




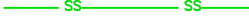



























**General Legend**

-  Gas Main
-  Gas Service
-  Water Main
-  Water Service
-  Sanitary Sewer Main
-  Sanitary Sewer Service
-  Underground Telephone Cable
-  Underground Telephone Service
-  Underground Electrical Cable
-  Underground Electrical Service
-  Overhead Electrical Cable
-  Overhead Electrical Service
-  Underground Cable TV
-  Underground Cable TV Service
-  Existing Storm Sewer
-  Existing Reducer
-  New Reducer
-  Existing Valve
-  New Valve
-  Stop Box
-  Existing Fire Hydrant
-  New Fire Hydrant
-  Meter Pit
-  Existing Manhole
-  New Manhole
-  Utility Pole
-  Property Pin
-  Poured Thrust Block
-  Gas Meter
-  Telephone Pedestal
-  Tracer Wire Riser

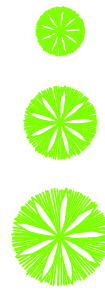
**Deciduous Trees**



**Trunk Dia.**

- under 12"
- 12" to 24"
- above 24"

**Evergreen Trees**



**Sheet Index**

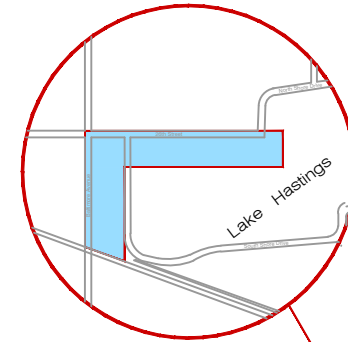
Cover	Plan Cover Sheet
Quantities	Sheet Layout and Quantities
CW1.1 to CW1.5	Water Main Plan and Profile Sheets
CW2.1	Water Main Civil Fitting Details
CW3.1	Water Main Civil Standard Plan Details



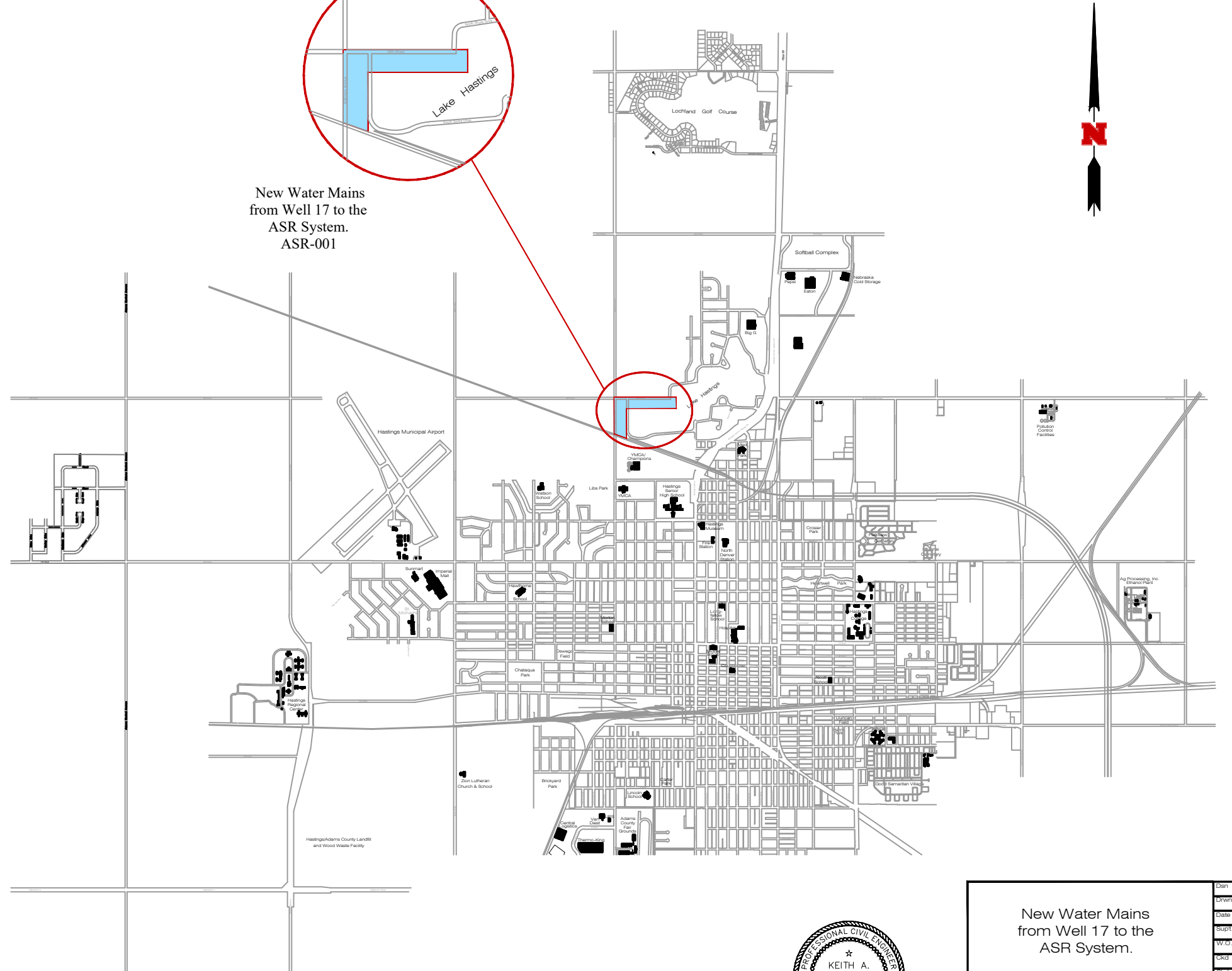
# Hastings Utilities

**2026**

## New Water Mains from Well 17 to the ASR System. WA-126 HU 2026-51



New Water Mains from Well 17 to the ASR System. ASR-001



Know what's below.  
Call before you dig.

No.	Revision	By	Date	Ckd	App
1	For Bid Drawings	SS	4/13/26	KM	

*Lee Vrooman 4/13/26*  
City Engineer



New Water Mains from Well 17 to the ASR System.



Desn	K. Miller
Drawn	S. Struss
Date	1/27/2026
Supt.	B. Lubken
W.D. No.	WA-126
Ckd	
App	
Sheet No.	Cover
No.	ASR-001



