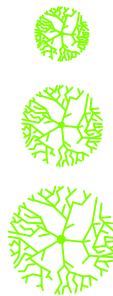


# General Legend

- 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

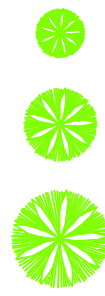
### Deciduous Trees



### Trunk Dia.

under 12"  
12" to 24"  
above 24"

### Evergreen Trees



### Sheet Index

CW1.1 to CW1.5	Water Main Improvements Plan and Profile Sheets
CW2.1 to CW2.2	Water Main Improvements Civil Fitting Details
CW3.1	Water Main Improvements Civil Standard Plan Details

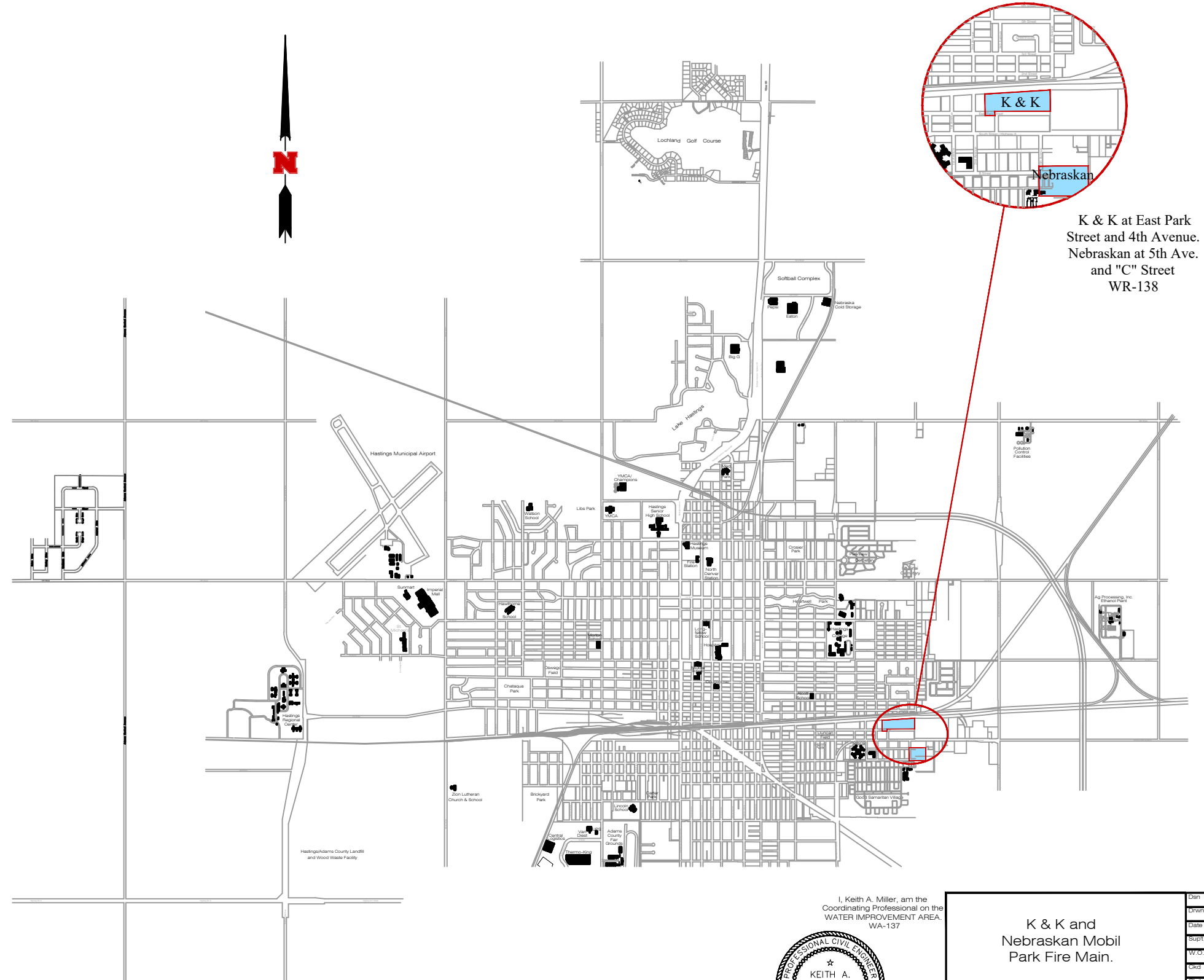


# Hastings Utilities

## 2025

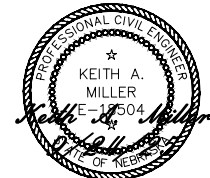
### Water Improvement Area

### WA-137



Know what's below.  
Call before you dig.

*Lee Vrooman 9/24/25*  
City Engineer



I, Keith A. Miller, am the  
Coordinating Professional on the  
WATER IMPROVEMENT AREA,  
WA-137

K & K and Nebraskan Mobil Park Fire Main.	Des: K. Miller
	Drawn: S. Struss
	Date: 3/11/2025
	Supt: B. Lubken
	W.D. No.: WA-137
City:	
Sheet No.:	Cover
No.:	WR-138 (Paid by Hastings Utilities)





