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'S 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 AND 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 DESIGNS TO BE APPROVED BY THE CITY, 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. EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 150' IN EXTRUDED-TYPE CURB.

8. AC PAVEMENT TO BE ONE-HALF INCH (1/2") ABOVE LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS AND CROSS GUTTERS.

9. CURB AND GUTTER FOUND TO BE UNACCEPTABLE TO THE CITY OF LAS VEGAS SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.

10. 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.

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.

12. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE SOILS ENGINEER APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.

13. EXACT LOCATION OF ALL SAWCUT LINES MUST BE ADJUSTED OR DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS ENGINEER IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRED RELOCATIONS.

14. 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. NO. 625.550.

15. 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 CITY ENGINEER.

16. 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 BUILDING DEPARTMENT.

17. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY.

18. CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING INLETS, VALVE BOXES, MANHOLE RIMS, AND SEWER CLEAN OUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.

19. MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NDOT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.

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 ZONES. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENT INTO EXISTING CITY STREET WHERE WARRANTED IMMEDIATELY AFTER 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 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.

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. 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 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. 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 FLAGERS TO ENSURE 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 RIGHTS 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 CITIZENS AREA TRANSIT (C.A.T.) 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 NO.: 229-3442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL. FEES FOR THE USE OF THESE OFFICERS SHALL BE SET UP 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.

BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

CITY OF LAS VEGAS BENCHMARK: #725, 6LV00 14SE6
ELEVATION: 694.8878 METERS (2279.81 FEET)

