

**CITY OF WEST DES MOINES
PLAN AND ZONING COMMISSION COMMUNICATION**

Meeting Date: September 9, 2019

Item: Raccoon River Basin 5 Lift Station, 3105 SW Grand Prairie Parkway – Construction of a sanitary sewer lift station – Raccoon River Land Company, LLC – SP-004421-2019

Requested Action: Recommend Approval of Site Plan

Case Advisor: Brian Portz, AICP *BP*

Applicant's Request: City of West Des Moines Engineering Services, with permission from the property owner, Raccoon River Land Company, LLC, is proposing to locate a sanitary sewer lift station south of the Raccoon River on the west side of the future extension of SW Grand Prairie Parkway. The lift station will include a 3,360 square foot building with a fenced in area and an access road from the street along with landscaping for screening and buffering purposes.

History: The property was brought into the City as a part of the Raccoon River Annexation, which was approved in 2010. The property has never been platted.

City Council Subcommittee: This item was presented to the Development & Planning City Council Subcommittee at their August 5, 2019 meeting, as an informational item only. No discussion was had and no disagreement with the proposal was expressed.

Staff Review and Comment: This request was distributed to other City departments and other agencies for their review and comment. There are no outstanding issues. Staff would summarize the following key points of interest:

- **Plat of Survey:** As a separate item, a Plat of Survey for the acquisition of the property will be reviewed by the City Council on September 16, 2019.
- **Access Road Paving:** Temporarily, the access road to the lift station will be gravel. City Code requires that the access road be paved. City Engineering Services staff has indicated that the road will be paved at the completion of the adjacent trunk sewer project or by December 21, 2021, whichever occurs first. Staff recommends a condition of approval requiring the paving of the access road by the date specified above.

Comprehensive Plan Consistency: The project has been reviewed for consistency with the Comprehensive Plan. Based upon that review, a finding has been made that the proposed project is consistent with the Comprehensive Plan in that the project is consistent with all of the goals and policies of the Comprehensive Plan and the land use map of the Comprehensive Plan.

Findings: This proposed project was distributed to various city departments for review and comment. Based upon that review, the following findings have been made on the proposed project:

1. The proposed development and use is consistent with the West Des Moines Comprehensive Plan in that the project has been reviewed for consistency with the Comprehensive Plan. Based upon that review, a finding has been made that the proposed project is consistent with the Comprehensive Plan in that the project is consistent with all of the goals and policies of the Comprehensive Plan.

2. The proposed development and use does assure compatibility of property uses within the zone and general area in that this project was reviewed by various City Departments for compliance with the Zoning Ordinance.
3. All applicable standards and conditions have been imposed which protects the public health, safety and welfare in that this project was reviewed by various City Departments and public agencies for compliance with the various state and local regulations. Based upon that review a finding is made that the project has been adequately conditioned to protect the health, welfare and safety of the community.
4. There is adequate on-site and off-site public infrastructure to support the proposed development in that this project was reviewed by various public agencies and City Departments and public utilities to ensure that either the petitioner will construct or the project has been conditioned to construct adequate public infrastructure to serve the development.
5. The proposed development and use has met the requirements contained in the City Code in that this project was reviewed by various City Departments and the project has complied with or has been conditioned to comply with all City Code requirements.
6. The proposed development and use is in keeping with the scale and nature of the surrounding neighborhood in that the proposed project is consistent with the zoning designation and Comprehensive Plan which designates this site as suitable for development such as that proposed by this project.

Staff Recommendation and Conditions of Approval: Based upon the preceding review and a finding of consistency with the goals and policies of the Comprehensive Plan, staff recommends the Plan and Zoning Commission adopt a resolution recommending the City Council approve the Raccoon River Basin 5 Lift Station site plan to allow construction of a sanitary sewer lift station with the associated building and fenced area, subject to the applicant meeting all City Code requirements and the following:

1. The applicant paving the access road to the site at the completion of the adjacent trunk sewer project or by December 21, 2021, whichever occurs first.

Property Owner: Raccoon River Land Co., LLC
5000 Westown Parkway, Suite 400
West Des Moines, IA 50266

Applicant: City of West Des Moines
4200 Mills Civic Parkway
West Des Moines, IA 50265
Jason.schlickbernd@wdm.iowa.gov

Applicant's Representatives:
Veenstra & Kimm, Inc.
3000 Westown Parkway
West Des Moines, IA 50266
bveenstra@v-k.net

ATTACHMENTS:

- Attachment A - Plan and Zoning Commission Resolution
- Exhibit A - Conditions of Approval
- Attachment B - Location Map
- Attachment C - Site Plans & Building Elevations

RESOLUTION NO. PZC-19-061

A RESOLUTION OF THE PLAN AND ZONING COMMISSION OF THE CITY OF WEST DES MOINES, IOWA, RECOMMENDING TO THE CITY COUNCIL THAT IT APPROVE THE RACCOON RIVER BASIN 5 LIFT STATION (SP-004421-2019) FOR THAT PROPERTY LOCATED AT 3105 SW GRAND PRAIRIE PARKWAY

WHEREAS, pursuant to the provisions of Title 9, Chapter 1 et seq, of the West Des Moines Municipal Code, the applicant, The City of West Des Moines, in association with the property owner, Raccoon River Land Company, LLC, has requested approval of a the Raccoon River Basin 5 Lift Station to allow the construction of a sanitary sewer lift station for that property located at 3105 SW Grand Prairie Parkway;

WHEREAS, studies and investigations were made, and staff reports and recommendations were submitted which is made a part of this record and herein incorporated by reference;

WHEREAS, on September 9, 2019, this Commission held a duly-noticed meeting to consider the Raccoon River Basin 5 Lift Station Site Plan (SP-004421-2019);

NOW, THEREFORE, THE PLAN AND ZONING COMMISSION OF THE CITY OF WEST DES MOINES DOES RESOLVE AS FOLLOWS:

SECTION 1. The findings, for approval, in the staff report, dated September 9, 2019, or as amended orally at the Plan and Zoning Commission meeting of September 9, 2019, are adopted.

SECTION 2. SITE PLAN PERMIT (SP-004421-2019) to allow construction of a sanitary sewer lift station is recommended to the City Council for approval, subject to compliance with all the conditions in the staff report, dated September 9, 2019, including conditions added at the meeting, and attached hereto as Exhibit "A". Violation of any such conditions shall be grounds for revocation of the permit, as well as any other remedy which is available to the City.

PASSED AND ADOPTED on September 9, 2019.

Erica Andersen, Chair
Plan and Zoning Commission

ATTEST:

Recording Secretary

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 held on September 9, 2019, by the following vote:

AYES:
NAYS:
ABSTENTIONS:
ABSENT:

ATTEST:

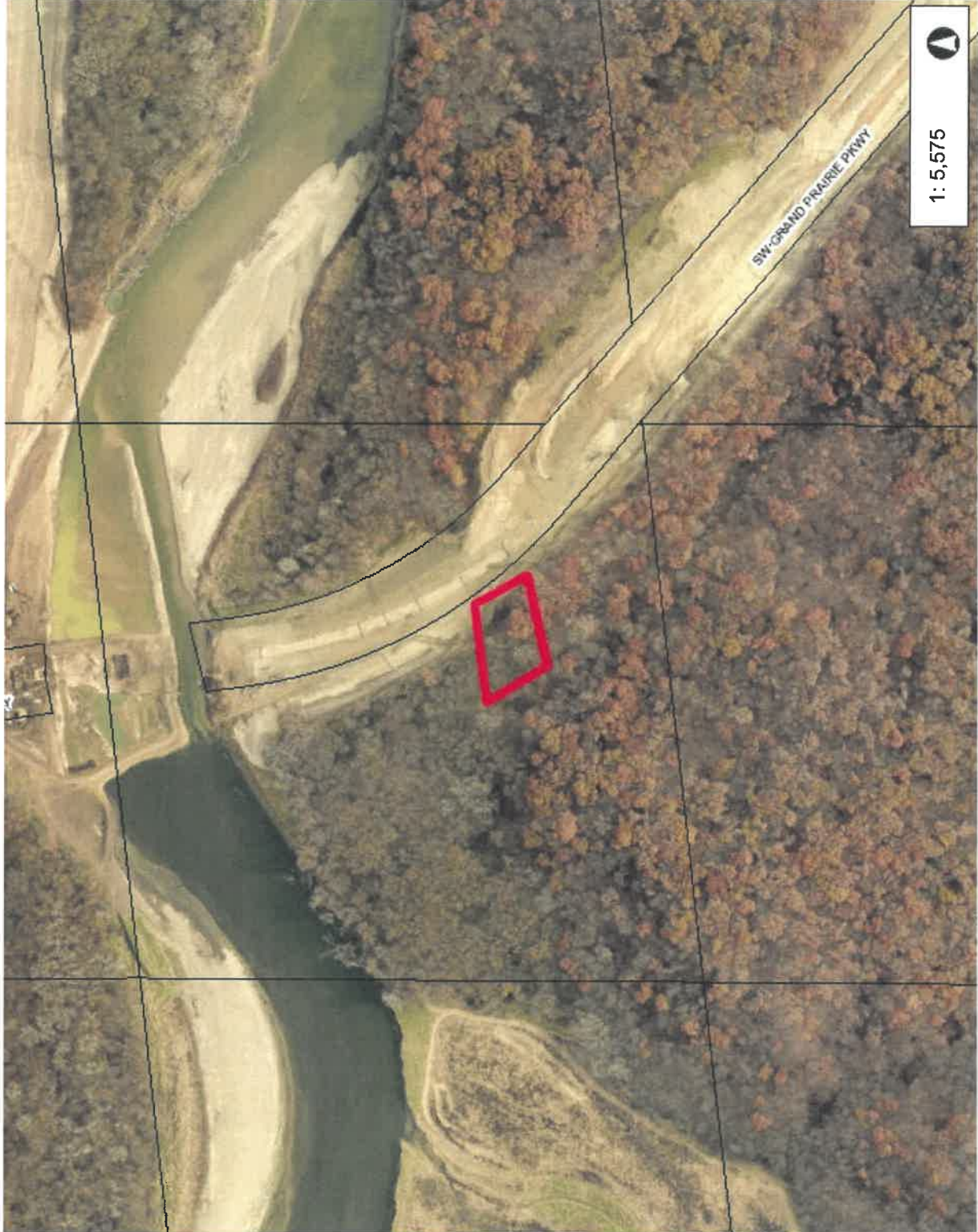
Recording Secretary

Exhibit A
Conditions of Approval

1. The applicant paving the access road to the site at the completion of the adjacent trunk sewer project or by December 21, 2021, whichever occurs first.



Location Map



1: 5,575

929.2

464.59

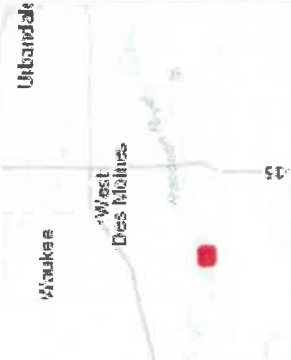
0

929.2 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere
© City of West Des Moines, Iowa

Legend

- Addresses
- Corporate Limits
- Parcels



Disclaimer: The City of West Des Moines makes no warranties regarding the accuracy or completeness of the data provided herein.
THIS MAP IS NOT TO BE USED FOR NAVIGATION

