

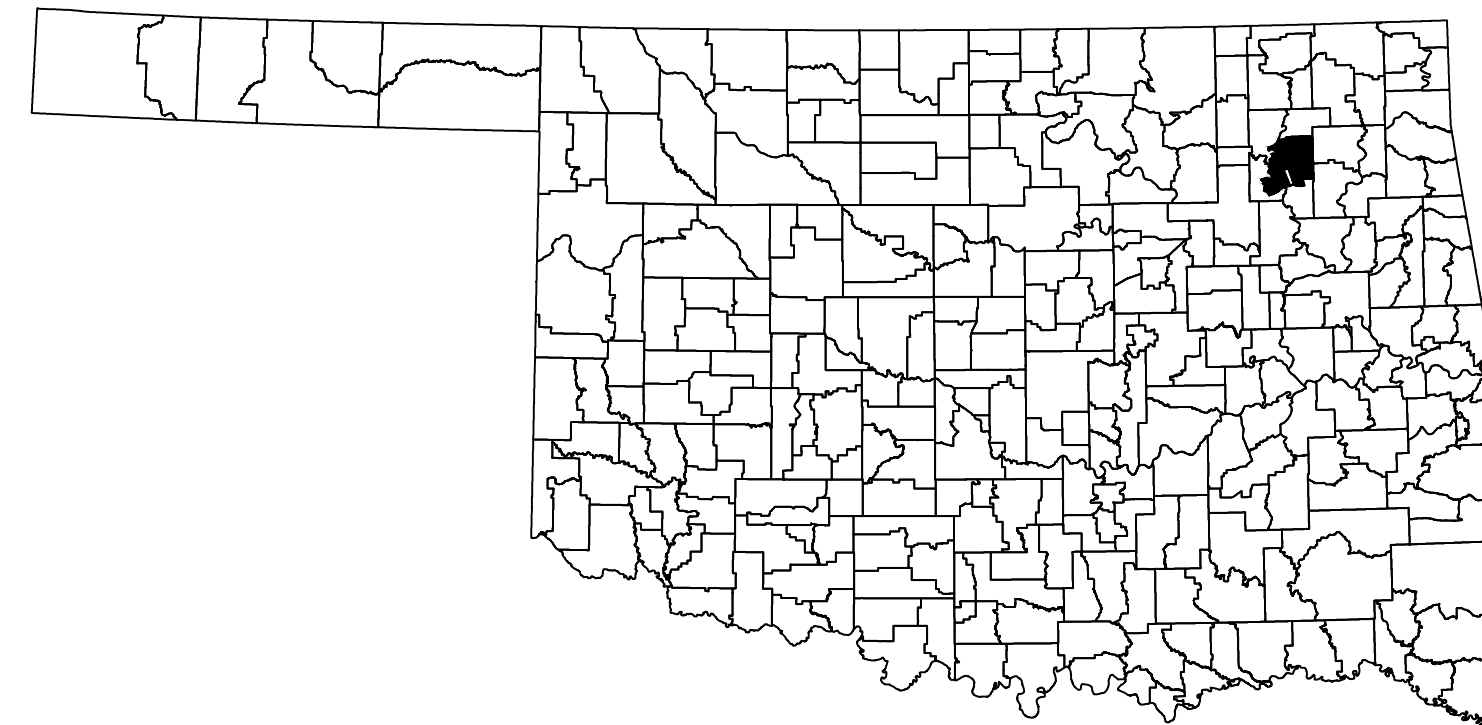
# PRIVATE GRAVITY AND PRESSURE SANITARY SEWER EXTENSIONS

## FOR WILL ROGERS DOWNS KOA

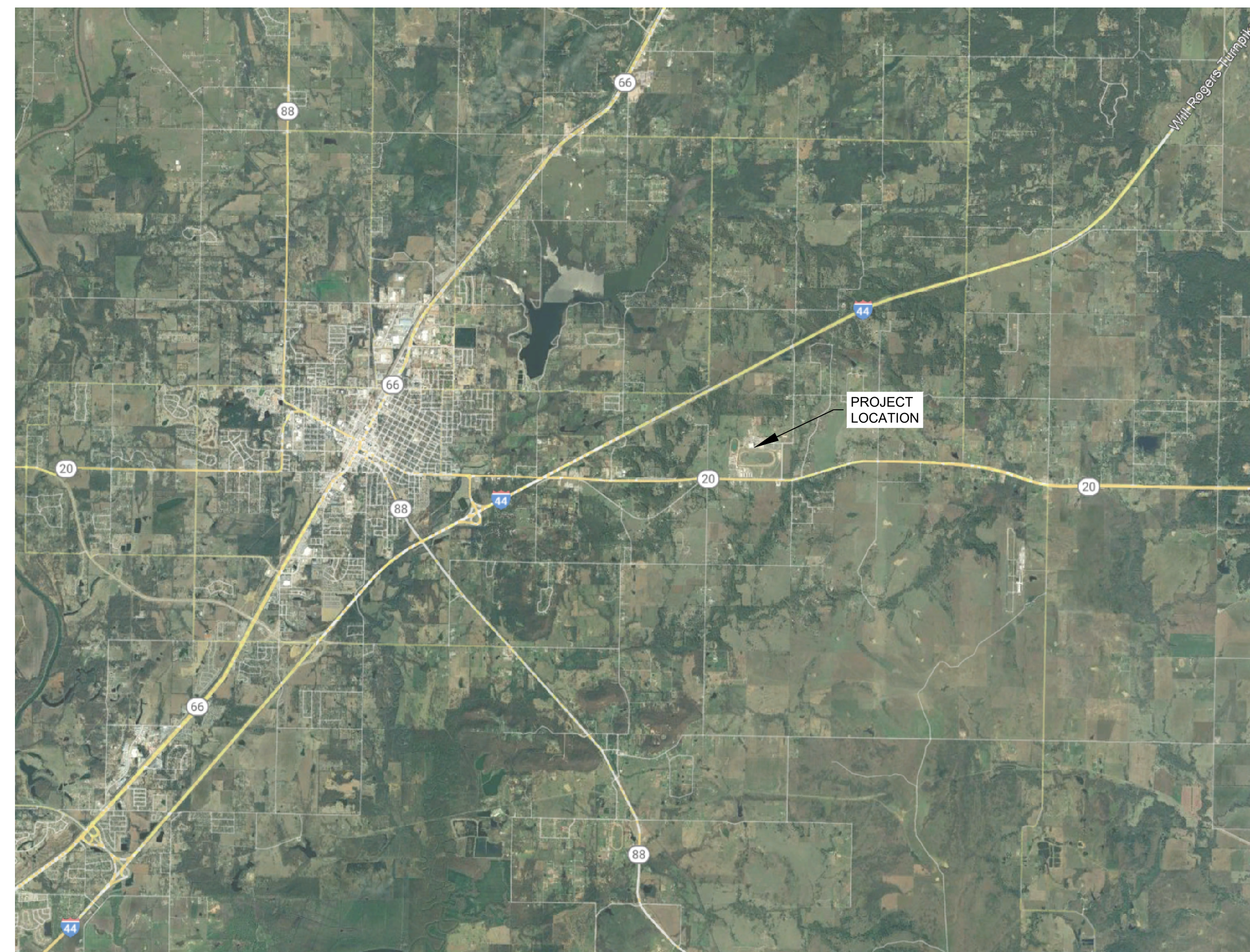
CHEROKEE NATION ENTERTAINMENT

ROGERS COUNTY, OKLAHOMA

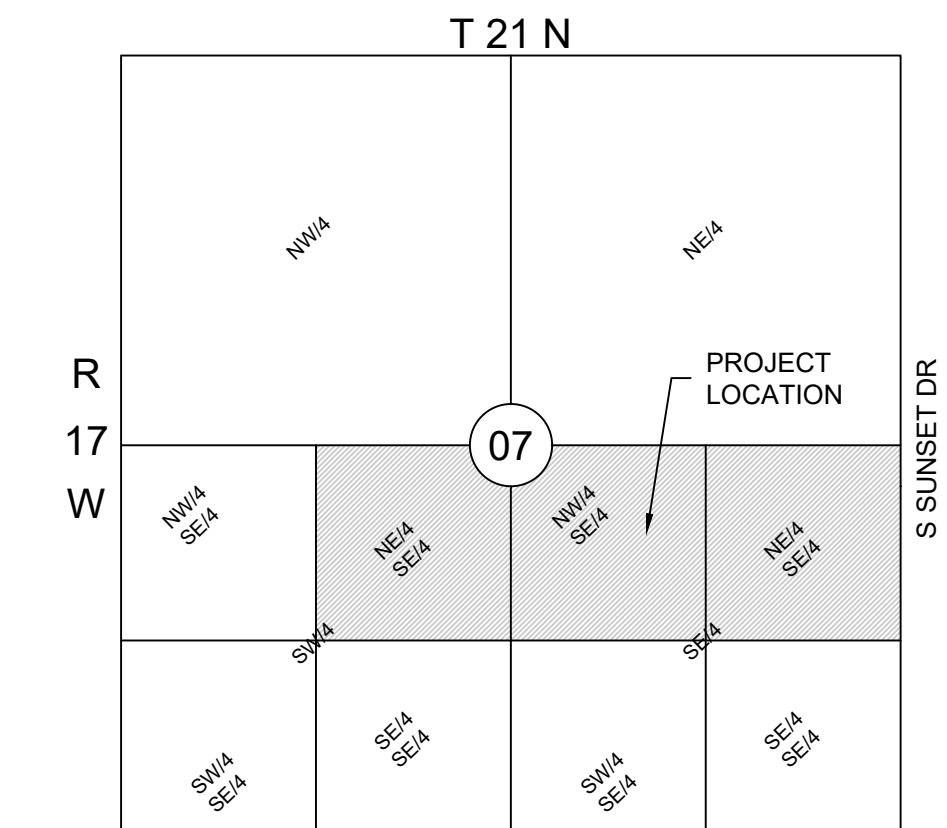
NOVEMBER 2024



VICINITY MAP  
NOT TO SCALE  
ROGERS COUNTY, OK



PROJECT LOCATION MAP  
NOT TO SCALE



SECTION LOCATION MAP  
NOT TO SCALE  
ROGERS COUNTY, OK

### CONTACTS

**OWNER**  
CHEROKEE NATION ENTERTAINMENT  
MARK WATOWICH  
777 W CHEROKEE ST  
CATOOSA, OK 74015  
918-828-6291

**SITE CONTACT**  
CHEROKEE NATION ENTERTAINMENT  
STEPHEN GOODELL  
20900 S 4200 RD  
CLAREMORE, OK 74019  
918-621-7103

**SURVEYOR**  
OSBURN LAND SURVEYORS  
KELLY OSBURN  
P.O. BOX 1406  
SALLISAW, OK 74955  
918-775-9322

**CIVIL ENGINEERING**  
KAS GALES COMPANY  
ZAK JOHNSTON  
155 FANTINEL DR  
SUITE D  
TONTITOWN, AR 72762  
501-454-3038

**WATER DEPARTMENT**  
CITY OF CLAREMORE  
724 W RAMM RD  
CLAREMORE, OK 74017  
918-341-0457

### SHEET LIST

- C000 COVER SHEET
- C001 SPECIFICATIONS
- C100 OVERALL SITE PLAN - WEST
- C101 OVERALL SITE PLAN - EAST
- C200 SEWER PROFILE
- C201 SEWER PROFILE
- C201 SEWER PROFILE
- C201 SEWER PROFILE
- C500 LIFT STATION PLAN AND DETAIL
- C501 STANDARD SEWER DETAILS

### ESTIMATED QUANTITIES FOR LIFT STATION, GRAVITY SEWER, AND FORCEMAIN

ITEM	DESCRIPTION	UNIT	QUANTITY
1	4" SDR-26 PVC Sewer Main	LF	1,570
2	6" SDR-26 PVC Sewer Main	LF	1,994
3	8" SDR-26 PVC Sewer Main	LF	2,616
4	4" Sch 40 Sanitary Service Line	LF	9,569
5	3" Sch 80 Force Main	LF	101
6	Two-Way Sanitary Clean Out	EA	4
7	Sanitary Manhole, 4' Diameter	EA	18
8	Sanitary Service Wye, 4"x4", Installed	EA	55
9	Sanitary Service Wye, 8"x4", Installed	EA	90
10	Sanitary Service Wye, 8"x4", Installed	EA	49
11	Sanitary RV Hookup	EA	194
12	Sanitary RV Dump Station	EA	1
13	Concrete Roadway T-Patch	SY	22
14	Aggregate Stone Drive Surface, 6" Depth	SY	1,065
15	Lift Station Package	EA	1