RIVET & PLATE IN TOP OF CURB ON THE WEST SIDE OF MAVERICK STREET @ CARTIER

7398316

LAS VEGAS FIRE + RESCUE GENERAL NOTES

1. All work shall be done in strict accordance with the City of Las Vegas Fire Department's Ordinance No. 5667, "Hydrant Specifications", and "Hydrant Installation Specification".
2. Authorized hydrants for this project are:
   A. Kennedy – Guardian models K81A and K81D
   B. Mueller – Super Centurion 250 model A-423
   C. Clow – Medallion model F-2546LV
   D. Troy Valve – Patriot model PT8100N Nevada Hydrant
   E. U.S. Pipe – Metroflow/M-03
3. On any residential or commercial installations fire hydrants shall be installed and fire apparatus access roads shall be maintained before commencement of any combustible constructions. All fire hydrants ~~shall be~~ in good working order and shall be capable of delivering the required fire flow.
4. To identify the fire hydrant locations, contractor shall place a blue reflective marker at the center line of street adjacent to the fire hydrants as required by Ordinance No. 5667.
5. All underground inspections, pressure and flush verifications of all fire hydrants and fire lines, shall be conducted before covering the lines. Call the City of Las Vegas Inspection Hot-line at 229-2071 to request an inspection by the City of Las Vegas Fire Department.
6. Painting of the curbs and fire hydrants and all other work necessary as required Ordinance No. 5667, for the protection of fire hydrants from physical damage, shall be completed before approval by the City of Las Vegas Fire Department.
7. A permit is required from the City of Las Vegas Fire Department for on-site water lines and fire hydrants. The permit and contractor's material and test certificate for underground piping form shall be obtained from the Fire Protection Engineer before commencement of work.
8. Private fire hydrants shall be painted red.
9. Prior to final occupancy, a flow test must be witnessed by the City of Las Vegas Fire Department to verify availability of the required fire flow.
10. All on-site underground water mains and materials shall be U.L. listed, A.W.W.A. approved, and shall be rated for the appropriate working pressure.
11. Fire hydrants spacing shall be:
    Residential – 500 feet unsprinklered; 600 feet sprinklered.
    Commercial – 300 feet unsprinklered; 400 feet sprinklered.
12. Where new water mains are extended along streets or new streets are installed where fire hydrants are not needed for protection of the structures, fire hydrants shall be installed at at maximum 1,000 foot spacing, to provide for transportation hazards. Where streets are provided with median dividers or have four or more traffic lanes and have a traffic count of more than 30,000 per day, hydrants are required on each side of the street spaced at 500 feet on an alternating basis.
13. No fire hydrants shall be located within the required radius of a cul-de-sac or within 20 feet of the perimeter of the radius of the cul-de-sac.
14. No fire hydrants shall be located within 6 feet of any curb return, driveway, power pole, streetlight or any other obstruction.
15. The maximum distance from a fire hydrant to a one-two family dwelling shall not exceed 300 feet, as measured by an approved route.
16. The maximum distance from a fire hydrant to a Fire Department Connection (FDC) shall not exceed 100 feet, as measured by an approved route.
17. The maximum distance from a fire hydrant to the end of a dead-end street shall not exceed 200 feet.
18. Two sources of supply are requiered whenever there are 4 or more fire hydrants/ sprinkler lead-ins are installed on a single system. Sectional control valves shall be installed so that no more than 2 fire hydrants can be out of service due to a break in a water main.
19. All fire apparatus access roads shall be paved to provide all-weather driving capabilities, and shall be designed and maintained to support the imposed loads of the fire apparatus.
20. The gradient for a fire apparatus access road shall not exceed 12%. Angles of approach and angles of departure shall not exceed 6% for 25 feet prior to or after the grade change. Adjacent to the structures gradient shall not exceed 6%.
21. The turning radius of a fire apparatus access road shall be no less than 52 feet outside and 28 feet inside turning radius.
22. Vertical clearance of all fire apparatus access roads shall be not less than 13 feet 6 inches.
23. Fire department access roads in residential developments (except for the appartment buildings) shall have a minimum unobstructed width of not less than 36 feet flow line to the flow line (this width may be reduced to 24 feet, if all buildings fronting the street are sprinklered) for main residential streets, with parking permitted on both sides of the street. Private drive asles, driveways, etc. shall be allowed to be reduced to minimum width of 24 feet wide flow line to flow line when serving no more than 6 residences, and when on street parking is disallowed.
24. All fire apparatus access roads in commercial developments and apartment complexes shall have a minimum unobstructed width of not less than 24 (flow line to the flow line), provided no parking is allowed on either side: 32 feet (flow line to flow line), if parallel parking is allowed on one side only; and 40 feet (flow line to the flow line), if parallel parking is allowed on both sides. These widths may be reduced by 4 feet if all buildings are sprinklered.
25. A fire department access road shall extend to within 50 feet of a single exterior door providing access to the interior of the building.
26. A fire apparatus access road shall be required when any portion of an exterior wall of the first story is located more than 150 feet from a fire department vehicle access. This distance could be increased to 250 feet if the building is sprinklered.
27. Approved secondary fire apparatus access shall be provided for 100 or more dwellings units, road(s) with dead-ends or with a single point of access in excess of 600 feet, and for all commercial, industrial, and multi-family residential developments.
28. All dead-end fire apparatus access roads and or fire lanes, public or private, in excess of 150 feet in length shall be provided with an approved turn around area having a minimum diameter of 81 feet.
29. All fire apparatus access roads shall be marked by placing approved signs at the start of the designated fire lane, one sign at the end of the fire lane and with signs at intervals 100 feet along all designated fire lanes. Signs to be placed on both sides of an access roadway if needed to prevent parking on either side. Signs to be installed no higher than 10 feet or less than 6 feet from roadway level. The curbs along or on the pavement or cement if curb is not provided shall be painted with a red weather resistant paint in addition to the signs.
30. Electrically controlled access gates shall be provided with an approved emergency vehicle detector/receiver system. Said system shall be installed in accordance with the City of Las Vegas guidelines for Automatic Emergency Vehicle Access Gates.

ABBREVIATIONS

BC – BACK OF CURB
BCR – BEGIN CURB RETURN
BVC – BEGIN VERTICAL CURVE
CG – CURB & GUTTER
CL – CENTERLINE
CL INT – CENTERLINE INTERSECTION
E – EAST
ECR – END CURB RETURN
EP – EDGE OF PAVEMENT
EQ – EQUIVALENT
EVC – END VERTICAL CURVE
EX – EXISTING
FG – FINISH GRADE
FL – FLOW LINE
GB – GRADE BREAK
GV – GATE VALVE
HDPE – HIGH DENSITY POLYETHYLENE
HP – HIGH POINT
HYD – FIRE HYDRANT
INV – INVERT
N – NORTH
NG – NATURAL GROUND
OC – ON CURVE
PC – POINT OF CURVATURE
PI – POINT OF INTERSECTION
PT – POINT OF TANGENCY
PVI – POINT OF VERTICAL INTERSECTION
PZ – PRESSURE ZONE
S – SOUTH
SL – STREET LIGHT
SS – SANITARY SEWER
TC – TOP OF CURB
TRC – TOP ROLL CURB
TMH – TOP OF MANHOLE
TW – TOP OF RETAINING WALL
TOP – TOP OF PIPE
VC – VERTICAL CURVE
VG – VALLEY GUTTER
W – WEST OR WATER

CLV 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 SEWER REQUIRES THE USE OF C-900 PVC PIPE WHICH ALLOWS FOR PIPE DEFLECTION AT THE JOINTS.

