

GENERAL NOTES

- 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 ISSUE, 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".
- 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 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.
- 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 REPLACES SATISFACTORY TO THE CITY ENGINEER OR OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
- TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGN TO BE APPROVED BY THE ENGINEER PRIOR TO USE ON THE PROJECT, UNLESS OTHERWISE NOTED.
- PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT OF WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
- EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED TYPE CURB.
- DENSE GRADE TO BE FLUSH WITH LIP OF CURB. OPEN GRADE TO BE 1/2" ABOVE LIP OF CURB, BUT FLUSH TO LIP OF CURB ON SIDEWALK RAMPS.
- 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.
- SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTIONS PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.
- 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, OR AS DESIGNATED IN THE FIELD BY A CITY INSPECTOR.
- ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE SOILS ENGINEER AND APPROVED BY THE CITY ENGINEER.
- EXACT LOCATION OF ALL SAWCUT 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.
- 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.
- 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.
- WALL NOTES:
 - ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN FOR THE PURPOSE OF GRADING RELATIONSHIPS.
 - THE STRUCTURAL AND ARCHITECTURAL DESIGN OF ALL WALLS (RETAINING OR NON-RETAINING) MUST BE APPROVED BY THE CLV BUILDING DEPARTMENT.
- ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT ON CITY STREETS.
- ALL VALVES AND MANHOLES WITHIN THE NEW ASPHALT PAVEMENT LIMITS WILL BE VERTICALLY ADJUSTED AND CONSTRUCTED WITH CONCRETE COLLARS IN ACCORDANCE WITH THE LATEST EDITION OF THE UNIFORM STANDARD DRAWINGS (DWG 517 AND DWG 408, RESPECTIVELY). WATER VALVES SHALL BE ASSESSABLE AT ALL TIMES.