# Hastings Utilities

## 2025

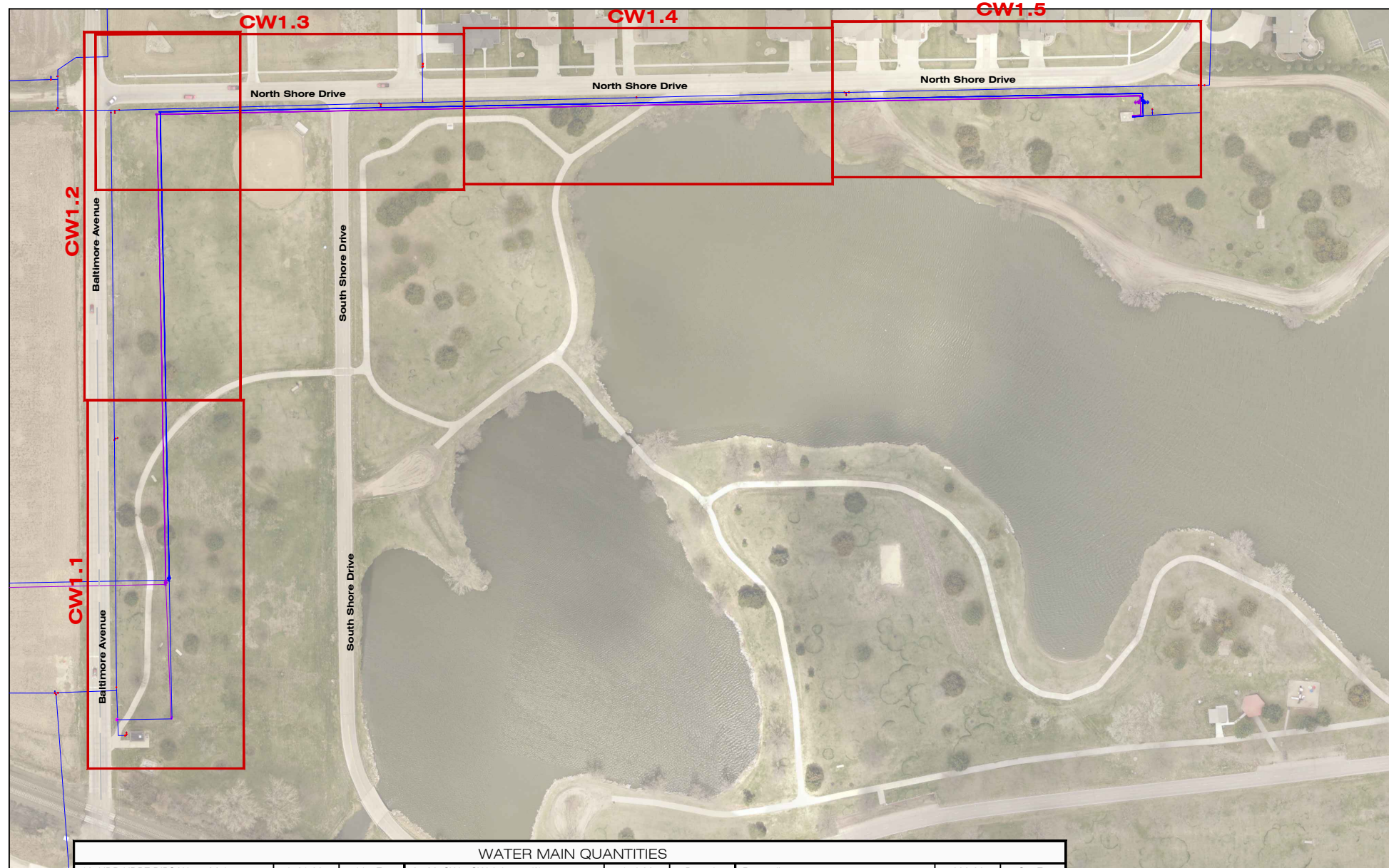
### Water Improvement Area

### WA-137



#### General Notes

1. The Contractor will be Responsible for Notifying the City Street Department Office at (402)461-2341 and the Communications Center at (402)461-2364 for all Temporary Street Closings Prior to Construction.
2. The Contractor will be Responsible for Calling "Diggers Hotline" for Locations of all Underground Facilities.
3. The Contractor Shall be Responsible for Repair of Construction Site to Fine Grading for Seeding. Damaged Areas Shall be Levelled Out to Match Existing Grade Conditions and Raked to Provide Suitable Bedding for Seeding. All Unsuitable Material Shall be Removed Such as Rock, Concrete, Etc. and is Subsidiary to the Bid. Seed Areas with a Contractors Blend Grass Seed.
4. The Contractor Shall be Responsible for the Erosion Control on the Project and is Subsidiary to the Bid. Removal of all Erosion Control Structures will be Removed by Hastings Utilities After Seeding is Established.
5. The Contractor is Responsible for the Traffic Control and Closure of any Lanes of Traffic and is Subsidiary to the Bid. All Barricades and Barricading Shall Comply with the Latest Edition of Part VI of the Manual on "Uniform Traffic Control Devices".
6. Tracer Wire, Tracer Wire Risers, Marking Tape, and Anodes will be Supplied By Hastings Utilities, Installed by the Contractor, and Shall be Subsidiary to the Bid.
7. Any Potholing or Excavating of Existing Utilities Needed to Complete this Project is Subsidiary to the Bid.



WATER MAIN QUANTITIES

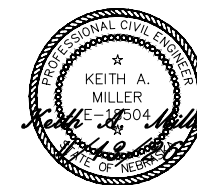
10" HDD HDPE DIPS Water Main	4761.00	Lin. Ft.	6", 36" SW x SW Adapter (2)	174.00	Pounds	Reseeding	5000.00	Sq. Ft.
10" DIP Water Main	2.00	Lin. Ft.	10" MJ Plug (8)	288.00	Pounds	3 lb. Anode	10.00	Each
8" DIP Water Main	12.00	Lin. Ft.	8" MJ Plug (2)	52.00	Pounds	Tracer Wire	5237.00	Lin. Ft.
10" Gate Valve and Box	4.00	Each	10" MJ Cap (1)	32.00	Pounds	Tracer Wire Riser	5.00	Each
8" Gate Valve and Box	3.00	Each	12" Foster Adaptor	1.00	Each	Thrust Block	1.00	Each
6" Gate Valve and Box	2.00	Each	10" Foster Adaptor	11.00	Each			
Fire Hydrant (6'-0" Bury)	2.00	Each	8" Foster Adaptor	8.00	Each			
12" HDPE DIPS MJ Adapter	2.00	Each	6" Foster Adaptor	2.00	Each			
10" HDPE DIPS MJ Adapter	12.00	Each	10" MEGA Lug	3.00	Each			
8" HDPE DIPS MJ Adapter	2.00	Each	8" MEGA Lug	4.00	Each			
12"x 12" MJ Tee (1)	160.00	Pounds	Remove 12" HDPE DIPS 90° Bend	1.00	Each			
10"x 10" MJ Tee (2)	1080.00	Pounds	Remove 8" HDPE DIPS 90° Bend	1.00	Each			
8"x 8" MJ Tee (2)	172.00	Pounds	Remove Fire Hydrant Assembly	1.00	Each			
8"x 6" MJ Tee (2)	120.00	Pounds						
10" 90° MJ Bend (1)	89.00	Pounds	2" HDD HDPE Comm. Conduit	2652.00	Lin. Ft.			
8" 90° MJ Bend (2)	114.00	Pounds	1 1/4" HDD HDPE Comm. Conduit	2652.00	Lin. Ft.			
12"x 10" MJ Reducer (1)	61.00	Pounds	Comm. Conduit Pull Box	2.00	Each			
10" x 8" MJ Reducer (4)	200.00	Pounds						

No.	Revision	By	Date	Ckd	App
1	For Bid Drawings	SS	4/13/26	KM	



Know what's below.  
Call before you dig.

Lee Vrooman 4/13/26  
City Engineer

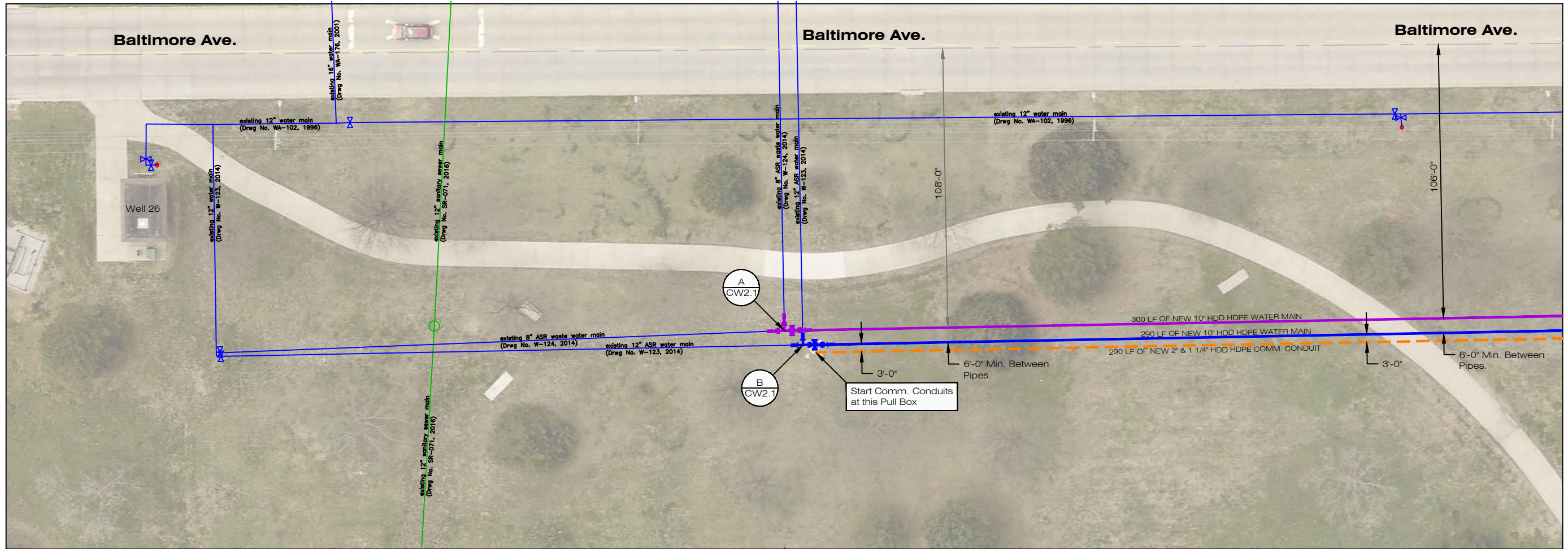


New Water Mains  
from Well 17 to the  
ASR System.



