DEPARTMENT OF PUBLIC WORKS

Mayor:
CAROLYN G. GOODMAN

City Council:
STEVEN D. ROSS (Mayor Pro-Tem)
LOIS TARKANIAN
RICKI Y. BARLOW
STAVROS S. ANTHONY
BOB COFFIN
BOB BEERS

City Manager:
ELIZABETH N. FRETWELL

Director of Public Works:
DAVID N. BOWERS, P.E., P.T.O.E.

City Engineer:
ALLEN E. PAVELKA, P.E.

Funded By:
CITY OF LAS VEGAS
SANITATION FUND

DOWNTOWN INTERCEPTOR SEWER REHABILITATION PHASE 2

CLV BID NO. 16.53545

carollo

Reviewed By:

CLV CITY ENGINEER — 3-15-17 DATE

CLV PROJECT MANAGER — 3/8/17 DATE

CLV CITY TRAFFIC ENGINEER — 3.14.17 DATE

CLV CONSTRUCTION MANAGER — 3/15/17 DATE

N/A
CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT — DATE

N/A
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA — DATE

SOUTHWEST GAS CORPORATION — 1.26.17 DATE

CENTRAL TELEPHONE COMPANY d/b/a CENTURYLINK — 1-12-17 DATE

THE AFFIXED CENTURYLINK NEVADA APPROVAL DOES NOT ASSUME OR GUARANTEE LIABILITY FOR KNOWN OR UNKNOWN CONFLICTS WITH EXISTING OR PROPOSED IMPROVEMENTS. RESOLUTION OF ANY CONFLICT WILL BE ACCOMPLISHED PURSUANT TO LOCAL ORDINANCES, NEVADA REVISED STATUTES AND/OR PUBLIC UTILITY COMMISSION STANDARD REGULATIONS.

COX COMMUNICATIONS LAS VEGAS, INC. — 1/24/17 DATE

NV ENERGY – DISTRIBUTION — 1.26.17 DATE

NV ENERGY ACKNOWLEDGES THAT WE HAVE RECEIVED YOUR PLANS AND WILL PROVIDE SERVICE TO ALL ELECTRICAL NEEDS ASSOCIATED WITH THIS PROJECT. NV ENERGY RESERVES THE RIGHT TO ADDRESS ANY EXISTING OR FUTURE CONFLICTS ONCE THE FINAL DESIGN IS COMPLETED. THE NEW SERVICE AND THE RESOLUTION OF ANY CONFLICTS WILL BE ACCOMPLISHED PURSUANT TO THE NEVADA PUBLIC UTILITY COMMISSION'S RULES AND REGULATIONS.

NV ENERGY - TRANSMISSION — 1-26-17 DATE

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER — 1/25/17 DATE
PROJECT# 124895
SHEETS: CV01, GN01-GN06, PP01-PP18, BP01-BP09, ~~BT01-BT08~~
GN06

THE SIGNATURE ABOVE ACKNOWLEDGES THAT THE UTILITY COMPANY REPRESENTATIVE HAS REVIEWED THE PLANS, AND THAT TO THE BEST OF HIS OR HER KNOWLEDGE THE UTILITY LINES ARE SHOWN IN THE CORRECT LOCATIONS AND ARE THE CORRECT SIZES. WHILE SUCH DATA HAS BEEN COLLECTED WITH REASONABLE CARE, THERE IS NO EXPRESSED OR IMPLIED GUARANTEE THAT THE LOCATIONS ARE EXACT. THE CONTRACTOR SHALL BEAR THE RESPONSIBILITY OF OBTAINING THE ACTUAL FIELD LOCATIONS.

THE SIGNATURE ABOVE FURTHER ACKNOWLEDGES THAT THE UTILITY COMPANY DOES NOT ANTICIPATE CONSTRUCTION OR MAINTENANCE IN THE PROJECT AREA FOR FIVE (5) YEARS IN CONFORMANCE WITH THE CLV NO-CUT POLICY.

NO.	DATE	SHEET	REVISIONS

PREPARED BY
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

H# 53545 | BID# 16.53545
DATE: JANUARY 2017 | DESIGNED BY: MAF
SUBMITTAL STAGE: 100% FINAL | DRAWN BY: ARE
CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

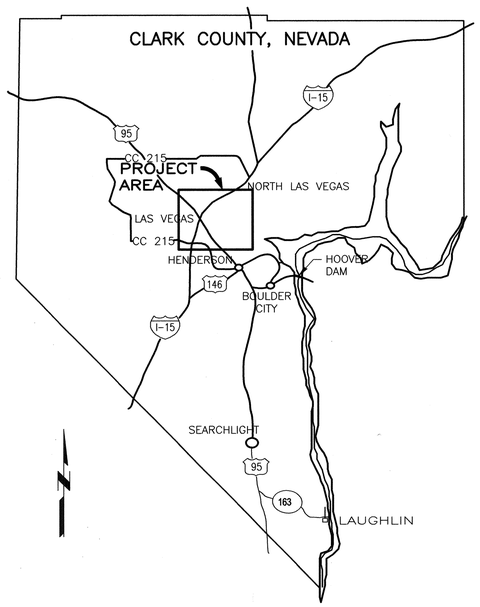
SHEET
COVER SHEET

STATE OF NEVADA — PROFESSIONAL ENGINEER — MICHAEL FLEURY — Exp: 06-30-17 — CIVIL — No. 20947 — 1/10/17

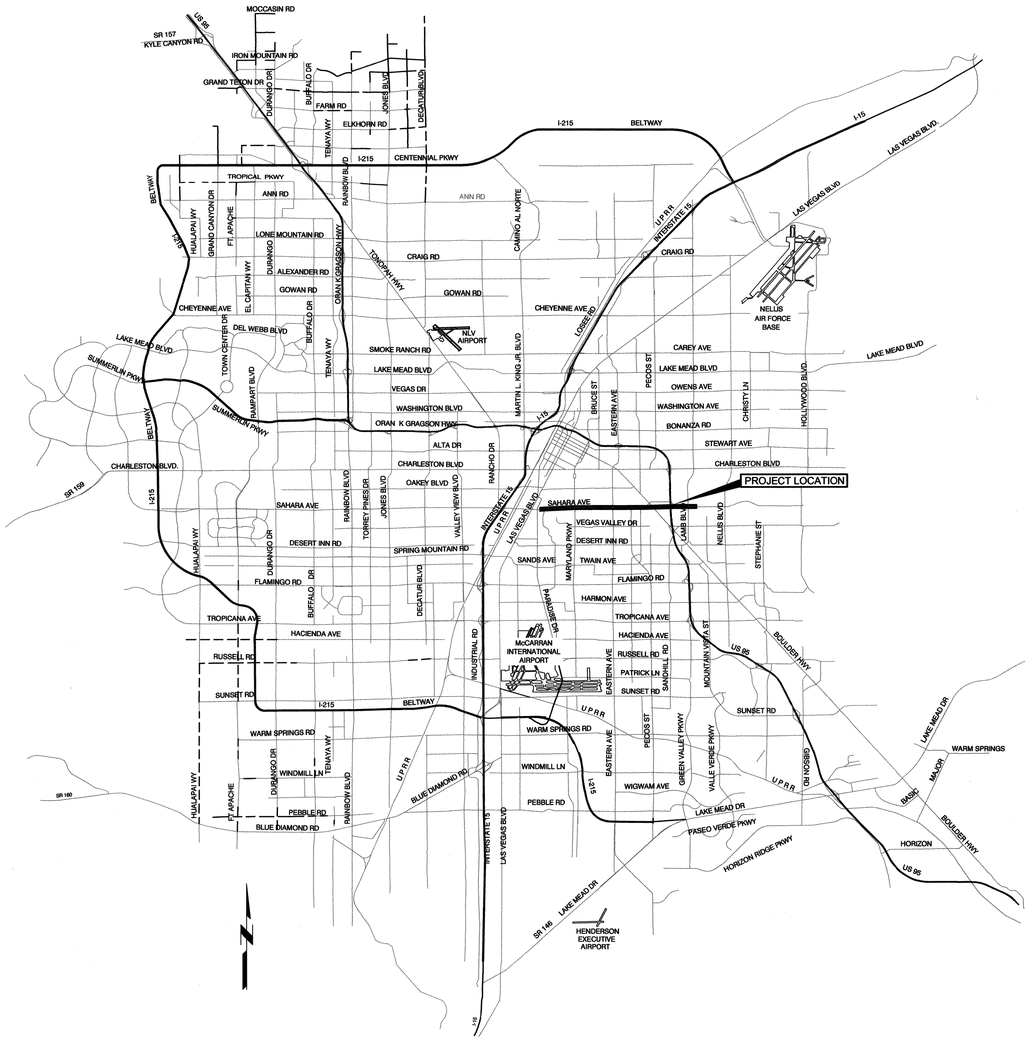
SHEET
CV01
1 OF 39
DRAWING NO.
307V1111

PROJ.#:124895 QS:162-10-NW,161-05-SW

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6/29/2016



LOCATION MAP
NOT TO SCALE



VICINITY MAP
NOT TO SCALE

SHEET INDEX

1.	CV01	COVER SHEET
2.	GN01	LOCATION MAP, VICINITY MAP & SHEET INDEX
3.	GN02	KEY MAP
4.	GN03	GENERAL ABBREVIATIONS, LEGEND & SYMBOLS
5.	GN04	DESIGN DATA
6.	GNO5	GENERAL NOTES I
7.	GN06	GENERAL NOTES II
8.	GN07	SURVEY HORIZONTAL COORDINATES
9.	PP01	SAHARA AVE PLAN STA 10+00 TO STA 27+00
10.	PP02	SAHARA AVE PLAN STA 27+00 TO STA 45+00
11.	PP03	SAHARA AVE PLAN STA 45+00 TO STA 63+00
12.	PP04	SAHARA AVE PLAN STA 63+00 TO STA 81+00
13.	PP05	SAHARA AVE PLAN STA 81+00 TO STA 99+00
14.	PP06	SAHARA AVE PLAN STA 99+00 TO STA 117+00
15.	PP07	SAHARA AVE PLAN STA 117+00 TO STA 135+00
16.	PP08	SAHARA AVE PLAN STA 135+00 TO STA 153+00
17.	PP09	GLEN AVE PLAN STA 153+00 TO STA 171+00
18.	PP10	GLEN AVE PLAN & PROFILE STA 171+00 TO STA 180+00
19.	PP11	GLEN AVE PLAN & PROFILE STA 180+00 TO STA 189+00
20.	PP12	SAHARA AVE PLAN & PROFILE STA 189+00 TO STA 198+00
21.	PP13	SAHARA AVE PLAN & PROFILE STA 198+00 TO STA 207+00
22.	PP14	SAHARA AVE PLAN & PROFILE STA 207+00 TO STA 216+00
23.	PP15	SAHARA AVE PLAN & PROFILE STA 216+00 TO STA 225+00
24.	PP16	SAHARA AVE PLAN & PROFILE STA 225+00 TO STA 234+00
25.	PP17	SAHARA AVE PLAN & PROFILE STA 234+00 TO STA 240+00
26.	PP18	ENLARGED PLAN AND PROFILES
27.	BP01	E. GLEN AVE - BYPASS PLAN STA 168+00 TO STA 177+00
28.	BP02	E. GLEN AVE - BYPASS PLAN STA 177+00 TO STA 186+00
29.	BP03	BIKE PATH/ US 95 BYPASS PLAN
30.	BP04	FLAMINGO WASH BYPASS PLAN
31.	BP05	FLAMINGO WASH BYPASS PLAN
32.	BP06	FLAMINGO WASH BYPASS PLAN
33.	BP07	FLAMINGO WASH BYPASS PLAN
34.	BP08	FLAMINGO WASH BYPASS PLAN
35.	BP09	FLAMINGO WASH AND SAHARA AVE/ARDEN ST BYPASS PLAN
36.	DT01	STANDARD DETAILS I
37.	DT02	STANDARD DETAILS II
38.	DT03	FLOW BYPASS DETAILS
39.	DT04	TRENCH DETAILS

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17 PROJECT# 124895

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY
CITY OF LAS VEGAS
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS
I# 53545 | BID# 16.53545
DATE: JANUARY 2017 | DESIGNED BY: MAF
SUBMITTAL STAGE: 100% FINAL | DRAWN BY: ARE
CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR SEWER REHABILITATION PHASE 2

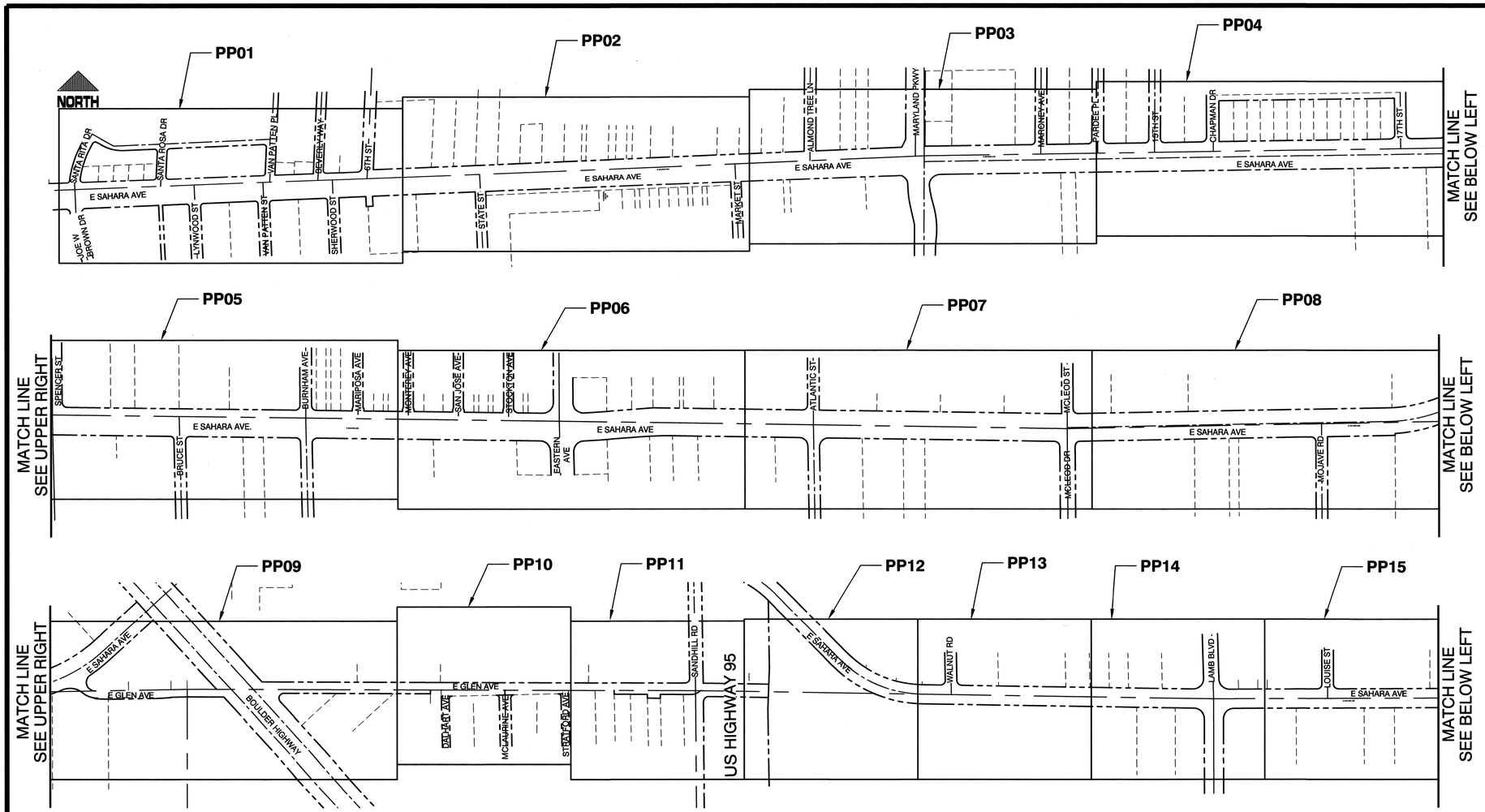
SHEET
LOCATION MAP, VICINITY MAP & SHEET INDEX

STATE OF NEVADA — MICHAEL A. FLEURY — Exp: 06-30-17 — CIVIL — No. 20941 — PROFESSIONAL ENGINEER — 1/25/17

SHEET
GN01
2 OF 39
DRAWING NO.
307V1111

PROJ.#:124895 QS:162-10-NW,161-05-SW

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6/9/15



KEY MAP
NOT TO SCALE

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17 PROJECT# 124895

carollo

PREPARED BY
CITY OF LAS VEGAS NEVADA
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

NO.	DATE	SHEET	REVISIONS

PREPARED FOR
CITY OF LAS VEGAS
BID# 16.53545
DESIGNED BY: MAF
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DATE: JANUARY 2017
SUBMITTAL STAGE:
100% FINAL

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

SHEET
KEY MAP

STATE OF NEVADA
MICHAEL A. FLEURY
Exp: 06-30-17
CIVIL
No. 20941
PROFESSIONAL ENGINEER
1/26/17

SHEET
GN02
3 OF 39
DRAWING NO.
307V1111

PROJ#:124895 QS-162-10-NW,161-05-SW

6/9/15 C:\PW_WORKING\PROJECTWISE\AEVANS\D04536691\0167A10-GN02.DWG

ABBREVIATIONS

@	AT
&	AND
Ø	DIAMETER
#	NUMBER
AB, ABAN	ABANDONED
AC	ASPHALTIC CONCRETE
ACP	ASBESTOS CEMENT PIPE
ADDL	ADDITIONAL
AGG	AGGREGATE
AIP	ABANDONED IN PLACE
ALT	ALTERNATE
APN	ASSESSOR'S PARCEL NUMBER
APPD	APPROVED
APPROX	APPROXIMATE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIAL
AVE	AVENUE
AVG	AVERAGE
BC	BACK OF CURB
BCR	BEGIN CURB RETURN
BDR	BORDER
BDRY	BOUNDARY
BEG	BEGINNING
BLDG	BUILDING
BFV	BUTTERFLY VALVE
BLVD	BOULEVARD
BM	BENCHMARK
BTM	BOTTOM
BVC	BEGIN VERTICAL CURVE
BW	BACK OF SIDEWALK
C-C	CENTER TO CENTER
CATV	CABLE TELEVISION
CC	CLARK COUNTY
CF	CURB FACE
CFS	CUBIC FEET PER SECOND
C&G	CURB & GUTTER
CIP	CAST IRON PIPE
CIPP	CURED IN PLACE PIPE
C/L OR CL	CENTERLINE
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CLV	CITY OF LAS VEGAS
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
COMM	COMMERCIAL
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUED
COR	CORNER
CSAP	CORRUGATED STEEL ARCH PIPE
CSP	CORRUGATED STEEL PIPE
COL	COLUMN
CULV	CULVERT
CY	CUBIC YARD
DB	DIRECT BURIED
DC	DEPRESSED CURB
DEPT	DEPARTMENT
DI	DROP INLET
DIA	DIAMETER
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
DMH	DROP MANHOLE
DR	DRIVE
DWG	DRAWING
DWY	DRIVEWAY
E	EAST
EA	EACH
EC	END CURVE
ECR	END CURB RETURN
EF	EACH FACE
EL, ELEV	ELEVATION
ELEC	ELECTRICAL
EOC	ELECTRIC
EMBK	EMBANKMENT
EO	EDGE OF OIL
EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EVC	END VERTICAL CURVE
EW	EACH WAY
EX, EXIST	EXISTING
FA	FIRE ALARM
FC	FACE OF CURB
FD	FOUND
FDC	FIRE DEPARTMENT CONNECTION
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
F/L	FLOW LINE
FL FLG	FLANGE
FO	FIBER OPTIC
FRP	FIBERGLASS REINFORCED PIPE
FRPMP	FIBERGLASS REINFORCED POLYMER MORTAR PIPE
FT	FOOT OR FEET
G	GAS
GALV	GALVANIZED
GB	GRADE BREAK
GM	GAS METER
GR	GAS PRESSURE REGULATOR
GUT	GUTTER
GV	GATE VALVE
GW	GUY WIRE
HDWL	HEADWALL
HORIZ	HORIZONTAL
HP	HIGH POINT/HIGH PRESSURE
HWY	HIGHWAY
I	INTERSTATE, RADIUS DELTA
ID	INSIDE DIAMETER
IN	INCH
INT	INTERSECTION
INV	INVERT
IRR	IRRIGATION
ISL	ISLAND
J	JUNCTION
JB	JUNTION BOX

L	LENGTH
LAT	LATERAL
LF	LINEAL, LINEAR FEET
LOC	LENGTH OF CURB
LN	LANE
LP	LOW POINT
LS	LANDSCAPE
LT	LEFT
LVVWD	LAS VEGAS VALLEY WATER DISTRICT
MAX	MAXIMUM
MFR	MANUFACTURER
MGD	MILLION GALLONS PER DAY
MH	MANHOLE
MIN	MINIMUM
MLCP	MORTAR LINED AND COATED PIPE
MON	MONOLITHIC
MPH	MILES PER HOUR
MSDS	MSDS MATERIAL SAFETY DATA SHEET
N	NORTH
NAVD	NORTH AMERICAN VERTICAL DATUM
NO	NUMBER
N/O	NORTH OF
NDOT	NEVADA DEPARTMENT OF TRANSPORTATION
NE	NORTHEAST
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NPW	NON-POTABLE WATER
NTS	NOT TO SCALE
NV	NEVADA
NVE	NV ENERGY
O/C, OC	ON CENTER
OD	OUTSIDE DIAMETER
OG	OPEN-GRADE PAVEMENT, ORIGINAL GRADE
OHE	OVERHEAD ELECTRIC
OHP	OVERHEAD POWER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
P	POWER
PB	PULLBOX
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVE
PCP	PORTLAND CEMENT PAVEMENT
PE	POLYETHYLENE
PG	PAD GRADE
PHP	PLASTIC HIGH PRESSURE
PI	POINT OF INTERSECTION
PIP	PROTECT IN PLACE
PKWY	PARKWAY
P/L	PROPERTY LINE
PL	PLACE, PLATE
PLG	PLASTIC GAS
PP	POWER POLE
PROP	PROPOSED
PRC	POINT OF REVERSE CURVE
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
Q	RATE OF FLOW
R	RADIUS
RC	REINFORCED CONCRETE
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REHAB	REHABILITATION
REINF	REINFORCED
RELOC	RELOCATE
RP	RADIAL POINT
RR	RAILROAD
RT	RIGHT
RTE	ROUTE
ROW, R/W	RIGHT-OF-WAY
S/O	SOUTH OF
S	SOUTH, SLOPE
SCCP	STEEL CYLINDER CONCRETE PIPE
SD	STORM DRAIN
SEC	SECTION
SF	SQUARE FOOT, FEET
SG	STEEL GAS
SHP	STEEL HIGH PRESSURE
SHT	SHEET
SIM	SIMILAR
SL	STREETLIGHT
SLV	SLEEVE
SMH	SEWER MANHOLE
SNWA	SOUTHERN NEVADA WATER AUTHORITY
SP	SPECIAL PROVISION
SPECS	SPECIFICATIONS
SQ	SQUARE
SS	SANITARY SEWER
SST	STAINLESS STEEL
ST	STREET
STA	STATION
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURAL
SURV	SURVEY
SW	SIDEWALK, SOUTHWEST
SWG	SOUTHWEST GAS COMPANY
SY	SQUARE YARD
T	TELEPHONE
T&B	TOP & BOTTOM
TBA	TO BE ADJUSTED
TBR	TO BE REMOVED
TEL	TELEPHONE
TEMP	TEMPORARY
TMH	TOP OF MANHOLE
TOC	TOP OF CURB
TOP	TOP OF PIPE
TOW	TOP OF WALL
TRANS	TRANSITION
TS	TRAFFIC SIGNAL
TSC	TRAFFIC SIGNAL CONDUIT
TSI	TRAFFIS SIGNAL INTERCONNECT
TYP	TYPICAL

UG	UNDERGROUND
UGT	UNDERGROUND TELEPHONE
UGE	UNDERGROUND ELECTRIC
UGP	UNDERGROUND POWER
UPRR	UNION PACIFIC RAILROAD
UFC	UNIFORM FIRE CODE
USD	UNIFORM STANDARD DRAWING
VAR	VARIABLE, VARIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VG	VALLEY GUTTER
W	WATER, WEST
W/	WITH
W/O	WEST OF
W	WEST, WATER
WC	WHEEL CHAIR
WM	WATER METER
WV	WATER VALVE
YD	YARD

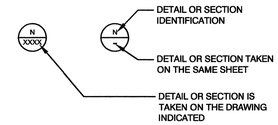
LEGEND AND SYMBOLS

- CENTERLINE
- RIGHT OF WAY LINE
- PROPERTY LINE
- EXISTING FENCE
- EXISTING ELECTRIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING FM
- EXISTING GAS
- EXISTING SEWER
- EXISTING STORM DRAIN
- EXISTING TELEPHONE
- EXISTING OVERHEAD TELEPHONE
- EXISTING CABLE TELEVISION
- EXISTING WATER
- EXISTING SEWER TO BE REHABILITATED BY FULL CIPP LINER
- DIRECTION OF FLOW
- EXISTING SEWER TO BE REHABILITATED WITH SECTIONAL LINER
- FUTURE UTILITY

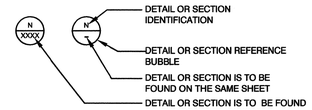
- AREA LIGHT
- BENCHMARK
- ELEC. VAULT/CABINET
- ELECTRIC MANHOLE
- ELECTRIC METER
- FIRE HYDRANT
- FOUND MONUMENT
- GAS METER
- GAS VALVE
- IRR. CONTROLLER
- IRR. VALVE
- LOOP DETECTOR
- SIDEWALK RAMP
- SIGN
- MANHOLE
- MANHOLE TO BE REHABILITATED
- (FM) FLOW MONITORING SITE

- STORM DRAIN INLET
- STORM DRAIN MH
- STREET LIGHT
- STREET LIGHT PB
- TELEPHONE MH
- TELEPHONE PB
- TRAFFIC SIGNAL POLE
- TRAFFIC SIGNAL PB
- TV PULLBOX
- UTILITY POLE
- UTILITY POLE GUY WIRE
- UTILITY VAULT
- WATER VAULT/CABINET
- WATER MANHOLE
- WATER METER
- WATER VALVE

DRAWING CROSS REFERENCE

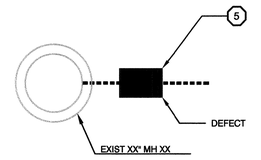


AT TITLE



AT CROSS REFERENCE

GENERAL POINT DEFECT ENLARGED DETAIL



NOTES:

1. (5) REHABILITION METHODS CALLED OUT IN CONSTRUCTION KEY NOTES DWG GN06. REHABILITATION DETAILS ARE SHOWN ON DWG DT02.
2. SEE GN04 FOR SEGMENT LOCATION. CONTRACTOR TO VERIFY LOCATION FOR POINT REPAIRS.

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/23/17 PROJECT# 124895

carollo

NO.	DATE	REVISIONS

PREPARED BY
CITY OF LAS VEGAS NEVADA
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

I# 53545	BID# 16.53545
DATE: JANUARY 2017	DESIGNED BY: MAF
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	CHECKED BY: GAG

TITLE: DOWNTOWN INTERCEPTOR SEWER REHABILITATION PHASE 2

SHEET: GENERAL ABBREVIATIONS, LEGEND & SYMBOLS

STATE OF NEVADA — PROFESSIONAL ENGINEER — MICHAEL A. FLEURY — Exp: 06-30-17 CIVIL — No. 20941 — 1/20/17

SHEET GN03
4 OF 39
DRAWING NO. 307V1111

PROJ.#:124895 QS:162-10-NW,161-05-SW

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6/9/15

PROJECT PIPELINES

1	2	3	4	5	6	7	8
SHEET NO.	UP MH. NO.	DOWN MH. NO.	PIPE DIA (IN)	LATERALS (NO.)	PIPE LENGTH (FT)	PIPE MATERIAL	REHAB METHOD
PP03	SA-627	SA-714	15	0	330 (2)	VCP	CIPP (1)
PP03	SA-693	SA-694	15	2	404 (2)	VCP	CIPP (1)
PP10	OK-385	OK-388	48	0	234	T-lock	CIPP
PP10	OK-388	OK-389	48	0	194	T-lock	CIPP
PP10/PP11	OK-389	OK-393	48	0	181	T-lock	CIPP
PP11	OK-393	OK-394	48	0	629	T-lock	CIPP
PP11	OK-394	OK-392	48	0	90	T-lock	CIPP
PP11/PP12	OK-392	OK-391	48	0	324	T-lock	CIPP
PP12	OK-391	OK-390	48	0	84	T-lock	CIPP
PP12	OK-390	OK-387	54	0	388	T-lock	CIPP
PP12/PP13	OK-387	OK-386	54	0	679	T-lock	CIPP
PP13/PP14	OK-386	OK-398	54	0	641	T-lock	CIPP
PP14	OK-398	OK-399	54	0	583	T-lock	CIPP
PP14/PP15	OK-399	OK-397	54	0	653	T-lock	CIPP
PP15	OK-397	OK-396	54	0	109	T-lock	CIPP
PP15/PP16	OK-396	OK-395	54	0	409	T-lock	CIPP
PP16	OK-395	OK-377	54	0	631	T-lock	CIPP
PP16/PP17	OK-377	OK-376	54	0	590	T-lock	CIPP
PP17	OK-376	OK-375-1	54	0	73	T-lock	CIPP
PP17/PP18	OK-375	PL-53	54	0	54	T-lock	CIPP
PP17/PP18	PL-53	PL-54	54	0	12	T-lock	CIPP
PP17/PP18	PL-55	PL-54	54	0	19	T-lock	CIPP
PP17/PP18	PL-57	PL-55	54	0	38	T-lock	CIPP

NOTES:

1. SECTIONAL LINER FOR SINGLE POINT REPAIR IN SEWER SEGMENT.
2. SEWER SEGMENT "____" PIPE LENGTH WITH POINT REPAIR.

FLOW MONITORING DATA (2)

1	2	3	4	5	6
SHEET NO.	MH NO.	PIPE DIA (IN)	PEAK MAX DEPTH (IN)	AVG DAILY FLOW (MGD)	PEAK DAILY FLOW (MGD)
PP16	OK-395 (1)	54	24.0	24.0	46.0
PP17/BP09	SN-11 (1)	54	23.6	14.3	32.2
PP17/BP09	SA-648 (1)	27	6.6	2.3	3.8

NOTES:

1. THE FLOW MONITORING DATA WAS OBTAINED FROM PERMANENT FLOW METERS. DRY WEATHER FLOW ONLY.
2. THE CONTRACTOR SHALL VALIDATE ALL FLOW DATA PRIOR TO DEVELOPING THE BYPASS PLAN.

PROJECT MANHOLES

1	2	3	4	5	6	7
SHEET NO.	MH NO.	MH TYPE	MH DIAMETER (IN)	MH DEPTH (FT)	THRU PIPE SIZE (IN)	REHAB METHOD
PP01	SA-711	BRICK	48"	9.6	15"	EPOXY COATING
PP01	SA-705	BRICK	48"	10.1	15"	EPOXY COATING
PP01	SA-704	BRICK	48"	10.4	15"	EPOXY COATING
PP01	SA-706	BRICK	48"	10.6	15"	EPOXY COATING
PP01	SA-703	BRICK	48"	11.0	15"	EPOXY COATING
PP01	SA-707	BRICK	48"	10.9	15"	EPOXY COATING
PP01	SA-561	PRECAST CONCRETE	60"	10.5	27"	EPOXY COATING
PP01	SA-563	PRECAST CONCRETE	60"	11.7	27"	EPOXY COATING
PP01	SA-562	PRECAST CONCRETE	60"	11.3	27"	EPOXY COATING
PP01	SA-564	PRECAST CONCRETE	60"	12.0	27"	EPOXY COATING
PP02	SA-702	BRICK	48"	11.2	15"	EPOXY COATING
PP02	SA-699	BRICK	48"	10.1	15"	EPOXY COATING
PP02	SA-697	PRECAST CONCRETE	48"	9.8	15"	EPOXY COATING
PP02	SA-628	PRECAST CONCRETE	48"	9.8	15"	EPOXY COATING
PP02	SA-698	BRICK	48"	10.4	15"	EPOXY COATING
PP02	SA-700	PRECAST CONCRETE	48"	11.0	15"	EPOXY COATING
PP02	SA-701	PRECAST CONCRETE	48"	12.0	15"	EPOXY COATING
PP02	SA-696	BRICK	48"	12.0	15"	EPOXY COATING
PP02	SA-695	PRECAST CONCRETE	48"	12.8	15"	EPOXY COATING
PP02	SA-565	PRECAST CONCRETE	60"	11.9	27"	EPOXY COATING
PP02	SA-566	PRECAST CONCRETE	60"	10.9	27"	EPOXY COATING
PP02	SA-568	PRECAST CONCRETE	60"	10.2	27"	EPOXY COATING
PP02	SA-570	PRECAST CONCRETE	60"	11.3	27"	EPOXY COATING
PP02	SA-571	PRECAST CONCRETE	60"	12.6	27"	EPOXY COATING
PP02	SA-572	PRECAST CONCRETE	60"	13.2	27"	EPOXY COATING
PP03	SA-693	BRICK	48"	12.5	15"	EPOXY COATING
PP03	SA-694	BRICK	48"	11.8	15"	EPOXY COATING
PP03	SA-627	PRECAST CONCRETE	48"	11.6	15"	EPOXY COATING
PP03	SA-714	BRICK	48"	7.3	15"	EPOXY COATING
PP03	SA-573	PRECAST CONCRETE	60"	13.1	27"	EPOXY COATING
PP03	SA-574	PRECAST CONCRETE	60"	12.3	27"	EPOXY COATING
PP03	SA-575	PRECAST CONCRETE	60"	8.1	27"	EPOXY COATING
PP03	SA-576	PRECAST CONCRETE	60"	9.1	27"/24"	EPOXY COATING
PP03	SA-577	PRECAST CONCRETE	60"	10.5	24"	EPOXY COATING
PP04	SA-578	PRECAST CONCRETE	60"	8.7	24"	EPOXY COATING
PP04	SA-579	PRECAST CONCRETE	60"	8.8	24"	EPOXY COATING
PP04	SA-580	PRECAST CONCRETE	60"	7.4	24"	EPOXY COATING
PP04	SA-581	PRECAST CONCRETE	60"	7.6	24"	EPOXY COATING
PP05	SA-582	PRECAST CONCRETE	60"	8.8	24"	EPOXY COATING
PP05	SA-549	PRECAST CONCRETE	60"	9.2	24"	EPOXY COATING
PP05	SA-752	PRECAST CONCRETE	60"	9.4	24"	EPOXY COATING
PP05	SA-550	PRECAST CONCRETE	60"	9.0	24"	EPOXY COATING
PP05	SA-551	PRECAST CONCRETE	60"	8.2	24"	EPOXY COATING
PP05	SA-552	PRECAST CONCRETE	60"	8.4	24"	EPOXY COATING
PP06	SA-553	PRECAST CONCRETE	60"	8.4	24"	EPOXY COATING
PP06	SA-554	PRECAST CONCRETE	60"	8.8	24"/27"	EPOXY COATING
PP06	SA-555	PRECAST CONCRETE	60"	8.8	27"	EPOXY COATING
PP06	SA-556	PRECAST CONCRETE	60"	9.1	27"	EPOXY COATING
PP07	SA-558	PRECAST CONCRETE	60"	9.7	27"	EPOXY COATING
PP07	SA-557	PRECAST CONCRETE	60"	9.9	27"	EPOXY COATING
PP07	SA-547	PRECAST CONCRETE	60"	9.1	27"	EPOXY COATING
PP07	SA-548	PRECAST CONCRETE	60"	8.8	27"	EPOXY COATING
PP07	SA-546	PRECAST CONCRETE	60"	9.8	27"	EPOXY COATING
PP08	SA-545	PRECAST CONCRETE	60"	11.9	27"	EPOXY COATING
PP08	SA-544	PRECAST CONCRETE	60"	11.4	27"	EPOXY COATING

PROJECT MANHOLES

1	2	3	4	5	6	7
SHEET NO.	MH NO.	MH TYPE	MH DIAMETER (IN)	MH DEPTH (FT)	THRU PIPE SIZE (IN)	REHAB METHOD
PP08	SA-543	PRECAST CONCRETE	60"	9.8	27"	EPOXY COATING
PP08	SA-542	PRECAST CONCRETE	60"	10.2	27"	EPOXY COATING
PP08	SA-541	PRECAST CONCRETE	60"	10.2	27"	EPOXY COATING
PP09	SA-540	PRECAST CONCRETE	60"	11.0	27"	EPOXY COATING
PP09	SA-539	PRECAST CONCRETE	60"	11.1	27"	EPOXY COATING
PP09	SA-538	PRECAST CONCRETE	60"	13.0	27"	EPOXY COATING
PP09	SA-537	PRECAST CONCRETE	60"	14.1	27"	EPOXY COATING
PP09	SA-583	PRECAST CONCRETE	60"	13.2	27"/24"	EPOXY COATING
PP10	OK-385	PRECAST CONCRETE	60"	12.9	51"/48"	EPOXY COATING
PP10	SA-646	PRECAST CONCRETE	60"	12.8	24"	EPOXY COATING
PP10	SA-754	PRECAST CONCRETE	60"	13.6	24"	EPOXY COATING
PP10	SA-659	PRECAST CONCRETE	60"	12.6	24"	EPOXY COATING
PP11	OK-393	PRECAST CONCRETE	60"	18.7	48"	EPOXY COATING
PP11	OK-394	T-LOCKED CONCRETE	60"	18.3	48"	EPOXY COATING
PP11	OK-392	T-LOCKED CONCRETE	60"	17.9	48"	EPOXY COATING
PP11	SA-660	PRECAST CONCRETE	60"	10.1	24"	EPOXY COATING
PP12	OK-391	T-LOCKED CONCRETE	60"	16.2	48"	EPOXY COATING
PP12	OK-390	T-LOCKED CONCRETE	60"	20.8	48"/54"	EPOXY COATING
PP12	OK-387	T-LOCKED CONCRETE	60"	20.6	54"	EPOXY COATING
PP12	SA-657	PRECAST CONCRETE	60"	14.4	24"	EPOXY COATING
PP12	SA-656	PRECAST CONCRETE	60"	10.6	24"/30"	EPOXY COATING
PP12	SA-647	PRECAST CONCRETE	60"	12.2	30"	EPOXY COATING
PP13	OK-386	T-LOCKED CONCRETE	60"	23.4	54"	EPOXY COATING
PP13	SA-654	PRECAST CONCRETE	60"	16.7	30"	EPOXY COATING
PP14	OK-398	T-LOCKED CONCRETE	60"	23.0	54"	EPOXY COATING
PP14	OK-399	T-LOCKED CONCRETE	60"	17.7	54"	EPOXY COATING
PP14	SA-655	PRECAST CONCRETE	60"	16.9	30"	EPOXY COATING
PP14	SA-653	PRECAST CONCRETE	60"	14.5	30"	EPOXY COATING
PP15	OK-397	T-LOCKED CONCRETE	60"	18.4	54"	EPOXY COATING
PP15	OK-396	T-LOCKED CONCRETE	60"	17.9	54"	EPOXY COATING
PP15	SA-652	PRECAST CONCRETE	60"	11.6	30"/27"	EPOXY COATING
PP15	SA-651	PRECAST CONCRETE	60"	11.7	27"	EPOXY COATING
PP16	OK-395	T-LOCKED CONCRETE	60"	16.8	54"	EPOXY COATING
PP16	OK-377	T-LOCKED CONCRETE	60"	14.6	54"	EPOXY COATING
PP16	SA-650	PRECAST CONCRETE	60"	11.6	27"	EPOXY COATING
PP16	SA-765	PRECAST CONCRETE	60"	12.1	27"	EPOXY COATING
PP17/PP18	OK-376	T-LOCKED CONCRETE	JUNCTION (8.5' X 12')	11.0	54"	EPOXY COATING
PP18	SN-11A, PL-57	T-LOCKED CONCRETE	JUNCTION (17' X 9.58')	10.0	54"	EPOXY COATING
PP17	SA-648	PRECAST CONCRETE	60"	10.8	27"	EPOXY COATING
PP17/PP18	SA-649	PRECAST CONCRETE	60"	10.2	27"/30"	EPOXY COATING

NOTES:

1. CONTRACTOR TO VERIFY ACTUAL DIAMETER OF EXISTING PIPE.
2. CONTRACTOR TO VERIFY ACTUAL LENGTH OF PIPE SEGMENTS.
3. CONTRACTOR TO VERIFY LOCATION OF POINT REPAIRS.
4. CONTRACTOR TO VERIFY ACTUAL DEPTH, CONFIGURATION, AND SIZE OF MANHOLES/ JUNCTION STRUCTURES.
5. CONTRACTOR TO FIELD VERIFY LOCATION AND NUMBER OF LATERALS.
6. MH OK-388 AND OK-389 END SEAL REPAIR ONLY.