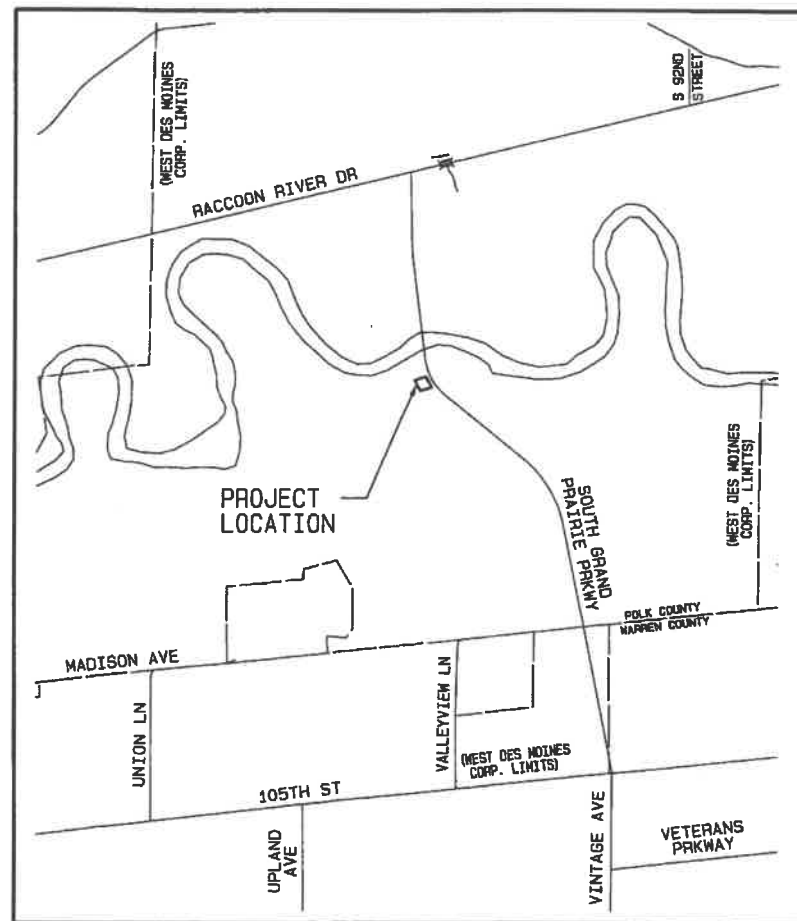


SITE PLANS FOR RACCOON RIVER BASIN 5 SEWER LIFT STATION WEST DES MOINES, IOWA

WEST DES MOINES PROJECT NO. SP - 004421 - 2019

P:\102217\1\MODEL GRAVITY SEWER AT LIFT STATION\CVL\102217 SITE PLAN APPLICATION.rvt

PLOTTED: Sep 5, 2019 14:52:57 Thu



VICINITY MAP
NOT TO SCALE

DRAWING INDEX

NO.	DRAWING TITLE
1	INDEX AND TITLE SHEET
2	GENERAL NOTES AND LEGEND
3	REFERENCE TIES AND BENCHMARKS
4	REFERENCE TIES AND BENCHMARKS
5	PLAN AND PROFILE
6	SITE PLAN
7	LIFT STATION LAYOUT PLAN
8	LIFT STATION SPOT ELEVATIONS
9	LIFT STATION JOINTING PLAN
10	ACCESS DRIVE
11	LIFT STATION
12	SITE PLAN - LANDSCAPING
13	EROSION CONTROL PLAN

1. ALL CONSTRUCTION WITHIN PUBLIC R.O.W./EASEMENTS, AND/OR ANY CONNECTION TO SEWERS AND STREETS, SHALL COMPLY WITH THE WEST DES MOINES STANDARD CONSTRUCTION SPECIFICATIONS FOR SUBDIVISIONS, DSM METRO DESIGN STANDARDS AND WDM ADDENDUMS.
2. AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC R.O.W./EASEMENTS AND/OR ANY CONNECTION TO SEWERS AND STREETS, THE CONTRACTOR SHALL CONTACT THE WDM ENGINEERING SERVICES 222-3475 TO SCHEDULE ANY REQUIRED INSPECTIONS. IT IS IMPORTANT TO NOTE CITY APPROVAL OF THE PLAN IS SUBJECT TO THE APPLICANT OBTAINING ALL NECESSARY EASEMENTS/AGREEMENTS AND APPLICABLE PERMITS.

ENGINEER

H. ROBERT VEENSTRA, JR.
VEENSTRA & KIMM, INC.
3000 WESTOWN PARKWAY
WEST DES MOINES, IA 50266-1320

PROPERTY OWNER/DEVELOPER

CITY OF WEST DES MOINES
C/O JASON SCHLICKBERND
4200 HILLS CIVIC PARKWAY
PO BOX 65320
WEST DES MOINES, IA 50265

COMPREHENSIVE PLAN

LAND USE: OPEN SPACE/SINGLE FAMILY RESIDENCE

ZONING

UNZONED
BUILDING SETBACKS:
FRONT: 35'
REAR AND SIDES: 20'
LOT SIZE: NO MINIMUM

IMPERVIOUS AREA

UNDEVELOPED SITE: 40,904 SF 0% IMPERVIOUS
DEVELOPED SITE: 6,069 SF 14.8% IMPERVIOUS
NET UNDEVELOPED SITE: 34,835 SF 85.2%

BUILDING AREA

12' X 28' = 3,360 SF



I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.
SIGNATURE: *H. Robert Veenstra Jr.*
NAME: H. ROBERT VEENSTRA, JR.
DATE: September 5, 2019
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2020
PAGES COVERED BY THIS SEAL: _____



CONTROL POINT	COORDINATES	BENCHMARK	ELEVATION	DATE	REVISIONS	SCALE	NONE	<p>VEENSTRA & KIMM, INC. 3000 Westown Parkway • West Des Moines, Iowa 50266-1320 515-225-8000 • 515-225-7948 (FAX) • 800-241-8000 (WATS)</p>	INDEX AND TITLE SHEET	DWG. NO.
						DRAWN	OLL		<p>1</p>	
						CHECKED	HRV			
						APPROVED	HRV			
						DATE	9-5-19			
						A.C.				

GENERAL LEGEND

	SURVEY LINE & STATION INDICATOR		12" CMP CULVERT; SIZE AND TYPE
	CONCRETE SURFACE		FLARED END SECTION
	ASPHALT SURFACE		RAILROAD
	CONCRETE SURFACE W/ ASPHALT OVERLAY		MAILBOX
	LOW GRADE ASPHALT SURFACE		FENCE (ALL OTHER)
	GRANULAR SURFACE		SECURITY FENCE
	DIRT SURFACE		WOOD FENCE
	BRICK SURFACE		PROPERTY LINE
	SURFACING REMOVAL/REPLACEMENT		PROPERTY PIN
	EARTH SECTION		SECTION CORNER
	NEW SEWER/MANHOLE		PLAT BOUNDARY
	NEW SEWER/INTAKE		BUILDING
	NEW WATER MAIN		ELEVATION MARKER
	NEW FORCE MAIN		CENTERLINE
	NEW HYDRANT		DIA.
	NEW WATER VALVE		ELEV.
	8" S EXISTING SANITARY SEWER AND SIZE		PVC POLYVINYLCHLORIDE PIPE
	18" SS EXISTING STORM SEWER AND SIZE		CI CAST IRON PIPE
	8" W EXISTING WATER MAIN AND SIZE		DI DUCTILE IRON PIPE
	6" FM EXISTING FORCE MAIN AND SIZE		CMP CORRUGATED METAL PIPE
	4" G GAS MAIN AND SIZE		VCP VITRIFIED CLAY PIPE
	UE UNDERGROUND POWER LINE		RCP REINFORCED CONCRETE PIPE
	OP OVERHEAD POWER LINE		RCAP REINFORCED CONCRETE ARCH PIPE
	T UNDERGROUND TELEPHONE LINE		LACP LINED REINFORCED CONCRETE PIPE
	CTV CABLE TELEVISION LINE		LCPP LINED CONCRETE PRESSURE PIPE
	FO FIBER OPTICS		STA. STATION
	TOP OF EMBANKMENT		LA LINE AHEAD
	TOE OF EMBANKMENT		LB LINE BACK
	DRAINAGE COURSE		BM-2 BENCH MARK AND NUMBER
	MANHOLE		ROW RIGHT-OF-WAY
	OR CURB INTAKE		PI POINT OF INTERSECTION
	OR AREA OR BEEHIVE INTAKE		POT POINT ON TANGENT
	EXISTING HYDRANT		LF LINEAR FEET
	EXISTING WATER VALVE		TH TACKED HUB
	GAS VALVE		SB-2 SOIL BORING AND NUMBER
	POWER POLE		PVC POINT OF VERTICAL CURVATURE
	TELEPHONE POLE		PVT POINT OF VERTICAL TANGENCY
	STREET LIGHT		VC VERTICAL CURVE
	POLE W/GUY ANCHOR		PC POINT OF CURVATURE
	TRAFFIC SIGNALS		PT POINT OF TANGENCY
	SIGN		MO MIDDLE ORDINATE
	TELEPHONE CABLE JUNCTION BOX		DWG. DRAWING
	PEDESTRIAN CONTROL LIGHT		CP-1 CONTROL POINT AND NUMBER
	RAILROAD CONTROL LIGHT		(TYP.) TYPICAL
	RAILROAD SIGN		HPG HIGH PRESSURE GAS
	UTILITY ACCESS COVER		IPG INTERMEDIATE PRESSURE GAS
	PARKING METER		INV. INVERT
	16" TREE AND SIZE		E.W., E.F. EACH WAY, EACH FACE
	2' EVERGREEN AND SIZE		E.W. EACH WAY
	18" STUMP AND SIZE		AT AT
	OR BUSH, SHRUB OR HEDGE		3 DRAWING NUMBER

NOTE: THIS IS A GENERAL LEGEND. ITEMS MAY OR MAY NOT APPEAR ON DRAWINGS.

LEGAL DESCRIPTION

A tract of land located in the Northeast 1/4 of the Northeast 1/4 of Section 33, Township 78 North, Range 26 West of the 5th P.M., Dallas County, Iowa. Said tract being more particularly described as follows:

Commencing at the Southeast corner of the Northeast 1/4 of the Northeast 1/4 of said Section 33; thence North 00°06'32" West (all bearings referenced to Grid North Iowa Regional Coordinate System Zone 8), 10.27 feet along the East line of said Northeast 1/4 of the Northeast 1/4 to the Westerly right-of-way line of SW Grand Prairie Parkway as shown on the Acquisition Plats thereof recorded in Book 2017 on Page 8269 in the Dallas County Recorder's Office; thence North 50°10'56" West, 263.51 feet along said Westerly right-of-way line to the beginning of a tangent curve concave Northeasterly and having a radius of 1182.50 feet; thence Northwesterly along said right-of-way line and along said curve through a central angle of 16°02'27" an arc distance of 331.06 feet, said curve having a chord which bears North 42°09'42" West, 329.98 feet to the point of beginning; thence continuing along said right-of-way line and along said curve through a central angle of 09°56'55" an arc distance of 205.32 feet, said curve having a chord which bears North 29°10'02" West, 205.06 feet; thence on a non-tangent line South 73°35'34" West, 201.59 feet to the beginning of a non-tangent curve concave Northeasterly and having a radius of 1382.50 feet; thence Southeasterly along said curve through a central angle of 08°26'53" an arc distance of 203.84 feet, said curve having a chord which bears South 27°17'06" East, 203.66 feet; thence on a non-tangent line North 73°35'34" East, 208.45 feet to the point of beginning.

Containing 40,904 square feet, more or less.

GENERAL NOTES

1. ALL ELEVATIONS ARE TO WEST DES MOINES DATUM.
2. WEST DES MOINES PUBLIC SERVICES TO REMOVE AND REPLACE ALL STREET SIGNS.
3. SHAPE ALL DITCHES TO DRAIN AFTER CONSTRUCTION.
4. CONFIRM LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES AS REQUIRED TO ELIMINATE CONFLICTS PRIOR TO CONSTRUCTION. ALLOW UTILITY PERSONNEL TO RELOCATE UTILITIES WHERE CONFLICTS OCCUR.
5. DO NOT INTERRUPT EXISTING UTILITIES OR INDIVIDUAL SERVICES UNLESS DIRECTED BY ENGINEER.
6. LOCATIONS OF CONSTRUCTION LIMIT LINES SHOWN ON PLANS ARE APPROXIMATE. CONFINE ALL CONSTRUCTION OPERATIONS, INCLUDING ACCESS TO WORK, TO CONSTRUCTION LIMITS.
7. SET MANHOLE COVERS FLUSH WITH PROPOSED GRADES UNLESS OTHERWISE NOTED.
8. STATIONING IS ALONG CENTER LINE OF SEWER, UNLESS OTHERWISE NOTED.
9. PROTECT UTILITY POLES, LINES AND APPURTENANCES NOT SHOWN FOR RELOCATION.
10. RESET ALL PROPERTY PINS DISTURBED BY CONSTRUCTION; PINS RESET BY REGISTERED LAND SURVEYOR; COST IS INCIDENTAL TO CONSTRUCTION.
11. PROTECT ALL SURFACING, NOT INDICATED BY SHADING FOR REMOVAL AND REPLACEMENT FROM DAMAGE DURING CONSTRUCTION.

PROTECTION OF VEGETATION

TREES AND OTHER VEGETATION WHICH MAY BE REMOVED ARE MARKED WITH AN "X" OVER THE APPROPRIATE SYMBOL. FOR EXAMPLE, X 12" INDICATES THE REMOVAL OF A 12" TREE. REPLACEMENT, BY CONTRACTOR, OF THESE ITEMS IS NOT REQUIRED.