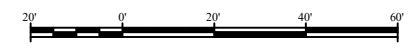
Desn	K. Miller
Dwn	S. Struss
Date	1/27/2026
Supt	B. Lubken
W.D. No.	
Ckd	
App	
Sheet No.	Quantities
No.	ASR-001

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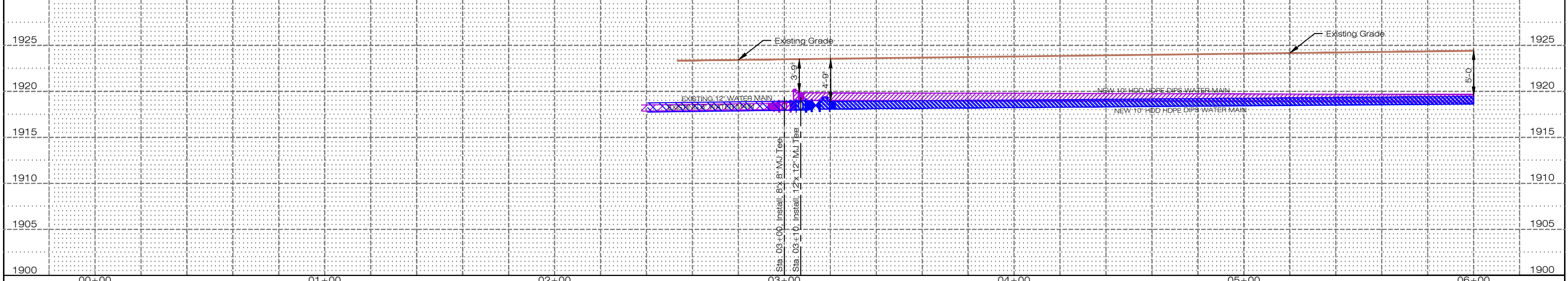


NORTH

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(Reduced Scale: 1" = 30')

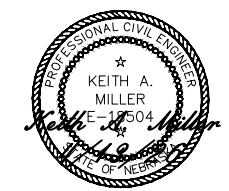


00+00 01+00 02+00 03+00 04+00 05+00 06+00



No.	Revision	By	Date	Ckd	App
1	For Bid Drawings	SS	4/13/26	KM	

WATER MAIN QUANTITIES											
10" HDD HDPE DIPS Water Main	590.00	Lin. Ft.	10" MJ Plug (2)	72.00	Pounds	3 lb. Anode	2.00	Each			
10" DIP Water Main	2.00	Lin. Ft.	12" Foster Adaptor	1.00	Each	Tracer Wire	650.00	Lin. Ft.			
10" Gate Valve and Box	2.00	Each	10" Foster Adaptor	7.00	Each	Tracer Wire Riser	2.00	Each			
12" HDPE DIPS MJ Adapter	2.00	Each	10" MEGA Lug	2.00	Each						
10" HDPE DIPS MJ Adapter	2.00	Each	Remove 12" HDPE DIPS 90° Bend	1.00	Each						
8" HDPE DIPS MJ Adapter	2.00	Each	Remove 8" HDPE DIPS 90° Bend	1.00	Each						
12" x 12" MJ Tee (1)	160.00	Pounds									
10" x 10" MJ Tee (3)	360.00	Pounds	2" HDD HDPE Comm. Conduit	290.00	Lin. Ft.						
10" 90° MJ Bend (1)	89.00	Pounds	1 1/4" HDD HDPE Comm. Conduit	290.00	Lin. Ft.						
12" x 10" MJ Reducer (1)	61.00	Pounds									
10" x 8" MJ Reducer (2)	100.00	Pounds									



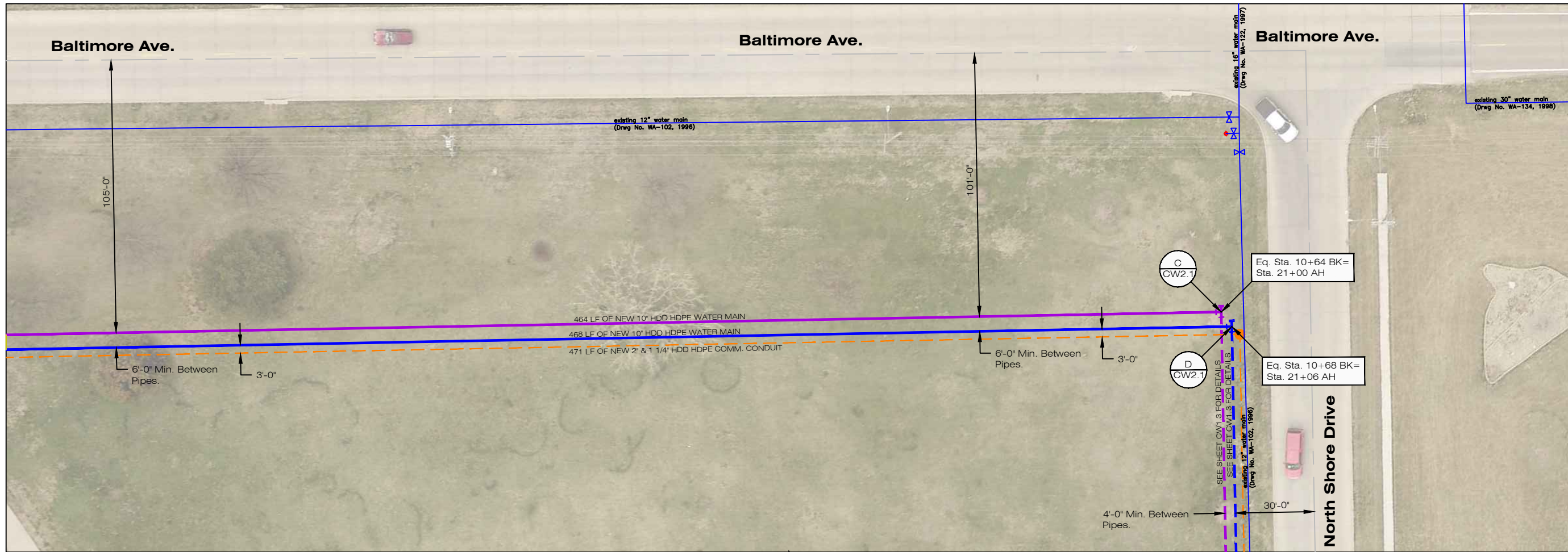
New Water Mains  
from Well 17 to the  
ASR System.



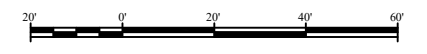
Desn	K. Miller
Dwn	S. Struss
Date	1/27/2026
Supt	B. Lubken
W.D. No.	WA-126
Ckd	
Sheet No.	CW1.1
No.	ASR-001



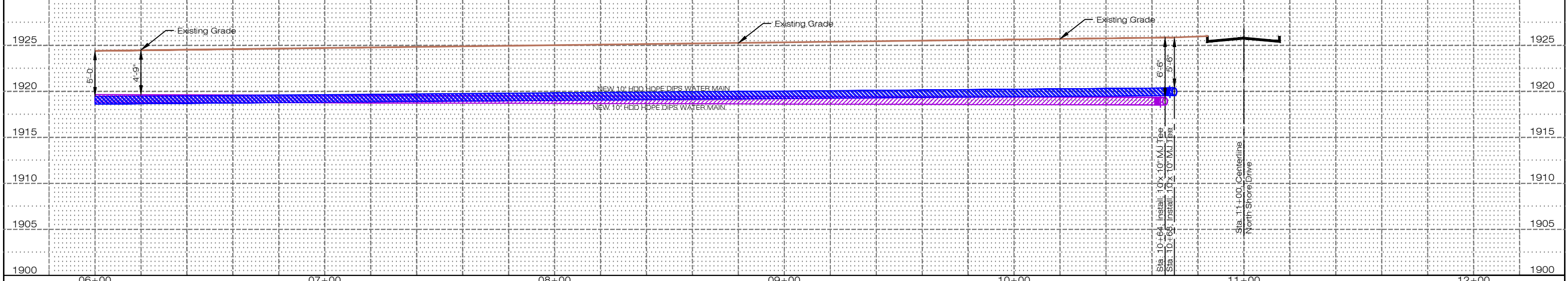
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NORTH  
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(Reduced Scale: 1" = 30')

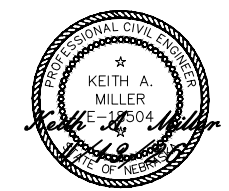


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No.	Revision	By	Date	Ckd	App
1	For Bid Drawings	SS	4/13/26	KM	