# Hastings Utilities

## 2025

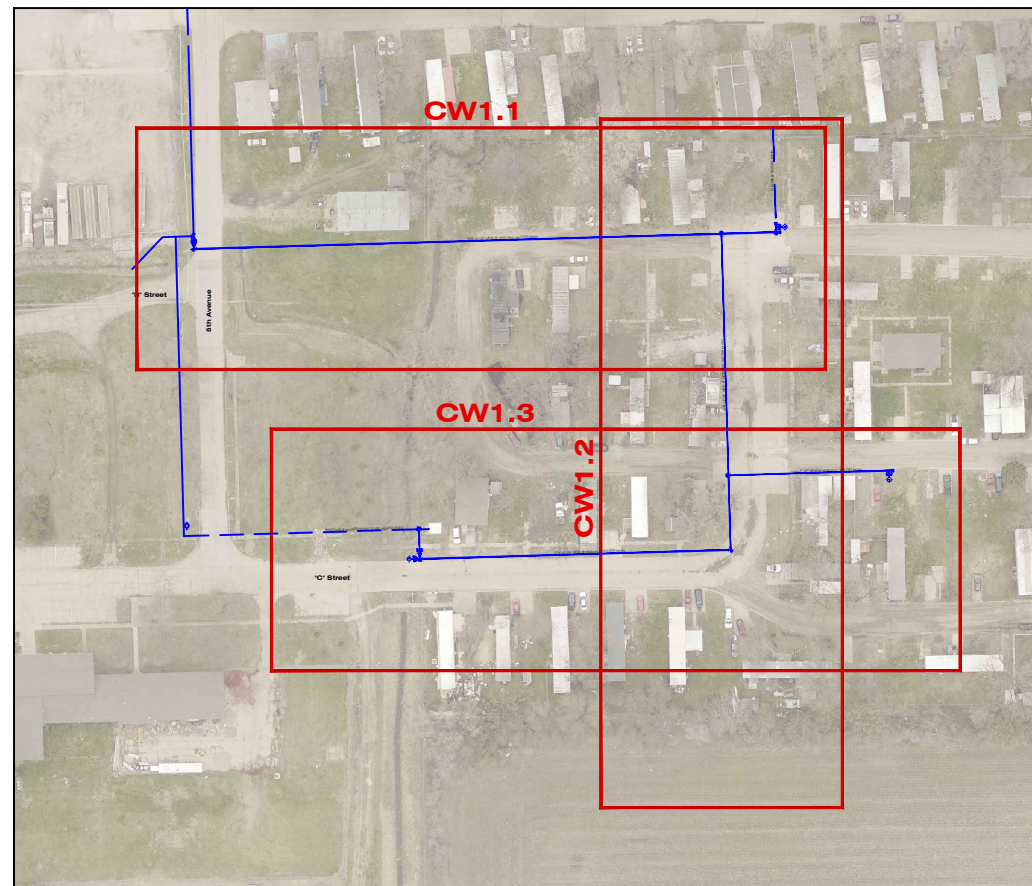
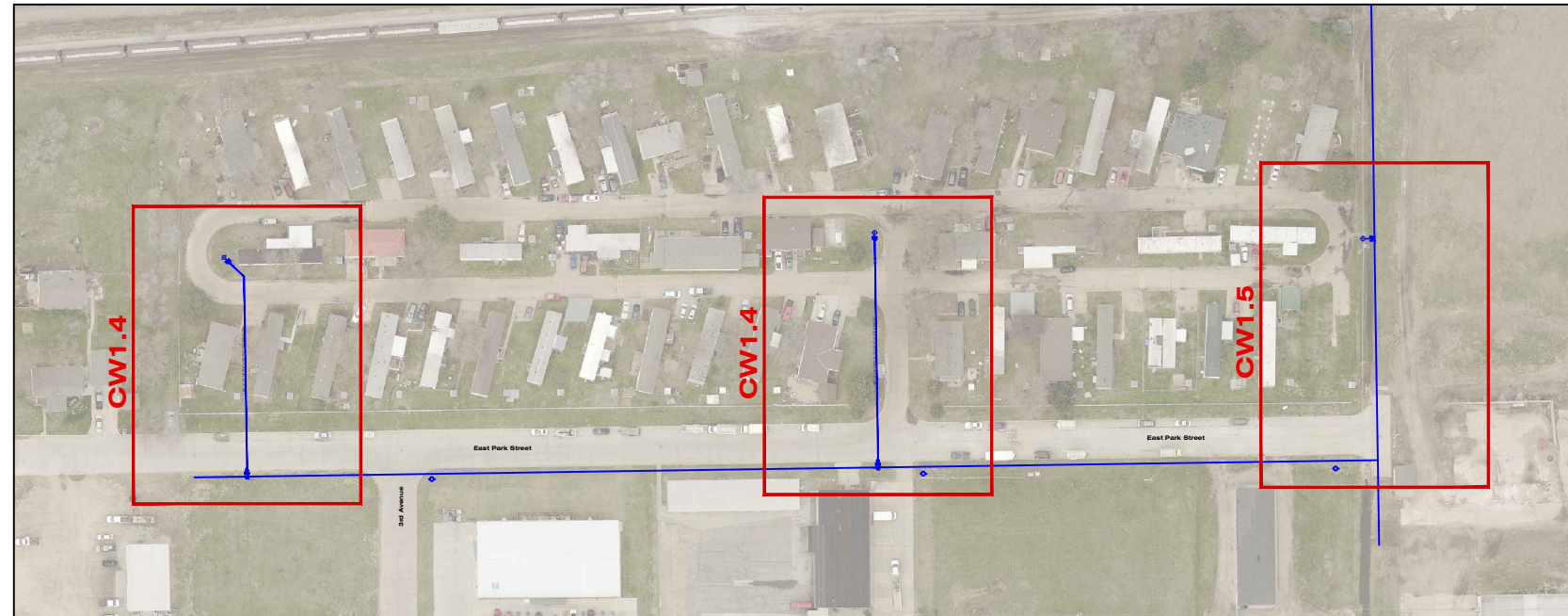
### Water Improvement Area

### WA-137



#### General Notes

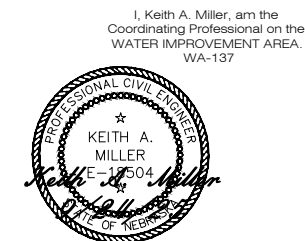
1. The Contractor will be Responsible for Notifying the City Street Department Office at (402)461-2341 and the Communications Center at (402)461-2364 for all Temporary Street Closings Prior to Construction.
2. The Contractor will be Responsible for Calling "Diggers Hotline" for Locations of all Underground Facilities.
3. The Contractor will be Responsible for Replacement of Gravel on Driveways or Streets in this Area.
4. The Contractor Shall be Responsible for Repair of Construction Site to Fine Grading for Seeding. Damaged Areas Shall be Leveled 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.
5. 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.
6. 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".
7. 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.
8. Any Potholing or Excavating of Existing Utilities Needed to Complete this Project is Subsidiary to the Bid.
9. Some Properties in the Project Area May Have Underground Sprinklers on them. Any Damages and Repairs will be the Responsibility of the Contractor.