### BENCHMARK TABLE

Point #	Raw Description	Elevation	Northing	Easting
1	CP PRIMARY OPUS BM1	640.420	487070.7200	2696437.9800
2	CP BM2 NEC CONC SAFE ROOM PAD MAG SPIKE	644.368	487326.6740	2696486.1080
4	CP BM4 SET MAG NWC PAD	651.019	487595.5070	2696249.1230
3	CP BM3 MAG SPIKE SEC ASPHALT PARKING	643.549	487091.0880	2695785.8590

### LEGEND

	FOUND MONUMENT		FENCE
	FIRE HYDRANT		EDGE OF PAVEMENT
	FROST FREE YARD HYDRANT		RIGHT OF WAY
	WATER VALVE		ROAD CENTERLINE
	POWER POLE		CURB AND GUTTER
	GUY WIRE		PROPOSED EASEMENT LINE
	EXISTING SANITARY SEWER MANHOLE		EXISTING STORM SEWER
	STREET LIGHT		EXISTING SANITARY SEWER
	ELECTRIC HOOKUP PANEL		EXISTING WATER LINE
	EXISTING SANITARY HOOKUP		PROPOSED SANITARY SEWER
	PROPOSED SANITARY HOOKUP		PROPOSED SANITARY SERVICE LINE
	BENCHMARK		PROPOSED UNDERGROUND ELECTRIC
			PROPOSED ASPHALT PAVEMENT
			PROPOSED CONCRETE SIDEWALK (HOME BUILDER)
			PROPOSED SANITARY SEWER MANHOLE
			PROPOSED SANITARY CLEANOUT
			UTILITY EASEMENT
			DRAINAGE EASEMENT
			BUILDING SETBACK LINE
			POINT OF BEGINNING

### SEWER CONSTRUCTION NOTES:

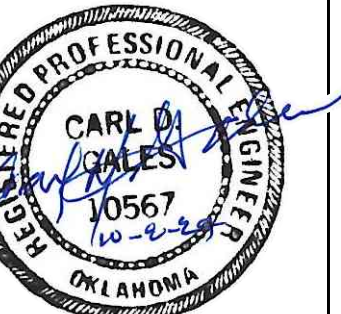
- THE CONTRACTOR SHALL SET ALL LINE AND GRADE STAKES
- THE RV SERVICE LATERALS ARE TO BE LOCATED AS DIRECTED BY THE ENGINEER
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES FOR LOCATION OF ALL UTILITY SERVICES BEFORE BEGINNING EXCAVATION.
- THE CONTRACTOR, AT THIS OWN EXPENSE, SHALL REMOVE AND RESET ALL FENCES, POSTS, CULVERTS, STREET MARKERS, MAILBOXES, AND THE LIKE WITHIN THE LIMITS OF THE PROPOSED IMPROVEMENTS
- ALL TRENCHES UNDER DRIVES AND STREETS MUST BE BACKFILLED WITH BASEROCK AND COMPACTED TO 95% PD.
- ASPHALT AND CONCRETE STREETS AND CURB AND GUTTER SHALL BE RESTORED TO MATCH ORIGINAL CONDITIONS PRIOR TO CONSTRUCTION.
- ALL SEWER LINES SHALL BE AIR TESTED AND ALL MANHOLES SHALL BE VACUUM TESTED.
- ALL SANITARY SEWER PIPE SHALL BE SDR26 UNLESS OTHERWISE NOTED.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE ENGINEER WITH ALL SUBMITTALS FOR PIPING, RING AND COVER, MANHOLES AND EXTERNAL SEALANTS FOR THE REVIEW AND APPROVAL PRIOR TO BEGINNING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE ENGINEER WITH CONSTRUCTION RECORD/AS BUILT DRAWINGS WITH VERIFIED USGS ELEVATIONS AND OKLAHOMA STATE PLANE COORDINATES AT HIS EXPENSE.
- SANITARY LINES SHOWN IN THIS COLOR ARE TO BE DESIGNATED AS SERVICE LINE AND ARE TO BE CONSTRUCTED UNDER OKLAHOMA PLUMBING CODE.



THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.



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ISSUE DATE: 10/02/2024



WILL ROGERS KOA SEWER EXTENSION  
CLAYMORE, OK

REVISION:

PROJ: 24-108

COVER  
C-000

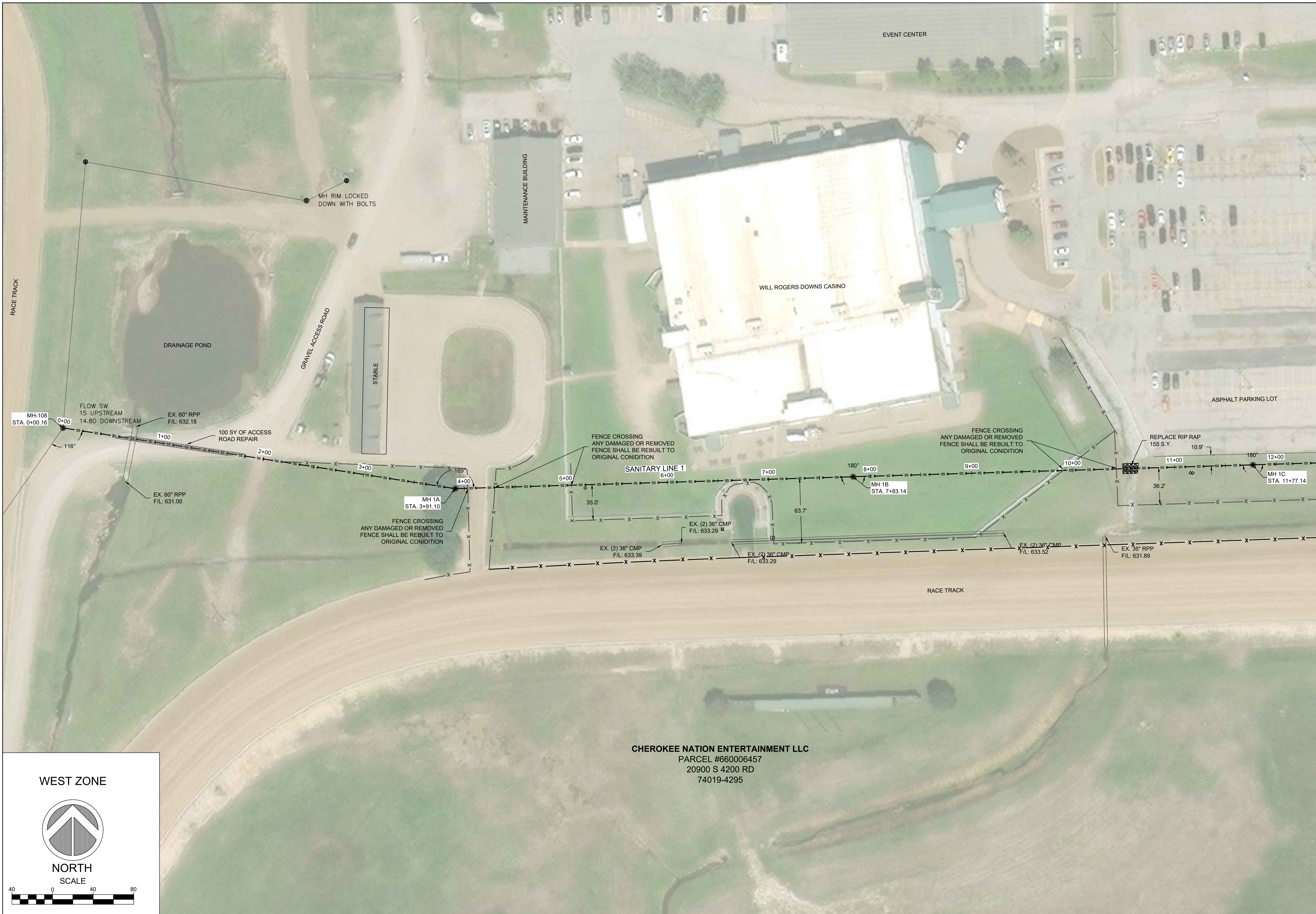




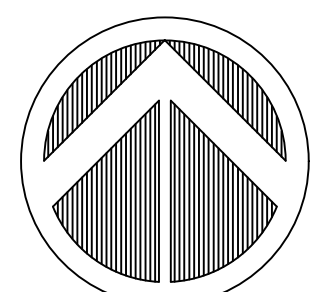
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WEST ZONE



NORTH  
SCALE



CHEROKEE NATION ENTERTAINMENT LLC  
PARCEL #660006457  
20900 S 4200 RD  
74019-4295

**WILL ROGERS KOA SEWER EXTENSION**  
CLAYMORE, OK

REVISION:

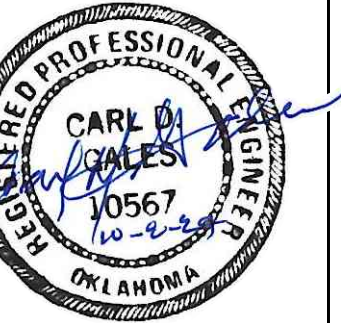
PROJ: 24-108

OVERALL WEST  
C-100

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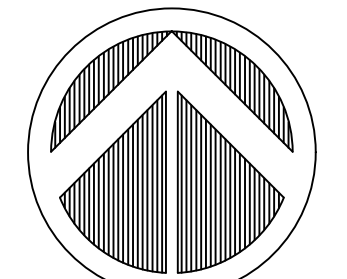
ISSUE DATE: 10/02/2024



EXACT LOCATION OF EXISTING UTILITIES IS UNKNOWN DUE TO LIMITED MARKINGS. LOCATION SHOWN IS APPROXIMATE. HAND DIGGING IS EXPECTED TO BE NECESSARY IN THE KOA AREA.

**WILL ROGERS KOA SEWER EXTENSION**  
 CLAYMORE, OK

EAST ZONE



NORTH  
 SCALE



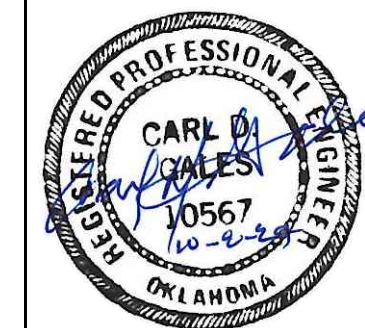
REVISION:

PROJ: 24-108

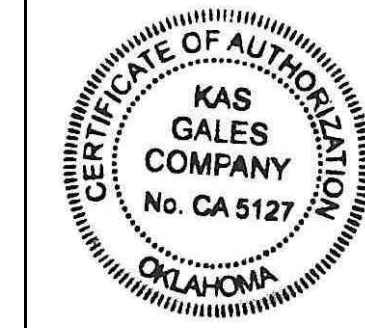
OVERALL EAST  
 C-101



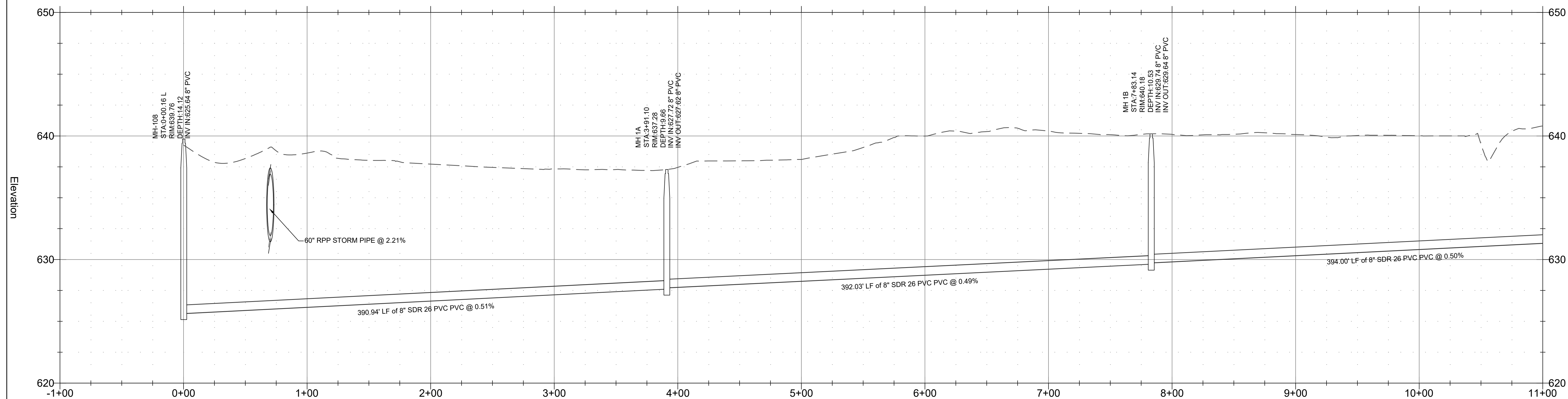
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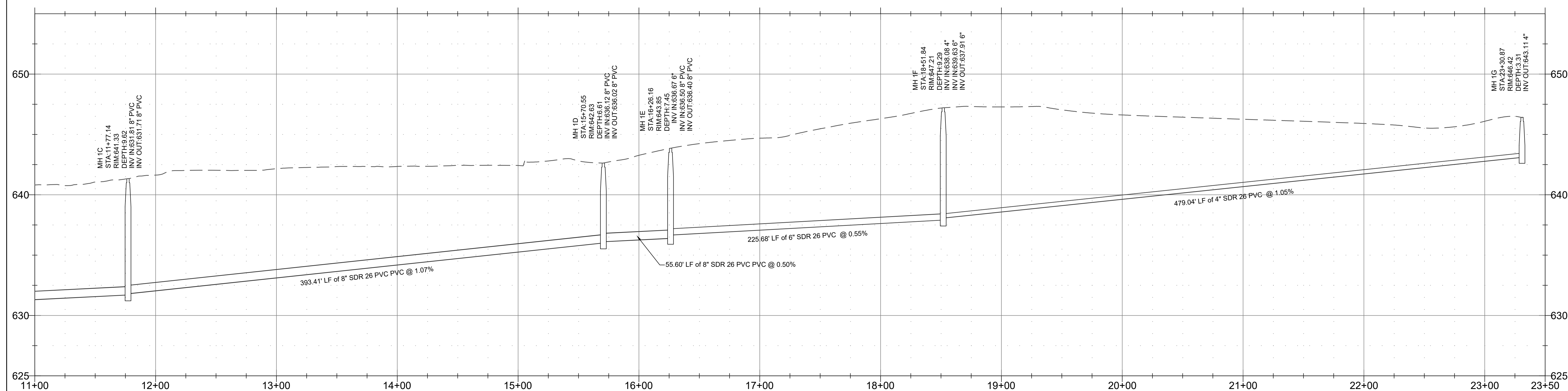
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**SANITARY LINE 1 PROFILE**  
HORIZONTAL SCALE: 1"=40'  
VERTICAL SCALE: 1"=4'



**SANITARY LINE 1 PROFILE**  
HORIZONTAL SCALE: 1"=40'  
VERTICAL SCALE: 1"=4'



**WILL ROGERS KOA SEWER EXTENSION**  
CLAYMORE, OK

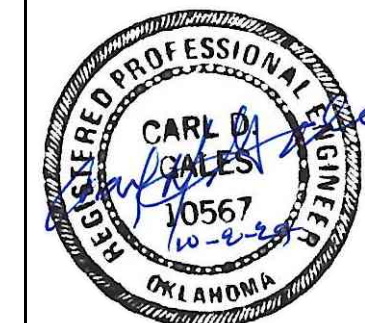
REVISION:

PROJ: 24-108

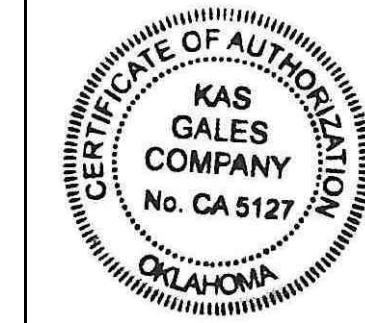
SANITARY P&P  
C-200



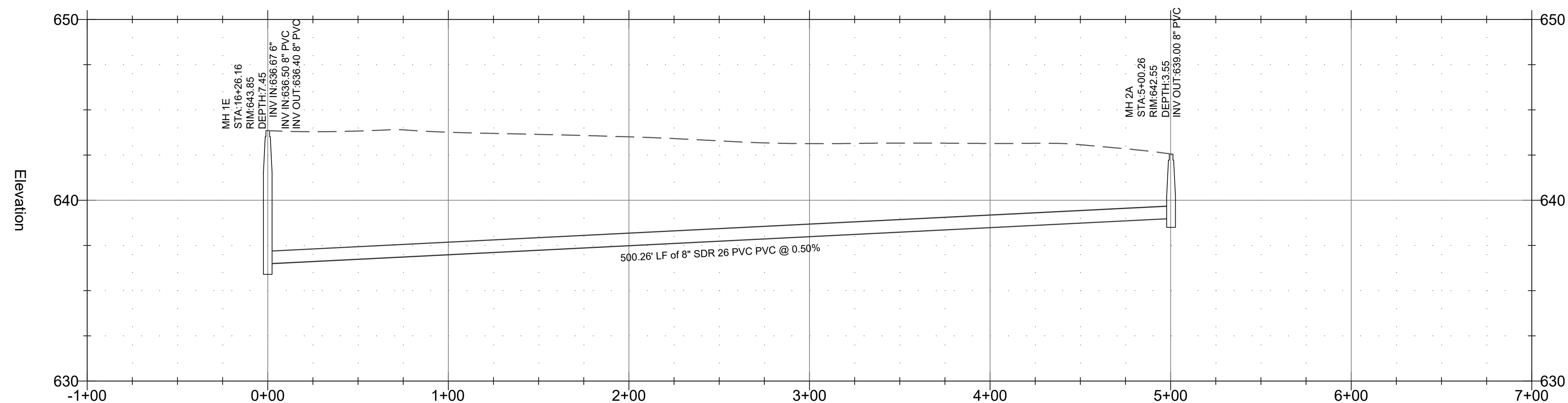
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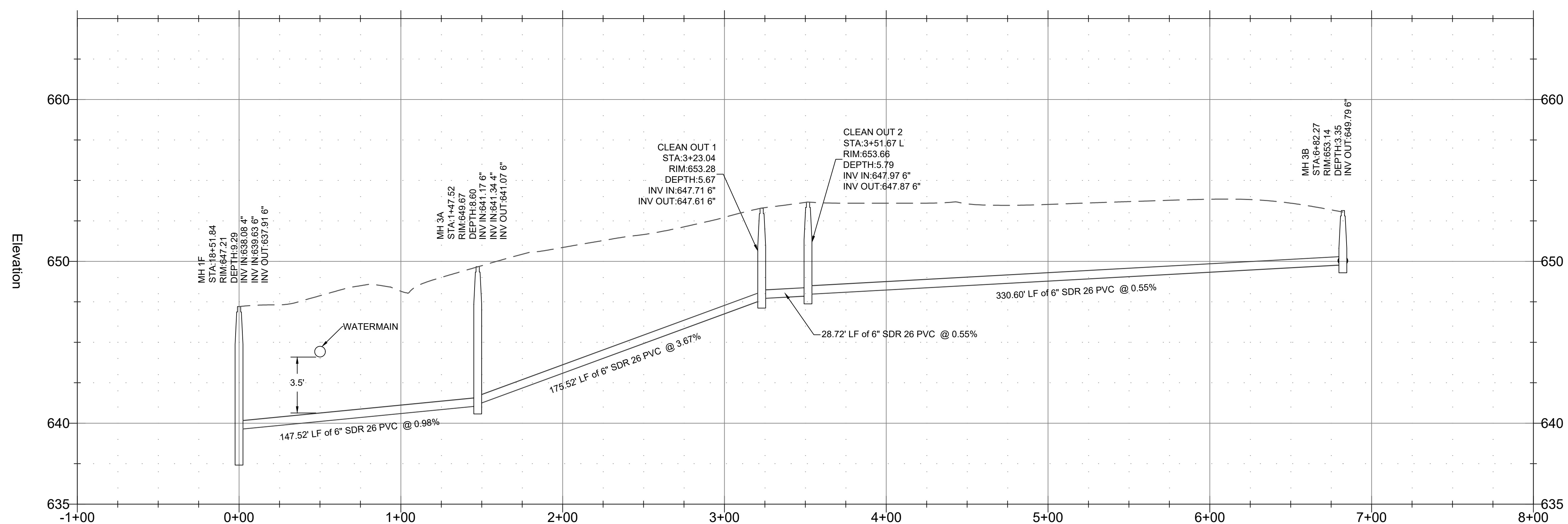
ISSUE DATE: 10/02/2024



**SANITARY LINE 2 PROFILE**  
 HORIZONTAL SCALE: 1"=40'  
 VERTICAL SCALE: 1"=4'



**SANITARY LINE 3 PROFILE**  
 HORIZONTAL SCALE: 1"=40'  
 VERTICAL SCALE: 1"=4'



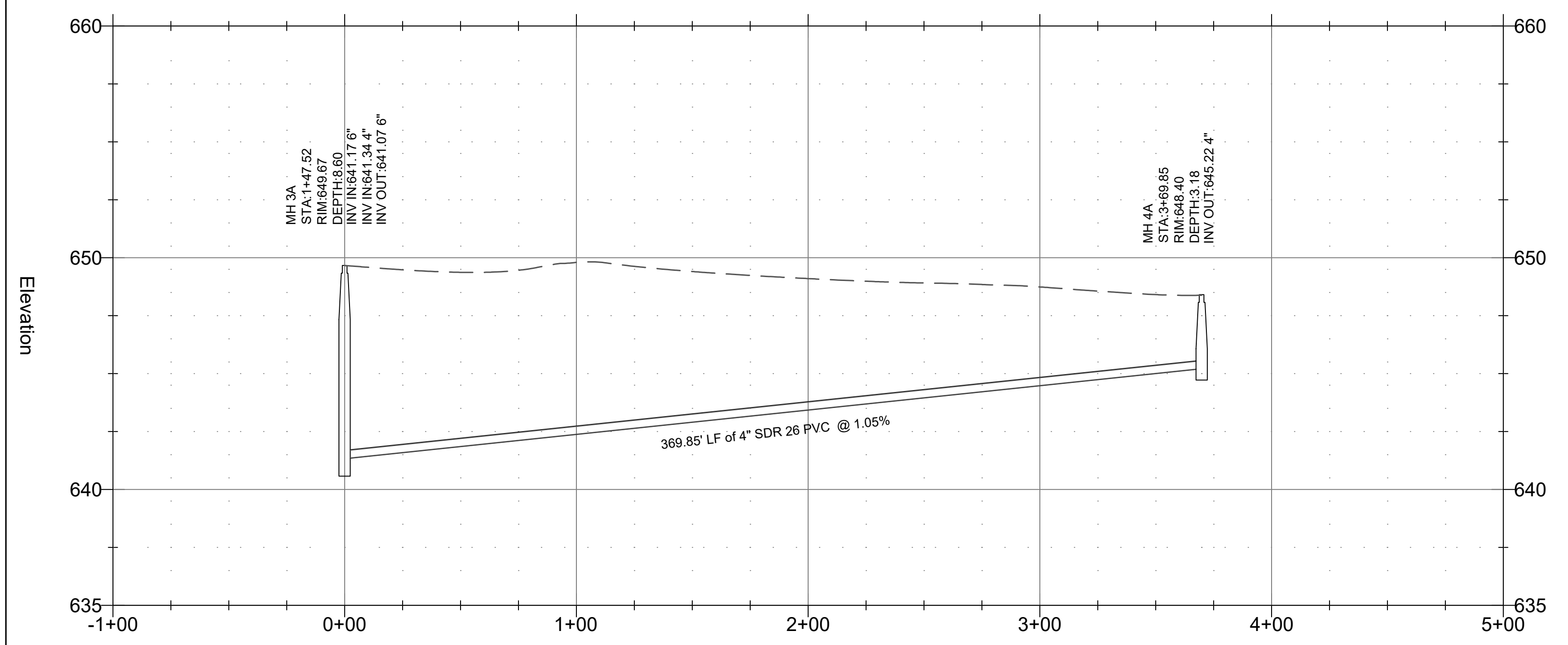
**WILL ROGERS KOA SEWER EXTENSION**  
 CLAYMORE, OK

REVISION:

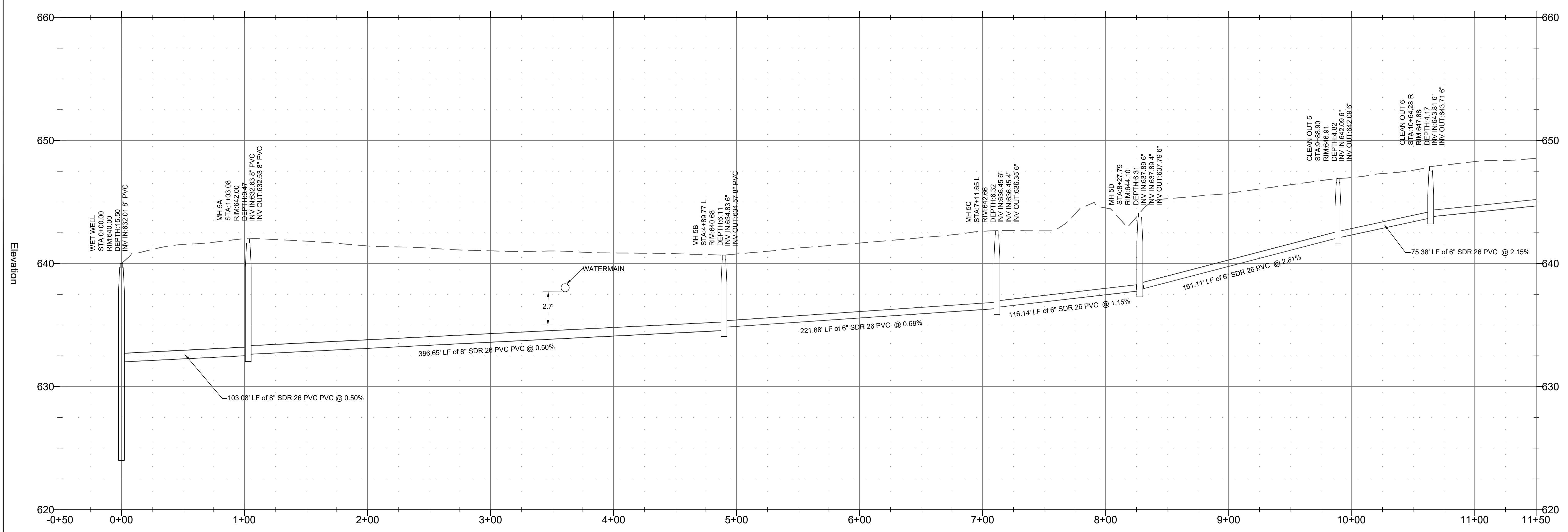
PROJ: 24-108

SANITARY P&P  
**C-201**

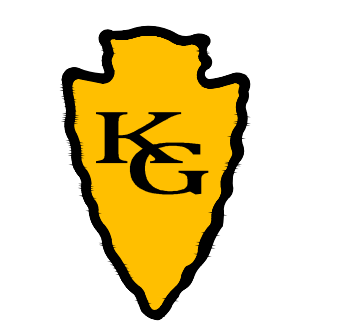
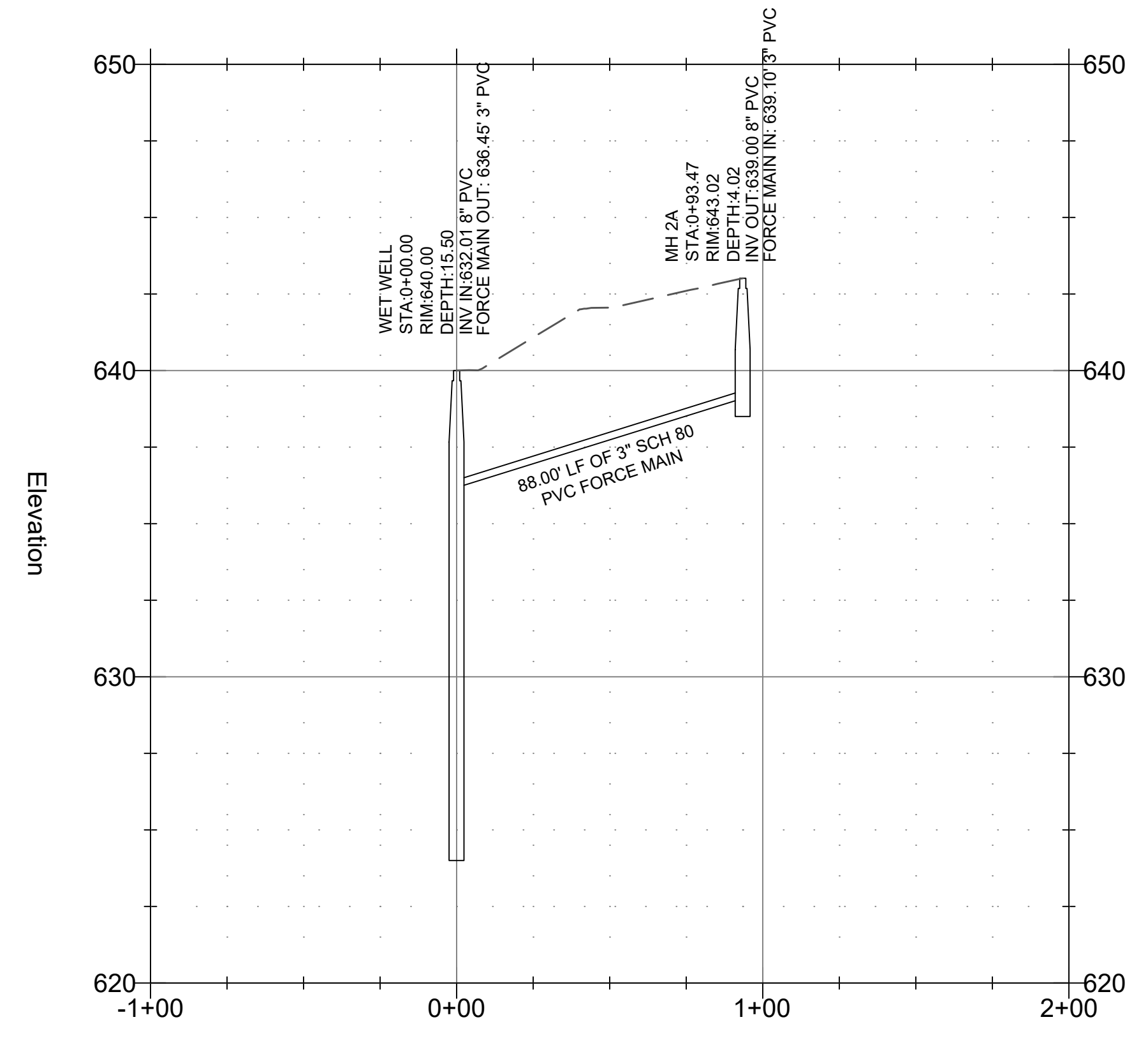
**SANITARY LINE 4 PROFILE**  
 HORIZONTAL SCALE: 1"=40'  
 VERTICAL SCALE: 1"=4'



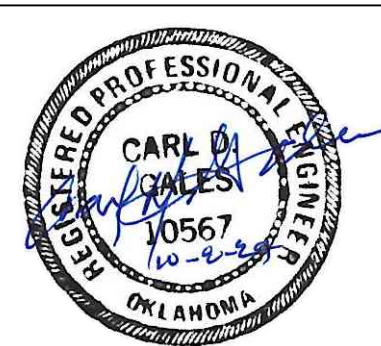
**SANITARY LINE 5 PROFILE**  
 HORIZONTAL SCALE: 1"=40'  
 VERTICAL SCALE: 1"=4'



**FORCE MAIN PROFILE**  
 HORIZONTAL SCALE: 1"=40'  
 VERTICAL SCALE: 1"=4'



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**WILL ROGERS KOA SEWER EXTENSION**  
 CLAYMORE, OK

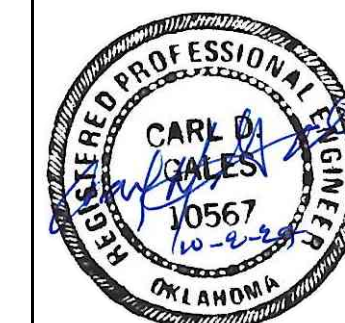
REVISION:

PROJ: 24-108

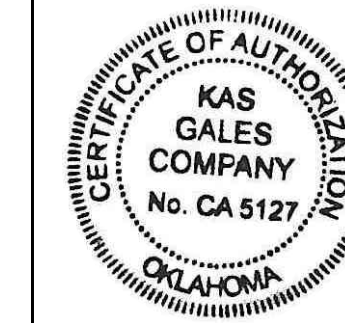
SANITARY P&P  
**C-202**



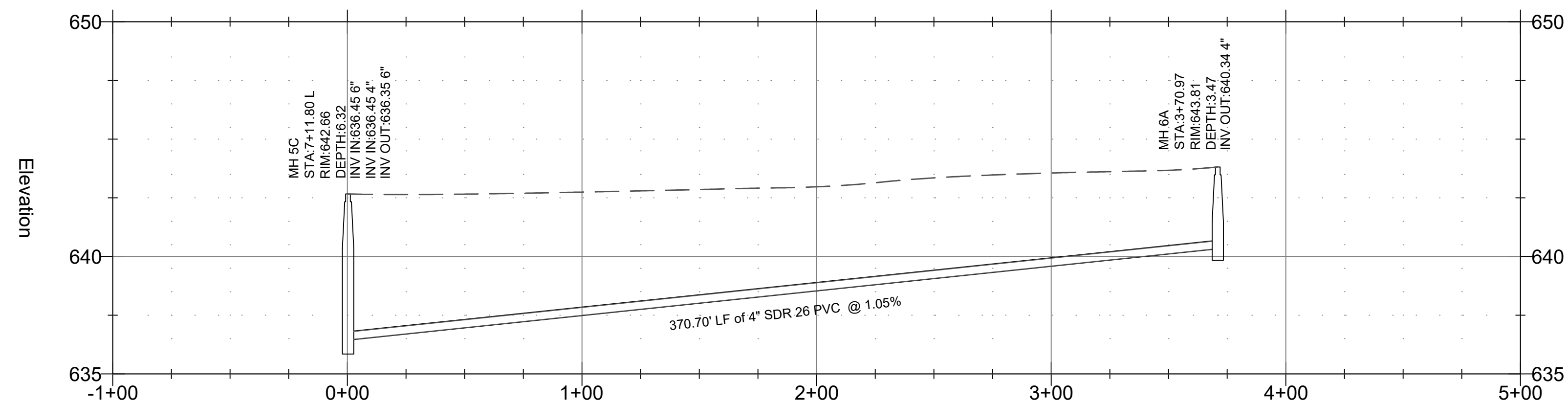
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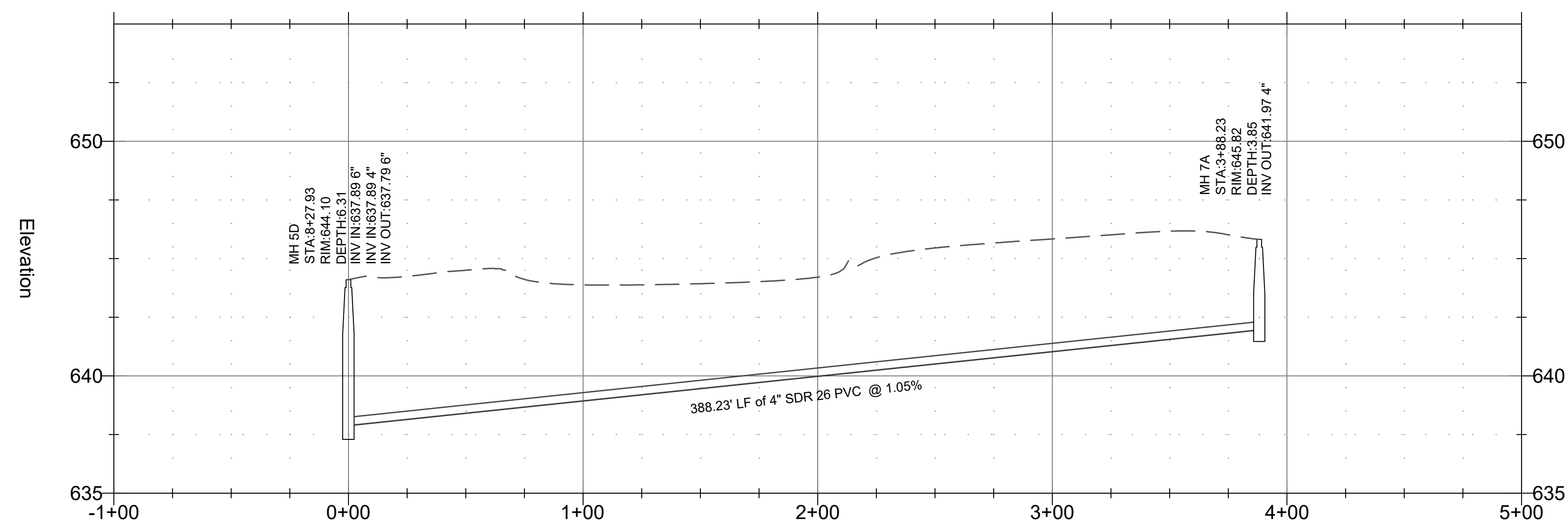
ISSUE DATE: 10/02/2024



