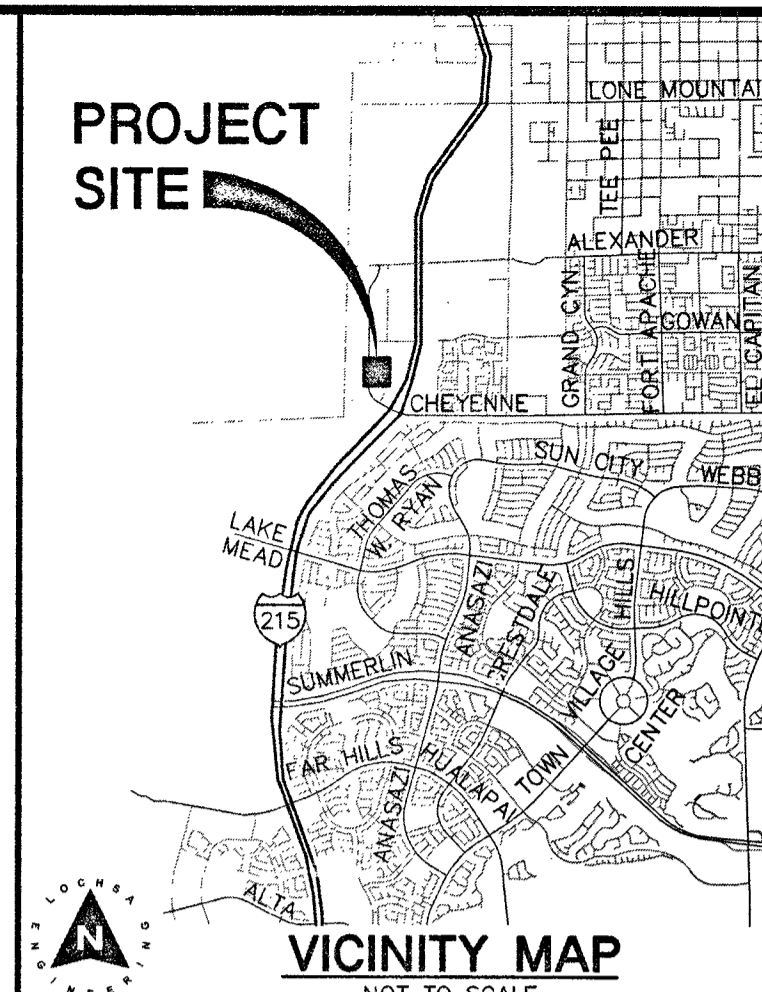
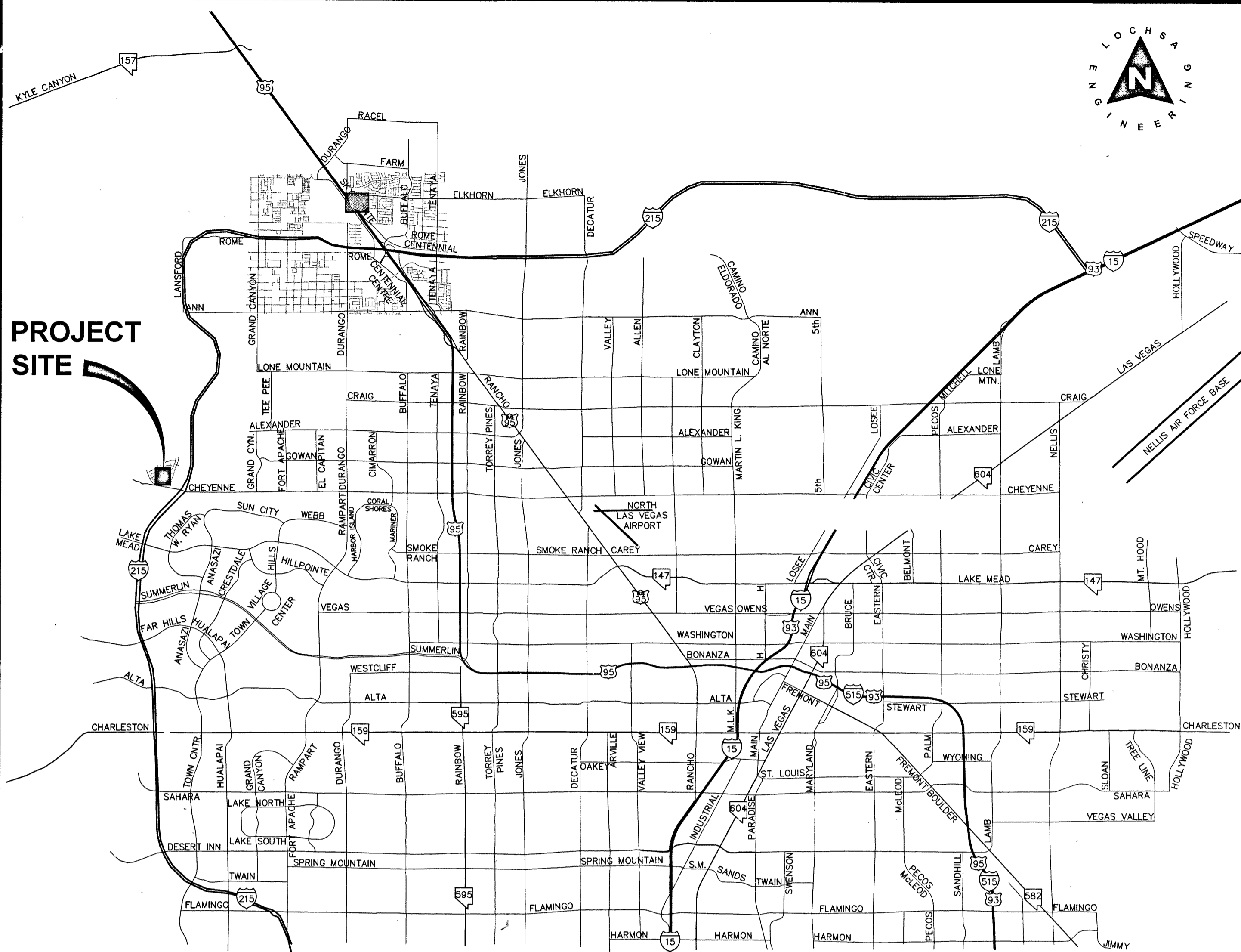


# IMPROVEMENT PLANS FOR NOVAT COMMERCIAL PHASE II 3375 NOVAT STREET



PROJECT SITE



A PORTION OF LOT ONE (1) OF CHEYENNE BELTWAY AS SHOWN IN BOOK 105 OF PLATS, PAGE 86 IN THE CLARK COUNTY RECORDER'S OFFICE, CITY OF LAS VEGAS, NEVADA.  
A.P.N.: 137-12-410-014  
AREA = 0.88 ACRES

