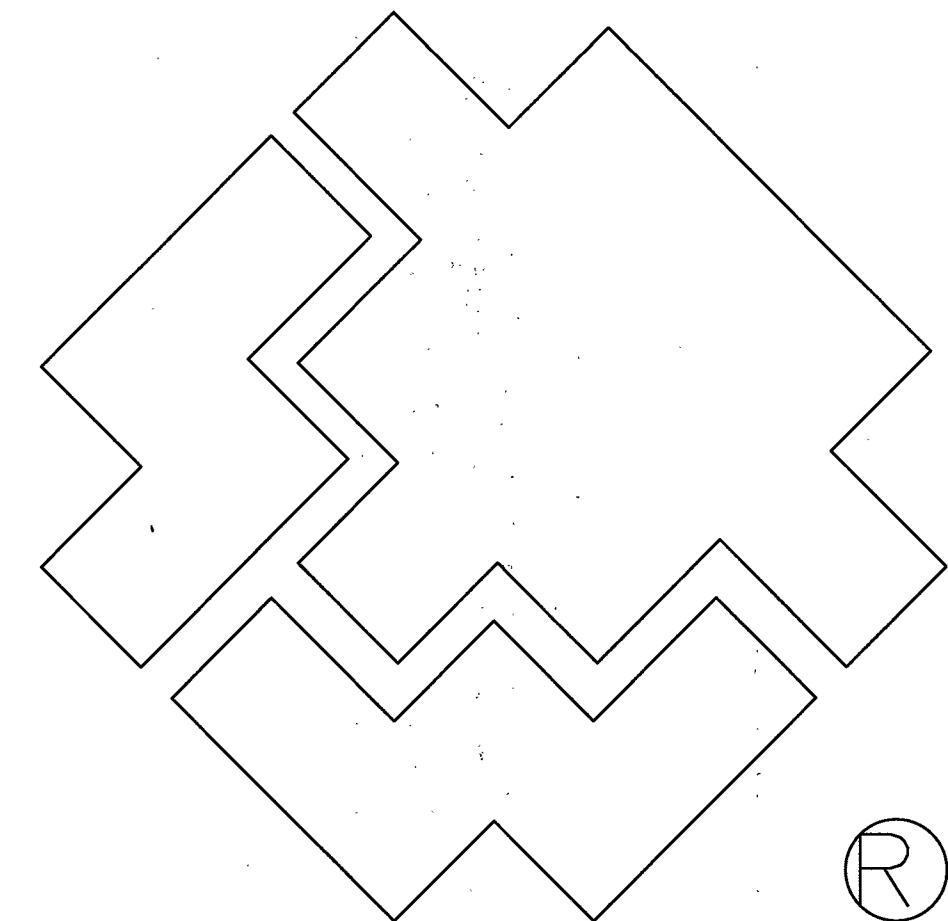




SOUTHWEST GAS CORPORATION

N 4TH ST AND STEWART CITY OF LAS VEGAS, NV WR #3676474

LEGEND

EXISTING GAS LINE

GAS LINE TO BE ABANDONED

EXISTING GAS SERVICE

PROPOSED MAIN GAS LINE (NEW)

PROPOSED SERVICE LATERAL (NEW)

PROPOSED SERVICE LINE (NEW)

RIGHT OF WAY LINE

STREET CENTERLINE

PROPERTY LINE

BACK OF CURB

TAX CODE BOUNDARY

MATCHLINE

PAVEMENT CUT AND REPAIR

EXISTING ANODELESS RISER

EXISTING ANODE RISER

EXISTING GAS LIGHT

EXISTING GAS VALVE

STL 1

PE 1

PROPOSED MAIN CALL OUT

ABANDONED FACILITIES CALL OUT

GAS DIMENSIONS

EXCESS FLOW VALVE

SHEET INDEX

1. COVER SHEET

2. ABBREVIATIONS AND NOTES

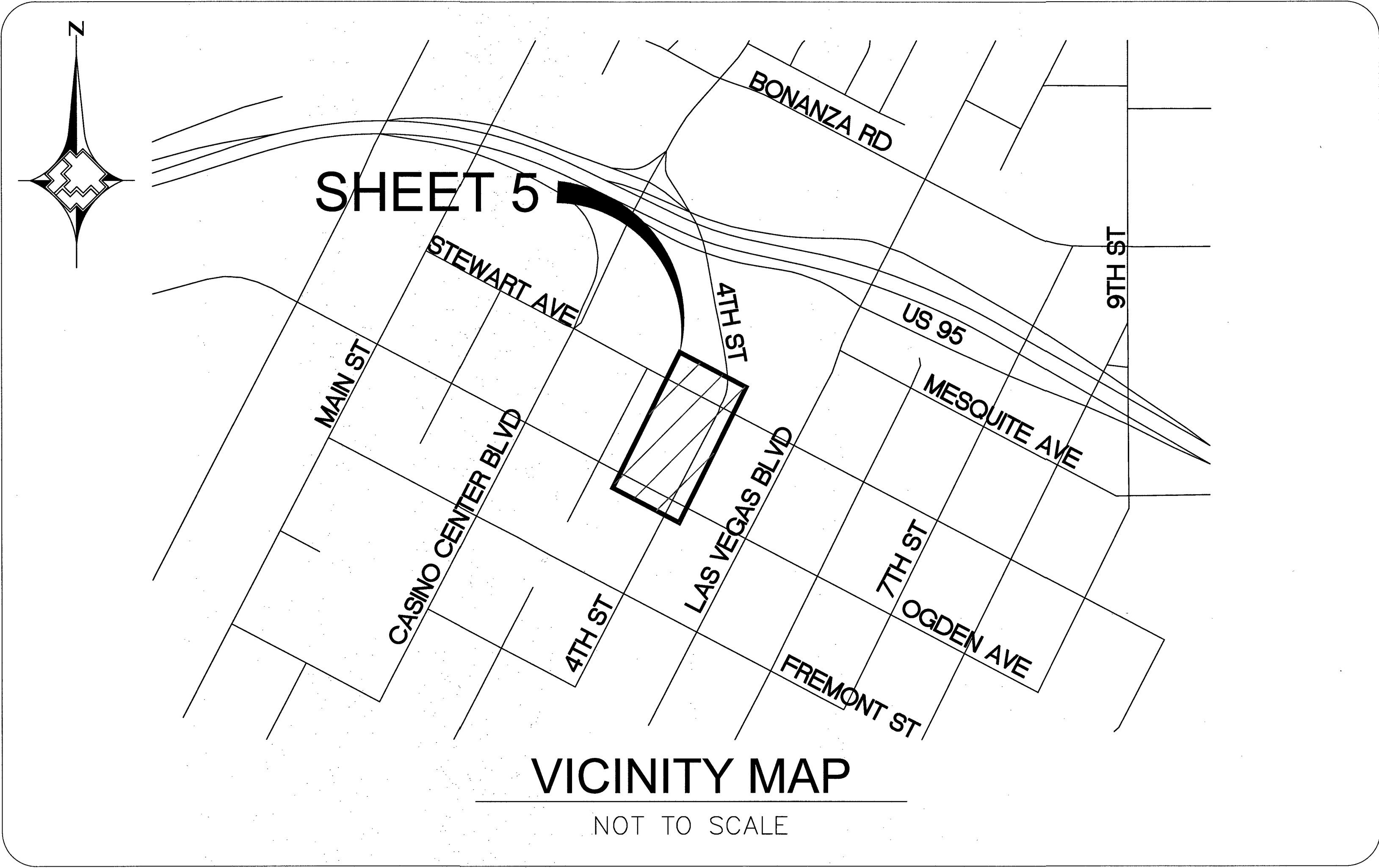
3. MATERIALS AND SIGNATURES - PE

4. MATERIALS AND SIGNATURES - STEEL

5. DESIGN PLAN

6. DETAILS A & B

7. TYPICAL SWPPP BMPs DETAILS



Total footage located in Public ROW 626'

