

GENERAL NOTES

1. All construction and materials shall be in accordance with "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 edition; the "Design and Construction Standards for Wastewater Collection Systems", 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. Existing utilities as shown from CLV plans library are approximate and for record purposes. Existing utilities are located on the 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's which may affect his operation during construction and shall take necessary precautions to avoid damage to the same. The Contractor shall use extreme caution when working near 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 Engineer and owning utility company at the expense of the contractor.
4. All construction shall be as shown on these plans, any revisions shall have prior approval of the Engineer.
5. Type V cement shall be used in all off-site concrete work. Concrete to be 3000 P.S.I. @ 28 days. Mix design to be approved by the Engineer, prior to the use on the project.
6. Curb and gutter found to be unacceptable by the City shall be removed and replaced per standard drawing 216.
7. 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.
8. 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 these plans.
9. Exact location of all sawcut lines may be adjusted or determined in the field by the Engineer if location on plans is not clearly shown, or existing pavement condition requires relocations.
10. The Contractor shall take all precautions necessary to protect existing permanent survey monuments. Any monuments disturbed shall be replaced and adjusted per available records accordance with N.R.S. Statute No. 625.550
11. 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 the Engineer.
12. Plantmix Bituminous mix design must be submitted and approved by the City Engineer prior to the placement of plantmix bituminous surface within city Right-of-way.
13. Contractor shall adjust all new and existing inlets, valve boxes, manhole rims, and sewer cleanouts, etc. To finish grade as applicable whether or not they are shown on the plans.
14. Materials, handling and placement of Portland Cement Concrete shall be in accordance with applicable sections of NDOT or the UNIFORM STANDARD SPECIFICATIONS (as applicable) and the plans and details shown hereon.
15. Contractor is responsible for obtaining all necessary permits.
16. Contractor is responsible to abide by the requirements of the NDOT occupancy permit.

GRADING NOTES

1. In the event that any unforeseen conditions not covered by these notes are encountered during grading operations, the 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 Contractor is warned that an earthwork balance was not necessarily the intent of this project. Any additional material required or leftover material following earthwork operations becomes the responsibility of the Contractor.
5. The Contractor is responsible to coordinate with the City to provide for the requirements of the project Storm Water Pollution Prevention Plan (SWPPP) and associated permit.
6. Contractor shall grade to the lines and elevations shown on the plans within the following horizontal and vertical tolerances and degrees of compaction, in the areas indicated:

	Horizontal	Vertical	Compaction
A. Pavement Area Subgrade	0.1+	+0.0 to -0.1	As indicated on plan
B. Engineered Fill	0.05+	+0.1 to -0.1	Minimum of 90% or as shown on plan

Compaction Testing will be performed by the City or the Cities representative

7. All cut and fill slopes shall be protected until effective erosion control has been established.
8. 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.
9. 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.
10. In the event that any temporary construction item is required that is not shown on these drawings, the Contractor agrees to provide and install such item at the Contractors expense and at the direction of the Engineer. Temporary construction includes ditches, berms, road signs, and barricades, etc.

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 and supplemented in the project specifications. 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 Engineer.
3. Chisel "S" in curbs where sewer laterals pass underneath the curb.
4. Polyvinyl (PVC) sewer pipe shall meet ASTM D-3034 SDR 35 specifications, Pipe trench bedding shall be type II aggregate base or sand backfill.
5. All manholes in paved streets (80')foot R/W and larger shall have concrete collars. Streets less than (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. Sewer main crossing with a water main will comply with note 8 of the water notes.
8. Contractors installing sewer mains that will be under the jurisdiction of the City must be State of Nevada Class "A" Contractors.
9. The City 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 and replaced to the satisfaction of the City Engineer prior to acceptance by the City of Las Vegas.

STREETLIGHT NOTES

1. All street lighting installations shall be in accordance with the street lighting plans, the Uniform Standard Specifications for Public Works Construction Off-Site Improvements, Clark County Area, Nevada, Latest Revision, and the "Uniform Standard Drawings for Public Works Construction Off-Site Improvements, Clark County Area, Nevada", Latest Revision
2. No deviation of street light, pullbox, conduits (etc.) locations shall be permitted without written approval of the Engineer.
3. All existing street lighting shall remain operational during construction.
4. All empty conduit shall have pull strings installed prior to final inspection.
5. Any structure such as block walls, chain link fences, retaining walls, etc., shall leave a minimum clearance of eighteen inches (18") to the face of street lighting pole on all sides when street light is installed behind sidewalk, and shall at no time completely enclose the street lighting pole.
6. As-built drawings shall be supplied to the Engineer prior to any prefinal inspection. The as-built drawing needs to be stamped "as-built" and signed by the prepare.
7. Service point shall be as shown on the Plans.
8. Wherever there is an overhead utility that may conflict with the installation of street lighting circuits and/or poles, these conflicts must be resolved between the Engineer and the utilities involved before streetlight bases are installed at no expense to the City of Las Vegas for the delay of installing the streetlights.

