

COMMUNITY DEVELOPMENT

Planning,
Zoning,
Building Safety,
Construction Inspection Services,
Public Health,
Housing Inspections,
Code Enforcement

To: Planning and Zoning Commission
From: Andrew Fangman, City Planner
Date: September 15, 2020
Re: Final Plat for the Arbor Commons Subdivision

INTRODUCTION: NSPW, LLC has submitted a final plat for, Arbor Commons, a 62-lot subdivision would be comprised of 48 standalone single-family homes, 4 duplexes and 2 triplexes. Two additional 2 additional outlots would be dedicated to the City of Muscatine and would accommodate a sewage lift station and a multi-use trail. A preliminary plat for this subdivision was approved by the Muscatine City Council on January 17, 2019.

With completion of construction of all improvements and infrastructure required for this subdivision, NSPW has now submitted a final plat for approval. Approval of a final plat would allow this subdivision to be recorded at County Recorder's Office, and is the action by which the City of Muscatine accepts, public infrastructure, such as streets and sewers constructed by the developer, to serve this subdivision. Approval of a final plat is based on a finding that that the submitted final plat and the constructed infrastructure and improvements are in accordance with approved preliminary plat and relevant sections of City Code.



BACKGROUND:

This property is located in the S-3 zoning district, which allows for any use permitted in any residential zoning district or in the M-1 Light Industrial Zoning District, subject to the approval by Planning and Zoning Commission of a development plan that details the specific layout and uses of the subject property. Attached is the development plan for this subdivision which was approved by City Council, upon recommendation for the Planning and Zoning Commission on January 17, 2019.

Based on the approved preliminary plat and development plan, the developer prepared a construction plan which is attached. This plan was fully reviewed and approved, by the City Engineer and all other relevant City staff, as meeting all City requirements and the approved preliminary plat and development plan. The improvements and infrastructure have now been constructed in accordance with these plans, with City staff performing the required construction inspections of all infrastructure which is intended to be dedicated as public infrastructure. Construction on all the required improvements and infrastructure is now complete. It should be noted that as per long standing city policy sidewalks will be completed, in accordance with what is on the approved construction plans at the time each lot is developed.

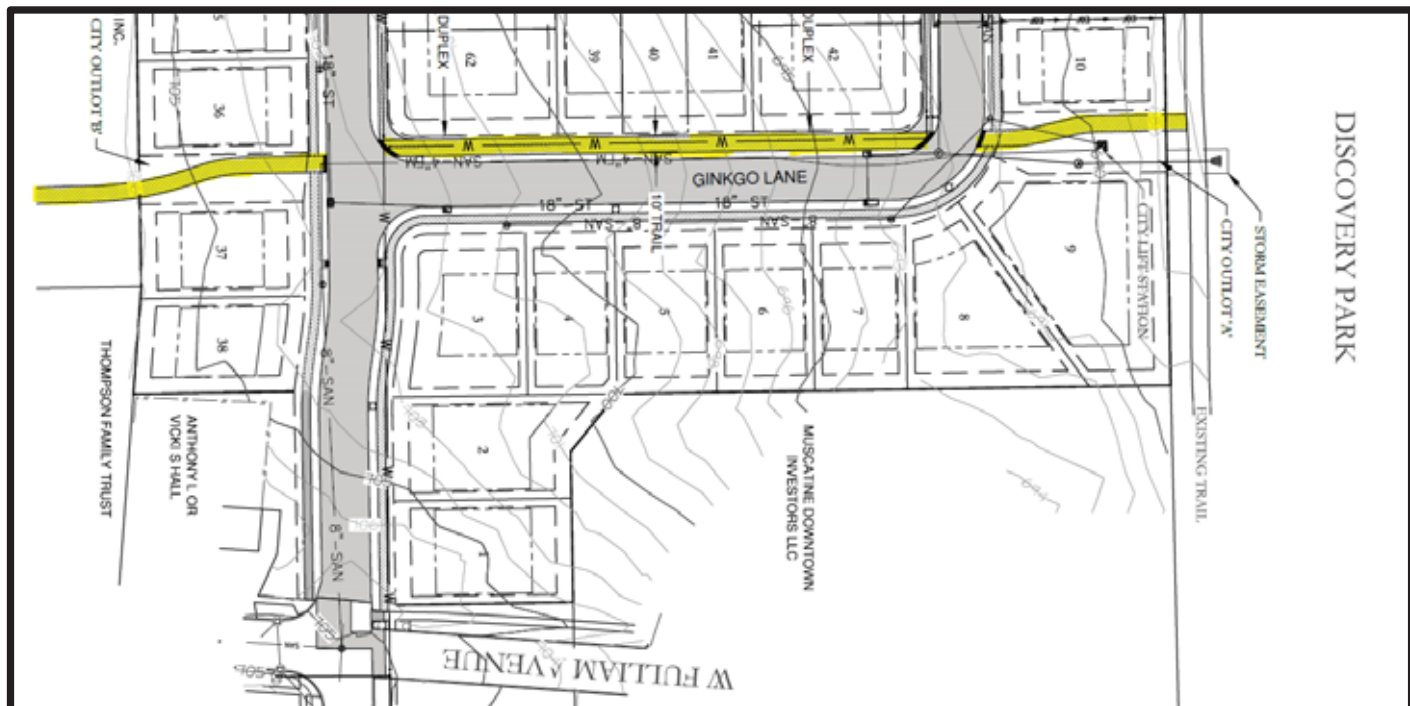


View of new Lift Station and Westside Trail at the Intersection Redwood Dr and Ginkgo Ln

The City of Muscatine and the developer reached an agreement allowing for the Westside Trail to be routed through the proposed subdivision. The Westside Trail is a 1.26-mile multiuse trail that the City of connecting to the existing trail network in Kent-Stein Park and Discovery Park. The Westside Trail was constructed by the City of Muscatine, with the funding coming through a mix of federal, state, and local funding sources.



Looking north along Redwood Dr



RECOMMENDATION/RATIONALE:

Staff recommends approval of the final plat based on the finding that that the submitted final plat and the constructed infrastructure and improvements are in accordance with approved preliminary plat and relevant sections of City Code.

Additionally, the proposed subdivision also helps achieve the following specific goals of the Comprehensive Plan.

- **Goal LU.3: Infill**

Increase new development (housing and commercial) on vacant lots in portions of the City already served by public infrastructure.

- **Goal H.1: Housing Quality**

A high-quality living environment in all neighborhoods, the preservation of stable residential neighborhoods, and where necessary, improvement of the condition of existing housing stock in Muscatine.

- **Goal H.7: Affordability**

Increase housing affordability without sacrificing long-term quality of life

The need for improved housing stock has been identified as one of the most pressing problems the community must address for Muscatine to be a thriving community. As a step towards addressing this issue, in 2017 the City of Muscatine commissioned RDG Inc to conduct a Housing Market and Demand Study. This study evaluated and identified strategies to address housing issues throughout the city; and through community engagement, identified the market gaps and desires of residents and stakeholders. The study summarized these opportunities and identifies potential strategies. One of the key findings of the study is the following: *“A limited lot supply presents the most significant challenge to overcome. The construction of new homes meets an immediate need for households who can afford homes above \$200,000. Additionally, new construction indirectly alleviates other housing challenges by opening existing housing and rental units at more affordable prices.”*

The Arbor Commons Subdivision is a direct and impactful step towards addressing this issue. It has now been more than a decade since a new single-family home subdivision has been constructed in the City of Muscatine, the resulting shortage of suitable lots for the construction of a significant number of single-family homes is barrier towards achieving a more vibrant and health community.

BACKUP INFORMATION:

1. Final Plat
2. Development Plan (enlarged view)
3. Development Plan (full view)
4. Preliminary Plat (enlarged view)
5. Preliminary Plat (full view)
6. Construction Plans

LEGEND

- SET 1/2" X 96" REBAR W/ RAN CAP #15481
- FOUND 1/2" REBAR
- FOUND 1/2" REBAR W/ YELLOW CAP #10316
- FOUND 1/2" IN CONCRETE
- FOUND 1/2" IN CONCRETE
- (R) R DENOTES RECORD DATA IF OTHER THAN ACTUAL FIELD MEASUREMENT

DEVELOPER/OWNER

NPSW ENTERPRISES, LLC
P.O. BOX 1516
MUSCATINE, IOWA 52716-0026

ZONING

S-3 LARGE SCALE MIXED USE
DEVELOPMENT (MXD) DISTRICT

DISCOVERY PARK

STORMWATER
MANAGEMENT
EASEMENT
REFER TO NOTE 2

177N

AREA

GROSS 12.04 ACRES

* FOR LOTS, SEE LOT TABLE

SETBACKS

- FRONT YARD, 25'
- SIDE YARD, 6'
- REAR YARD, 25'
- * FRONT YARD, 15' (LOTS 3-4 & 14-26)
- * FRONT YARD, 14.5' (LOTS 1-3 & 37-38)
- * FRONT YARD, 18' (LOTS 10-18 & 27-36)
- * REAR YARD, 17' (LOTS 1-27)
- * REAR YARD, 20' (LOTS 27-38)
- * PER VARIANCE 0284V-25
APPROVED BY THE ZONING
BOARD OF ADJUSTMENT ON
03/24/20.

15' STORMWATER
MANAGEMENT
EASEMENT
REFER TO NOTE 2

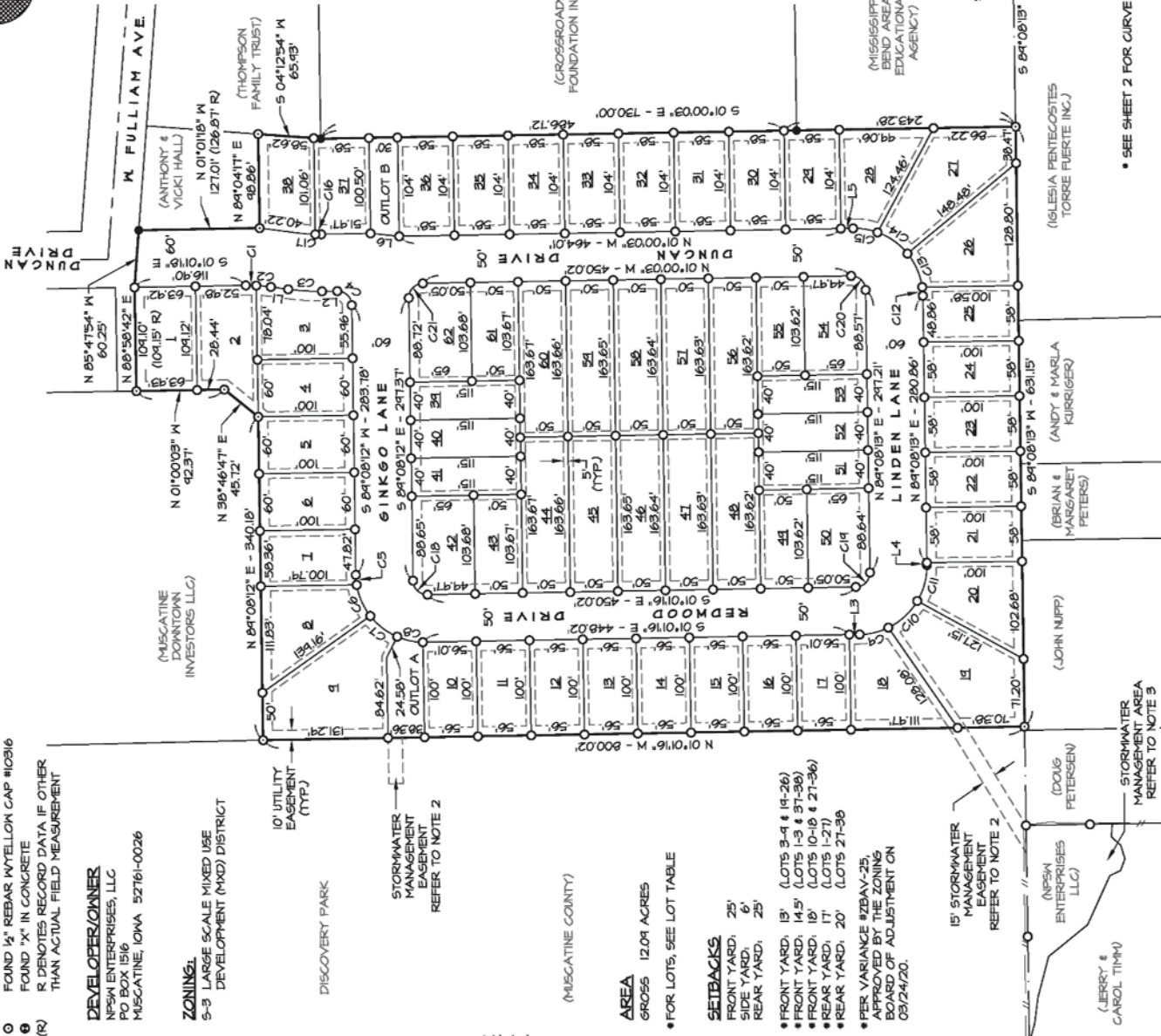
STORMWATER
MANAGEMENT AREA
REFER TO NOTE 3

ARBOR COMMONS SUBDIVISION FINAL PLAT

R2W



BASIS OF BEARINGS
IOWA STATE PLANE
COORDINATE SYSTEM
SOUTH ZONE



The utility easements as shown are acceptable to the following utilities:

Utility	Title	Date
CENTURYLINK, LC	5/4/2020	
WESTERN POWER AND LIGHT, AN ALLIANT ENERGY COMPANY	5/19/2020	
MUSCATINE POWER & WATER		
Transmission & Distribution	May 29, 2020	
Water Production & Distribution	May 31, 2020	
Communications		

VICINITY MAP
NOT TO SCALE

LAND DESCRIPTION - DOC. # 2009-06138

PARCEL 1, PER PLAT OF SURVEY RECORDED AS DOCUMENT NO. 2001-01851, IN THE MUSCATINE COUNTY RECORDER'S OFFICE, LOCATED IN THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 77 NORTH, RANGE 2 WEST OF THE 5TH P.M. IN MUSCATINE COUNTY, IOWA, EXCEPT THE REUBEN AND SARAH BAKER ADDITION PHASE IV, TO THE CITY OF MUSCATINE, IOWA.

NOTES

- ROAD RIGHT-OF-WAY, OUTLOT 'A', AND OUTLOT 'B' TO BE DEDICATED TO THE CITY.
- STORMWATER MANAGEMENT EASEMENT SHALL BE AN EXCLUSIVE STORM SEWER EASEMENT.
- STORMWATER MANAGEMENT AREA ESTABLISHED UNDER SEPARATE PLAT TO BE TRANSFERRED TO MUSCATINE COUNTY.

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



Matthew W. Krause
Date: 08/11/20 Reg. No. 15981
My license renewal date is December 31, 2021
Pages or sheets covered by this seal: 2

SURVEY COMPANY / RETURN TO:

Martin & Whitacre
Surveyors & Engineers, Inc.
P.O. BOX 413 MUSCATINE, IOWA 52761
INFO@MARTIN-WHITACRE.COM (563)263-7691

SURVEYOR: MATTHEW W. KRAUSE

PROPRIETOR(S): NPSW ENTERPRISES, LLC

REQUESTOR: NPSW ENTERPRISES, LLC

LOCATION: SE 1/4 - NE 1/4 OF SEC. 33, T17N, R2W

SURVEY TYPE: FINAL PLAT

FILE	BOOK	SCALE	DRN	CHKD	DATE	JOB NO.
177N-24	1000	1"=50'	JWH		02/25/16	622516
SHEET	OF					
2	2					

* SEE SHEET 2 FOR CURVE TABLE, LINE TABLE AND AREA TABLE

**STORM WATER
MANAGEMENT AREA**

DOUGLAS N
PETERSEN

ANDREW J. OR
MARIA J. KURRIGER

IGLESIA PENTECOSTES
TORRE FUERTE INC

MUSCATINE DOWNTOWN
INVESTORS LLC

ANTHONY L. OR
VICKI S. HALL

THOMPSON FAMILY TRUST

CROSSROADS FOUNDATION INC.