TUNNEL, INSTALL TIGHT SHEETING, HAND EXCAVATE OR EMPLOY OTHER MEANS APPROVED BY ENGINEER TO PROTECT EXPOSED PORTIONS AND ROOT SYSTEMS OF TREES AND OTHER VEGETATION NOT SCHEDULED FOR REMOVAL. IF TREES AND OTHER VEGETATION NOT SCHEDULED FOR REMOVAL ARE DAMAGED DURING CONSTRUCTION, REPLACE IN KIND AND SIZE AT NO COST TO CITY OR PROPERTY OWNER.

SITE ADDRESS

3105 SW GRAND PRAIRIE PARKWAY
WEST DES MOINES, IOWA

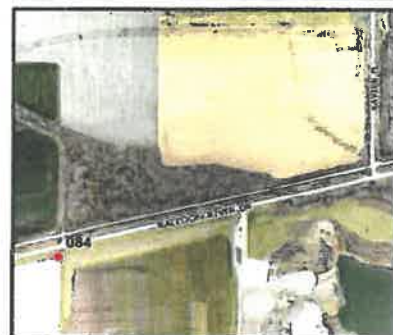
CONTROL POINT	COORDINATES	BENCHMARK	ELEVATION	DATE	REVISIONS	SCALE NONE	<p>VEENSTRA & KIMM, INC. 3000 Westown Parkway • West Des Moines, Iowa 50266-1320 515-225-8000 • 515-225-7848 (FAX) • 800-241-8000 (WATS)</p>	GENERAL NOTES AND LEGEND	DWG. NO.
						DRAWN DLL		2	
						CHECKED HRV			
						APPROVED HRV			
						DATE 9-5-19			
						A.C.	PROJECT 102217		



City of West Des Moines, Iowa
Vertical Control Network

Benchmark: 084

NAVD83 - FEET	841.07	LOCATION	
WDM DATUM - FEET	67.06	LOCATION	9100 Block of Raccoon River Drive, Intersection of Raccoon River Drive and S. 92nd Street, 3 feet North of South Fence, 25 feet West of fence corner, Sta 1.124 ± stamped in FCC pavement on the South side.
NAVD83 - METERS	256.359	DESCRIPTION	Standard Benchmark.
NAVD83 NORTHING	559438.3	NOTE	
NAVD83 EASTING	1549116.9		
SECTION	27		
TOWNSHIP	T78N		
RANGE	R26W		
COUNTY	Dallas		



City of West Des Moines, Iowa
Vertical Control Network

Benchmark: 130

NAVD83 - FEET	873.86	LOCATION	
WDM DATUM - FEET	99.85	LOCATION	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.
NAVD83 - METERS	266.353	DESCRIPTION	Standard Benchmark.
SECTION	20	NOTE	
TOWNSHIP	T78N		
RANGE	R26W		
COUNTY	Dallas		



City of West Des Moines, Iowa
Vertical Control Network

Benchmark: USGS E

NAVD83 - FEET	845.50	LOCATION	
WDM DATUM - FEET	71.49	LOCATION	U.S.G.S. Tablet #845 - Southwest concrete headwall of railroad bridge #370.9 over creek on the North side of Raccoon River Drive, 300+/- West of East line of Section 26, Township 78 North, Range 26 West.
NAVD83 - METERS	257.709	DESCRIPTION	Stamped elevation 845.268 feet;
SECTION	28	NOTE	
TOWNSHIP	T78N		
RANGE	R26W		
COUNTY	Dallas		



CONTROL POINTS - BENCHMARKS		COORDINATES
CP-100:	CUT 'X' TOP OF WEST CURB OF GRAND PRAIRIE PKWY 100' ± SOUTH OF DRIVE. STA. 7+30.58, 103.90' LT. EL.=87.46.	N=553709.85 E=1544825.00
CP-101:	CUT 'X' TOP OF WEST CURB OF GRAND PRAIRIE PKWY 100' ± NORTH OF DRIVE. STA. 7+77.88, 102.69' RT. EL.=78.68.	N=553901.28 E=1544734.09
CP-102:	SET 1/2" REBAR 225' ± NN OF BM-1, 200' ± SOUTH OF RIVER BANK. STA. 7+77.88, 102.69' RT. EL.=78.68.	N=553901.28 E=1544734.09

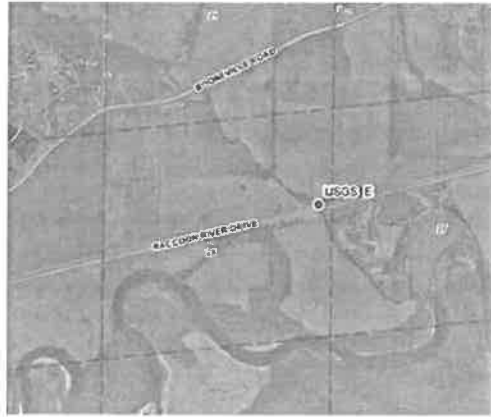
CONTROL POINT	COORDINATES	BENCHMARK	ELEVATION	DATE	REVISIONS	SCALE	NONE	DRAWN	OLL	CHECKED	HRV	APPROVED	HRV	DATE	9-5-19	A.C.	VEENSTRA & KIMM, INC.	3000 Whetown Parkway 515-225-8000 • 515-225-7848 (FAX) • 800-341-8000 (M/W/T/S)	West Des Moines, Iowa 50266-1320	REFERENCE TIES AND BENCHMARKS	DWG. NO.
																					3

2014 City of West Des Moines, Iowa
 Horizontal Datum: NAD 83(2011) - Vertical Datum: NAVD 1988
 Iowa South Zone (1402)
 Iowa Regional Coordinate System Zone 8 Ames-Des Moines
 US Survey Feet

Point Name: **USGS E** Network Point ID: **117**
 NAD 83(2011) Latitude: **N41°31'47.97198"** Longitude: **W93°50'55.36516"**
 NAVD 88 Ortho Height: **845.500sft** Ellip. Ht: **743.983sft** **Geoid12A**
 Mapping Angle: **-0°13'47"** Combination Scale Factor: **0.999929333**
 Iowa South Zone (1402) Northing: **557623.979sft** Easting: **1544939.094sft**
 IaRCS Zone 8 Northing: **7466398.465sft** Easting: **18463943.244sft**

Designation: NGS 1st order vertical control station "845" PID: MH0427

Monument Type: A USGS survey disk stamped "ELEV 845.208" and set in the south end of the west abutment of railroad bridge 370.9.



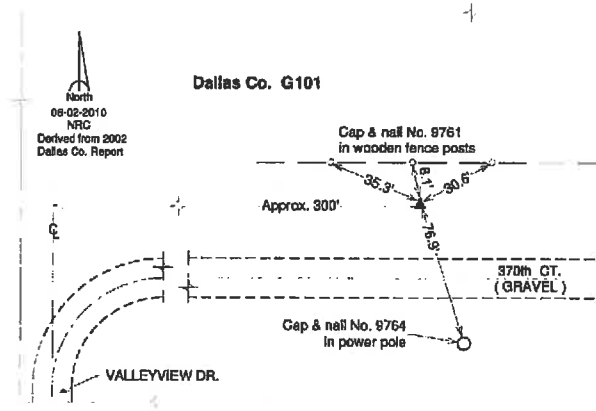
This document was prepared by DCI on June 13, 2014 for use by The City of West Des Moines, Iowa

2014 City of West Des Moines, Iowa
 Horizontal Datum: NAD 83(2011) - Vertical Datum: NAVD 1988
 Iowa South Zone (1402)
 Iowa Regional Coordinate System Zone 8 Ames-Des Moines
 US Survey Feet

Point Name: **G101** Network Point ID: **201**
 NAD 83(2011) Latitude: **N41°30'26.73470"** Longitude: **W93°50'47.60153"**
 NAVD 88 Ortho Height: **994.340sft** Ellip. Ht: **892.741sft** **Geoid12A**
 Mapping Angle: **-0°13'42"** Combination Scale Factor: **0.999920054**
 Iowa South Zone (1402) Northing: **549399.364sft** Easting: **1545496.799sft**
 IaRCS Zone 8 Northing: **7458174.677sft** Easting: **18464421.396sft**

Designation: Dallas Co. GPS Control Monument G101 (set by WHKS in 2002)

Monument Type: 5/8" x 6'-0" long aluminum rod with stamped cap and NGS style access cover.



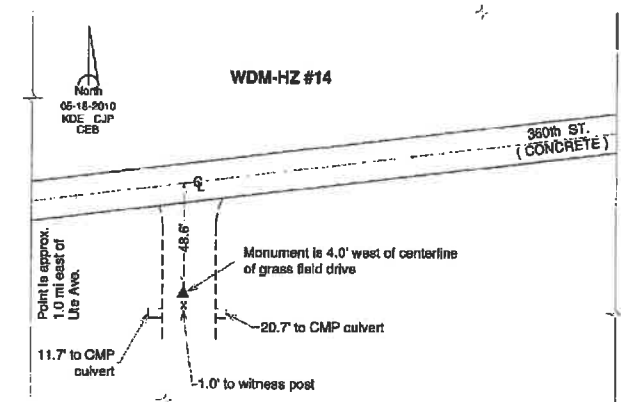
This document was prepared by DCI on June 13, 2014 for use by The City of West Des Moines, Iowa

2014 City of West Des Moines, Iowa
 Horizontal Datum: NAD 83(2011) - Vertical Datum: NAVD 1988
 Iowa South Zone (1402)
 Iowa Regional Coordinate System Zone 8 Ames-Des Moines
 US Survey Feet

Point Name: **WDM-HZ #14** Network Point ID: **2014**
 NAD 83(2011) Latitude: **N41°31'35.28892"** Longitude: **W93°51'55.76938"**
 NAVD 88 Ortho Height: **852.930sft** Ellip. Ht: **751.511sft** **Geoid12A**
 Mapping Angle: **-0°14'27"** Combination Scale Factor: **0.999928623**
 Iowa South Zone (1402) Northing: **556360.162sft** Easting: **1540339.650sft**
 IaRCS Zone 8 Northing: **7465123.154sft** Easting: **18459246.627sft**

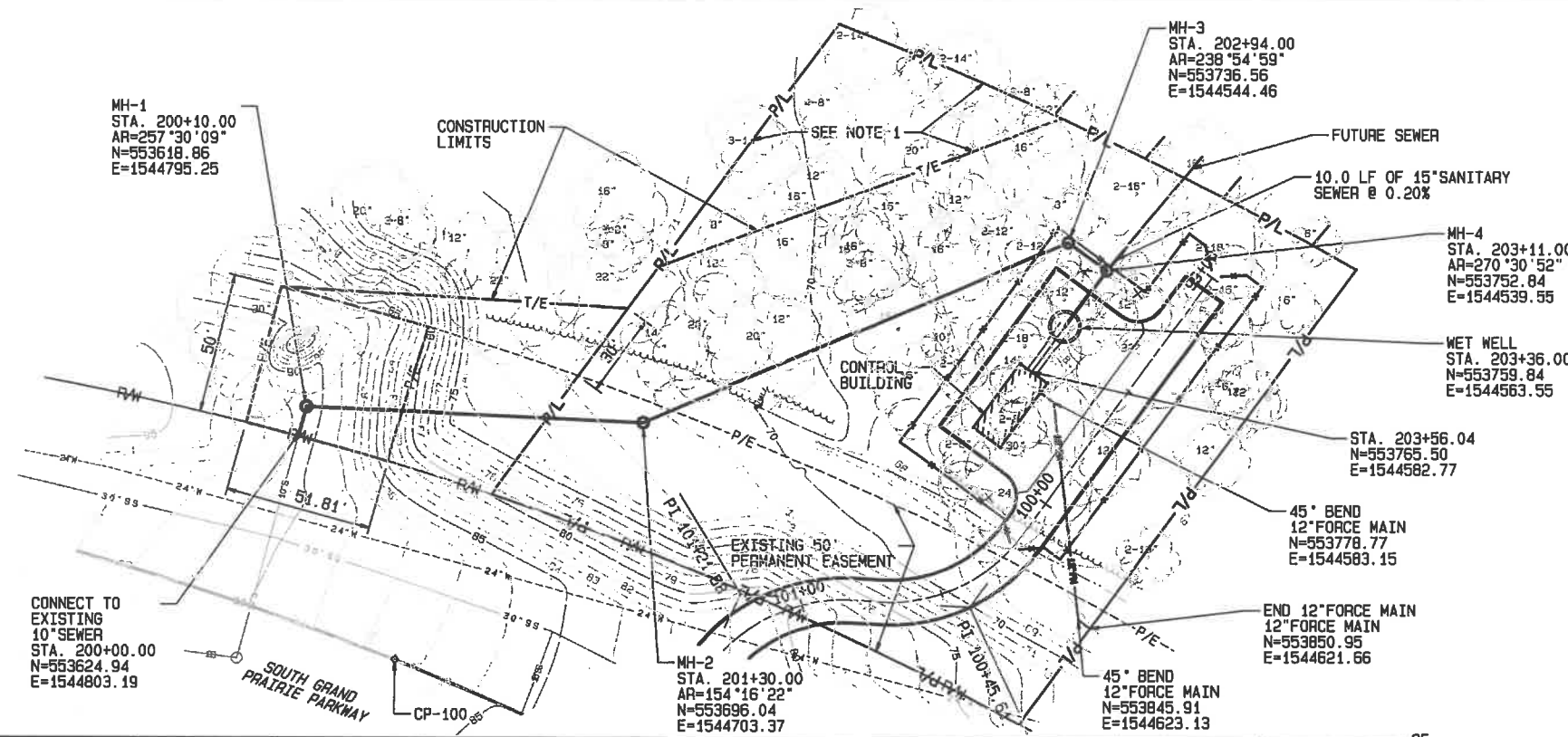
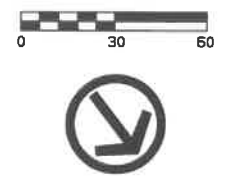
Designation: West Des Moines GPS Control Pt. - WDM-HZ #14

Monument Type: 3/4" x 9'-0" long Berntsen Top Security Rod monument with a 2-1/2" dia. domed survey cap and permanent magnet encased in a white PVC pipe with a NGS style alum. access cover.