APPROVED FOR CONSTRUCTION
K. Dishari FOR J.M.
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17 PROJECT# 124895

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY
CITY OF LAS VEGAS NEVADA
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS
BID# 16.53545
DESIGNED BY: MAF
DRAWN BY: ARE
CHECKED BY: GAG
I.# 53545
DATE: JANUARY 2017
SUBMITTAL STAGE: 100% FINAL

TITLE
DOWNTOWN INTERCEPTOR SEWER REHABILITATION PHASE 2

SHEET
DESIGN DATA

STATE OF NEVADA
MICHAEL A. FLEURY
Exp: 06-30-17
CIVIL
No. 20941
PROFESSIONAL ENGINEER
1/6/17

SHEET
GN04
5 OF 39
DRAWING NO.
307V1111

PROJ#:124895 QS-162-10-NW,161-05-SW

C:\PW_WORKING\PROJECTWISE\AEVANS\D04536691\0167A10-GN04.DWG
6/9/15

CITY OF LAS VEGAS GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA", LATEST ISSUE; THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST REVISED EDITION; THE "SUMMERLIN IMPROVEMENT STANDARDS" FOR WORK IN THE SUMMERLIN AREA; AND OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY; THE UNIFORM BUILDING CODE; AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE, EXCEPT AS NOTED ON THIS SHEET AS "DEVIATIONS FROM STANDARDS".
2. THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES AS SHOWN FROM CLV PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCE WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER OR OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
4. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS; ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
5. TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGN TO BE APPROVED BY THE QUALITY CONTROL DIVISION, PRIOR TO THE USE ON THE PROJECT.
6. PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
7. JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED-TYPE CURB.
8. AC PAVEMENT TO BE 1/2" ABOVE LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS.
9. CURB AND GUTTER WITH A GRADE OF LESS THAN FOUR-TENTHS OF ONE PERCENT SHALL BE WATER-TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION. ANY CURB AND GUTTER FOUND TO BE UNACCEPTABLE TO THE CITY SHALL BE REMOVED AND REPLACED PER USD 216.
10. SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER USD 235; CASE I. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY PROJECT REPRESENTATIVE.
11. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF TRANSITIONS TO BE AS SHOWN ON PLANS, OR AS DESIGNATED IN THE FIELD BY CITY PROJECT REPRESENTATIVE.
12. EXACT LOCATION OF ALL SAWCUT LINES MAY BE DETERMINED IN THE FIELD BY A CITY PROJECT REPRESENTATIVE IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATIONS.
13. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED, AND SHALL BE DONE ONLY BY A NEVADA PROFESSIONAL LAND SURVEYOR IN ACCORDANCE WITH THE UNIFORM STANDARD DRAWINGS - CLARK COUNTY AREA. A RECORD-OF-SURVEY FOR REPLACEMENT OF PERMANENT SURVEY MONUMENTS SHALL BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL PRIOR TO RECORDING. THE RECORD-OF-SURVEY SHALL BE PREPARED IN ACCORDANCE WITH NEVADA REVISED STATUTES 625.350.
14. UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOWLINES, AND CROSS GUTTER UNLESS WRITTEN APPROVAL IS GRANTED BY THE AFFECTED UTILITY COMPANY AND THE CITY ENGINEER.
15. ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS. NEW WALLS REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE CLV BUILDING DEPARTMENT.
16. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHTS OF WAY.
17. CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING INLETS, VALVE BOXES, MANHOLE RIMS, SEWER CLEANOUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.
18. MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NDOT AND CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.
19. WHEN INSTALLING UNDERGROUND FACILITIES THAT REQUIRE UNDERGROUND LOCATING DEVICES SUCH AS MARKER BALLS, LOCATING RIBBON, ETC, THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO THE ENGINEER CERTIFYING THAT ALL DEVICES HAVE BEEN PLACED AND VERIFIED TO BE IN GOOD WORKING CONDITION PRIOR TO THE CONSTRUCTION OF ANY ROAD BASE.
20. NEWLY INSTALLED AND EXISTING UTILITIES EXPOSED DURING CONSTRUCTION SHALL BE SURVEYED AND DOCUMENTED PER SECTION 622 OF THE SPECIAL PROVISIONS.
21. CCTV VIDEO INSPECTION IS REQUIRED FOR ALL SEWER AND STORM DRAINS. THE CCTV VIDEO INSPECTIONS NEED TO BE PERFORMED PER THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS LATEST ADDITION.
22. A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.

REVISED JULY 23, 2015 (CPM VERSION)

CITY OF LAS VEGAS GRADING NOTES

1. IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
3. CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION. ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
4. THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT.
5. ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
6. THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER.
7. THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT- OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
8. IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, SUCH ITEM SHALL BE PROVIDED, AS DIRECTED BY THE CITY ENGINEER, AT NO EXPENSE TO THE CITY OF LAS VEGAS. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

REVISED APRIL 13, 2015 (CPM VERSION)

CITY OF LAS VEGAS SEWER NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATIONS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CITY ENGINEER.
3. CHISEL "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
4. POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II AGGREGATE BASE.
5. ALL MANHOLES PAVED IN STREETS EIGHTY (80') FOOT R/W AND LARGER SHALL HAVE CONCRETE COLLARS. STREETS LESS THAN EIGHTY (80') FOOT R/W WILL REQUIRE RETROFIT IF PAVING DOES NOT CONFORM TO CITY STANDARDS AT THE MANHOLE.
6. TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO TWELVE INCH (12") DIAMETER. CONNECTIONS TO FIFTEEN INCH (15") OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES. IN LINE "Y" 'S SHALL BE USED ON LINES TWELVE INCHES (12") OR ABOVE.
7. WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LVVWD STANDARDS WHENEVER A SEWER MAIN CROSSES OVER A WATER MAIN OR THE SEWER IS LESS THAN EIGHTEEN INCH (18") UNDER A WATER MAIN.
8. ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CITY OF LAS VEGAS MUST BE STATE OF NEVADA CLASS "A" CONTRACTORS.
9. THE CITY OF LAS VEGAS WILL NOT ACCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE TENTH (0.1) OF A FOOT FROM THE APPROVED CONSTRUCTION PLANS AT ANY LOCATION. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REMOVED OR REPLACED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO ACCEPTANCE BY THE CITY OF LAS VEGAS.
10. INSTALLATION OF CURVED SEWERS REQUIRES THE USE OF C-900 PVC PIPE WHICH ALLOWS FOR PIPE DEFLECTION AT THE JOINTS.

REVISED JANUARY 13, 2015

CITY OF LAS VEGAS TRAFFIC NOTES

1. ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
2. THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
3. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING CITY STREETS WHERE WARRANTED IMMEDIATELY AFTER FIRST GRADING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.
4. WHEN A DESIGNATED "SUGGESTED ROUTE TO SCHOOL" IS ENCROACHED UPON BY A CONSTRUCTION WORK ZONE AND PUBLIC WORKS STAFF IDENTIFIES A NEED FOR STUDENTS TO BE ASSISTED IN THE SAFE CROSSING THROUGH THAT WORK ZONE, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A QUALIFIED "CROSSING GUARD". THE GUARD SHALL BE PRESENT FOR THE FULL DURATION OF TIME THAT CHILDREN ARE LIKELY TO BE PRESENT.

CITY OF LAS VEGAS TRAFFIC NOTES CONT'D

5. IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. ALL NEW TRAFFIC SIGNS SHALL UTILIZE TYPE XI RETROREFLECTIVE SHEETING IN ACCORDANCE WITH CCAUSS 627 AND 716 AND SHALL HAVE AN ANTI-GRAFFITI PROTECTIVE OVERLAY FILM THAT IS A MATCHING COMPONENT TO, AND OF THE SAME MANUFACTURER AS THE RETROREFLECTIVE SHEETING TO WHICH IT IS APPLIED. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS.
7. WHEN A PROPOSED STREET LIGHT STANDARD IS LOCATED WITHIN FIVE (5') FEET OF ANY PROPOSED SIGN SHOWN ON THE PLANS TO BE MOUNTED ON A SIGNPOST, THE SIGN SHALL BE MOUNTED ON THE STREET LIGHT STANDARD AND THE SIGNPOST SHALL BE ELIMINATED.
8. ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HERE UNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
9. STREET SIGNS AND STOP SIGNS SHALL BE INSTALLED PER CITY STANDARD SPECIFICATIONS FOR PLACEMENT OF STREET NAME SIGNS.
10. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL DEVICES AND FLAGGERS TO INSURE THE SAFETY OF THE PUBLIC IN OR AROUND THE WORK AREA. THE CONTRACTOR SHALL HAVE A CERTIFIED ATSSA TRAFFIC CONTROL TECHNICIAN OR IMSA WORK ZONE SAFETY SPECIALIST SET UP, MAINTAIN AND/OR REMOVE ALL TRAFFIC CONTROL DEVICES IN THE CITY OF LAS VEGAS RIGHT OF WAY.
11. WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE EXPEDITED TO COMPLETION SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING RTC TRANSIT IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.
13. GUARDS SHALL BE OBTAINED BY CONTACTING THE METROPOLITAN POLICE DEPARTMENT SPECIAL EVENTS UNIT (PHONE # 828-3442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL. FEES FOR THE USE OF THESE OFFICERS SHALL BE SET BY METRO AND WILL BE PAID BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL ARRANGEMENTS WITH METRO.
14. ANY WORK WITHIN 300' OF A SIGNALIZED INTERSECTION WILL BE NIGHT WORK, UNLESS DIRECTED BY THE CITY OF LAS VEGAS TRAFFIC ENGINEER.
15. THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEERING DIVISION (TRANSPORTATION SECTION) THROUGH THE PROJECT'S OFFSITE INSPECTOR PRIOR TO INITIATING PAVING TO RECEIVE DIRECTION FOR ANY PERMANENT OR TEMPORARY MODIFICATIONS TO THE APPROVED DRAWINGS REGARDING FINAL PAVEMENT TRANSITIONS, MARKINGS AND SIGNING THAT ARE REQUIRED TO MATCH ADJACENT ROADWAY SEGMENTS. THE CONTRACTOR SHALL PROVIDE A DRAWING FOR APPROVAL BY THE TRAFFIC ENGINEERING DIVISION DEPICTING ANY ADJUSTMENTS TO THE FINAL PAVEMENT MARKINGS AND SIGNAGE, WHICH MAY INCLUDE OMITTING, ADDING OR MODIFYING PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SUCH THAT ADEQUATE TRANSITIONS AND LANE TERMINATIONS BETWEEN ADJACENT ROADWAY SEGMENTS ARE CONSTRUCTED.

REVISED JULY 3, 2013

CITY OF LAS VEGAS TRAFFIC SIGNAL NOTES

1. ALL WORK PERFORMED ON ANY TRAFFIC SIGNAL COMPONENT MUST BE UNDER THE DIRECT ON-SITE SUPERVISION OF AN IMSA CERTIFIED TECHNICIAN. THE LEVEL OF CERTIFICATION REQUIRED SHALL BE LEVEL II.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ALL EXISTING UTILITIES. THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TO VERIFY IN THE FIELD THE LOCATIONS OF THEIR INSTALLATIONS 72 HOURS PRIOR TO CONSTRUCTION.

CALL-BEFORE-YOU-LOVERHEAD	1-702-227-2929
CALL-BEFORE-YOU-DIG	1-800-227-2600
STREETLIGHTS	1-702-229-6331
F.A.S.T.	1-702-432-5300

3. ALL TRAFFIC SIGNAL INSTALLATIONS SHALL CONFORM TO THE UNIFORM STANDARD DRAWINGS SPECIFICATIONS AND SPECIAL PROVISIONS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, VOLUMES I AND II, ADOPTED BY THE REGIONAL TRANSPORTATION COMMISSION APRIL 8, 1992 WITH ALL SUBSEQUENT REVISIONS.
4. SERVICE SHALL HAVE 1-60 AMP SINGLE POLE BREAKER FOR SIGNAL, AND ONE 40 AMP SINGLE POLE BREAKERS FOR STREET LIGHTS. SERVICE SHALL BE 200 AMP PADMOUNT.
5. LINE SIDE OF METER TO BE WIRED WITH THREE #3/0 AWG THW. LOAD SIDE SHALL BE WIRED WITH FOUR #4 AWG THW (2 BLACK, 2 WHITE) AND ONE #8 AWG THW (GREEN).
6. LUMINAIRES ON ALL SIGNAL POLES SHALL BE 400 WATT HIGH PRESSURE SODIUM CUTOFF (G.E. M400A) WITH MC-111 DISTRIBUTION. EACH LUMINAIRE SHALL HAVE AN INDIVIDUAL 1000 WATT P.E. CONTROL. FOR LUMINAIRES THERE SHALL BE 2(TWO)-#4 AWG THW CONDUCTORS FROM THE SERVICE TO THE CABINET. IN THE CABINET, THE #4 AWG THW CONDUCTORS SHALL BRANCH OFF INTO #10 AWG THW CONDUCTORS INDIVIDUALLY FUSED WITH 10 AMP FUSES. THERE SHALL BE NO SPLICES BETWEEN THE CABINET AND LUMINAIRE FIXTURES.
7. THE INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL BE WIRED TO THE LUMINAIRES PHOTO CELL FOR CONTROL WITH #10 AWG THW COPPER STRANDED WIRE (TYPICAL). THE SIGN SHALL BE WIRED TO THE LUMINAIRE DIRECTLY ABOVE IT. IN THE EVENT THERE IS NO LUMINAIRE ON THE TRAFFIC SIGNAL POLE, THE 1000 WATT P.E. CONTROL SHALL BE MOUNTED ON THE POLE CAP. ALL NEW ILLUMINATED STREET NAME SIGNS SHALL HAVE LIGHT EMITTING DIODE (LED) LAMPS PER SECTION 623 T.02.16 OF THE SPECIAL PROVISIONS.
8. CHECK CONDUIT AND CABLE SCHEDULE FOR CONDUIT, CABLE, AND WIRE SIZE. VERIFY ALL EXISTING CONDUIT RUNS.

CITY OF LAS VEGAS TRAFFIC SIGNAL NOTES

9. ALL PULLBOXES SHALL BE IN ACCORDANCE WITH UNIFORM STANDARD DRAWINGS NO. 705, NO. 706, AND NO. 707.
10. TRAFFIC SIGNAL CABLE SHALL BE 15 OR 25 CONDUCTOR #14 AWG SOLID (TYPICAL) CABLE AND SHALL CONFORM TO IMSA SPEC. NO. 20-1.
11. PEDESTRIAN PUSH BUTTONS SHALL BE AUDIBLE TACTILE "POLARA NAVIGATOR" TYPE (2 WIRE SYSTEM) OR CAMPBELL COMPANY ADVANCED ACCESSIBLE PEDESTRIAN SYSTEM BUTTONS WITH AAPS APC (CONTROLLER) IN ACCORDANCE WITH CITY OF LAS VEGAS SPECIAL PROVISIONS AND SECTION 623 OF THE CCA USS. PUSH BUTTON SIGNS SHALL BE R10-3E PER MUTCD, 2009 EDITION, WITH FULL MOUNTING BRACKETS, AS MODIFIED BY THE MANUFACTURER TO FIT ON A 9"X12" SIGN, AND SHALL BE PORCELAIN-ENAMELED METAL. ALL PUSH BUTTONS TO BE MOUNTED 42" ABOVE SIDEWALK. THE MAXIMUM HORIZONTAL REACH DISTANCE IS TO BE 10". SIDEWALK RAMPS WILL BE ACCORDING TO U.S.D. NO. 235 (1-4) LATEST EDITION. WHEN AN EXISTING SIGNAL WITH EXISTING AUDIBLE-TACILE PUSH BUTTONS IS MODIFIED, THE CONTRACTOR SHALL VERIFY NEW PEDESTRIAN PUSH BUTTONS OR CABINET EQUIPMENT MATCHES THE MANUFACTURE AND MODEL OF ANY EXISTING EQUIPMENT SCHEDULED TO REMAIN, TO PROVIDE A FULLY FUNCTIONING SYSTEM. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL CABINET EQUIPMENT, INCLUDING THE PEDESTRIAN PUSH BUTTON CONTROL UNIT, INTERFACE PANEL AND ANY REQUIRED HARNESSES, TO PROVIDE A FULLY FUNCTIONING SYSTEM.
12. THE ROUTING AND TERMINATION OF CONDUITS AND THE PLACING OF POLES AND CABINETS SHALL BE AS INDICATED ON THE PLANS. ALL CHANGES SHALL BE APPROVED BY THE ENGINEER.
13. MAST ARM R10-12 SIGNS TO BE ADJACENT (NO GAP) TO THE M-5 SIGNAL HEAD. WHERE FLASHING YELLOW ARROW LEFT TURN SIGNALS ARE USED, A MAST ARM R10-26 "LEFT TURN YIELD ON FLASHING YELLOW ARROW" SIGN SHALL BE MOUNTED ADJACENT TO THE M2A SIGNAL HEAD.
14. TRAFFIC SIGNAL CABINET SHALL BE A TYPE VIII CABINET UNLESS OTHERWISE SPECIFIED IN THE PLANS. THIS IS COMMONLY REFERRED TO AS AN "R" CABINET. THE CABINET SHALL CONFORM TO THE CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS AND THE CITY OF LAS VEGAS SPECIAL PROVISIONS. INSTALL CABINET NEAR THE R.O.W. LINE OR AS SHOWN ON THE DRAWINGS. THE TRAFFIC SIGNAL CONTROLLER CABINET, SHALL BE EQUIPPED WITH 16 LOAD BAY POSITIONS,SHALL BE A 48 DETECTOR CHANNEL R CABINET AND SHALL INCLUDE TWO (2) RACK-MOUNTED, 12 SLOT, LOOP DETECTION RACKS, WITH 2 DETECTOR LOOP CHANNELS PER SLOT FULLY WIRED SO THAT ALL CHANNELS ARE USABLE AND 4 CHANNEL SLOTS THAT CAN ACCOMMODATE VIDEO DETECTION CARDS. THE CABINET SHALL CONTAIN A 764 OPTICOM PHASE SELECTOR IN A 760 RACK, WITH A 768 AUXILIARY INTERFACE PANEL MOUNTED IN THE CABINET AND FULLY WIRED FOR GREEN SENSE CAPABILITIES.
15. THE CONTRACTOR SHALL SUPPLY A MALFUNCTION MANAGEMENT UNIT (MMU) TO THE CITY OF LAS VEGAS TRAFFIC SIGNAL REPAIR SHOP A MINIMUM OF FOURTEEN DAYS PRIOR TO SIGNAL TURN-ON OR PRIOR TO CONVERTING TO A NEW PHASING SCHEME, FOR TESTING AND PROGRAMMING PURPOSES. THE MMU SHALL BE A MODEL MMU-1600GE AS MANUFACTURED BY RENO A&E OR MODEL MMU2-16LEIP AS MANUFACTURED BY EBERLE DESIGN, INC., OR APPROVED EQUAL. THE CONTRACTOR SHALL DELIVER THE MMU TO AND PICKUP THE CONTROLLER AT 2824 E. CHARLESTON BOULEVARD. CONTRACTOR SHALL NOTIFY THE TRAFFIC SIGNAL REPAIR SHOP (229-6075) SEVEN DAYS PRIOR TO PICK UP. THE CITY, AT ITS DISCRETION, MAY PROVIDE A DIFFERENT MODEL MMU FOR INITIAL TURN-ON, IN WHICH CASE CITY PERSONNEL WILL SWAP THE MMU AFTER THE PROJECT IS ACCEPTED.
16. CONTRACTOR SHALL POTHOLE SIGNAL POLE LOCATIONS PRIOR TO ORDERING OF POLES.
17. ALL MAST ARMS TO BE HOT-DIP GALVANIZED BY THE MANUFACTURER THE MAST ARM IS TO BE FABRICATED WITH END TENON ONLY. THE END TENON SHALL BE FACTORY INSTALLED AND THE REMAINING TENONS SHALL BE FABRICATED IN THE FIELD AT THE LOCATION SHOWN ON THE PLANS OR AS DIRECTED BY THE TRAFFIC ENGINEER AND/OR HIS AUTHORIZED REPRESENTATIVE. FOR TENON FABRICATION DETAILS SEE CLARK COUNTY AREA U.S.D. NO. 806 SHEET 2. ALL WELDING SHALL CONFORM TO AWS D 2.0, "SPECIFICATION FOR WELDED HIGHWAYS AND RAILWAY BRIDGES," AND TO ANY ADDITIONAL REQUIREMENTS OF SECTION 623 OF THE SPECIFICATIONS. ALL EXPOSED WELDS, SHALL BE PAINTED AS PROVIDED FOR REPAIRING DAMAGED GALVANIZED SURFACES.
18. ALL VEHICLE AND PEDESTRIAN SIGNAL INDICATIONS SHALL HAVE LIGHT EMITTING DIODE (LED) TYPE INDICATIONS, IN CONFORMANCE TO CITY OF LAS VEGAS SPECIAL PROVISIONS AND TO SECTION 623 OF THE CCA USS. ALL PEDESTRIAN SIGNAL FACES SHALL PROVIDE "WALKING PERSON", "HAND", AND "COUNTDOWN" MESSAGES AS PROVIDED BY DURALIGHT MODEL #JXM-400-VIEIL OR DIALIGHT MODEL #430-6479-001X, OR APPROVED EQUAL. THE "COUNTDOWN" MESSAGE SHALL NOT FLASH. WHERE EXISTING SIGNALS ARE MODIFIED, THE CONTRACTOR SHALL VERIFY THAT LED PEDESTRIAN INDICATIONS FOR A SPECIFIC PHASE ARE OF THE SAME MANUFACTURE SO THAT THEY FUNCTION CORRECTLY OR SHALL REPLACE ALL COUNTDOWN PEDESTRIAN INDICATIONS FOR THAT PHASE.
19. VIDEO DETECTION SYSTEMS WILL BE EITHER ITERIS EDGE 2 WITH EDGECONNECT PAK, (IP ADDRESSABLE); PEEK VIDEOTRAK IQ (WITH ETHERNET PORT); OR TRAFICON VIP WITH VIEWCOM (IP ADDRESSABLE). WHEN VIDEO DETECTION IS SPECIFIED ON THE TRAFFIC SIGNAL PLANS. ALL VIDEO DETECTION SYSTEMS WILL BE STAND ALONE SYSTEMS TO INCLUDE ALL NECESSARY EQUIPMENT TO PROGRAM THE VIDEO DETECTION SYSTEM. A PROGRAMMING "MOUSE", KEYPAD OR LAPTAOP COMPUTER (IF REQUIRED FOR PROGRAMMING THE VIDEO DETECTION SYSTEM) AND APPROPRIATE SOFTWARE WILL BE SUPPLIED WITH EACH VIDEO SYSTEM. PERSONAL COMPUTERS (PCS) MAY NOT BE SUBSTITUTED FOR LAPTOPS. A VIDEO MONITOR (COLOR FLAT SCREEN) 9" TO 13" WILL BE SUPPLIED WITH EACH VIDEO DETECTION SYSTEM. EACH VIDEO CAMERA WILL HAVE POWER AND VIDEO CABLE DIRECTLY FROM THE CABINET. COAXIAL CABLE WILL BE TYPE 82811 (SOLID CENTER CONDUCTOR). CAMERAS THAT USE A PREFABRICATED CABLE INTEGRATING POWER AND COAXIAL CABLE INTO A SINGLE WEATHERPROOF CONNECTOR ARE ACCEPTABLE. "BNC" ARE THE ONLY ACCEPTABLE TERMINATION OF COAXIAL CABLES. CAMERAS WILL BE MOUNTED PER MANUFACTURER'S RECOMMENDATIONS AND PER CLV TRAFFIC ENGINEER APPROVAL. VIDEO CAMERAS SHALL BE COLOR AND SHALL BE MOUNTED ON A MINIMUM 6 FOOT RISER ON THE SIGNAL MAST ARM WITH EXTENSION BRACKETS (TYPE AB-0166-5-62 OR EQUIVALENT). THE LOCATION OF THE CAMERA ON THE MAST ARM SHALL BE APPROVED BY THE TRAFFIC SIGNAL SUPERVISOR. A VIDEO FILTER (CX06-BNYC OR EQUIVALENT) WILL BE INSTALLED IN THE SIGNAL CABINET FOR EACH CAMERA VIDEO INPUT. VIDEO DETECTION PROCESSORS AND COMMUNICATIONS CARDS SHALL BE PROVIDED WITH THE LATEST VERSIONS OF THE MANUFACTURER'S SOFTWARE. THE CONTRACTOR SHALL AIM CAMERAS AND PROGRAM AND CONFIGURE THE VIDEO DETECTION PROCESSORS TO PROVIDE A FULLY FUNCTIONING SYSTEM.

CITY OF LAS VEGAS TRAFFIC SIGNAL NOTES

20. WHERE NEW LOOPS WILL BE OVERLAID WITH NEW PAVEMENT, LOOP DETECTORS SHALL BE PREFORMED LOOPS AS MANUFACTURED BY RENO A & E OR NEVER-FAIL LOOP SYSTEMS, AND ALL LOOPS SHALL BE INSTALLED IN THE ROADWAY PRIOR TO PLACEMENT OF THE FINAL PAVEMENT LI

CLARK COUNTY TRAFFIC NOTES

1. ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HEREUNDER,REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
2. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY GROUND MOUNTED STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING COUNTY STREETS IMMEDIATELY AFTER FIRST GRADING WORK IS ACCOMPLISHED AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.
3. ALL CONSTRUCTION SIGNING, BARRICADING AND PAVEMENT MARKINGS SHALL CONFORM TO THE NEVADA WORK ZONE TRAFFIC CONTROL HANDBOOK — 1986 AND TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
4. IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL, OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE COUNTY TRAFFIC MANAGER.
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CLARK COUNTY AREA STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGNPOSTS SHALL BE INSTALLED IN ACCORDANCE WITH CLARK COUNTY AREA STANDARDS. ALL SIGNS SHALL USE CLASS VI SHEETING.
6. IF A PROPOSED STREET LIGHT STANDARD IS FIELD LOCATED TO WITHIN FIVE (5) FEET OF ANY SIGN SHOWN HEREON TO BE MOUNTED ON A SIGN POST, CHANGE SIGN MOUNTING TO ONE ON THE STREETLIGHT STANDARD.
7. PRIOR TO CONSTRUCTION, THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE CURRENT PLANNING DIVISION OF THE DEPARTMENT OF COMPREHENSIVE PLANNING.
8. ALL TRAFFIC SIGNAL POLE ASSEMBLIES, STEEL PEDESTAL FOR CABINETS AND STREET LIGHT POLES SHALL BE GALVANIZED PER ASTM A.123.
9. ALL STREET LIGHTING INSTALLATIONS EXCEPT NOTED ON THE STREET LIGHTING PLANS SHALL CONFORM TO THE UNIFORM STANDARD DRAWINGS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS CLARK COUNTY AREA, NEVADA, LATEST EDITION OF EACH.
10. THE FOLLOWING CLARK COUNTY UNDERGROUND FACILITIES MAY BE LOCATED IN YOUR PROJECT AREA: STREET LIGHTING, TRAFFIC SIGNALS, AND FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION (F.A.S.T.) INTERCONNECT CABLE. YOU MUST CONTACT CLARK COUNTY TRAFFIC MANAGEMENT DIVISION, OPERATIONS UNIT AT 455-6000 FOR LOCATIONS AT LEAST 48 HOURS PRIOR TO WORKING IN THE AREA. CLARK COUNTY IS NOT A MEMBER OF "CALL BEFORE YOU DIG" (UNDERGROUND SERVICE ALERT), AND A CALL TO THAT ORGANIZATION DOES NOT RELIEVE YOU OF LIABILITY FOR CLARK COUNTY FACILITIES.
11. F.A.S.T. INTERCONNECT CABLE POLICY IS IN EFFECT. INTERCONNECT CABLE MUST BE MAINTAINED AT ALL TIMES. DEVELOPER/CONTRACTOR SHALL PROVIDE TEMPORARY OVERHEAD INTERCONNECT CABLE WHILE PERMANENT CABLE IS BEING RELOCATED. TEMPORARY AERIAL INSTALLATION MUST BE ACCEPTABLE TO THE COUNTY TRAFFIC MANAGER AND TO F.A.S.T. ANY DAMAGE TO THIS CABLE IS DEEMED IN EMERGENCY BY F.A.S.T., CITY OF LAS VEGAS, CLARK COUNTY AND NDOT AND MUST BE REPAIRED IMMEDIATELY TO F.A.S.T. ACCEPTANCE. $2,500 PER DAY DAMAGES MAY BE ASSESSED AFTER 24 HOURS HAS ELAPSED FROM TIME OF BREAK OR DAMAGE.
12. ALL NEW OR REPLACEMENT TRAFFIC SIGNAL LOOPS SHALL BE INSTALLED USING CABLE-IN-DUCT WIRING, SHALL HAVE INDEPENDENT LEAD-IN WIRES FOR EACH LOOP FROM THE CONTROLLER TO THE PULL-BOX, AND EACH LEAD-IN SHALL BE INDIVIDUALLY TAGGED.
13. TRAFFIC SIGNAL PEDESTRIAN HEADS SHALL BE THE L.E.D. TYPE.
14. ELECTRICAL POWER SERVICE POINT LOCATION(S) FOR STREET LIGHTING AND TRAFFIC SIGNALS MUST BE INDICATED ON THE PLANS. IF CONNECTING TO AN EXISTING CIRCUIT, INDICATE LOCATION OF EXISTING SERVICE POINT FOR EACH CIRCUIT.
15. WHEN STREETLIGHTS ARE TO BE CONNECTED TO AN EXISTING CIRCUIT, THE ENGINEER MUST CERTIFY THAT THE EXISTING CIRCUIT IS CAPABLE OF HANDLING THE ADDITIONAL CIRCUIT LOAD.
16. CLARK COUNTY RESERVES THE RIGHT TO REJECT STREET LIGHT AND TRAFFIC SIGNAL POLES AND ASSEMBLIES WHICH HAVE A "STRIPED" APPEARANCE.
17. TWO WEEKS PRIOR TO BEGINNING OF CONSTRUCTION, MODIFICATION OR RELOCATION OF ANY TRAFFIC SIGNAL SYSTEM, WRITTEN NOTICE SHALL BE SUBMITTED TO THE CLARK COUNTY TRAFFIC MANAGEMENT DIVISION OF THE DATE THAT WORK WILL BEGIN.
18. THREE (3) NORMAL WORKING DAYS PRIOR TO TURN-ON OR COMPLETION OF MODIFICATION(S) TO A TRAFFIC SIGNAL SYSTEM, WRITTEN NOTICE SHALL BE SUBMITTED TO THE CLARK COUNTY TRAFFIC MANAGEMENT DIVISION THAT WORK IS BEING COMPLETED AND THE PROPOSED DATE OF COMPLETION.

RTC NOTES

1. THE CONTRACTOR SHALL NOT BE ALLOWED TO CLOSE MORE THAN ONE CONSECUTIVE BUS STOP ON THE SAME SIDE OF THE STREET. TEMPORARY CLOSURES SHALL BE PWD (PERSONS WITH DISABILITY) ACCESSIBLE BEFORE ANY BUS STOP CAN BE CLOSED. THE CONTRACTOR SHALL NOTIFY CARL SCARBROUGH AT (702) 676-1608 OR ERIC TRAASDAHL AT (702) 676-1633, AT LEAST SEVEN WORKING DAYS IN ADVANCE.
2. THE CONTRACTOR SHALL SUBMIT A BUS STOP CLOSURES SCHEDULE WITH THE TRAFFIC CONTROL PLAN. THE BUS STOP CLOSURE SCHEDULE SHALL IDENTIFY SPECIFIC DURATIONS AND TIMES OF THE DAY FOR ALL PROPOSED BUS STOP CLOSURES. BUS STOP CLOSURES ARE NOT TO EXCEED TWO CONSECUTIVE STOPS AT ONE TIME, OR MORE THAN 1,000 FEET AT A TIME. PERSONS WITH DISABILITIES SHALL HAVE ACCESS TO BUS STOPS. THE CONTRACTOR SHALL PROVIDE A 100 FOOT LONG BY 10 FEET WIDE GRAVELED TURN OUT AT TEMPORARY BUS STOPS.

REVISED FEBRUARY 14, 2013

RTC/FAST ITS NOTES

1. CONTRACTOR IS TO MAINTAIN AND KEEP OPERATIONAL ALL EXISTING ITS INFRASTRUCTURE WITHIN THE CONSTRUCTION LIMITS. IF ANY EXISTING ITS INFRASTRUCTURE IS DAMAGED DUE TO CONSTRUCTION, WITHIN THE PROJECT LIMITS, THE CONTRACTOR SHALL IMMEDIATELY CONTACT MR. JESUS "CHUY" MARMOLEJO (RTC/FAST MANAGER TRAFFIC SYSTEMS MAINTENANCE) AT 702-604-7078.