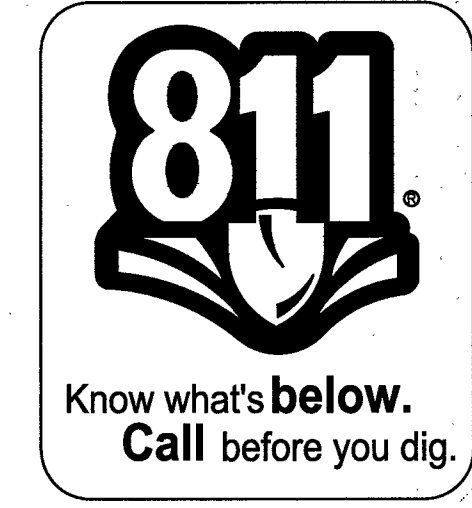
APPROVED FOR CONSTRUCTION

THIS APPROVAL IS FOR WORK IN CLV R/W OR CLV EASEMENTS ONLY. OBTAINING PERMISSIONS OR EASEMENTS FOR WORK SHOWN ON PRIVATE PROPERTY IS THE RESPONSIBILITY OF THE UTILITY.

APPROVAL

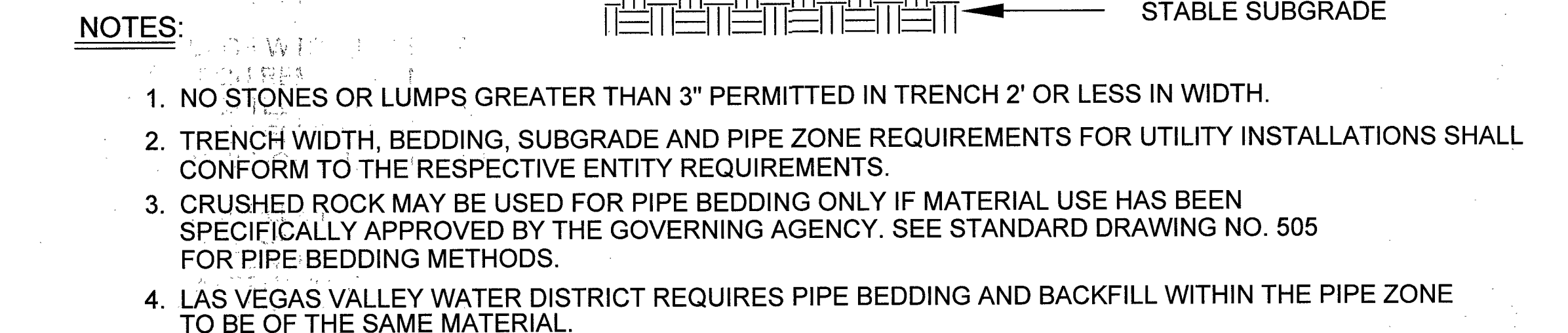
2 11 19
DATE

Hansen L 19-00002 Dwg 1007V7561-6AS



1. 2. 3. 4. NO. DESCRIPTION BY DATE APPVD.				AS-BUILT DRAWING-PRESSURE TEST DATA				INDIVIDUAL PERFORMING VISUAL INSPECTION VISUAL INSPECTION CERTIFICATION				CONSTRUCTION				ISOLATION AREA		W.R. NO.		ENGINEER/TECH: RYAN STEMMERIK				PHONE: 702-365-2311							
REVISIONS				SEE SHEET 3				SEE SHEET 3				SEE SHEET 3				SEE SHEET 3				ISO_21_DIST_096		3676474		ACCOUNT REP: NASRIN HOUSTON				PHONE: 702-365-2549			
																								PROJECT CONTACT: RICH RIAL				PHONE: 702-376-0527			
																								SHEET NO: 1 OF 7				SCALE: NTS		DATE: 9/12/2018	
																								DWN. BY: BC&F				CHKD. BY:		APPVD. BY:	
																								TITLE							
																								N 4TH ST AND STEWART							
																								COVER SHEET							

1/8/19 1/2/19 1/2/19 APPROVED



Know what's **below**.
Call before you dig.

ABAN	ABANDONED
AC	ASPHALTIC CONCRETE
ACP	ASBESTOS CEMENT PIPE
AIM	AREA ISOLATION MODULE
BC	BACK OF CURB
BLVD	BOULEVARD
BM	BENCHMARK
BMI	BLACK MOUNTAIN INDUSTRIAL
BO	BLOW OFF
BTU	BRITISH THERMAL UNIT
BWC	BASIC WATER COMPANY
COBC	CITY OF BOULDER CITY
CC	CLARK COUNTY
COCAUSD	CLARK COUNTY AREA UNIFORM STANDARD DRAWING
CCRCD	CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT
CCWRD	CLARK COUNTY WATER RECLAMATION DISTRICT
CIP	CAST IRON PIPE
CL	CENTERLINE
CLV	CITY OF LAS VEGAS
CNLV	CITY OF NORTH LAS VEGAS
COH	CITY OF HENDERSON
CP	CATHODIC PROTECTION
CPL	COUPLING
DET	DETAIL
DI	DUCTILE IRON
DIA	DIAMETER
DIMP	DISTRIBUTION INTEGRITY MANAGEMENT PROGRAM
DNR	DOES NOT REGISTER
DWG	DRAWING
EFV	EXCESS FLOW VALVE
EG	EXISTING GROUND
EHDD	EFFECTIVE HEATING DEGREE DAY
ELB	ELBOW
ELEC	ELECTRICAL
ELEV	ELEVATION
EMRS	ELECTRONIC MAPPING RECORDS SYSTEM
EOM	END OF MAIN
EPR	ELECTRONIC PRESSURE RECORDERS
ESMT	EASEMENT
EX	EXISTING
FERC	FEDERAL ENERGY REGULATORY COMMISSION
FOS	FACILITY OUT OF SERVICE
FH	FIRE HYDRANT
GIR	GAS INFRASTRUCTURE REPLACEMENT
GPR	GAS PRESSURE REGULATOR
HCA	HIGH CONSEQUENCE AREA
HDD	HEATING DEGREE DAY
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HP	HIGH PRESSURE
HERS	HOME ENERGY RATING SYSTEM
HOP	HISTORIC OPERATING PROCEDURE
HVTT	HIGH VOLUME TAPPING TEE
ID	INSIDE DIAMETER
IN	INCH(ES)
IPS	IRON PIPE SIZE
IS	IDENTIFIED SITE
JT	JOINT TRENCH
KRG	KERN RIVER GAS COMPANY
LDCPE	LARGE DIAMETER COILED POLYETHYLENE PIPE
LVVWD	LAS VEGAS VALLEY WATER DISTRICT
MAOP	MAXIMUM ALLOWABLE OPERATING PRESSURE
MCFH	THOUSAND CUBIC FEET PER HOUR
MH	MANHOLE
MOP	MAXIMUM OPERATING PRESSURE
MSA	METER SET ASSEMBLY
MVP	MAPPING VERIFICATION PROCEDURE

[illegible]