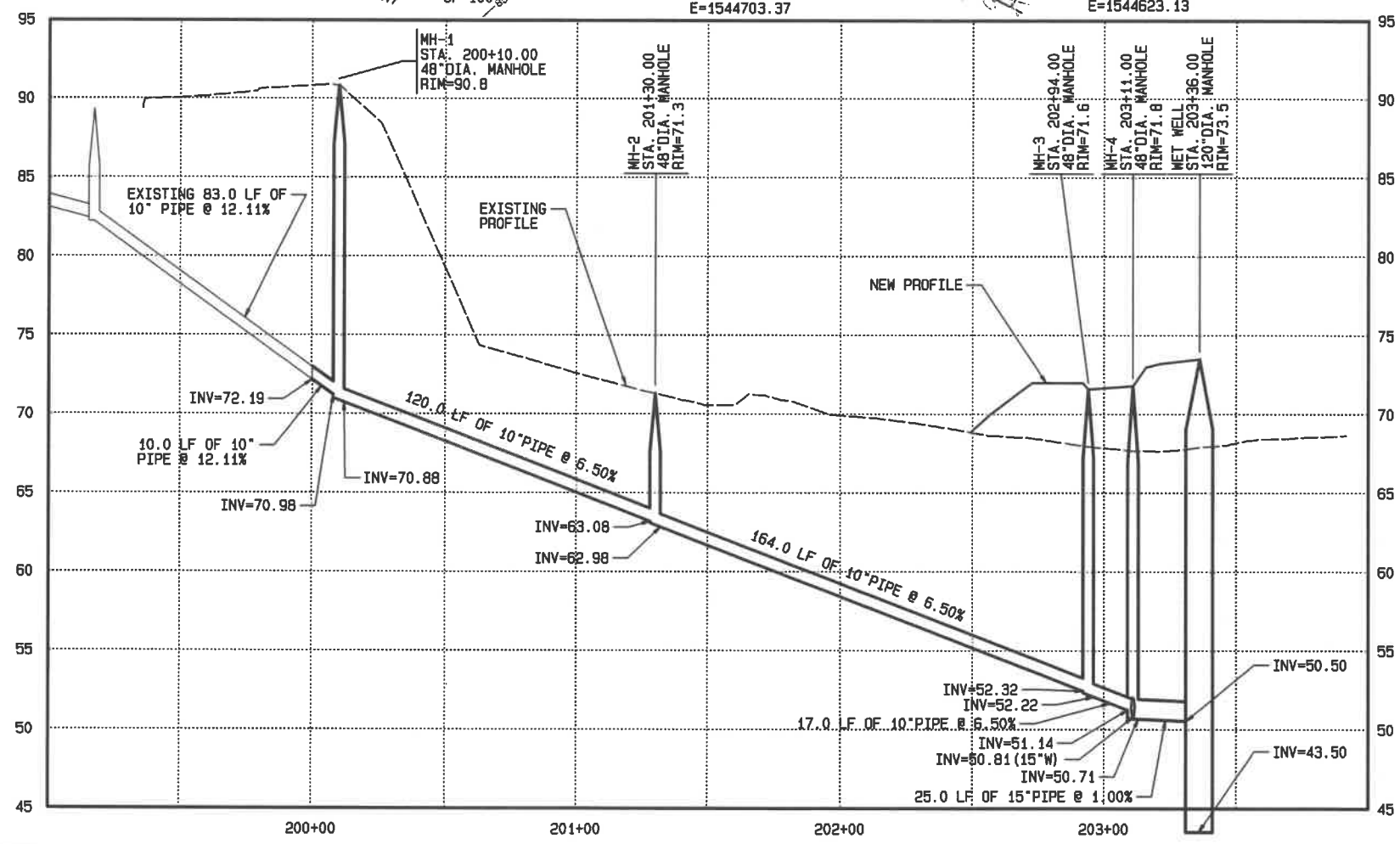


This document was prepared by DCI on June 13, 2014 for use by The City of West Des Moines, Iowa

CONTROL POINT	COORDINATES	BENCHMARK	ELEVATION	DATE	REVISIONS	SCALE	NONE		REFERENCE TIES AND BENCHMARKS	DWG. NO.	
DATE 9-5-19 A. C.								3000 Westown Parkway • West Des Moines, Iowa 50266-1320 515-225-8000 • 515-225-7848 (FAX) • 800-241-8000 (WATS)	4		
PROJECT 102217											



NOTES
1. ALL TREES TO BE REMOVED ON THE PROPERTY EXCLUDING THE TRIANGULAR SHAPED AREA IN THE SW CORNER OF THE PROPERTY.



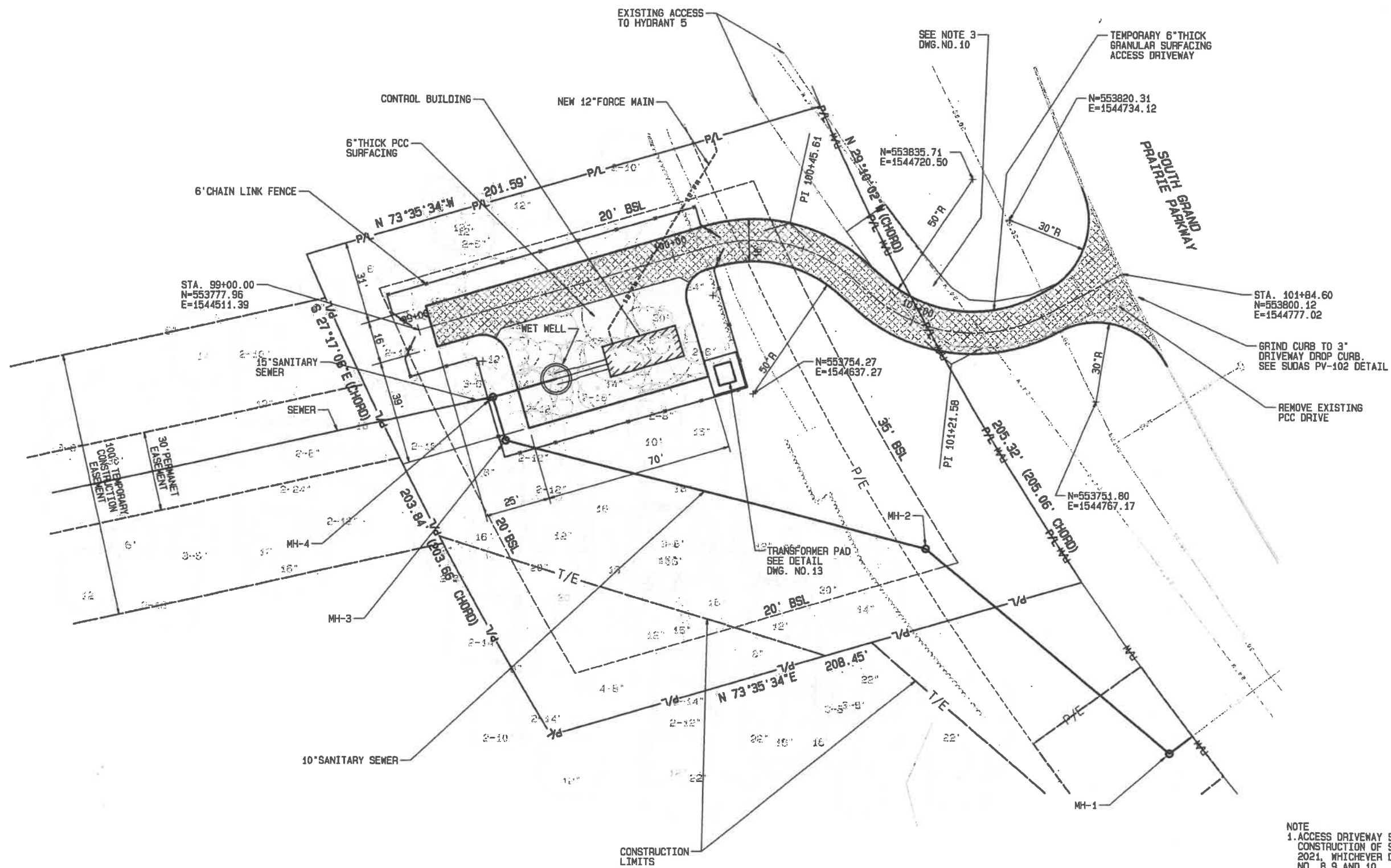
CONTROL POINT	COORDINATES	BENCHMARK	ELEVATION	DATE	REVISIONS	SCALE AS NOTED	 VEENSTRA & KIMM, INC. 3000 Westown Parkway • West Des Moines, Iowa 50266-1320 515-225-8000 • 515-225-7848 (FAX) • 800-241-8000 (WATS)	PLAN AND PROFILE	DWG. NO.
						DRAWN DILL		5	
						CHECKED HRV			
						APPROVED HRV			
						DATE 9-5-19			
						A.C.	PROJECT 102217		



CURVE DATA

PI	101+21.58
A=	68°39'46"
North	553765.90
East	1544712.83
R=	69.51
T=	58.00
LC=	39.61

PI	100+45.61
A=	56°51'44"
North	553818.74
East	1544651.17
R=	57.56
T=	58.00
LC=	31.40