GENERAL NOTES FOR CIVIL DRAWINGS:

1. HORIZONTAL CONTROL: HORIZONTAL CONTROL DATUM SURVEY IS BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83 NGS 2002).
2. VERTICAL CONTROL: ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). BENCHMARKS AND/OR STRUCTURE ELEVATIONS FROM EXISTING SURVEYS OR REFERENCE DRAWINGS MAY RESULT IN VARIANCES WITH ELEVATIONS INDICATED ON THE DRAWINGS FOR EXISTING FACILITIES.
3. EXISTING UTILITIES AND STRUCTURES (UNDERGROUND, SURFACE, OR OVERHEAD) ARE INDICATED ONLY TO THE EXTENT THAT SUCH INFORMATION WAS KNOWN, OR MADE AVAILABLE TO, OR DISCOVERED BY THE ENGINEER IN PREPARING THE DRAWINGS. THE LOCATIONS, CONFIGURATIONS, AND ELEVATIONS OF SUBSURFACE FACILITIES AND UTILITIES ARE APPROXIMATE, AND NOT ALL UTILITIES AND FACILITIES MAY BE INDICATED. PIPING SIZES AND MATERIALS, WHERE KNOWN ARE DESIGNATED BASED ON AS-BUILT RECORDS AND INSPECTION DATA. CONTRACTOR TO VERIFY DURING INITIAL INSPECTION WORK. REPORT DISCREPANCIES TO THE ENGINEER. UTILITIES ARE NOT INDICATED IN ARCHITECTURAL ELEVATIONS, PROFILE OR SECTION DRAWINGS. THE ENGINEERING INVESTIGATIONS, LOCATION, AND DESIGNATION OF SUBSURFACE UTILITIES INDICATED IN THESE CONTRACT DOCUMENTS HAS BEEN PERFORMED TO QUALITY LEVEL C IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRINCIPLES AND PRACTICES AS OUTLINED IN ASCE STANDARD AND GUIDELINE BULLETIN CI/ASCE 38-02 UNLESS OTHERWISE DESIGNATED. WHERE SUCH ACTIVITIES HAVE BEEN TO A HIGHER LEVEL OF QUALITY, THE HIGHER QUALITY LEVEL FOR THE AFFECTED AREAS IS INDICATED IN THE CONTRACT DOCUMENTS.
4. "SCREENED" (LIGHT) DELINEATION INDICATED ON THE DRAWINGS DENOTES EXISTING FACILITIES. "SCREENED" INFORMATION WAS TAKEN FROM EXISTING CONSTRUCTION DRAWINGS AND DATA, IS FOR REFERENCE ONLY, AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE ORDERING OF MATERIALS AND BEGINNING OF CONSTRUCTION. "BOLD" DELINEATION IS A WORK TO BE CONSTRUCTED UNDER THIS CONTRACT.
5. PIPE SIZES AND MATERIALS, WHERE KNOWN ARE DESIGNATED BASED ON AS-BUILT RECORDS, AND INSPECTION DATA. CONTRACTOR SHALL VERIFY DURING INITIAL INSPECTION WORK. REPORT DISCREPANCIES TO THE ENGINEER.
6. DRAWINGS SHOW ONLY KNOWN SEWER PIPELINES AND LATERALS FROM AS-BUILT RECORDS. CONTRACTOR SHALL VERIFY EXISTENCE AND LOCATIONS OF OTHER SEWER PIPES AND LATERALS DURING INITIAL INSPECTION OF WORK.
7. CONTRACTOR TO MAINTAIN CONTINUOUS SEWER SERVICE AT ALL TIMES DURING CONSTRUCTION.
8. RIM ELEVATIONS AND INVERT ELEVATIONS SHOWN ON THE DRAWINGS ARE BY LICENSED SURVEYOR. CONTRACTOR TO VERIFY ELEVATIONS DURING INITIAL INSPECTION WORK.
9. ALL CONFINED SPACE ENTRY WORK SHALL COMPLY WITH STATE AND FEDERAL OSHA REQUIREMENTS.
10. CONTRACTOR SHALL OBTAIN RIGHTS-OF-ENTRY FROM PRIVATE PROPERTY OWNERS PRIOR TO ENTERING PRIVATE PROPERTY.
11. PIPES, MANHOLES AND LATERALS NOT SHOWN FOR REHABILITATION, REPLACEMENT OR ABANDONMENT ON DRAWINGS ARE EXCLUDED FROM THE WORK.
12. ALL PIPES DESIGNATED AS "TO BE REHABILITATED" SHALL BE LINED USING CURED-IN-PLACE PIPE (CIPP). CONTRACTOR SHALL VERIFY CONDITION OF PIPE FOR SUITABILITY OF CIPP INSTALLATION. CHANGES TO THE SCHEDULED REHABILITATION SHALL BE APPROVED, IN ADVANCE OF ANY WORK, BY THE ENGINEER.
13. NOT ALL MANHOLES LOCATED ON PIPES SCHEDULED FOR REHABILITATION SHALL BE COATED. ANY CHANGES TO THE SCHEDULED MANHOLE REHABILITATION SHALL BE APPROVED, IN ADVANCE OF ANY WORK, BY THE ENGINEER.
14. UNLESS OTHERWISE INDICATED ON THE DRAWINGS, CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISIONS.
15. MH DIAMETERS, IN GENERAL ARE STANDARD ECCENTRIC STRUCTURES IN ACCORDANCE WITH "SEWER SPECIFICATIONS".
16. MH INVERT ELEVATIONS SHOWN ON THE DRAWINGS REPRESENT THE APPROXIMATE CENTER OF THE MANHOLE INVERT OR INVERT OF INCOMING SEWERS.
17. REFERENCE "UNIFORM DESIGN AND CONSTRUCTION STANDARDS, CLARK COUNTY AREA" SECTION 600 FOR STANDARD TRAFFIC CONTROL DRAWINGS.
18. CALL BEFORE YOU DIG. CONTRACTOR SHALL VERIFY PRECISE LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STRUCTURES, WHETHER INDICATED ON THE DRAWINGS OR NOT, IN THE FIELD IN ADVANCE OF EXCAVATING, BY CONTACTING ALL UTILITIES AND OTHER AGENCIES, AND BY PROSPECTING. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL, DEMOLITION, RECONSTRUCTION, AND RECONNECTION OF EXISTING FACILITIES AS REQUIRED TO COMPLETE THE WORK. IF REQUIRED AFTER FIELD VERIFICATION, CONTRACTOR SHALL IMMEDIATELY COORDINATE WITH THE ENGINEER TO DETERMINE ANY NECESSARY MODIFICATIONS TO PROPOSED NEW WORK.
19. BEFORE CONSTRUCTION IS STARTED, CONTRACTOR SHALL COORDINATE WITH THE OWNER OF EACH UTILITY AND DEFINE THE REQUIREMENTS AND METHODS TO ACCOMMODATE THE PROTECTION, TEMPORARY SUPPORT, ADJUSTMENT, OR RELOCATION OF ANY UTILITIES AFFECTED BY THE PROPOSED NEW WORK.
20. CONTRACTOR SHALL COMPLY WITH THE GOVERNING AGENCY NPDES CONSTRUCTION REQUIREMENTS, AND SHALL PROVIDE APPROPRIATE MITIGATION MEASURES OR PROTECTION AND RESTORATION AT ALL LOCATIONS AS REQUIRED BY THEIR OPERATIONS, AND AS DIRECTED BY ENGINEER.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL PROPERTY CORNER MARKERS. PROPERTY CORNER MARKERS DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REESTABLISHED BY A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF NEVADA.
22. CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING TREES, SHRUBS, AND PLANTS, UNLESS OTHERWISE NOTED.
23. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING ROADS, BUILDINGS, OR OTHER STRUCTURES RESULTING FROM CONTRACTORS CONSTRUCTION ACTIVITIES. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE OWNER AND THE ENGINEER AT NO COST TO THE OWNER.
25. THE CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS TO ALL ADJOINING PROPERTIES ACCESSIBLE TO THE PUBLIC AND EMERGENCY VEHICLES. DESIGNS FOR MAINTAINING ACCESS WILL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE CONTROLLING AGENCY FOR REVIEW AND APPROVAL.
26. THE CONTRACTOR SHALL PREPARE AND SUBMIT TRAFFIC CONTROL PLAN (TCP) PER SPECIAL PROVISIONS 624. THE CONTRACTOR MUST HAVE AN APPROVED TCP PRIOR TO ANY CONSTRUCTION.
27. THE CONTRACTOR SHALL PREPARE AND SUBMIT DIVERSION OF FLOW PLAN PER SPECIAL PROVISIONS 695. THE CONTRACTOR MUST HAVE AN APPROVED BYPASS PUMPING PLAN PRIOR TO ANY CONSTRUCTION.
28. ONLY WORK ADJACENT TO AND WITHIN NDOT RIGHT-OF-WAY IS PROFILED.

CLARK COUNTY CONSTRUCTION NOTES

1. INSPECTIONS ARE REQUIRED. CALL 24 HOURS IN ADVANCE TO SCHEDULE AT (702) 455-4610. PERMIT, APPROVED PLANS, AND BARRICADE PLANS FOR THIS WORK MUST BE ON THE JOB SITE AT ALL TIMES.
2. EXACT LOCATION OF ALL SAW-CUT LINES SHALL BE DETERMINED IN THE FIELD BY A CLARK COUNTY INSPECTOR.
3. CURB AND GUTTER WITH A GRADE OF LESS THAN 4/10 OF ONE PERCENT SHALL BE CONSTRUCTED BY FORMING. EACH JOINT SHALL BE CHECKED FOR GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.
4. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE-HALF (1/2") INCH ABOVE THE LIP OF THE GUTTER (INCLUDING OPEN GRADE).
5. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE UNIFORM STANDARD SPECIFICATIONS AND STANDARD DRAWINGS CLARK COUNTY AREA NEVADA AND CLARK COUNTY SUPPLEMENT TO UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS, LATEST REVISION.
6. PRIVATE STREETS, CURBS, GUTTERS, AND VALLEY GUTTERS REFLECTED ON THESE PLANS ARE TO BE INSPECTED BY A CLARK COUNTY INSPECTOR.
7. WHEEL CHAIR RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS SHALL BE DETERMINED IN THE FIELD BY CLARK COUNTY PUBLIC WORKS INSPECTOR.
8. PROPER SIGNS, BARRIERS, BARRICADES AND LIGHTS SHALL BE PLACED AND MAINTAINED IN ACCORDANCE WITH THE LATEST MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS. TRAFFIC, SCHOOL, OR STREET SIGNS OF ANY KIND ARE NOT TO BE MOVED FOR ANY REASON WITHOUT FIRST COORDINATING WITH THE DEPARTMENT OF PUBLIC WORKS INSPECTIONS AT (702) 455-4610.
9. THIS PLAN DOES NOT AUTHORIZE CLOSURE OF ANY ROAD OR STREET.
10. NO OPEN TRENCH SHALL BE ALLOWED ACROSS ANY STREET OR WITHIN TEN (10) FEET OF ANY TRAVEL-WAY, EXCEPT WHEN WORK IS IN ACTUAL PROGRESS. AREAS COVERED BY ACCEPTABLE STEEL PLATE ARE NOT TO BE CONSTRUED AS A TRENCH. NO OPEN TRENCH IS PERMITTED IN EXCESS OF 500 FEET OR LENGTH NECESSARY TO ACCOMMODATE PIPE INSTALLATION IN A SINGLE DAY, WHICHEVER IS GREATER. ALL TRENCH CROSSINGS AND BACKFILL SHALL MEET THE STANDARD SPECIFICATION UNLESS OTHERWISE STATED.
11. A TEMPORARY PATCH IS TO BE IN PLACE AT THE END OF EACH WORK DAY WHERE THE BACKFILL IN THE TRENCH HAS BEEN COMPLETED AND PRIOR TO OPENING THE WORK AREA BACK TO TRAFFIC AND IS TO BE MAINTAINED BY THE PERMITTEE. A PERMANENT PATCH IS TO BE IN PLACE WITHIN THIRTY (30) DAYS AFTER THE INSTALLATION OF THE TEMPORARY PATCH.
12. COMPACTION TESTS ARE REQUIRED.

LVVWD STANDARD NOTES

LVVWD PROJECT # 124895

1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7171) TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO THE REQUESTED LVVWD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT# IDENTIFIED ABOVE.
2. ALL WORK SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND TO THE 2010 EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS). THE LATEST EDITION OF UDACS SHALL SUPERSEDE ANY CONFLICTS CONTAINED IN THE APPROVED DRAWINGS AND/OR SPECIFICATIONS.
3. ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
8. ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE 2010 EDITION OF THE UDACS.
9. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD DISTRIBUTION SYSTEM.
10. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3802, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
11. ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.14.01, AND APPROVED BY THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
12. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD PRE-APPROVED MATERIALS AND MANUFACTURER'S LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.
13. TELEPHONE "CALL BEFORE YOU DIG" AT "811" OR 1-800-227-2600
14. THE INSTALLATION OF LAS VEGAS VALLEY WATER DISTRICT (LVVWD) MUNICIPAL WATER FACILITIES WITHIN ALL STREETS IS ASSUMED TO BE IN COMPLIANCE WITH THE UNIFORM STANDARDS, INCLUDING THE PLACEMENT OF ASPHALT PAVING STREET SURFACES. ANY REPAIR WORK DONE BY THE LVVWD TO THE MUNICIPAL FACILITIES WILL INCLUDE THE PLACEMENT OF ANY APPROPRIATELY SIZED ASPHALT REPAIR PATCH ON THE STREET SURFACE.

ANY DECORATIVE PAVING SURFACE WITHIN THE STREET IS THE RESPONSIBILITY OF THE OWNER'S ASSOCIATION, OR THE INDIVIDUAL PROPERTY OWNERS IF NO OWNER'S ASSOCIATION IS IN EXISTENCE, OR THE AGENCY HAVING JURISDICTION. DECORATIVE SURFACE MATERIALS PLACED WITHIN THE TEN FOOT EASEMENT ABUTTING A PUBLIC OR PRIVATE STREET, IF DISTURBED BY THE LVVWD DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVVWD WITH AN APPROPRIATELY SIZED PLAIN FINISH CONCRETE PATCH. THE LVVWD WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE RESTORATION OF, ANY DECORATIVE PAVING SURFACE WITHIN THE STREET. THE LVVWD WILL NOT ATTEMPT TO MATCH COLOR OR FINISH OF ANY ADJACENT MATERIALS.

LVVWD REQUIREMENT FOR BELOW GRADE INSTALLATION

PRIOR TO COMMENCEMENT OF WORK IN ANY LOCATION WHERE THE CONTRACTOR ELECTS TO TEMPORARILY INSTALL THE BYPASS LINE BELOW PAVEMENT, A SHOP DRAWING SUBMITTAL INDICATING THE MEANS AND METHOD MUST BE SUMITTED TO AND APPROVED BY LVVWD FOR SEWER-WATER SEPARATION MITIGATION.

CONSTRUCTION KEY NOTES:

1. REHABILITATE MANHOLE WITH COATING SYSTEM PER DETAIL 1, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691. REMOVE T-LOCK FROM MANHOLES WITH T-LOCK LINING.
2. REPAIR CIPP END SEAL TERMINATION/BENCH AND TIE-IN WITH MANHOLE COATING SYSTEM PER DETAIL 2, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691.
3. INSTALL CIPP LINER IN EXISTING PIPE PER SPECIAL PROVISIONS 690. REMOVE WELD STRIPS AND LINER AS NEEDED TO PROVIDE A SMOOTH SURFACE.
4. FOR CIPP LINER TERMINATION AND/OR MANHOLE REHABILITATION SEE DETAIL 2, SHT DT01. FOR CIPP LINER THROUGH MANHOLE SEE DETAIL 1, SHT DT01. REMOVE T-LOCK FROM MANHOLES PRIOR TO REHABILITATION.
5. INSTALL CIPP SECTIONAL LINER TO REHABILITATE A SINGLE POINT REPAIR IN EXISTING PIPE PER DETAIL 1, SHT DT02 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 690 AT STA 48+52.34 AND STA 53+40.13.
6. INSTALL 4-INCH TOP HAT LATERAL LINER
7. PERMANENT FLOW MONITORING MANHOLE. SEE SPECIAL PROVISIONS 105 PARA 105.07.F.
8. TEMPORARY FLOW MONITORING MANHOLE

CONSTRUCTION BYPASS KEY NOTES:

1. PERMANENT FLOW MONITORING MANHOLE. SEE SPECIAL PROVISIONS 105 PARA 105.07.F.
2. TEMPORARY FLOW MONITORING MANHOLE

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE: 1/25/17 PROJECT# 124895

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY

CITY OF LAS VEGAS — DEPARTMENT OF PUBLIC WORKS — CAPITAL PROJECT MANAGEMENT

PREPARED FOR: CITY OF LAS VEGAS

H# 55545	BID# 16.55545	DESIGNED BY:	MAF
DATE: JANUARY 2017		DRAWN BY:	ARE
SUBMITTAL STAGE: 100% FINAL		CHECKED BY:	GAG

TITLE: DOWNTOWN INTERCEPTOR SEWER REHABILITATION PHASE 2

SHEET: GENERAL NOTES II

STATE OF NEVADA — PROFESSIONAL ENGINEER — MICHAEL FLEURY — Exp: 06-30-17 — CIVIL — No. 20947 — 1/10/17

SHEET GN06

7 OF 39

DRAWING NO. 307V1111

PROJ#:124895 QS-162-10-NW,161-05-SW

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6/9/15

CITY OF LAS VEGAS - DOWNTOWN INTERCEPTOR PHASE 2

HORIZONTAL CONTROL SURVEY

BEING A PORTION OF OF SECTIONS 1-3 AND 10-12, TOWNSHIP 21 SOUTH, RANGE 61 EAST, AND SECTIONS 5-8, TOWNSHIP 21 SOUTH, RANGE 62 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA

BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS AND LAS VEGAS HIGH ELEVATION ZONES, NORTH AMERICAN DATUM OF 1983 (NAD83); SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

FOUND MONUMENT INFORMATION					
MON NO.	INTERSECTION	DESCRIPTION	NORTHING	EASTING	ELEVATION
1	WEST OF SAHARA AVE & PARADISE ROAD	BRASS CAP IN WELL PLS 5094	617494.4130	272068.4680	2039.25'
2	SAHARA AVE & 6TH ST.	BRASS CAP IN WELL PLS 12203	617614.1200	274931.7980	2022.37'
3	SAHARA AVE & MARYLAND PKWY	BRASS CAP IN WELL PLS 5094	617736.5580	277821.4380	1999.71'
4	SAHARA AVE & SPENCER ST.	BRASS CAP IN WELL PLS 10203	617777.5000	280522.2660	1939.98'
5	SAHARA AVE & S EASTERN AVE	BRASS CAP IN WELL	617744.8020	283150.1230	1888.89'
6	SAHARA AVE & ATLANTIC AVE	BRASS CAP IN WELL PLS 11585	617725.6790	284467.7960	1868.69'
7	SAHARA AVE. & MCLEOD DR.	BRASS CAP IN WELL PLS 12203	617706.8590	285785.4520	1853.70'
8	GLEN AVE & JACYRA AVE	BRASS CAP SIDEWALK NO PLS	617755.2900	288423.4400	1824.80'
9	GLEN AVE & DALHART AVE	ALUMINUM CAP PLS 4046	617751.3740	289741.3670	1810.58'
10	GLEN AVE & MCLAURINE AVE	ALUMINUM CAP PLS ILLEGIBLE	617750.2490	290071.3400	1806.84'
11	GLEN AVE. & S. SANDHILL RD.	BRASS CAP IN CONCRETE PLS 15446	617747.2800	291060.6510	1790.91'
12	SAHARA AVE & S WALNUT RD.	BRASS CAP PLS 7635	617725.8840	292386.2240	1781.58'
13	SAHARA AVE & S LAMB BLVD.	BRASS CAP IN WELL	617703.8720	293747.1840	1771.88'
14	SAHARA AVE & ARDEN ST.	BRASS CAP IN WELL PLS 7635	617713.4930	296326.3810	1745.24'
16	SANTA CLARA DR NORTH OF SAHARA AVE	AERIAL PANEL #1	617947.9960	272990.6980	2033.61'
17	JOE W BROWN DR SOUTH OF SAHARA AVE	AERIAL PANEL #2	617008.1300	273520.3500	2030.65'
18	NORTH OF STATE ST AND SAHARA AVE	AERIAL PANEL #3	618234.2580	275402.7320	2021.47'
19	STATE ST SOUTH OF SAHARA AVE	AERIAL PANEL #4	617078.4920	275529.9540	2018.16'
20	MARONEY AVENUE NORTH OF SAHARA AVE	AERIAL PANEL #5	618180.5880	278428.3630	1993.23'
21	SOUTH OF MARONEY AVENUE AND SAHARA AVE	AERIAL PANEL #6	617212.8460	278558.3460	1995.01'
22	SPENCER ST NORTH OF SAHARA AVE	AERIAL PANEL #7	618266.0220	280540.5900	1934.79'
23	BRUCE ST SOUTH OF SAHARA AVE	AERIAL PANEL #8	617077.6950	281194.6900	1929.23'
24	EASTERN AVENUE NORTH OF SAHARA AVE	AERIAL PANEL #9	618515.7600	283167.3930	1885.43'
25	EASTERN AVENUE SOUTH OF SAHARA AVE	AERIAL PANEL #10	617012.8270	283168.4930	1893.86'
26	MCLEOD ST NORTH OF SAHARA AVE	AERIAL PANEL #11	618232.2200	285802.4930	1850.55'
27	MCLEOD ST SOUTH OF SAHARA AVE	AERIAL PANEL #12	616994.4130	285790.2570	1857.12'
28	PALM ST NORTH OF SAHARA AVE	AERIAL PANEL #13	618616.6480	288421.1140	1819.46'
29	JACYRA AVENUE SOUTH OF GLEN AVENUE	AERIAL PANEL #14	617578.0150	288396.2130	1825.58'
30	SANDHILL ROAD NORTH OF SAHARA AVE	AERIAL PANEL #15	618862.5190	291038.3100	1784.51'
31	SANDHILL ROAD AND THE FLAMINGO WASH	AERIAL PANEL #16	616986.6390	291120.2700	1789.39'
32	LAMB BOULEVARD NORTH OF SAHARA AVE	AERIAL PANEL #17	618365.2240	293730.5760	1766.75'
33	LAMB BOULEVARD SOUTH OF SAHARA AVE	AERIAL PANEL #18	616896.2860	293737.7470	1778.49'

REFERENCES

PLAT MAPS

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BOOK 4, PAGE 83 OF PLATS
BOOK 5, PAGE 59 OF PLATS
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BOOK 5, PAGE 89 OF PLATS
BOOK 35, PAGE 15 OF PLATS
BOOK 49, PAGE 8 OF PLATS
BOOK 102, PAGE 78 OF PLATS

PARCEL MAPS

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FILE 9, PAGE 85 OF PARCEL MAPS
FILE 33, PAGE 17 OF PARCEL MAPS
FILE 55, PAGE 27 OF PARCEL MAPS
FILE 94, PAGE 91 OF PARCEL MAPS
FILE 97, PAGE 79 OF PARCEL MAPS
FILE 108, PAGE 80 OF PARCEL MAPS
FILE 114, PAGE 13 OF PARCEL MAPS

SURVEYS

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FILE 189, PAGE 49 OF SURVEYS
FILE 190, PAGE 98 OF SURVEYS
FILE 191, PAGE 73 OF SURVEYS
FILE 194, PAGE 98 OF SURVEYS

BENCHMARK NO. 1

CITY OF LAS VEGAS VERTICAL CONTROL #12LV113SSW6

RIVET AND PLATE IN TOP OF CURB AT NORTHWEST CORNER OF SANTA ROSA DR AND SAHARA AVENUE.

ELEVATION = 2028.40' (FEET)

NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88)

BENCHMARK NO. 2

CITY OF LAS VEGAS VERTICAL CONTROL #08LV112SES

RIVET AND PLATE IN TOP OF CURB AT NORTHWEST CORNER OF SAHARA AVENUE AND EASTERN AVENUE.

ELEVATION = 1889.55' (FEET)

NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88)

BENCHMARK NO. 3

CLARK COUNTY VERTICAL CONTROL #80125S4

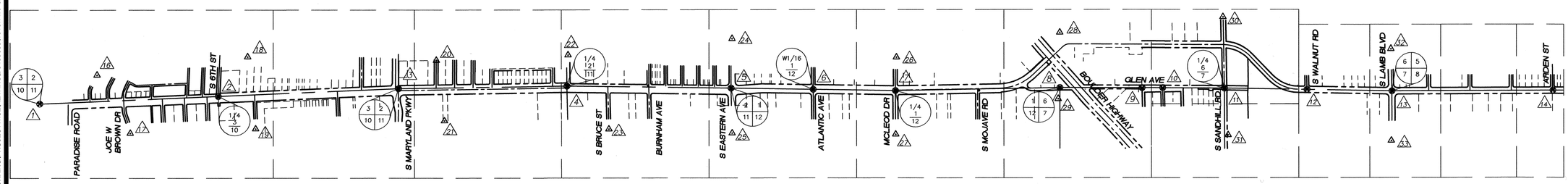
RIVET AND PLATE IN TOP OF CURB AT NORTHEAST CORNER OF SAHARA AVENUE AND ARDEN AVENUE.

ELEVATION = 1744.57 (FEET)

NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88)

CITY LIMITS NOTE

ACCORDING TO GIS DATA FROM LOCAL ENTITIES, THE CITY OF LAS VEGAS LIMITS LIE NORTH OF THE SECTION LINE ALONG SAHARA AVENUE WEST OF BOULDER HIGHWAY. ALL OTHER PORTIONS OF THE PROJECT LIE WITHIN CLARK COUNTY.



HORIZON SURVEYS, LLC
10501 WEST GOWAN ROAD, SUITE 200
LAS VEGAS, NEVADA 89129
PHONE (702) 228-5066
FAX (702) 228-0677
WWW.HORIZONSURVEYS.COM

NO.	DATE	SHEET	REVISIONS

PREPARED BY
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

H# 53545 | BID# 16.53545
DATE: JANUARY 2017 | DESIGNED BY: MAF
SUBMITTAL STAGE: 100% FINAL | DRAWN BY: ARE
CHECKED BY: GAG

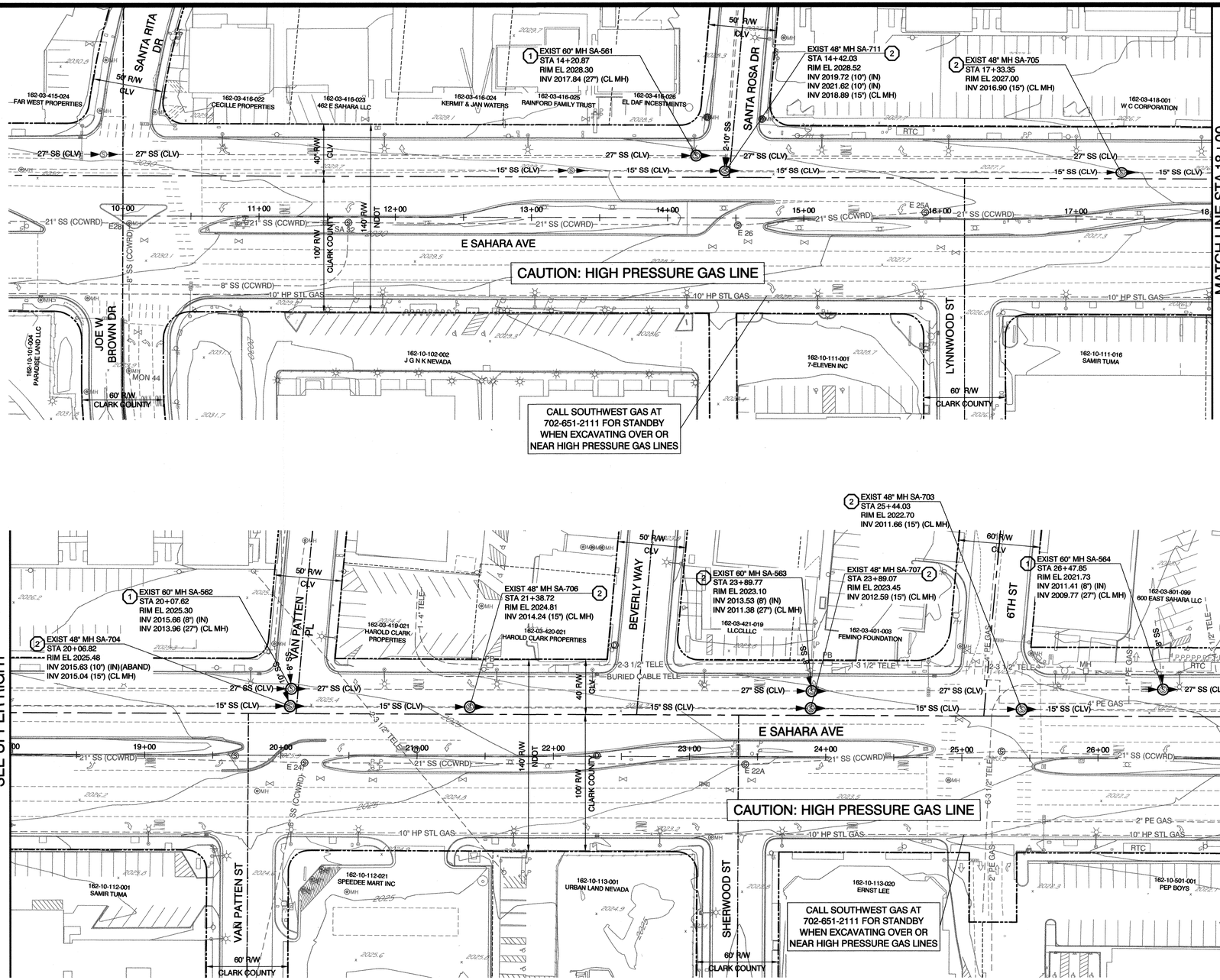
TITLE
DOWNTOWN INTERCEPTOR SEWER REHABILITATION PHASE 2

SHEET
SURVEY HORIZONTAL COORDINATES

STATE OF NEVADA
DENNIS M. JENSEN
No. 5859
PROFESSIONAL
EXP: 06-30-17

SHEET
GN07
8 OF 39
DRAWING NO.
307V1111

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GRAPHIC SCALE

NORTH

(IN FEET)

1 inch = 40 ft.

Call before you Dig 811 1-800-227-2600 or 1-702-455-7544

Avoid cutting overhead utility lines. It's costly.

Call before you do Overhead 1-702-593-6111

Call Before You Dig Underground 1-702-455-7511 or 1-702-729-6611

GENERAL NOTES:

1. SEE DRAWING GN02 FOR OVERALL SHEET INDEX.
2. SEE DRAWING GN04 FOR DESIGN DATA.
3. SEE DRAWING GN05 AND GN06 FOR GENERAL, CIVIL AND OVERALL CONSTRUCTION KEY NOTES.

CONSTRUCTION KEY NOTES:

1. REHABILITATE MANHOLE WITH COATING SYSTEM PER DETAIL 1, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691. REMOVE T-LOCK FROM MANHOLES WITH T-LOCK LINING.
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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE: 1/25/17 PROJECT# 124895

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY

CITY OF LAS VEGAS NEVADA

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

BID# 16.53545
I# 53545
DESIGNED BY: XXX
DATE: JANUARY 2017
DRAWN BY: XXX
SUBMITTAL STAGE:
100% FINAL
CHECKED BY: XXX

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

SHEET
SAHARA AVE PLAN
STA 10+00 TO STA 27+00

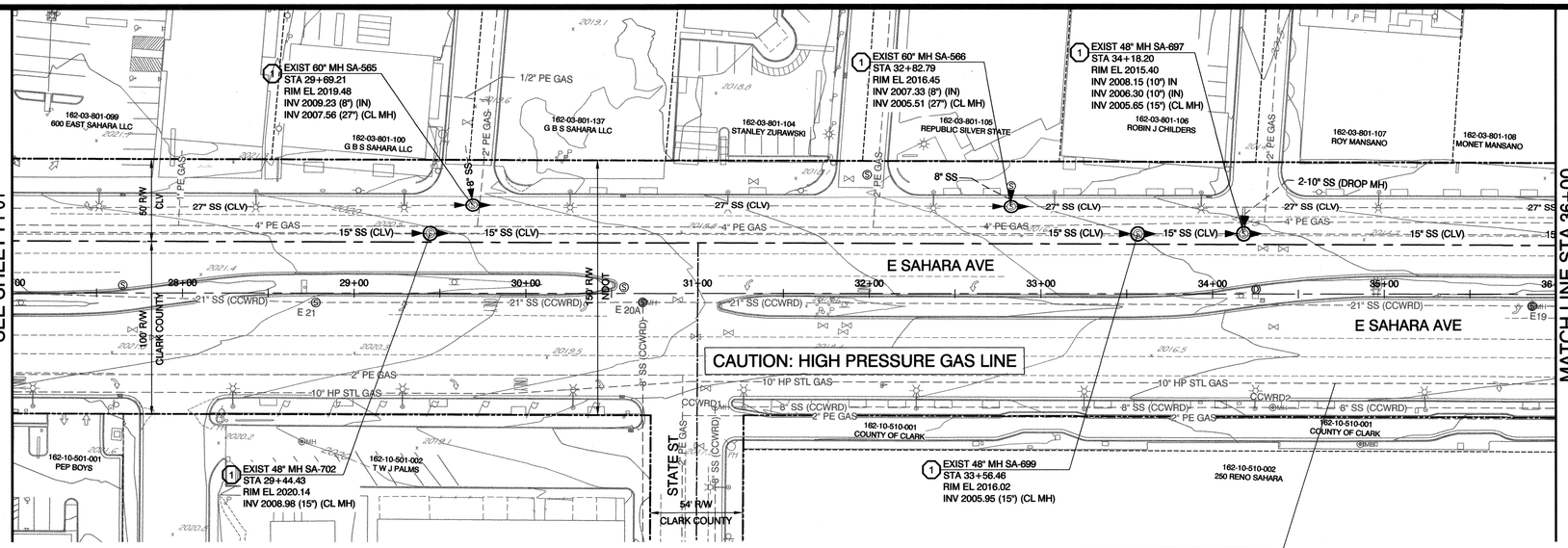
STATE OF NEVADA
PROFESSIONAL ENGINEER
MICHAELA FLEURY
Exp: 06-30-17
CIVIL
No. 20947
1/10/17

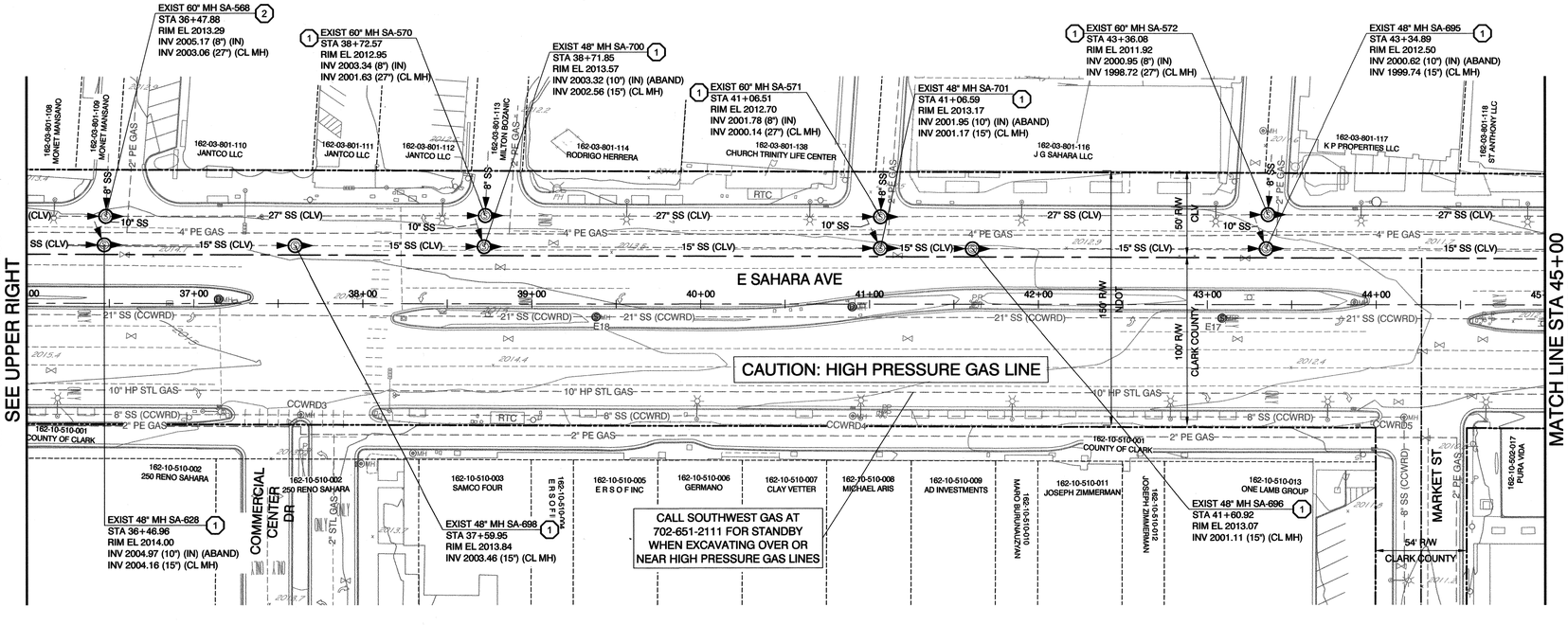
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9 OF 39

DRAWING NO.
307V1111

PROJ.#:124895 QS:162-10-NW,161-05-SW

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GRAPHIC SCALE

NORTH

(IN FEET)

1 inch = 40 ft.

Call before you Dig — Call 811 — 1-800-227-2600 or 1-702-455-7544

Avoid cutting overhead utility lines, it's costly — Call before you do Overhead 1-702-593-6111 OVERHEAD SERVICE ALERT

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(2) REPAIR CIPP END SEAL TERMINATION/BENCH AND TIE-IN WITH MANHOLE COATING SYSTEM PER DETAIL 2, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691

NOT ALL UTILITIES ARE SHOWN WEST OF BOULDER HIGHWAY BECAUSE CONSTRUCTION IS LIMITED TO MH COVER REMOVAL AND INTERNAL MH REHABILITATION. NO EXCAVATION OF ANY KIND.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE: 1/25/17 PROJECT# 124895

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY

CITY OF LAS VEGAS NEVADA

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

BID# 16.53545
DESIGNED BY: MAF
DRAWN BY: ARE
CHECKED BY: GAG

P#: 53545
DATE: JANUARY 2017
SUBMITTAL STAGE:
100% FINAL

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

SHEET
SAHARA AVE PLAN
STA 27+00 TO STA 45+00

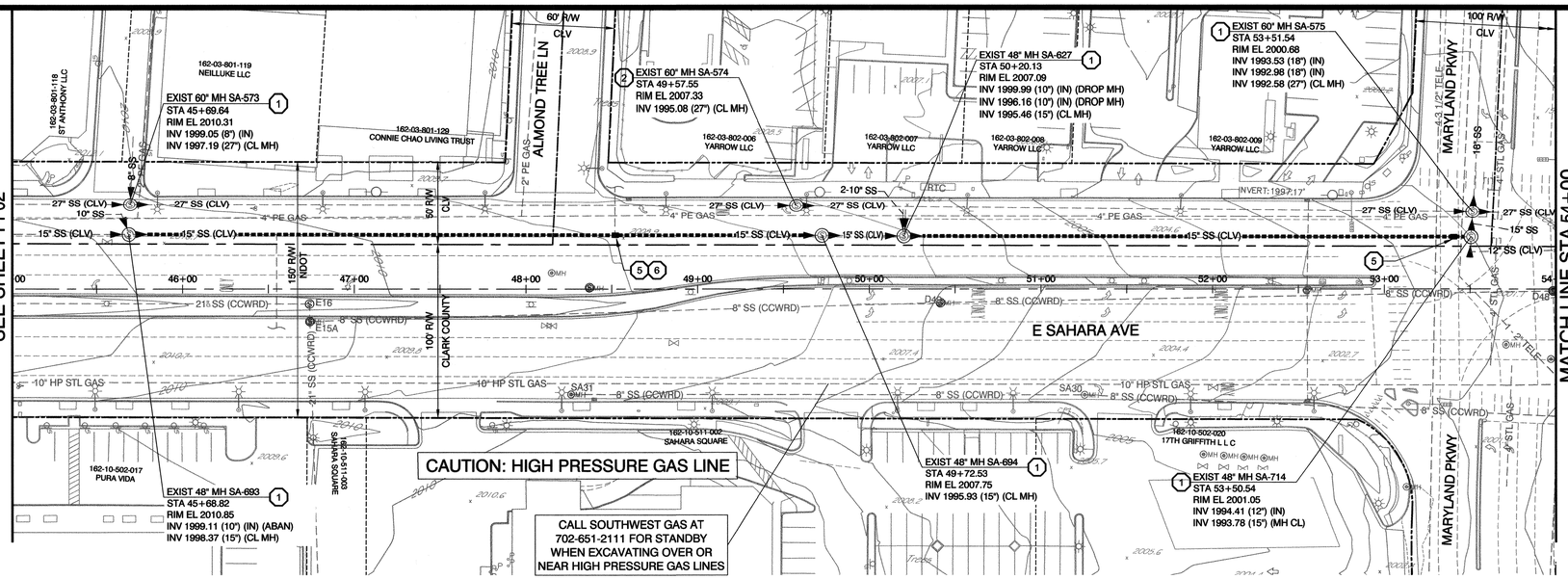
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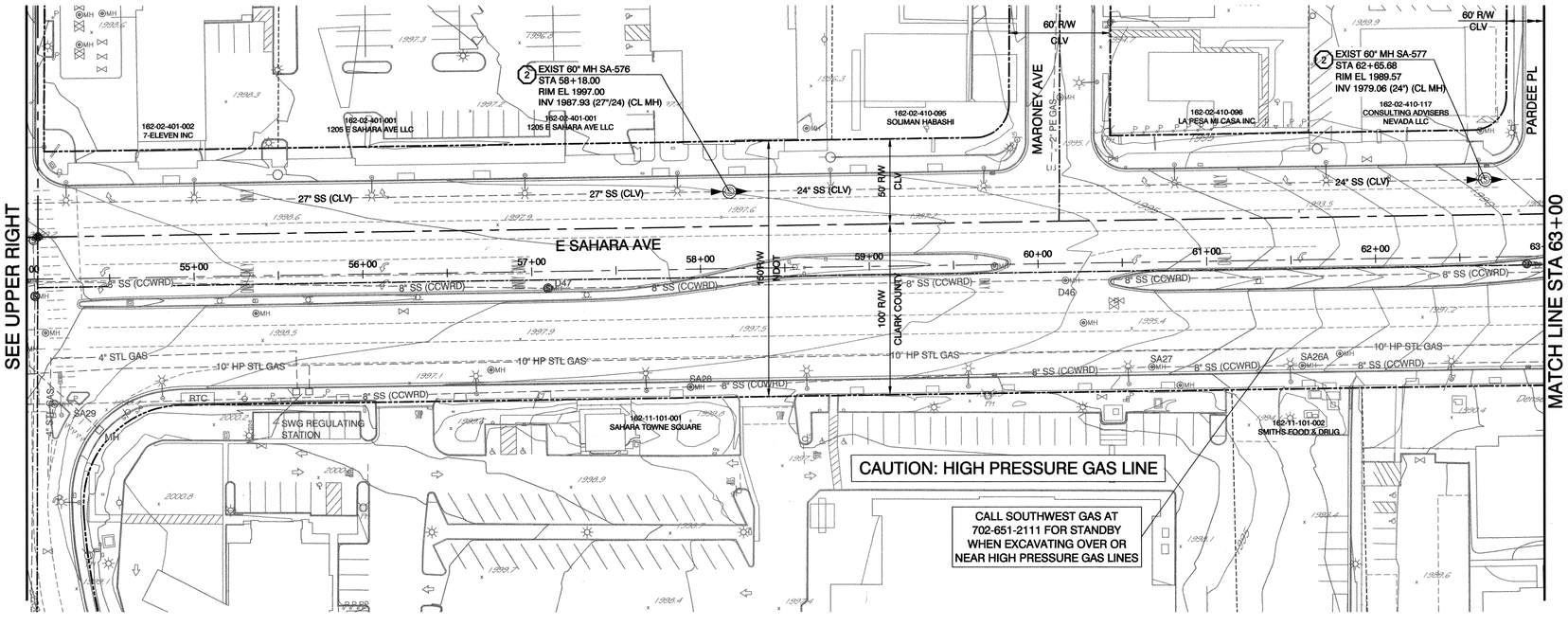
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DRAWING NO.
307V1111

PROJ#:124895 QS:162-10-NW\161-05-SW

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6/9/15





APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE: 1/25/17 PROJECT# 124895

GRAPHIC SCALE

NORTH

(IN FEET)

1 inch = 40 ft.

