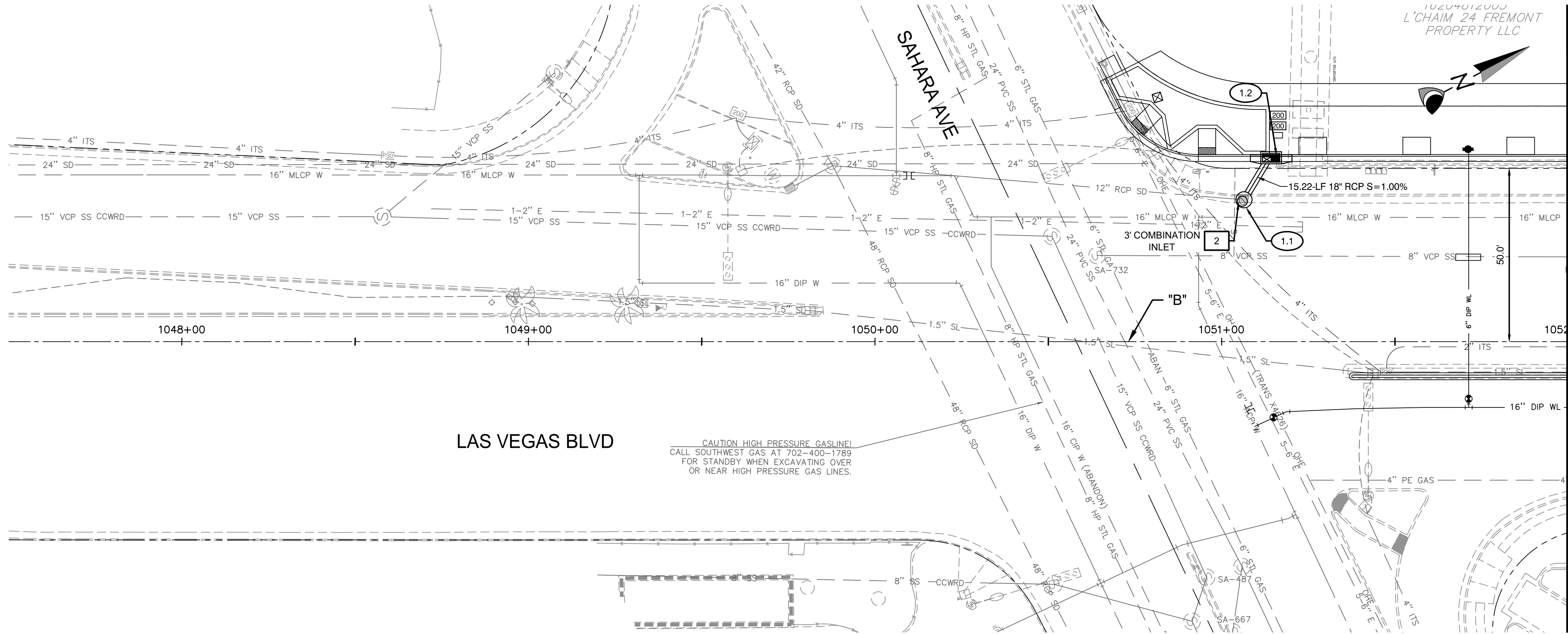




MATCH LINE "B" 1052+ 00.00 SEE SHEET SD-2

CONSTRUCTION NOTES

- 1.1 "B" 1051+06.44, 40.95' LT
CONSTRUCT 48" TYPE IA
SDMH PER USDCCA 404.1
SEE PROFILE 1 ON SD-35
- 1.2 "B" 1051+14.27, 54.00' LT
CONSTRUCT 5' TYPE "DM2"
DI PER PER USDCCA 412.1
W/ 2 GRATES
SEE PROFILE 1 ON SD-38

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY
MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL
NEW DROP INLETS PER USDCCA DWG. NO. 421.

2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF
MANHOLE.

3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL
ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE:
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP
BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE
CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT
STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR
APPROVED EQUAL).

APPROVED FOR CONSTRUCTION

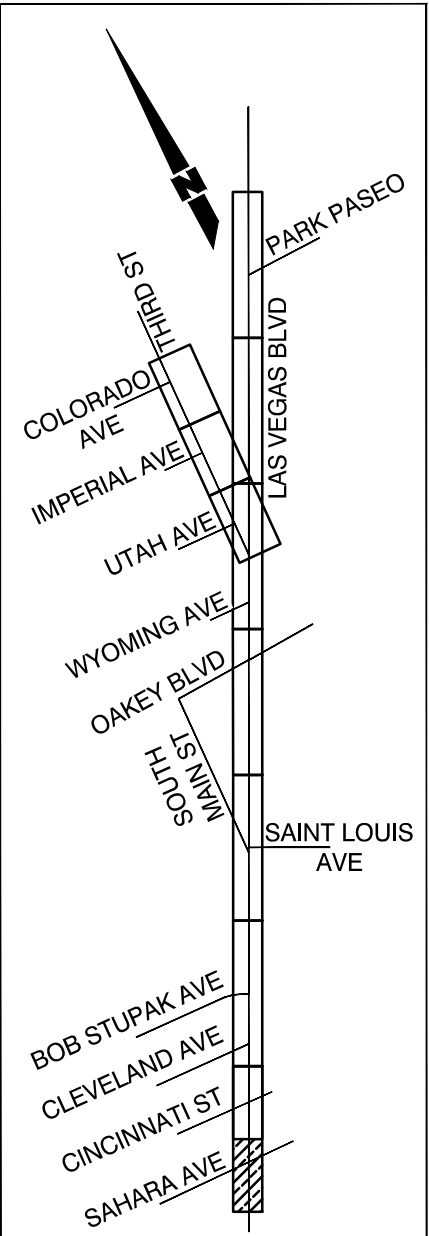
LWWWD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955

CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN
EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

GRAPHIC SCALE
20 0 10 20 40
HORZ 1" = 20' VERT 1" = 4'

CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
	F.A.S.T.	702-432-5300
BEFORE YOU UNDERGROUND	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929



SHEET KEY MAP

PREPARED BY

CA Group, Inc
C A V I O L A A N S O N
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE (702) 685-5945

PREPARED FOR

CITY OF LAS VEGAS

BID# 19-68939

DESIGNED BY: JB

DRAWN BY: JB

CHECKED BY: HM

DATE: 06/27/2019

SUBMITTAL STAGE:
100% SUBMITTAL

TITLE

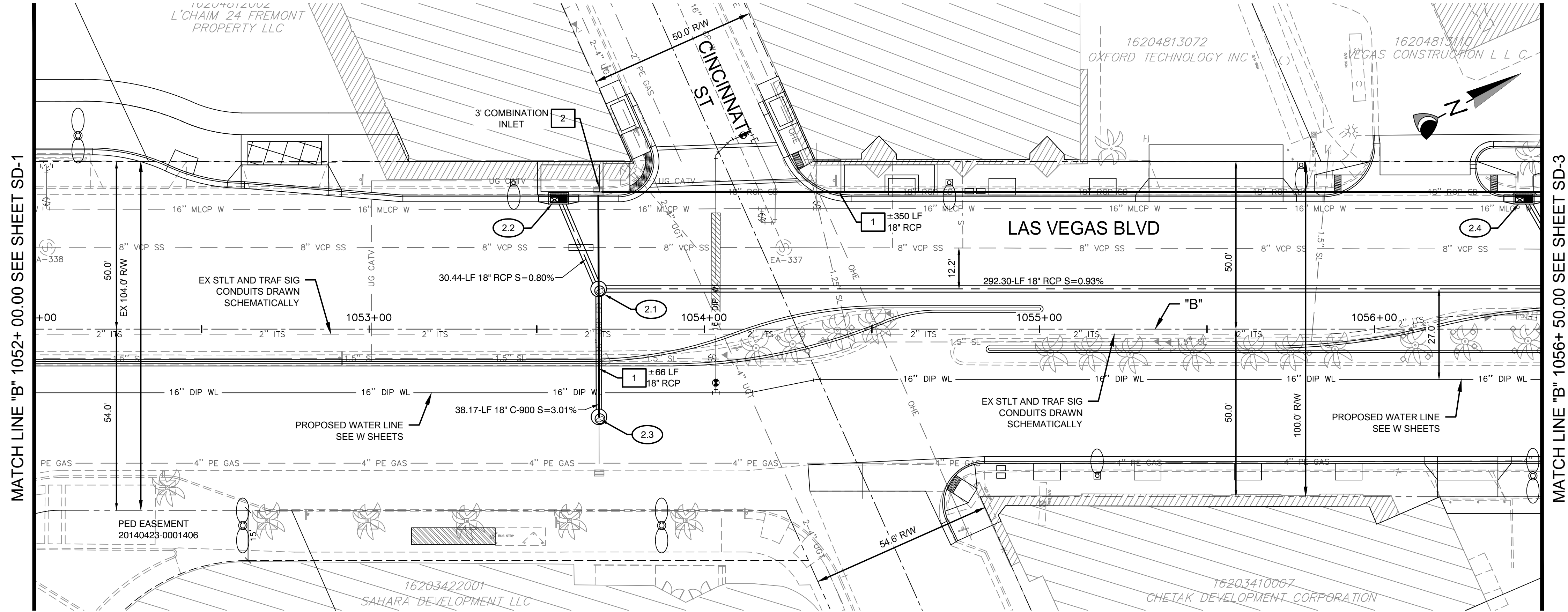
**LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.**

SHEET

**STORM DRAIN PLAN AND PROFILE
"B" 1047+ 50.00 TO "B" 1052+ 00.00**

NOT FOR CONSTRUCTION

SD-1
XX OF
DRAWING NO.
XXXXXXXXX-X



CONSTRUCTION NOTES

- 2.1 "B" 1053+68.47, 12.00' LT
CONSTRUCT 48" TYPE IA
SDMH PER USDOCA 404.1
LID & FRAME PER DETAIL 1, SD-51
- 2.2 "B" 1053+56.53, 40.00' LT
CONSTRUCT 5' TYPE "DM2"
DI PER PER USDOCA 412.1
W/ 2 GRATES
SEE PROFILE 2 ON SD-38
- 2.3 "B" 1053+68.57, 26.17' RT
CONSTRUCT TYPE 1 MOD.
SDMH PER NDOT R-4.3.1
LID & FRAME PER DETAIL 1, SD-51
SEE PROFILE 2 ON SD-38
- 2.4 "B" 1056+44.60, 40.00' LT
CONSTRUCT 5' TYPE "DM2"
DI PER PER USDOCA 412.1
W/ 2 GRATES
SEE PROFILE 3 ON SD-38

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY
MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL
NEW DROP INLETS PER USDOCA DWG. NO. 421.

2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF
MANHOLE.

3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL
ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE:
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP
BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE
CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT
STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR
APPROVED EQUAL).

APPROVED FOR CONSTRUCTION

L\W\W\D ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955

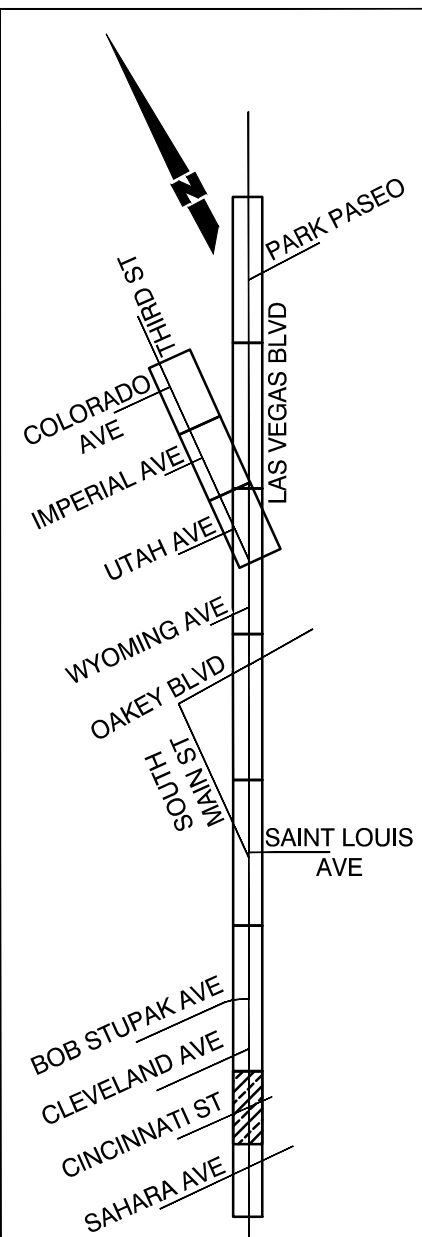
CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN
EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

GRAPHIC SCALE

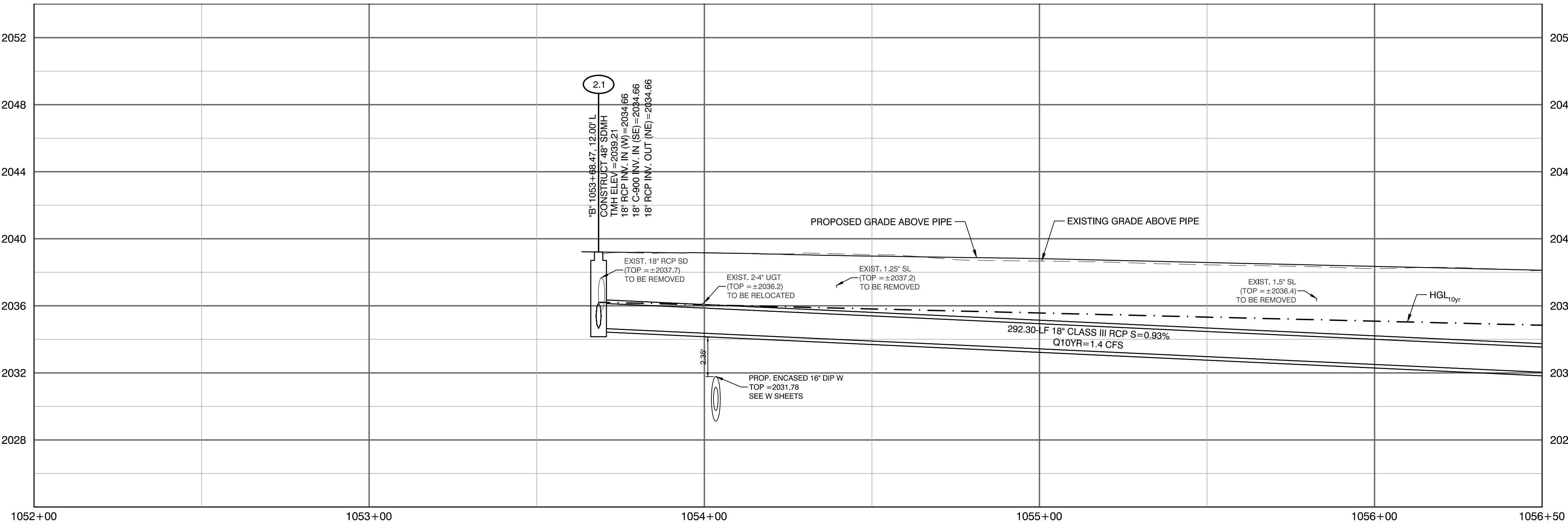


CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929



SHEET KEY MAP



PREPARED BY
CA Group, Inc
C A V I O L A N S O N
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 685-5945

PREPARED FOR
CITY OF LAS VEGAS

BID# 19.68939

DESIGNED BY: JB

DRAWN BY: JB

CHECKED BY: HM

HW 46330

DATE: 06/27/2019

SUBMITTAL STAGE:
100% SUBMITTAL

LAS VEGAS BOULEVARD IMPROVEMENTS

STEWART AVE. TO SAHARA AVE.

SD-2

XX OF

DRAWING NO.
XXXXXXXXX-X

JUNE 2019

100% SUBMITTAL

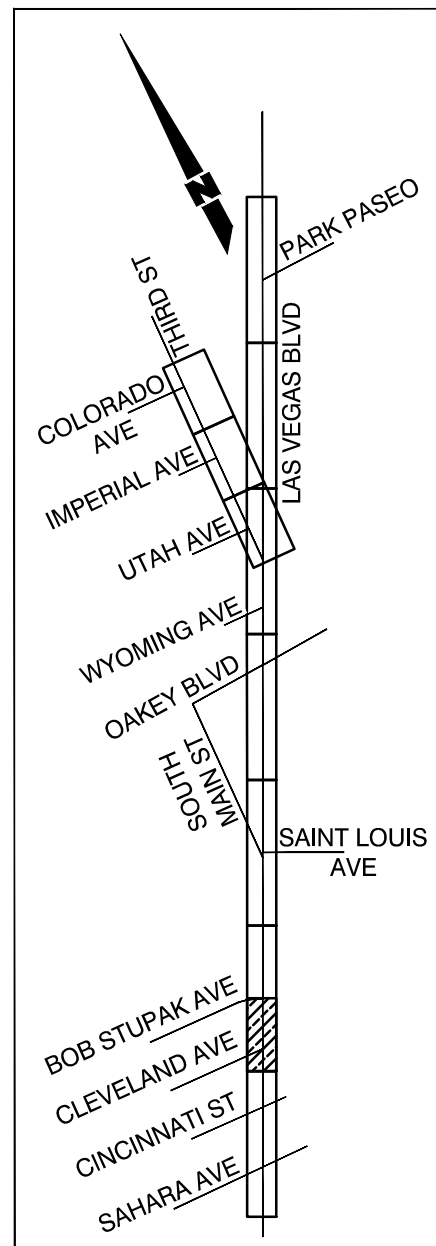
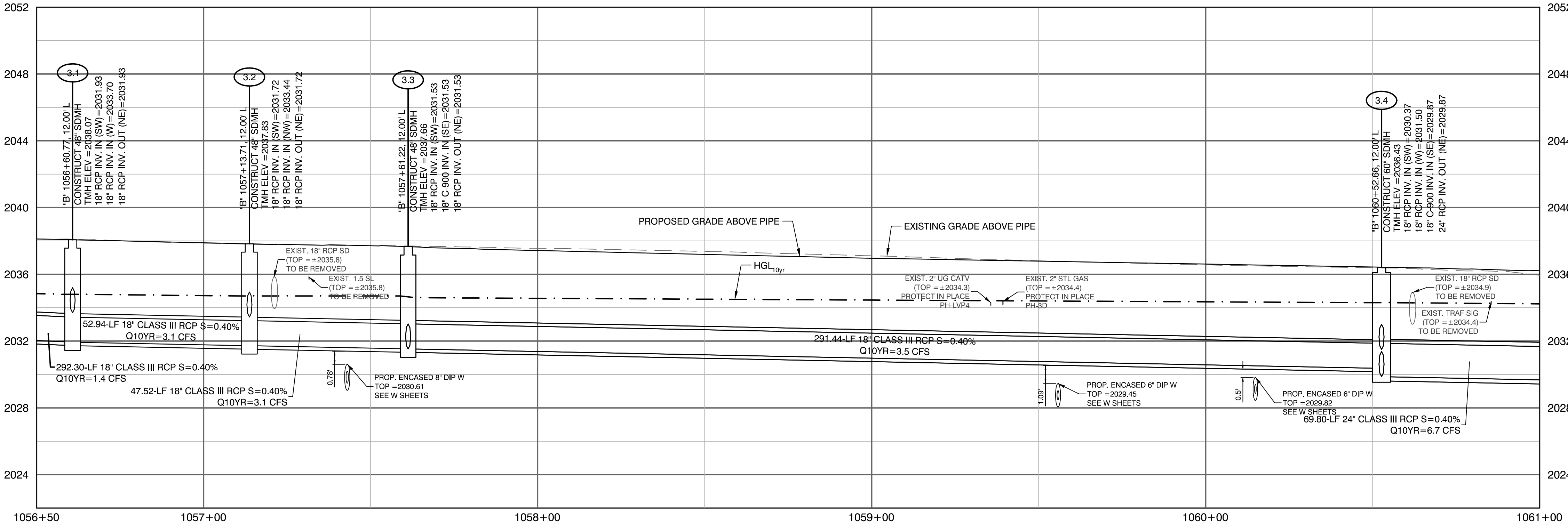
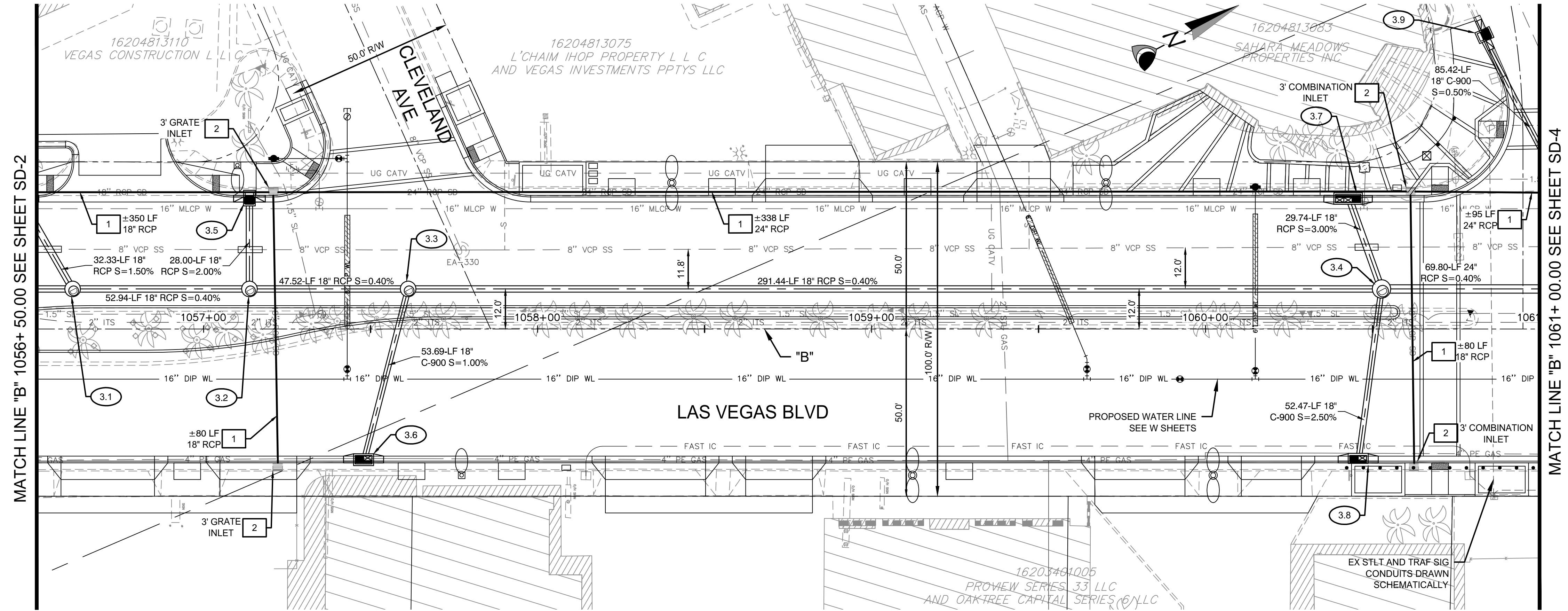
NOT FOR CONSTRUCTION

SHEET

SD-2

OF

DRAWING NO.
XXXXXXXXX-X



CONSTRUCTION NOTES

- 3.1 "B" 1056+60.77, 12.00' LT CONSTRUCT 48" TYPE IA SDMH PER USDOCA 404.1 LID & FRAME PER DETAIL 1, SD-51
- 3.2 "B" 1057+13.71, 12.00' LT CONSTRUCT 48" TYPE IA SDMH PER USDOCA 404.1 LID & FRAME PER DETAIL 1, SD-51
- 3.3 "B" 1057+61.22, 12.00' LT CONSTRUCT 48" TYPE IA SDMH PER USDOCA 404.1 LID & FRAME PER DETAIL 1, SD-51
- 3.4 "B" 1060+52.66, 12.00' LT CONSTRUCT 60" TYPE IA SDMH PER USDOCA 404.1 LID & FRAME PER DETAIL 1, SD-51
- 3.5 "B" 1057+13.71, 40.00' LT CONSTRUCT 2.5' TYPE 3 DI PER PER NDOT R-4.2.3 SEE PROFILE 4 ON SD-38
- 3.6 "B" 1057+47.87, 40.00' RT CONSTRUCT 5' TYPE "DM2" DI PER PER USDOCA 412.1 W/ 2 GRATES SEE PROFILE 5 ON SD-38
- 3.7 "B" 1060+42.65, 40.00' LT CONSTRUCT 7.5' TYPE "DM2" DI PER PER USDOCA 412.1 SEE PROFILE 6 ON SD-38
- 3.8 "B" 1060+45.68, 40.00' RT CONSTRUCT 5' TYPE "CM" DI PER PER USDOCA 422 (1'-8" WIDTH), W/ 2 GRATES SEE PROFILE 6 ON SD-38
- 3.9 "B" 1060+82.72, 87.61' LT CONSTRUCT 2.5' TYPE 3 DI PER PER NDOT R-4.2.3 SEE PROFILE 7 ON SD-38

REMOVAL NOTES

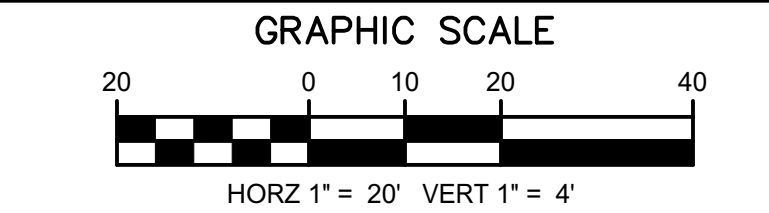
- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL NEW DROP INLETS PER USDOCA DWG. NO. 421.
2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF MANHOLE.
3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE: CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL).

APPROVED FOR CONSTRUCTION

LWWWD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955
CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.



CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929

PREPARED FOR
CITY OF LAS VEGAS

BID# 19.68939
DATE: 06/27/2019
SUBMITTAL STAGE:
100% SUBMITTAL

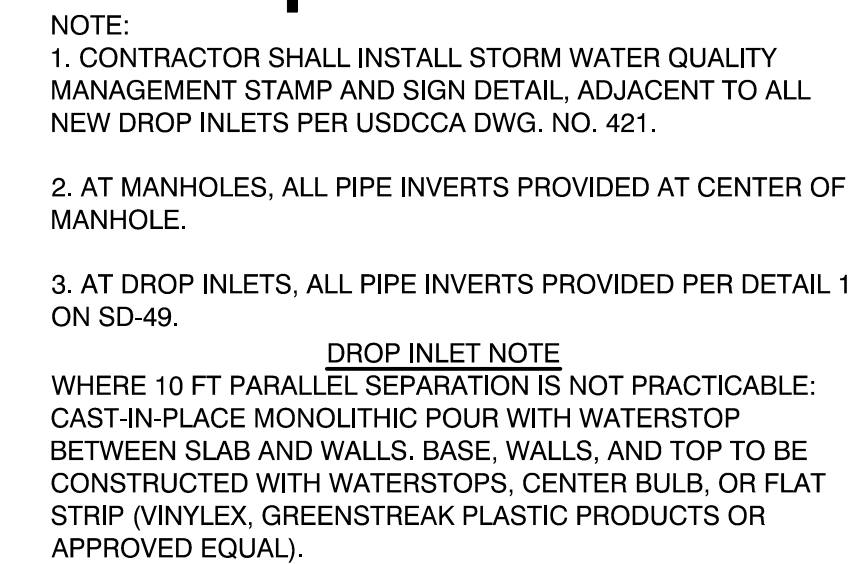
DESIGNED BY: JB
DRAWN BY: JB
CHECKED BY: HM

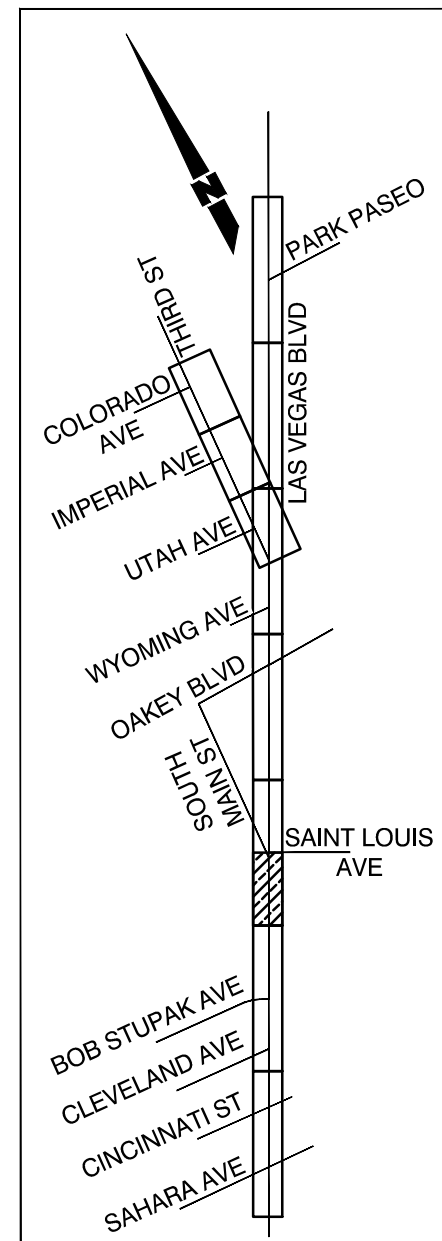
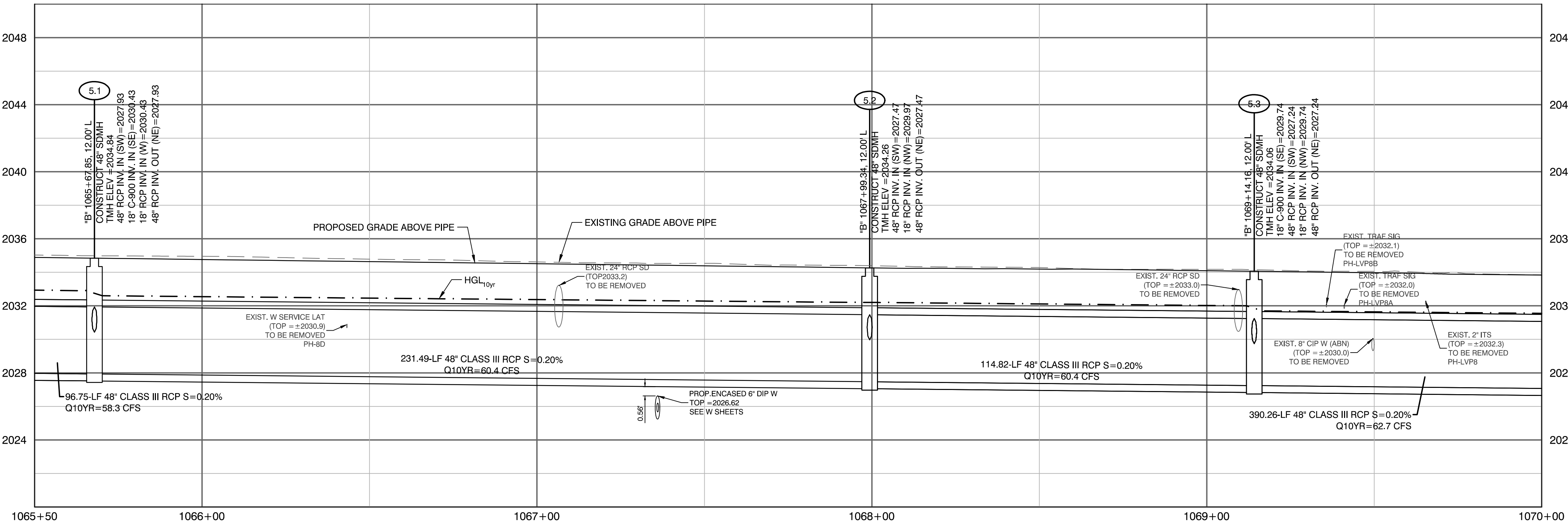
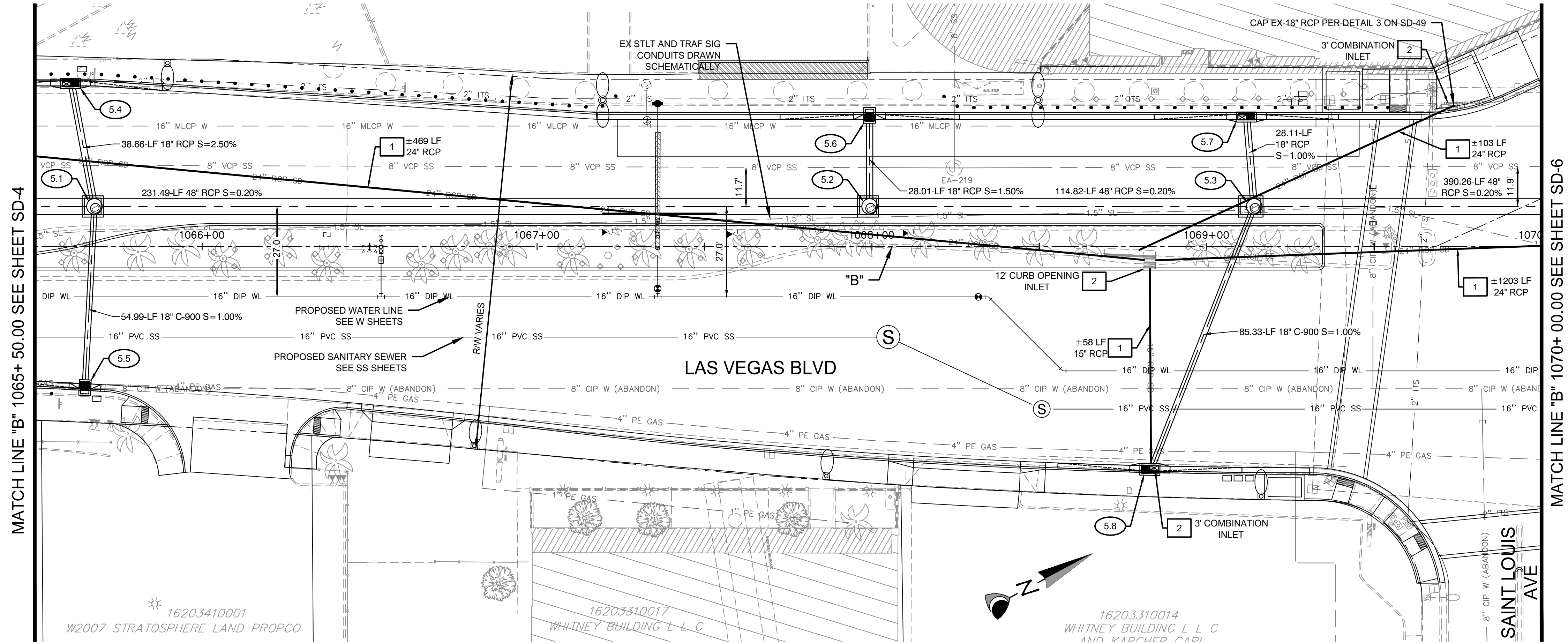
LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.

STORM DRAIN PLAN AND PROFILE
"B" 1056+ 50.00 TO "B" 1061+ 00.00

SD-3
XX OF
DRAWING NO. XXXXXXXX-X

NOT FOR CONSTRUCTION





CONSTRUCTION NOTES

- 5.1 "B" 1065+67.85, 12.00' LT
CONSTRUCT 48" TYPE II
SDMH W/ TYPE IA RISER
PER USDOCA 405.2 AND 404.1
LID & FRAME PER DETAIL 1, SD-51
- 5.2 "B" 1067+99.34, 12.00' LT
CONSTRUCT 48" TYPE II
SDMH W/ TYPE IA RISER
PER USDOCA 405.2 AND 404.1
LID & FRAME PER DETAIL 1, SD-51
- 5.3 "B" 1069+14.16, 12.00' LT
CONSTRUCT 48" TYPE II
SDMH W/ TYPE IA RISER
PER USDOCA 405.2 AND 404.1
LID & FRAME PER DETAIL 1, SD-51
- 5.4 "B" 1065+60.76, 50.00' LT
CONSTRUCT 5" TYPE "CM"
DI PER PER USDOCA 422
(1'-8" WIDTH), W/ 2 GRATES
25' CURB TRANS (BOTH)
SEE PROFILE 13 ON SD-39
- 5.5 "B" 1065+64.96, 42.91' RT
CONSTRUCT 2.5' TYPE 3
DI PER PER NDOT R-4.2.3
25' CURB TRANS (SOUTH)
SEE PROFILE 13 ON SD-39
- 5.6 "B" 1067+99.34, 40.01' LT
CONSTRUCT 2.5' TYPE 3
DI PER PER NDOT R-4.2.3
25' CURB TRANS (BOTH)
SEE PROFILE 14 ON SD-39
- 5.7 "B" 1069+11.80, 40.01' LT
CONSTRUCT 5" TYPE "CM"
DI PER PER USDOCA 422
(1'-8" WIDTH), W/ 2 GRATES
25' CURB TRANS (BOTH)
SEE PROFILE 15 ON SD-40
- 5.8 "B" 1068+83.67, 43' RT
CONSTRUCT 5" TYPE "DM2"
DI PER PER USDOCA 412.1
W/ 2 GRATES
25' CURB TRANS (BOTH)
SEE PROFILE 15 ON SD-40

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

- NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY
MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL
NEW DROP INLETS PER USDOCA DWG. NO. 421.
2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF
MANHOLE.
3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL
ON SD-49.

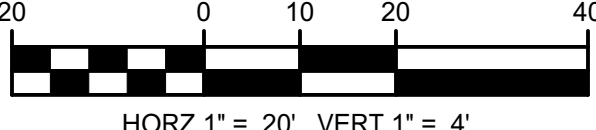
DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE:
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP
BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE
CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT
STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR
APPROVED EQUAL).

APPROVED FOR CONSTRUCTION

LWWWD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955

CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN
EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

GRAPHIC SCALE



CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929

PREPARED BY
CA Group, Inc
CAVIOLA ANSON
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 685-5945

DESIGNED BY: JB
DRAWN BY: JB
CHECKED BY: HM

DATE: 06/27/2019
SUBMITTAL STAGE:
100% SUBMITTAL

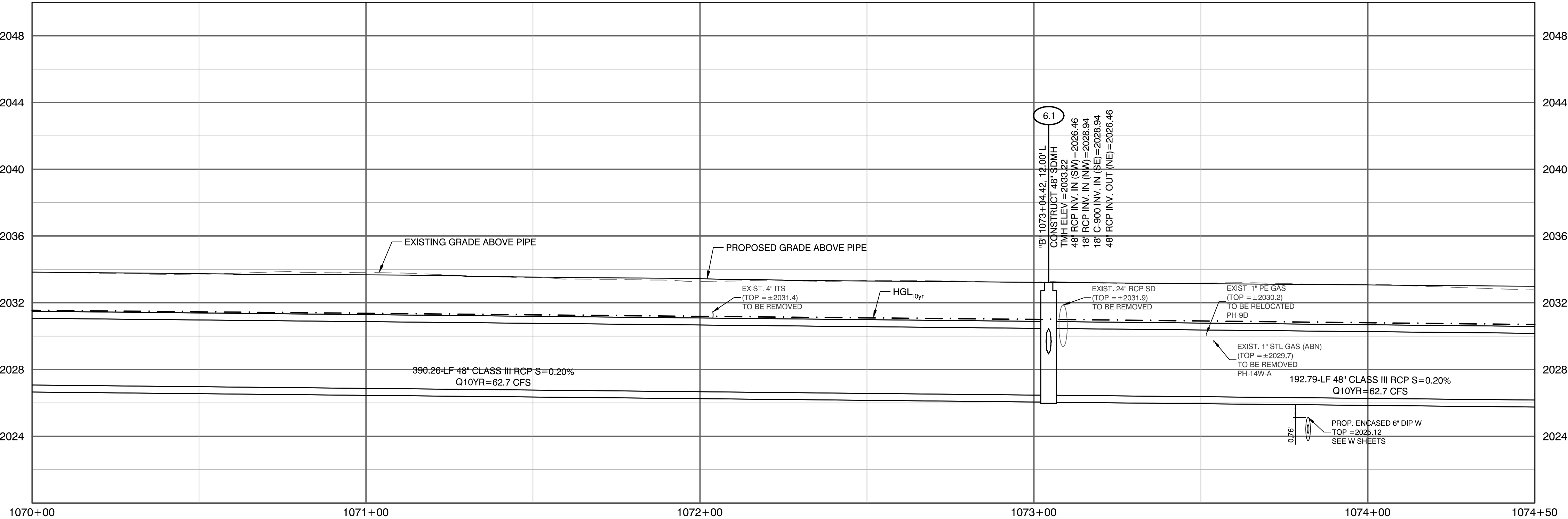
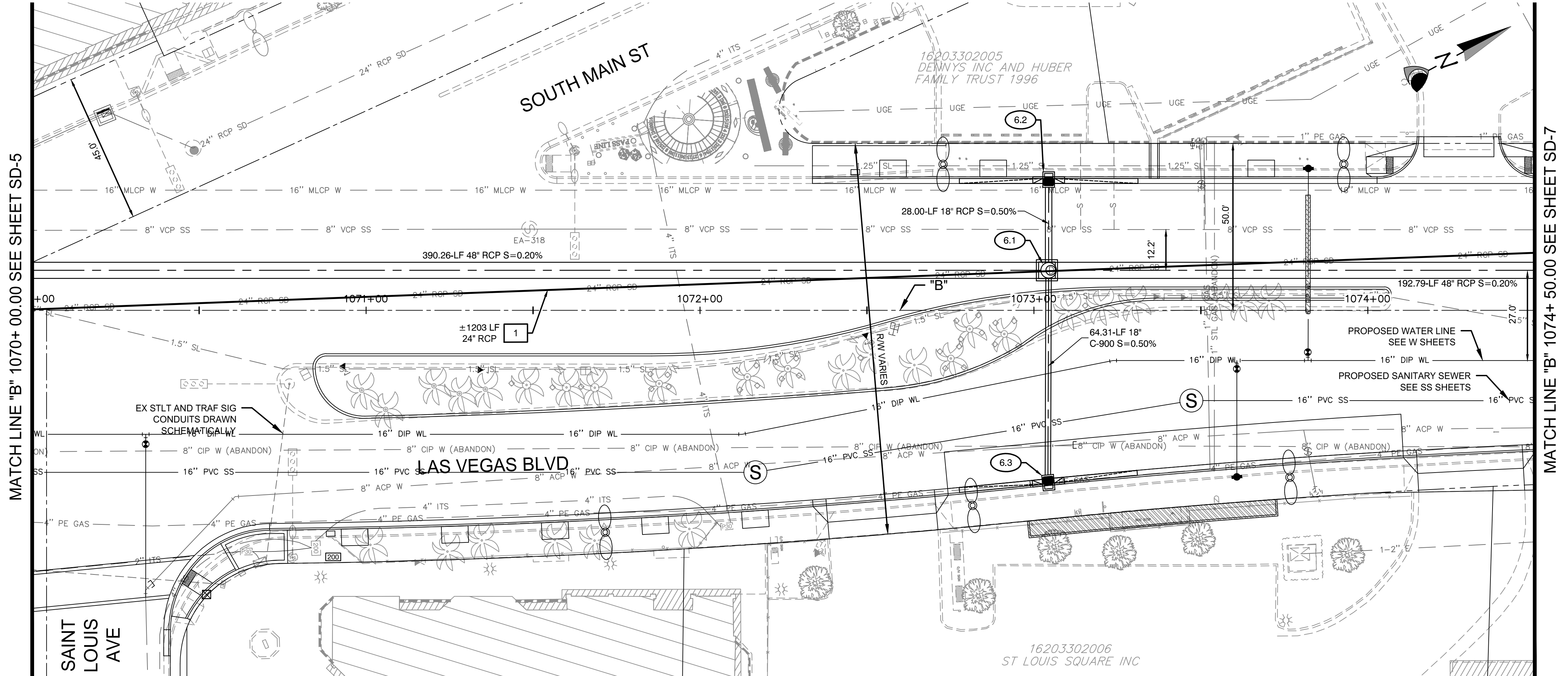
CITY OF LAS VEGAS

LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.

STORM DRAIN PLAN AND PROFILE
"B" 1065+ 50.00 TO "B" 1070+ 00.00

SD-5
XX OF
XXXXXXX-X

DATE: 06/27/2019
BY: [Signature]
NOT FOR CONSTRUCTION



CONSTRUCTION NOTES

- 6.1 "B" 1073+04.42, 12.00' LT
CONSTRUCT 48" TYPE II
SDMH W/ TYPE IA RISER
PER USDOCA 405.2 AND 404.1
LID & FRAME PER DETAIL 1, SD-51
- 6.2 "B" 1073+04.42, 40.00' LT
CONSTRUCT 2.5' TYPE 3
DI PER PER NDOT R-4.2.3
25' CURB TRANS (BOTH)
SEE PROFILE 16 ON SD-40
- 6.3 "B" 1073+04.42, 52.43' RT
CONSTRUCT 2.5' TYPE 3
DI PER PER NDOT R-4.2.3
25' CURB TRANS (BOTH)
SEE PROFILE 16 ON SD-40

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY
MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL
NEW DROP INLETS PER USDOCA DWG. NO. 421.

2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF
MANHOLE.

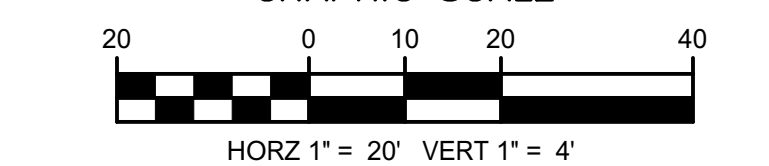
3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL
ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE:
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP

APPROVED FOR CONSTRUCTION

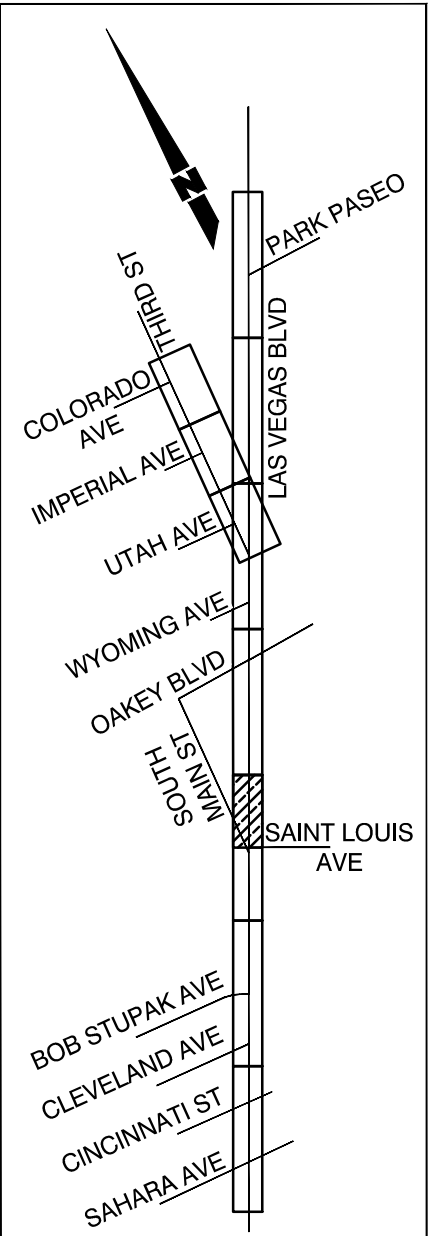
LWWWD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955

GRAPHIC SCALE



CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929



SHEET KEY MAP

PREPARED BY
CA Group, Inc.
C A V I O L A N S O N
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 655-5945

CITY OF LAS VEGAS

BID# 19.68939

DESIGNED BY: JB

DRAWN BY: JB

CHECKED BY: HM

DATE: 06/27/2019

SUBMITTAL STAGE:

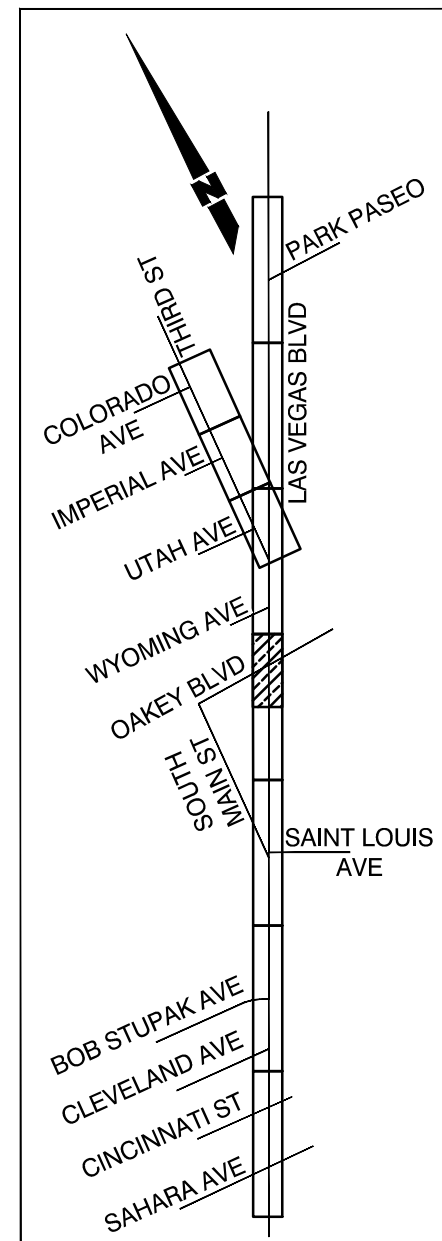
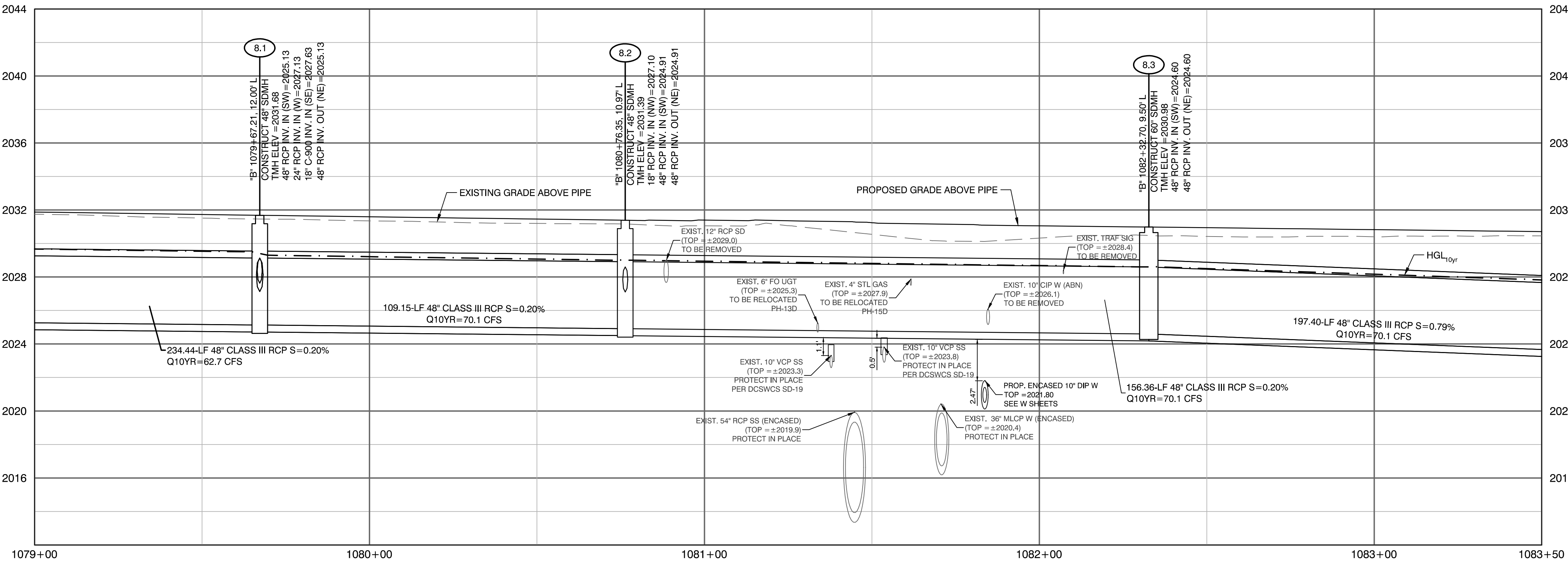
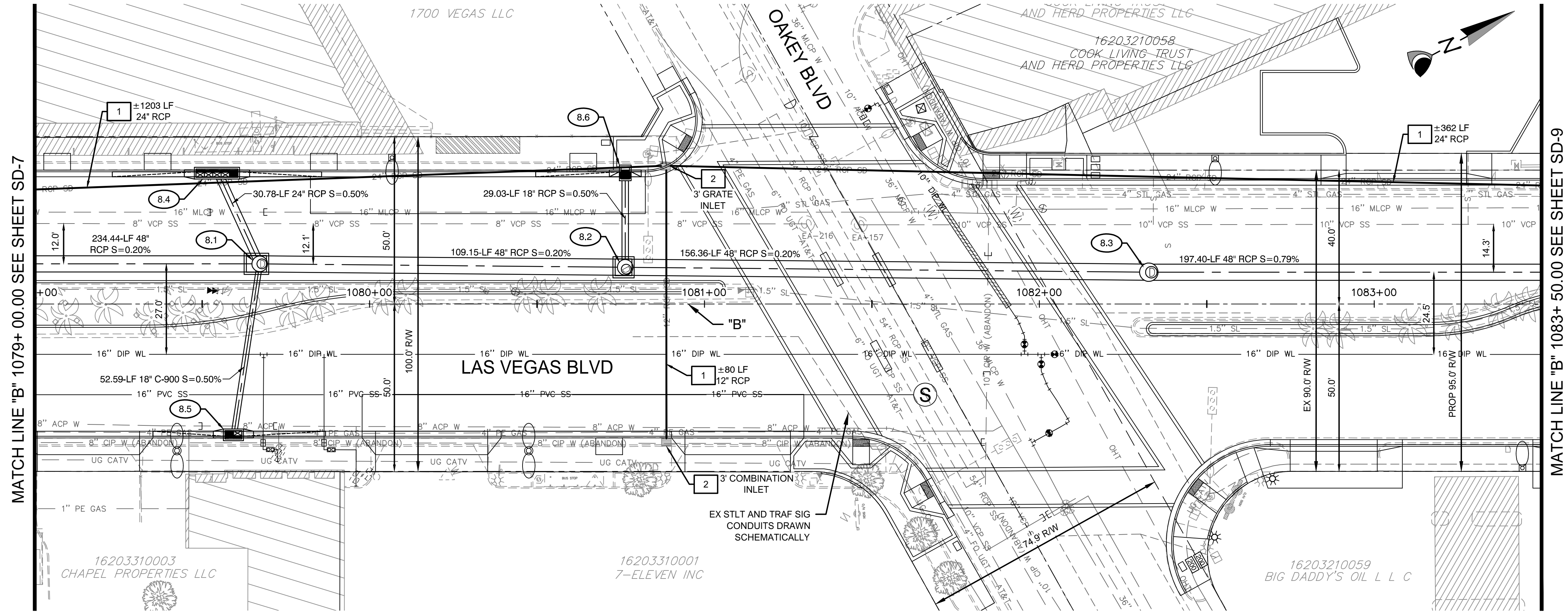
100% SUBMITTAL

TITLE
**LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.**

SHEET
**STORM DRAIN PLAN AND PROFILE
"B" 1070+ 00.00 TO "B" 1074+ 50.00**

SD-6
XX OF
DRAWING NO.
XXXXXXXXX-X

SD-6
XX OF
DRAWING NO.
XXXXXXXXX-X



CONSTRUCTION NOTES

- 8.1 "B" 1079+67.21, 12.00' LT CONSTRUCT 48" TYPE II SDMH W/ TYPE IA RISER PER USDCCA 405.2 AND 404.1 LID & FRAME PER DETAIL 1, SD-51
- 8.2 "B" 1080+76.35, 10.97' LT CONSTRUCT 48" TYPE II SDMH W/ TYPE IA RISER PER USDCCA 405.2 AND 404.1 LID & FRAME PER DETAIL 1, SD-51
- 8.3 "B" 1082+32.70, 9.50' LT CONSTRUCT 60" TYPE III SDMH W/ TYPE IA RISER PER USDCCA 406.1 AND 404.1 LID & FRAME PER DETAIL 1, SD-51
- 8.4 "B" 1079+54.42, 40.00' LT CONSTRUCT 12.5' TYPE "DM2" DI PER PER USDCCA 412.1 25' CURB TRANS (BOTH) SEE PROFILE 19 ON SD-40
- 8.5 "B" 1079+59.34, 40.00' RT CONSTRUCT 5' TYPE "DM2" DI PER PER USDCCA 412.1 W/ 2 GRATES 25' CURB TRANS (BOTH) SEE PROFILE 19 ON SD-40
- 8.6 "B" 1080+76.35, 40.00' LT CONSTRUCT 2.5' TYPE 3 DI PER PER NDOT R-4.2.3 25' CURB TRANS (SOUTH) SEE PROFILE 20 ON SD-40

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL NEW DROP INLETS PER USDCCA DWG. NO. 421.

- 2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF MANHOLE.
- 3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL 1 ON SD-49.

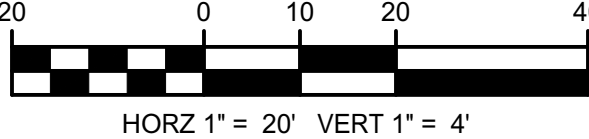
DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE: CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS. CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL).

APPROVED FOR CONSTRUCTION

LWWWD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955

CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

GRAPHIC SCALE



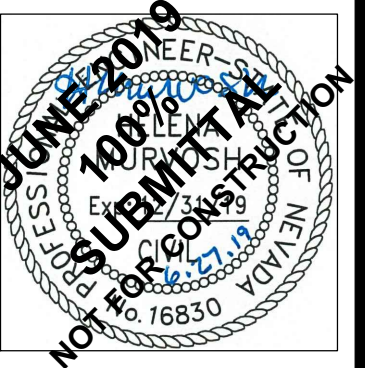
CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929

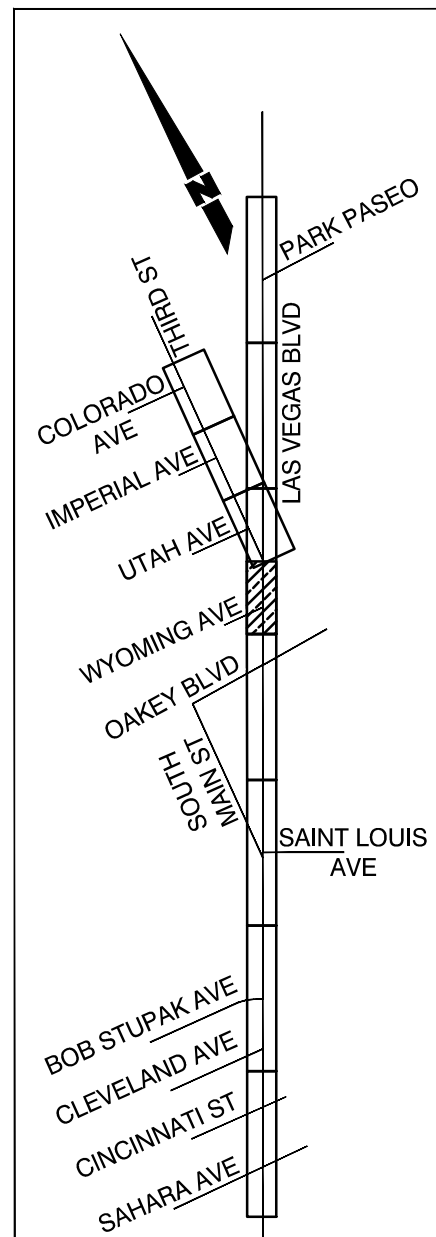
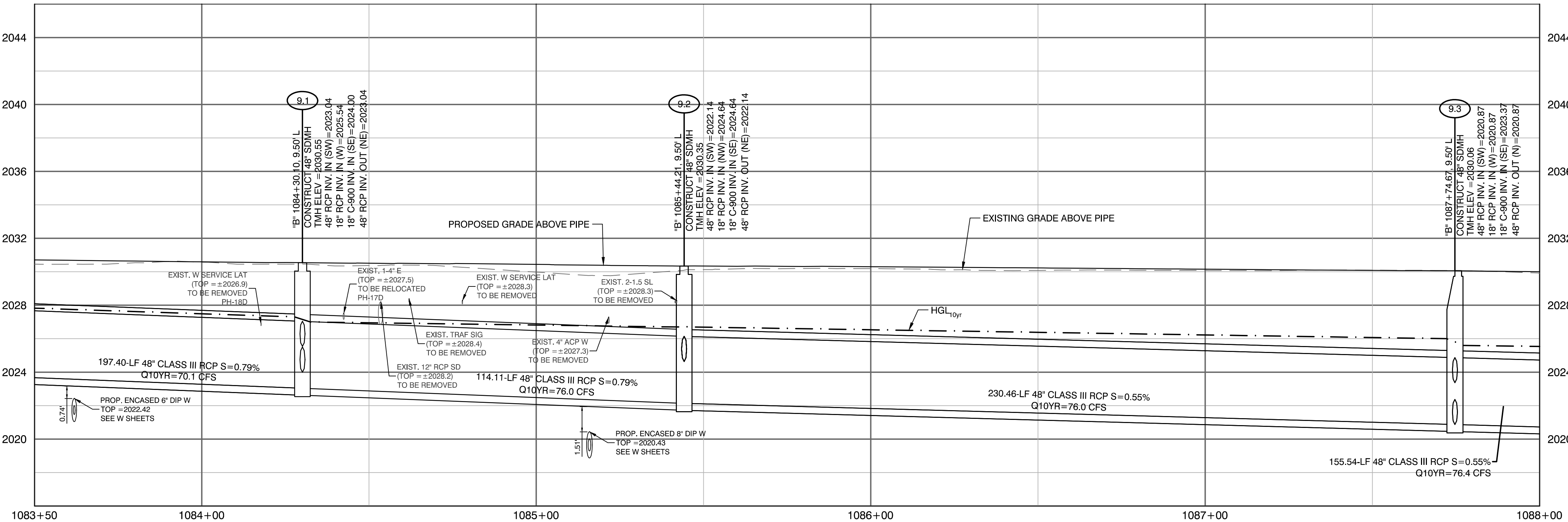
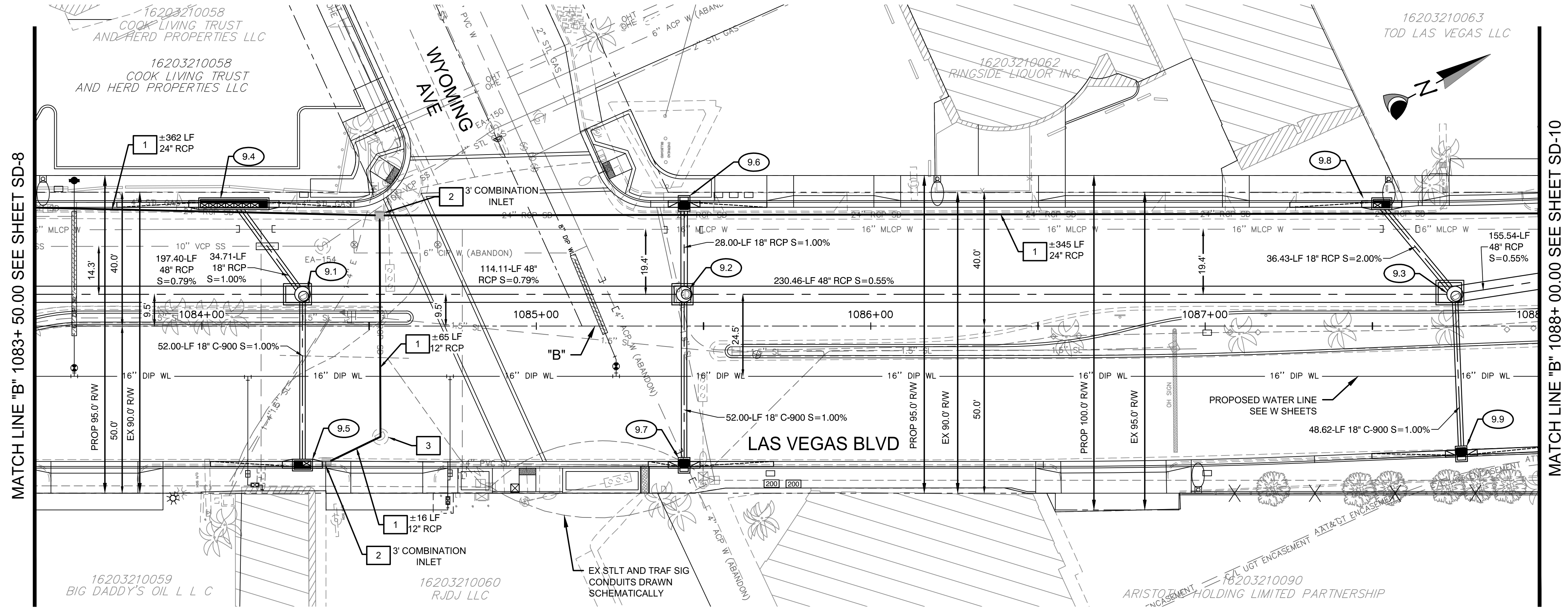
PREPARED BY	 CA Group, Inc. CAVIOLA ANSON									
DESIGNED BY	2785 S. RAINBOW BLVD.									
DRAWN BY	LAS VEGAS, NV 89146									
CHECKED BY	PHONE: (702) 685-5845									
NO.	DATE	REVISIONS								
		</								

PREPARED FOR	CITY OF LAS VEGAS
BID#	19.68939
DATE	06/27/2019
SUBMITTAL STAGE	100% SUBMITTAL

TITLE	LAS VEGAS BOULEVARD IMPROVEMENTS STEWART AVE. TO SAHARA AVE.
SHEET	SD-8
STORM DRAIN PLAN AND PROFILE	"B" 1079+ 00.00 TO "B" 1083+ 50.00



SHEET	SD-8
XX OF	XX
DRAWING NO.	XXXXXXX-XX



CONSTRUCTION NOTES

- 9.1 "B" 1084+30.10, 9.50' LT
CONSTRUCT 48" TYPE II
SDMH W/ TYPE IA RISER
PER USDOCA 405.2 AND 404.1
LID & FRAME PER DETAIL 1, SD-51
- 9.2 "B" 1085+44.21, 9.50' LT
CONSTRUCT 48" TYPE II
SDMH W/ TYPE IA RISER
PER USDOCA 405.2 AND 404.1
LID & FRAME PER DETAIL 1, SD-51
- 9.3 "B" 1087+74.67, 9.50' LT
CONSTRUCT 48" TYPE II
SDMH PER USDOCA 405.2
LID & FRAME PER DETAIL 1, SD-51
- 9.4 "B" 1084+09.59, 37.50' LT
CONSTRUCT 20" TYPE "DM2"
DI PER PER USDOCA 412.1
25' CURB TRANS (BOTH)
SEE PROFILE 21 ON SD-41
- 9.5 "B" 1084+30.10, 42.50' RT
CONSTRUCT 5" TYPE "DM2"
DI PER PER USDOCA 412.1
W/ 2 GRATES
25' CURB TRANS (SOUTH)
SEE PROFILE 21 ON SD-41
- 9.6 "B" 1085+44.21, 37.50' LT
CONSTRUCT 2.5" TYPE 3
DI PER PER NDOT R-4.2.3
SEE PROFILE 22 ON SD-41
- 9.7 "B" 1085+44.21, 42.50' RT
CONSTRUCT 2.5" TYPE 3
DI PER PER NDOT R-4.2.3
25' CURB TRANS (BOTH)
SEE PROFILE 22 ON SD-41
- 9.8 "B" 1087+52.82, 37.50' LT
CONSTRUCT 5" TYPE "DM2"
DI PER PER USDOCA 412.1
W/ 2 GRATES
25' CURB TRANS (SOUTH)
SEE PROFILE 23 ON SD-41
- 9.9 "B" 1087+76.64, 39.08' RT
CONSTRUCT 2.5" TYPE 3
DI PER PER NDOT R-4.2.3
25' CURB TRANS (BOTH)
SEE PROFILE 23 ON SD-41

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY
MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL
NEW DROP INLETS PER USDOCA DWG. NO. 421.

2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF
MANHOLE.

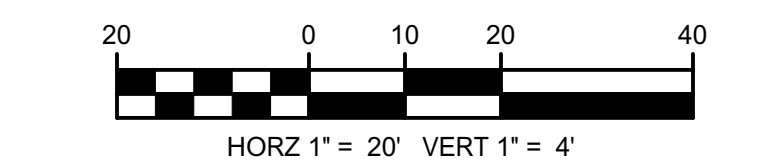
3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL
ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE:
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP
BETWEEN SLAB AND WALLS, BASE, WALLS, AND TOP TO BE
CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT
STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR FLAT
APPROVED EQUAL).