TRAFFIC NOTES

1. All construction signing, barricading, and traffic delineation shall conform to the "Nevada Work Zone Traffic Control Handbook", Latest Edition, and to the "Manual on Uniform Traffic Control Devices", Latest Edition.
2. The 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 "Safe Route To School" is encroached upon by a construction work zone and the Engineer 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 the time children are to be likely to be present.
5. If the improvements necessitate the obliteration, temporary obstruction, temporary removal or relocation of any existing pavement traffic marking, such pavement marking shall be restored or replaced with like materials to the satisfaction of the Engineer.
6. The Contractor shall be responsible for providing and installing all permanent signs shown on the plans. 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 hereunder, regardless of the status of completion of paving or other off-site improvements called for by these plans.
9. The Contractor shall provide barricades, signs, flashers, other equipment and flag persons necessary to insure the safety of workers and visitors.
10. 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.

DEVIATIONS FROM STANDARDS

- 1 PAVEMENT SECTIONS. SEE SECTION SHEETS TSS-1 & TSS-2
- 2 TYPE C MODIFIED INLETS. SEE SHT. DS-2 AND DS-3.

PERMIT TO BE PROVIDED

1. NDOT RIGHT-OF-WAY OCCUPANCY PERMIT

WATER NOTES

- LVVWD Project No. 21622
1. No work shall begin until the water plans have been released for construction by the LVVWD. Following water plan approval, 48 hour notice shall be given to the LVVWD Communication Support Center (258-7171) prior to the start of construction. Notice must be given by 2:00 pm, the business day prior to a 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 the Uniform Design and Construction Standards for Water Distribution Systems (UDACS), latest edition.
3. All work, except as modified by these plans or by note 2, shall be done in accordance with the most current 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 copper tubing with LVVWD approved service laterals.
6. All water meter boxes shall be located outside driveway areas.
7. All valves shall be located outside driveways, valley gutters and curb gutters.
8. The following requirements must be met in the event a water line and sanitary or storm sewer line cross:
- A minimum eighteen (18) inch vertical separation (outside to outside) must be maintained when the water line is installed over the sanitary or storm sewer line. If the vertical separation cannot be maintained or the water line must be placed under the sanitary or storm sewer line, the sanitary or storm sewer line must be constructed with one of the following or, as shown on these plans:
- a) Potable water supply quality material
- b) Encasement, with four (4) inch concrete (minimum)
- c) Sleeving with potable water supply quality pipe.
- Each provision must extend along the sanitary or storm sewer, on either side of the main, a minimum 10 foot distance perpendicular to the water main exterior.
9. Warning tape shall be required over all mains, all six (6) inch diameter and larger service laterals, and any service lateral not installed perpendicular to the main in accordance with Standard Plate No. 27.
10. All water facilities shall be filled, disinfected, pressure tested, flushed, filled and an acceptable water sample obtained, prior to connection to the LVVWD's distribution system.
11. The contractor must obtain all meters two (2) inches and smaller from LVVWD central stores. Telephone 258-3152 fourty-eight (48) hours prior to pickup.
12. Construction may interrupt service, with LVVWD approval and proper notification, between the hours of 10 PM. and 6 AM., Sunday through Thursday. Circumstances that may require temporary service feeds be installed, without LVVWD reimbursement. Any temporary service feed must have prior LVVWD approval.
13. All water facility construction materials used must be listed on the LVVWD's pre-approved Materials and Manufacturers Listing for New Facilities, latest revision, or specifically approved on these plans.
14. Approval of these plans for the water stubout installation will not be construed as a commitment for water service to said properties.

BASIS OF BEARING

NORTH 39°40'38" WEST BEING THE BEARING OF THE LINE FROM POINT 825 TO POINT No. 808 AS SHOWN BY THAT CERTAIN RECORD OF THE SURVEY ON FILE IN THE OFFICE OF THE CLARK COUNTY RECORDER, CLARK COUNTY, NEVADA IN FILE 88, PAGE 53. SAID BEARING BEING BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD '83), NEVADA STATE PLANE EAST ZONE (2701)

BENCHMARK

NAVD 88- CLV BENCH 1LV003W4
CLV PIN & PLATE IN TOP OF ELEC. BASE
SOUTH SIDE OF CRAIG RD., 250' +/- EAST
OF BUFFALO DR.
ELEVATION 714.730 METERS, 2344.91 FEET

