical Power Management Systems (EPMS)	Technical Lead
Telecommunications / Network	Technical Lead
Security Design Manager	FRED HARRIS

DESIGN TEAM

Civil Engineering Lead	RYAN HARDISTY / NAVIX ENGINEERING
Structural Engineering Lead	BRYAN JEMAL / BM&D
Architectural Lead	NEAL CLEMENTS / BM&D
Mechanical Engineering Lead	JOE GRICE / BM&D
Plumbing Engineering Lead	EDDIE GIRONDEZ / BM&D
Fire Protection Engineering Lead	ALAN DEGROFF / BM&D
BAS Engineering Lead	JARROD MCMANNIS / BM&D
Electrical Engineering Lead	CAROL LINTREAD & JASON PHAM / BM&D
Telecommunications / Network Engineering Lead	CHAD STREHL / BM&D
Security Systems Engineering Lead	DANIEL PUTNAM / ROSSBAR

Revisions

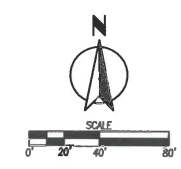
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0	21 JAN 2021	50% ISSUED FOR REVIEW
1	18 FEB 2021	30% ISSUED FOR REVIEW
2	16 MAR 2021	ISSUED FOR PERMIT
3	02 APR 2021	CITY OF WEST DES MOINES SUBMITTAL #1
4	29 APR 2021	CITY OF WEST DES MOINES SUBMITTAL #2
5	16 MAY 2021	CITY OF WEST DES MOINES SUBMITTAL #3



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Package
CORE & SHELL
Sheet Title/Number

**CIVIL
LANDSCAPE PLAN
OVERALL**
DSM40-L-A1-02

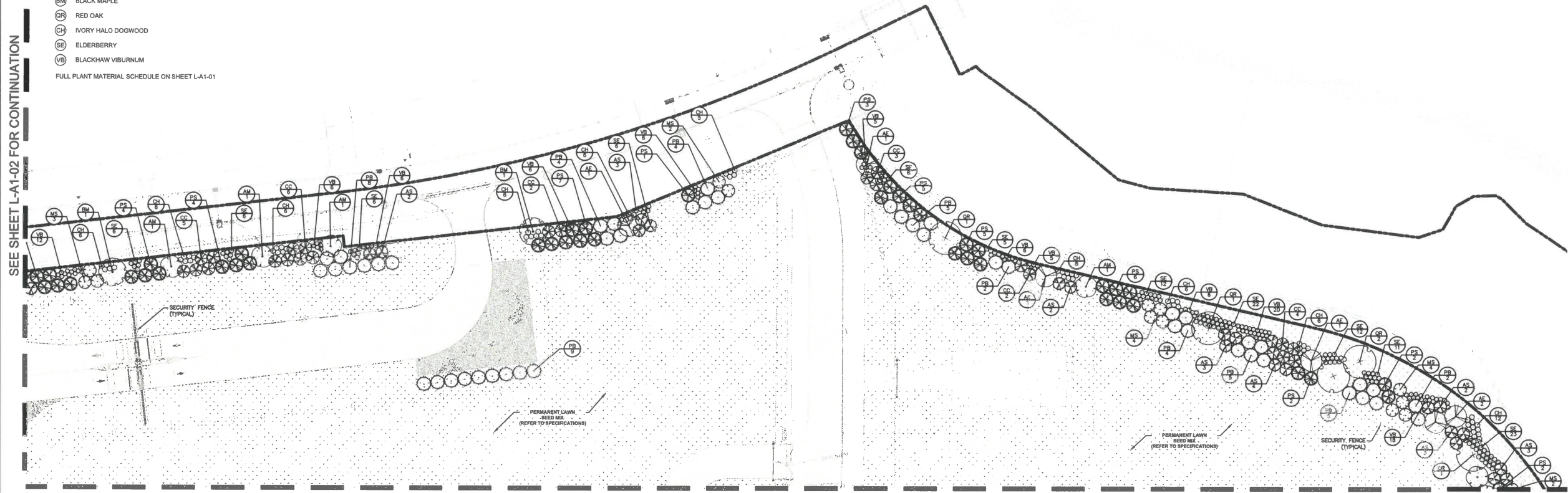


LANDSCAPE KEY (ALL CALLOUTS ARE TYPICAL)

