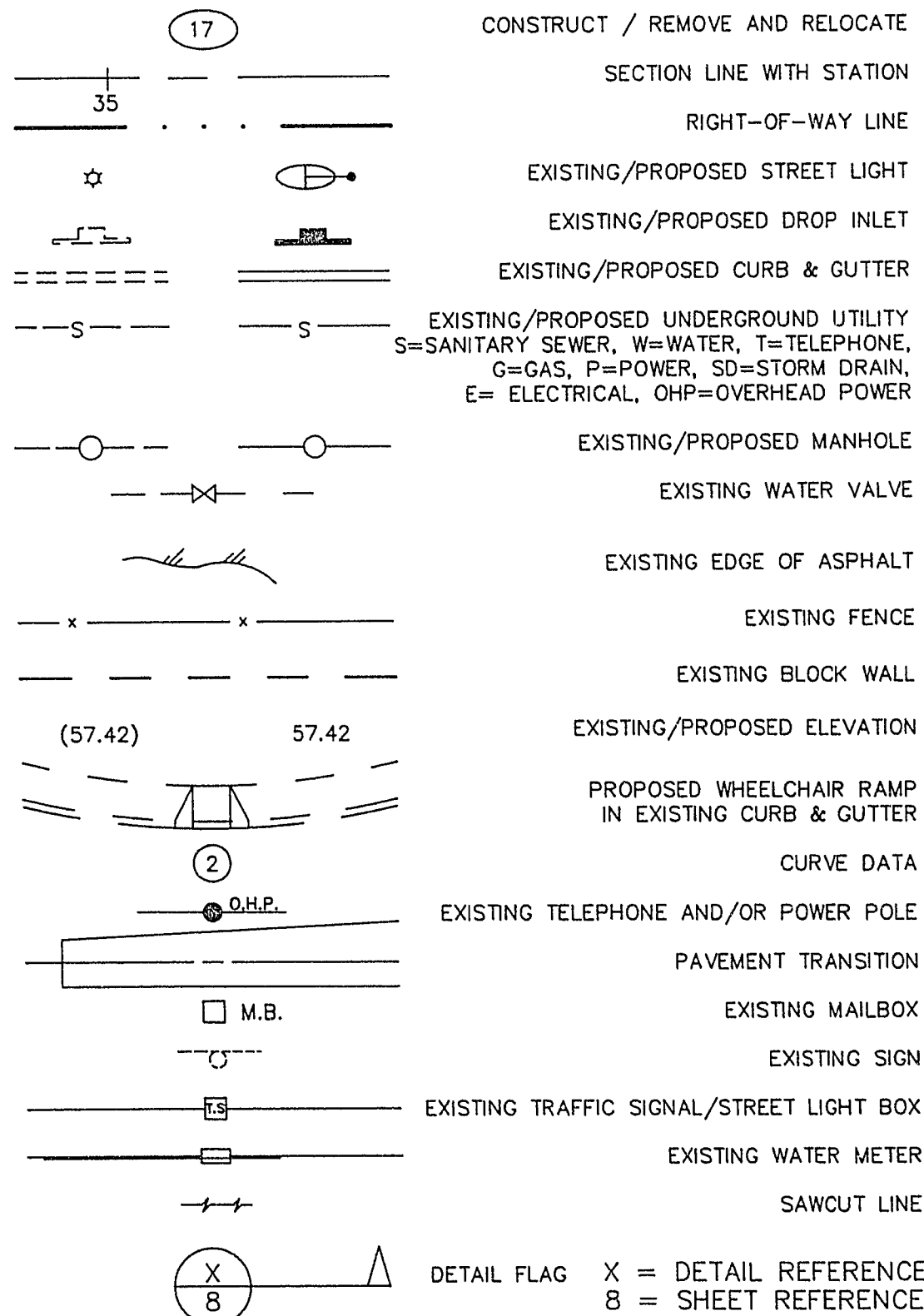


GENERAL NOTES

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, CITY OF LAS VEGAS". ANY OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY: THE UNIFORM BUILDING CODE; AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE.
2. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE DRAWINGS. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS ARE NOT SHOWN ON THE PLANS.
3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING 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 RECONSTRUCTED SATISFACTORY TO THE OWNER AT THE EXPENSE OF THE CONTRACTOR.
4. THE CONTRACTOR SHALL NOT BACKFILL ANY TRENCHES IN WHICH WATERLINES HAVE BEEN UNCOVERED UNTIL THE WATERLINES HAVE BEEN INSPECTED BY THE LAS VEGAS VALLEY WATER DISTRICT. THE WATER DISTRICT SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF CONSTRUCTION IN THE VICINITY OF WATER LINES.
5. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY ALTERATIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE ENGINEER.
6. TYPE V CEMENT SHALL BE USED FOR ALL WORK IDENTIFIED IN SECTION 613 OF THE STANDARD SPECIFICATIONS. CONCRETE TO BE DESIGNED FOR A 5.5 SACK MIX WITH A MAXIMUM WATER/CEMENT RATIO OF 0.45 (OR AS DESIGNED BY THE SOILS ENGINEER). MIX DESIGN TO BE APPROVED BY THE QUALITY CONTROL DIVISION PRIOR TO USE ON THE PROJECT. STRUCTURAL CONCRETE SHALL BE CLASS DA.
7. THE CONTRACTOR SHALL, AT HIS EXPENSE, LOCATE ALL 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 AND/OR TELEPHONE FACILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
8. PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
9. EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED TYPE CURB.
10. A.C. PAVEMENT TO BE 1/2" ABOVE LIP OF ALL GUTTERS AND VALLEY GUTTER AFTER COMPACTION.
11. APPLY FOG SEAL ONLY AFTER CORRECTIONS AND ADJUSTMENTS HAVE BEEN MADE.
12. CURB AND GUTTER WITH A GRADE OF LESS THAN FOUR TENTHS 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.
13. WHEELCHAIR 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 AN INSPECTOR.
14. 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 SAID CONSTRUCTION. EXTENT OF TRANSITIONS TO BE DETERMINED BY THE ENGINEER AND AS SHOWN ON PLANS.
15. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY KLEINFELDER INC. OR PER THESE PLANS.
16. EXACT LOCATION OF ALL SAWCUT LINES MAY BE DETERMINED IN THE FIELD BY THE ENGINEER IF LOCATION OF PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITIONS REQUIRES LOCATION.
17. 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. 625.550.
