

ESTIMATE OF QUANTITIES

ITEM No.	DESCRIPTION UPPER WASHINGTON AVENUE CONVEYANCE SYSTEM PHASE 2 AND BONANZA ROAD	UNIT	ESTIMATED DRAINAGE QUANTITY
200.01	MOBILIZATION AND DEMOBILIZATION	LS	1
202.01	REMOVAL OF CURB AND GUTTER	LF	368
202.02	REMOVAL OF ASPHALTIC PAVEMENT	SY	12,326
202.03	REMOVAL OF PORK CHOP MEDIAN ISLAND	SF	3531
202.04	REMOVAL OF STORM DRAIN PIPE	LF	290
202.05	REMOVAL AND SALVAGE STREETLIGHT ASSEMBLY	EA	1
202.06	REMOVAL OF SEWER PIPE	LF	110
202.07	REMOVAL OF MANHOLE	EA	4
202.08	REMOVAL OF RETAINING WALL	LF	20
202.09	REMOVAL AND SALVAGE OF CHAIN-LINK FENCE	LF	609
202.10	REMOVAL AND SALVAGE IRON FENCE	LF	109
202.11	REMOVAL EX. HEADWALL & BOX CULVERT UNDER UPRR AND IN MAIN STATION FOR BOX "B" BETWEEN STA 104+44 AND STA 105+79	LS	1
202.12	REMOVAL OF GABION LINED CHANNEL (STA 103+27.5 TO 104+44.1)	LS	1
202.13	REMOVAL OF EXISTING 12' X 8' RCB	LF	62
202.14	3/4-INCH ROTO-MILL	SY	1721
202.15	REMOVAL OF SIDEWALK	SF	1415
202.16	REMOVAL OF 8-INCH CALNEV PIPE LINE	LF	30
202.17	REMOVAL OF DROP INLET	EA	1
202.18	REMOVAL OF EXISTING 3' X 3' RCB	LF	20
202.19	REMOVAL OF TACK-ON MEDIAN ISLAND	SF	766
202.20	REMOVAL OF CONCRETE LINED CHANNEL & CUTOFF WALLS	LS	1
202.21	REMOVAL OF CONCRETE PAVEMENT	SF	4500
202.22	ROTMILL 4-INCHES OF ASPHALTIC PAVEMENT	SY	12300
202.23	REMOVAL OF SIDEWALK RAMP	EA	29
206.01	OVER-EXCAVATION / BACKFILL	CY	4500
212.01	REMOVAL AND RESTORATION OF LANDSCAPING (BONANZA & MAIN)	LS	1
212.02	REMOVAL AND RESTORATION OF LANDSCAPING (VETERANS MEMORIAL TO BONANZA)	LS	1
302.01	TYPE II AGGREGATE BASE	CY	3457
402.01	4-INCH DEPTH PLANTMIX BITUMINOUS SURFACE	SY	24160
402.02	8-INCH DEPTH PLANTMIX BITUMINOUS SURFACE	SY	258
402.03	PLANTMIX MISCELLANEOUS AREAS (MEDIAN SURFACE)	SF	3621
403.01	3/4-INCH DEPTH PLANTMIX BITUMINOUS SURFACE OPEN GRADE	SY	22047
502.01	REINFORCED CONCRETE BOX CULVERT (SINGLE 12' X 8')	LF	123
502.02	REINFORCED CONCRETE BOX CULVERT (SINGLE 14' X 8')	LF	2204
502.03	REINFORCED CONCRETE BOX CULVERT (SINGLE 16' X 8')	LF	115
502.04	REINFORCED CONCRETE BOX CULVERT (DOUBLE 9' X 8')	LF	122
502.05	REINFORCED CONCRETE TRANSITION STRUCTURE	LF	157
502.06	REINFORCED CONCRETE RETAINING WALL	LF	20
502.07	REINFORCED CONCRETE OUTLET STRUCTURE	LS	1
502.08	REINFORCED CONCRETE SPLITTER STRUCTURE	LS	1
502.09	REINFORCED CONCRETE 8-FOOT CONNECTION STRUCTURE	EA	1
502.10	REINFORCED CONCRETE TRANS. (16' X 8' RCB / EX. 12' X 8' RCB)	LF	20
603.01	18" REINFORCED CONCRETE PIPE (CLASS III)	LF	125
603.02	24" REINFORCED CONCRETE PIPE (CLASS III)	LF	25
603.03	36" REINFORCED CONCRETE PIPE (CLASS IV)	LF	336
603.04	42" REINFORCED CONCRETE PIPE (CLASS III)	LF	86
609.01	RCB MANHOLE	EA	5
609.02	RECONSTRUCT MANHOLE BASE @ CONNECT 36-INCH RCP	EA	1
609.03	NDOT PIPE RISER INLET	EA	2
609.04	NDOT TYPE "3" DROP INLET	EA	2
609.05	7-FOOT NDOT TYPE "11" DROP INLET	EA	2
609.06	30-FOOT MODIFIED NDOT TYPE "11" DROP INLET	EA	2
609.07	VERTICAL ADJUST MANHOLE COVER	EA	5