REV #	REVISION DESCRIPTION	SHEETS	APPD BY	DATE APPD
1	RELOCATED BUILDING	1, 3-5	CLV SB	8/17/17

Lochsa Engineering  
137-12-410-014  
CLV SB

### ABBREVIATIONS

ABAN	ABANDON	INV	INVERT
AIP	ABANDON IN PLACE	ISL	ISLAND
AGG	AGGREGATE	JB	JUNCTION BOX
ALT	ALTERNATE	LOC	LENGTH OF CURB
A	ANODE, GAS	LT	LEFT
ACP	ASBESTOS CEMENT PIPE	LF	LINEAR FEET
ADP	ASPHALTIC CONCRETE	LS	LANDSCAPE
AVE	AVENUE	LVWD	LAS VEGAS VALLEY WATER DISTRICT
BC	BACK OF CURB	MH	MANHOLE
BCR	BACK OF CURB RADIUS	MAX	MAXIMUM
BVC	BEGINNING OF VERTICAL CURVE	MIN	MINIMUM
BM	BENCHMARK	MON	MONOLITHIC
BORY LINE	BOUNDARY LINE	N/O	NORTH OF
CATV	CABLE TELEVISION	NOT TO SCALE	NOT TO SCALE
C-C	CENTER TO CENTER	ON CENTER	ON CENTER
CL	CENTERLINE	OPEN-GRADED PAVEMENT, ORIGINAL GROUND	OPEN-GRADED PAVEMENT, ORIGINAL GROUND
CLC	CITY OF BOULDER CITY	PAVT	PAVEMENT
CLV	CITY OF LAS VEGAS	PI	POINT OF INTERSECTION
COH	CITY OF HENDERSON	PRC	POINT OF REVERSE CURVE
CM	CITY OF MESQUITE	PC	POINT OF CURVE
CNLY	CITY OF NORTH LAS VEGAS	PT	POINT OF TANGENCY
CC	CLARK COUNTY	PCO	POINT OF COMPOUND CURVE
CCWFO	CLARK COUNTY WATER RECLAMATION DISTRICT	PCC, CONC	PORTLAND CEMENT CONCRETE
CD	CLEAN OUT, SEWER	PP	POWER POLE
COM	COMMERCIAL	P	POWER
CON	CONCRETE	PL	PROPERTY LINE
CNST	CONSTRUCTION OR CONSTRUCT	PROP	PROPOSED
COR	CORNER	PB	PULL BOX
CMP	CORRUGATED METAL PIPE	RF	RADIUS POINT
CSAP	CORRUGATED STEEL ARCH PIPE	R	RADIUS
CSP	CORRUGATED STEEL PIPE	RR	RAILROAD
C&G	CURB & GUTTER	REINF	REINFORCED
CIP	CAST IRON PIPE	RC	REINFORCED CONCRETE
COL	COLUMN	RCB	REINFORCED CONCRETE BOX
CU YD, CY	CUBIC YARD	RCF	REINFORCED CONCRETE PIPE
CU FT, CF	CUBIC FOOT	RELOC	RELOCATE
CULV	CULVERT	RT	RIGHT
CF	CURB FACE	R/W	RIGHT-OF-WAY
DEPT	DEPARTMENT	R	ROAD
DIA	DIAMETER	SS	SANITARY SEWER
DWY	DRIVEWAY	SHT	SHEET
DI	DROP INLET	S/O	SOUTH OF
ESMT	EASEMENT	SW	SIDEWALK
E/O	EAST OF	SO FT, SF	SQUARE FOOT
ER	EDGE OF PAVEMENT	SO YD, SY	SQUARE YARD
EO	EDGE OF OIL	STA	STATION
E	ELECTRIC	STP	STEEL HIGH-PRESSURE PIPE
EV	ELECTRIC METER	SD	STORM DRAIN
ELEV	ELEVATION	STD	STANDARD
EMBK	EMBANKMENT	STRUCT	STRUCTURAL OR STRUCTURE
ECR	END OF CURB RETURN	SURV	SURVEY
EC	END OF CURVE	TL	TIE
EBS	CATHODE PROTECTION BOND STATION	STREETLIGHT	STREETLIGHT
ETS	CATHODE PROTECTION TEST STATION	TEMP	TEMPORARY
EVC	END OF VERTICAL CURVE	TBA	TO BE ADJUSTED
EXIST	EXISTING	TO	TO BE REMOVED
FT	FEET/FOOT	TOP	TOP OF CURB
FG	FINISH GRADE	TP	TOP OF PIPE
FA	FIRE ALARM	TS	TRAFFIC SIGNAL
FH	FIRE HYDRANT	TSI	TRAFFIC SIGNAL INTERCONNECT
FL	FLOW LINE	TRANS	TRANSITION
GALV	GLAZIATED	TYP	TYPICAL
GM	GAS METER	UG	UNDERGROUND
GR	GAS PRESSURE REGULATOR	VAR	VARIABLE
PL-G	PLASTIC GAS	VERT	VERTICAL
SG	STEEL GAS	VC	VERTICAL CURVE
GB	GRADE BREAK	VG	VALLEY GUTTER
GUT	GUTTER	VCP	VITRIFIED CLAY PIPE
HDWL	HEADWALL	W	WATER
IN	INCH	WM	WATER METER
INT	INTERSECTION	WO	WEST OF YARD

### DEVELOPER

**DAPPER DEVELOPMENT**  
985 WHITE DRIVE SUITE 100  
LAS VEGAS, NV 89119  
CONTACT: J. DAPPER  
PHONE: (702) 733-3622  
FAX: (702) 733-8653

### OWNER

**DAPPER DEVELOPMENT**  
985 WHITE DRIVE SUITE 100  
LAS VEGAS, NV 89119  
CONTACT: J. DAPPER  
PHONE: (702) 733-3622  
FAX: (702) 733-8653

### UTILITY PROVIDERS

WATER:	LAS VEGAS VALLEY WATER DISTRICT
SEWER:	CITY OF LAS VEGAS
GAS:	SOUTHWEST GAS CORPORATION
ELECTRIC:	NV ENERGY
TELEPHONE:	CENTURYLINK
CABLE TV:	COX COMMUNICATIONS LAS VEGAS, INC.
TRASH:	REPUBLIC SILVER STATE DISPOSAL SERVICE

### APPROVALS

*Allen Pavelka* FOR ALLEN PAVELKA  
ALLEN PAVELKA, P.E., #9029 P.T.O.E.  
CITY ENGINEER  
6/14/17  
DATE

*Chris Knight*  
CHRIS KNIGHT, DIRECTOR - BUILDING SAFETY DEPARTMENT  
6/14/17  
DATE

*Las Vegas Fire and Rescue*  
LAS VEGAS FIRE AND RESCUE  
4/27/17  
DATE

*Las Vegas Valley Water District*  
LAS VEGAS VALLEY WATER DISTRICT  
APPROVED FOR CONSTRUCTION  
6/8/17  
DATE

*Southwest Gas Corporation*  
SOUTHWEST GAS CORPORATION  
4/29/17  
DATE

*NV Energy*  
NV ENERGY  
4/19/17  
DATE

*CenturyLink*  
CENTURYLINK  
4/19/17  
DATE

*Cox Communications*  
COX COMMUNICATIONS LAS VEGAS, INC.  
4/19/17  
DATE

### SHEET INDEX

Sheet List Table

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	SHEET 1 OF 1	C5.01

### GENERAL SITE INFORMATION

PROJECT NO.: 171022  
DATE: April 13, 2017  
SCALE: NTS  
DRAWN BY: MGZ  
DESIGNED BY: MGZ  
CHECKED BY: JLI

**NOTE:**  
LOCHSA ENGINEERING ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS AND ELEVATIONS. THE UTILITIES SHOWN ON THIS PLAN ARE FROM THE BEST AVAILABLE INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES, INCLUDING BUT NOT LIMITED TO, THE WATER, FIRE, SANITARY SEWER, STORM SEWER, TELEPHONE, POWER, GAS, AND IRRIGATION LINES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. IF CONFLICT EXISTS IN THE FIELD, THE CONTRACTOR IS TO NOTIFY THE PROJECT ARCHITECT, OWNER'S REPRESENTATIVE AND THE PROJECT ENGINEER IMMEDIATELY.

**A.P.N.:**  
137-12-410-014  
**BASIS OF BEARINGS:**  
THE BASIS OF BEARINGS FOR THIS SURVEY IS THE NORTH LINE. Call before you Dig. Avoid hitting overhead power lines. It's costly. Head cutting underground. Call before you Dig. Avoid hitting overhead power lines. It's costly.

**BENCHMARK:**  
CITY OF LAS VEGAS BENCHMARK NO. 5LV09 125SW. BENCHMARK IN TOP OF CURB E/S OF CLIFF SHADOW & BUCKSKIN. ELEVATION: 2924.27 FEET/891.318 METERS (NAVD 88 DATUM)

1-800-227-2800  
1-702-432-5300  
1-702-227-2929

LEGEND	DESCRIPTION:	CONTOUR LINES	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	100w HPS STREETLIGHTS	150w HPS STREETLIGHTS	200w HPS STREETLIGHTS	250w HPS STREETLIGHTS
CL OR SURVEY LINE	EXISTING: (2120)	---	---	---	---	---	---	---	---	(12.34)	---	---	① = SANITARY SEWER ② = STORM DRAIN ③ = ELECTRICAL ④ = TELEPHONE	---	---	---	---	---	BWV (BWV)	---	---	---	---
PROPERTY LINE	PROPOSED: (2122)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ROW LINE	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

SEAL  
LOCHSA ENGINEERING  
CIVIL  
No. 11286  
4/3/2017

SHEET NO. C1.01  
SHEET 1 OF 6  
CLV No. H#09975

PROJ #125464 AGR #16314 QS 137-12-SW

### 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, AND ANY ADOPTED SPECIAL AREA STANDARDS.
2. NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUITS (ETC.) LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF TRAFFIC ENGINEERING AND THE CITY ENGINEER.
3. ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
4. ALL STREET LIGHTING CONDUITS SHALL HAVE AT LEAST ONE GREEN #8 THW WIRE INSTALLED AS TRAZER WIRE. ALL TRAZER WIRES SHALL BE INSTALLED FROM FB TO FB, IT SHALL HAVE MINIMUM OF 2 #4 AND 1 #6 THW WIRE WITH THE ENDS TAPED OR "SAFE OFF" PRIOR TO FINAL INSPECTION.
5. ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL LEAVE A MINIMUM CLEARANCE IN ACCORDANCE WITH THE US NO. 320A.
6. AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE FIELD PRIOR TO ANY PRE-FINAL INSPECTION. THE ASBUILT DRAWING NEEDS TO BE STAMPED AS-BUILT AND SIGNED BY THE PREPARER.
7. SERVICE POINT SHALL BE COORDINATED WITH NV ENERGY COMPANY, AND WHEREVER POSSIBLE, BE LOCATED NEAR THE CENTER OF THE CIRCUIT. SERVICE POINTS SHALL BE SHOWN ON THE CIVIL 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, AT NO EXPENSE TO THE CITY OF LAS VEGAS, BEFORE STREETLIGHT BASES ARE INSTALLED.
10. THE CONTRACTOR SHALL FURNISH COMPLETE SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON PLANS.
11. THE DEVELOPER/OWNER WILL BE REQUIRED TO SUPPLY POWER TO ALL NEW PUBLIC STREET LIGHTS INSTALLED UNDER THIS DESIGN PRIOR TO BOND RELEASE OR PROJECT COMPLETION. THE DEVELOPER/OWNER WILL BE RESPONSIBLE FOR ALL ITEMS ASSOCIATED WITH THE INSTALLATION, CONSTRUCTION, ENERGIZING, MAINTENANCE AND OPERATIONAL COST OF SAID STREET LIGHTS PRIOR TO PROJECT COMPLETION. REFER TO THE PLAN FOR ANY NEW SERVICE REQUIREMENTS. THE TRANSFER OF OWNERSHIP FROM THE DEVELOPER/OWNER TO THE CITY OF LAS VEGAS FOR ALL NEW PUBLIC STREET LIGHTS AND/OR SERVICE/S INSTALLED UNDER THIS PLAN DESIGN WILL BE IN CONJUNCTION WITH THIS PROJECT COMPLETION. COORDINATE ALL MAINTENANCE AND OPERATIONAL TRANSFERS WITH THE CITY OF LAS VEGAS TRAFFIC ENGINEERING DEPARTMENT (TEFO) AT (702) 229-6331.