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 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 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.

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'	SEE SOILS REPORT
B. ENGINEERED FILL	0.5'+	+0.1' TO -0.1'	SEE SOILS REPORT

COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS 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 OWNER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENCE AND AT THE DIRECTION OF CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

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, PULL BOX, CONDUITS (ETC.) LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF THE TRAFFIC/ELECTRICAL FIELD OPERATIONS DIVISION AND THE CITY ENGINEER. ANY DEVIATION FROM THE PLAN LOCATION WILL REQUIRE COMPLIANCE WITH SECTION 623.L0.03(E) OF THE SPECIFICATIONS.

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 LIGHTNING POLE ON ALL SIDES WHEN STREETLIGHT IS INSTALLED BEHIND SIDEWALK, AND SHALL AT NO TIME COMPLETELY ENCLOSE THE STREET LIGHTING POLE.

6. AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE ELECTRICAL SERVICES SECTION PRIOR TO ANY PRE-FINAL INSPECTION. THE AS-BUILT DRAWING NEEDS TO BE STAMPED AS-BUILT AND SIGNED BY THE PREPARER.

7. SERVICE POINT SHALL BE COORDINATED WITH NEVADA POWER COMPANY, AND WHEREVER POSSIBLE, BE LOCATED NEAR THE CENTER OF THE CIRCUIT. SERVICE POINTS SHALL BE SHOWN ON THE PLANS.

8. IT SHALL BE ASSUMED THAT IN THE ABSENCE OF AN EXISTING, WORKABLE CIRCUIT TO ATTACH TO, ALL INSTALLATIONS SHALL REQUIRE A NEW SERVICE FOR OPERATION OF THE CIRCUIT.

9. 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 DEVELOPER AND THE UTILITIES INVOLVED BEFORE STREETLIGHT BASES ARE INSTALLED AT NO EXPENSE TO THE CITY OF LAS VEGAS.

10. THE CONTRACTOR SHALL FURNISH COMPLETE SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON PLANS.

DEVIATIONS FROM STANDARDS

1. NONE

BASIS OF BEARING

NORTH 04°13'42" WEST, BEING THE CENTERLINE OF MUSTANG ROAD, THE WEST LINE OF THE NW 1/4 OF THE NE 1/4 OF THE SW 1/4 OF THE NE 1/4 OF SECTION 14, TOWNSHIP 20 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN ON PARCEL MAP FILE 13, PAGE 23, CLARK COUNTY, NEVADA.

ESTIMATED QUANTITIES

ITEM DESCRIPTION	QUANTITY	UNIT
2 INCH ASPHALTIC CONCRETE PAVING	3680	SY
3 INCH ASPHALTIC CONCRETE PAVING	7617	SY
5 INCH ASPHALTIC CONCRETE PAVING	0	SY
OPEN GRADE	7617	SY
TYPE I GRAVEL	0	CY
TYPE II GRAVEL	3380	CY
EXCAVATION EMBANKMENTS	0	CY
CURB & GUTTER (24 INCH L-TYPE)	4431	LF
ROLL CURB	0	LF
COMMERCIAL DRIVEWAY	0	SF
CONCRETE VALLEY GUTTER	2538	SF
4 INCH CONCRETE SIDEWALK	16940	SF
LIGHT STANDARD (STAND BASE, 100 W)	0	EA
LIGHT STANDARD (STAND BASE, 150 W)	0	EA
4" SEWER (PRIVATE)	0	LF
8" SEWER (PUBLIC)	1534	LF
6" SEWER (LATERAL)	0	LF
SEWER (6" DIA.) (PUBLIC)	0	LF
SEWER MANHOLES UNDER 6 FEET (PUBLIC)	1	EA
SEWER MANHOLES OVER 6 FEET (PUBLIC)	7	EA
CLEAN-OUT MANHOLE PER C. C. S. D.	0	EA
6" WATER MAIN	494	LF
8" WATER MAIN	1067	LF
10" WATER MAIN	0	LF
24" DIP WATER MAIN	0	LF
WATER MAIN	0	LF
FIRE HYDRANT	6	EA
SURVEY MONUMENTS	0	LS
WATER SERVICE TO LOTS	34	EA
POWER TO LOTS	34	EA
DROP INLET (MOD TYPE CM)	6	EA
STORM DRAIN MANHOLE	1	EA
BEEHIVE DROP INLET	0	EA
SIDEWALK UNDERDRAIN	0	EA
18" RCP STORM DRAIN	379	LF
24" RCP STORM DRAIN	6	LF
30" RCP STORM DRAIN	33	LF
36" RCP STORM DRAIN	0	LF
RIP RAP	0	CF
HEADWALL	0	EA
SOLID GROUTED STEM WALL	1600	LF