ITEM No.	DESCRIPTION UPPER WASHINGTON AVENUE CONVEYANCE SYSTEM PHASE 2 AND BONANZA ROAD	UNIT	ESTIMATED DRAINAGE QUANTITY
609.08	VERTICAL ADJUST UTILITY ACCESS LID	EA	2
609.09	MODIFIED DOUBLE TYPE "A" DROP INLET	EA	1
613.01	"L" TYPE CURB & GUTTER	LF	643
613.02	CONCRETE SIDEWALK	SF	4374
613.03	16-FOOT COMMERCIAL DRIVEWAY OPTION C	SF	168
613.04	CONCRETE PORK CHOP MEDIAN ISLAND	SF	2960
613.05	REMOVE AND REPLACE EXISTING COMMERCIAL DRIVEWAY	SF	220
613.06	CONCRETE SIDEWALK RAMP	EA	33
613.07	CONCRETE TACK-ON MEDIAN ISLAND	SF	652
613.08	CUT BACK CONCRETE MEDIAN NOSE	LF	18
613.09	19-FOOT WIDE CONCRETE CROSS GUTTER	SF	726
616.01	72-INCH CHAIN-LINK 3B FENCE	LF	375
616.02	72-INCH CHAIN-LINK 3B W/C-POSTS	LF	340
616.03	16-FOOT DOUBLE SWING GAGE	EA	2
616.04	REMOVAL AND RECONSTRUCTION OF EXISTING CMU WALL ALONG MAIN STREET STATION/UPRR PROPERTY LINE	LF	60
616.05	REMOVAL AND RESTORATION OF EXISTING CHAIN-LINK FENCE ALONG MAIN STREET STATION PARKING LOT	LF	160
616.06	RESTORATION OF EXISTING IRON FENCE	LF	109
616.07	REMOVAL AND REPLACEMENT OF CMU WALL NEAR BONANZA ROAD	LF	36
616.08	REMOVAL AND REPLACEMENT OF 4' HIGH FENCE NEAR GATE	LF	20
621.01	MONUMENTS	EA	7
622.01	CONSTRUCTION SURVEY BY CONTRACTOR	LS	1
623.01	REMOVAL AND REPLACEMENT OF EXISTING STREETLIGHT ASSEMBLY	EA	1
623.02	TRAFFIC SIGNAL MODIFICATIONS AT MAIN STREET AND BONANZA ROAD	LS	1
623.03	MAINTAIN AND RESTORE STREET LIGHTS IN MAIN STREET STATION PARKING LOT	LS	1
623.04	REPLACEMENT OF 6' X 6' INDUCTION LOOPS	EA	43
623.05	REMOVAL AND REPLACEMENT OF EX. TRAFFIC SIGNAL PULLBOX	EA	2
623.06	REMOVAL OF PEDESTRIAN PUSH BUTTON ASSEMBLY AND REPACE WITH ADA PEDESTRIAN PUSH BUTTON ASSEMBLY	EA	8
623.07	VERTICALLY ADJUST STREET LIGHT POLE	EA	1
624.01	TRAFFIC CONTROL	LS	2
625.01	PORTABLE CHANGABLE MESSAGE SIGN	DAY	260
625.02	TYPE "B" ARROW DISPLAY	DAY	260
627.01	RELOCATE SIGN	EA	8
627.02	REMOVE AND REPLACE EXISTING ADVERTISEMENT SIGNS	EA	2
628.01	TYPE I FILM FOR CROSSWALKS & STOP BARS	SF	1186
628.02	TYPE I FILM FOR " ONLY"	EA	6
628.03	TYPE I FILM FOR ARROW	EA	15
628.04	PAINT MEDIAN ISLAND	SF	250
628.05	MAINTAIN AND RESTORE PAVEMENT MARKINGS IN MAIN STREET STATION PARKING LOT	LS	1
629.01	VERTICAL ADJUST WATER VALVE COVER	EA	9
629.02	36" STEEL PIPE (35000 PSI YIELD)	LF	56
629.03	REMOVE AND REPLACE 8-INCH WATER MAIN	LF	50
629.04	VERTICALLY ADJUST WATER METER BOX	EA	1
630.01	6" (SDR 35) PVC SANITARY SEWER MAIN	LF	110
630.02	4" DIA. SEWER MANHOLE	EA	2
630.03	REPLACE EX. SEWER MANHOLE W/ 5'-STD ECC SEWER MANHOLE	EA	1
630.04	RELOCATE EXISTING 8" SEWER (MAIN STREET STATION CASINO)	LF	50
633.01	PAVEMENT MARKER NON-REFLECTIVE	EA	1625
633.02	PAVEMENT MARKER REFLECTIVE	EA	485