APPROVED FOR CONSTRUCTION

LWWWD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955

GRAPHIC SCALE



CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929

PREPARED BY
CITY OF LAS VEGAS
H# 46330
DATE: 06/27/2019
SUBMITTAL STAGE:
100% SUBMITTAL

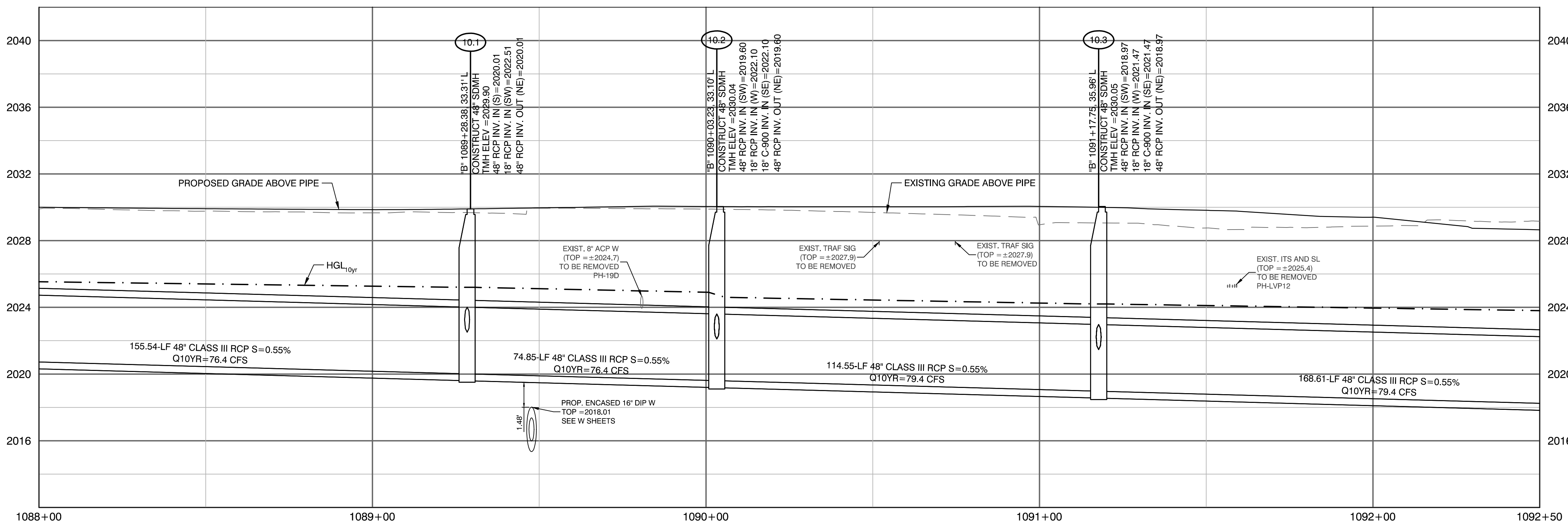
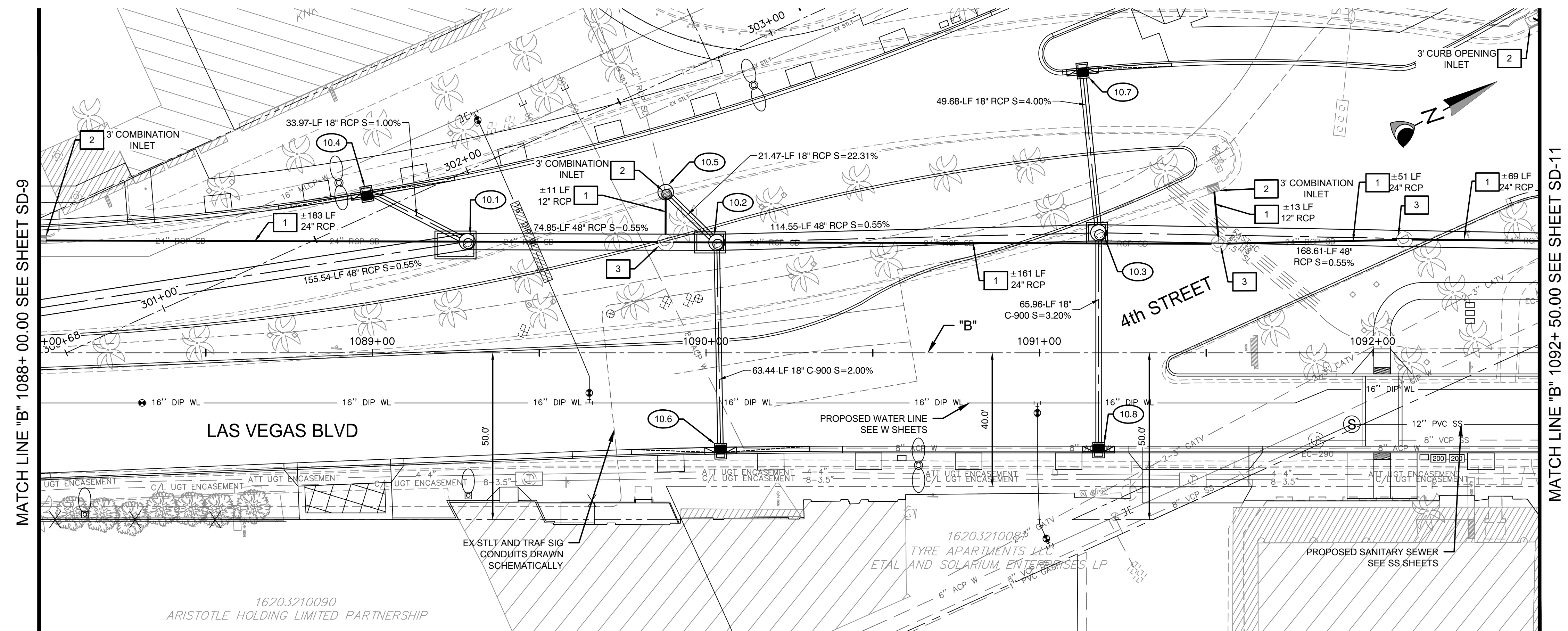
BID# 19.68939
DESIGNED BY: JB
DRAWN BY: JB
CHECKED BY: HM

LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.

STORM DRAIN PLAN AND PROFILE
"B" 1083+ 50.00 TO "B" 1088+ 00.00

SD-9
XX OF
DRAWING NO.
XXXXXXXXX-X

NOT FOR CONSTRUCTION
JUNE 2019
100% SUBMITTAL
CITY OF LAS VEGAS
702-229-6611



CONSTRUCTION NOTES

- (10.1) "B" 1089+28.38, 33.31' LT
CONSTRUCT 48" TYPE II
SDMH PER USDOCA 405.2
LID & FRAME PER DETAIL 1, SD-51
- (10.2) "B" 1090+03.23, 33.10' LT
CONSTRUCT 48" TYPE II
SDMH PER USDOCA 405.2
LID & FRAME PER DETAIL 1, SD-51
- (10.3) "B" 1091+17.75, 35.96' LT
CONSTRUCT 48" TYPE II
SDMH PER USDOCA 405.2
LID & FRAME PER DETAIL 1, SD-51
- (10.4) "B" 1088+98.16, 48.43' LT
CONSTRUCT 2.5' TYPE 3
DI PER PER NDOT R-4.2.3
A=2.5' & J=3.5'
25 CURB TRANS (BOTH)
SEE PROFILE 24 ON SD-41
- (10.5) "B" 1089+87.91, 48.13' LT
CONSTRUCT TYPE 1 MOD.
SDMH PER NDOT R-4.3.1
LID & FRAME PER DETAIL 1, SD-51
SEE PROFILE 25 ON SD-41
- (10.6) "B" 1090+04.39, 30.33' RT
CONSTRUCT 2.5' TYPE 3
DI PER PER NDOT R-4.2.3
25 CURB TRANS (BOTH)
SEE PROFILE 25 ON SD-41
- (10.7) "B" 1091+12.83, 85.40' LT
CONSTRUCT 2.5' TYPE 3
DI PER PER NDOT R-4.2.3
25 CURB TRANS (NORTH)
SEE PROFILE 26 ON SD-41
- (10.8) "B" 1091+17.75, 30.00' RT
CONSTRUCT 2.5' TYPE 3
DI PER PER NDOT R-4.2.3
SEE PROFILE 26 ON SD-41

REMOVAL NOTES

- | | |
|---|--------------------------------------|
| 1 | REMOVE EXISTING STORM DRAIN PIPE. |
| 2 | REMOVE EXISTING STORM DRAIN INLET. |
| 3 | REMOVE EXISTING STORM DRAIN MANHOLE. |
| 4 | ABANDON EXISTING STORM DRAIN PIPE. |

NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY
MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL
NEW DROP INLETS PER USDCCA DWG. NO. 421.

2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF MANHOLE.

3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE:
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP
BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE
CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLA
STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR
APPROVED EQUAL).

APPROVED FOR CONSTRUCTION

LVVWD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955

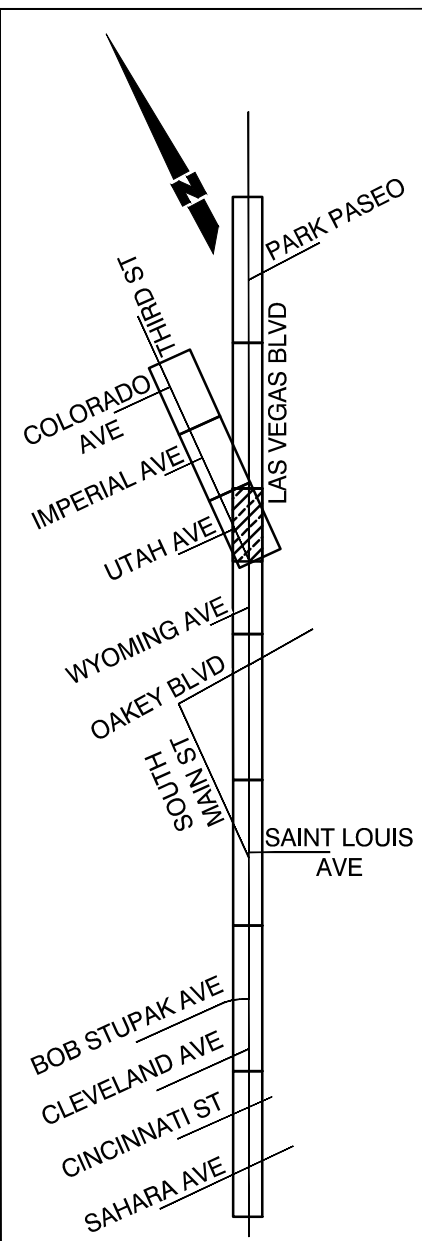
GRAPHIC SCALE



HORIZ 1" = 20' VERT 1" = 4'

CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929



SHEET KEY MAP

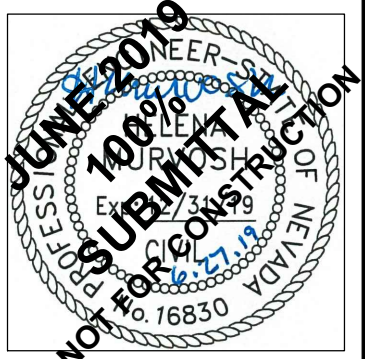
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CA Group, Inc.
CAVIOLA ANSON

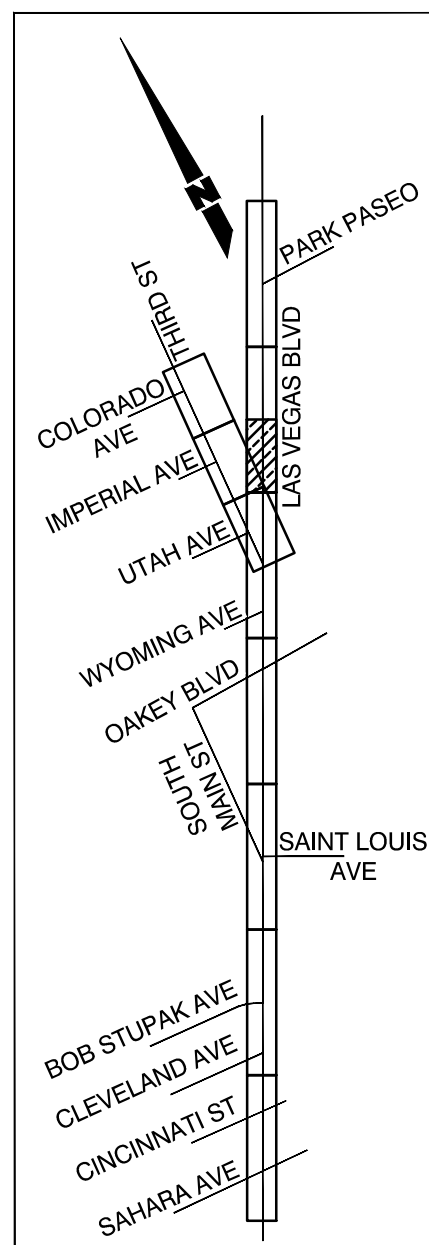
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 685-5945

PREPARED FOR CITY OF LAS VEGAS	H# 46330	BID# 13 68939
	DATE: 06/27/2019	DESIGNED BY: JB
	SUBMITTAL STAGE:	DRAWN BY: JB
	100% SUBMITTAL	CHECKED BY: HM

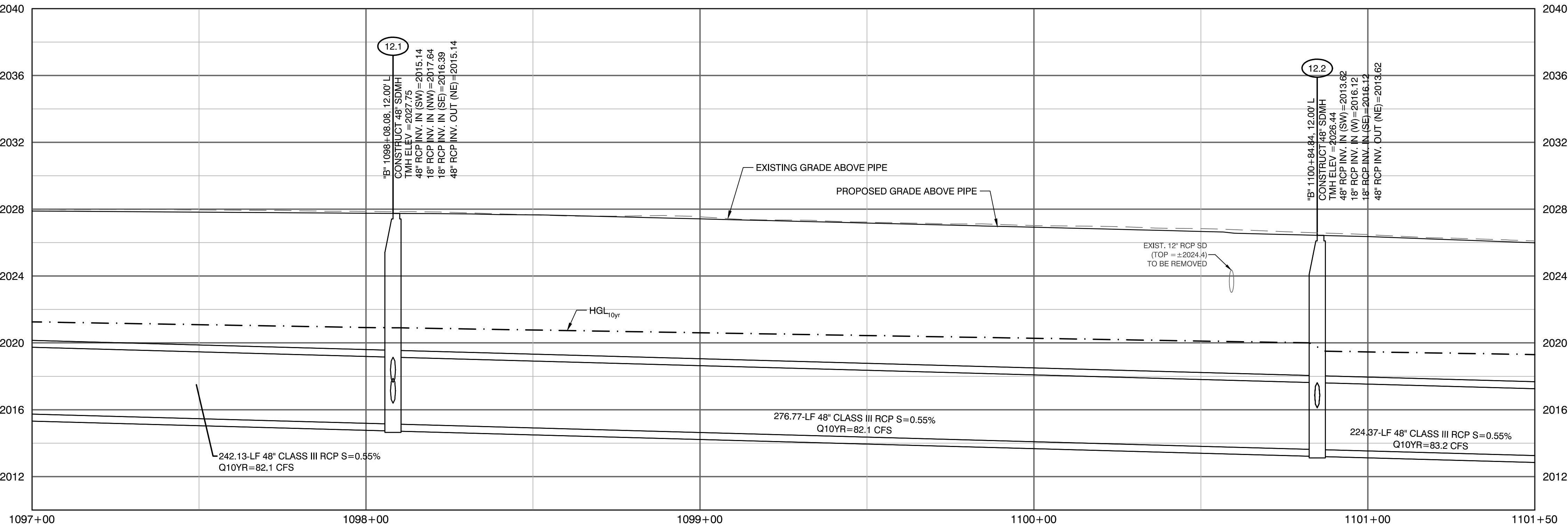
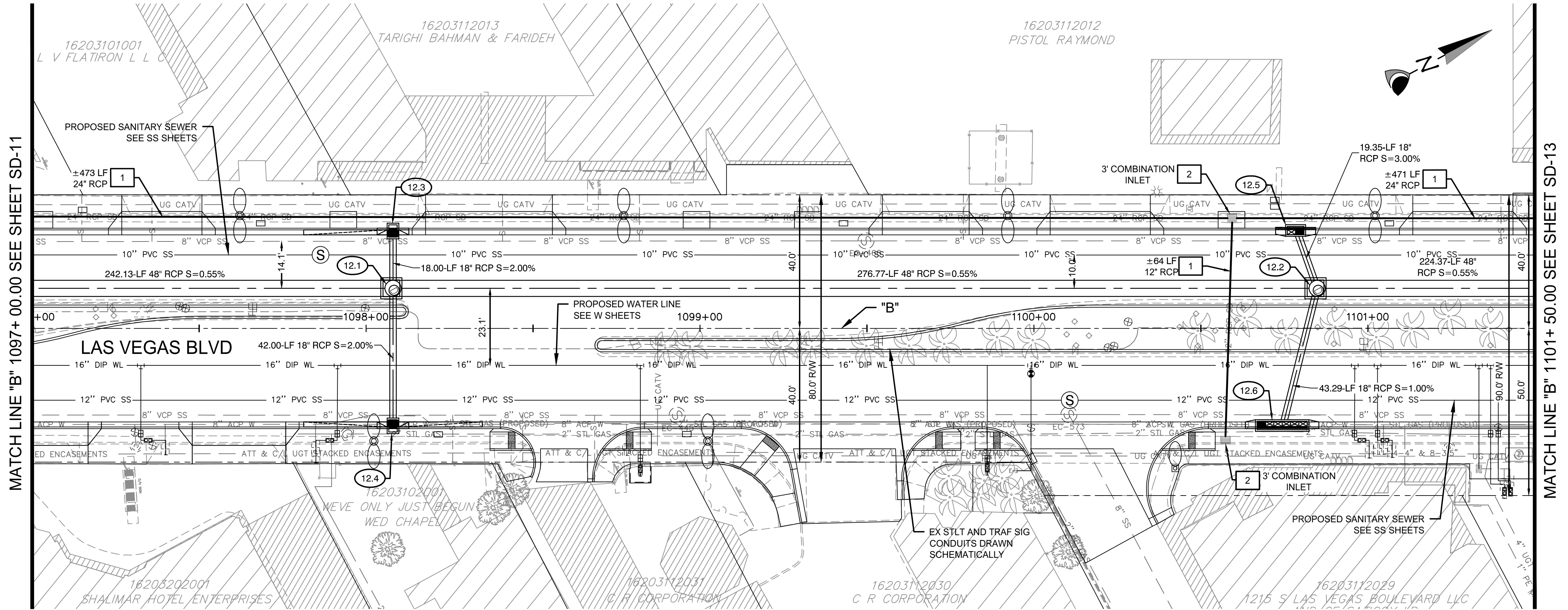
TITLE LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.
SHEET STORM DRAIN PLAN AND PROFILE
"B" 1088+ 00.00 TO "B" 1092+ 50.00



SHEET
SD-10
XX OF
DRAWING NO.
XXXXXXXXXX-X



SHEET
SD-11
XX OF
DRAWING NO.
XXXXXXXXXX-X



CONSTRUCTION NOTES

- 12.1 "B" 1098+08.08, 12.00' LT CONSTRUCT 48" TYPE II SDMH PER USDOCA 405.2 LID & FRAME PER DETAIL 1, SD-51
- 12.2 "B" 1100+84.84, 12.00' LT CONSTRUCT 48" TYPE II SDMH PER USDOCA 405.2 LID & FRAME PER DETAIL 1, SD-51
- 12.3 "B" 1098+08.08, 30.00' LT CONSTRUCT 2.5' TYPE 3 DI PER PER NDOT R-4.2.3 25' CURB TRANS (SOUTH) SEE PROFILE 30 ON SD-42
- 12.4 "B" 1098+08.08, 30.00' RT CONSTRUCT 2.5' TYPE 3 DI PER PER NDOT R-4.2.3 25' CURB TRANS (BOTH) SEE PROFILE 29 ON SD-42
- 12.5 "B" 1100+78.39, 30.24' LT CONSTRUCT 5' TYPE "DM2" DI PER PER USDOCA 412.1 W/ 2 GRATES SEE PROFILE 31 ON SD-42
- 12.6 "B" 1100+74.36, 30.00' RT CONSTRUCT 15' TYPE "DM2" DI PER PER USDOCA 412.1 SEE PROFILE 31 ON SD-42

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

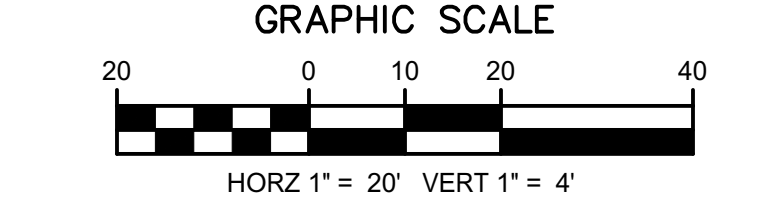
NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL NEW DROP INLETS PER USDOCA DWG. NO. 421.
2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF MANHOLE.
3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE: CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL).

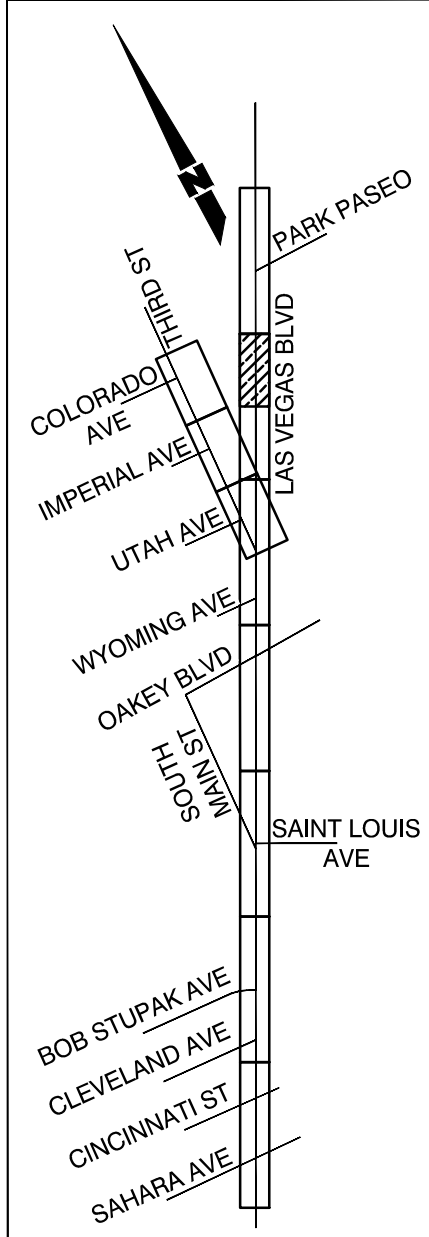
APPROVED FOR CONSTRUCTION

LWWWD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955

CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.



BEFORE YOU DIG		USA NORTH	
		811 OR	800-227-2600
		F.A.S.T.	702-432-5300
BEFORE YOU UNDERGROUND	CLARK COUNTY TRAFFIC OPERATIONS		702-455-7511
	CITY OF LAS VEGAS T.E.F.O.		702-229-6611
BEFORE YOU OVERHEAD	NV ENERGY		702-227-2929



SHEET KEY MAP

PREPARED BY
CA Group, Inc
C A V I O L A N S O N
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE (702) 685-5945

DESIGNED BY: JB
DRAWN BY: JB
CHECKED BY: HM

DATE: 06/27/2019
SUBMITTAL STAGE: 100% SUBMITTAL

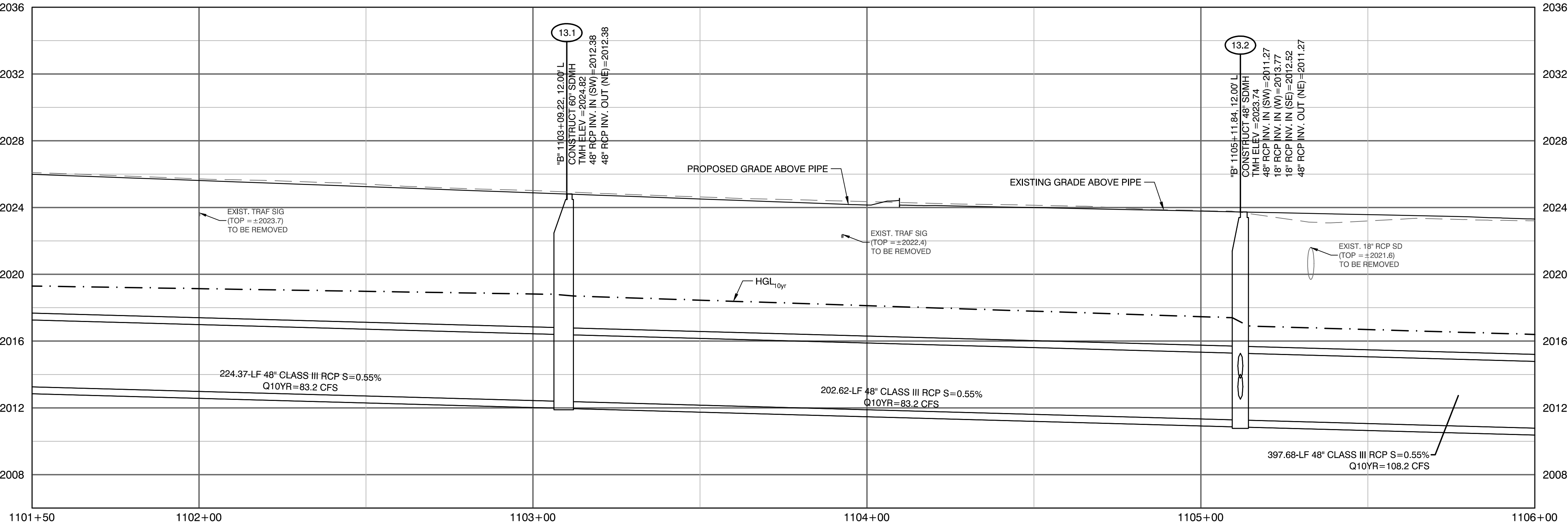
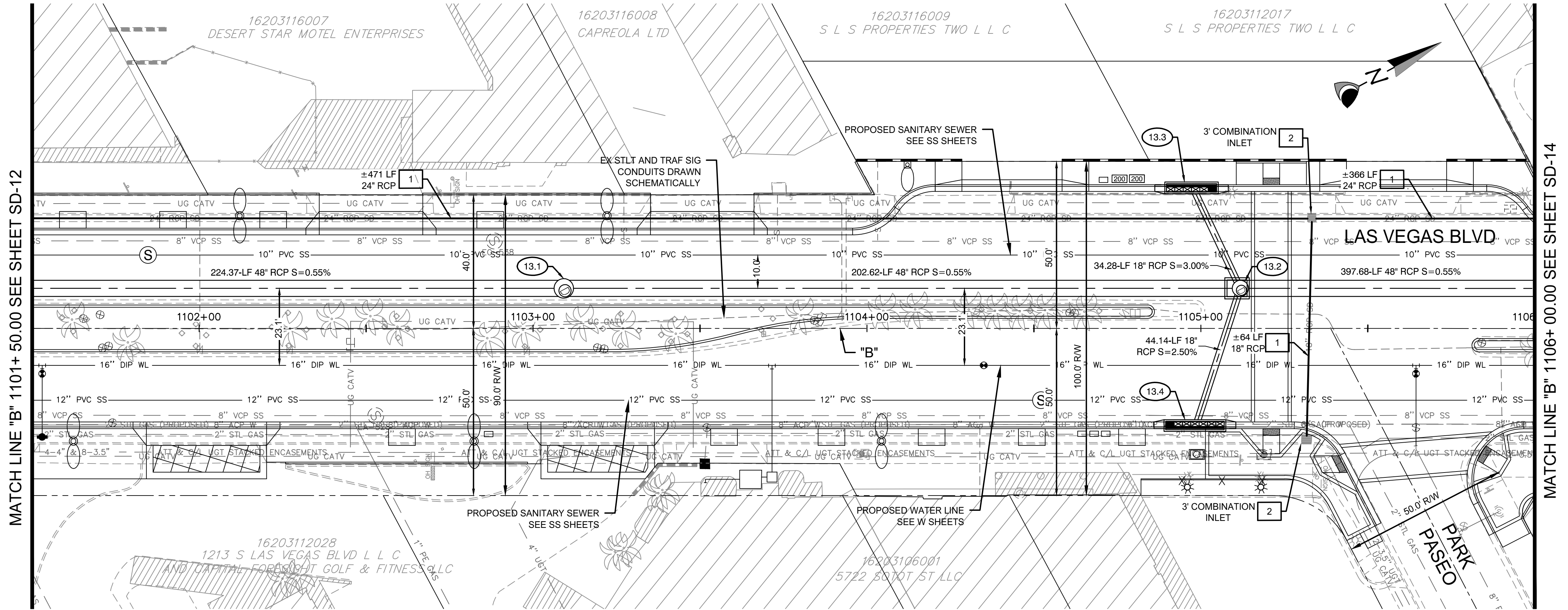
CITY OF LAS VEGAS

STORM DRAIN PLAN AND PROFILE

"B" 1097+ 00.00 TO "B" 1101+ 50.00

DATE: 06/27/2019
TIME: 10:00 AM
BY: [Signature]
FOR: [Signature]

SD-12
XX OF
DRAWING NO. XXXXXXXX-X



CONSTRUCTION NOTES

- 13.1 "B" 1103+09.22, 12.00' LT
CONSTRUCT 60" TYPE III
SDMH PER USDOCA 406.1
LID & FRAME PER DETAIL 1, SD-51
- 13.2 "B" 1105+11.84, 12.00' LT
CONSTRUCT 48" TYPE II
SDMH PER USDOCA 405.2
LID & FRAME PER DETAIL 1, SD-51
- 13.3 "B" 1104+97.21, 43.00' LT
CONSTRUCT 18" TYPE "DM2"
DI PER PER USDOCA 412.1
SEE PROFILE 32 ON SD-42
- 13.4 "B" 1104+98.25, 30.00' RT
CONSTRUCT 17.5" TYPE "DM2"
DI PER PER USDOCA 412.1
SEE PROFILE 32 ON SD-42

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY
MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL
NEW DROP INLETS PER USDOCA DWG. NO. 421.
2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF
MANHOLE.
3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL
ON SD-49.

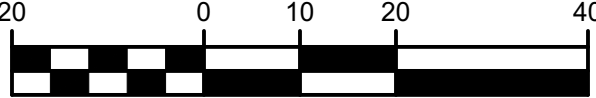
DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE:
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP
BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE
CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT
STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR
APPROVED EQUAL).

APPROVED FOR CONSTRUCTION

LWWDD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955

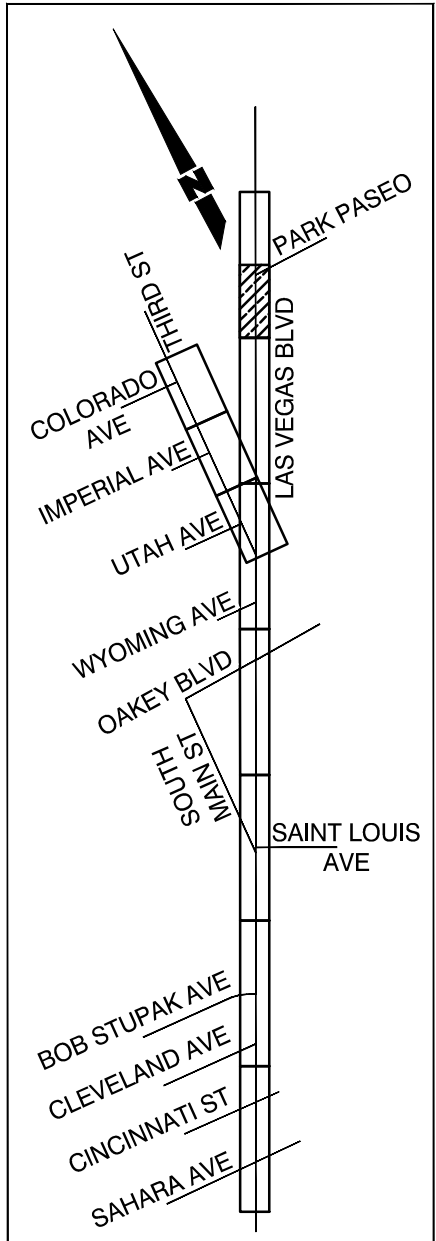
CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN
EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

GRAPHIC SCALE



CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929



SHEET KEY MAP

PREPARED BY
CA Group, Inc
C A V I O L A A N S O N
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 655-5945

PREPARED FOR
CITY OF LAS VEGAS

BID# 19.68939

DESIGNED BY: JB

DRAWN BY: JB

CHECKED BY: HM

DATE: 06/27/2019

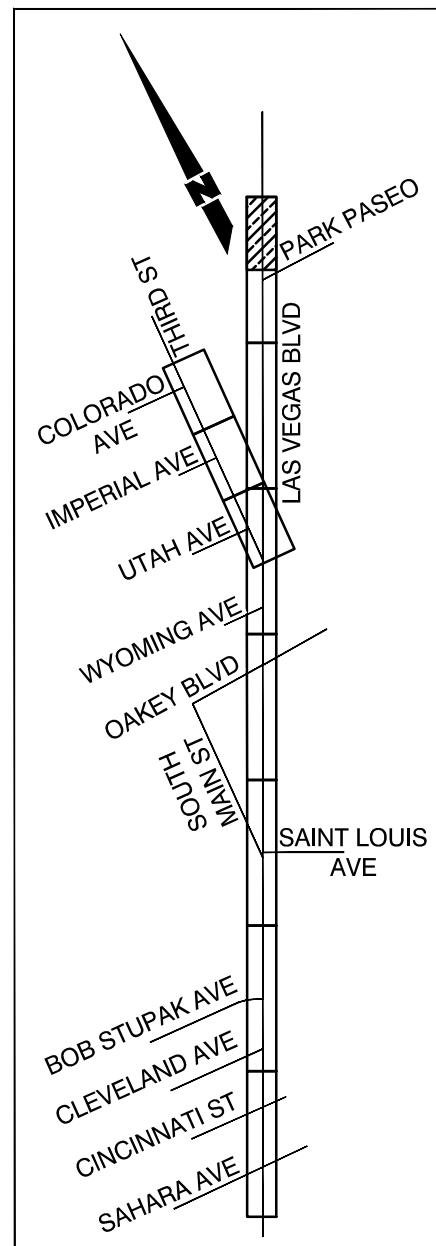
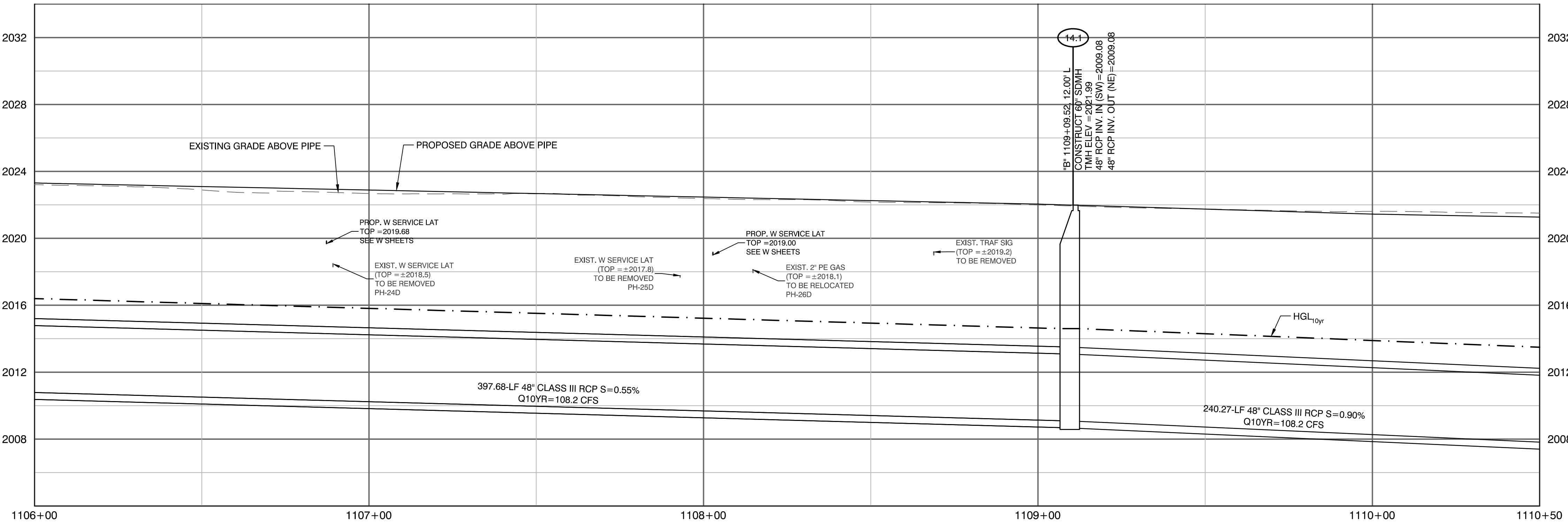
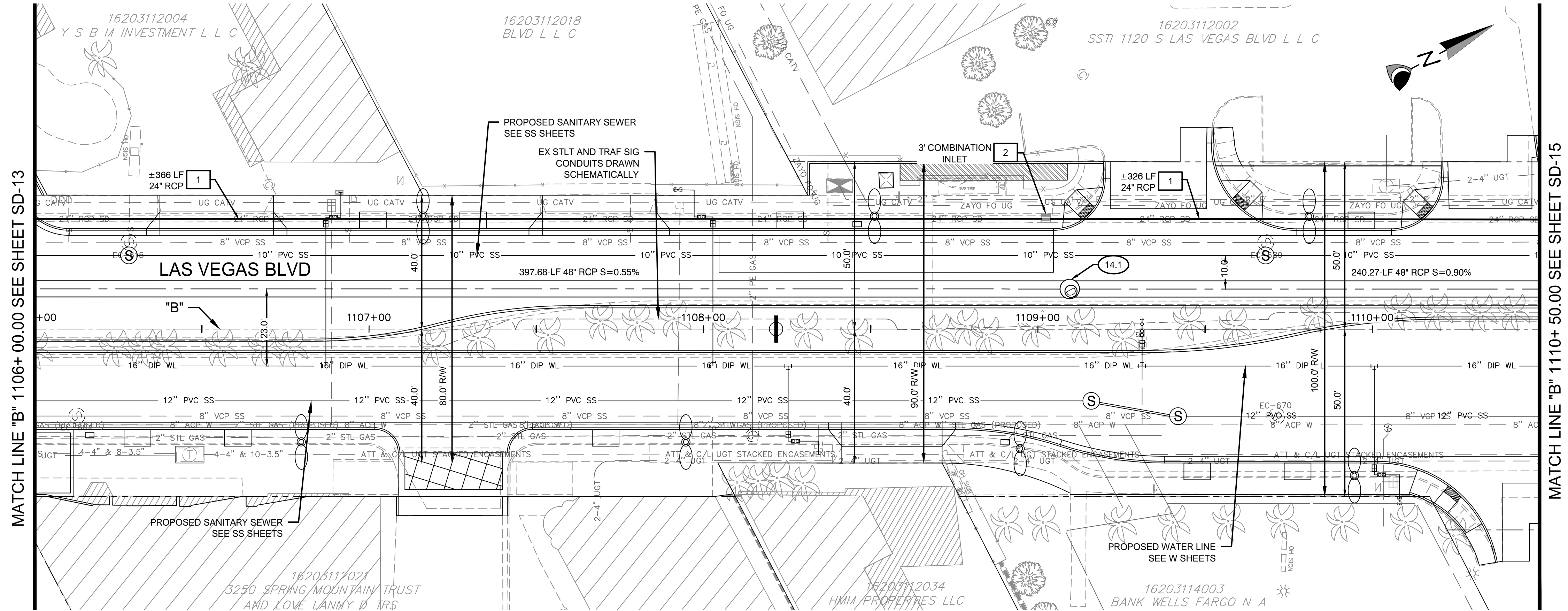
SUBMITTAL STAGE:
100% SUBMITTAL

LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.

SD-13
XX OF
XXXXXXXXXX-X

STORM DRAIN PLAN AND PROFILE
"B" 1101+ 50.00 TO "B" 1106+ 00.00

SD-13
XX OF
XXXXXXXXXX-X



CONSTRUCTION NOTES

- 14.1
- "B" 1109+09.52, 12.00' LT
CONSTRUCT 60" TYPE III
SDMH PER USDOCA 406.1
LID & FRAME PER DETAIL 1, SD-51

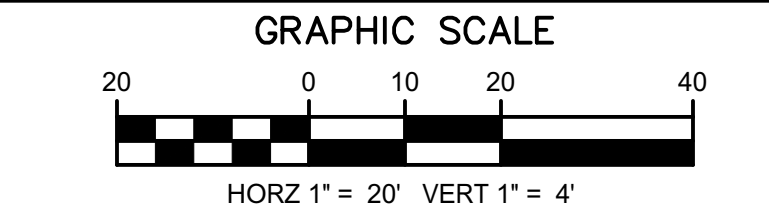
REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY
MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL
NEW DROP INLETS PER USDOCA DWG. NO. 421.
2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF
MANHOLE.
3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL
ON SD-49.
DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE:
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP
BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE
CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT
STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR
APPROVED EQUAL).

APPROVED FOR CONSTRUCTION

LWW ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955
CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN
EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.



CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929

PREPARED BY
CA Group, Inc
CAVIOLA ANSON
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE (702) 655-5945

CITY OF LAS VEGAS

BID# 19.68939

DESIGNED BY: JB

DRAWN BY: JB

CHECKED BY: HM

DATE: 06/27/2019

SUBMITTAL STAGE:
100% SUBMITTAL

LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.

SHEET

STORM DRAIN PLAN AND PROFILE

"B" 1106+ 00.00 TO "B" 1110+ 50.00

SD-14

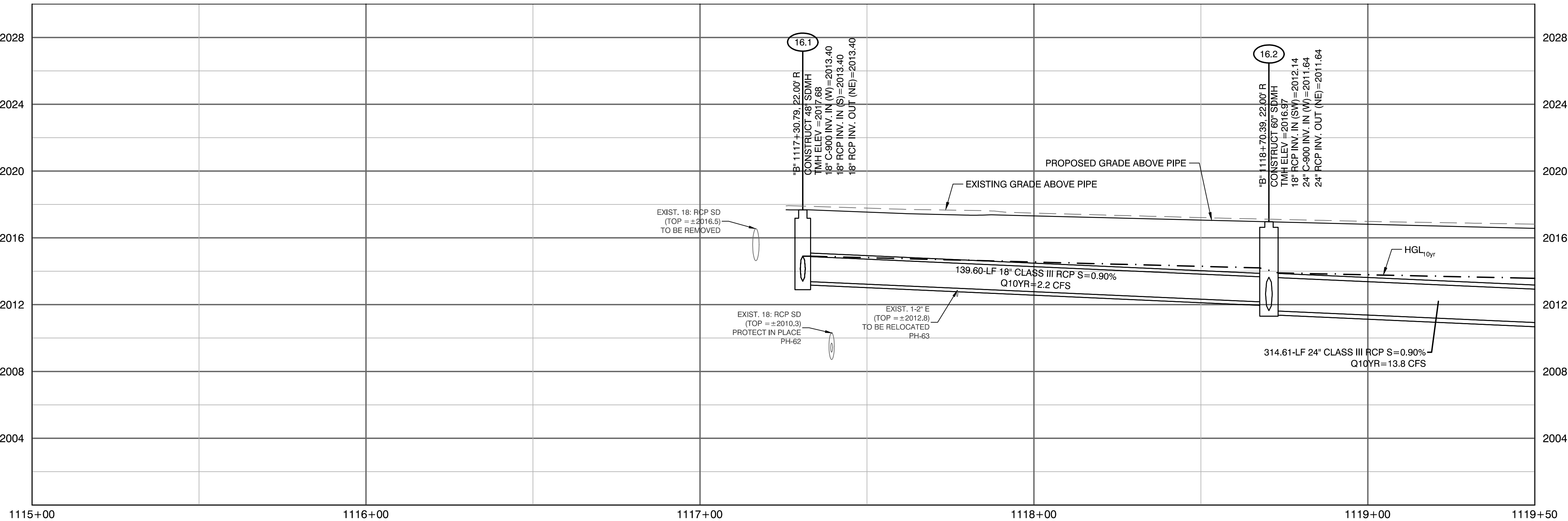
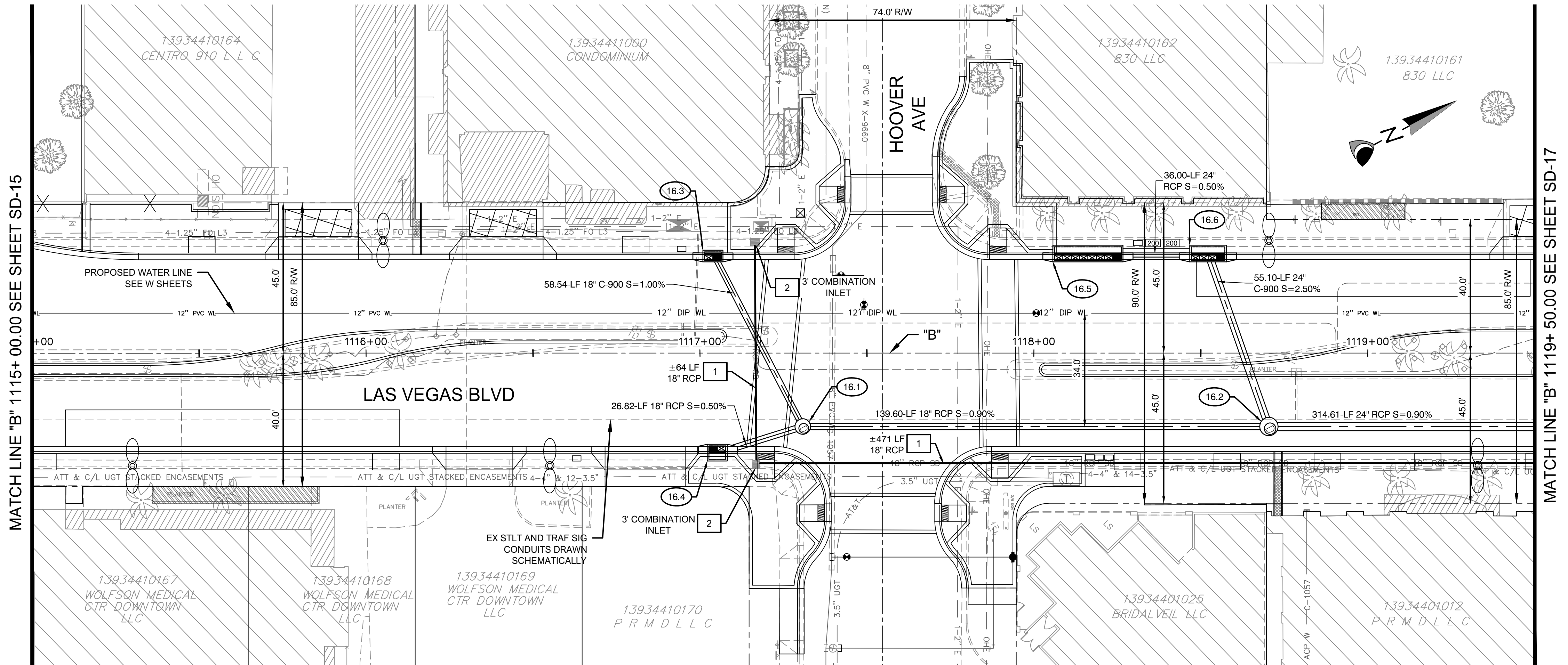
XX OF

DRAWING NO.
XXXXXXXXX-X

NOT FOR CONSTRUCTION

100% SUBMITTAL

DATE: 06/27/2019



CONSTRUCTION NOTES

- 16.1 "B" 1117+30.79, 22.00' RT CONSTRUCT 48" TYPE IA SDMH PER USDOCA 404.1
- 16.2 "B" 1118+70.39, 22.00' RT CONSTRUCT 60" TYPE IA SDMH PER USDOCA 404.1
- 16.3 "B" 1117+03.89, 30.00' LT CONSTRUCT 5" TYPE "DM2" DI PER PER USDOCA 412.1 W/ 2 GRATES SEE PROFILE 37 ON SD-43
- 16.4 "B" 1117+05.19, 30.00' RT CONSTRUCT 5" TYPE "CM2" DI PER PER USDOCA 412.1 W/ 2 GRATES SEE PROFILE 37 ON SD-43
- 16.5 "B" 1118+16.18, 30.00' LT CONSTRUCT 20" TYPE "CM2" DI PER PER USDOCA 412.1 SEE PROFILE 38 ON SD-43
- 16.6 "B" 1118+52.18, 30.00' LT CONSTRUCT 10" TYPE "CM2" DI PER PER USDOCA 412.1 SEE PROFILE 38 ON SD-43

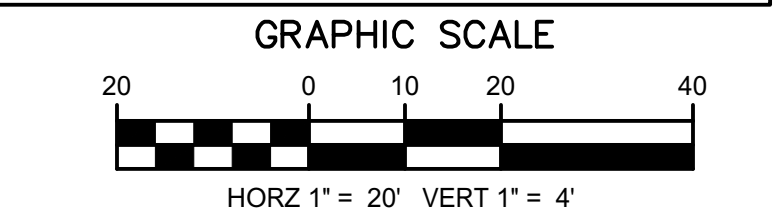
REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

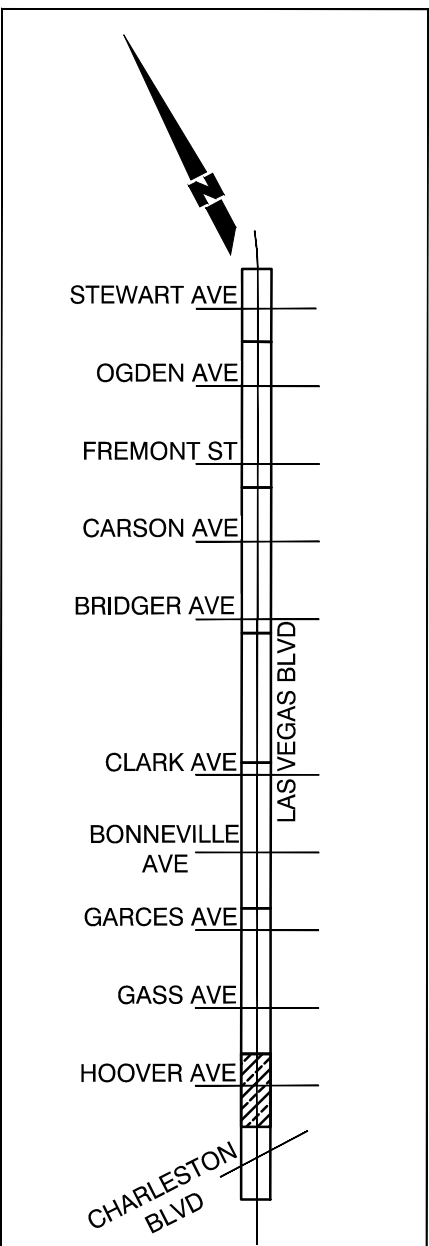
NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL NEW DROP INLETS PER USDOCA DWG. NO. 421.
2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF MANHOLE.
3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE: CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS. CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL).

APPROVED FOR CONSTRUCTION
LWWDD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955
CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.



BEFORE YOU DIG		USA NORTH	
		811 OR	800-227-2600
		F.A.S.T.	702-432-5300
		CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
		CITY OF LAS VEGAS T.E.F.O.	702-229-6611
		NV ENERGY	702-227-2929



SHEET KEY MAP

PREPARED BY
CA Group, Inc
C A V I O L A N S O N
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE (702) 855-5945

DESIGNED BY: JB
DRAWN BY: JB
CHECKED BY: HM

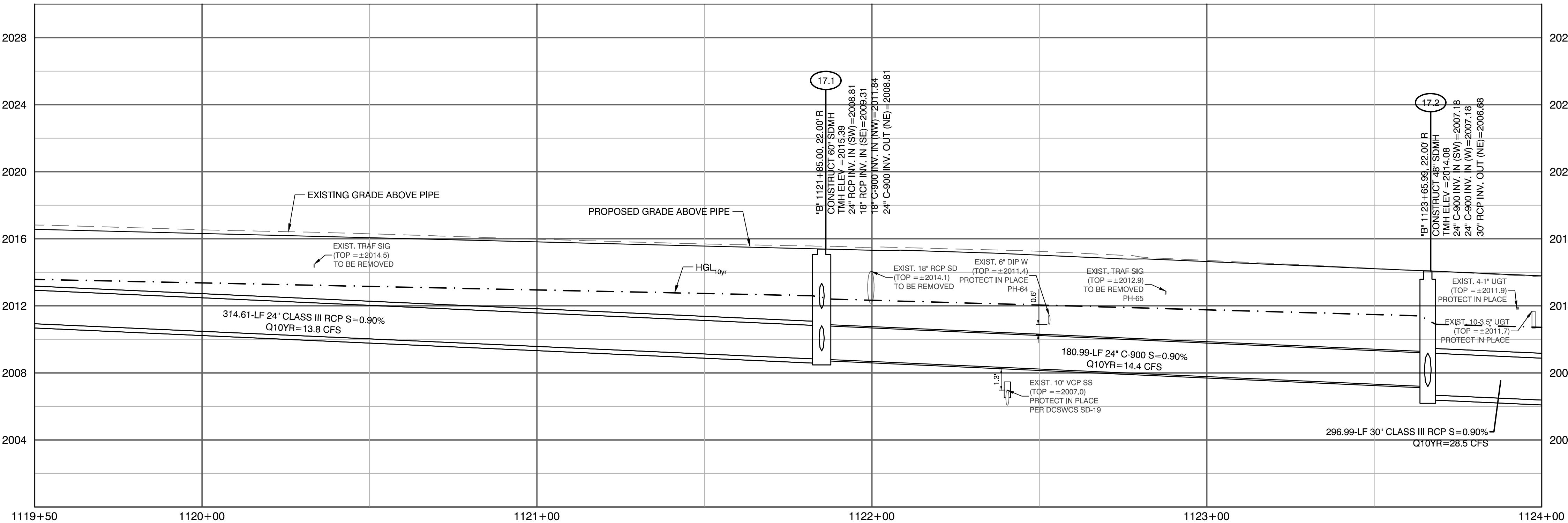
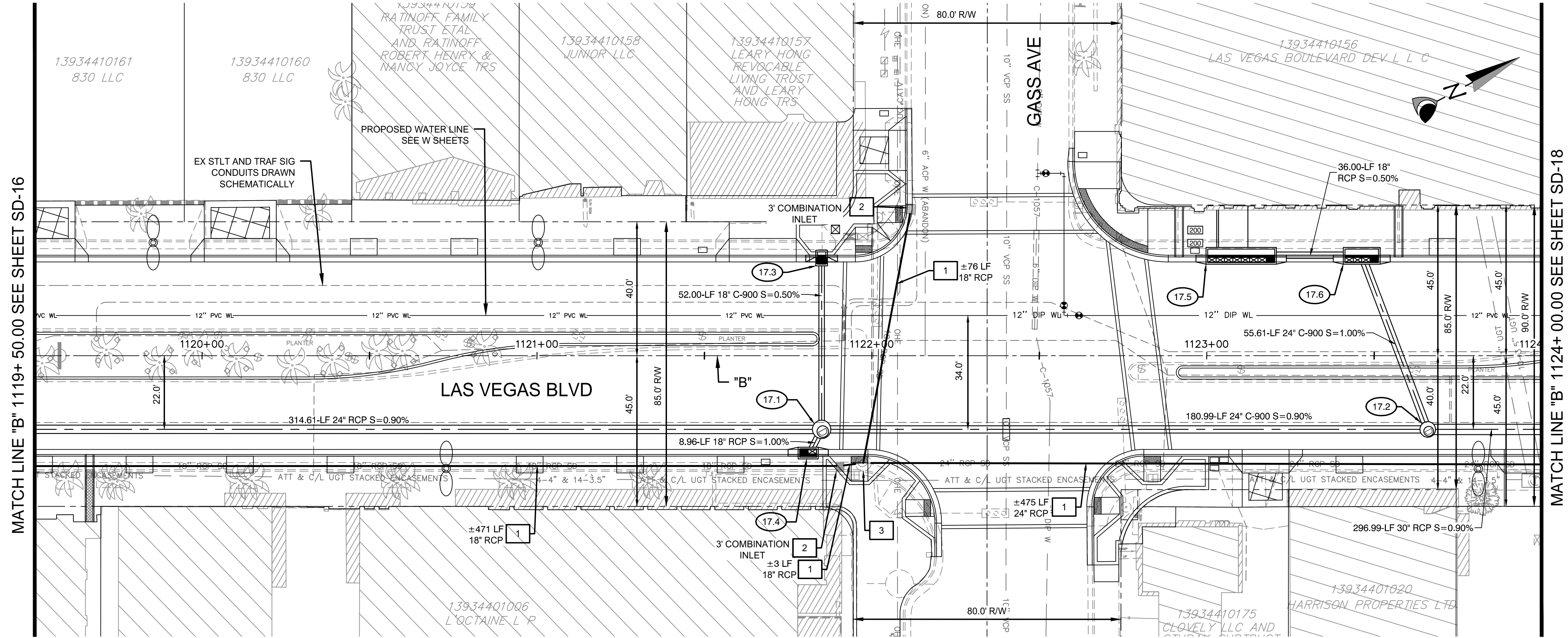
DATE: 06/27/2019
SUBMITTAL STAGE: 100% SUBMITTAL

LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.

STORM DRAIN PLAN AND PROFILE
"B" 1115+ 00.00 TO "B" 1119+ 50.00

DATE: 06/27/2019
PROJECT NO. 123955
SHEET NO. 16830

SD-16
XX OF
DRAWING NO. XXXXXXXX-X



CONSTRUCTION NOTES

- 17.1 "B" 1121+85, 22.00' RT CONSTRUCT 60" TYPE IA SDMH PER USDOCA 404.1
- 17.2 "B" 1123+65.99, 22.00' RT CONSTRUCT 48" TYPE II SDMH W/ TYPE IA RISER PER USDOCA 405.2 AND 404.1
- 17.3 "B" 1121+85, 30.00' LT CONSTRUCT 2.5' TYPE 3 DI PER PER NDOT R-4.2.3 SEE PROFILE 39 ON SD-43
- 17.4 "B" 1121+80.97, 30.00' RT CONSTRUCT 5' TYPE "DM2" DI PER PER USDOCA 412.1 W/ 2 GRATES SEE PROFILE 39 ON SD-43
- 17.5 "B" 1123+10.27, 30.00' LT CONSTRUCT 20" TYPE "CM2" DI PER PER USDOCA 412.1 SEE PROFILE 40 ON SD-43
- 17.6 "B" 1123+46.27, 30.00' LT CONSTRUCT 10" TYPE "CM2" DI PER PER USDOCA 412.1 SEE PROFILE 40 ON SD-43

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

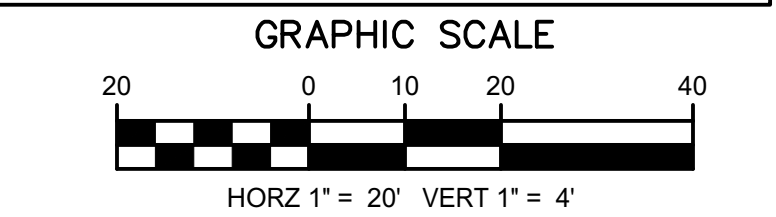
NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL NEW DROP INLETS PER USDOCA DWG. NO. 421.
2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF MANHOLE.
3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE: CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS. CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL).

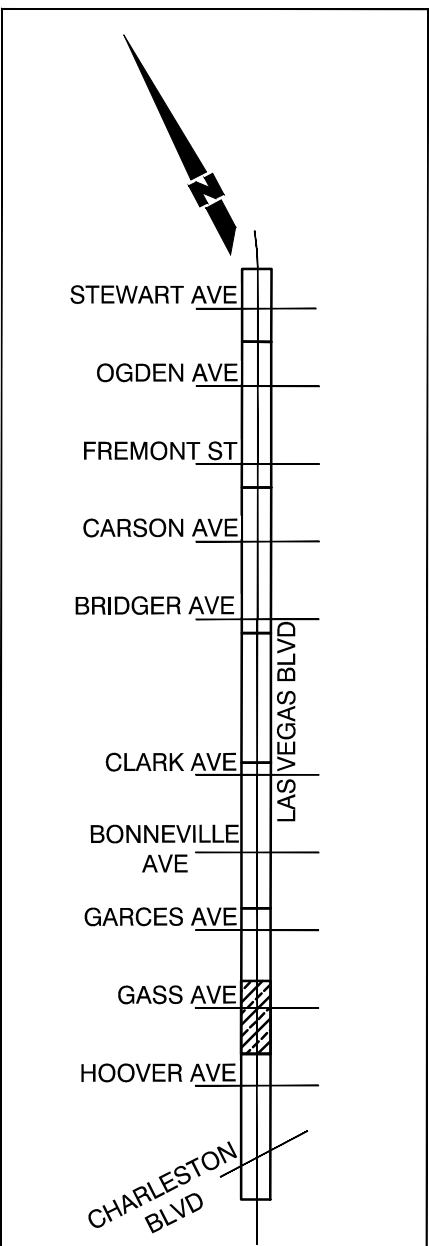
APPROVED FOR CONSTRUCTION

LWWWD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955

CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.



CALL BEFORE CONSTRUCTION			
BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600	
	F.A.S.T.	702-432-5300	
BEFORE YOU UNDERGROUND	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511	
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611	
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929	



SHEET KEY MAP

PREPARED BY
CA Group, Inc
C A V I O L A A N S O N
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE (702) 855-5945

DESIGNED BY: JB
DRAWN BY: JB
CHECKED BY: HM

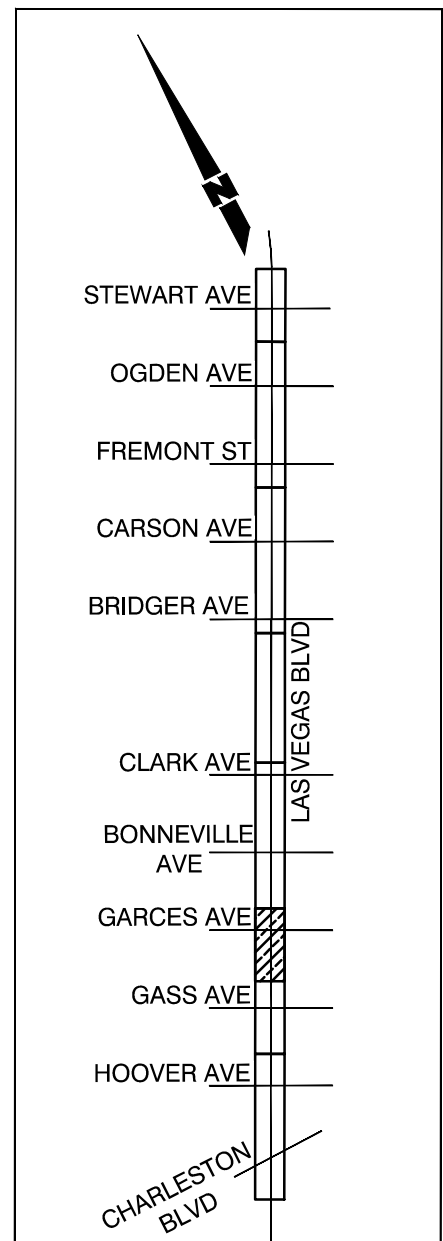
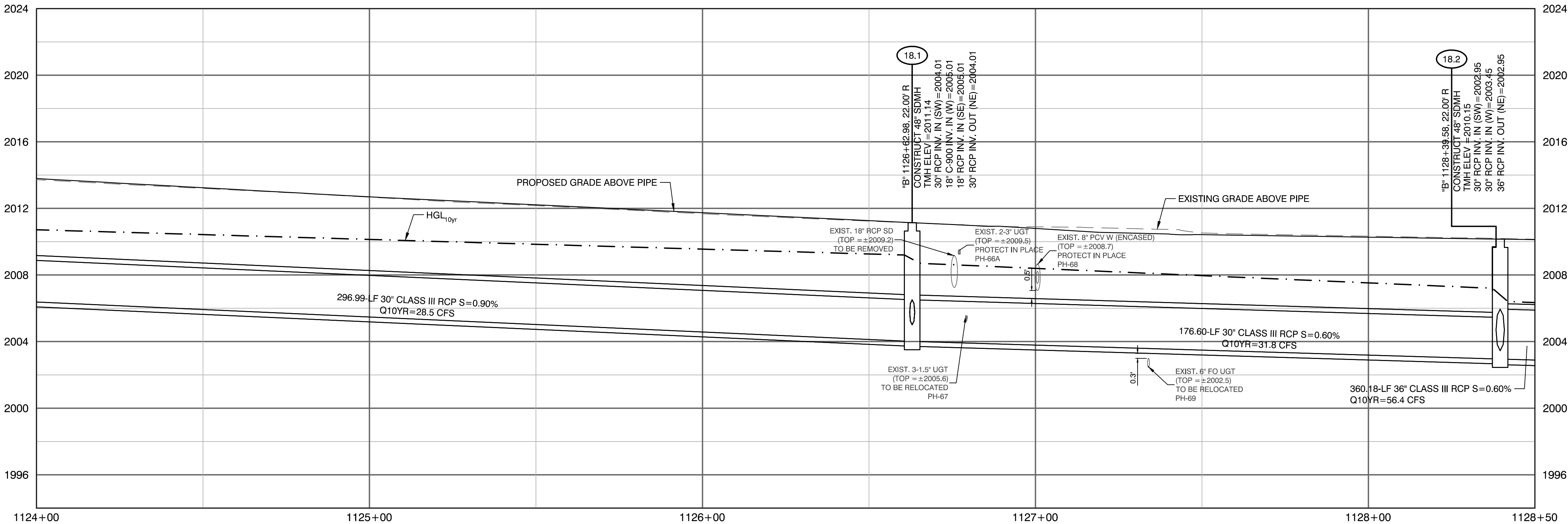
CITY OF LAS VEGAS
BID# 19.68939
DATE: 06/27/2019
SUBMITTAL STAGE:
100% SUBMITTAL

LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.

STORM DRAIN PLAN AND PROFILE
"B" 1119+ 50.00 TO "B" 1124+ 00.00

DATE: 06/27/2019
BY: [Signature]
NOT FOR CONSTRUCTION

SHEET
SD-17
XX OF
DRAWING NO.
XXXXXXXXX-X



APPROVED FOR CONSTRUCTION

LWWWD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955

CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN
EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

GRAPHIC SCALE
20 0 10 20 30 40
HORZ 1" = 20' VERT 1" = 4'

CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929

CONSTRUCTION NOTES

- 18.1 "B" 1126+62.98, 22.00' RT
CONSTRUCT 48" TYPE II
SDMH W/ TYPE IA RISER
PER USDCCA 405.2 AND 404.1
- 18.2 "B" 1128+39.58, 22.00' RT
CONSTRUCT 48" TYPE II
SDMH W/ TYPE IA RISER
PER USDCCA 405.2 AND 404.1
- 18.3 "B" 1126+57.34, 30.00' LT
CONSTRUCT 5" TYPE "DM2"
DI PER PER USDCCA 412.1
W/ 2 GRATES
SEE PROFILE 41 ON SD-44
- 18.4 "B" 1126+61.19, 30.00' RT
CONSTRUCT 5" TYPE "DM2"
DI PER PER USDCCA 412.1
W/ 2 GRATES
SEE PROFILE 41 ON SD-44
- 18.5 "B" 1127+91.60, 30.00' LT
CONSTRUCT 20" TYPE "CM2"
DI PER PER USDCCA 412.1
SEE PROFILE 42 ON SD-44
- 18.6 "B" 1128+30.10, 30.00' LT
CONSTRUCT 15" TYPE "CM2"
DI PER PER USDCCA 412.1
SEE PROFILE 42 ON SD-44

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

- NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY
MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL
NEW DROP INLETS PER USDCCA DWG. NO. 421.
2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF
MANHOLE.
3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL
ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE:
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP
BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE
CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT
STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR
APPROVED EQUAL).

PREPARED BY
CA Group, Inc
C A V I O L A N S O N
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 855-5945

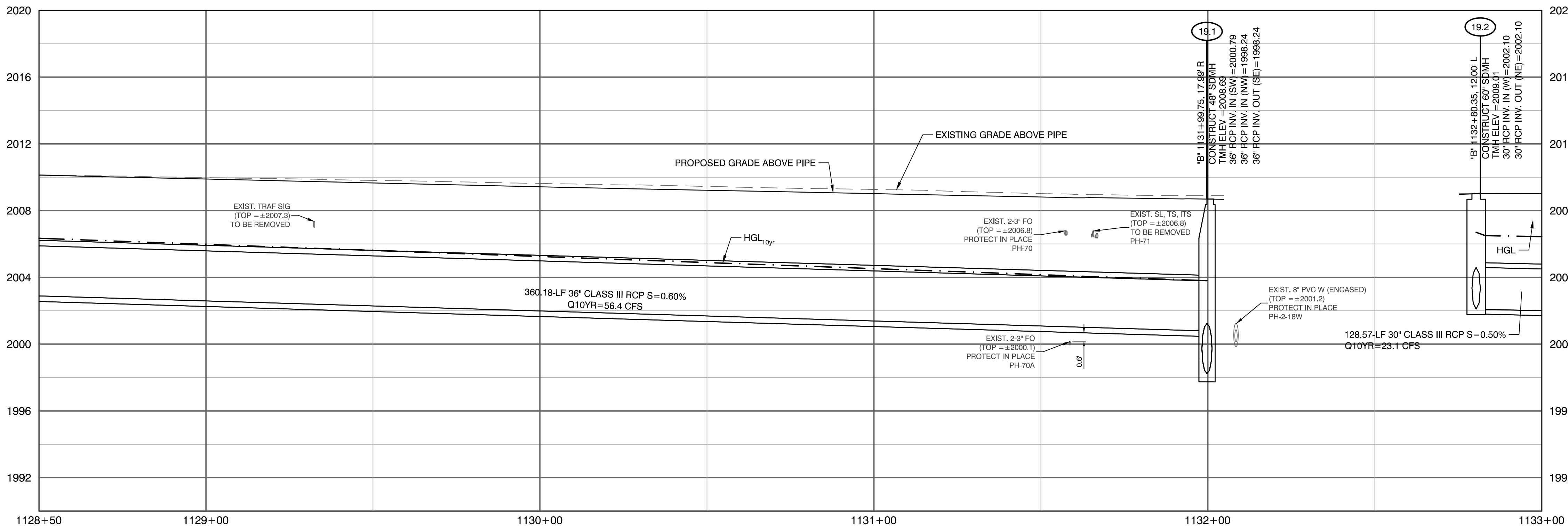
PREPARED FOR
CITY OF LAS VEGAS
BID# 19.68939
DESIGNED BY: JB
DRAWN BY: JB
CHECKED BY: HM

LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.