- (PB) BLACK HILLS SPRUCE
- (PW) WHITE PINE
- (AS) SERVICEBERRY
- (CC) EASTERN REDBUD
- (MS) SPRING SNOW CRABAPPLE
- (AE) ENDOWMENT MAPLE
- (AM) CRESCENDO MAPLE
- (BM) BLACK MAPLE
- (RO) RED OAK
- (CH) IVORY HALO DOGWOOD
- (EB) ELDERBERRY
- (VB) BLACKHAW VIBURNUM

FULL PLANT MATERIAL SCHEDULE ON SHEET L-A1-01

SEE SHEET L-A1-02 FOR CONTINUATION



SEE SHEET L-A1-04 FOR CONTINUATION

EA
Civil Design Advantage
3405 SE Crossroads Drive, Suite G
Grimes, IA 50111

**BURNS
MCDONNELL**
9400 Ward Parkway
Kansas City, MO 64114
www.burnsmcd.com

NAVIX
SITE | CIVIL

Microsoft

DSM 40
DATA CENTER

11100 BOONEVILLE ROAD
WEST DES MOINES, IA

Design	MM/TC
Drawn	MM/TC
Checked	RJK
Date	25 MAR 2021
MS&D Project No.	120204
M.S. Project No.	P-17000

MICROSOFT

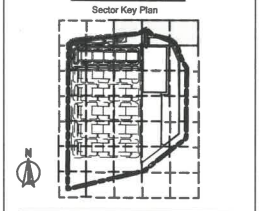
Design Manager	GREG DEENEY
Landscape Manager	
Dir. (w/ Service, Landscaping, Technical Lead)	SONDIP DHAR
Architectural & Structural Technical Lead	TODD MCGLOTHLIN
Mech. Plumbing & Fire Protection Technical Lead	STEVEN TROUPIN
Building Automation Systems (BAS) Technical Lead	PAUL DEISE
Electrical Technical Lead	AC COLUCCI
Electrical Power Management Systems (EPMS) Technical Lead	SEBASTIAN
Telecommunications / Network Technical Lead	BRUCE CHASE
Security Design Manager	FRED HARRIS

DESIGN TEAM

Dir. Engineering Lead	RYAN HARDISTY / NAVIX ENGINEERING
Structural Engineering Lead	BINYAM JEMAL / BM&D
Architectural Lead	NEAL CLEMENTS / BM&D
Mechanical Engineering Lead	KYLE GRICE / BM&D
Plumbing Engineering Lead	SCOTT ORDOFF / BM&D
Fire Protection Engineering Lead	JARROD MCHAMBERS / BM&D
BAS Engineering Lead	CARSON LINTSEAD & JASON PHAM / BM&D
Electrical Engineering Lead	CHAD STUMWELL / BM&D
Telecommunications / Network Engineering Lead	DANIEL PUTNAM / ROSSBAR
Security Systems Engineering Lead	

Revisions

No.	Date	Description
1	21 JUN 2021	90% ISSUED FOR REVIEW
2	10 FEB 2021	100% ISSUED FOR REVIEW
3	10 MAR 2021	ISSUED FOR PERMIT
4	02 APR 2021	CITY OF WEST DES MOINES SUBMITTAL #1
5	23 APR 2021	CITY OF WEST DES MOINES SUBMITTAL #2
6	12 MAR 2021	CITY OF WEST DES MOINES SUBMITTAL #4

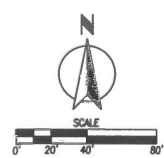


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Package
CORE & SHELL
Sheet Title/Number

**CIVIL
LANDSCAPE PLAN
OVERALL**

DSM40-L-A1-03



SEE SHEET L-A1-03 FOR CONTINUATION

LANDSCAPE KEY (ALL CALLOUTS ARE TYPICAL)