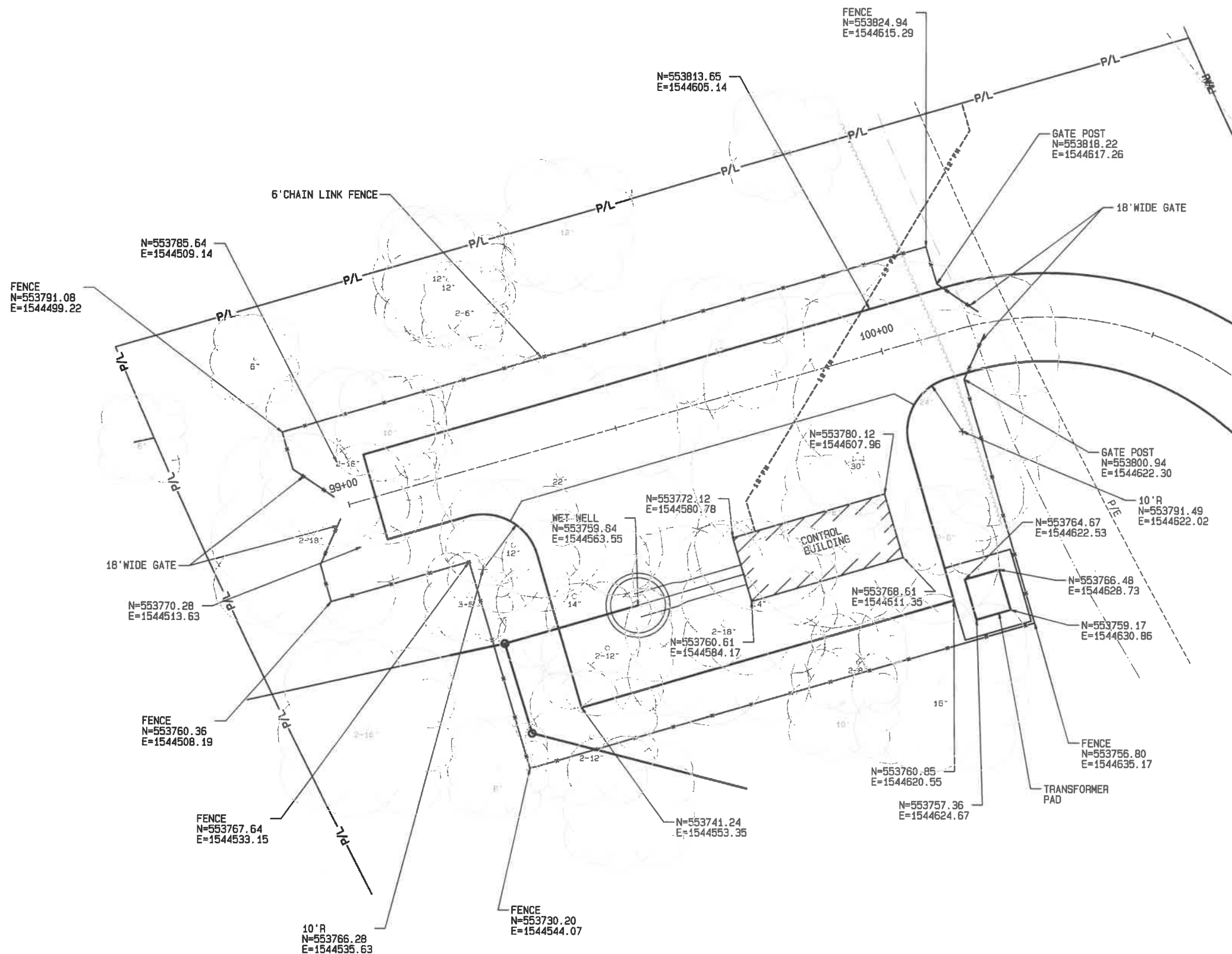



NOTE
 1. ACCESS DRIVEWAY SHALL BE PAVED UPON COMPLETION OF CONSTRUCTION OF SANITARY SEWER, OR BY DECEMBER 21, 2021, WHICHEVER DATE OCCURS FIRST. REFER TO DWG. NO. 8, 9 AND 10.

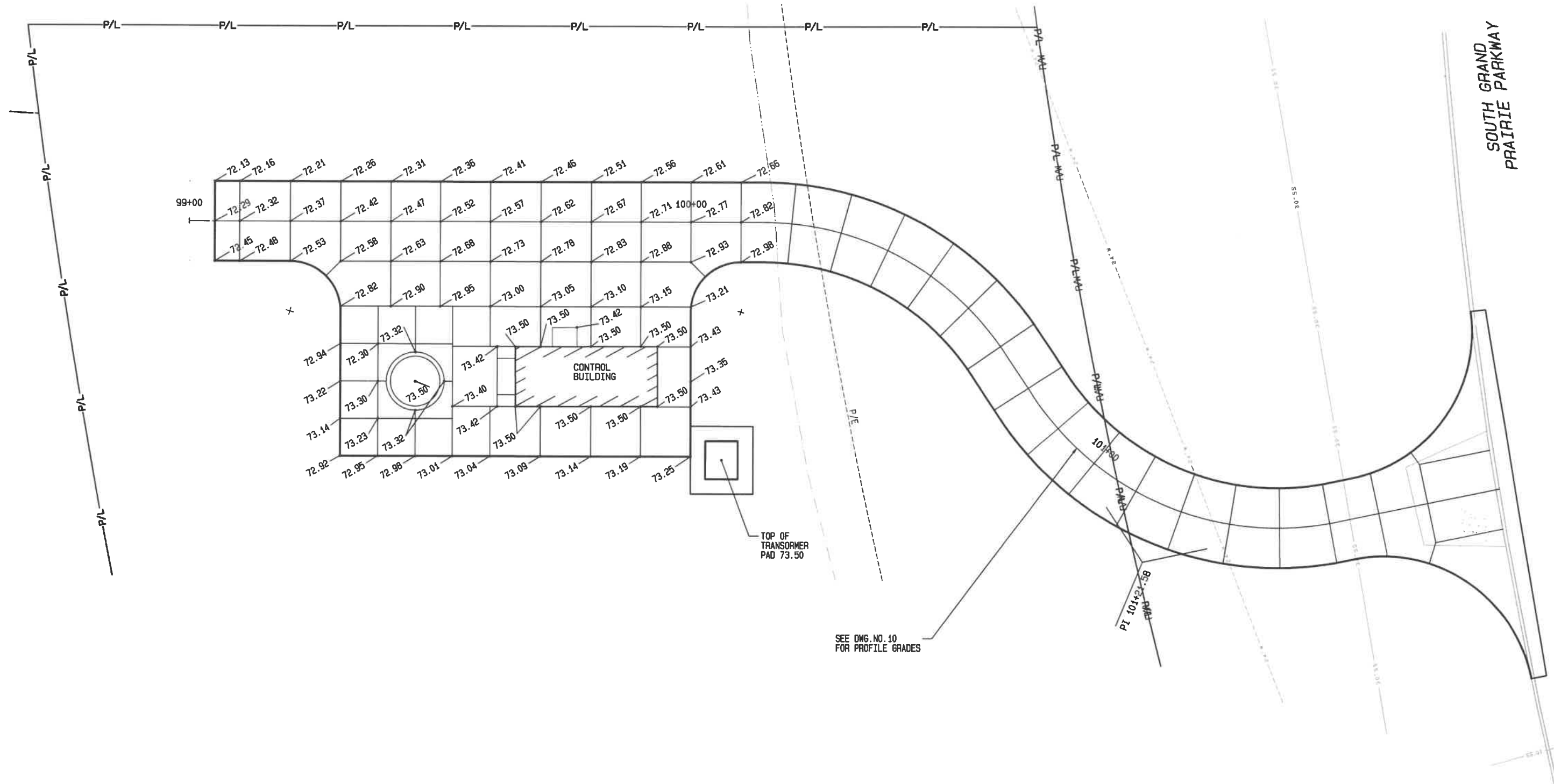
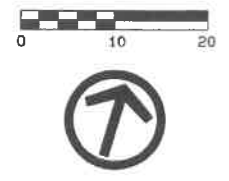
CONTROL POINT	COORDINATES	BENCHMARK	ELEVATION	DATE	REVISIONS	SCALE AS NOTED	 VEENSTRA & KIMM, INC. 3000 Westown Parkway • West Des Moines, Iowa 50266-1320 515-225-8000 • 515-225-7848 (FAX) • 800-241-8000 (NATS)	SITE PLAN	DWG. NO.	
						SCALE AS NOTED				6
						DRAWN DLL				
						CHECKED HRV				
						APPROVED HRV				
						DATE 9-5-19				
						A.C.			PROJECT 102217	

P: 1102217\TMODEL_GRAVITY_SEWER_AT_LIFT_STATION\CIVIL\102217 SITE PLAN APPLICATION.DWG


PLOTTED: Sep 5, 2019 14:41:54 Thu

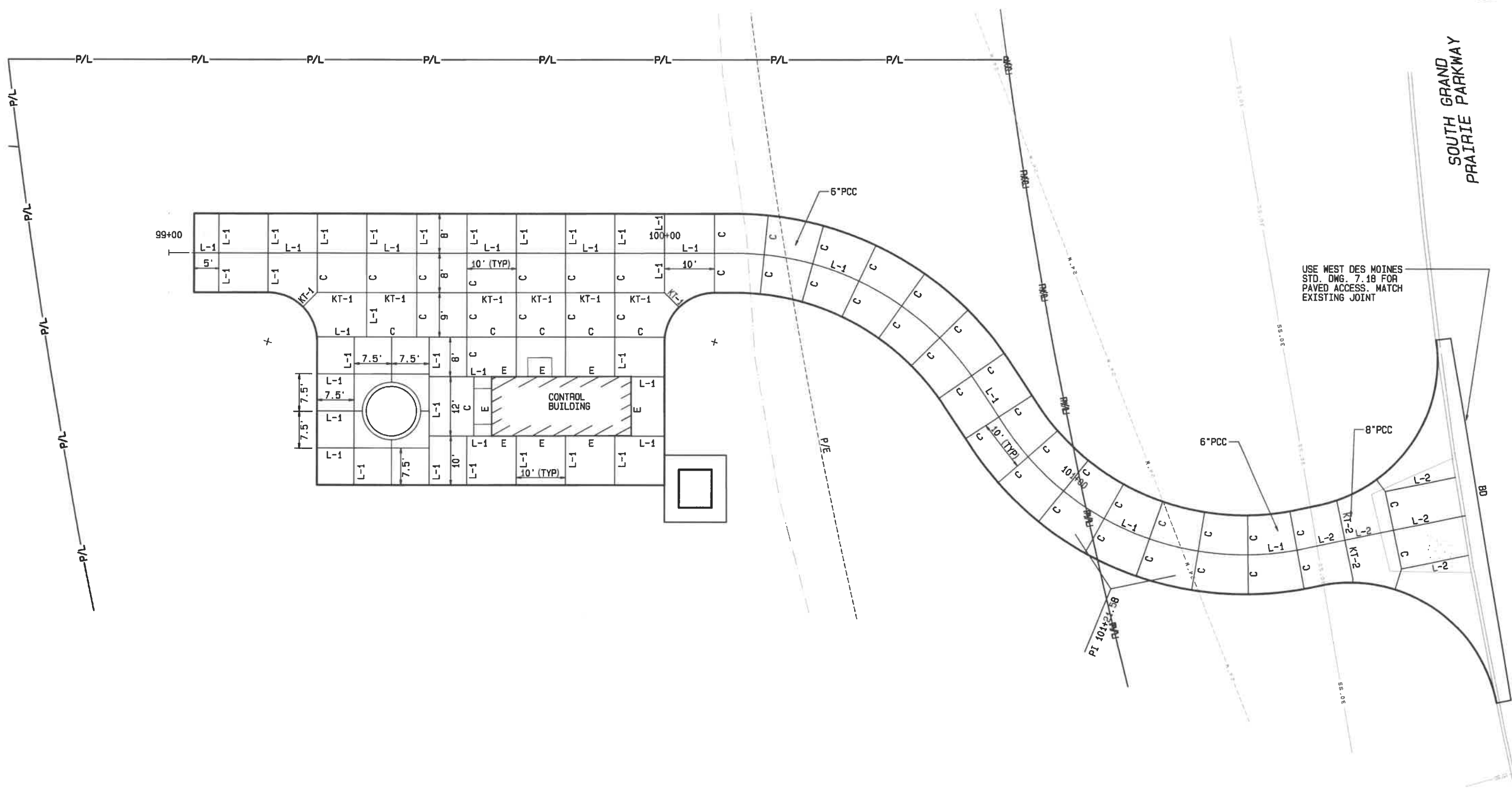
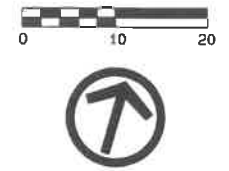


CONTROL POINT	COORDINATES	BENCHMARK	ELEVATION	DATE	REVISIONS	SCALE AS NOTED	 VEENSTRA & KIMM, INC. <small>3000 Westown Parkway • West Des Moines, Iowa 50266-1320 515-225-8000 • 515-225-7848 (FAX) • 800-241-8000 (WATS)</small>	DWG. NO.
						DRAWN DLL		7
						CHECKED HRV		
						APPROVED HRV		
						DATE 9-5-19		
						A.C.	PROJECT 102217	




SEE DWG. NO. 10 FOR PROFILE GRADES

CONTROL POINT	COORDINATES	BENCHMARK	ELEVATION	DATE	REVISIONS	SCALE AS NOTED	 VEENSTRA & KIMM, INC. 3000 Westown Parkway • West Des Moines, Iowa 50266-1320 515-225-8000 • 515-225-7848 (FAX) • 800-241-8000 (WATS)	LIFT STATION SPOT ELEVATIONS	DWG. NO.
						DRAWN DLL CHECKED HRV APPROVED HRV DATE 9-5-19 A.C.			8