18. ALL CONCRETE WORK SHALL CEASE IF SHRINKAGE CRACKS APPEAR. THE ENGINEER WILL BE NOTIFIED IMMEDIATELY AND NO CONCRETE WORK IS TO RESUME UNTIL THE CAUSE AND A REMEDY OF THE CRACKING HAS BEEN DETERMINED.

LEGEND



LVVWD NOTES

1. NO WORK SHALL BEGIN ON THE WATER PLANS UNTIL THEY HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING APPROVAL OF THE PLANS, NOTICE MUST BE GIVEN TO THE LVVWD CUSTOMER SERVICE DEPARTMENT (870-4149), 48 HOURS PRIOR TO ACTUAL CONSTRUCTION AND 24 HOURS PRIOR TO AN INSPECTION.
2. CALL BEFORE YOU DIG 1-800-227-2600.
3. ALL WORK SHALL CONFORM TO LVVWD LATEST STANDARD PLATES, DRAWINGS AND SPECIFICATIONS.
4. ALL WORK, EXCEPT AS MODIFIED HEREON OR BY NOTE 3, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR ADDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENTS, CLARK COUNTY AREA.
5. DISTRICT APPROVED SERVICE SADDLES OR TAPPED COLLARS WILL BE REQUIRED ON ALL 3/4" AND 1" SERVICE LATERALS. SERVICE SADDLES ONLY WILL BE PERMITTED ON 1 1/2" AND 2" SERVICE LATERALS. DOUBLE TAPPED COLLARS ARE NOT PERMITTED.
6. COPPER SERVICE LATERALS: ALL 3/4" TO 2" SERVICE LATERALS SHALL BE OF COPPER TUBING IN ACCORDANCE WITH THE DISTRICT'S SPECIFICATIONS AND STANDARD PLATES.
7. THE MAXIMUM ALLOWABLE JOINT DEFLECTION FOR ACP AND DUCTILE IRON PIPE SHALL BE AS FOLLOWS:
- | PIPE SIZES | ACP | DUCTILE IRON SLIP JOINT | DUCTILE IRON MECHANICAL JOINT |
|--------------|------|-------------------------|-------------------------------|
| 6 INCH | 2.5" | 2.5" | 3.5" |
| 8 - 12 INCH | 2.5" | 2.5" | 2.5" |
| 14 - 18 INCH | 2" | 1.5" | 1.5" |
| 18 - 24 INCH | N/A | 1.5" | 1.5" |
- ON PVC PIPE, THE MAXIMUM OFFSET FOR A 20' LENGTH OF FACTORY BELLED PIPE SHALL BE 16 INCHES FOR 6" PIPE, 12 INCHES FOR 8" PIPE, AND 9 INCHES FOR 10" AND 12" PIPE.
- IF THESE OFFSETS CONFLICT WITH THE PIPE MANUFACTURERS RECOMMENDATION, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
8. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
9. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS AND VALLEY GUTTERS.
10. DETECTOR TAPE IS REQUIRED IN ACCORDANCE WITH STANDARD PLATE No. 27 WHERE INDICATED, AND AS FOLLOWS:
A) OVER ALL MAINS NOT INSTALLED 6 FEET FROM BACK OF CURB.
B) OVER ALL SERVICE LATERALS NOT INSTALLED AT RIGHT ANGLES TO MAIN.
11. ALL WATER MAINS ARE TO BE PRESSURE TESTED AT 200 PSI FOR A CONTINUOUS TWO HOUR PERIOD, IN ACCORDANCE WITH DISTRICT STANDARDS.
12. ALL WATER MAINS AND LATERALS SHALL BE DISINFECTED, FLUSHED AND AN ACCEPTABLE HEALTH SAMPLE OBTAINED, PRIOR TO THE CONNECTION OF THE WATER MAIN(S) AND/OR LATERAL(S) TO THE DISTRICT'S SYSTEM.
13. CONTRACTOR TO OBTAIN ALL METERS 2" AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 FORTY-EIGHT (48) HOURS PRIOR TO PICKUP.