REVISED 04/15/10

### 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 EARTH-WORK REQUIRED OR LEFT-OVER 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:
 

A. PAVEMENT AREA SUBGRADE	HORIZONTAL 0.1+ "	VERTICAL +0.0' TO -0.1' "	COMPACTION 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 SPLITS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING OR AFTER THE CONSTRUCTION OF THE PROJECT. ALL DEBRIS INCLUDING CONSTRUCTION DEBRIS, 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 EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

REVISED 04/15/10

### CITY OF LAS VEGAS 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 PIPE WHICH ALLOWS FOR PIPE DEFLECTION AT THE JOINTS.

REVISED 04/15/10

### CITY OF LAS VEGAS FIRE DEPARTMENT NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LAS VEGAS FIRE & RESCUE ADOPTED FIRE CODE ORDINANCE #6325 FOR HYDRANT SPECIFICATIONS AND HYDRANT INSTALLATION SPECIFICATIONS.
2. ONLY FIRE HYDRANTS THAT ARE ON THE LAS VEGAS VALLEY WATER DISTRICTS - APPROVED PRODUCTS LIST ARE ALLOWED TO BE INSTALLED.
3. A PERMIT IS REQUIRED FROM LAS VEGAS FIRE & RESCUE FOR THE INSTALLATION OF ON-SITE WATER LINES AND FIRE HYDRANTS. THE PERMIT AND CONTRACTORS MATERIAL TEST CERTIFICATE FOR UNDERGROUND PIPING WORK SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK. [IFC § 105.7.12]
4. ON ANY RESIDENTIAL OR COMMERCIAL INSTALLATIONS, FIRE HYDRANTS SHALL BE INSTALLED AND FIRE APPARATUS ACCESS ROADS SHALL BE MAINTAINED BEFORE COMMENCEMENT OF ANY COMBUSTIBLE CONSTRUCTION. ALL FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER AND SHALL BE CAPABLE OF DELIVERING THE REQUIRED FIRE FLOW. [IFC § 3310, § 3312]
5. TO IDENTIFY THE FIRE HYDRANT LOCATIONS, THE CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT THE CENTER LINE OF STREET ADJACENT TO THE FIRE HYDRANTS. [IFC § 507.5.7.3]
6. ALL UNDERGROUND INSPECTIONS, PRESSURE AND FLUSH VERIFICATIONS OF ALL FIRE HYDRANTS AND FIRE LINES, SHALL BE CONDUCTED BEFORE COVERING THE LINES. CENTER LOADING IS ACCEPTABLE FOR THE HYDRO TESTS WITH PRIOR FIRE PREVENTION APPROVAL. [IFC § 106.3]
7. 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. [IFC § 507.2.1, NFPA 24]
8. PAINTING OF CURBS, FIRE HYDRANTS, PADS, PROTECTION OF FIRE HYDRANTS FROM PHYSICAL DAMAGE, AND ALL OTHER WORK NECESSARY PER PLANS SHALL BE COMPLETED BEFORE APPROVAL BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION. [IFC § 507.1]
9. PRIVATE HYDRANTS SHALL BE PAINTED RED. [IFC § 507.5.7.1]
10. PRIOR TO THE FINAL OCCUPANCY, A FIRE FLOW TEST SHALL BE WITNESSED BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION TO VERIFY AVAILABILITY OF THE REQUIRED FIRE FLOW. [IFC § 507]
11. FIRE HYDRANT SPACING SHALL BE AS FOLLOWS: [IFC § C102]
 

RESIDENTIAL - 500 FEET UNSPRINKLERED; 600 FEET SPRINKLERED.
COMMERCIAL - 300 FEET UNSPRINKLERED; 400 FEET SPRINKLERED.
12. WHERE THE WATER MAINS ARE EXTENDED ALONG STREETS OR NEW STREETS ARE INSTALLED WHERE FIRE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF STRUCTURES, FIRE HYDRANTS SHALL BE INSTALLED AT A MAXIMUM OF 1000 FT SPACING, TO PROVIDE FOR TRANSPORTATION HAZARDS. WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS OR HAVE FOUR (4) 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 FT ON AN ALTERNATING BASIS. [IFC § C102.8]
13. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN THE RADIUS OF A CUL-DE-SAC OR WITHIN 20 FT OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
14. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FT OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT OR ANY OTHER OBSTRUCTION. [IFC § C102.12]
15. A MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A ONE-TWO FAMILY DWELLING SHALL NOT EXCEED 300 FT, AS MEASURED BY AN APPROVED ROUTE. [IFC § C102.4]
16. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A FIRE DEPARTMENT CONNECTION (FDC) SHALL NOT EXCEED 100 FT, AS MEASURED BY AN APPROVED ROUTE. [IFC § C102.7]
17. THE MAXIMUM DISTANCE FROM A HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 200 FT. [IFC § C102.6]
18. TWO (2) SOURCES OF SUPPLY ARE REQUIRED WHENEVER THERE IS 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. [IFC § C104]
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. [IFC § 503.2.3]
20. THE GRADIENT FOR THE FIRE APPARATUS ROADS SHALL NOT EXCEED 12% ANGLES OF APPROACH AND ANGLES OF DEPARTURE SHALL NOT EXCEED 6% FOR 25 FT PRIOR TO OR AFTER THE GRADE CHANGE. ADJACENT TO THE STRUCTURES GRADIENT SHALL NOT EXCEED 6%. [IFC § 503.2.7, § 503.2.8]
21. THE TURNING RADIUS OF THE FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 52 FT OUTSIDE AND 28 FT INSIDE TURNING RADIUS. [IFC § 503.2.4]
22. VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL NOT BE LESS THAN 13 FT 6 INCHES. [IFC § 503.2.1]
23. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 40 FT FLOW LINE TO FLOW LINE WITH PARALLEL PARKING PERMITTED ON BOTH SIDES. NOT LESS THAN 32 FT WIDE, FLOW-LINE TO FLOW-LINE, WHERE PARKING IS PERMITTED ONLY ON ONE SIDE OF THE FIRE APPARATUS ACCESS ROAD. NOT LESS THAN 24 FT WIDE, FLOW-LINE TO FLOW-LINE, WHERE NO PARKING IS PERMITTED ON EITHER SIDE. FIRE LINES THROUGH PARKING LOTS SHALL NOT BE LESS THAN 24 FT. [IFC § 503.2.1.1]
24. FIRE APPARATUS ACCESS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FT FROM A FIRE DEPARTMENT VEHICLE ACCESS. THIS DISTANCE COULD BE INCREASED TO 250 FT IF THE BUILDING IS SPRINKLERED. [IFC § 503.1.1]
25. APPROVED SECONDARY FIRE APPARATUS ACCESS SHALL BE PROVIDED FOR 100 OR MORE DWELLING UNITS, ROAD(S) WITH DEAD-ENDS OR WITH A SINGLE POINT OF ACCESS IN EXCESS OF 600 FT. COMMERCIAL AND INDUSTRIAL DEVELOPMENTS WHERE BUILDINGS EXCEED 2 STORIES OR 30 FT IN HEIGHT, OR EXCEEDING 62,000 SQ FT IN AREA. [IFC § 503.1.2]
26. ALL DEAD-END FIRE APPARATUS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FT IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND HAVING A MINIMUM DIAMETER OF 81 FT. [IFC § 503.2.5]
27. 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 OF 100 FT ALONG THE 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 FT OR LESS THAN 6 FT FROM THE ROADWAY LEVEL. THE CURB ALONG OR ON THE PAVEMENT OR CEMENT (IF NO CURB IS PROVIDED) SHALL BE PAINTED WITH RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS. [IFC § 503.3]
28. ELECTRONICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE IFC § 503.6 AND IFC APPENDIX M.

EFFECTIVE DATE 03-01-2016

### 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 "SUMMER IMPROVEMENT STANDARDS" FOR WORK IN THE SUMMERLAND 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 EXISTING UTILITIES 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. 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 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. MINIMUM V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. TYPE M @ 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 300' IN EXTRUDED-TYPE CURB.
8. AC PAVEMENT TO BE ONE-HALF INCH (1/2) ABOVE UP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMP 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 THE TRANSITIONS TO BE AS SHOWN ON PLANS.
12. EXACT LOCATION OF ALL SAWCUT LINES MAY 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 REQUIRES RELOCATIONS.
13. 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. 625.380 & CITY OF LAS VEGAS TITLE 18, APPENDIX D.
14. 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:  
 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 NOTOT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREIN.