CONSTRUCTION NOTES

- 1) CONSTRUCT 14'x8' RCB SEE DET "A" OR "B" ON SHT SD10
- 2) CONSTRUCT RCB MANHOLE PER DETAIL E, SHEET SD10
- 3) CONSTRUCT TRENCH SHORING SEE SHEET "C3" FOR TRENCH SHORING NOTES.
- 4) CONSTRUCT DOUBLE 9' X 8' RCB SEE SHT SD16
- 5) SAWCUT AC, ACTUAL LOCATION TO BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION.
- 6) REMOVE 24" CMP AND DROP INLET
- 7) CONSTRUCT NEW 72" CHAIN-LINK 3B FENCE PER NDOT R-6.3.1 (616)
- 8) SEE CONSTRUCTION NOTE 10 ON SHT S2.
- 9) CONSTRUCT PRE-CAST 12'x8' RCB SEE DET "A" SHT SD10
- 10) RELOCATE TRAFFIC SIGNAL POLE AND PULLBOXES. SEE SHT T1 & T2.
- 11) VERTICAL ADJUST WATER VALVE PER DWG 517
- 12) REMOVE EXISTING FENCE
- 13) INSTALL A NEW 72-INCH CHAIN-LINK 3B FENCE PER NDOT R-6.3.2.1
- 14) INSTALL A NEW 16-FOOT DOUBLE SWING GATE FOR 72-INCH CHAIN-LINK PER NDOT R-6.3.3 (616)
- 15) CONSTRUCT 8-FOOT CIP CONNECTION SEE DET "F", SHT SD10
- 16) REMOVE AND REPLACE EXISTING RETAINING WALL SEE SHT SD9
- 17) CONSTRUCT 14' X 8' RCB. SEE DET "A" ON SHT SD10.
- 18) CONSTRUCT CAST-IN-PLACE TRANSITION STRUCTURE SEE SHT SD16
- 19) REMOVE AND REPLACE EXISTING CHAIN-LINK FENCE.
- 20) RELOCATE EXISTING UNDERGROUND TELEPHONE CONDUIT AND WIRE. (BY OTHERS)
- 21) CONTRACTOR COORDINATE WITH CENTRAL TELEPHONE COMPANY. SEE CLV GENERAL NOTE 3 ON SHT C3.
- 22) INSTALL A NON-CLIMBABLE TEMPORARY FENCE. ACTUAL LOCATION DETERMINED IN FIELD.
- 23) REMOVE AND REPLACE EXISTING STREETLIGHT ASSEMBLY. SEE SHT TS1.
- 24) REMOVE CONCRETE, DEBRIS AND ASPHALT FROM CHANNEL.
- 25) RELOCATE EXISTING SEWER. SEE SHT SS1.
- 26) CONTRACTOR COORDINATION WITH SWG; SEE SWG NOTES ON SHEET C3
- 27) REMOVE AND RECONSTRUCT EXISTING 12'x8' RCB. SEE SHT SD13.
- 28) CONTRACTOR TO PROTECT TRAFFIC SIGNAL POLE AND/OR REMOVE SIGNAL POLE AND PROVIDE TEMPORARY OVERHEAD SIGNAL
- 29) CONSTRUCT 36-INCH STORM DRAIN. SEE SHT SD6.
- 30) REMOVE AND RECONSTRUCT EXISTING DRIVEWAY PER DWG 224
- 31) RELOCATE EXISTING PULLBOX.
- 32) REMOVE AND RECONSTRUCT EXISTING CMU WALL.
- 33) CONSTRUCT TRENCH AND ASPHALTIC PAVEMENT PER DWG 504
- 34) CONSTRUCT OUTLET STRUCTURE SEE SHT SD14 & SD14.
- 35) REMOVE AND REPLACE IRON FENCE
- 36) REMOVE AND REPLACE W/ 5'-STD ECC SEWER MANHOLE
- 37) DECORATIVE BRICK IN A SAND BASE MATERIAL
- 38) REMOVE AND REPLACE EXISTING (2) SIGNS
- 39) REMOVE EXISTING 24" CMP PIPE AND PLUG EACH END
- 40) CAREFULLY REMOVE DECORATIVE BRICK, RECONSTRUCT CUT-OFF WALL AND RE-STALL REMOVE EXISTING 3'x3' RCB AS REQUIRED TO INSTALL RCB. PLUG END WITH CONCRETE.
- 41) REMOVE EXISTING CONCRETE PAVEMENT AS REQUIRED TO INSTALL RCB. (DEPTH UNKNOWN)
- 42) SUPPORT EXISTING 12-INCH WATER MAIN AS APPROVED BY LVVWD.
- 43) REMOVE & REPLACE 8-INCH WATER MAIN AS APPROVED BY LVVWD.