- Ⓟ BLACK HILLS SPRUCE
- Ⓠ WHITE PINE
- Ⓡ SERVICEBERRY
- Ⓒ EASTERN REDBUD
- Ⓜ SPRING SNOW CRABAPPLE
- Ⓜ ENDOWMENT MAPLE
- Ⓜ CRESCENDO MAPLE
- Ⓜ BLACK MAPLE
- Ⓡ RED OAK
- Ⓒ IVORY HALO DOGWOOD
- Ⓜ ELDERBERRY
- Ⓜ BLACKHAW VIBURNUM

FULL PLANT MATERIAL SCHEDULE ON SHEET L-A1-01



Civil Design Advantage
3405 SE Crossroads Drive, Suite G
Gimes, IA 50111



8400 Ward Parkway
Kansas City, MO 64114
www.burnsmo.com



DSM 40
DATA CENTER

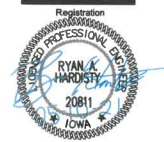
11100 BOONEVILLE ROAD
WEST DES MOINES, IA

Design	NH / TC
Drawn	NH / TC
Checked	RJP
Date	25 MAR 2021
B&M Project No.	12020
M.S. Project No.	P-17229

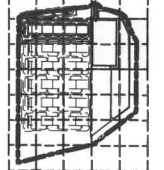
MICROSOFT	
Design Manager	GREG DEENEY
Layout Manager	
CAD File Survey, Landscaping Technical Lead	SCOTT DORR
Architectural & Structural Technical Lead	TYSON WICKLOV
Mech, Plumbing & Fire Protection Technical Lead	STEVEN TRUPE
Building Automation Systems (BAS) Technical Lead	PAUL HELDE
Electrical Technical Lead	
Electrical Power Management System (EPMS) Technical Lead	AC COULT
Telecommunications/Network Technical Lead	KRIS REZOVIC
Security Design Manager	BARA CHASE
Security Design Manager	FRED HARRIS

DESIGN TEAM	
Civil Engineering Lead	RYAN HARDSY / NAVIX ENGINEERING
Structural Engineering Lead	BRYAN JENAL / B&M
Architectural Lead	NEAL CLEMENTS / B&M
Mechanical Engineering Lead	KYLE ORICE / B&M
Plumbing Engineering Lead	SCOTT ORDOZ / B&M
Fire Protection Engineering Lead	KOEN DEGRUFF / B&M
BAS Engineering Lead	BARBOD MCHAMIS / B&M
Electrical Engineering Lead	CAROLAN STEAD & JASON PHAM / B&M
Telecommunications/Network Engineering Lead	CHAD STILWELL / B&M
Security Systems Engineering Lead	DANIEL PUTNAM / ROSSBAR

Revisions	
No.	Description
0	21 JAN 2021 50% ISSUED FOR REVIEW
1	19 FEB 2021 100% ISSUED FOR REVIEW
2	12 MAR 2021 100% FOR PERMIT
3	02 APR 2021 CITY OF WEST DES MOINES SUBMITTAL #1
4	23 APR 2021 CITY OF WEST DES MOINES SUBMITTAL #2
5	12 MAY 2021 CITY OF WEST DES MOINES SUBMITTAL #3



Sector Key Plan

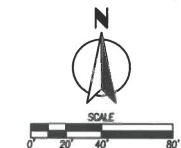


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Package
CORE & SHELL
Sheet Title/Number

CIVIL
LANDSCAPE PLAN
OVERALL

DSM40-L-A1-04



PERMANENT LASH
2" x 3" x 1/2"
(REFER TO SPECIFICATIONS)

**DSM40
DATA CENTER**

Design	
Drawn	Author
Checked	Checker
Date	
B/M/D Project No.	120288
U.S. Project No.	P-17289

MICROSOFT	
Design Manager	GREG DEENEY
Layout Manager	
3D/4D Site Survey / Landscaping Technical Lead	SCOTT W. DIER
Architectural & Structural Technical Lead	TRICOR WICKLOV
Mech, Plumbing & Fire Protection Technical Lead	STEVEN TROUPIN
Building Automation Systems (BAS) Technical Lead	PAUL HULSE
Electrical Technical Lead	AC COOTU
Electrical Power Management Systems (EPMS) Technical Lead	KRIS REDDING
Telecommunications / Network Technical Lead	SARA CHASE
Security Design Manager	FRED HARRIS