WATER MAIN QUANTITIES					
10" HDD HDPE DIPS Water Main	932.00	Lin. Ft.	3 lb. Anode	2.00	Each
10" HDPE DIPS MJ Adapter	4.00	Each	Tracer Wire	1025.00	Lin. Ft.
10'x 10' MJ Tee (2)	240.00	Pounds			
10' MJ Plug (2)	72.00	Pounds			
2" HDD HDPE Comm. Conduit	471.00	Lin. Ft.			
1 1/4" HDD HDPE Comm. Conduit	471.00	Lin. Ft.			
Comm. Conduit Pull Box	1.00	Each			



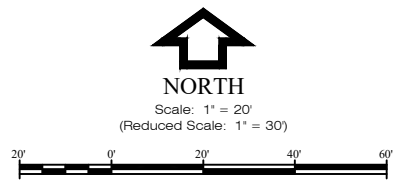
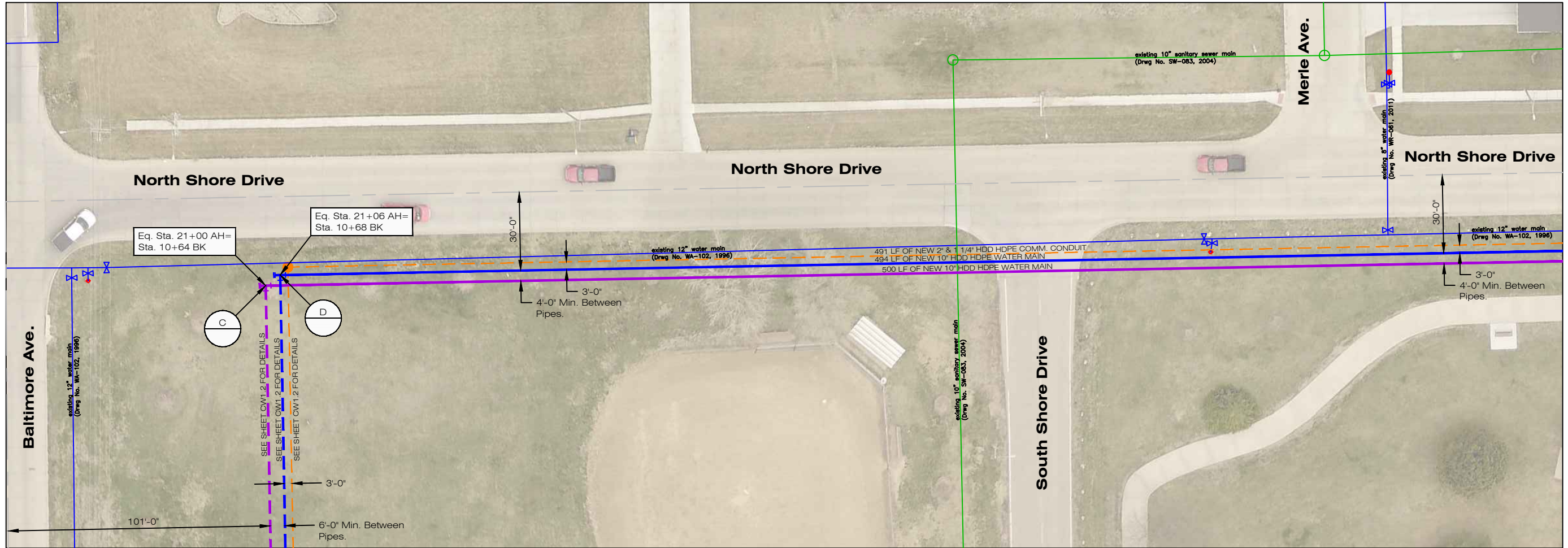
New Water Mains  
from Well 17 to the  
ASR System.



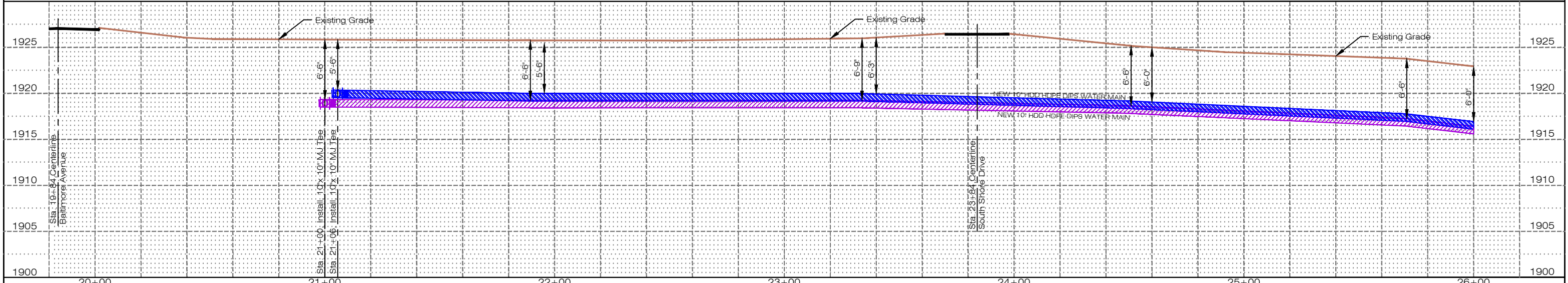
Desn	K. Miller
Dwn	S. Struss
Date	1/27/2026
Supt	B. Lubken
W.D. No.	WA-126
Ckd	
Sheet No.	CW1.2
No.	ASR-001



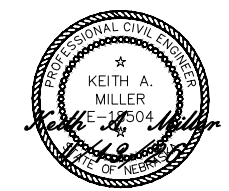
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20+00 21+00 22+00 23+00 24+00 25+00 26+00



No.	Revision	By	Date	Ckd	App	WATER MAIN QUANTITIES									
1	For Bid Drawings	SS	4/13/26	KM											
						10" HDD HDPE DIPS Water Main	994.00	Lin. Ft.							
						2" HDD HDPE Comm. Conduit	491.00	Lin. Ft.							
						1 1/4" HDD HDPE Comm. Conduit	491.00	Lin. Ft.							
						3 lb. Anode	2.00	Each							
						Tracer Wire	1093.00	Lin. Ft.							

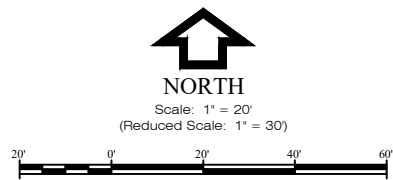
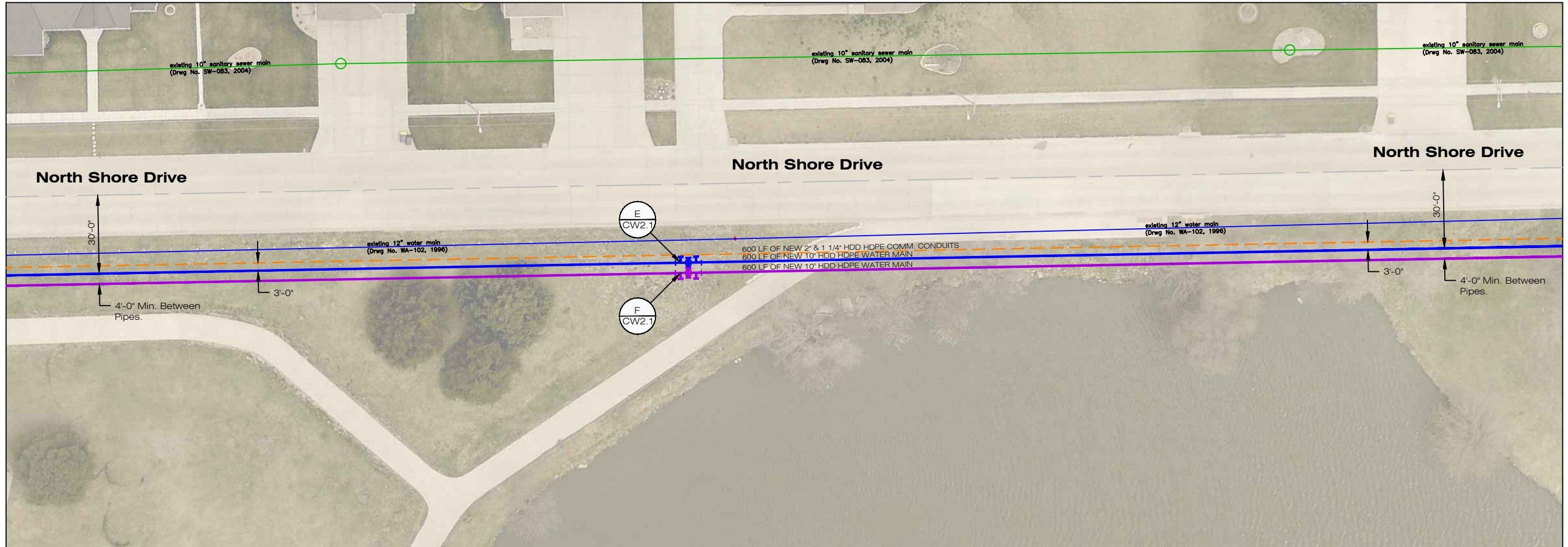


New Water Mains from Well 17 to the ASR System.