20. WHEN INSTALLING UNDERGROUND FACILITIES THAT REQUIRE UNDERGROUND LOCATING DEVICES SUCH AS MARKER BALLS, LOCATING RIBBON, ETC. THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO OFFSITE INSPECTION AND TESTING CERTIFYING THAT ALL DEVICES HAVE BEEN PLACED AND VERIFIED TO BE IN GOOD WORKING CONDITION PRIOR TO THE CONSTRUCTION OF ANY ROAD BASE.

21. SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S) SHALL BE PROVIDED TO THE CITY AND APPROVED PRIOR TO ACCEPTANCE OF FACILITY VIDEO INSPECTION. THE MAP(S) SHALL INCLUDE THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES AND TRANSITION STRUCTURES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND AT THE CONNECTION TO A DROP INLET, THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXIT THE PUBLIC RIGHT-OF-WAY, AND STORM DRAIN MAIN ALIGNMENT, INCLUDING DEFLECTION POINTS. THE LOCATION SHALL BE DESCRIBED BY COORDINATES WHICH SHALL BE BASED ON THE OFFICIAL HORIZONTAL AND VERTICAL CONTROL NETWORKS OF THE CITY OF LAS VEGAS. FINAL LOCATION MAPS MUST BE SEALED AND CERTIFIED BY A NEVADA PROFESSIONAL LAND SURVEYOR TO HAVE POSITIONAL CERTAINTY OF ± 0.09 METERS (± 0.3 FEET) HORIZONTALLY AND VERTICALLY. A SEPARATE ELECTRONIC COMMA DELIMITED FILE FOR THE SANITARY SEWER AND STORM DRAIN COORDINATES SHALL ALSO ACCOMPANY THE SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S).

22. CCTV VIDEO INSPECTION IS REQUIRED FOR ALL SEWER AND STORM DRAINS. THE CCTV VIDEO INSPECTIONS NEED TO BE PERFORMED PER THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS LATEST EDITION.

23. A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.

REVISED 02/03/15

### DEVIATIONS FROM STANDARDS

NONE.

### 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 APPROVED 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 PUBLICLY AVAILABLE SIGNAGE IS NEEDED FOR STUDENTS TO BE ASSISTED IN THE SAFE CROSSING THROUGH THAT WORK ZONE, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A QUALIFIED "CROSSING GUARD" WHO 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 AS 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. ALL NEW TRAFFIC SIGNS SHALL BE FABRICATED WITH DIAMOND GRADE VP CLASS 6 REFLECTIVE SHEETS OR APPROVED EQUAL. ALL NEW TRAFFIC SIGNS, EXCEPT STREETNAME AND SCHOOL SPEED LIMIT SIGNS, SHALL HAVE 3M SERIES 1160 OR APPROVED EQUIVALENT ANTI-GRAFFITI PROTECTIVE OVERLAY FILM; SCHOOL ZONE SIGNS SHALL HAVE 3M SERIES 1150 PROTECTIVE OVERLAY FILM. 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 SIGNING ON THE PLAN 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 HERE UNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
9. STREET SIGNS AND STOPS 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 FLAGGERS TO INSURE THE SAFETY OF THE PUBLIC IN OR AROUND THE WORK AREA. THE CONTRACTOR SHALL HAVE A CERTIFIED ATSSA TRAFFIC CONTROL TECHNICIAN OR IGA WORK ZONE SAFETY SPECIALIST SET UP, MAINTAIN AND/OR REMOVE ALL TRAFFIC CONTROL DEVICES IN THE CITY OF LAS VEGAS RIGHT 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 # 828-3442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL TECHNIQUES FOR THE USE OF THESE OFFICERS SHALL BE SET 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 OTHERWISE GRANTED BY THE CITY OF LAS VEGAS TRAFFIC ENGINEER.

REVISED 04/15/10

### LAS VEGAS VALLEY WATER DISTRICT NOTES

**LVVWD PROJECT # 125464**

1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7771) TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO THE REQUESTED LVVWD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.
2. ALL WORK SHALL CONFORM TO THE LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND TO THE 2010 EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS). THE LATEST EDITION OF UDACS SHALL SUPERSEDE ANY CONFLICTS CONTAINED IN THE APPROVED DRAWINGS AND/OR SPECIFICATIONS.
3. ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE 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 TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
8. ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE 2010 EDITION OF THE UDACS.
9. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED, AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD DISTRIBUTION SYSTEM.
10. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FORM LVVWD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3802, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
11. ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH U.D.A.C.S. SECTION 3.14.01, AND APPROVED BY THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
12. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD PRE-APPROVED MATERIALS AND MANUFACTURER'S LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.
13. TELEPHONE "CALL BEFORE YOU DIG" AT "811" OR 1-800-227-2600.
14. THE INSTALLATION OF LAS VEGAS VALLEY WATER DISTRICT (LVVWD) MUNICIPAL WATER FACILITIES WITHIN ALL STREETS IS ASSUMED TO BE IN COMPLIANCE WITH THE UNIFORM STANDARDS, INCLUDING THE PLACEMENT OF ASPHALT PAVING STREET SURFACES. ANY REPAIR WORK DONE BY THE LVVWD TO THE MUNICIPAL WATER FACILITIES WILL INCLUDE THE PLACEMENT OF AN APPROPRIATELY SIZED ASPHALT REPAIR PATCH ON THE STREET SURFACE.

ANY DECORATIVE PAVING SURFACE WITHIN THE STREET IS THE RESPONSIBILITY OF THE OWNER'S ASSOCIATION, OR THE INDIVIDUAL PROPERTY OWNERS IF NO OWNER'S ASSOCIATION IS IN EXISTENCE, OR THE AGENCY HAVING JURISDICTION. DECORATIVE SURFACE MATERIALS PLACED WITHIN THE TEN FOOT EASEMENT ABUTTING A PUBLIC OR PRIVATE STREET, IF DISTURBED BY THE LVVWD DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVVWD WITH AN APPROPRIATELY SIZED PLAIN FINISH CONCRETE PATCH. THE LVVWD WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE RESTORATION OF ANY DECORATIVE PAVING SURFACE WITHIN THE STREET. THE LVVWD WILL NOT ATTEMPT TO MATCH COLOR OR FINISH OF ANY ADJACENT MATERIALS.

15. NO LEAD COMPLIANCE NOTE:  
 TO COMPLY WITH THE FEDERAL SAFE DRINKING WATER ACT, ALL WATER WORKS BRASS PRODUCTS PROPOSED TO BE INSTALLED AS NEW MUST BE INSTALLED WITHIN THE LEAD FREE APPROVED PRODUCT. THE OLD LEADED PRODUCT MAY NOT BE REUSED.

### QUANTITIES

DESCRIPTION	PUBLIC QUANTITY	PRIVATE QUANTITY
2-INCH ASPHALTIC CONCRETE PAWING	SY	SY
3-INCH ASPHALTIC CONCRETE PAWING	SY	SY
5-INCH ASPHALTIC CONCRETE PAWING	SY	SY
OPEN GRADE	SY	SY
TYPE I GRAVEL	CY	CY
TYPE II GRAVEL	CY	CY
EXCAVATION & EMBANKMENTS	CY	CY
CURB & GUTTER "L" CURB	LF	LF
CURB & GUTTER "ROLL" CURB	LF	LF
CONCRETE VALLEY GUTTER	SF	SF
4-INCH CONCRETE SIDEWALK	SF	SF
8-INCH SEWER (PRIVATE)	LF	LF
12-INCH SEWER (PRIVATE)	LF	LF
15-INCH SEWER (PRIVATE)	LF	LF
18-INCH SEWER (PRIVATE)	LF	LF
24-INCH SEWER (PRIVATE)	LF	LF
48-INCH SEWER MANHOLES (PRIVATE)	EA	EA
60-INCH SEWER MANHOLES (PRIVATE)	EA	EA
SEWER MANHOLE ADJUSTMENTS	EA	EA
6-INCH WATER MAIN	LF	LF
8-INCH WATER MAIN	LF	LF
10-INCH WATER MAIN	LF	LF
12-INCH WATER MAIN	LF	LF
WATER MAIN (1-INCH DIAMETER)	LF	LF
FIRE HYDRANT ASSEMBLY	EA	EA
FIRE HYDRANT RELOCATION	EA	EA
8" WATER METER	EA	EA
10" BPPA	EA	EA
12" X 12" TEE	EA	EA
12" X 10" TEE	EA	EA
12" X 8" TEE	EA	EA
8" X 8" TEE	EA	EA
12" GATE VALVE	EA	EA
10" GATE VALVE	EA	EA
8" GATE VALVE	EA	EA
12" 90° BEND	EA	EA
12" 45° BEND	EA	EA
12" 11.25° BEND	EA	EA
10" 90° BEND	EA	EA
8" 90° BEND	EA	EA
8" 45° BEND	EA	EA
8" 22.5° BEND	EA	EA
8" 11.25° BEND	EA	EA
6" 90° BEND	EA	EA
12" X 8" REDUCER	EA	EA
12" X 10" REDUCER	EA	EA
10" X 8" REDUCER	EA	EA
8" X 6" REDUCER	EA	EA
48" SD MANHOLE	EA	EA
DRAINAGE EASEMENT CONCRETE	SF	SF
RP-RAP (050-06")	CY	CY
2'X2' JENSEN DROP INLET	EA	EA
18" STORM DRAIN	LF	LF
SIDEWALK UNDERDRAN	EA	EA
SURVEY MONUMENTS	EA	EA

NOTE:  
 THIS QUANTITY ESTIMATE IS FOR BONDING PURPOSES ONLY. CONTRACTOR TO DETERMINE INDEPENDENT ESTIMATIONS.