- 10' UTILITY EASEMENT (TYP)
UTILITY LINEMISSISSIPPI BEND AREA
EDUCATIONAL AGENCY

PROPOSED DEVELOPMENT PLAN ARBOR COMMONS SUBDIVISION MUSCATINE, IOWA



SITE PLAN INFORMATION

DEVELOPER INFORMATION: NISW INCORPORATED, LLC
 PROJECT LOCATION: 1/4 SECTION 36, TOWNSHIP 35 NORTH, RANGE 10 WEST, MUSCATINE, IOWA
 LOT INFORMATION: 10 LOTS
 TO: LOTS 1-10
 SUBDIVISION DEVELOPMENT: 1.5 ACRES
 ZONING: RESIDENTIAL
 RETRACTION REQUIREMENT: 5 FT
 SETBACK: 5 FT
 ROAD WIDE: 20 FT
 ROAD RIGHT-OF-WAY: 20 FT
 FLOOD ELEVATION: 1000.00

EXPECTED DEVELOPMENT

WHOLE FAMILY FARM AND FARM HOUSE AS LOTS

UTILITIES:

ELECTRIC: CITY OF MUSCATINE
 WATER: CITY OF MUSCATINE
 SEWER: CITY OF MUSCATINE
 STORM: CITY OF MUSCATINE
 GAS: CITY OF MUSCATINE
 TELEPHONE: CITY OF MUSCATINE
 CABLE: CITY OF MUSCATINE
 PRE-REPAIR: CITY OF MUSCATINE
 LAMING: CITY OF MUSCATINE

GENERAL NOTES

1. THE DEVELOPER SHALL BE RESPONSIBLE FOR THE OBTAINING OF ALL NECESSARY PERMITS AND CONSTRUCTION ACTIVITIES.

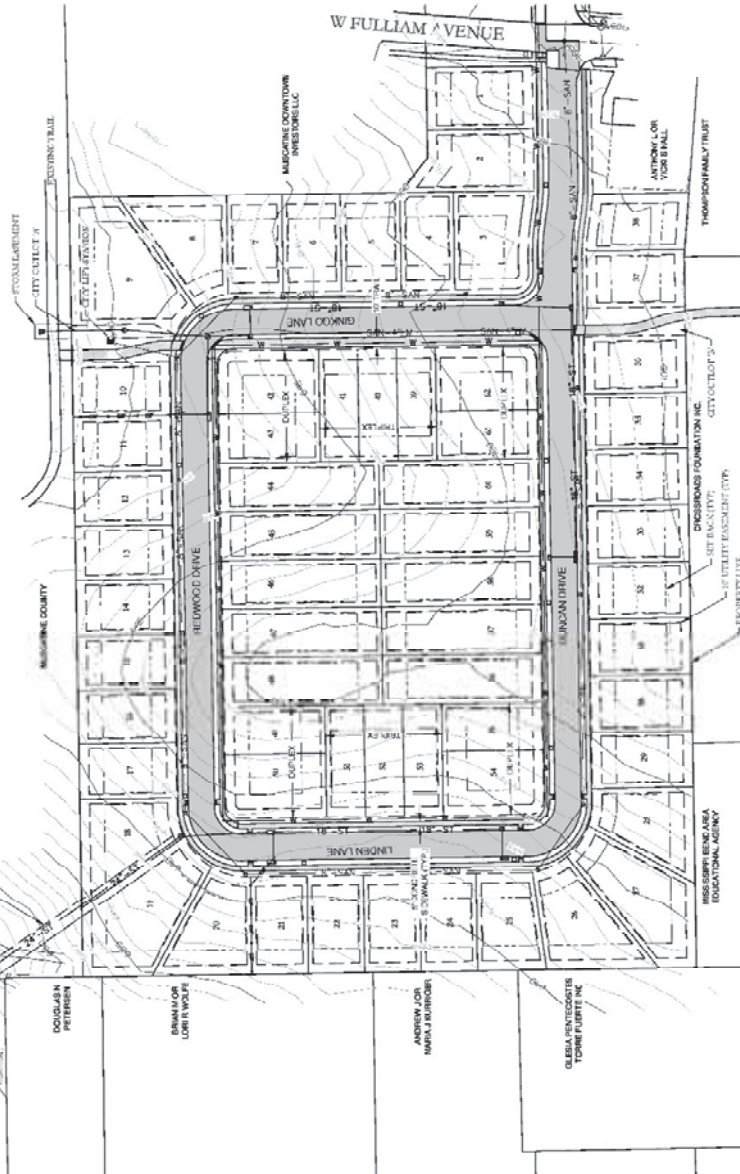
PROJECT LOCATION



PROJECT NO.	2023-01	DATE	11/27/2023
CONTRACT NO.	001	DATE	11/27/2023
PROJECT NO.	2023-01	DATE	11/27/2023

DEVELOPMENT PLAN

DISCOVERY PARK



PROPERTY INFORMATION

SETBACK: 5' FRONT, 5' SIDE, 10' REAR
 SETBACK: 5' FRONT, 5' SIDE, 10' REAR
 SETBACK: 5' FRONT, 5' SIDE, 10' REAR
 SETBACK: 5' FRONT, 5' SIDE, 10' REAR

LEGAL DESCRIPTION

TX BUTTER A SARA DARTER ADD. PLOT 11 PART 1
 NENE & SE NE 200-57501, 357760W
 PLOT 11 PART 1

GENERAL NOTES

1. THE DEVELOPER SHALL BE RESPONSIBLE FOR THE OBTAINING OF ALL NECESSARY PERMITS AND CONSTRUCTION ACTIVITIES.

BY	DESIGNED BY	DATE
DESIGNED BY	DATE	DATE
PROJECT ENGINEER	DATE	DATE

Martin & Whitacre
 Surveyors & Engineers, Inc.
 P.O. BOX 413
 MUSCATINE, IOWA
 PHONE: (562) 555-1881
 EMAIL: info@martinwhitacre.com

ARBOR COMMONS SUBDIVISION
 NISW ENTERTAINMENT, LLC
 MUSCATINE, IOWA

ARBOR COMMONS SUBDIVISION PRELIMINARY PLAT

R2W

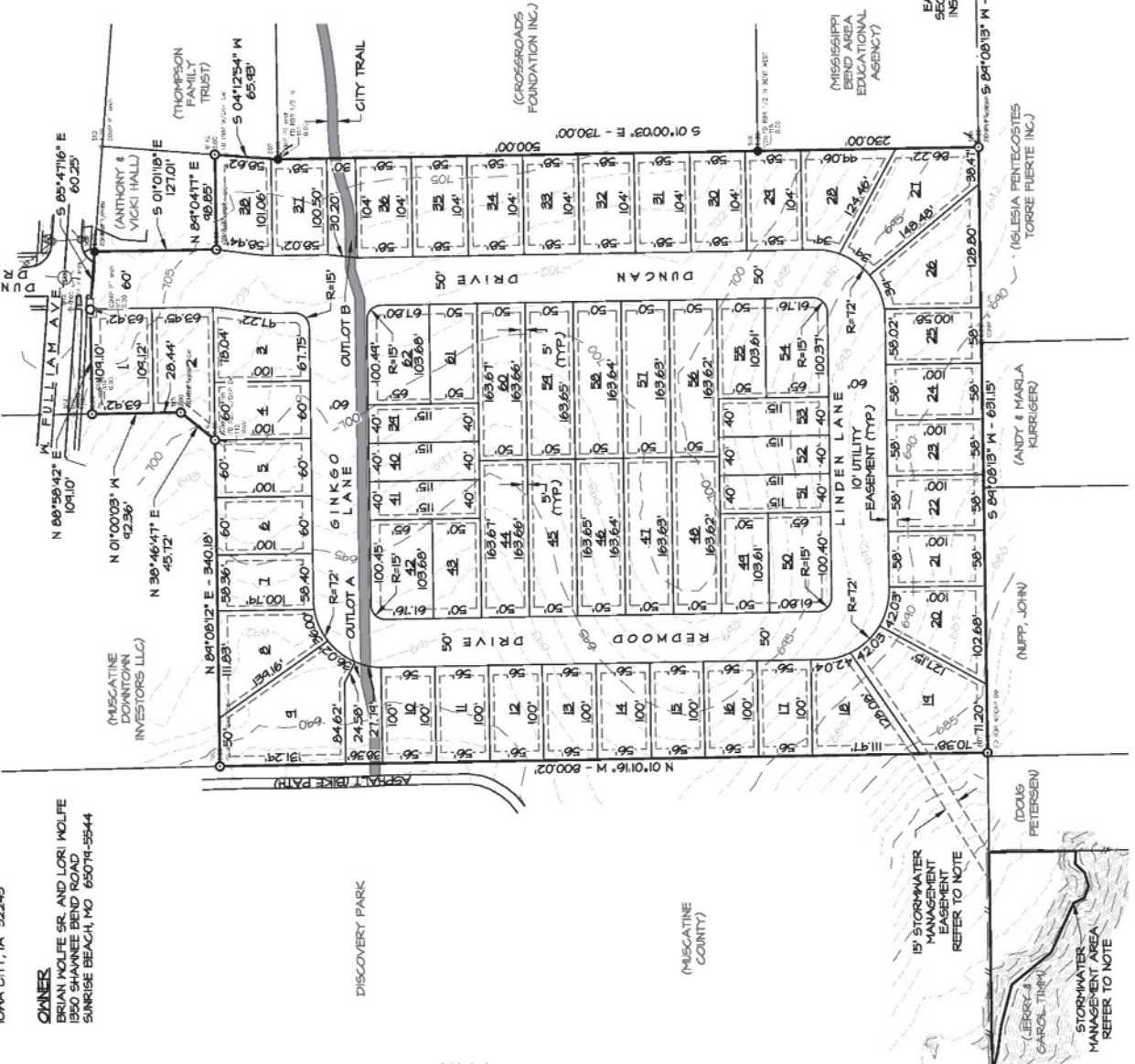
DEVELOPER
NPSW ENTERPRISES, LLC
3116 ALPINE COURT
IOWA CITY, IA 52245

OWNER
BRIAN WOLFE SR. AND LORI WOLFE
1950 SHAWNEE BEND ROAD
SUNRISE BEACH, MO 65074-5544



BASIS OF BEARINGS
IOWA STATE PLANE
COORDINATE SYSTEM
SOUTH ZONE

VICINITY MAP
NOT TO SCALE



DISCOVERY PARK

(MUSCATINE COUNTY)

15' STORMWATER
MANAGEMENT
EASEMENT
REFER TO NOTE

(DOUG
PETERSEN)
(LARRY A
CAROL TITM)
STORMWATER
MANAGEMENT AREA
REFER TO NOTE

LAND DESCRIPTION - DOC. # 2009-06138

PARCEL 1, PER PLAT OF SURVEY RECORDED AS DOCUMENT NO. 2001-01851, IN THE MUSCATINE COUNTY RECORDER'S OFFICE, LOCATED IN THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 77 NORTH, RANGE 2 WEST OF THE 5TH P.M., IN MUSCATINE COUNTY, IOWA, EXCEPT THE REUBEN AND SARAH BAKER ADDITION PHASE IV, TO THE CITY OF MUSCATINE, IOWA.

NOTES

1. ROAD RIGHT-OF-WAY, OUTLOT "A", AND OUTLOT "B" TO BE DEDICATED TO THE CITY.
2. STORMWATER MANAGEMENT EASEMENT SHALL BE AN EXCLUSIVE STORM SEWER EASEMENT.
3. STORMWATER MANAGEMENT AREA TO BE ESTABLISHED UNDER SEPARATE SUBDIVISION PLAT AND TRANSFERRED TO MUSCATINE COUNTY.

I hereby certify that this land surveying document was prepared and the related survey work was performed in accordance with the laws of the State of Iowa, and that I am a duly licensed Professional Land Surveyor under the laws of the State of Iowa.

Matthew W. Krause
Surveyor
Exp. No. 15081
My license renewal date is December 31, 2019
Pages or sheets covered by this seal: 1



SURVEY COMPANY / RETURN TO:

Martin & Whitacre
Surveyors & Engineers, Inc.
P.O. BOX 413 MUSCATINE, IOWA 52761
INFO@MARTIN-WHITACRE.COM (563)263-7891

PROPRIETOR: MATTHEW M. KRAUSE
REQUESTOR: NPSW ENTERPRISES, LLC
LOCATION: SE 1/4 - NE 1/4 OF SEC. 33, T77N, R2W
IN MUSCATINE COUNTY, IOWA

FILE	BOOK	SCALE	DRN	CHKD	DATE	JOB NO.
55-TH-24	104	1"=50'	JRM	MMK	02/20/19	0225019
REV.	0					SHEET 1 OF 1

ARBOR COMMONS SUBDIVISION
NPSW ENTERPRISE, LLC

MUSCATINE, IOWA

DEVELOPER
NPSW ENTERPRISE, LLC MIKE NOLAN, AIA 563-506-4965

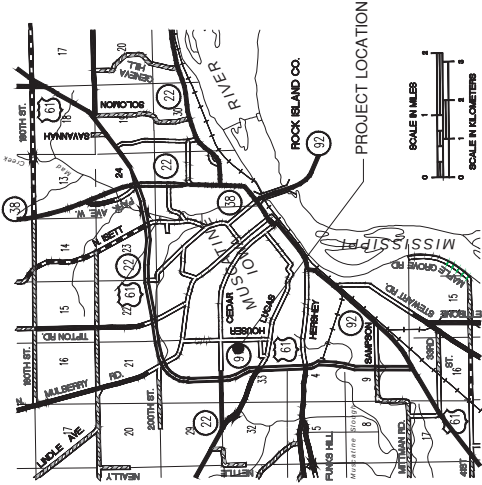
PROJECT ENGINEER
MARTIN & WHITACRE SURVEYORS & ENGINEERS, INC.
RICKY TEED, P.E. 563-263-7691

CITY OF MUSCATINE CONTACTS
CITY ENGINEER JIM EDMOND 563-263-8933

MUSCATINE POWER & WATER:
WATER: BRYAN BUTLER 563-262-3360
ELECTRIC: STEVE SHOPPA 563-262-3324
COMMUNICATIONS: TOM LEWIS 563-262-3206

ALLIANT ENERGY
GAS JOHN CARNEY 563-288-3322

CENTURY LINK
COMMUNICATIONS 563-355-1893



VICINITY MAP
NO SCALE

PROJECT DESCRIPTION: SINGLE FAMILY HOME SUBDIVISION
LOCATION: DUNCAN DRIVE AND WEST FULLIAM AVENUE



PROJECT LOCATION



THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT IOWA STATEWIDE URBAN DESIGN STANDARDS AND PERMIT. ALL CONTRACTORS SHALL SIGN AND ADHERE TO PROJECT SPECIAL CONDITIONS

THIS PROJECT SHALL OPERATE UNDER NPDES GENERAL PERMIT NO. 2 FOR "STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FOR CONSTRUCTION ACTIVITIES". THE DEVELOPER HAS FILED A PERMIT. ALL CONTRACTORS SHALL SIGN AND ADHERE TO PROJECT SPECIAL CONDITIONS

CONTRACTORS SHALL CALL IOWA ONE CALL 1-800-292-4989 PRIOR TO START OF WORK. EXISTING UTILITIES SHOWN ARE DERIVED FROM SURVEY & MAPPING DATA. FIELD LOCATE AND VERIFY ALL UTILITIES SHOWN. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES AND REPAIR DAMAGES.

CONTRACTORS SHALL PROVIDE TEMPORARY FENCING TO PREVENT INTERFERENCE BY PEDESTRIANS AND VEHICLES. ALL WORK SHALL MEET CITY AND HNI SAFETY PROTOCOLS



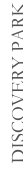
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA

RICHARD H. TEED, P.E. I.A. REG. NO. 23290 DATE
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2019

Pages or sheets covered by this seal: _____
A.01 THROUGH W.05

SHEET INDEX		
REV #	SHEET NO.	SHEET TITLE
0	A.01	COVER PAGE
0	A.02	LEGEND
0	A.03	DEVELOPMENT PLAN
0	B.01	TYPICAL CROSS SECTIONS
0	B.02	DETAILS
0	B.03	DETAILS
0	B.04	DETAILS
0	C.01	QUANTITIES & ESTIMATE REFERENCE NOTES
0	C.02	ESTIMATE REFERENCE NOTES
0	C.03	EROSION CONTROL
0	D.00	PAVING KEY PLAN
0	D.01	PLAN & PROFILE
0	D.02	PLAN & PROFILE
0	D.03	PLAN & PROFILE
0	D.04	PLAN & PROFILE
0	G.01	ALIGNMENTS & BENCHMARKS
0	H.01	RIGHT-OF-WAY
0	L.01	PAVEMENT PLAN
0	M.01	SEWER KEY PLAN
0	M.02	SEWER PLAN & PROFILE
0	M.03	SEWER PLAN & PROFILE
0	M.04	SEWER PLAN & PROFILE
0	M.05	SEWER PLAN & PROFILE
0	M.06	SEWER PLAN & PROFILE
0	M.07	SEWER PLAN & PROFILE
0	M.08	SEWER CROSS RUNS
0	M.09	SEWER FORCE MAIN PLAN & PROFILE
1	M.10	SANITARY SEWER LIFT STATION
0	M.11	UTILITY KEY PLAN
0	M.12	UTILITY PLAN & PROFILE
0	M.13	UTILITY PLAN & PROFILE
0	M.14	UTILITY PLAN & PROFILE
0	M.15	UTILITY PLAN & PROFILE
0	T.01	GRADING PLAN
0	T.02	GRADING CROSS SECTION
0	W.01	CROSS SECTIONS
0	W.02	CROSS SECTIONS
0	W.03	CROSS SECTIONS
0	W.04	CROSS SECTIONS
0	W.05	CROSS SECTIONS



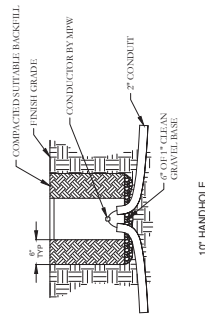
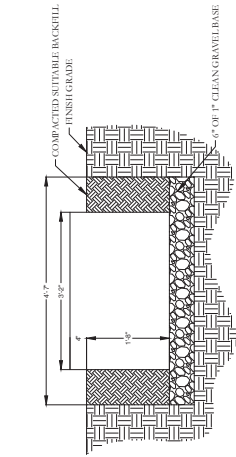
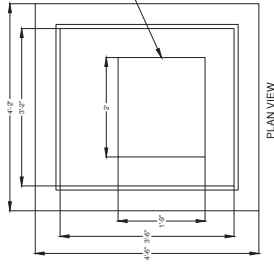
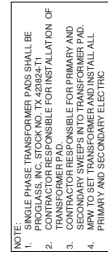