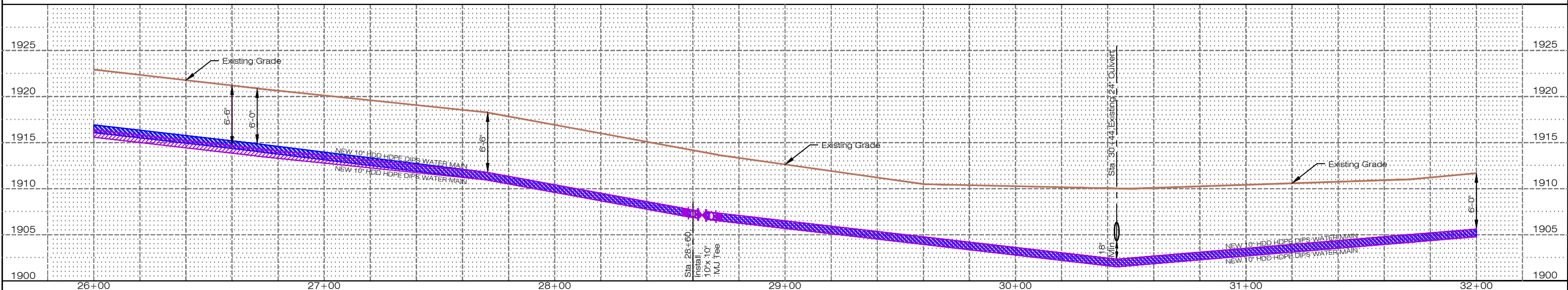


Desn	K. Miller
Drawn	S. Struss
Date	1/27/2026
Supt.	B. Lubken
W.D. No.	WA-126
Ckd	
Sheet No.	CW1.3
No.	ASR-001

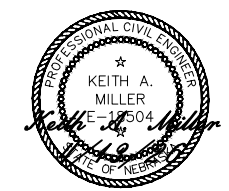
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26+00 27+00 28+00 29+00 30+00 31+00 32+00



No.	Revision	By	Date	Ckd	App	WATER MAIN QUANTITIES								
1	For Bid Drawings	SS	4/13/26	KM		10" HDD HDPE DIPS Water Main	1200.00	Lin. Ft.	3 lb. Anode	2.00	Each			
						10" Gate Valve and Box	2.00	Each	Tracer Wire	1320.00	Lin. Ft.			
						10" HDPE DIPS MJ Adapter	4.00	Each	Tracer Wire Riser	2.00	Each			
						10"x 10" MJ Tee (4)	480.00	Pounds						
						10" MJ Plug (4)	144.00	Pounds						
						10" Foster Adaptor	4.00	Each						
						2" HDD HDPE Comm. Conduit	600.00	Lin. Ft.						
						1 1/4" HDD HDPE Comm. Conduit	600.00	Lin. Ft.						



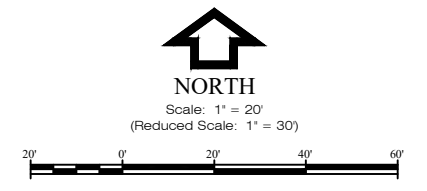
New Water Mains from Well 17 to the ASR System.



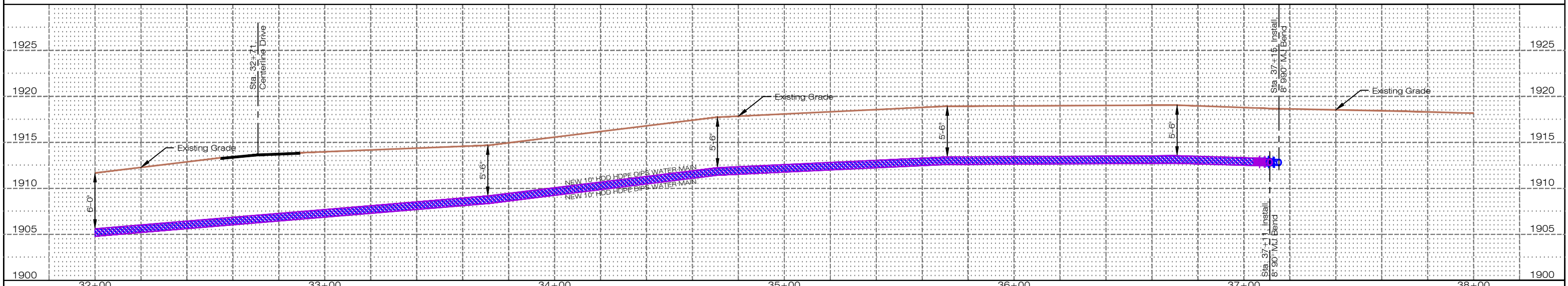
Desn	K. Miller
Drawn	S. Struss
Date	1/27/2026
Supt	B. Lubken
W.D. No.	WA-126
Ckd	
Sheet No.	CW1.4
No.	ASR-001



32+00 33+00 34+00 35+00 36+00 37+00 38+00

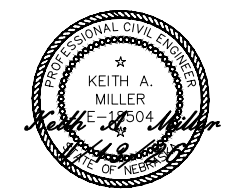


32+00 33+00 34+00 35+00 36+00 37+00 38+00



No.	Revision	By	Date	Ckd	App
1	For Bid Drawings	SS	4/13/26	KM	

WATER MAIN QUANTITIES									
10" HDD HDPE DIPS Water Main	1045.00	Lin. Ft.	8" MJ Plug (2)	52.00	Pounds	3 lb. Anode	2.00	Each	
8" DIP Water Main	12.00	Lin. Ft.	10" MJ Cap (1)	32.00	Pounds	Tracer Wire	1149.00	Lin. Ft.	
8" Gate Valve and Box	3.00	Each	8" Foster Adaptor	8.00	Each	Tracer Wire Riser	1.00	Each	
6" Gate Valve and Box	2.00	Each	6" Foster Adaptor	2.00	Each	Thrust Block	1.00	Each	
Fire Hydrant (6'-0" Bury)	2.00	Each	10" MEGA Lug	1.00	Each				
10" HDPE DIPS MJ Adapter	2.00	Each	8" MEGA Lug	4.00	Each				
8"x 8" MJ Tee (2)	172.00	Pounds	Remove Fire Hydrant Assembly	1.00	Each				
8"x 6" MJ Tee (2)	144.00	Pounds							
8" 90° MJ Bend (2)	114.00	Pounds	2" HDD HDPE Comm. Conduit	530.00	Lin. Ft.				
6", 36" SW x SW Adapter (2)	174.00	Pounds	1 1/4" HDD HDPE Comm. Conduit	530.00	Lin. Ft.				
10"x 8" MJ Reducer (2)	100.00	Pounds	Comm. Conduit Pull Box	1.00	Each				



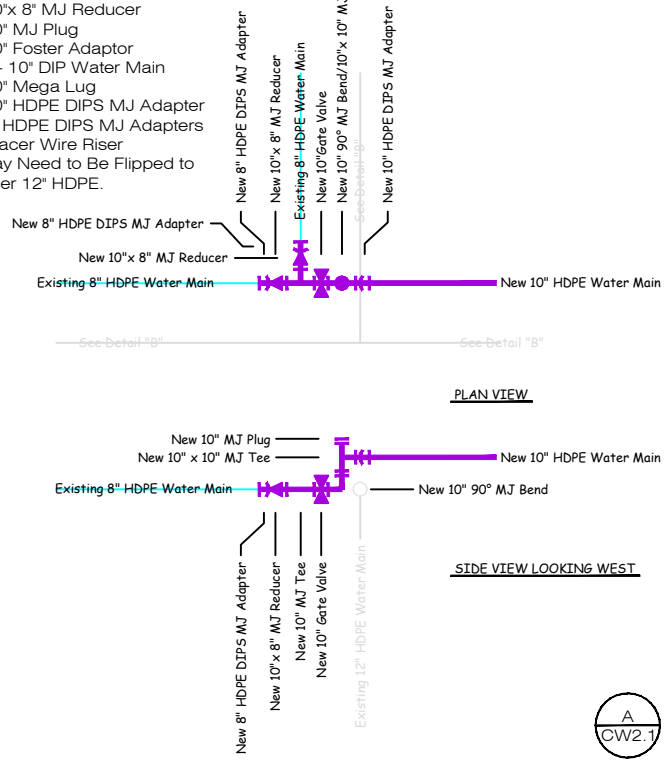
New Water Mains from Well 17 to the ASR System.



