

GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA," LATEST EDITION; THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA," LATEST EDITION; 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. THE 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 INTERFERENCES 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 OR UNDERGROUND POWER, GAS AND/OR OTHER UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COSTS 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 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 OFFSITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGN TO BE APPROVED BY THE QUALITY CONTROL DIVISION PRIOR TO 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. EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 30' IN EXTRUDED TYPE CURB.
8. AC PAVEMENT TO BE 1/2" ABOVE LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS.
9. APPLY FOG SEAL ONLY AFTER ALL CORRECTIONS AND ADJUSTMENTS HAVE BEEN MADE.
10. 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.
11. SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.
12. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACE 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 A CITY INSPECTOR.
13. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE SOILS ENGINEER AND APPROVED BY THE CITY ENGINEER AND AS SHOWN ON THESE PLANS.
14. EXACT LOCATION OF ALL SAWKUT LINES MAY BE DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS INSPECTOR IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATION.
15. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER AVAILABLE RECORDS IN ACCORDANCE WITH N.R.S. STATUTE NO. 623.550
16. UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOWLINES, AND CROSS GUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND CITY ENGINEER.
17. WALL NOTES:
 - A. ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN FOR THE PURPOSE OF GRADING RELATIONSHIPS.
 - B. THE STRUCTURAL AND ARCHITECTURAL DESIGN OF ALL WALLS RETAINING OR NON-RETAINING) MUST BE APPROVED BY THE CLV BUILDING DEPARTMENT.
18. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT ON CITY STREETS.
19. RIM TO BE FINISH GRADE. ELEVATIONS SHOWN ARE TO ASSIST IN BIDDING AND ESTIMATING QUANTITIES.

CITY OF LAS VEGAS - SPECIAL 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 OFFSITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IN ALL CASES, THESE STANDARDS SHALL SUPERSEDE THE UNIFORM STANDARD SPECIFICATIONS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATION BOOKS.
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 CONTROLLING AGENCY.
3. CHISEL "S" OR "O" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
4. POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATION, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II GRAVEL.
5. ALL MANHOLES IN PAVED STREETS 80' R/W AND LARGER, SHALL HAVE CONCRETE COLLARS.
6. TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO 12" DIA. SIZE. CONNECTIONS TO 15" OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES.
7. A SEWER MAIN CROSSING OVER A WATER MAIN OR LESS THAN 18" UNDER A WATER MAIN MUST BE REINFORCED CONCRETE ENCASED FOR A DISTANCE NOT LESS THAN TEN FEET (10') TO EACH SIDE OF THE CENTERLINE OF THE WATER MAIN.
8. ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CONTROLLING AGENCY MUST BE 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 (0.10) OF A FOOT FROM THE APPROVED CONSTRUCTION PLANS. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REMOVED AND REPLACED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO ACCEPTANCE BY THE CITY.
10. INSTALLATION OF CURVED SEWER REQUIRES SPECIAL CONSTRUCTION PROCEDURES AND INSPECTIONS. CONTACT CITY OF LAS VEGAS CONSTRUCTION SERVICES PRIOR TO INSTALLATION.

APPROXIMATE QUANTITIES (PUBLIC)	
ALTERNATE A	TOTAL
27" SEWER PIPE	1,353 LF
24" SEWER PIPE	5,329 LF
21" SEWER PIPE	796 LF
12" SEWER PIPE	20 LF
10" SEWER PIPE	10 LF
8" SEWER PIPE	30 LF
PAVEMENT REPLACEMENT	3890 SY
STANDARD MANHOLE (60" DIA.)	15 EA
<u>ALTERNATE B</u>	
15" SEWER PIPE	4533 LF
12" SEWER PIPE	3082 LF
STANDARD MANHOLE (48" DIA.)	18 MH
PAVEMENT REPLACEMENT	3890 SY
<u>NOTE TO CONTRACTOR:</u>	
QUANTITIES SHOWN ARE APPROXIMATIONS ONLY AND ARE INTENDED TO ILLUSTRATE SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT QUANTITIES INVOLVED.	