WATER MAIN QUANTITIES					
8" HDD DIP Water Main	1587.00	Lin. Ft.	6", 72" SW x SW Adapter (1)	174.00	Pounds
8" DIP Water Main	65.00	Lin. Ft.	6", 36" SW x SW Adapter (5)	435.00	Pounds
10"x 6" Tapping Sleeve By HU	1.00	Each	8" MJ Plug (6)	208.00	Pounds
8"x 8" Tapping Sleeve By HU	2.00	Each	8" MJ Cap (1)	22.00	Pounds
8" Tapping Valve and Box By HU	2.00	Each	10" Foster Adaptor	1.00	Each
6" Tapping Valve and Box By HU	1.00	Each	8" Foster Adaptor	11.00	Each
8" Gate Valve and Box	2.00	Each	6" Foster Adaptor	5.00	Each
6" Gate Valve and Box	5.00	Each	8" MEGA Lug	20.00	Each
Fire Hydrant (5'-6" Bury)	6.00	Each	Remove 10" MJ Plug	1.00	Each
8"x 8" MJ Tee (9)	774.00	Pounds			
8"x 6" MJ Tee (2)	144.00	Pounds			
8" 90° MJ Bend (2)	114.00	Pounds	3 lb. Anode	4.00	Each
8" 45° MJ Bend (4)	184.00	Pounds	Blue Water Marking Tape	1779.00	Lin. Ft.
10"x 8" MJ Reducer (1)	50.00	Pounds	Tracer Wire	1779.00	Lin. Ft.
8x 6" MJ Reducer (3)	108.00	Pounds	Tracer Wire Riser	9.00	Each
			Thrust Block	13.00	Each



Lee Vrooman 9/24/25  
City Engineer



<b>K &amp; K and Nebraskan Mobil Park Fire Main.</b>	Desn	K. Miller
	Drawn	S. Struss
	Date	3/11/2025
	Supt	B. Lubken
	W.D. No.	WA-137
Sheet No.		Quantities
No.		WR-138 (Paid by Hastings Utilities)









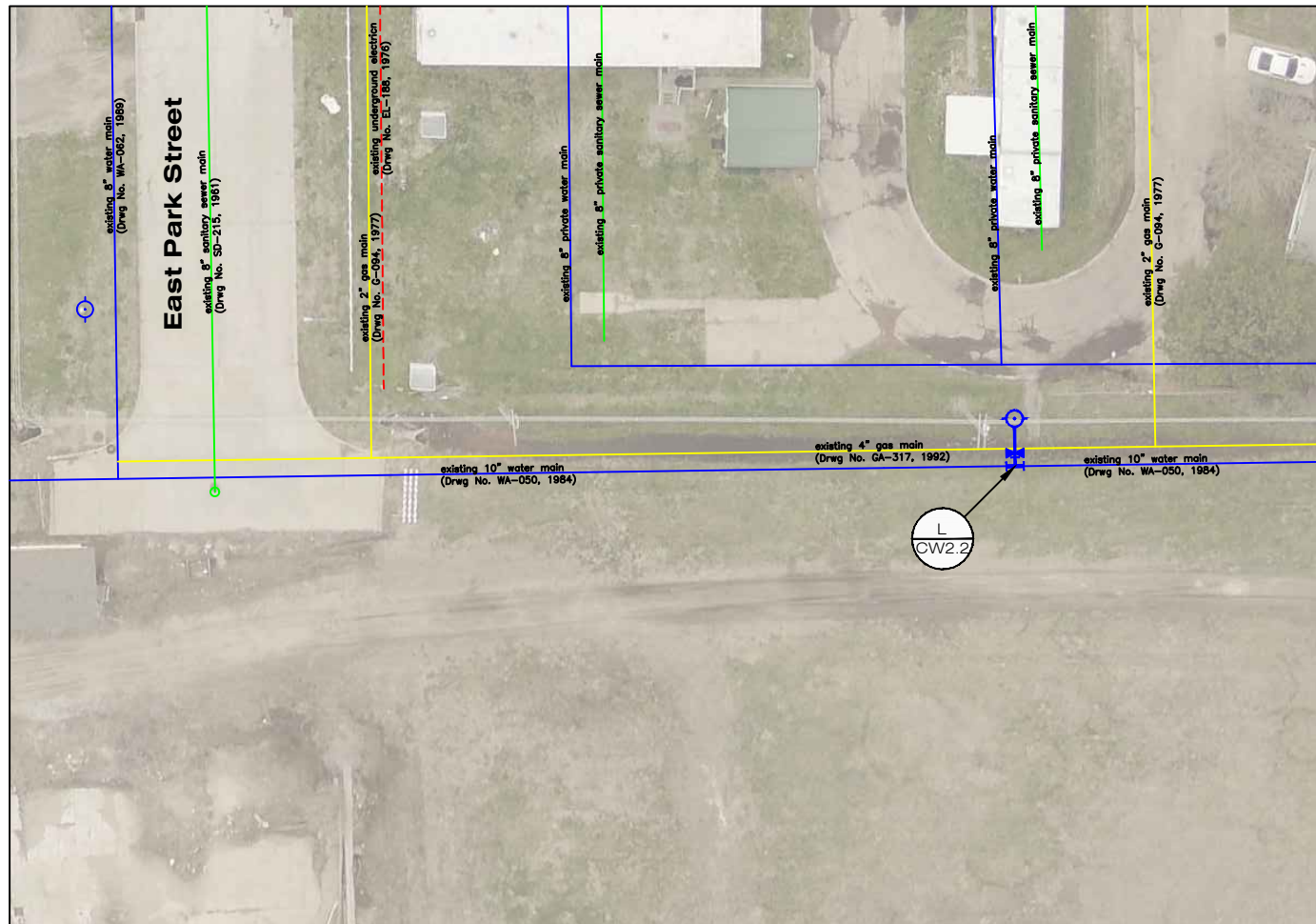


35+00

36+00

37+00

38+00

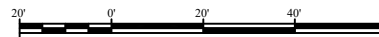


NOTE:  
Underground Utilities Inside of Trailer Park need to be Located and Verified for Depth Prior to Start of Construction. Depth of New Main will be Determined by this Information.