Desn	K. Miller
Dwn	S. Struss
Date	1/27/2026
Supt	B. Lubken
W.D. No.	WA-126
Ckd	
Sheet No.	CW1.5
No.	ASR-001

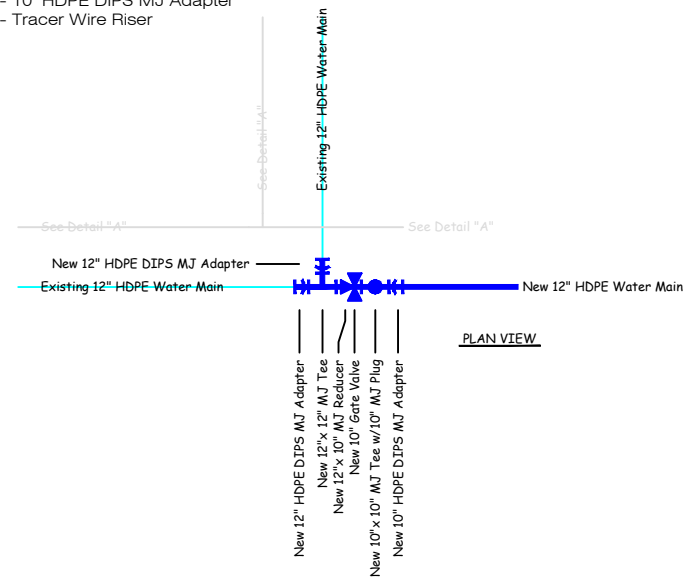


- Sta. 03+00, Remove  
 1 - 8" HDPE DIPS 90° Bend  
 Sta. 03+00, Install  
 2 - 10"x 10" MJ Tee  
 1 - 10" Gate Valve w/Box  
 1 - 10" 90° MJ Bend  
 2 - 10"x 8" MJ Reducer  
 1 - 10" MJ Plug  
 5 - 10" Foster Adaptor  
 2 LF - 10" DIP Water Main  
 2 - 10" Mega Lug  
 1 - 10" HDPE DIPS MJ Adapter  
 2 - 8" HDPE DIPS MJ Adapters  
 1 - Tracer Wire Riser  
 This May Need to Be Flipped to Go Under 12" HDPE.



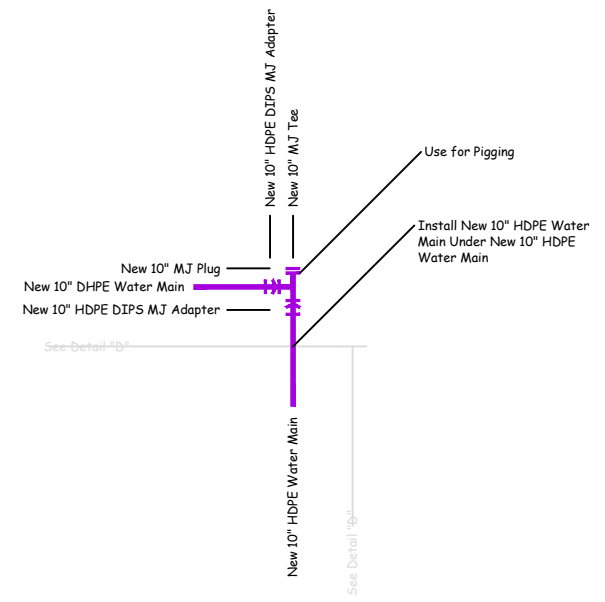
A  
CW2.1

- Sta. 03+10, 6' Rt., Remove  
 1 - 12" HDPE DIPS 90° Bend  
 Sta. 03+10, 6' Rt., Install  
 1 - 12"x 12" MJ Tee  
 1 - 10"x 10" MJ Tee  
 1 - 10" Gate Valve w/Box  
 1 - 12"x 10" MJ Reducer  
 1 - 10" MJ Plug  
 1 - 12" Foster Adaptor  
 2 - 10" Foster Adaptor  
 2 - 12" HDPE DIPS MJ Adapters  
 1 - 10" HDPE DIPS MJ Adapter  
 1 - Tracer Wire Riser



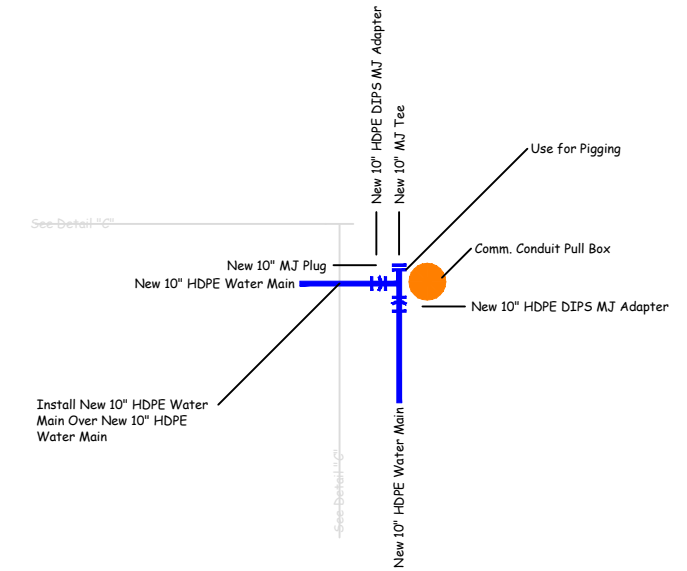
B  
CW2.1

- Sta. 10+64, Install  
 1 - 10"x 10" MJ Tee  
 1 - 10" MJ Plug  
 2 - 10" HDPE DIPS MJ Adapters  
 Eq. Sta. 10+64 BK=  
 Eq. Sta. 21+00 AH



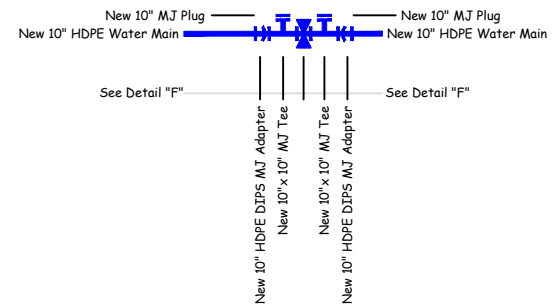
C  
CW2.1

- Sta. 10+68, 6' Rt., Install  
 1 - 10"x 10" MJ Tee  
 1 - 10" MJ Plug  
 2 - 10" HDPE MJ Adapters  
 1 - Comm. Conduit Pull Box  
 Eq. Sta. 10+68 BK=  
 Eq. Sta. 21+06 AH



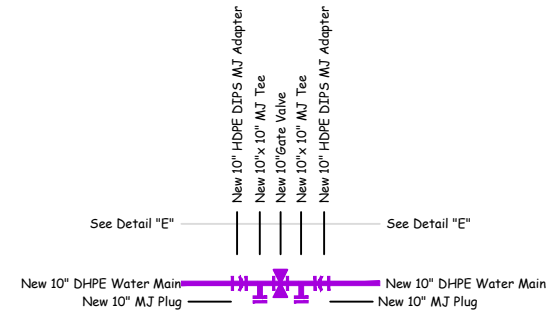
D  
CW2.1

- Sta. 28+60, Install  
 2 - 10"x 10" MJ Tee  
 1 - 10" Gate Valve w/Box  
 2 - 10" MJ Plug  
 2 - 10" Foster Adaptor  
 2 - 10" HDPE DIPS MJ Adapters  
 1 - Tracer Wire Riser