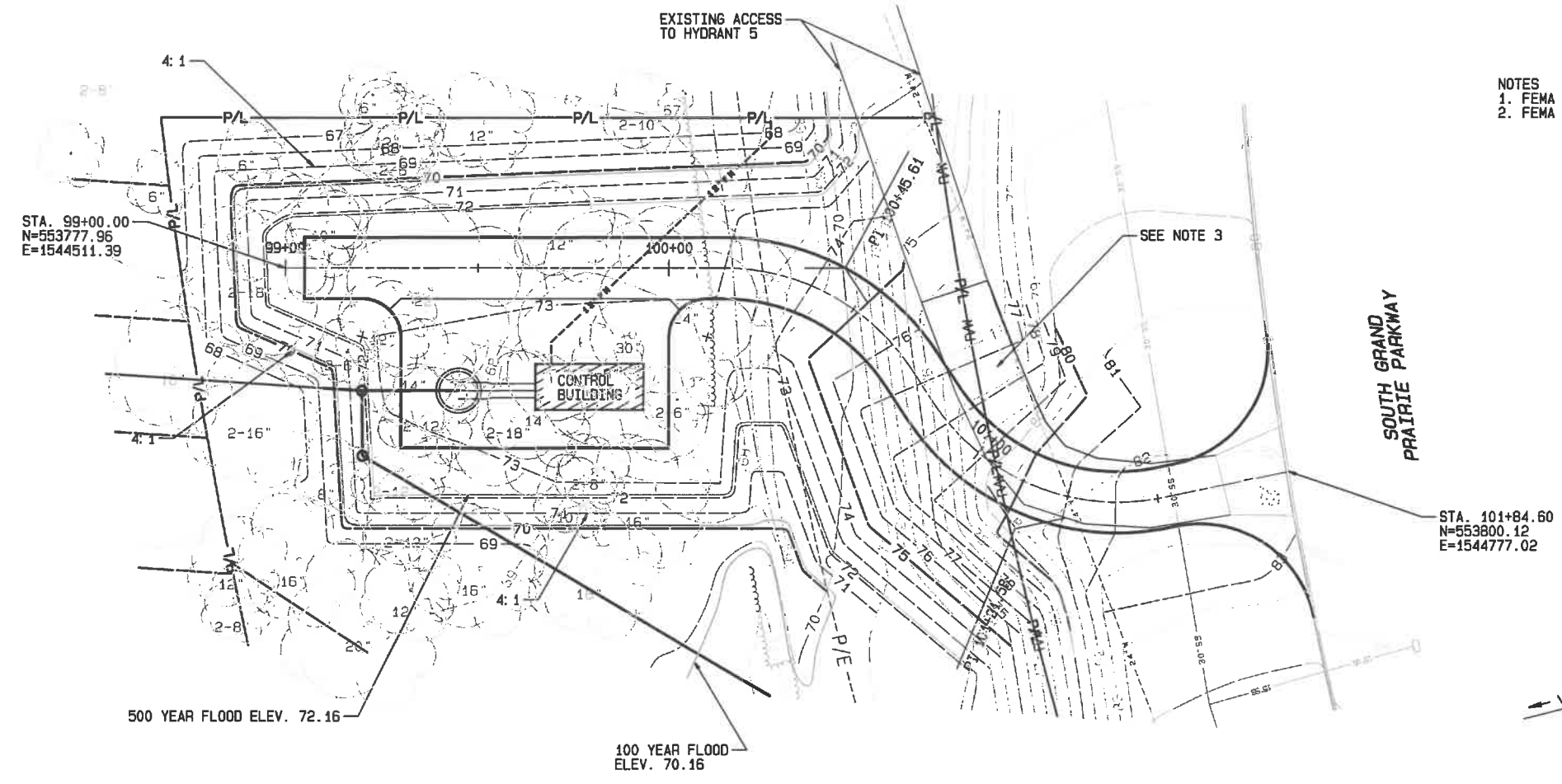


USE WEST DES MOINES
STD. DWG. 7.18 FOR
PAVED ACCESS. MATCH
EXISTING JOINT

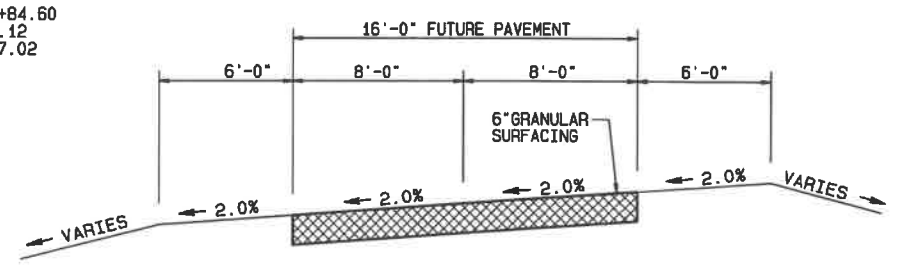
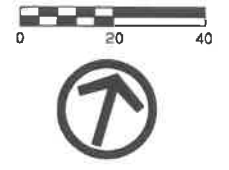
CONTROL POINT	COORDINATES	BENCHMARK	ELEVATION	DATE	REVISIONS	SCALE AS NOTED	 VEENSTRA & KIMM, INC. 3000 Westown Parkway • West Des Moines, Iowa 50266-1320 515-225-8000 • 515-225-7848 (FAX) • 800-241-8000 (WATS)	LIFT STATION JOINTING PLAN	DWG. NO.
						DRAWN DLL		9	
						CHECKED HRV			
						APPROVED HRV			
						DATE 9-5-19			
						A.C.	PROJECT 102217		

P:\102217\102217\MODEL GRAVITY SEWER AT LIFT STATION\CIVIL\102217 SITE PLAN APPLICATION.DWG

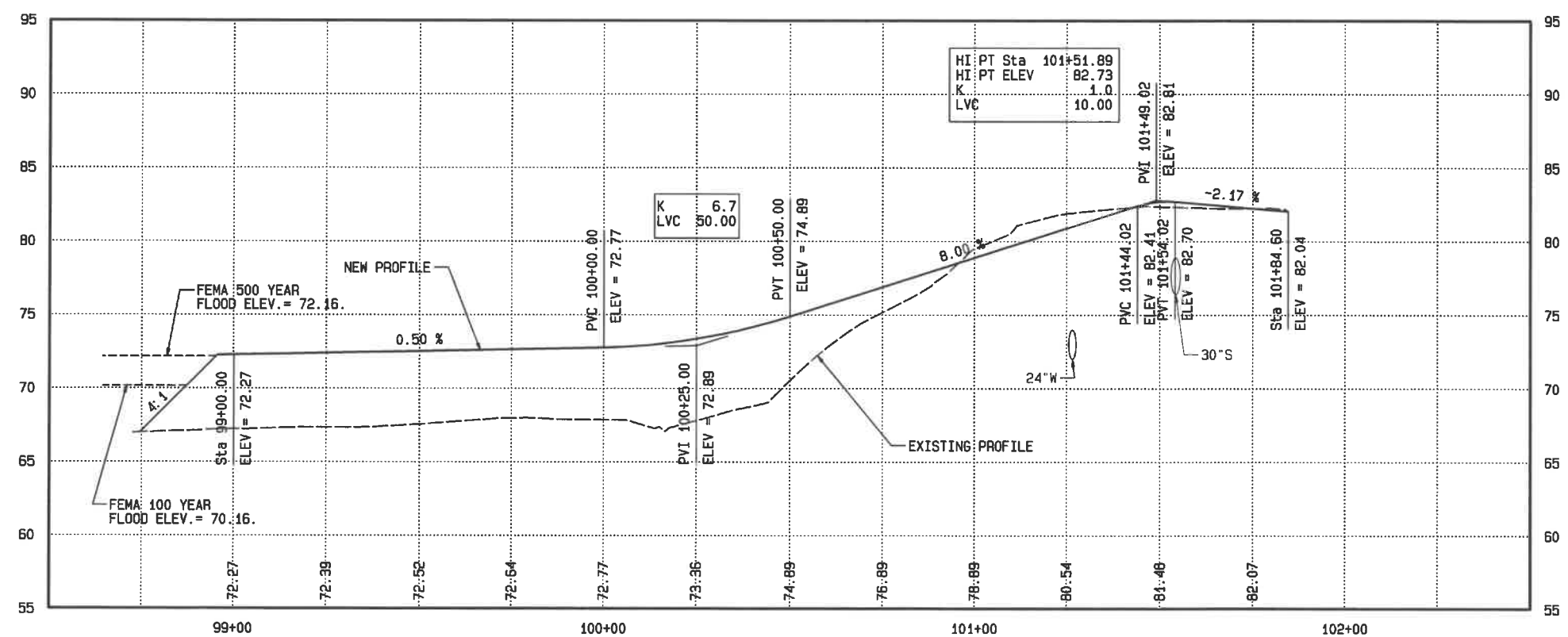
PLOTTED: Sep 5, 2019 14:43:15 Thu



NOTES
 1. FEMA 100 YEAR FLOOD ELEV. = 70.16.
 2. FEMA 500 YEAR FLOOD ELEV. = 72.16.




GRANULAR DRIVE CROSS SECTION
 NO SCALE

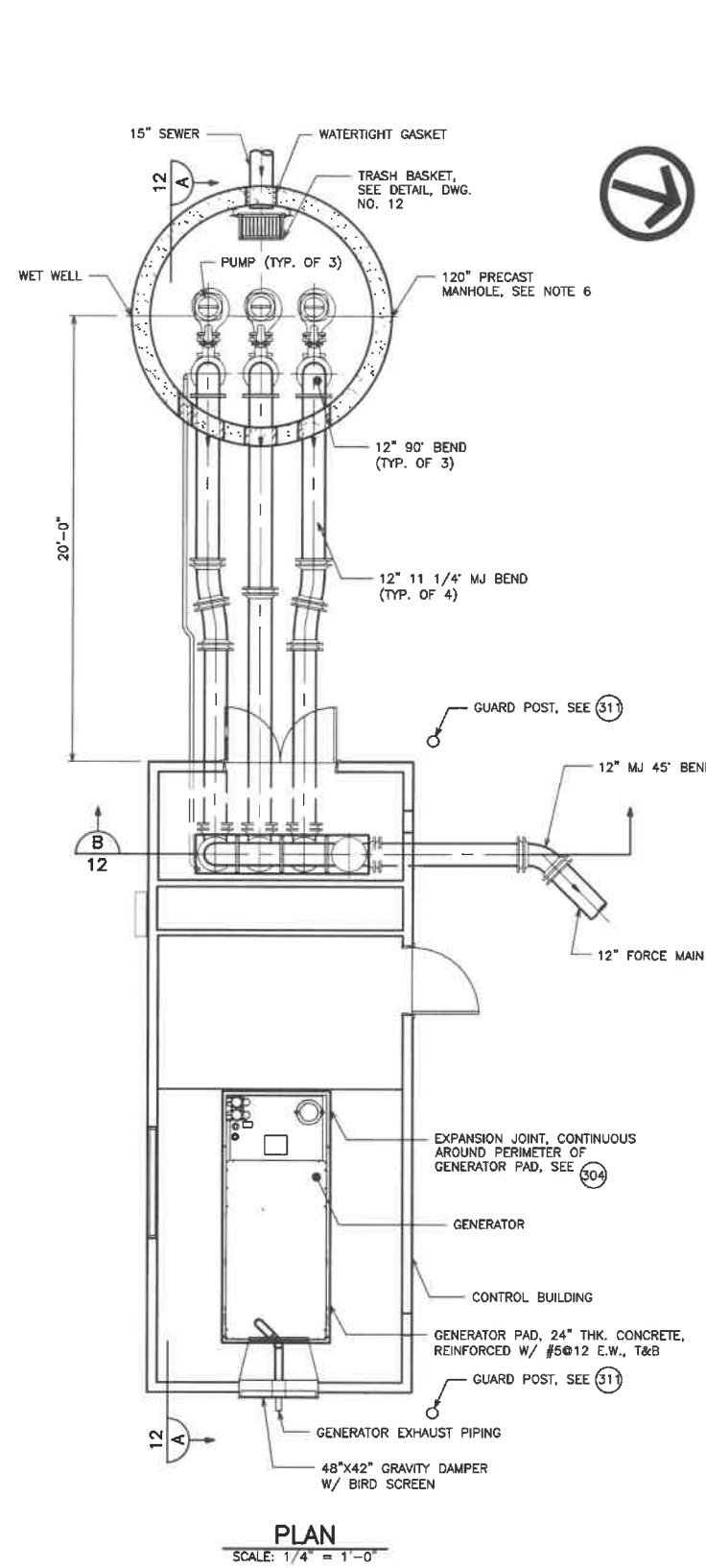


NOTE
 1. THE GRANULAR SURFACING OF THE DRIVEWAY IS TEMPORARY TO PROVIDE CONSTRUCTION ACCESS TO THE LIFT STATION SITE AND TO THE CONSTRUCTION OF THE SANITARY SEWER WESTERLY OF THE LIFT STATION SITE. THE DRIVEWAY WILL BE PAVED AFTER THE SANITARY SEWER CONSTRUCTION HAS BEEN COMPLETED.
 2. THE DRIVEWAY PROFILE APPLIES TO BOTH TEMPORARY AND PAVED DRIVEWAY.
 3. PROVIDE GRANULAR SURFACING AS REQUIRED ON THE DES MOINES WATER WORKS DRIVE LOCATED IN THE CONSTRUCTION AREA OF THE LIFT STATION SITE TO MAINTAIN ACCESS TO EXISTING HYDRANT 5 AND VALVE.