NORTH

Scale: 1" = 20'  
(Reduced Scale: 1" = 30')

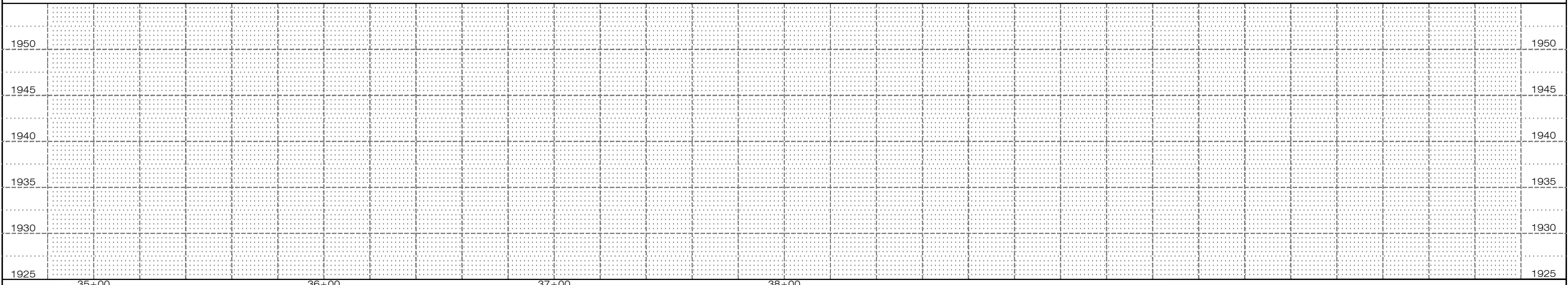


35+00

36+00

37+00

38+00



35+00

36+00

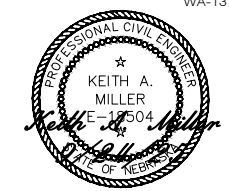
37+00

38+00

WATER MAIN QUANTITIES

No.	Revision	By	Date	Ckd	App															
						10"x 6" Tapping Sleeve By HU	1.00	Each												
						6" Tapping Valve and Box By HU	1.00	Each												
						Fire Hydrant (6"-6" Bury)	1.00	Each												
						6", 72" SW x SW Adapter (1)	174.00	Pounds												
						Tracer Wire Riser	1.00	Each												

I, Keith A. Miller, am the Coordinating Professional on the WATER IMPROVEMENT AREA. WA-137



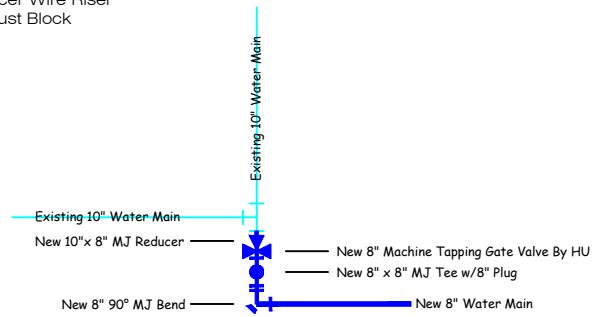
K & K and Nebraskan Mobil Park Fire Main.



Des: K. Miller  
Drawn: S. Struss  
Date: 3/11/2025  
Supt: B. Lubken  
W.D. No.: WA-137  
Ckd:  
Sheet No.: CW1.2  
No.: WR-138  
(Paid by Hastings Utilities)

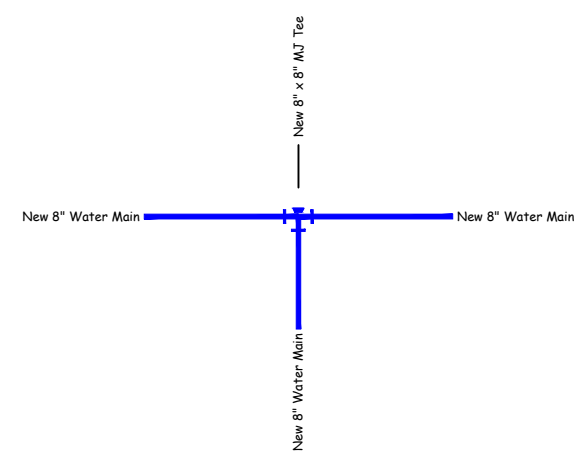


- Sta. 00+50, Remove  
 1 - 10" MJ Plug  
 Sta. 00+50, Install  
 1 - 10"x 8" MJ Reducer  
 1 - 8" Gate Valve w/Box  
 1 - 8"x 8" MJ Tee  
 1 - 8" 90° MJ Bend  
 1 - 8" MJ Plug  
 1 - 10" Foster Adaptor  
 3 - 8" Foster Adaptor  
 1 - 8" Mega Lug  
 1 - Tracer Wire Riser  
 1 - Thrust Block



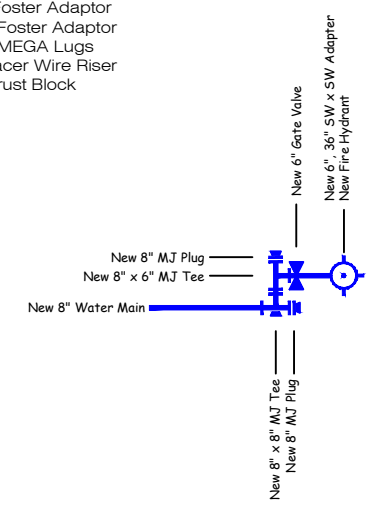
A  
CW2.1

- Sta. 5+10, Install  
 1 - 8"x 8" MJ Tee  
 3 - 8" MEGA Lug  
 1 - Thrust Block  
 Eq. Sta. 5+10 BK=  
 Eq. Sta. 11+00 AH



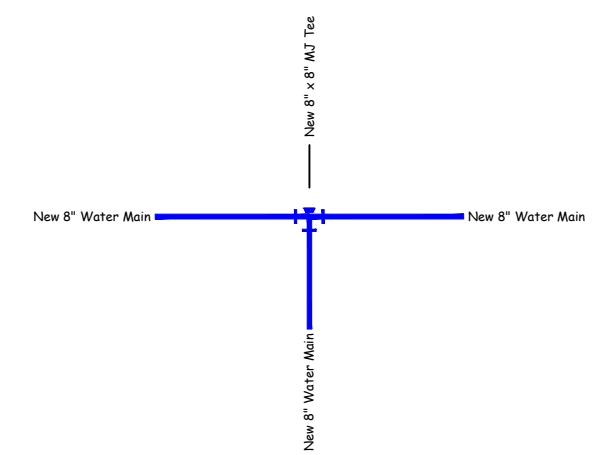
B  
CW2.1

- Sta. 5+57, Install  
 1 - 8"x 8" MJ Tee  
 1 - 8"x 6" MJ Tee  
 1 - 6" Gate Valve w/Box  
 1 - Fire Hydrant (5'-6" Bury)  
 1 - 6", 36" SW x SW Adapter  
 2 - 8" MJ Plug  
 1 - 8" Foster Adaptor  
 1 - 6" Foster Adaptor  
 1 - 8" MEGA Lugs  
 1 - Tracer Wire Riser  
 3 - Thrust Block