A	ANODE, GAS	DWY	DRIVEWAY
ABAN	ABANDON	E or ELEC	ELECTRIC
AC	ASPHALTIC CONCRETE	EBOX	ELECTRIC BOX
ACP	ASBESTOS CEMENT PIPE	EC	END OF CURVE
AGG	AGGREGATE	ECR	END CURB RETURN
AIP	ABANDONED IN PLACE	ELM or EL	ELEVATION
ALT	ALTERNATE	ELE	ELECTRIC METER
ANG. PT.	ANGLE POINT	EMBK	EMBANKMENT
AVE	AVENUE	EMTR	ELECTRIC METER
BC	BACK OF CURB	EP	EDGE OF PAVEMENT
BC-BC	BACK OF CURB TO BACK OF CURB	ESMT	EASEMENT
BCR	BEGIN CURB RETURN	ETRAN	ELECTRIC TRANSFORMER
BDRY LINE	BOUNDARY LINE	EVC	END OF VERTICAL CURVE
BHDI	BEEHIVE DROP INLET	EVCE	END OF VERTICAL CURVE ELEVATION
BLVD	BOULEVARD	EVCS	END OF VERTICAL CURVE STATION
BM	BENCH MARK	EVL T	ELECTRIC VAULT
BO	BLOW-OFF	EXIST	EXISTING
BVC	BEGINNING OF VERTICAL CURVE	EX BLDG	EXISTING BUILDING CORNER
BVCE	BEGINNING OF VERTICAL CURVE ELEVATION	EX FNC	EXISTING FENCE
BVCS	BEGINNING OF VERTICAL CURVE STATION	EX FNC-COR	EXISTING FENCE CORNER
CATV	CABLE TELEVISION	EX LS	EXISTING LANDSCAPE
CATVRSR	CABLE TELEVISION RISER	EX TC-AP	TOP OF CURB - ANGLE POINT
C-C	CENTER TO CENTER	FA	FIRE ALARM
CC	CLARK COUNTY	FC	FACE OF CURB
CCSD	CLARK COUNTY SANITATION DISTRICT	FF	FINISH FLOOR
CF or CL	CENTERLINE	FG	FINISH GRADE
CF	CURB FACE	FH	FIRE HYDRANT
CIP	CAST IRON PIPE	FL	FLOWLINE
CLV	CITY OF LAS VEGAS	FO	FIBER OPTIC
CMP	CORRUGATED METAL PIPE	FT	FEET OR FOOT
CMPAP	CORRUGATED METAL ARCHED PIPE	FUT	FUTURE
CNLV	CITY OF NORTH LAS VEGAS	GALV	GALVANIZED
CO	CLEANOUT, SEWER	G.B.	GRADE BREAK
COL	COLUMN	GI	GRADED INLET
COMM	COMMERCIAL	GM	GAS METER
CONC, PCC	CONCRETE	GJT	GUTTER
CONST	CONSTRUCTION or CONSTRUCT	GV	GAS VALVE
COR	CORNER	HERCP	HORIZ ELLIPTICAL
C&G or C/G	CURB & GUTTER	RC	REINFORCED CONCRETE PIPE
CULV	CULVERT	RCB	REINFORCED CONCRETE BOX
DCSWCS	DESIGN AND CONSTRUCTION STANDARDS FOR WASTE WATER COLLECTION SYSTEMS	RCP	REINFORCED CONCRETE PIPE
		RCAP	REINFORCED CONCRETE ARCHED PIPE
		RD	ROAD
		REINF	REINFORCED
		RORCP	RUBBER GASKETED
		RGHERCP	RUBBER GASKETED HORIZONTAL ELLIPTICAL
		RGVERCP	RUBBER GASKETED VERTICAL ELLIPTICAL
DEPT	DEPARTMENT	RC	RADIOS
DI	DROP INLET	RC	REINFORCED CONCRETE
DIA	DIAMETER	RCB	REINFORCED CONCRETE BOX
DWG	DRAWING	RCP	REINFORCED CONCRETE PIPE
		RCAP	REINFORCED CONCRETE ARCHED PIPE
		RD	ROAD
		REINF	REINFORCED
		RORCP	RUBBER GASKETED
		RGHERCP	RUBBER GASKETED HORIZONTAL ELLIPTICAL
		RGVERCP	RUBBER GASKETED VERTICAL ELLIPTICAL
		RC	RADIOS
		RC	REINFORCED CONCRETE
		RCB	REINFORCED CONCRETE BOX
		RCP	REINFORCED CONCRETE PIPE
		RCAP	REINFORCED CONCRETE ARCHED PIPE
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GENERAL LEGEND

-----	EXISTING CURB & GUTTER	=====	PROPOSED CURB & GUTTER
--- --- --- ---	EXISTING EDGE OF PAVEMENT	--- --- ---	PROPOSED EDGE OF PAVEMENT
-----	EXISTING RIGHT-OF-WAY	-X-X-X-	PROPOSED FENCE LINE
-----CATV-----	EXISTING CABLE TELEVISION LINE(S)	=====	PROPOSED STORM DRAIN
---4" G---	EXISTING GAS LINE (SIZE VARIES)	□	PROPOSED DROP INLET
---12" SS---	EXISTING SEWER LINE (SIZE VARIES)	□	PROPOSED WATER METER
---8" W---	EXISTING WATER LINE (SIZE VARIES)	X	PROPOSED VALVE
---UGT---	EXISTING TELEPHONE CABLE/CONDUIT(S)	⊕	PROPOSED FIRE HYDRANT
---18" SD---	EXISTING STORM DRAIN (SIZE VARIES)	⊕ OR ⊕	PROPOSED STREET SIGN
---TS---	EXISTING TRAFFIC SIGNAL WIRE AND/OR CONDUIT	⊕ OR ⊕	PROPOSED STREET LIGHT
---UGE---	EXISTING UNDERGROUND ELECTRIC LINE(S)	⊕	PROPOSED POLE LIGHT
-X-X-X-	EXISTING FENCE LINE	⊕	PROPOSED PULL BOX
⊕ WM	EXISTING WATER METER	⊕	PROPOSED UTILITY VAULT OR CABINET
⊕ OR ⊕	EXISTING VALVE	⊕	PROPOSED TRAFFIC CONTROL SERVICE PEDESTAL
⊕ FH	EXISTING FIRE HYDRANT	⊕	PROPOSED SIDEWALK RAMP
○	EXISTING MANHOLE		
⊕	EXISTING POLE w/ GUY WIRE AND ANCHOR		
⊕ OR ⊕	EXISTING STREET SIGN		
⊕ OR ⊕	EXISTING STREET LIGHT		
⊕	EXISTING POLE LIGHT		
□	EXISTING PULL BOX		
⊕	EXISTING UTILITY VAULT OR CABINET		
⊕	EXISTING TRAFFIC CONTROL SERVICE PEDESTAL		
⊕	EXISTING SIDEWALK RAMP		
T	EXISTING CATHOTIC TEST STATION		
A	EXISTING COMBINATION AIR VALVE		