GENERAL NOTES:
CONTRACTORS SHALL FIELD LOCATE UTILITIES VIA
CONSTRUCTION ACTIVITIES

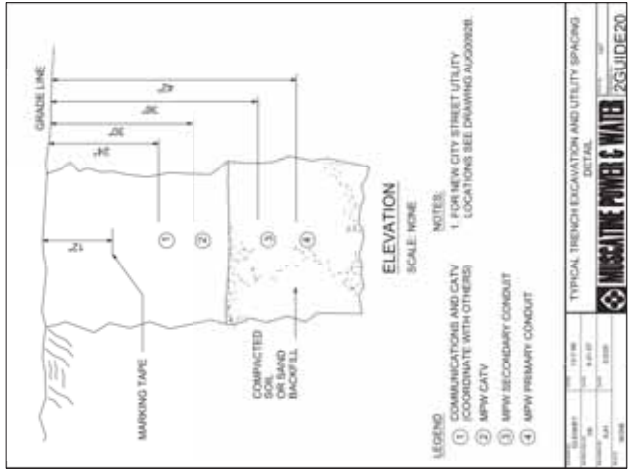
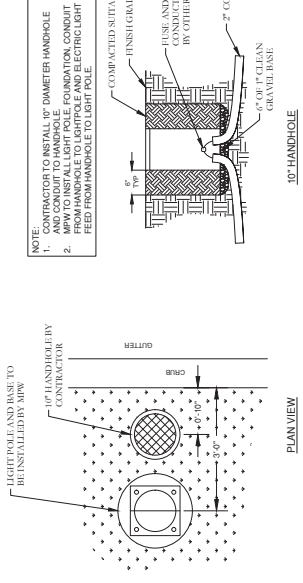
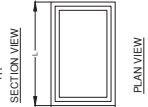
1. THE CURRENT ZONING: S-3 MIXED USE DEVELOPMENT(MXD)

DEVELOPMENT PLAN

PROJ NO:	8253.18	DRAWING NO: A.03
CONST PROJ:	000	
SCALE:	AS NOTED	
DATE:	2/27/2019	
		SHEET NO: 3 OF 40



HANDHOLE SCHEDULE						
NO.	TYPE	W	L	D	PART NO.	
					COVER	BOX
1.	13" x 24"	15-1/2"	25"	18"	PG1324HA0017	PG1324BA18
2.	17" x 30"	19-1/4"	19-1/4"	24"	PG1730HA0021	PG1730BA24
3.	30" x 48"	32-1/8"	40-5/8"	36"	PG3048HA0021	PG3048BA36
4.						PE10HX

[illegible]

1. PLACE CONDUIT TO A MINIMUM DEPTH INDICATED ON THE MPW CONDUIT INSTALLATION SPECIFICATIONS.
2. CHANGE DIRECTION AT HANDHOLES OR BY BENDING, SUCH THAT THE CONDUIT WILL NOT BE DAMAGED OR ITS INTERNAL DIAMETER CHANGED. INSIDE BENDS ARE UNIFORM CURVATURE AND DO NOT EXCEED AN OUTSIDE RADIUS OF 18 INCHES. THERE SHALL BE NO MORE THAN SIX TIMES THE INTERNAL DIAMETER OF THE CONDUIT.
3. ON THE EXPOSED ENDS OF CONDUIT, PLACE BELT END FITTINGS PRIOR TO INSTALLING CABLE. EXTEND ALL CONDUITS A MINIMUM OF 2-INCHES AND A MAXIMUM OF 14 INCHES ABOVE THE FINISHED SURFACE OF ANY FOUNDATION, FOOTING, OR STRUCTURAL SLAB. TRIM THE ENDS OF CONDUITS WITH AN APPROPRIATE TOOL WHEN PLACING CONDUIT UNDER PAVEMENTS IS REQUIRED.
4. TRENCHLESS INSTALLATION METHODS DESCRIBED IN SECTION 06900 SHALL BE USED FOR ALL CONDUITS INSTALLED THROUGH EXISTING TRENCHES. STAKING CONDUIT SHALL NOT BE PERMITTED. ALL OTHER CONDUIT SHALL BE INSTALLED ON THE BOTTOM OF THE TRENCH. STAKING CONDUIT SHALL NOT BE PERMITTED.

[illegible]

ESTIMATED PROJECT QUANTITIES

ITEM NO.	ITEM CODE	ITEM	UNIT	TOTAL	AS BUILT QUANTITY
1	1070-08-A-0	TRAFFIC CONTROL	LS	1	
2	2010-08-A-0	CLEANING AND GULFING	LS	1	
3	2010-08-D-0	REPLACEMENT OF UNSUITABLE BACKFILL MATERIAL	TONS	3,205	
4	2010-08-D-0	EXCAVATION, CLASS 10, SUBDRAIN	CY	2,039	
5	2010-08-F-0	EXCAVATION, CLASS 13, DETENTION BASIN	CY	629	
6	2010-08-F-0	SUBGRADE PREPARATION	SY	7,116	
7	2010-08-F-0	SUBGRADE STABILIZATION, 12 INCH	CY	100	
8	2010-08-F-0	SUBGRADE TREATMENT, GEOTEXTILE	SY	303	
9	2010-08-F-2	SUBGRADE, MODIFIED SUBGRADE, 8 INCH	SY	7,116	
10	3010-08-A-0	TRENCH COMPACTION TESTING	LS	1	
11	4010-08-A-1	SANITARY SEWER GRAVITY MAIN, TRENCHED, P.V.C. 8 INCH	LF	1,663	
12	4010-08-C-1	SANITARY SEWER FORCE MAIN, TRENCHED, 4 INCH	EA	550	
13	4010-08-B-0	SANITARY SEWER STUB, P.V.C. 4 INCH	EA	62	
14	4020-08-A-1	STORM SEWER, TRENCHED, RCP, 12 INCH	LF	14	
15	4020-08-A-1	STORM SEWER, TRENCHED, RCP, 15 INCH	LF	27	
16	4020-08-A-1	STORM SEWER, TRENCHED, RCP, 18 INCH	LF	916	
17	4020-08-A-1	STORM SEWER, TRENCHED, RCP, 24 INCH	LF	997	
18	4030-08-B-0	RPE APRON, RCP, 12 INCH	EA	1	
19	4200-08-B-0	RPE APRON, RCP, 24 INCH	EA	3	
20	4030-08-C-0	FOOTING FOR CONCRETE PIPE, APRON, 24 INCH	EA	3	
21	4030-08-D-0	RPE APRON GUARD, 12 INCH	EA	1	
22	4030-08-D-0	RPE APRON GUARD, 24 INCH	EA	3	
23	5010-08-A-1	WATER MAIN, TRENCHED, P.V.C. C900, 6 INCH	LF	1,648	
24	5010-08-A-1	WATER MAIN, TRENCHED, P.V.C. C900, 8 INCH	LF	322	
25	5010-08-C-1	FITTINGS, M.I. TEE, 8 INCH X 6 INCH	EA	1	
26	5010-08-C-1	FITTINGS, M.I. BEND, 6 INCH	EA	3	
27	5010-08-C-1	FITTINGS, M.I. REDUCER, 3 INCH X 8 INCH	EA	2	
28	5010-08-D-0	WATER SERVICE STUB, 1.1 INCH	EA	62	
29	5020-08-A-0	VALVE, M.I. GATE VALVE, 6 INCH	EA	7	
30	5020-08-C-0	HYDRANT ASSEMBLY	EA	3	
31	6010-08-A-0	MANHOLE TYPE SW-301, 48 INCH	EA	11	
32	6010-08-A-0	MANHOLE TYPE SW-301, 60 INCH	EA	5	
33	6010-08-B-0	INTAKE TYPE SW-505	EA	2	
34	6010-08-B-0	INTAKE TYPE SW-505	EA	3	
35	6010-08-B-0	INTAKE TYPE SW-507	EA	1	
36	6010-08-B-0	INTAKE TYPE SW-508	EA	6	
37	6010-08-B-0	INTAKE TYPE SW-512, 30' AREA INTAKE W/ TYPE 5 CASTING	EA	1	
38	7010-08-A-0	PAVEMENT, P.C. 7 INCH	SY	6,190	
39	7010-08-A-0	CONCRETE WALK, P.C.G. 3 INCH	SY	103	
40	7020-08-B-0	CONCRETE WALK, P.C.G. 3 INCH	SY	102	
41	7030-08-C-0	DETECTABLE WALKING	SY	99	
42	7040-08-A-0	PAV. DEPTH PATCH, P.C.G. 7 INCH	AC	3.7	
43	8010-08-B-0	SEEDING, FERTILIZING & HYDROMULCHING	LS	1	
44	9040-08-A-2	SURPP MANAGEMENT	LF	1	
45	9040-08-H-0	TEMPORARY EARTH OVERTENSION STRUCTURE	LS	623	
46	9040-08-A-0	RIP RAP, CLASS 2 REVEMENT STONE	TON	164	
47	9040-08-A-1	SILT FENCE OR SILT FENCE OTION CHECK	LF	1,281	
48	9040-08-C-1	STABILIZED CONSTRUCTION DEGREE	SY	122	
49	9040-08-F-1	INLET PROTECTION DEVICE, SURFACE APPLIED INTAKE PROTECTION	EA	13	
50	11020-08-A-0	MOBILIZATION - GRADING	LS	1	
51	11020-08-A-0	MOBILIZATION - UTILITIES	LS	1	
52	11020-08-A-0	MOBILIZATION - PAVING	LS	1	
53	11020-08-A-0	CONCRETE WASHOUT	LS	1	
54	12000-0000-X-1	ELECTRICAL CONDUIT, OPEN CUT, HOPE-PVC, 2 INCH PRIMARY	LF	2,358	
55	12000-0000-X-2	ELECTRICAL CONDUIT, OPEN CUT, HOPE-PVC, 3 INCH SECONDARY	LF	1,172	
56	12000-0000-X-3	ELECTRICAL CONDUIT, OPEN CUT, HOPE-PVC, 2 INCH LIGHT	LF	535	
57	12000-0000-X-4	ELECTRICAL CONDUIT, OPEN CUT, HOPE-PVC, 2 INCH SERVICES	LF	1,386	
58	12000-0000-X-5	3 X 3 TRANSFORMER PAD	EA	9	
59	12000-0000-X-6	HANDHOLE ELECTRICAL, 13 INCH X 24 INCH	EA	14	
60	12000-0000-X-7	HANDHOLE ELECTRICAL, LIGHT POLE ASSEMBLY	EA	12	
61	12000-0000-X-8	COMMUNICATION CONDUIT, OPEN CUT, RISE, 2 INCH	LF	2,768	
62	12000-0000-X-9	COMMUNICATION CONDUIT, OPEN CUT, RISE, 1 INCH	LF	604	
63	12000-0000-X-10	HANDHOLE COMMUNICATIONS, 17 INCH X 30 INCH	EA	20	
64	12000-0000-X-11	HANDHOLE COMMUNICATIONS, 30 INCH X 48 INCH	EA	2	
65	12000-0000-X-12	HANDHOLE COMMUNICATIONS, 10 INCH DIAMETER	EA	17	
66	12000-0000-X-13	LIFT STATION	LS	1	

#	DATE	DESCRIPTION	BY	DESIGNED BY:
				JMS
				DRAWN BY:
				JMS
				PROJECT ENGR:
				BIT



**Martin & Whitacre
Surveyors & Engineers, Inc.**
P.O. BOX 413
VOICE (563) 263-7691
MUSCATINE, IOWA
EMAIL info@martin-whitacre.com

EMAIL info@martin-whitacre.com

ARBOR COMMONS SUBDIVISION
NPSW ENTERPRISE, LLC
MUSCATINE, IOWA

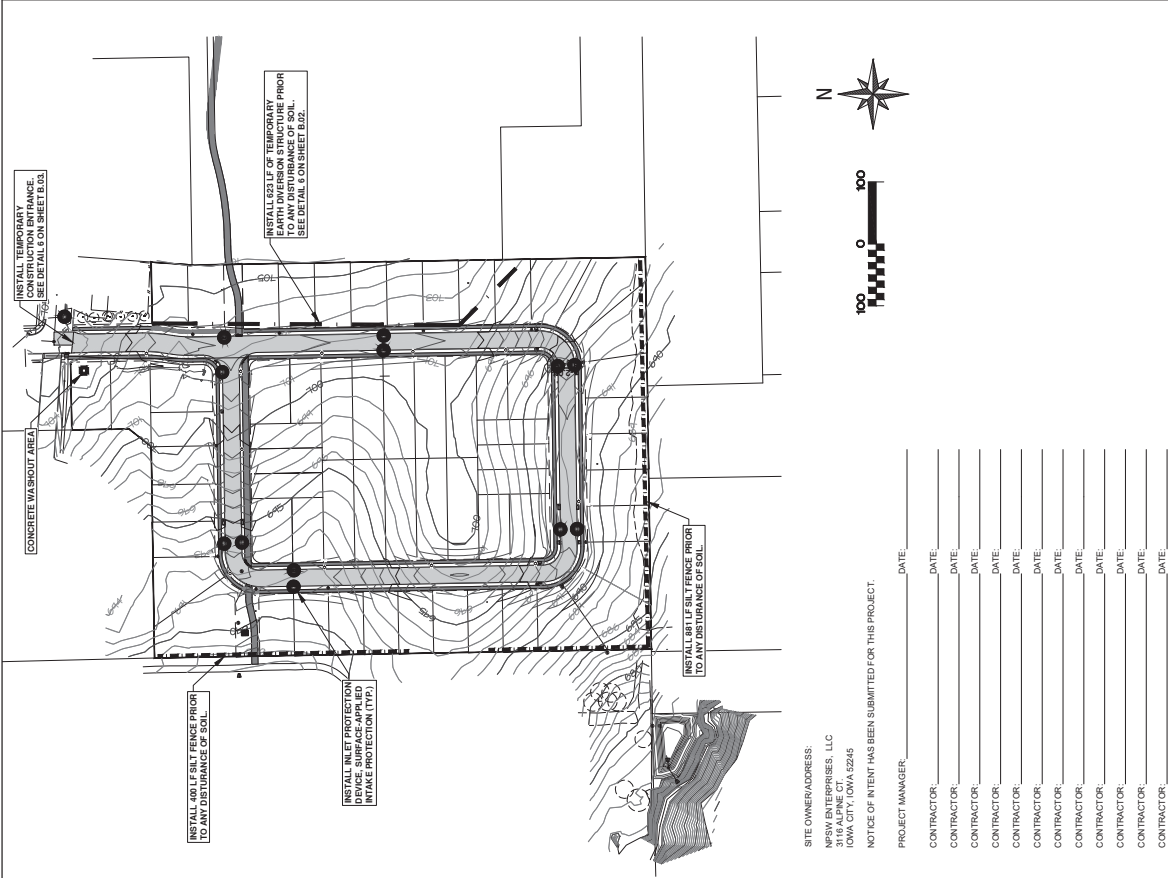
QUANTITIES & ESTIMATE REFERENCE

PROJ NO:	8253.18	DRAWING NO: C.01
CONST PROJ:	000	
SCALE:	AS NOTED	
DATE:	2/27/2019	SHEET NO: 8 OF 40

[illegible]

[illegible]

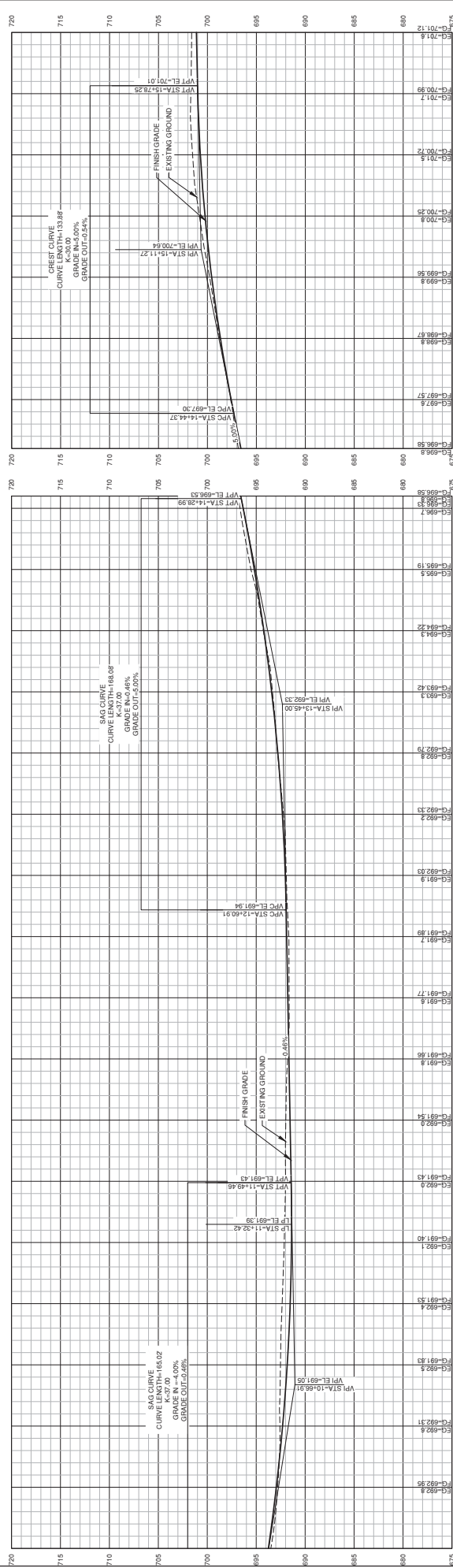
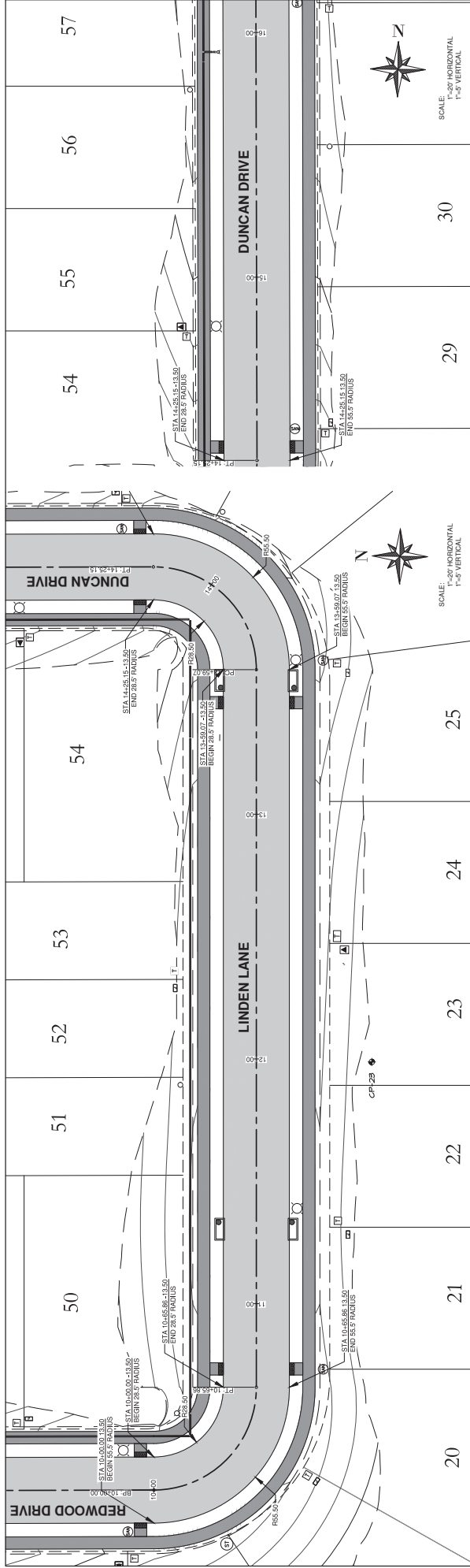
ARBOR COMMONS SUBDIVISION NPSW ENTERPRISE, LLC MUSCATINE, IOWA	ESTIMATE REFERENCE NOTES	PROJ NO: 823518 CONST PROJ: 000 SCALE: AS NOTED DATE: 2/27/2019 DRAWING NO: C.02 SHEET NO: 9 OF 40
--	--------------------------	---