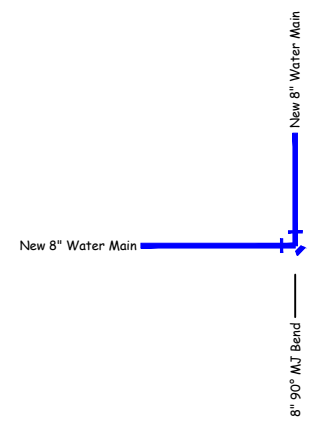
C  
CW2.1

- Sta. 13+10, Install  
 1 - 8"x 8" MJ Tee  
 3 - 8" MEGA Lug  
 1 - Thrust Block  
 Eq. Sta. 13+10 BK=  
 Eq. Sta. 20+00 AH



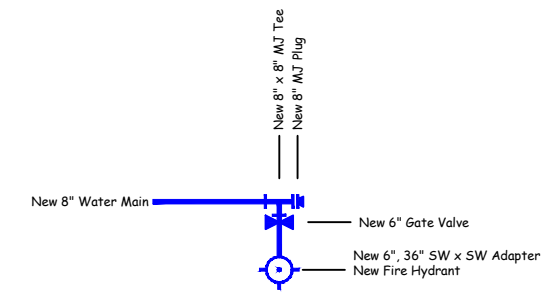
D  
CW2.1

- Sta. 13+75, Install  
 1 - 8" 90° MJ Bend  
 2 - 8" MEGA Lug  
 1 - Thrust Block  
 Eq. Sta. 13+75 BK=  
 Eq. Sta. 20+00 AH



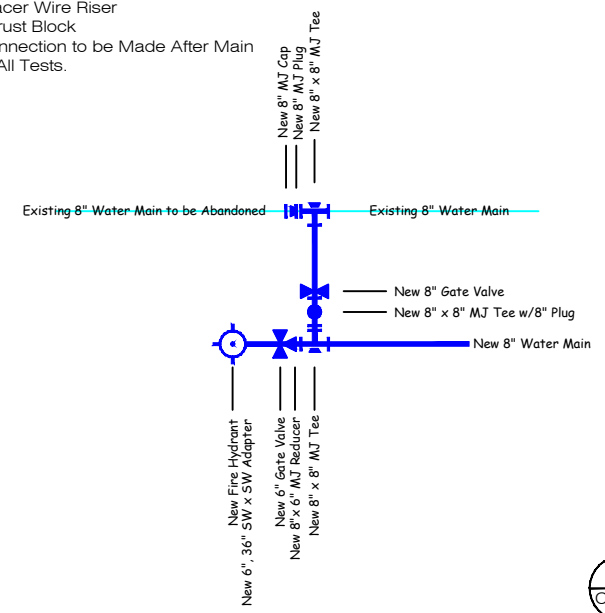
E  
CW2.1

- Sta. 18+62, Install  
 1 - 8"x 6" MJ Tee  
 1 - 6" Gate Valve w/Box  
 1 - Fire Hydrant (5'-6" Bury)  
 1 - 6", 36" SW x SW Adapter  
 1 - 8" MJ Plug  
 1 - 6" Foster Adaptor  
 1 - 8" MEGA Lugs  
 1 - Tracer Wire Riser  
 1 - Thrust Block



F  
CW2.1

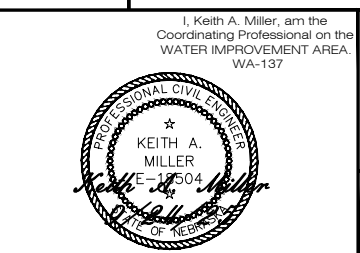
- Sta. 22+71, Install  
 3 - 8"x 8" MJ Tee  
 1 - 8" Gate Valve w/Box  
 1 - 6" Gate Valve w/Box  
 1 - Fire Hydrant (5'-6" Bury)  
 1 - 8"x 6" MJ Reducer  
 1 - 6", 36" SW x SW Adapter  
 2 - 8" MJ Plug  
 1 - 8" MJ Cap  
 3 - 8" Foster Adaptor  
 1 - 6" Foster Adaptor  
 3 - 8" MEGA Lugs  
 25 LF - 8" DIP Water Main  
 1 - Tracer Wire Riser  
 3 - Thrust Block  
 Final Connection to be Made After Main  
 Passes All Tests.



G  
CW2.1

No.	Revision	By	Date	Ckd	App

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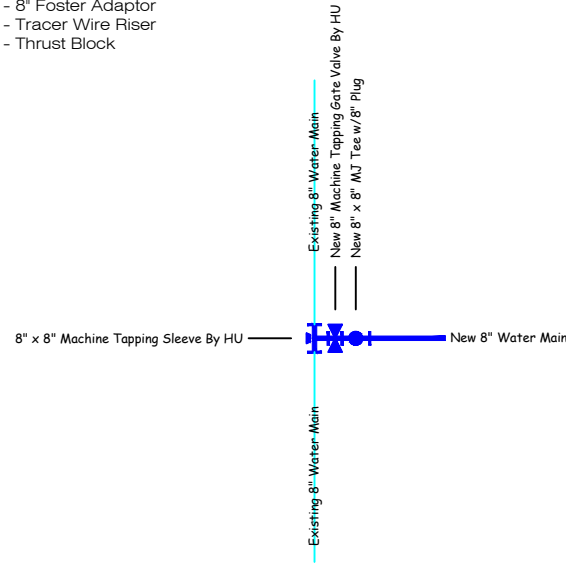
**K & K and  
Nebraskan Mobil  
Park Fire Main.**

**HASTINGS  
UTILITIES**

Desn	K. Miller
Dwn	S. Struss
Date	3/11/2025
Supt	B. Lubken
W.D. No.	WA-137
Ckd	
App	
Sheet No.	CW2.1
No.	WR-138 (Paid by Hastings Utilities)