DESIGN TEAM	
3D/4D Engineering Lead	RYAN HARDISTY / NAVIX ENGINEERING
Structural Engineering Lead	SAYAM JEMAL / B/M/D
Architectural Lead	NEAL CLEMENTS / B/M/D
Mechanical Engineering Lead	KYLE GRICE / B/M/D
Plumbing Engineering Lead	KYLE GRICE / B/M/D
Fire Protection Engineering Lead	ADAM DEGRIFOFF / B/M/D
BAS Engineering Lead	BARROD MCHAMNS / B/M/D
Electrical Engineering Lead	CARSON LYNSTEAD / B/M/D
Telecommunications / Network Engineering Lead	CHAD STILWELL / B/M/D
Security Systems Engineering Lead	DANIEL PUTNAM / PROSBAR

Revisions		
No.	Date	Description

Registration

Sector Key Plan

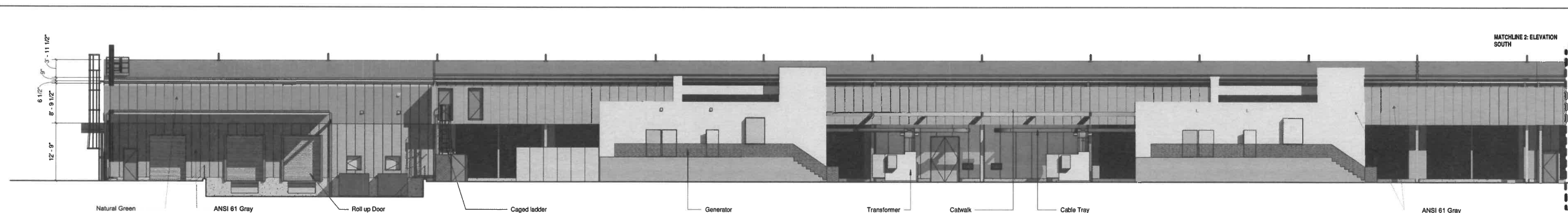
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Package

Sheet Title/Number

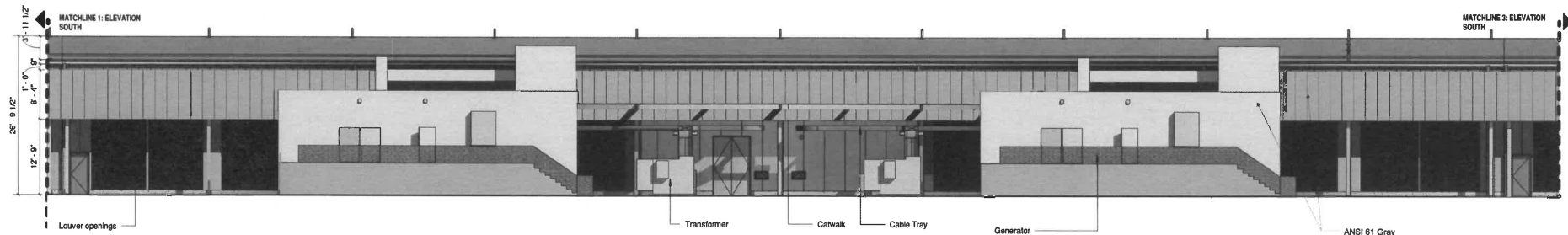
**ARCHITECTURAL
RENDERED
EXTERIOR
ELEVATIONS**

DSM40-2



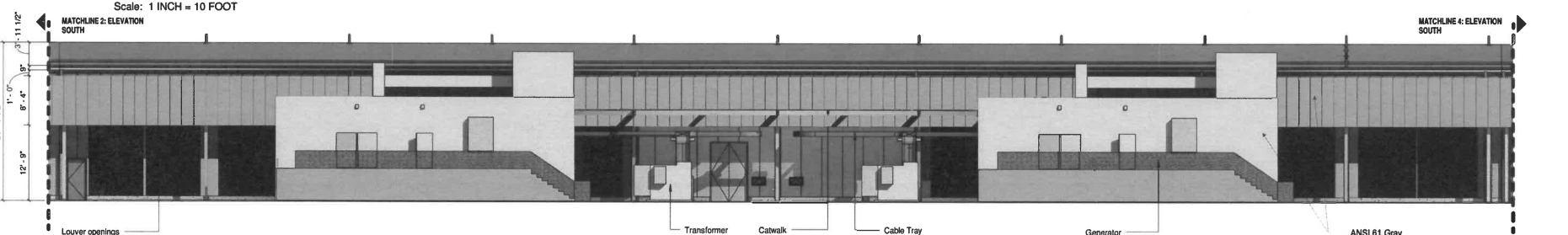
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Scale: 1 INCH = 10 FOOT