THE QUANTITY ESTIMATE SHOWN HERE IS FOR EXAMPLE ONLY. ALL DRAFTERS NEED TO CHECK WITH THEIR PROJECT MANAGER BEFORE USING THIS QUANTITY ESTIMATE. SOME PROJECT MANAGERS MAY LIKE IT AND SOME MAY NOT. IT IS NOT REQUIRED IN CLARK COUNTY TO SHOW A QUANTITY ESTIMATE ON THE NOTE SHEET. IT IS MANDATORY, HOWEVER, TO SHOW A QUANTITY ESTIMATE ON THE NOTE SHEET IN CITY OF LAS VEGAS JURISDICTION. IF YOUR PROJECT MANAGER WANTS THE QUANTITY ESTIMATE TO SHOW, THEN CHANGE IT TO THE APPROPRIATE LAYERS ALREADY DEFINED IN THIS DRAWING.

**APPROVED FOR CONSTRUCTION**

*DISHABER*  
 LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER  
 PROJECT NO. 125464 DATE: 6/8/17

**A.P.N.:**  
 137-12-410-014  
**BASIS OF BEARINGS:**  
 THE BASIS OF BEARINGS FOR THIS SURVEY IS THE NORTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 12, TOWNSHIP 59 EAST, 140.D.M., AS SHOWN ON FILE IN BOOK 105, PAGE 86 OF PLATS, CLARK COUNTY RECORDER'S OFFICE. SAID LINE BEARS NORTH 89°30'00" EAST

**BENCHMARK:**  
 CITY OF LAS VEGAS BENCHMARK NO. SLV99 125566  
 RIVET/PLATE IN TOP OF CURB E/S/OV OF CLIFF SHADOW & BUCKSKIN. ELEVATION: 2924.27 FEET/891.318 METERS (NAVD 893000' EAST)

GENERAL NOT-SHEET

NOVAT COMMERCIAL PHASE II

Lochsa Engineering

6345 South Jones Blvd  
Las Vegas, NV 89118  
Phone (702) 365-9612  
www.lochsa.com

REV: DATE: BY:

PROJECT No.: 171022

DATE:

SCALE: NTS

DRAWN BY: MGZ

DESIGNED BY: MGZ

CHECKED BY: JULI

PROJECT No.: 171022

DATE:

SCALE: NTS

DRAWN BY: MGZ

DESIGNED BY: MGZ

CHECKED BY: JULI

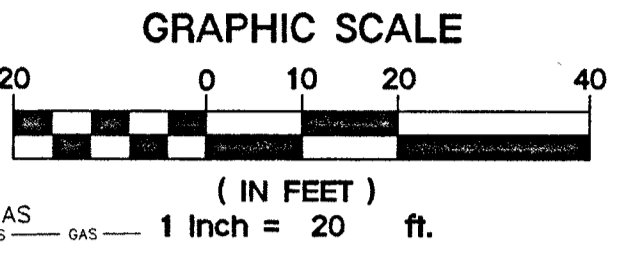
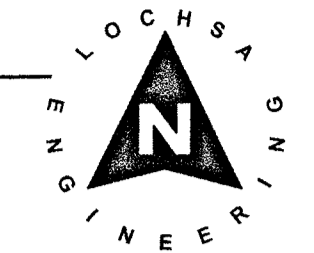
PROJECT No.: 171022

DATE:

A.P.N. 137-12-310-000  
GOWAN/CLIFF SHADOWS CONDOMINIUMS UNIT 1  
NOT A PART

N89°30'05"E 310.37' (BASIS OF BEARINGS)  
270.37'

N0°42'44"E  
0.16'



THIS PROPERTY MAY HAVE A STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL, ON-SITE (PRIVATE), PRESSURE-REDUCING VALVES BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRV'S ARE THE DEVELOPER'S RESPONSIBILITY, AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVWD FACILITIES.

A.P.N. 137-12-410-013  
GREGORY NOVAT ST.  
NOT A PART

EXISTING BUILDING  
FINISHED FLOOR:  
2901.2'

PROP.  
BUILDING  
FF=2901.74

A.P.N. 137-12-410-012  
BRAINTREE VENTURES LLC  
NOT A PART

EXISTING BUILDING  
FINISHED FLOOR:  
2905.3'

**WATER CONSTRUCTION NOTES:**

- ALL WATER CONSTRUCTION TO BE DONE IN ACCORDANCE WITH "UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDACS)" LATEST EDITION.
- NOT ALL NOTES USED ON THIS SHEET -
- 1 REMOVE CAP AND CONNECT TO WATER SERVICE. REFER TO PLUMBING PLANS FOR CONTINUATION.
- 2 INSTALL 1-1/2" RPPA PER UDACS PLATE NO. 8.
- 3 INSTALL 1-1/2" WATER SERVICE & METER PER UDACS PLATE NO. 4.
- 4 INSTALL 6"x1-1/2" WET TAP.
- 5 CUT AND CAP EX. WATERLINE.
- 6 INSTALL 2"x1" WET TAP.

**SEWER CONSTRUCTION NOTES:**

- NOT ALL NOTES USED ON THIS SHEET -
- 1 REMOVE CAP AND CONNECT TO SANITARY SEWER SERVICE. REFER TO PLUMBING PLANS FOR CONTINUATION.

**FIRE DEPARTMENT APPROVAL:**

APPROVAL BY THE FIRE DEPARTMENTS HAVING JURISDICTION IS REQUIRED PRIOR TO OBTAINING FINAL APPROVAL FROM THE LVWD.

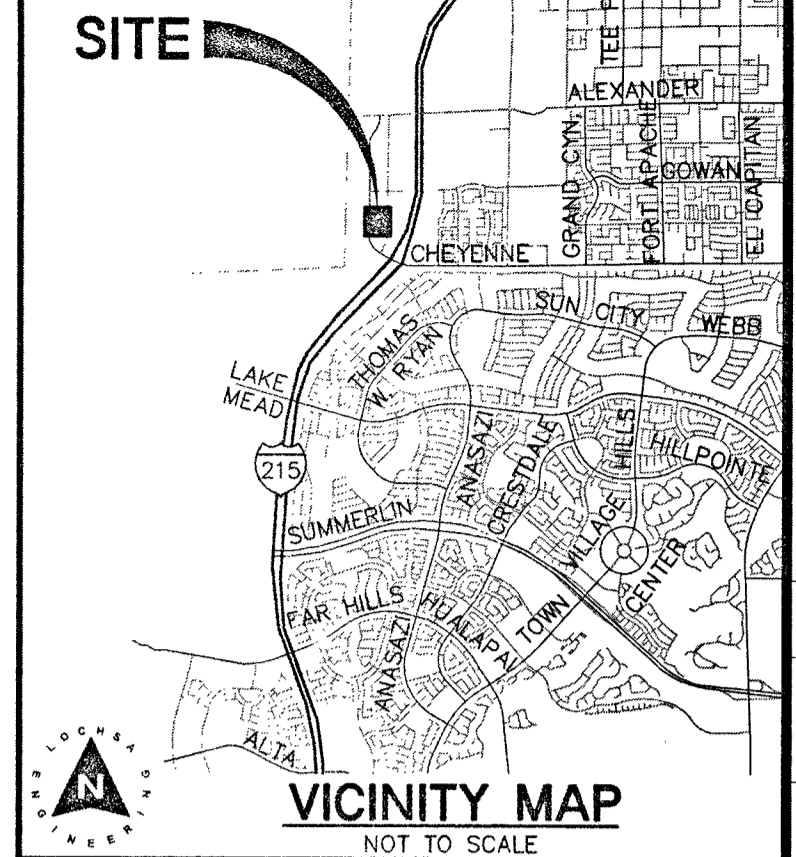
**NOTE:**

CONTRACTOR TO INCLUDE COST OF UNDERGROUND UTILITY DETECTION COMPANY TO LOCATE AND MARK ALL EXISTING UTILITIES PRIOR TO ANY DEMOLITION OR EXCAVATION. ENGINEER TO BE PROVIDED WITH AS-BUILT SKETCH OF EXISTING UTILITIES, AND IS TO BE NOTIFIED IMMEDIATELY OF ANY POTENTIAL CONFLICTS WITH PROPOSED UTILITIES AND/OR FINISHED GRADES.

**EASEMENT WITH TREES, SHRUBS, DECORATIVE ROCKS, BLOCK WALL OR FENCE**

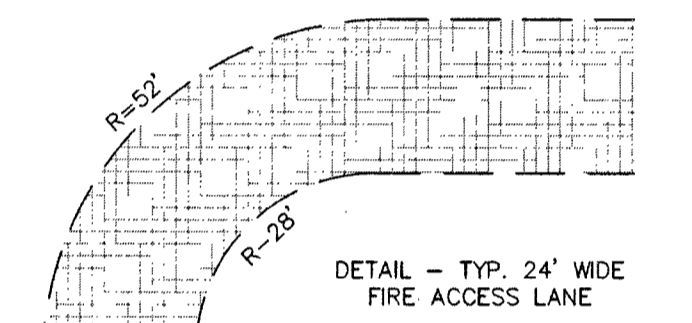
TREES, SHRUBS, OR DECORATIVE ROCKS, AND ANY BLOCK WALL OR OTHER FENCE MATERIAL, SHALL BE DESIGNED AND CONSTRUCTED AROUND THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS TO THE VAULT(S), BACKFLOW ASSEMBLY, AND PIPING FROM THE ADJACENT RIGHT OF WAY.