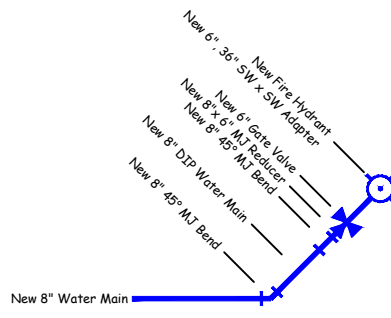


- Sta. 25+00, Install
- 1 - 8"x 8" Tapping Sleeve by HU
  - 1 - 8" Tapping Valve by HU
  - 1 - 8"x 8" MJ Tee
  - 1 - 8" MJ Plug
  - 1 - 8" Foster Adaptor
  - 1 - Tracer Wire Riser
  - 1 - Thrust Block



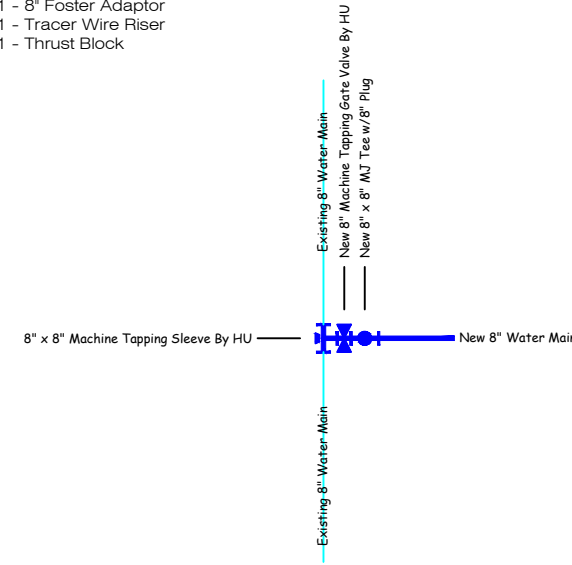
H  
CW2.2

- Sta. 26+99, 15' Lt., Install
- 2 - 8" 45° MJ Bend
  - 1 - 8" x 6" MJ Reducer
  - 3 - 8" MEGA Lug
  - 1 - 8" Foster Adaptor
  - 1 - 6" Foster Adaptor
  - 1 - 6" Gate Valve w/Box
  - 1 - Fire Hydrant (5'-6" Bury)
  - 1 - 6", 36" SW x SW Adapter
  - 20 LF - 8" DIP Water Main
  - 1 - Tracer Wire Riser



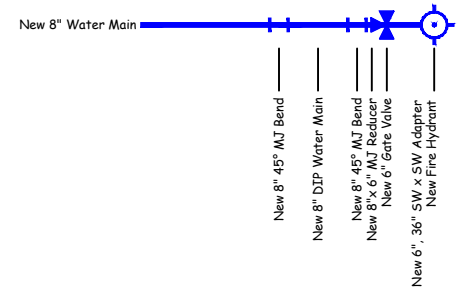
I  
CW2.2

- Sta. 30+00, Install
- 1 - 8"x 8" Tapping Sleeve by HU
  - 1 - 8" Tapping Valve by HU
  - 1 - 8"x 8" MJ Tee
  - 1 - 8" MJ Plug
  - 1 - 8" Foster Adaptor
  - 1 - Tracer Wire Riser
  - 1 - Thrust Block



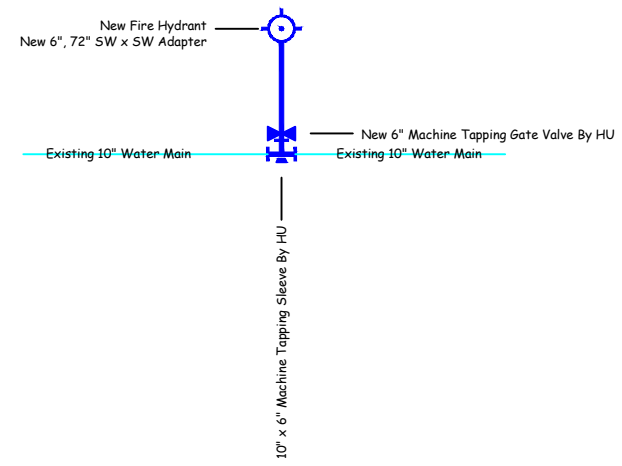
J  
CW2.2

- Sta. 32+12, Install
- 2 - 8" 45° MJ Bend
  - 1 - 8" x 6" MJ Reducer
  - 3 - 8" MEGA Lug
  - 1 - 8" Foster Adaptor
  - 1 - 6" Foster Adaptor
  - 1 - 6" Gate Valve w/Box
  - 1 - Fire Hydrant (5'-6" Bury)
  - 1 - 6", 36" SW x SW Adapter
  - 20 LF - 8" DIP Water Main
  - 1 - Tracer Wire Riser



K  
CW2.2

- Sta. 37+00, Install
- 1 - 10"x 6" Tapping Sleeve by HU
  - 1 - 6" Tapping Valve by HU
  - 1 - Fire Hydrant (5'-6" Bury)
  - 1 - 6", 72" SW x SW Adapter
  - 1 - Tracer Wire Riser



L  
CW2.2

No.	Revision	By	Date	Ckd	App



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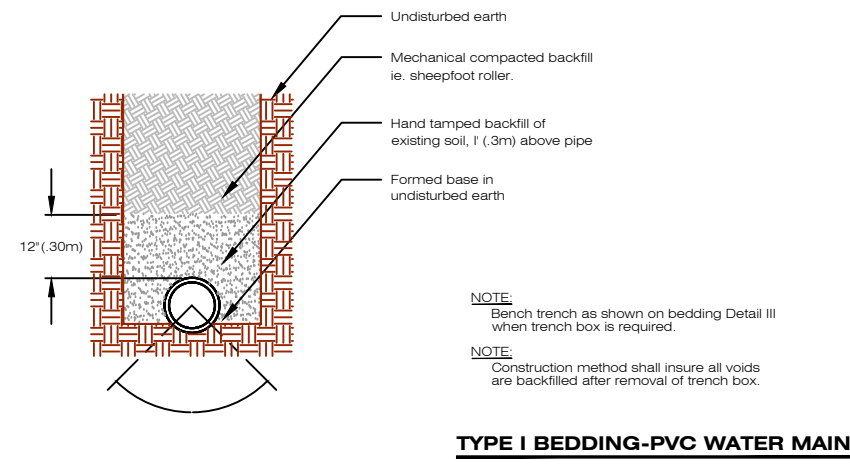
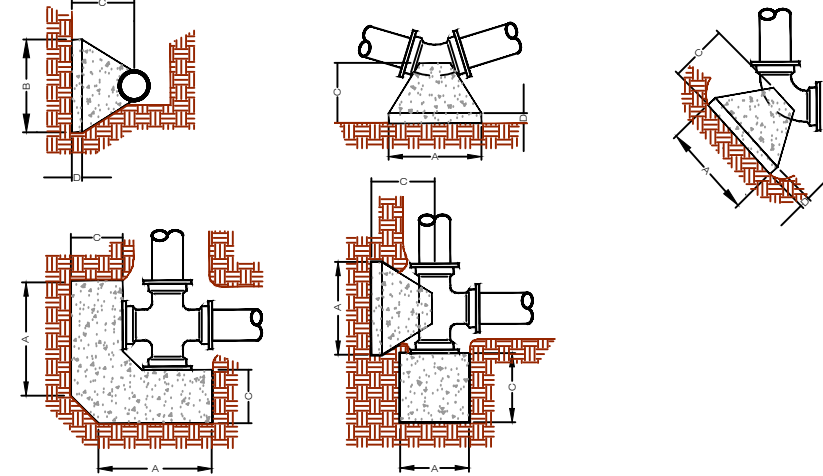
K & K and  
Nebraskan Mobil  
Park Fire Main.