STORM DRAIN PLAN AND PROFILE
"B" 1124+ 00.00 TO "B" 1128+ 50.00

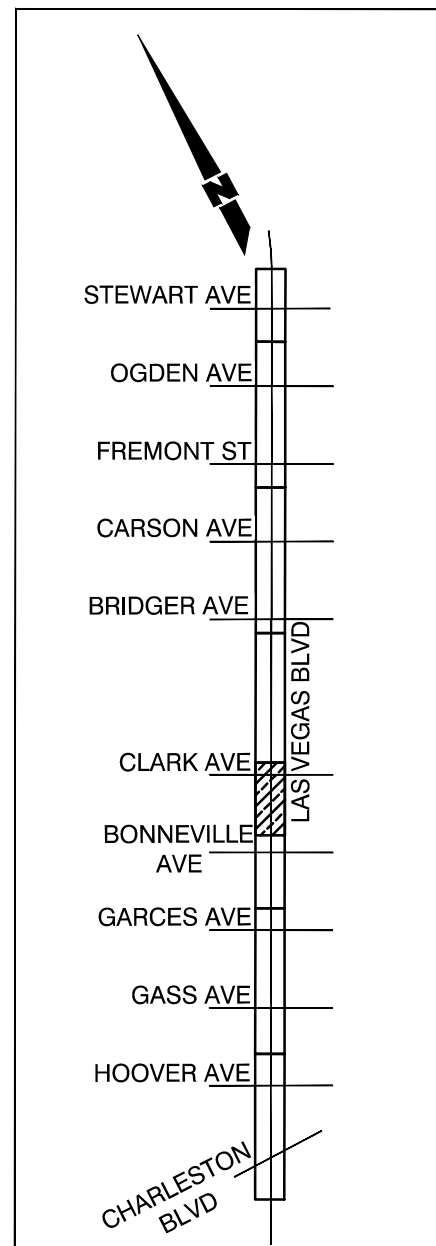
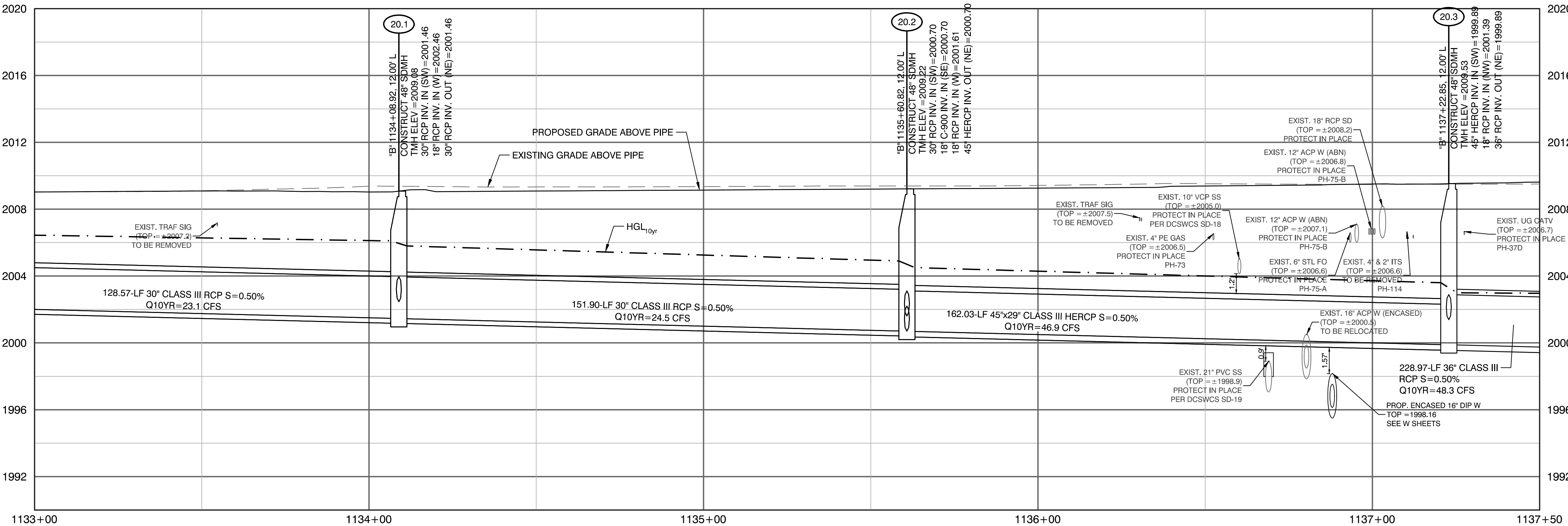
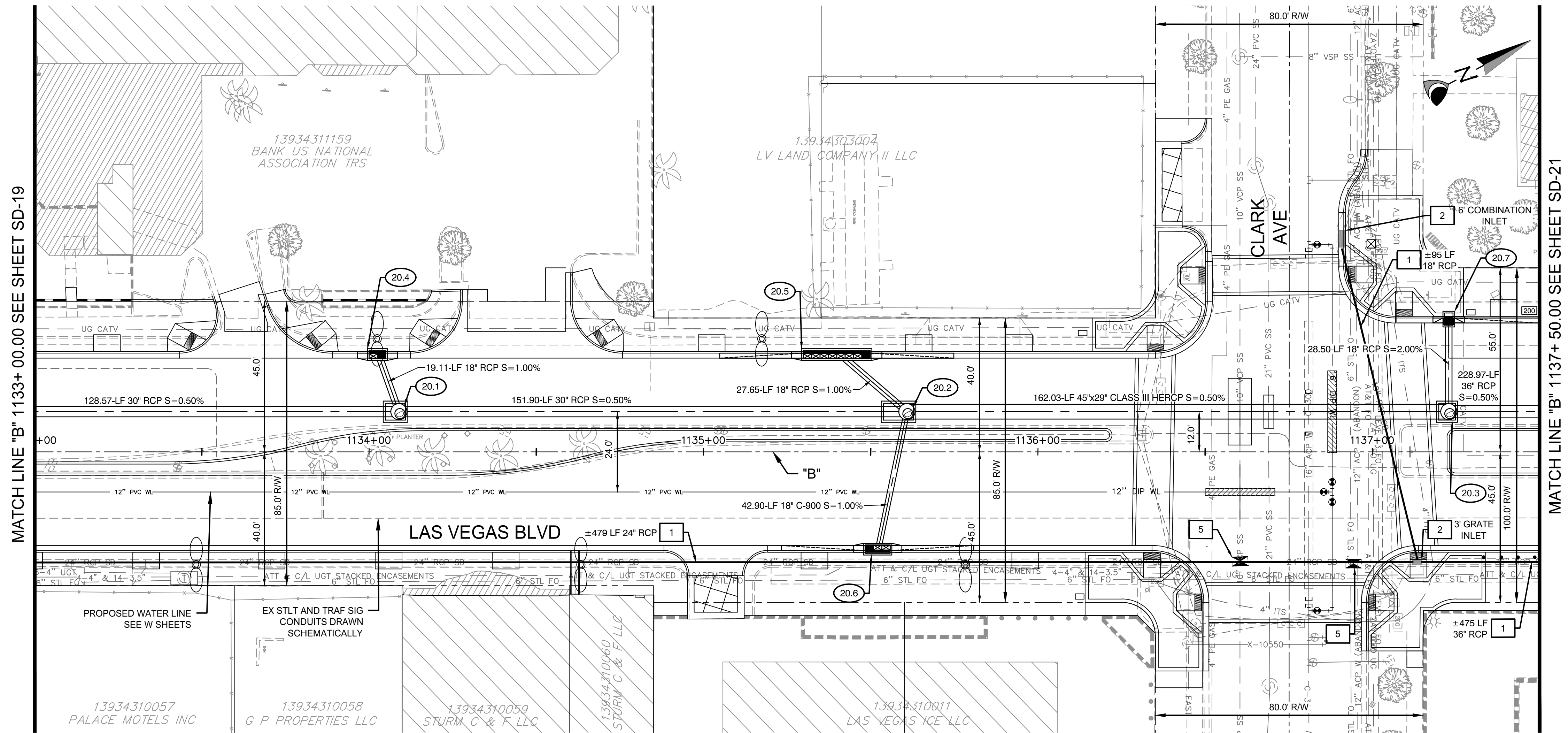
SD-18
XX OF
DRAWING NO.
XXXXXXXXX-X

SD-18
XX OF
DRAWING NO.
XXXXXXXXX-X





06/25/2019 H:\0106 (Las Vegas Blvd Stewart to Sahara)\Design\Production Drawings\SD-1 - SD-34 Storm Drain Plan-Profile.dwg



CONSTRUCTION NOTES

- 20.1 "B" 1134+08.92, 12.00' LT CONSTRUCT 48" TYPE II SDMH PER USDOCA 405.2
- 20.2 "B" 1135+60.82, 12.00' LT CONSTRUCT 48" TYPE II SDMH PER USDOCA 405.2
- 20.3 "B" 1137+22.85, 12.00' LT CONSTRUCT 48" TYPE II SDMH PER USDOCA 405.2
- 20.4 "B" 1134+02.51, 30.00' LT CONSTRUCT 5" TYPE "DM2" DI PER PER USDOCA 412.1 W/ 2 GRATES SEE PROFILE 44 ON SD-44
- 20.5 "B" 1135+39.83, 30.00' LT CONSTRUCT 20" TYPE "DM2" DI PER PER USDOCA 412.1 25' CURB TRANS (BOTH) SEE PROFILE 45 ON SD-44
- 20.6 "B" 1135+52.07, 30.00' RT CONSTRUCT 7.5" TYPE "DM2" DI PER PER USDOCA 412.1 SEE PROFILE 45 ON SD-44 25' CURB TRANS (BOTH)
- 20.7 "B" 1137+22.85, 40.50' LT CONSTRUCT 2.5" TYPE 3 DI PER PER NDOT R-4.2.3 25' CURB TRANS (NORTH) SEE PROFILE 46 ON SD-44

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.
- 5 REMOVE ABANDONED DROP INLET WITH PENETRATING UTILITIES 6" BELOW SUBGRADE, CLSM BACKFILL TO TOP OF REMAINING STRUCTURE.

- NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL NEW DROP INLETS PER USDOCA DWG. NO. 421.
 2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF MANHOLE.
 3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE: CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL).

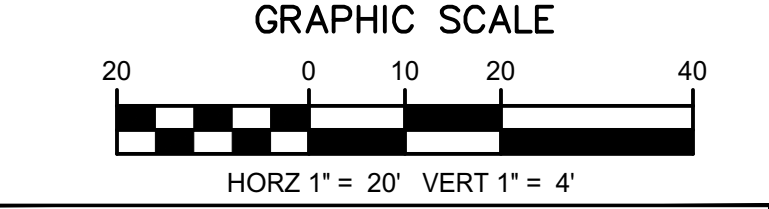
APPROVED FOR CONSTRUCTION

LWWWD ENGINEERING SERVICES MANAGER

DATE

PROJECT NO. 123955

CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.



CALL BEFORE CONSTRUCTION			
BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600	
	F.A.S.T.	702-432-5300	
BEFORE YOU UNDERGROUND	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511	
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611	
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929	

PREPARED BY

CA Group, Inc

2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 855-5945

CITY OF LAS VEGAS

BID# 19.68939

DESIGNED BY: JB

DATE: 06/27/2019

DRAWN BY: JB

CHECKED BY: HM

100% SUBMITTAL

100% SUBMITTAL

LAS VEGAS BOULEVARD IMPROVEMENTS

STEWART AVE. TO SAHARA AVE.

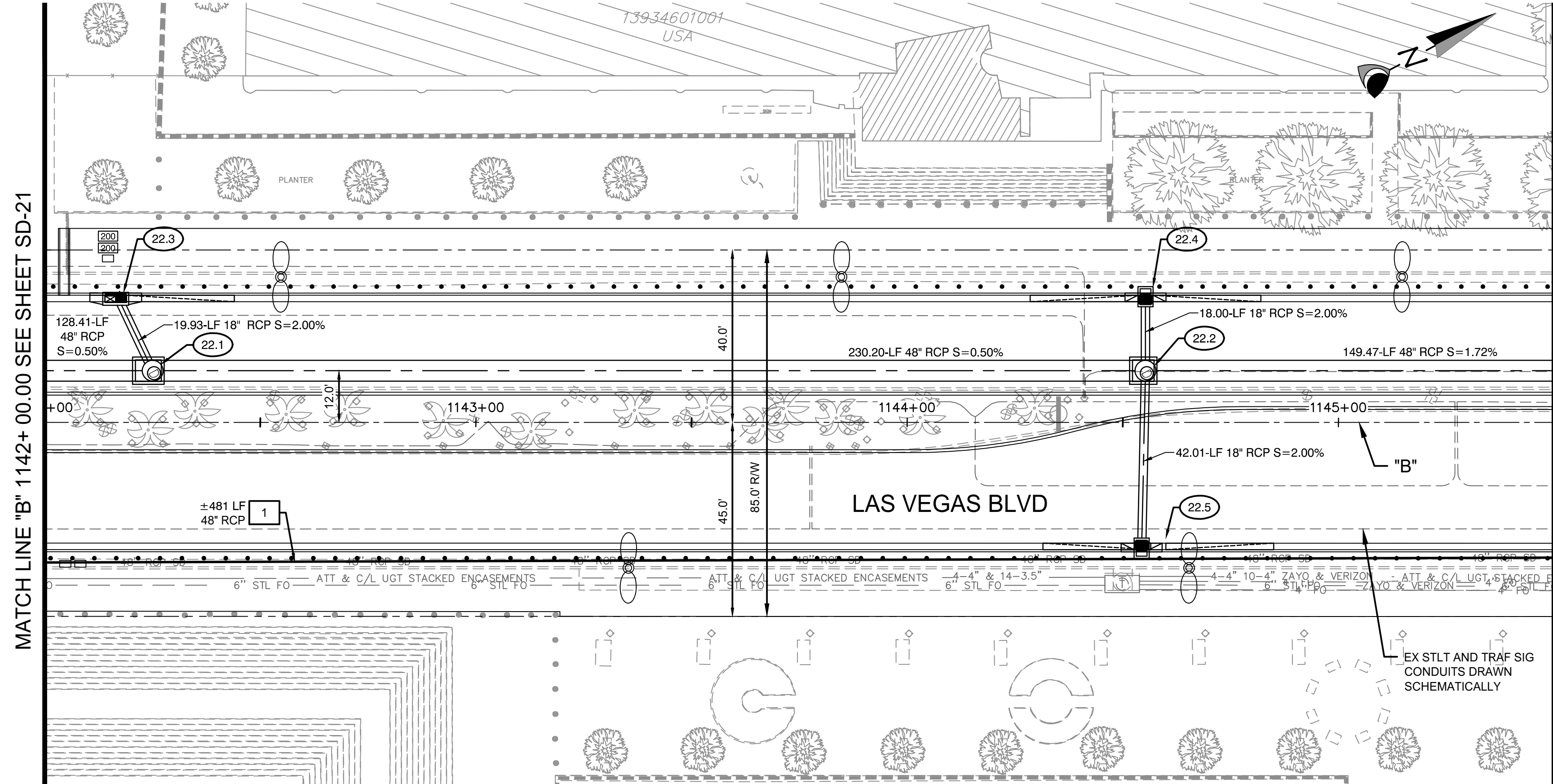
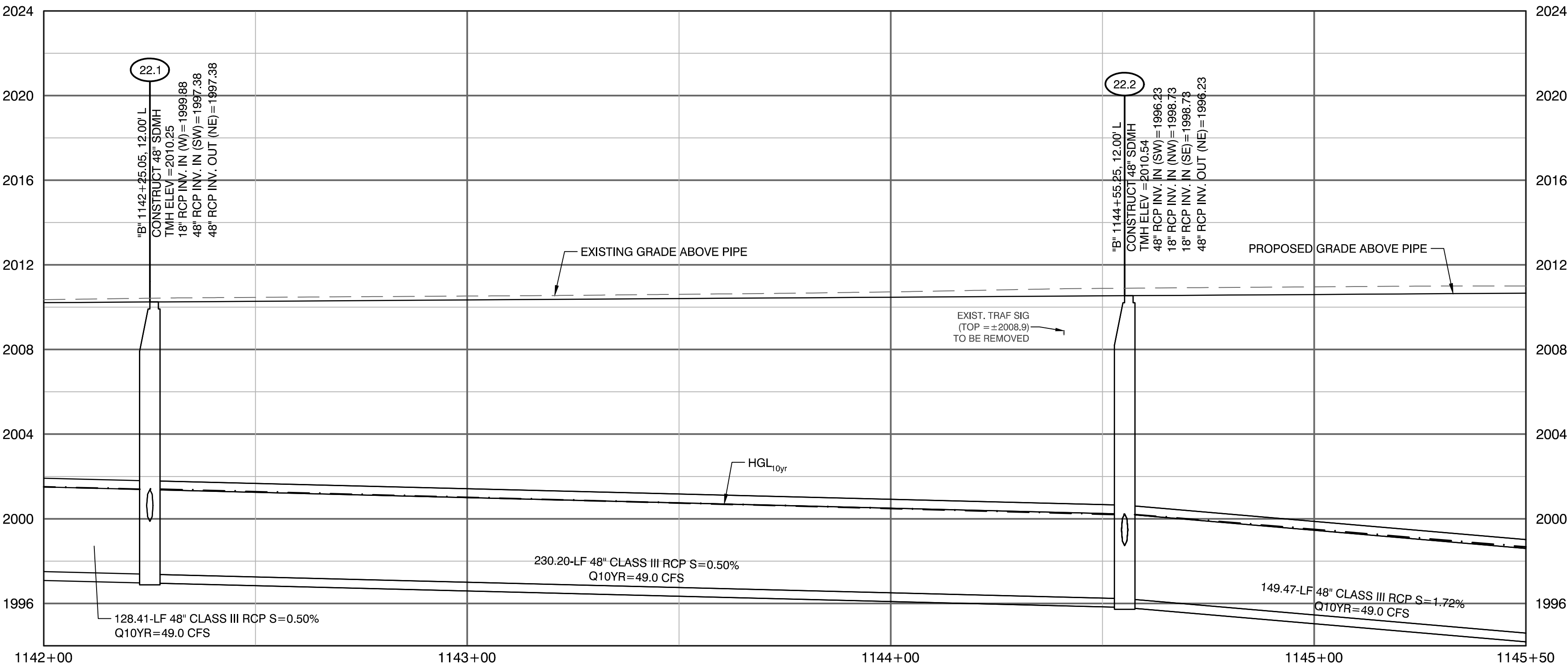
STORM DRAIN PLAN AND PROFILE

"B" 1133+ 00.00 TO "B" 1137+ 50.00

SD-20

XX OF

XXXXXXXXX-X



CONSTRUCTION NOTES

- 22.1 "B" 1142+25.05, 12.00' LT
CONSTRUCT 48" TYPE II
SDMH PER USDCCA 405.2
- 22.2 "B" 1144+55.25, 12.00' LT
CONSTRUCT 48" TYPE II
SDMH PER USDCCA 405.2
- 22.3 "B" 1142+16.50, 30.00' LT
CONSTRUCT 5" TYPE "CM"
DI PER PER USDCCA 422
(1'-8" WIDTH), W/ 2 GRATES
25' CURB TRANS (NORTH)
SEE PROFILE 49 ON SD-45
- 22.4 "B" 1144+55.25, 30.00' LT
CONSTRUCT 2.5" TYPE 3
DI PER PER NDOT R-4.2.3
25' CURB TRANS (BOTH)
SEE PROFILE 50 ON SD-45
- 22.5 "B" 1144+54.37, 30.00' RT
CONSTRUCT 2.5" TYPE 3
DI PER PER NDOT R-4.2.3
25' CURB TRANS (BOTH)
SEE PROFILE 50 ON SD-45

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY
MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL
NEW DROP INLETS PER USDCCA DWG. NO. 421.

2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF
MANHOLE.

3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL
ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE:
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP
BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE
CONSTRUCTED WITH WATERSTOPS. CENTER BULB, OR FLAT
STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR
APPROVED EQUAL).

APPROVED FOR CONSTRUCTION

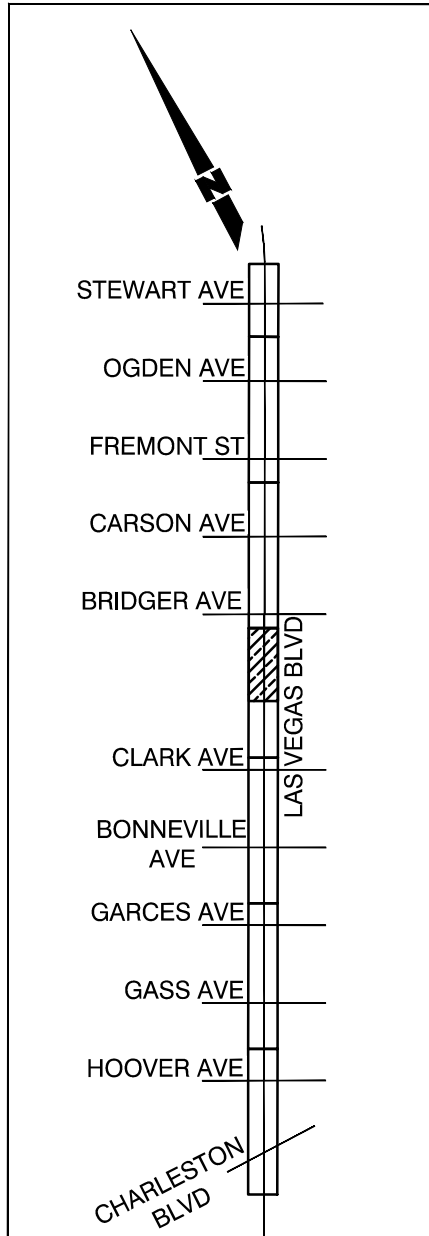
LWWDD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955

GRAPHIC SCALE



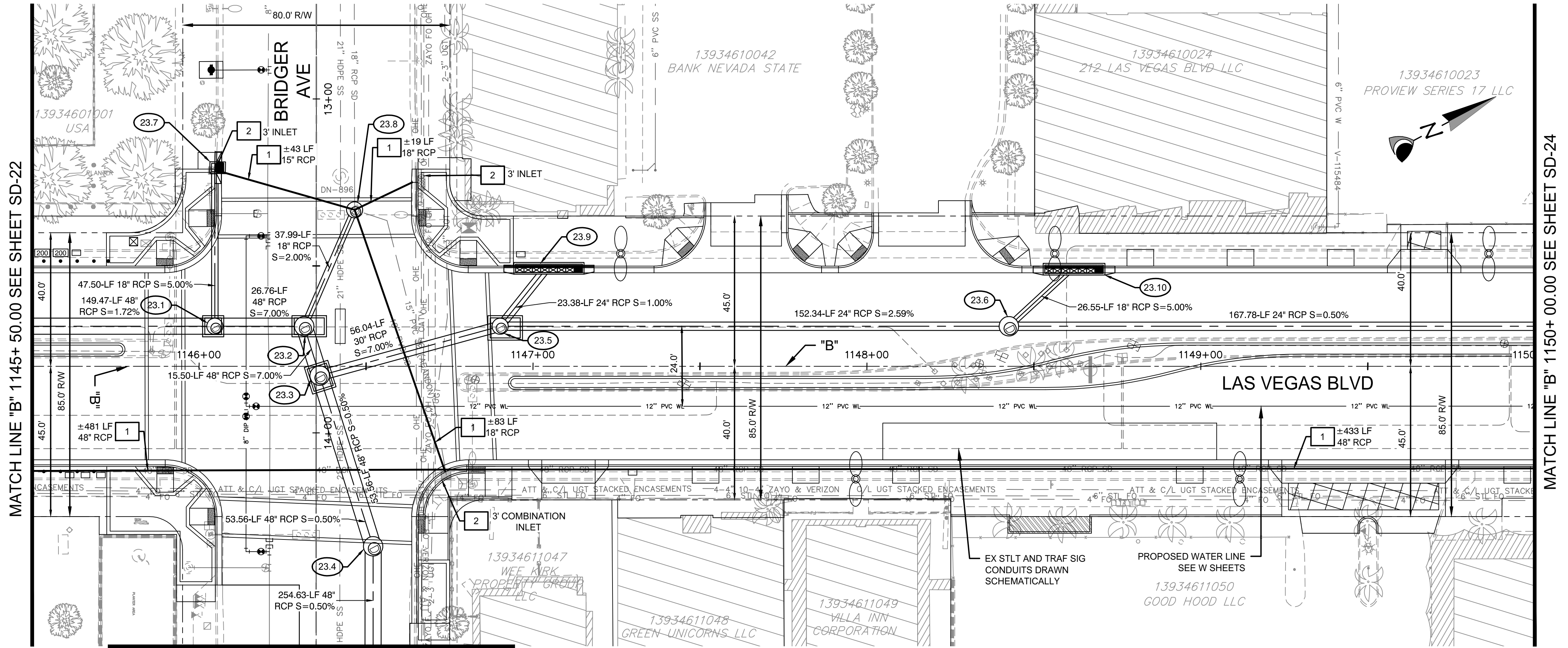
CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS T.E.F.O.	702-455-7511
	CITY OF LAS VEGAS	702-229-6611
	NV ENERGY	702-227-2929

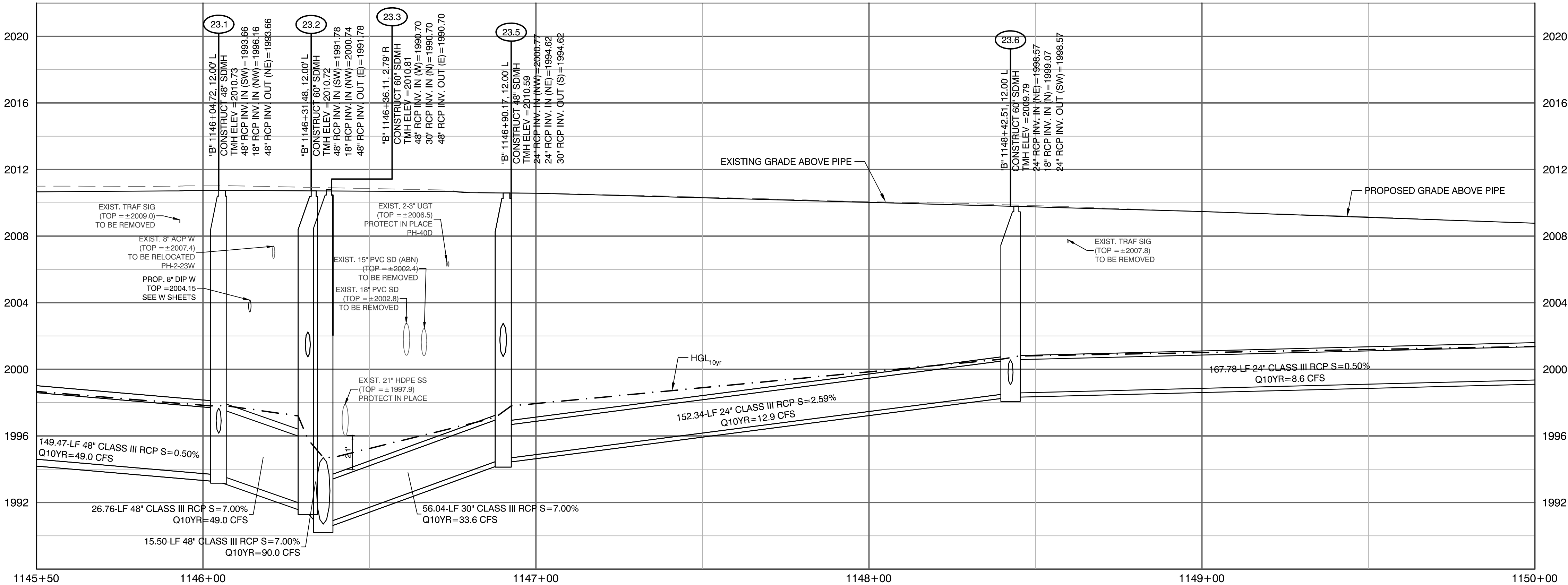


SHEET KEY MAP

CITY OF LAS VEGAS		PREPARED BY	
LAS VEGAS BOULEVARD IMPROVEMENTS STEWART AVE. TO SAHARA AVE.		CA Group, Inc.	
STORM DRAIN PLAN AND PROFILE "B" 1142+ 00.00 TO "B" 1145+ 50.00		2785 S. RAINBOW BLVD LAS VEGAS, NV 89146 PHONE (702) 855-5945	
SHEET		NO. DATE	
SD-22		REVISIONS	
XX OF			
DRAWING NO.			
XXXXXXXXX-X			



SEE SHEET SD-28



CONSTRUCTION NOTES

- 23.1 "B" 1146+04.72, 12.00' LT CONSTRUCT 48" TYPE II SDMH PER USDOCA 405.2
- 23.2 "B" 1146+31.48, 12.00' LT CONSTRUCT 60" TYPE II SDMH PER USDOCA 405.2
- 23.3 "B" 1146+36.11, 2.79' RT CONSTRUCT 60" TYPE II SDMH PER USDOCA 405.2
- 23.4 "B" 1146+52.12, 53.91' RT CONSTRUCT 60" TYPE III SDMH PER USDOCA 406.1
- 23.5 "B" 1146+90.17, 12.00' LT CONSTRUCT 48" TYPE II SDMH PER USDOCA 405.2
- 23.6 "B" 1148+42.51, 12.00' LT CONSTRUCT 60" TYPE I SDMH PER USDOCA 403.1
- 23.7 "B" 1146+04.72, 59.50' LT CONSTRUCT 2.5' TYPE 3 DI PER PER NDOT R-4.2.3 SEE PROFILE 51 ON SD-45
- 23.8 "B" 1146+46.58, 46.85' LT CONSTRUCT 48" TYPE I SDMH PER USDOCA 403.1 SEE PROFILE 52 ON SD-45
- 23.9 "B" 1147+04.78, 30.25' LT CONSTRUCT 20" TYPE "DM2" DI PER PER USDOCA 412.1 SEE PROFILE 53 ON SD-45
- 23.10 "B" 1148+62.02, 30.00' LT CONSTRUCT 17.5' TYPE "DM2" DI PER PER USDOCA 412.1 SEE PROFILE 54 ON SD-45

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

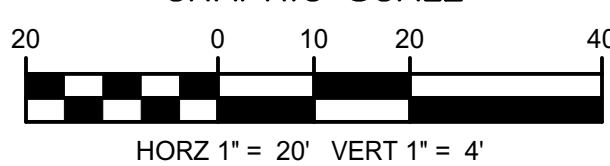
NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL NEW DROP INLETS PER USDOCA DWG. NO. 421.
2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF MANHOLE.
3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE: CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL).

APPROVED FOR CONSTRUCTION

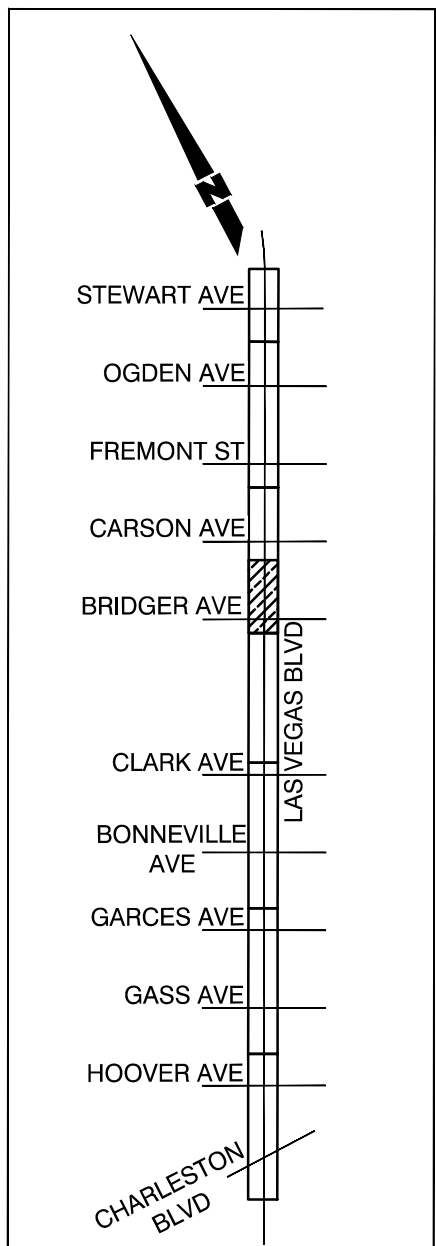
LWWDD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955

GRAPHIC SCALE



CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929



SHEET KEY MAP

PREPARED BY
CA Group, Inc.
C A V I O L A N S O N
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 855-5945

DESIGNED BY: JB
DRAWN BY: JB
CHECKED BY: HM

DATE: 06/27/2019
SUBMITTAL STAGE: 100% SUBMITTAL

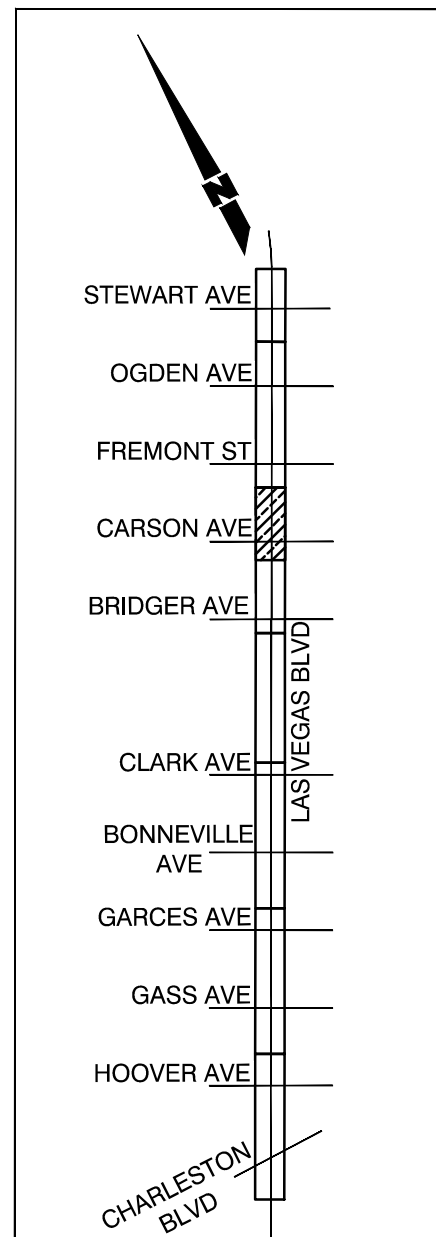
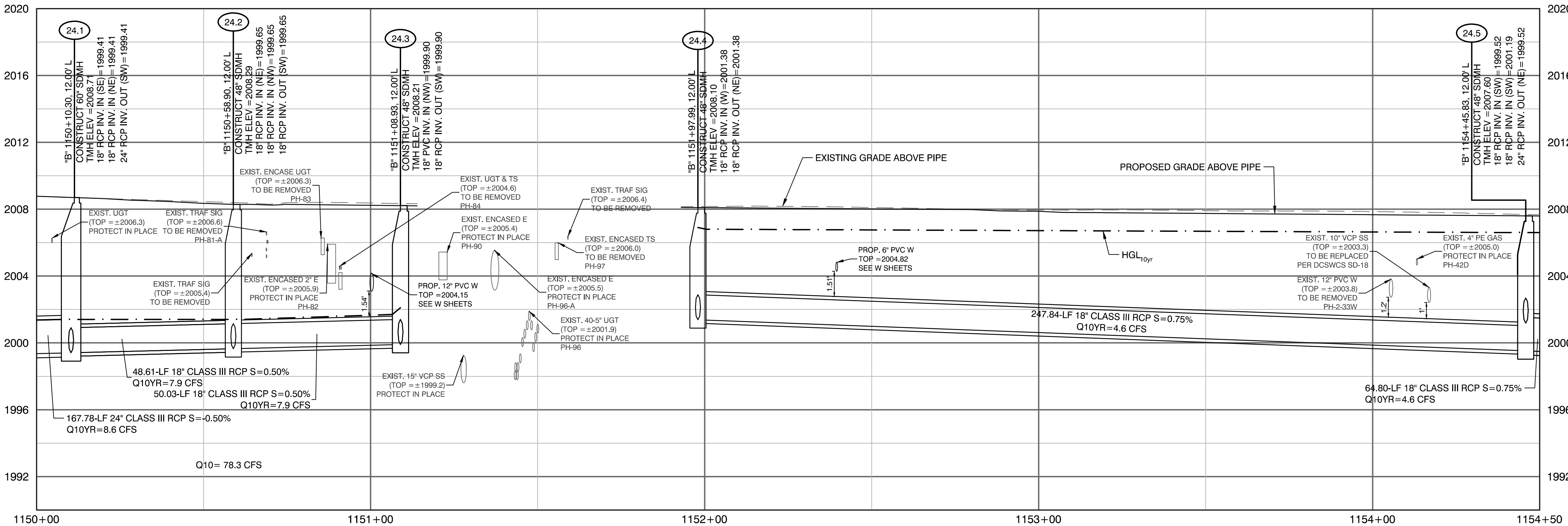
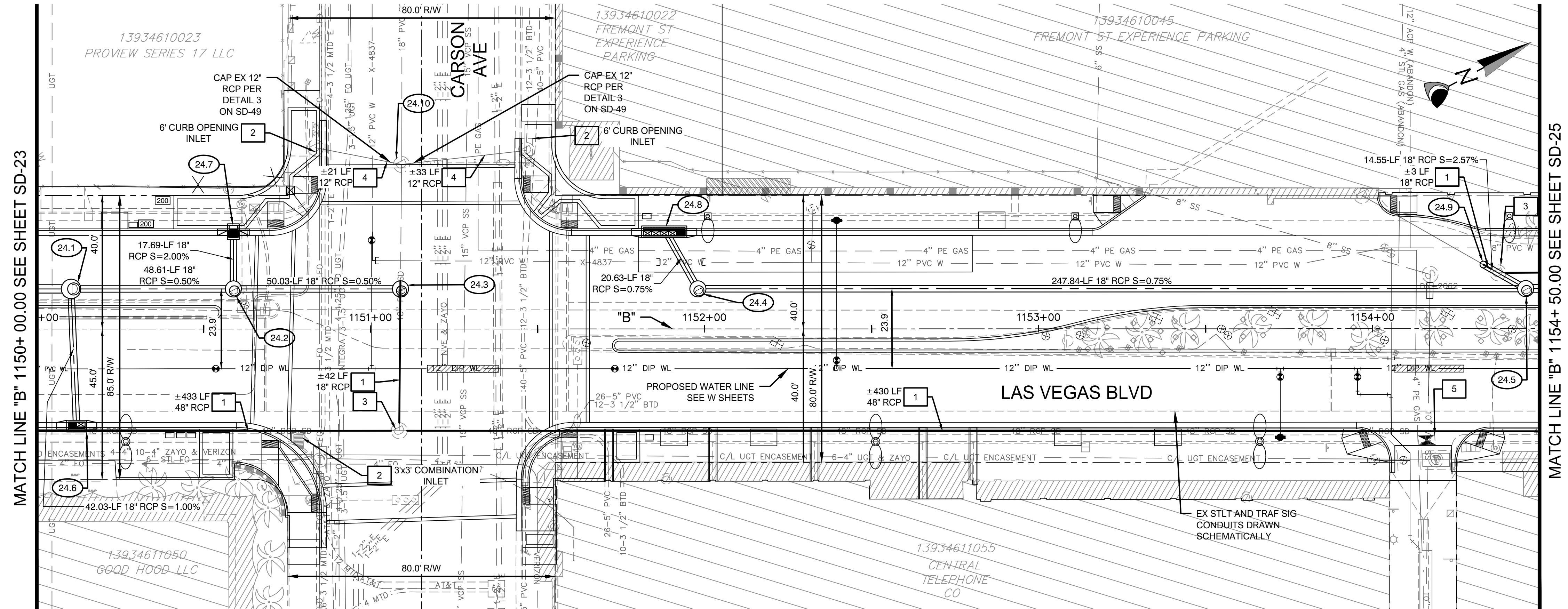
CITY OF LAS VEGAS

LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.

STORM DRAIN PLAN AND PROFILE
"B" 1145+ 50.00 TO "B" 1150+ 00.00

DATE: 06/27/2019
BY: [Signature]
NOT FOR CONSTRUCTION

SD-23
XX OF
DRAWING NO. XXXXXXXX-X



CONSTRUCTION NOTES

- 24.1 "B" 1150+10.30, 12.00' LT CONSTRUCT 60" TYPE I SDMH PER USDOCA 403.1
- 24.2 "B" 1150+58.90, 12.00' LT CONSTRUCT 48" TYPE I SDMH PER USDOCA 403.1
- 24.3 "B" 1151+08.93, 12.00' LT CONSTRUCT 48" TYPE I SDMH PER USDOCA 403.1
- 24.4 "B" 1151+97.99, 12.00' LT CONSTRUCT 48" TYPE I SDMH PER USDOCA 403.1
- 24.5 "B" 1154+45.83, 12.00' LT CONSTRUCT 48" TYPE I SDMH PER USDOCA 403.1
- 24.6 "B" 1150+11.99, 30.00' RT CONSTRUCT 5' TYPE "DM2" DI PER PER USDOCA 412.1 W/ 2 GRATES SEE PROFILE 55 ON SD-45
- 24.7 "B" 1150+58.90, 30.00' LT CONSTRUCT 2.5' TYPE 3 DI PER PER NDOT R-4.2.3 SEE PROFILE 56 ON SD-46
- 24.8 "B" 1151+87.90, 30.00' LT CONSTRUCT 12.5' TYPE "DM2" DI PER PER USDOCA 412.1 SEE PROFILE 57 ON SD-46
- 24.9 "B" 1154+33.19, 19.20' LT CONSTRUCT CONCRETE COLLAR PER DETAIL 2, SD-49 SEE PROFILE 58 ON SD-46
- 24.10 "B" 1151+09.26, 49.28' LT ADJUST EXISTING STORM DRAIN MANHOLE TO FINISHED GRADE.

REMOVAL NOTES

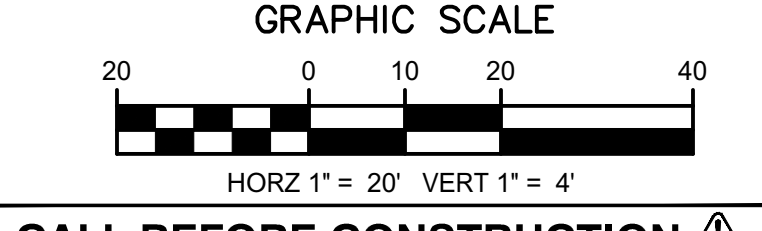
- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.
- 5 REMOVE ABANDONED DROP INLET WITH PENETRATING UTILITIES 6" BELOW SUBGRADE, CLSM BACKFILL TO TOP OF REMAINING STRUCTURE.

NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL NEW DROP INLETS PER USDOCA DWG. NO. 421.
2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF MANHOLE.
3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE: CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS. CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL).

APPROVED FOR CONSTRUCTION

LWWWD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955



CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929

PREPARED BY
CA Group, Inc
CAYIOLA ANSON
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 855-5945

PREPARED FOR
CITY OF LAS VEGAS

BID# 19.68939

DESIGNED BY: JB

DRAWN BY: JB

CHECKED BY: HM

LAS VEGAS BOULEVARD IMPROVEMENTS

STEWART AVE. TO SAHARA AVE.

STORM DRAIN PLAN AND PROFILE

"B" 1150+ 00.00 TO "B" 1154+ 50.00

DATE: 06/27/2019

SUBMITTAL STAGE: 100% SUBMITTAL

DATE: 06/27/2019

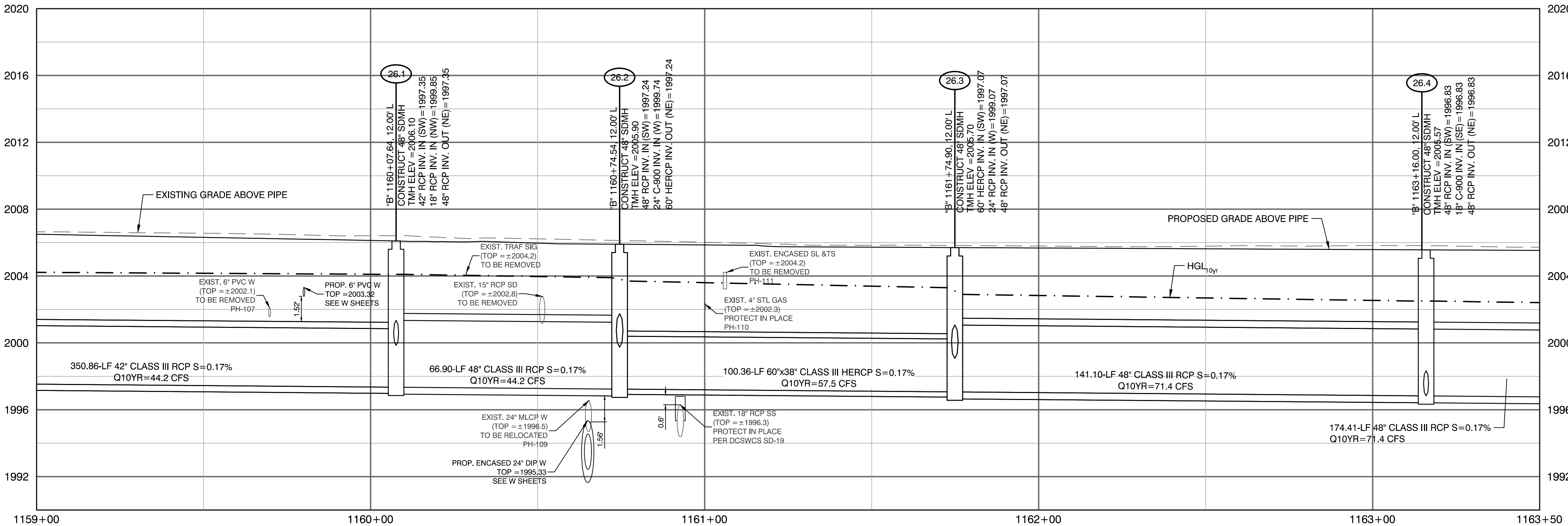
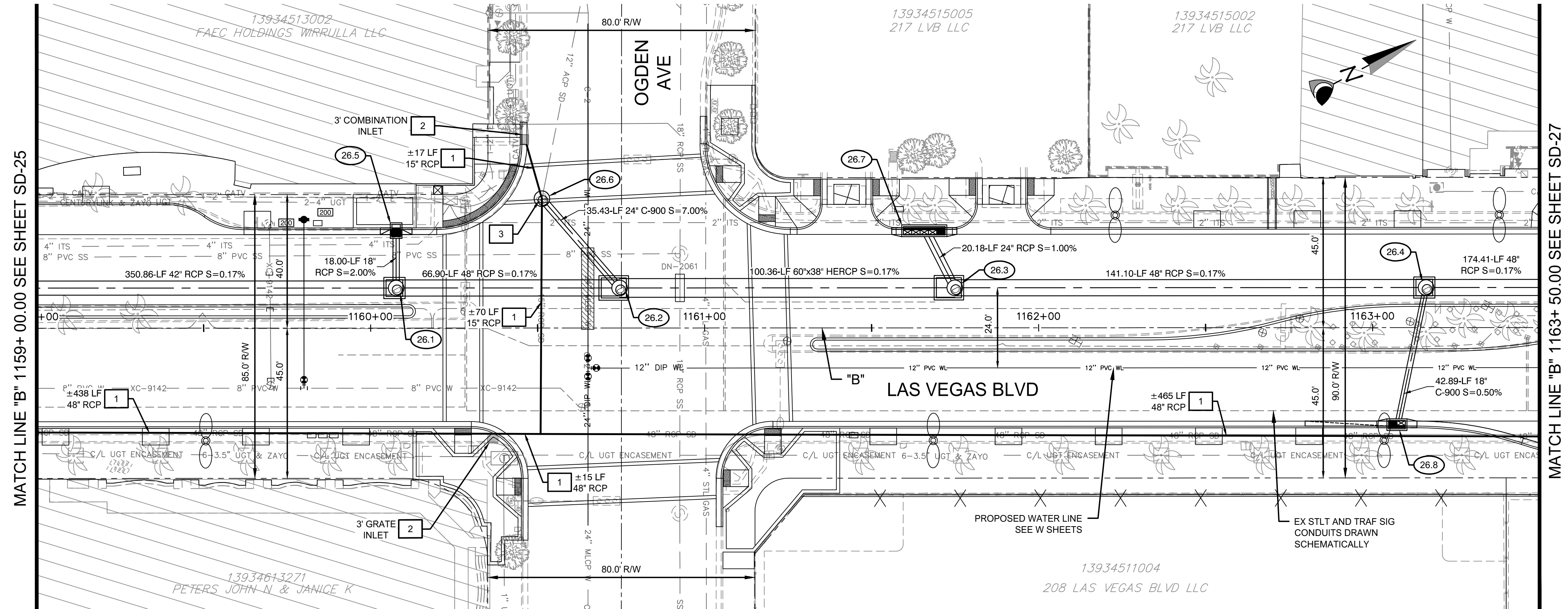
PROJECT NO. 123955

SD-24

XX OF XXXXXXXX-X

NOT FOR CONSTRUCTION

DATE: 06/27/2019



CONSTRUCTION NOTES

- 26.1 "B" 1160+07.64, 12.00' LT CONSTRUCT 48" TYPE II SDMH W/ TYPE IA RISER PER USDOCA 405.2 AND 404.1
- 26.2 "B" 1160+74.54, 12.00' LT CONSTRUCT 48" TYPE II SDMH W/ TYPE IA RISER PER USDOCA 405.2 AND 404.1
- 26.3 "B" 1161+74.90, 12.00' LT CONSTRUCT 48" TYPE II SDMH W/ TYPE IA RISER PER USDOCA 405.2 AND 404.1
- 26.4 "B" 1163+16, 12.00' LT CONSTRUCT 48" TYPE II SDMH W/ TYPE IA RISER PER USDOCA 405.2 AND 404.1
- 26.5 "B" 1160+07.64, 30.00' LT CONSTRUCT 2.5' TYPE 3 DI PER PER NDOT R-4.2.3 SEE PROFILE 63 ON SD-46
- 26.6 "B" 1160+51.29, 38.73' LT CONSTRUCT 48" TYPE IA SDMH PER USDOCA 404.1 SEE PROFILE 64 ON SD-47
- 26.7 "B" 1161+65.77, 30.00' LT CONSTRUCT 12.5' TYPE "DM2" DI PER PER USDOCA 412.1 SEE PROFILE 65 ON SD-47
- 26.8 "B" 1163+07.28, 30.00' RT CONSTRUCT 5' TYPE "DM2" DI PER PER USDOCA 412.1 W/ 2 GRATES 25" CURB TRANS (SOUTH) SEE PROFILE 66 ON SD-47

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

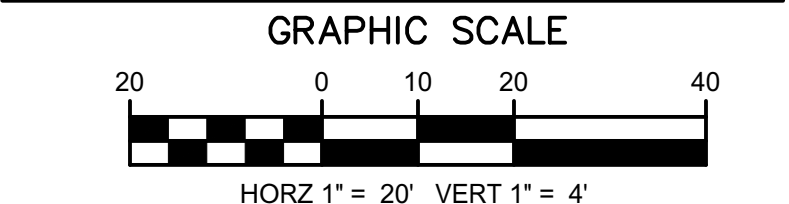
NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL NEW DROP INLETS PER USDOCA DWG. NO. 421.
2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF MANHOLE.
3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE: CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS, BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL).

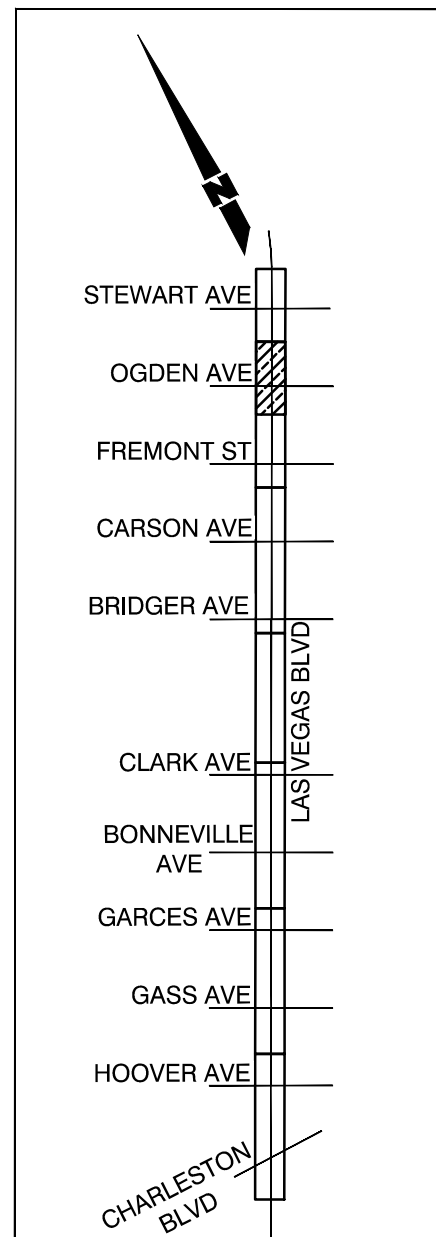
APPROVED FOR CONSTRUCTION

LWWWD ENGINEERING SERVICES MANAGER DATE PROJECT NO. 123955

CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.



CALL BEFORE CONSTRUCTION			
BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600	
	F.A.S.T.	702-432-5300	
BEFORE YOU UNDERGROUND	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511	
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611	
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929	



SHEET KEY MAP

PREPARED BY
CA Group, Inc
CAVIOLA ANSON
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE (702) 855-5945

DESIGNED BY: JB
DRAWN BY: JB
CHECKED BY: HM

DATE: 06/27/2019
SUBMITTAL STAGE: 100% SUBMITTAL

CITY OF LAS VEGAS
BID# 19.68939
HW 46330

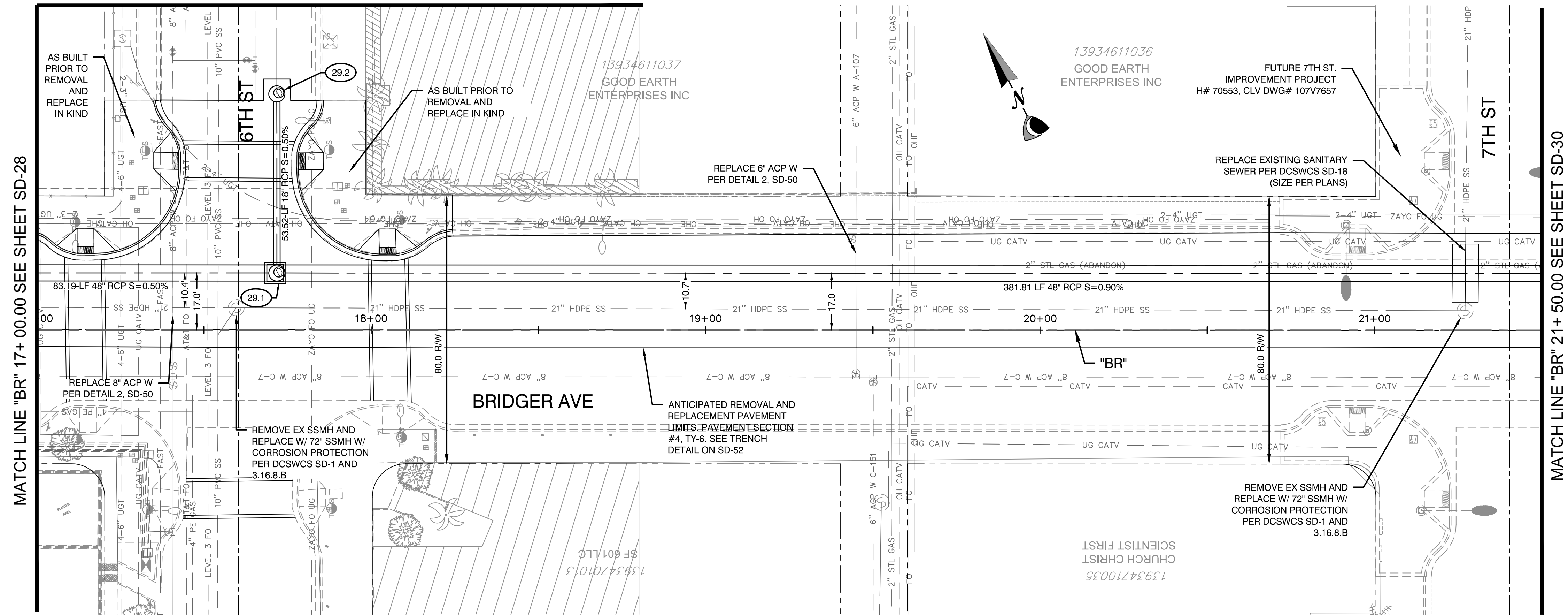
LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.
STORM DRAIN PLAN AND PROFILE
"B" 1159+ 00.00 TO "B" 1163+ 50.00

DATE: 06/27/2019
SUBMITTAL STAGE: 100% SUBMITTAL

DATE: 06/27/2019
TIME: 10:00 AM
BY: J. ANSON
NOT FOR CONSTRUCTION

SHEET
SD-26
XX OF
DRAWING NO.
XXXXXXXXX-X

SEE SPECIAL PROVISIONS FOR 6TH STREET DROP INLET LIDS



CONSTRUCTION NOTES

- 29.1
BR 17+71.78, 17.05 LT
CONSTRUCT 48" TYPE II
SDMH PER USDCCA 405.2
- 29.2
*BR 17+71.75, 70.55' LT
CONSTRUCT 48" TYPE I
SDMH PER USDCCA 403.1
SEE PROFILE 69 ON SD-47

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

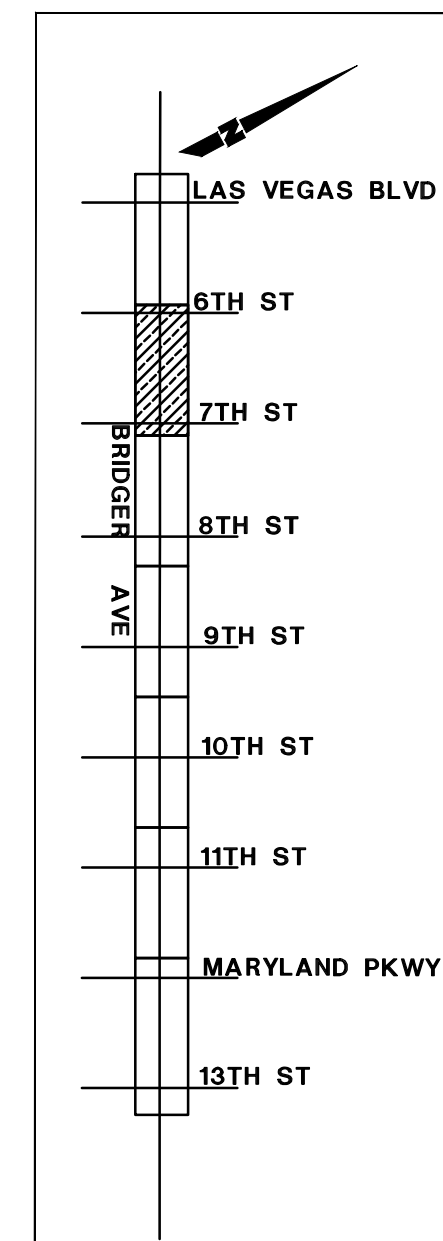
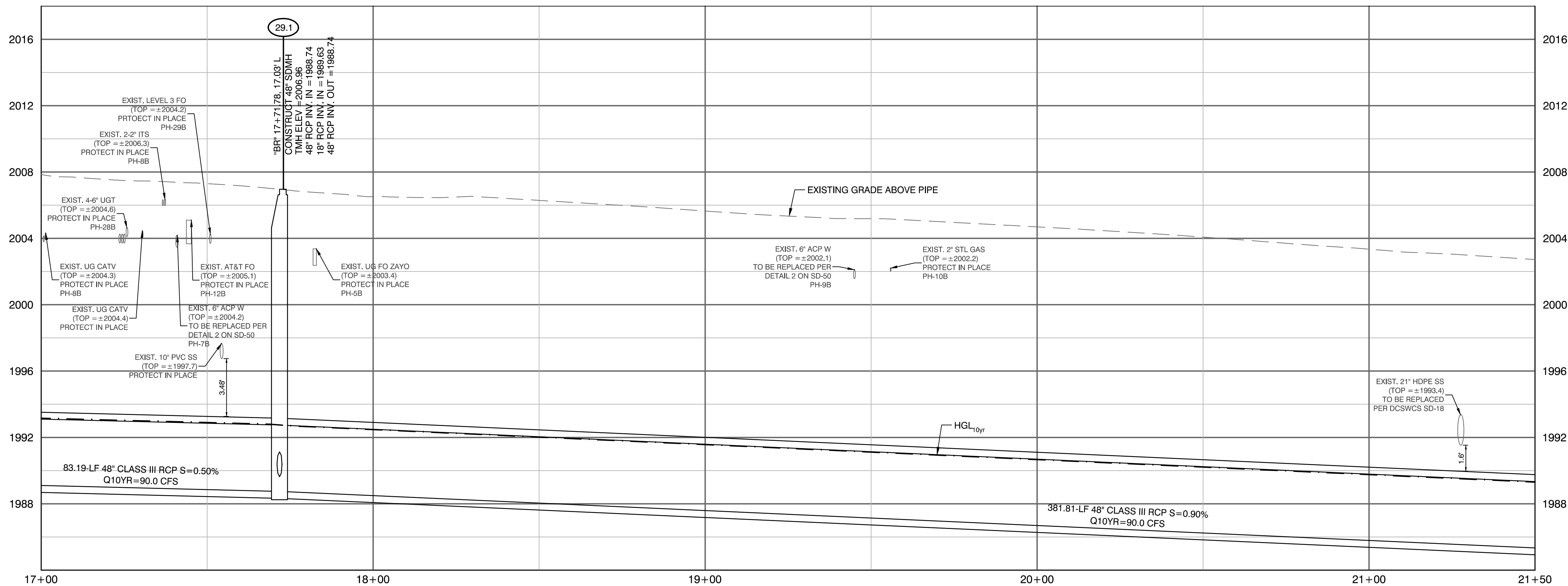
NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY
MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL
NEW DROP INLETS PER USDCCA DWG. NO. 421.

2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF MANHOLE.

3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL 1 ON SD-49.

DROP INLET NOTE

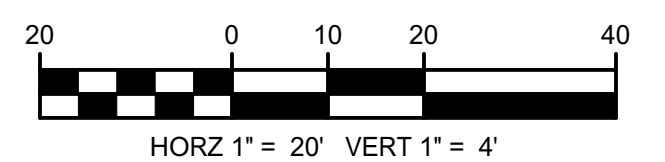
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE: CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL).



APPROVED FOR CONSTRUCTION

LVVWD ENGINEERING SERVICES MANAGER	DATE
PROJECT NO. 123955	
CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.	

GRAPHIC SCALE



CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929

SHEET KEY MAP

PREPARED BY



2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 685-5945

PREPARED FOR
CITY OF LAS VEGAS

BID# 19.68939

DESIGNED BY:

DRAWN BY:

CHECKED BY:

PREPARED FOR
CITY OF

H#	46330
----	-------

DATE: 06/

SUBMITTA

100% S

**VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.**

STORM DRAIN PLAN AND PROFILE
"BR" 17+ 00.00 TO "BR" 21+ 50.00

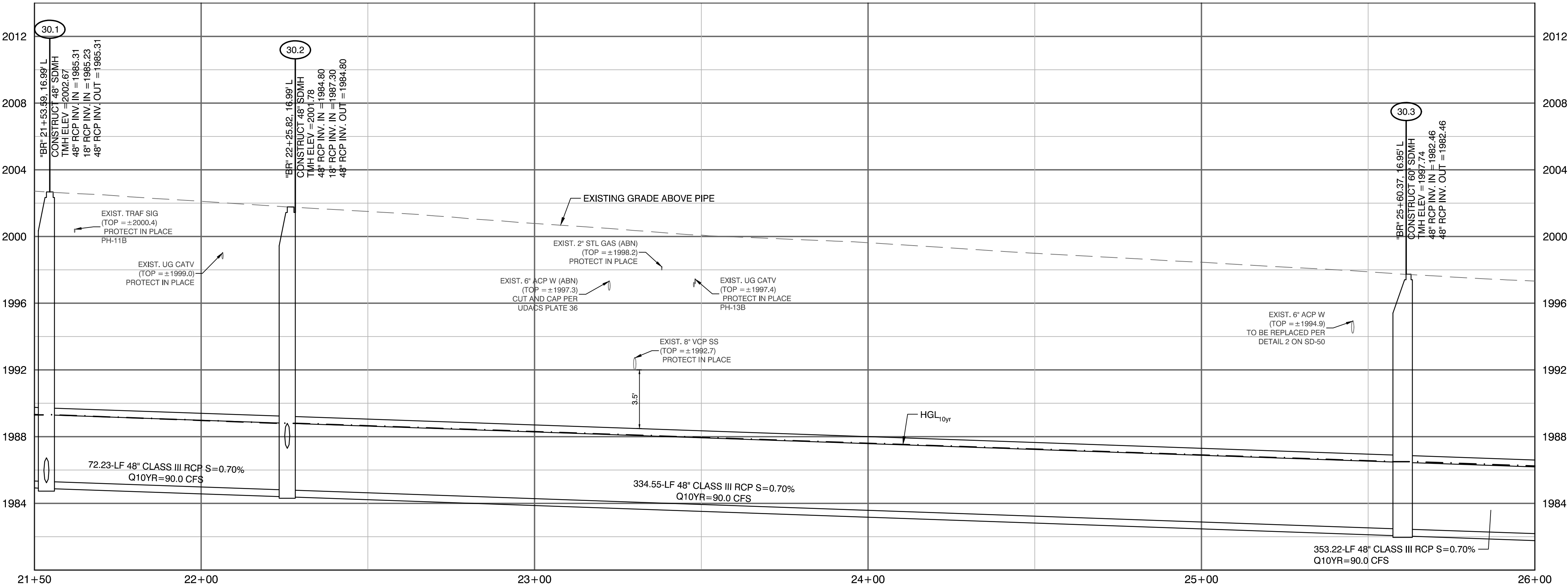
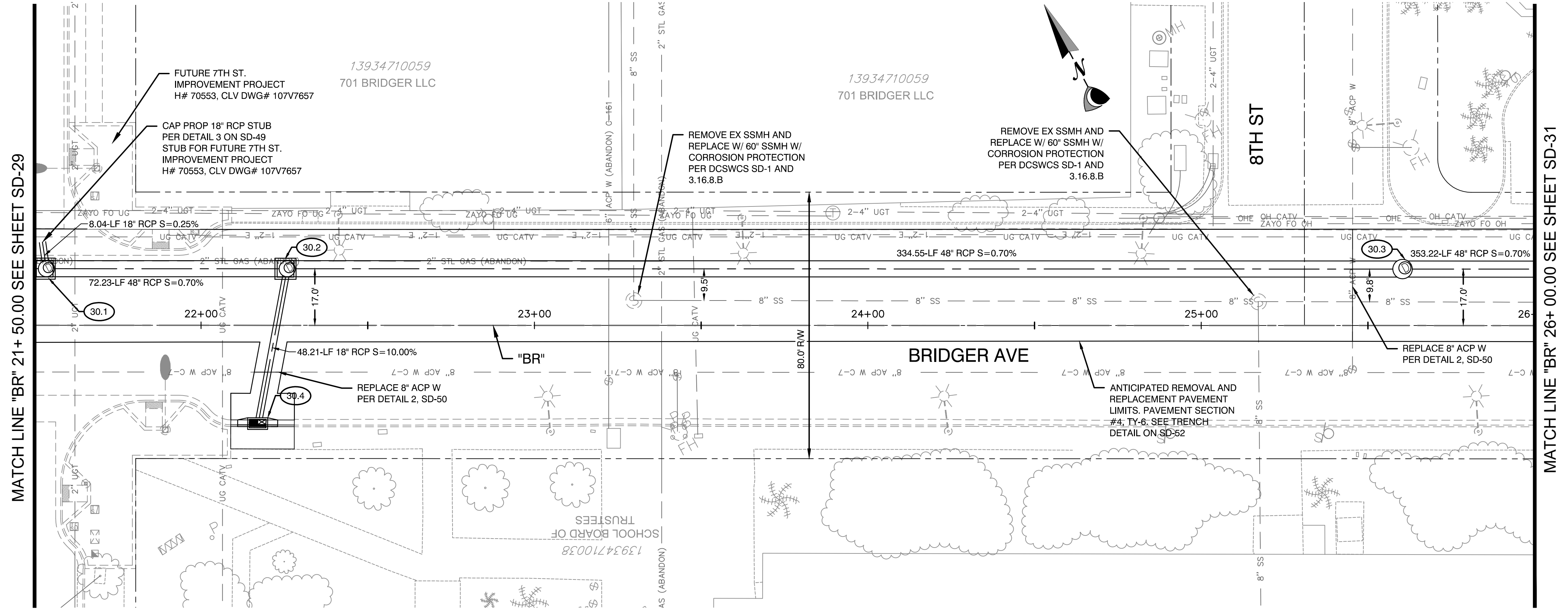


SHEET

SD-29

XX OF

DRAWING NO.
XXXXXXXXXX-X



CONSTRUCTION NOTES

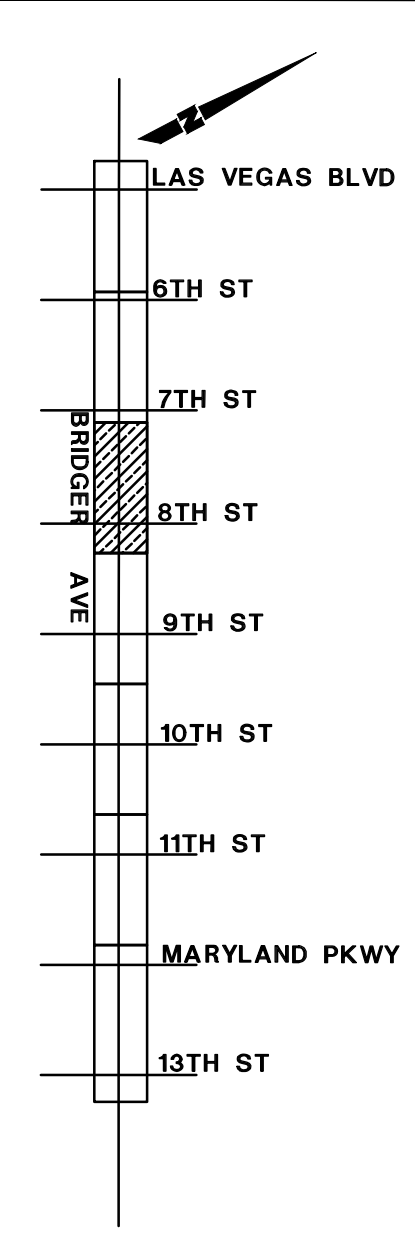
- 30.1 "BR" 21+53.59, 16.99' LT CONSTRUCT 48" TYPE II SDMH PER USDCCA 405.2
- 30.2 "BR" 22+25.82, 16.99' LT CONSTRUCT 48" TYPE II SDMH PER USDCCA 405.2
- 30.3 "BR" 25+60.37, 16.95' LT CONSTRUCT 60" TYPE III SDMH PER USDCCA 406.1
- 30.4 "BR" 22+16.97, 30.41' RT CONSTRUCT 5' TYPE "DM2" DI PER PER USDCCA 412.1 W/ 2 GRATES SEE PROFILE 70 ON SD-47

REMOVAL NOTES

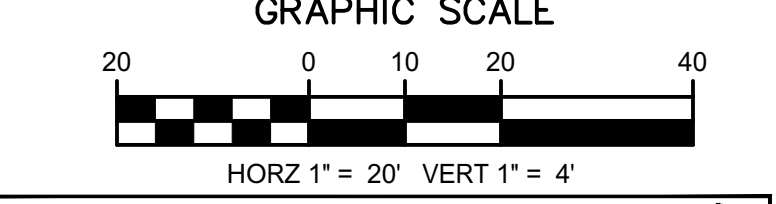
- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL NEW DROP INLETS PER USDCCA DWG. NO. 421.
2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF MANHOLE.
3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE: CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE CONSTRUCTED WITH WATERSTOPS. CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL).



