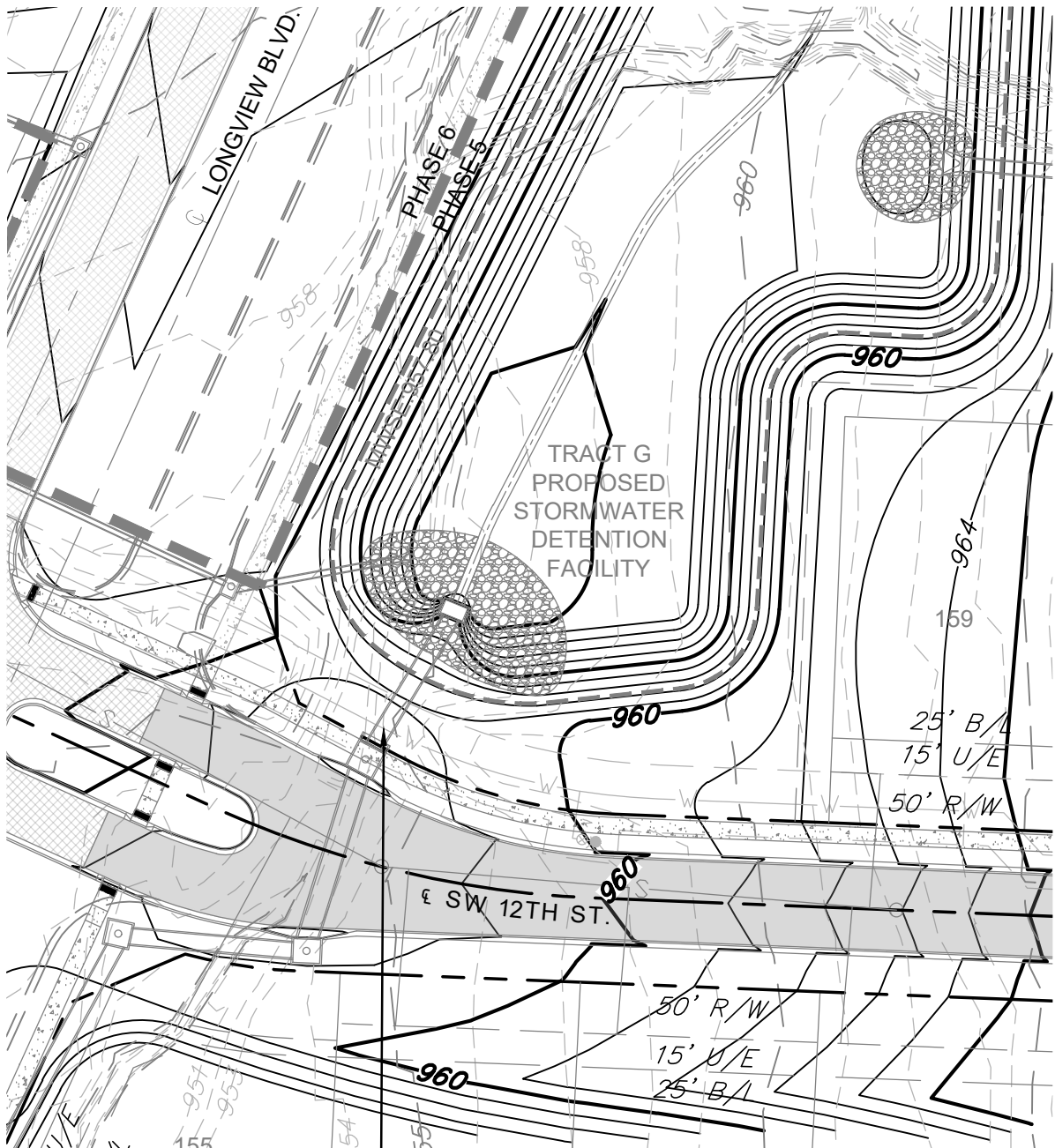


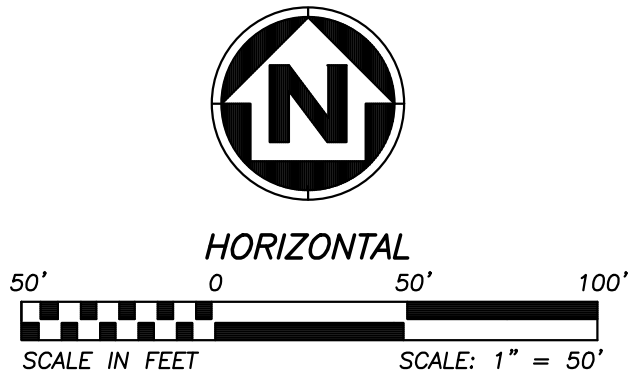
Aug 20, 2021 - 12:11pm Plotted By: gsc Shared drives \VC10 - Land Development\Projects\2020\20KCT10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Sheet\STREET AND STORM\20KCT10057 - SHT - GRADING PLAN.dwg Layout: WATER LINE RELOCATION EXHIBIT



PLAN VIEW:

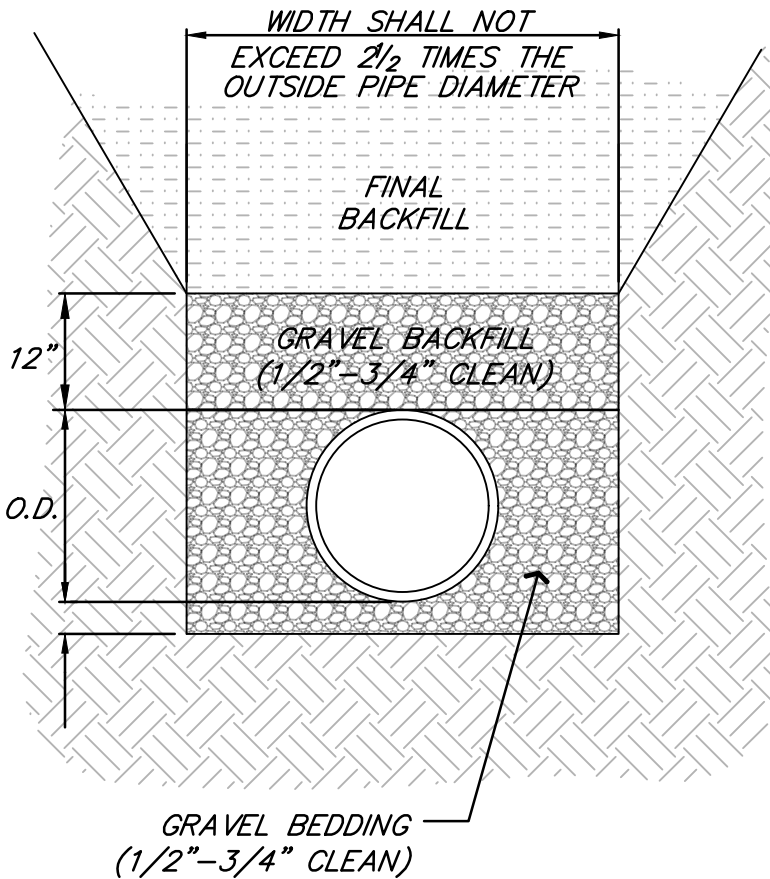
LOCATION OF STORM SEWER
CONFLICT WITH EXISTING
WATER MAIN. CONTRACTOR
SHALL FOLLOW ALL DETAILS
AND SPECIFICATIONS OF THE
CITY OF LEE'S SUMMIT.