**SANITARY LINE 6 PROFILE**  
 HORIZONTAL SCALE: 1"=40'  
 VERTICAL SCALE: 1"=4'



**SANITARY LINE 7 PROFILE**  
 HORIZONTAL SCALE: 1"=40'  
 VERTICAL SCALE: 1"=4'



**WILL ROGERS KOA SEWER EXTENSION**  
 CLAYMORE, OK

REVISION:

PROJ: 24-108

SANITARY P&P  
 C-203



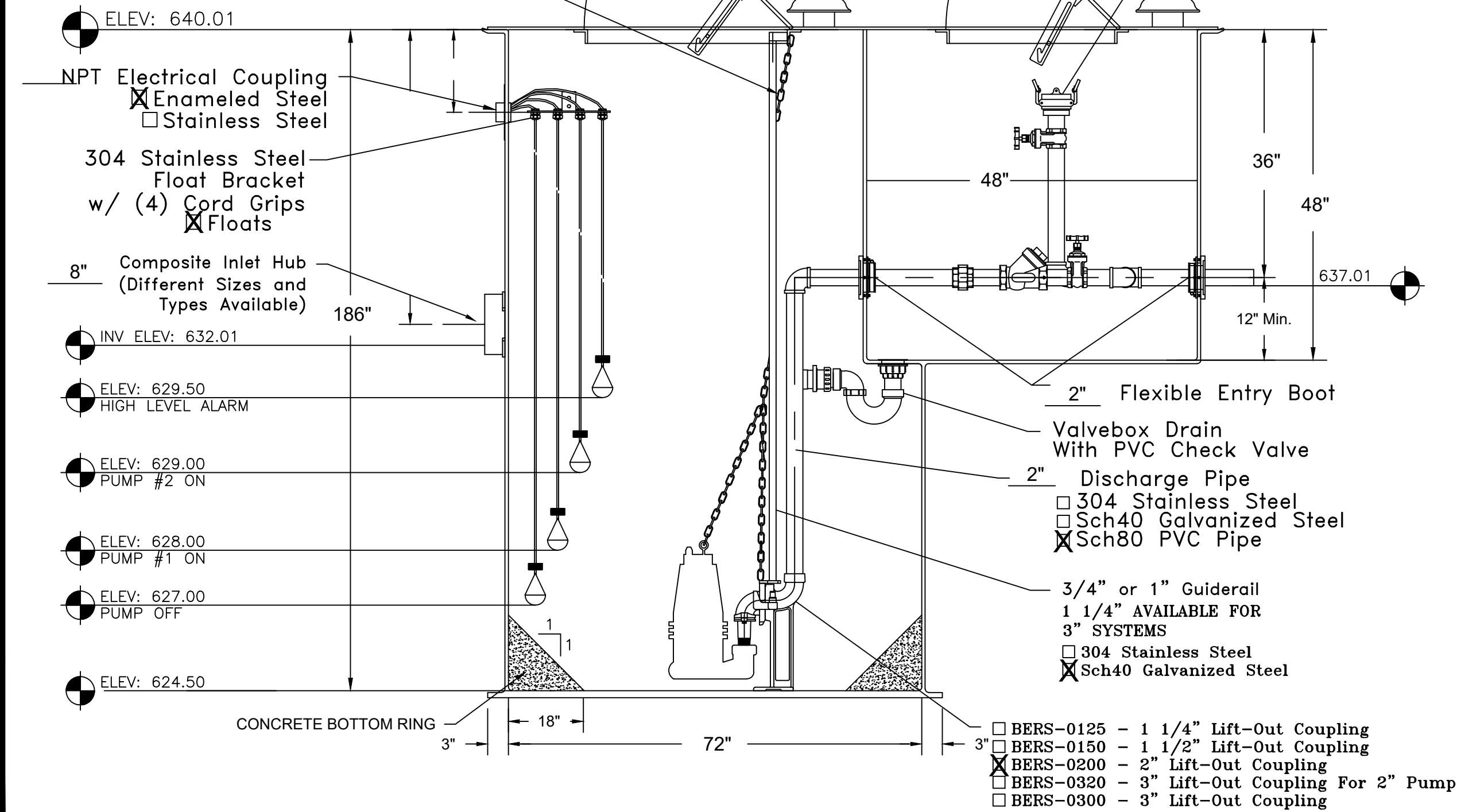
**PUMP INFORMATION**

Type:  Sump Pump(s)  
 Grinder Pump(s)  
 Non-Clog Pump(s)  
 Model NO: HOMA GRP 16/1/C  
 Rating: 45 GPM 17 TDH  
 Motor: 2 HP 3550 RPM  
 Elec: 1 PH HZ  
 Elec: FL AMPS 230 v

**DISCHARGE PIPE**

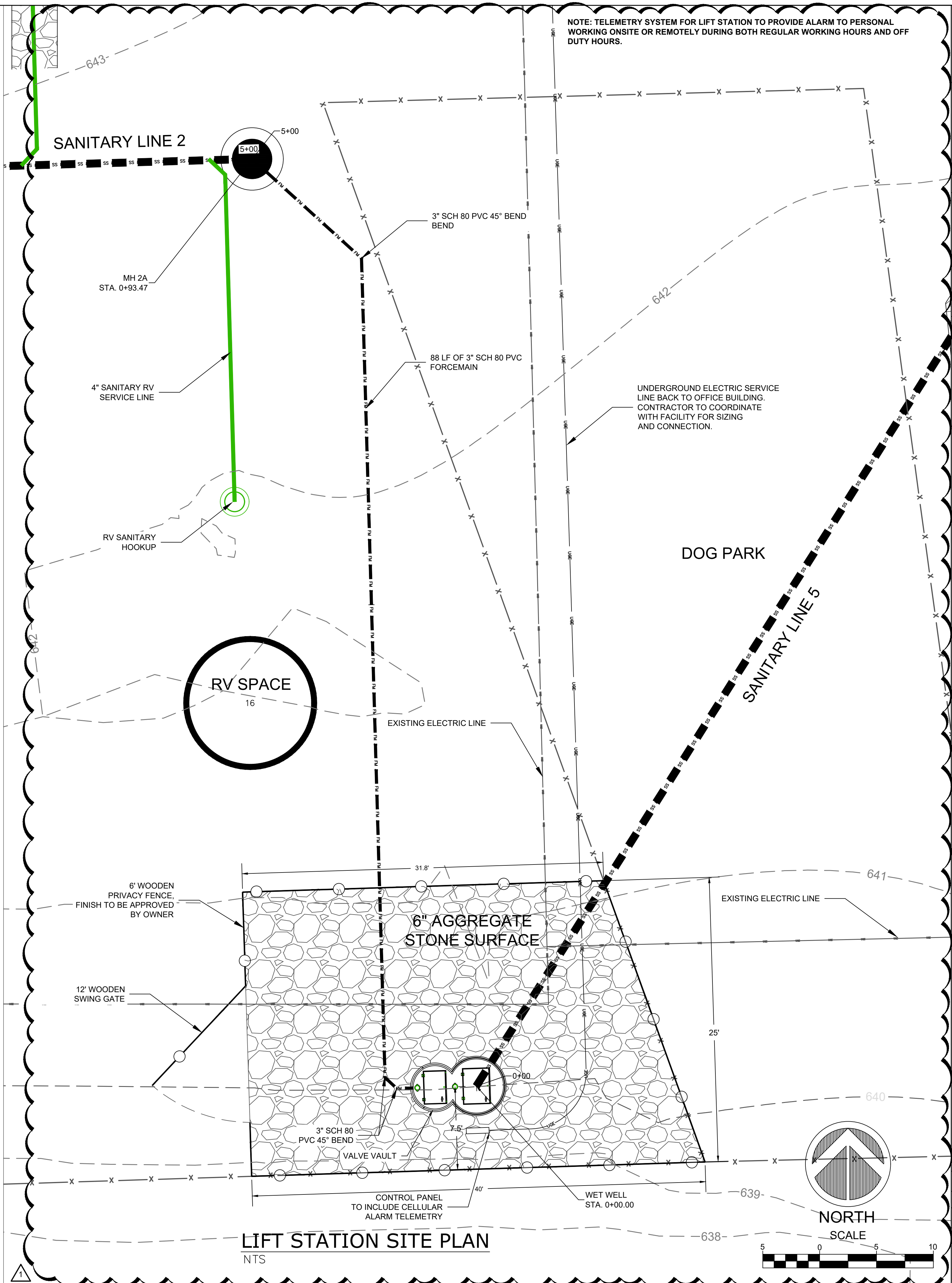
304 Stainless Steel  
 Sch40 Galvanized Steel  
 Sch80 PVC Pipe  
 1 1/4"  
 1 1/2"  
 2"  
 3"  
 Anti-Floatation Flange  
 Fiberglass Encapsulated  
 ASTM A-36 Square Steel  
 Round Fiberglass  
 None

3/16" Lifting Chain  
 304 Stainless Steel  
 Galvanized Steel  
 \* Stainless Steel Cable is Available

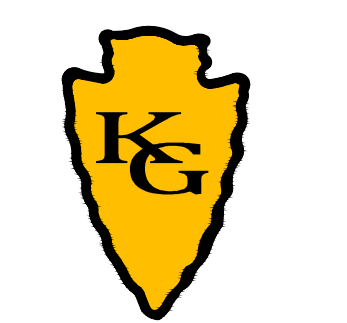


	Prefabricated Fiberglass Lift Station 1 1/4" - 3" Duplex With Cylindrical Valvebox	Scale: None Drawn By: R17 App'd By: Date: 04/21/03	This print is and contains confidential proprietary information owned exclusively by TOPP INDUSTRIES, INC. It is furnished on a strictly confidential basis. This restriction includes, but is not limited to the condition that this print will not be used as a model or to identify or inspect parts or for other reproduction purposes and will not be used to manufacture or procure the manufacture of the items shown in this print by any other source than TOPP INDUSTRIES, INC.
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NOTE: 9'X9'X2' CONCRETE ANCHOR PAD TO BE POURED UNDER LIFT STATION. CONCRETE PAD SHALL BE ANCHOR BOLTED TO THE BOTTOM OF THE LIFT STATION



NOTE: TELEMETRY SYSTEM FOR LIFT STATION TO PROVIDE ALARM TO PERSONAL WORKING ONSITE OR REMOTELY DURING BOTH REGULAR WORKING HOURS AND OFF DUTY HOURS.