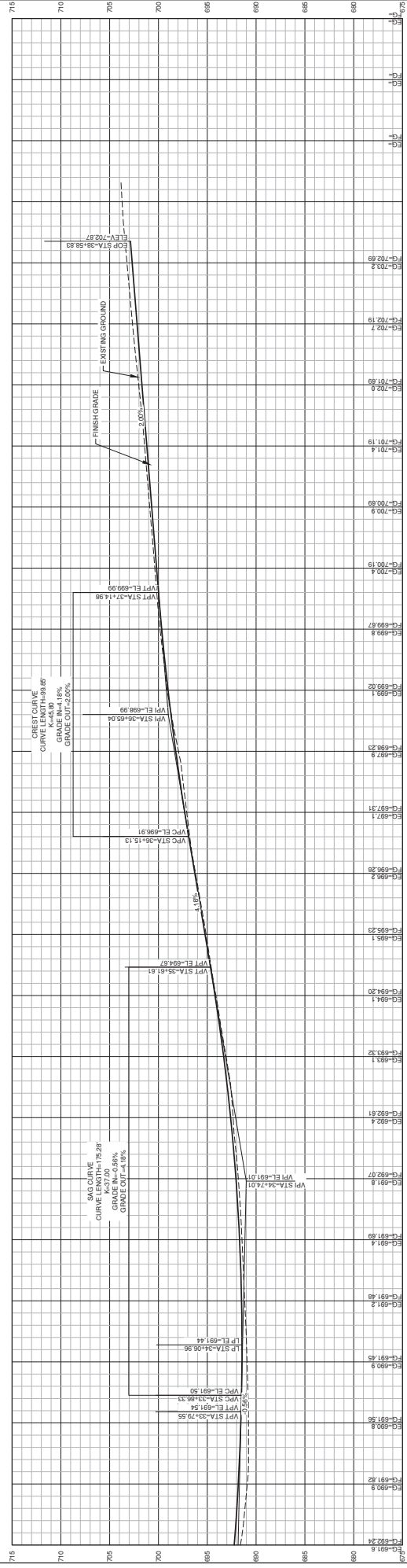
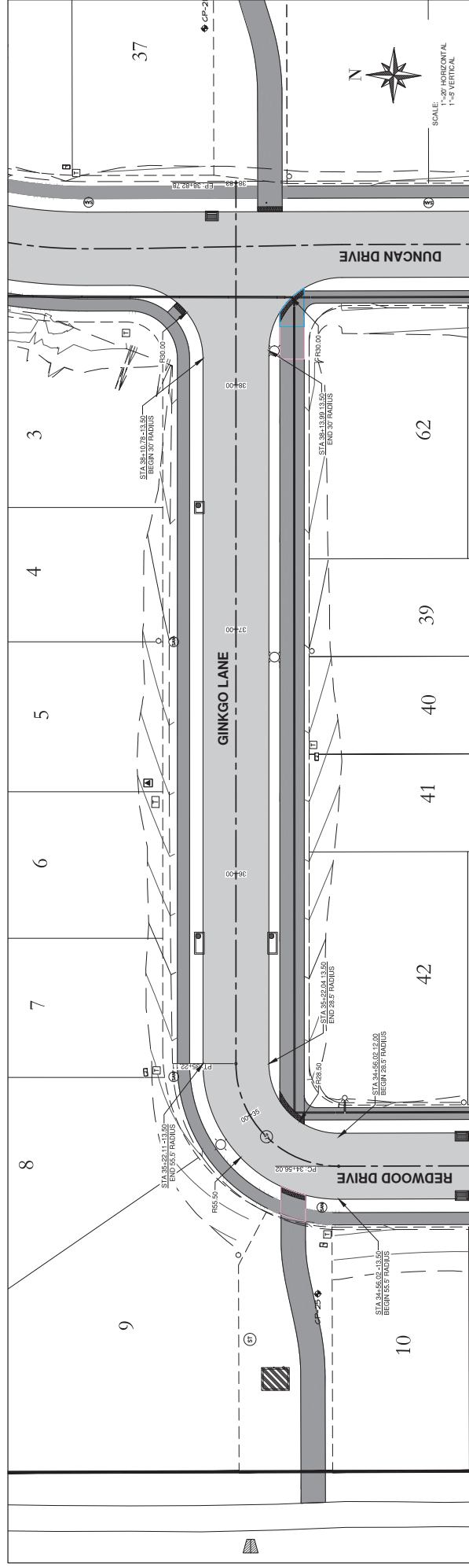
- 1. SITE EVALUATION AND DESIGN DEVELOPMENT
 - SITE INFORMATION CONTAINED HEREIN APPLIES TO ALL CONTRACTORS AND OTHER PARTIES PERFORMING WORK ON THIS PROJECT.
 - SITE INFORMATION FOR THIS PROPERTY HAS BEEN COLLECTED USING SURVEYING EQUIPMENT, ONLINE AND SOIL CONSERVATION SERVICE REFERENCE MATERIAL, AND A VISUAL INSPECTION OF THE SITE.
 - NO DATA IS CURRENTLY AGRICULTURAL LAND.
 - NO DATA IS AVAILABLE TO DETERMINE EXISTING RUNOFF WATER QUALITY.
 - THE EXISTING SITE DRAINS VIA SURFACE RUNOFF.
 - THE SITE IS WELL DRAINED.
 - THIS PROJECT WILL INCLUDE:
 - CONSTRUCTION, GRADING, AND PAVING.
 - UTILITY INSTALLATION.
 - CONSTRUCTION ACTIVITIES WILL COMMENCE IN SPRING 2019 AND FINISH IN 2019.
 - CONSTRUCTION PLANS HAVE BEEN DEVELOPED AND ARE AVAILABLE AT THE JOB TRAILER.
 - TOTAL SITE AREA IS APPROXIMATELY 12.1 ACRES.
 - THE DISTURBED AREA WILL INCLUDE APPROXIMATELY 2 ACRES DURING THE CONSTRUCTION OF THE UTILITIES AND DRIVEWAY.
 - EXISTING AVERAGE RUNOFF COEFFICIENT IS 0.60 FOR AGRICULTURAL LAND.
 - THE POTENTIAL DEVELOPMENT AVERAGE COEFFICIENT IS 0.90 IN BUILDING/PAVING AREAS AND 0.35 IN GRASSED AREAS.
- 2. CONTROLS
 - CONSTRUCTION SEQUENCE:
 - INSTALLATION OF UTILITIES
 - STRIP ALL TOP SOIL ALONG ROADWAY ALIGNMENT
 - OPERATIONS
 - CLEANUP
 - STABILIZATION PRACTICES
 - AREAS NOT SUBJECT TO CONSTRUCTION ACTIVITY FOR 14 DAYS OR MORE SHALL HAVE STABILIZATION MEASURES WITHIN DAYS AFTER CONSTRUCTION HAS CEASED
 - IMPROVED BY USE OF ROLLED EROSION CONTROL PRODUCTS AND TURF NEW GERMEN MATS
 - AFTER UTILITY INSTALLATION OPERATIONS, PERMANENT SEEDING SHALL BE INSTALLED IN INTERCEPTING DITCHES AND FLAMES, LETHOWNS, AND EARTH DRAINS SHALL BE INSTALLED AS MAINTENANCE OF DEVICES SHALL BE IN ACCORDANCE WITH IOWA SOILS SECTION 9
 - STRUCTURAL PRACTICES:
 - INSTALL ROCK DITCH CHECKS AND SALT FENCING WHERE SHOWN ON THE PLANS
 - CONCRETE TRUCK WASHOUT LOCATION SHALL BE CONSTRUCTED AND MAINTAINED, CONCRETE WASHOUT LOCATIONS SHALL BE COMPLETELY REMOVED AND RE-SEEDED LOCATION TO BE FIELD
 - ADDITIONAL STRUCTURAL PRACTICES SHALL BE IMPLEMENTED AS NEEDED THROUGHOUT THE PROJECT LIFE.
 - STORMWATER MANAGEMENT:
 - EXISTING AND PROPOSED STORMWATER MANAGEMENT FEATURES SHALL BE PROTECTED FROM SEDIMENTATION AND CLEANED UPON COMPLETION OF PROJECT.
 - OTHER CONTROLS
 - ALL MATERIALS SHALL BE STORED IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS
 - ETC IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS
 - ALL MATERIALS SHALL BE STORED IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS
 - ACCESS TO SITE SHALL BE LIMITED TO CLEARLY DESIGNATED AREAS AND STABILIZED CONSTRUCTION ENTRANCES SHALL BE CONSTRUCTED WHERE NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE SITE
 - WASTE DISPOSAL FROM THE CONSTRUCTION SITE SHALL INCLUDE DISPOSAL OF RUMBLE (IF ANY IS FOUND) AND PROPER DISPOSAL OF CONSTRUCTION WASTE
 - REQUIREMENTS
 - DISPOSE OF ALL DEBRIS ON SITE OR AT A DISPOSAL SITE IN ACCORDANCE WITH STATE OR LOCAL REQUIREMENTS
 - DISPOSE OF ALL DEBRIS ON SITE OR AT A DISPOSAL SITE IN ACCORDANCE WITH STATE OR LOCAL REQUIREMENTS
 - DISPOSE OF ALL DEBRIS ON SITE OR AT A DISPOSAL SITE IN ACCORDANCE WITH STATE OR LOCAL REQUIREMENTS
 - DISPOSE OF ALL DEBRIS ON SITE OR AT A DISPOSAL SITE IN ACCORDANCE WITH STATE OR LOCAL REQUIREMENTS
- 3. MAINTENANCE
 - ONGOING MAINTENANCE
 - ALL EXISTING EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED
 - ALL EXISTING EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED
 - ALL EXISTING EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED
 - END OF PROJECT MAINTENANCE
 - AT THE END OF CONSTRUCTION ALL PERMANENT SEDIMENT AND EROSION CONTROL DEVICES SHALL BE REMOVED
 - ALL EXISTING EROSION CONTROL DEVICES SHALL BE REMOVED
 - ALL EXISTING EROSION CONTROL DEVICES SHALL BE REMOVED
 - ALL PAVEMENTS SHALL BE SWEEPED.

#	DATE	DESCRIPTION	BY	DESIGNED BY:
				JMS
				JMS
				PROJECT ENGR:

ARBOR COMMONS SUBDIVISION		EROSION CONTROL		DRAWING NO:
NPSW ENTERPRISE, LLC				4533.18
MUSCATINE, IOWA				C.03
				SCALE: AS NOTED
				DATE: 2/27/2019
				SHEET NO: 10 OF 40

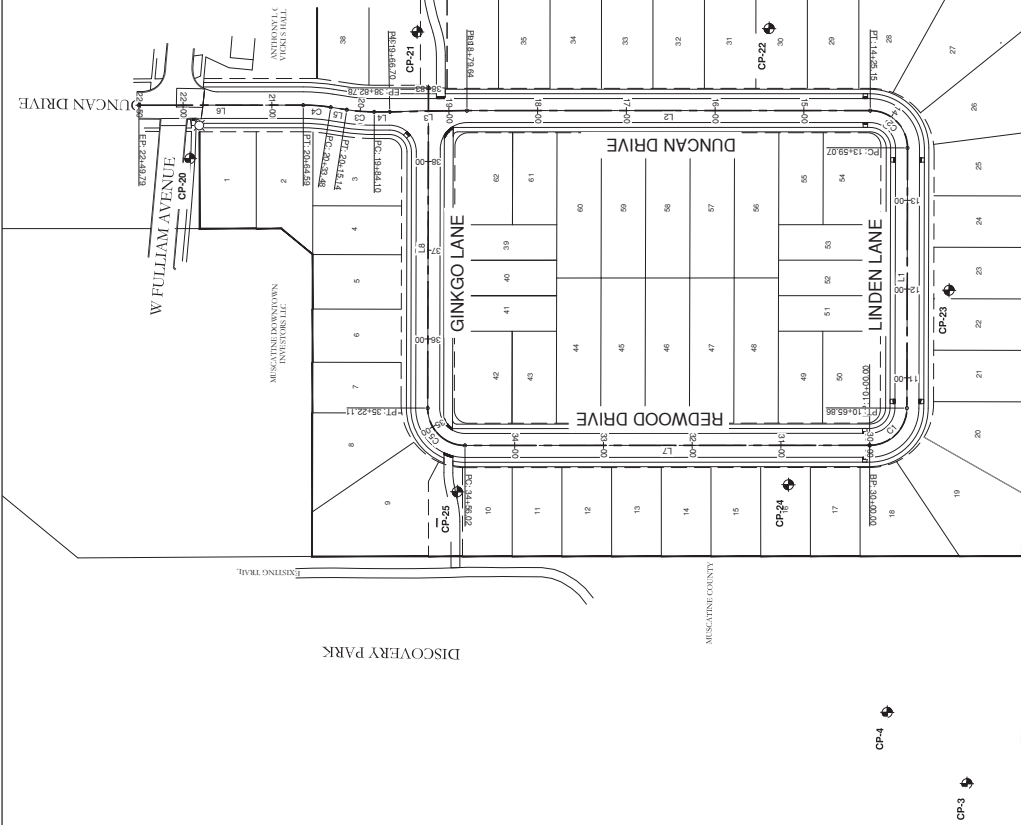


#	DATE	DESCRIPTION	BY	DESIGNED BY:	JMS	Martin & Whitacre Surveyors & Engineers, Inc. P.O. BOX 413 MUSCATINE, IOWA VOICE (815) 283-7891 EMAIL info@martin-whitacre.com		ARBOR COMMONS SUBDIVISION NPSW ENTERPRISE, LLC MUSCATINE, IOWA		PLAN & PROFILE D.01		DRAWING NO: 8233.18	PROJ NO: 8233.18	SHEET NO: 12 OF 40
					JMS									
					JMS									
					BIT									

[illegible]

SW ROAD NE ROAD											
NUMBER	PI STATION	PI NORTHING	PI EASTING	START STATION	START NORTHING	START EASTING	LENGTH	END STATION	END NORTHING	END EASTING	LINE/CHORD DIRECTION
C1	10+41.88	84913.56	328293.08	10+00.00	84905.44	328298.31	65.85	10+65.86	84914.19	328300.84	S45° 06' 31.38"E
L1				10+65.86	84914.19	328300.84	230.22	13+59.07	84918.81	328304.12	N80° 06' 12.37"E
C2	14+01.18	84919.24	328904.22	13+59.07	84919.81	328904.12	66.074	14+25.15	84913.34	328906.48	N44° 04' 03.27"E
L2				14+25.15	84913.34	328905.48	454.49	18+79.64	85413.76	328927.54	N01° 02' 02.77"W
L3				18+79.64	85413.76	328927.54	87.06	19+46.70	85502.77	328934.52	N01° 59' 16.87"W
L4				19+46.70	85502.77	328934.52	17.40	19+64.10	85502.17	328934.22	N01° 00' 02.77"W
C3	19+69.65	85505.71	328921.05	19+64.10	85502.17	328934.22	31.038	20+15.14	85511.12	328936.08	N03° 26' 42.46"E
L5				20+15.14	85511.12	328936.08	18.34	20+33.48	85509.28	328938.90	N07° 52' 27.70"E
C4	20+49.06	85594.72	328930.74	20+33.48	85509.28	328938.90	31.111	20+44.59	85600.30	328939.66	N07° 58' 04.79"E
L6				20+44.59	85600.30	328939.66	195.20	22+49.79	85905.48	328957.16	N01° 01' 15.97"W
L7				22+49.79	85905.48	328957.16	456.07	24+46.02	86411.38	328990.18	N01° 01' 15.97"W
C5	34+08.13	86403.49	328940.43	24+46.02	86411.38	328990.18	66.089	35+12.11	86454.13	328992.18	N80° 06' 12.37"E
L8				35+12.11	86454.13	328992.18	305.67	38+42.78	86509.66	328992.18	N80° 06' 12.37"E

CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
3	84893.20	327825.01	871.97	SET 12" X 36" REBAR WYELLOW CAP
4	84890.44	327957.74	689.96	SET 12" X 36" REBAR WYELLOW CAP
20	85726.95	328668.02	706.39	SET 12" X 36" REBAR WYELLOW CAP
21	85473.36	328715.18	705.05	SET 12" X 36" REBAR WYELLOW CAP
22	85076.90	328729.84	703.12	SET 12" X 36" REBAR WYELLOW CAP
23	84868.98	328433.54	698.41	SET 12" X 36" REBAR WYELLOW CAP
24	85046.14	328212.30	695.79	SET 12" X 36" REBAR WYELLOW CAP
25	85419.18	328197.82	690.31	SET 12" X 36" REBAR WYELLOW CAP
26	85461.87	328167.75	714.80	SET MAGNETIC NAIL IN SIDEWALK
27	85097.38	328221.20	713.14	SET 12" X 36" REBAR WYELLOW CAP
28	84824.66	328225.17	704.66	SET 12" X 36" REBAR WYELLOW CAP



#	DATE	DESCRIPTION	BY	DESIGNED BY:	JMS	Martin & Whitacre Surveyors & Engineers, Inc. P.O. BOX 413 MUSCATINE, IOWA E-Mail: info@martinwhitacre.com PHONE (562) 262-7911	ARBOR COMMONS SUBDIVISION NPSW ENTERPRISE, LLC MUSCATINE, IOWA	ALIGNMENTS & BENCHMARKS	PROJ NO:	8253.16	DRAWING NO:
				CONST PROJ:	000				G-01		
				SCALE:	AS NOTED				SHEET NO:		
				DATE:	2/27/2019				16 OF 40		

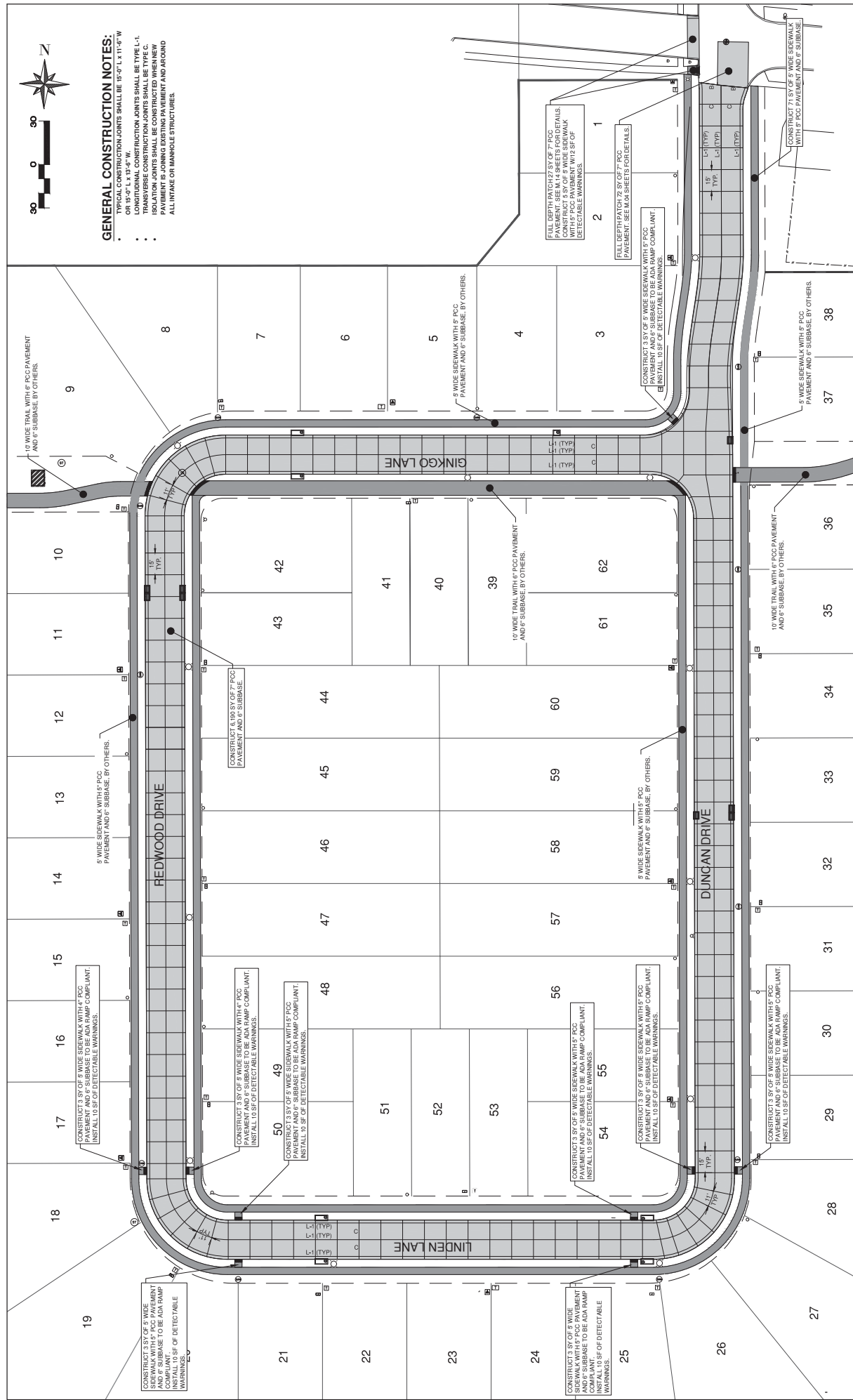
DOUGLAS N PETERSEN	BRIAN N OR LORE K WELFE	ANDREW R OR MADON J A DARGA	HELENA PINTO COSTES TORRE FUENTE INC.
-----------------------	----------------------------	--------------------------------	--



N

NOT TO SCALE

**Martin & Whitacre**
Surveyors & Engineers, Inc.
P.O. BOX 413
MUSCATINE, IOWA
EMAIL: info@marto-whitacre.com
VOICE: (563) 283-7891

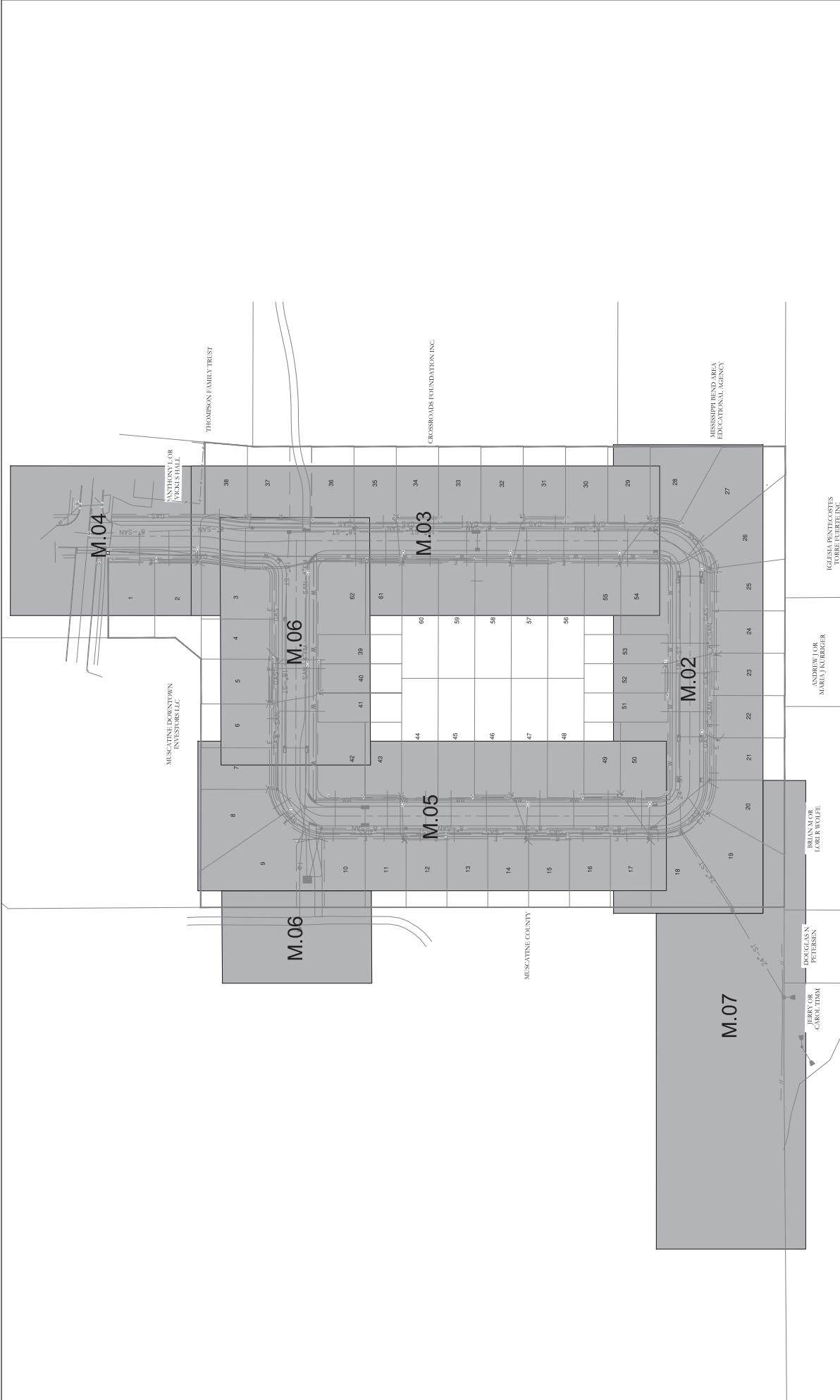


GENERAL CONSTRUCTION NOTES:

- TYPICAL CONSTRUCTION JOINTS SHALL BE 15'-0" L x 11'-6" W OR 15'-0" L x 13'-6" W.



#	DATE	DESCRIPTION	BY	DESIGNED BY: JMS		Martin & Whitacre Surveyors & Engineers, Inc. MUSCATINE, IOWA P.O. BOX 413 VOICE (563) 283-7891 EMAIL info@martin-whitacre.com	ARBOR COMMONS SUBDIVISION NPSW ENTERPRISE, LLC MUSCATINE, IOWA	PAVEMENT PLAN	PROJ NO:	825318	DRAWING NO:	L.01		
									CONST PROJ:	000	SCALE:	AS NOTED	SHEET NO:	15 OF 40
													DATE:	2/27/2010
													PROJECT ENGR:	



#	DATE	DESCRIPTION	BY	DESIGNED BY:	SEWER KEY PLAN				PROJ NO:	DRAWING NO:
				JMS					8533.16	
				JMS					CONSTR PROJ:	M.01
				JMS					SCALE:	AS NOTED
				BIT					DATE:	2/27/2019
									SHEET NO:	
									19 OF 40	

**Martin & Whitacre**
Surveyors & Engineers, Inc.
P.O. BOX 413
MUSCATINE, IOWA
VOICE (563) 253-7891
EMAIL info@mawhite.com

ARBOR COMMONS SUBDIVISION
NPSW ENTERPRISE, LLC
MUSCATINE, IOWA

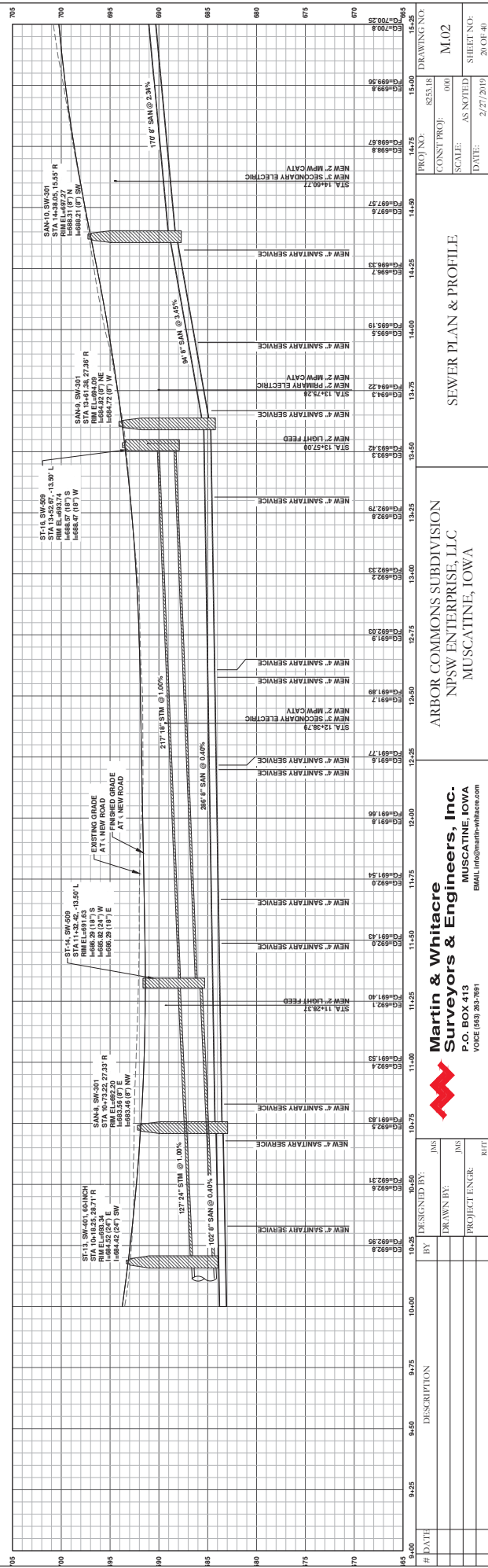
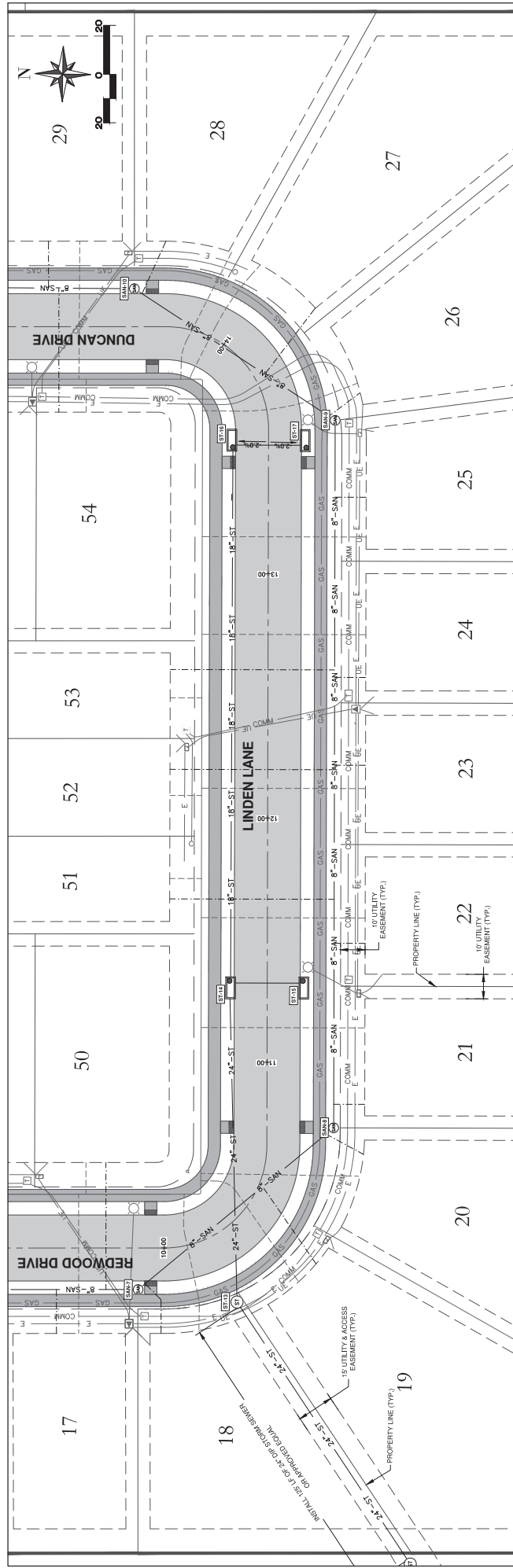
IGLESIA PENTACOSTES
TORRE FUERTE INC