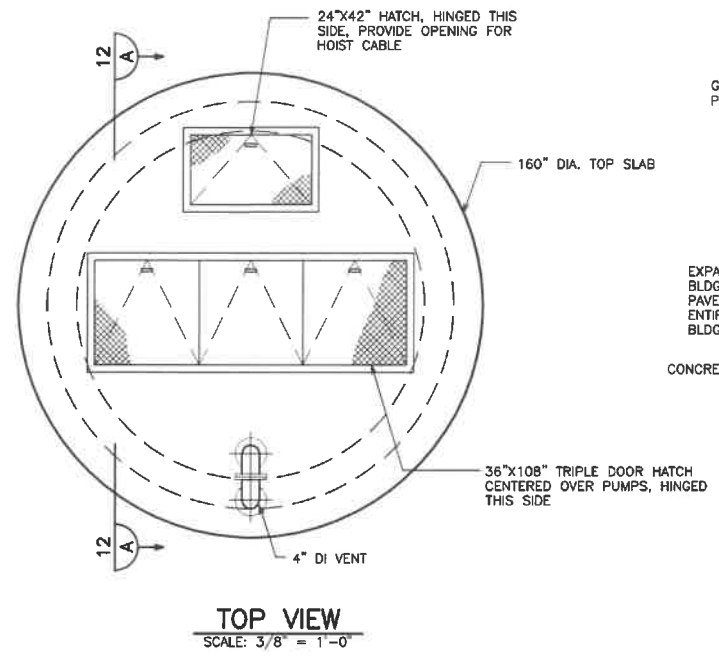
HI PT Sta	101+51.89
HI PT ELEV	82.73
K	1.0
LVC	10.00

K	6.7
LVC	50.00

CONTROL POINT	COORDINATES	BENCHMARK	ELEVATION	DATE	REVISIONS	SCALE AS NOTED	 VEENSTRA & KIMM, INC. 3000 Westown Parkway • West Des Moines, Iowa 50266-7320 515-225-8000 • 515-225-7848 (FAX) • 800-241-8000 (WATS)	ACCESS DRIVE	DWG. NO.	
						DRAWN D.L.		10		
						CHECKED HRV				
						APPROVED HRV				
						DATE 9-5-19				
						A.C.			PROJECT 102217	

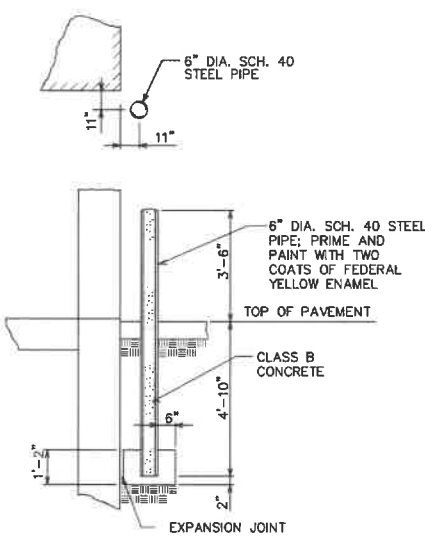


PLAN
SCALE: 1/4" = 1'-0"

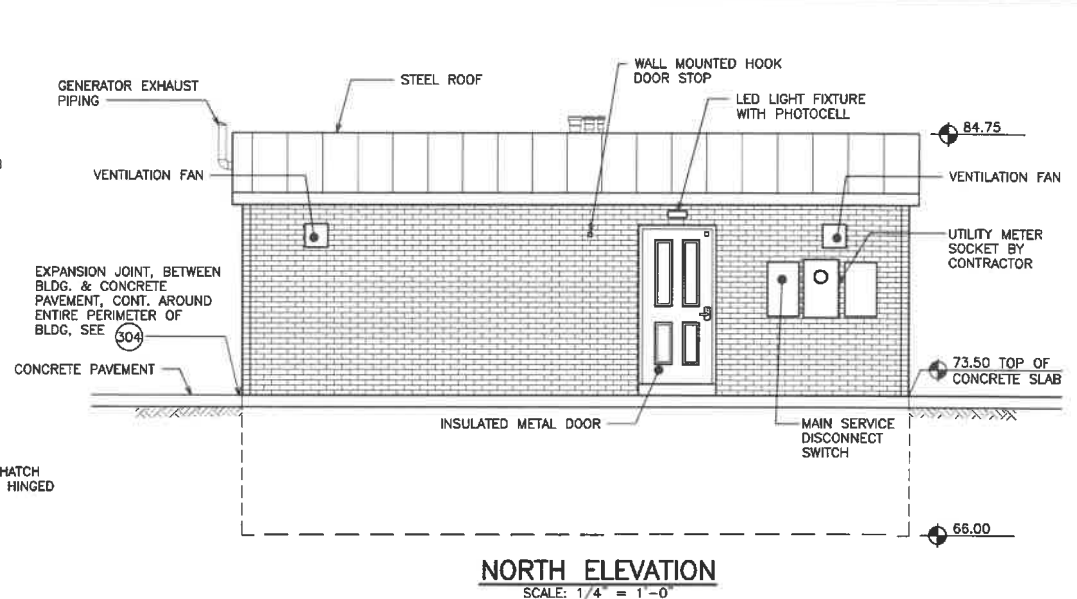


TOP VIEW
SCALE: 3/8" = 1'-0"

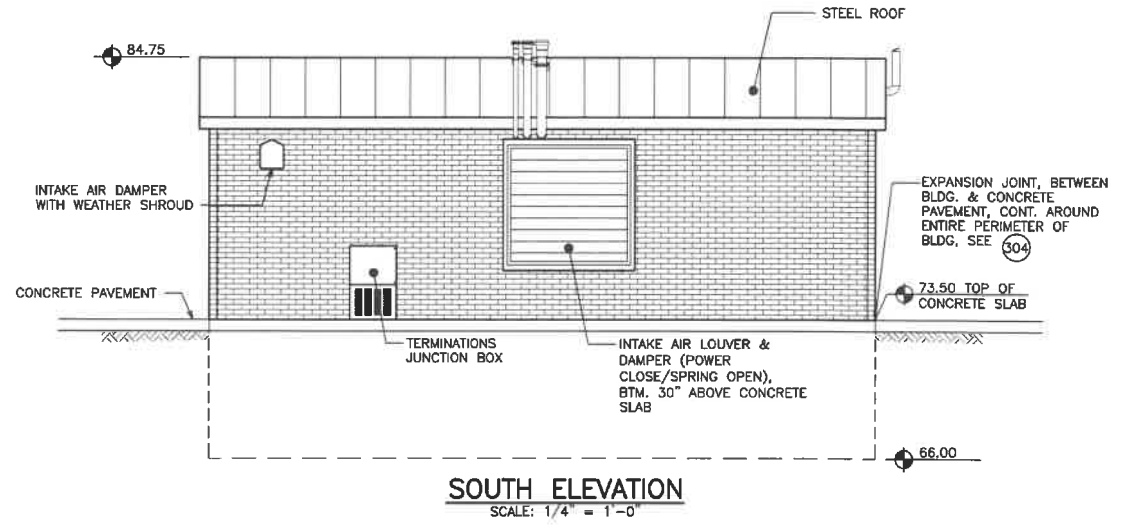
- NOTES:**
1. CONCRETE 4,000 PSI CLASS C. MEET REQUIREMENTS OF SUDAS SECTION 6010.
 2. REINFORCING STEEL: 60 KSI UNCOATED. DO NOT FIELD BEND.
 3. WET WELL: MEET REQUIREMENTS OF SUDAS SECTION 6010. INTEGRAL BASE NOT ALLOWED. PROVIDE CAST IN PLACE BASE. DO NOT PROVIDE STEPS. PROVIDE GASKETED JOINTS.
 4. COMPACTED GRANULAR SUBBASE: CRUSHED MATERIAL MEET REQUIREMENTS OF IDOT SECTION 4121.
 5. PIPING & FITTINGS: ALL TO BE DUCTILE IRON UNLESS OTHERWISE NOTED. MEET REQUIREMENTS OF SUDAS SECTION 4010. INSIDE PIPING CLASS 53, BURIED PIPING CLASS 52. PUSH ON OR MECHANICAL JOINT FITTINGS & JOINTS FOR BURIED PIPING. FLANGED JOINTS WITH FULL RED RUBBER GASKETS FOR INSIDE PIPING. STAINLESS STEEL BOLTS & HARDWARE. COMPACT FITTINGS ALLOWED. TRACER WIRE NOT REQ'D. BETWEEN WET WELL & CONTROL BUILDING. PROVIDE INTERIOR PIPE LINING. POLYETHYLENE ENCASEMENT REQ'D. FOR ALL BURIED DUCTILE IRON PIPING.
 6. LINE INTERIOR WET WELL WALLS & UNDER SIDE OF TOP SLAB.



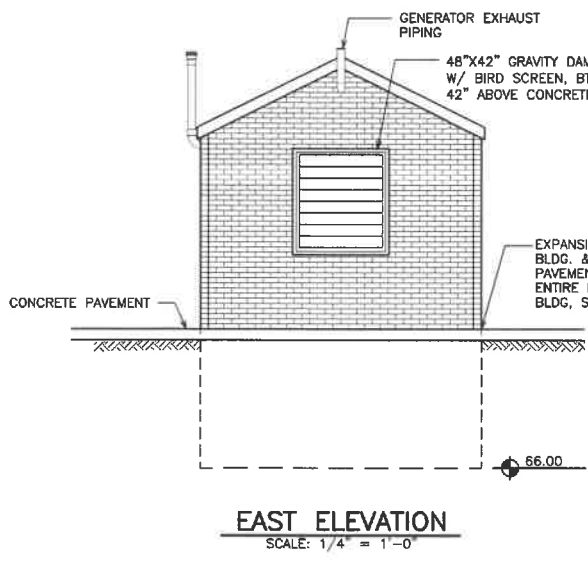
GUARD POST DETAIL
NO SCALE (311)



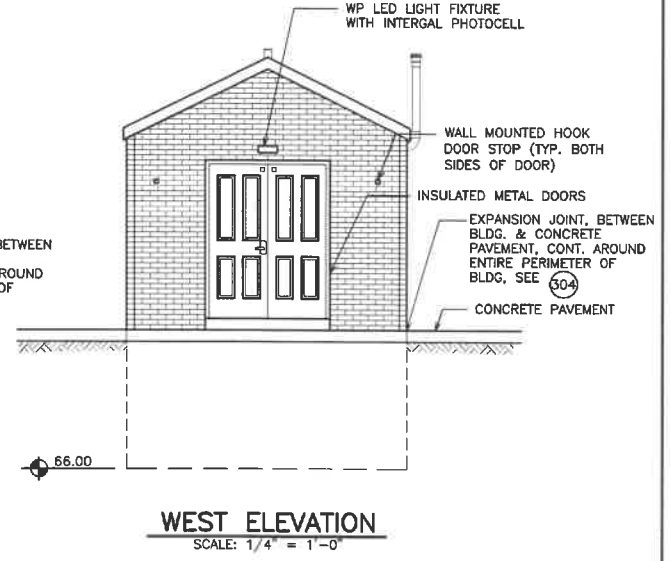
NORTH ELEVATION
SCALE: 1/4" = 1'-0"



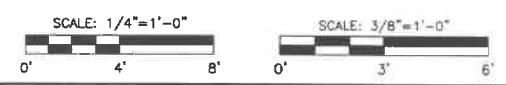
SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