CONSTRUCTION NOTES

CONSTRUCT

- 1 SAWCUT AND MATCH EXISTING PAVEMENT
- 2 CONSTRUCT A.C. TRANSITION
- 3 CONSTRUCT 24" 'L' TYPE CURB AND GUTTER PER STD. DWG. No. 216
- 4 CONSTRUCT CONCRETE SIDEWALK PER STD. DWG. No. 234
- 5 CONSTRUCT 'L' TYPE ISLAND CURB PER STD. DWG. No. 219
- 6 EXISTING SIDEWALK AND CURB & GUTTER TO REMAIN
- 7 VERTICALLY ADJUST SEWER MANHOLE
- 8 ADJUST WATER VALVES PER STD. DWG. No. 517
- 9 CONSTRUCT MEDIAN ISLAND PER STD. DWG. No. 218
- 10 CONSTRUCT ASPHALT PAVEMENT

REMOVE AND/OR RELOCATE

- 20 REMOVE EXISTING ASPHALT
- 21 REMOVE EXISTING CURB & GUTTER
- 22 REMOVE EXISTING SIDEWALK
- 23 REMOVE EXISTING DRIVEWAY
- 24 REMOVE EXISTING DRAINAGE PIPE
- 25 REMOVE AND RELOCATE TRAFFIC SIGN
- 26 REMOVE AND RELOCATE BY OTHERS

STANDARD DRAWINGS

"UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS' CONSTRUCTION, CLARK COUNTY AREA, NEVADA", DATED 1988.

DWG. No.	DESCRIPTION
216	"L" TYPE CURB AND GUTTER
218	MEDIAN ISLAND TYPICAL SECTION
219	"L" TYPE ISLAND CURB
234	SIDEWALK
412	DROP INLET TYPE "B"
517	VALVE BOX ADJUSTMENT

"STATE OF NEVADA STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION", DATED OCTOBER 1989.

DWG. No.	DESCRIPTION
R-8.1.6	BREAKAWAY CABLE TERMINAL
R-8.2.2	GALVANIZED GUARDRAIL ("W" - BEAM)

TRAFFIC NOTES

1. 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 IMMEDIATELY AFTER FIRST GRADING WORK IS ACCOMPLISHED.
2. ALL CONSTRUCTION SIGNING, BARRICADING AND TRAFFIC DELINEATION SHALL CONFORM TO THE "NEVADA WORK ZONE TRAFFIC CONTROL HANDBOOK-1985" AND TO THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES-1978, REVISION NO. 4, MARCH, 1986".
3. 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.
4. THE DEVELOPER SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CITY OF LAS VEGAS STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF LAS VEGAS STANDARDS.
5. IF A PROPOSED STREETLIGHT STANDARD IS FIELD LOCATED TO WITHIN FIVE (5) FEET OF ANY SIGN SHOWN HEREON TO BE MOUNTED ON A SIGN POST, THEN CHANGE SIGN MOUNTING TO ONE ON THE STREETLIGHT STANDARD.
6. 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.

RECORD DRAWING

These Record Drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein as a result.