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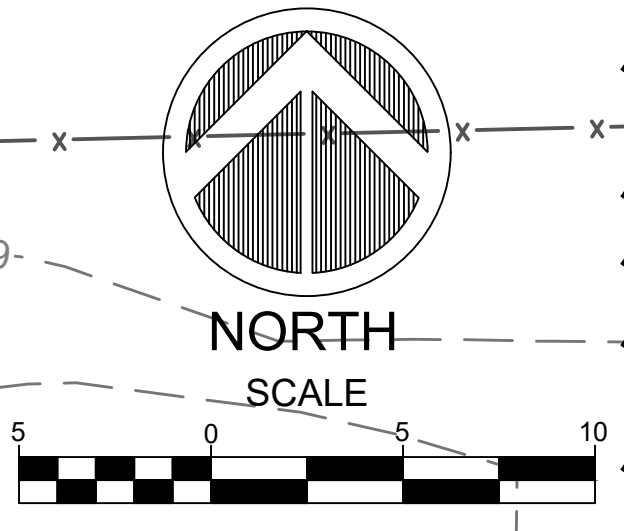


**WILL ROGERS KOA SEWER EXTENSION**  
 CLAYMORE, OK

REVISION:  
 1. 20241219: GRADES ADDED FOR ODEQ FEMA CHECK

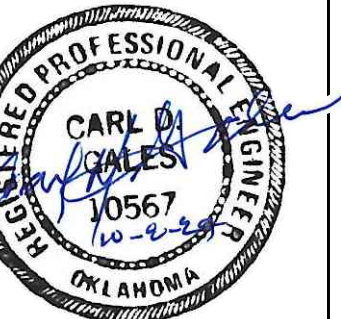
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LIFT STATION  
**C-500**





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CLAYMORE, OK

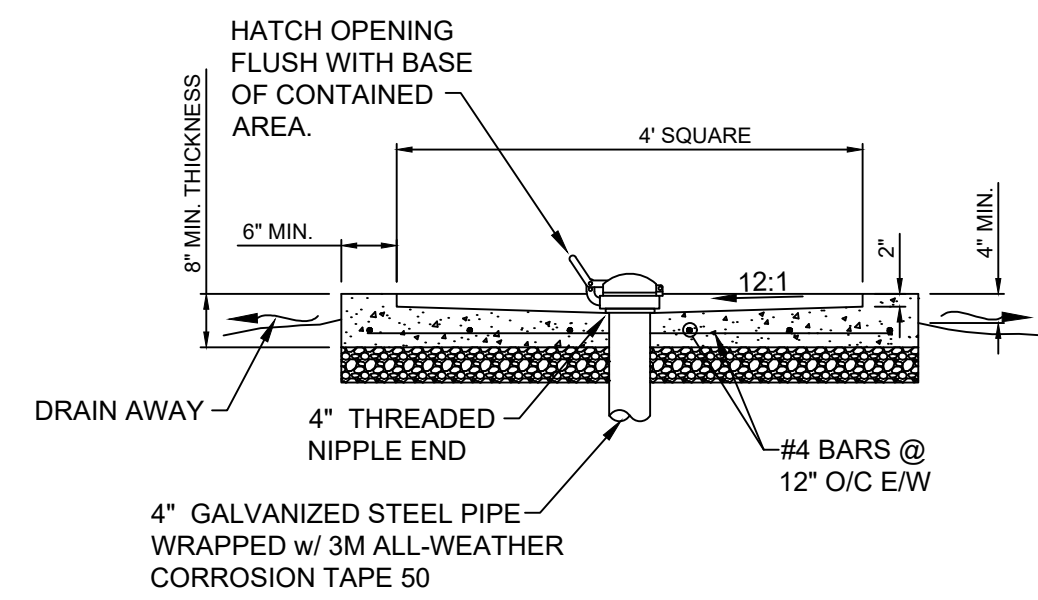
REVISION:

1. 20241219: NOTE UPDATES PER CHEROKEE NATION

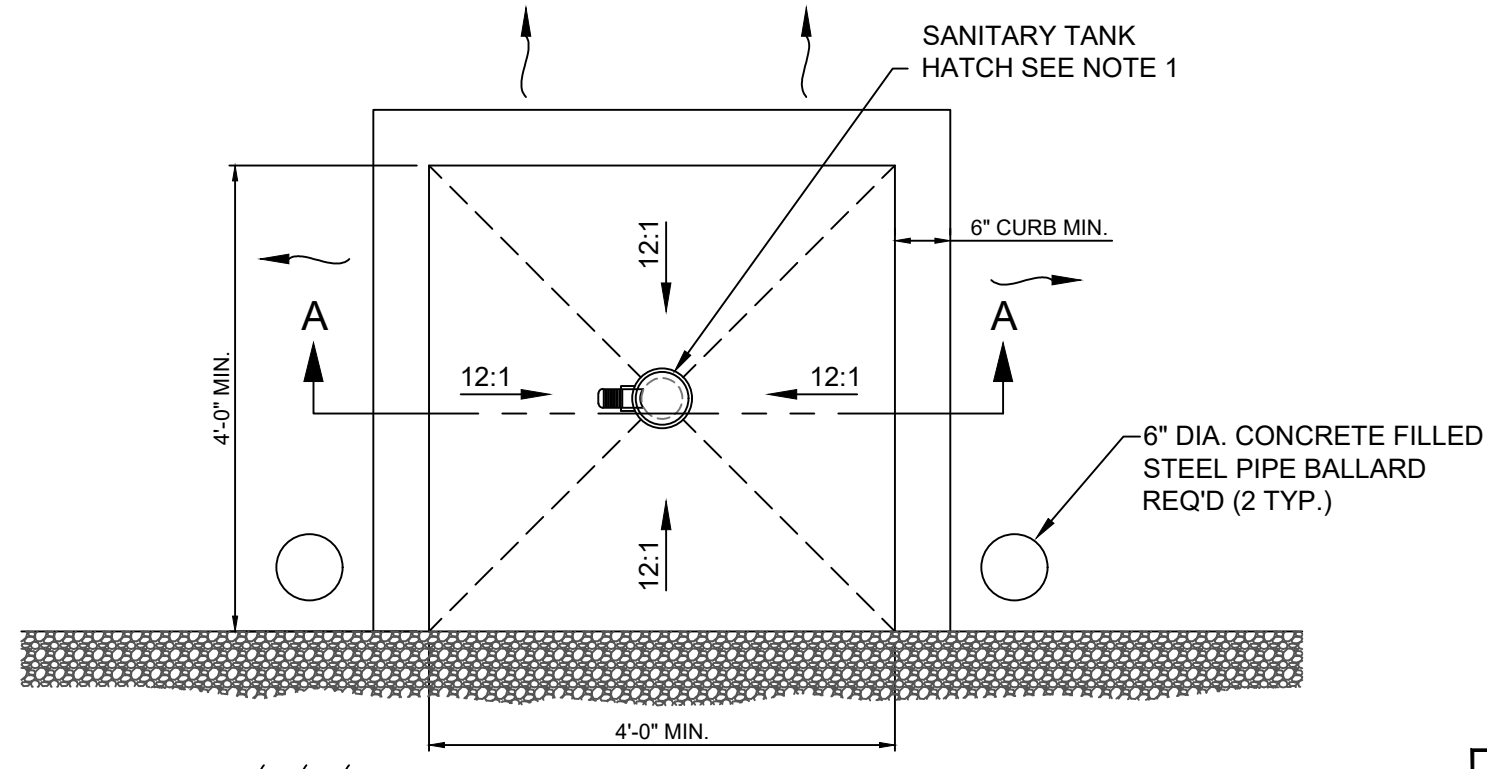
PROJ: 24-108

STANDARD DETAILS

C-501



SECTION A-A  
N.T.S.

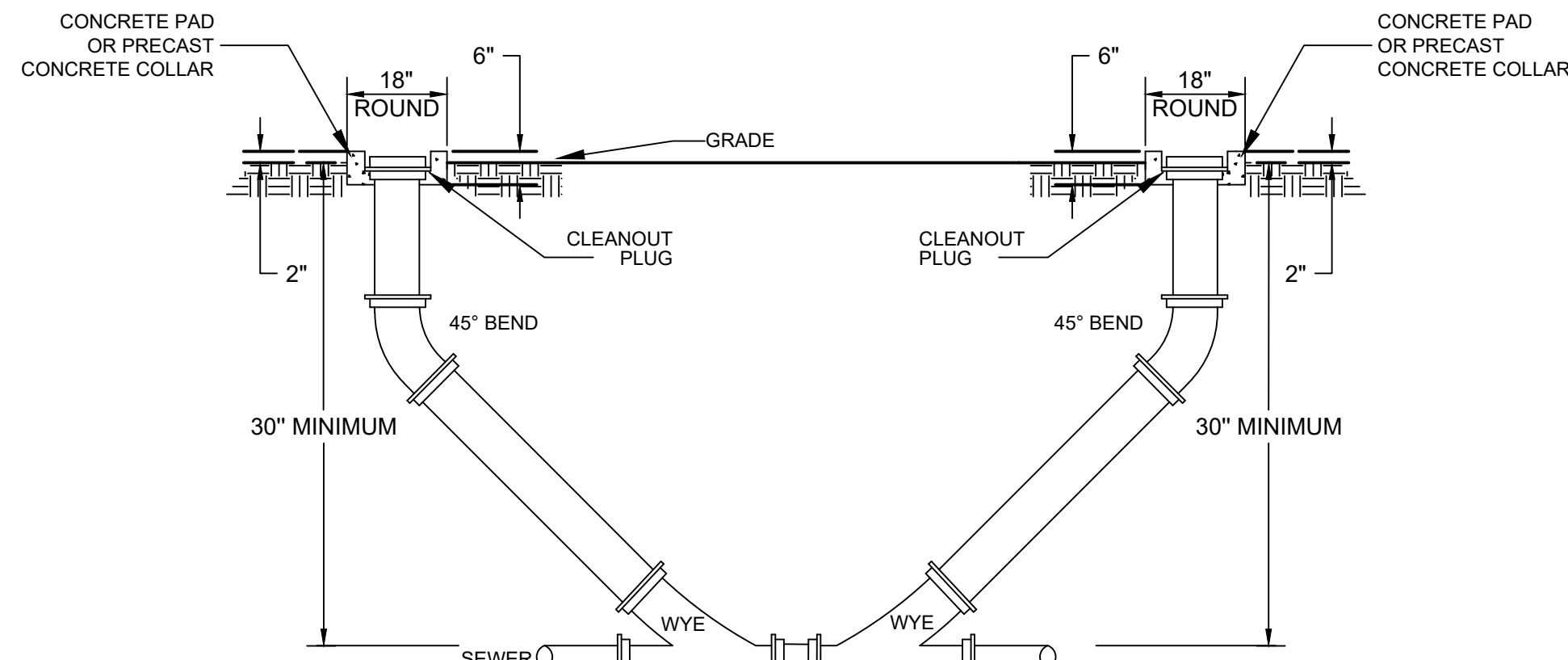


PLAN VIEW  
N.T.S.

**RV DUMP STATION DETAIL**

NTS

DRAINAGE OF SURFACE WATER MUST BE SLOPED TO DRAIN AWAY FROM RV DUMP AREA (TYP.)

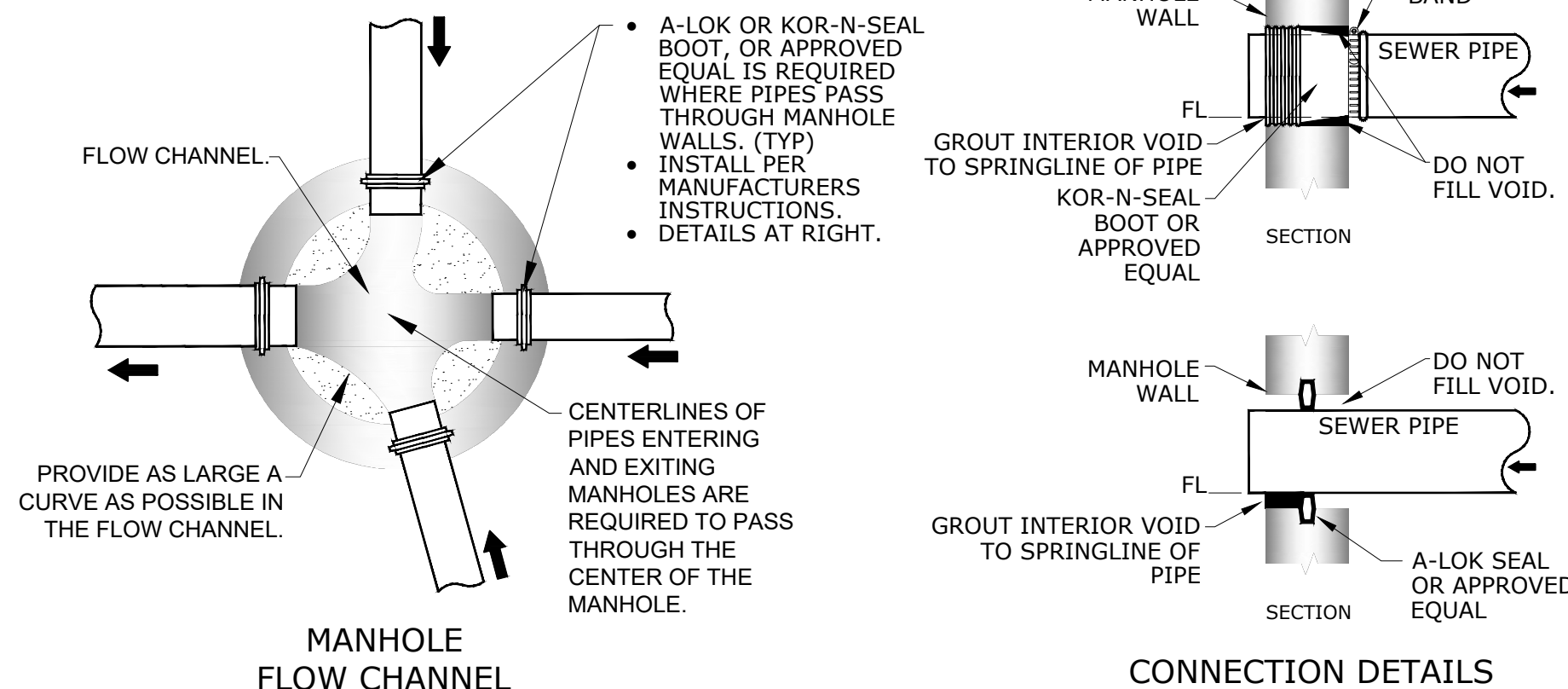


**TWO-WAY CLEANOUT DETAIL**

N.T.S.