NOTE TO THE CONTRACTOR:
THE QUANTITIES SHOWN ARE FOR PERMITTING PURPOSE AND IS INTENDED TO ILLUSTRATE THE SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT QUANTITIES INVOLVED.

LEGEND

Symbol	Description
—W— —	EXISTING WATER LINE
—W—	PROPOSED WATER LINE
	EXISTING FIRE HYDRANT
	PROPOSED FIRE HYDRANT W/6" LATERAL & 6" G.V.
	GATE VALVE
	REDUCER
— —S— —	EXISTING SEWER LINE
—S—	PROPOSED SEWER LINE
	PROPOSED SEWER LATERAL
	EXISTING SEWER MANHOLE
MH	PROPOSED SEWER MANHOLE
	CONCRETE DRIVEWAY
	EXISTING CONTOUR
	PROPOSED CONTOUR
	RIGHT-OF-WAY LINE
	SUBDIVISION BOUNDARY
	STREET CENTERLINE
1	BLOCK NUMBER
10	LOT NUMBER
FF=22.1	PROPOSED FINISH FLOOR
21.1	PROPOSED PAD ELEVATION
21.5	EXISTING PAD ELEVATION
21.1	FUTURE PAD ELEVATION
(21.55)	EXISTING ELEVATION
21.55	PROPOSED ELEVATION
[21.55]	FUTURE ELEVATION
	FUTURE IMPROVEMENTS
	EXISTING IMPROVEMENTS
	SWALE
	UNIT BOUNDARY
00.5	PAD HIGH POINT
	SIGHT VISIBILITY RESTRICTION ZONE
	TOP OF SLOPE, FRONT AND SIDEYARD
	GRADE BREAK OR TRANSITION
	0" LIP DRIVEWAY
	RETAINING WALL
	SCREEN WALL
	OPTIONAL RETAINING WALL
	2:1 SCARP
	CURB TRANSITION 30" ROLL TO "L" TYPE
	PROPOSED 100w HPS STREET LIGHT
	EXISITING 100w HPS STREET LIGHT
	SAW CUT LINE

APPROVALS

CITY FIRE MARSHAL 9/15/04
DATE

DISCLAIMER NOTE

Avoid cutting underground utility lines. It's costly.
Call before you Dig
1-800-227-2600
UNDERGROUND SERVICE (USA)

Avoid overhead power line contact.
Call before you Overhead
1-702-227-2929
NEVADA POWER ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL SYSTEMS AND STREET LIGHT SYSTEM CONDUITS
Call before you UnderGround
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS, AND
1-702-229-6611
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND OR OVERHEAD UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

REV	DESCRIPTION	BY	DATE	AGEN. APP.	DATE

PROJ NO: 607.001N
DESIGN: DL
DATE: FEB. 2004
SCALE: AS SHOWN
CADFILE:

PROFESSIONAL ENGINEER – STATE OF NEVADA
DENIS L. ATWOOD
EXP. 12/31/04
CIVIL
No. 8713
9/15/04
STAMP DATE: ~~8/16/04~~
EXP. DATE: 12/31/04

TRC
Customer-Focused Solutions
BV Engineering Nevada
8395 W. SUNSET ROAD
Suite 190
Las Vegas, NV 89113
Tel: 702-650-0572
Fax: 702-307-4222
Web: trcsolutions.com

OWNER/DEVELOPER
SF INVESTMENTS
4511 W. CHEYENNE BLVD.
N. LAS VEGAS, NEVADA 89032
TEL: 702-873-7773

BUNKER COMMONS
NOTE SHEET

SHEET 2 OF 17 SHTS

PROJECT ID 10748439

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