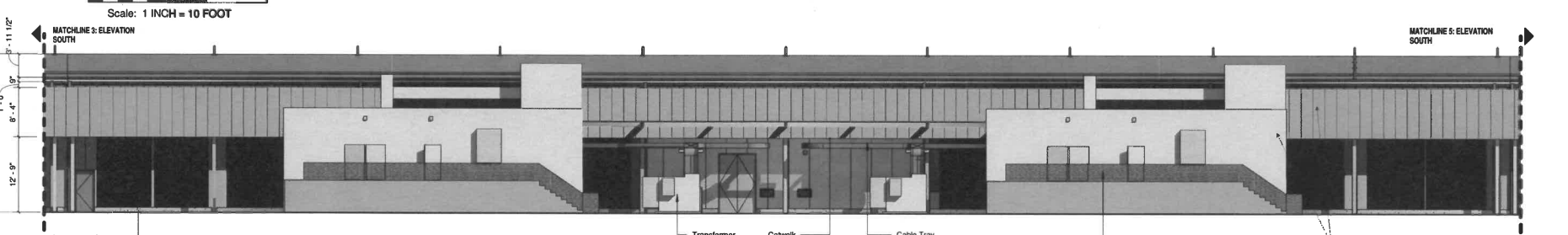
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Scale: 1 INCH = 10 FOOT



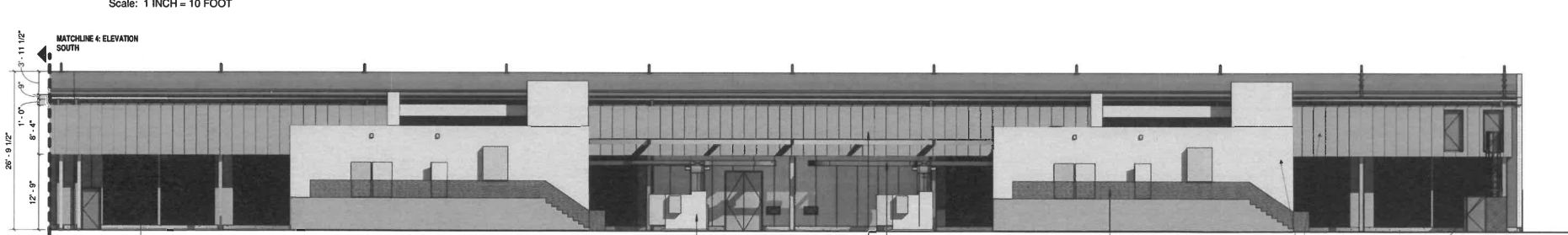
3 ARCHITECTURAL EXTERIOR ELEVATIONS - SOUTH3

Scale: 1 INCH = 10 FOOT



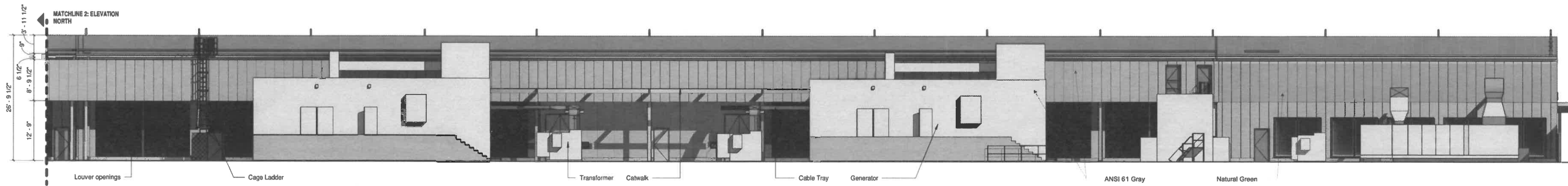
4 ARCHITECTURAL EXTERIOR ELEVATIONS - SOUTH4