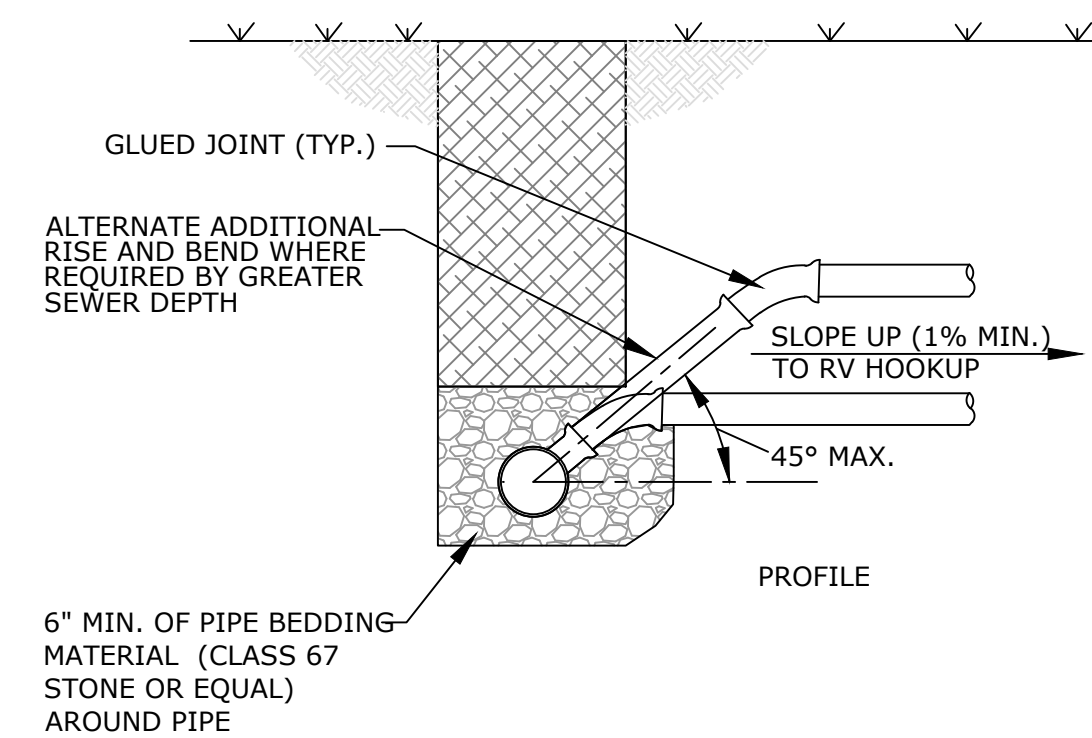
Inside Diameter of Manhole	Minimum Wall Thickness	Base Thickness	Minimum Ring & Cover Size
4' DIA	5"	8"	24" (< or Equal to 24" Pipes)
5' DIA	6 1/2"	8"	
6' DIA	7"	8"	

MANHOLE INFORMATION TABLE

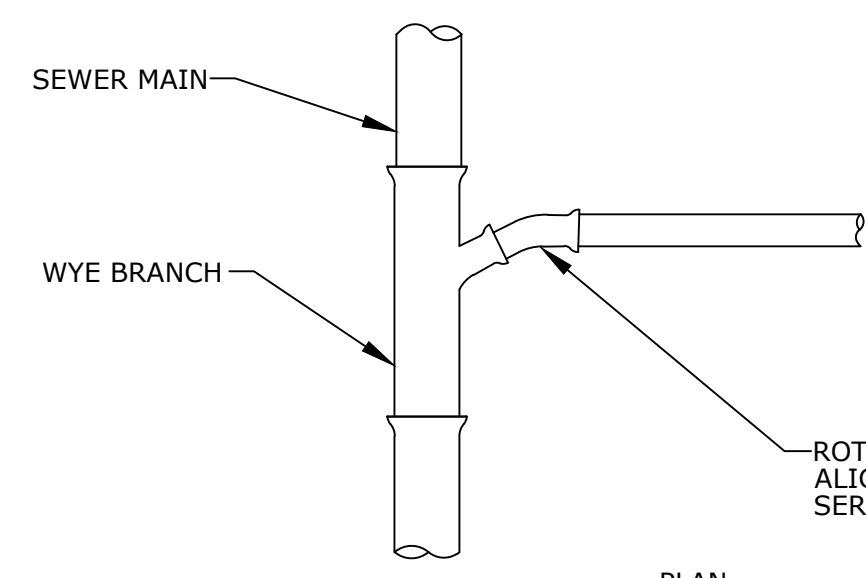


MANHOLE FLOW CHANNEL

CONNECTION DETAILS



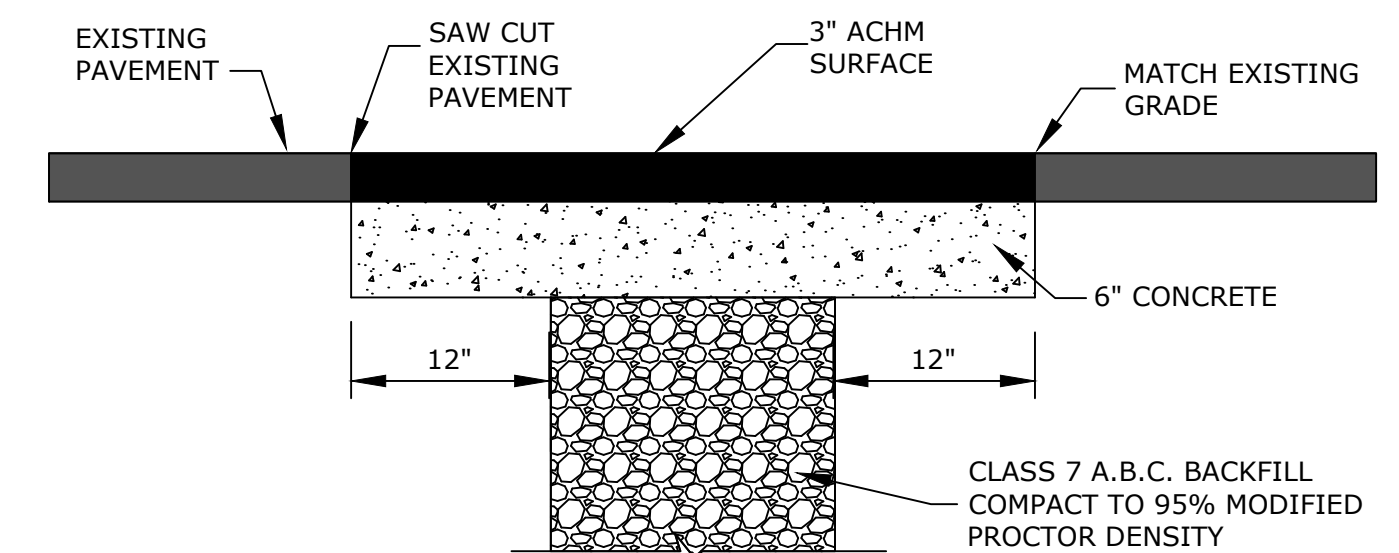
PROFILE



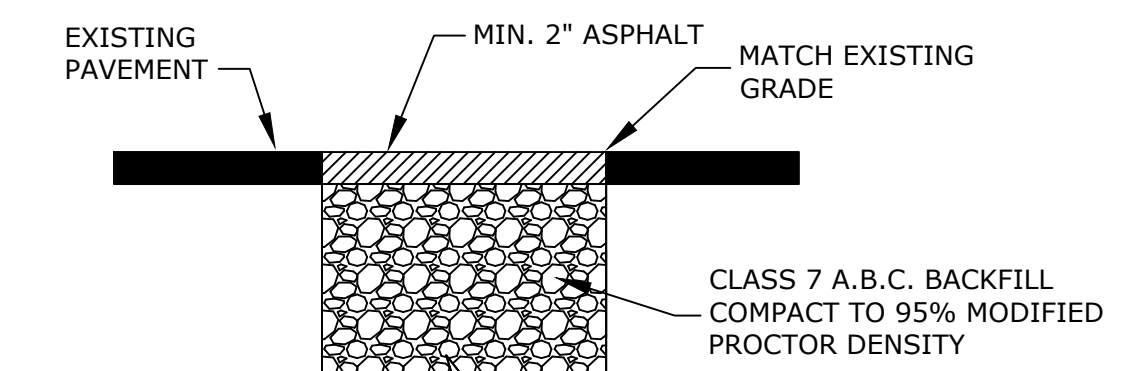
PLAN

**SEWER SERVICE LATERAL**

NTS



ASPHALT PAVEMENT REPAIR

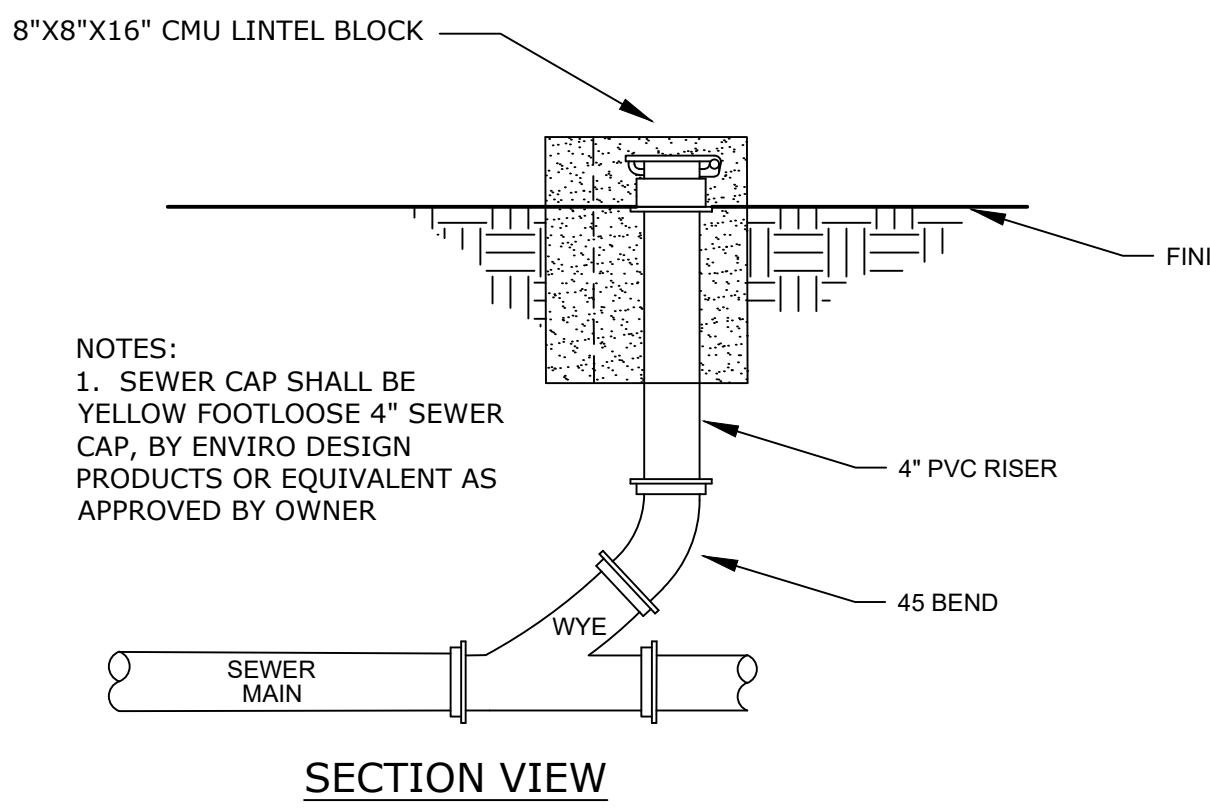


TEMPORARY PAVEMENT REPAIR

- NOTES:
1. CONCRETE SHALL HAVE A MINIMUM OF 5.5 BAGS OF CEMENT PER CU. YD. AND 5 1/2% ± 1 1/2% AE AND DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 3500 psi @ 28 DAYS.
  2. PERMANENT REPAIRS TO BE USED ONLY WHERE ADJACENT PAVEMENT IS TO REMAIN. USE TEMPORARY PATCH IN AREAS WHERE ADJACENT PAVEMENT IS TO BE REMOVED OR RECONSTRUCTED.
  3. ASPHALT FOR TEMPORARY REPAIRS MAY BE HOT MIX OR COLD MIX.