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(5) INSTALL CIPP SECTIONAL LINER TO REHABILITATE A SINGLE POINT REPAIR IN EXISTING PIPE PER DETAIL 1, SHT DT02 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 690 AT STA 48+52.34 AND STA 53+40.13. CONTRACTOR TO VERIFY LOCATIONS.

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carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY

CITY OF LAS VEGAS NEVADA

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

H# 53545 | BID# 16.53545

DATE: JANUARY 2017 | DESIGNED BY: MAF

SUBMITTAL STAGE: 100% FINAL | DRAWN BY: ARE | CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

SHEET
SAHARA AVE PLAN
STA 45+00 TO STA 63+00

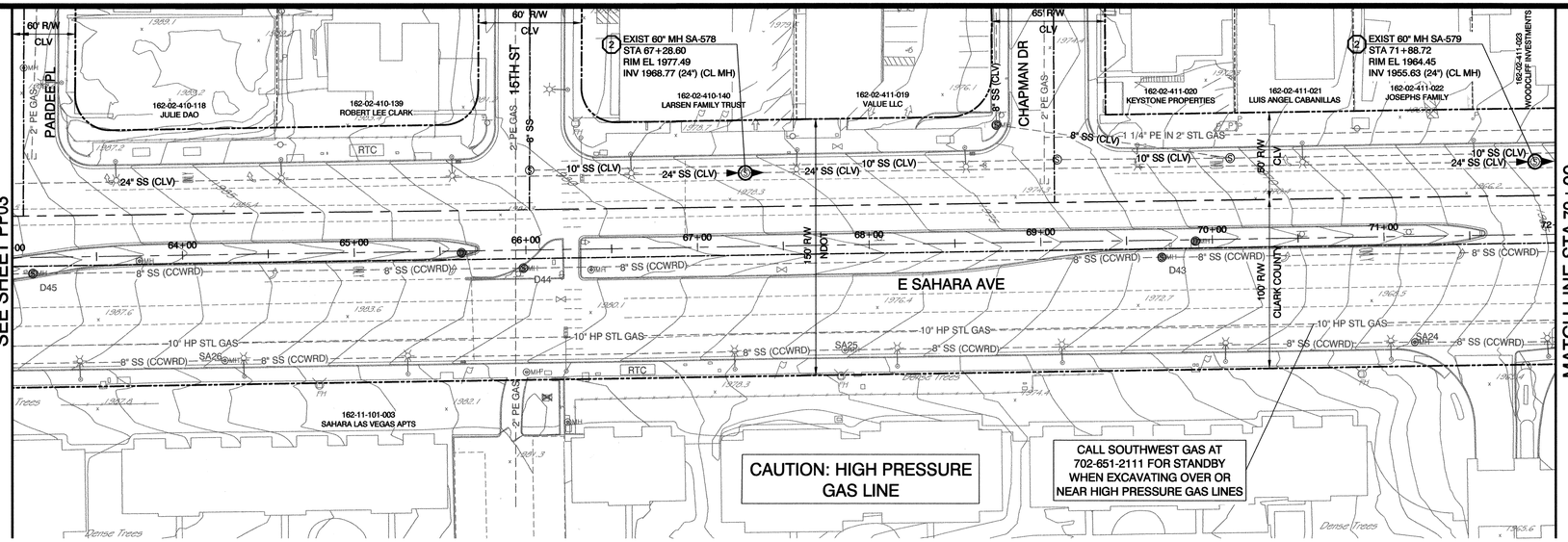
STATE OF NEVADA
MICHAEL A. FLEURY
Exp: 06-30-17
CIVIL
No. 20941
PROFESSIONAL ENGINEER

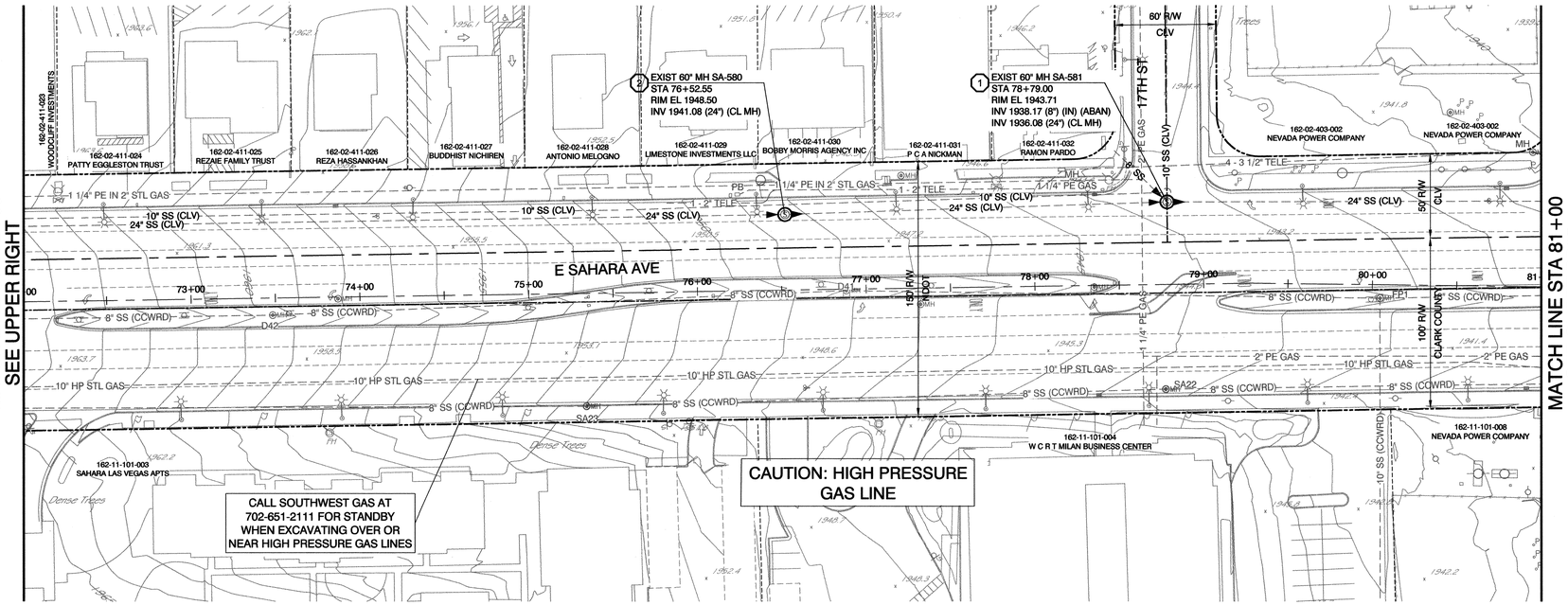
SHEET
PP03
11 OF 39

DRAWING NO.
307V1111

PROJ#:124895 QS-162-10-NW,161-05-SW

6/9/15 C:\PW_WORKING\PROJECTWISE\AEVANS\D04536701\0167A10-PP03.DWG





APPROVED FOR CONSTRUCTION

4 / DISHARI FOR / DSM

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE: 1/25/17 PROJECT# 124895

NORTH

GRAPHIC SCALE

(IN FEET)

1 inch = 40 ft.

Call before you Dig 811 1-800-227-2600 or 1-702-455-7544

Avoid cutting overhead utility lines. It's costly. Call before you do Overhead 1-702-493-6111 overhead service wires only!

Call Before You Dig Underground 1-702-455-7511 1-702-229-6611 for non-NV Power Co. lines

GENERAL NOTES:

1. SEE DRAWING GN02 FOR OVERALL SHEET INDEX.
2. SEE DRAWING GN04 FOR DESIGN DATA.
3. SEE DRAWING GN05 AND GN06 FOR GENERAL, CIVIL AND OVERALL CONSTRUCTION KEY NOTES.

CONSTRUCTION KEY NOTES:

(1) REHABILITATE MANHOLE WITH COATING SYSTEM PER DETAIL 1, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691. REMOVE T-LOCK FROM MANHOLES WITH T-LOCK LINING.

(2) REPAIR CIPP END SEAL TERMINATION/BENCH AND TIE-IN WITH MANHOLE COATING SYSTEM PER DETAIL 2, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691.

NOT ALL UTILITIES ARE SHOWN WEST OF BOULDER HIGHWAY BECAUSE CONSTRUCTION IS LIMITED TO MH COVER REMOVAL AND INTERNAL MH REHABILITATION. NO EXCAVATION OF ANY KIND.

NO.	DATE	SHEET	REVISIONS

PREPARED BY

CITY OF LAS VEGAS REWARD

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

H# 53545 | BID# 16.53545

DATE: JANUARY 2017 | DESIGNED BY: MAF

SUBMITTAL STAGE: 100% FINAL | DRAWN BY: ARE | CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

SHEET
SAHARA AVE PLAN
STA 63+00 TO STA 81+00

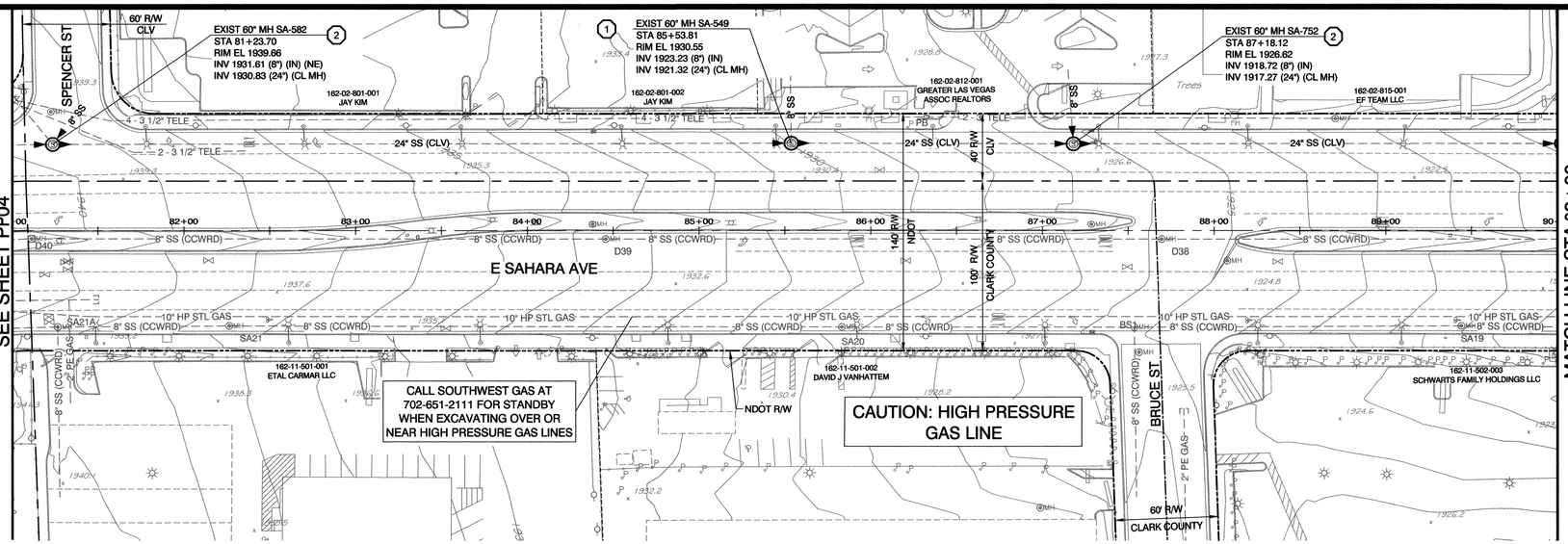
STATE OF NEVADA
MICHAEL A. FLEURY
No. 20947
Exp: 06-30-17
CIVIL
PROFESSIONAL ENGINEER
1/10/17

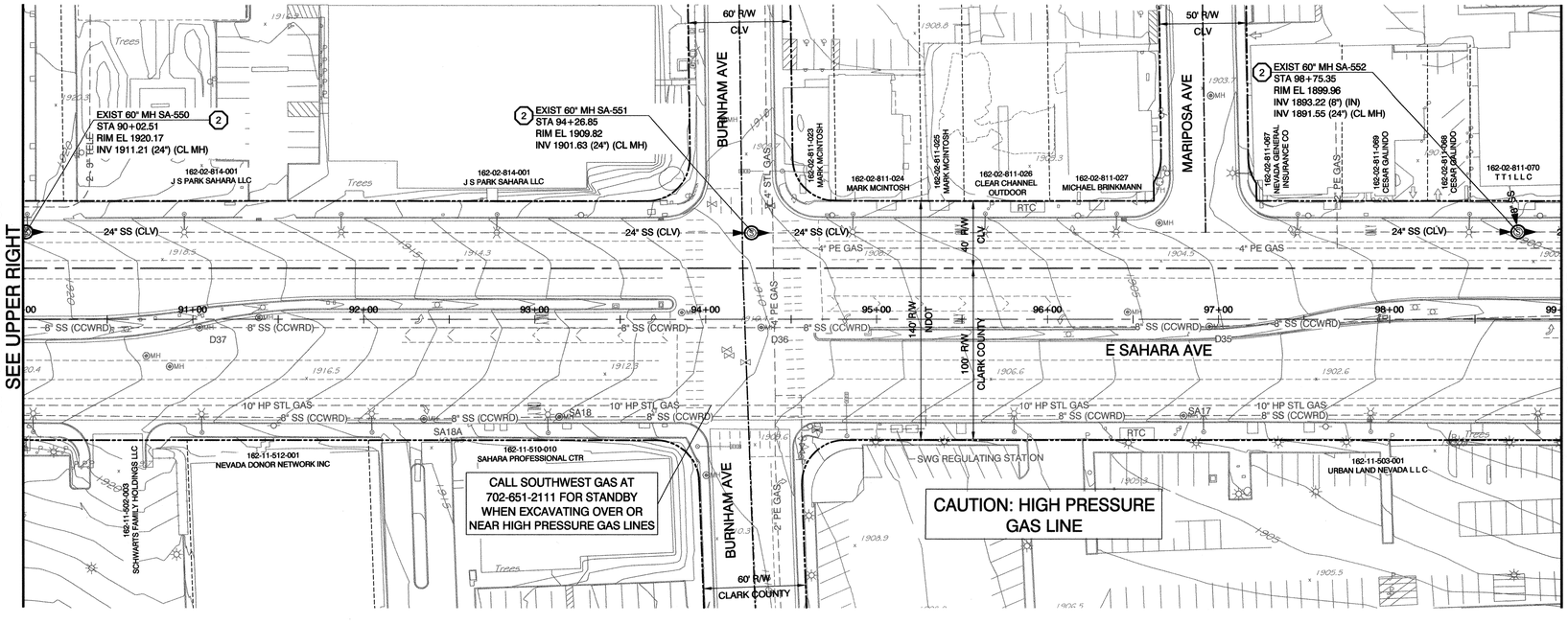
SHEET
PP04
12 OF 39
DRAWING NO.
307V1111

PROJ.#:124895 QS:162-10-NW,161-05-SW

carollo

6/9/15 C:\PW_WORKING\PROJECTWISE\AE\VANS\D04536701\10167A10-PP04.DWG





APPROVED FOR CONSTRUCTION

for Director

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE: 1/25/17 PROJECT# 124895

GRAPHIC SCALE

NORTH

(IN FEET)

1 inch = 40 ft.

Call before you Dig — Call 811 — 1-800-227-2600 — 1-702-455-7544

Avoid cutting overhead utility lines. It's costly. Call before you do Overhead 1-702-593-6111 (extension 65002 again)

Call Before You Dig Under Ground 1-702-455-7511 — 1-702-729-6611

GENERAL NOTES:

1. SEE DRAWING GN02 FOR OVERALL SHEET INDEX.
2. SEE DRAWING GN04 FOR DESIGN DATA.
3. SEE DRAWING GN05 AND GN06 FOR GENERAL, CIVIL AND OVERALL CONSTRUCTION KEY NOTES.

CONSTRUCTION KEY NOTES:

(1) REHABILITATE MANHOLE WITH COATING SYSTEM PER DETAIL 1, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691. REMOVE T-LOCK FROM MANHOLES WITH T-LOCK LINING.

(2) REPAIR CIPP END SEAL TERMINATION/BENCH AND TIE-IN WITH MANHOLE COATING SYSTEM PER DETAIL 2, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691.

NOT ALL UTILITIES ARE SHOWN WEST OF BOULDER HIGHWAY BECAUSE CONSTRUCTION IS LIMITED TO MH COVER REMOVAL AND INTERNAL MH REHABILITATION. NO EXCAVATION OF ANY KIND.

NO.	DATE	SHEET	REVISIONS

PREPARED BY

CITY OF LAS VEGAS NEVADA

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

H# 53545 BID# 16.53545

DATE: JANUARY 2017 DESIGNED BY: MAF

SUBMITTAL STAGE: DRAWN BY: ARE

100% FINAL CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

SHEET
SAHARA AVE PLAN
STA 81+00 TO STA 99+00

STATE OF NEVADA — MICHAEL A. FLEURY — Exp: 06-30-17 — CIVIL — No. 20041 — PROFESSIONAL ENGINEER

SHEET
PP05
13 OF 39

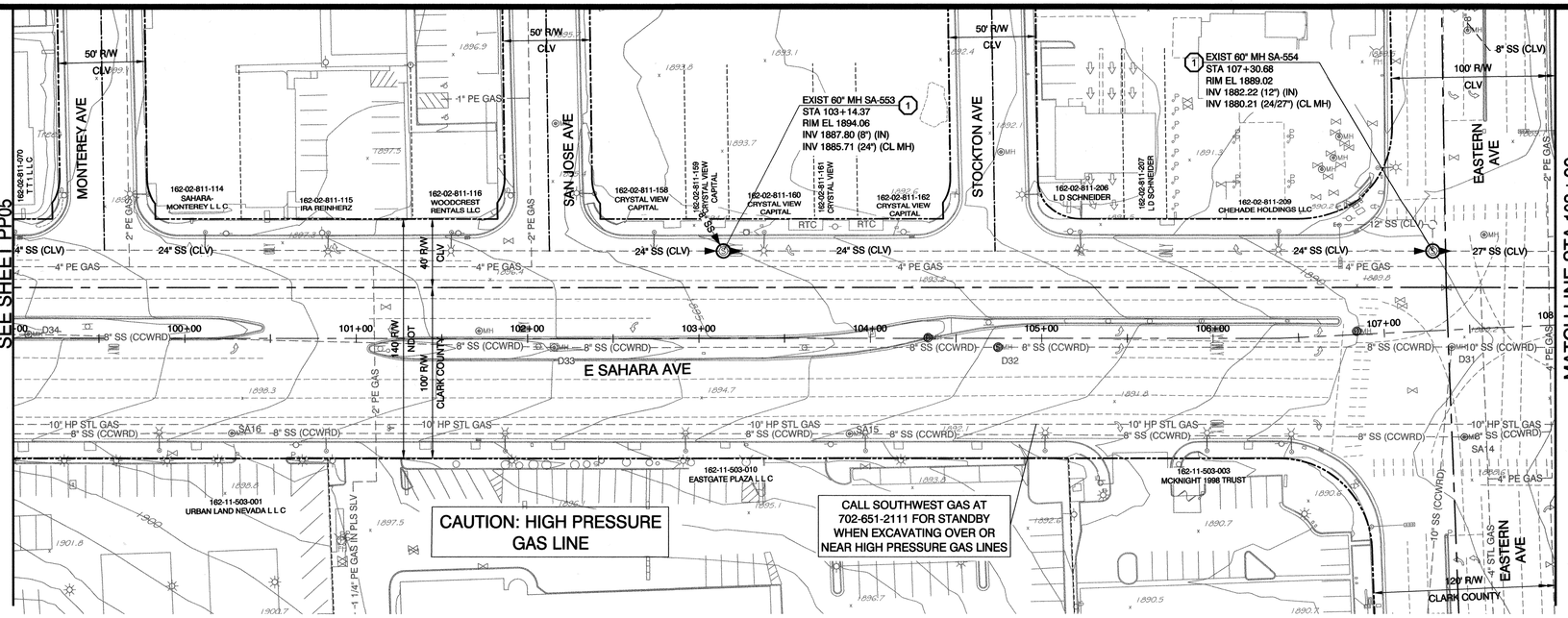
DRAWING NO.
307V1111

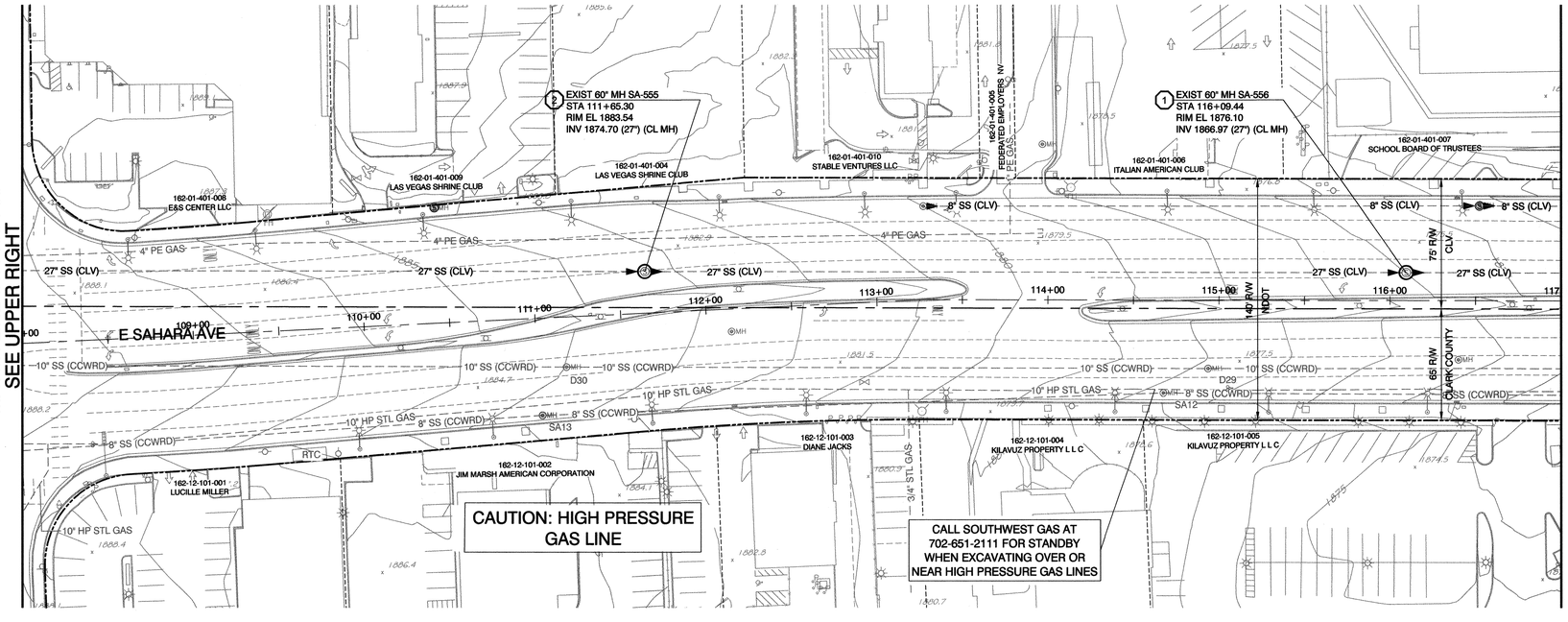
PRO.#:124895 QS:162-10-NW,161-05-SW

carollo

C:\PW_WORKING\PROJECTWISE\AEVANS\D04536701\01167A10-PP05.DWG

6/9/15





GRAPHIC SCALE

NORTH

(IN FEET)
1 inch = 40 ft.

Call before you Dig 811 1-800-227-2600 or 1-702-455-7544

Avoid cutting overhead utility lines, it's risky! Call before you do Overhead 1-702-593-6111

Call Before You Dig Underground 1-702-455-7511 1-702-229-6611

GENERAL NOTES:

1. SEE DRAWING GN02 FOR OVERALL SHEET INDEX.
2. SEE DRAWING GN04 FOR DESIGN DATA.
3. SEE DRAWING GN05 AND GN06 FOR GENERAL, CIVIL AND OVERALL CONSTRUCTION KEY NOTES.

CONSTRUCTION KEY NOTES:

(1) REHABILITATE MANHOLE WITH COATING SYSTEM PER DETAIL 1, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691. REMOVE T-LOCK FROM MANHOLES WITH T-LOCK LINING.

(2) REPAIR CIPP END SEAL TERMINATION/BENCH AND TIE-IN WITH MANHOLE COATING SYSTEM PER DETAIL 2, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691.

NOT ALL UTILITIES ARE SHOWN WEST OF BOULDER HIGHWAY BECAUSE CONSTRUCTION IS LIMITED TO MH COVER REMOVAL AND INTERNAL MH REHABILITATION. NO EXCAVATION OF ANY KIND.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE: 1/25/17 PROJECT# 124895

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY

CITY OF LAS VEGAS NEVADA

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

BID# 16.53545
DESIGNED BY: MAF
DRAWN BY: ARE
CHECKED BY: GAG

DATE: JANUARY 2017
SUBMITTAL STAGE: 100% FINAL

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

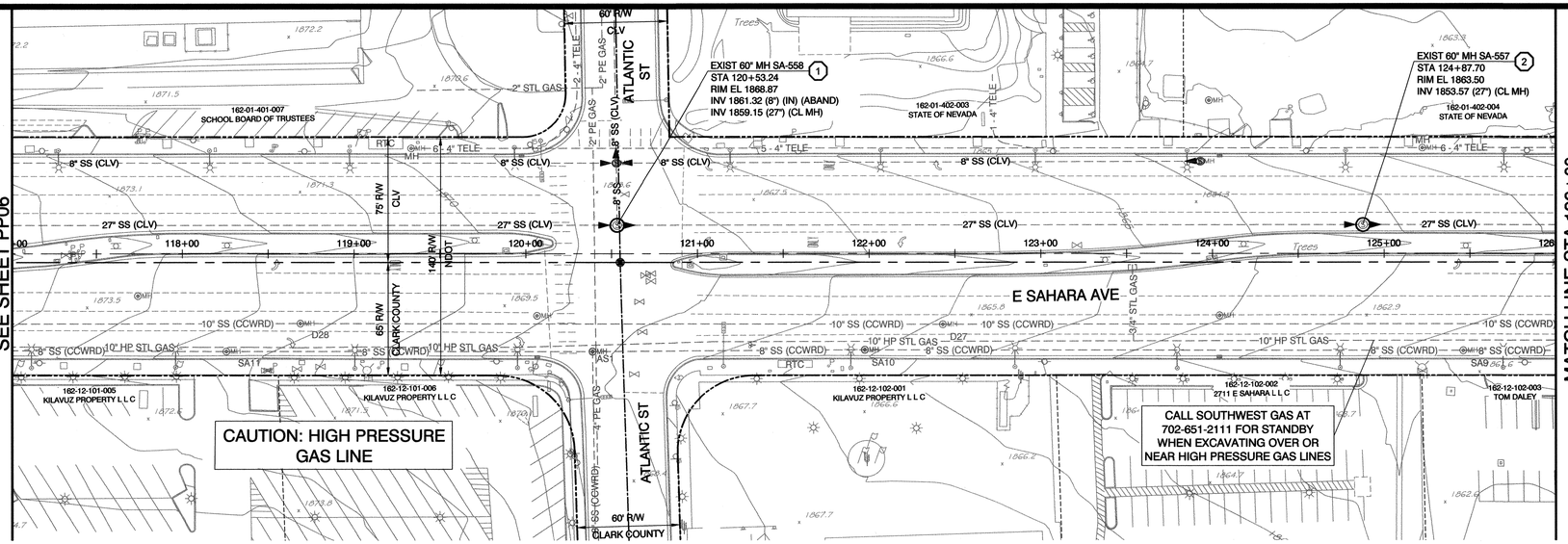
SHEET
SAHARA AVE PLAN
STA 99+00 TO STA 117+00

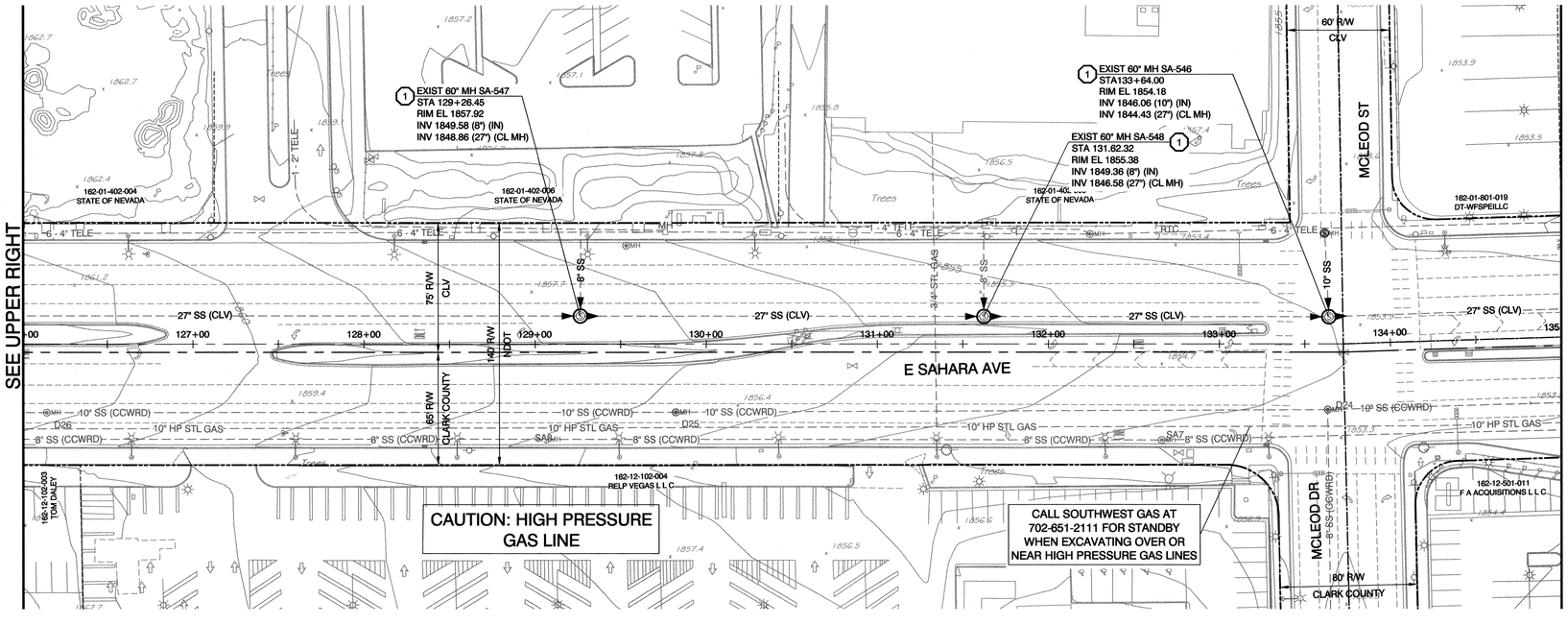
PROFESSIONAL ENGINEER STATE OF NEVADA MICHAEL A. FLEURY Exp: 06-30-17 CIVIL No. 20941

SHEET
PP06
14 OF 39
DRAWING NO.
307V1111

PROJ#:124895 QS:162-10-NW,161-05-SW

6/9/15 C:\PW_WORKING\PROJECTWISE\AEVANS\D04536701\0167A110-PP06.DWG





GRAPHIC SCALE

NORTH

(IN FEET)

1 inch = 40 ft.

Call before you Dig — Call 811 — 1-800-227-2600 or 1-702-455-7544

Avoid cutting overhead utility lines, it's costly. Call before you do Overhead 1-702-593-6111

Call Before You Dig Underground 1-702-455-7511 or 1-702-229-6611

GENERAL NOTES:

1. SEE DRAWING GN02 FOR OVERALL SHEET INDEX.
2. SEE DRAWING GN04 FOR DESIGN DATA.
3. SEE DRAWING GN05 AND GN06 FOR GENERAL, CIVIL AND OVERALL CONSTRUCTION KEY NOTES.

CONSTRUCTION KEY NOTES:

(1) REHABILITATE MANHOLE WITH COATING SYSTEM PER DETAIL 1, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691. REMOVE T-LOCK FROM MANHOLES WITH T-LOCK LINING.

(2) REPAIR CIPP END SEAL TERMINATION/BENCH AND TIE-IN WITH MANHOLE COATING SYSTEM PER DETAIL 2, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691.

NOT ALL UTILITIES ARE SHOWN WEST OF BOULDER HIGHWAY BECAUSE CONSTRUCTION IS LIMITED TO MH COVER REMOVAL AND INTERNAL MH REHABILITATION. NO EXCAVATION OF ANY KIND.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE: 1/25/17 PROJECT# 124895

NO.	DATE	SHEET	REVISIONS

PREPARED BY

CITY OF LAS VEGAS NEVADA

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

F#: 53545 BID#: 16.53545

DATE: JANUARY 2017 DESIGNED BY: MAF

SUBMITTAL STAGE: DRAWN BY: ARE

100% FINAL CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

SHEET
SAHARA AVE PLAN
STA 117+00 TO STA 135+00

STATE OF NEVADA — MICHAEL A. FLEURY — Exp: 06-30-17 CIVIL — No. 20947 — PROFESSIONAL ENGINEER

SHEET
PP07
15 OF 39

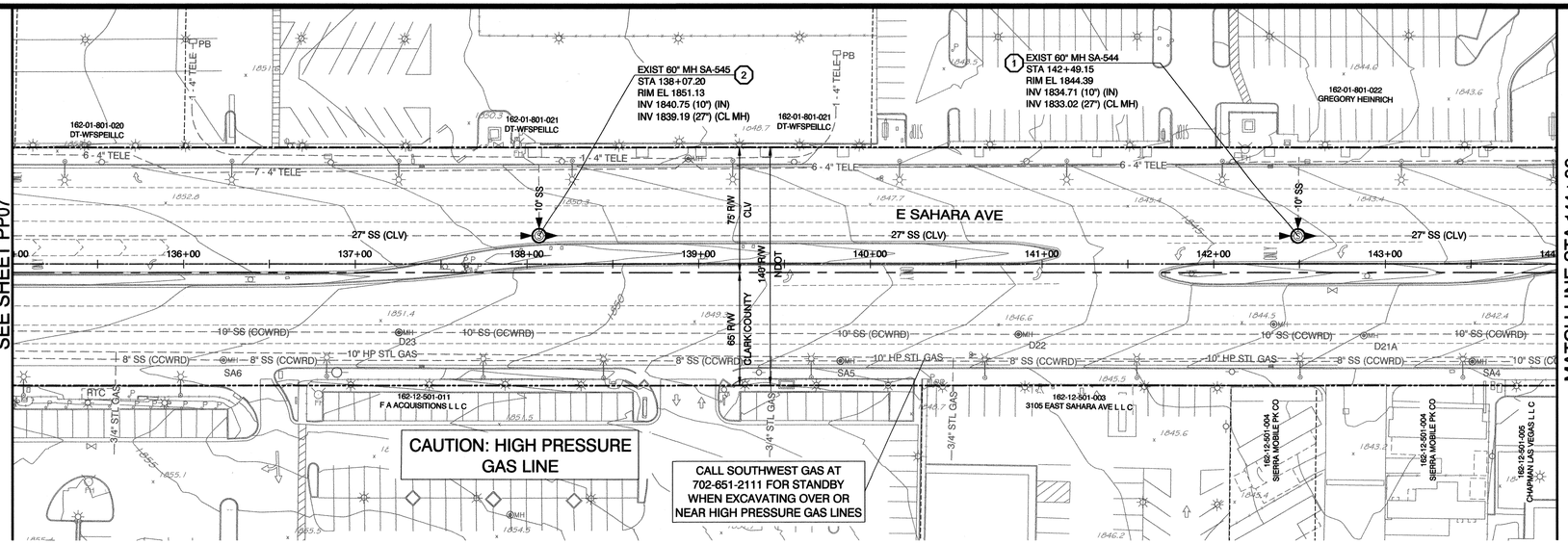
DRAWING NO.
307V1111

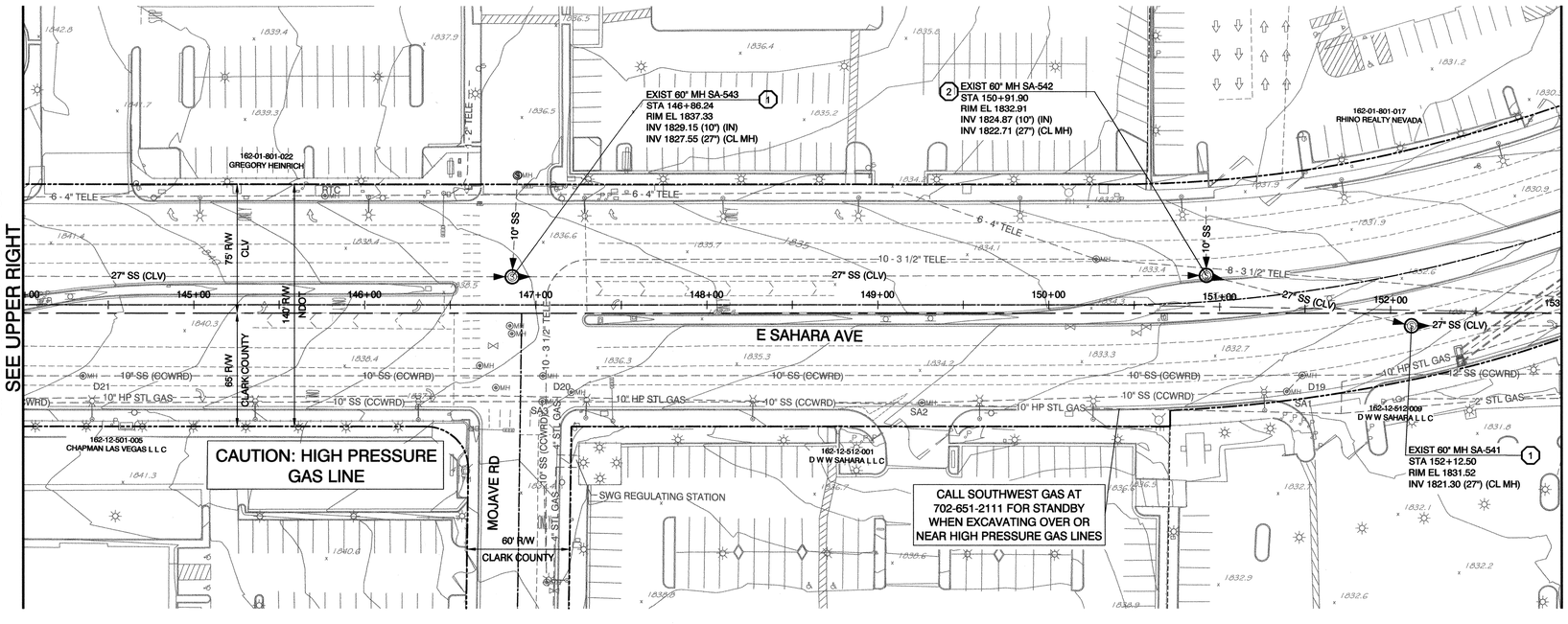
PROJ#:124895 QS:162-10-NW,161-05-SW

carollo

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6/9/15





GRAPHIC SCALE

NORTH

(IN FEET)

1 inch = 40 ft.