Scale: 1 INCH = 10 FOOT

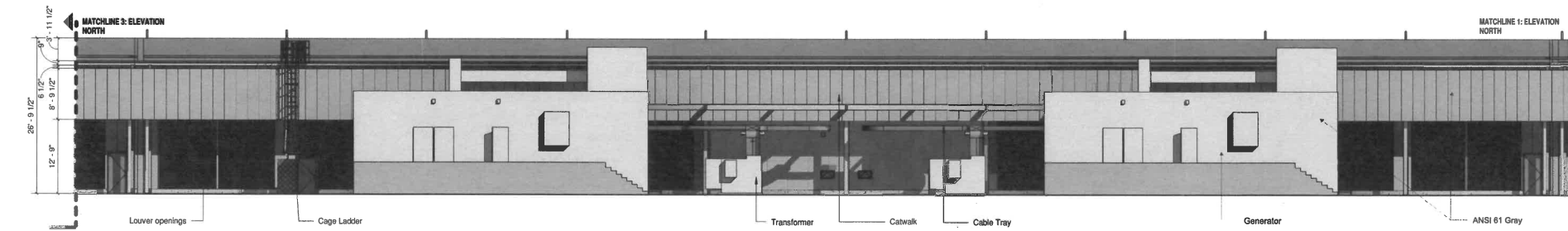


5 ARCHITECTURAL EXTERIOR ELEVATIONS - SOUTH5

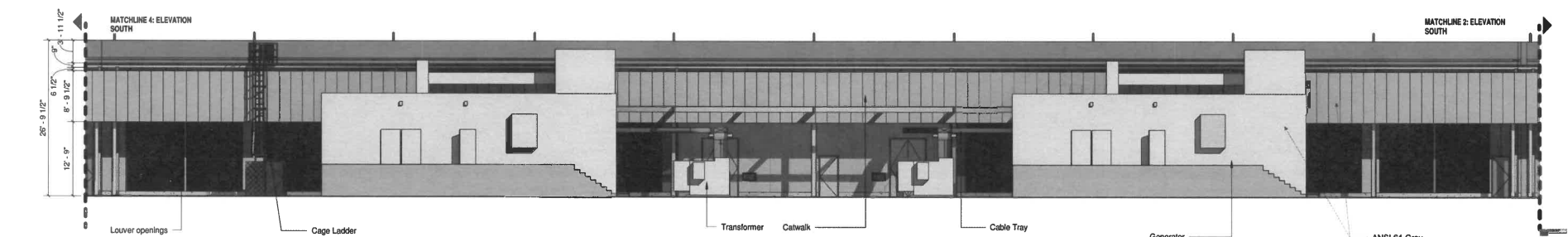
Scale: 1 INCH = 10 FOOT



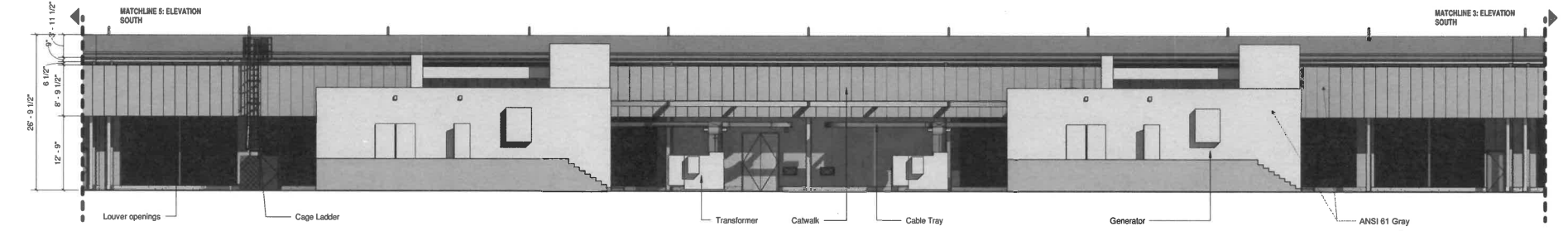
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 Scale: 1 INCH = 10 FOOT