LEGEND

①	PIPELINE	
②	MANHOLE	

SYMBOLS OF EXISTING TOPOGRAPHY

CURB & GUTTER	
RIGHT-OF-WAY	
SURVEY LINE	
EDGE OF PAVEMENT	
STREET LIGHT	
LIGHT POST	
PULL BOX, METER BOX	
POLE	
POLE	
TEST BORING	
UNDERGROUND UTILITY (SS,STD,G,T,W,C)	
SIGN	
MISCELLANEOUS UTILITY BOX	

ABBREVIATIONS

AGG	AGGREGATE	MH	MANHOLE
ACP	ASBESTOS CEMENT PIPE	MAX	MAXIMUM
AC	ASPHALTIC CONCRETE	MIN	MINIMUM
AVE	AVENUE	NTS	NOT TO SCALE
BC	BACK OF CURB	OC	ON CENTER
BCR	BACK OF CURB RADIUS	OHP	OVERHEAD POWER
BM	BENCH MARK	PVMT	PAVEMENT
CATV	CABLE TELEVISION	PI	POINT OF
C-C	CENTER TO CENTER		INTERSECTION
CL	CENTERLINE	PRC	POINT OF REVERSE
CLV	CITY OF LAS VEGAS		CURVE
CC	CLARK COUNTY	PC	POINT OF CURVE
CONC	CONCRETE	PT	POINT OF TANGENCY
CONST	CONSTRUCTION OR	PP	POWER POLE
	CONSTRUCT	P	POWER
C&G	CURB & GUTTER	PL	PROPERTY LINE
CU YD,	CAST IRON PIPE	PB	PULL BOX
CY		R	RADIUS
CU FT,	CUBIC YARD	RCP	REINFORCED
CF	CUBIC FOOT		CONCRETE PIPE
DIA	DIAMETER	R/W	RIGHT-OF-WAY
DWY	DRIVEWAY	RT	RIGHT
DI	DROP INLET	SS	SANITARY SEWER
ESMT	EASEMENT	SHT	SHEET
EP	EDGE OF PAVEMENT	SQ FT,	SQUARE FOOT
ELEC	ELECTRIC	SF	STA
EL	ELEVATION	SD	STORM DRAIN
EC	END OF CURVE	STD	STANDARD
EXIST	EXISTING	SL	STREETLIGHT
FT	FEET OR FOOT	TEL,	
FG	FINISH GRADE	T	TELEPHONE
FH	FIRE HYDRANT	TEMP	TEMPORARY
FL	FLOW LINE	TC	TOP OF CURB
GM	GAS METER	TS	TRAFFIC SIGNAL
GPR	GAS PRESSURE	TSI	TRAFFIC SIGNAL
	REGULATOR		INTERCONNECT
GB	GRADE BREAK	TRANS	TRANSITION
IN	INCH	TYP	TYPICAL
INT	INTERSECTION	UG	UNDERGROUND
INV	INVERT	UON	UNLESS OTHERWISE
JB	JUNCTION BOX		NOTED
LT	LEFT	VERT	VERTICAL
LF	LINEAR FEET	VG	VALLEY GUTTER
LVVWD	LAS VEGAS VALLEY	W	WATER
	WATER DISTRICT	WCR	WHEEL CHAIR RAMP
		WM	WATER METER
		WV	WATER VALVE

LOCATION OF DRAWINGS

CITY OF LAS VEGAS

SHEET 9

GRAND TETON DR.

CITY OF LAS VEGAS

CLARK COUNTY

NORTH
NOT TO SCALE

SEWER CONTRIBUTION

AVERAGE DAILY FLOW	0.57mgd
PEAK FLOWS	1.54mgd

FARM RD.

SHEET 8

SHEET 7

SHEET 6

SHEET 5

SHEET 4

CLARK COUNTY

SHEET 3

CONNECT TO EXISTING
30" SEWER

ELK HORN RD.

-EX 30"

RIO VISTA ST.

RAINBOW BLVD.

THE CONTRACTOR IS TO INSTALL THE 27.24 AND 21 INCH PIPES SHOWN AS ALTERNATE A. BIDS ARE TO BE SUBMITTED FOR ALTERNATE B, AND ALTERNATE A TO COMPLY WITH THE INSTALLATION AGREEMENT BETWEEN THE CITY AND THE OWNER.