Avoid cutting underground utility lines. It's costly.

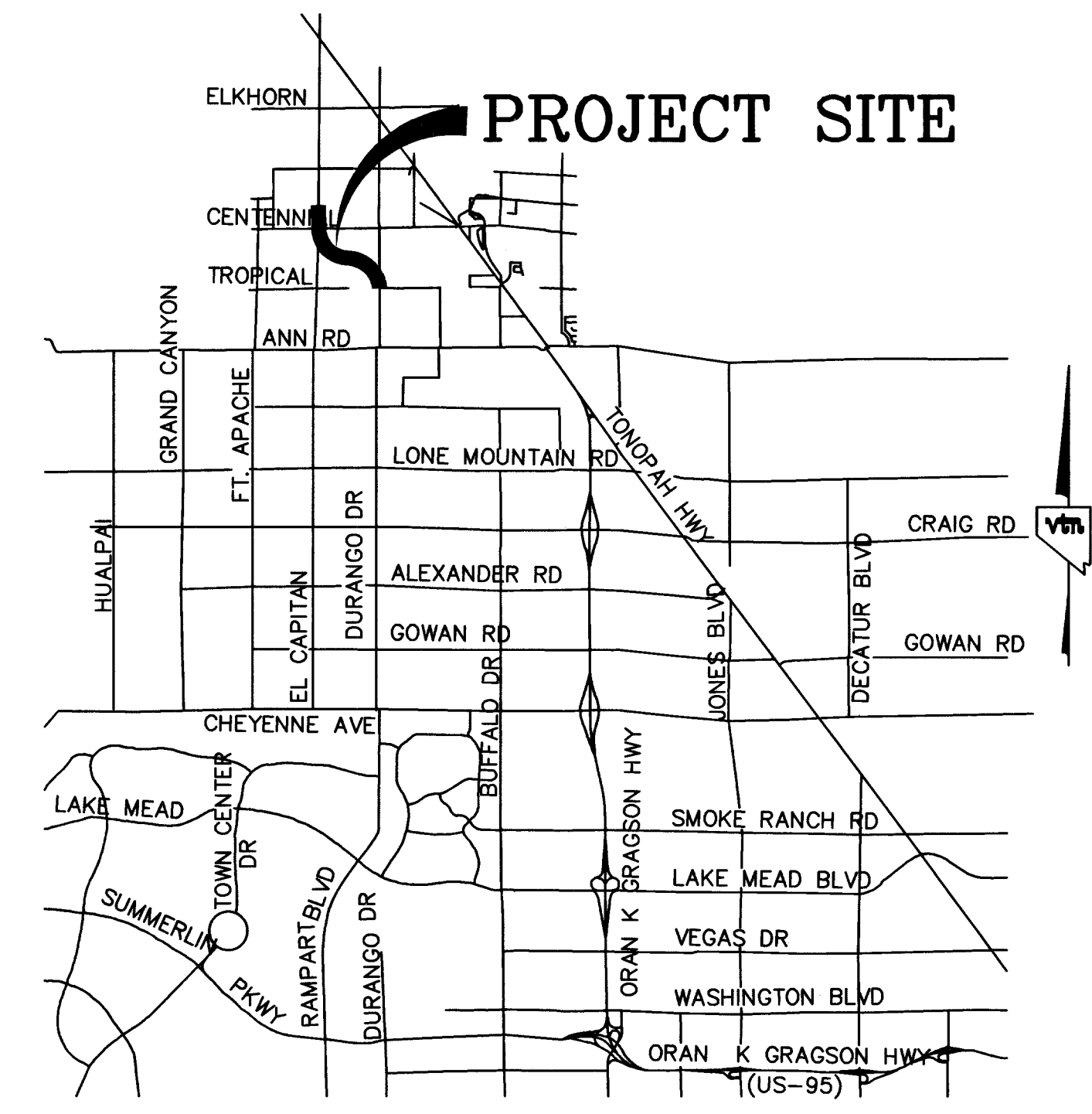
2 working days
Call before you Dig
1-800-227-2600
Underground Service Alert (U.S.A.)