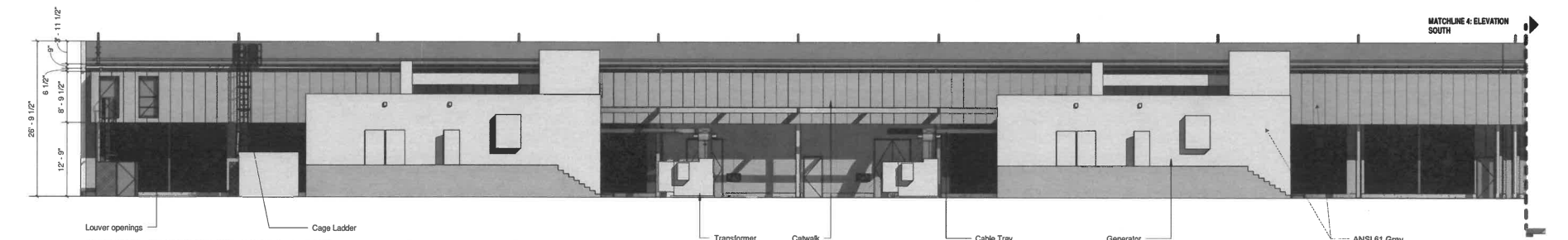
2 ARCHITECTURAL EXTERIOR ELEVATIONS - NORTH2
 Scale: 1 INCH = 10 FOOT



3 ARCHITECTURAL EXTERIOR ELEVATIONS - NORTH3
 Scale: 1 INCH = 10 FOOT



4 ARCHITECTURAL EXTERIOR ELEVATIONS - NORTH4
 Scale: 1 INCH = 10 FOOT



5 ARCHITECTURAL EXTERIOR ELEVATIONS - NORTH5
 Scale: 1 INCH = 10 FOOT

**DSM40
 DATA CENTER**

Design	
Drawn	Auto
Checked	Chickie
Date	
BMD Project No.	12020
M.S. Project No.	P-17229

MICROSOFT	
Design Manager	GREG DEENEY
Layout Manager	
Site Survey / Landscaping Technical Lead	SCHNEIDER SMER
Architectural & Structural Technical Lead	TOOBY NIKOLOV
Mech. Plumbing & Fire Protection Technical Lead	STEVEN TOLPIN
Building Automation Systems (BAS) Technical Lead	PAUL HILDE
Electrical Technical Lead	AG COVATY
Electrical Power Management Systems (EPMS) Technical Lead	KRIS REDDING
Telecommunications Technical Lead	SARA CHASE
Security Design Manager	FRED HARRIS

DESIGN TEAM	
Chief Engineering Lead	RYAN BRODSTY / NAVIX ENGINEERING
Structural Engineering Lead	SEYFAM JEMAL / BMD
Architectural Lead	NEAL CLEMENTS / BMD
Mechanical Engineering Lead	E GRICE / BMD
Plumbing Engineering Lead	RYLE GRICE / BMD
Fire Protection Engineering Lead	ADAM DEGIROFF / BMD
SAS Engineering Lead	JARROLD MCMANUS / BMD
Electrical Engineering Lead	CARSON LINSTEAD / BMD
Telecommunications Technical Lead	CHAD STILLWELL / BMD
Security Systems Engineering Lead	DANIEL PUTNAM / ROSSBAR

Revisions		
No.	Date	Description

Registration

Sector Key Plan

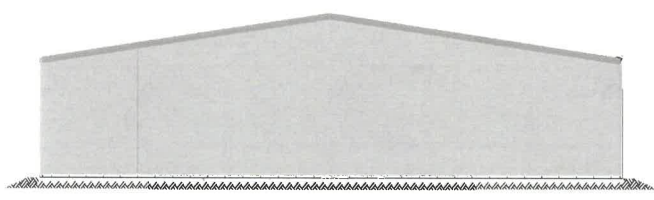
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 Package