APPROVED FOR CONSTRUCTION
LWWDD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955
CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.



CALL BEFORE CONSTRUCTION			
BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600	
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300	
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511	
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611	
	NV ENERGY	702-227-2929	

PREPARED BY: CA Group, Inc. CAVIOLA ANSON

2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 685-5945

CITY OF LAS VEGAS	BID# 19.68939	DESIGNED BY: JB	CHECKED BY: HM
HW 46330	DATE: 06/27/2019	DRAWN BY: JB	
	SUBMITTAL STAGE: 100% SUBMITTAL		

TITLE LAS VEGAS BOULEVARD IMPROVEMENTS STEWART AVE. TO SAHARA AVE.

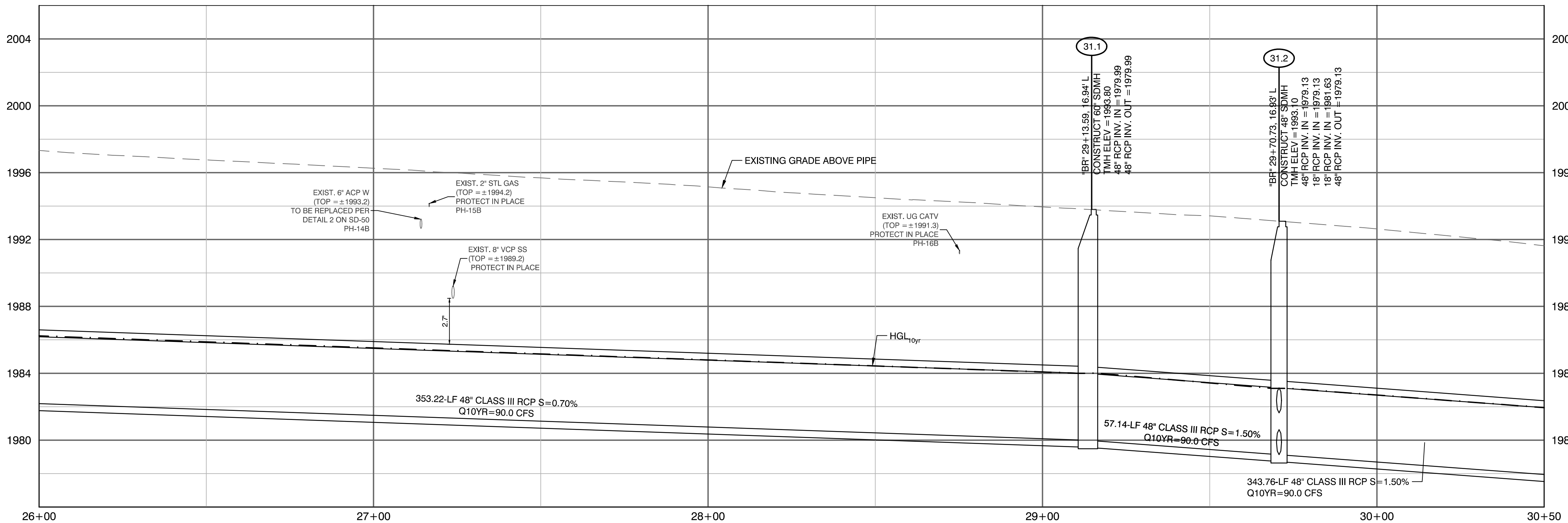
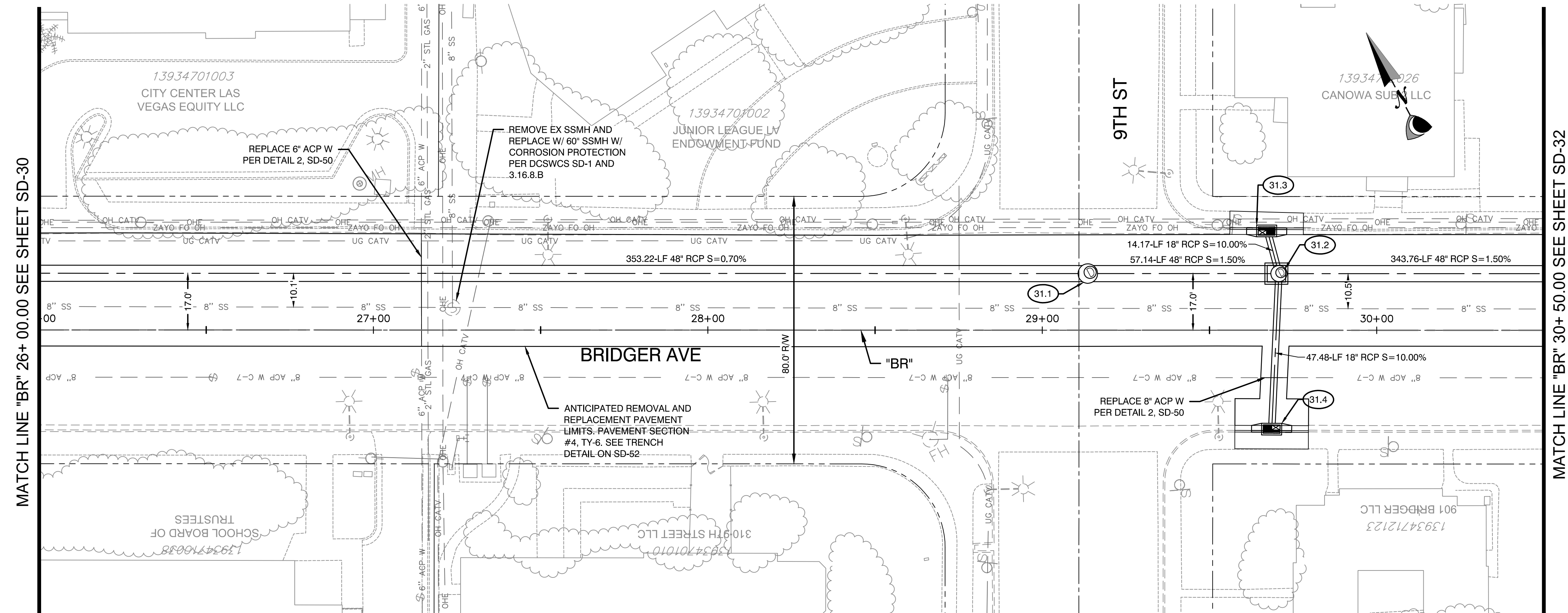
SHEET STORM DRAIN PLAN AND PROFILE "BR" 21+ 50.00 TO "BR" 26+ 00.00

DATE: 06/27/2019

100% SUBMITTAL

SHEET SD-30

XX OF XXXXXXXX-X



CONSTRUCTION NOTES

- 31.1 "BR" 29+13.59, 16.94' LT
CONSTRUCT 60" TYPE II
SDMH PER USDOCA 406.1
- 31.2 "BR" 29+70.73, 16.93' LT
CONSTRUCT 48" TYPE II
SDMH PER USDOCA 405.2
- 31.3 "BR" 29+67.06, 30.62' LT
CONSTRUCT 5" TYPE "DM2"
DI PER PER USDOCA 412.1
W/ 2 GRATES
SEE PROFILE 71 ON SD-47
- 31.4 "BR" 29+68.57, 30.50' RT
CONSTRUCT 5" TYPE "DM2"
DI PER PER USDOCA 412.1
W/ 2 GRATES
SEE PROFILE 71 ON SD-47

REMOVAL NOTES

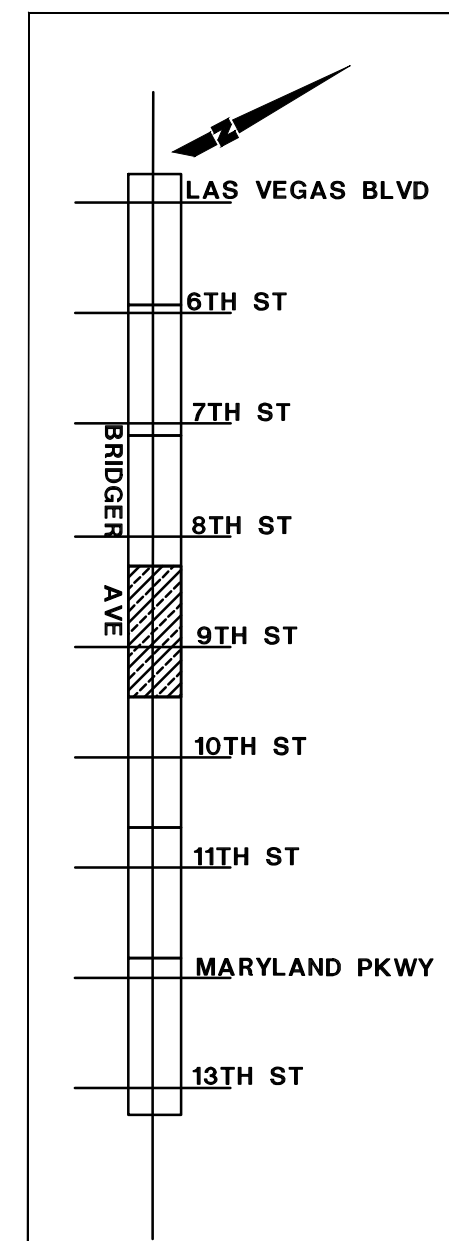
- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY
MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL
NEW DROP INLETS PER USDCCA DWG. NO. 421.

2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF MANHOLE.

3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE:
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP
BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE
CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLA
STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR
APPROVED EQUAL).



APPROVED FOR CONSTRUCTION

LVVWD ENGINEERING SERVICES MANAGER	DATE
PROJECT NO. 123955	

GRAPHIC SCALE

A horizontal scale bar with alternating black and white segments. The segments are labeled with numbers: 20, 0, 10, 20, 40. Below the bar, the text reads: **HORZ 1" = 20' VERT 1" = 4'**

CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929

SHEET KEY MAP

PREPARED BY

PREPARED FOR
CITY OF LAS VEGAS

# 46330	BID# 19.68939
---------	---------------

DATE: 06/27/2019	DESIGNED BY: JB
------------------	-----------------

JBMITTAL STAGE:	DRAWN BY: JB
-----------------	--------------

PREPARED FOR

H# 46330

DATE: 06/27/2019

SUBMITTAL STAGE

TITLE
LAS VEGAS BOULEVARD IMPROVEMENTS

STEWART AVE. TO SAHARA AVE.

SHEET
STORM DRAIN PLAN AND PROFILES

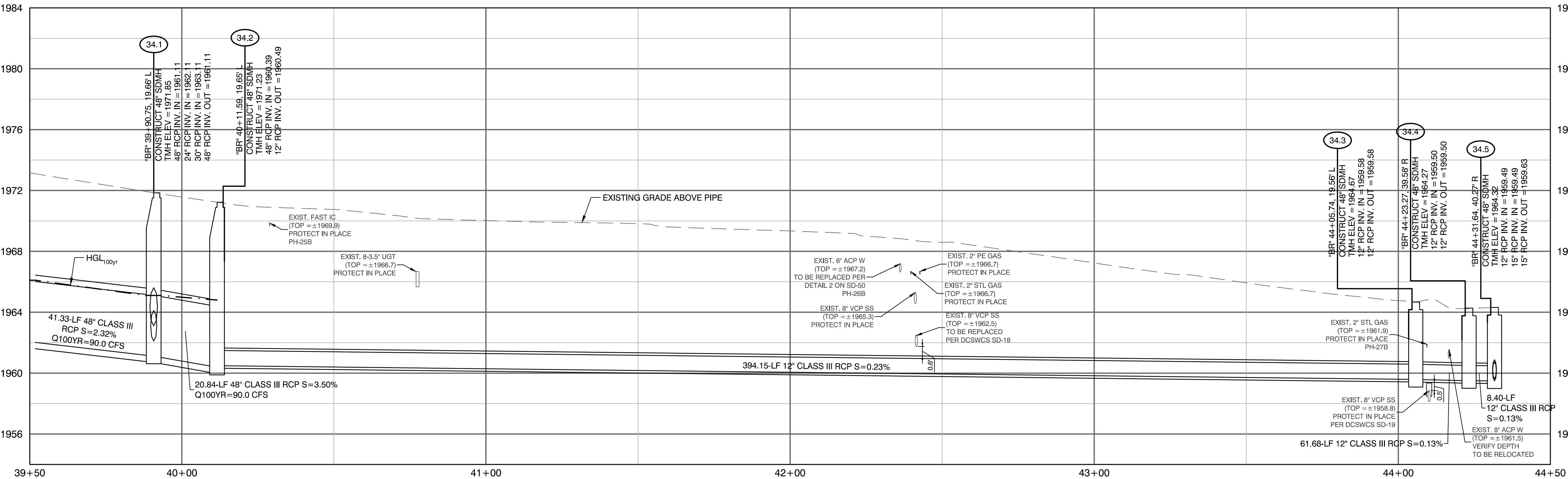
STORM DRAIN PLAN AND PROFILE
"BP" 2E+00 TO "BP" 30+ 50.00

SHEET

SD-31

XX OF

DRAWING NO.
XXXXXXXXXX-X



CONSTRUCTION NOTES

- 34.1 "BR" 39+90.75, 19.66' LT
CONSTRUCT 48" TYPE II
SDMH PER USDOCA 405.2
LID & FRAME PER DETAIL 1, SD-51
- 34.2 "BR" 40+11.59, 19.65' LT
CONSTRUCT 48" TYPE 4
SDMH PER NDOT R-4.3.2
LID & FRAME PER DETAIL 1, SD-51
- 34.3 "BR" 44+05.74, 19.56' LT
CONSTRUCT 48" TYPE IA
SDMH PER USDOCA 404.1
LID & FRAME PER DETAIL 1, SD-51
- 34.4 "BR" 44+23.27, 39.58' RT
CONSTRUCT 48" TYPE IA
SDMH PER USDOCA 404.1
LID & FRAME PER DETAIL 1, SD-51
- 34.5 "BR" 44+31.64, 40.27' RT
CONSTRUCT 48" TYPE IA
SDMH PER USDOCA 404.1
LID & FRAME PER DETAIL 1, SD-51
- 34.6 "BR" 39+84.70, 30.38' LT
CONSTRUCT 20" TYPE "DM2"
DI PER PER USDOCA 412.1
SEE PROFILE 73 ON SD-48
- 34.7 "BR" 39+51.38, 30.57' RT
CONSTRUCT 20" TYPE "DM2"
DI PER PER USDOCA 412.1
SEE PROFILE 73 ON SD-48

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

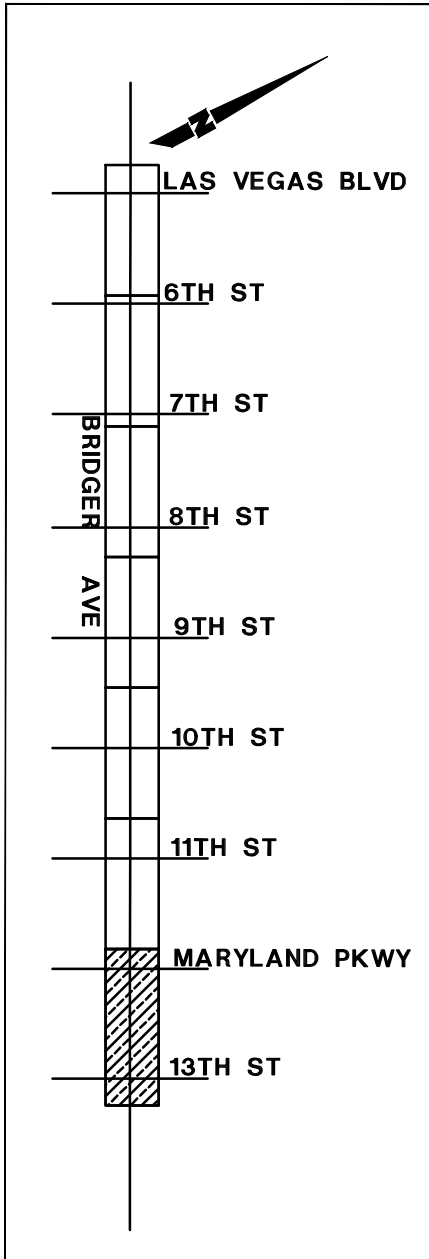
NOTE:

1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY
MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL
NEW DROP INLETS PER USDOCA DWG. NO. 421.

2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF
MANHOLE.

3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL 1
ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE:
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP
BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE
CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT
STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR
APPROVED EQUAL).

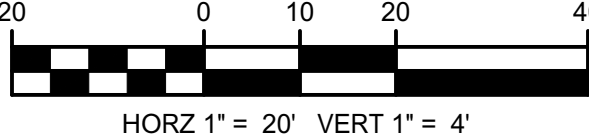


APPROVED FOR CONSTRUCTION

LWWWD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955

CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN
EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

GRAPHIC SCALE



CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929

PREPARED BY
CITY OF LAS VEGAS

BID# 19.68939
DATE: 06/27/2019
SUBMITTAL STAGE:
100% SUBMITTAL

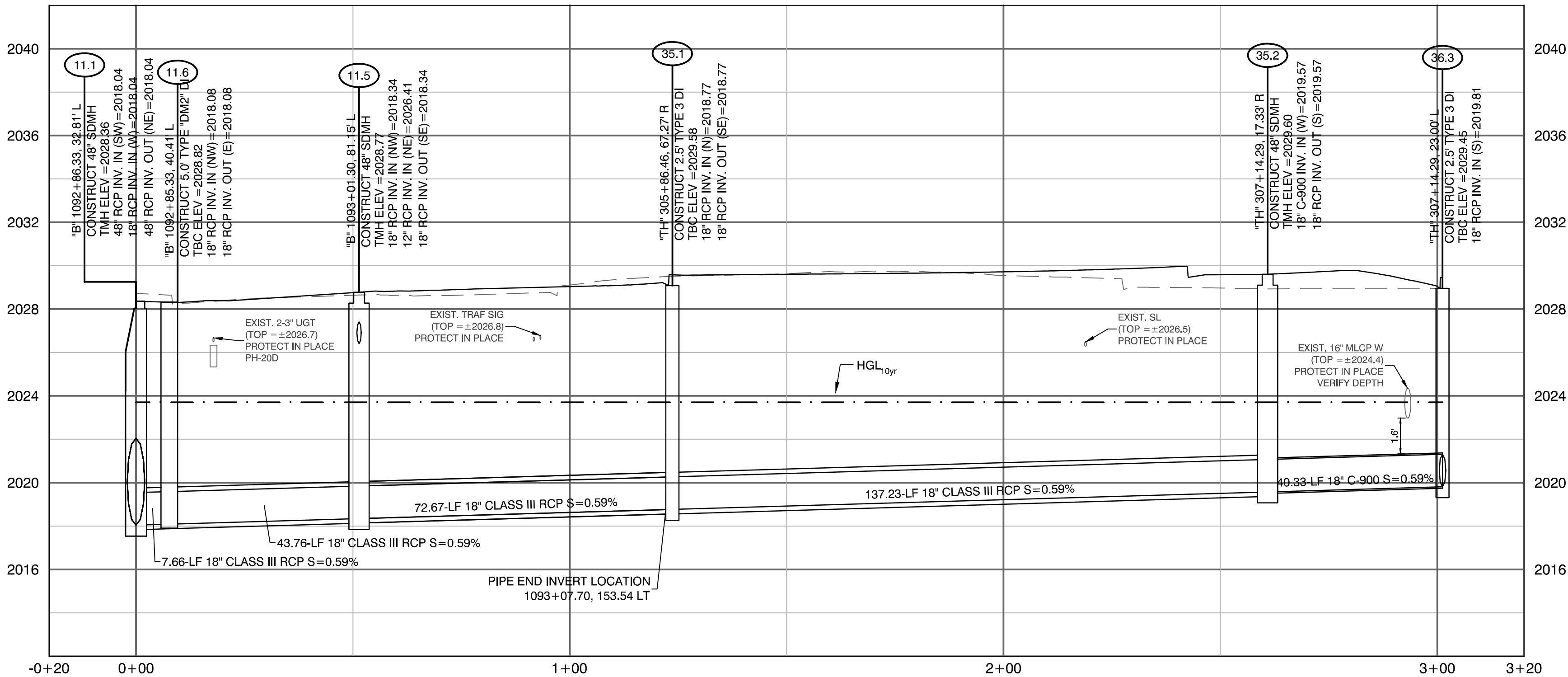
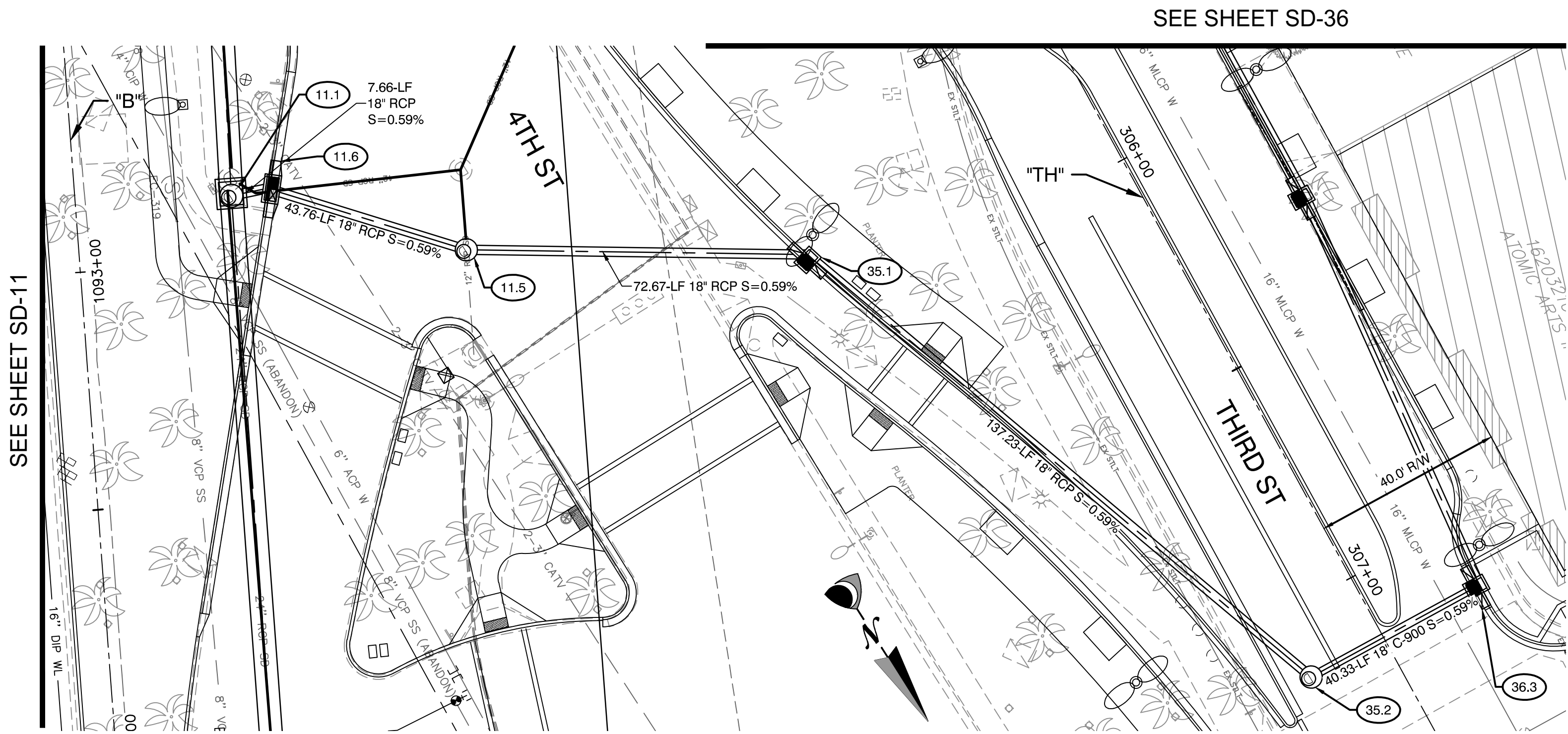
DESIGNED BY: JB
DRAWN BY: JB
CHECKED BY: HM

LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.

SHEET
SD-34
XX OF
DRAWING NO.
XXXXXXXXX-X

DATE: 06/27/2019
TIME: 10:00 AM
BY: [Signature]
FOR: [Signature]

NOT FOR CONSTRUCTION



CONSTRUCTION NOTES

- 35.1 "TH" 305+86.46, 67.27' RT
CONSTRUCT 2.5' TYPE 3
DI PER PER NDOT R-4.2.3
A=2.5' & J=3.5'
- 35.2 "TH" 307+14.29, 17.33' RT
CONSTRUCT 48" TYPE IA
SDMH PER USDOCA 404.1

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY
MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL
NEW DROP INLETS PER USDOCA DWG. NO. 421.

2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF
MANHOLE.

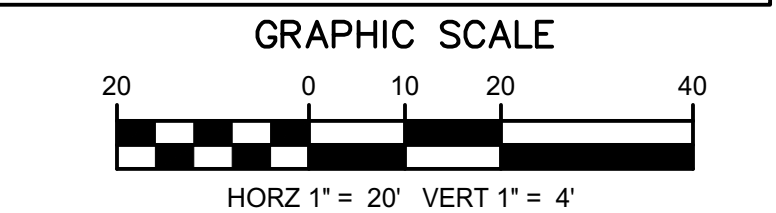
3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL
ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE:
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP
BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE
CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT
STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR
APPROVED EQUAL).

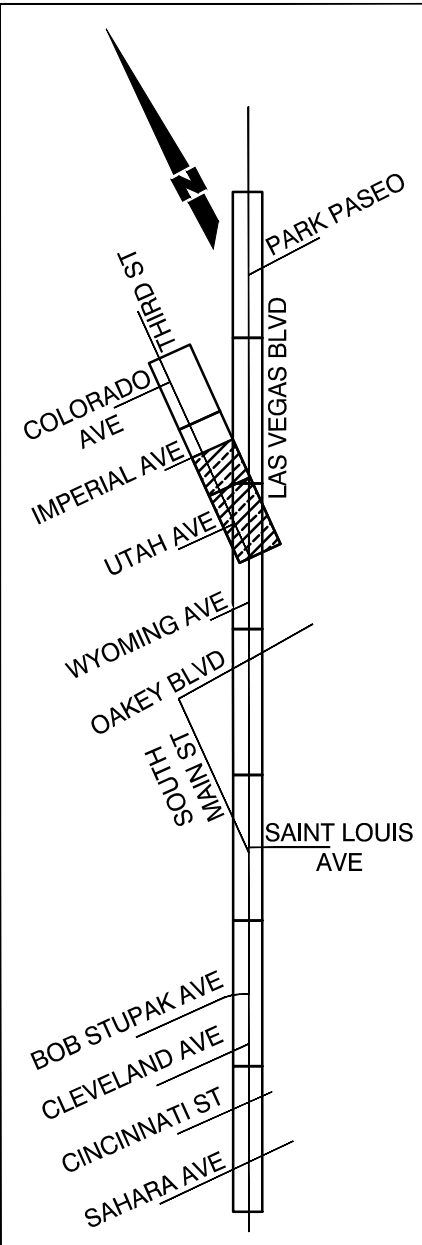
APPROVED FOR CONSTRUCTION

LWWWD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955

CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN
EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

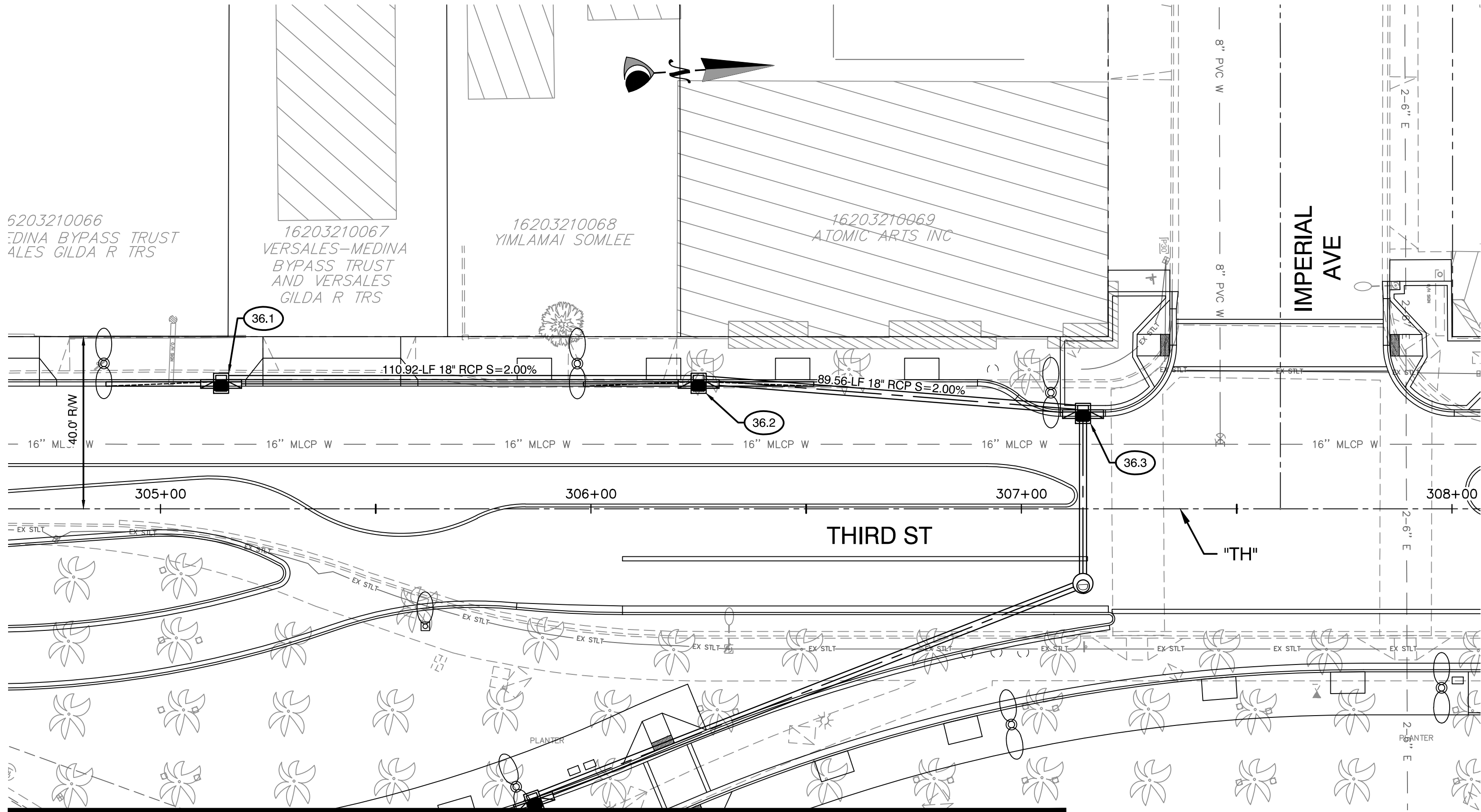


CALL BEFORE CONSTRUCTION		
BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS T.E.F.O.	702-455-7511
	CITY OF LAS VEGAS	702-229-6611
	NV ENERGY	702-227-2929

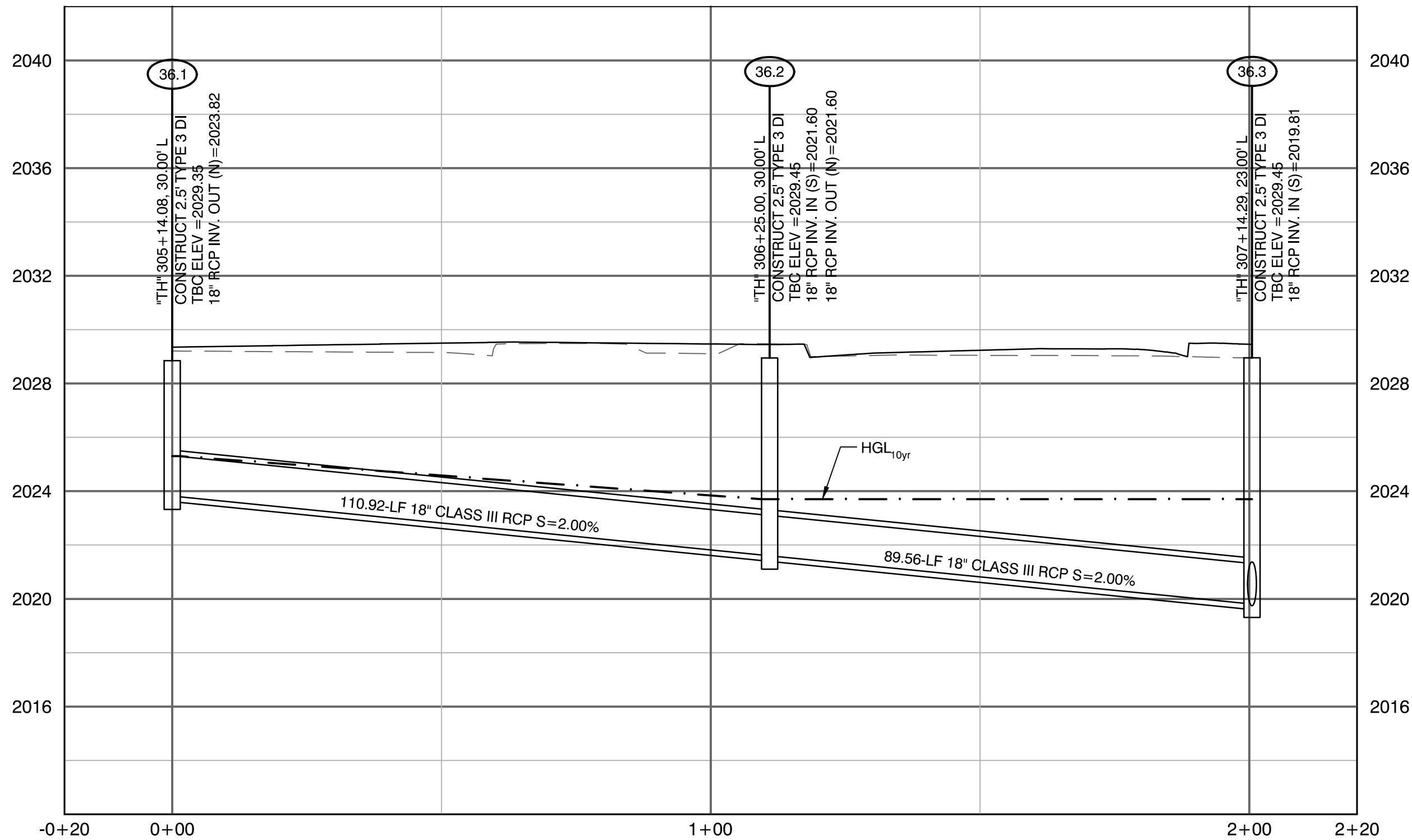


SHEET KEY MAP

PREPARED BY		CITY OF LAS VEGAS	
CA Group, Inc.		BID# 19.68939	
2785 S. RAINBOW BLVD LAS VEGAS, NV 89146 PHONE (702) 685-5945		DESIGNED BY: JB	
		DRAWN BY: JB	
		CHECKED BY: HM	
		SUBMITTAL STAGE: 100% SUBMITTAL	
TITLE		SHEET	
LAS VEGAS BOULEVARD IMPROVEMENTS STEWART AVE. TO SAHARA AVE.		STORM DRAIN PLAN AND PROFILE 4TH ST STORM DRAIN CONNECTION	
SHEET		SD-35	
XX OF		DRAWING NO.	
XXXXXXX-X			



SEE SHEET SD-35



CONSTRUCTION NOTES

- 36.1 "TH" 305+14.08, 30.00' LT
CONSTRUCT 2.5' TYPE 3
DI PER PER NDOT R-4.2.3
25' CURB TRANS (BOTH)
- 36.2 "TH" 306+25, 30.00' LT
CONSTRUCT 2.5' TYPE 3
DI PER PER NDOT R-4.2.3
25' CURB TRANS (BOTH)
- 36.3 "TH" 307+14.29, 23.00' LT
CONSTRUCT 2.5' TYPE 3
DI PER PER NDOT R-4.2.3

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY
MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL
NEW DROP INLETS PER USDOCA DWG. NO. 421.

2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF
MANHOLE.

3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL
ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE:
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP
BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE
CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT
STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR
APPROVED EQUAL).

APPROVED FOR CONSTRUCTION

L\W\W\ ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955

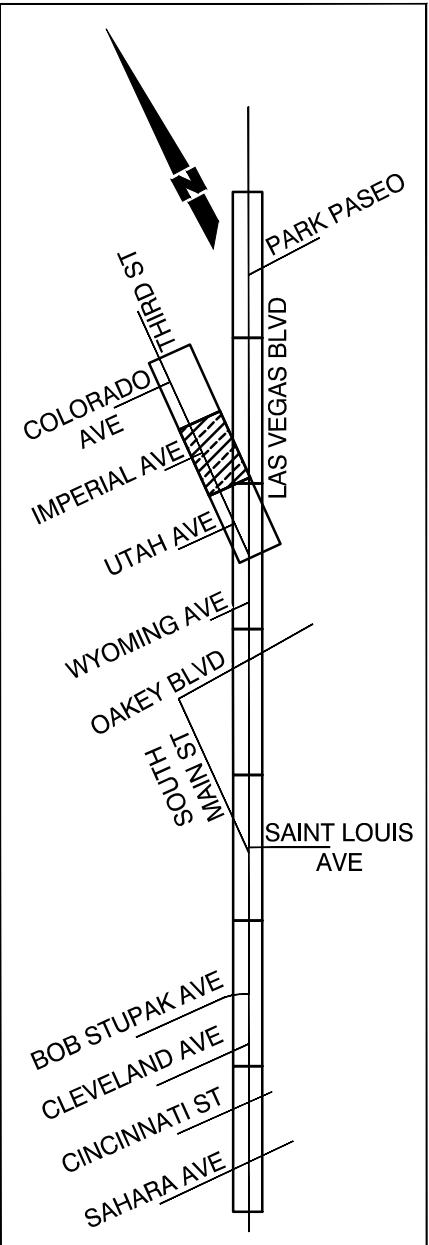
CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN
EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

GRAPHIC SCALE



CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929



SHEET KEY MAP

PREPARED BY
CA Group, Inc.
C A V I O L A N S O N
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 685-5945

PREPARED FOR
CITY OF LAS VEGAS

BID# 19.68939
DESIGNED BY: JB
DRAWN BY: JB
CHECKED BY: HM

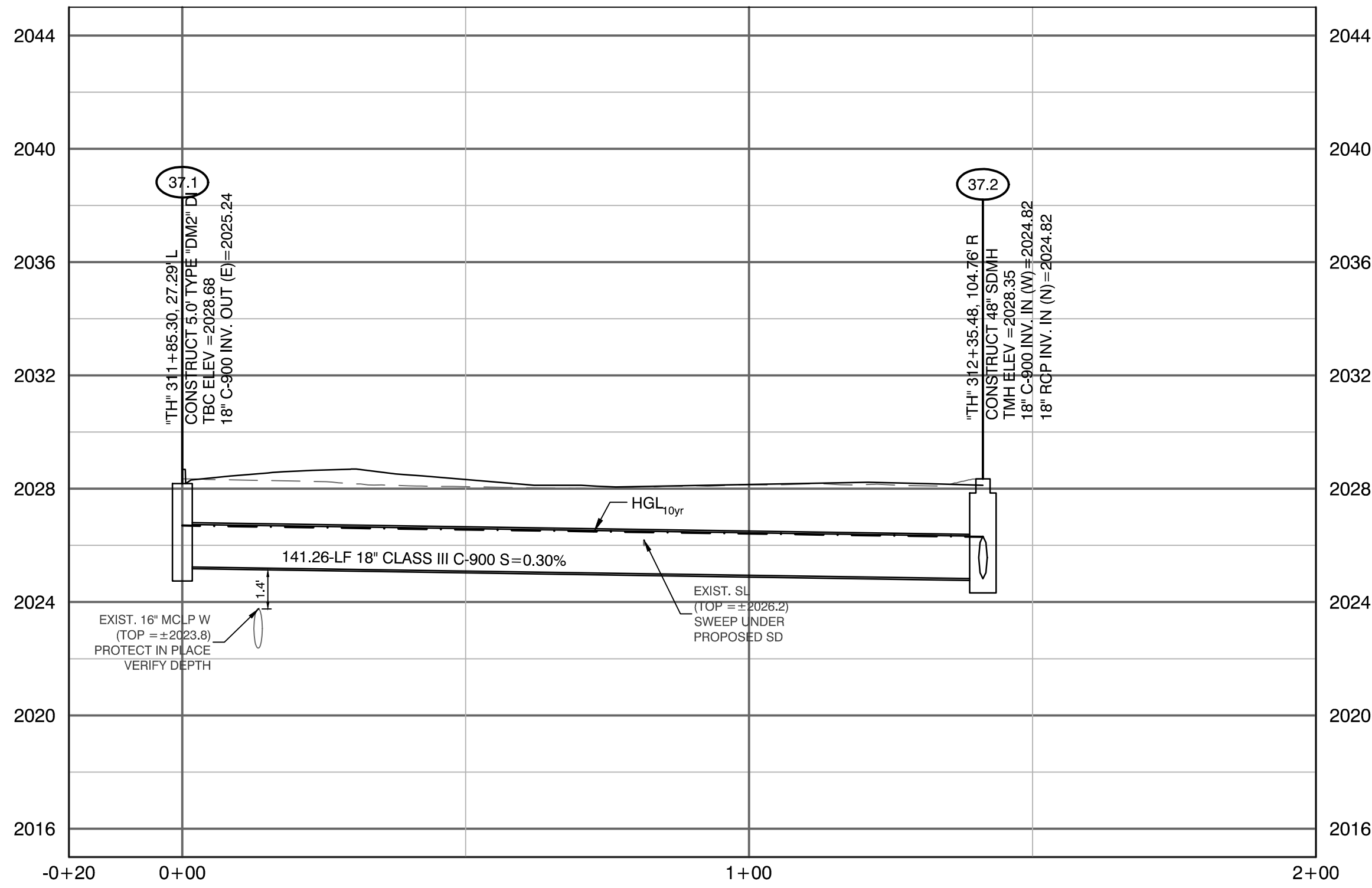
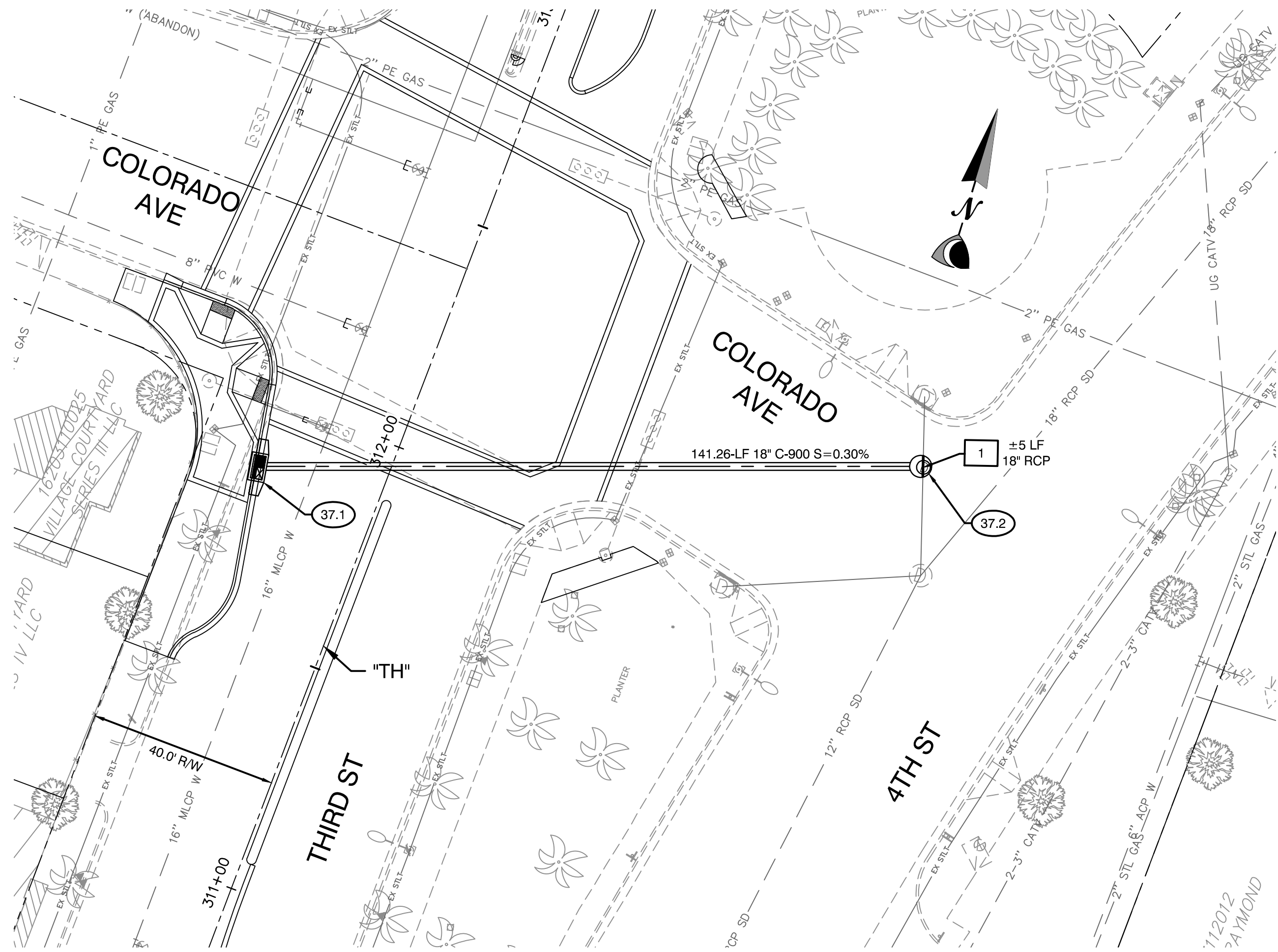
DATE: 06/27/2019
SUBMITTAL STAGE:
100% SUBMITTAL

**LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.**

**STORM DRAIN PLAN AND PROFILE
"TH" 304+ 50 TO "TH" 308+ 10**

SD-36
XX OF
DRAWING NO.
XXXXXXXX-X

NOT FOR CONSTRUCTION
JUN 27 2019
100% SUBMITTAL
CITY OF LAS VEGAS
ENGINEER
NO. 16830



CONSTRUCTION NOTES

- 37.1 "TH" 311+85.30, 27.29' LT
CONSTRUCT 5' TYPE "DM2"
DI PER PER USDOCA 412.1
W/ 2 GRATES
- 37.2 "TH" 312+35.48, 104.76' RT
CONSTRUCT 48" TYPE IA
SDMH PER USDOCA 404.1
CONTRACTOR TO VERIFY
DEPTH (MIN DEPTH SHOWN)

REMOVAL NOTES

- 1 REMOVE EXISTING STORM DRAIN PIPE.
- 2 REMOVE EXISTING STORM DRAIN INLET.
- 3 REMOVE EXISTING STORM DRAIN MANHOLE.
- 4 ABANDON EXISTING STORM DRAIN PIPE.

NOTE:
1. CONTRACTOR SHALL INSTALL STORM WATER QUALITY
MANAGEMENT STAMP AND SIGN DETAIL, ADJACENT TO ALL
NEW DROP INLETS PER USDOCA DWG. NO. 421.

2. AT MANHOLES, ALL PIPE INVERTS PROVIDED AT CENTER OF
MANHOLE.

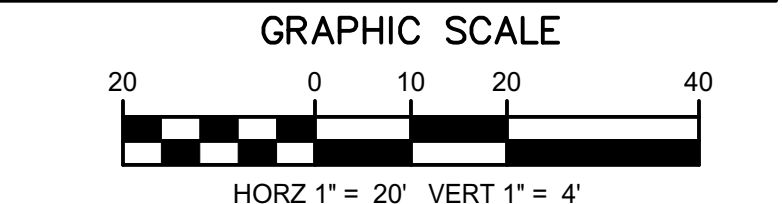
3. AT DROP INLETS, ALL PIPE INVERTS PROVIDED PER DETAIL
ON SD-49.

DROP INLET NOTE
WHERE 10 FT PARALLEL SEPARATION IS NOT PRACTICABLE:
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP
BETWEEN SLAB AND WALLS. BASE, WALLS, AND TOP TO BE
CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT
STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR
APPROVED EQUAL).

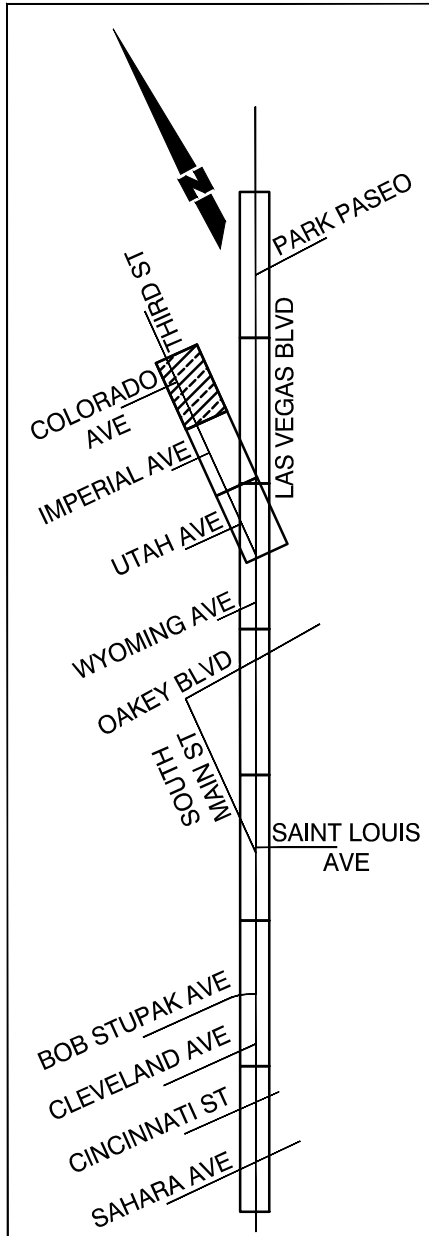
APPROVED FOR CONSTRUCTION

LWWWD ENGINEERING SERVICES MANAGER DATE
PROJECT NO. 123955

CALL SOUTHWEST GAS AT 365-2296 FOR STANDBY WHEN
EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.



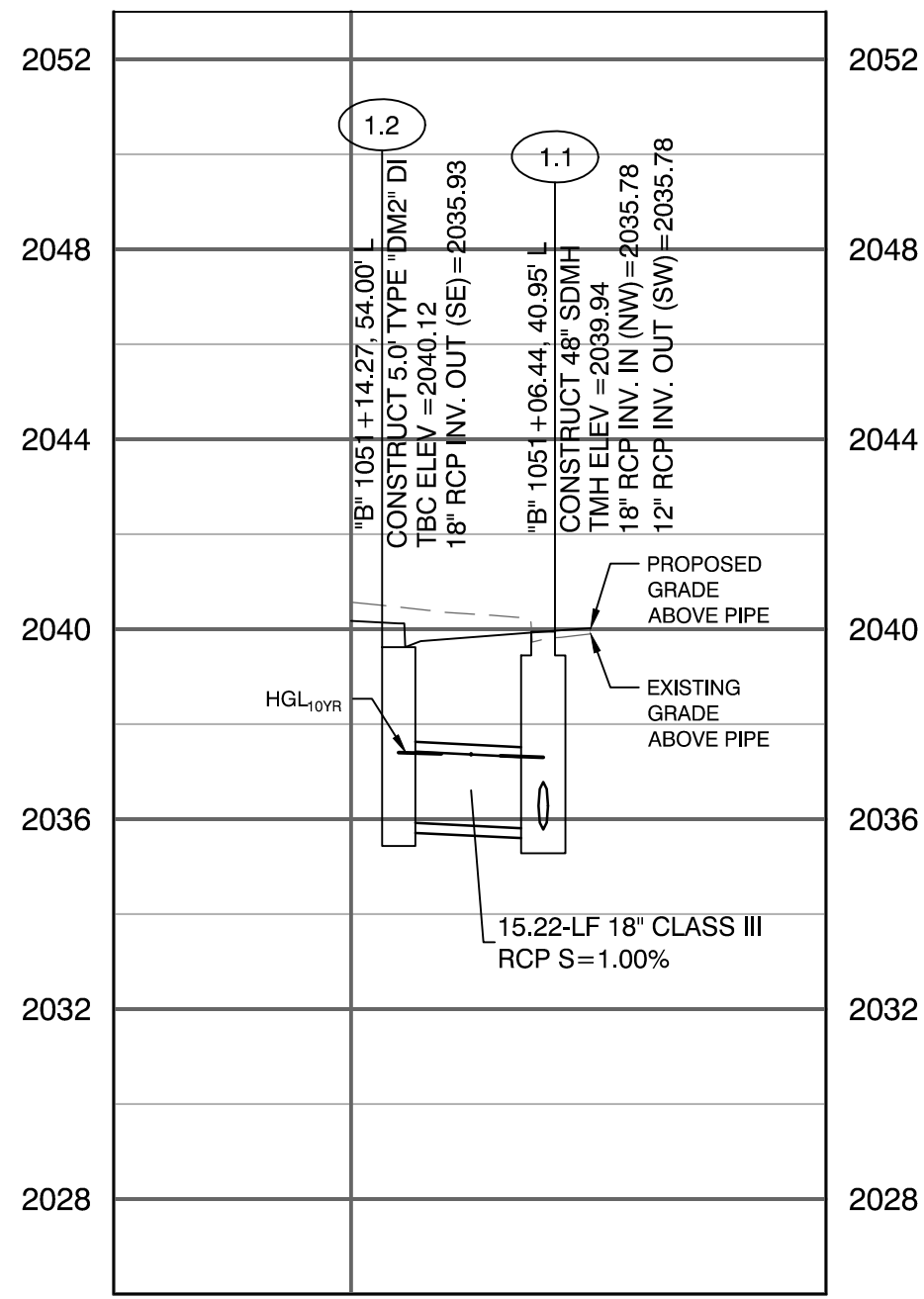
CALL BEFORE CONSTRUCTION		
BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929



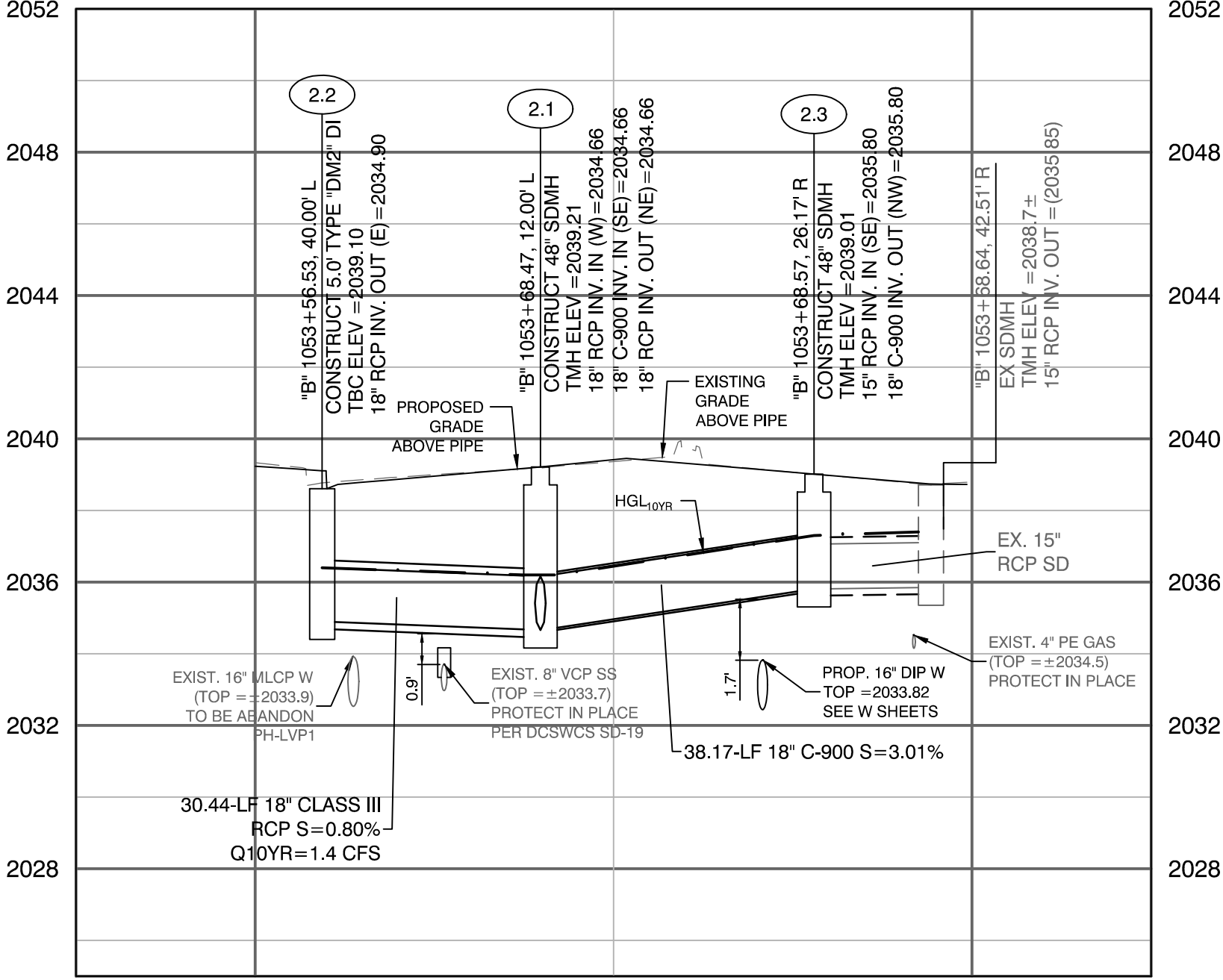
SHEET KEY MAP

PREPARED BY		CITY OF LAS VEGAS	
CA Group, Inc.		LAS VEGAS BOULEVARD IMPROVEMENTS	
2785 S. RAINBOW BLVD		STEWART AVE. TO SAHARA AVE.	
LAS VEGAS, NV 89146		STORM DRAIN PLAN AND PROFILE	
PHONE: (702) 685-5945		3RD ST AND COLORADO AVE STORM DRAIN	
BID# 19.68939		DESIGNED BY: JB	
DATE: 06/27/2019		DRAWN BY: JB	
SUBMITTAL STAGE:		CHECKED BY: HM	
100% SUBMITTAL		NO. DATE	
REVISIONS		NO. DATE	

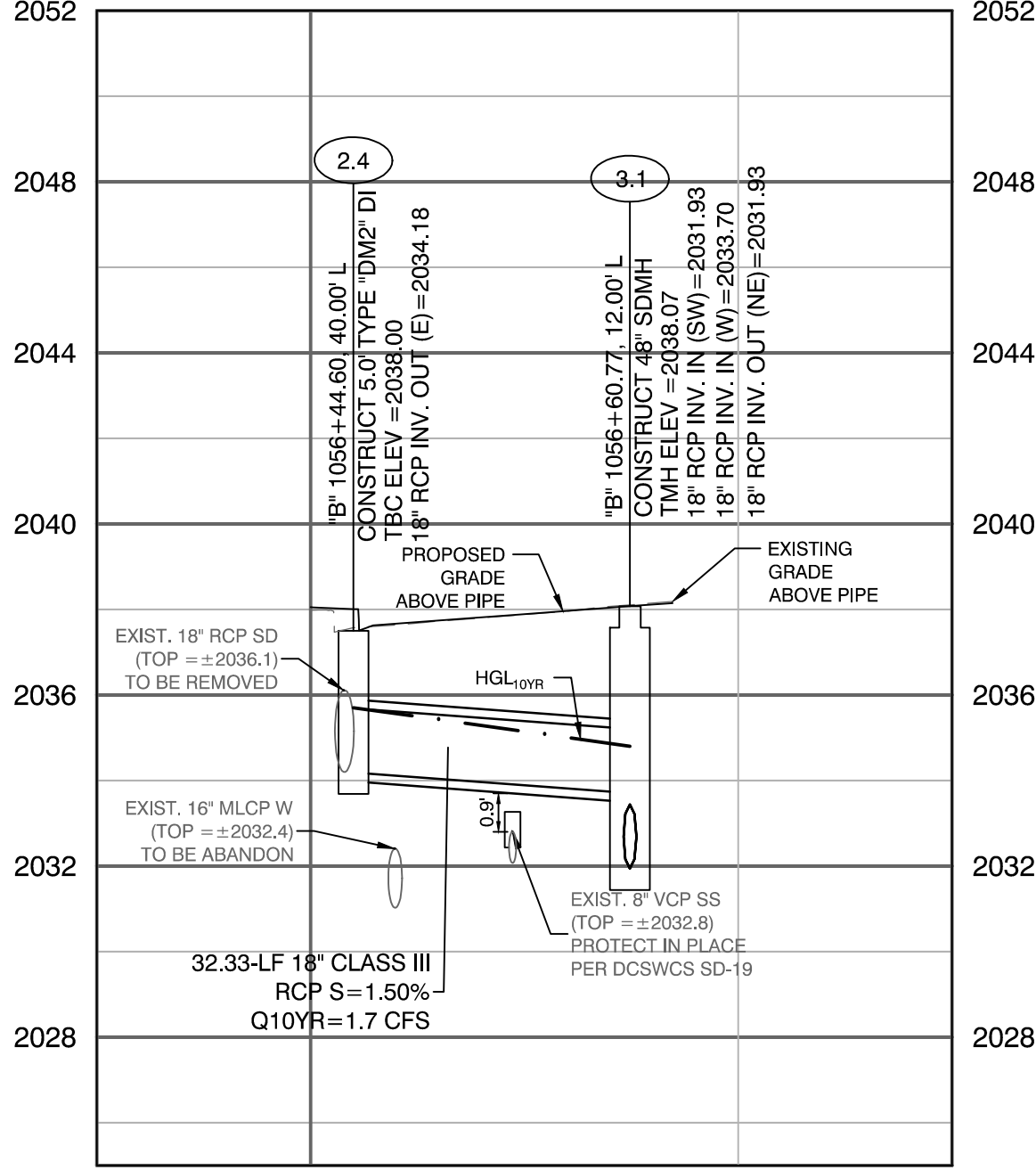
SHEET		SD-37	
XX OF		DRAWING NO.	
XXXXXXXXX-X		NOT FOR CONSTRUCTION	