MATERIAL LIST FOR DISTRIBUTION FACILITIES				
ITEM#	QTY. (DESIGN)	QTY. (AS-BUILT)	STOCK ID#	DESCRIPTION
①	1		160-8030	TEE, 3-WAY, 4" STL WELD O-RING/TEE, 275 PSIG
②	1		160-8302	TRANSITION FITTING 4" STL/PE

FOR STEEL ONLY: TIE-IN #1

- EXISTING TYPE OF PIPE COATING
- ☐ TAR WRAP
 - ☐ ASPHALT
 - ☐ PRITEC
 - ☐ FUSION BONDED EPOXY (FBE)
 - ☐ PLASTIC TAPE WRAP
 - ☐ EXTRUDED POLY COATING
 - ☐ OTHER
 - ☐ ABRASIVE RESISTANT OVERCOAT (ARO)
 - ☐ FILLER TAPE (POLYKEN AND TAC-TAPE)
 - ☐ GREASE W/GLASS MAT WRAP & PLASTIC WRAP
 - ☐ SHRINK SLEEVE
 - ☐ POLYETHYLENE (BLACK)
 - ☐ POLYETHYLENE (YELLOW)
 - ☐ POLYETHYLENE TAPE
 - ☐ POLYPROPYLENE (BLACK)
 - ☐ POLYPROPYLENE (ORANGE)
 - ☐ SYNERGY
 - ☐ THERMIT WELD CAP
 - ☐ POWERCRETE
 - ☐ VISCOTAQ
 - ☐ WRAPID SHIELD FIBERGLASS WRAP
 - ☐ HIGH BUILD EPOXY (HBE)
 - ☐ STOP-IT BORESHIELD PIPE WRAP
 - ☐ CLOCK SPRING COMPOSITE WRAP
 - ☐ WIRE CONNECTION COVERS

- CONDITION OF PIPE COATING
- ☐ EXCELLENT (E)
 - ☐ GOOD (G)
 - ☐ FAIR (F)
 - ☐ POOR (P)
 - ☐ NO COATING (N)

- EXTERNAL CONDITION OF PIPE
- ☐ EXTERNAL GOOD (EG)
 - ☐ EXTERNAL SLIGHT CORROSION (ESC)
 - ☐ EXTERNAL HEAVY CORROSION (EHC)

EXISTING PIPE TO SOIL _____

EXISTING WALL THICKNESS _____

- INTERNAL CONDITION OF PIPE (IF CUT OR COUPON)
- ☐ NA
 - ☐ INTERNAL GOOD (IG)
 - ☐ INTERNAL SLIGHT CORROSION (ISC)
 - ☐ INTERNAL HEAVY CORROSION (IHC)

- ANODE INSTALLED
- YES ☐
- NO ☐
- IF YES, PIPE TO SOIL _____

- NEW TYPE OF PIPE COATING
- ☐ TAR WRAP
 - ☐ ASPHALT
 - ☐ PRITEC
 - ☐ FUSION BONDED EPOXY (FBE)
 - ☐ PLASTIC TAPE WRAP
 - ☐ EXTRUDED POLY COATING
 - ☐ OTHER
 - ☐ ABRASIVE RESISTANT OVERCOAT (ARO)
 - ☐ FILLER TAPE (POLYKEN AND TAC-TAPE)
 - ☐ GREASE W/GLASS MAT WRAP & PLASTIC WRAP
 - ☐ SHRINK SLEEVE
 - ☐ POLYETHYLENE (BLACK)
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 - ☐ HIGH BUILD EPOXY (HBE)
 - ☐ STOP-IT BORESHIELD PIPE WRAP
 - ☐ CLOCK SPRING COMPOSITE WRAP
 - ☐ WIRE CONNECTION COVERS

CATHODIC PROTECTION NOTES:

- CONTACT CP DEPARTMENT AT (702) 528-7873 AT LEAST 48 HOURS PRIOR TO WORK TO COORDINATE INSTALLATION
- THIS WR AFFECTS THE FOLLOWING CP AREAS:

CPID#:

WMIS#:

WELDS CUT OUT:

WELD PROCEDURES USED:

SIGNATURE _____

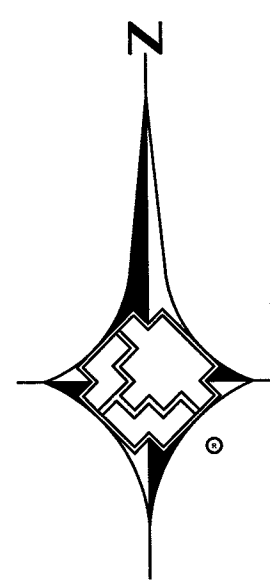
DATE _____

CP READ: _____

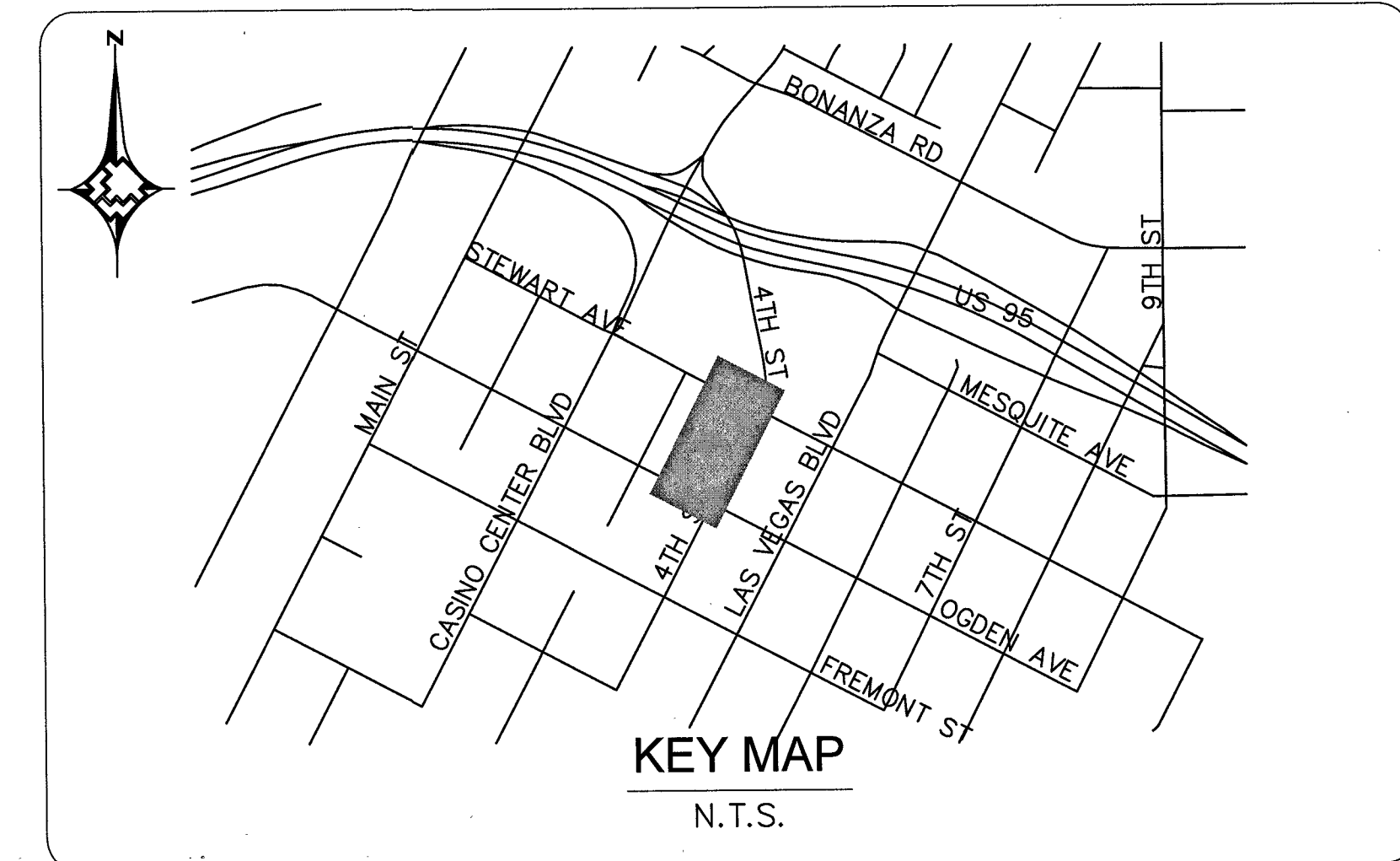
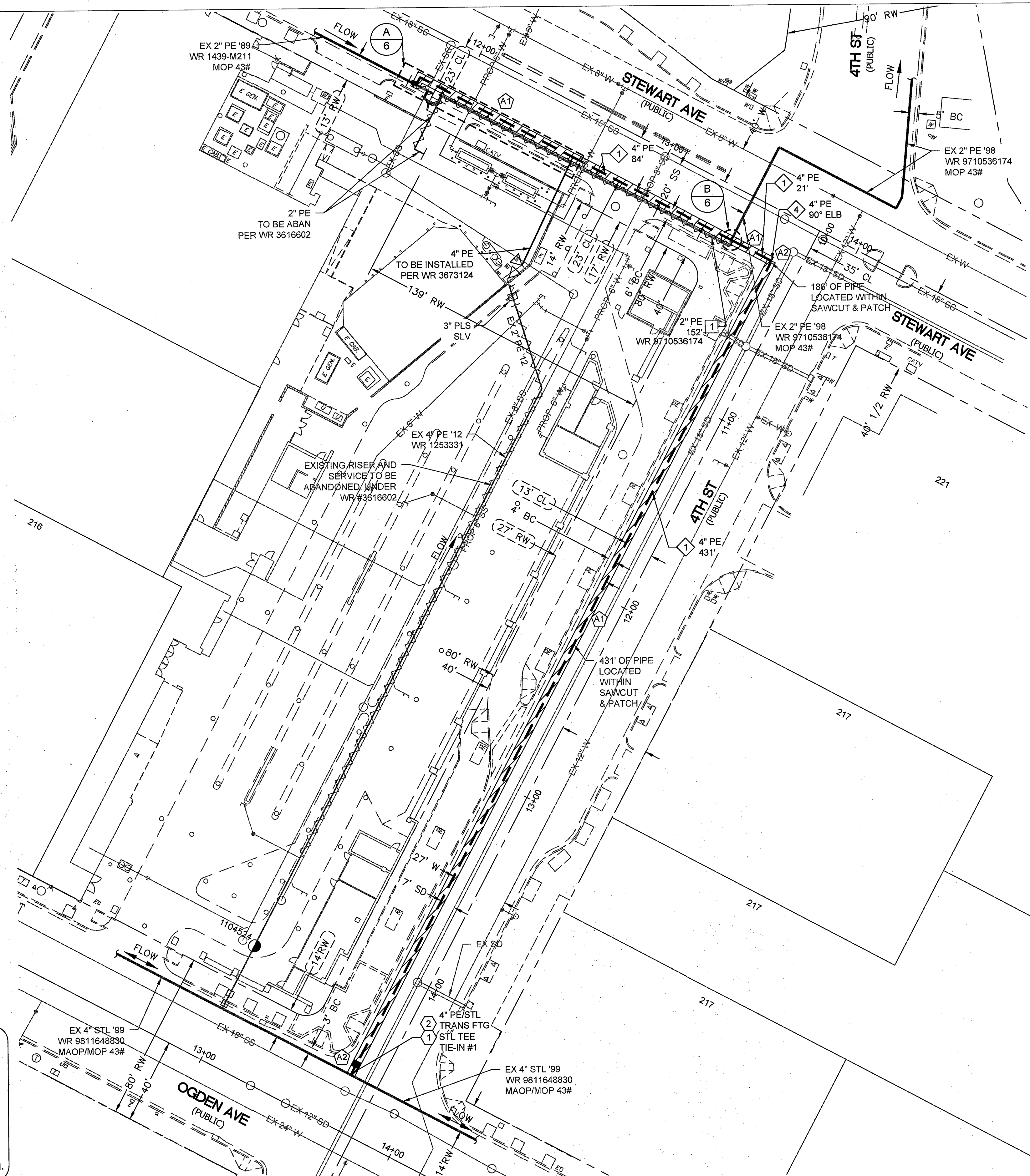
SIGNATURE: _____



1. _____				2. _____				3. _____				4. _____				NO. _____				DESCRIPTION _____				BY _____				DATE _____				APPVD. _____				TAX CODES _____				UNIT NO. _____				UNIT TYPE _____				INSTL. PROPOSED _____				RETIRED COMPLETED _____				PROPERTY UNITS				AS-BUILT DRAWING-PRESSURE TEST DATA				TEST MEDIUM _____				TEST METHOD _____				PIPE DIA. _____				PIPE LENGTH _____				PIPE TYPE _____				MIN. DURATION _____				TEST PRES. (PSIG) (MAX) _____				(MIN) _____				TIME (HOUR) (STOP) _____				DATE (START) _____				(STOP) _____				PERFORMED BY: _____				CHECKED BY: _____				INDIVIDUAL PERFORMING VISUAL INSPECTION				VISUAL INSPECTION CERTIFICATION				I HAVE VISUALLY INSPECTED ALL HEATED FUSION, SOLVENT CEMENT, MECHANICAL JOINTS, AND WELDS THAT HAVE PERFORMED				NAME _____				DATE _____				CONSTRUCTION				INSPECTOR _____				FOREMAN _____				REVIEWED BY _____				PERMIT INFORMATION				CITY OF LAS VEGAS				TAX CODE: 02-0203				ISOLATION AREA				ISO_21_DIST_096				W.R. NO.				3676474				ENGINEER/TECH: RYAN STEMMERIK				ACCOUNT REP: NASRIN HOUSTON				PROJECT CONTACT: RICH RIAL				SHEET NO: 4 OF 7				SCALE: NTS				DATE: 9/12/2018				DWN. BY: BC&F				CHKD. BY: _____				APPVD. BY: _____				TITLE				N 4TH ST AND STEWART				MATERIALS AND SIGNATURES - STEEL			
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0 1" = 30' 30



MATERIAL LIST FOR PROPOSED DISTRIBUTION FACILITIES

ITEM#	QTY. (AS-BUILT)	STOCK ID#	DESCRIPTION
1		100-5201	4" PE MAIN
4		140-3069	4" PE 90° ELBOW

MATERIAL LIST FOR ABANDONED FACILITIES

ITEM#	QTY. (AS-BUILT)	PROPERTY UNITS	DESCRIPTION
1		3760102	EX 2" PE '98 MOP 43#

MATERIAL LIST FOR DISTRIBUTION FACILITIES

ITEM#	QTY. (AS-BUILT)	STOCK ID#	DESCRIPTION
1		160-8030	TEE, 3-WAY, 4" STL WELD O-RING/TEE, 275 PSIG
2		160-8302	TRANSITION FITTING 4" STL/PE



Know what's below.
Call before you dig.