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/26/2021

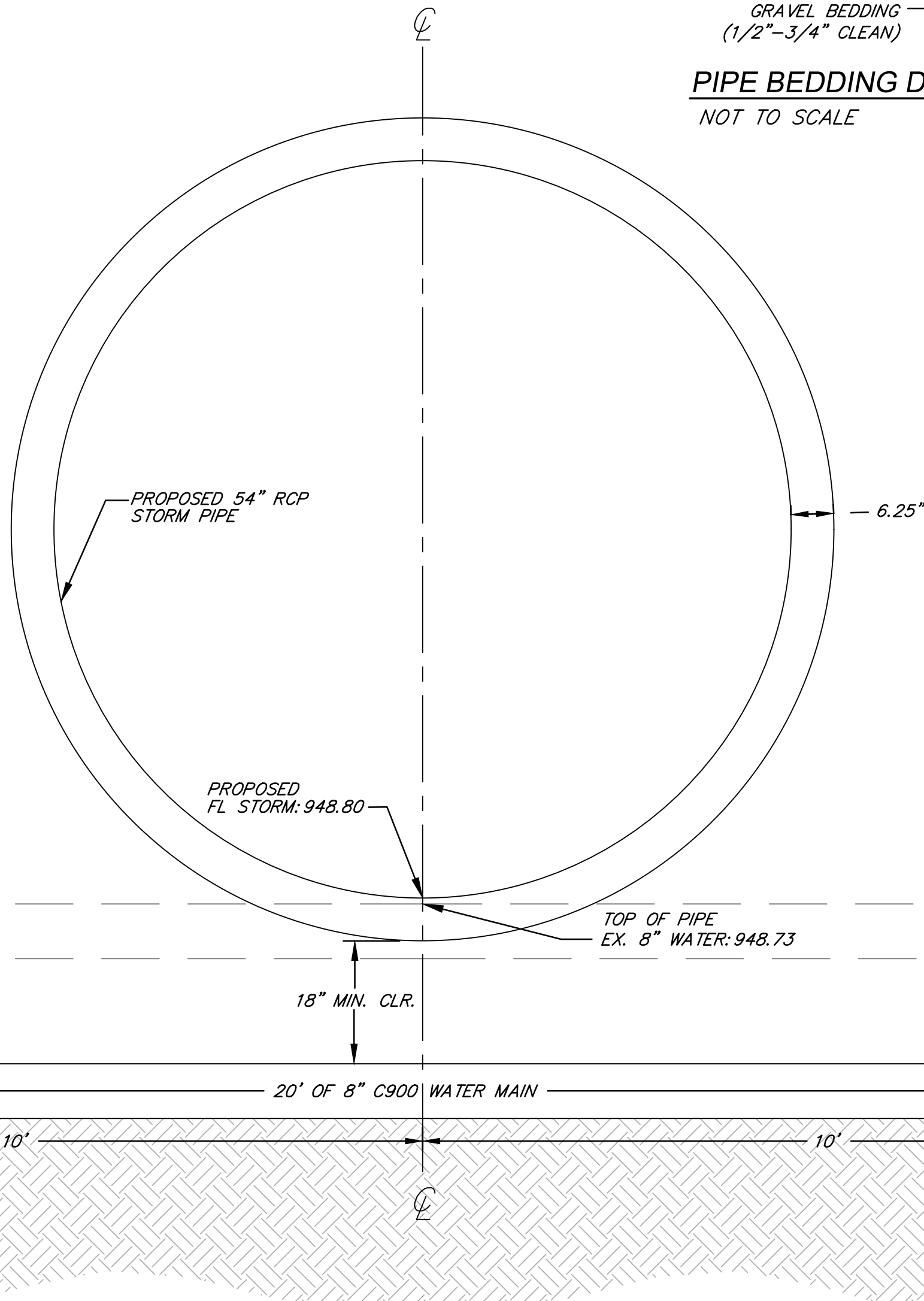


- BEDDING**
1/2"-3/4" CLEAN AGGREGATE, HAND TAMPED OR MECHANICALLY COMPACTED IN MAX. 4" LIFTS
INITIAL BACKFILL
-UNDER PAVED AREAS OR WITHIN 4' HORIZONTAL OF PAVED AREAS
1/2"-3/4" CLEAN AGGREGATE, HAND TAMPED OR MECHANICALLY COMPACTED IN MAX. 4" LIFTS
-UNDER OPEN AREAS
1/2"-3/4" CLEAN AGGREGATE, HAND TAMPED OR MECHANICALLY COMPACTED IN MAX. 4" LIFTS
FINAL BACKFILL
-UNDER PAVED AREAS OR WITHIN 4' HORIZONTAL OF PAVED AREAS
ON-SITE OR IMPORTED MATERIAL FREE OF MUCK, FROZEN MATERIAL, EXCESS MOISTURE,
ORGANICS, TOPSOIL, RUBBISH, CONSTRUCTION DEBRIS, ROCK OR BRICK LARGER THAN 8",
COMPACTED TO 95% OF STANDARD DENSITY PER ASTM D-698
-UNDER OPEN AREAS
ON-SITE OR IMPORTED MATERIAL FREE OF MUCK, FROZEN MATERIAL, EXCESS MOISTURE,
ORGANICS, TOPSOIL, RUBBISH, CONSTRUCTION DEBRIS, ROCK OR BRICK LARGER THAN 8",
COMPACTED TO 90% OF STANDARD DENSITY PER ASTM D-698