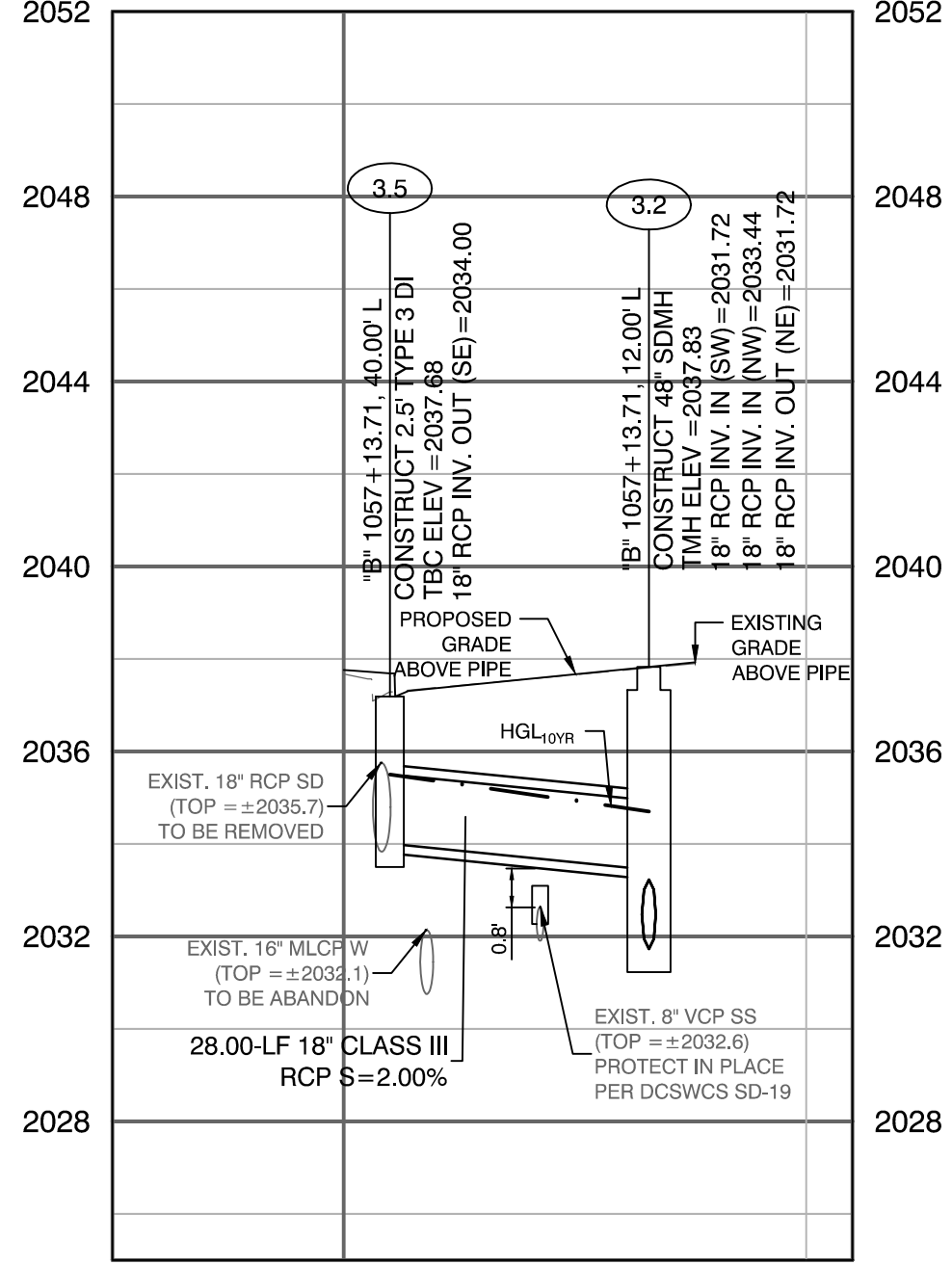
LATERAL PROFILE 1
"B" 1051+06.44



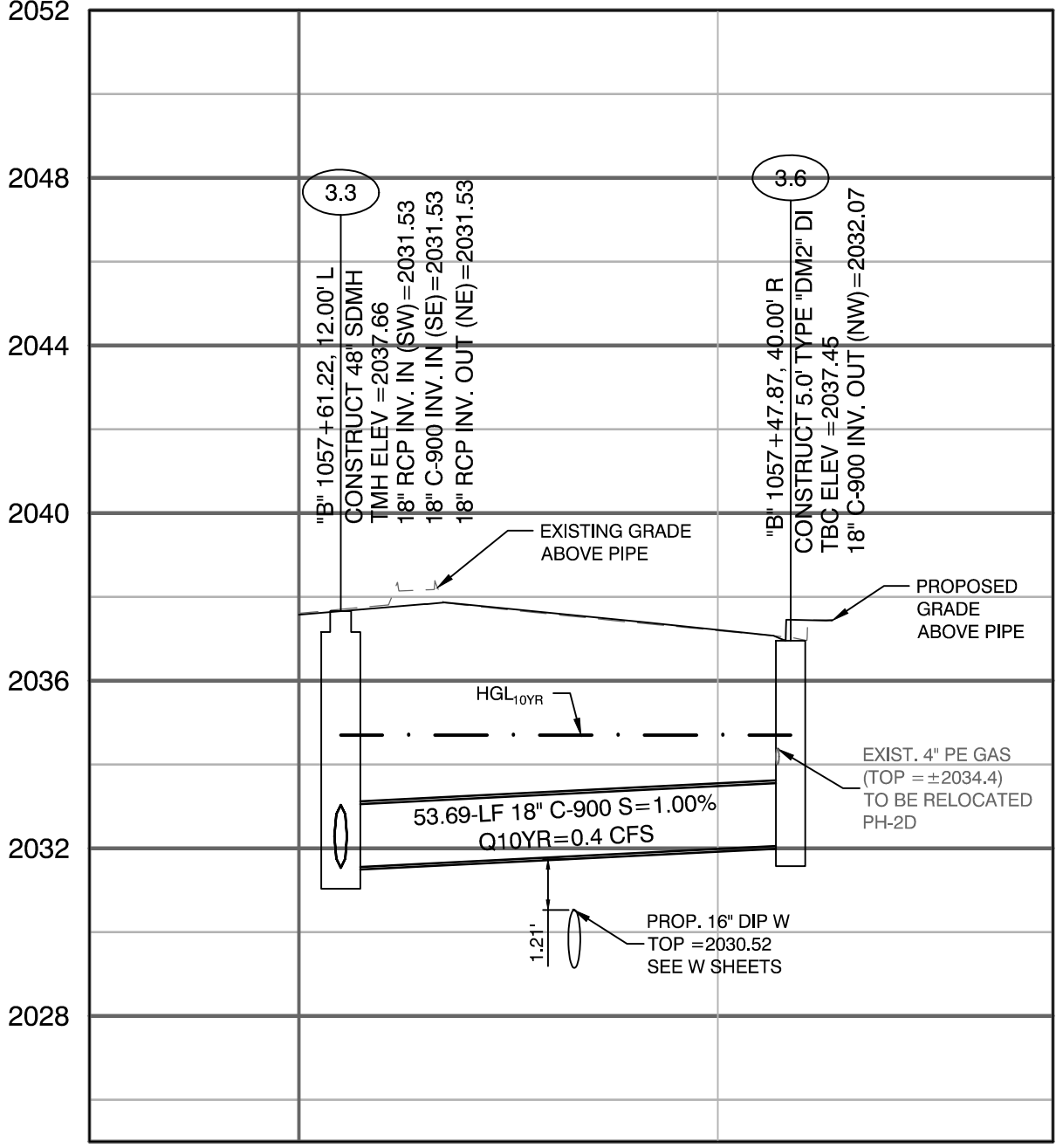
LATERAL PROFILE 2
"B" 1053+68.47



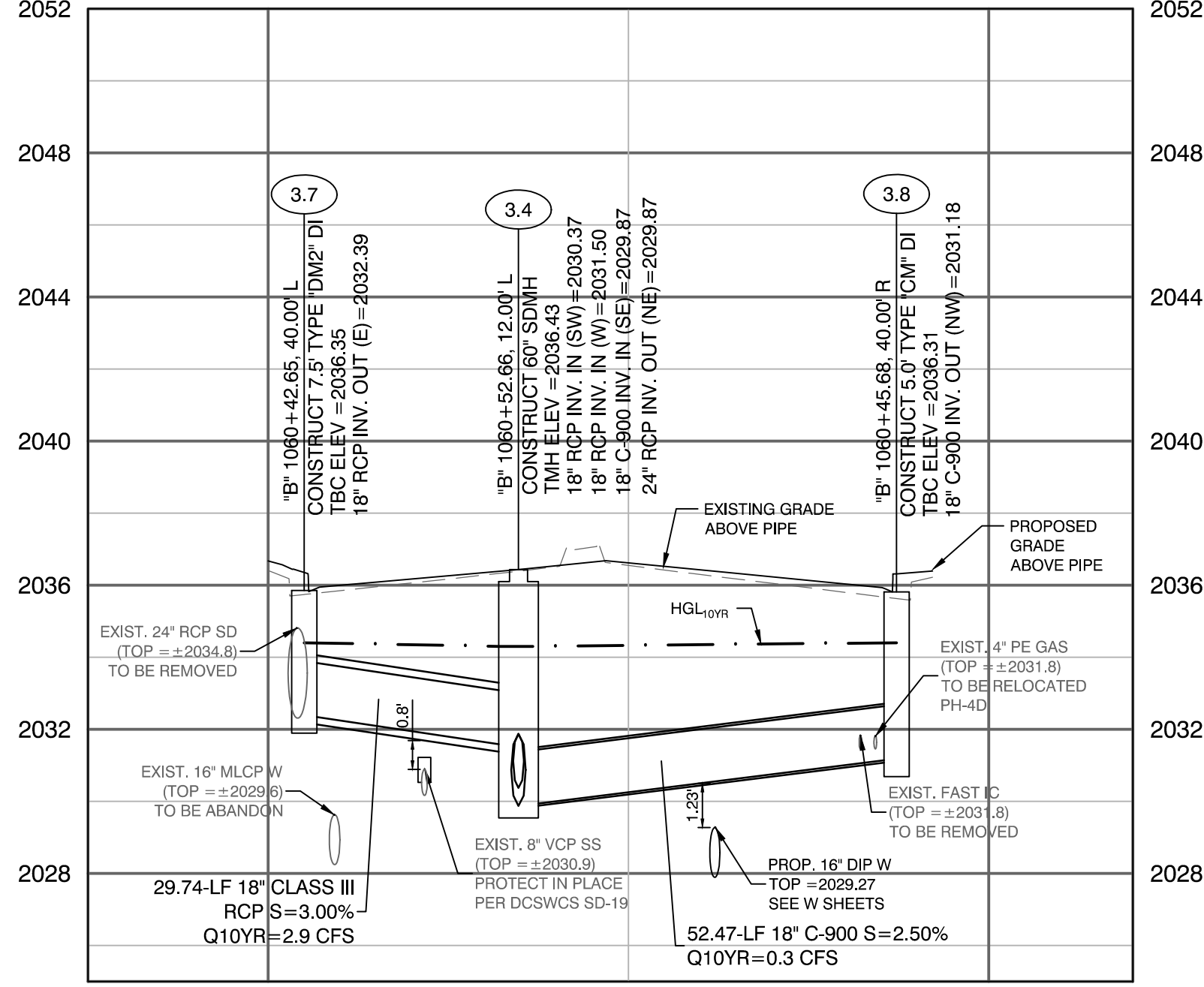
LATERAL PROFILE 3
"B" 1056+60.77



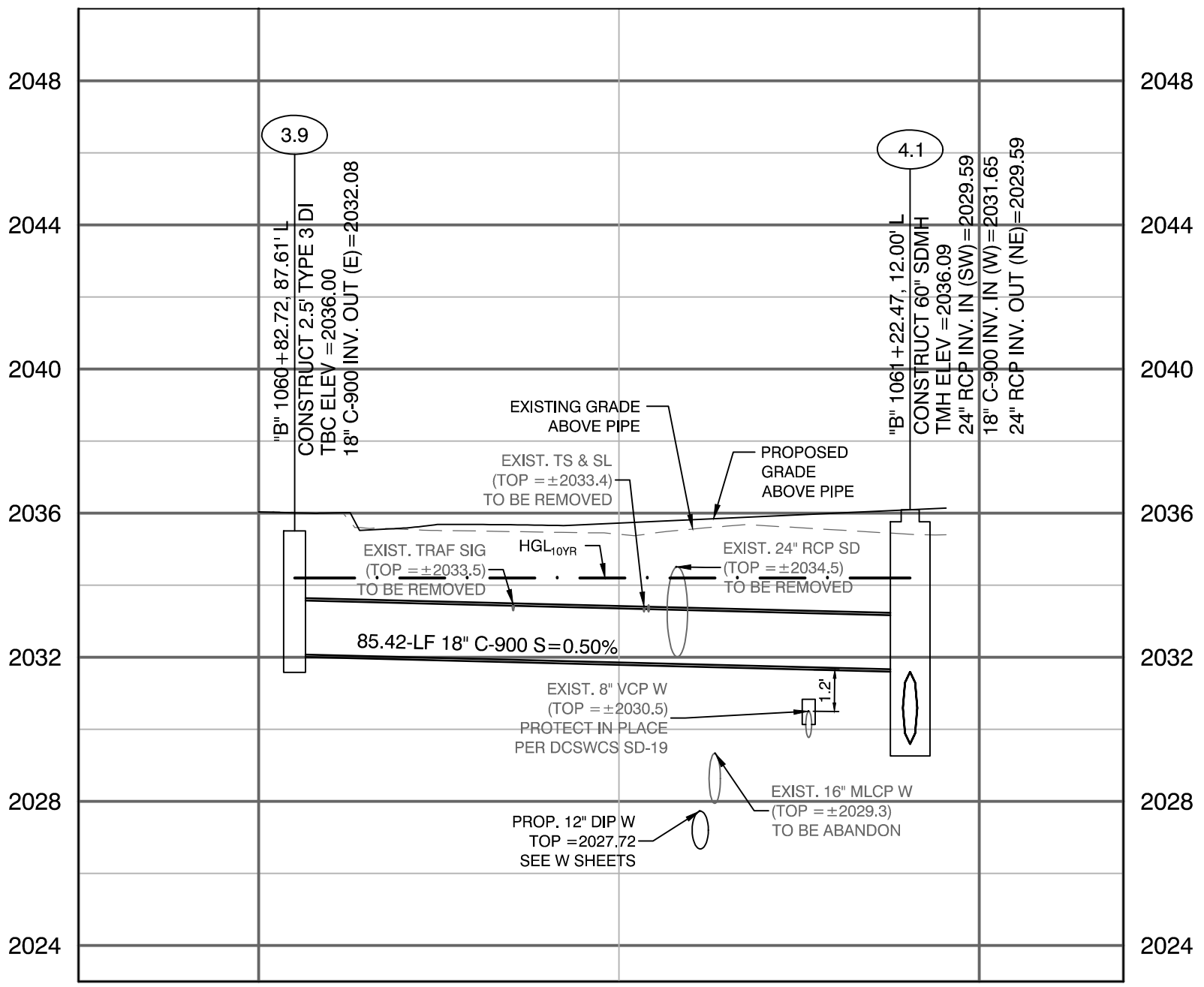
LATERAL PROFILE 4
"B" 1057+13.71



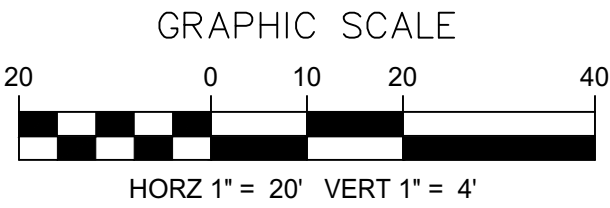
LATERAL PROFILE 5
"B" 1057+61.22



LATERAL PROFILE 6
"B" 1060+52.66



LATERAL PROFILE 7
"B" 1061+22.47



UTILITY NOTE:
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CALL SOUTHWEST GAS AT 702-400-1789 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 123955 FIRST APPROVED DATE: 06/27/2019

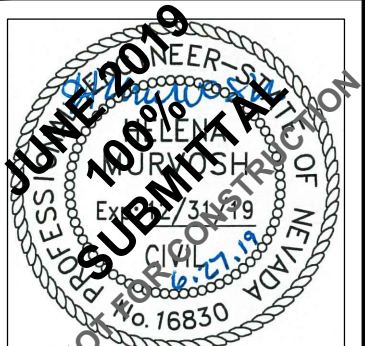
CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
	F.A.S.T.	702-432-5300
BEFORE YOU UNDERGROUND	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929

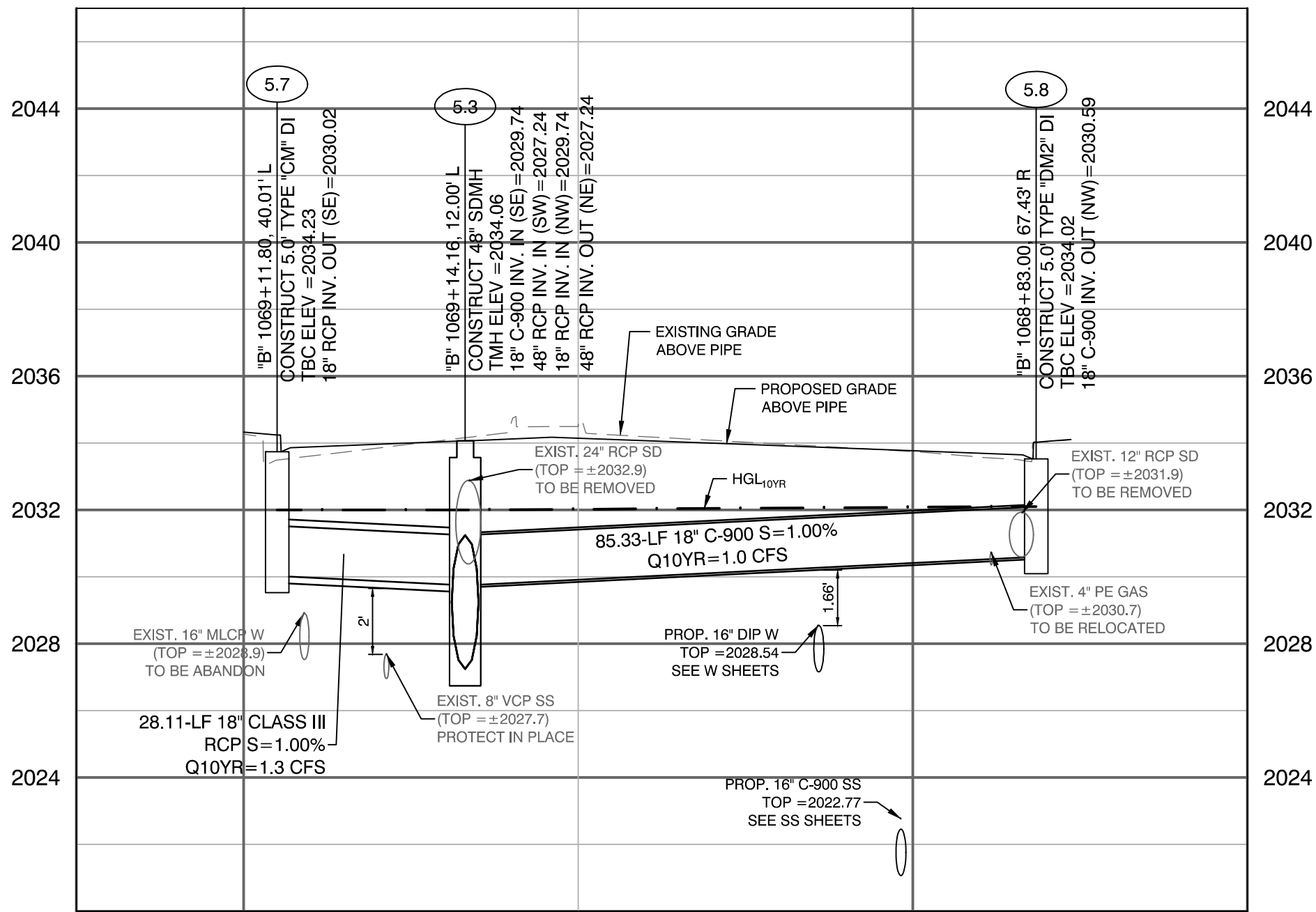
PREPARED BY: CA Group, Inc. CAVIOLANSON
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 685-5945

PREPARED FOR: CITY OF LAS VEGAS	BID# 19.68939	DESIGNED BY: JB	CHECKED BY: HM
DATE: 06/27/2019	H# 46330	DRAWN BY: JB	
SUBMITTAL STAGE: 100% SUBMITTAL			

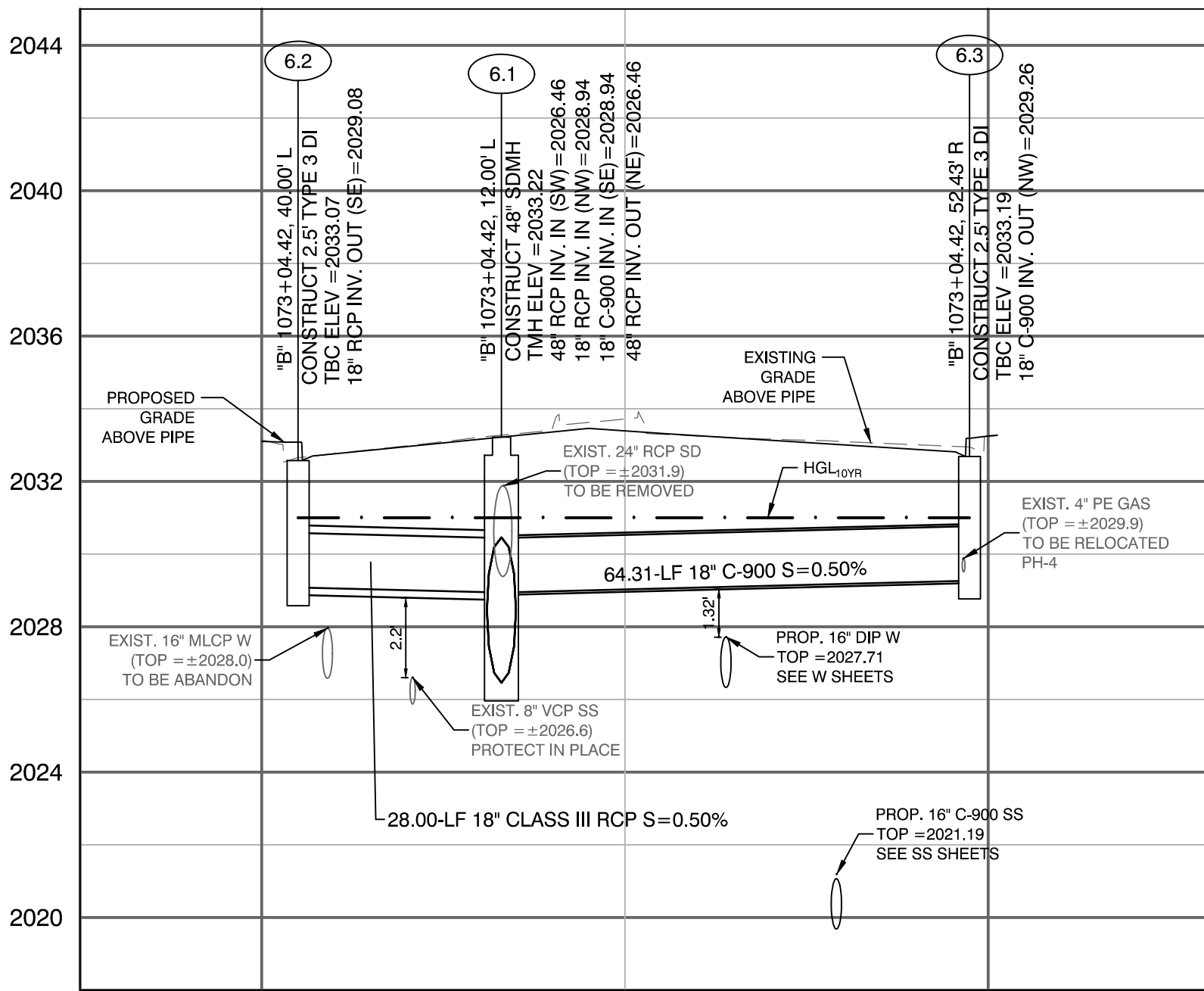
TITLE LAS VEGAS BOULEVARD IMPROVEMENTS STEWART AVE. TO SAHARA AVE.
SHEET STORM DRAIN LATERAL PROFILES



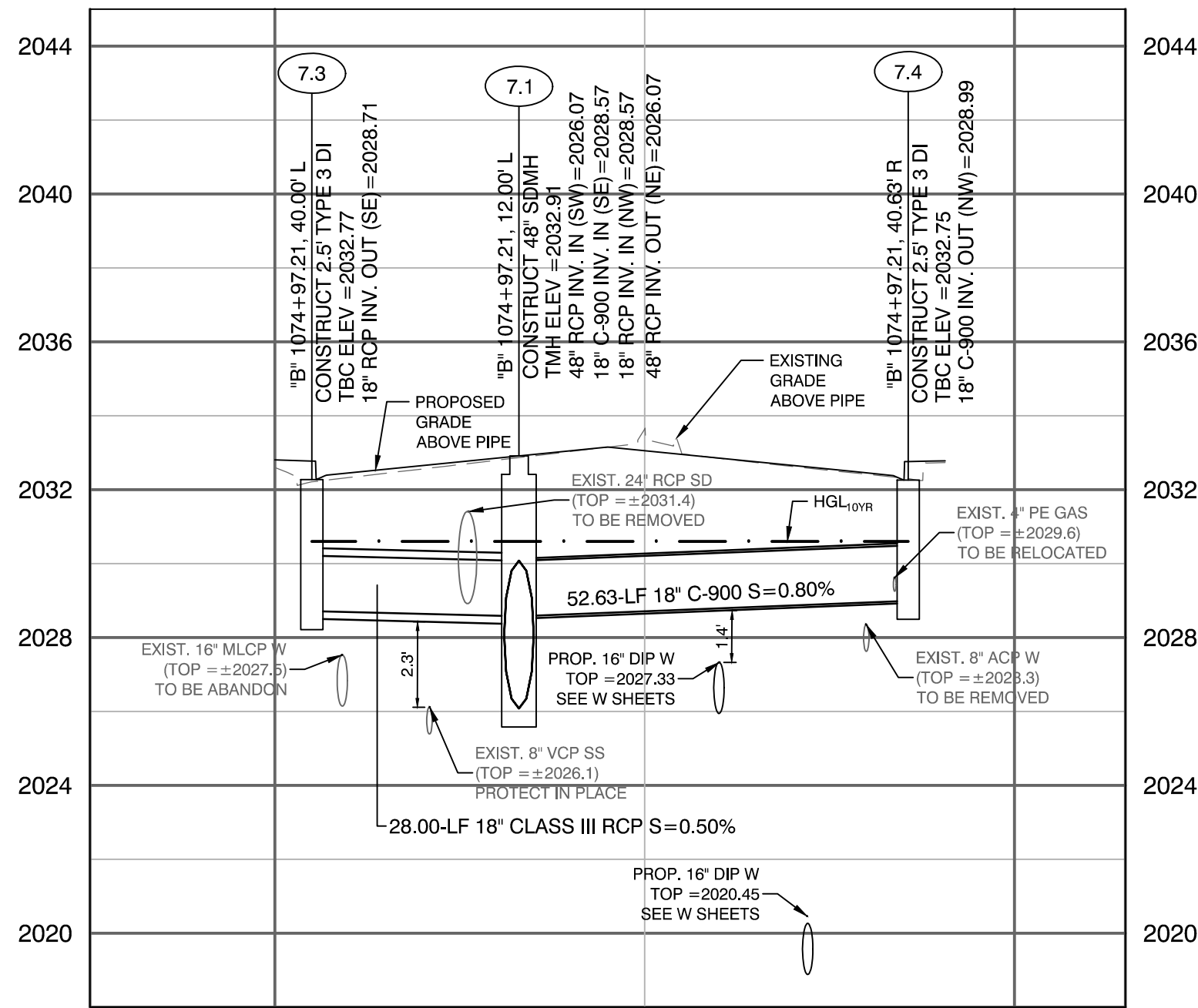
SHEET SD-38
XX OF
DRAWING NO. XXXXXXXX-X



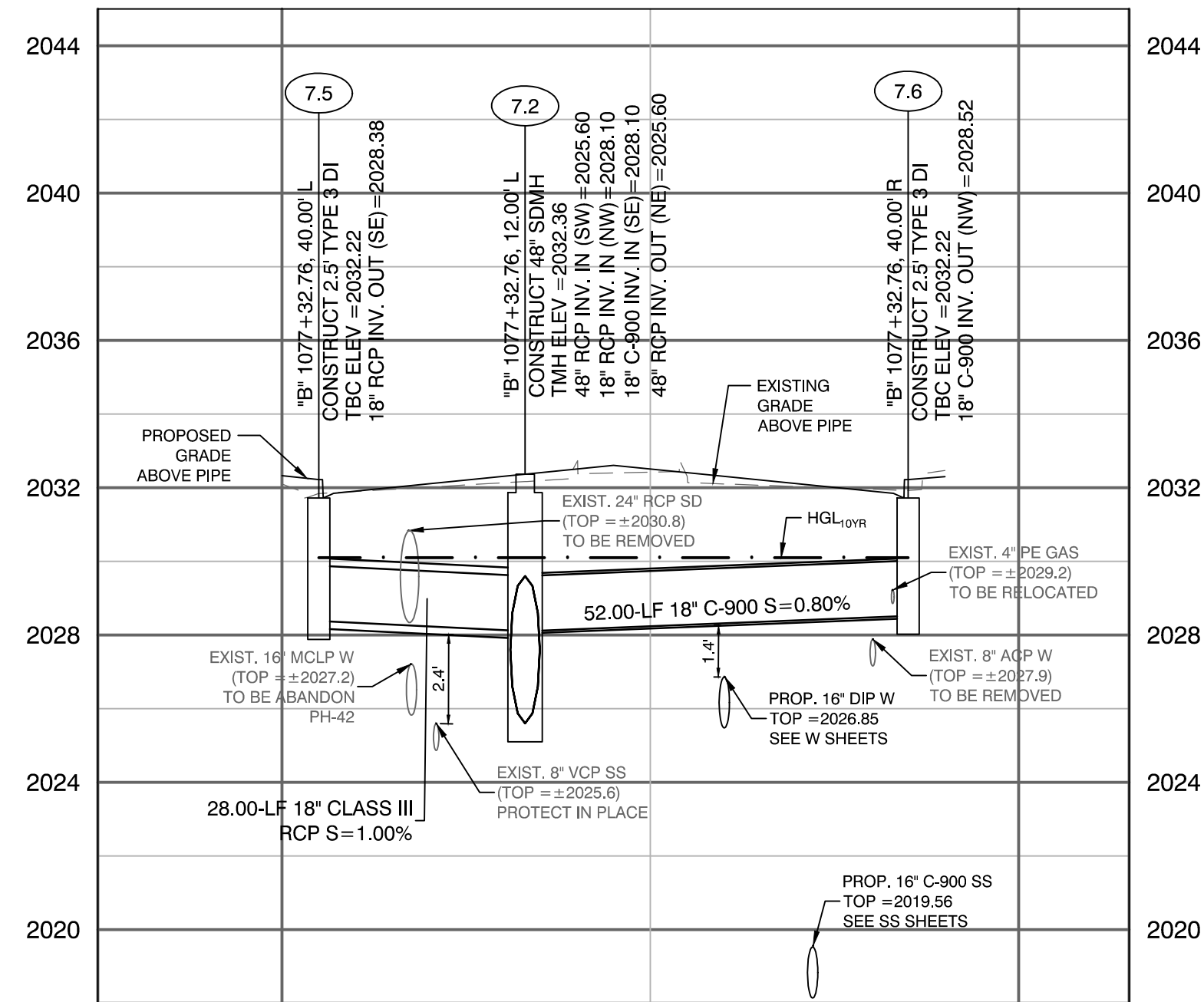
LATERAL PROFILE 15
"B" 1069+11.80



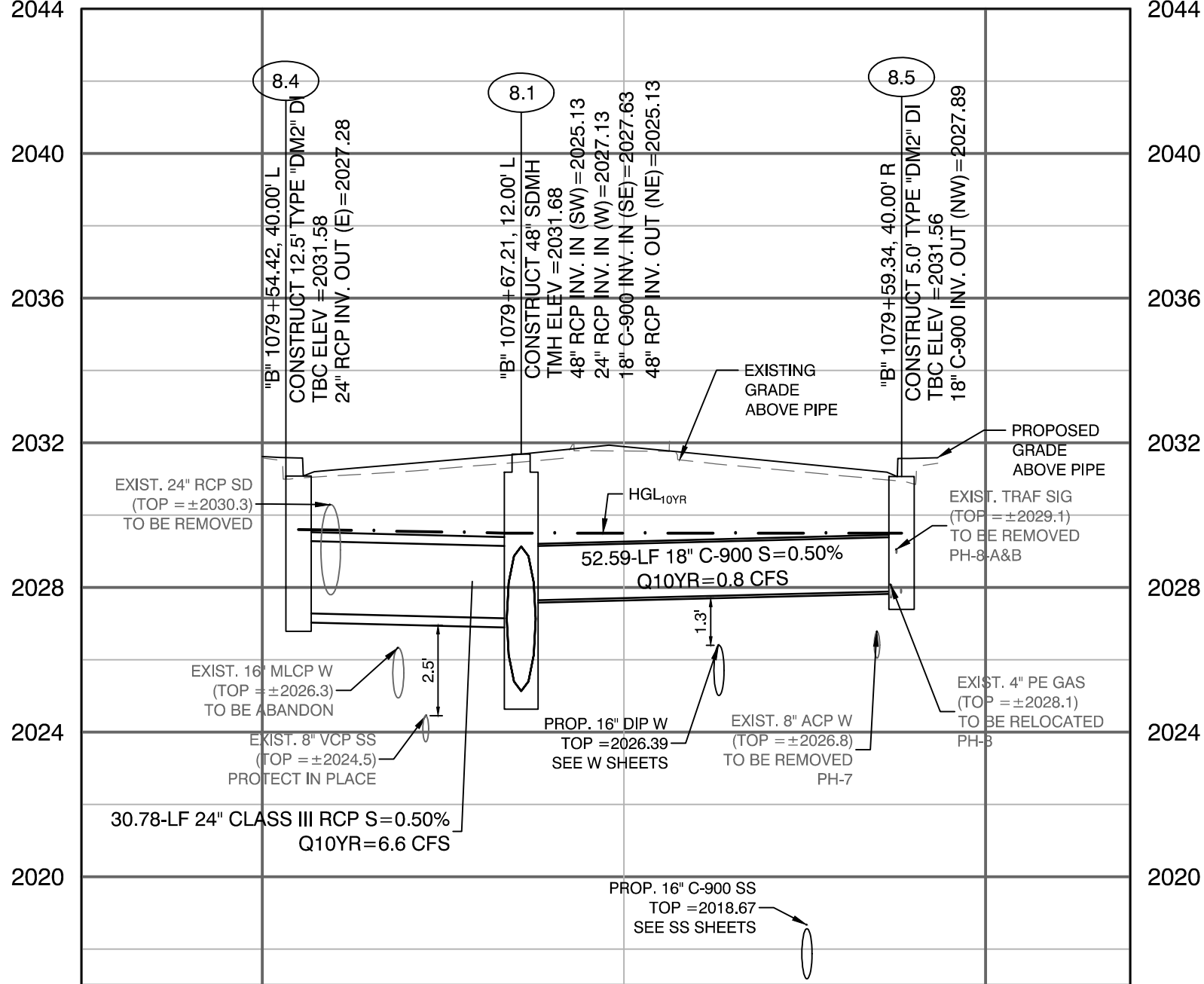
LATERAL PROFILE 16
"B" 1073+04.42



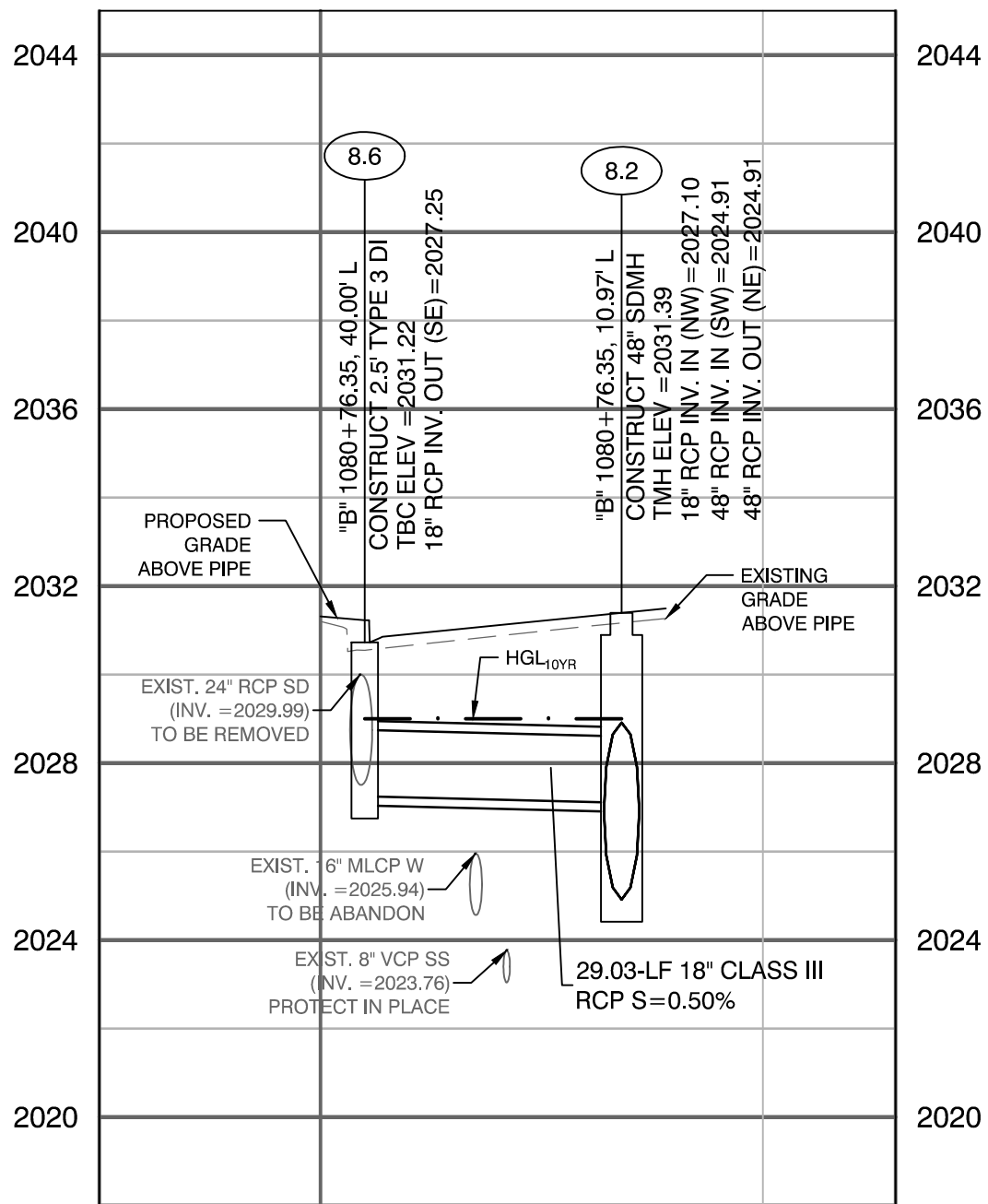
LATERAL PROFILE 17
"B" 1074+97.21



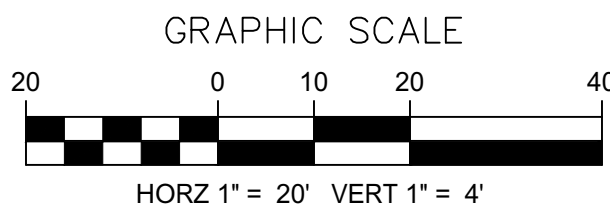
LATERAL PROFILE 18
"B" 1077+32.76



LATERAL PROFILE 19
"B" 1079+67.21



LATERAL PROFILE 20
"B" 1080+76.35



UTILITY NOTE:
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CALL SOUTHWEST GAS AT 702-400-1789 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 123955 FIRST APPROVED DATE: 06/27/2019

CALL BEFORE CONSTRUCTION			
BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600	
	F.A.S.T.	702-432-5300	
BEFORE YOU UNDERGROUND	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511	
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611	
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929	

PREPARED BY
CA Group, Inc
C A V I O L A N S O N
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 655-5945

DESIGNED BY: JB
DRAWN BY: JB
CHECKED BY: HM

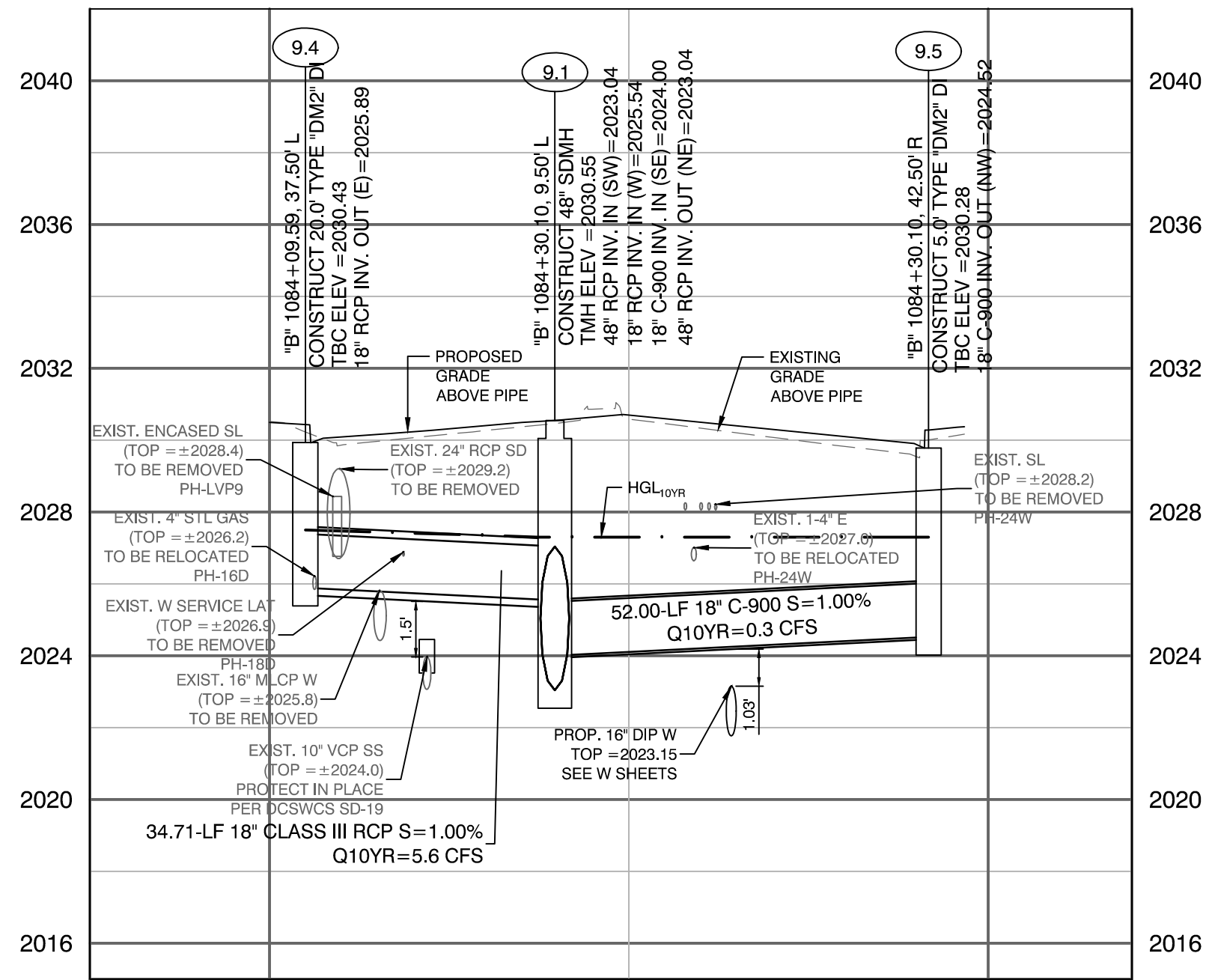
DATE: 06/27/2019
SUBMITTAL STAGE: 100% SUBMITTAL

TITLE
**LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.**

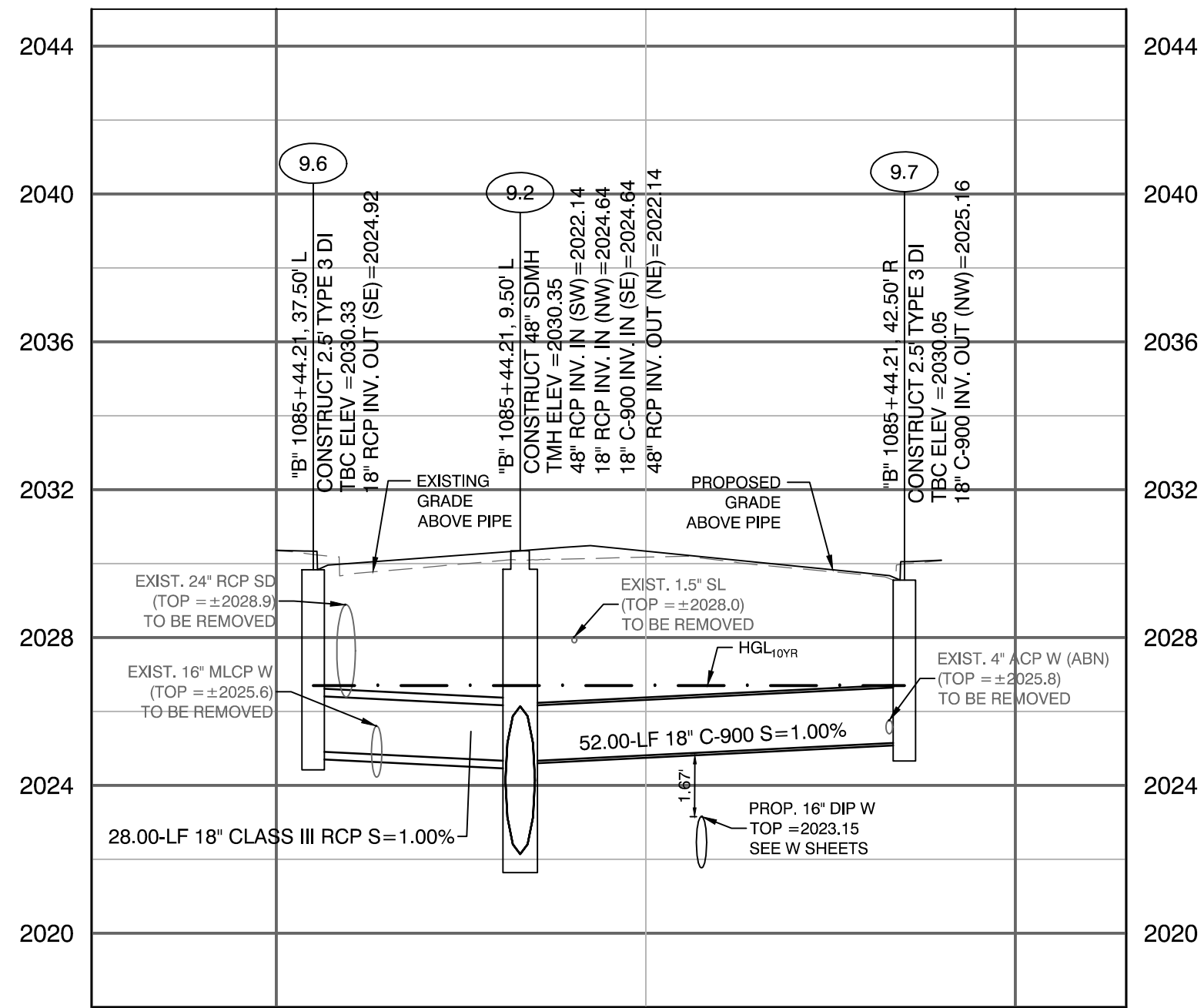
SHEET
STORM DRAIN LATERAL PROFILES

06/25/2019
100% SUBMITTAL
CITY OF LAS VEGAS
DESIGN DIVISION
PROJECT NO. 16830

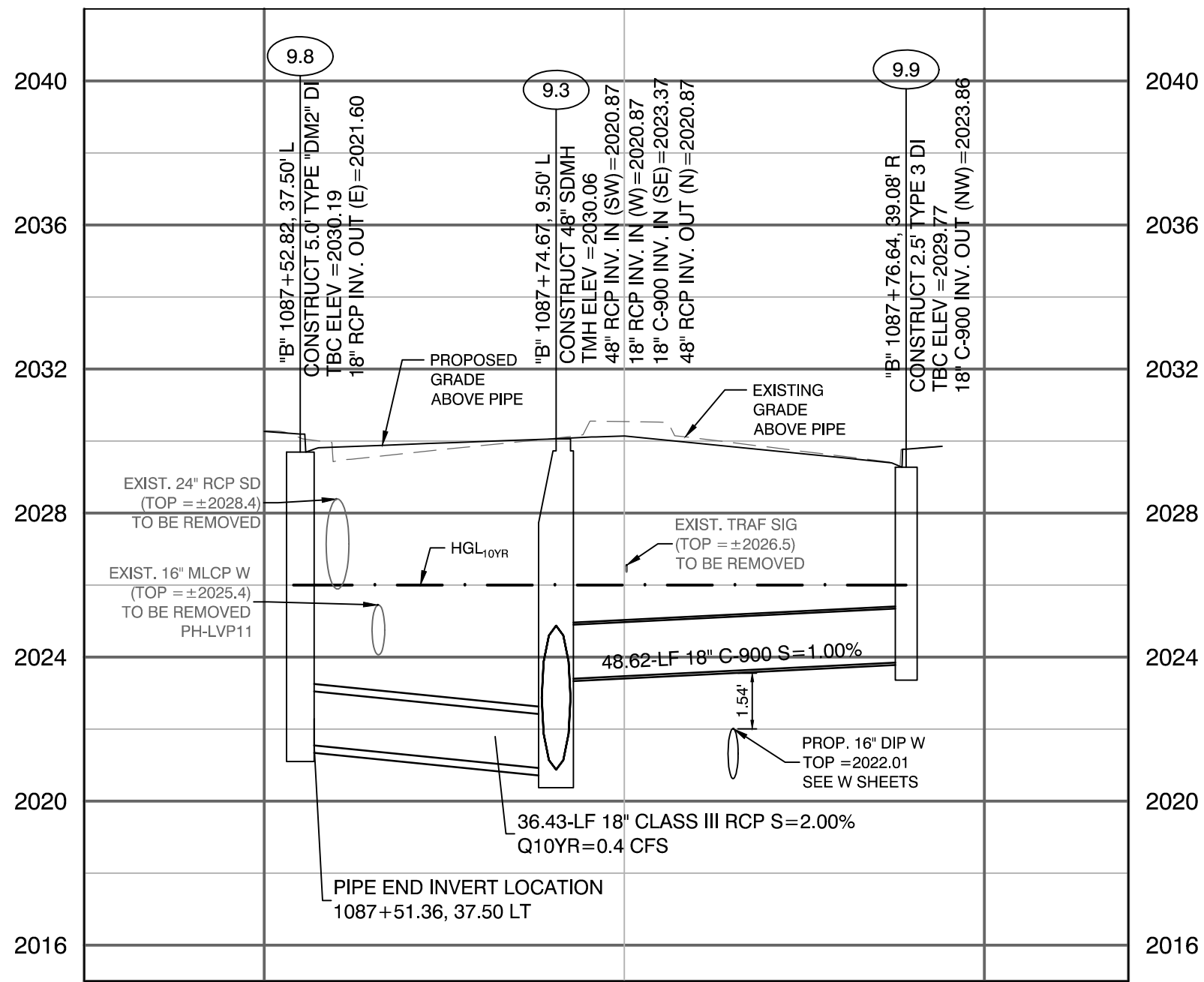
SD-40
XX OF
DRAWING NO. XXXXXXXX-X



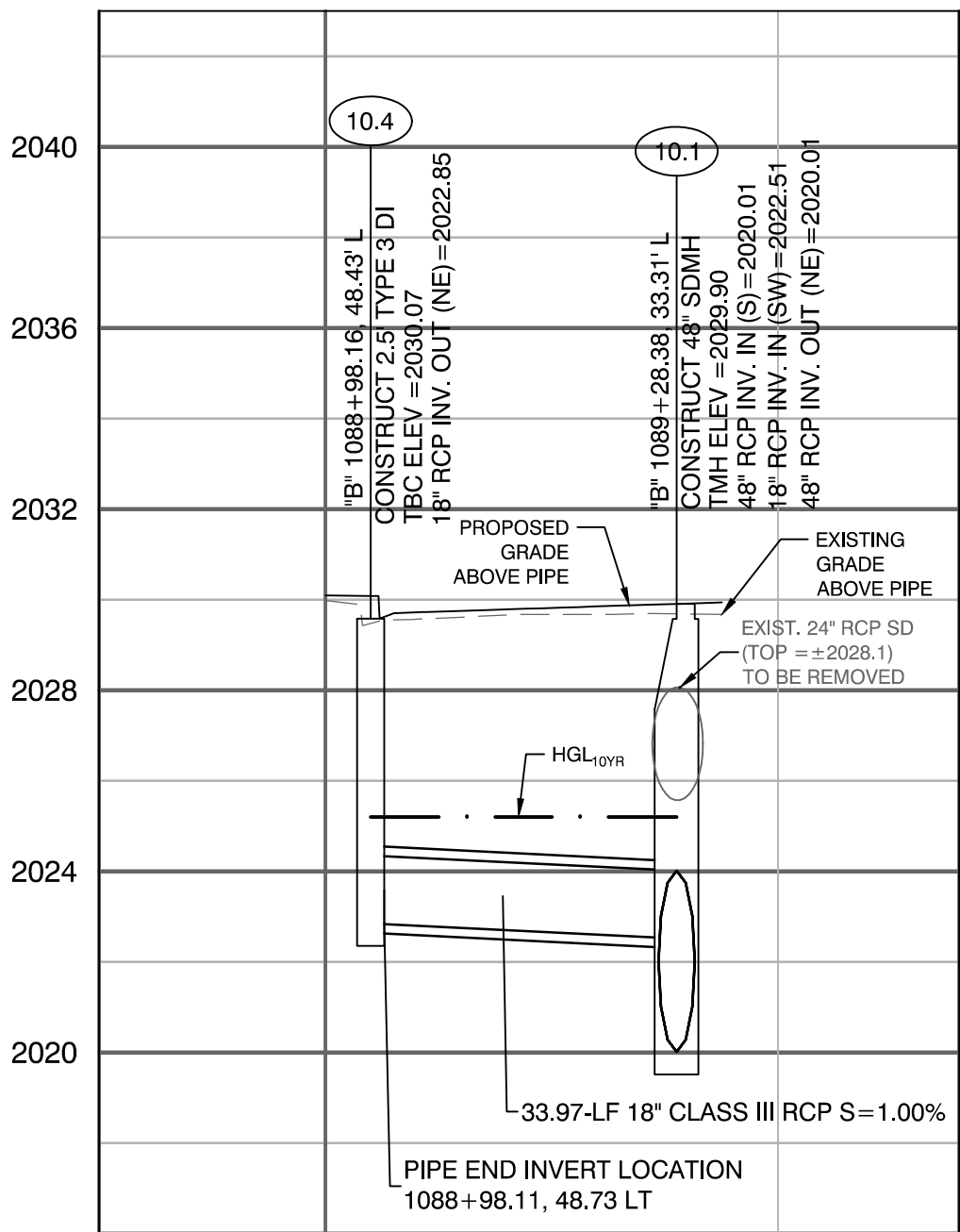
LATERAL PROFILE 21
"B" 1083+99.97



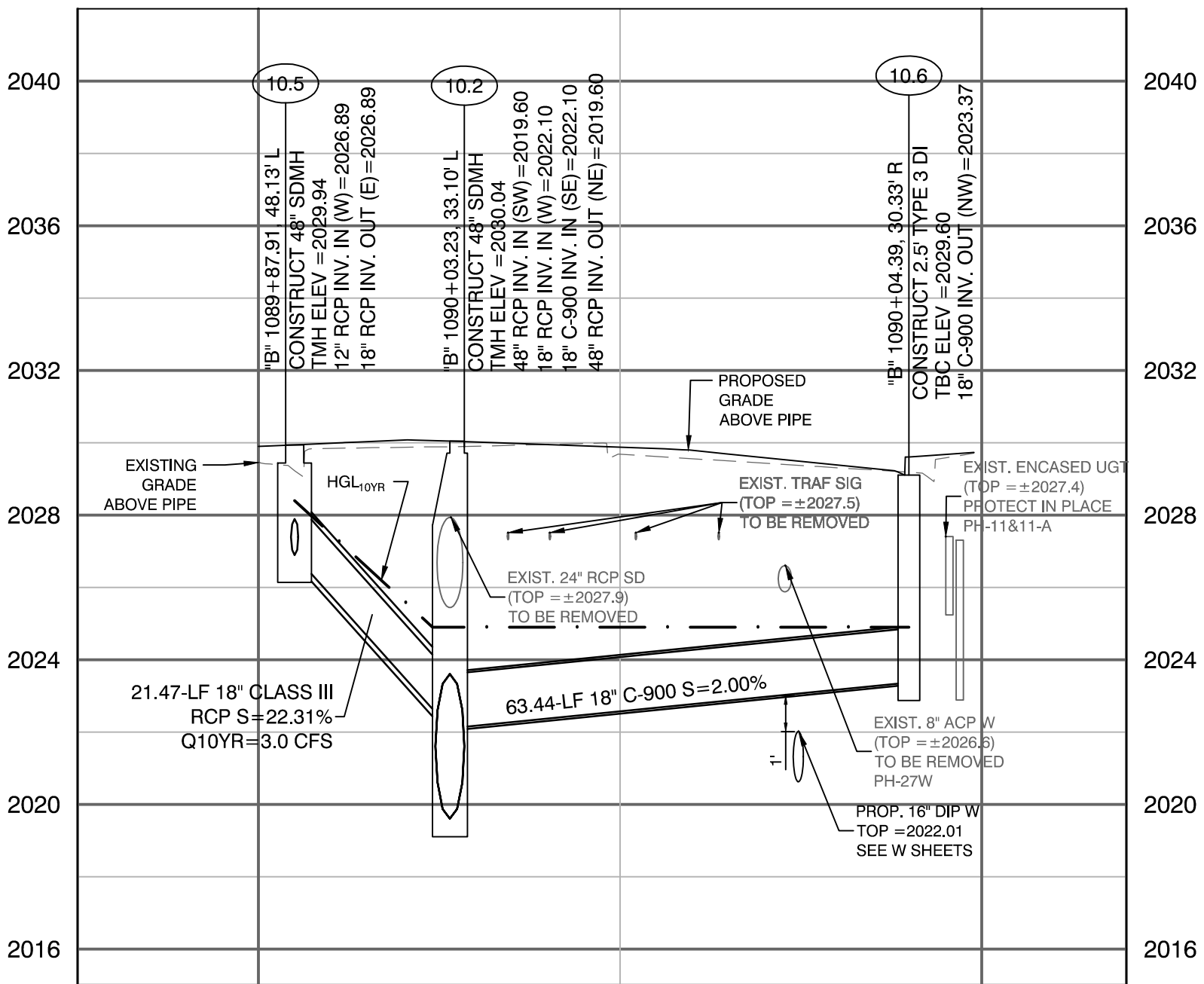
LATERAL PROFILE 22
"B" 1085+44.21



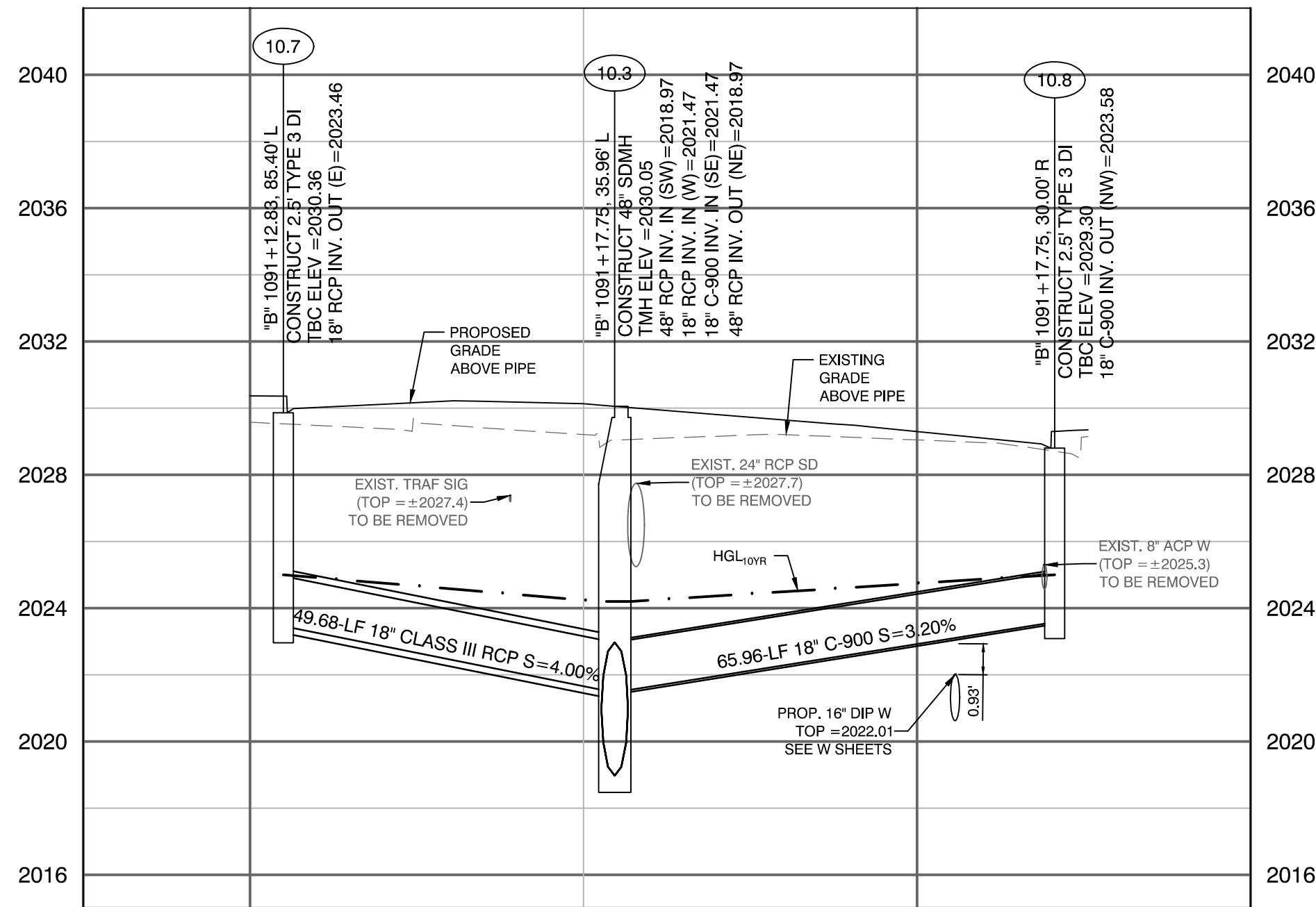
LATERAL PROFILE 23
"B" 1087+74.67



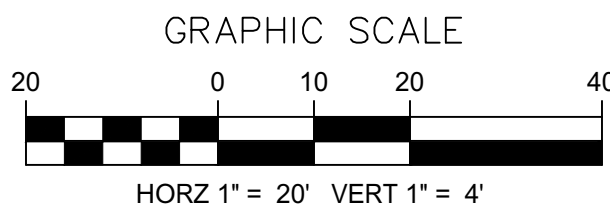
LATERAL PROFILE 24
"B" 1088+98.16



LATERAL PROFILE 25
"B" 1089+28.38



LATERAL PROFILE 26
"B" 1091+17.75



CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929

UTILITY NOTE:
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CALL SOUTHWEST GAS AT 702-400-1789 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

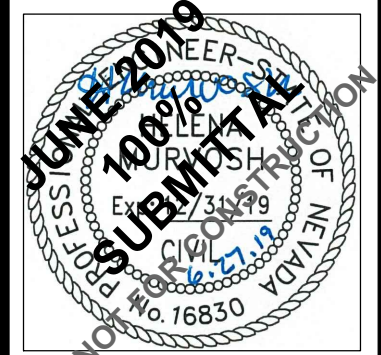
APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 123955 FIRST APPROVED DATE: 06/27/2019

NO.	DATE	REVISIONS

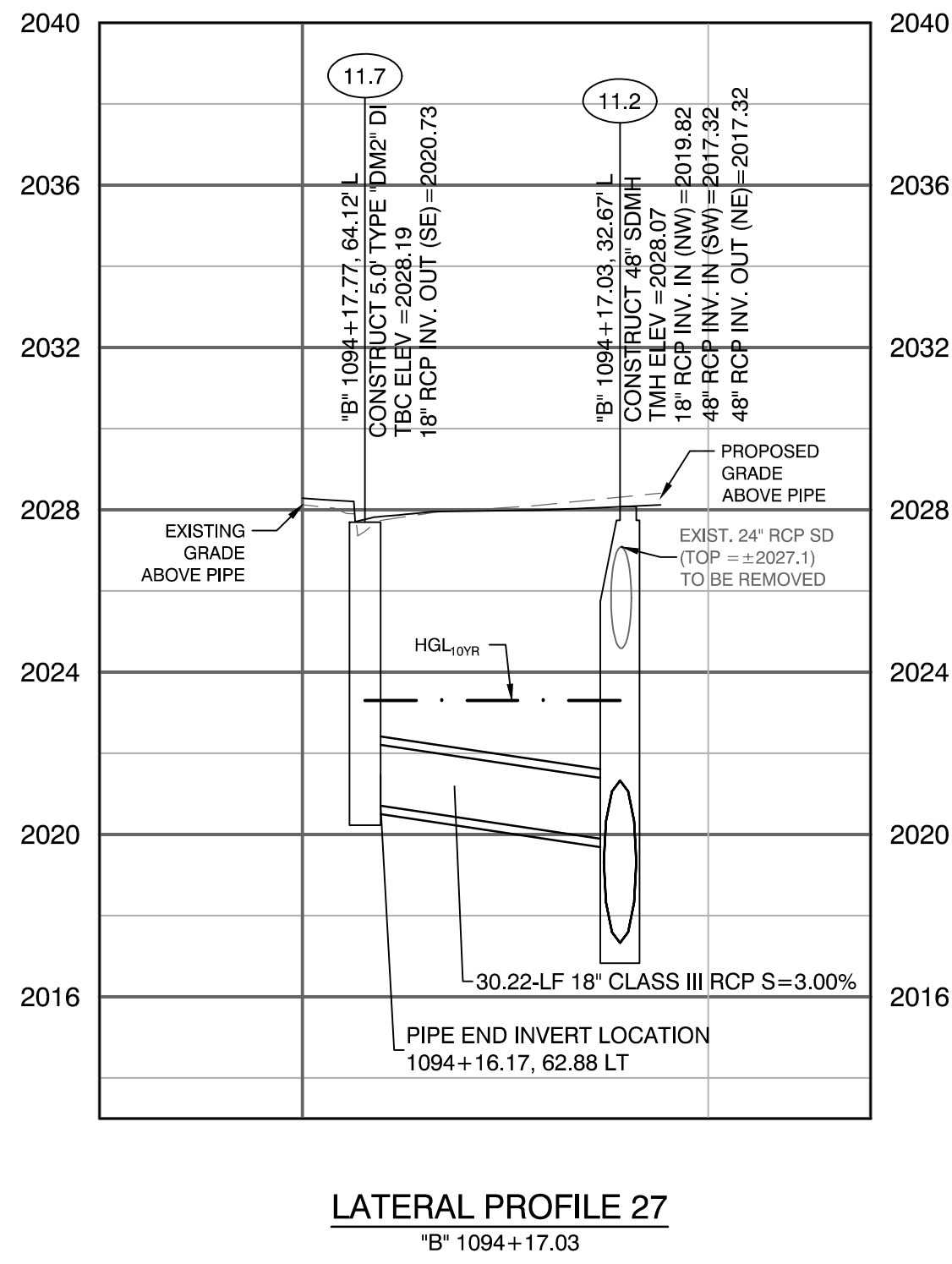
PREPARED BY
CA Group, Inc.
C A V I O L A N S O N
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 655-5945

PREPARED FOR CITY OF LAS VEGAS	BID# 19.68939	DESIGNED BY: JB	CHECKED BY: HM
H# 46330	DATE: 06/27/2019	DRAWN BY: JB	
	SUBMITTAL STAGE:		
	100% SUBMITTAL		

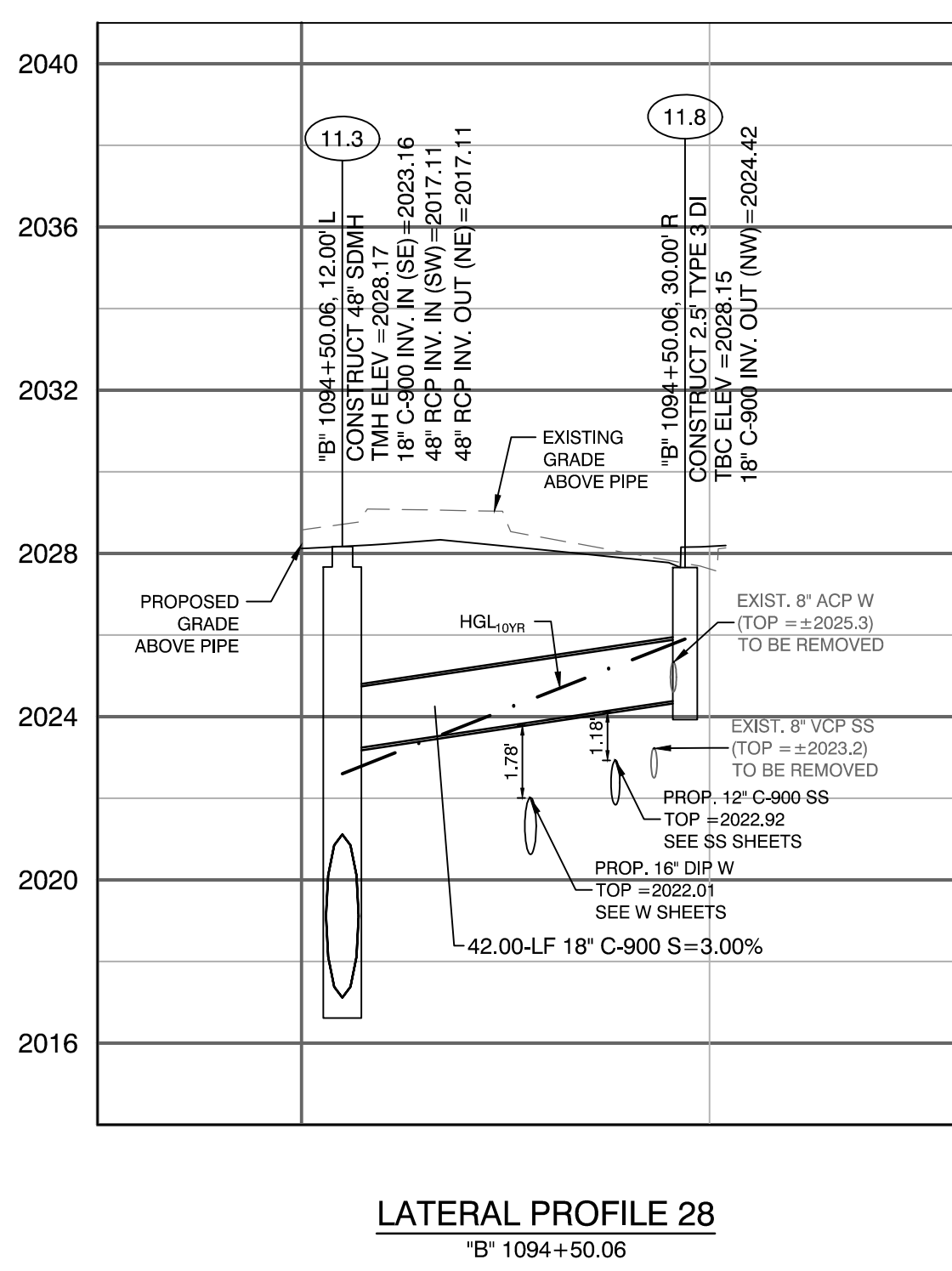
TITLE
**LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.**
SHEET
STORM DRAIN LATERAL PROFILES