VICINITY MAP

The map illustrates the project's location within Clark County, Nevada. Key features include:

- Geographic Orientation:** A north arrow is located on the left side, pointing upwards. A dashed line represents the Nevada/California border, with "NEVADA" to the north and "CALIFORNIA" to the south.
- Major Roads:**
 - RAINBOW BLVD.** runs horizontally across the middle of the map.
 - MOCCASIN DR.** runs horizontally at the top.
 - CLARK COUNTY RD.** runs horizontally at the bottom.
 - STATE PARK DR.** runs vertically on the left side.
 - ELKHORN SPRINGS DR.** runs vertically on the left side, below State Park Dr.
 - ELKHORN BLVD.** runs vertically in the center.
 - WINDY WAY** runs vertically on the right side.
 - 10TH ST.** runs vertically on the right side.
 - 11TH ST.** runs vertically on the right side.
 - 12TH ST.** runs vertically on the right side.
 - 13TH ST.** runs vertically on the right side.
 - 14TH ST.** runs vertically on the right side.
 - 15TH ST.** runs vertically on the right side.
 - 16TH ST.** runs vertically on the right side.
 - 17TH ST.** runs vertically on the right side.
 - 18TH ST.** runs vertically on the right side.
 - 19TH ST.** runs vertically on the right side.
 - 20TH ST.** runs vertically on the right side.
 - 21ST ST.** runs vertically on the right side.
 - 22ND ST.** runs vertically on the right side.
 - 23RD ST.** runs vertically on the right side.
 - 24TH ST.** runs vertically on the right side.
 - 25TH ST.** runs vertically on the right side.
 - 26TH ST.** runs vertically on the right side.
 - 27TH ST.** runs vertically on the right side.
 - 28TH ST.** runs vertically on the right side.
 - 29TH ST.** runs vertically on the right side.
 - 30TH ST.** runs vertically on the right side.
 - 31ST ST.** runs vertically on the right side.
 - 32ND ST.** runs vertically on the right side.
 - 33RD ST.** runs vertically on the right side.
 - 34TH ST.** runs vertically on the right side.
 - 35TH ST.** runs vertically on the right side.
 - 36TH ST.** runs vertically on the right side.
 - 37TH ST.** runs vertically on the right side.
 - 38TH ST.** runs vertically on the right side.
 - 39TH ST.** runs vertically on the right side.
 - 40TH ST.** runs vertically on the right side.
 - 41ST ST.** runs vertically on the right side.
 - 42ND ST.** runs vertically on the right side.
 - 43RD ST.** runs vertically on the right side.
 - 44TH ST.** runs vertically on the right side.
 - 45TH ST.** runs vertically on the right side.
 - 46TH ST.** runs vertically on the right side.
 - 47TH ST.** runs vertically on the right side.
 - 48TH ST.** runs vertically on the right side.
 - 49TH ST.** runs vertically on the right side.
 - 50TH ST.** runs vertically on the right side.

<u>INDEX OF DRAWINGS</u>	
1. COVER SHEET	
2. GENERAL NOTES, INDEX OF DRAWINGS, LEGEND, VICINITY MAP	
3. PLAN & PROFILE	STA. 10+00 TO STA. 22+00
4. PLAN & PROFILE	STA. 22+00 TO STA. 34+00
5. PLAN & PROFILE	STA. 34+00 TO STA. 46+00
6. PLAN & PROFILE	STA. 46+00 TO STA. 58+00
7. PLAN & PROFILE	STA. 58+00 TO STA. 69+00
8. PLAN & PROFILE	STA. 69+00 TO STA. 76+67.12
9. PLAN & PROFILE	STA. 76+89.90 TO STA. 84+76.58
10. DETAILS	

DEVIATIONS FROM STANDARDS

NOTE:

ALL UTILITIES SHOWN ARE BELIEVED TO BE ACCURATELY LOCATED, BUT THE ACCURACY AND COMPLETENESS OF UTILITY INFORMATION IS NOT GUARANTEED. FOR EXACT LOCATION OF ANY UTILITY, SEE THE APPROPRIATE UTILITY OR GOVERNMENTAL AGENCY.

THERE SHALL BE NO DEVIATION FROM STANDARD DETAILS.

Avoid cutting underground utility lines. It's costly.

**Call
before you
Dig.**

1-800-227-2600

UNDERGROUND SERVICE ALERT (USA)

BENCHMARK

BLM BRASS CAP #41, RAINBOW BLVD. & HORSE DRIVE.
STA. 1LY90/11W4, ELEV. = 2396.994' (NGVD29) - PROJECT DATUM
ADD 2.41' TO CONVERT TO THE NAVD88 DATUM.

BASIS OF BEARING

SOUTH 00°37'59" EAST, BEING THE BEARING OF THE EAST LINE OF THE
NORTHEAST (N1/4) OF SECTION 10, TOWNSHIP 19 SOUTH, RANGE 60 EAST,
M.D.M., AS SHOWN BY A MAP ON FILE IN CLARK COUNTY, NEVADA RECORDER'S
OFFICE AS PAGE 15, FILE 70 OF RECORD OF SURVEY BOOK .