Avoid overhead power line contact.

2 working days
Call before you Overhead
1-702-593-6111
Nevada Power Environment and Safety Services Department

ABBREVIATIONS

L	LENGTH OF CURVE	RP	RADIOS POINT	W	WATER
LP	LOW POINT	RT	RIGHT	W/	WITH
LT	LEFT	RTN	RETURN	WBO	WATER BLOW-OFF VALVE
LVVWD	LAS VEGAS VALLEY WATER DISTRICT	R/W	RIGHT-OF-WAY	WM	WATER METER
		RWDS	RECLAIMED WATER DELIVERY SYSTEM	WMH	WATER VAULT MANHOLE
		S	SEWER	W/O	WEST OF
MAX	MAXIMUM	SD	STORM DRAIN	WV	WATER VALVE
MH	MANHOLE	SDMH	STORM DRAIN MANHOLE	YD	YARD
MIN	MINIMUM	SHT	SHEET		
MLCP	MORTAR LINED AND COATED STEEL PIPE	SLPB	STREETLIGHT PULL BOX		
MO	MODIFIED	SSMH	SANITARY SEWER MANHOLE		
NG	NATURAL GROUND	SL or STLT	STREET LIGHT		
N/O	NORTH OF	SS	SANITARY SEWER		
NTS	NOT TO SCALE	SQ FT, SF	SQUARE FOOT		
		SQ YD, SY	SQUARE YARD		
OC	ON CENTER	ST	STREET		
OG	OPEN-GRADED PAVEMENT	STA	STATION		
OH/CATV	OVERHEAD CABLE TELEVISION	STD	STANDARD		
OHE	OVERHEAD ELECTRIC	STRUCT	STRUCTURAL OR STRUCTURE		
OHT	OVERHEAD TELEPHONE	SW	SIDEWALK		
P	POWER	T	TELEPHONE		
PB	PULL BOX	TBC	TOP BACK OF CURB		
PC	POINT OF CURVE	TBOX	TELEPHONE BOX		
PCC	POINT OF COMPOUND CURVE	TC	TOP OF CURB		
PCC, CONC	PORTLAND CEMENT CONCRETE	TEMP	TEMPORARY		
PG	PROFILE GRADE	TFC	TOP FACE OF CURB		
PK	POINT OF INTERSECTION	TG	TOP OF GRATE		
PKWY	PARKWAY	TMH	TELEPHONE MANHOLE		
PL	PROPERTY LINE	TOE	BOTTOM OF SLOPE		
PP	POWER POLE	TOS	TOP OF SLAB		
POC	POINT ON CURVE	TPFC	TOP OF PAVEMENT @ FACE OF CURVE		
POT	POINT ON TANGENT	TRANS	TRANSITION		
PRC	POINT OF REVERSE CURVE	TRSR	TELEPHONE RISER		
PROP	PROPOSED	TS	TRAFFIC SIGNAL		
PT	POINT OF TANGENCY	TSI	TRAFFIC SIGNAL INTERCONNECT		
PVI	POINT OF VERTICAL INTERSECTION	TSPB	TRAFFIC SIGNAL PULL BOX		
PVMT	PAVEMENT	TRANS	TRANSITION		
		TVLT	TELEPHONE VAULT		
		TW	TOP OF WALL		
		TYP	TYPICAL		
		UG	UNDERGROUND		
		USD	UNIFORM STD DWG		
		VERCP	VERT ELLIPTICAL REINF CONC PIPE		
		VERT	VERTICAL		
		VC	VERTICAL CURVE		
		VG	VALLEY GUTTER		
		VCP	VITRIFIED CLAY PIPE		