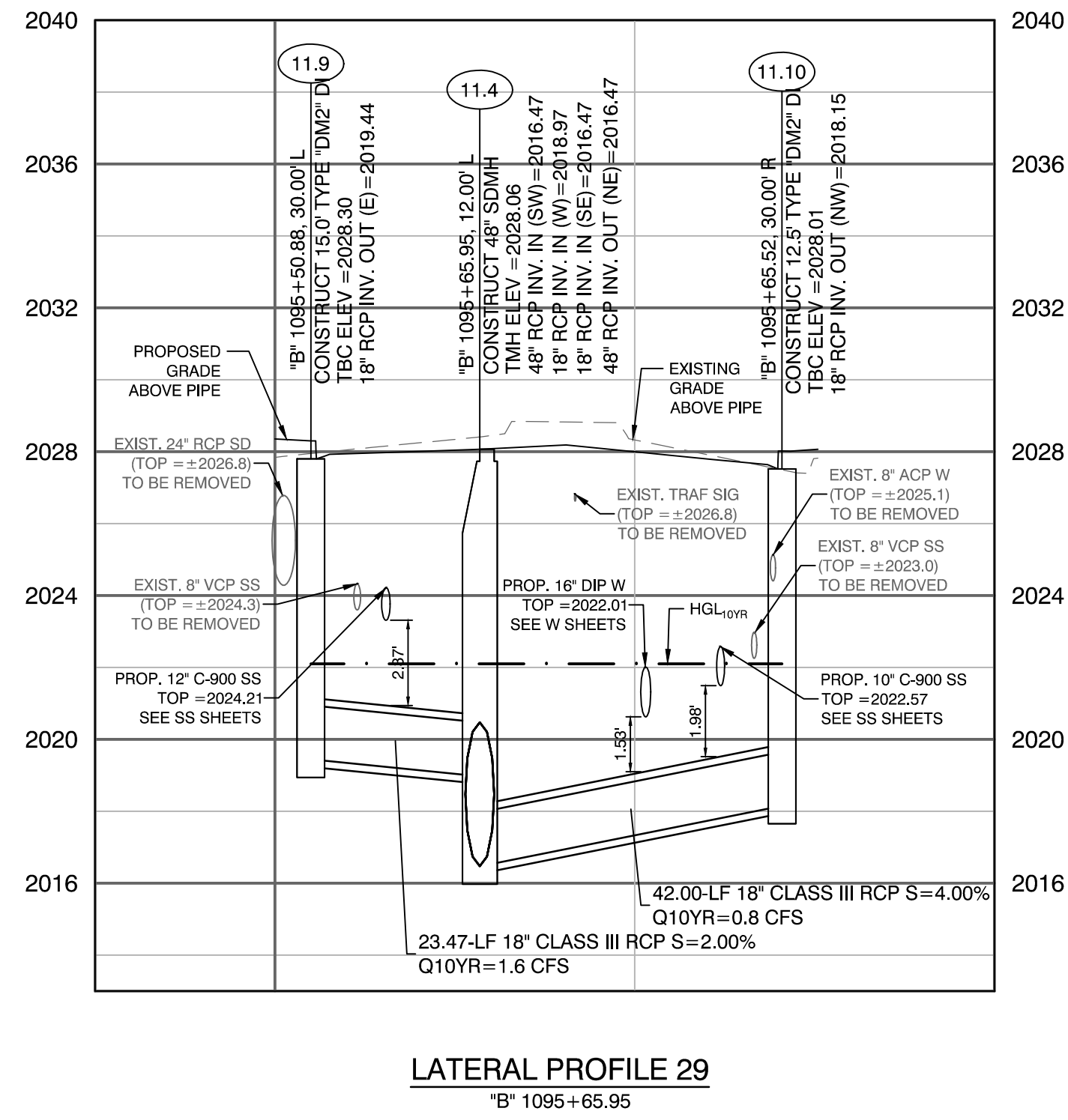
SHEET
SD-41
XX OF
DRAWING NO.
XXXXXXXXX-X



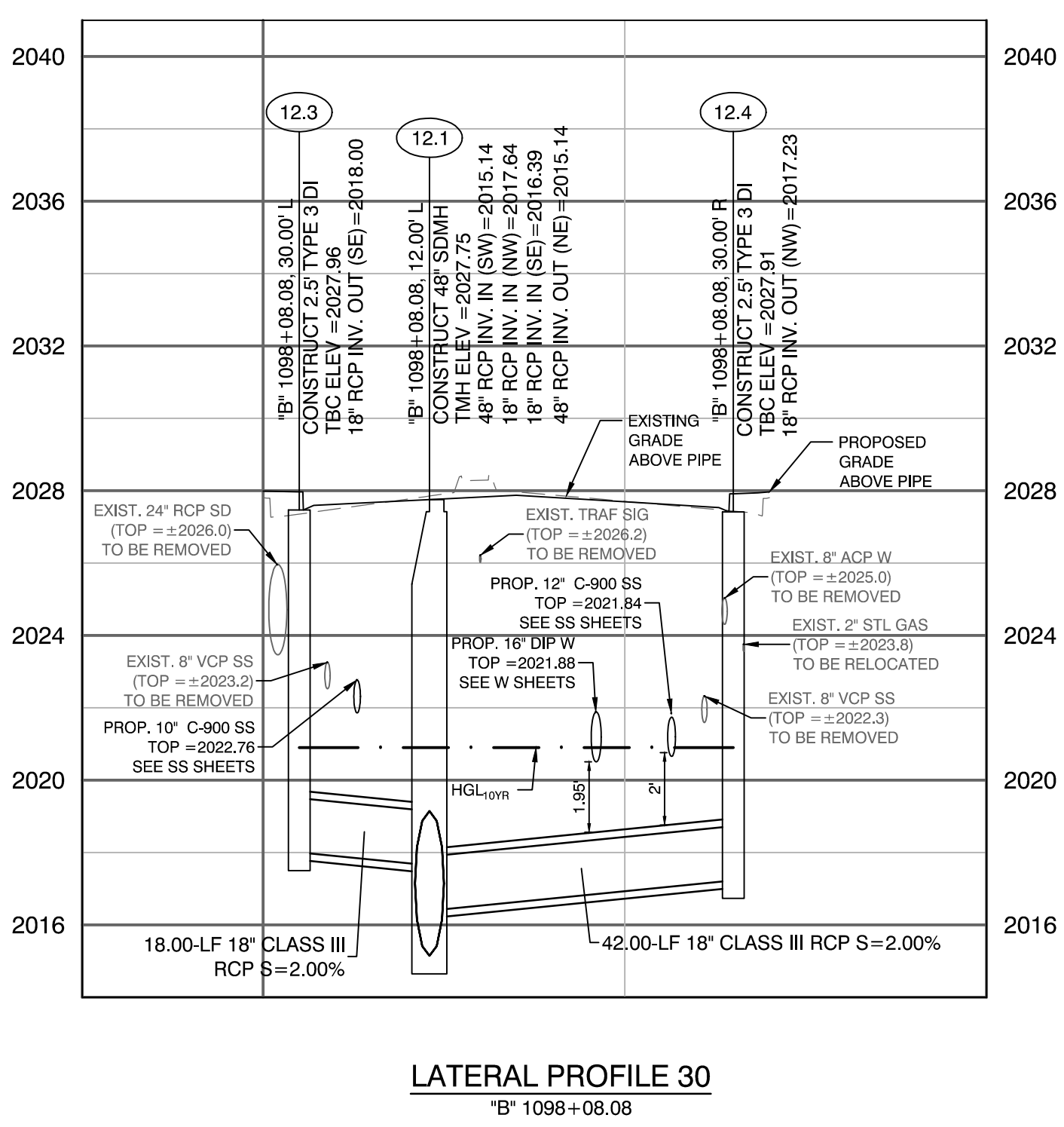
LATERAL PROFILE 27
"B" 1094+17.03



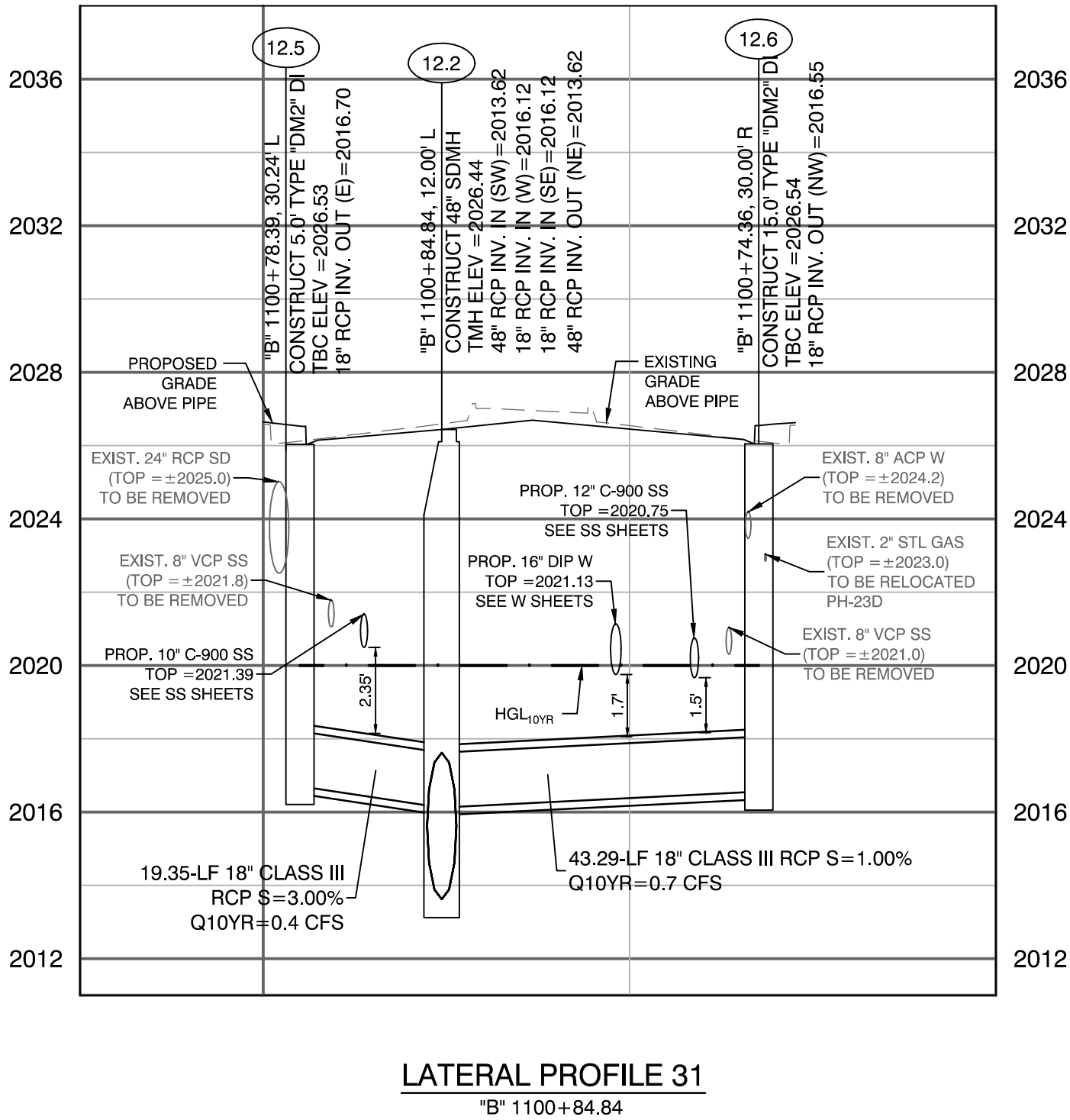
LATERAL PROFILE 28
"B" 1094+50.06



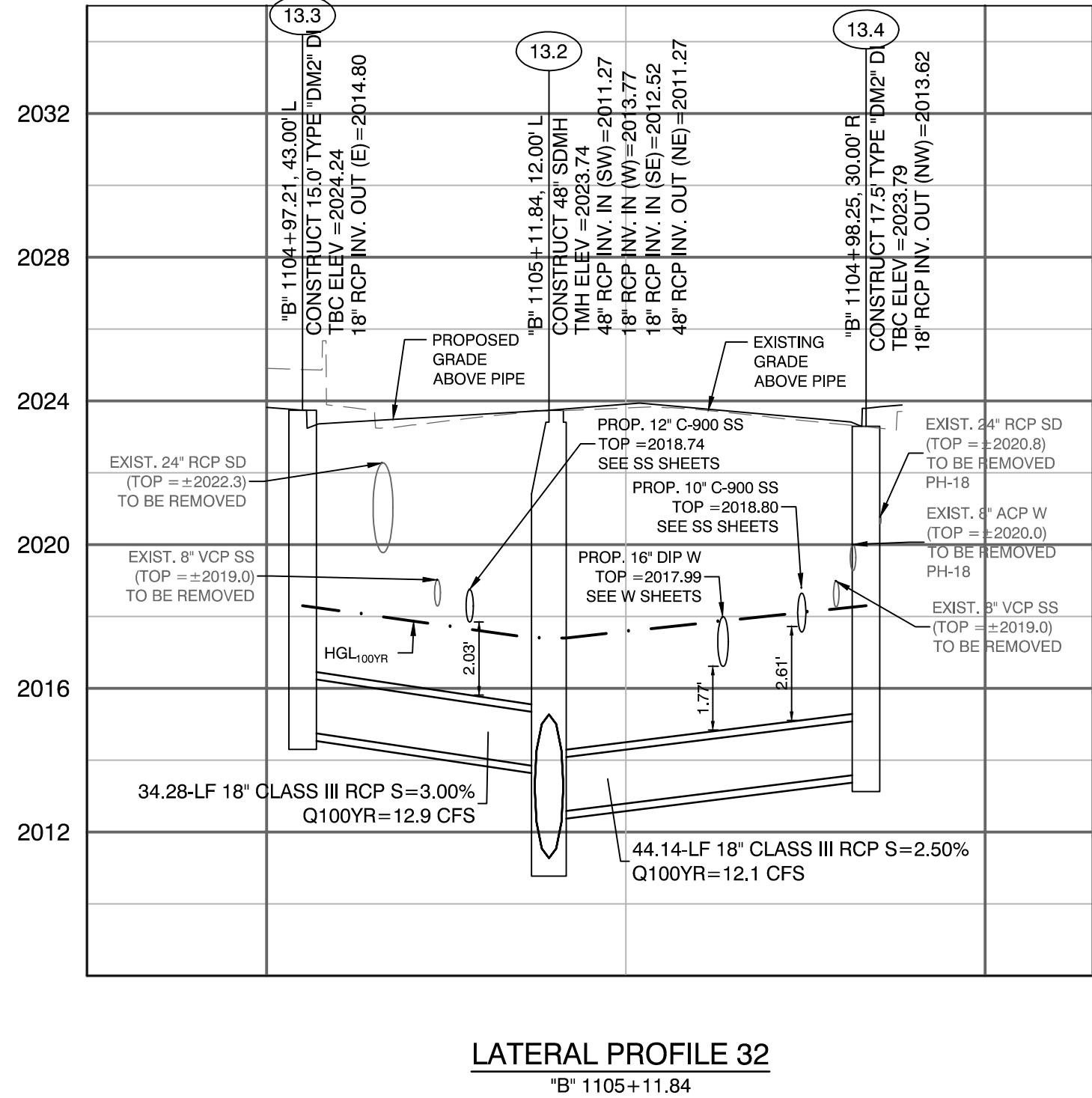
LATERAL PROFILE 29
"B" 1095+50.88



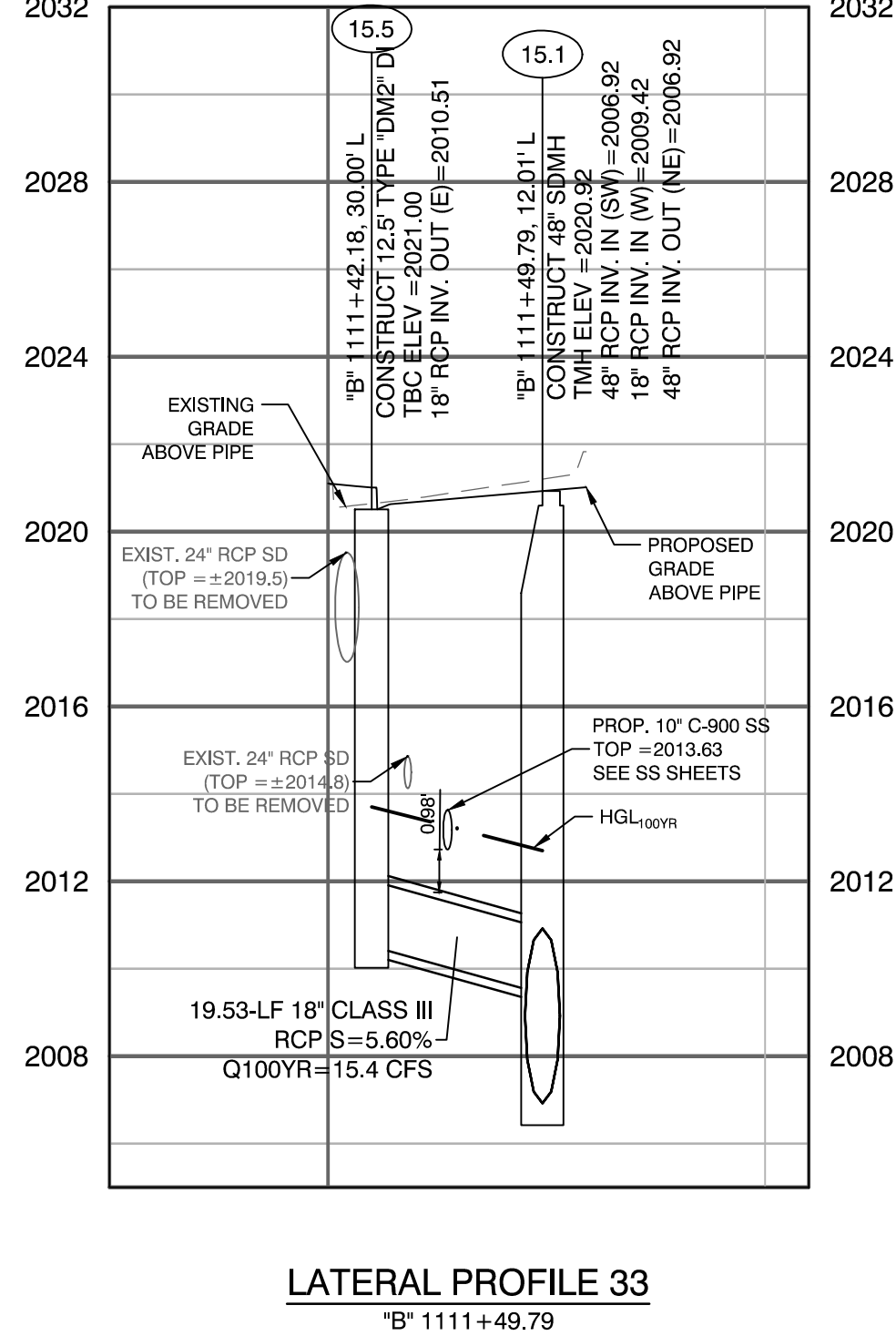
LATERAL PROFILE 30
"B" 1095+08.08



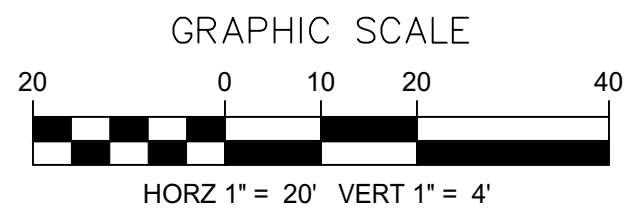
LATERAL PROFILE 31
"B" 1100+84.84



LATERAL PROFILE 32
"B" 1105+11.84



LATERAL PROFILE 33
"B" 1111+49.79



UTILITY NOTE:
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CALL SOUTHWEST GAS AT 702-400-1789 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 123955 FIRST APPROVED DATE: 06/27/2019

CALL BEFORE CONSTRUCTION			
BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600	
	F.A.S.T.	702-432-5300	
BEFORE YOU UNDERGROUND	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511	
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611	
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929	

PREPARED BY
CITY OF LAS VEGAS
H# 46330
DESIGNED BY: JB
DATE: 06/27/2019
SUBMITTAL STAGE: 100% SUBMITTAL
CHECKED BY: HM

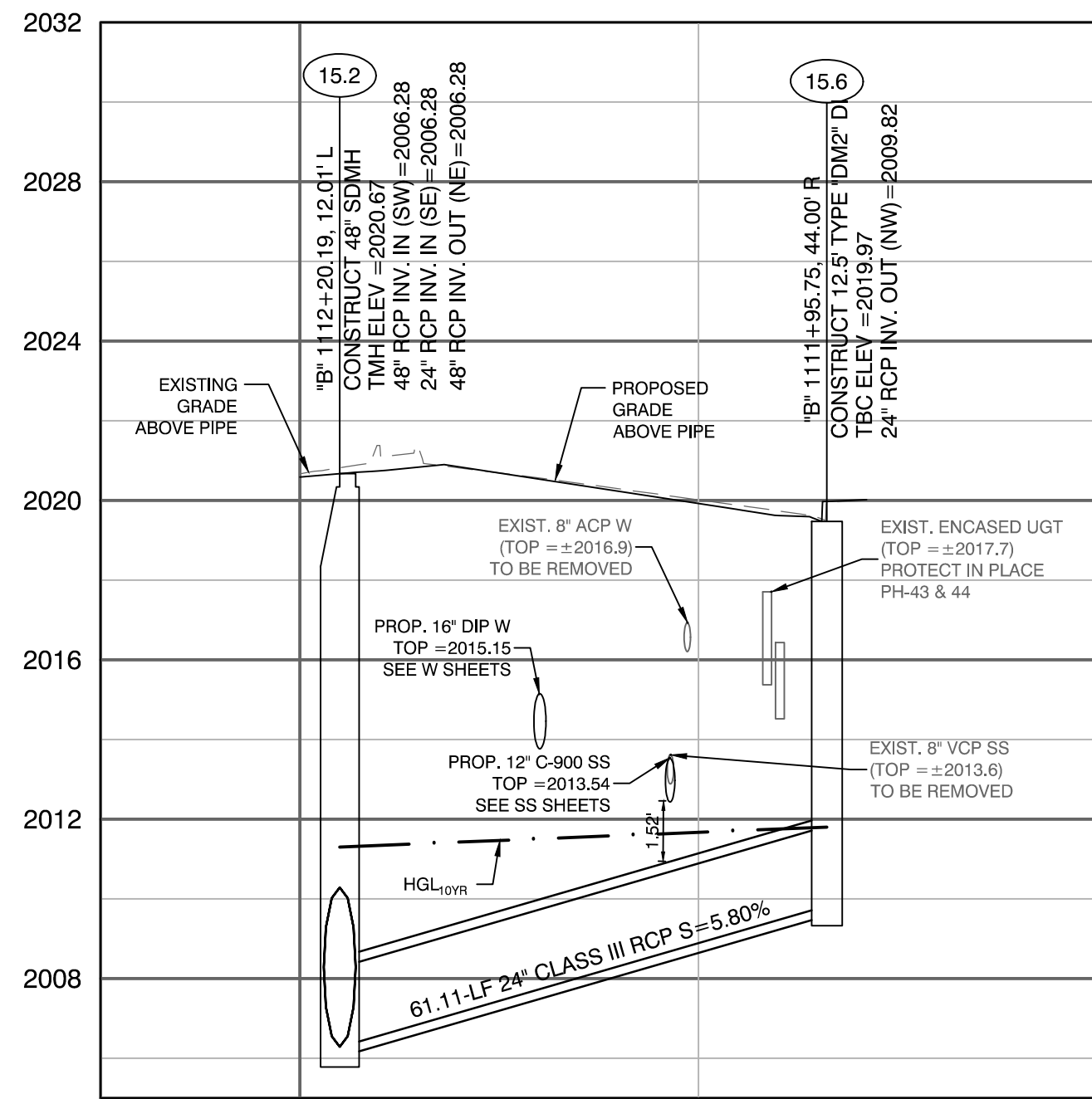
CA Group, Inc.
C A V I O L A N S O N
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 655-5945

SD-42
XX OF
DRAWING NO. XXXXXXXX-X

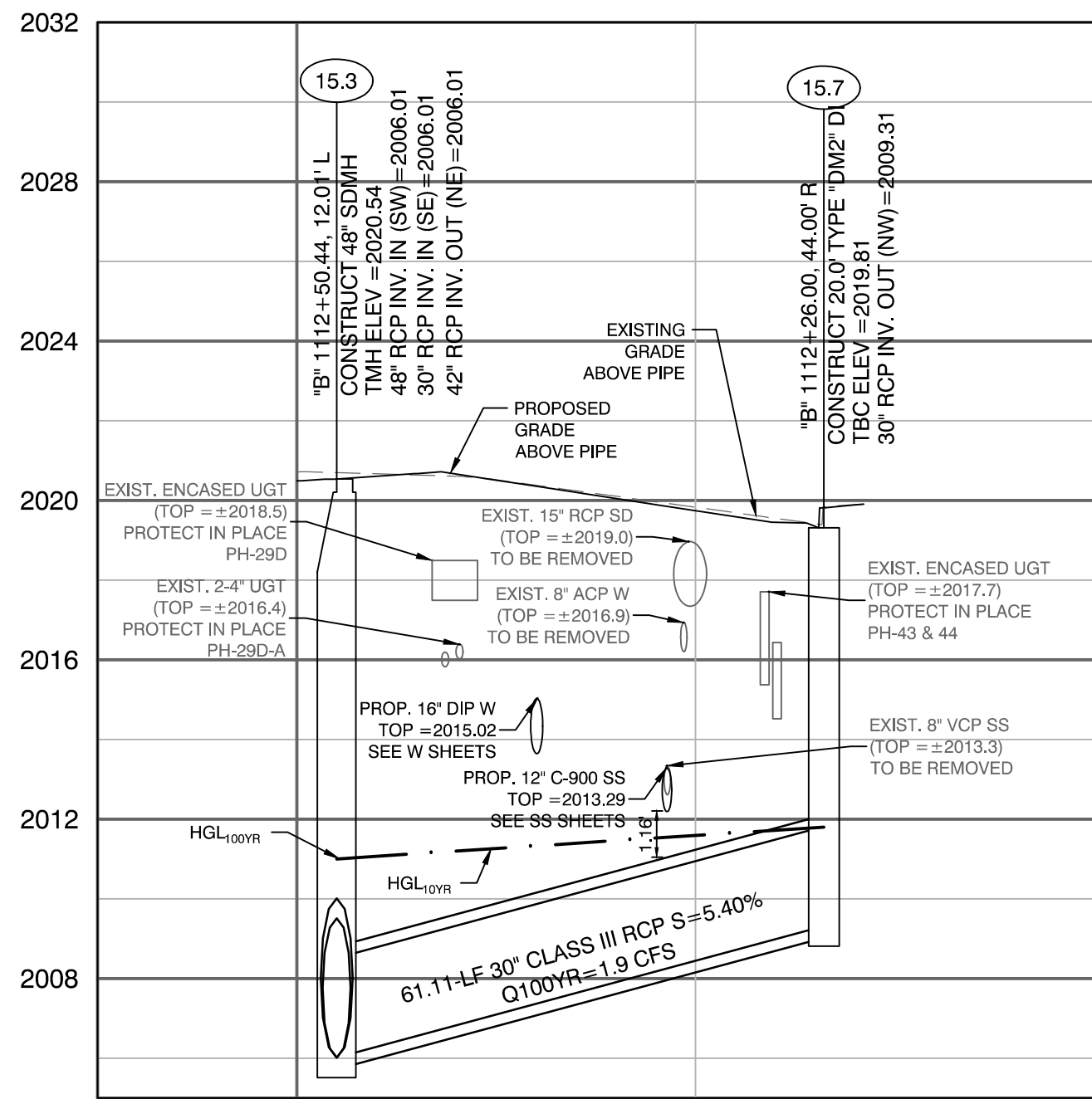
06/25/2019
100%
SUBMITTAL

LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.
STORM DRAIN LATERAL PROFILES
SHEET

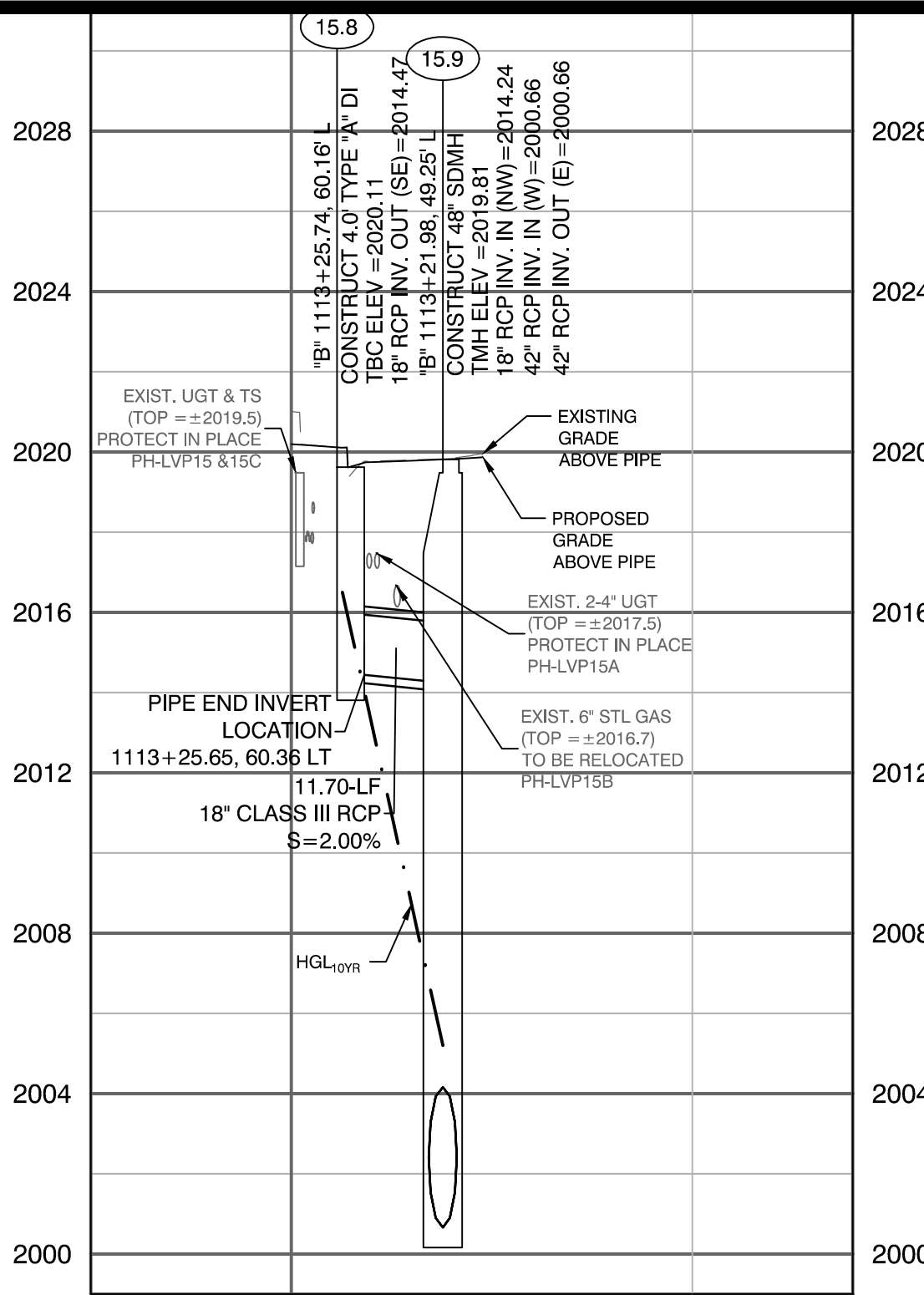
NO. DATE REVISIONS



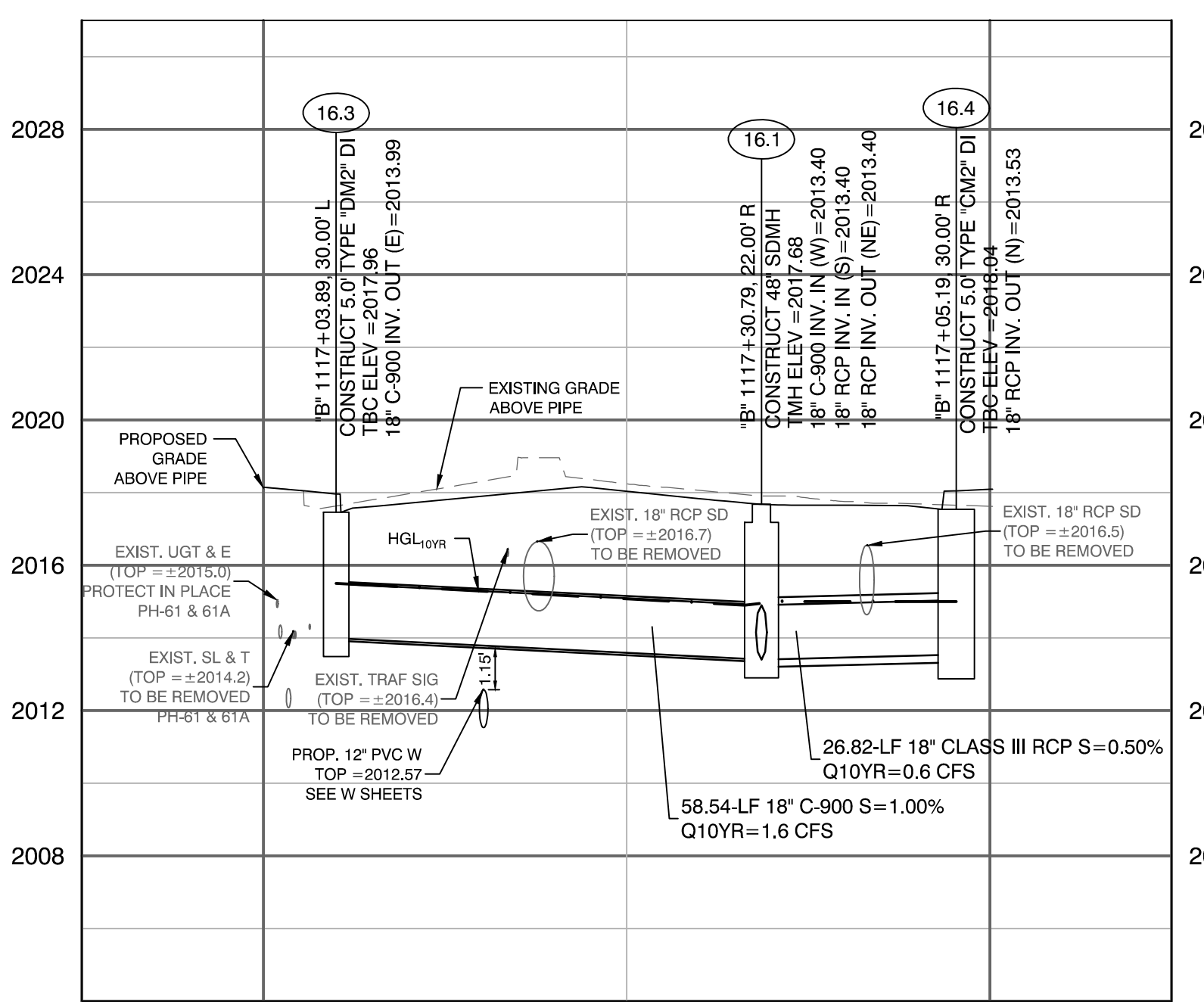
LATERAL PROFILE 34
"B" 1112+20.19



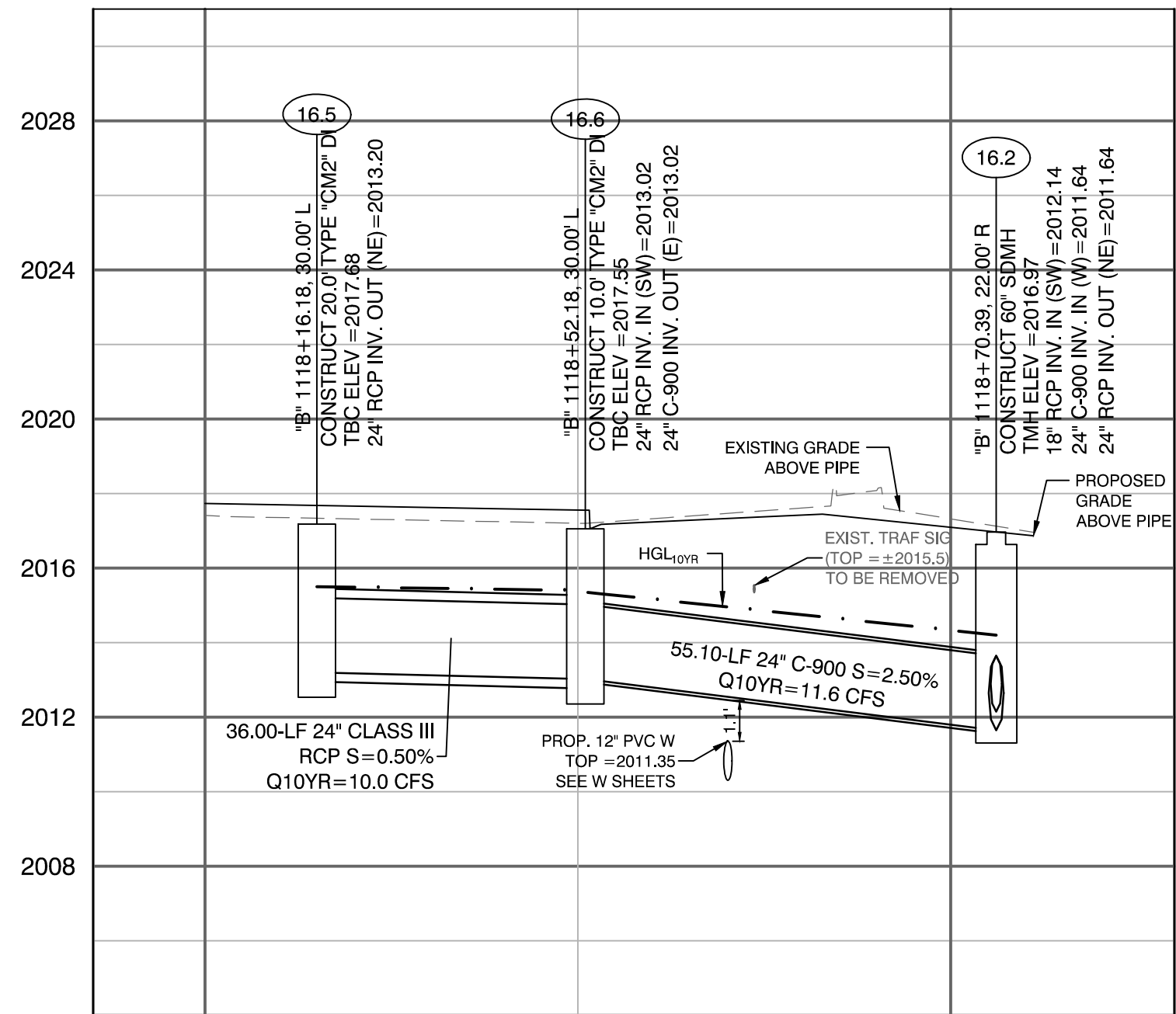
LATERAL PROFILE 35
"B" 1112+50.44



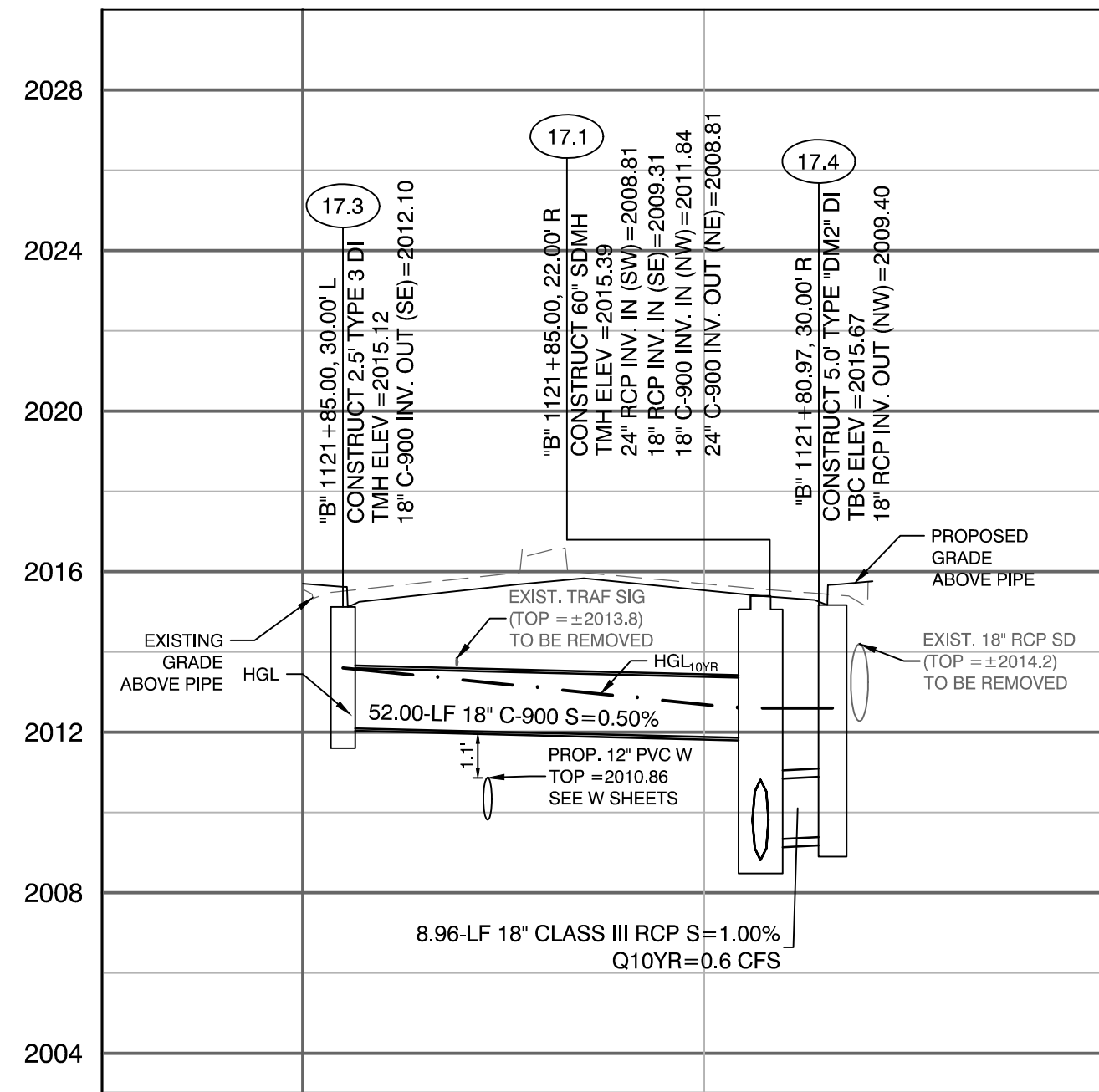
LATERAL PROFILE 36
"B" 1113+21.98



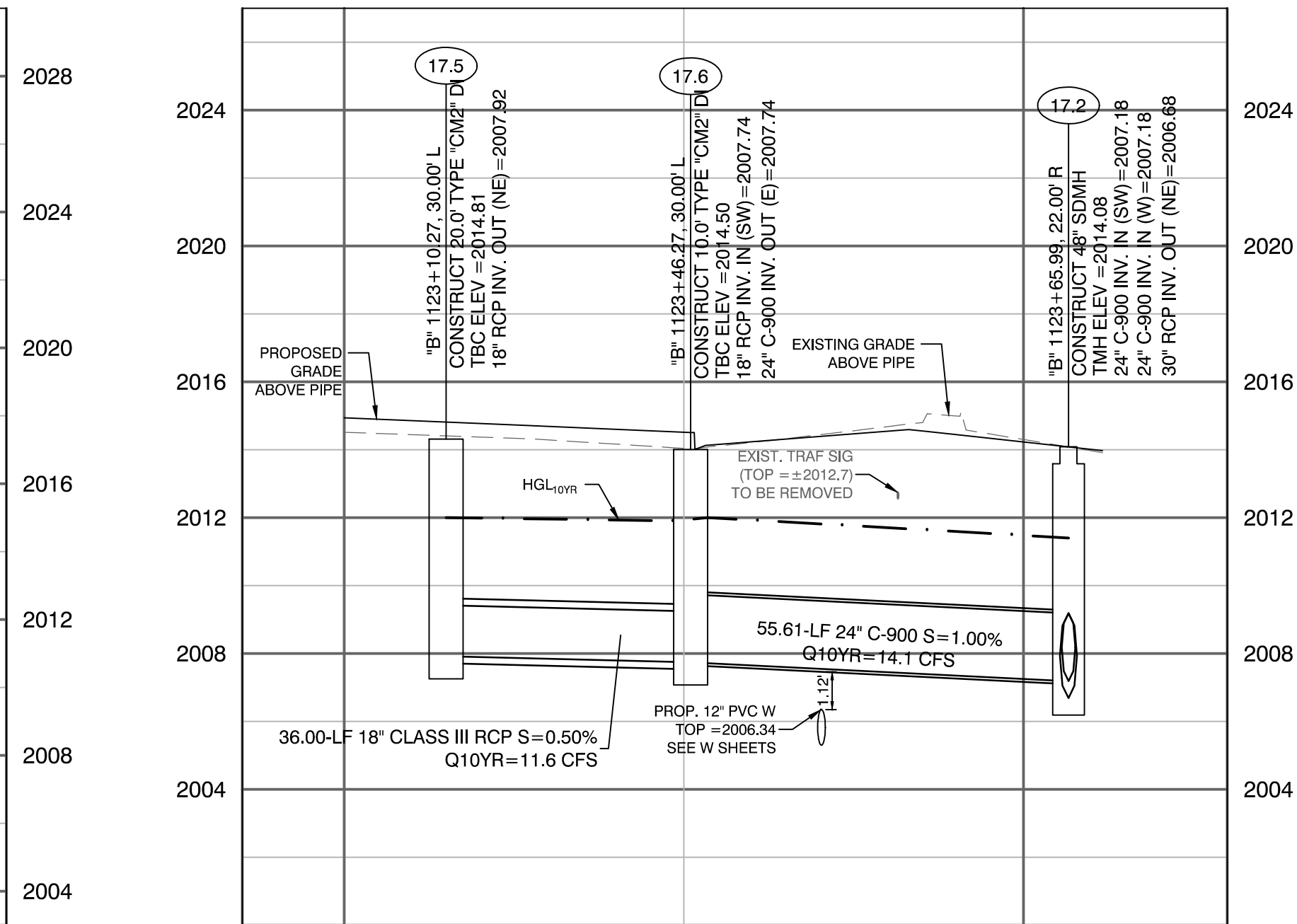
LATERAL PROFILE 37
"B" 1117+30.79



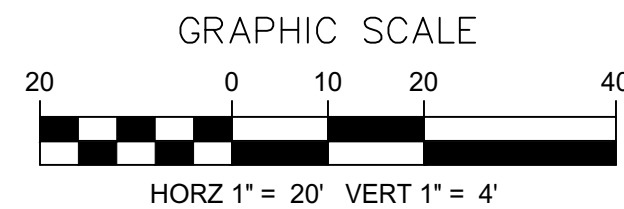
LATERAL PROFILE 38
"B" 1118+70.39



LATERAL PROFILE 39
"B" 1121+85.00



LATERAL PROFILE 40
"B" 1123+46.27



UTILITY NOTE:
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CALL SOUTHWEST GAS AT 702-400-1789 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 123595 FIRST APPROVED DATE: 06/27/2019

CALL BEFORE CONSTRUCTION			
BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600	
	F.A.S.T.	702-432-5300	
BEFORE YOU UNDERGROUND	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511	
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611	
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929	

PREPARED BY
CITY OF LAS VEGAS
H# 46330
DATE: 06/27/2019
SUBMITTAL STAGE:
100% SUBMITTAL

BID# 19.68939
DESIGNED BY: JB
DRAWN BY: JB
CHECKED BY: HM

TITLE

LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.

SHEET

DATE: 06/27/2019

100% SUBMITTAL

CAVIOLANSON
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 685-5945

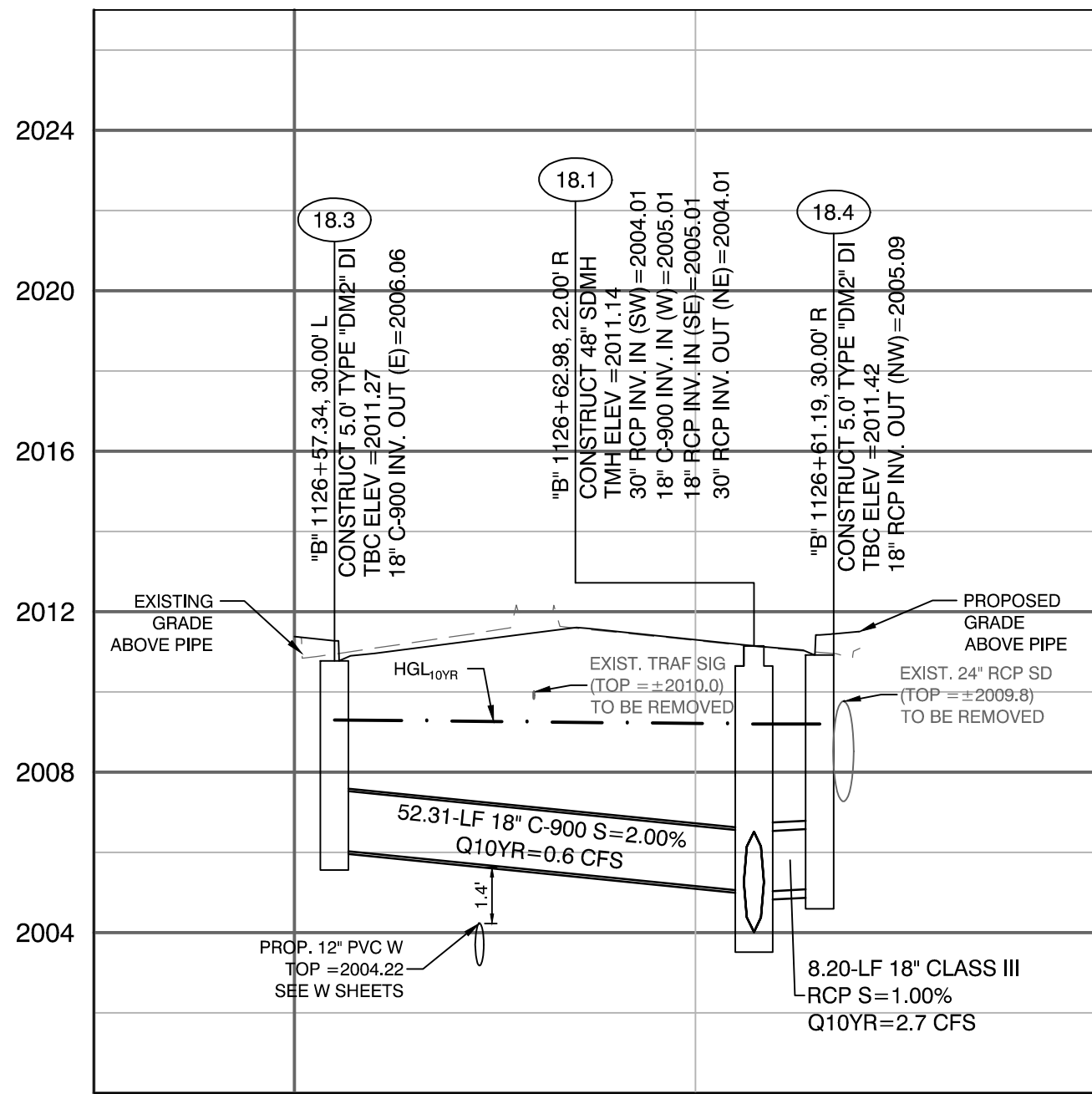
DATE: 06/27/2019

100% SUBMITTAL

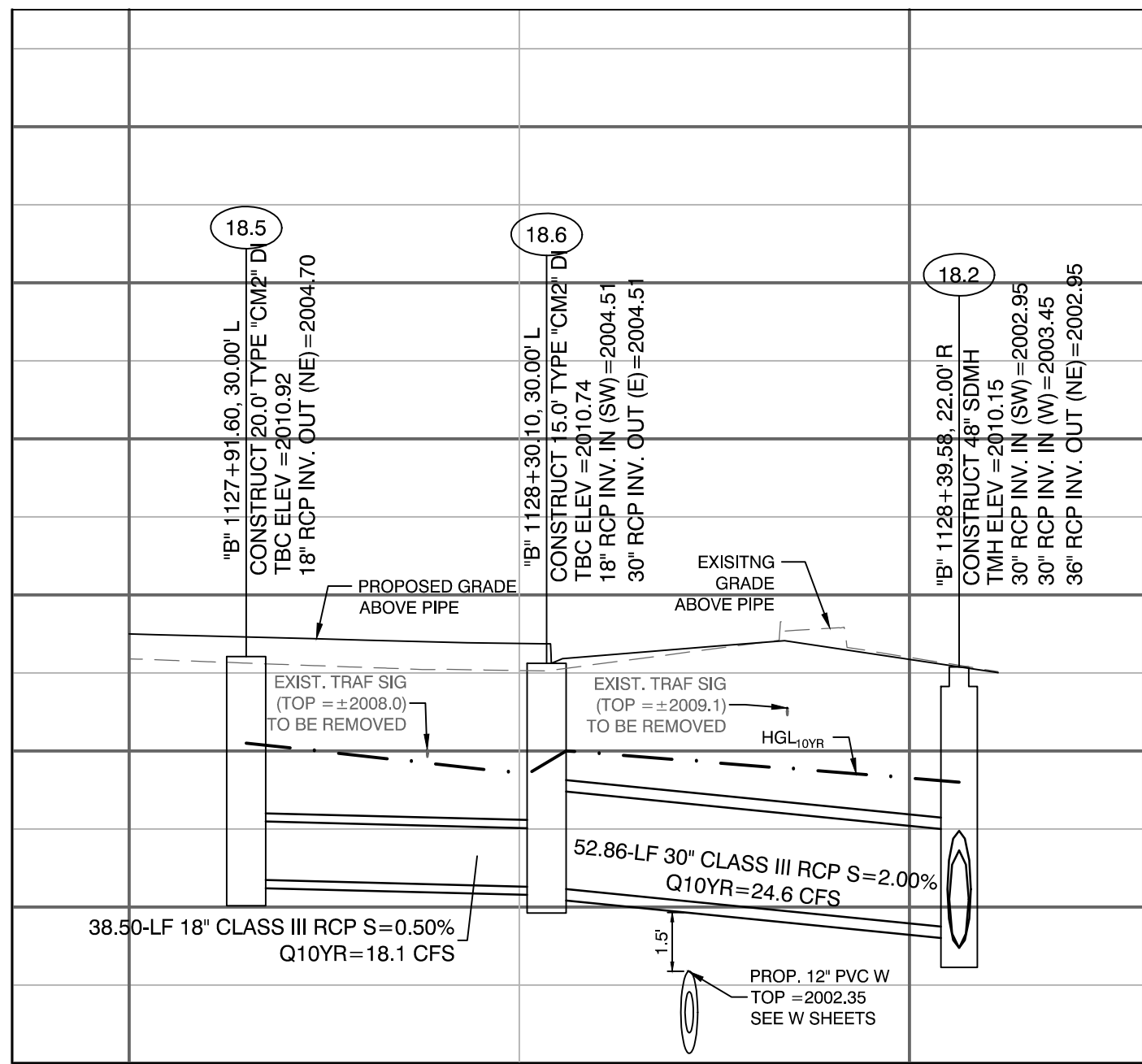
SD-43

XX OF

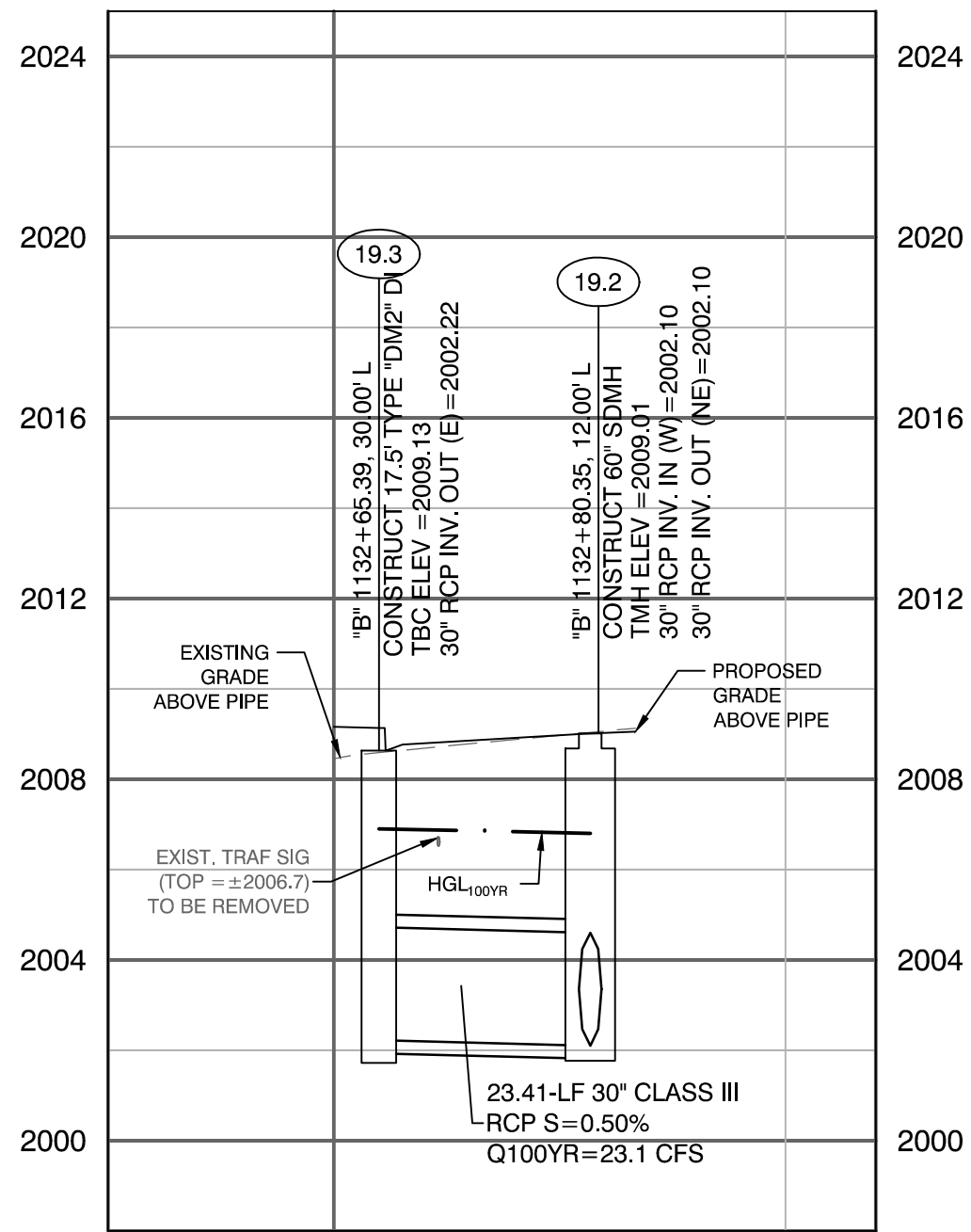
DRAWING NO.
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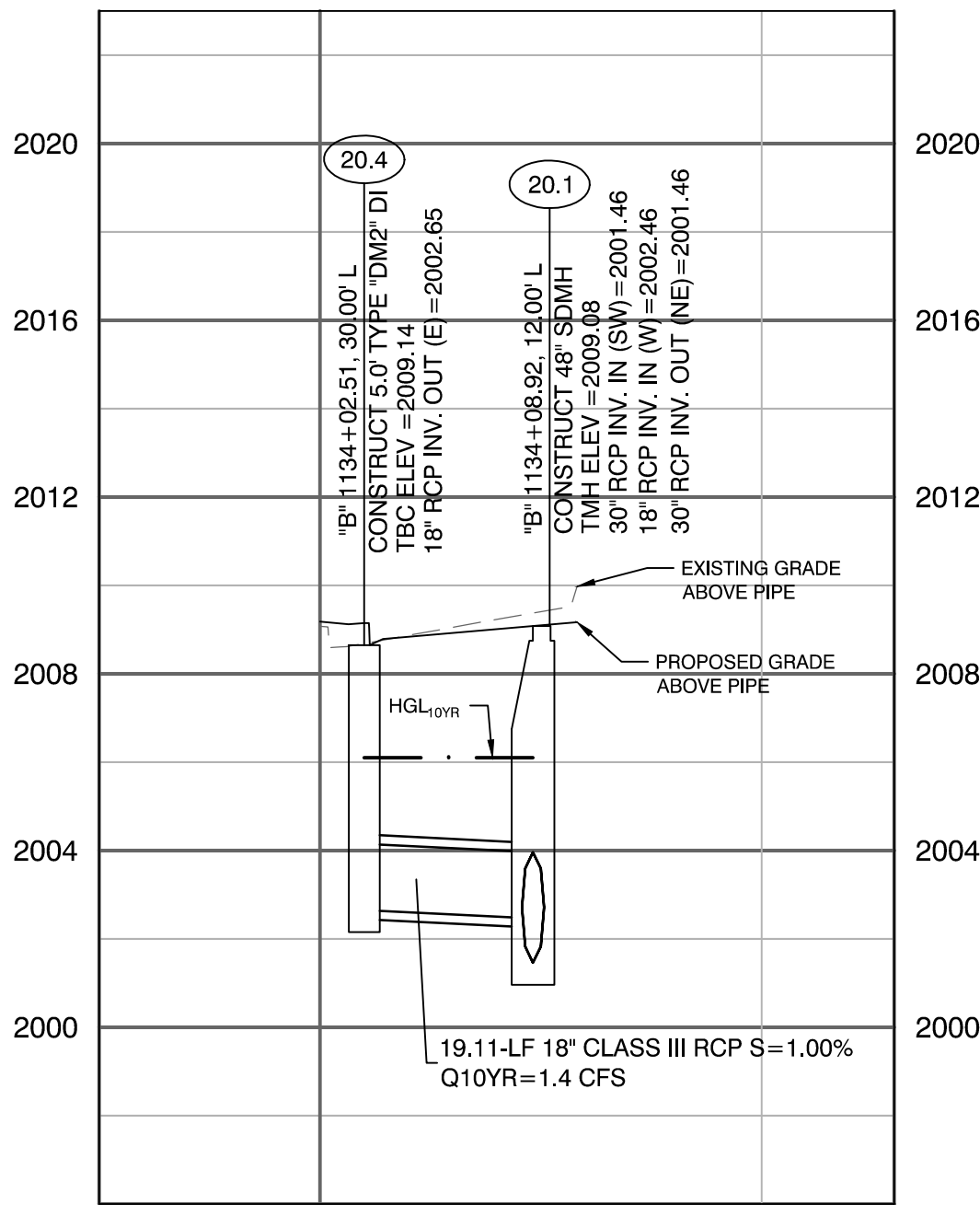
LATERAL PROFILE 41
"B" 1126+62.96



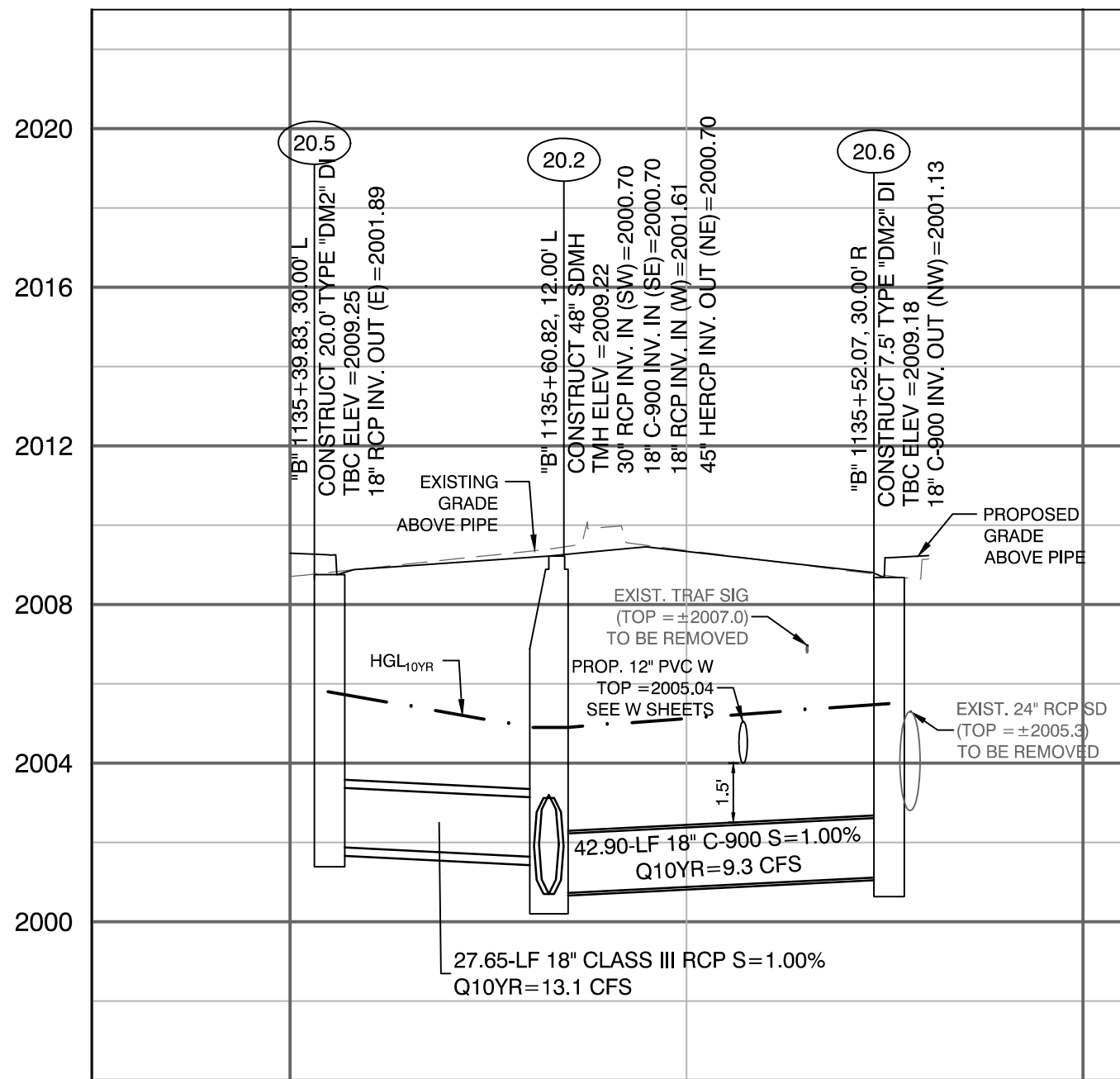
LATERAL PROFILE 42
"B" 1128+39.58



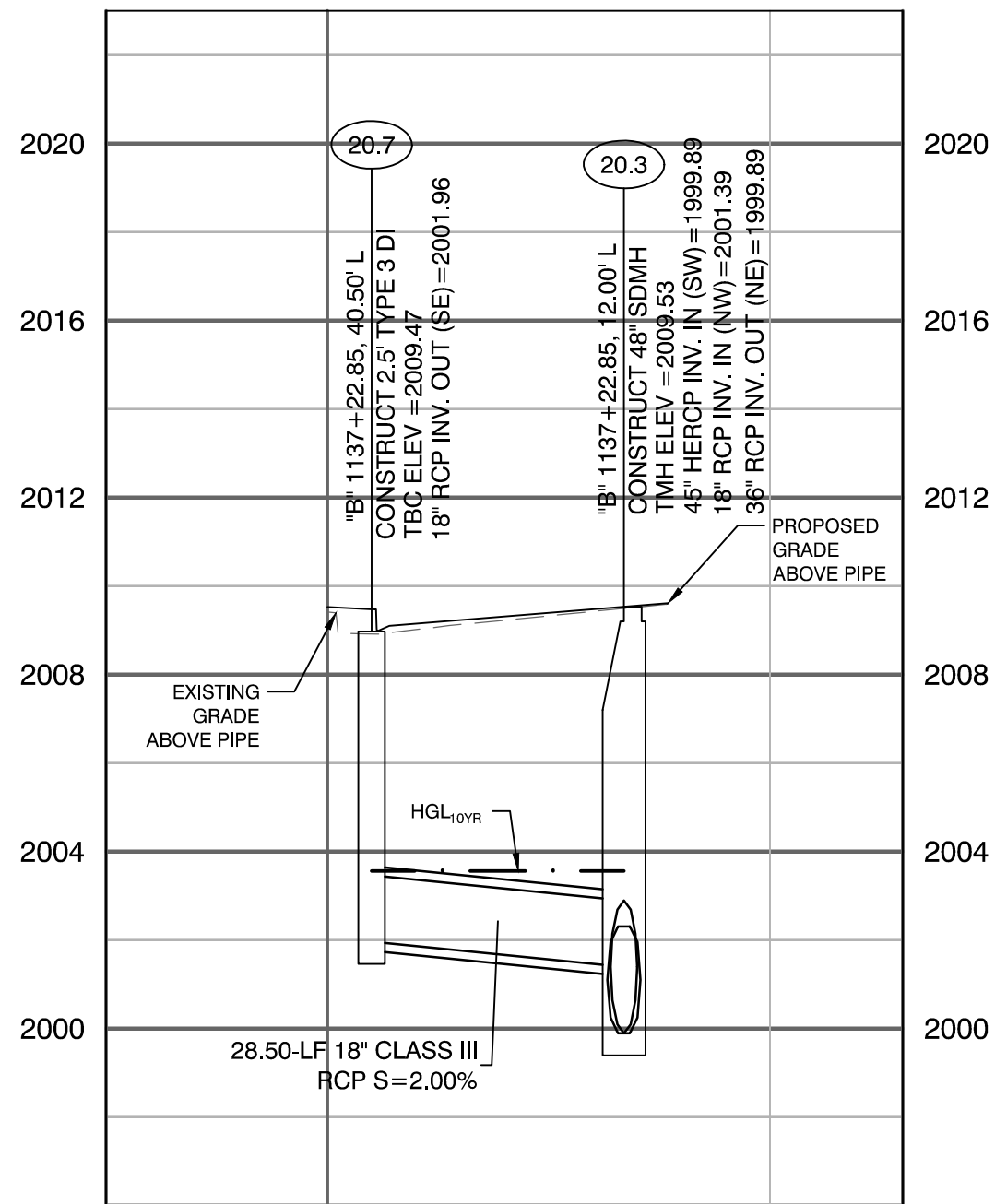
LATERAL PROFILE 43
"B" 1132+80.35



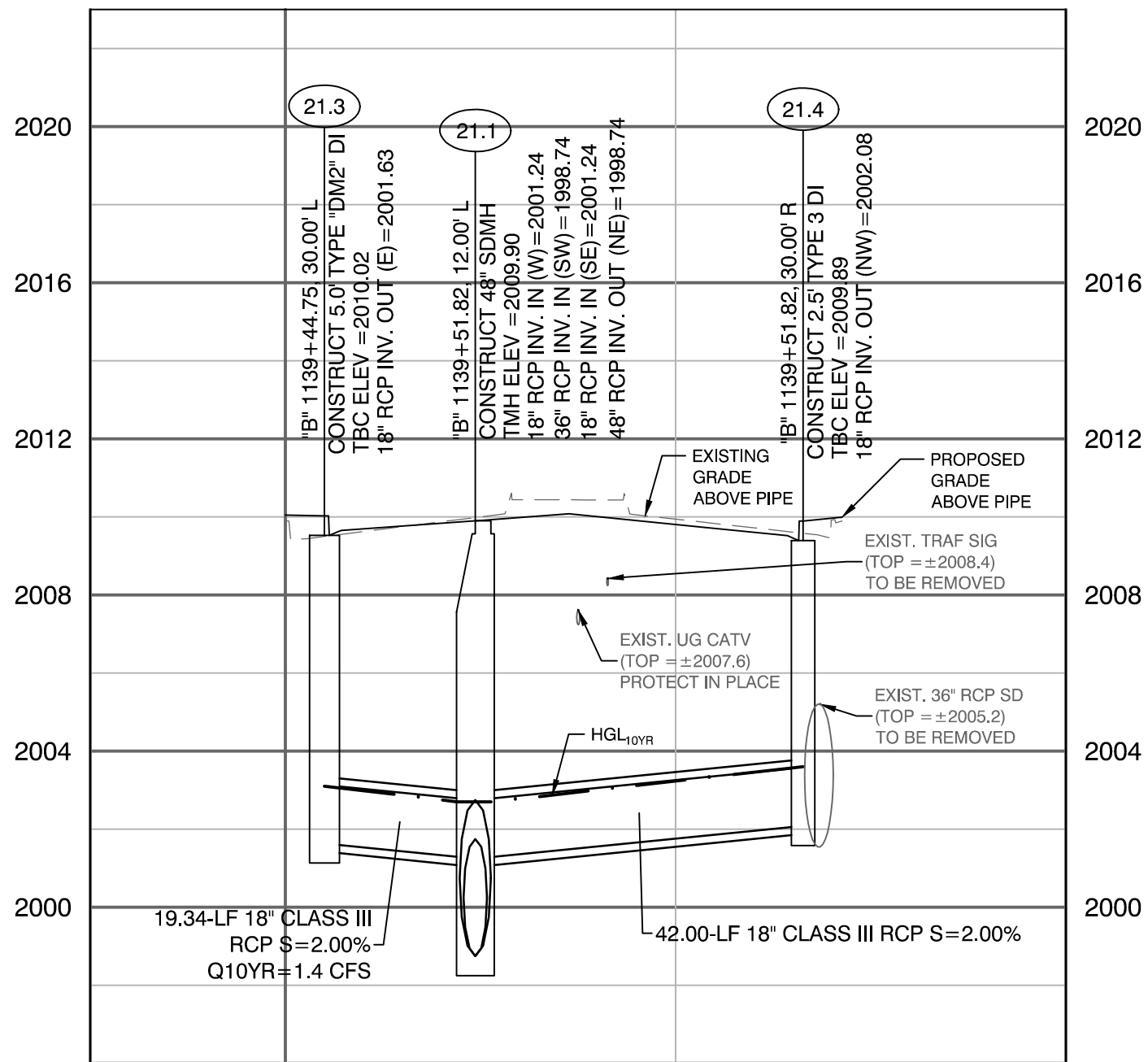
LATERAL PROFILE 44
"B" 1134+08.92



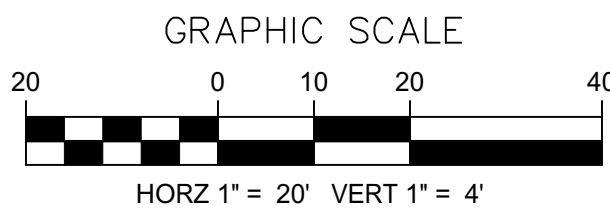
LATERAL PROFILE 45
"B" 1135+60.82



LATERAL PROFILE 46
"B" 1137+22.85



LATERAL PROFILE 47
"B" 1138+37.39



CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929

UTILITY NOTE:
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CALL SOUTHWEST GAS AT 702-400-1789 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT NO. 123955 FIRST APPROVED DATE: 06/27/2019

PREPARED BY
CITY OF LAS VEGAS

DESIGNED BY: JB
DRAWN BY: JB
CHECKED BY: HM

DATE: 06/27/2019
SUBMITTAL STAGE: 100% SUBMITTAL

LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.