ABBREVIATIONS

● Aban	At	FT	Feet or Foot	RCEP	Reinforced Concrete
Abd	Abandon	Galv	Galvanized	RD	Elliptical Pipe
Abut.	Abandoned	GB	Grade Break	RT	Road
Add.	Abutment	HGL	Hydraulic Grade Line	B/W	Right
Adj	Addition	ID	Inside Diameter	SD	Right-of-Way
Agg	Adjacent	IN	Inch	SE	South
AIP	Aggregate	INT	Intersection	SHT	Storm Drain
Appd	Abandon In Place	INV	Invert	STA	Southeast
Ave	Approved	LT	Left	STD	Sheet
BC	Avenue	LVVWD	Las Vegas Valley	STL	Station
BCR	Back of Curb	Max	Water District	SS	Street Light
BCT	Begin Curb Radius	MH	Maximum	SS	Sanitary Sewer
Bldg	Begin Curb Transition	Min	Manhole	STD	Standard
B.O.C.	Building	N	Minimum	SDW	Sidewalk
BM	Back of Curb	NE	North	SW	Southwest
BST	Bench Mark	NP	Northeast	T	Telephone
BVC	Begin Sidewalk Transition	NP	Number	TC	Top of Curb
C&G	Begin Vertical Curve	NPC	Nevada Power	Temp	Temporary
C&J	Curb & Gutter	NTS	Company	TP	Telephone Pole
C&V	Cut and Join	OC	Not to Scale	Trans	Transition
CC	Cable Television	OC	Northwest	TW	Typical
CC	Clark County	OC	On Center	UDACS	Top of Wall or Walk
CL	Cast in Place	OC	Outside Diameter		Uniform Design And
CLV	Centerline	OC	Open Grade		Construction Standards
CY	City of Las Vegas	QHP	Overhead Power		for Water Distribution
Culv	Cubic Yard	P	Power		Systems
Dept	Culvert	PB	Pullbox	UG	Underground
DI	Department	PBS	Plantmix Bituminous Surface	UGP	Underground Power
Dia	Drop Inlet	PC	Point of Curvature	USSPWC	Uniform Standard
Drwy	Diameter	PGL	Point of Grade Line		Specifications for
Ea	Driveway	PI	Point of Intersection		Public Works
EOR	Each, East	P/L	Property Line	VC	Construction
ECT	End Curb Return	PP	Power Pole	VG	Vertical Curve
EG	End Curb Transition	PRC	Point of Reverse	W	Valley Gutter
EL or ELEV	Existing Grade	Pt	Curvature	WM	Water
EP	Elevation	PVC	Point		Water Meter
Esmt	Edge of Pavement	PV	Polyvinyl chloride		
EVC	Easement	PV	Point of Vertical		
EST	End Vertical Curve	Pvmt	Intersection		
Exc	End Sidewalk Transition	R	Pavement		
Exist	Excavate	RC	Radius		
F-TC	Existing	RCB	Ring & Cover		
FG	Future Top of Curb	RCB	Reinforced Concrete		
FH	Finish Grade	Box	Box		
FL	Fire Hydrant	RCP	Reinforced Concrete		
F.O.C.	Flow Line	Pipe	Pipe		
	Face of Curb				

LEGEND

DESCRIPTION	PROPOSED	EXISTING
CENTERLINE	----	----
RIGHT-OF-WAY LINE	----	----
EDGE OF PAVEMENT	----	----
LIP OF GUTTER	----	----
BACK OF CURB	----	----
FUTURE LIP OF GUTTER	----	----
FUTURE BACK OF CURB	----	----
CHAIN LINK FENCE	--- x ---	--- x ---
RETAINING WALL	=====	=====
BLOCK WALL	=====	----- XX" SD -----
STORM DRAIN	=====	----- XX" SS -----
SANITARY SEWER	----- ● -----	----- XX" W -----
WATER MAIN	-----	----- XX" GAS -----
GAS MAIN	----- GAS -----	----- CATV -----
CABLE TELEVISION	----- CATV -----	----- OHP -----
OVERHEAD POWER	----- OHP -----	----- UGP -----
UNDERGROUND POWER	----- UGP -----	----- (00.00) -----
ELEVATION GRADE TAG	00.00	(00.00)
CURB INLET	⊞	⊞
FIRE HYDRANT	⊞	⊞
GATE VALVE	⊞	⊞
SIGN	⊞	⊞
STREET LIGHT	⊞	⊞
PULLBOX	⊞	⊞
SIDWALK RAMP	⊞	⊞
INDEX CONTOUR	⊞	⊞
INTERMEDIATE CONTOUR	⊞	⊞
TEMPORARY CONSTRUCTION EASEMENT	⊞	⊞
PROPERTY LINE	⊞	⊞

Las Vegas Valley Water District

2-28-00

DATE

CITY OF LAS VEGAS
731 SOUTH FOURTH STREET
LAS VEGAS, NEVADA 89101

URS Greiner
2785 EAST DESERT INN ROAD
LAS VEGAS, NEVADA 89121
(702)-798-7775 FAX (702)-796-1803

GENERAL NOTES
& LEGEND SHEET

CRAIG ROAD
IMPROVEMENTS
BID NO. 00.1730.23

DRAWN BY: DMS/MRA 7/20/98

DESIGNED BY: DMS/MRA 7/20/98

CHECKED BY: DM 7/20/98

PROJECT NO: 44300

SCALE: NONE

RECEIVED PROFESSIONAL ENGINEER
FILED IN THE OFFICE OF THE CLARK COUNTY RECORDER
CLARK COUNTY, NEVADA
2/28/2000
No. 7401

SHEET
3 OF 55 SHEETS

DRAWING NO.
107-V3048

REVISION

REV. DATE BY

26332