**PROJECT SITE**



**GENERAL UTILITY NOTES:**

1. STATIC WATER PRESSURE IN ZONE 2745 = 63 PSI±.
2. THE FIRE SAFETY CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING THE SIZE OF PIPING REQUIRED TO CONNECT FROM THE FIRE WATER LOOP TO THE FIRE SPRINKLER RISER. LINE SIZE SHOWN FOR INFORMATION PURPOSES ONLY.
3. TRENCH BACKFILL FOR WATER LINES TO BE CONSTRUCTED PER UDACS PLATE NO. 17, EXCEPT WITHIN 180° RIGHT OF WAY, TRENCH BACKFILL TO BE CONSTRUCTED PER UDACS PLATE NO. 18.
4. ONLY SEWER LINES AND LATERALS MAY BE INSTALLED IN TRENCHES EXCAVATED FOR SEWER LINES. SEE DOWNSIDE SECTION 2.2.18 (TYPICAL).
5. WATER AND SEWER TO BE INSTALLED IN SEPARATE TRENCHES WITH AT LEAST 12" MINIMUM SEPARATION FROM EXTERIOR PIPE WALLS (TYPICAL). SEE UDACS SECTION 2.2.2.
6. CONTRACTOR TO SAWCUT AND REMOVE EXISTING ASPHALT AND CONCRETE AS NECESSARY FOR UTILITY TRENCHES, BACKFILL AND PATCH ALL TRENCHES AS INDICATED ON DETAILS AND/OR ACCORDING TO THE GOVERNING ENTITY.
7. THESE DRAWINGS MAY NOT INDICATE ALL EXISTING BURIED UTILITY LINES. CONTRACTOR IS TO EXERCISE GREAT CARE DURING EXCAVATION IN ORDER TO AVOID MAKING CONTACT WITH ANY EXISTING UTILITY LINES. IF UTILITY LINES ARE DAMAGED BY THE CONTRACTOR, SUCH DAMAGE SHALL BE REPLACED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.
8. CONTRACTOR TO LOCATE AND VERIFY SIZE, LINE TYPE, CONDITION, DEPTH, PRESSURE, AND LOCATION OF ALL EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA PRIOR TO CONSTRUCTION. THE CIVIL ENGINEER SHALL BE CONTACTED ONCE THE UTILITY LINE IS LOCATED.
9. CONTRACTOR/OWNER TO OBTAIN CITY OF LAS VEGAS OFF-SITE IMPROVEMENT PERMIT FOR ALL WORK WITHIN PUBLIC RIGHT-OF-WAY.
10. CONTRACTOR TO VERIFY UTILITY STUB LOCATIONS AND SIZE WITH PLUMBING PLANS PRIOR TO INSTALLATION OF NEW UTILITIES.
11. ALL EXISTING STREET LIGHTS INDICATED ON THESE PLANS ARE SHOWN FOR INFORMATION PURPOSES ONLY. LOCATION IS APPROXIMATE UNLESS NOTED WITH STATION AND OFFSET.
12. ALL EXISTING GAS LINE LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATIONS ONLY. PROPOSED GAS LINES SHOWN ON THESE PLANS ARE FOR COORDINATION ONLY. SEE SOUTHWEST GAS PLANS FOR CONSTRUCTION.
13. ALL DIMENSIONS TO UTILITIES LINES ARE TO CENTERLINE OF PIPE UNLESS INDICATED OTHERWISE.
14. ALL LINEAR FEET OF STORM DRAIN AND SANITARY SEWER PIPE NOTED ON PLANS IS MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE.



**FIRE FLOW CALCULATIONS**

BASED ON:

SQUARE FOOTAGE:	3,400
LARGEST AREA BETWEEN SEPARATION WALL:	N/A
BUILDING HEIGHT:	20'
NUMBER OF STORIES:	1
TYPE OF CONSTRUCTION:	V-B
EXPOSURES:	N/A
SPRINKLER SYSTEM:	N
OCCUPANCY:	A-2
ROOF CONSTRUCTION:	TPO-MEMBRANE
RESIDUAL FLOW REQUIRED @ 20 PSI	1500 GPM

EX. STATIC WATER PRESSURE IS 83± PSI IN STREET.

**NOTE:**

PROPERTY SITUATED IN PRESSURE ZONE 3090, THIS PROPERTY MAY HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL, ON-SITE (PRIVATE) PRESSURE-REDUCING VALVES (PRV) BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRV'S ARE THE DEVELOPER'S RESPONSIBILITY AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVWD FACILITIES.

**APPROVED FOR CONSTRUCTION**

DATE: 6/8/17 PROJECT No. 125464  
LVWD APPROVED FIRE FLOW = 1500 GPM AT 20 PSI RESIDUAL

**CITY OF LAS VEGAS FIRE DEPARTMENT APPROVAL**

APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS. FIRE FLOW 1500 GPM AT 20 P.S.I. RESIDUAL.

**REDUCED PRESSURE PRINCIPLE ASSEMBLY (RPPA): (1) 1-1/2"**

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE U.D.A.C.S. PLATE NO. 8. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACK FLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVWD.

ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY.

EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

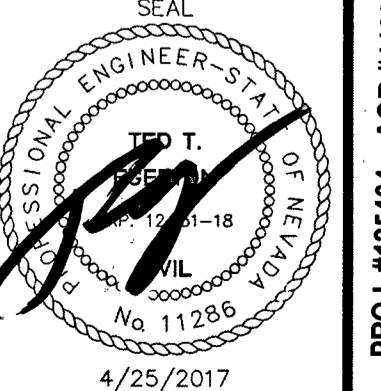
**NOTE:**

LOCHSA ENGINEERING ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS AND ELEVATIONS. THE UTILITIES SHOWN ON THIS PLAN ARE FROM THE BEST AVAILABLE INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES, INCLUDING BUT NOT LIMITED TO, THE WATER, FIRE, SANITARY SEWER, STORM SEWER, TELEPHONE, POWER, GAS, AND IRRIGATION LINES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. IF CONFLICT EXISTS IN THE FIELD, THE CONTRACTOR IS TO NOTIFY THE PROJECT ARCHITECT, OWNER'S REPRESENTATIVE AND THE PROJECT ENGINEER IMMEDIATELY.

Call before you Dig  
Avoid hitting overhead power lines. It's costly. FAST  
CALL BEFORE YOU DIG  
Underground  
1-800-227-2800  
1-702-432-5300  
1-702-227-2929

UTILITY PLANS  
SHEET 1 OF 1

PROJECT No.: 171022  
DATE: April 25, 2017  
SCALE: 1"=20'  
DRAWN BY: MGZ  
DESIGNED BY: MGZ  
CHECKED BY: JLI



SHEET No. C2.01  
SHEET 3 OF 6  
CLV No. H#69975

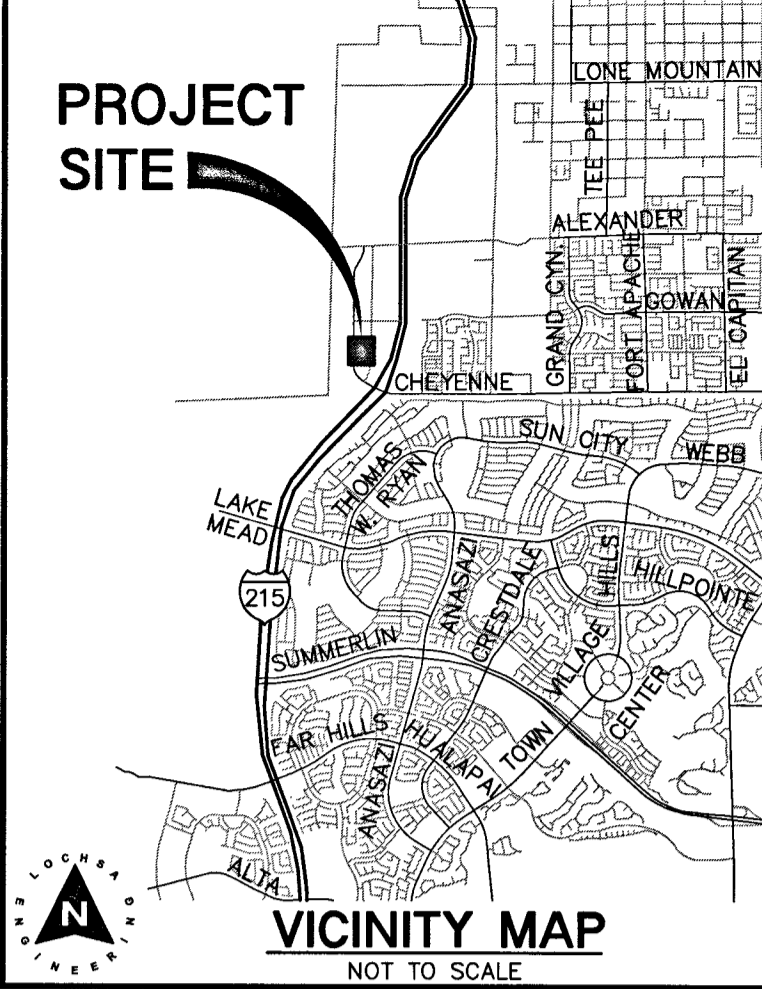
Lochsa Engineering  
1811 S. Jones Blvd.  
Suite 100  
Las Vegas, NV 89118  
Phone (702) 365-5812  
www.lochsa.com