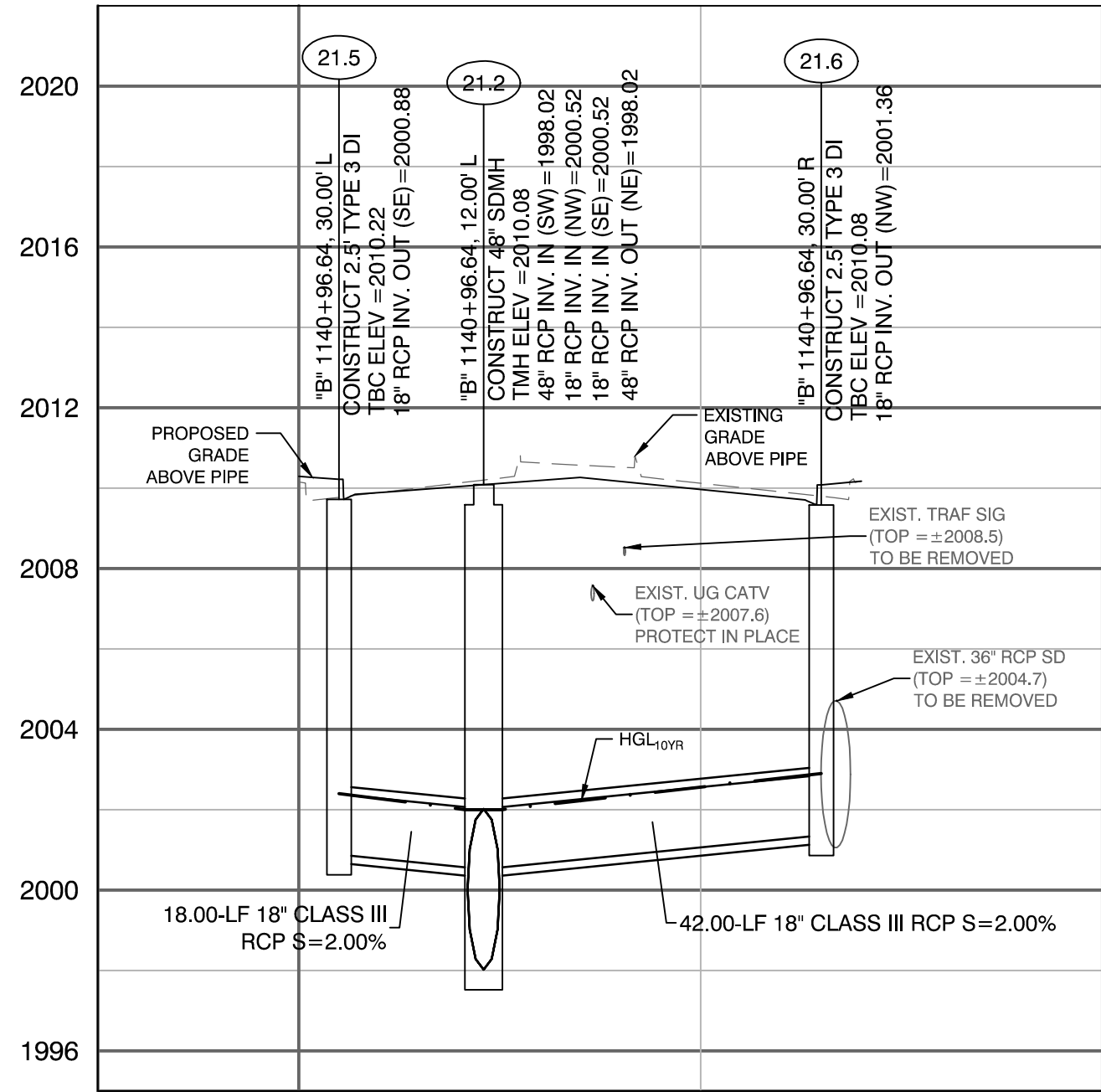
STORM DRAIN LATERAL PROFILES

SD-44
XX OF
DRAWING NO. XXXXXXXX-X

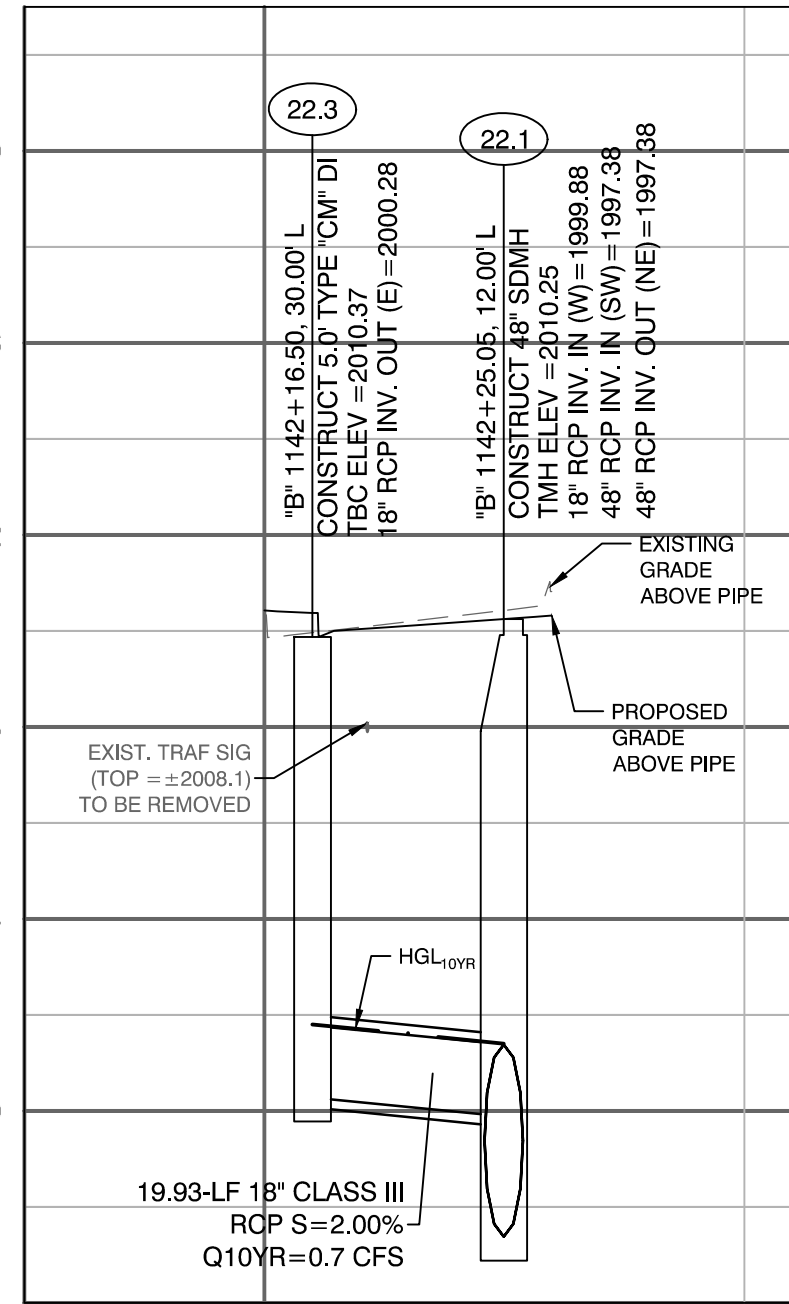
CAVIOLANSON
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 685-5945

NO. DATE

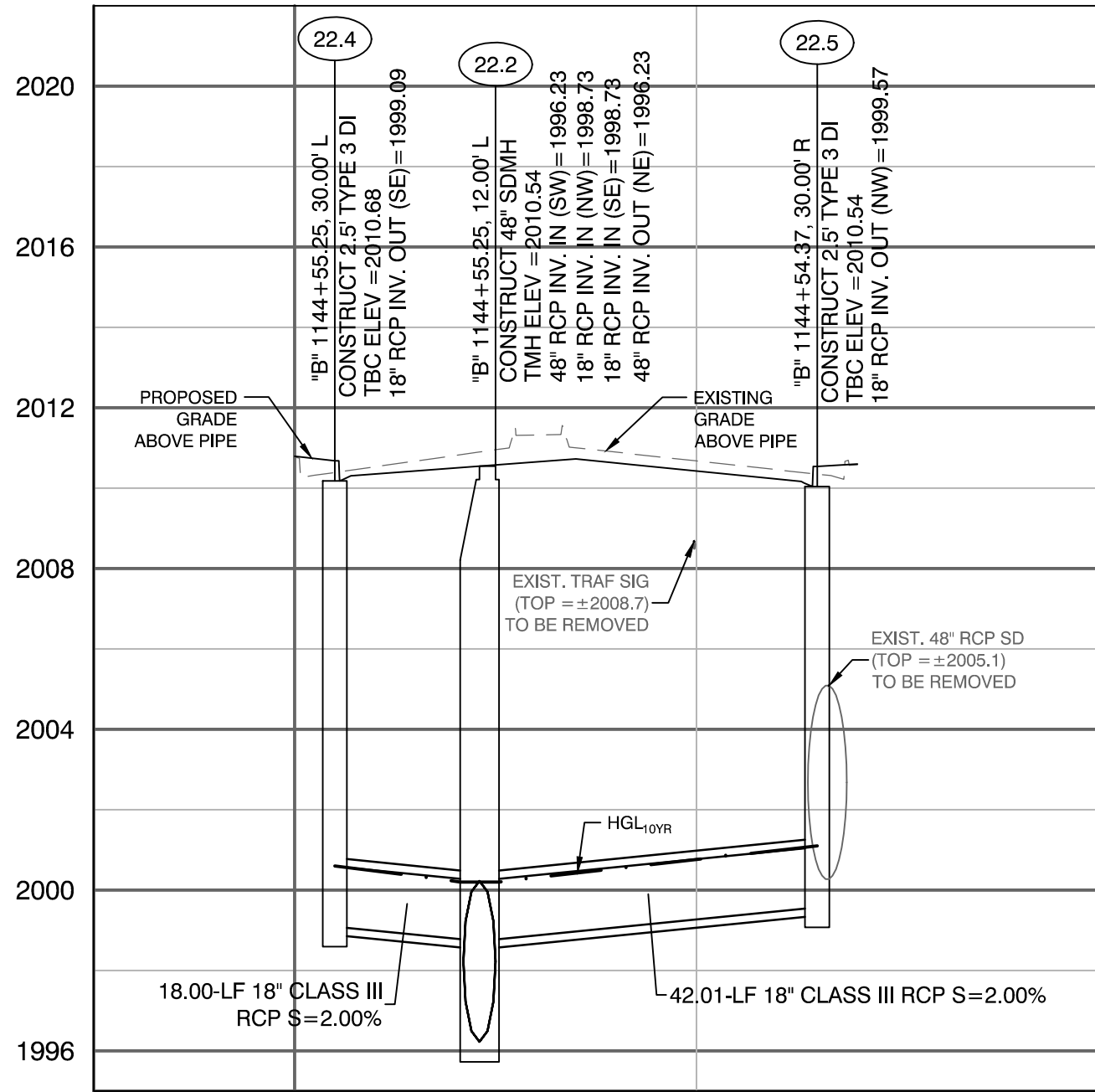
REVISIONS



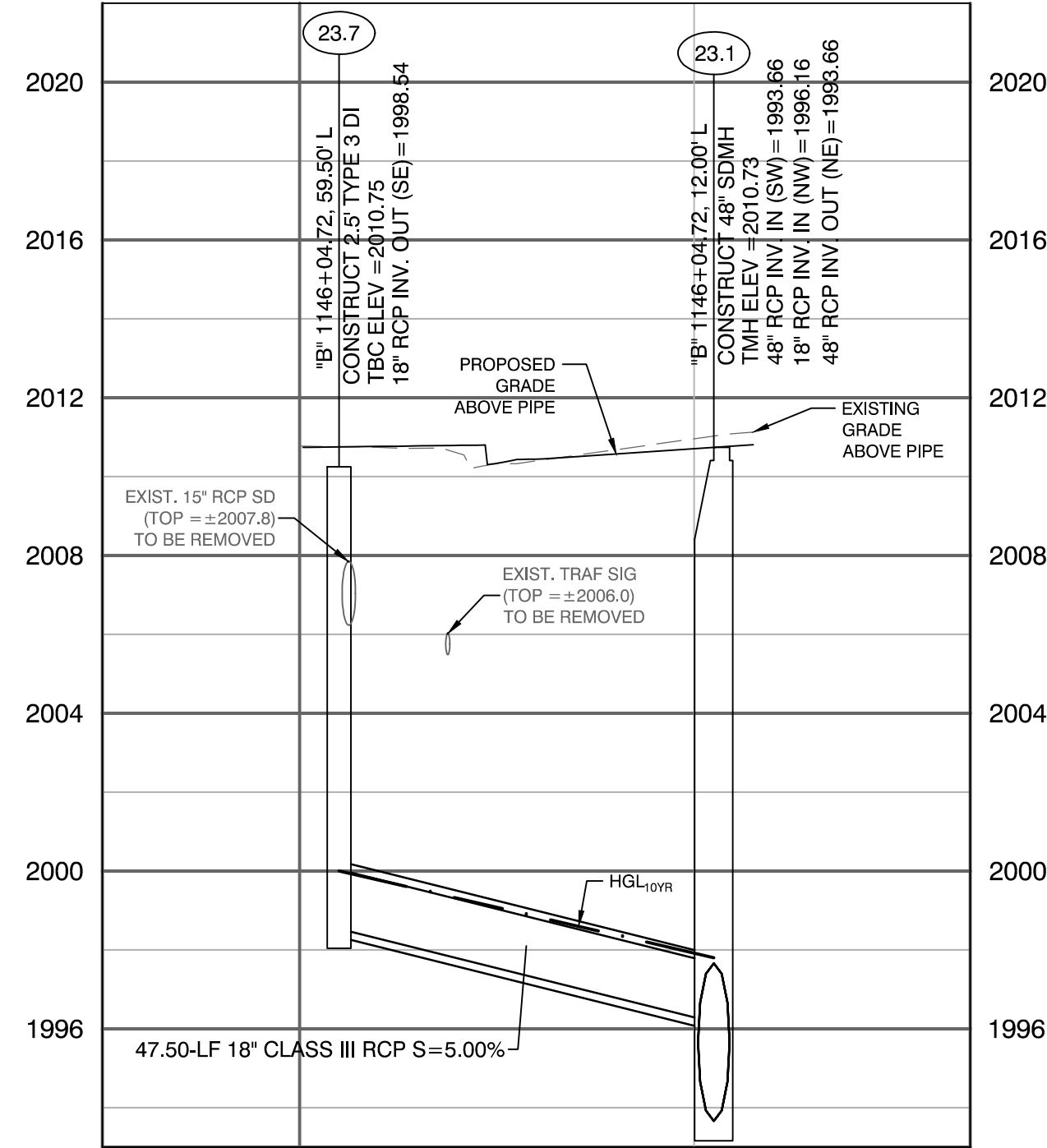
LATERAL PROFILE 48
"B" 1140+96.64



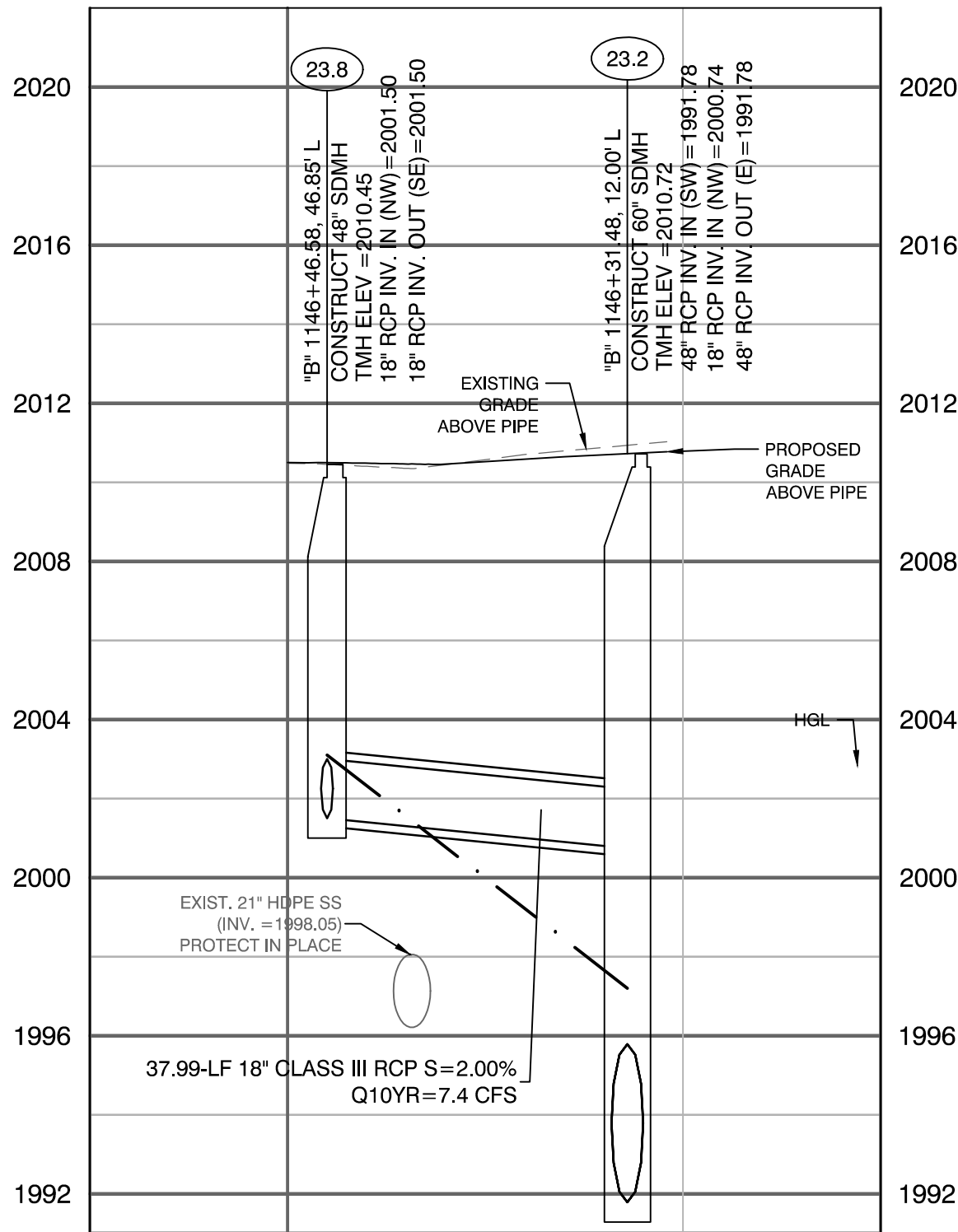
LATERAL PROFILE 49
"B" 1142+25.05



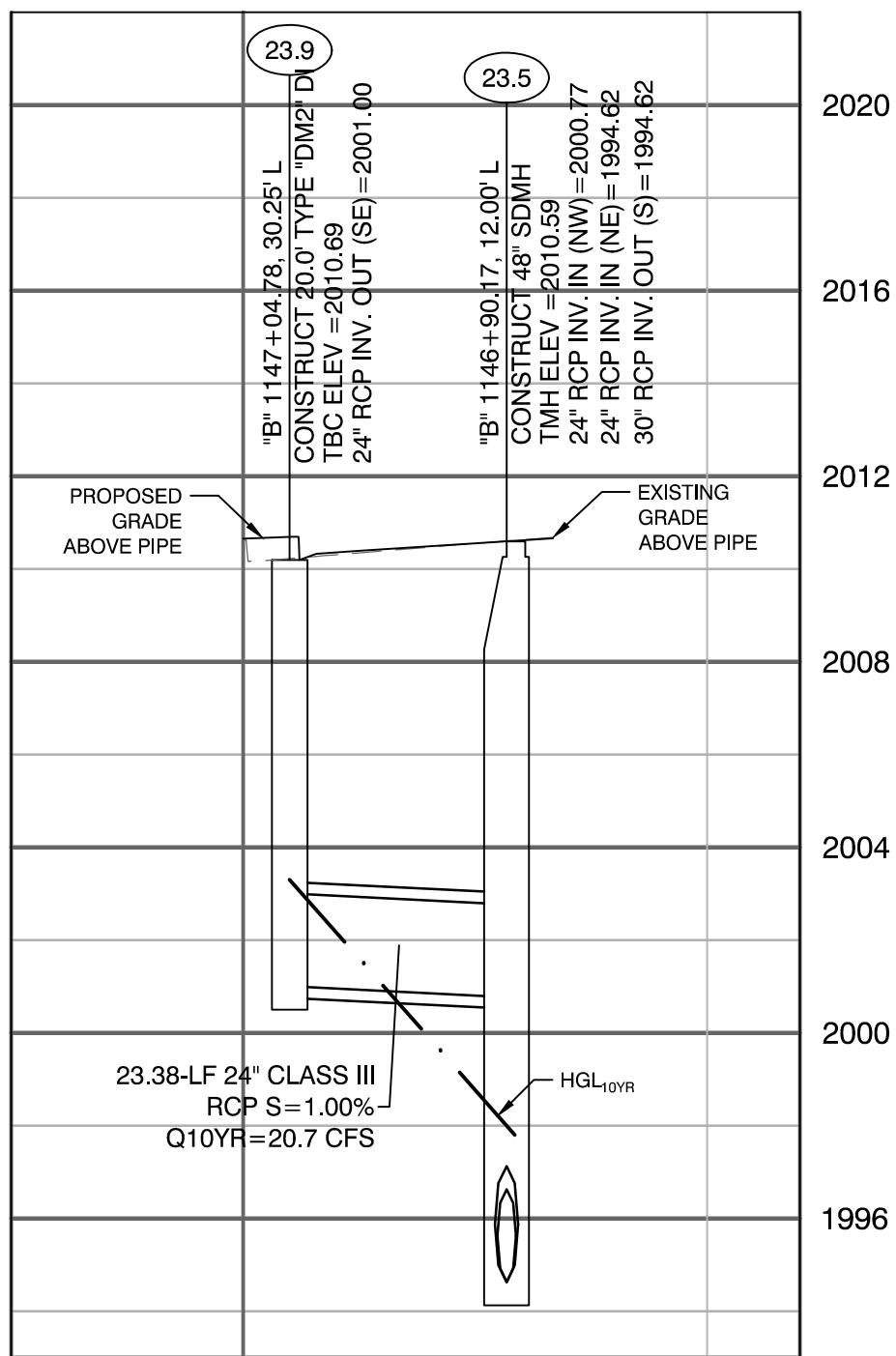
LATERAL PROFILE 50
"B" 1144+55.25



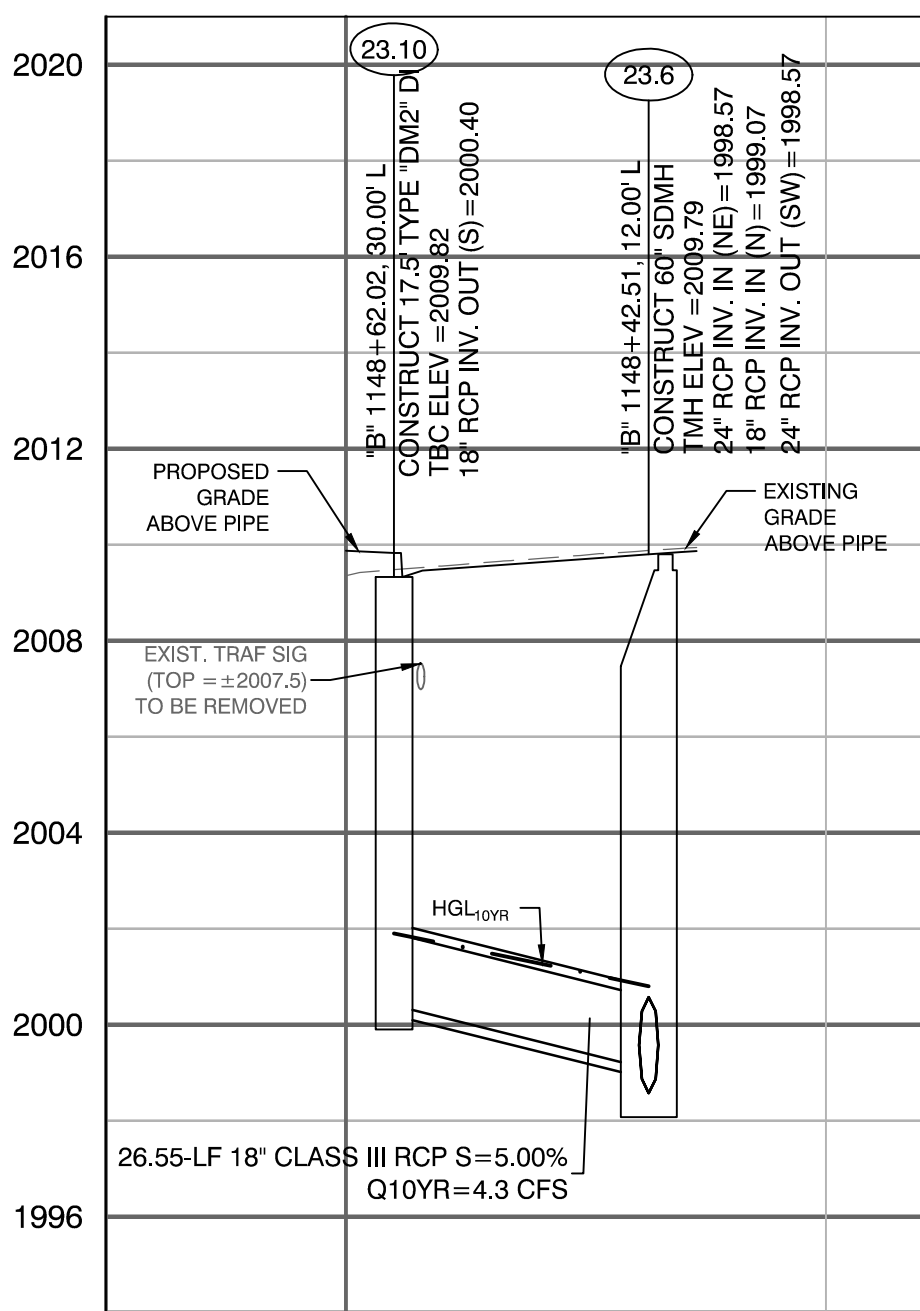
LATERAL PROFILE 51
"B" 1146+04.72



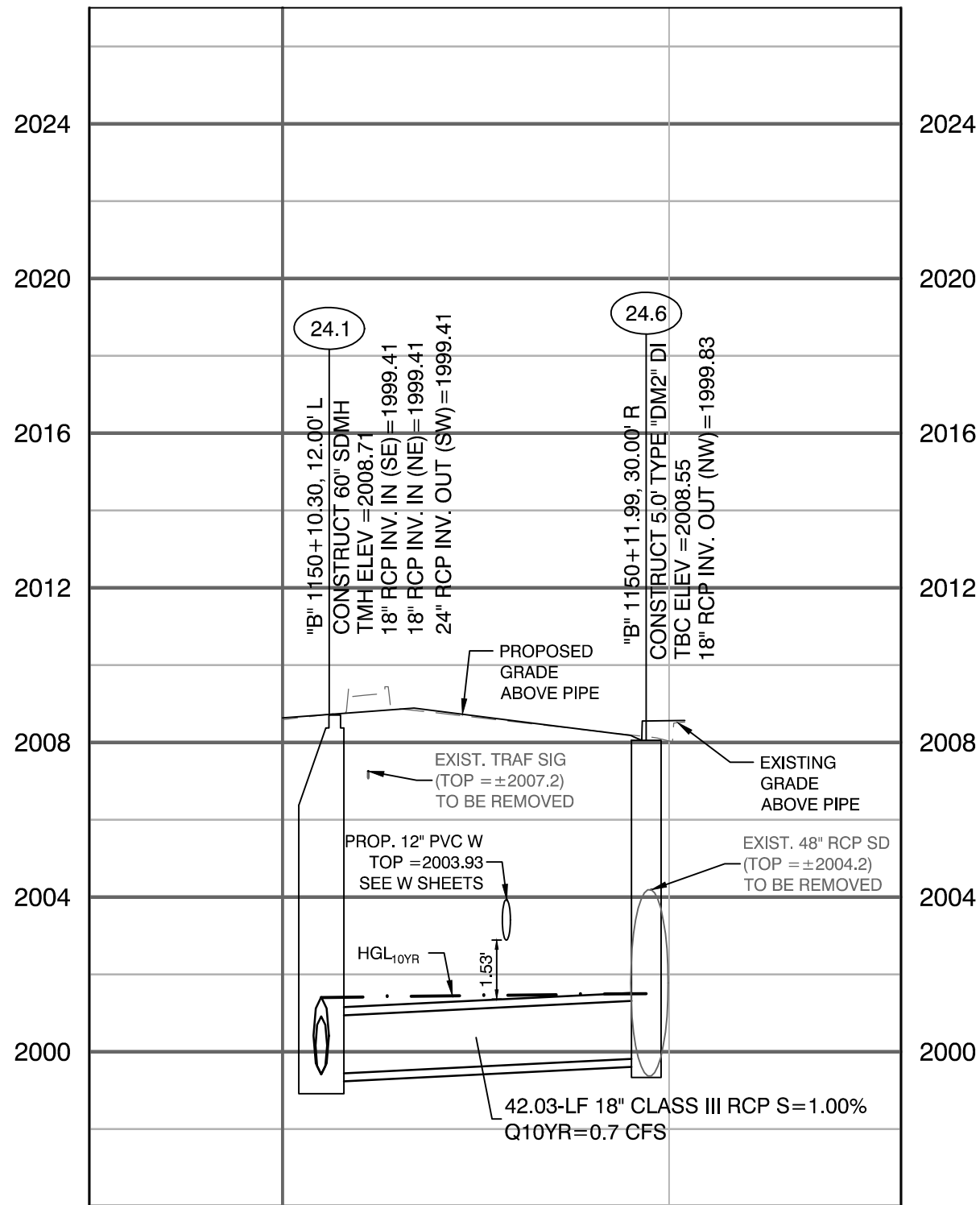
LATERAL PROFILE 52
"B" 1146+31.48



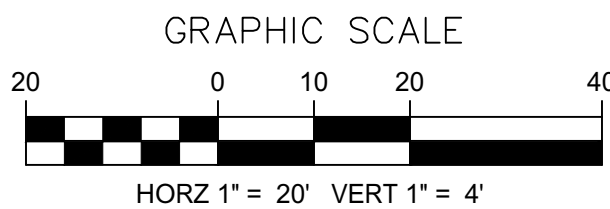
LATERAL PROFILE 53
"B" 1146+90.17



LATERAL PROFILE 54
"B" 1148+42.51



LATERAL PROFILE 55
"B" 1150+10.30



UTILITY NOTE:
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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 123955 FIRST APPROVED DATE: 06/27/2019

CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929

PREPARED BY
CA Group, Inc.
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 655-5945

DESIGNED BY: JB
DRAWN BY: JB
CHECKED BY: HM

DATE: 06/27/2019
SUBMITTAL STAGE: 100% SUBMITTAL

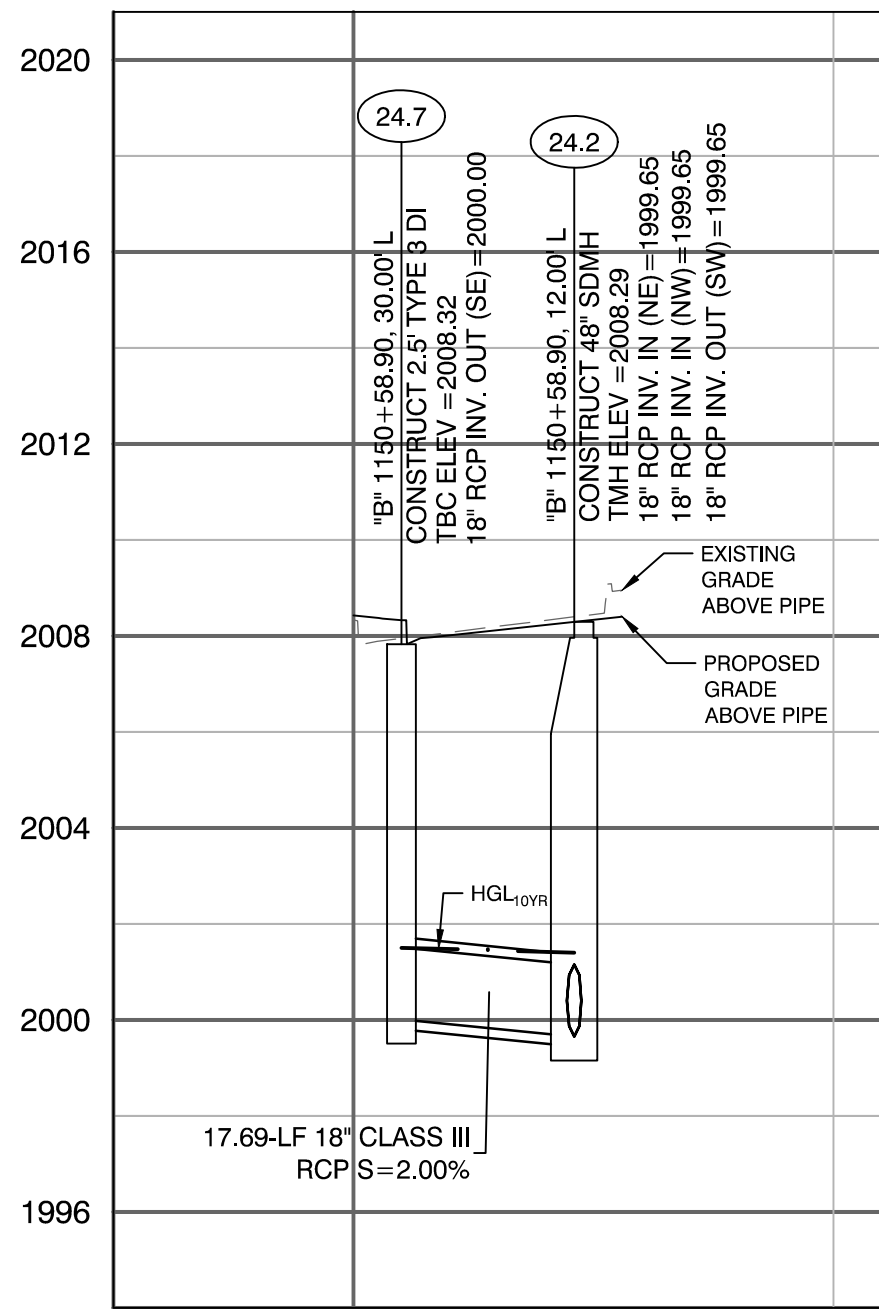
PREPARED FOR
CITY OF LAS VEGAS

**LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.**

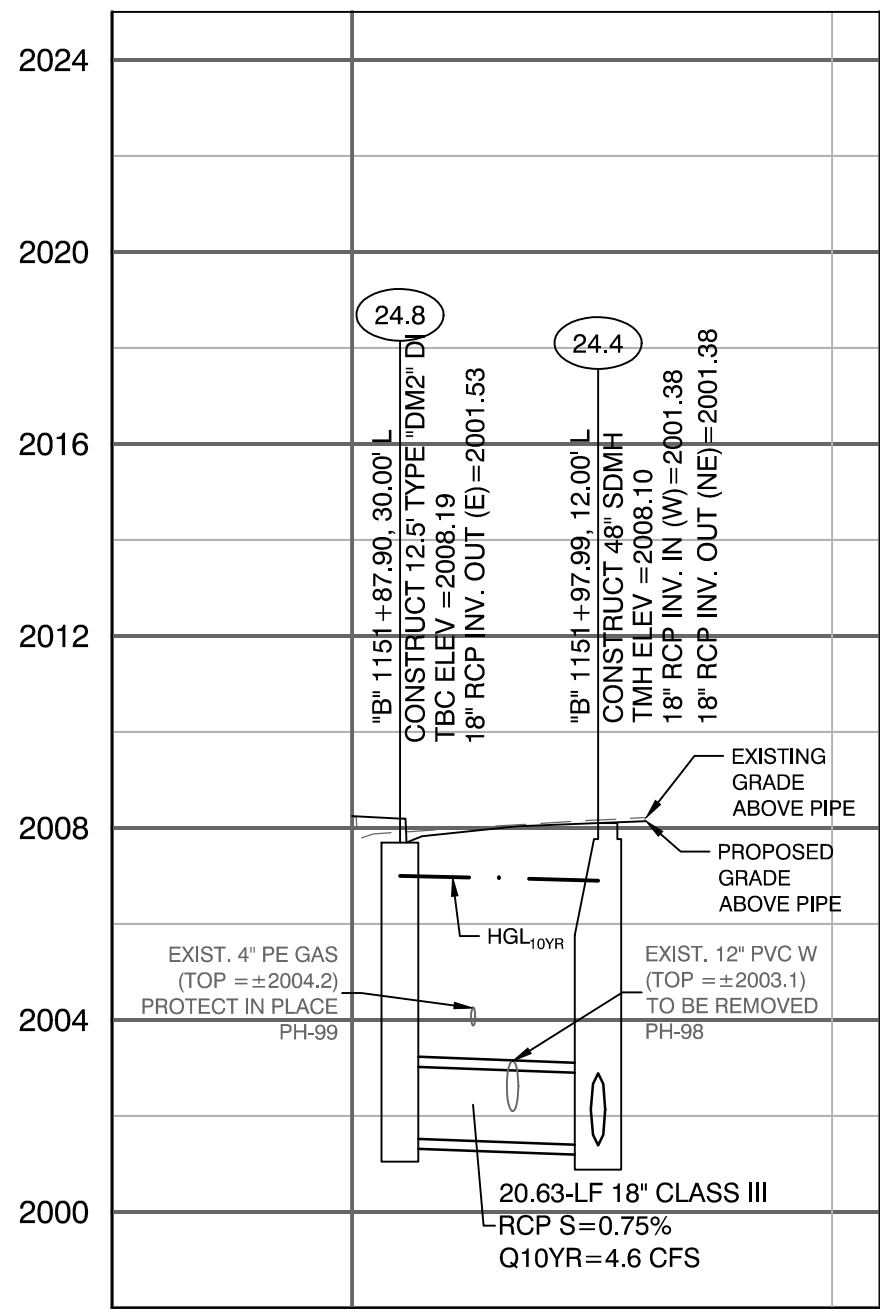
STORM DRAIN LATERAL PROFILES

DATE: 06/27/2019
SUBMITTAL STAGE: 100% SUBMITTAL

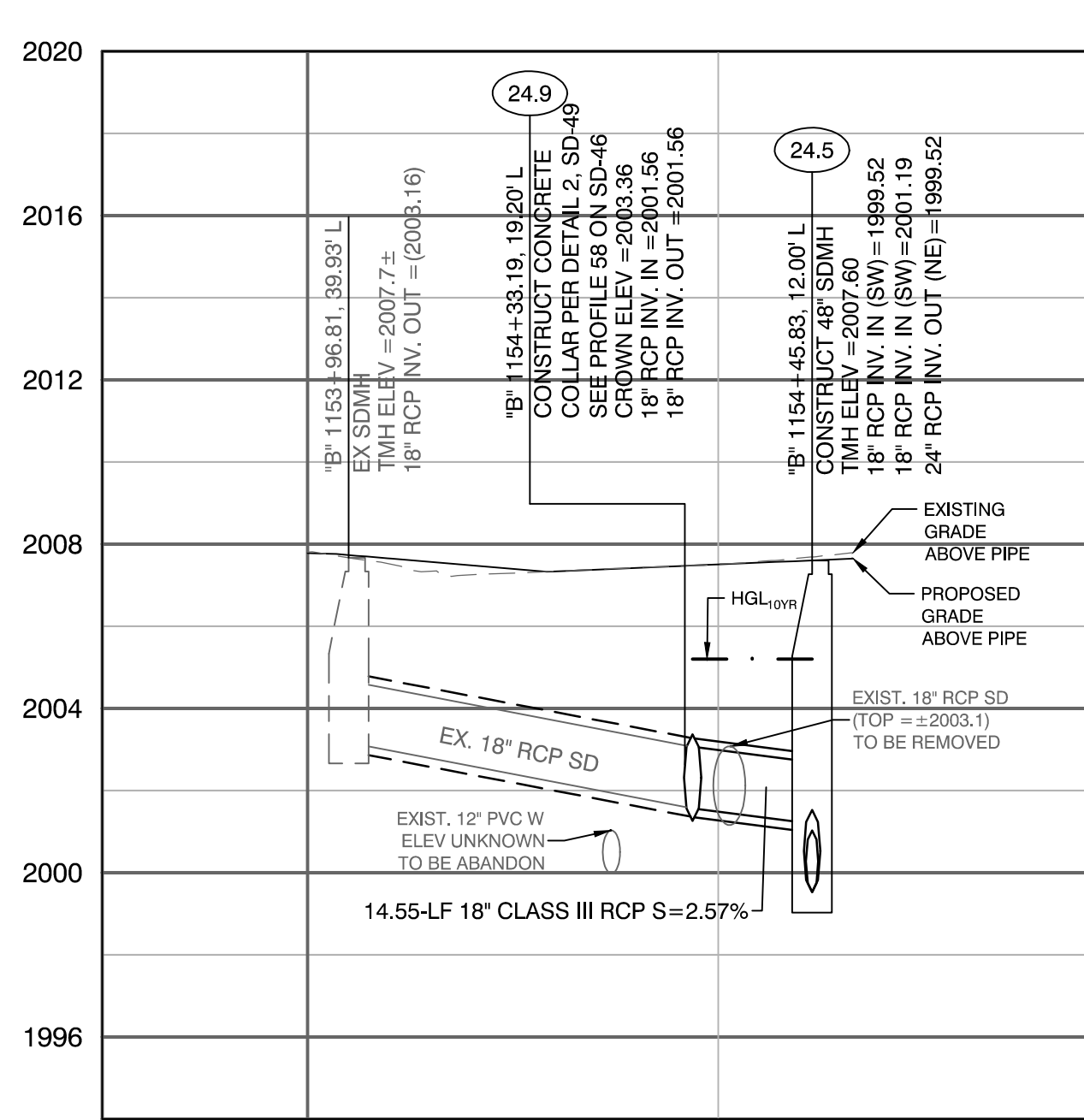
SD-45
XX OF
DRAWING NO. XXXXXXXX-X



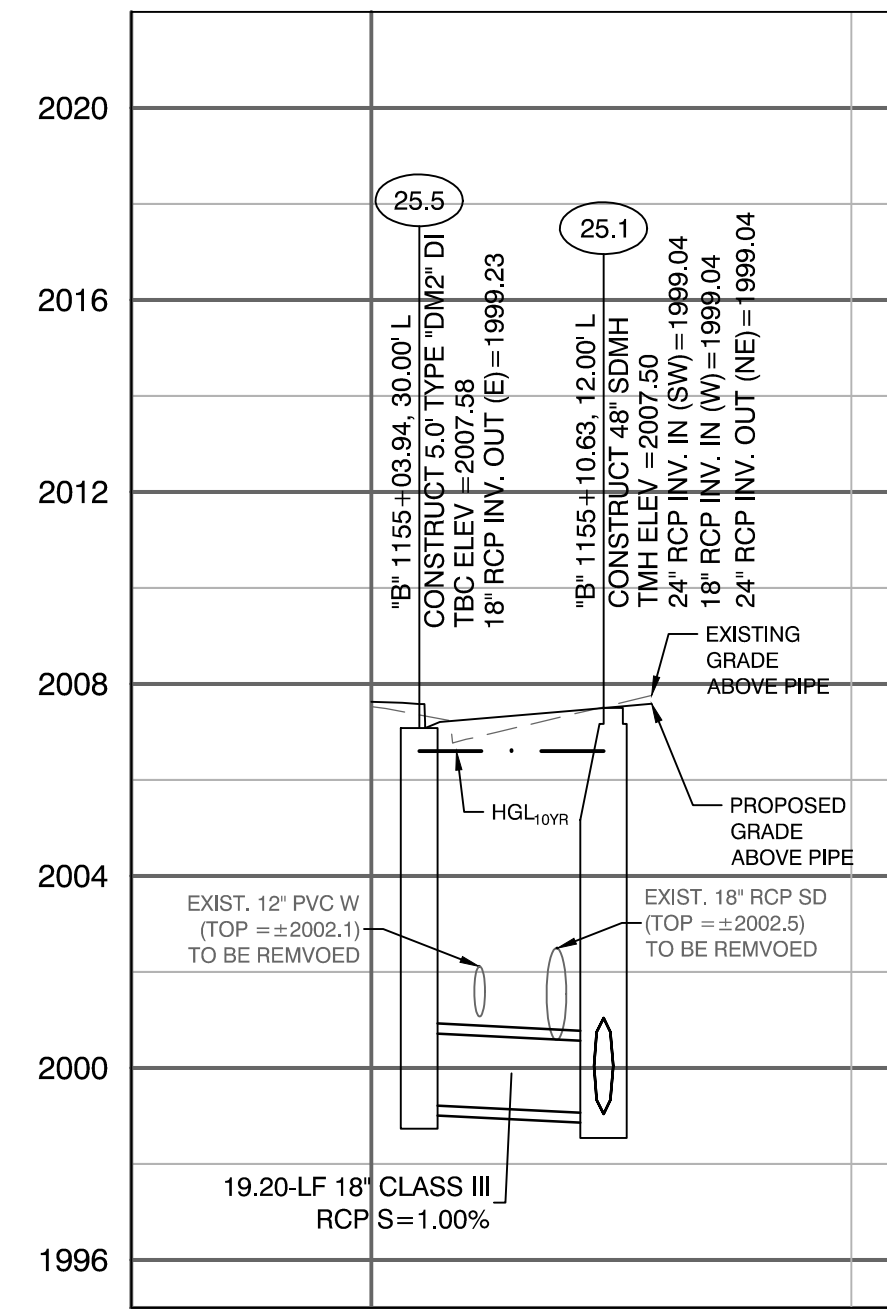
LATERAL PROFILE 56
"B" 1150+58.90



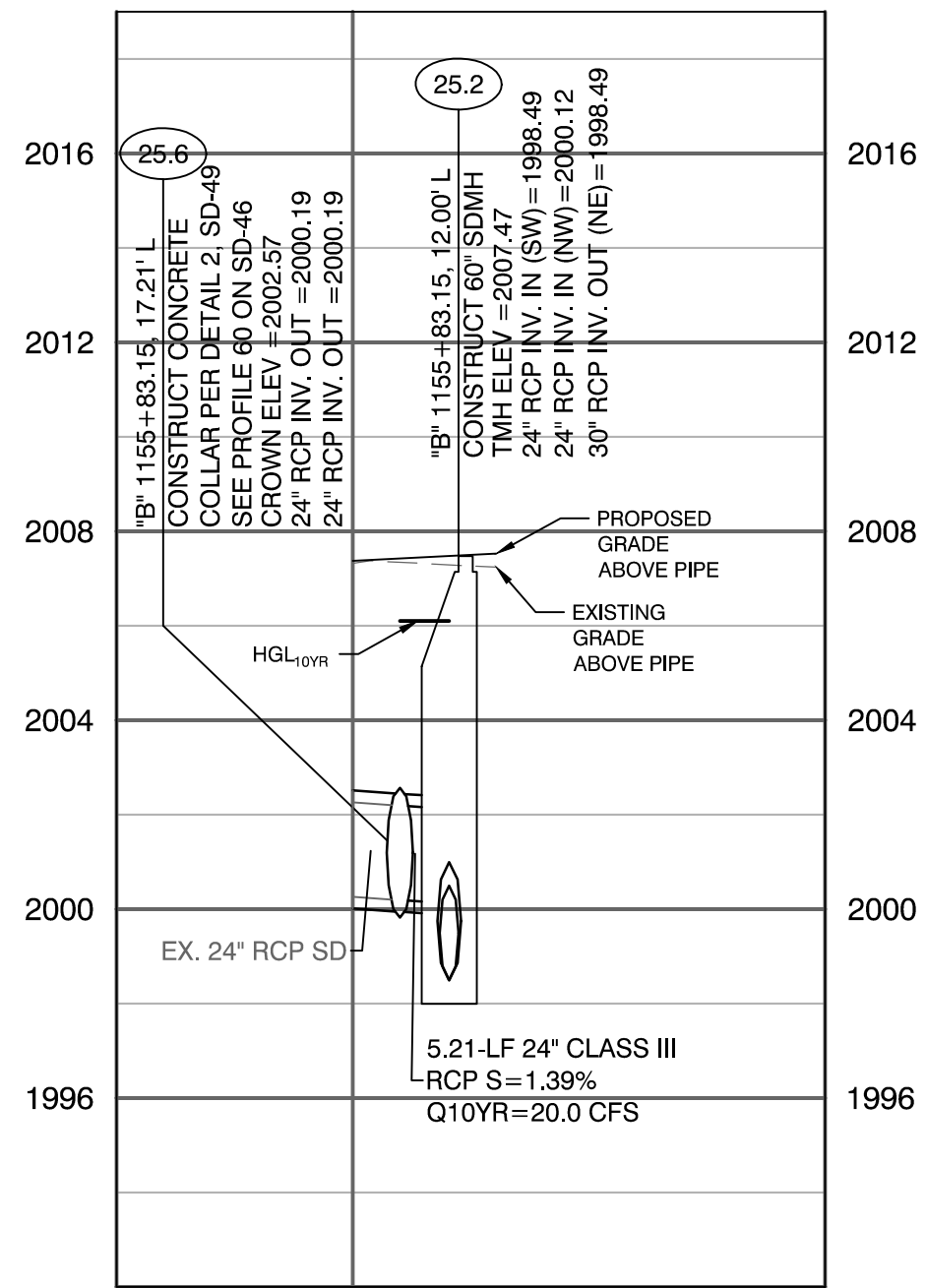
LATERAL PROFILE 57
"B" 1151+97.99



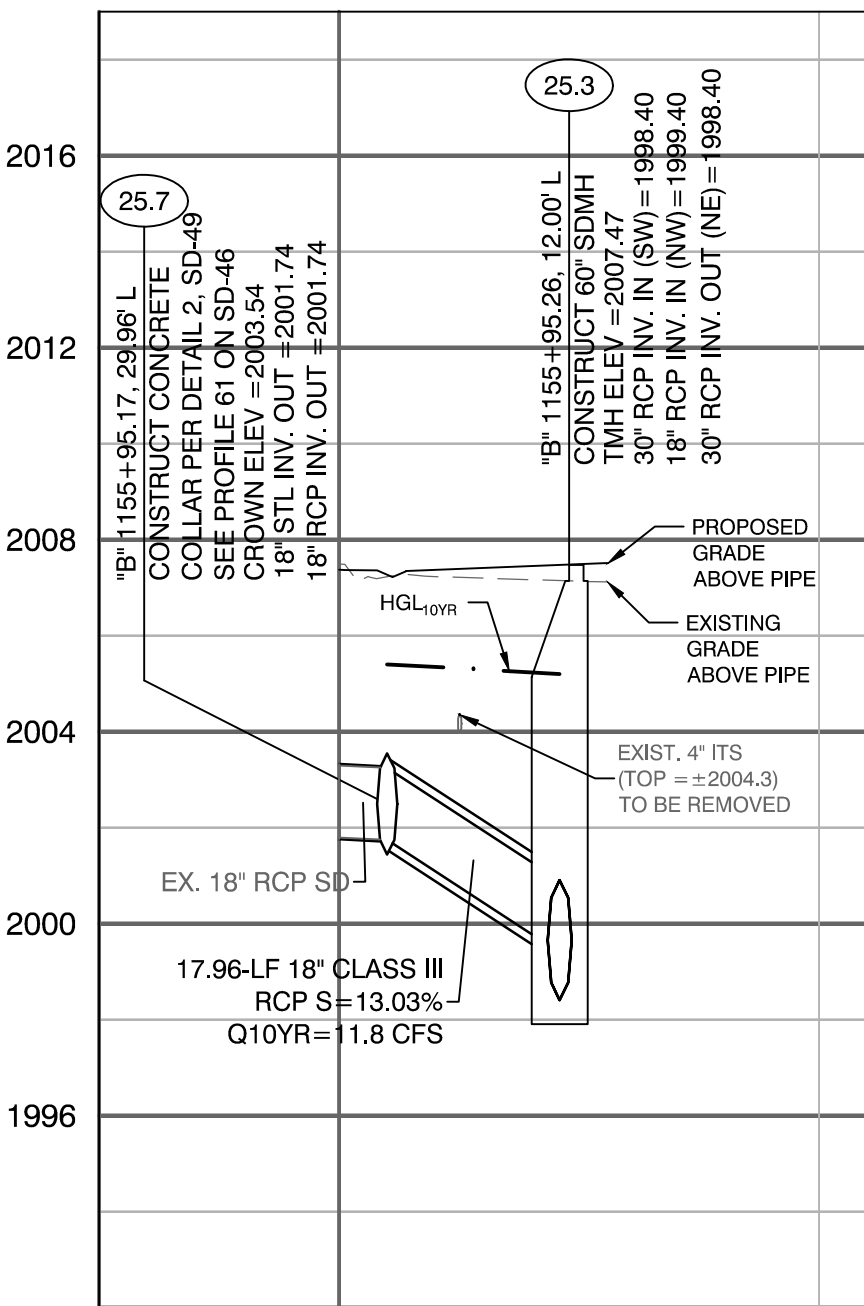
LATERAL PROFILE 58
"B" 1154+45.83



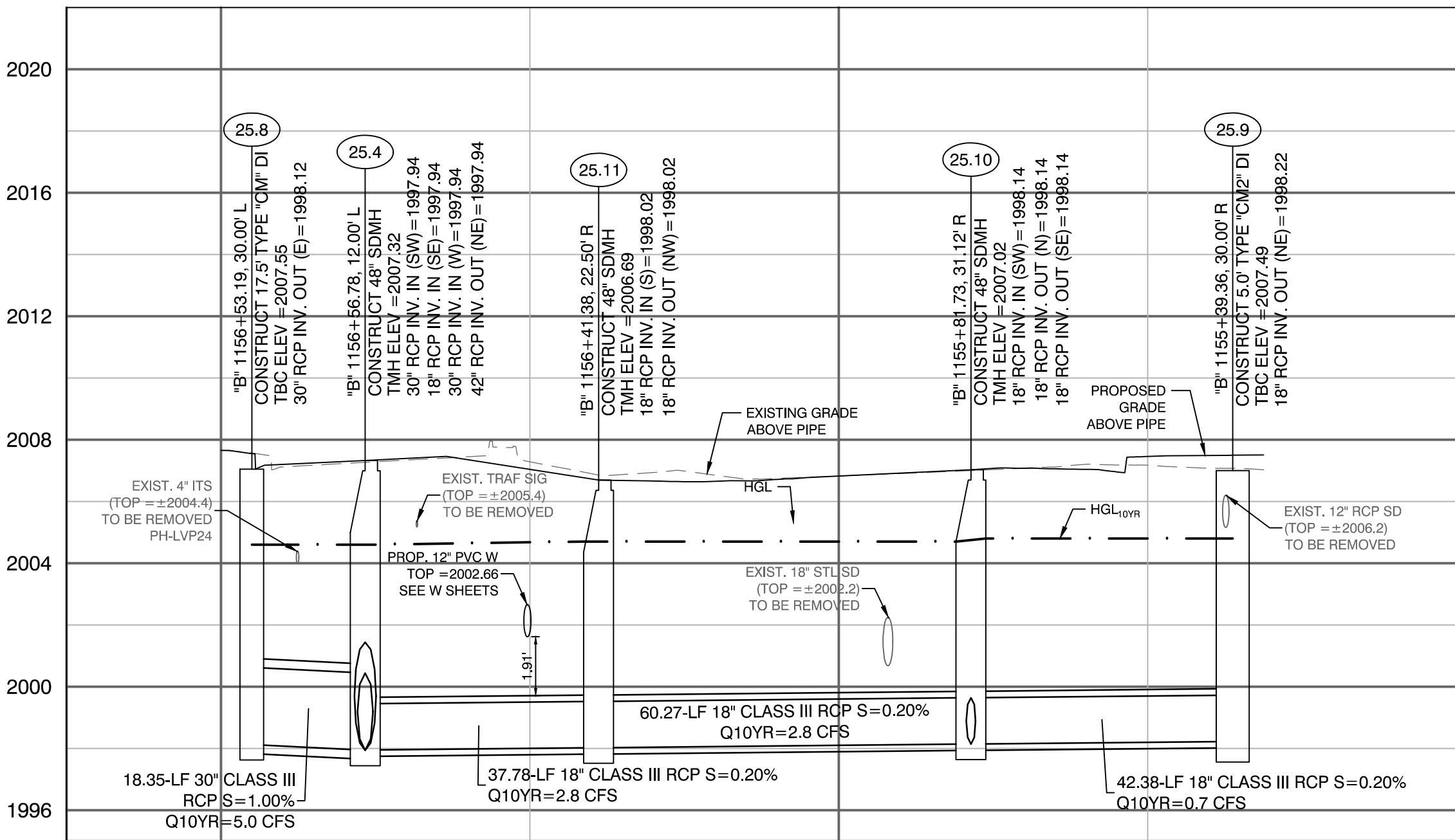
LATERAL PROFILE 59
"B" 1155+10.63



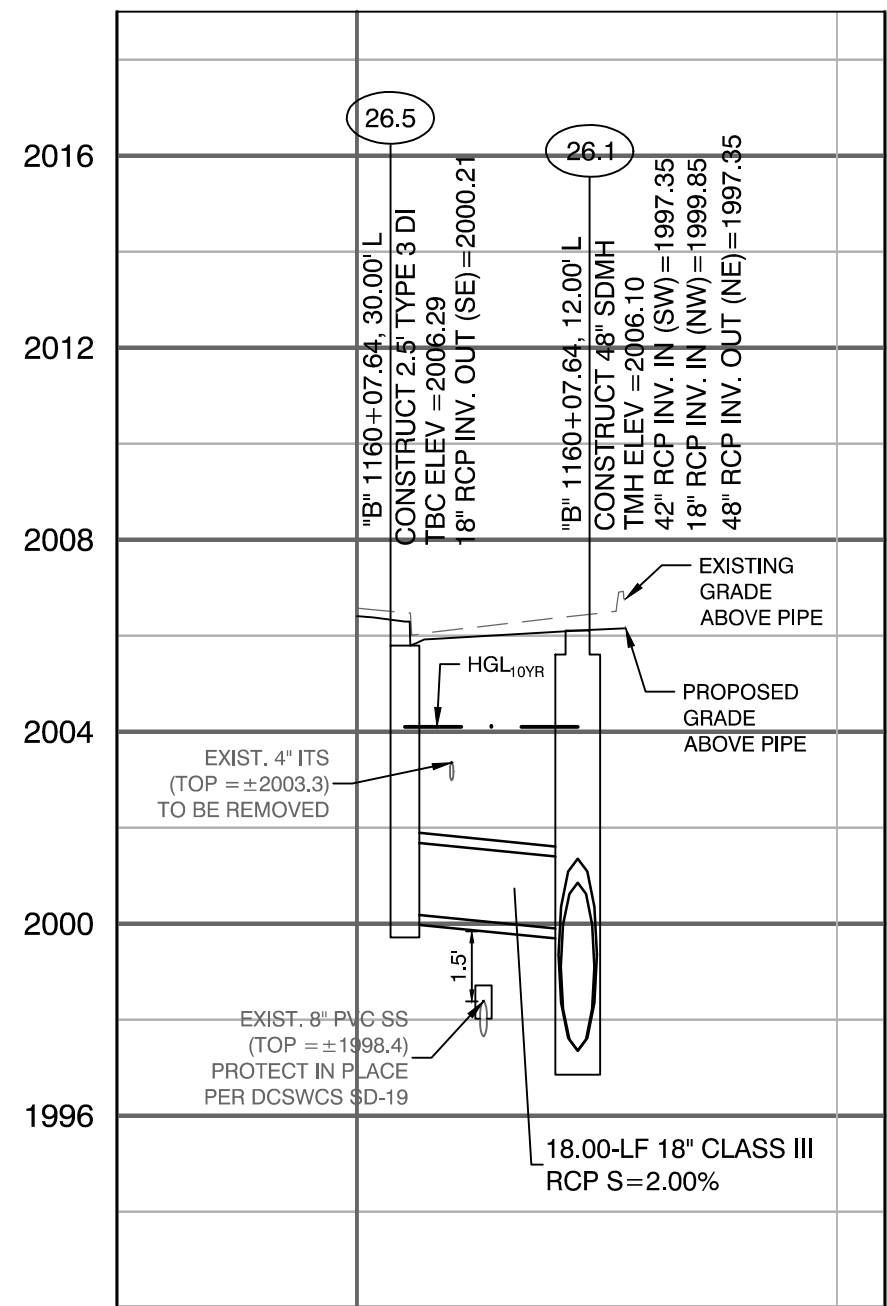
LATERAL PROFILE 60
"B" 1155+83.15



LATERAL PROFILE 61
"B" 1155+95.26



LATERAL PROFILE 62
"B" 1156+56.78



LATERAL PROFILE 63
"B" 1160+07.64

UTILITY NOTE:
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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT NO. 123955 FIRST APPROVED DATE: 06/27/2019

GRAPHIC SCALE

HORZ 1" = 20' VERT 1" = 4'

CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929

PREPARED FOR: CITY OF LAS VEGAS

DESIGNED BY: JB

DRAWN BY: JB

CHECKED BY: HM

100% SUBMITTAL

DATE: 06/27/2019

SUBMITTAL STAGE:

NO. DATE REVISIONS

TITLE: LAS VEGAS BOULEVARD IMPROVEMENTS STEWART AVE. TO SAHARA AVE. STORM DRAIN LATERAL PROFILES

SHEET: SD-46

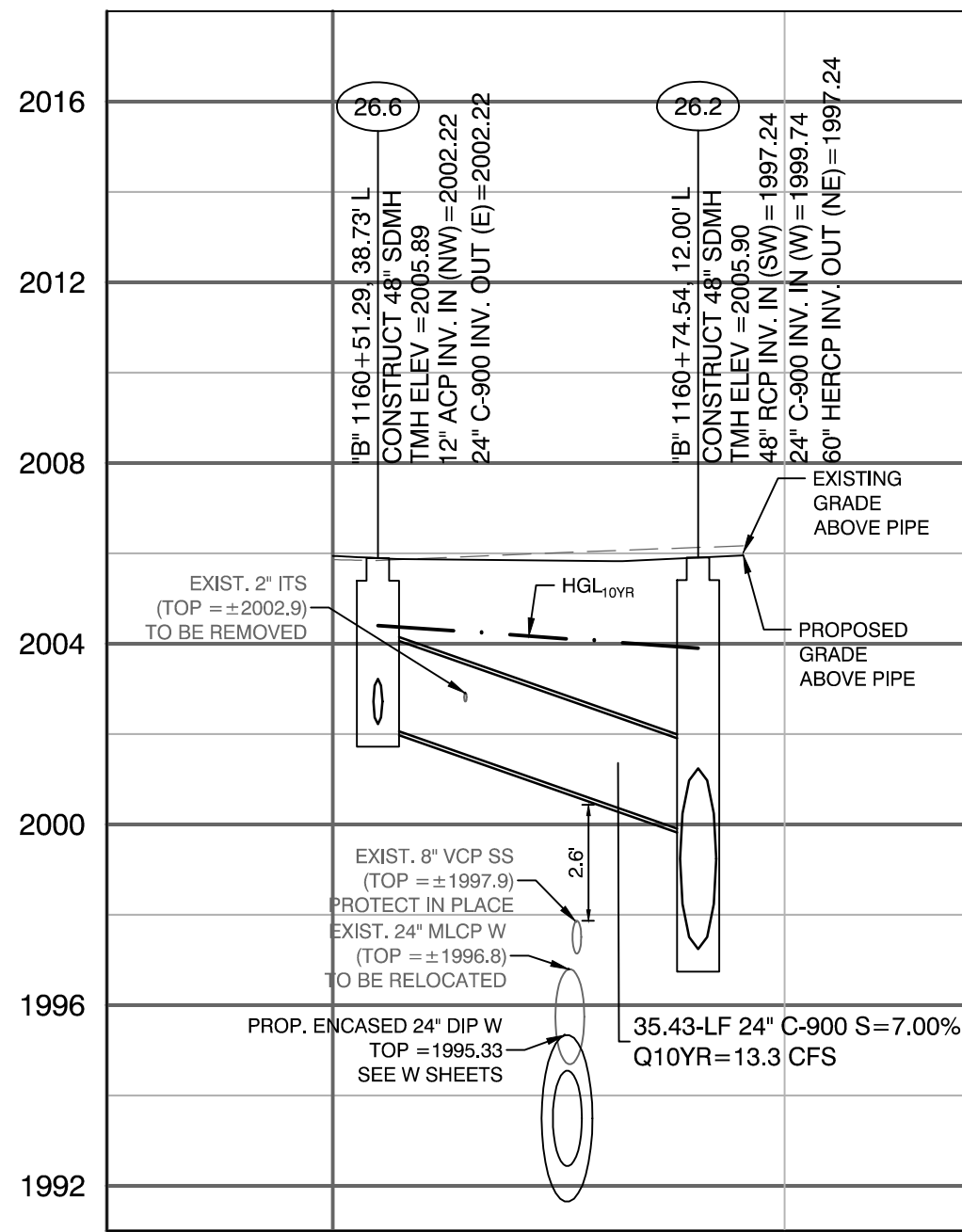
XX OF XXXXXXXX-X

CAVIOLANSON

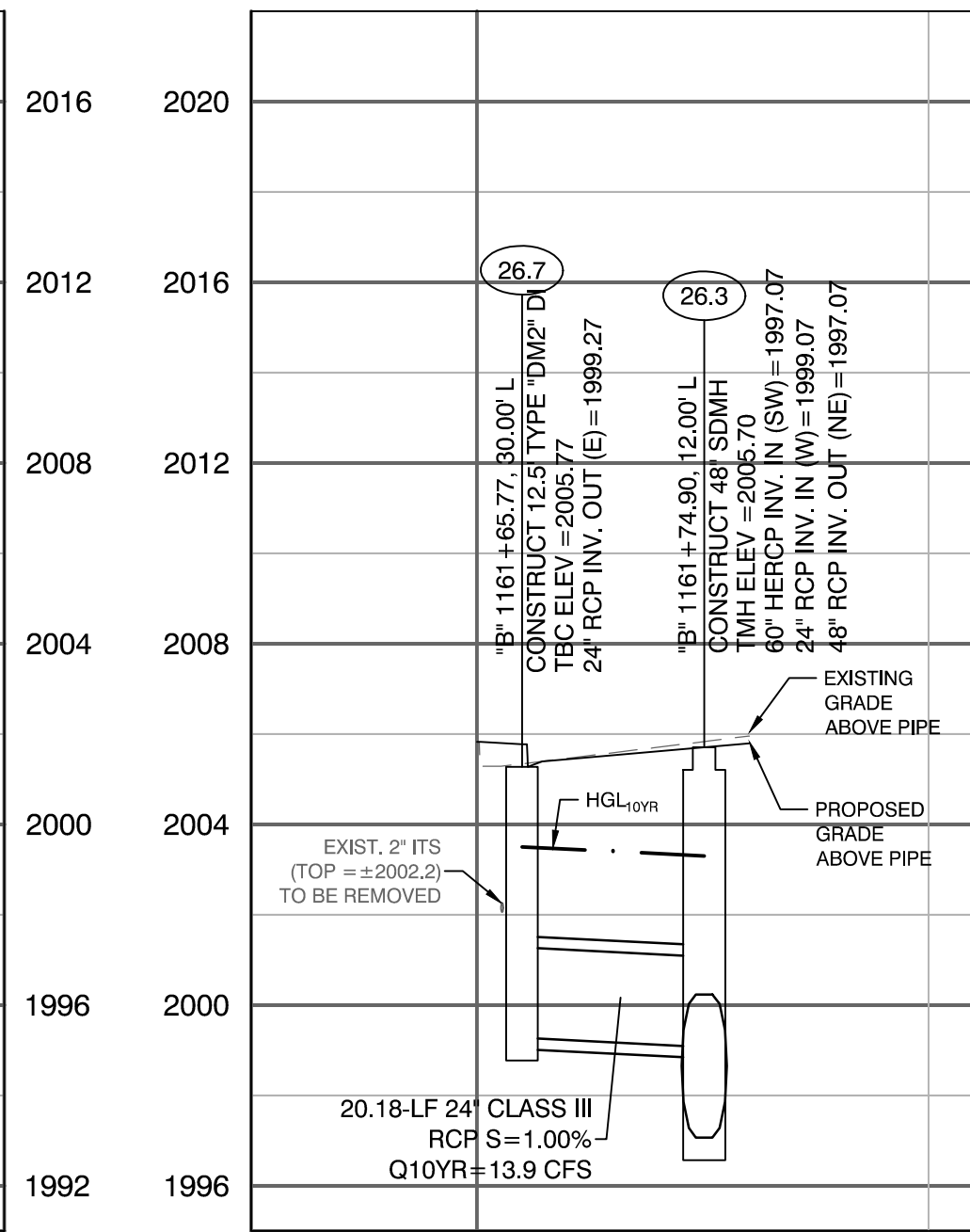
2785 S. RAINBOW BLVD LAS VEGAS, NV 89146 PHONE: (702) 655-5945

DATE: 06/27/2019

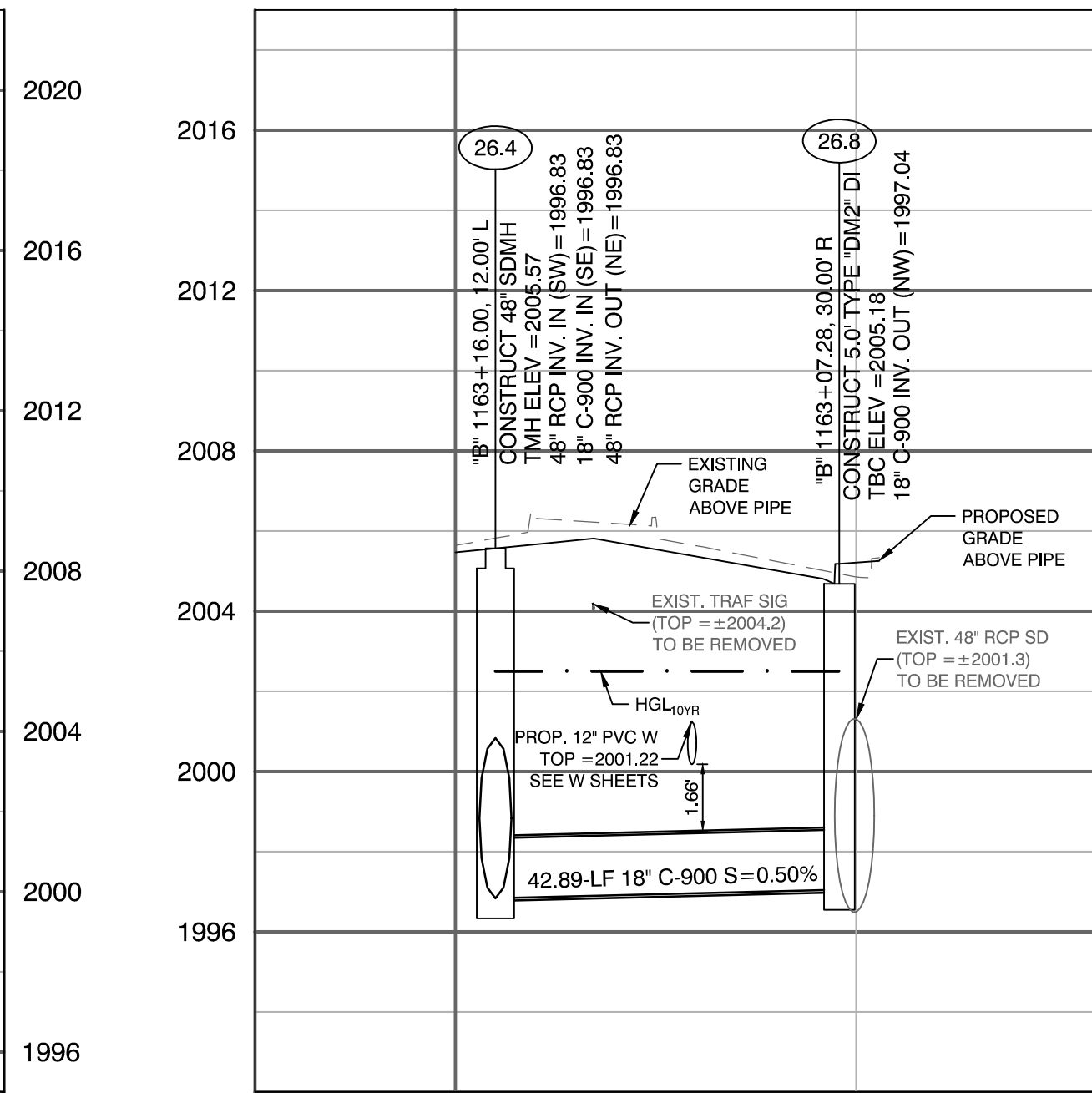
100% SUBMITTAL



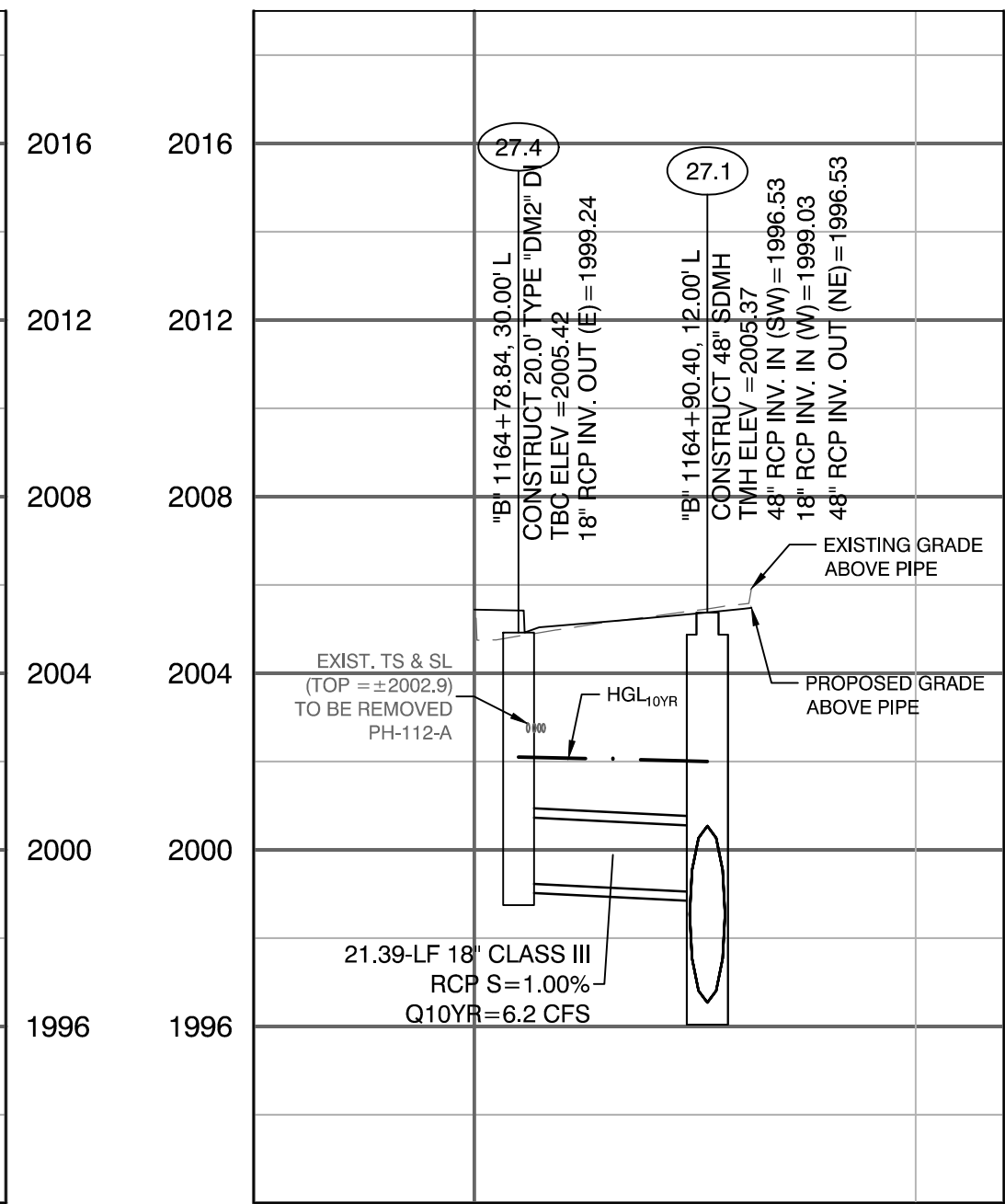
LATERAL PROFILE 64
"B" 1160+74.54



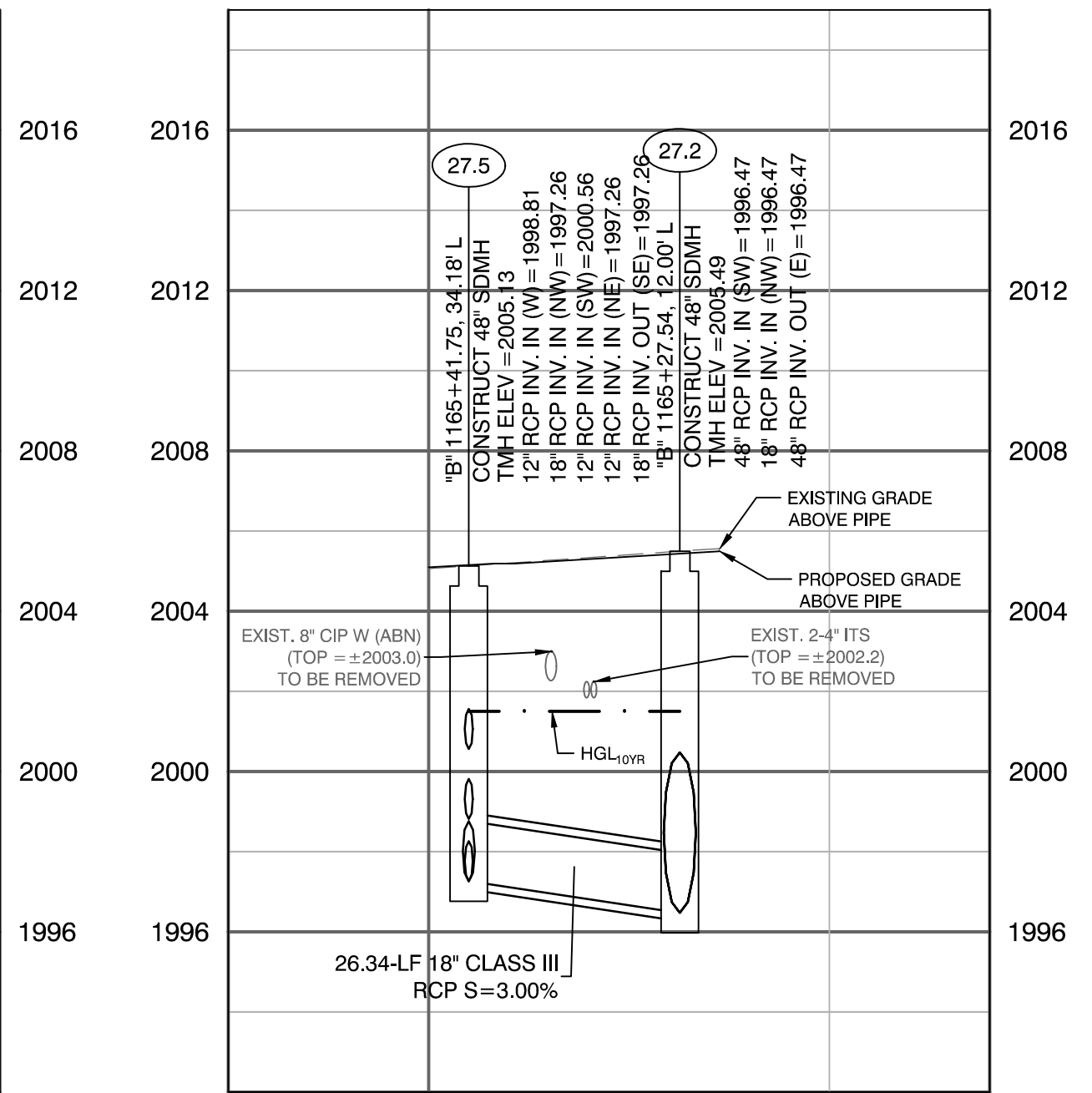
LATERAL PROFILE 65
"B" 1161+74.90



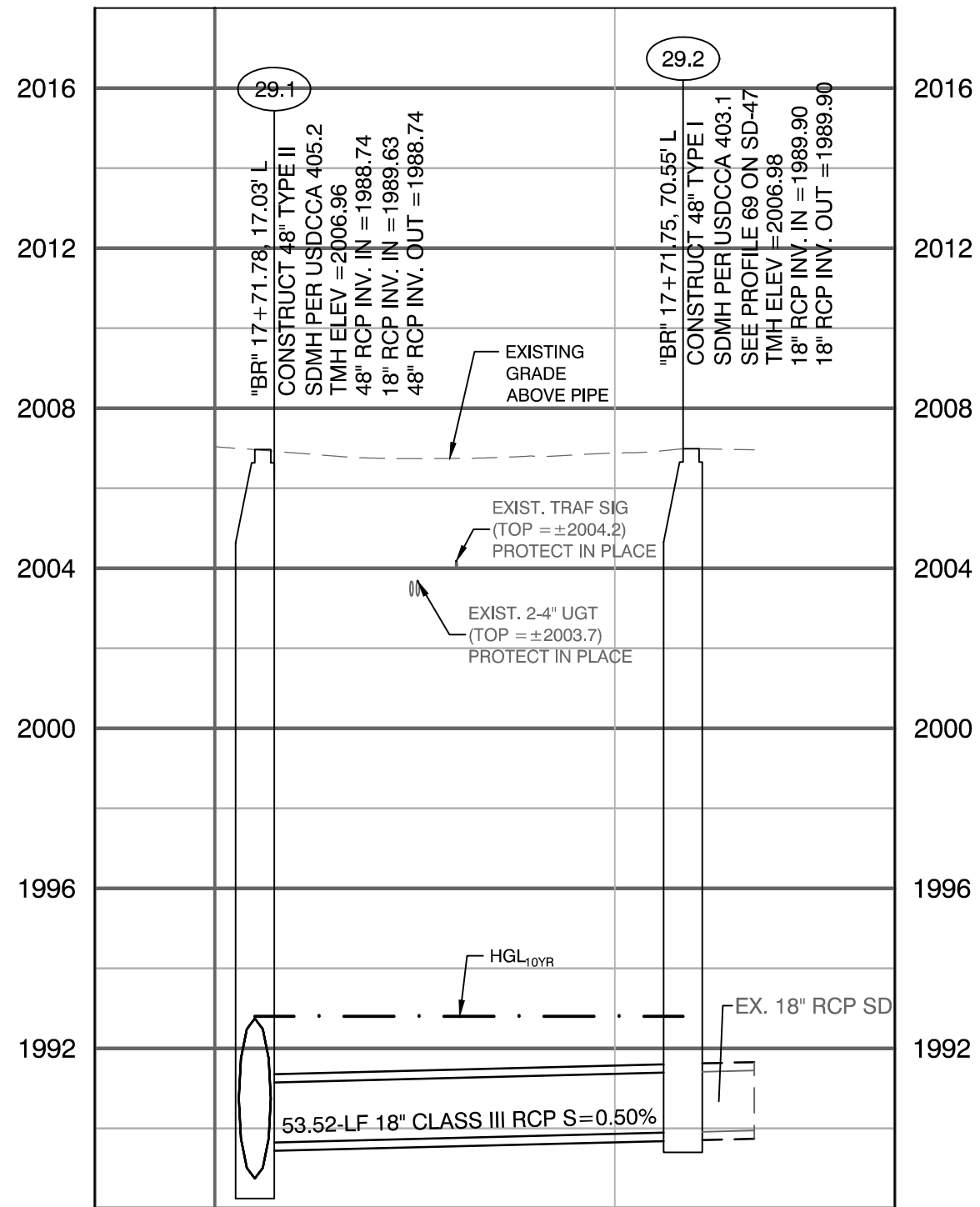
LATERAL PROFILE 66
"B" 1163+16.00



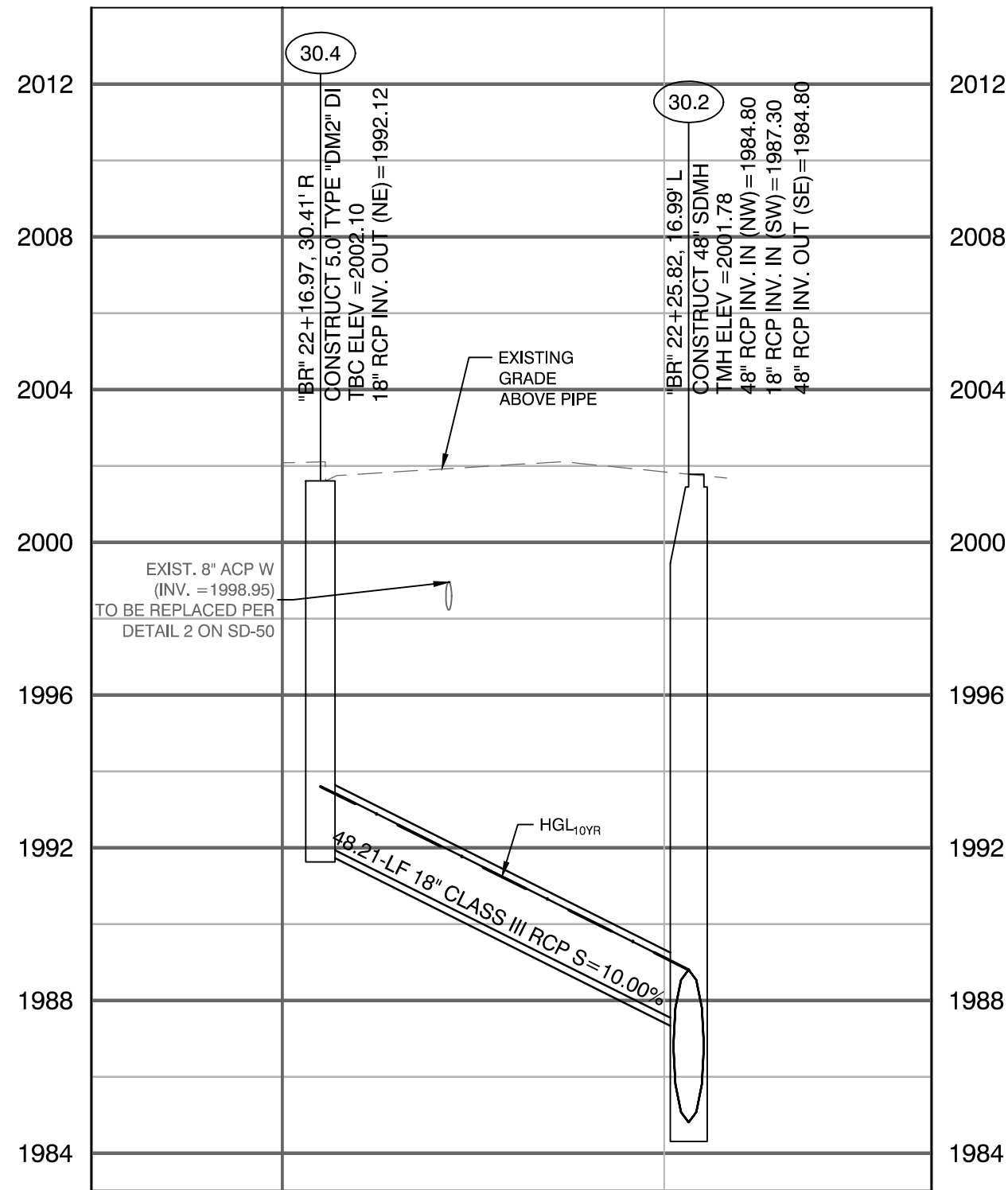
LATERAL PROFILE 67
"B" 1164+90.40



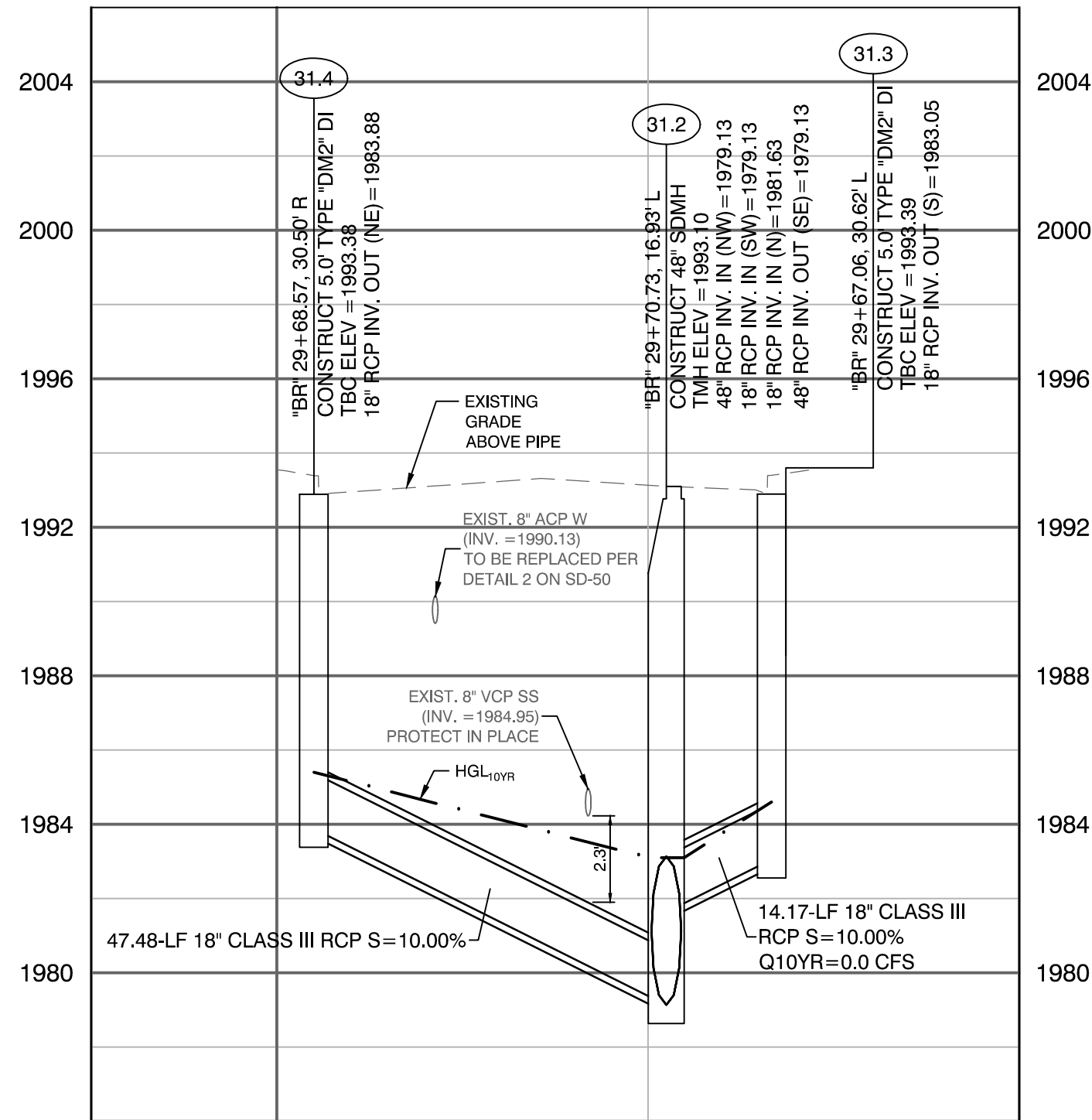
LATERAL PROFILE 68
"B" 1165+27.54



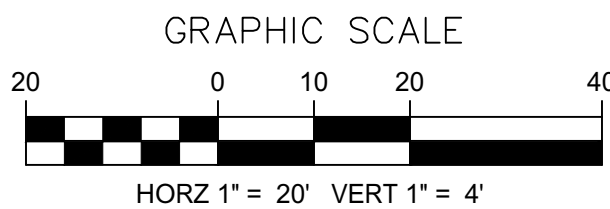
LATERAL PROFILE 69
"BR" 17+71.78



LATERAL PROFILE 70
"BR" 22+25.82



LATERAL PROFILE 71
"BR" 29+70.73



UTILITY NOTE:
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CALL SOUTHWEST GAS AT 702-400-1789 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 123955 FIRST APPROVED DATE: 06/25/2019

CALL BEFORE CONSTRUCTION

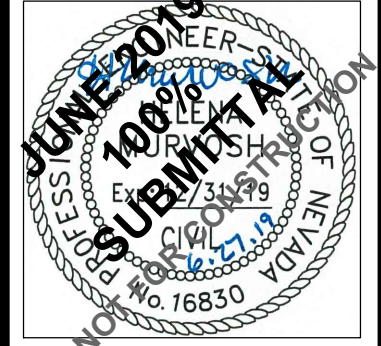
BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
	F.A.S.T.	702-432-5300
BEFORE YOU UNDERGROUND	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929

NO.	DATE	REVISIONS

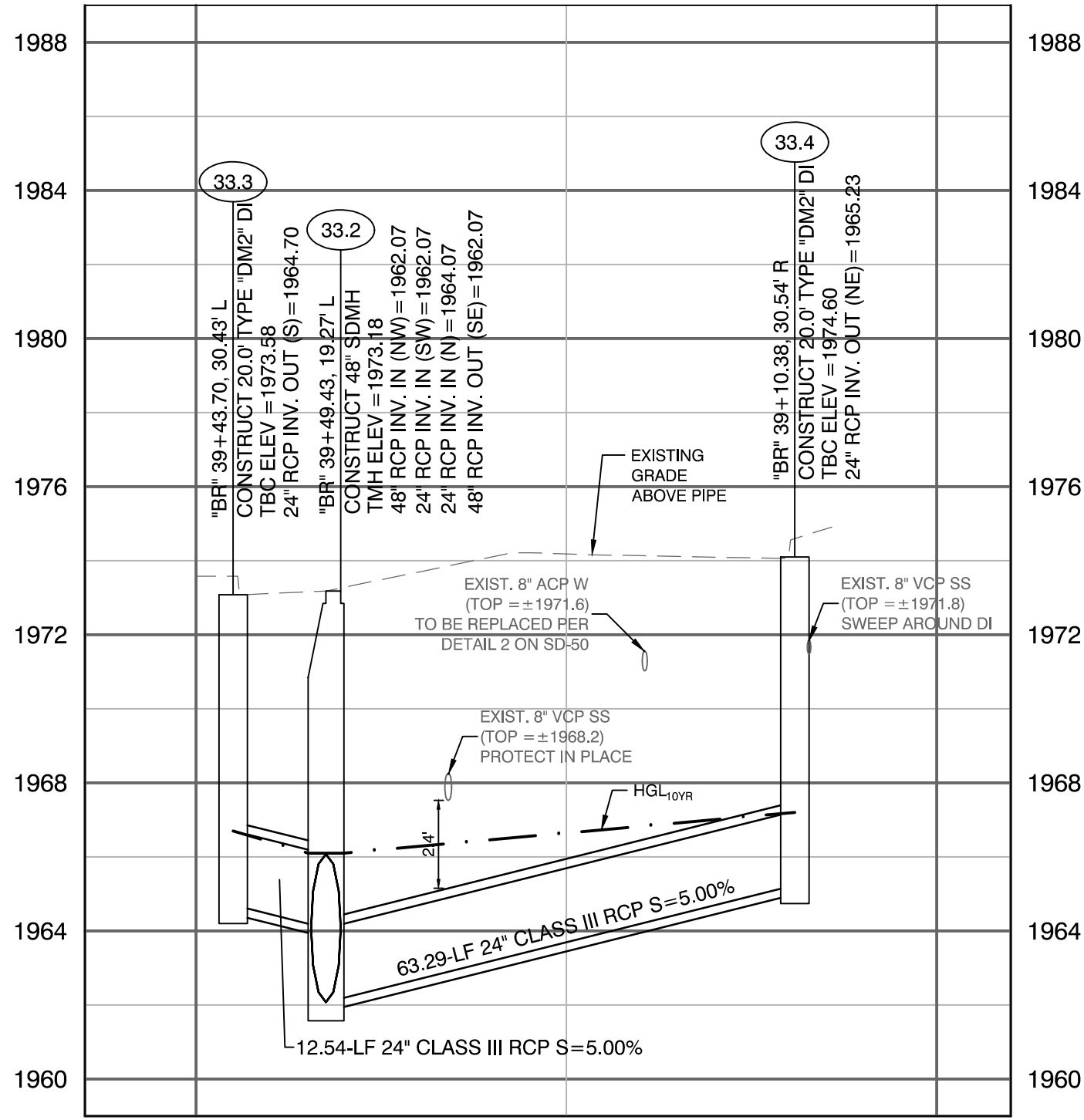
PREPARED BY
CA Group, Inc.
C A V I O L A N S O N
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 655-5945

PREPARED FOR CITY OF LAS VEGAS	BID# 19.68939	DESIGNED BY: JB	CHECKED BY: HM
HW 46300	DATE: 06/27/2019	DRAWN BY: JB	
	SUBMITTAL STAGE:	100% SUBMITTAL	

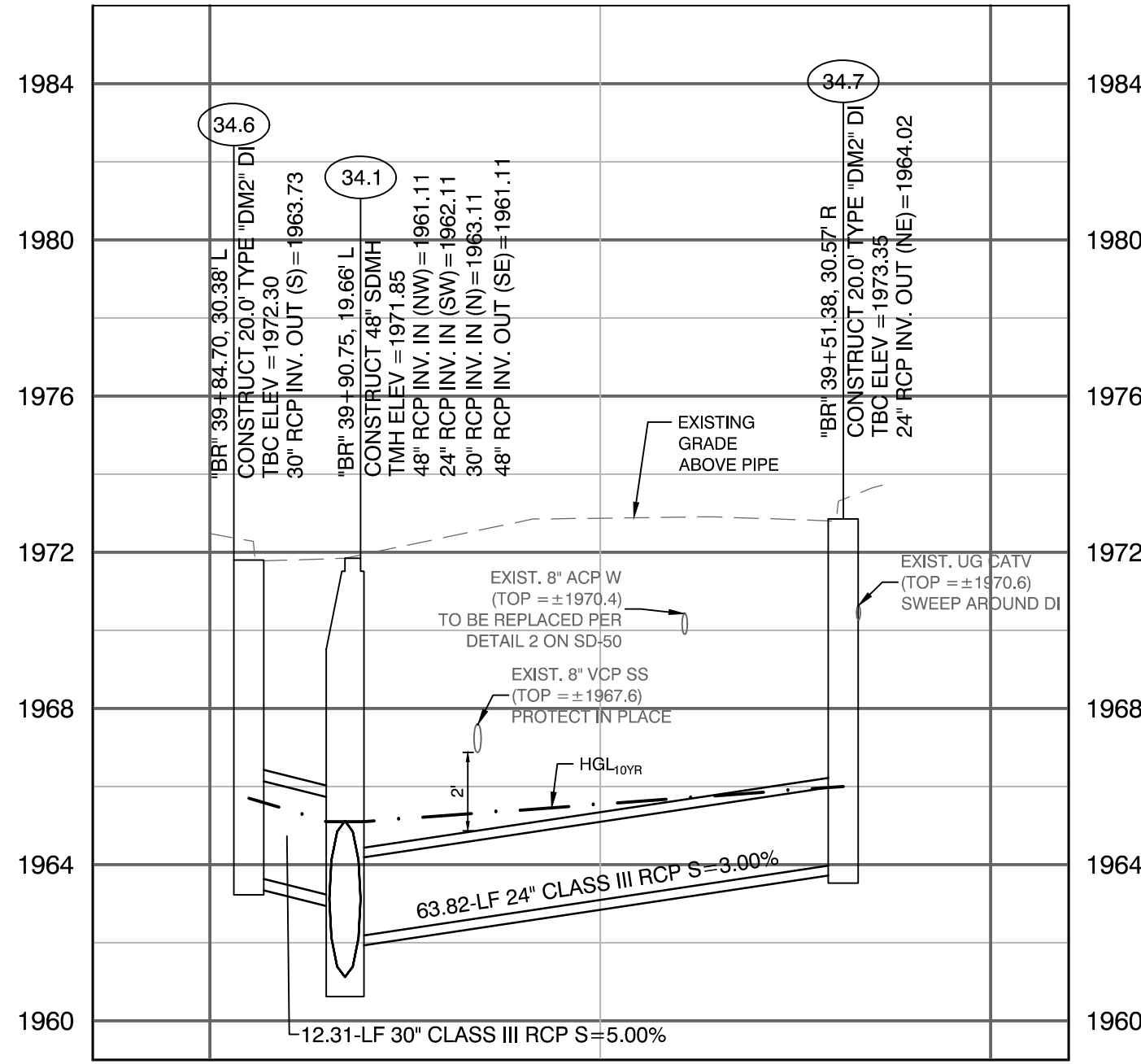
TITLE
**LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.**
SHEET
STORM DRAIN LATERAL PROFILES



SHEET
SD-47
XX OF
DRAWING NO.
XXXXXXXX-X



LATERAL PROFILE 72
"BR" 39+49.43



LATERAL PROFILE 73
"BR" 39+90.75

UTILITY NOTE:
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CALL SOUTHWEST GAS AT 702-400-1789 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 123955 FIRST APPROVED DATE:

GRAPHIC SCALE
20 0 10 20 40
HORZ 1" = 20' VERT 1" = 4'

CALL BEFORE CONSTRUCTION

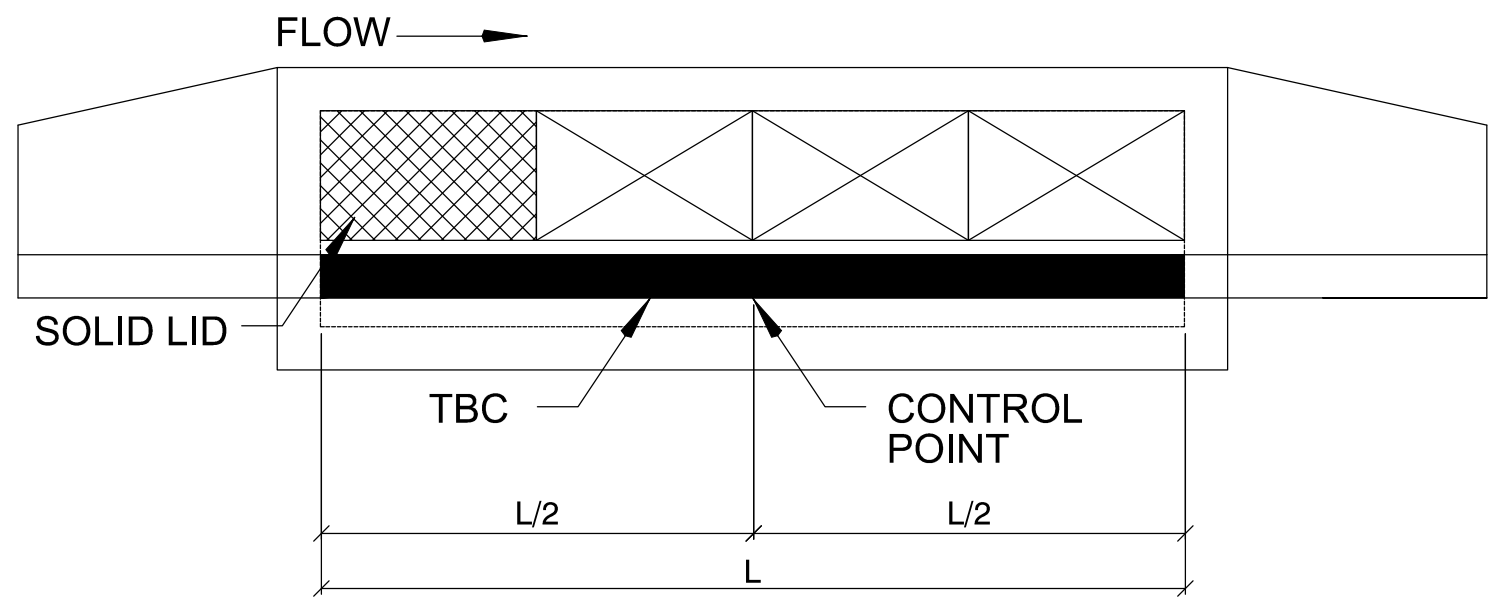
BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
	F.A.S.T.	702-432-5300
BEFORE YOU UNDERGROUND	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929

TITLE LAS VEGAS BOULEVARD IMPROVEMENTS STEWART AVE. TO SAHARA AVE. SHEET	PREPARED FOR CITY OF LAS VEGAS	BID# 19.68939	DESIGNED BY: JB
	H# 46330	DATE: 06/27/2019	DRAWN BY: JB
	SUBMITTAL STAGE: 100% SUBMITTAL		
	CHECKED BY: HM		
SHEET SD-48 XX OF DRAWING NO. XXXXXXXX-X			

PREPARED BY
CA Group, Inc
CAVIOLANSON
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 685-5945

100% SUBMITTAL
JUN 27 2019
100% SUBMITTAL
NO. 16830

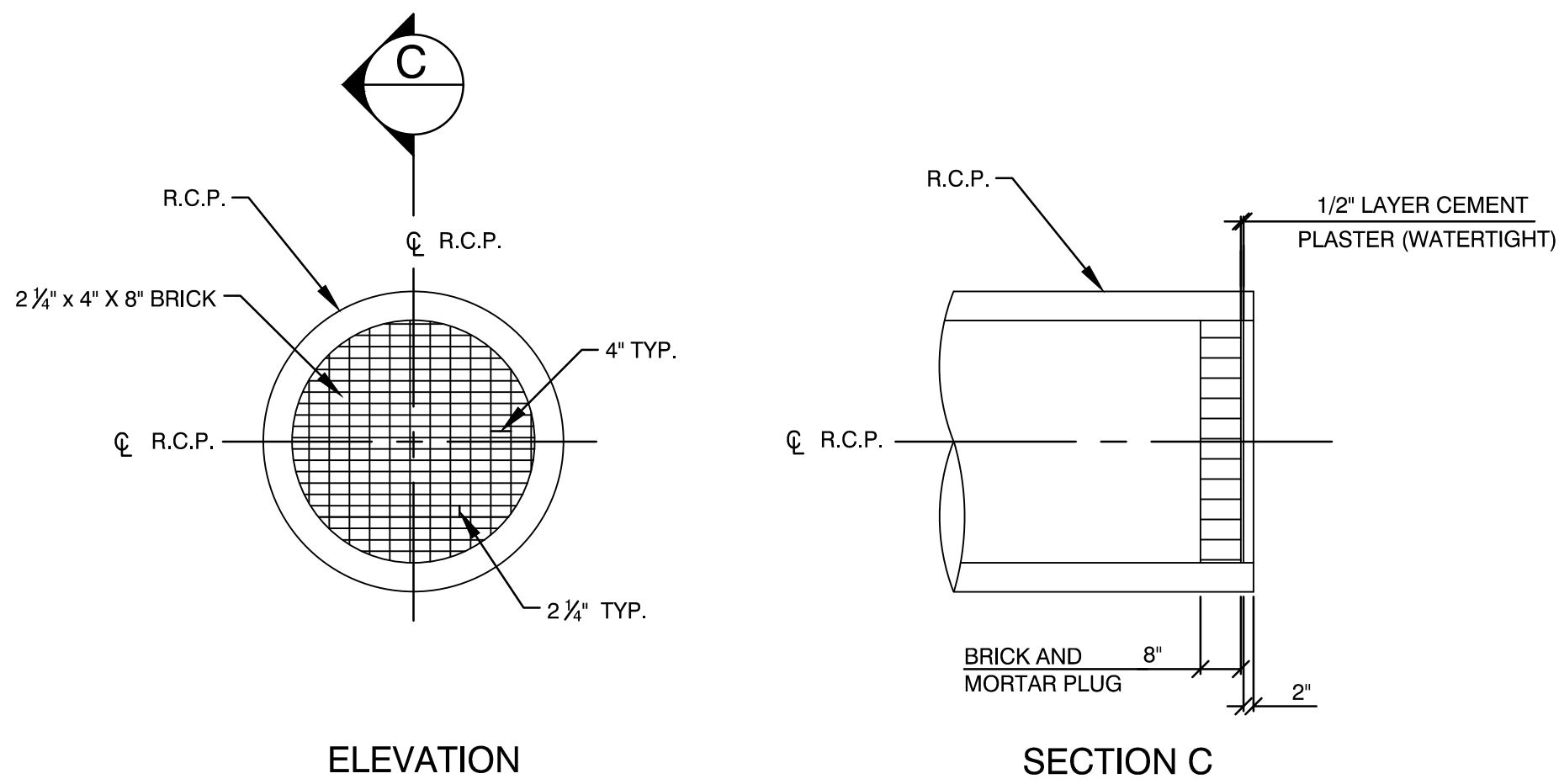
06/25/2019 H:10106 (Las Vegas Blvd Stewart to Sahara)Design\Production Drawings\SD-35 - SD-41 Storm Drain Lateral\Profile.dwg



- NOTES:
1. THE DROP INLET "CONTROL POINT" DEPICTS THE LOCATION OF THE STATION AND OFFSET PROVIDED ON THE PLANS.
 2. THE PIPE INVERT ELEVATION SHOWN IN THE PROFILE IS LOCATED AT THE "CONTROL POINT" EXCEPT WHERE NOTED ON THE PLANS (SEE PROFILE SCHEDULE BELOW FOR PROFILES WITH ADJUSTED INVERT LOCATIONS).

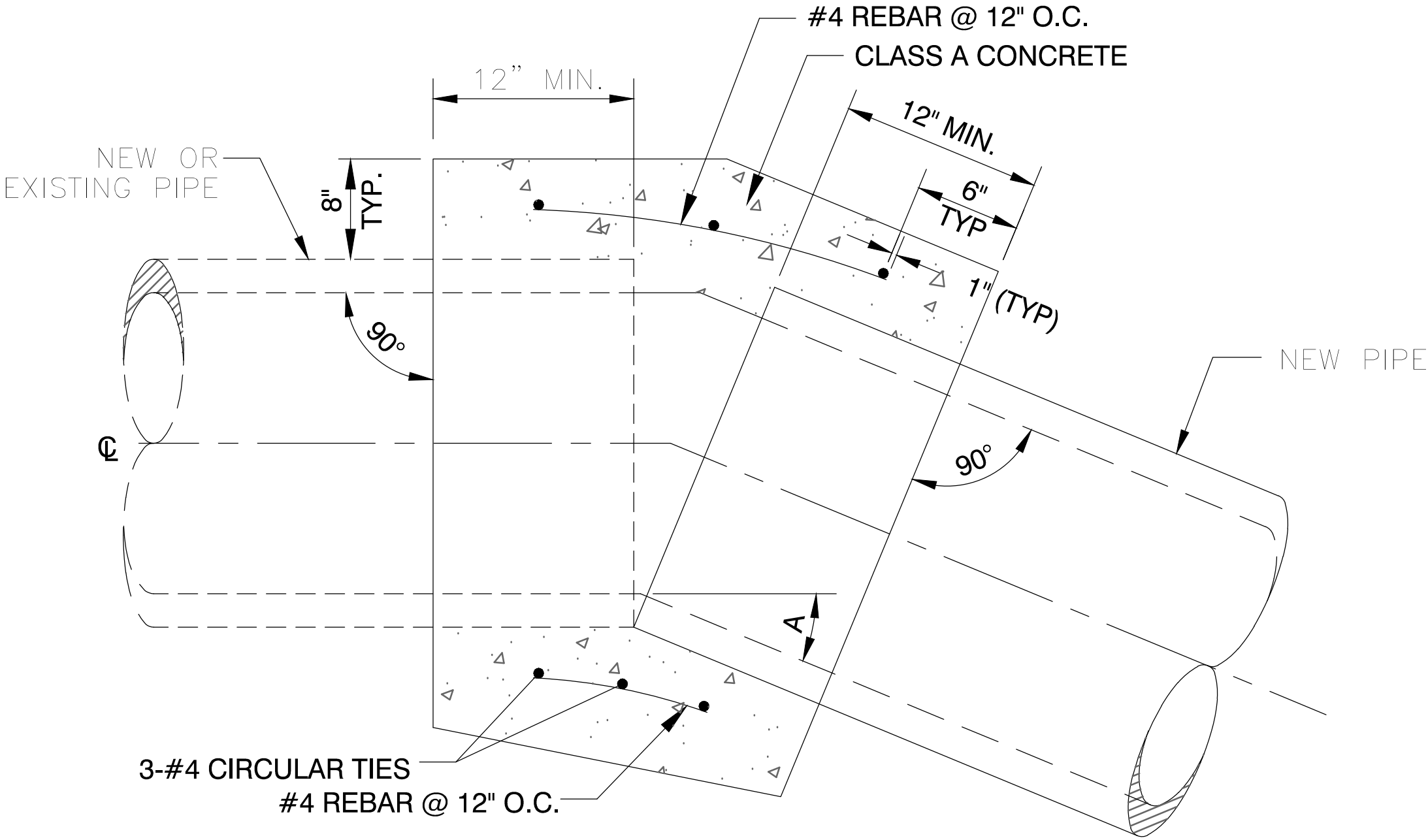
PROFILE SCHEDULE	
PROFILE #	STRUCTURE #
PROFILE 23	9.8
PROFILE 24	10.4
PROFILE 27	11.7
PROFILE 36	15.8
SD-35	35.1

DETAIL 1
DROP INLET CONTROL POINT
NO SCALE



- NOTES:
1. PRECAST CONCRETE PLUG MAY BE USED IN LIEU OF BRICK AND MORTAR PLUG

DETAIL 3
BRICK AND MORTAR
RCP END PLUG
NO SCALE



- NOTES:
1. THE DIAMETER OF THE CIRCULAR TIES SHALL BE = (OUTSIDE DIAMETER + 8").
 2. BACKFILL MATERIAL ALL AROUND COLLAR FOR A DISTANCE OF 12" MIN TO 90% OF MAX DRY DENSITY.
 3. TROWEL INVERT TO A SMOOTH FINISH BETWEEN PIPES.
 4. A = ANGLE OF DEFLECTION.

DETAIL 2
CONCRETE COLLAR DETAIL
NO SCALE

GRAPHIC SCALE

HORZ 1" = 20' VERT 1" = 4'

CALL BEFORE CONSTRUCTION

BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929

PREPARED BY
CA Group, Inc
C A V I O L A N S O N
2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 685-5945

PREPARED FOR
CITY OF LAS VEGAS
H# 46330
DATE: 06/27/2019
SUBMITTAL STAGE: 100% SUBMITTAL

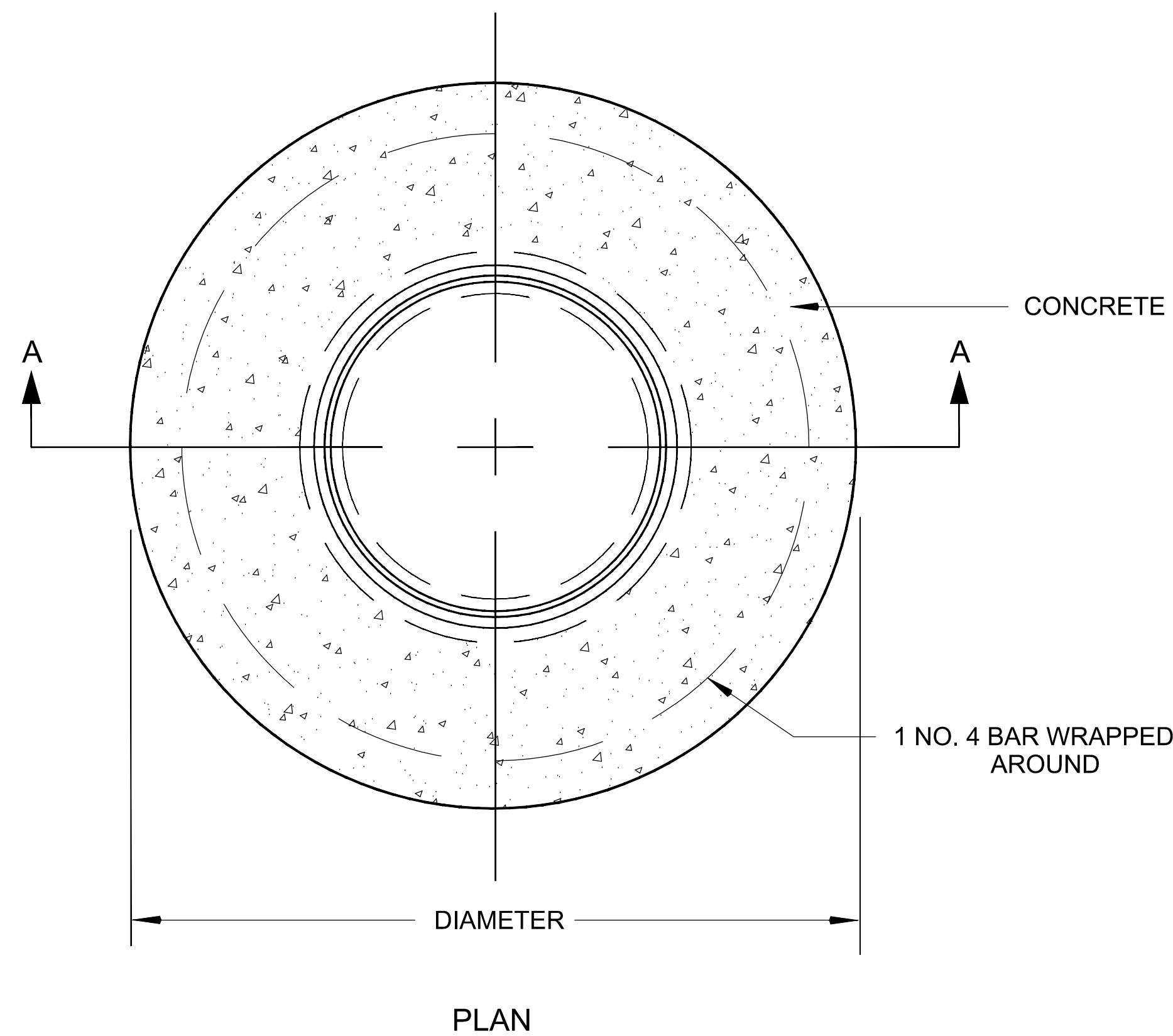
DESIGNED BY: JB
DRAWN BY: JB
CHECKED BY: HM

LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.

STORM DRAIN DETAILS

SD-49
XX OF
DRAWING NO. XXXXXXXX-X

SD-49
XX OF
DRAWING NO. XXXXXXXX-X



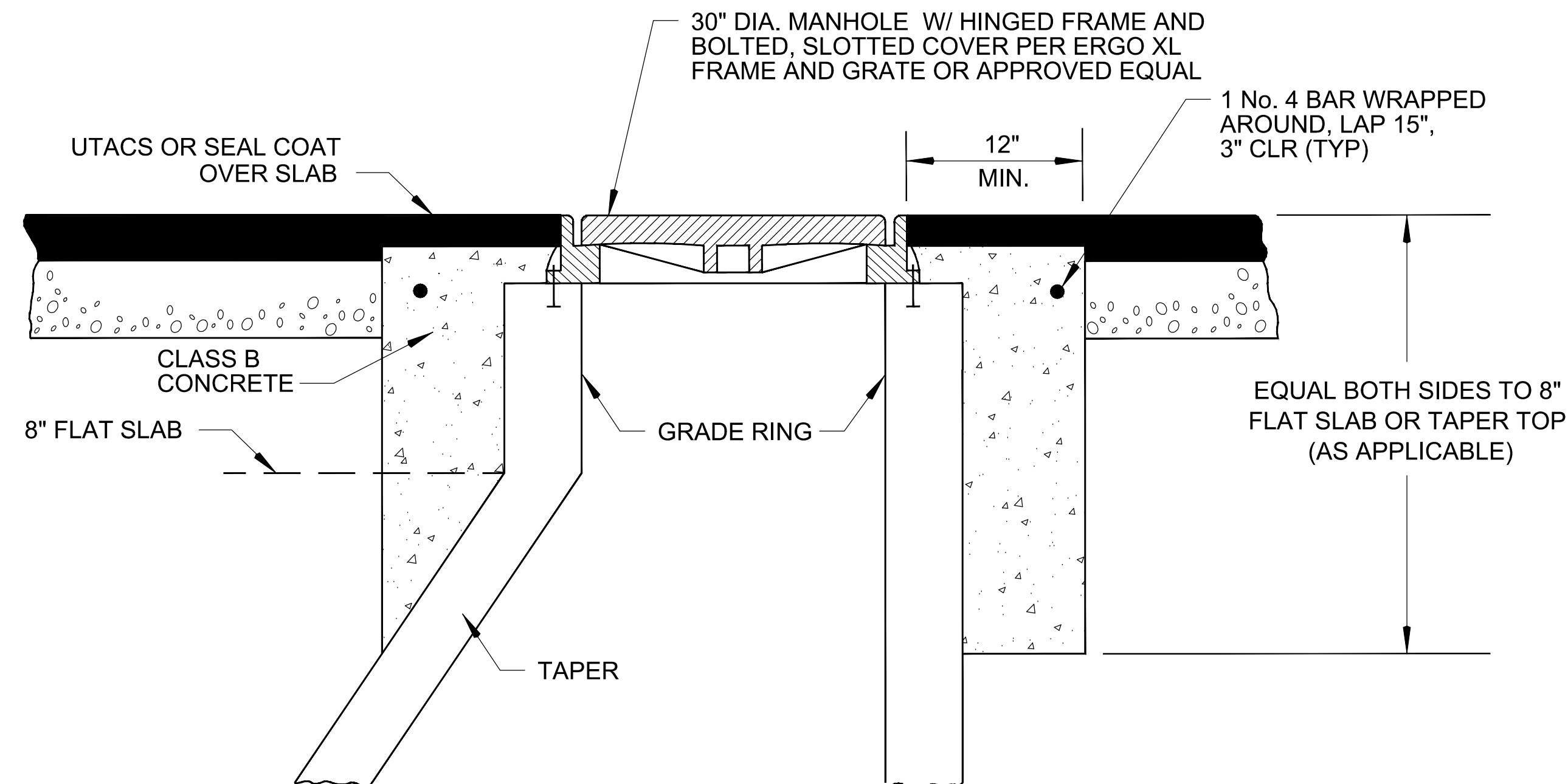
NOTE TO CITY OF LAS VEGAS MAINTENANCE:

1. MANHOLES LISTED ON "MANHOLE SCHEDULE" BELOW TO REMAIN BOLTED

MANHOLE SCHEDULE			
STRUCTURE #	ALIGNMENT	STATION	OFFSET
2.1	"B"	1053+68.47	12.00 LT
4.1	"B"	1061+22.47	12.00 LT
4.2	"B"	1061+66.94	12.00 LT
4.7	"B"	1061+43.96	12.00 LT
4.8	"B"	1061+49.20	12.00 LT
10.1	"B"	1089+28.38	33.31 LT
10.3	"B"	1091+17.75	35.96 LT
10.5	"B"	1089+87.91	48.13 LT
11.2	"B"	1094+17.03	32.67 LT
13.2	"B"	1105+11.84	12.00 LT
15.2	"B"	1112+20.19	12.01 LT
15.3	"B"	1112+50.44	12.01 LT
15.4	"B"	1113+41.52	12.00 LT
15.9	"B"	1113+21.98	49.25 LT
34.2	"BR"	40+11.59	19.65 LT
34.3	"BR"	44+05.74	19.56 LT
34.4	"BR"	44+23.27	39.58 RT
34.5	"BR"	44+31.64	40.27 RT

DETAIL 1
30" MANHOLE W/
BOLTED, SLOTTED LID

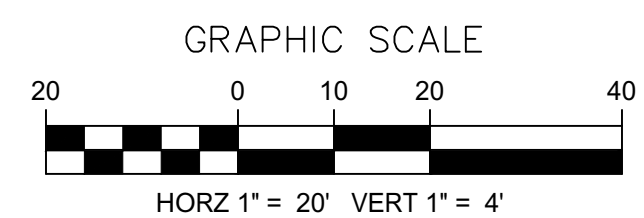
NO SCALE



SECTION A-A

NOTES:

1. CONCRETE COLLAR FRAME AND COVER TO BE CONSTRUCTED 1/8" BELOW SURFACE OF DENSE GRADE WHERE UTACS IS NOT USED.
2. CONCRETE, CLASS B, PER SECTION 501, UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
3. CONTRACTOR TO BOLT LID CLOSED. BOLT TO REMAIN IN PLACE UNTIL CITY OF LAS VEGAS RETROFIT IS COMPLETE. (CITY OF LAS VEGAS MAINTENANCE SEE NOTE BELOW)

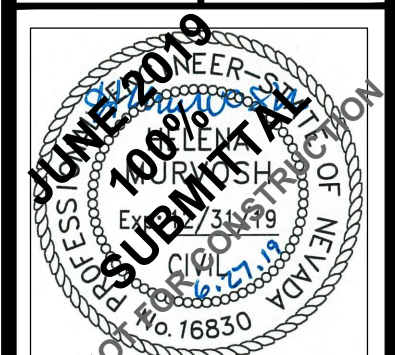


CALL BEFORE CONSTRUCTION 		
BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-2500
	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929

[illegible]

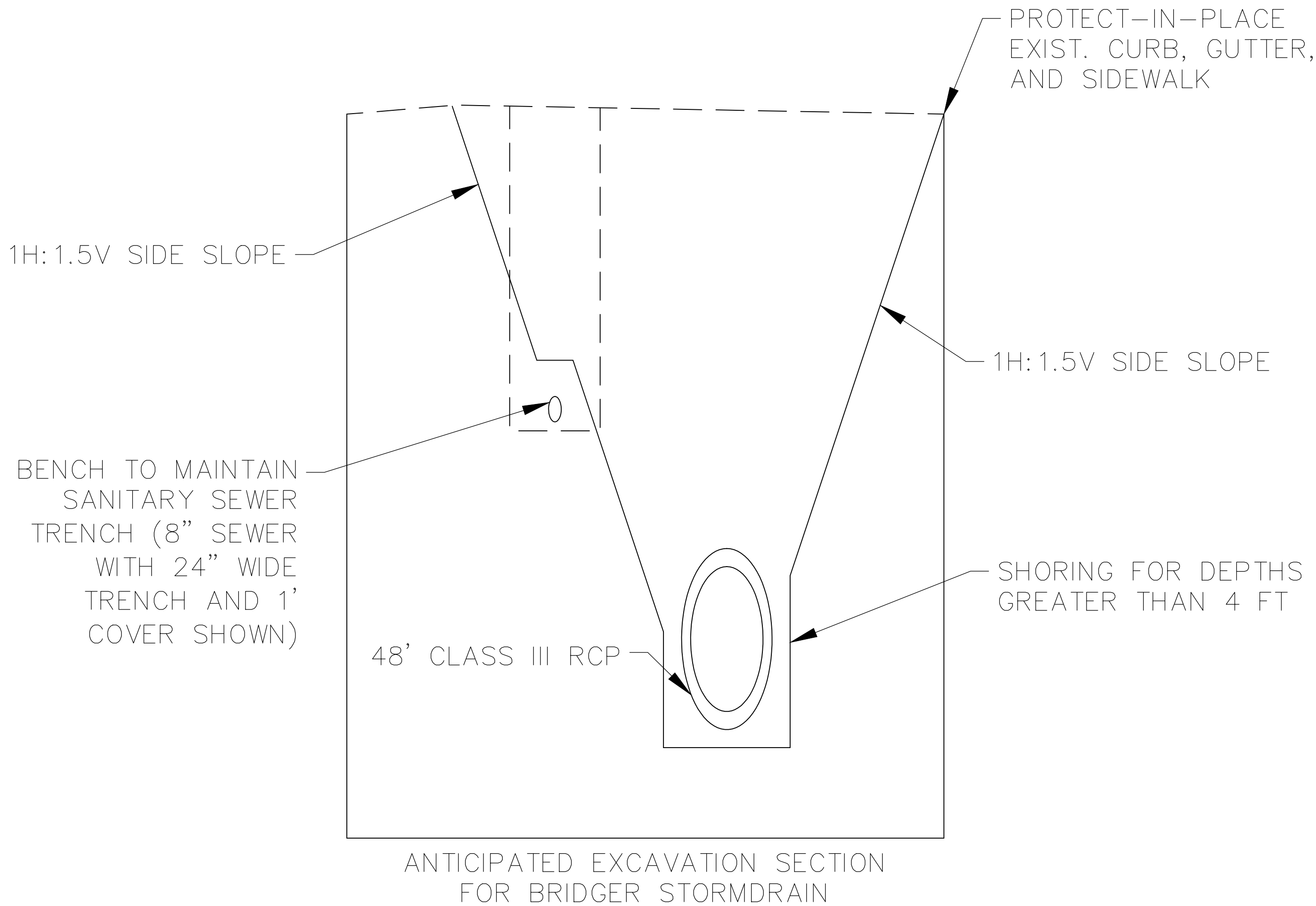
CITY OF LAS VEGAS	BID# 19-68939
DESIGNED BY: JB	
DRAWN BY: JB	
CHECKED BY: HM	
100% SUBMITTAL	

TITLE	LAS VEGAS BOULEVARD IMPROVEMENTS STEWART AVE. TO SAHARA AVE.
SHEET	STORM DRAIN DETAILS

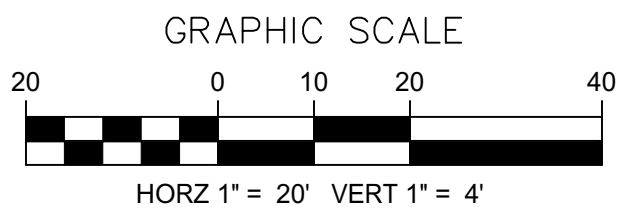


SHEET
SD-51
XX OF
DRAWING NO.
XXXXXXXXXX-X

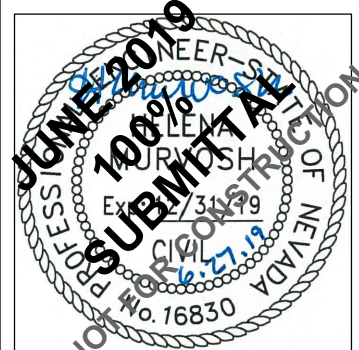
06/25/2019 H:10106 (Las Vegas Blvd Stewart to Sahara)Design\Production Drawings\SD-35 - SD-41 Storm Drain Lateral\Profile.dwg



- NOTES:
1. CONTRACTOR IS REQUIRED TO BENCH OVER EXISTING SEWER TO MAINTAIN EXISTING MINIMUM SEWER TRENCH WIDTH.
 2. SECTION REFLECTS THE BENCH FOR THE EXISTING 8" SEWER. A WIDER BENCH WILL BE REQUIRED FOR LARGER DIAMETER SEWER.
 3. BENCH REQUIREMENTS ARE DETAILED IN THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS FROM CONSTRUCTION, CURRENT EDITION, SECTION 2.3.6B:
2) THE TRENCH SHALL HAVE A MINIMUM WIDTH OF OUTSIDE PIPE DIAMETER PLUS 16-INCHES AND A MAXIMUM WIDTH AS RECOMMENDED BY THE UNI-BELL PVC PIPE HANDBOOK (IF APPLICABLE) AND PIPE MANUFACTURER, BUT NOT GREATER THAN OUTSIDE PIPE DIAMETER PLUS 36-INCHES.
3) THE TRENCH WIDTH, PIPE BEDDING METHOD, PIPE HAUNCH SUPPORT, AND PIPE COVER TO 1-FOOT OVER THE TOP OF THE PIPE SHALL BE DESIGNED BY THE ENGINEER.
 4. CONTRACTOR TO VERIFY BENCH REQUIREMENTS



CALL BEFORE CONSTRUCTION 		
BEFORE YOU UNDERGROUND	BEFORE YOU DIG	USA NORTH 811 OR 800-227-2600
		F.A.S.T. 702-432-5300
		CLARK COUNTY TRAFFIC OPERATIONS 702-455-7511
BEFORE YOU OVERHEAD		CITY OF LAS VEGAS T.E.F.O. 702-229-6611
		NV ENERGY 702-227-2929



SHEET
SD-52
XX OF
DRAWING NO.
XXXXXXXX-X

TITLE
**LAS VEGAS BOULEVARD IMPROVEMENTS
STEWART AVE. TO SAHARA AVE.**
SHEET
STORM DRAIN DETAILS

PREPARED FOR CITY OF LAS VEGAS		H# 46300	DATE: 06/27/2019	SUBMITTAL STAGE: 100% SUBMITTAL
DESIGNED BY: JB		BID# 19.68939	DRAWN BY: JB	CHECKED BY: HM

PREPARED BY

**CA Group, Inc.**
C A V I O L A N S O N

2785 S. RAINBOW BLVD
LAS VEGAS, NV 89146
PHONE: (702) 685-5945

NO.	DATE	REVISIONS