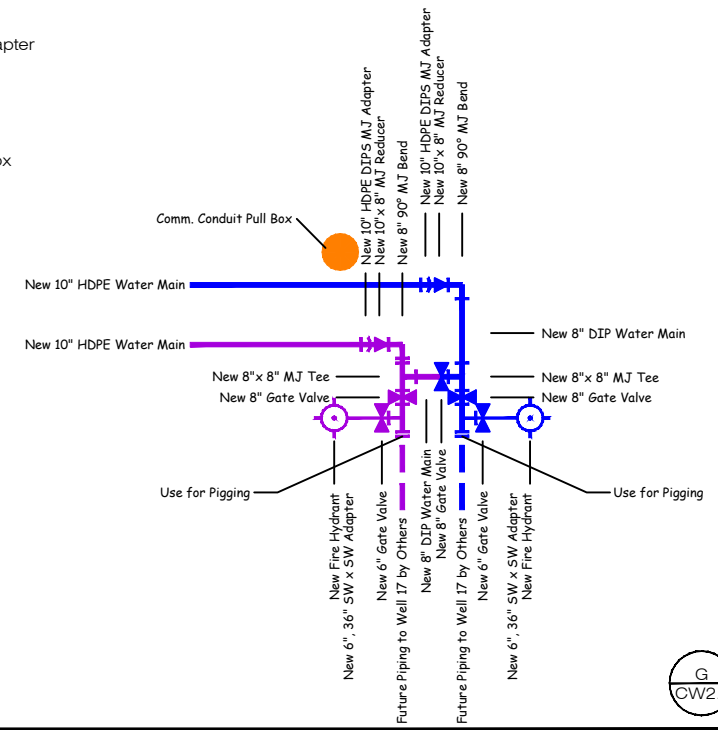
E  
CW2.1

- Sta. 28+60, 4' Rt., Install  
 2 - 10"x 10" MJ Tee  
 1 - 10" Gate Valve w/Box  
 2 - 10" MJ Plug  
 2 - 10" Foster Adaptor  
 2 - 10" HDPE DIPS MJ Adapters  
 1 - Tracer Wire Riser



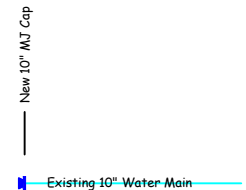
F  
CW2.1

- Sta. 37+11, 4' Rt./Sta. 37+15, Install  
 2 - 8" 90° MJ Bend  
 2 - 8"x 8" MJ Tee  
 2 - 8"x 6" MJ Tee  
 3 - 8" Gate Valve w/Box  
 2 - 6" Gate Valve w/Box  
 2 - Fire Hydrant (6' Bury)  
 2 - 6", 36" SW x SW Adapter  
 2 - 10"x 8" MJ Reducer  
 2 - 8" MJ Plug  
 2 - 10" HDPE DIPS MJ Adapter  
 8 - 8" Foster Adaptor  
 2 - 6" Foster Adaptor  
 4 - 8" MEGA Lugs  
 12 LF - 8" DIP Water Main  
 1 - Tracer Wire Riser  
 1 - Comm. Conduit Pull Box



G  
CW2.1

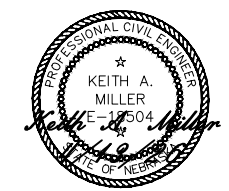
- Sta. 37+21, 35' Rt., Remove  
 1 - Fire Hydrant Assembly  
 Sta. 37+21, 35', Install  
 1 - 10" MJ Cap  
 1 - 10" MEGA Lug  
 1 - Thrust Block



H  
CW2.1



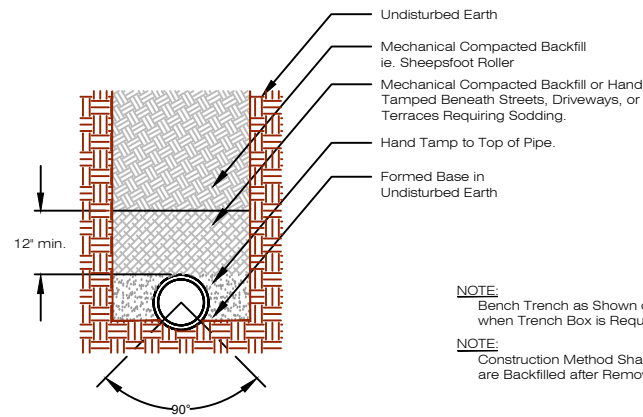
No.	Revision	By	Date	Ckd	App
1	For Bid Drawings	SS	4/13/26	KM	



New Water Main  
 from Well 17 to the  
 ASR System.



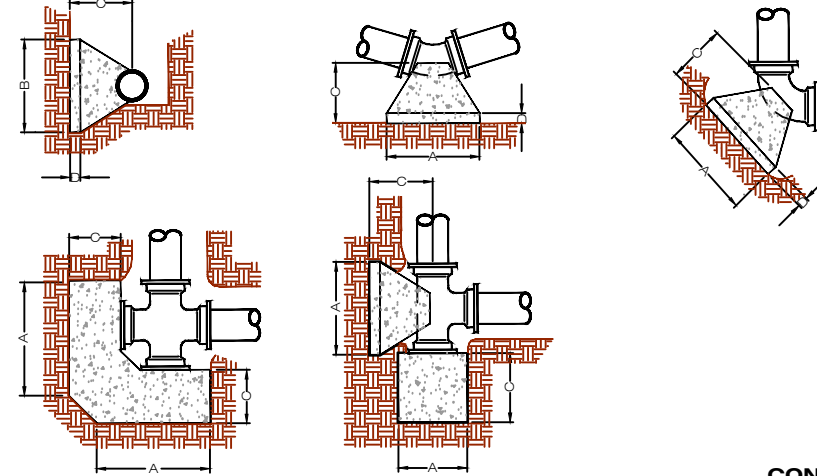
Desn	K. Miller
Drawn	S. Struss
Date	1/27/2026
Supt	B. Lubken
W.D. No.	WA-126
Ckd	
App	
Sheet No.	CW2.1
No.	ASR-001



**NOTE:**  
Bench Trench as Shown on Bedding Detail III when Trench Box is Required

**NOTE:**  
Construction Method Shall Insure all Voids are Backfilled after Removal of Trench Box.

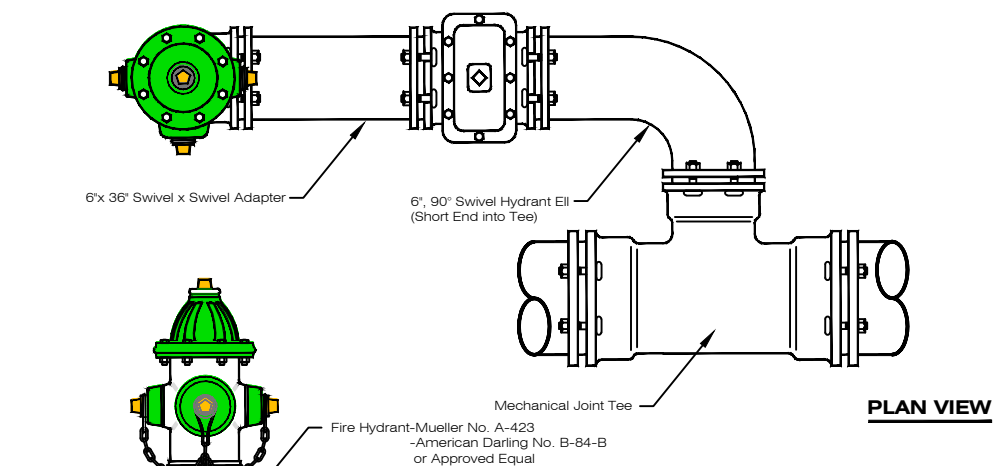
**TYPE II BEDDING-DIP WATER MAIN**  
Not to Scale