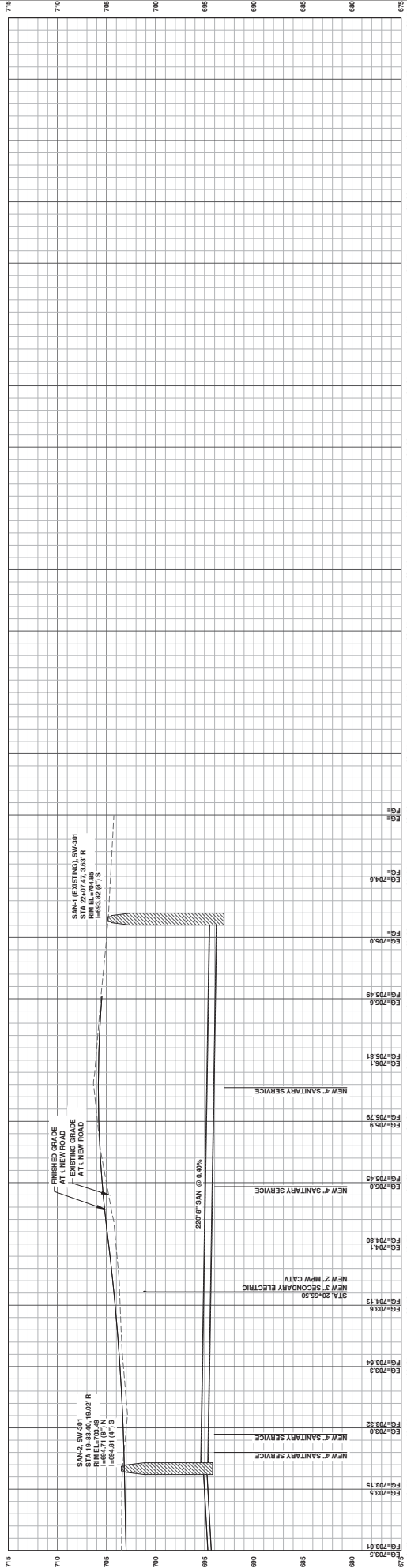
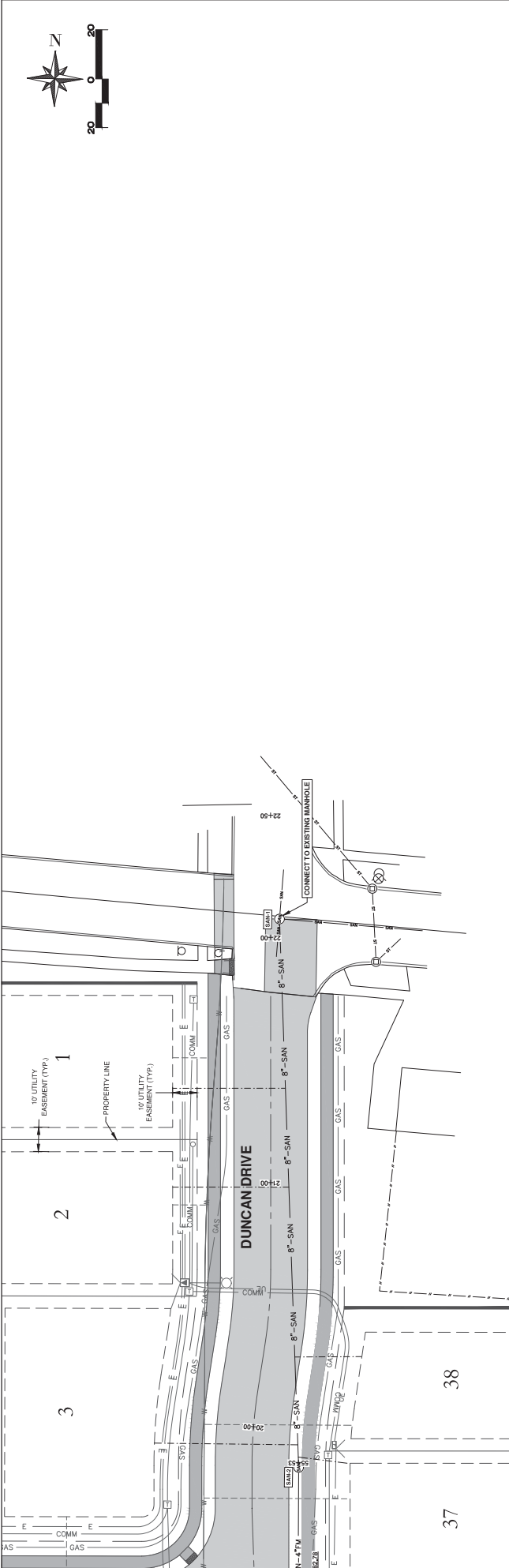
ANDREW TOR
MAMIA J KIRCHGER

BRIAN MAJOR
LOREN WOLFE

DOUGLAS N
PETERSEN

JERRY OR
CAROL THAM



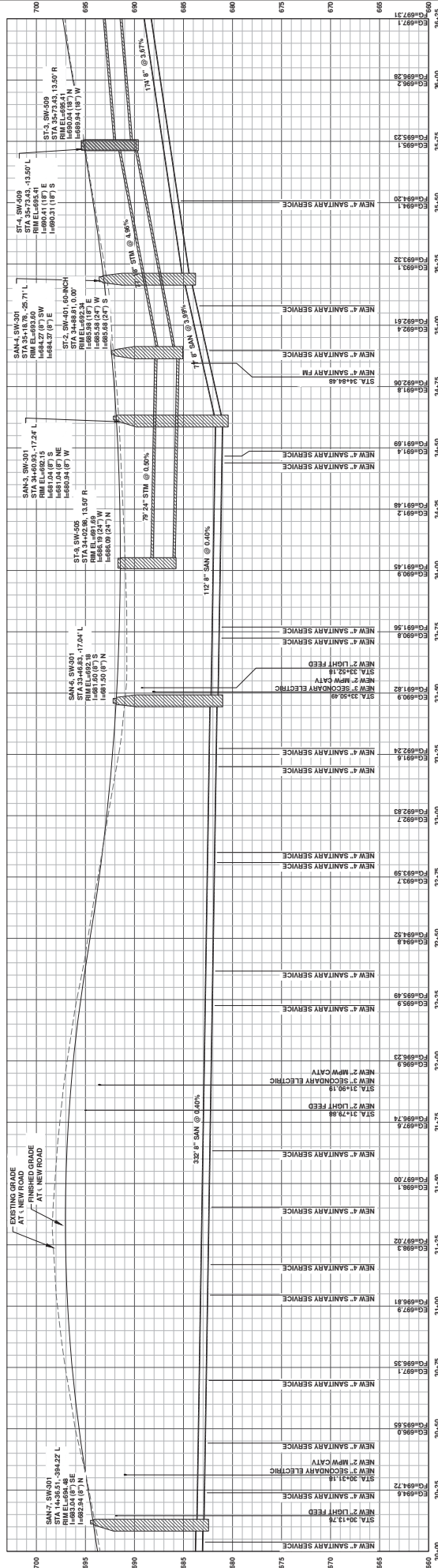
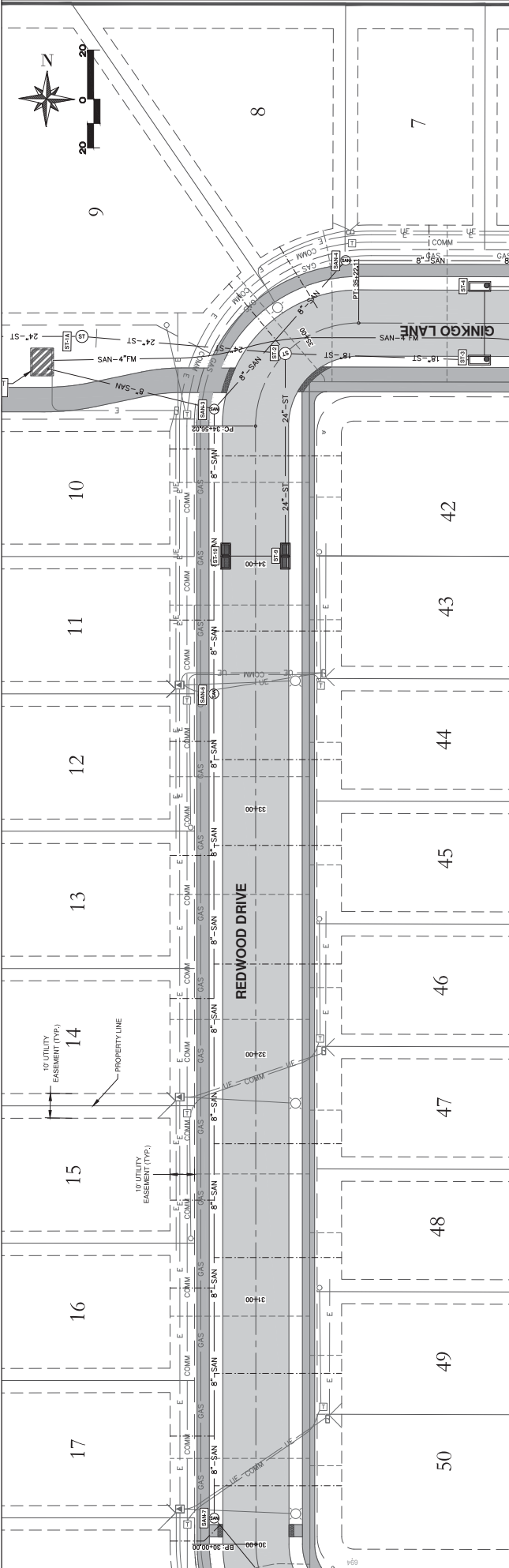


#	DATE	DESCRIPTION	BY	DESIGNED BY	JMS	PROJECT ENGINEER	JMS	PROJECT NO.	DATE	SCALE	CONST. PROJ.	PROJ. NO.	DRAWING NO.	SHEET NO.
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
31														
32														
33														
34														
35														
36														
37														
38														
39														
40														
41														
42														
43														
44														
45														
46														
47														
48														
49														
50														
51														
52														
53														
54														
55														
56														
57														
58														
59														
60														
61														
62														
63														
64														
65														
66														
67														
68														
69														
70														
71														
72														
73														
74														
75														

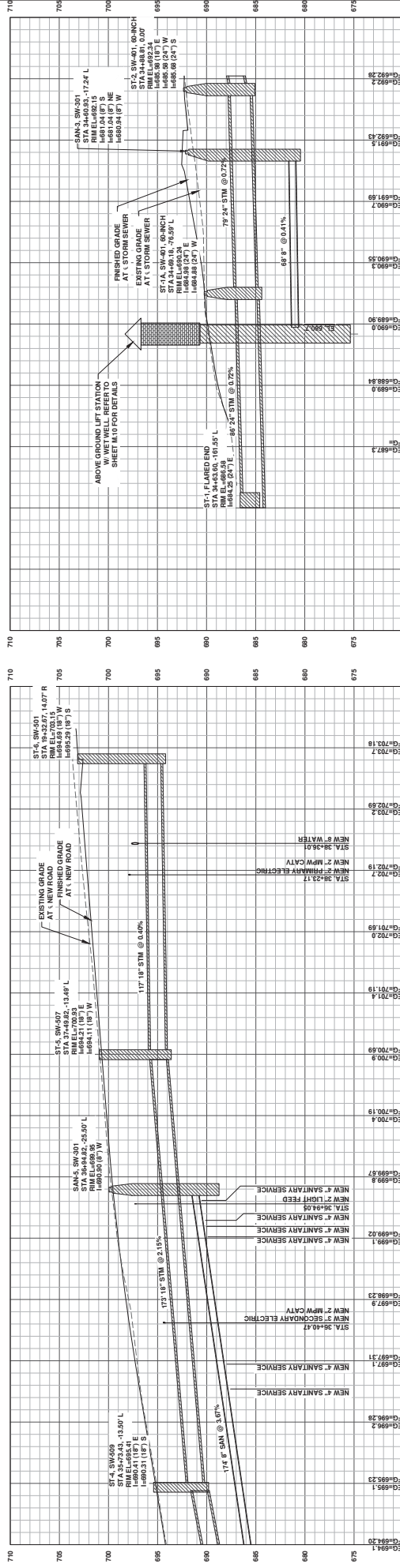
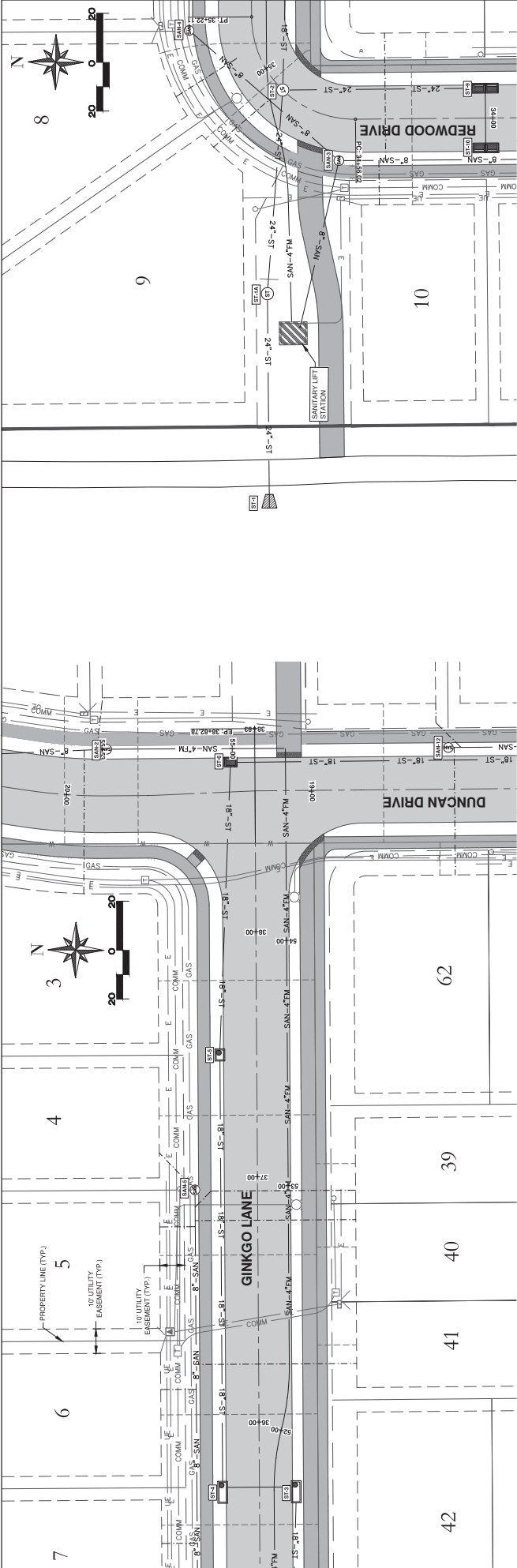
ARBOR COMMONS SUBDIVISION
NPSW ENTERPRISE, LLC
MUSCATINE, IOWA

Martin & Whitacre
Surveyors & Engineers, Inc.
P.O. BOX 413
MUSCATINE, IOWA 52579
PHONE (563) 253-7891
EMAIL info@martin-whitacre.com

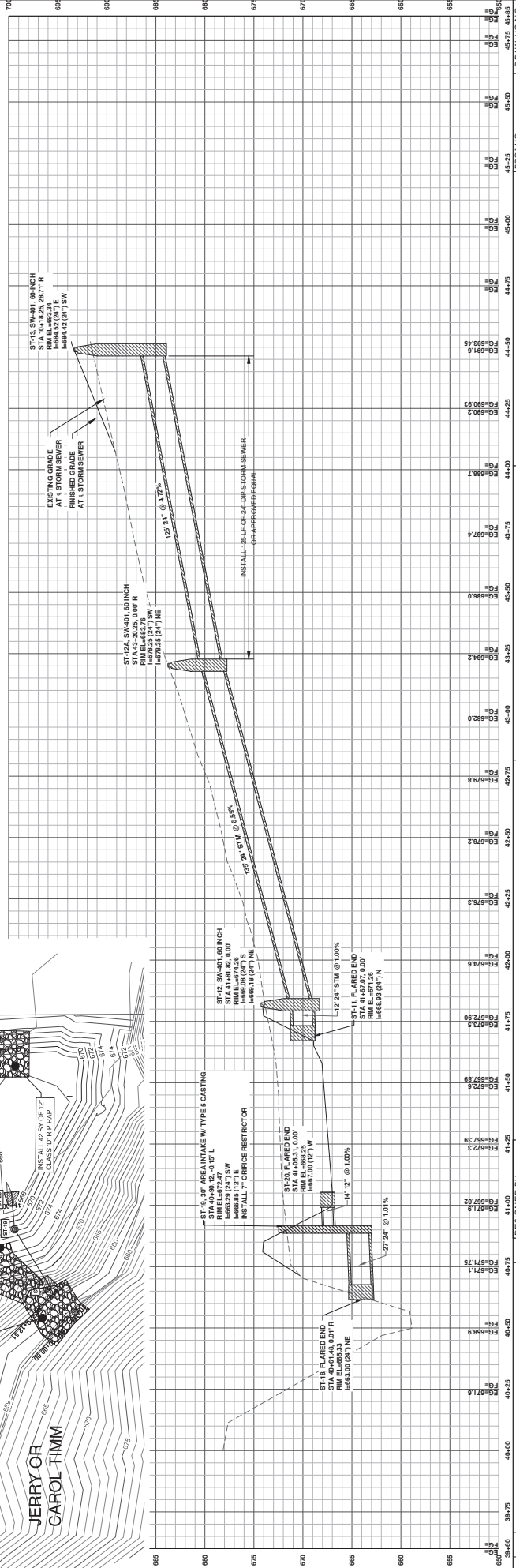
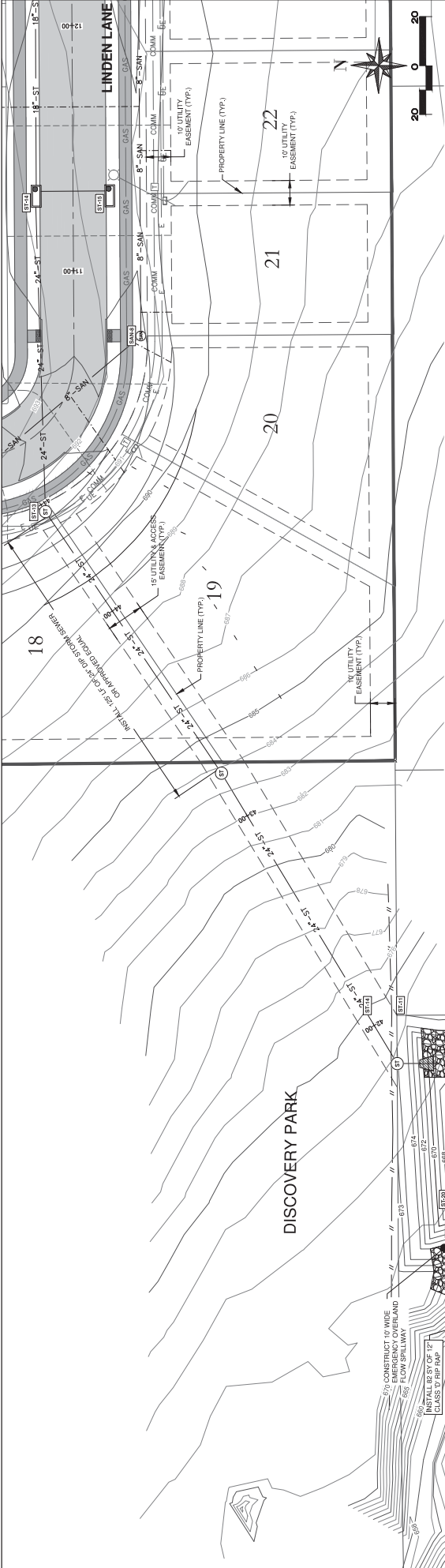
DRAWING NO. M.04
CONST. PROJ. 000
SCALE: AS NOTED
DATE: 2/27/2019
SHEET NO. 22 OF 40