Call before you Dig 811 1-800-227-2600 1-702-455-7511 1-702-455-7544

Avoid cutting overhead utility lines. It's costly. Call before you do Overhead 1-702-593-6111 OVERHEAD SERVICE ALERT

Call Before You Dig Under Ground 1-702-455-7511 1-702-229-6611

GENERAL NOTES:

1. SEE DRAWING GN02 FOR OVERALL SHEET INDEX.
2. SEE DRAWING GN04 FOR DESIGN DATA.
3. SEE DRAWING GN05 AND GN06 FOR GENERAL, CIVIL AND OVERALL CONSTRUCTION KEY NOTES.

CONSTRUCTION KEY NOTES:

(1) REHABILITATE MANHOLE WITH COATING SYSTEM PER DETAIL 1, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691. REMOVE T-LOCK FROM MANHOLES WITH T-LOCK LINING.

(2) REPAIR CIPP END SEAL TERMINATION/BENCH AND TIE-IN WITH MANHOLE COATING SYSTEM PER DETAIL 2, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691.

NOT ALL UTILITIES ARE SHOWN WEST OF BOULDER HIGHWAY BECAUSE CONSTRUCTION IS LIMITED TO MH COVER REMOVAL AND INTERNAL MH REHABILITATION. NO EXCAVATION OF ANY KIND.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE: 1/25/17 PROJECT# 124895

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY

CITY OF LAS VEGAS NEVADA

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS
H# 53545

BID# 16.53545
DESIGNED BY: MAF
DRAWN BY: ARE
CHECKED BY: GAG
DATE: JANUARY 2017
SUBMITTAL STAGE: 100% FINAL

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

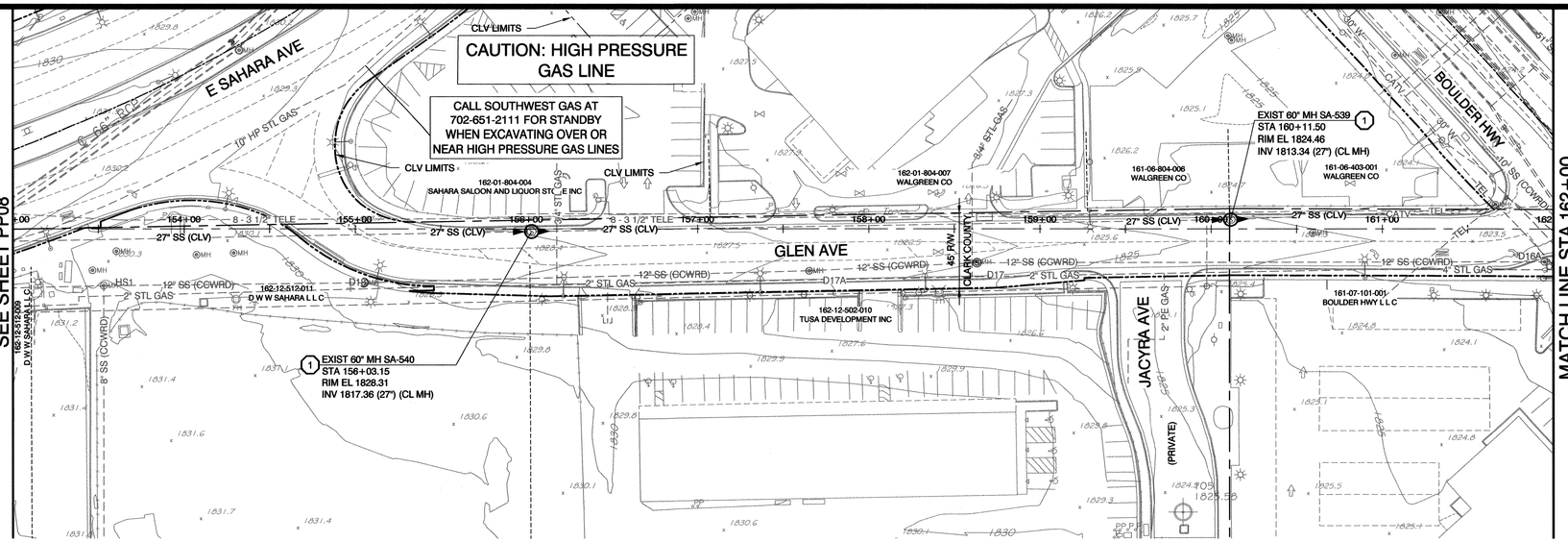
SHEET
SAHARA AVE PLAN
STA 135+00 TO STA 153+00

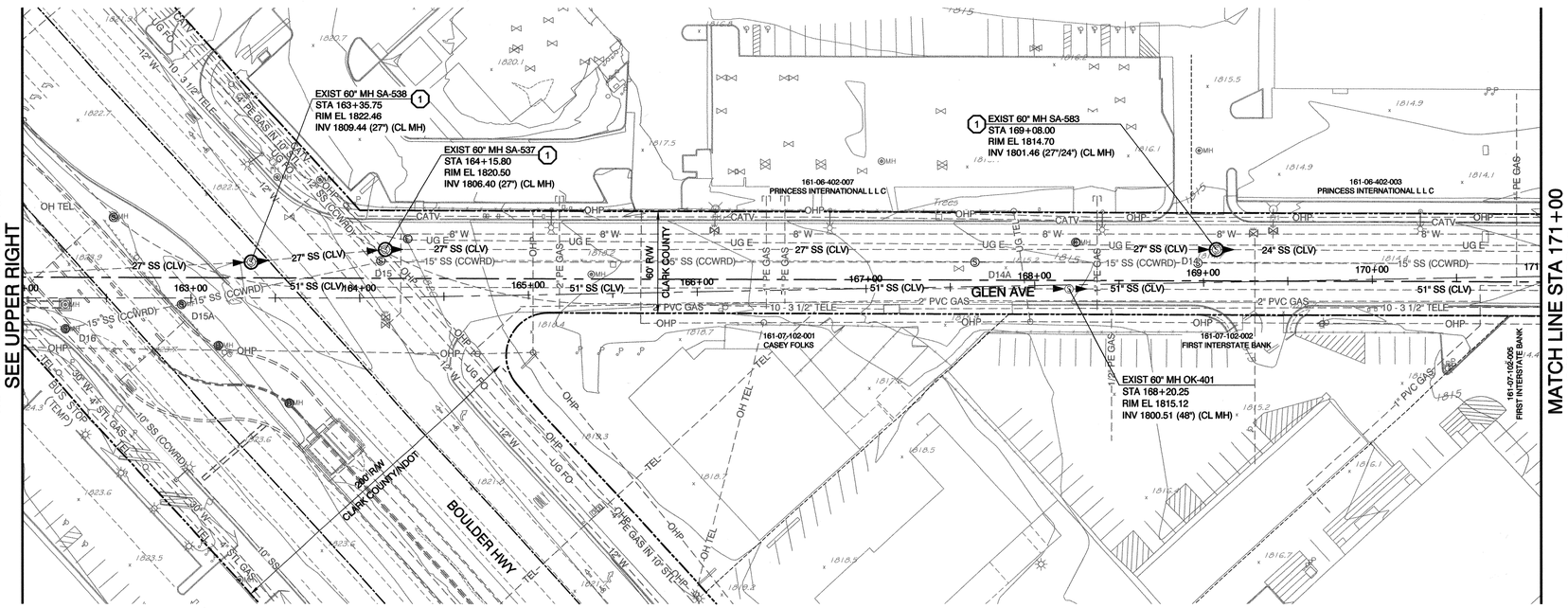
STATE OF NEVADA
MICHAEL A. FLEURY
Exp: 06-30-17
CIVIL
No. 20941
PROFESSIONAL ENGINEER

SHEET
PP08
16 OF 39
DRAWING NO.
307V1111

PROJ#:124895 QS-162-10-NW,161-05-SW

6/9/15 C:\PW_WORKING\PROJECTWISE\AE\ANS\D04538701\10167A10-PP08.DWG





GRAPHIC SCALE

NORTH

(IN FEET)
1 inch = 40 ft.

Call before you Dig 811 1-800-227-2600 1-702-455-7511 1-702-455-7544

Avoid cutting overhead utility lines. It's costly. Call before you do Overhead 1-702-593-6111 OVERHEAD SERVICE ALERT

Call Before You Dig Call Southwest Gas Underground 1-702-455-7511 1-702-729-6611

GENERAL NOTES:

1. SEE DRAWING GN02 FOR OVERALL SHEET INDEX.
2. SEE DRAWING GN04 FOR DESIGN DATA.
3. SEE DRAWING GN05 AND GN06 FOR GENERAL, CIVIL AND OVERALL CONSTRUCTION KEY NOTES.

CONSTRUCTION KEY NOTES:

(1) REHABILITATE MANHOLE WITH COATING SYSTEM PER DETAIL 1, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691. REMOVE T-LOCK FROM MANHOLES WITH T-LOCK LINING.

NOT ALL UTILITIES ARE SHOWN WEST OF BOULDER HIGHWAY BECAUSE CONSTRUCTION IS LIMITED TO MH COVER REMOVAL AND INTERNAL MH REHABILITATION. NO EXCAVATION OF ANY KIND.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17 PROJECT# 124895

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY

CITY OF LAS VEGAS NEVADA

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

I# 53545 | BID# 16-53545

DATE: JANUARY 2017 | DESIGNED BY: MAF

SUBMITTAL STAGE: 100% FINAL | DRAWN BY: ARE | CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

SHEET
GLEN AVE PLAN
STA 153+00 TO STA 171+00

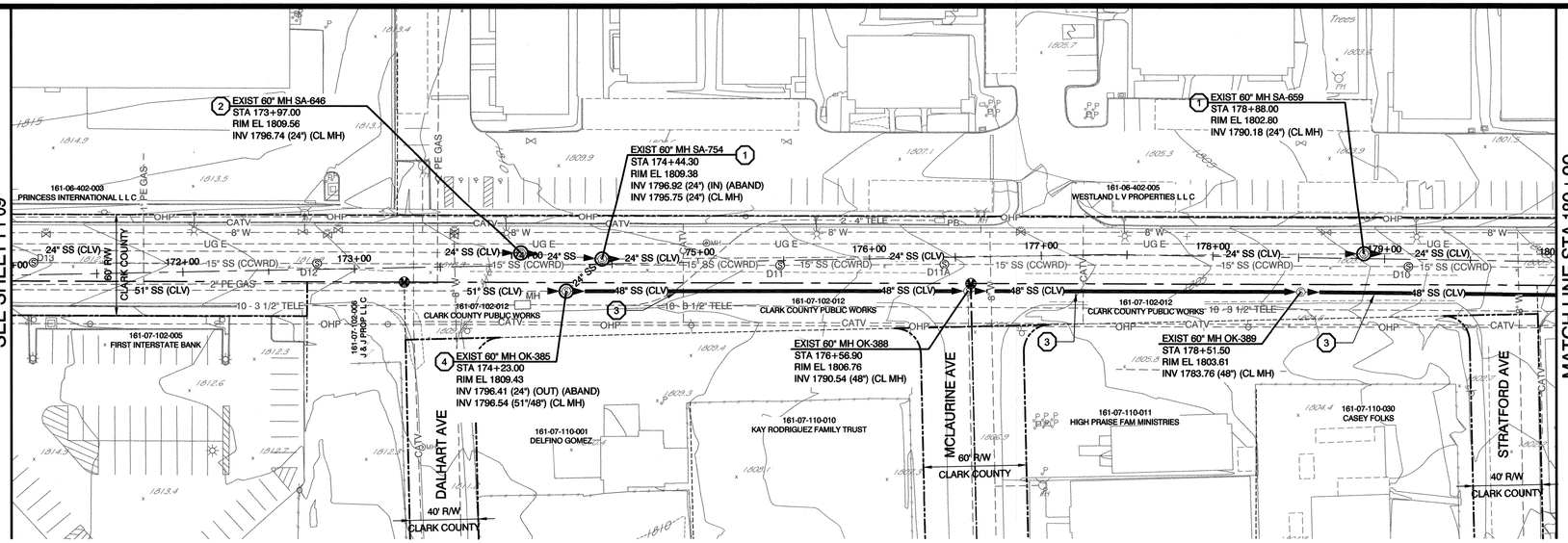
REGISTERED PROFESSIONAL ENGINEER STATE OF NEVADA MICHAEL A. FLEURY No. 20041 Exp: 06-30-17 CIVIL

SHEET
PP09
17 OF 39

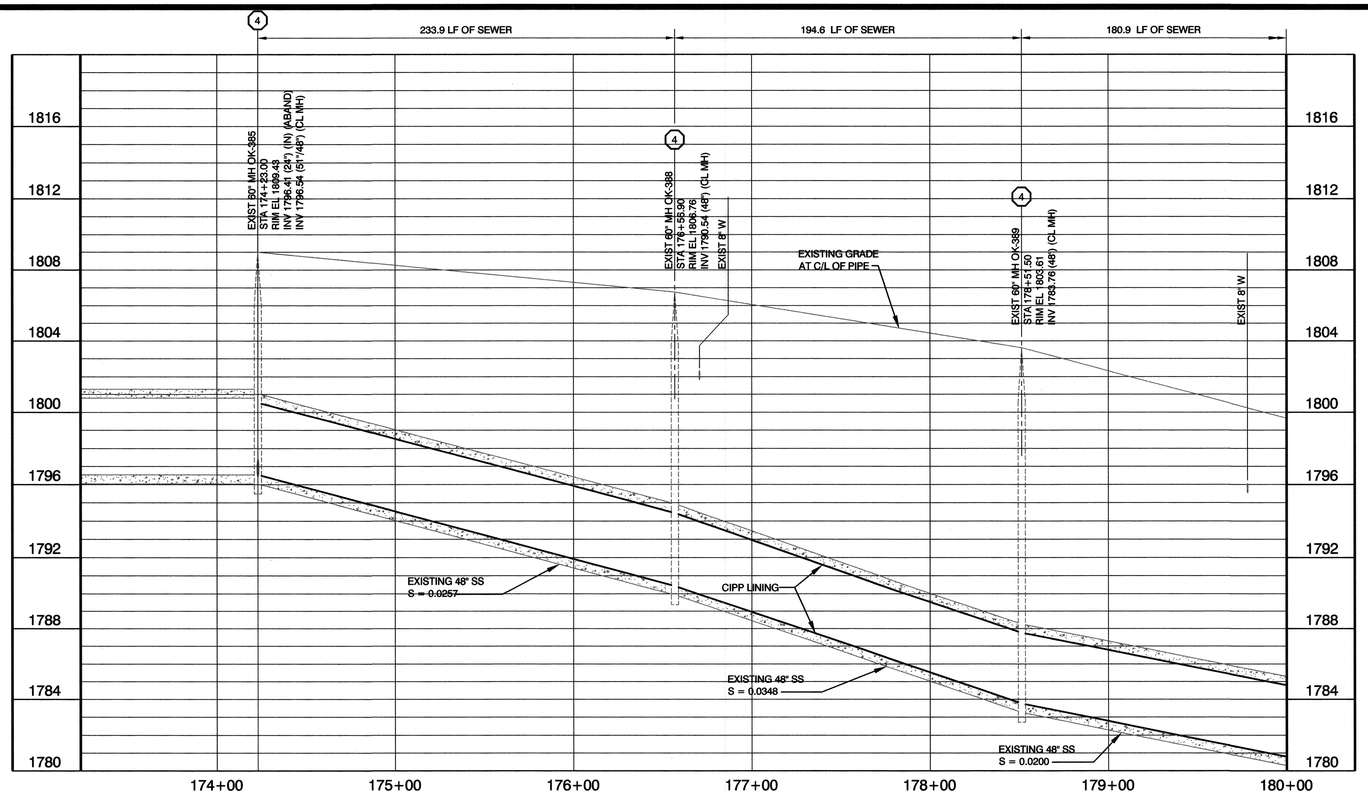
DRAWING NO.
307V1111

PROJ.#:124895 QS:162-10-NW,161-05-SW

6/9/15 C:\PW_WORKING\PROJECTWISE\AEVANS\D04538701\0167A10-PP09.DWG



PLAN
1" = 40'



PROFILE
HORIZ: 1" = 40'
VERT : 1" = 4'

GRAPHIC SCALE
NORTH
(IN FEET)
1 inch = 40 ft.

Call before you Dig
Call 811
1-800-227-2600
1-702-486-2700
1-702-455-7544

Avoid cutting overhead utility lines. It's costly.
Call before you do Overhead
1-702-593-6111
OVERHEAD SERVICE ALERT

Call Before You Dig
Call Underground
1-702-455-7511
1-702-729-6611

GENERAL NOTES:

1. SEE DRAWING GN02 FOR OVERALL SHEET INDEX.
2. SEE DRAWING GN04 FOR DESIGN DATA.
3. SEE DRAWING GN05 AND GN06 FOR GENERAL, CIVIL, OVERALL NOTES KEY NOTES.

CONSTRUCTION KEY NOTES:

(1) REHABILITATE MANHOLE WITH COATING SYSTEM PER DETAIL 1, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691. REMOVE T-LOCK FROM MANHOLES WITH T-LOCK LINING.

(2) REPAIR CIPP END SEAL TERMINATION/BENCH AND TIE-IN WITH MANHOLE COATING SYSTEM PER DETAIL 2, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691.

(3) INSTALL CIPP LINER IN EXISTING PIPE PER SPECIAL PROVISIONS 690. REMOVE WELD STRIPS AND LINER AS NEEDED TO PROVIDE A SMOOTH SURFACE.

(4) FOR CIPP LINER TERMINATION AND/OR MANHOLE REHABILITATION SEE DETAIL 2, SHT DT01. FOR CIPP LINER THROUGH MANHOLE SEE DETAIL 1, SHT DT01. REMOVE T-LOCK FROM MANHOLES PRIOR TO REHABILITATION.

APPROVED FOR CONSTRUCTION
H. DISHARI FOR
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17
SHEETS: PROJECT# 124895

NO.	DATE	SHEET	REVISIONS

PREPARED BY
CITY OF LAS VEGAS NEVADA
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

I# 53545 | BID# 16-53545
DATE: JANUARY 2017 | DESIGNED BY: MAF
SUBMITTAL STAGE: 100% FINAL | DRAWN BY: ARE
CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

SHEET
GLEN AVE PLAN & PROFILE
STA 171+00 TO STA 180+00

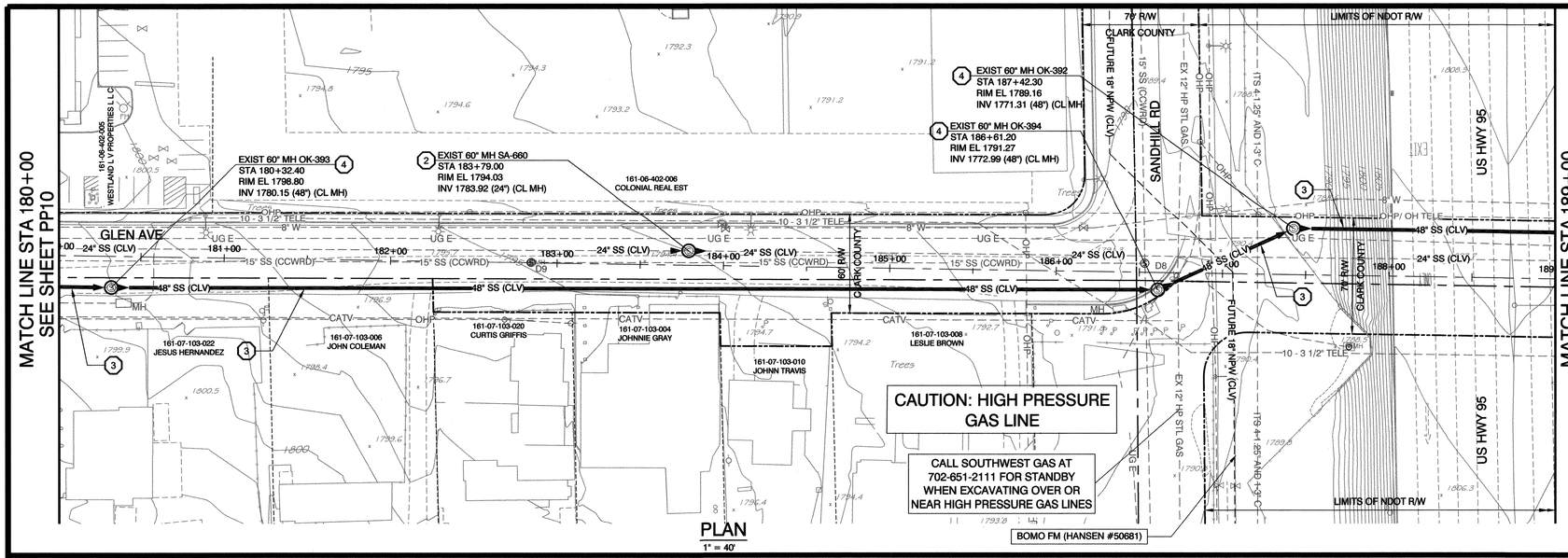
PREPARED BY
STATE OF NEVADA
MICHAEL A. FLEURY
Exp. 06-30-17
CIVIL
No. 20947
PROFESSIONAL ENGINEER

SHEET
PP10
18 OF 39
DRAWING NO.
307V1111

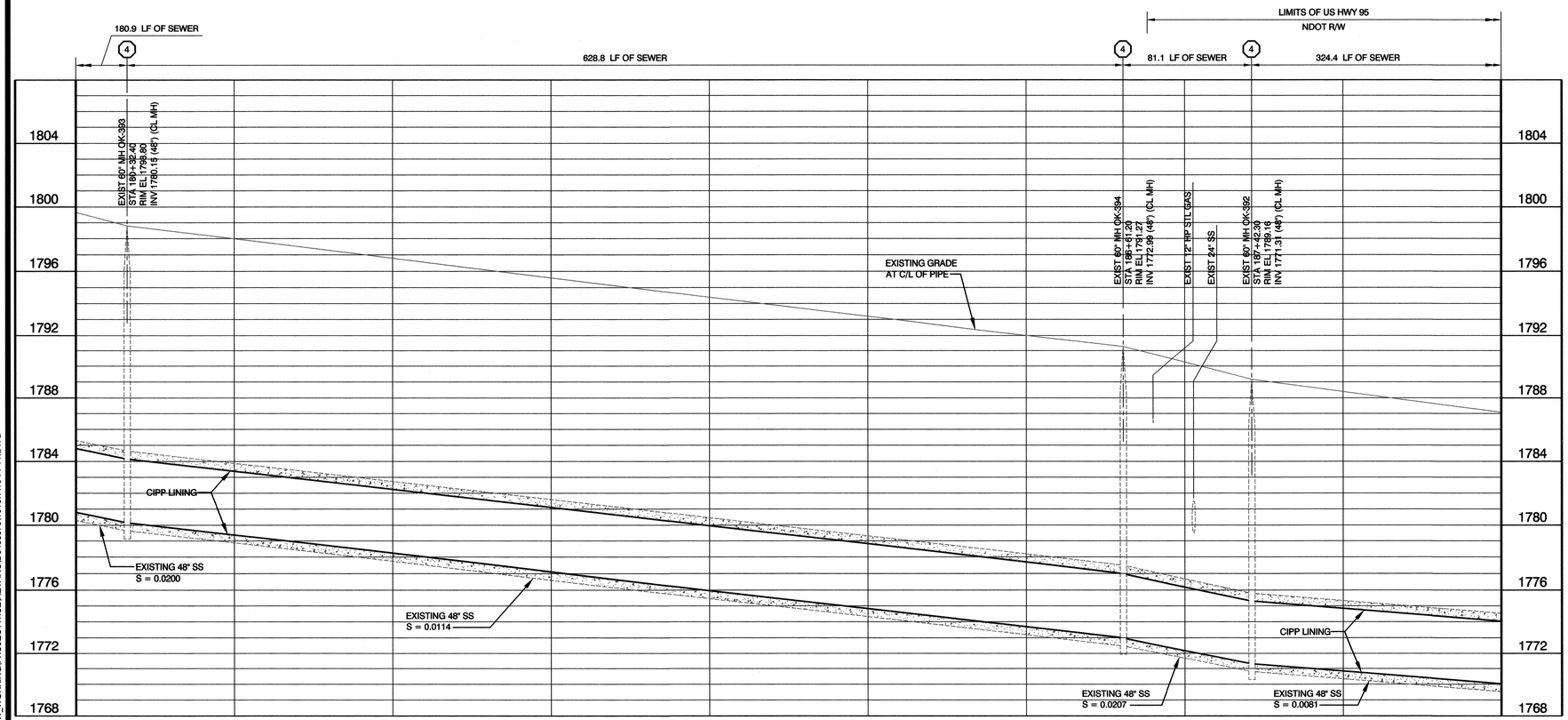
carollo

PROJ.#124895 QS:162-10-NW,161-05-SW

C:\PW_WORKING\PROJECTWISE\AEVANS\D04536701\101167A10-PP10.DWG
6/9/15



PLAN
1" = 40'



PROFILE
HORIZ: 1" = 40'
VERT : 1" = 4'

GRAPHIC SCALE
NORTH
(IN FEET)
1 inch = 40 ft.

Call before you Dig — Call 811 — 1-800-227-2600 — 1-702-486-7544
Avoid cutting overhead utility lines. It's costly. — Call before you do Overhead — 1-702-593-6111
Call Before You Dig — Call Sunrise Utility Underground — 1-702-455-7511 — 1-702-229-6611

GENERAL NOTES:

1. SEE DRAWING GN02 FOR OVERALL SHEET INDEX.
2. SEE DRAWING GN04 FOR DESIGN DATA.
3. SEE DRAWING GN05 AND GN06 FOR GENERAL, CIVIL, OVERALL NOTES KEY NOTES.

CONSTRUCTION KEY NOTES:

(2) REPAIR CIPP END SEAL TERMINATION/BENCH AND TIE-IN WITH MANHOLE COATING SYSTEM PER DETAIL 2, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691.

(3) INSTALL CIPP LINER IN EXISTING PIPE PER SPECIAL PROVISIONS 690. REMOVE WELD STRIPS AND LINER AS NEEDED TO PROVIDE A SMOOTH SURFACE.

(4) FOR CIPP LINER TERMINATION AND/OR MANHOLE REHABILITATION SEE DETAIL 2, SHT DT01. FOR CIPP LINER THROUGH MANHOLE SEE DETAIL 1, SHT DT01. REMOVE T-LOCK FROM MANHOLES PRIOR TO REHABILITATION.

APPROVED FOR CONSTRUCTION
A. DISHARI FOR J.M.
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17 PROJECT# 124895

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY
CITY OF LAS VEGAS
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS
I# 53545 | BID# 16.53545
DATE: JANUARY 2017 | DESIGNED BY: MAF
SUBMITTAL STAGE: 100% FINAL | DRAWN BY: ARE
CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR SEWER REHABILITATION PHASE 2

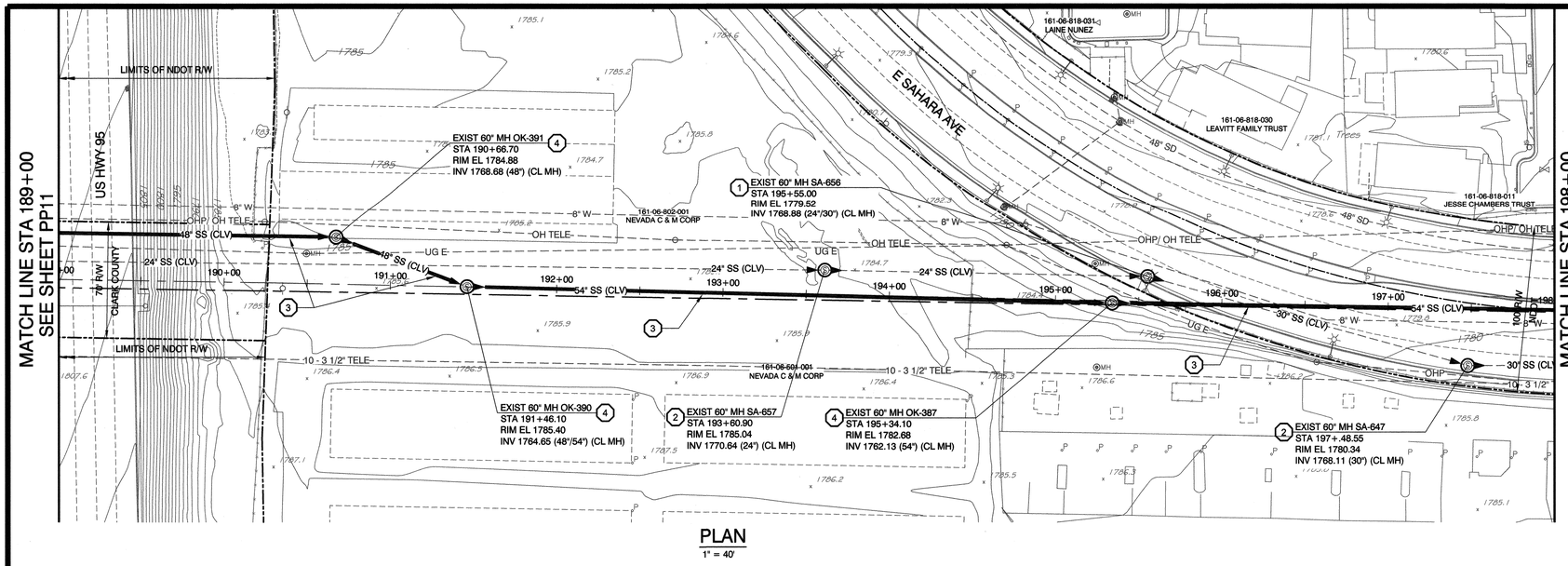
SHEET
GLEN AVE PLAN & PROFILE STA 180+00 TO STA 189+00

STATE OF NEVADA — REGISTERED PROFESSIONAL ENGINEER — MICHAEL A FLEURY — Exp: 06-30-17 — CIVIL — No. 20641

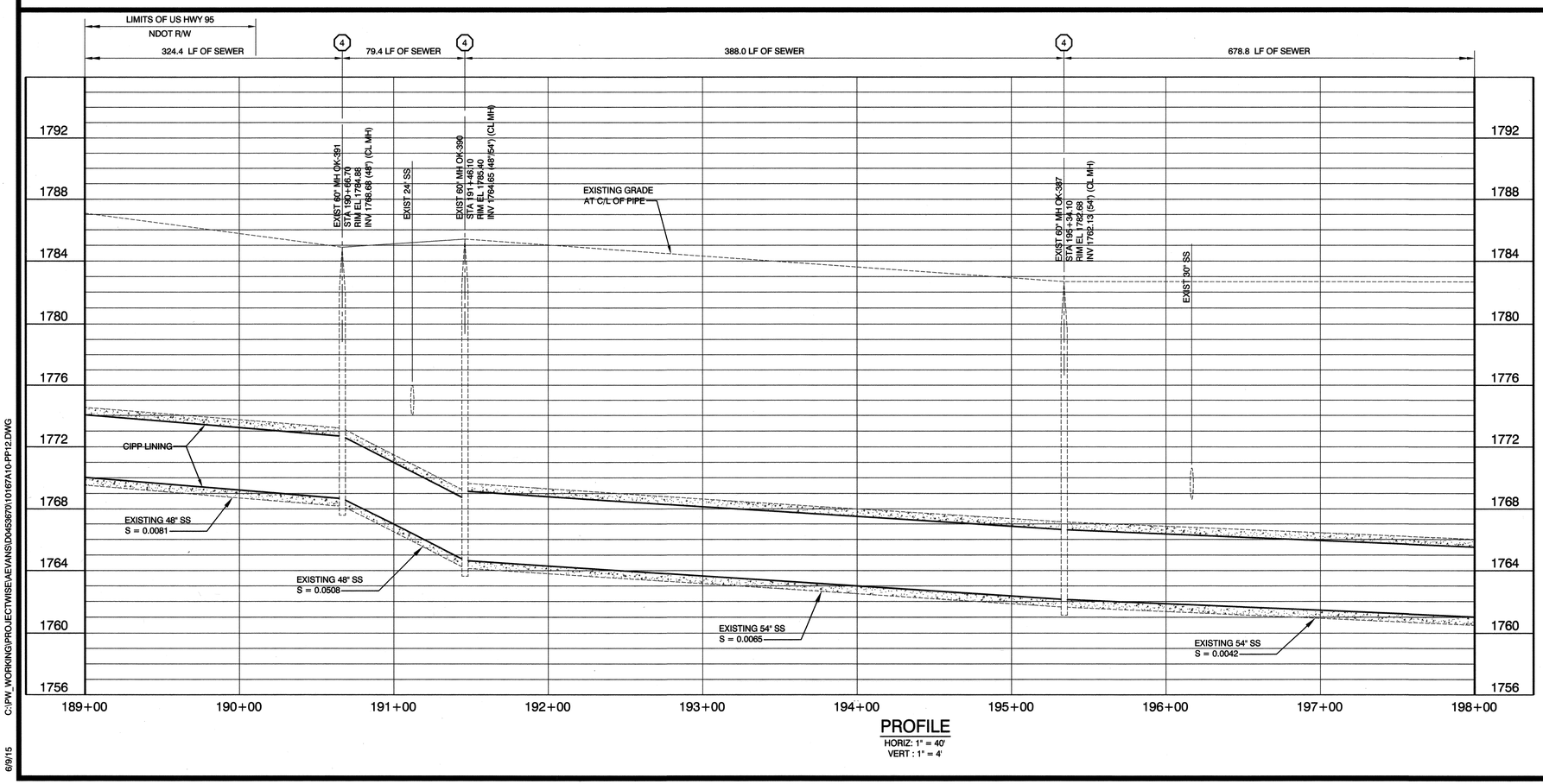
SHEET
PP11
19 OF 39
DRAWING NO.
307V1111

PROJ#:124895 QS:162-10-NW,161-05-SW

C:\PW_WORKING\PROJECTWISE\AEVANS\D04536701\0167A10-PP11.DWG
6/9/15



PLAN
1" = 40'



PROFILE
HORIZ: 1" = 40'
VERT : 1" = 4'

GRAPHIC SCALE
NORTH
(IN FEET)
1 inch = 40 ft.

Call Before you Dig 811 1-800-227-2600 1-702-455-7544

Avoid cutting overhead utility lines. It's costly. Call before you do Overhead 1-702-593-6111

Call Before You Dig Underground 1-702-455-7511 1-702-229-6611

GENERAL NOTES:

1. SEE DRAWING GN02 FOR OVERALL SHEET INDEX.
2. SEE DRAWING GN04 FOR DESIGN DATA.
3. SEE DRAWING GN05 AND GN06 FOR GENERAL, CIVIL, OVERALL NOTES KEY NOTES.

CONSTRUCTION KEY NOTES:

(1) REHABILITATE MANHOLE WITH COATING SYSTEM PER DETAIL 1, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691. REMOVE T-LOCK FROM MANHOLES WITH T-LOCK LINING.

(2) REPAIR CIPP END SEAL TERMINATION/BENCH AND TIE-IN WITH MANHOLE COATING SYSTEM PER DETAIL 2, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691.

(3) INSTALL CIPP LINER IN EXISTING PIPE PER SPECIAL PROVISIONS 690. REMOVE WELD STRIPS AND LINER AS NEEDED TO PROVIDE A SMOOTH SURFACE.

(4) FOR CIPP LINER TERMINATION AND/OR MANHOLE REHABILITATION SEE DETAIL 2, SHT DT01. FOR CIPP LINER THROUGH MANHOLE SEE DETAIL 1, SHT DT01. REMOVE T-LOCK FROM MANHOLES PRIOR TO REHABILITATION.