RTC NOTES:

PAVEMENT REPAIR SHALL CONFORM TO RTC:

A1 500.3

A2 500.5

NO.	DESCRIPTION	BY	DATE	APPVD.
1.				
2.				
3.				
4.				
REVISIONS				
SOUTHWEST GAS CORPORATION				
TAX CODES	UNIT NO.	UNIT TYPE	INSTL. PROPOSED	RETIRED COMPLETED
PROPERTY UNITS				

AS-BUILT DRAWING-PRESSURE TEST DATA

PIPE DIA. _____ TEST MEDIUM _____ TEST METHOD _____
PIPE LENGTH _____ GAUGE _____
PIPE TYPE _____ NITROGEN _____ CHART _____
MIN. DURATION _____ WATER GAUGE/ _____
TEST PRES. (PSIG) (MAX) _____ (MIN) _____ SOAP PRESS REC SN# _____
TIME (H:MM) _____ (STOP) _____
DATE (MM/DD) _____ (STOP) _____
PERFORMED BY: _____
SING VERIFIED BY: _____

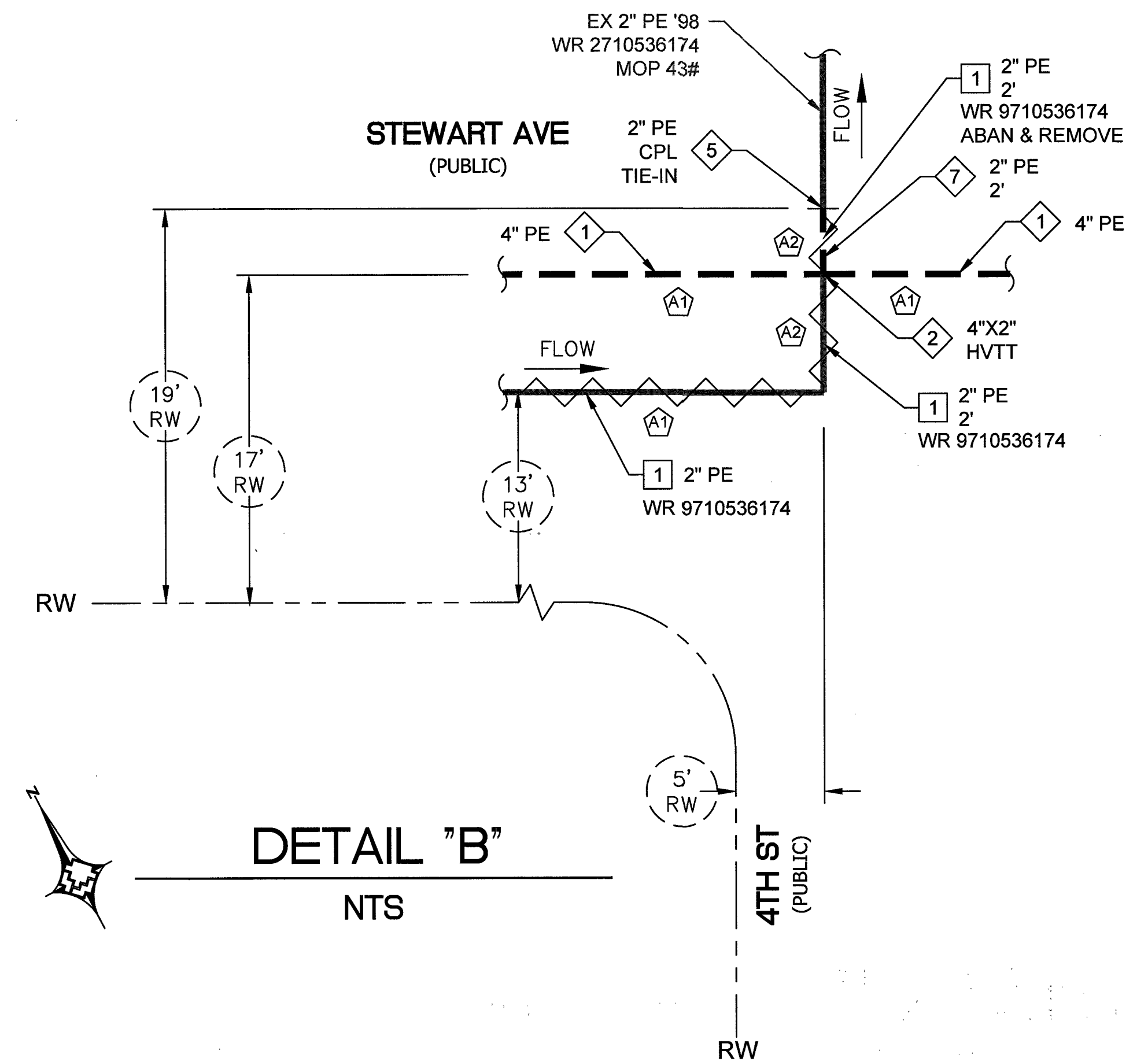
INDIVIDUAL PERFORMING VISUAL INSPECTION VISUAL INSPECTION CERTIFICATION

I HAVE VISUALLY INSPECTED ALL HEATED FUSIONS, SOLVENT CEMENT, MECHANICAL JOINTS, AND WELDS THAT HAVE PERFORMED
NAME _____ DATE _____
INSPECTOR _____
FOREMAN _____
REVIEWED BY: SEE SHEET 3
AS-BUILTS ACCEPTED BY _____ DATE _____
POSTED BY _____ DATE _____
POSTING QCD BY _____ DATE _____

CONSTRUCTION

SEE SHEET 3
PERMIT INFORMATION
CITY OF LAS VEGAS
TAX CODE: 02-0203

ISOLATION AREA ISO_21_DIST_096	W.R. NO. 3676474	ENGINEER/TECH: RYAN STEMMERIK ACCOUNT REP: NASRIN HOUSTON PROJECT CONTACT: RICH RIAL SHEET NO: 5 OF 7 DWN. BY: BC&F	PHONE: 702-365-2311 PHONE: 702-365-2549 PHONE: 702-376-0527 DATE: 9/12/2018 APPVD. BY:
LOCATION SEC 34 T20S R61E M.D.M.	ATLAS #/TITLE # x630y516	TITLE N 4TH ST AND STEWART DESIGN PLAN	



MATERIAL LIST FOR PROPOSED DISTRIBUTION FACILITIES			
ITEM#	QTY. (AS-BUILT)	STOCK ID#	DESCRIPTION
1		100-5201	4" PE MAIN
2		160-8174	4"X2" HVTT
3		140-5118	4"X2" PE REDUCER
4		140-3069	4" PE 90° ELBOW
5		140-3532	2" PE COUPLING
7		100-5101	2" PE MAIN
8		140-3076	4" PE TEE
9		100-5201	4" PE SERVICE
10		140-3530	4" PE COUPLING

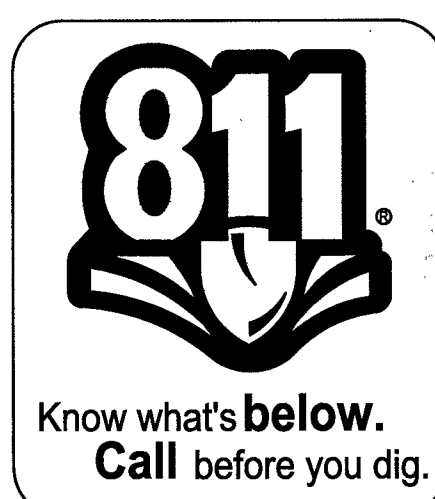
MATERIAL LIST FOR ABANDONED FACILITIES			
ITEM#	QTY. (AS-BUILT)	PROPERTY UNITS	DESCRIPTION
1		3760102	EX 2" PE '98 MOP 43#
2		3760102	EX 2" PE '89 MOP 43#
3		3800102	2" PE MOP 43# TO BE INSTALLED