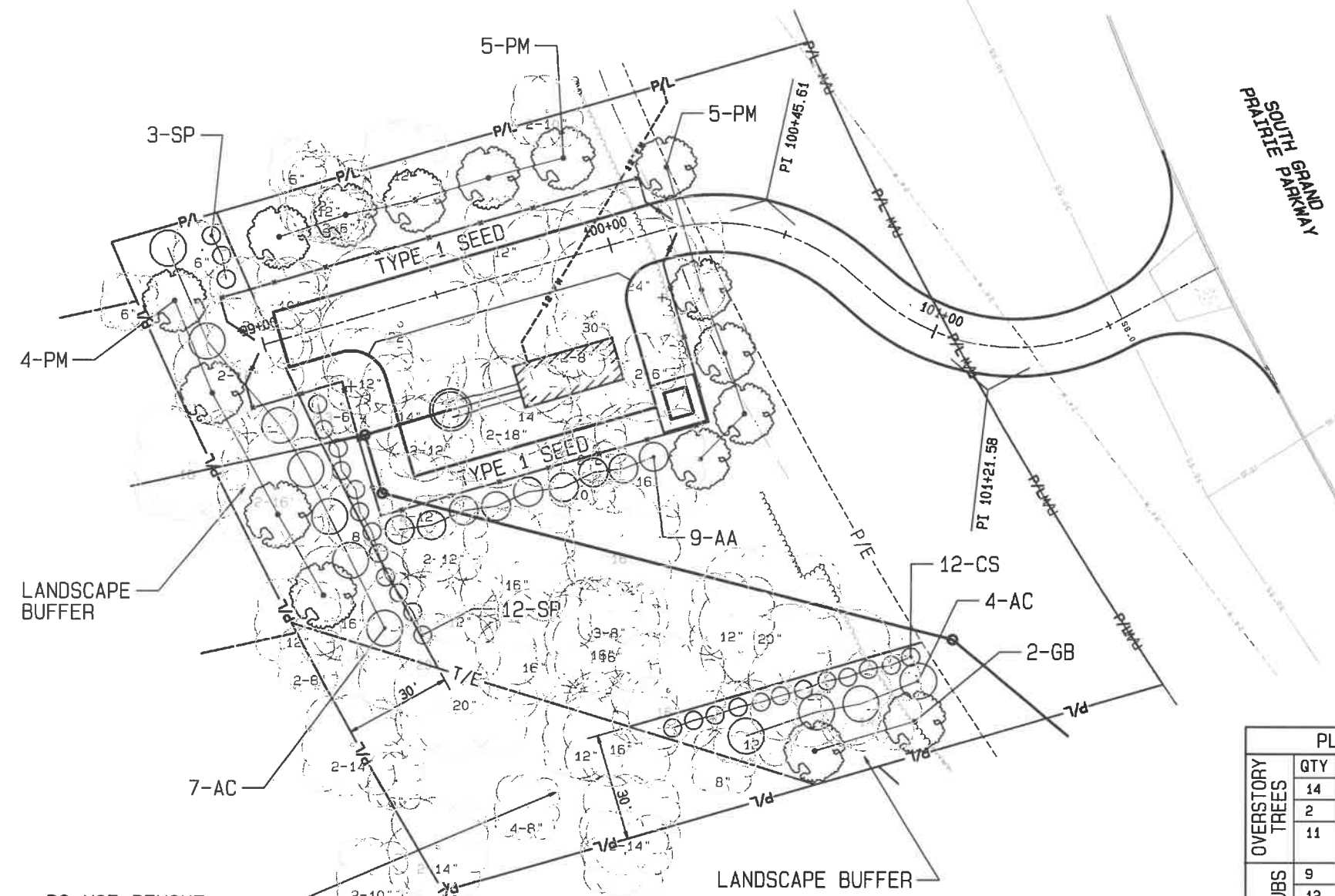
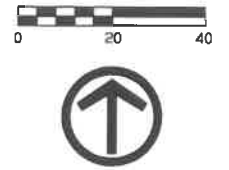
EAST ELEVATION
SCALE: 1/4" = 1'-0"



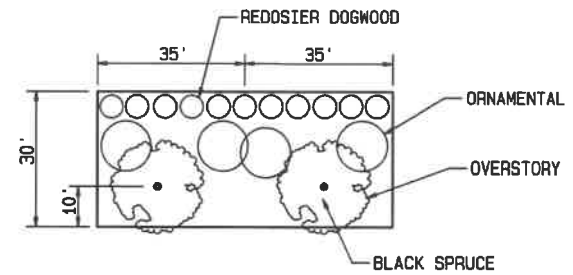
WEST ELEVATION
SCALE: 1/4" = 1'-0"



BENCHMARK	ELEVATION	VERIFY SCALE	DATE	REVISIONS	SCALE AS NOTED		LIFT STATION	DWG. NO. 11
		BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.			DRAWN JPB CHECKED FSA APPROVED HRV JR DATE 7/1/19 A.C.			



DO NOT REMOVE TREES IN THIS AREA



TYPICAL LANDSCAPE BUFFER

OPEN SPACE LANDSCAPE REQUIREMENTS

OPEN SPACE: 25%
 REQUIRED OPEN SPACE = 8,029 SF
 PROVIDED OPEN SPACE = 34,835 SF

TREES

TOTAL TREES REQUIRED (2 PER 3,000 SF OF 25% OPEN SPACE)
 6 TREES REQUIRED
 10 TREES PROVIDED

SHRUBS

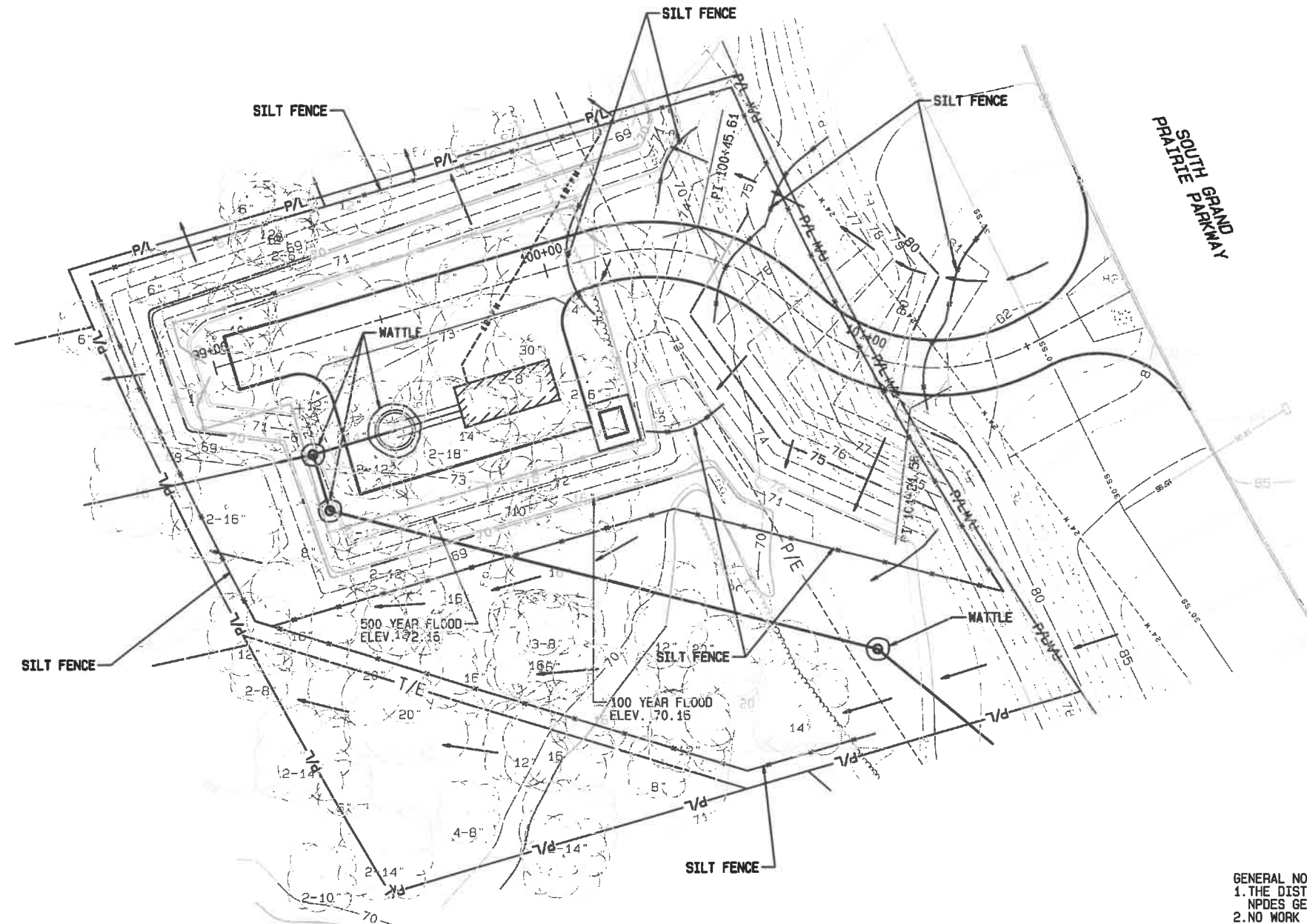
TOTAL SHRUBS REQUIRED (3 PER 3,000 SF OF 25% OPEN SPACE)
 9 SHRUBS REQUIRED
 9 SHRUBS PROVIDED

BUFFER LANDSCAPE REQUIREMENTS


PER 30' WIDE X 35' LONG BUFFER
 1 OVERSTORY/EVERGREEN TREE
 2 ORNAMENTAL TREES
 6 SHRUBS

PLANTING SCHEDULE						
	QTY	ID	BOTANICAL NAME	COMMON NAME	SIZE	METHOD
OVERSTORY TREES	14	PM	<i>Picea mariana</i>	BLACK SPRUCE	2-1 1/2" Cal.	B&B
	2	GB	<i>Ginkgo biloba</i> 'Autumn Gold'	AUTUMN GOLD GINKGO	2-1 1/2" Cal.	B&B
	11	AC	<i>Amelanchier canadensis</i>	SERVICEBERRY	5 Gal.	Cont.
UNDERSTORY TREES AND SHRUBS	9	AA	<i>Aronia arbutifolia</i>	RED CHOKECHERRY	5 Gal.	Cont.
	12	CS	<i>Cornus sericea</i>	REDOSIER DOGWOOD	5 Gal.	Cont.
SHRUBS	15	SP	<i>Salix purpurea</i> Nana	PURPLESIER WILLOW NANA	3 Gal.	Cont.
SEEDING	SUDAS TYPE 1 SEED MIXTURE WITHIN FENCED AREA AND WITHIN SOUTH GRAND PRAIRIE PARKWAY ROW. SUDAS TYPE 2 SEED MIXTURE FOR ALL OTHER AREAS OF SITE DISTURBED BY CONSTRUCTION.					

CONTROL POINT	COORDINATES	BENCHMARK	ELEVATION	DATE	REVISIONS	SCALE AS NOTED	<p>VEENSTRA & KIMM, INC. 3000 Westown Parkway • West Des Moines, Iowa 50266-1320 515-225-8000 • 515-225-7848 (FAX) • 800-241-8000 (WATS)</p>	SITE PLAN - LANDSCAPING	DWG. NO.
						DRANN DLL		12	
						CHECKED HRV			
						APPROVED HRV			
						DATE 9-5-19			
						A.C.	PROJECT 102217		



- GENERAL NOTES**
1. THE DISTURBED AREA OF THE SITE IS LESS THAN ONE ACRE AND THE NPDES GENERAL PERMIT NO. 2 AND SWPPP ARE NOT REQUIRED FOR THIS PROJECT.
 2. NO WORK SHALL BE PERFORMED BEYOND THE CONSTRUCTION LIMITS WITHOUT ENGINEER'S APPROVAL.
 3. UNDERTAKE SITE CLEANUP ON A DAILY BASIS. SOUTH GRAND PRAIRIE PARKWAY SHALL BE KEPT CLEAN OF MUD AND DEBRIS AT ALL TIMES.
 4. REMOVE TREES ONLY WITHIN THE CONSTRUCTION LIMITS AND AS NECESSARY TO IMPLEMENT THE PROJECT.
 5. CONTRACTOR IS RESPONSIBLE FOR ADDING, MAINTAINING AND ADJUSTING SILT FENCES AND WATTLES AS NECESSARY TO PREVENT EROSION OF THE SITE.
 6. ALL WASH WATER FOR CLEANING TRUCKS AND EQUIPMENT SHALL BE CONTAINED, TREATED AND PROPERLY DISPOSED.

CONTROL POINT	COORDINATES	BENCHMARK	ELEVATION	DATE	REVISIONS	SCALE AS NOTED	 VEENSTRA & KIMM, INC. 3000 Westown Parkway • West Des Moines, Iowa 50266-1320 515-225-8000 • 515-225-7848 (FAX) • 800-241-8000 (WATS)	EROSION CONTROL PLAN	DWG. NO.
						DRAWN DLL		13	
						CHECKED HRV			
						APPROVED HRV			
						DATE 9-5-19			
						A.C.	PROJECT 102217		