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17 PROJECT# 124895

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY
CITY OF LAS VEGAS NEVADA
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

I.# 53545
BID# 16.53545
DATE: JANUARY 2017
DESIGNED BY: MAF
DRAWN BY: ARE
CHECKED BY: GAG
SUBMITTAL STAGE: 100% FINAL

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

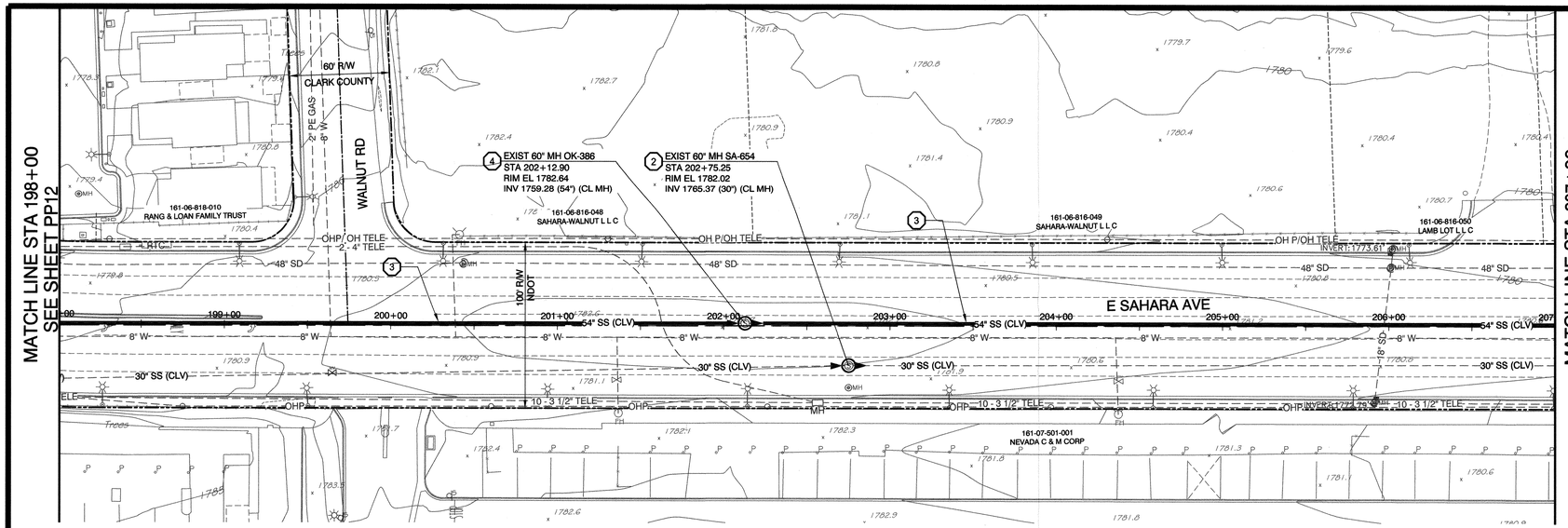
SHEET
SAHARA AVE PLAN & PROFILE
STA 189+00 TO STA 198+00

STATE OF NEVADA
MICHAEL A. FLEURY
No. 20947
PROFESSIONAL ENGINEER
Exp: 06-30-17 CIVIL

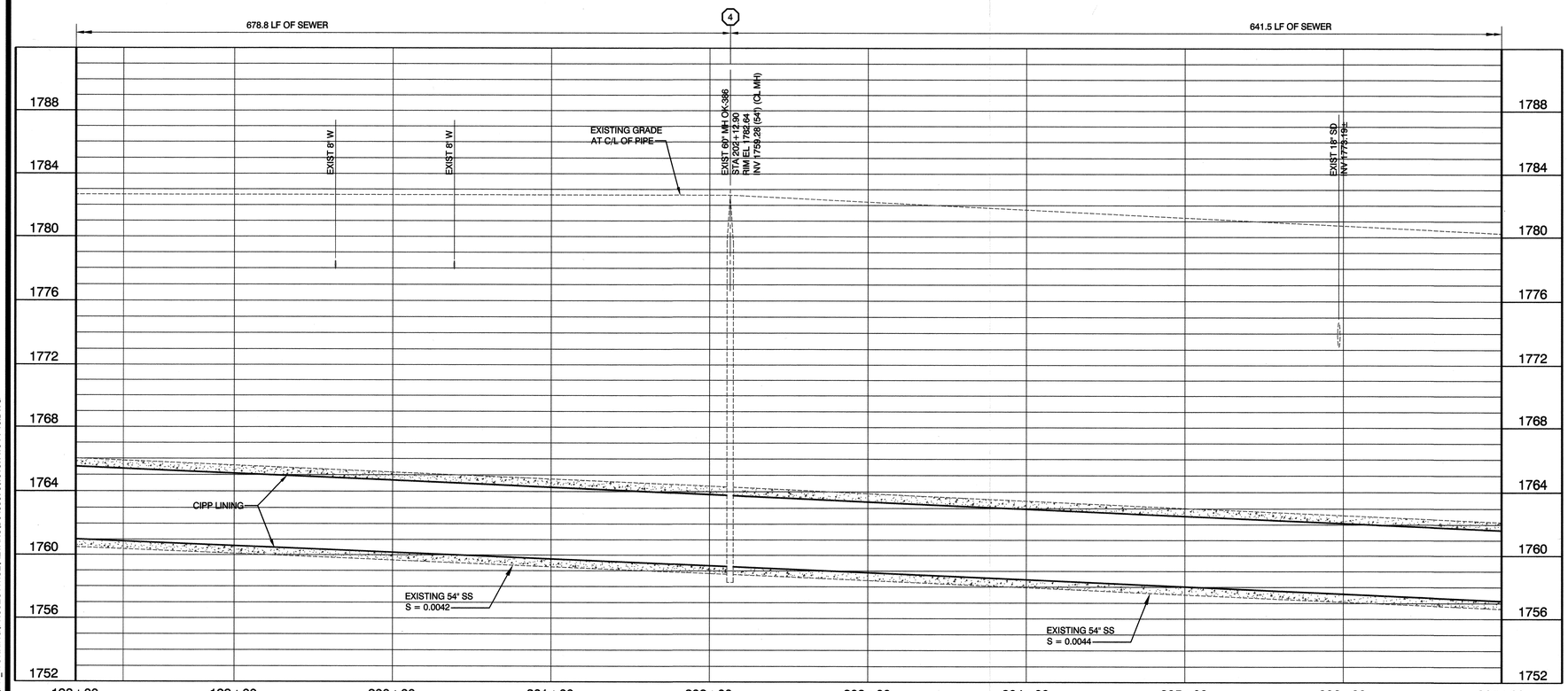
SHEET
PP12
20 OF 39
DRAWING NO.
307V1111

PRO.#:124895 QS:162-10-NW,161-05-SW

C:\PW_WORKING\PROJECTWISE\AEVANS\D0453670\10167A10-PP12.DWG
6/9/15



PLAN
1" = 40'



PROFILE
HORIZ: 1" = 40'
VERT : 1" = 4'

GRAPHIC SCALE
NORTH
(IN FEET)
1 inch = 40 ft.

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Call 811
1-800-227-2600
1-702-455-7544

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Call before you do Overhead
1-702-593-6111
OVERHEAD SERVICE ALERT

Call Before You Dig
Call Underground
1-702-455-7511
1-702-229-6611

GENERAL NOTES:

1. SEE DRAWING GN02 FOR OVERALL SHEET INDEX.
2. SEE DRAWING GN04 FOR DESIGN DATA.
3. SEE DRAWING GN05 AND GN06 FOR GENERAL, CIVIL, OVERALL NOTES KEY NOTES.

CONSTRUCTION KEY NOTES:

(2) REPAIR CIPP END SEAL TERMINATION/BENCH AND TIE-IN WITH MANHOLE COATING SYSTEM PER DETAIL 2, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691.

(3) INSTALL CIPP LINER IN EXISTING PIPE PER SPECIAL PROVISIONS 690. REMOVE WELD STRIPS AND LINER AS NEEDED TO PROVIDE A SMOOTH SURFACE.

(4) FOR CIPP LINER TERMINATION AND/OR MANHOLE REHABILITATION SEE DETAIL 2, SHT DT01. FOR CIPP LINER THROUGH MANHOLE SEE DETAIL 1, SHT DT01. REMOVE T-LOCK FROM MANHOLES PRIOR TO REHABILITATION.

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17 PROJECT# 124895

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY
CITY OF LAS VEGAS NEVADA
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

I# 53545 | BID# 16-53545
DATE: JANUARY 2017 | DESIGNED BY: MAF
SUBMITTAL STAGE: 100% FINAL | DRAWN BY: ARE
CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

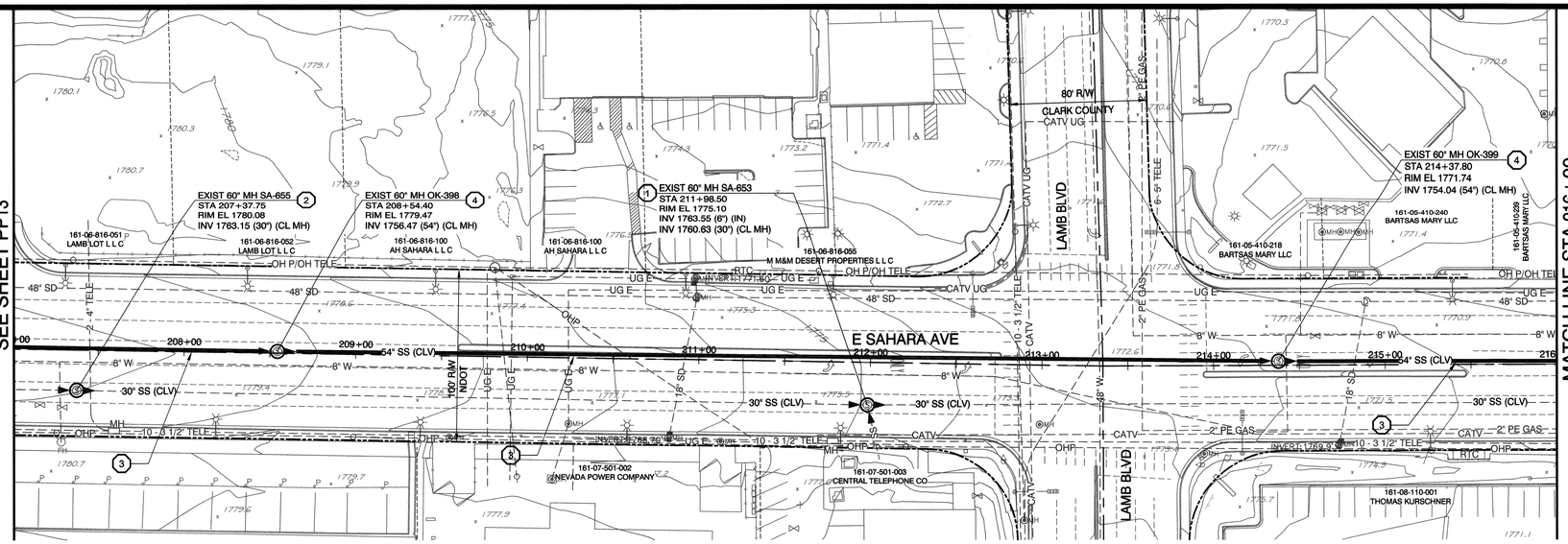
SHEET
SAHARA AVE PLAN & PROFILE
STA 198+00 TO STA 207+00

STATE OF NEVADA
MICHAEL A. FLEURY
No. 20941
Exp: 06-30-17
CIVIL
PROFESSIONAL ENGINEER

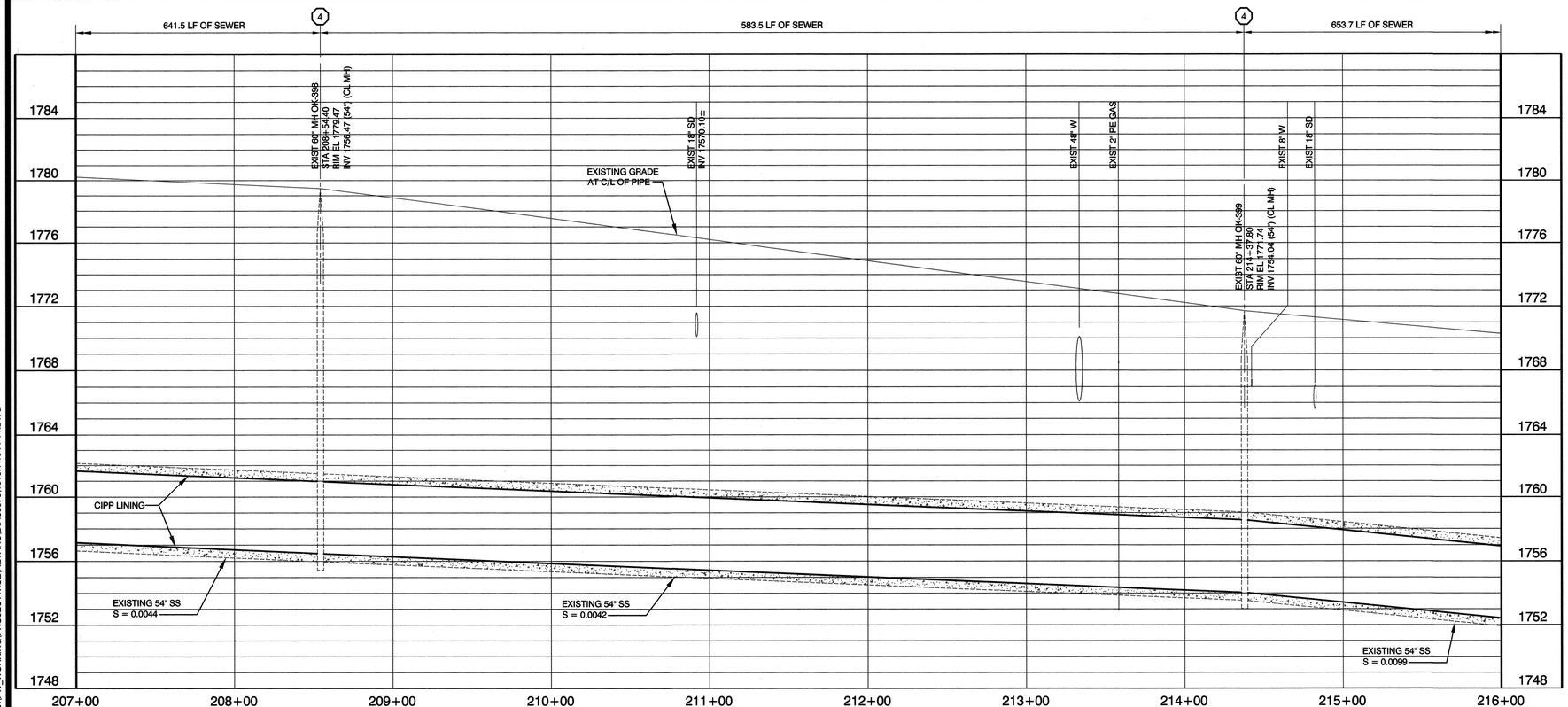
SHEET
PP13
21 OF 39
DRAWING NO.
307V1111

PROJ.#:124895 QS:162-10-NW,161-05-SW

C:\PW_WORKING\PROJECTWISE\AEVANS\D04536701\10167A10-PP13.DWG
6/9/15



PLAN
1" = 40'



PROFILE
HORIZ: 1" = 40'
VERT : 1" = 4'

GRAPHIC SCALE
NORTH
(IN FEET)
1 inch = 40 ft.

Call before you Dig 811 1-800-227-2600
Avoid cutting overhead utility lines. It's costly. Call before you do Overhead 1-702-593-6111
Call before you Dig Under Ground 1-702-455-7511 1-702-729-6611

GENERAL NOTES:

1. SEE DRAWING GN02 FOR OVERALL SHEET INDEX.
2. SEE DRAWING GN04 FOR DESIGN DATA.
3. SEE DRAWING GN05 AND GN06 FOR GENERAL, CIVIL, OVERALL NOTES KEY NOTES.

CONSTRUCTION KEY NOTES:

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APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17 PROJECT# 124895

carollo

NO.	DATE	SHEET REVISIONS

PREPARED BY
CITY OF LAS VEGAS NEVADA
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS
I.# 53545
DATE: JANUARY 2017
SUBMITTAL STAGE: 100% FINAL
BID# 16.53545
DESIGNED BY: MAF
DRAWN BY: ARE
CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR SEWER REHABILITATION PHASE 2

SHEET
SAHARA AVE PLAN & PROFILE STA 207+00 TO STA 216+00

REGISTERED PROFESSIONAL ENGINEER STATE OF NEVADA MICHAELA FLEURY Expr. 06-30-17 CIVIL No. 20941

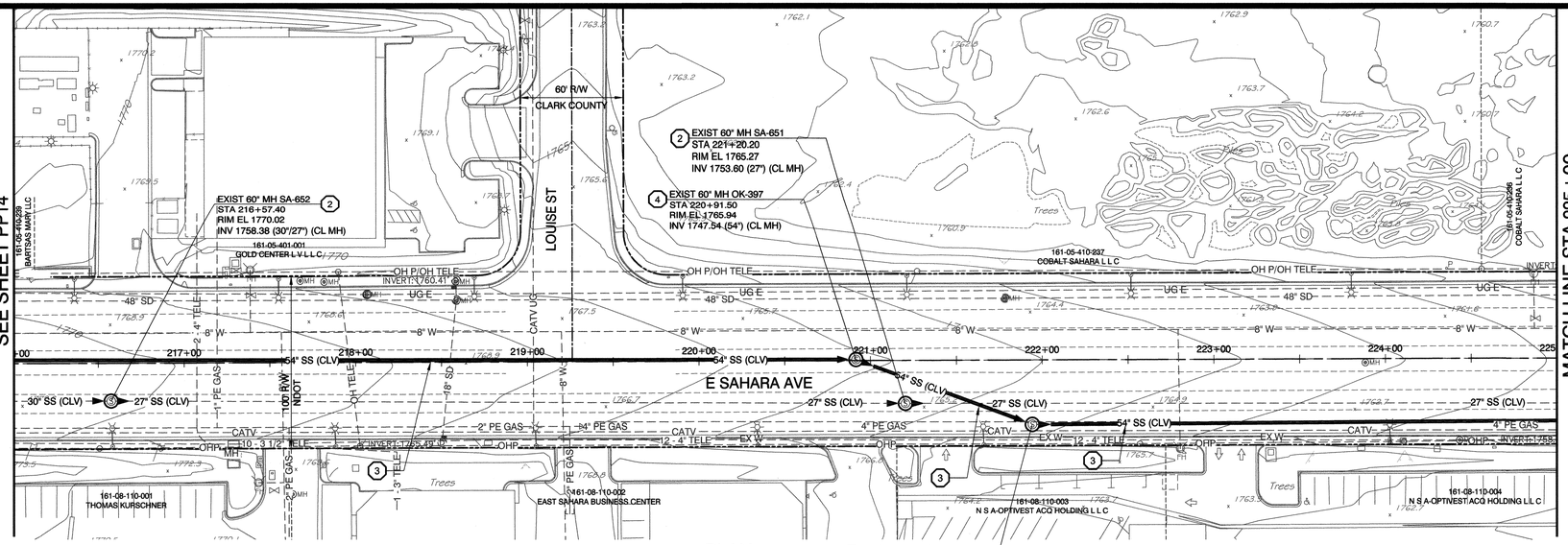
SHEET
PP14
22 OF 39
DRAWING NO.
307V1111

PROJ.#:124895 QS:162-10-NW,161-05-SW

C:\PW_WORKING\PROJECTWISE\AE\VANS\D04536701\10167A10-PP14.DWG
6/9/15

MATCH LINE STA 216+00
SEE SHEET PP14

MATCH LINE STA 225+00
SEE SHEET PP16



PLAN
1" = 40'

GRAPHIC SCALE
NORTH
(IN FEET)
1 inch = 40 ft.

GENERAL NOTES:

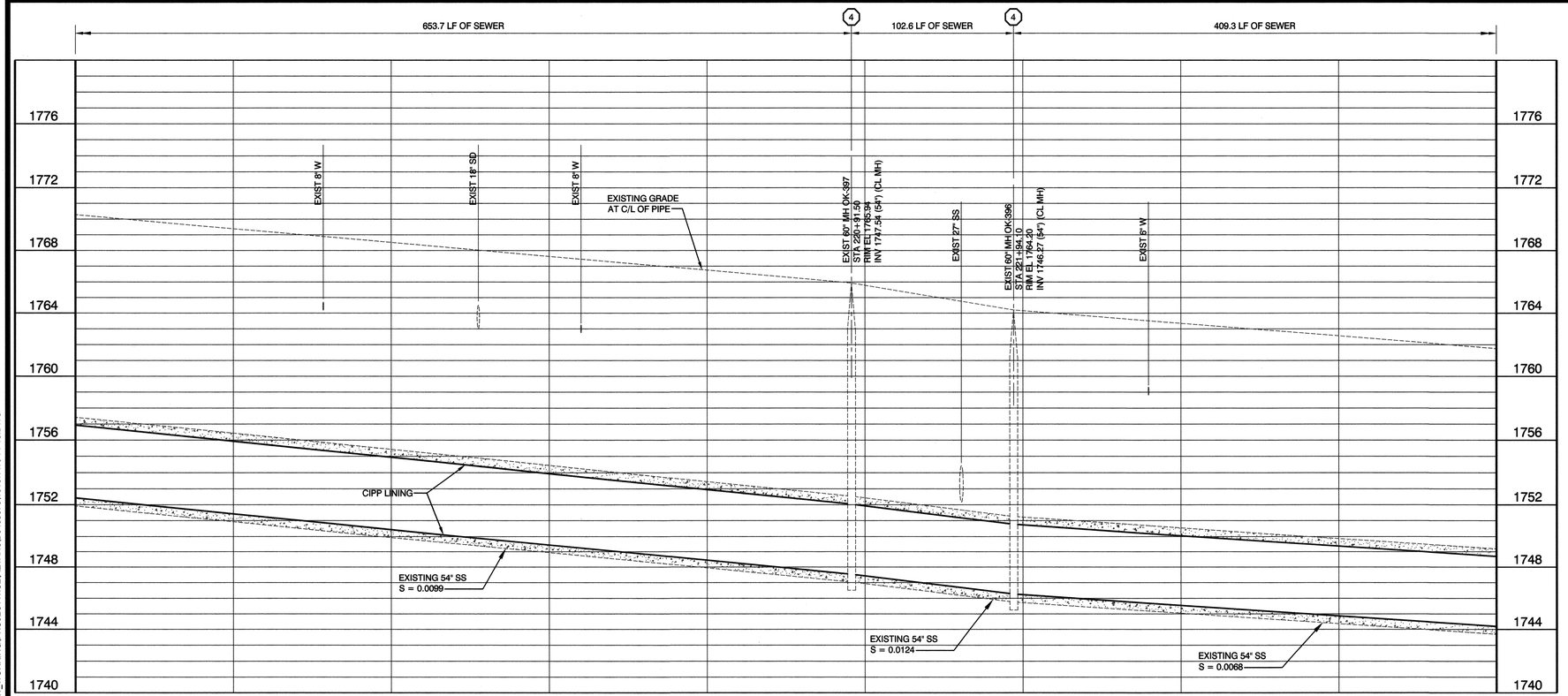
1. SEE DRAWING GN02 FOR OVERALL SHEET INDEX.
2. SEE DRAWING GN04 FOR DESIGN DATA.
3. SEE DRAWING GN05 AND GN06 FOR GENERAL, CIVIL, OVERALL NOTES KEY NOTES.

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PROFILE
HORIZ: 1" = 40'
VERT : 1" = 4'

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE 1/25/17 PROJECT# 122070

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY
CITY OF LAS VEGAS
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS
H# 53545
DATE: JANUARY 2017
SUBMITTAL STAGE: 100% FINAL
BID# 16.53545
DESIGNED BY: GAG
DRAWN BY: ARE
CHECKED BY: MAF

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

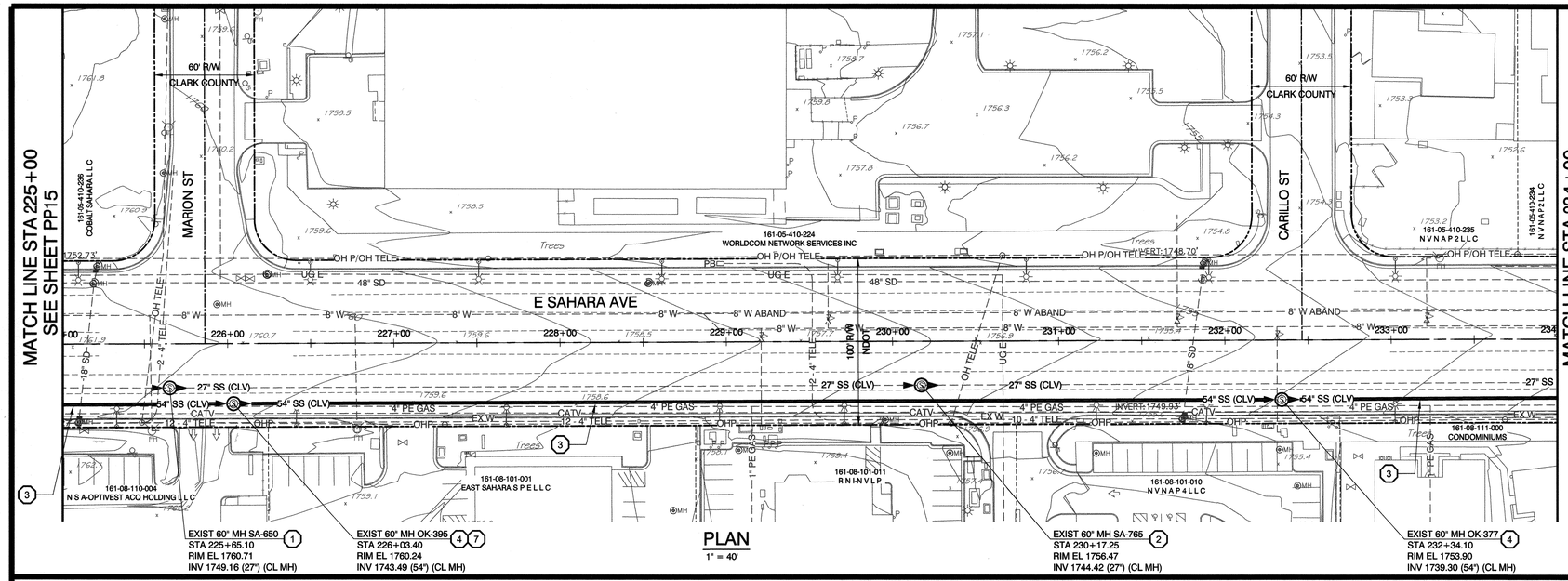
SHEET
SAHARA AVE PLAN & PROFILE
STA 216+00 TO STA 225+00

STATE OF NEVADA
PROFESSIONAL ENGINEER
MICHAEL A FLEURY
Exp: 06-30-17
CIVIL
No. 20941

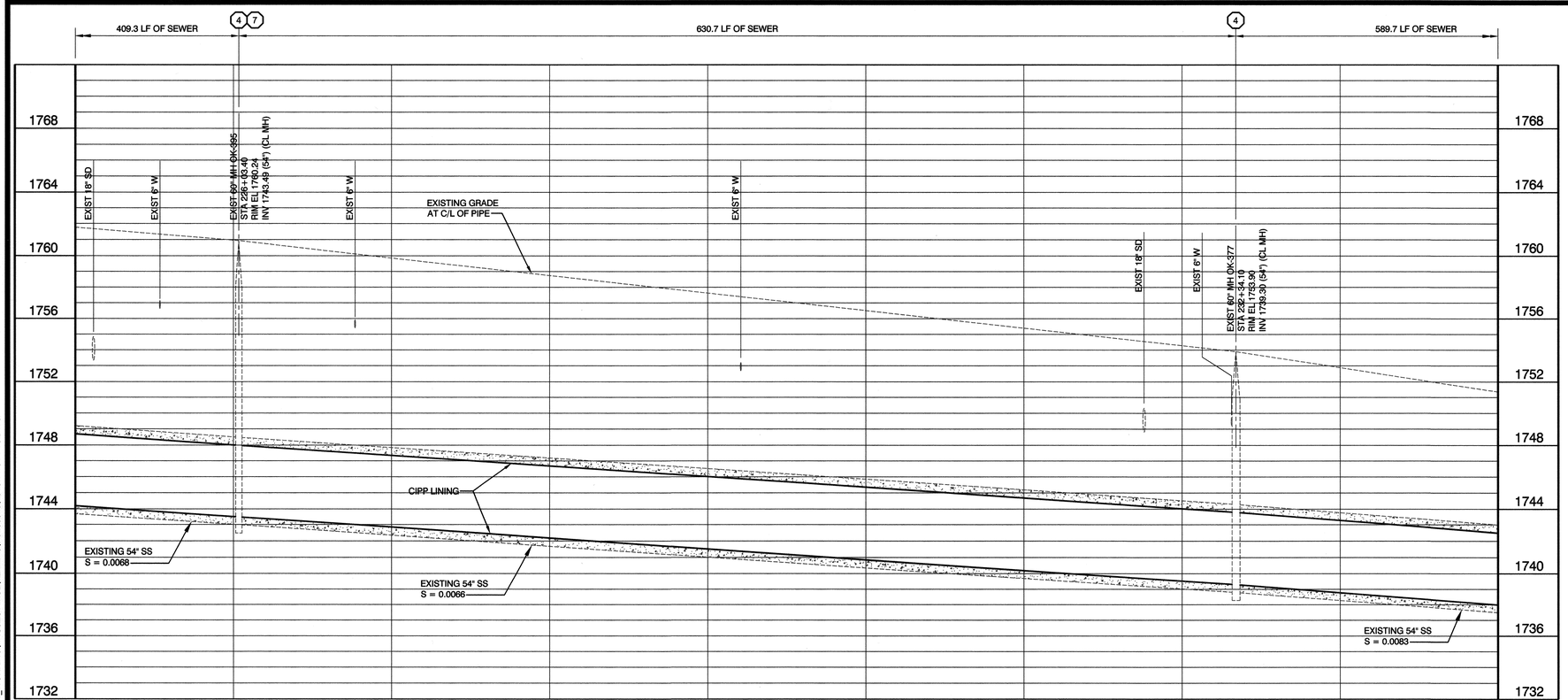
SHEET
PP15
23 OF 39
DRAWING NO.
307V1111

PROJ.#:124895 QS:162-10-NW\161-05-SW

C:\PW_WORKING\PROJECTWISE\AE\ANSID\4536270\10167A10-PP15.DWG
6/9/15



PLAN
1" = 40'



PROFILE
HORIZ: 1" = 40'
VERT : 1" = 4'

GRAPHIC SCALE
NORTH
(IN FEET)
1 inch = 40 ft.

Call before you Dig
Call 811
1-800-227-2600
1-702-486-4180
1-702-455-7544

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1-702-593-6111
OVERHEAD SERVICE ALERT

Call before you Dig
Call Underground
1-702-455-7511
1-702-229-6611

GENERAL NOTES:

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2. SEE DRAWING GN04 FOR DESIGN DATA.
3. SEE DRAWING GN05 AND GN06 FOR GENERAL, CIVIL, OVERALL NOTES KEY NOTES.

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(2) REPAIR CIPP END SEAL TERMINATION/BENCH AND TIE-IN WITH MANHOLE COATING SYSTEM PER DETAIL 2, SHT DT01 AND IN ACCORDANCE WITH SPECIAL PROVISIONS 691

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(7) PERMANENT FLOW MONITORING MANHOLE. SEE SPECIAL PROVISIONS 105 PARA 105.07.F.

APPROVED FOR CONSTRUCTION
H. DISHARI FOR - DSM
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17 PROJECT# 124895

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY
CITY OF LAS VEGAS
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS
I# 53545
DATE: JANUARY 2017
SUBMITTAL STAGE: 100% FINAL
BID# 16.53545
DESIGNED BY: MAF
DRAWN BY: ARE
CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR SEWER REHABILITATION PHASE 2

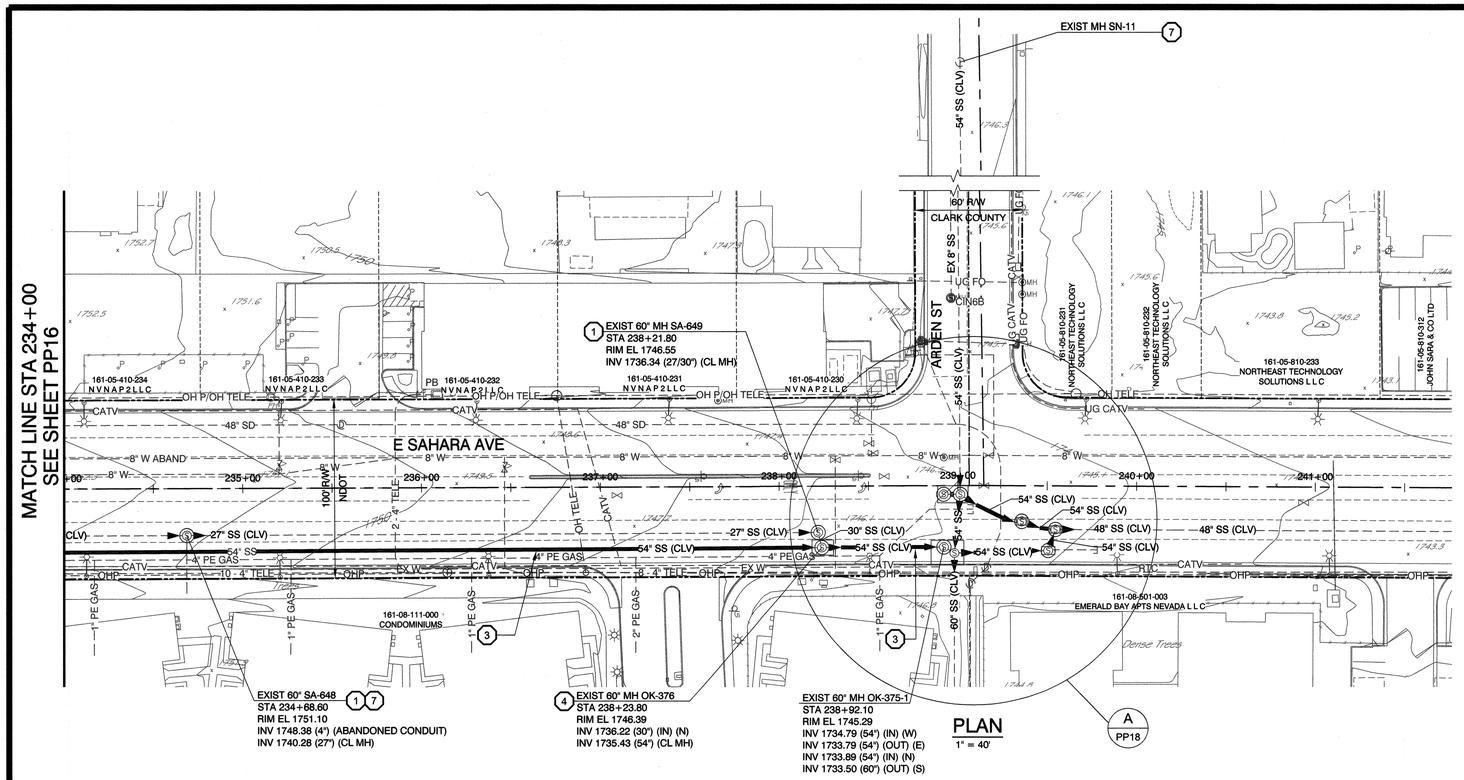
SHEET
SAHARA AVE PLAN & PROFILE STA 225+00 TO STA 234+00

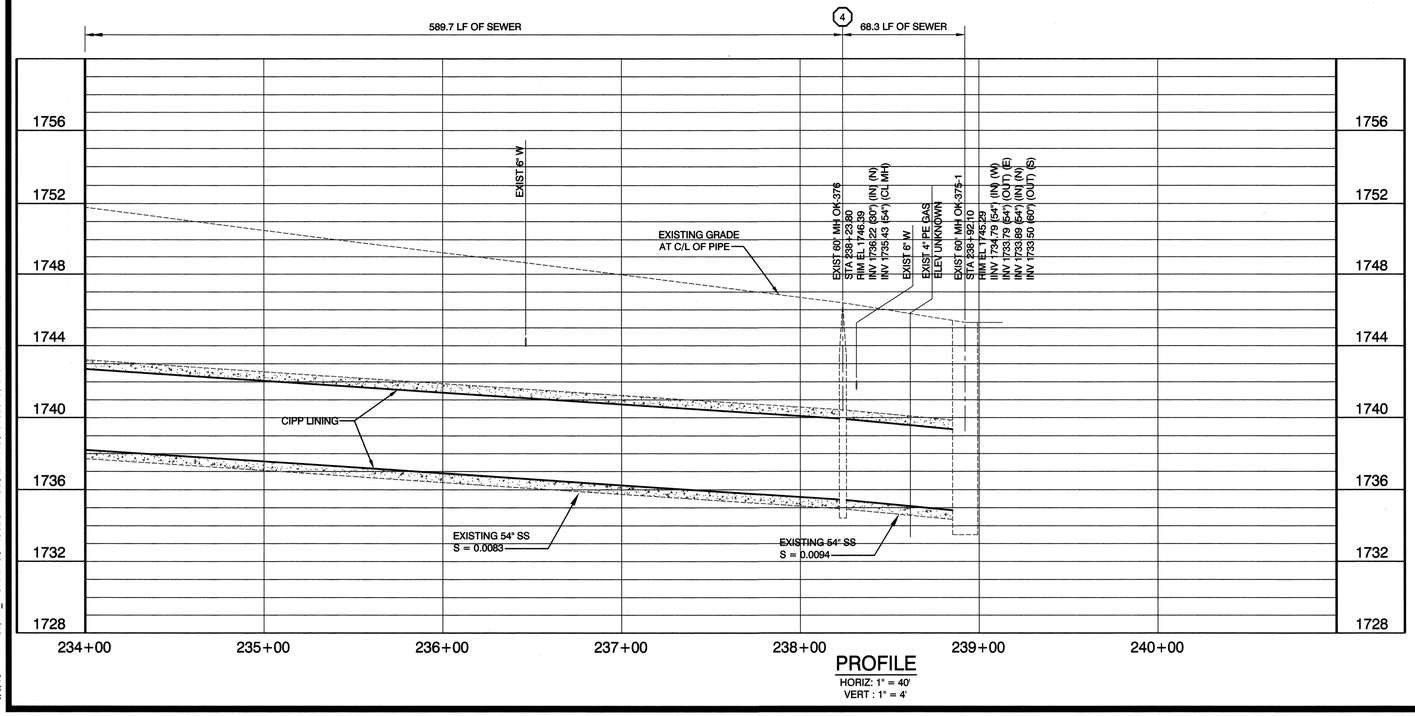
STATE OF NEVADA
MICHAEL A. FLEURY
Exp: 06-30-17
CIVIL
No. 20947
PROFESSIONAL ENGINEER
1/25/17

SHEET
PP16
24 OF 39
DRAWING NO.
307V1111

PROJ#:124895 QS-162-10-NW,161-05-SW

C:\PW_WORKING\PROJECTWISE\AEVANS\D04586701\0167A10-PP16.DWG
6/9/15





PROFILE
HORIZ: 1" = 40'
VERT : 1" = 4'

GRAPHIC SCALE
NORTH
(IN FEET)
1 inch = 40 ft.