RTC NOTES:

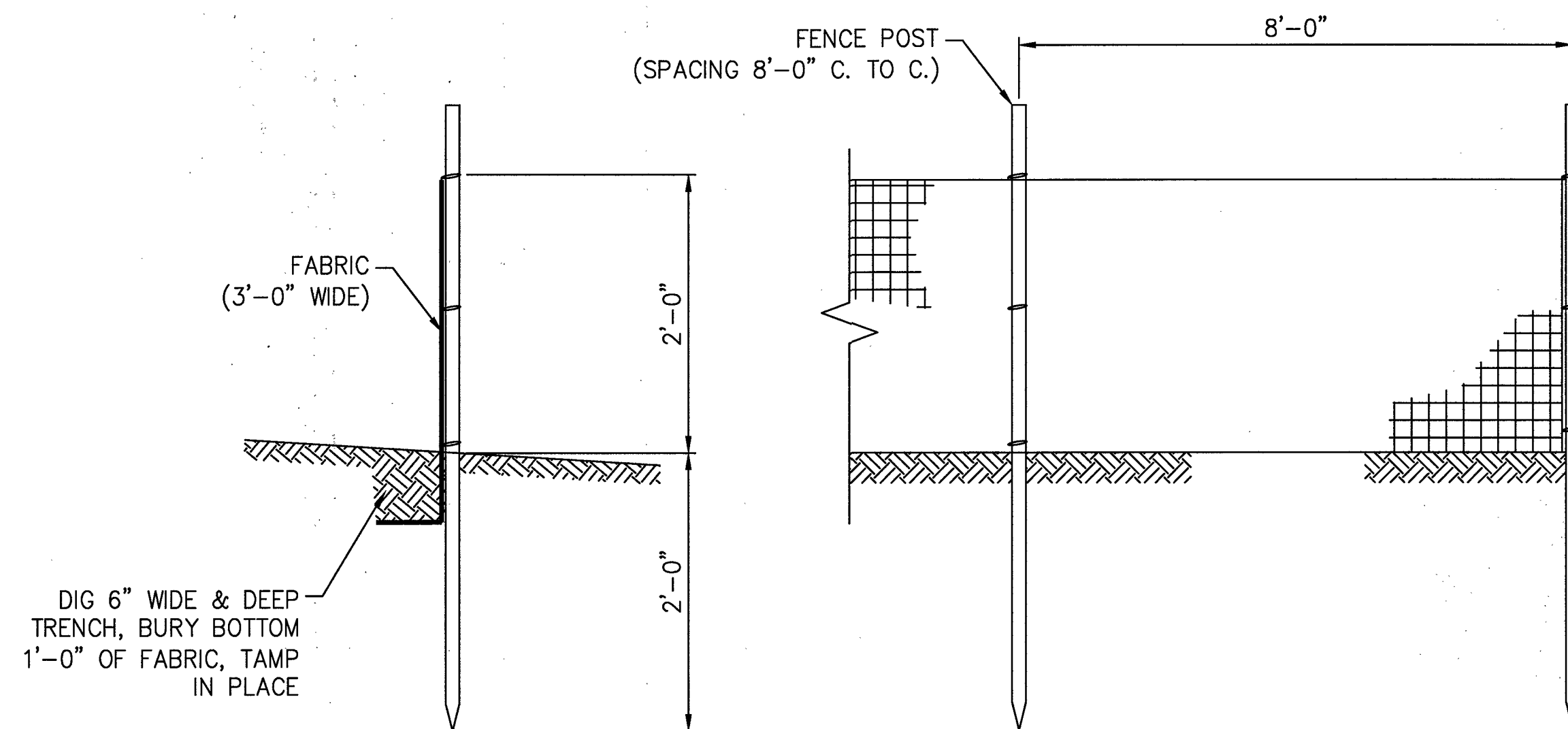
PAVEMENT REPAIR SHALL CONFORM TO RTC:

A1 500.3

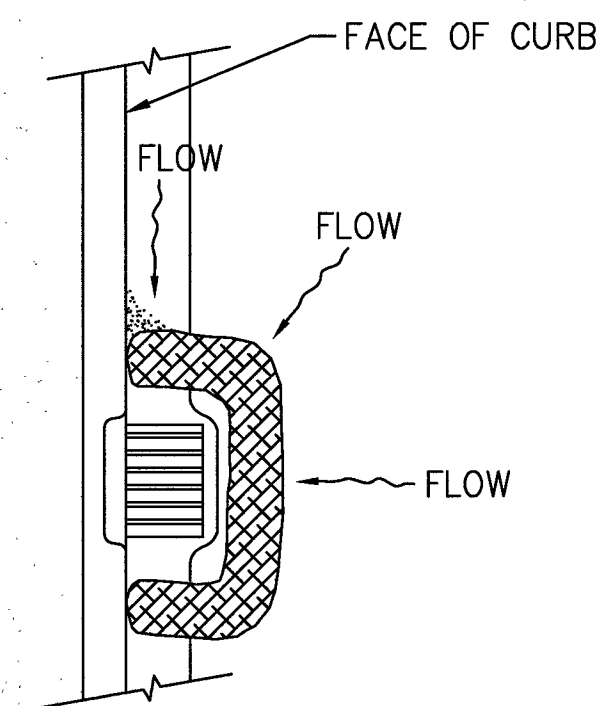
A2 500.5

[illegible]