VICINITY MAP

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS PROJECT IS NORTH 00°27'17" WEST, BEING THE WEST LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 28, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA, AS SHOWN ON A RECORD OF SURVEY RECORDED IN THE CLARK COUNTY, NEVADA, RECORDER'S OFFICE IN FILE 101 AT PAGE 47.

PROJECT BENCHMARK

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988
 BENCHMARK: CITY OF LAS VEGAS BENCH 1LV9033W4
 ELEVATION: 740.8191 METERS (2430.50)
 RIVET AND PLATE IN TOP OF CURB, NE RETURN OF DURANGO DRIVE AND WASHBURN ROAD.

DRAWING INDEX

DWG NO.	SHT NO.	TITLE
I1		TITLE / COVER SHEET AND APPROVALS
I2		GENERAL NOTES, LEGEND, DRAWING INDEX, AND ABBREVIATIONS
I3 - I5		SURVEY CONTROL PLAN
TS1 - TS3		TYPICAL CROSS SECTIONS
D1 - D6		MISCELLANEOUS DETAILS
ST1 - ST6		STRUCTURAL DETAILS (DWG NO. ST2 NOT INCLUDED)
W1 - W3		WATER DETAILS
R1 - R5		DURANGO ROADWAY PLAN & PROFILE
R6 - R8		SIDE STREET ROADWAY PLAN & PROFILE
R9 - R11		INTERSECTION GRADING PLAN
R12 - R16		MEDIAN ISLAND GEOMETRICS
SD1 - SD6		STORM DRAIN PLAN & PROFILE
SD7 - SD10		STORM DRAIN LATERAL PROFILE
SS1 - SS4		SANITARY SEWER PLAN & PROFILE
T1 - T3		TRAFFIC GENERAL NOTES & SCHEDULES
T4 - T7		STRIPING & STREET LIGHTING PLAN
T8 - T10		TRAFFIC SIGNAL & UNDERGROUND PLANS
T11 - T12		FAST INCIDENT DETECTION CAMERA PLANS
T13		INCIDENT DETECTION CAMERA DETAILS
S1		SIGNING DETAILS
S2 - S6		SIGNING PLANS

DEPARTMENT OF PUBLIC WORKS
CITY OF LAS VEGAS

REVISION
BY
DATE
REV

CONSULTING ENGINEERS • PLANNERS • LAND SURVEYORS
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148 PHONE (702) 873-7550 FAX (702) 362-2597

vtm nevada

GENERAL NOTES, LEGEND, DRAWING INDEX AND ABBREVIATIONS

PROJECT: DURANGO DRIVE IMPROVEMENTS TROPICAL PARKWAY TO I-215

SEAL
KEN D. GILBRETH
EXP. 08/30/06
CIVIL
No. 9177

NO. NO. 5678

BY LMW

DATE 12/05/03

SCALE HORIZ NONE VERT NONE

DRAWING SHEET 12 OF 71 SHEETS