Sheet Title/Number
**ARCHITECTURAL
 RENDERED
 EXTERIOR
 ELEVATIONS**

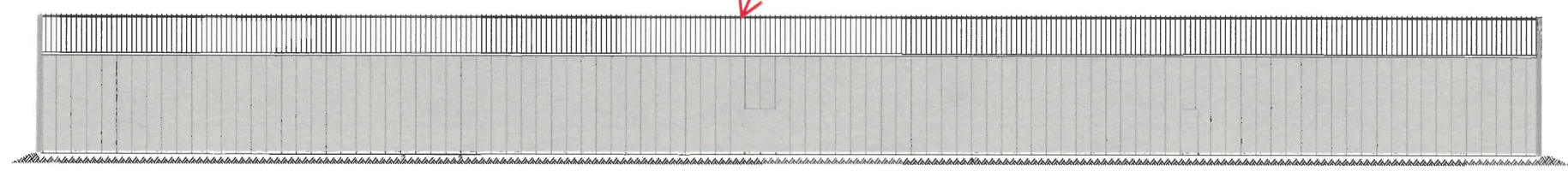
The design and information contained within this drawing are the exclusive sole property of Sure Steel, Inc. and may not for any reason be copied, fabricated, or used for any other purpose without written permission from Sure Steel, Inc.

Engineered By

Rev	Description	Date

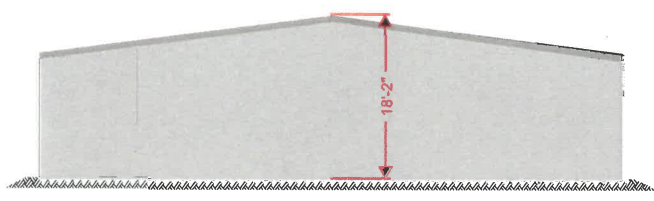


Right Elevation

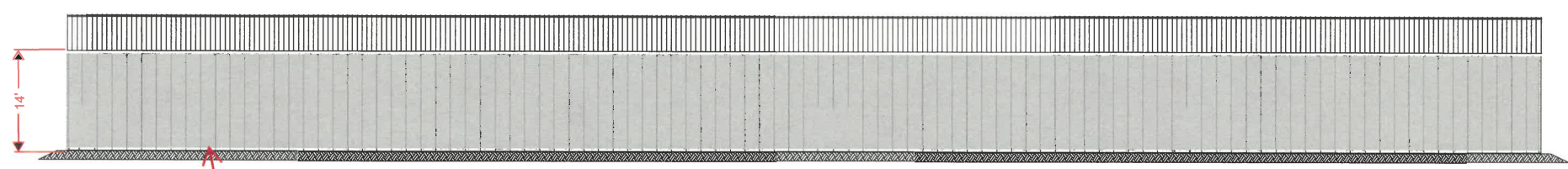


Top Elevation

Roof will selected from a White color for energy and solar reflective index



Left Elevation



Bottom Elevation

Project selected gray color wall panels and trims

SURE STEEL, INC.
 7528 South Cornia Drive - South Weber, UT 84405
 P 801-917-5800 F 801-917-5799 www.SureSteel.com



Project	Title
Job Number	
Dwg. Reference	
Sheet Number	

Date	Checked	Date	Engineer	Date	Scale

**A RESOLUTION OF THE PLAN AND ZONING COMMISSION
NO. PZC-21-51**

WHEREAS, pursuant to the provisions of Title 9, Zoning of the West Des Moines Municipal Code, the applicant and property owner, Microsoft Corporation, requests approval of a Full Site Plan for the approximately 188-acre property located at 11100 Booneville Road for the purpose of constructing a 250,000 square foot data center building; and

WHEREAS, the Site Plan complies with the findings stated in the applicable provisions of Title 9, Chapter 1, the Comprehensive Plan and City Code.

NOW THEREFORE, the Plan and Zoning Commission of the City of West Des Moines recommends the City Council approve the Full Site Plan (SP-005041-2021), subject to compliance with all the conditions of approval as stated in the staff report, including conditions added at the meeting, and attached hereto as Exhibit "A", if applicable.

PASSED AND ADOPTED on June 14, 2021.

Erica Andersen, Chair
Plan and Zoning Commission

I HEREBY CERTIFY that the foregoing resolution was duly adopted by the Plan and Zoning Commission of the City of West Des Moines, Iowa, at a regular meeting on June 14, 2021, by the following vote:

AYES:

NAYS:

ABSTENTIONS:

ABSENT:

ATTEST:

Recording Secretary