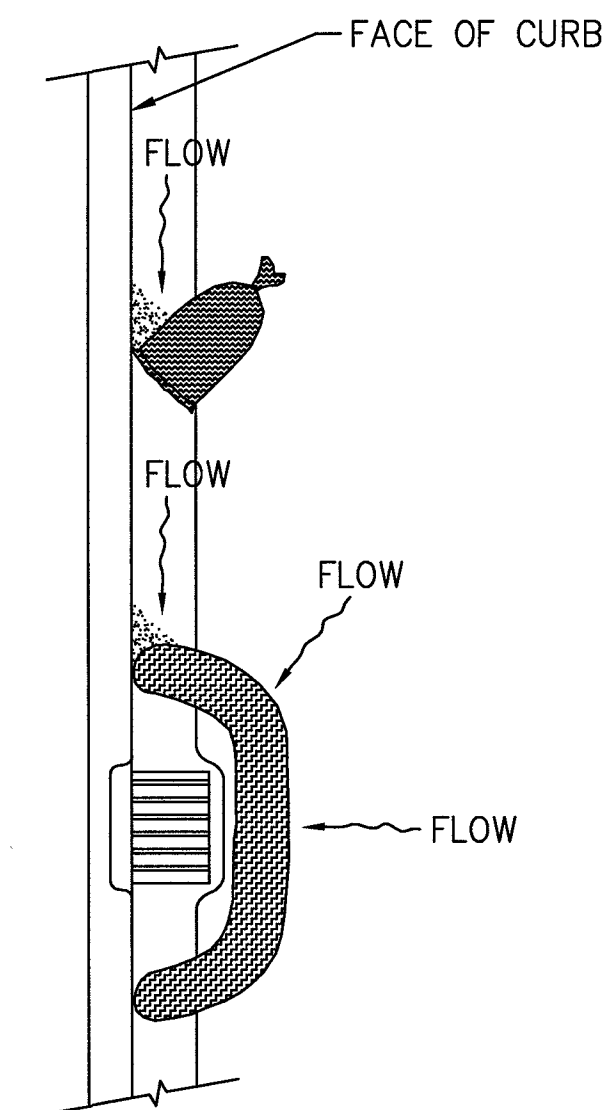
TYPICAL SWPPP BMPs DETAILS



SILT FENCE
NOT TO SCALE

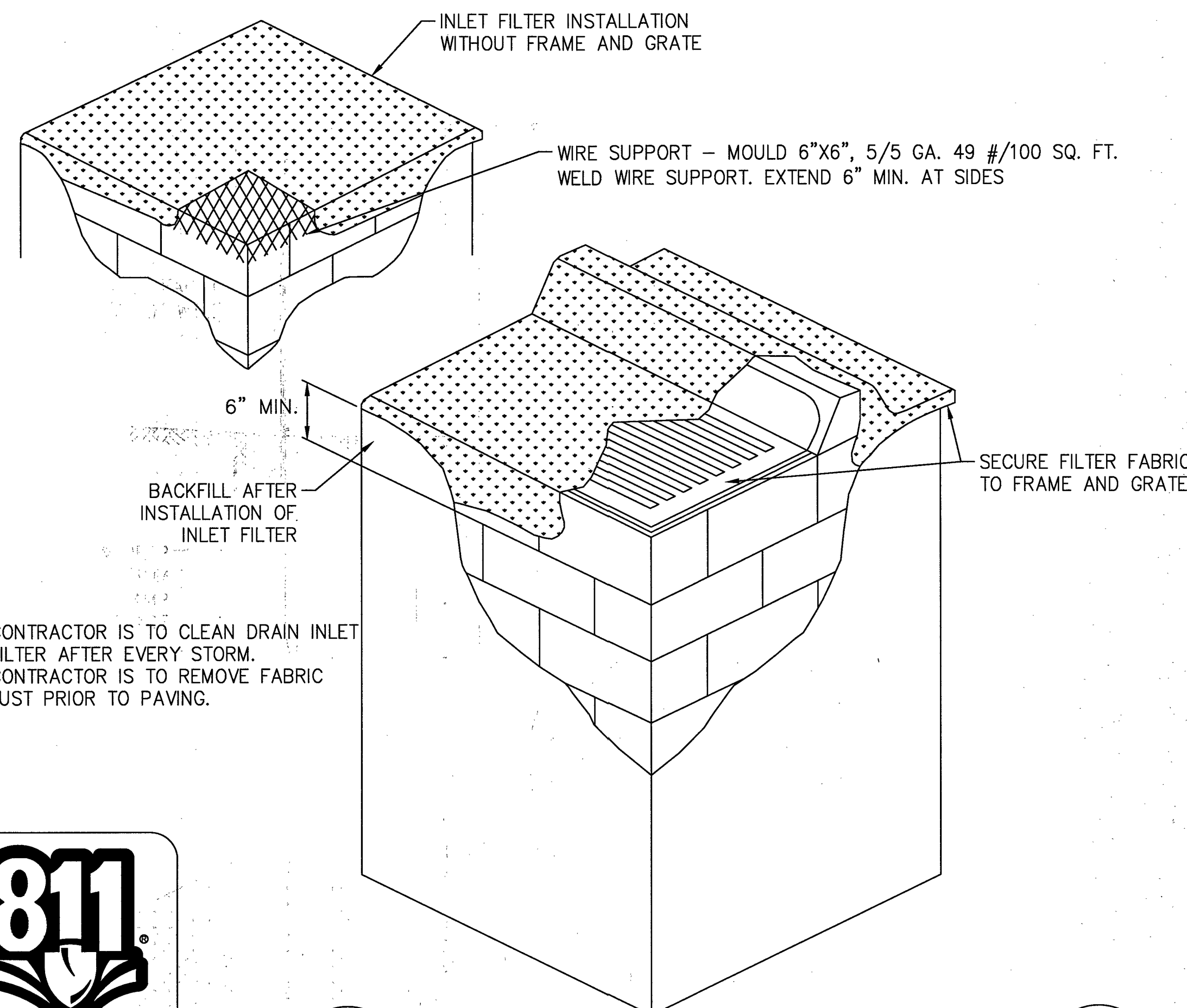


2 FIBER ROLL
7 NOT TO SCALE



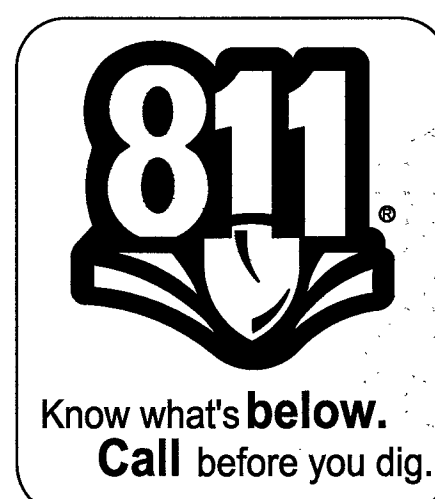
3 SAND BAG / ROLL
7 NOT TO SCALE

- ## STORMWATER NOTES
1. SOUTHWEST GAS CORPORATION, IT'S CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL INSTALL ONE OF THE APPROPRIATE BMPs FOR THE PROTECTION OF EXISTING STORM DRAIN INLETS, WITHIN OR SIGNIFICANTLY NEAR ANY IMPROVED RIGHT-OF-WAY, FROM DEBRIS AND SEDIMENT RESULTING FROM CONSTRUCTION OF NATURAL GAS FACILITIES.
 2. SOUTHWEST GAS CORPORATION, IT'S CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY OF CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM, USING BEST MANAGEMENT PRACTICES DETAILED ON THIS SHEET.
 3. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF SOUTHWEST GAS CORPORATION, IT'S CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE LISTED BMPs ON THIS SHEET DO NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN THE CLARK COUNTY CODE - CHAPTER 24.40/STORM SEWER SYSTEM DISCHARGE AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
 4. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.



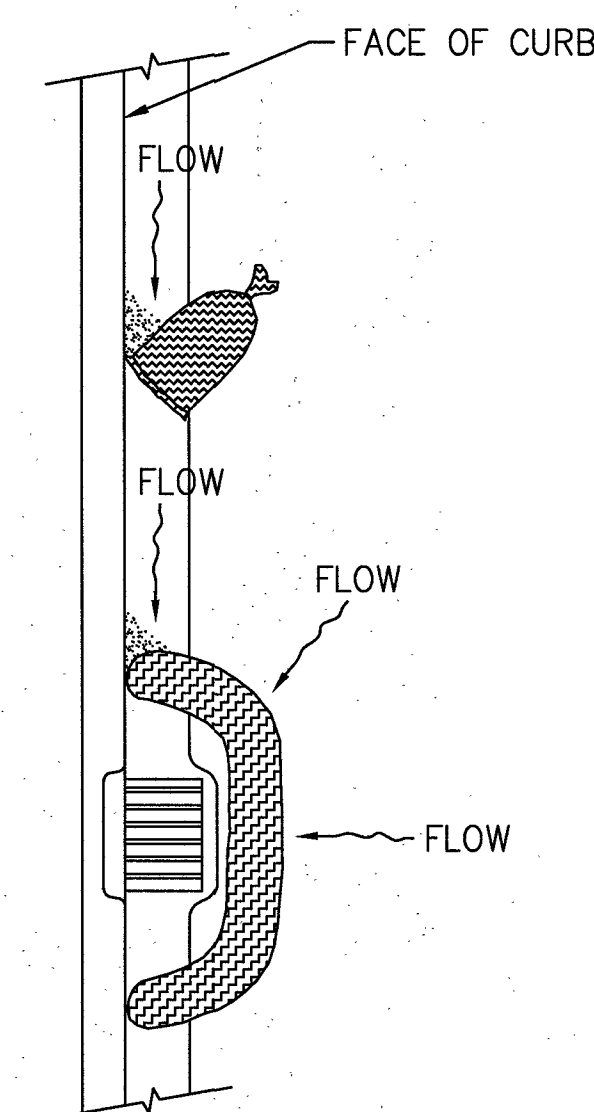
NOTE:

1. CONTRACTOR IS TO CLEAN DRAIN INLET FILTER AFTER EVERY STORM.
2. CONTRACTOR IS TO REMOVE FABRIC JUST PRIOR TO PAVING.

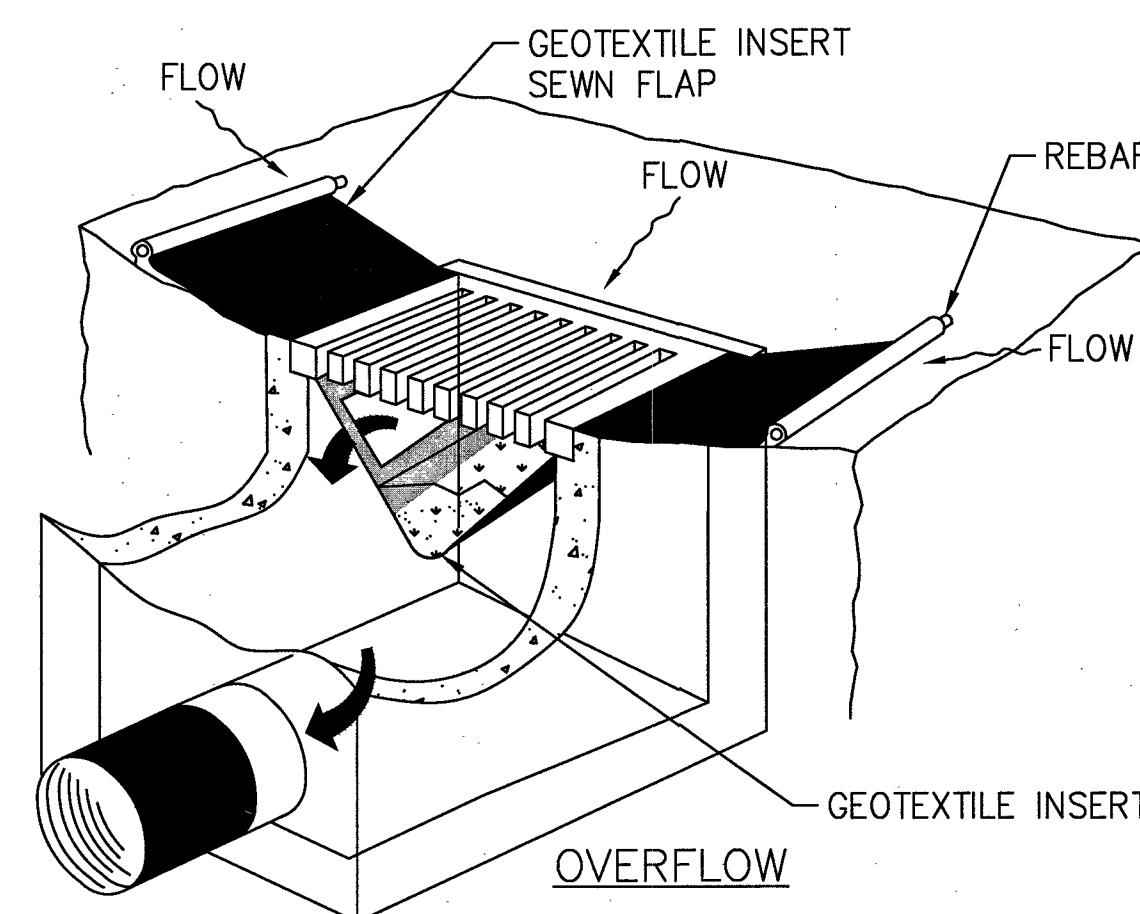
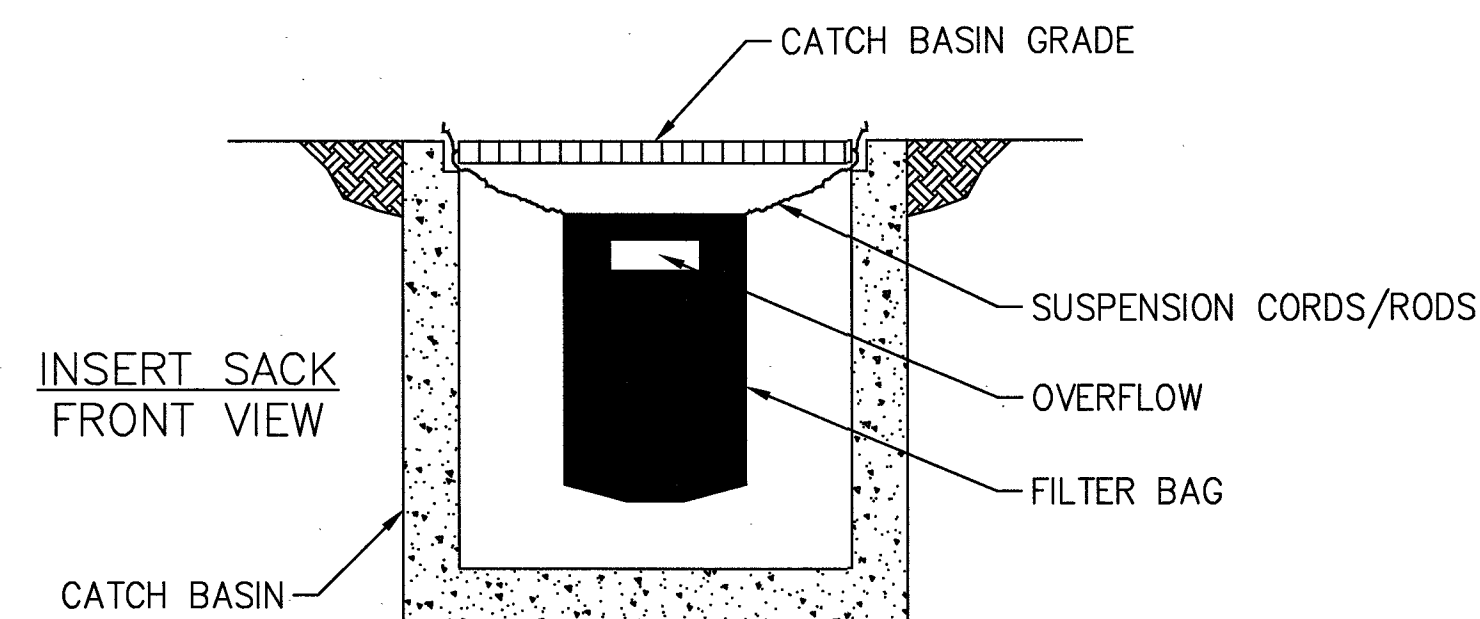


4
7

DRAIN INLET FILTER
NOT TO SCALE



5 GRAVEL BAG / ROLL
7 NOT TO SCALE



NOTE:
RECESSED CURB INLET MUST BE BLOCKED WHEN USING FILTER FABRIC INLET SACKS.
SIZE OF FILTER FABRIC INLET SACK TO BE DETERMINED BY MANUFACTURER.

6 SEDIMENT FILTER BAG
7 NOT TO SCALE

[illegible]