INDEX OF DRAWINGS

TOTAL	SHEET No.	DESCRIPTION
1	1	COVER SHEET
2	2	NOTES and INDEX, LEGEND and ABBREVIATIONS
3	3	PROJECT GEOMETRICS AND ESTIMATE OF QUANTITIES
4	4	LAS VEGAS WASH OUTFALL PLAN AND GRADING
5	5	OUTFALL AND RETAINING WALL DETAILS
6	6	OUTFALL AND RETAINING WALL DETAILS
7	7	RCB PLAN AND PROFILE
8	8	RCB PLAN AND PROFILE
9	9	RCB SECTION AND DETAILS
10	10	INLET PLAN AND SECTIONS
11	11	INLET DETAILS
12	12	SANDHILL ROAD - DROP INLET AND LATERAL DESIGN
13	13	WASHINGTON AVE / SANDHILL ROAD INTERSECTION DESIGN
14	14	SANITARY SEWER RELOCATION
15	15	WATER RELOCATION

BASIS OF BEARING

NORTH 89° 36' 56" WEST ALONG THE CENTERLINE OF WASHINGTON AVENUE BETWEEN THE CENTERLINES OF LAMB BOULEVARD AND PECOS ROAD ROTATED RIGHT 0° 02' 14" FROM THAT BEARING AS SHOWN ON FILE 35 OF PARCEL MAPS, PAGE 73 (N 89° 39' 10" W), AS RECORDED IN THE RECORDER'S OFFICE, CLARK COUNTY, NEVADA.

BENCHMARK

CITY OF LAS VEGAS BENCHMARK # 06125A14 LOCATED ON THE WEST CURB RETURN ON THE SOUTHWEST CORNER OF PECOS ROAD AND OSAGE AVENUE. ELEVATION = 1807.177

ABBREVIATIONS

A.C. ASPHALTIC CONCRETE
ADJ. ADJUST
B.C. BACK OF CURB
B.C.R. BACK OF CURB RADIUS
B.O.F. BOTTOM OF FOOTING
B.V.C. BEGIN VERTICAL CURVE
B.W. BACK OF WALK
C.C. CLARK COUNTY
C & G CURB AND GUTTER
C.L. CENTER LINE
CONC. CONCRETE
CONSTR. CONSTRUCT or CONSTRUCTION
D.I. DROP INLET
DIA. DIAMETER
DWG. DRAWING
ELEV./EL. ELEVATION
E.O. EDGE OF PAVEMENT
E.V.C. END VERTICAL CURVE
E.W. EACH WAY
EX/EXIST. EXISTING
F.G. FINISHED GRADE
F.H. FIRE HYDRANT
F.L. FLOW LINE
G.B. GRADE BREAK
G.V. GATE VALVE
INV. INVERT
L. LENGTH
L.F. LINEAR FEET
L.T. LEFT
MAX. MAXIMUM
M.H. MANHOLE
MIN. MINIMUM
P.C. POINT OF CURVATURE
P.I. POINT OF INTERSECTION
P.R.C. POINT OF REVERSE CURVATURE
PROP. PROPOSED
P.T. POINT OF TANGENCY
R.C.P. REINFORCED CONCRETE PIPE
R.P. RADIAL POINT
R.T. RIGHT
R/W. RIGHT-OF-WAY
S.D. STORM DRAIN
STD. STANDARD
S.W. SIDEWALK
T.C. TOP OF CURB
T.O.W. TOP OF WALL
TRANS. TRANSITION
TYP. TYPICAL
V.C. VERTICAL CURVE
V.G. VALLEY GUTTER
W.M. WATER METER

Avoid cutting underground utility lines - it's costly.

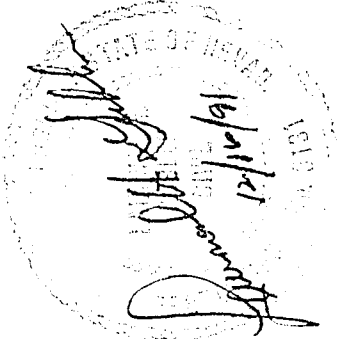
Call before you Dig.

1-800-227-2600

UNDERGROUND SERVICE ALERT (USA)

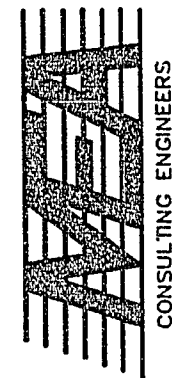
REVISIONS

No.	Date



DESIGNED: RJT	RTJ				
DRAWN: RJT	LHC				
CHECKED: LHC	343-90				
JOB NO.					
SCALE:					
HORIZ.					
VERT.					

1055 EAST TROPICANA
SUITE 800
LAS VEGAS, NEVADA 89119
(702)798-1007



PROJECT: CITY OF LAS VEGAS
WASHINGTON AVENUE CONVEYANCE SYSTEM

DESCRIPTION: NOTES and INDEX

LEGEND and ABBREVIATIONS

SHEET	2
2	OF 15