**T-PATCH REPAIR DETAIL**

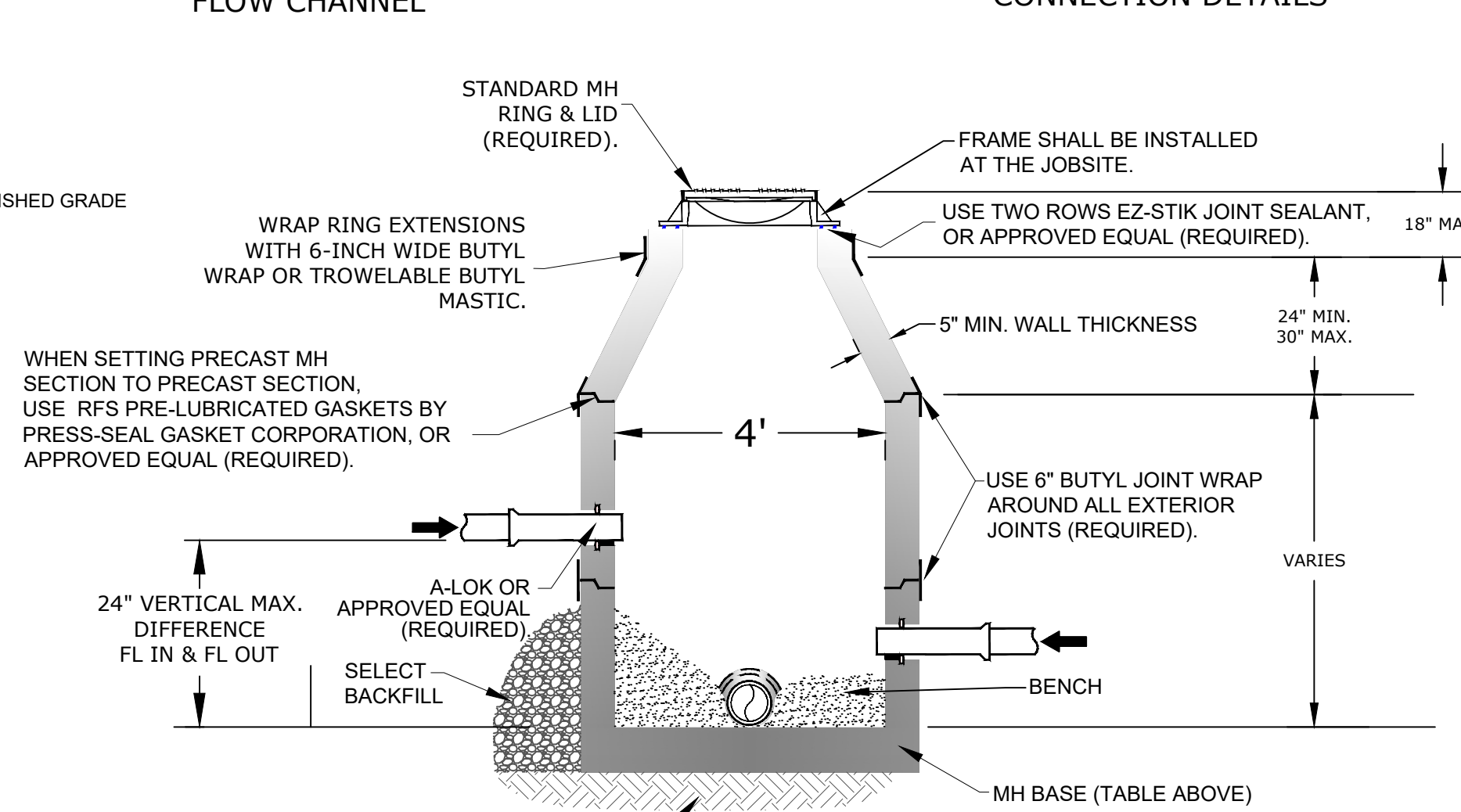
NTS



SECTION VIEW

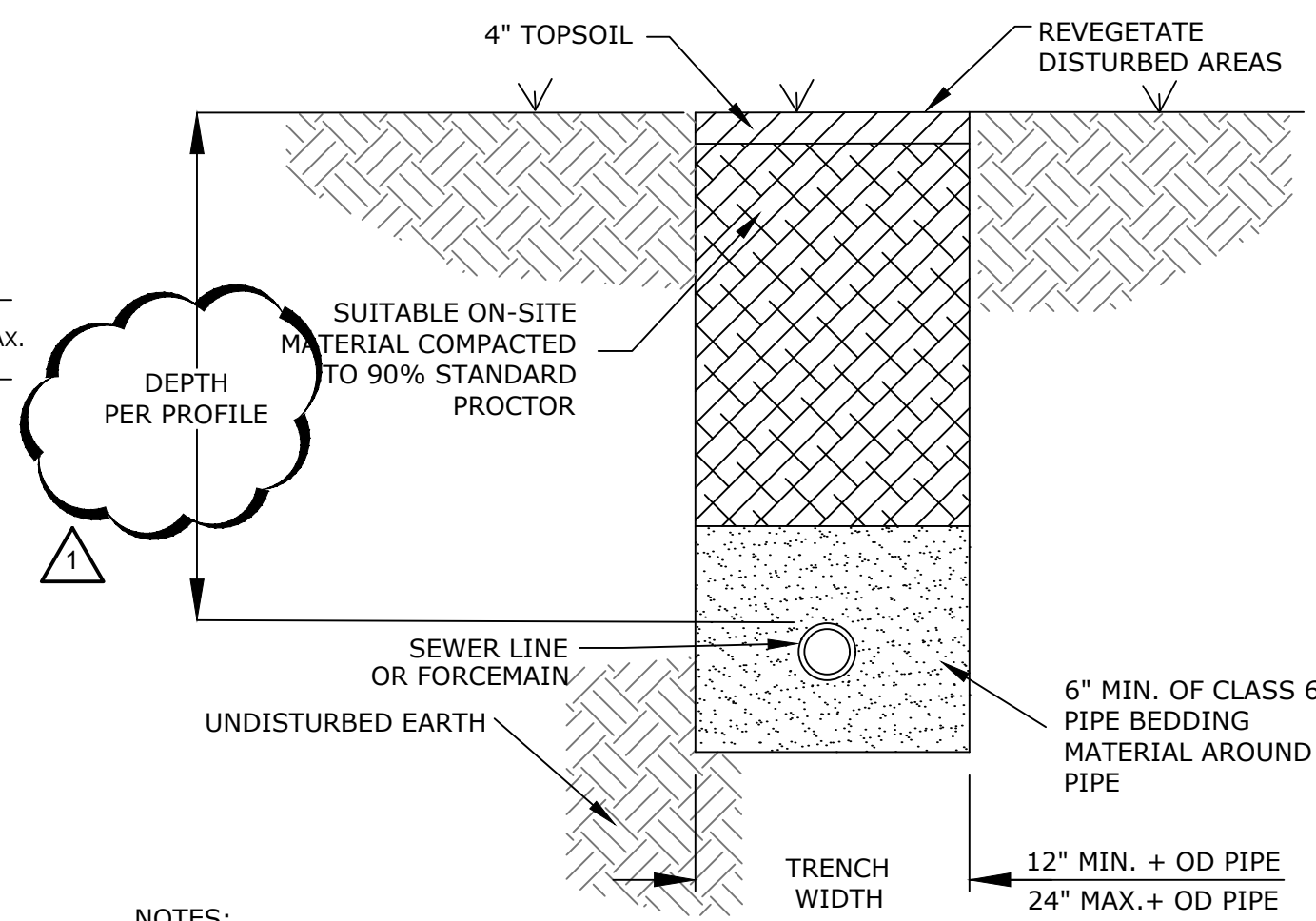
**RV SITE HOOK UP DETAIL**

NTS



**PRECAST MANHOLE**

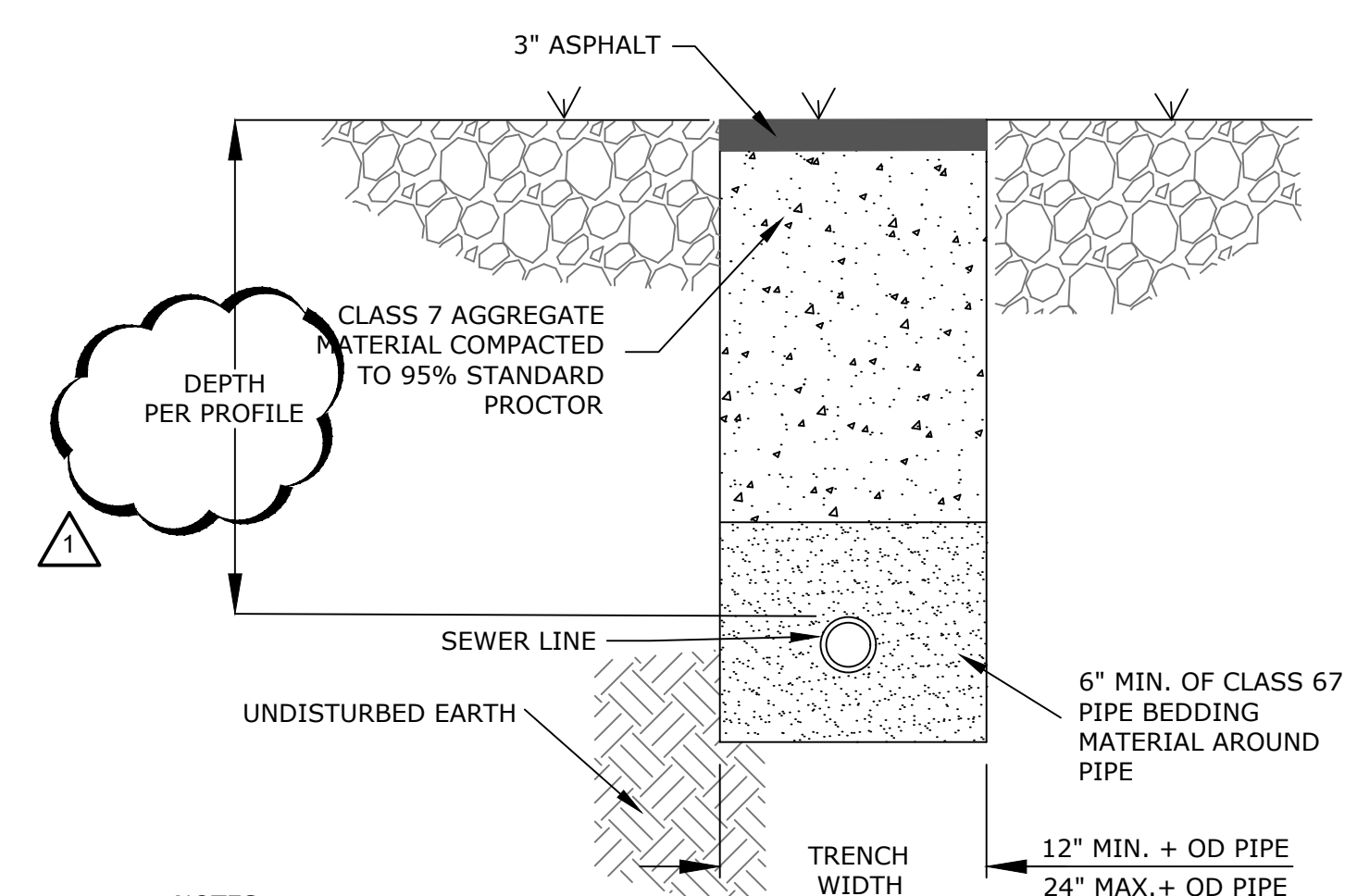
NTS



- NOTES:
1. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING SEWER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE SEWER SYSTEM.
  2. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH. XVII, SUBPART B)
  3. TRENCH SHALL BE EXCAVATED BELOW GRADE REQUIRED TO PROVIDE A MINIMUM 36" OF PIPE COVER.

**SANITARY TRENCH OUTSIDE DRIVE PATHS OR PAVEMENT**

NTS



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**SANITARY TRENCH UNDER DRIVE PATHS OR PAVEMENT**

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