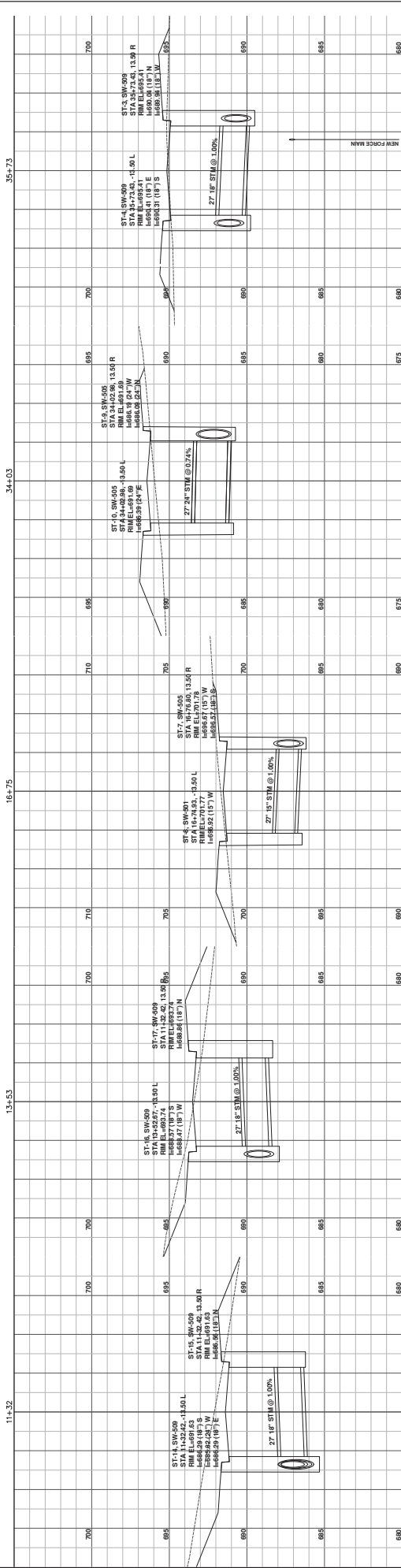
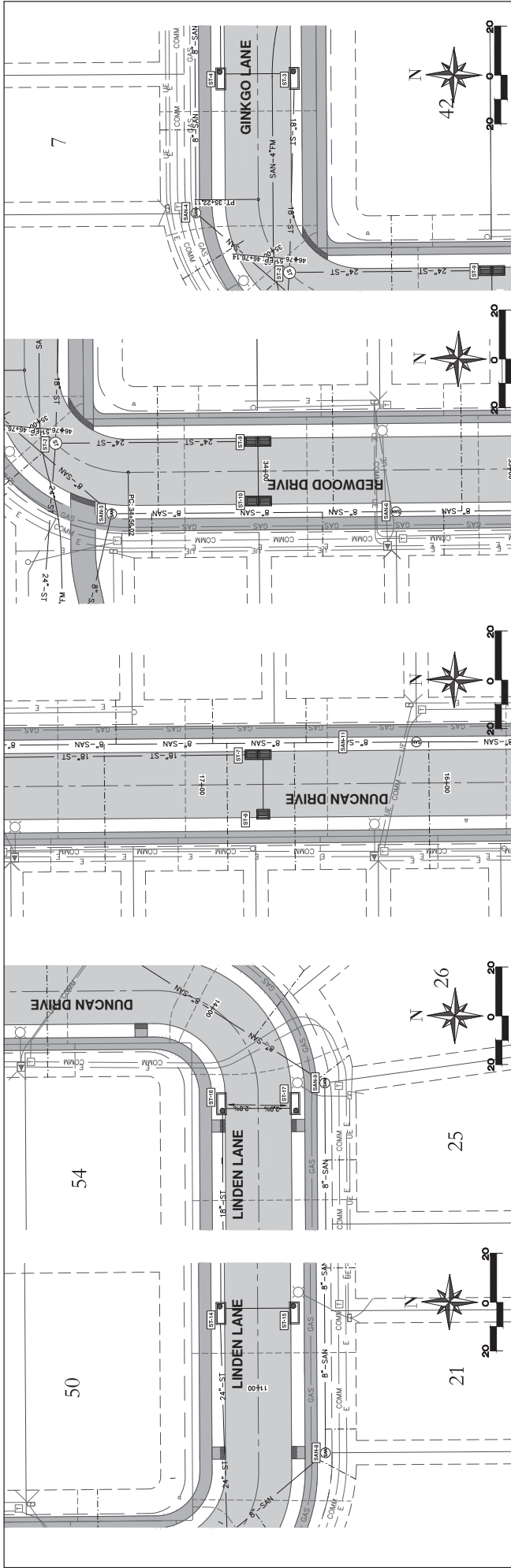
#	DATE	DESCRIPTION	BY	DESIGNED BY:	JMS	Martin & Whitacre Surveyors & Engineers, Inc. MUSCATINE, IOWA P.O. BOX 413 VOICE (563) 282-7891 EMAIL info@martin-whitacre.com										ARBOR COMMONS SUBDIVISION NPSW ENTERPRISE, LLC MUSCATINE, IOWA										SEWER PLAN & PROFILE										DRAWING NO.		M.05		SHEET NO.		23 OF 40									
																																				PROJECT NO.		8233.18		CONST. PROJ.		000		SCALE:		AS NOTED		DATE:		2/27/2019	



--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

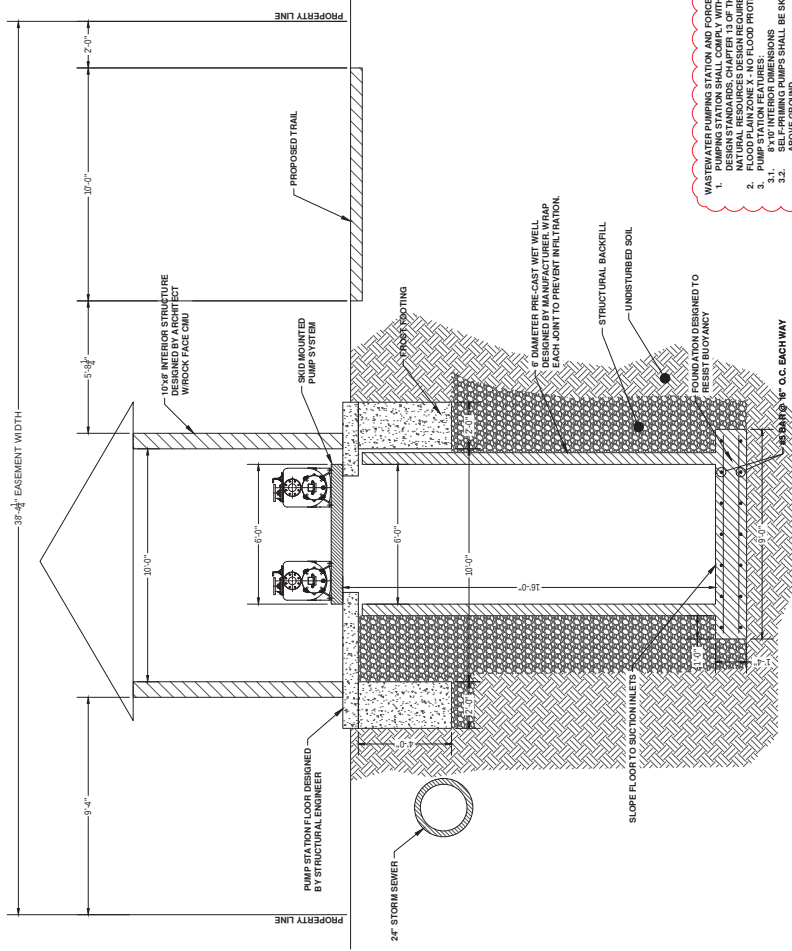
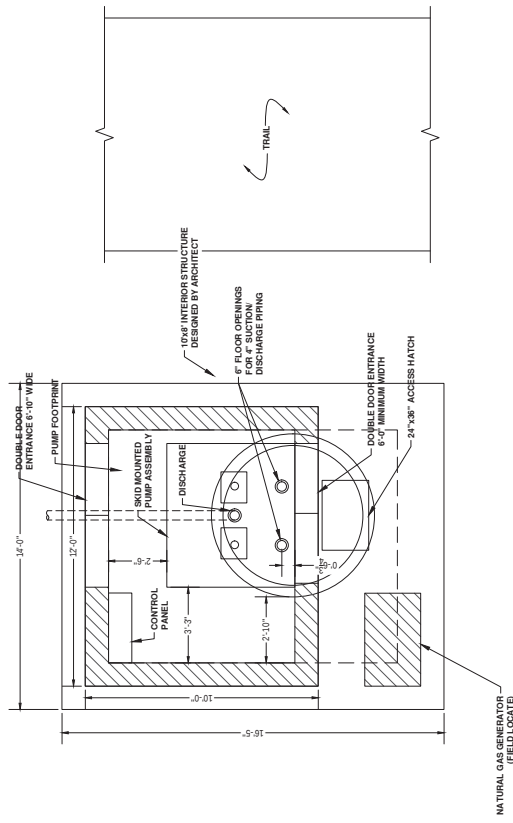


#	DATE	DESCRIPTION	BY	DESIGNED BY:	JMS	JMS	RHT	Martin & Whitacre Surveyors & Engineers, Inc. P.O. BOX 413 MUSCATINE, IOWA VOICE (563) 253-7891 EMAIL info@martin-whitacre.com	ARBOR COMMONS SUBDIVISION NPSW ENTERPRISE, LLC MUSCATINE, IOWA	SEWER PLAN & PROFILE	PROJ NO: 9232.19 CONST PROJ: 000 SCALE: AS NOTED DATE: 2/27/2019	DRAWING NO: M.07 SHEET NO: 25 OF 40
38+75												
40+00												
40+25												
40+50												
40+75												
41+00												
41+25												
41+50												
41+75												
42+00												
42+25												
42+50												
42+75												
43+00												
43+25												
43+50												
43+75												
44+00												
44+25												
44+50												
44+75												
45+00												
45+25												
45+50												
45+75												
46+00												
46+25												
46+50												
46+75												
47+00												
47+25												
47+50												
47+75												
48+00												
48+25												
48+50												
48+75												
49+00												
49+25												
49+50												
49+75												
50+00												
50+25												
50+50												
50+75												
51+00												
51+25												
51+50												
51+75												
52+00												
52+25												
52+50												
52+75												
53+00												
53+25												
53+50												
53+75												
54+00												
54+25												
54+50												
54+75												
55+00												
55+25												
55+50												
55+75												
56+00												
56+25												
56+50												
56+75												
57+00												
57+25												
57+50												
57+75												
58+00												
58+25												
58+50												
58+75												
59+00												
59+25												
59+50												
59+75												
60+00												
60+25												
60+50												
60+75												
61+00												
61+25												
61+50												
61+75												
62+00												
62+25												
62+50												
62+75												
63+00												
63+25												
63+50												
63+75												
64+00												
64+25												
64+50												
64+75												
65+00												
65+25												
65+50												
65+75												
66+00												
66+25												
66+50												
66+75												
67+00												
67+25												
67+50												
67+75												
68+00												
68+25												
68+50												
68+75												
69+00												
69+25												
69+50												
69+75												
70+00												



--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Martin & Whitacre
Surveyors & Engineers, Inc.
P.O. BOX 413
MUSCATINE, IOWA
VOICE (563) 253-7891
EMAIL: info@martin-whitacre.com



LIFT STATION - SECTION VIEW

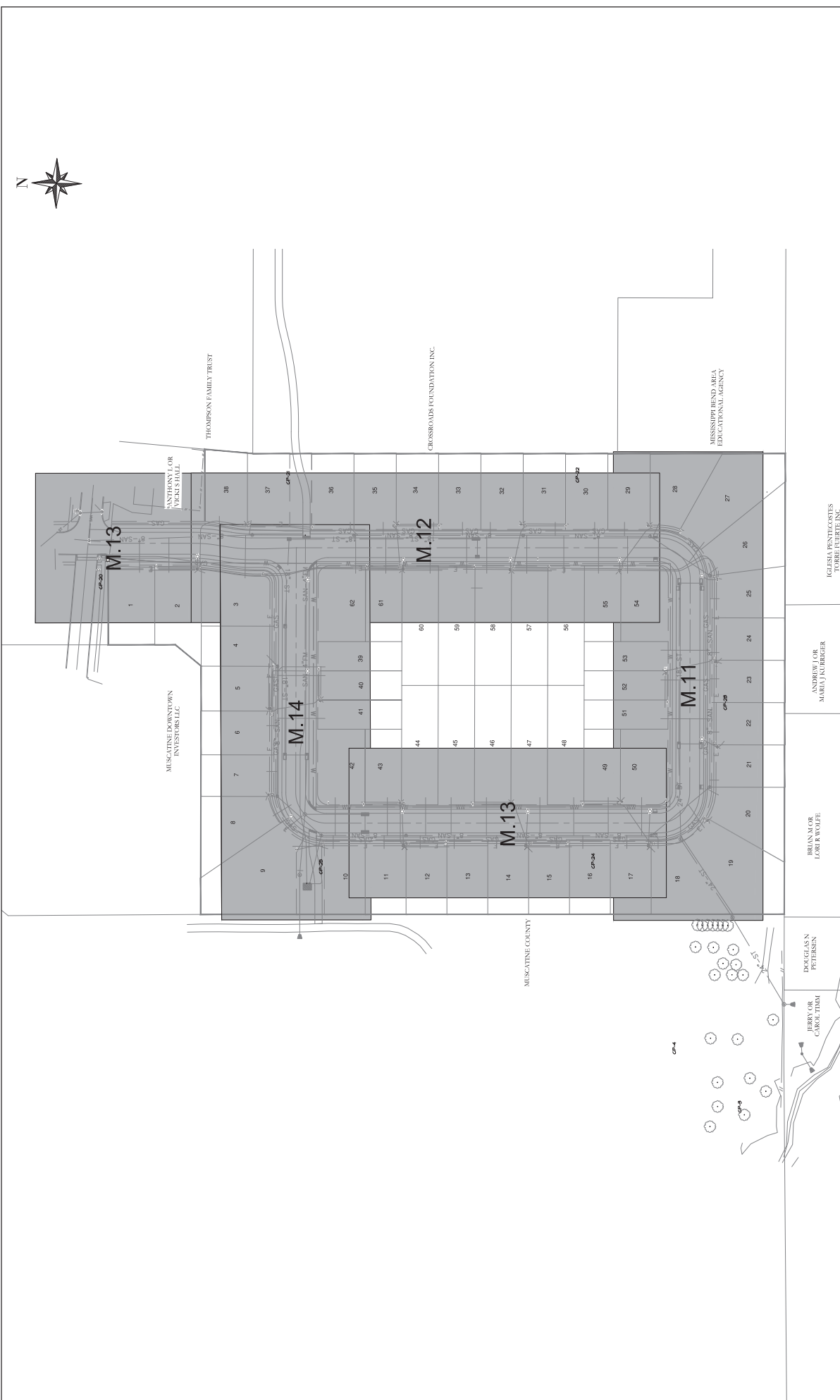
$$\frac{\text{SCALE} \cdot 1^{\text{cm}} = 3.18^{\text{cm}}}{\text{LH 1017}}$$