CL OR SURVEY LINE	EASEMENT LINE	DESCRIPTION:	CONTOUR LINES	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	100W HPS STREETLIGHTS	150W HPS STREETLIGHTS	200W HPS STREETLIGHTS	250W HPS STREETLIGHTS
PROPERTY LINE	SAWCUT LINE	EXISTING:	(---(221)---)	---	---	---	---	---	---	---	(12.34)	---	---	---	---	---	---	---	---	BWV	---	---	---	---
ROW LINE	SCARP LINE	PROPOSED:	(---(212)---)	---	---	---	---	---	---	---	(12.34)	---	---	---	---	---	---	---	---	BWV	---	---	---	---

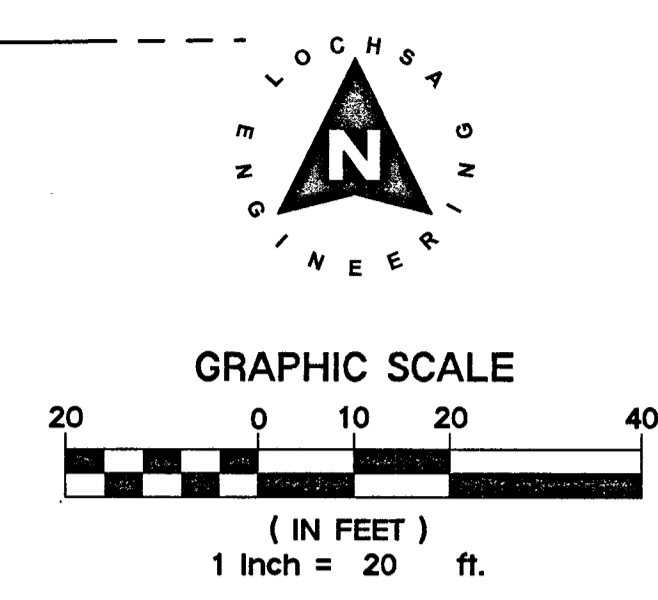
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PROJ #125464 AGR #116314 QS 137-12-SW



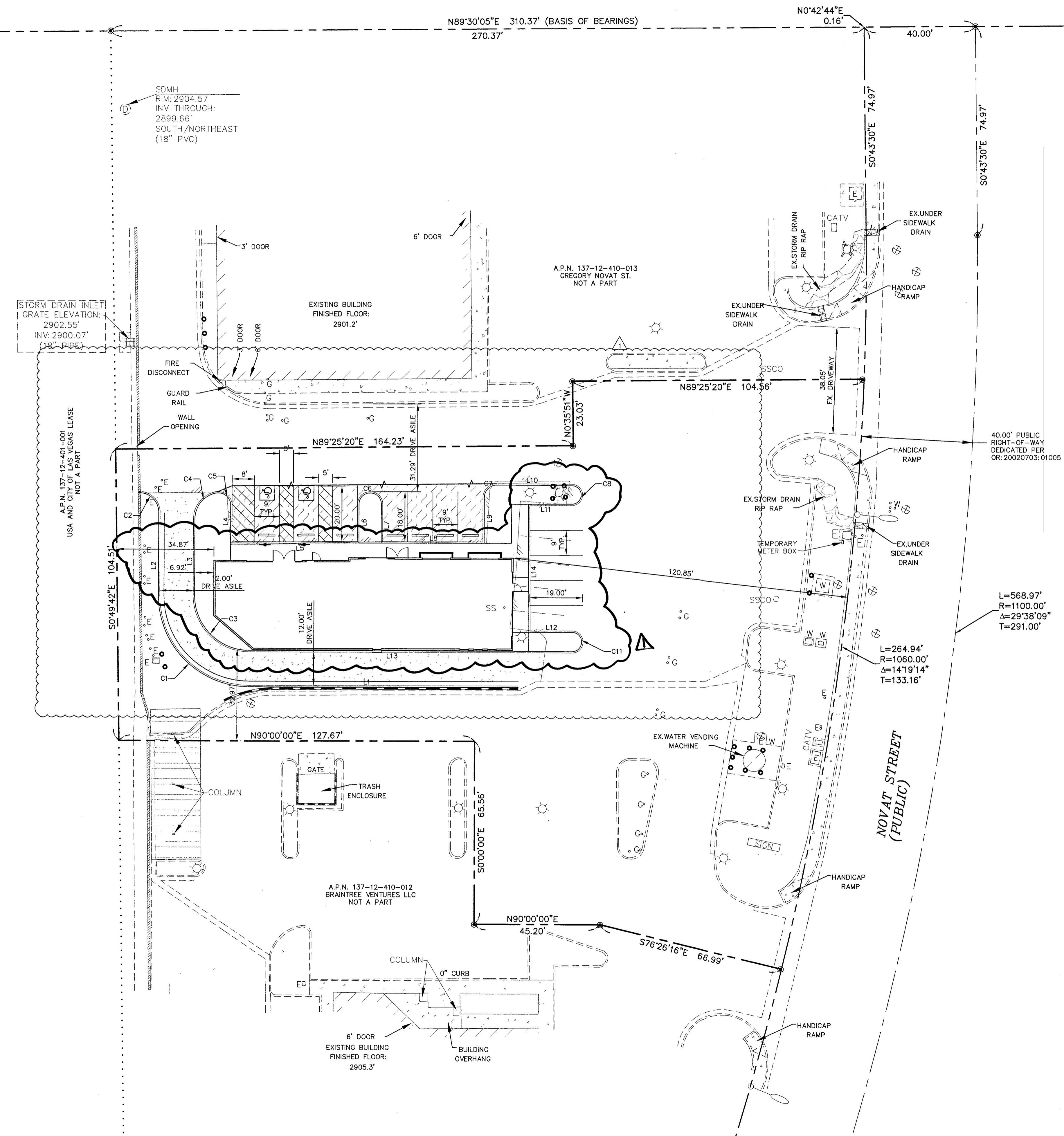


PROJECT	RELOCATED BUILDING	SB	8/17
DATE:	BY:		
1	6/25/17		



LINE #	LENGTH	DIRECTION
L1	96.72'	N90°00'00"E
L2	29.77'	S00°00'00"E
L3	27.60'	S00°00'00"E
L4	13.36'	N00°00'00"E
L5	46.00'	N90°00'00"W
L6	14.00'	S00°00'00"E
L7	14.00'	N00°00'00"E
L8	37.00'	N90°00'00"W
L9	16.50'	S00°00'00"E
L10	26.84'	N89°46'52"W
L11	15.60'	N89°37'09"E
L12	15.60'	S89°37'09"W
L13	116.08'	S89°57'00"E
L14	46.00'	N00°22'51"W

CURVE #	LENGTH	RADIUS	DELTA	TANGENT
C1	51.05'	32.50'	090°00'00"	32.50'
C2	11.31'	7.20'	090°00'00"	7.20'
C3	30.63'	19.50'	090°00'00"	19.50'
C4	12.71'	9.50'	076°39'50"	7.51'
C5	8.12'	4.50'	103°20'47"	5.69'
C6	12.57'	4.00'	180°00'00"	INFINITY'
C7	7.07'	4.50'	090°00'00"	4.50'
C8	10.68'	3.40'	180°00'00"	INFINITY'
C11	10.68'	3.40'	180°00'10"	139248.77'



HORIZONTAL CONTROL PLANS  
SHEET 1 OF 1  
NOVAT  
COMMERCIAL  
PHASE II

PROJECT No.:	171022
DATE:	April 25, 2017
SCALE:	1"=20'
DRAWN BY:	MGZ
DESIGNED BY:	MGZ
CHECKED BY:	JLI

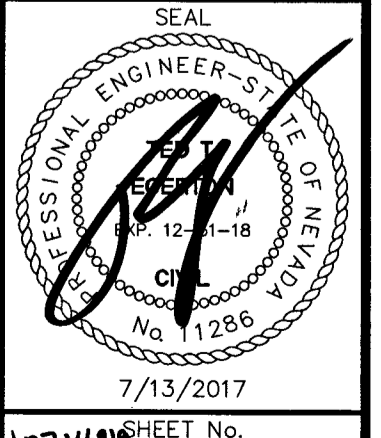
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Call before you Dig  
Avoid cutting underground utility lines. It's costly.