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Call Before you Under Ground 1-702-455-7511 1-702-229-6611

GENERAL NOTES:

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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17 PROJECT# 124895

carollo

NO.	DATE	SHEET REVISIONS

PREPARED BY
CITY OF LAS VEGAS NEVADA
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

BID#	16.53545
DESIGNED BY:	MAF
DRAWN BY:	ARE
CHECKED BY:	GAG

DATE: JANUARY 2017
SUBMITTAL STAGE: 100% FINAL

TITLE
DOWNTOWN INTERCEPTOR SEWER REHABILITATION PHASE 2

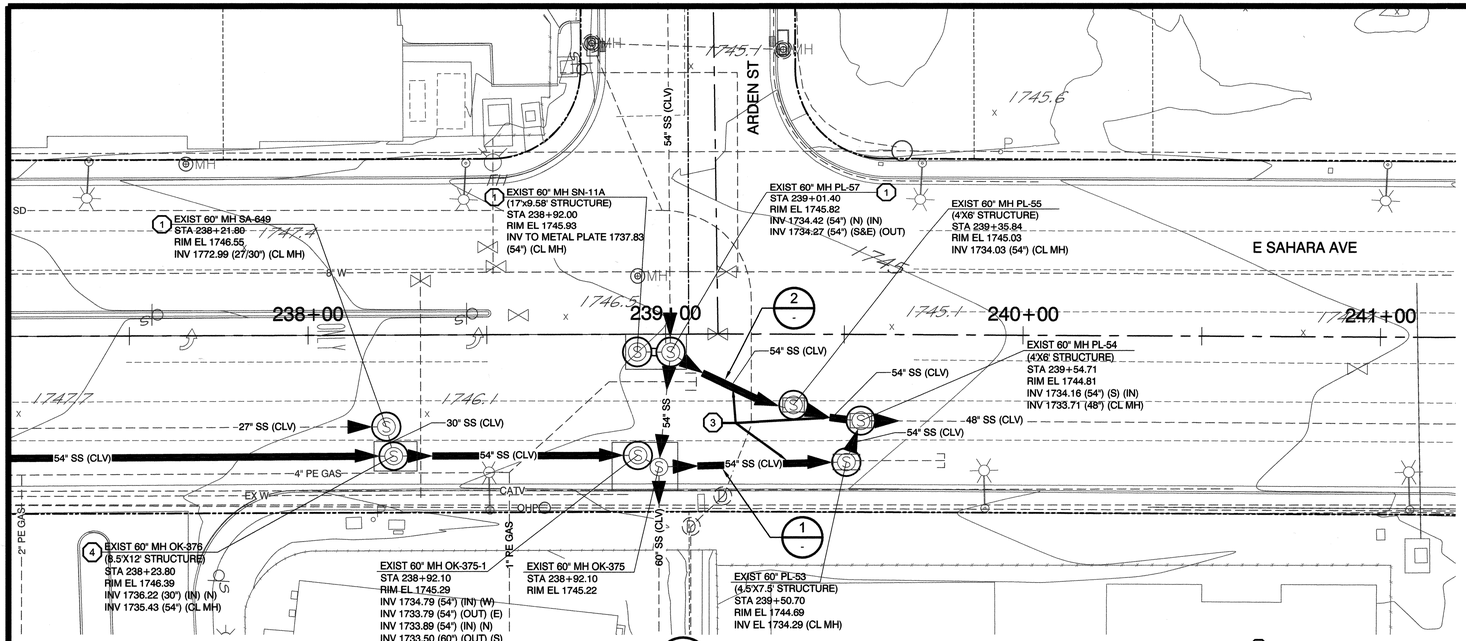
SHEET
SAHARA AVE PLAN & PROFILE STA 234+00 TO STA 240+00

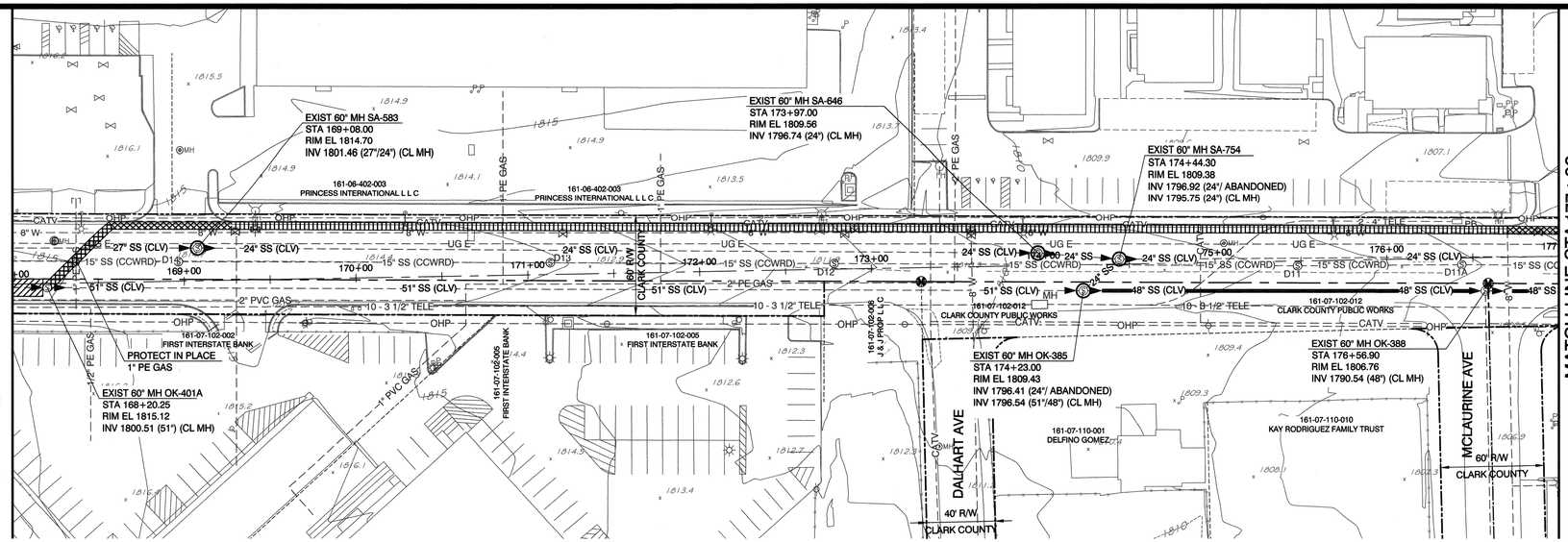
STATE OF NEVADA PROFESSIONAL ENGINEER MICHAEL A. FLEURY Exp: 06-30-17 CIVIL No. 20944
10/19

SHEET
PP17
25 OF 39
DRAWING NO.
307V1111

PROJ.#:124895 QS:162-10-NW,161-05-SW

C:\PW_WORKING\PROJECTWISE\AEVANS\D04536701\01167A10-PP17.DWG
6/9/15


ARDEN ST
E SAHARA AVE
238+00
239+00
240+00
241+00
1745.1
1745.6
1747.4
1747.7
1746.5
1746.1
1745.1
1745.3
1747.3
1747.7
1746.1
1745.6
1745.3



PLAN
1" = 40'

GRAPHIC SCALE

NORTH

(IN FEET)
1 inch = 40 ft.

Call before you Dig — Call 811 — 1-800-227-3600 — 1-702-455-7511

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Call before you Dig Under Ground 1-702-455-7511 1-702-229-6611

CONSTRUCTION BYPASS NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SEWER BYPASS DESIGN FOR DEWATERING OF THE PIPE DURING REHABILITATION. THIS INCLUDES ALL PUMPING EQUIPMENT, PIPING AND FITTINGS, POWER, COLLECTION AND DISTRIBUTION ELEMENTS TO ACHIEVE THE BYPASSING OF THE EXISTING SEWAGE FROM INTAKE POINT TO DISCHARGE POINT.
2. THE CONTRACTOR SHALL PREPARE AND SUBMIT A TEMPORARY BYPASS PLAN (TBP) FOR THE BYPASS OPERATION (SEE SPECIAL PROVISIONS SECTION 695). THE CONTRACTOR MUST HAVE AN APPROVED TBP PRIOR TO ANY PIPE LINING.
3. THE CONTRACTOR SHALL BYPASS ALL MAINLINE AND LATERAL FLOWS. QUANTITY OF SEWAGE TO BE BYPASSED FROM POINT TO POINT SHALL BE THE SUM OF ALL THE FLOWS ENTERING THE PIPELINE BEFORE POINT OF DISCHARGE.
4. ODOR CONTROL SHALL BE IN CONFORMANCE WITH SECTION 695 OF THE SPECIAL PROVISIONS.
5. THE CONTRACTOR BYPASS PLANS MUST CONSIDER THE EXISTING SPEED LIMITS AND ALLOWABLE REDUCTIONS IN DETERMINING THE LOCATION OF PIPING AND THE REQUIRED TCP ELEMENTS. THE CONTRACTOR SHALL BE ALLOWED TO REDUCE SPEED AT EACH LOCATION WHERE THE PIPING CROSSES PERPENDICULAR TO A LANE(S) OF TRAFFIC BY 10 MPH. THE LOCATION AND CONSTRUCTION OF THE BYPASS PIPING SHALL CONFORM TO THE DETAILS SHOWN ON DRAWING DT03. THE CONTRACTOR MAY REQUEST A VARIANCE TO THESE DETAILS BY SHOWING ALTERNATIVES THAT WILL ACHIEVE THE REQUIRED SPEED LIMITS, PROVIDE SAFETY TO VEHICLES AND PEDESTRIANS, AND ACHIEVE THE DESIRED RESULTS FOR THE BYPASSING OF SEWAGE.
6. THE CONTRACTOR SHALL PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN (TCP) TO THE CITY OF LAS VEGAS OR CLARK COUNTY TRAFFIC ENGINEERING DIVISION, AND NDOT FOR THE WORK (SEE SPECIAL PROVISIONS SECTION 624). THE CONTRACTOR MUST HAVE AN APPROVED TCP PRIOR TO ANY CONSTRUCTION.
7. STANDARD DETAILS FOR TRENCH EXCAVATION, TRENCH PLATING, AND FINISHED ROAD CROSS SECTIONS ARE SHOWN IN DETAILS ON SHEET DT03 AND DT04. CHANGES TO THESE DETAILS WILL REQUIRE APPROVAL FROM THE CITY OF LAS VEGAS TRAFFIC ENGINEERING DIVISION.
8. IF REQUIRED, REMOVE AND REINSTALL MANHOLE FRAME, COVER, GRADE RINGS, AND CONE PER SD-4 OF THE DESIGN CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS (2009).
9. THE CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS TO ALL ADJOINING PROPERTIES ACCESSIBLE TO THE PUBLIC AND EMERGENCY VEHICLES. DESIGNS FOR MAINTAINING ACCESS WILL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE CONTROLLING AGENCY FOR REVIEW AND APPROVAL. SEE DETAIL 2, SHEET DT03 FOR DRIVEWAY RAMP.
10. CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS THROUGH RAMPS AT CROSSWALKS.
11. ALL BYPASS OPERATIONS ARE TO OCCUR WITHIN THE BYPASS CORRIDOR SHOWN ON THE BYPASS DRAWINGS. IF THE CONTRACTOR REQUIRES AN ADDITIONAL CLOSURE AREA THEY MUST OBTAIN ADDITIONAL APPROVAL FROM THE CITY OF LAS VEGAS OR CLARK COUNTY TRAFFIC ENGINEERING DIVISION.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING STAGING AREAS FOR THEIR WORK.
13. CONTRACTOR SHALL MAINTAIN STORM FLOW TO EXISTING DROP INLETS. DESIGNS FOR MAINTAINING FLOW WILL BE PREPARED BY THE CONTRACTOR AND INCLUDED IN THE TBP.
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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17 PROJECT# 124895

LEGEND

- MAINTAIN PEDESTRIAN ACCESS
- FLOW BYPASS CORRIDOR PIPE LAID ABOVE GRADE. INSTALL PER DETAIL 1, AS SHOWN ON DT03 FOR ROADWAY AND DRIVEWAY CROSSINGS.
- FLOW BYPASS CORRIDOR PIPE TRENCHED PER DETAILS SHOWN ON DT04.
- SUCTION STAGING AREA

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

H# 53545 | BID# 16.53545 | DESIGNED BY: MAF
DATE: JANUARY 2017 | DRAWN BY: ARE
SUBMITTAL STAGE: 100% FINAL | CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

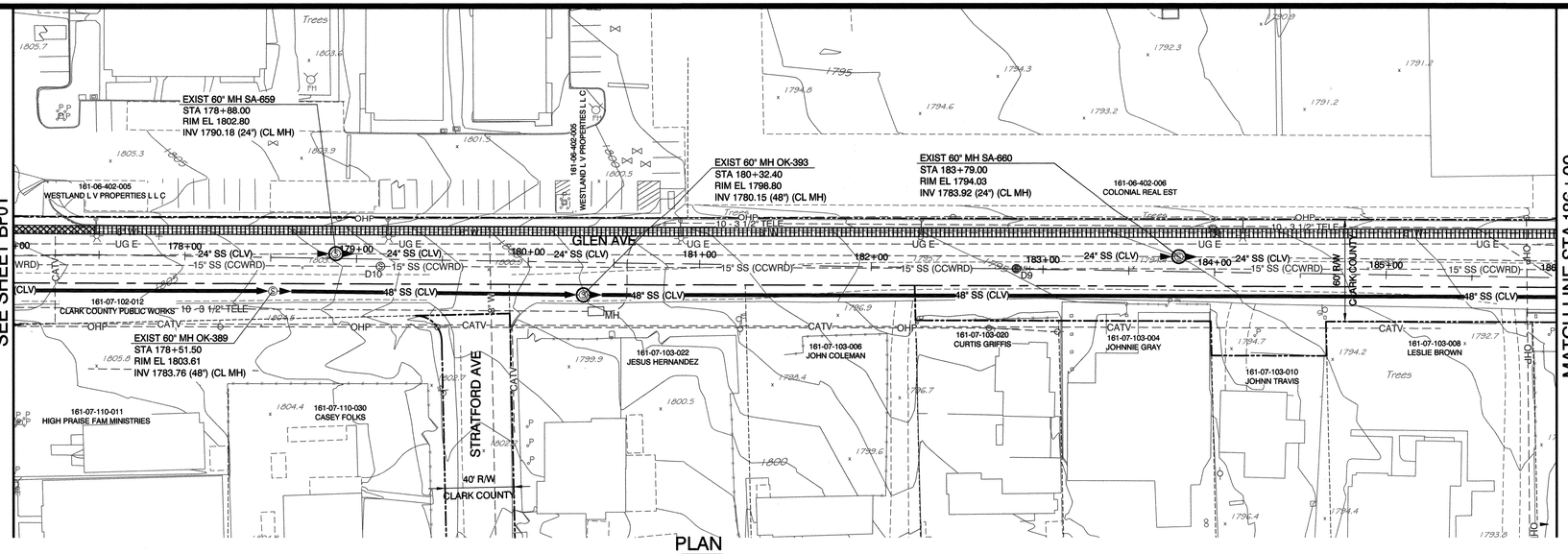
SHEET
E. GLEN AVE - BYPASS PLAN
STA 168+00 TO STA 177+00

STATE OF NEVADA — MICHAEL A. FLEURY — Exp: 06-30-17 — CIVIL — No. 22941 — PROFESSIONAL ENGINEER

SHEET
BP01
27 OF 39
DRAWING NO.
307V1111

PROJ.#:124895 QS:162-10-NW, 161-05-SW

6/9/15 C:\PW_WORKING\PROJECTWISE\AEVANS\D04539670\10167A10-BP01.DWG



PLAN
1" = 40'

GRAPHIC SCALE
NORTH
(IN FEET)
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APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17 PROJECT# 124895

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- SUCTION STAGING AREA

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY
CITY OF LAS VEGAS
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS
I# 53545
DATE: NOVEMBER 2016
SUBMITTAL STAGE: 100% DESIGN
BID# 16-53545
DESIGNED BY: MAF
DRAWN BY: ARE
CHECKED BY: GAG

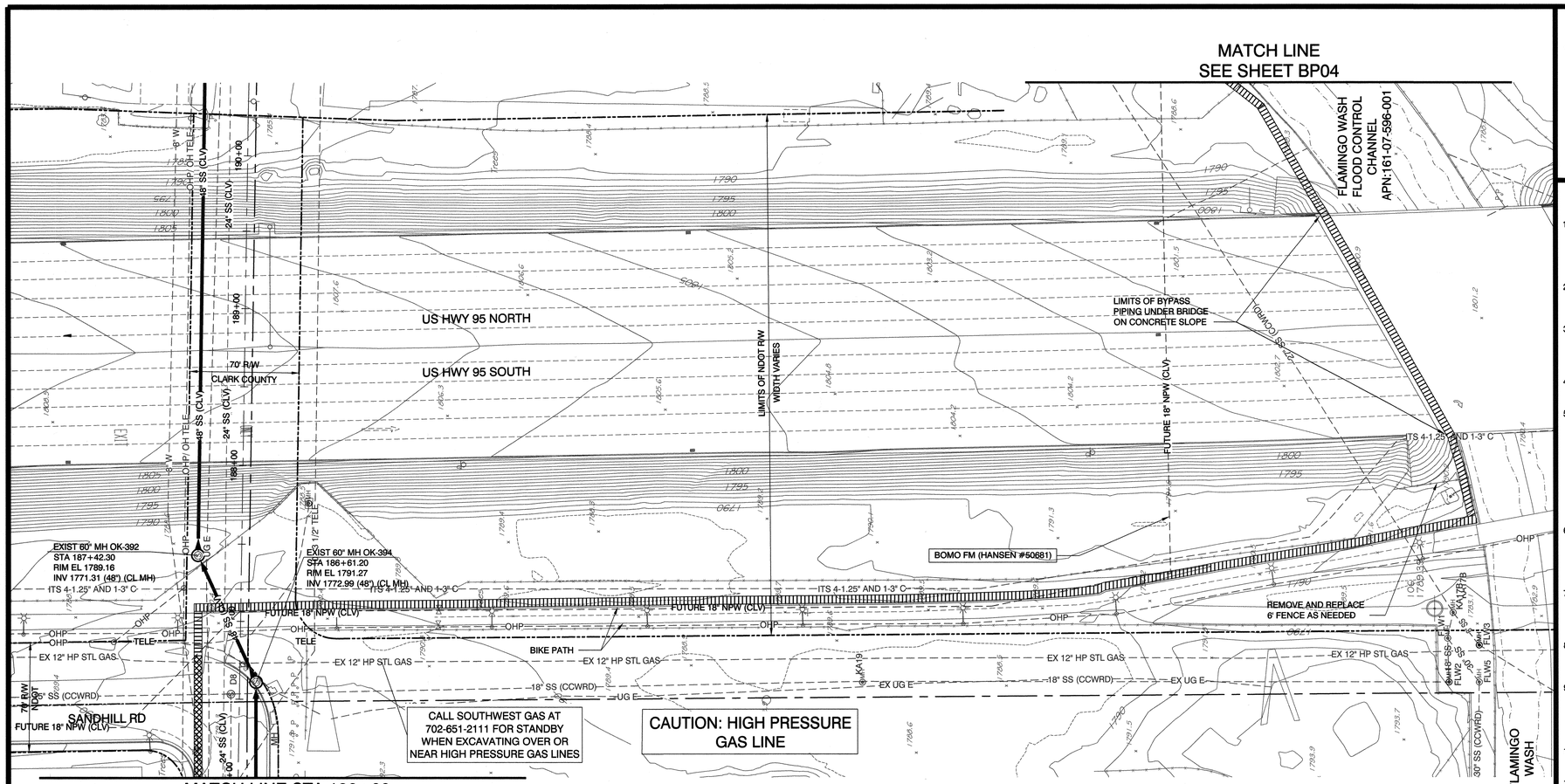
TITLE: DOWNTOWN INTERCEPTOR SEWER REHABILITATION PHASE 2
SHEET: E. GLEN AVE - BYPASS PLAN STA 177+00 TO STA 186+00

STATE OF NEVADA · PROFESSIONAL ENGINEER · MICHAEL A. FLEURY · Exp. 06-30-17 · CIVIL · No. 20941

SHEET BP02
28 OF 39
DRAWING NO. 307V1111

PROJ.#:124895 QS:162-10-NW,161-05-SW

6/9/15 C:\PW_WORKING\PROJECTWISE\CWRIGHT\D04536701\0167A10-BP02.DWG



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GRAPHIC SCALE
(IN FEET)
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NORTH

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APPROVED FOR CONSTRUCTION
N. DISHARI ER DSM
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17 PROJECT# 124895

LEGEND

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- SUCTION STAGING AREA

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY
CITY OF LAS VEGAS NEVADA
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

H# 53545 | BID# 16.53545
DATE: JANUARY 2017 | DESIGNED BY: MAF
SUBMITTAL STAGE: 100% FINAL | DRAWN BY: ARE
CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

SHEET
BIKE PATH / US 95
BYPASS PLAN

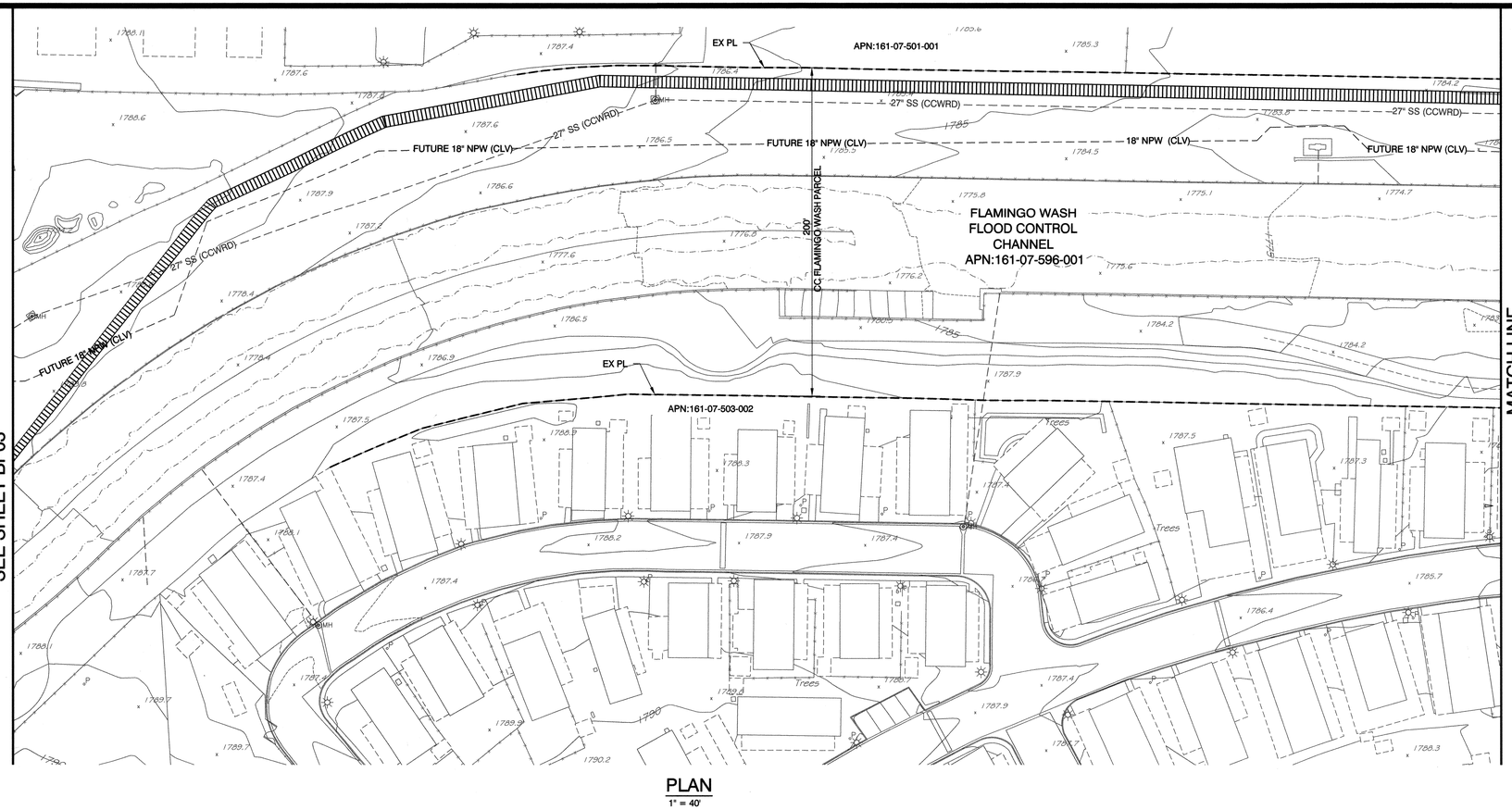
STATE OF NEVADA — MICHAEL A. FLEURY — No. 20947 — Exp. 06-30-17 — CIVIL — PROFESSIONAL ENGINEER

SHEET
BP03
29 OF 39

DRAWING NO.
307V1111

PROJ.#:124895 OS:162-10-NW,161-05-SW

6/9/15 C:\PW_WORKING\PROJECTWISE\AEVANS\D04536701\10167A10-BP03.DWG



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APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17 PROJECT# 124895

LEGEND

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carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY
CITY OF LAS VEGAS NEVADA
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

I# 53545 | BID# 16.53545
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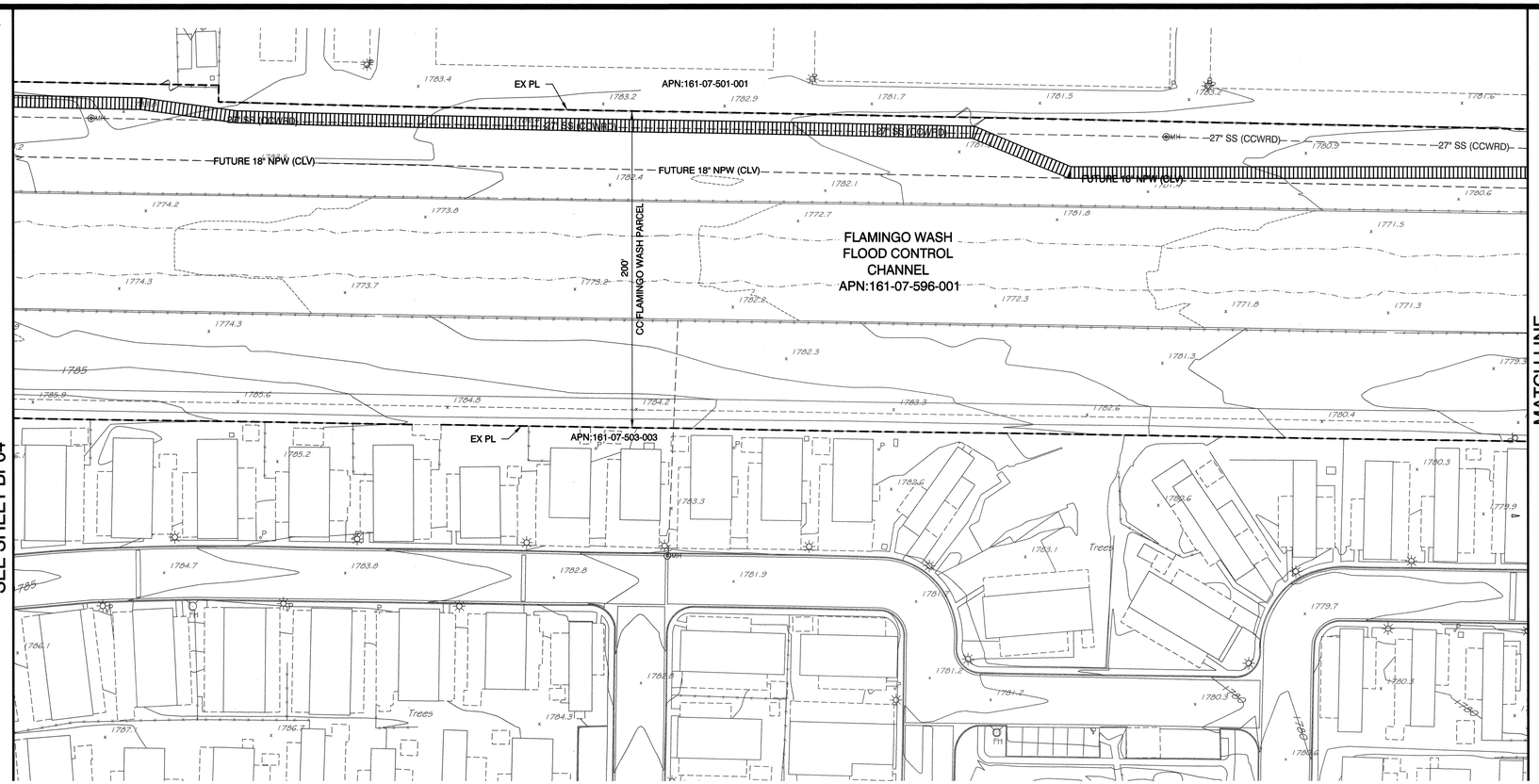
SHEET
FLAMINGO WASH
BYPASS PLAN

STATE OF NEVADA
MICHAEL A. FLEURY
Exp: 06-30-17
CIVIL
No. 20941
PROFESSIONAL ENGINEER
1/25/17

SHEET
BP04
30 OF 39
DRAWING NO.
307V1111

PROJ#:124895 QS:162-10-NW,161-05-SW

6/9/15 C:\PW_WORKING\PROJECTWISE\AE\ANSI\D0453670\10167A10-BP04.DWG



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APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
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PREPARED FOR
CITY OF LAS VEGAS

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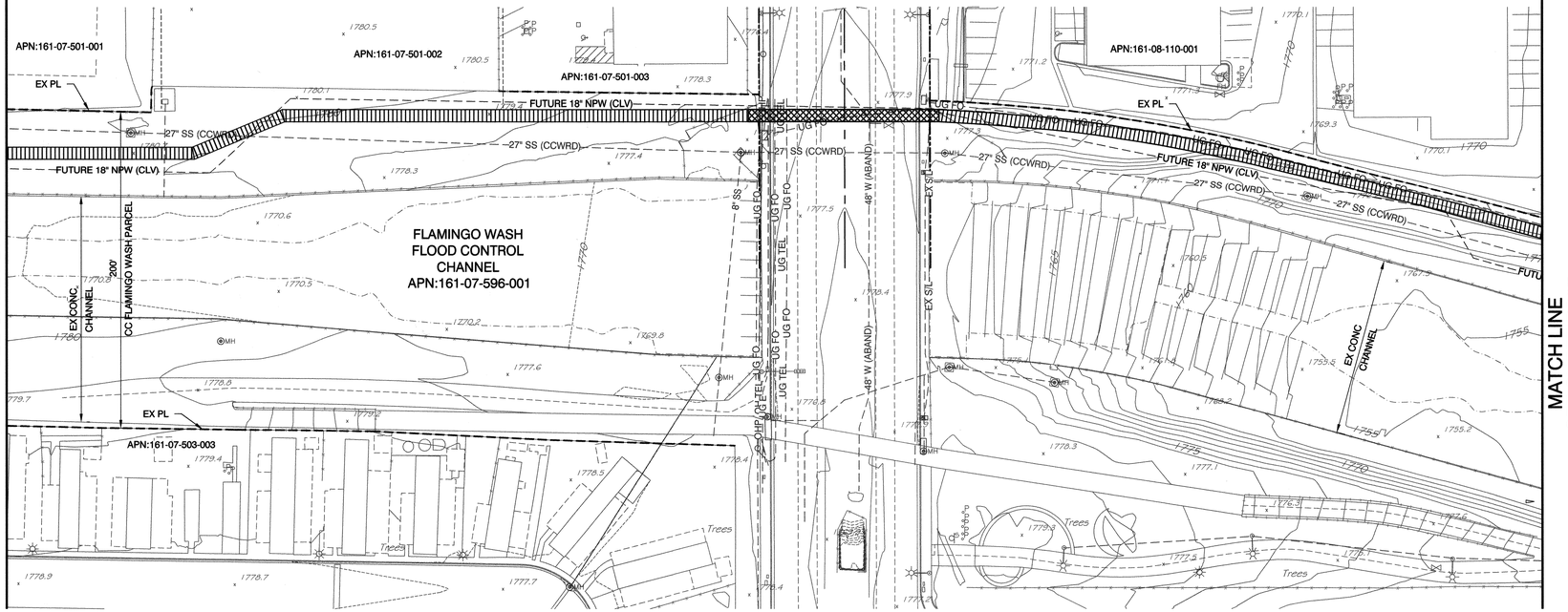
SHEET
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MICHAEL A. FLEURY
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CIVIL
No. 20941
PROFESSIONAL ENGINEER
1/10/17

SHEET
BP05
31 OF 39
DRAWING NO.
307V1111

PROJ.#:124895 OS:162-10-NW,161-05-SW

6/9/15 C:\PW_WORKING\PROJECTWISE\AEVANS\D04536701\0167A10-BP05.DWG



PLAN
1" = 40'

JEROME D. MACK
MIDDLE SCHOOL

PRIOR TO COMMENCEMENT OF WORK IN ANY LOCATION WHERE THE CONTRACTOR ELECTS TO TEMPORARILY INSTALL THE BYPASS SEWER LINE BELOW PAVEMENT, A SHOP DRAWING SUBMITTAL INDICATING THE MEANS AND METHOD, MUST BE SUBMITTED TO, AND APPROVED BY, LVVWD FOR SEWER-WATER SEPARATION MITIGATION.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17 PROJECT# 124895

GRAPHIC SCALE

NORTH

(IN FEET)
1 inch = 40 ft.