LIFT STATION PLAN VIEW

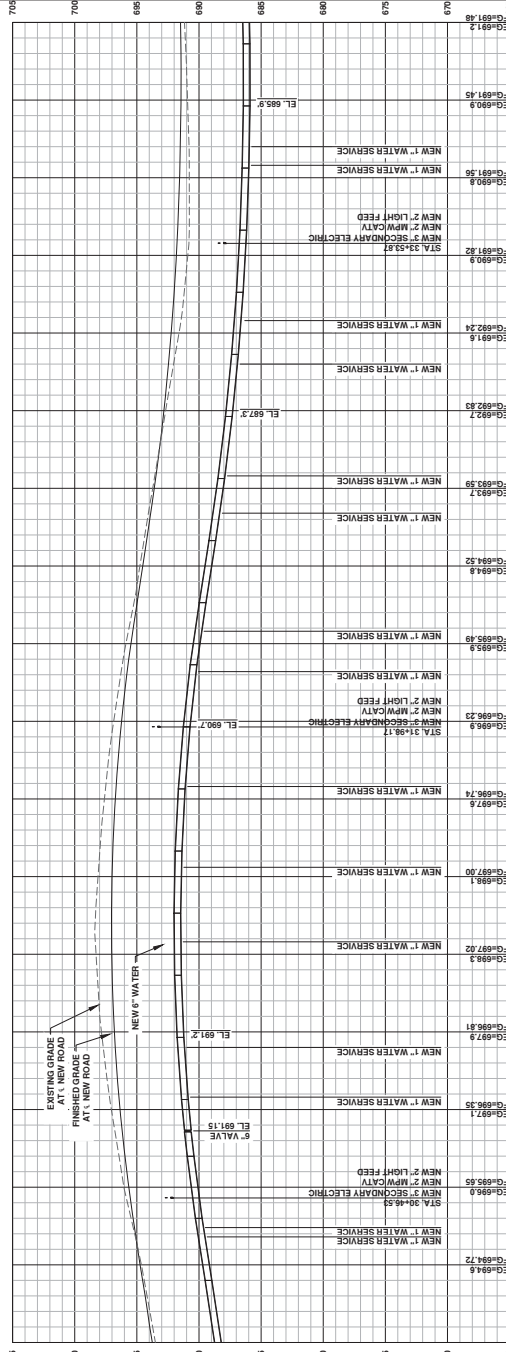
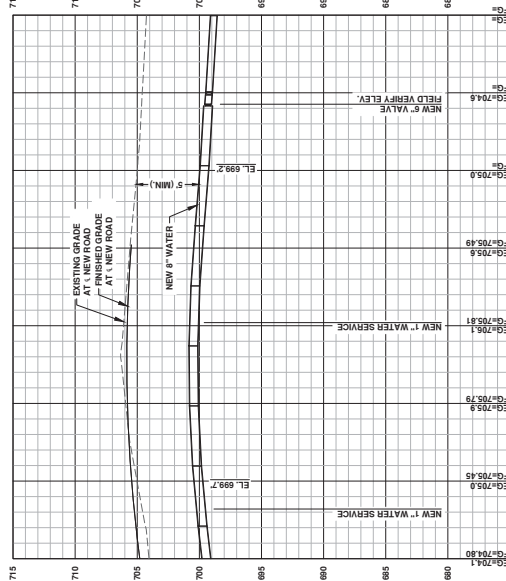
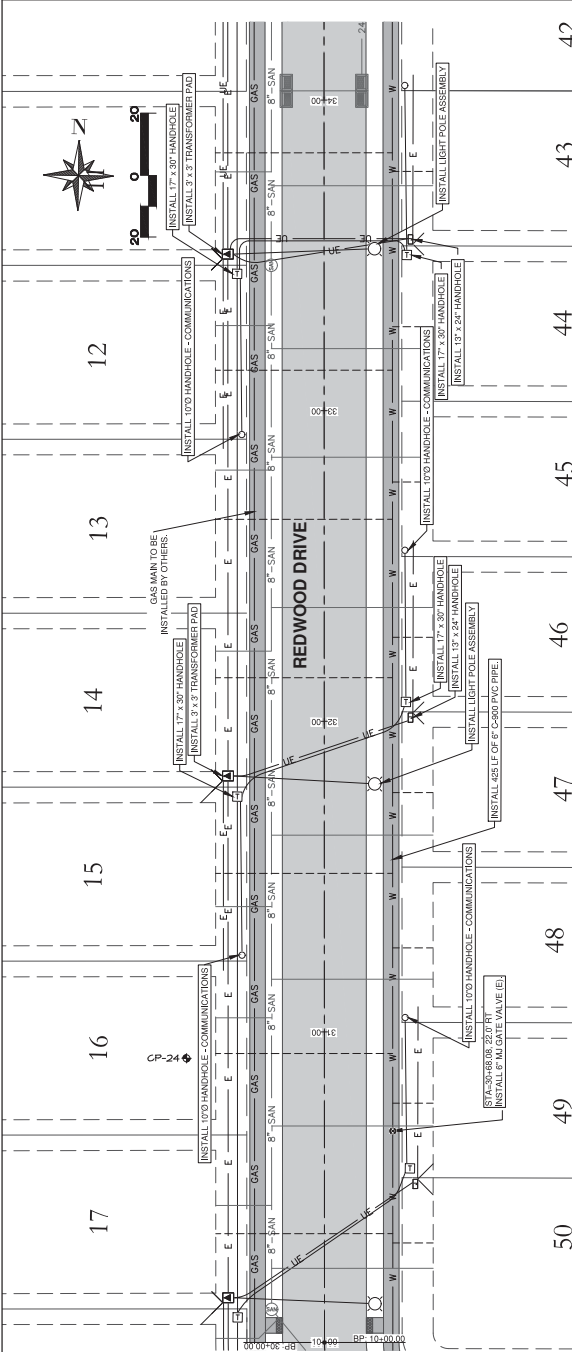
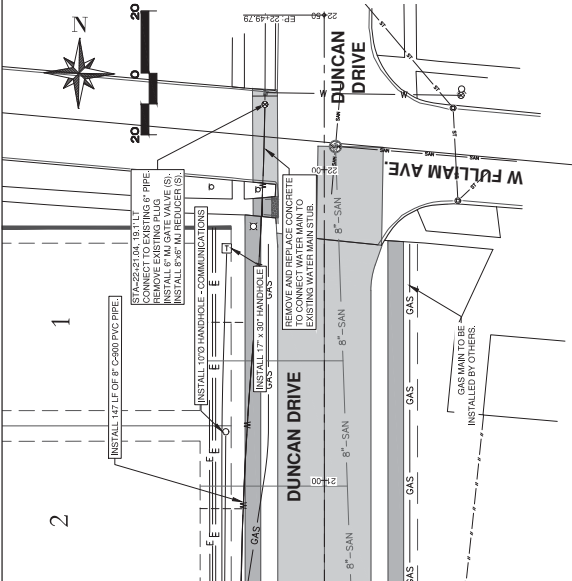
SCALE: 1" = 3/8"

- | | |
|--|---|
| WASTEWATER PUMPING STATION AND IOWA WATER MAIN SPECIFICATIONS: | |
| 1. PUMPING STATION SHALL COMPLY WITH FIVE WASTEWATER FACILITIES DESIGN SPECIFICATIONS, IOWA DEPARTMENT OF NATURAL RESOURCES DESIGN NO. FLOOD PROTECTION REQUIRED | |
| 2. FLOOD PLANE ZONE X-NO FLOOD PROTECTION REQUIRED | |
| 3. 1" R/W INTERIOR DIMENSIONS | 5.5. MANUFACTURER SHALL BE GREENCHECK OR APPROVED EQUAL |
| 3.1. SELF-PRIMING PUMPS SHALL BE SKID MOUNTED AND INSTALLED | 5.5.1. EXHAUST FAN |
| 3.2. CONTROLS SHALL BE PROVIDED BY PUMP MANUFACTURER | 5.5.2. TWO OUTLET, ONE INSIDE AND ONE OUTSIDE |
| 3.3. STARTUP SHALL INCLUDE ADJUSTMENT OF SET POINTS | 5.5.3. AIR CHANGE RATE SHALL BE 120 CFM |
| 3.4. VENTS TO BE ROUTED THROUGH WALL NEAR CEILING OR THROUGH | 5.5.4. MANUFACTURER SHALL BE QUALITY FLOW WAVE |
| 3.5. THE ROOF | 6.1. PUMPS SHALL BE "BARBERS" MODEL 8H4U |
| 3.6. WELL VENT | 6.1.1. PUMPS SHALL BE 1/2" ABOVE LEAD PUMP ON LEVEL |
| 3.7. GENERATOR VENT | 6.1.2. MANUFACTURER OF STAND-BY GENERATOR SHALL BE KOKER |
| 3.8. EXHAUST FAN | 6.1.3. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| 3.9. TRANSFER SWITCH | 6.1.4. EMERGENCY STOP OF OPERATOR SHALL BE PROVIDED AT THE |
| 4. NATIONAL ELECTRICAL CODE REQUIREMENTS FOR CLASS 1 GROUP D, WELLS WITH HOIST TO RAISE AND LOWER BASKET FOR MAINTENANCE | 6.2.1. EMERGENCY STOP OF OPERATOR SHALL BE PROVIDED AT THE |
| 5. DISINCH 1 LOCATIONS | 6.2.2. MANUFACTURER OF STAND-BY GENERATOR SHALL BE KOKER |
| 5.1. TWO SHIP (MAX) MOTORS | 6.2.3. GENERATOR MODEL NO. 250CL |
| 5.2. EXTERIOR LIGHT ABOVE DOORS | 6.2.4. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| 5.3. WELL PAN | 6.2.5. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| 5.4. CONTINUOUS AIR CHANGE RATE SHALL BE 60 CFM | 6.2.6. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.7. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.8. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.9. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.10. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.11. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.12. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.13. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.14. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.15. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.16. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.17. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.18. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.19. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.20. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.21. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.22. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.23. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.24. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.25. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.26. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.27. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.28. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.29. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.30. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.31. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.32. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.33. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.34. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.35. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.36. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.37. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.38. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.39. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.40. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.41. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.42. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.43. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.44. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.45. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.46. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.47. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.48. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.49. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.50. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.51. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.52. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.53. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.54. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.55. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.56. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.57. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.58. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.59. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.60. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.61. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.62. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.63. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.64. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.65. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.66. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.67. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.68. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.69. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.70. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.71. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.72. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.73. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.74. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.75. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.76. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.77. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.78. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.79. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.80. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.81. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.82. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |
| | 6.2.83. SET HIGH LEVEL ALARM AT 1" ABOVE LEAD PUMP ON LEVEL |

#	DATE	DESCRIPTION	DESIGNED BY:	 Martin & Whitacre Surveyors & Engineers, Inc. MUSCATINE, IOWA P.O. BOX 4113 EMAIL: info@mwh-engineers.com VOICE: (563) 265-7691		ARBOR COMMONS SUBDIVISION NPSW ENTERPRISE, LLC MUSCATINE, IOWA		SANITARY SEWER LIFT STATION		DRAWING NO.	8263.1B	M.10
			BY:							PROJ. NO.		
			DRAWN BY:							CONST. PROJ.	000	
2	5/7/19	PUMP MANUFACTURER AND GENERATOR UPDATED								SCALE:		
1	5/27/18	DNF REVISIONS								DATE:	2/27/2019	SHEET NO.: 28 OF 40



--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



#	DATE	DESCRIPTION	BY	DESIGNED BY	DRAWN BY	PROJECT ENGR.	REIT
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							

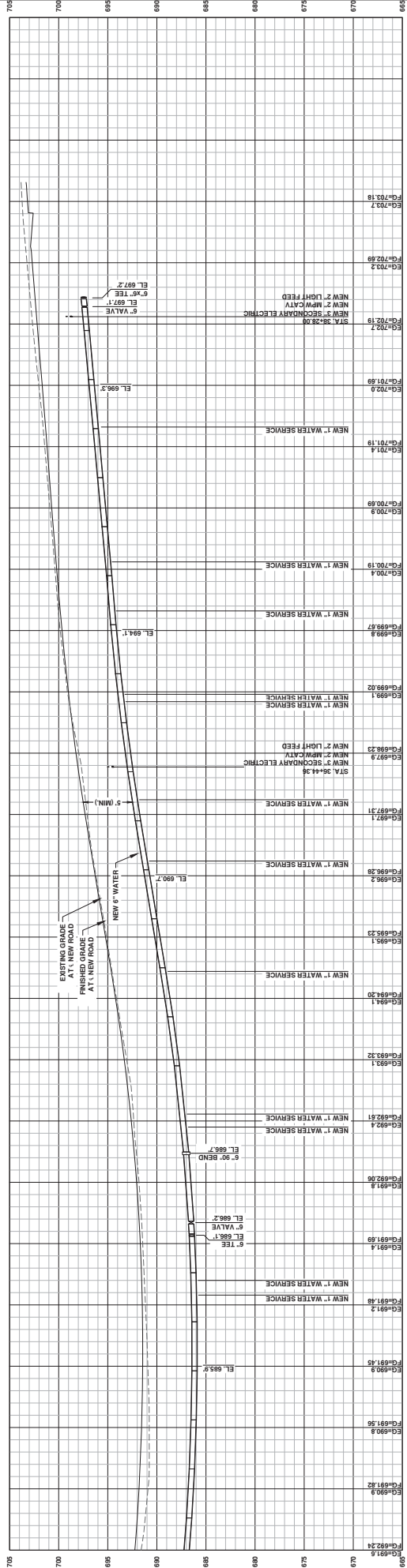
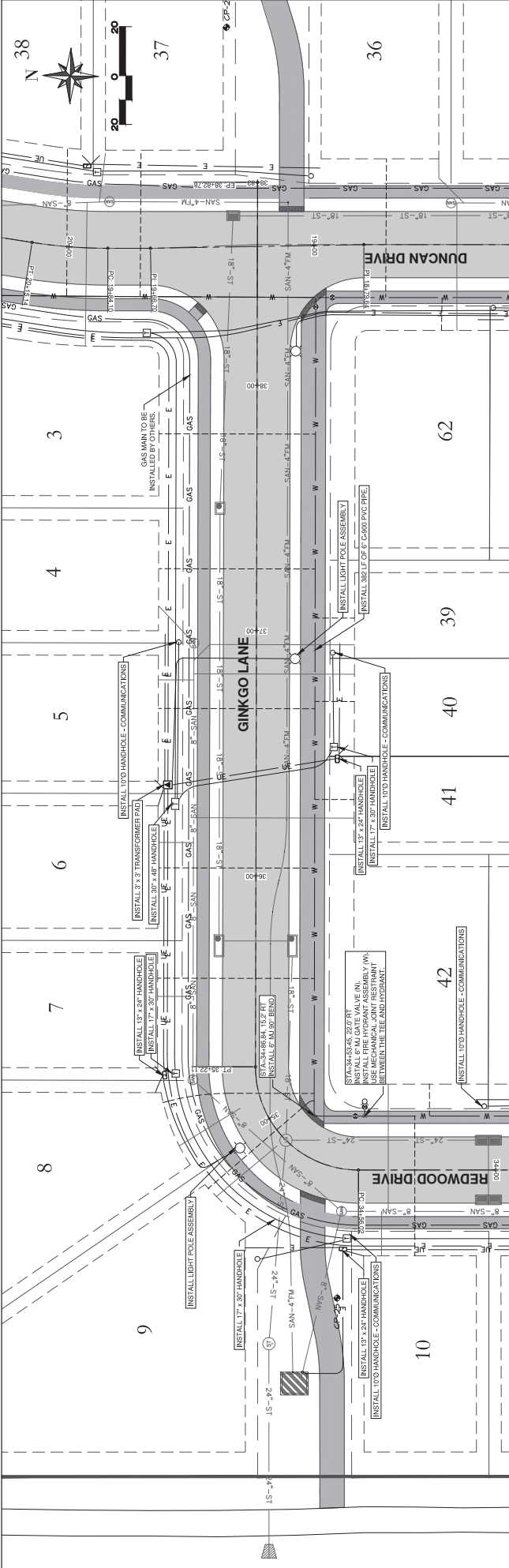
Martin & Whitacre
Surveyors & Engineers, Inc.
P.O. BOX 413
MUSCATINE, IOWA
VOICE (815) 283-7891
EMAIL info@martin-whitacre.com

ARBOR COMMONS SUBDIVISION
NPSW ENTERPRISE, LLC
MUSCATINE, IOWA

UTILITY PLAN & PROFILE

PROJ NO: 8533.18
CONST PROJ: M.14
SCALE: AS NOTED
DATE: 2/27/2019

DRAWING NO: 34-25
SHEET NO: 32 OF 40



#	DATE	DESCRIPTION	BY	DESIGNED BY	JMS	PROJECT ENGR.	JMS	UTILITY PLAN & PROFILE	ARBOR COMMONS SUBDIVISION	PROJ NO:	DRAWING NO:
1										8533.16	8533.16
2										000	000
3										AS NOTED	AS NOTED
4										DATE:	DATE:
5										2/27/2019	2/27/2019
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											
46											
47											
48											
49											
50											
51											
52											
53											
54											
55											
56											
57											
58											
59											
60											
61											
62											
63											
64											
65											
66											
67											
68											
69											
70											
71											
72											
73											
74											
75											
76											
77											
78											
79											
80											
81											
82											
83											
84											
85											
86											
87											
88											
89											
90											
91											
92											
93											
94											
95											
96											
97											
98											
99											
100											

Martin & Whitacre
Surveyors & Engineers, Inc.
P.O. BOX 413
MUSCATINE, IOWA
VOICE (815) 283-7891
EMAIL: info@martin-whitacre.com

ARBOR COMMONS SUBDIVISION
NPSW ENTERPRISE, LLC
MUSCATINE, IOWA

PROJ NO: 8533.16
CONST PROJ: M.15
SCALE: AS NOTED
DATE: 2/27/2019
SHEET NO: 33 OF 40



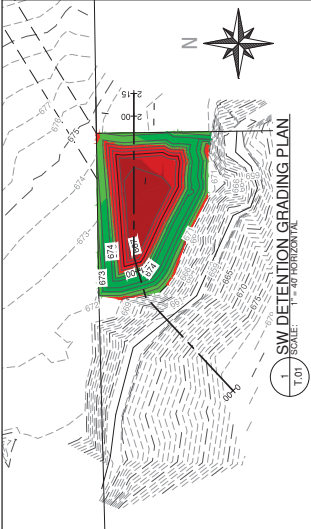
DOUGLAS N
PETERSEN

BRIAN M OR
LORI R WOLFE

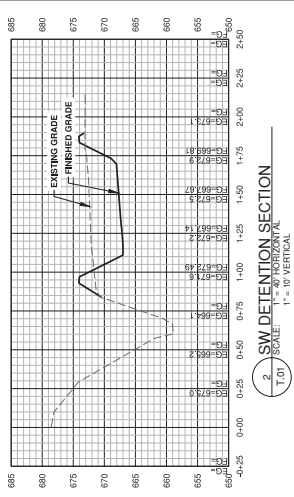
ANDREW J OR
MARIA J KURRIGER

ELISA PENTECOSTES
TORRE FUERTE INC

REFER TO SW DETENTION
GRADING PLAN THIS SHEET



1 SW DETENTION GRADING PLAN
SCALE: 1" = 40' HORIZONTAL



2 SW DETENTION SECTION
SCALE: 1" = 10' VERTICAL

CUT/FILL RANGE TABLE			
RANGE NO	MIN CUT/FILL	MAX CUT/FILL	COLOR
1	-5	-4	RED
2	-4	-3	RED
3	-3	-2	RED
4	-2	-1	RED
5	-1	0	RED
6	0	1	GREEN
7	1	2	GREEN
8	2	3	GREEN

EXISTING MAJOR CONTOUR LINE
EXISTING MINOR CONTOUR LINE
PROPOSED MAJOR CONTOUR LINE
PROPOSED MINOR CONTOUR LINE



--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Martin & Whitacre
Surveyors & Engineers, Inc.
P.O. BOX 413
MUSCATINE, IOWA
VOICE (563) 253-7891
EMAIL: info@martin-whitacre.com