Desn	K. Miller
Drawn	S. Struss
Date	3/11/2025
Supt	B. Lubken
W.D. No.	WA-137
Ckd	
Sheet No.	CW2.2
No.	WR-138 (Paid by Hastings Utilities)

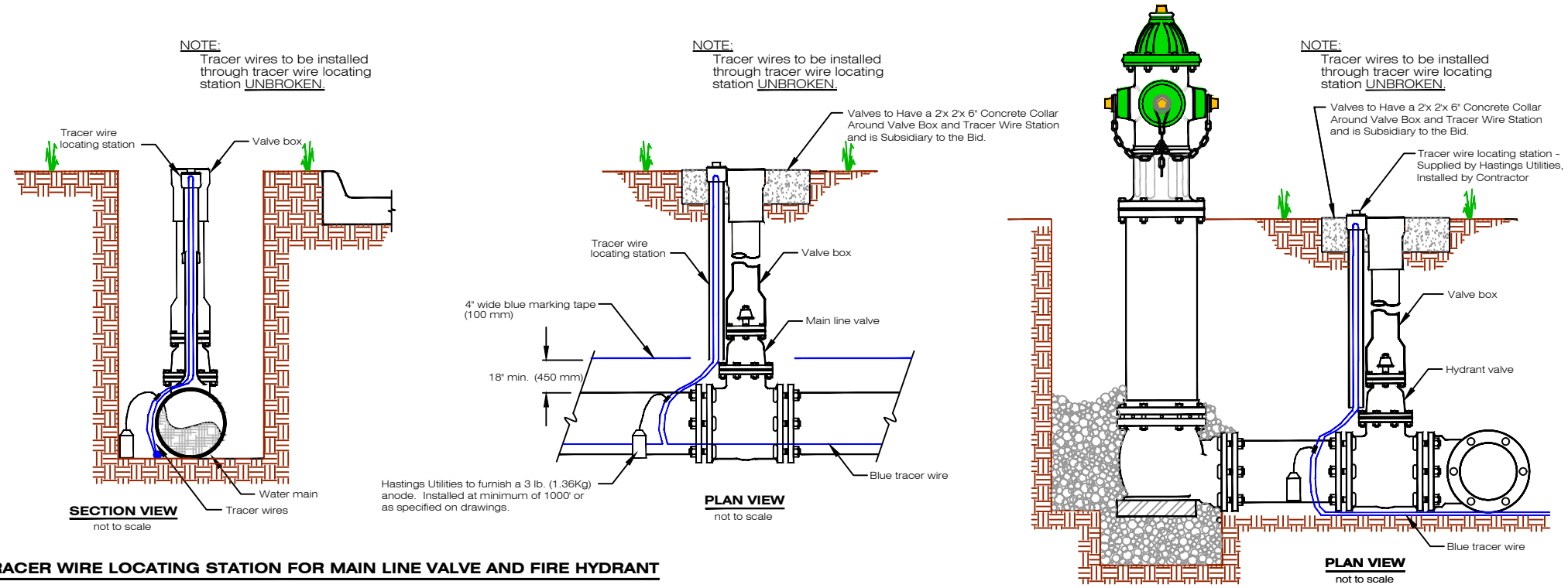
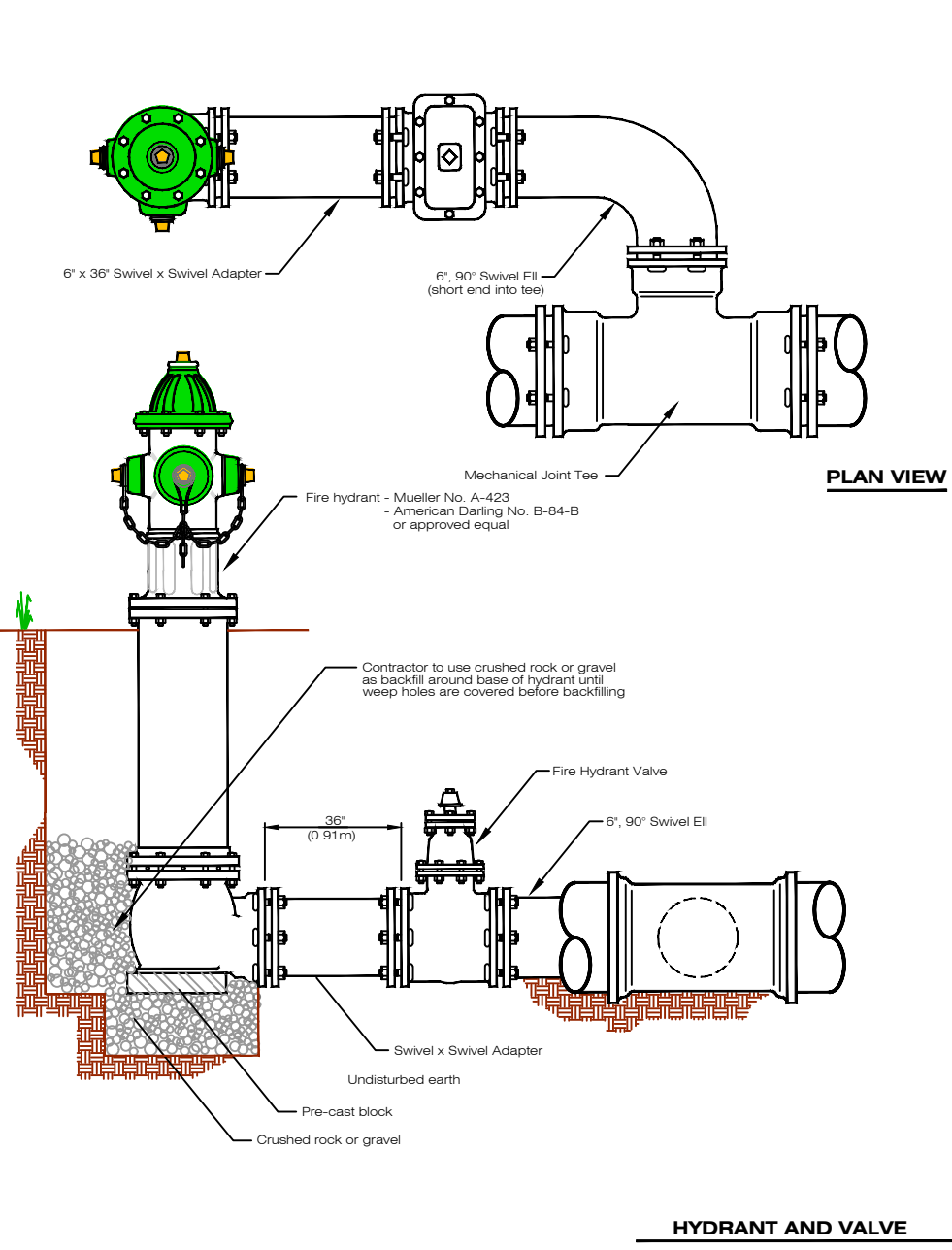
**THRUST BLOCK DIMENSIONS**