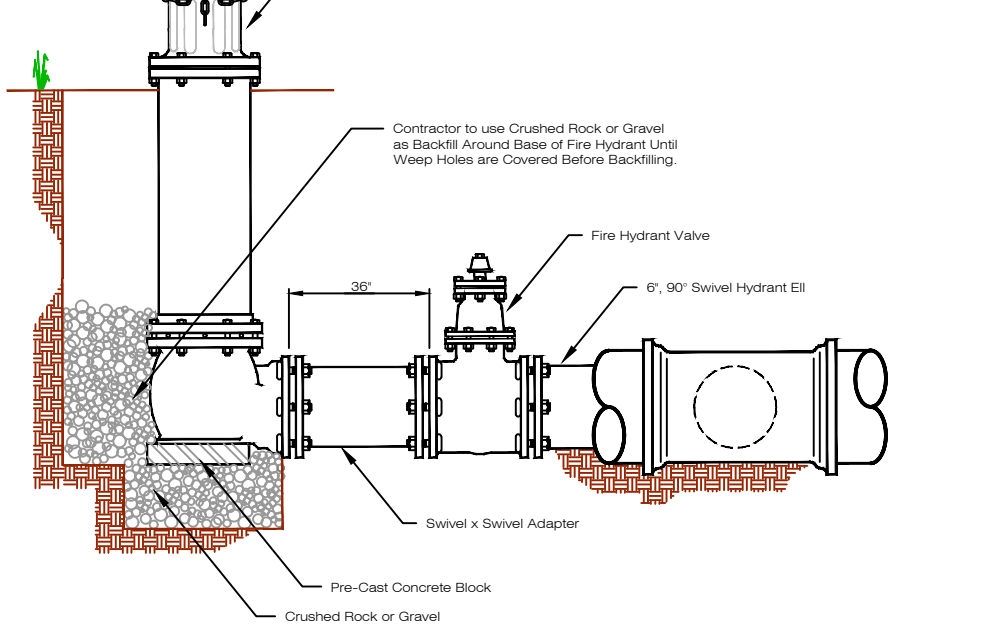
**THRUST BLOCK DIMENSIONS**

PIPE SIZE INCH	A FEET	B FEET	C FEET	D INCH
4	1.00	1.00	1.00	3
6	1.50	1.50	1.00	6
8	2.00	2.00	1.00	6
10	2.50	2.50	2.00	9
12	3.00	3.00	2.00	9

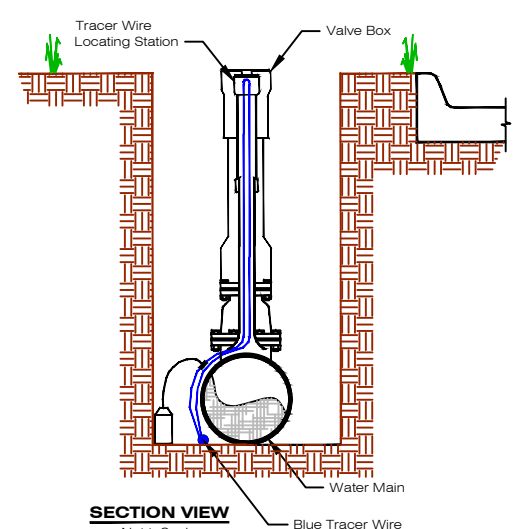
**CONCRETE THRUST BLOCK**  
Not to Scale



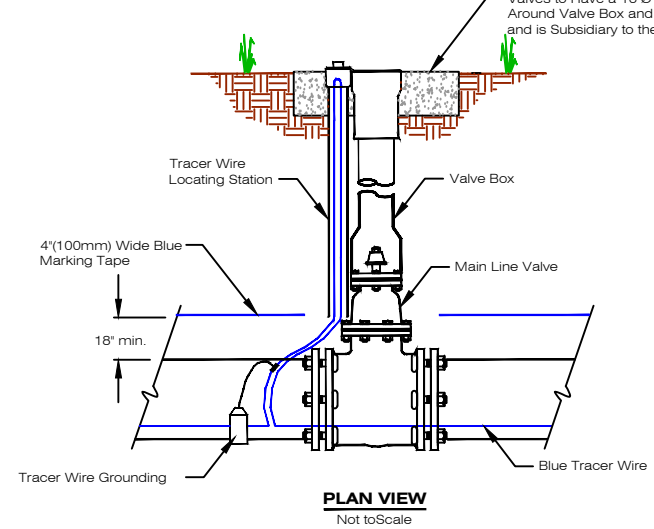
**PLAN VIEW**



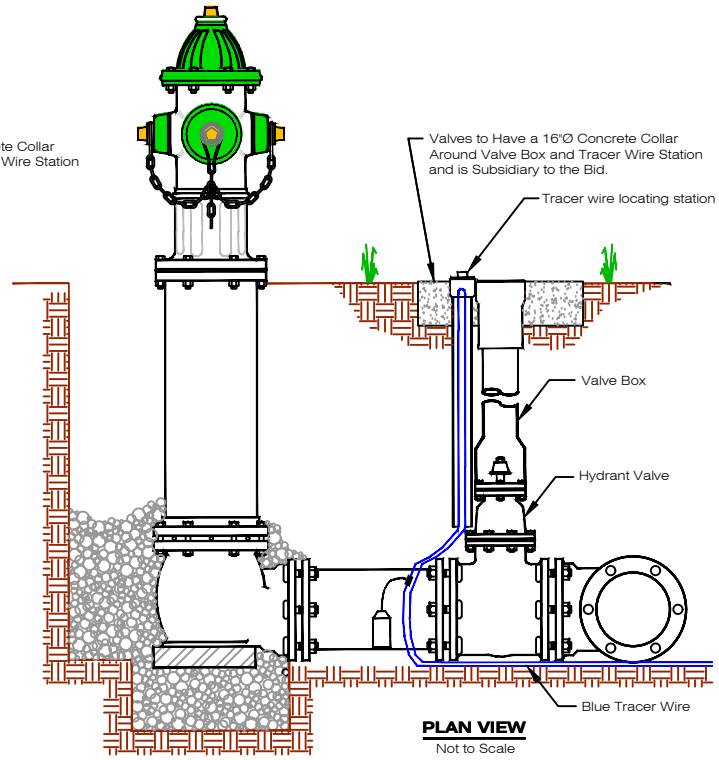
**HYDRANT AND VALVE**  
Not to Scale



**SECTION VIEW**  
Not to Scale

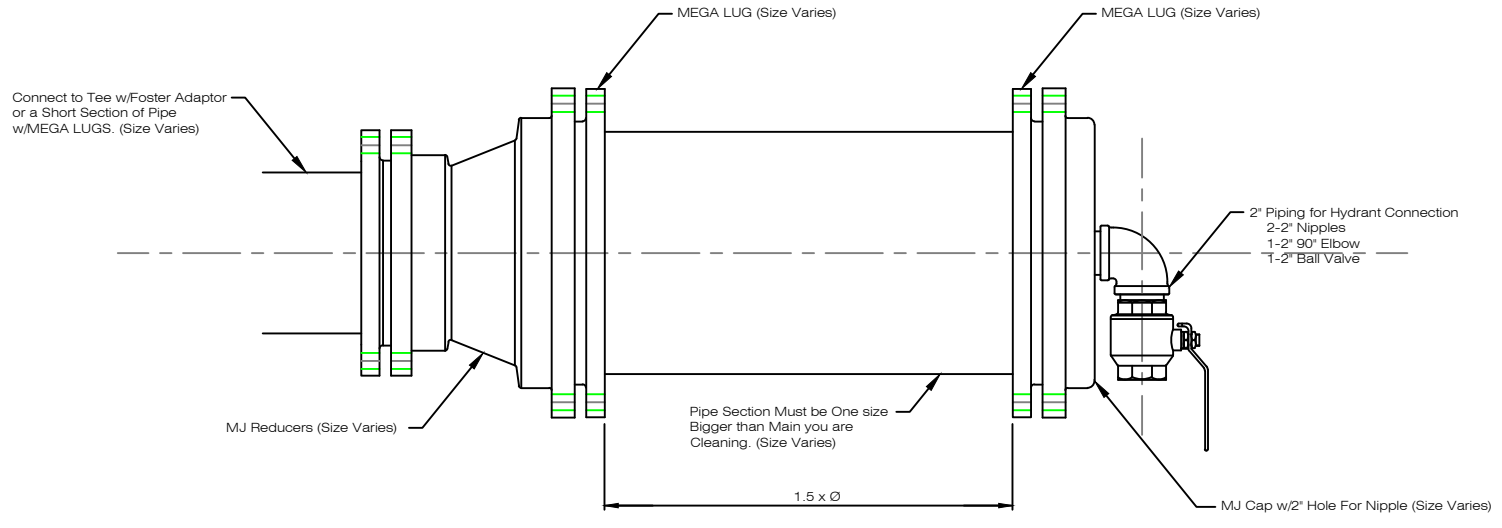


**PLAN VIEW**  
Not to Scale



**PLAN VIEW**  
Not to Scale

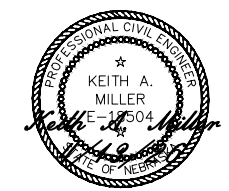
**TRACER WIRE LOCATING STATION FOR MAIN LINE VALVE AND FIRE HYDRANT**



**PIG LAUNCHER**  
Not to Scale



No.	Revision	By	Date	Ckd	App
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New Water Main from Well 17 to the ASR System.



Desn	K. Miller
Dwn	S. Struss
Date	1/27/2026
Supt	B. Lubken
W.D. No.	WA-126
Ckd	
Ckd	
Sheet No.	CW3.1
No.	ASR-001