RCB MANHOLE SCHEDULE

M.H.#	I.D.	TYPE	STATION	OFFSET	COMMENTS
#1	5'	MODIFIED TYPE A	110+50.00	RT OF C.L.	SEE DET "E" SHT SD10
#2	5'	MODIFIED TYPE A	114+45.00	RT OF C.L.	SEE DET "E" SHT SD10
#3	5'	MODIFIED TYPE A	116+90.00	RT OF C.L.	SEE DET "E" SHT SD10
#4	5'	MODIFIED TYPE A	121+50.00	RT OF C.L.	SEE DET "E" SHT SD10
#5	5'	MODIFIED TYPE A	126+25.00	RT OF C.L.	SEE DET "E" SHT SD10

SEWER MANHOLE SCHEDULE

M.H.#	I.D.	TYPE	STATION	OFFSET	INV IN	INV OUT	NORTHING	EASTING	COMMENTS
1	4'	STD MH SD-1	122+07.33	16 00' LT	N/A	2005.55	N 18438.96	E 4252.80	
2	4'	STD MH SD-1	123+22.42	16 71' LT	2004.00	2003.7±	N 18390.3±	E 4357.1±	PLUG EX. 8" SEWER AS SHOWN
N/A	5'	STD. MH SD-1	119+51.1±	10.4'± RT	EXISTING	EXISTING	N 18525.0±	E 4010.0±	REMOVE/REPLACE SEWER MANHOLE

CITY OF LAS VEGAS
UPPER WASHINGTON AVENUE CONVEYANCE SYSTEM
PHASE 2 - ESTIMATE OF QUANTITIES AND MANHOLE SCHEDULES

SHEET: 7/14/99
DESIGNED BY: GRB
CHECKED BY: GRB
PROJECT NO.: 00-1730-11-RC
SCALE: 1" = 1' = 1" = VER.
DATE: 7/14/99

DRAWN BY: SCC
DESIGNED BY: GRB
CHECKED BY: GRB
PROJECT NO.: 00-1730-11-RC
SCALE: 1" = 1' = 1" = VER.
DATE: 7/14/99

SHEET: C4
4 OF 32
DRAWING NO.: 731-54F