PIPE SIZE INCH (mm)	A FEET (m)	B FEET (m)	C FEET (m)	D INCH (mm)
4 (101mm)	1.00 (.30m)	1.00 (.30m)	1.00 (.30m)	3 (76mm)
6 (152mm)	1.50 (.46m)	1.50 (.46m)	1.00 (.30m)	6 (152mm)
8 (203mm)	2.00 (.61m)	2.00 (.61m)	1.00 (.30m)	6 (152mm)
10 (254mm)	2.50 (.76m)	2.50 (.76m)	2.00 (.61m)	9 (228mm)
12 (304mm)	3.00 (.91m)	3.00 (.91m)	2.00 (.61m)	9 (228mm)
14 (355mm)	3.00 (.91m)	3.00 (.91m)	2.50 (.76m)	12 (304mm)
16 (406mm)	4.00 (1.20m)	3.00 (.91m)	2.50 (.76m)	12 (304mm)
18 (457mm)	4.00 (1.20m)	4.00 (1.20m)	2.50 (.76m)	12 (304mm)
20 (508mm)	4.00 (1.20m)	4.00 (1.20m)	3.00 (.91m)	16 (406mm)
24 (609mm)	4.50 (1.40m)	4.50 (1.40m)	3.00 (.91m)	16 (406mm)
30 (762mm)	4.50 (1.40m)	5.00 (1.50m)	3.50 (1.10m)	18 (457mm)
36 (914mm)	5.00 (1.50m)	5.00 (1.50m)	3.50 (1.10m)	18 (457mm)
42 (1066mm)	5.50 (1.70m)	5.50 (1.70m)	4.00 (1.20m)	24 (609mm)
48 (1219mm)	6.00 (1.80m)	6.00 (1.80m)	4.00 (1.20m)	24 (609mm)

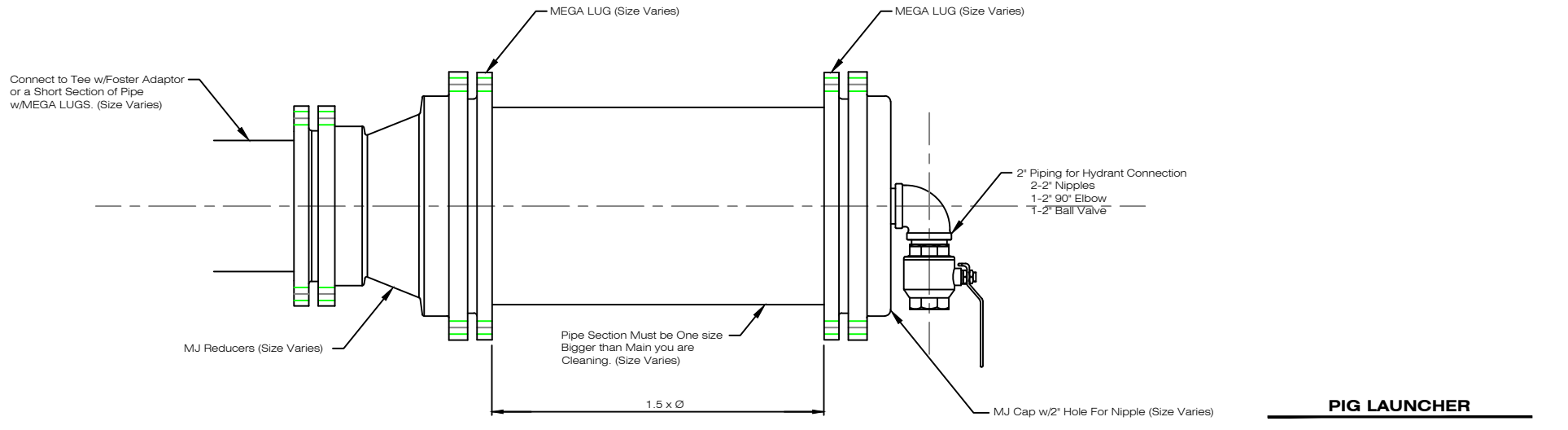
**CONCRETE THRUST BLOCK**



**TYPE I BEDDING-PVC WATER MAIN**



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



No.	Revision	By	Date	Ckd	App

I, Keith A. Miller, am the Coordinating Professional on the WATER IMPROVEMENT AREA. WA-137

K & K and Nebraskan Mobil Park Fire Main.

Den: K. Miller  
Drawn: S. Struss  
Date: 3/11/2025  
Supt: B. Lubken  
W.D. No.: WA-137  
Ckd:  
Ckd:  
Sheet No.: CW3.1  
No.: WR-138  
(Paid by Hastings Utilities)