BEDDING DEPTH BELOW PIPE		
PIPE DIAMETER	IN SOIL	IN ROCK
24" AND LESS	4"	6"
27" THRU 60"	4"	9"



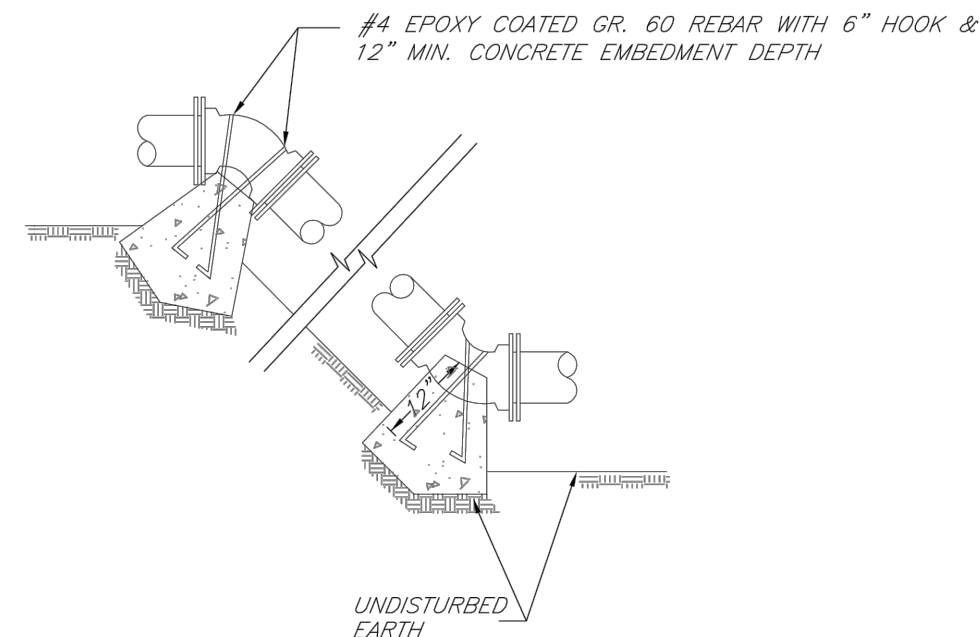
PIPE BEDDING DETAIL
NOT TO SCALE



WATER LINE RELOCATION DETAIL:
NOT TO SCALE

REQUIRED CONCRETE VOLUME (CUBIC FEET - CF)				
NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND
6	50.5	71.4	38.6	19.7
8	89.8	126.9	68.7	35.0
10	140.2	198.3	107.3	54.7
12	202.0	287.1	154.6	78.8
14	276.0	396.0	210.4	107.3
16	361.0	514.0	276.0	140.1
18	457.0	641.0	351.0	177.3
20	564.0	777.0	436.0	219.0
24	816.0	1164.0	624.0	318.0

- NOTES:**
1. ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
2. MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
3. BEARING MUST BE AGAINST UNDISTURBED SOIL.
4. DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.



LEE'S SUMMIT
MISSOURI

PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

VERTICAL THRUST BLOCKS

Date: 02/13
Drawn By: JN
Checked By: DL
File: WAT-2
Rev: 1/14
Rev:

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

EXISTING WATER MAIN
RELOCATION EXHIBIT

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI



SHEET NUMBER
EX-1
1 OF 1

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DRAWING INFO.		REVISIONS	
NO.	DESCRIPTION	BY	DATE
1	GC	DATE	DATE
2	PJ	DATE	DATE
3	PE-2008030032	DATE	DATE
4	8/20/2021	DATE	DATE
5	FOR CONSTRUCTION	DATE	DATE
6	20KCT10057	DATE	DATE
7	000062	DATE	DATE