Call before you Dig — Call 811 — 1-800-227-2600 — 1-702-486-7544

Avoid cutting overhead utility lines, it's costly. Call before you do Overhead — 1-702-593-6111

Call before you Dig Underground — 1-702-455-7511 — 1-702-729-6611

CONSTRUCTION BYPASS NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SEWER BYPASS DESIGN FOR DEWATERING OF THE PIPE DURING REHABILITATION. THIS INCLUDES ALL PUMPING EQUIPMENT, PIPING AND FITTINGS, POWER, COLLECTION AND DISTRIBUTION ELEMENTS TO ACHIEVE THE BYPASSING OF THE EXISTING SEWAGE FROM INTAKE POINT TO DISCHARGE POINT.
2. THE CONTRACTOR SHALL PREPARE AND SUBMIT A TEMPORARY BYPASS PLAN (TBP) FOR THE BYPASS OPERATION (SEE SPECIAL PROVISIONS SECTION 695). THE CONTRACTOR MUST HAVE AN APPROVED TBP PRIOR TO ANY PIPE LINING.
3. THE CONTRACTOR SHALL BYPASS ALL MAINLINE AND LATERAL FLOWS. QUANTITY OF SEWAGE TO BE BYPASSED FROM POINT TO POINT SHALL BE THE SUM OF ALL THE FLOWS ENTERING THE PIPELINE BEFORE POINT OF DISCHARGE.
4. ODOR CONTROL SHALL BE IN CONFORMANCE WITH SECTION 695 OF THE SPECIAL PROVISIONS.
5. THE CONTRACTOR BYPASS PLANS MUST CONSIDER THE EXISTING SPEED LIMITS AND ALLOWABLE REDUCTIONS IN DETERMINING THE LOCATION OF PIPING AND THE REQUIRED TCP ELEMENTS. THE CONTRACTOR SHALL BE ALLOWED TO REDUCE SPEED AT EACH LOCATION WHERE THE PIPING CROSSES PERPENDICULAR TO A LANE(S) OF TRAFFIC BY 10 MPH. THE LOCATION AND CONSTRUCTION OF THE BYPASS PIPING SHALL CONFORM TO THE DETAILS SHOWN ON DRAWING DT03. THE CONTRACTOR MAY REQUEST A VARIANCE TO THESE DETAILS BY SHOWING ALTERNATIVES THAT WILL ACHIEVE THE REQUIRED SPEED LIMITS, PROVIDE SAFETY TO VEHICLES AND PEDESTRIANS, AND ACHIEVE THE DESIRED RESULTS FOR THE BYPASSING OF SEWAGE.
6. THE CONTRACTOR SHALL PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN (TCP) TO THE CITY OF LAS VEGAS OR CLARK COUNTY TRAFFIC ENGINEERING DIVISION, AND NDOT FOR THE WORK (SEE SPECIAL PROVISIONS SECTION 624). THE CONTRACTOR MUST HAVE AN APPROVED TCP PRIOR TO ANY CONSTRUCTION.
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8. IF REQUIRED, REMOVE AND REINSTALL MANHOLE FRAME, COVER, GRADE RINGS, AND CONE PER SD-4 OF THE DESIGN CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS (2009).
9. THE CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS TO ALL ADJOINING PROPERTIES ACCESSIBLE TO THE PUBLIC AND EMERGENCY VEHICLES. DESIGNS FOR MAINTAINING ACCESS WILL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE CONTROLLING AGENCY FOR REVIEW AND APPROVAL. SEE DETAIL 2, SHEET DT03 FOR DRIVEWAY RAMP.
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LEGEND

- MAINTAIN PEDESTRIAN ACCESS
- FLOW BYPASS CORRIDOR PIPE LAID ABOVE GRADE PER DETAIL 1, SHOWN ON DT03.
- FLOW BYPASS CORRIDOR PIPE TRENCHED PER DETAILS SHOWN ON DT04.
- SUCTION STAGING AREA

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY

CITY OF LAS VEGAS NEVADA

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

BID# 16.53545
DESIGNED BY: MAF
DRAWN BY: ARE
CHECKED BY: GAG

I# 53545
DATE: JANUARY 2017
SUBMITTAL STAGE: 100% FINAL

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

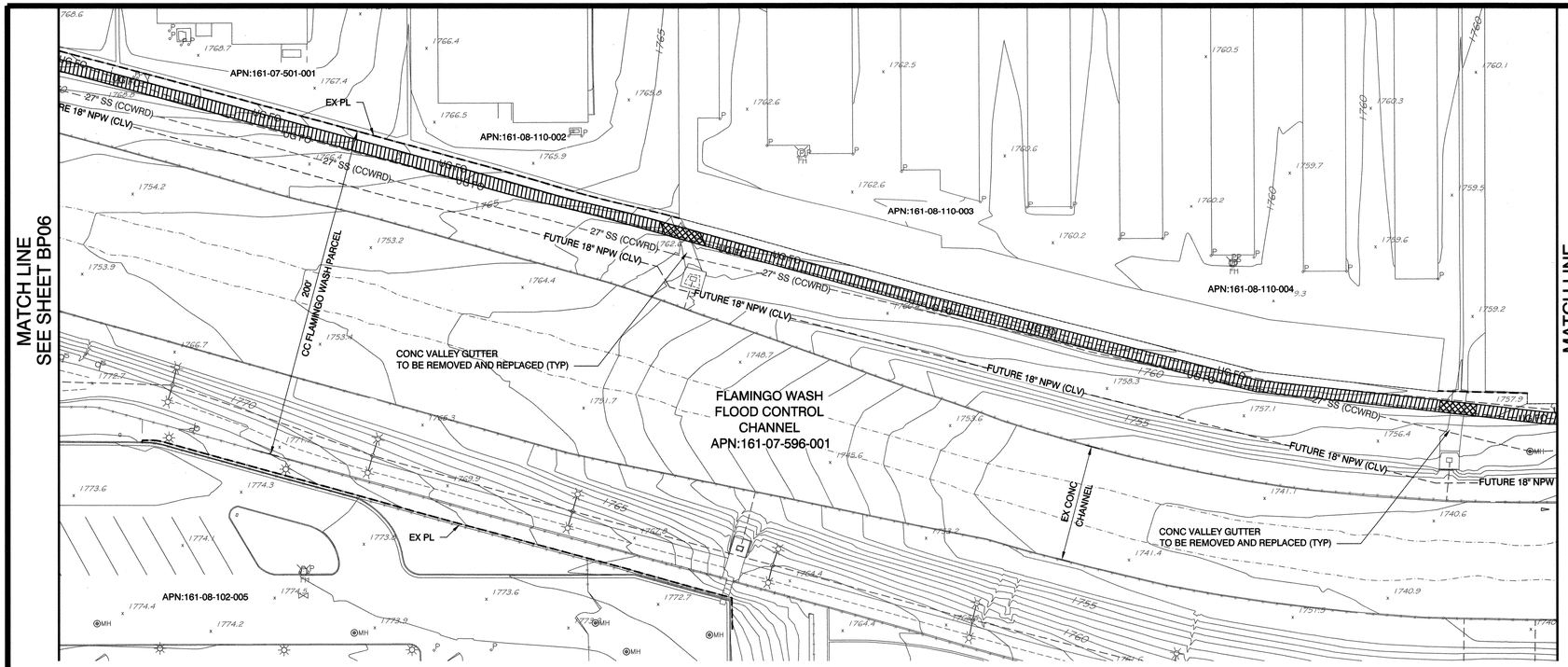
SHEET
FLAMINGO WASH
BYPASS PLAN

ENGINEER'S SEAL — STATE OF NEVADA — MICHAEL A. FLEURY — Exp: 06-30-17 CIVIL — No. 20041 — PROFESSIONAL ENGINEER — 1/10/17

SHEET
BP06
32 OF 39
DRAWING NO.
307V1111

PROJ.#:124895 QS:162-10-NW,161-05-SW

6/9/15 C:\PW_WORKING\PROJECTWISE\AEVANS\D0453870\10167A10-BP06.DWG



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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE: 1/25/17 PROJECT# 124895

GRAPHIC SCALE

NORTH

(IN FEET)

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Avoid cutting overhead utility lines. It's costly. Call before you do Overhead 1-702-383-6111 Overhead across town, across Nevada

Call Before You Dig Underground 1-702-455-7511 1-702-229-6611

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- FLOW BYPASS CORRIDOR PIPE TRENCHED PER DETAILS SHOWN ON DT04.
- SUCTION STAGING AREA

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY

CITY OF LAS VEGAS — DEPARTMENT OF PUBLIC WORKS — CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

H# 53545 | BID# 16.53545
DATE: JANUARY 2017 | DESIGNED BY: MAF
SUBMITTAL STAGE: 100% FINAL | DRAWN BY: ARE | CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

SHEET
FLAMINGO WASH
BYPASS PLAN

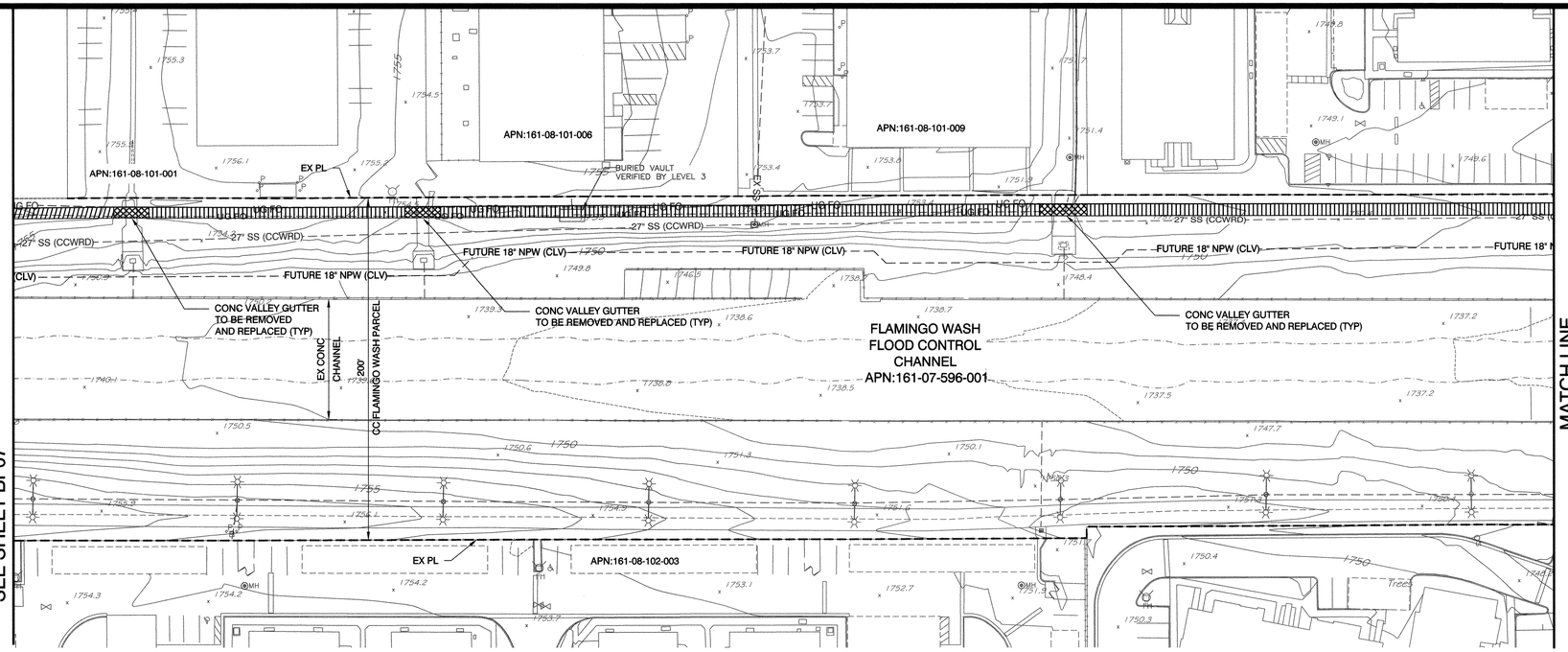
REGISTERED PROFESSIONAL ENGINEER — STATE OF NEVADA — MICHAEL A. FLEURY — Exp: 06-30-17 — CIVIL — No. 20941 — 1/6/17

SHEET
BP07
33 OF 39

DRAWING NO.
307V1111

PROJ.#:124895 QS:162-10-NW,161-05-SW

6/9/15 C:\PW_WORKING\PROJECTWISE\AEVANS\D04536701\10167A10-BP07.DWG



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APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17 PROJECT# 124895

GRAPHIC SCALE

NORTH

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1-702-486-2351
1-702-455-7544

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Call before you do Overhead
1-702-593-6111
(outside service area)

Call Before You Dig
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- SUCTION STAGING AREA

carollo

NO.	DATE	SHEET	REVISIONS

PREPARED BY
CITY OF LAS VEGAS NEVADA
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

H# 53545
DATE: JANUARY 2017
BID# 16.53545
DESIGNED BY: MAF
DRAWN BY: ARE
CHECKED BY: GAG
SUBMITTAL STAGE:
100% FINAL

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

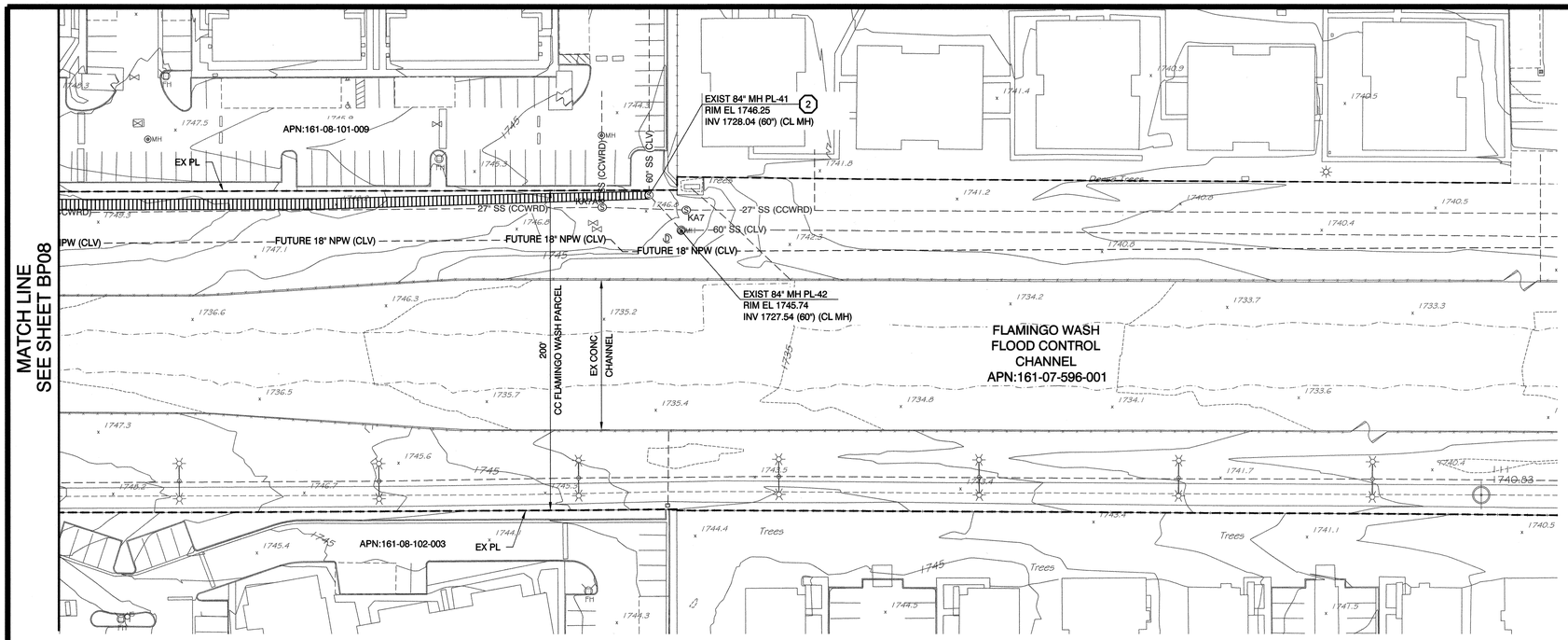
SHEET
FLAMINGO WASH
BYPASS PLAN

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEVADA
MICHAEL A FLEURY
Exp. 06-30-17
CIVIL
No. 20941
PROFESSIONAL ENGINEER
STATE OF NEVADA
1/6/17

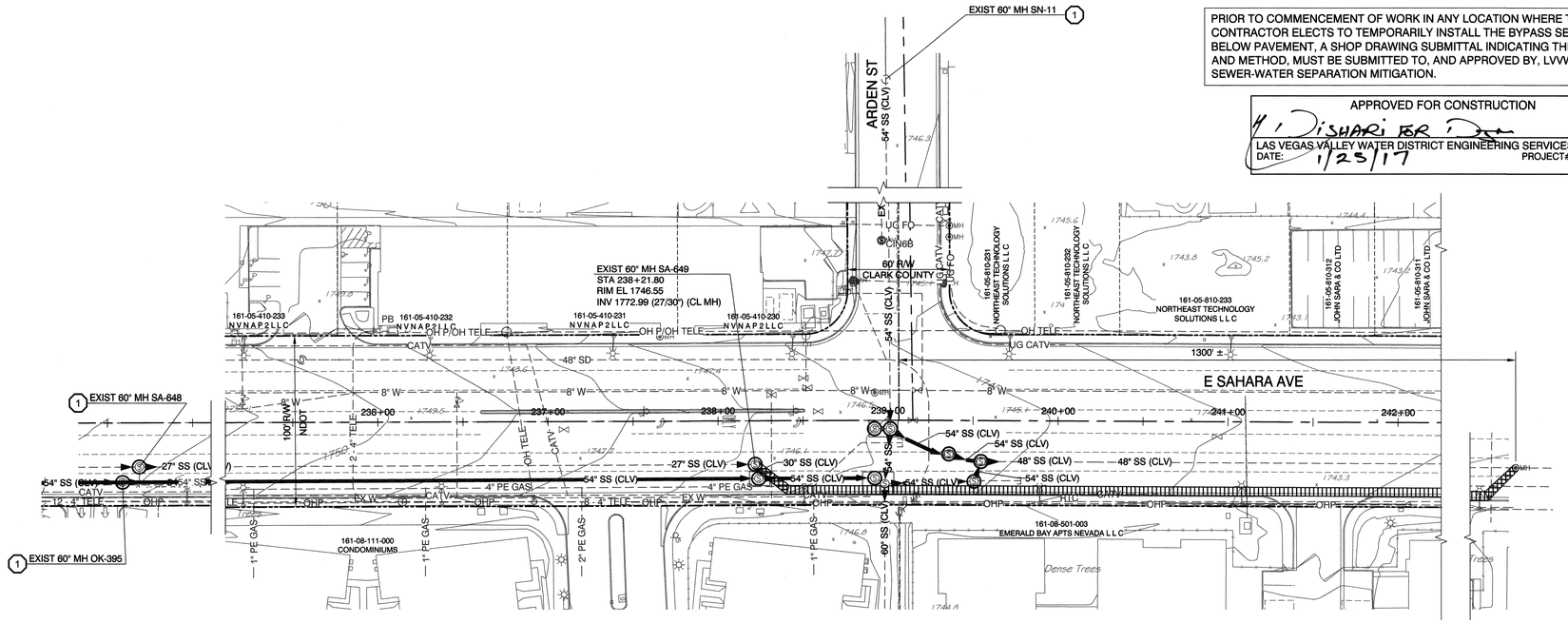
SHEET
BP08
34 OF 39
DRAWING NO.
307V1111

PROJ.#:124895 QS:102-10-NW,161-05-SW

6/9/15 C:\PW_WORKING\PROJECTWISE\AEVANS\D04536701\01167A10-BP08.DWG



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APPROVED FOR CONSTRUCTION

Y. DISHARI FOR

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/25/17 PROJECT# 124895

GRAPHIC SCALE

NORTH

(IN FEET)
1 inch = 40 ft.

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CONSTRUCTION BYPASS KEY NOTES:

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LEGEND

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carollo

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PREPARED BY
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

I.# 53545 | BID# 16.53545
DATE: JANUARY 2017 | DESIGNED BY: MAF
SUBMITTAL STAGE: 100% FINAL | DRAWN BY: ARE
CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR
SEWER REHABILITATION PHASE 2

SHEET
FLAMINGO WASH AND SAHARA AVE/
ARDEN ST BYPASS PLAN

STATE OF NEVADA
PROFESSIONAL ENGINEER
MICHAEL A FLEURY
Exp: 06-30-17
CIVIL
No. 20941
1/25/17

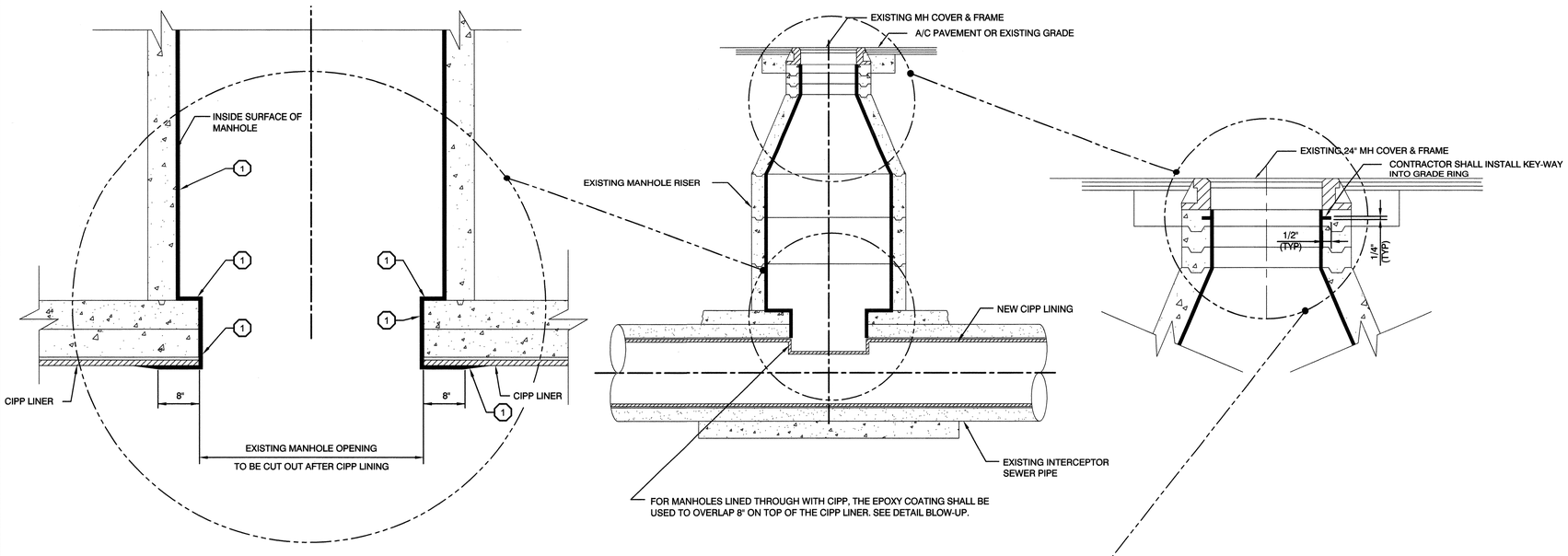
SHEET
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35 OF 39
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307V1111

PRO.J#:124895 QS:162-10-NW,161-05-SW

6/9/15 C:\PW_WORKING\PROJECTWISE\AEVANS\D04536701\10167A10-BP09.DWG

CONSTRUCTION NOTES:

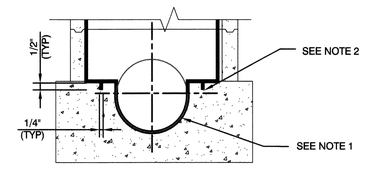
1. CONTRACTOR SHALL INSTALL COATING SYSTEM AS SPECIFIED IN SPECIAL PROVISION 691 TO THE LIMITS AS SHOWN. THE CONTRACTOR SHALL INSTALL THE COATING SYSTEM ON ANY SURFACE OF THE PIPE NOT LINED BY THE CIPP LINER. THE COATING SHALL BE 1/4" MIN. (250mils) THICK ON THE MANHOLE SURFACE. THE CONTRACTOR SHALL THEN OVERLAP THE COATING 8-INCHES ON TOP OF THE CIPP LINER OF EXISTING PIPE W/TAPER AS SHOWN TO SEAL MANHOLE AND PIPE.
2. CONTRACTOR SHALL INSTALL FLOW THROUGH PLUG TO FACILITATE CHANNEL AND CIPP END SEAL EPOXY COATING.
3. REMOVE EXISTING T-LOCK LINING WELD STRIPS AS NEEDED PRIOR TO CIPP LINER. SEE SPECIAL PROVISIONS AND GN04.



1 MANHOLE EPOXY COATING DETAIL (CIPP LINED THROUGH MANHOLE)

PP01 SCALE: NTS

PP02-PP17

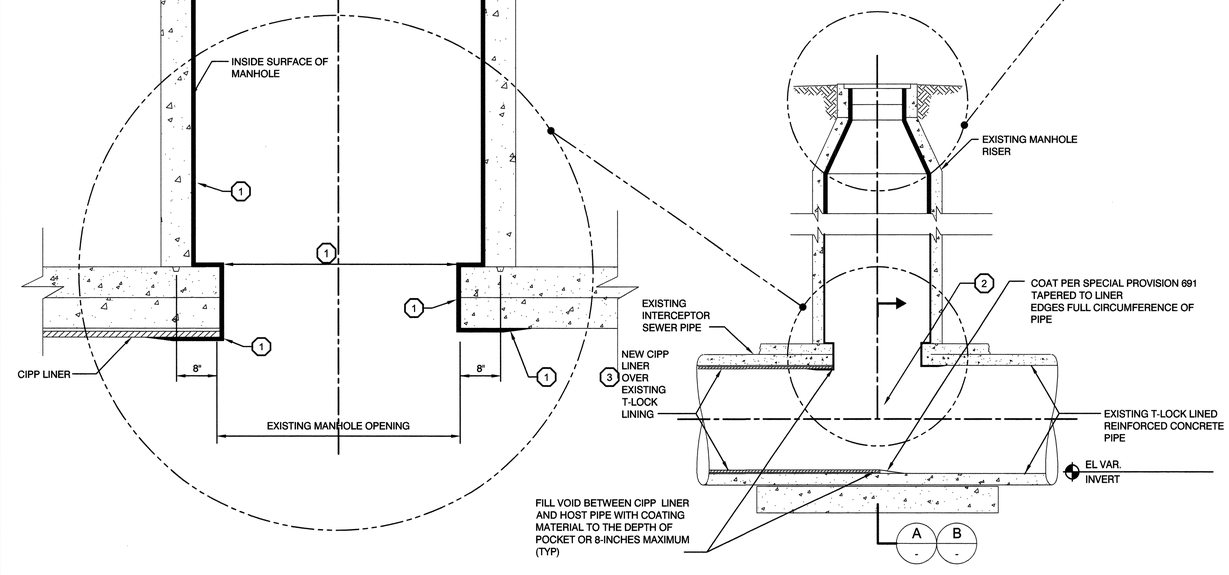


NOTES:

1. MANHOLES NOT LINED THROUGH WITH CIPP WILL HAVE CHANNEL AND INVERT EPOXY COATED WITH A COATING SYSTEM IN ACCORDANCE WITH SPECIAL PROVISION 691. SEE CONSTRUCTION NOTE 2 ABOVE.
2. CONTRACTOR SHALL INSTALL KEY-WAY INTO BENCH (TYP).

A SECTION (FOR CIPP INSERTION/TERMINATION MANHOLE)

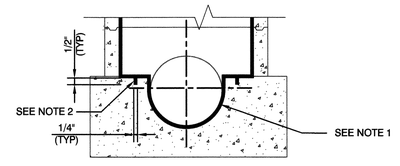
SCALE: NTS



2 MANHOLE EPOXY COATING AND/OR CIPP LINER TERMINATION AT MANHOLE DETAIL

PP01 SCALE: NTS

PP02-PP17



NOTES:

1. MANHOLES EPOXY COATED SHALL BE EPOXY COATED DOWN TO THE INVERT OF THE PIPE CHANNEL IN ACCORDANCE WITH SPECIAL PROVISION 691.
2. CONTRACTOR SHALL INSTALL KEY-WAY IN LOCATION SHOWN.

B SECTION (FOR MANHOLE BASE EPOXY COATING)

SCALE: NTS

carollo

NO.	DATE	REVISIONS

PREPARED BY

CITY OF LAS VEGAS NEVADA

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

I# 53545 | BID# 16.53545
DATE: JANUARY 2017 | DESIGNED BY: MAF
SUBMITTAL STAGE: 100% FINAL | DRAWN BY: ARE
CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR SEWER REHABILITATION PHASE 2

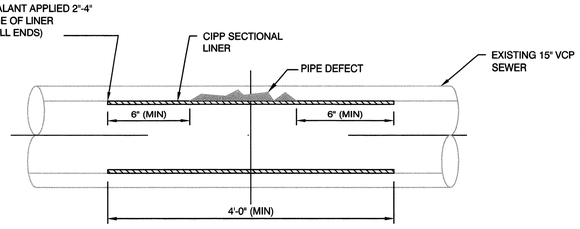
SHEET
STANDARD DETAILS I

STATE OF NEVADA
REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. FLEURY
Exp.: 06-30-17
CIVIL
No. 20941
10/17

SHEET
DT01
36 OF 39

DRAWING NO.
307V1111

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NOTE:

1. CONTRACTOR TO VERIFY LOCATION FOR POINT REPAIR. SEE GN04.

1 PP03 CIPP SECTIONAL LINER FOR A SINGLE POINT REPAIR

SCALE: NTS

carollo

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PREPARED FOR
CITY OF LAS VEGAS
H# 53545
DATE: JANUARY 2017
SUBMITTAL STAGE:
100% FINAL

BID# 16.53545
DESIGNED BY: MAF
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DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

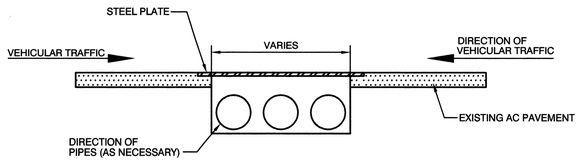
NO.	DATE	SHEET	REVISIONS

TITLE
DOWNTOWN INTERCEPTOR SEWER REHABILITATION PHASE 2

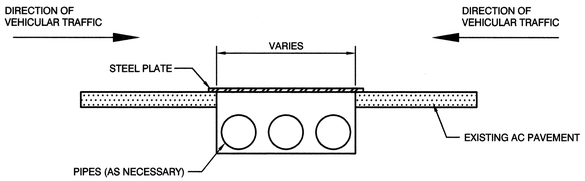
SHEET
STANDARD DETAILS II

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A. FLEURY
Exp: 06-30-17
CIVIL
No. 20947
STATE OF NEVADA
10/17

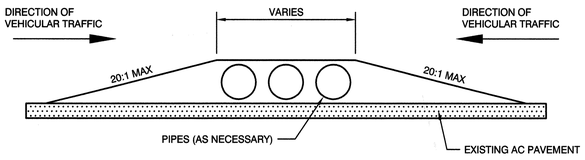
SHEET
DT02
37 OF 39
DRAWING NO.
307V1111



CASE 1-FOR SPEEDS > 25 MPH



CASE 2-FOR SPEEDS ≤ 25 MPH



CASE 3-FOR SPEEDS ≤ 25 MPH

1 BP01 FLOW BYPASS PIPING DETAILS PERPENDICULAR TO TRAFFIC FLOW DETAIL

SCALE: NTS

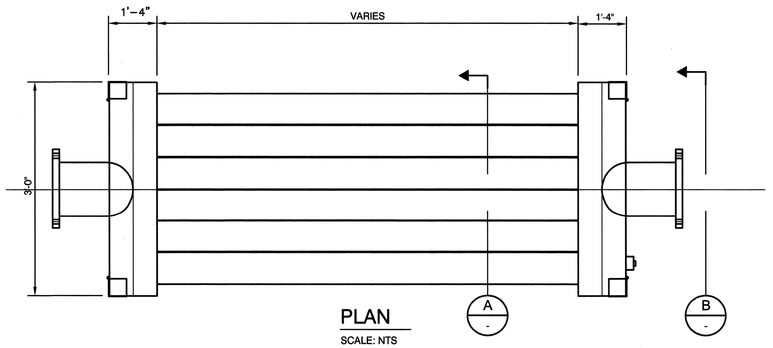
BP02-BP09

NOTE:

1. PATCH EXISTING PAVEMENT PER DETAILS ON DT04.

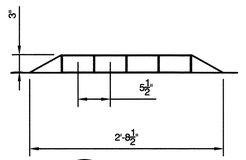
NOTE: CASE 1 AND CASE 2:

LVVWD REQUIREMENT FOR BELOW PAVEMENT INSTALLATION PRIOR TO COMMENCEMENT OF WORK IN ANY LOCATION WHERE THE CONTRACTOR ELECTS TO TEMPORARILY INSTALL THE BYPASS SEWER LINE BELOW PAVEMENT, A SHOP DRAWING SUBMITTAL INDICATING THE MEANS AND METHOD, MUST BE SUBMITTED TO, AND APPROVED BY, LVVWD FOR SEWER - WATER SEPERATION MITIGATION.



PLAN

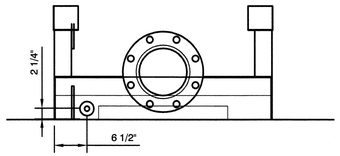
SCALE: NTS



A SECTION

SCALE: NTS

4-12 STITCH WELD



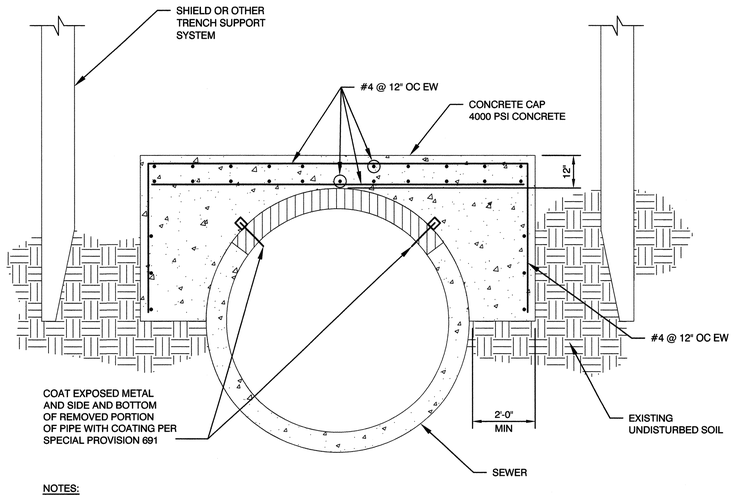
B SECTION

SCALE: NTS

2 BP01 DRIVEWAY RAMP

SCALE: NTS

BP02-BP09



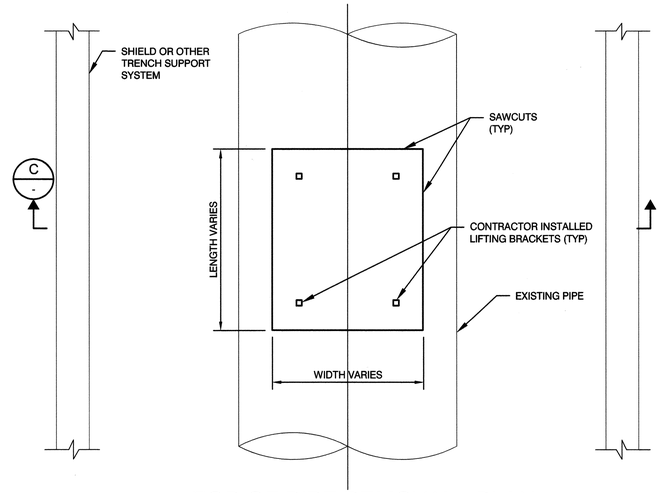
NOTES:

1. CONCRETE CAP SHALL EXTEND 2-FEET BEYOND END OF PIPE SECTION REMOVED.

4 BP01 TOP OF PIPE REPLACEMENT - DETAIL

SCALE: NTS

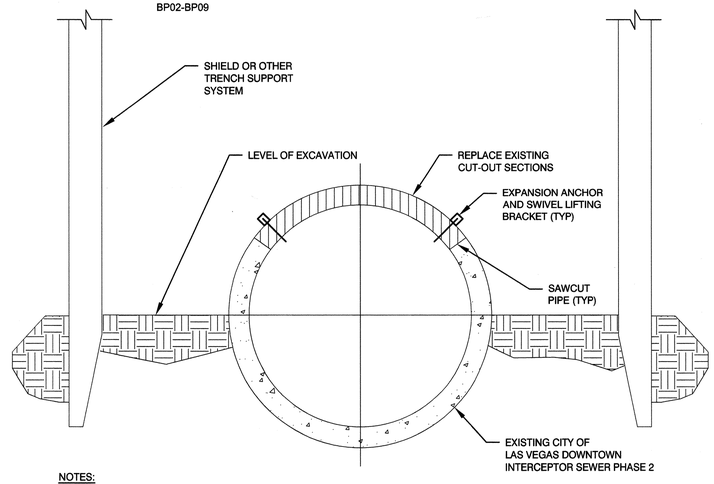
BP02-BP09



3 BP01 TOP OF PIPE REMOVAL - PLAN BYPASS PIT DETAIL

SCALE: NTS

BP02-BP09



NOTES:

1. PROVIDE EXPANSION ANCHORS AND LIFTING BRACKETS FOR REMOVAL OF TOP SECTION OF PIPE.
2. CONTRACTOR SHALL DETERMINE THE NUMBER OF LIFTING BRACKETS REQUIRED BASED ON THE CONDITION OF THE EXISTING PIPE AND SIZE OF SECTIONS OF PIPE TO BE REMOVED.
3. REPLACE PIPE SECTIONS TO ORIGINAL LOCATIONS PER REPLACEMENT DETAIL 4.
4. REMOVE EXCESS GROUNDWATER PER SPECIAL PROVISION 270.

C TOP OF PIPE REMOVAL - SECTION

SCALE: NTS

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE: 1/25/17 PROJECT# 124895

NO.	DATE	SHEET	REVISIONS

PREPARED BY

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

PREPARED FOR
CITY OF LAS VEGAS

H# 53545 | BID# 16.53545
DATE: JANUARY 2017 | DESIGNED BY: MAF
SUBMITTAL STAGE: 100% FINAL | DRAWN BY: ARE
CHECKED BY: GAG

TITLE
DOWNTOWN INTERCEPTOR SEWER REHABILITATION PHASE 2

SHEET
FLOW BYPASS DETAILS

STATE OF NEVADA — REGISTERED PROFESSIONAL ENGINEER — MICHAEL A. FLEURY — Exp: 06-30-17 CIVIL — No. 22947

SHEET
DT03
38 OF 39

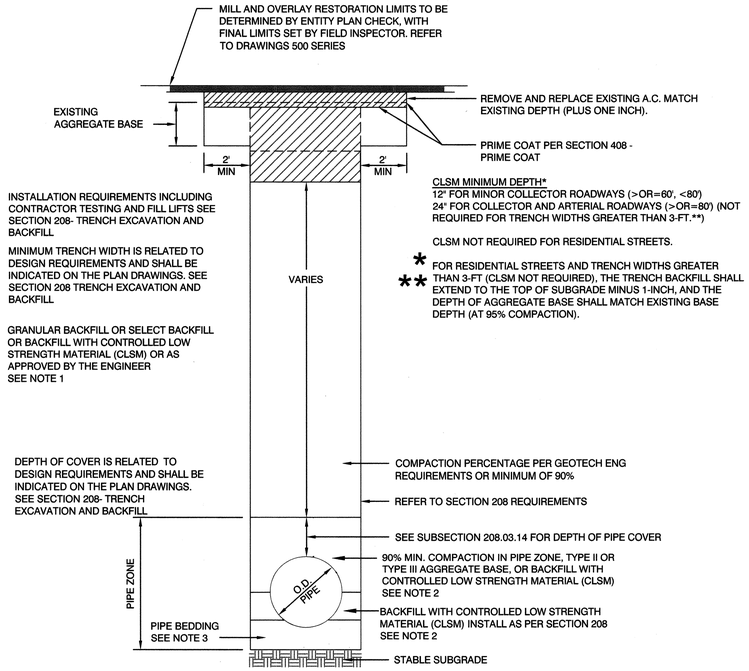
DRAWING NO.
307V1111

carollo

PRO.J#:124895 QS:162-10-NW,161-05-SW

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6/9/15



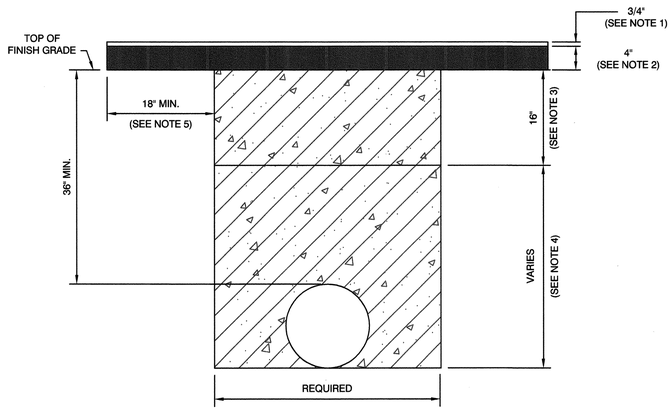
NOTES:

1. NO STONES OR LUMPS GREATER THAN 3" PERMITTED IN TRENCH 2' OR LESS IN WIDTH.
2. TRENCH WIDTH, BEDDING, SUBGRADE AND PIPE ZONE REQUIREMENTS FOR UTILITY INSTALLATIONS SHALL CONFORM TO THE RESPECTIVE ENTITY REQUIREMENTS.
3. CRUSHED ROCK MAY BE USED FOR PIPE BEDDING ONLY IF MATERIAL USE HAS BEEN SPECIFICALLY APPROVED BY THE GOVERNING AGENCY. SEE STANDARD DRAWING NO. 505 FOR PIPE BEDDING METHODS.
4. LAS VEGAS VALLEY WATER DISTRICT REQUIRES PIPE BEDDING AND BACKFILL WITHIN THE PIPE ZONE TO BE OF THE SAME MATERIAL.

UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA METHOD A FOR RIGID PIPE TRENCH BACKFILL - PAVED AREAS #503.2

1 / BP01 SCALE: NTS

BP02-BP09



NOTES:

1. 3/4 INCH OPEN GRADE.
2. 4 INCH MINIMUM DENSE GRADE OR MATCH EXISTING, WHICHEVER IS GREATER.
3. BASE AGGREGATE (AS PER NDOT SPECIFICATIONS; SECTION 704). A MINIMUM OF 16 INCHES TO BE LAID IN MAXIMUM 8 INCH LOOSE LIFTS. 95% COMPACTION REQUIRED.
4. BACKFILL WITH SELECT MATERIAL TO BOTTOM OF BASE AGGREGATE (AS PER NDOT SPECIFICATIONS; SECTION 207). 90% COMPACTION REQUIRED.
5. LIMITS OF PAVING TO BE DETERMINED BY THE NDOT INSPECTOR.

NDOT METHOD OF PATCHING ROADWAY WHERE TRENCHING IS NECESSARY FOR UTILITY OR OTHER INSTALLATIONS

2 / BP01 SCALE: NTS

BP02-BP09

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H# 53545
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DOWNTOWN INTERCEPTOR SEWER REHABILITATION PHASE 2

SHEET
TRENCH DETAILS

STATE OF NEVADA
PROFESSIONAL ENGINEER
MICHAEL A FLEURY
Exp. 06-30-17
CIVIL
No. 20941
10/17

SHEET
DT04
39 OF 39

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307V1111

carollo

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