**811**

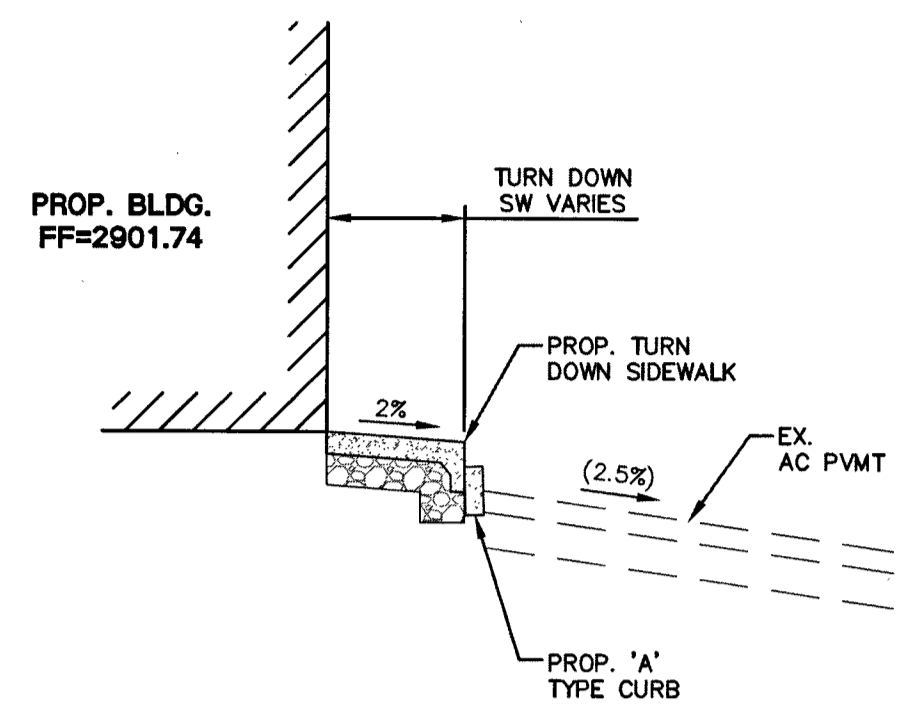
FAST  
Call before you Dig  
Underground

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1-702-227-2929

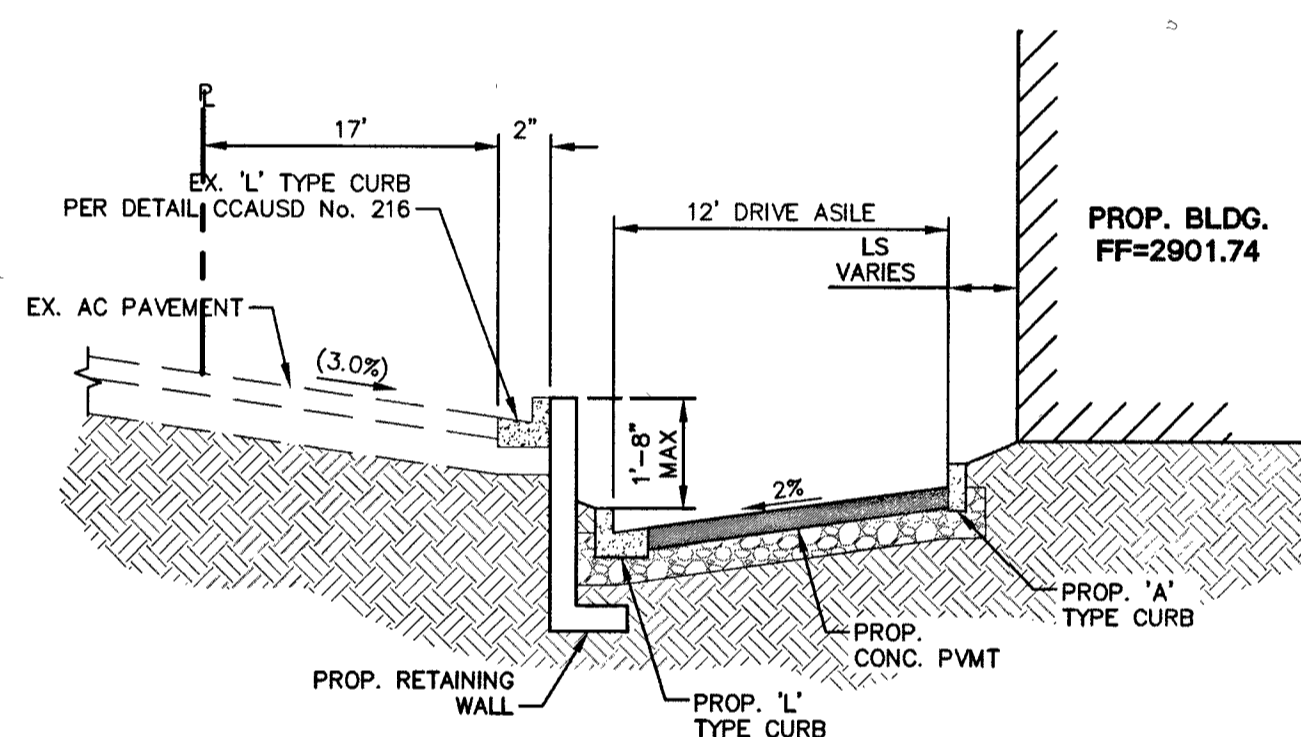


CL OR SURVEY LINE	EASEMENT LINE	DESCRIPTION:	CONTOUR LINES	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	100w HPS STREETLIGHTS	150w HPS STREETLIGHTS	200w HPS STREETLIGHTS	250w HPS STREETLIGHTS
PROPERTY LINE	SAWCUT LINE	EXISTING:	---(2210)								(12.34) BC		⊙	⊙ = SANITARY SEWER	⊙	⊙	▶	○	□	⊙	⊙	⊙	⊙	⊙
ROW LINE	SCARP LINE	PROPOSED:	---(2122)								(12.34) BC		⊙	⊙ = STORM DRAIN	⊙	⊙				⊙	⊙	⊙	⊙	⊙

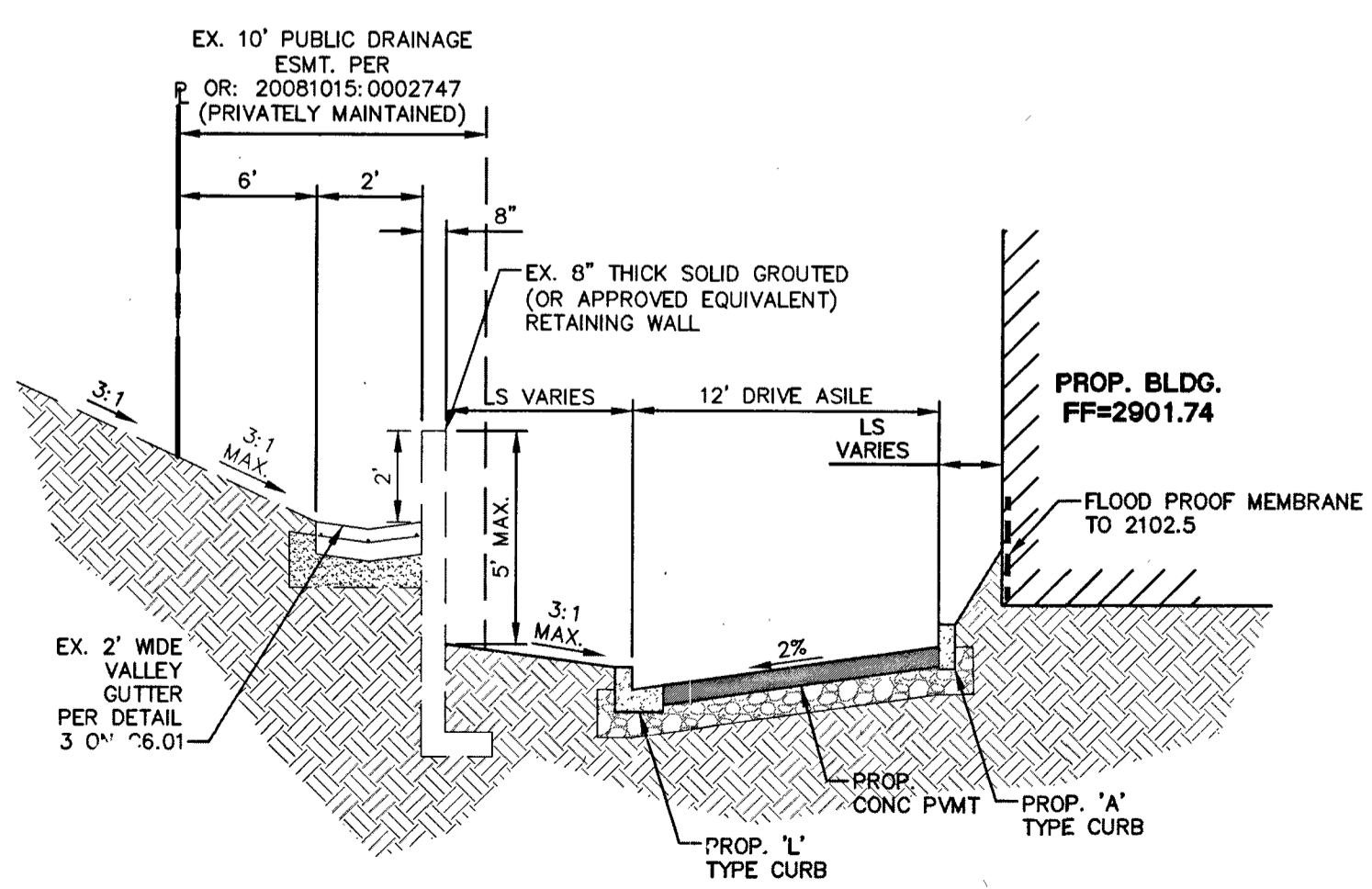
171022 SHEET No. C4.01  
SHEET 5 OF 6  
CLV No. L-64975



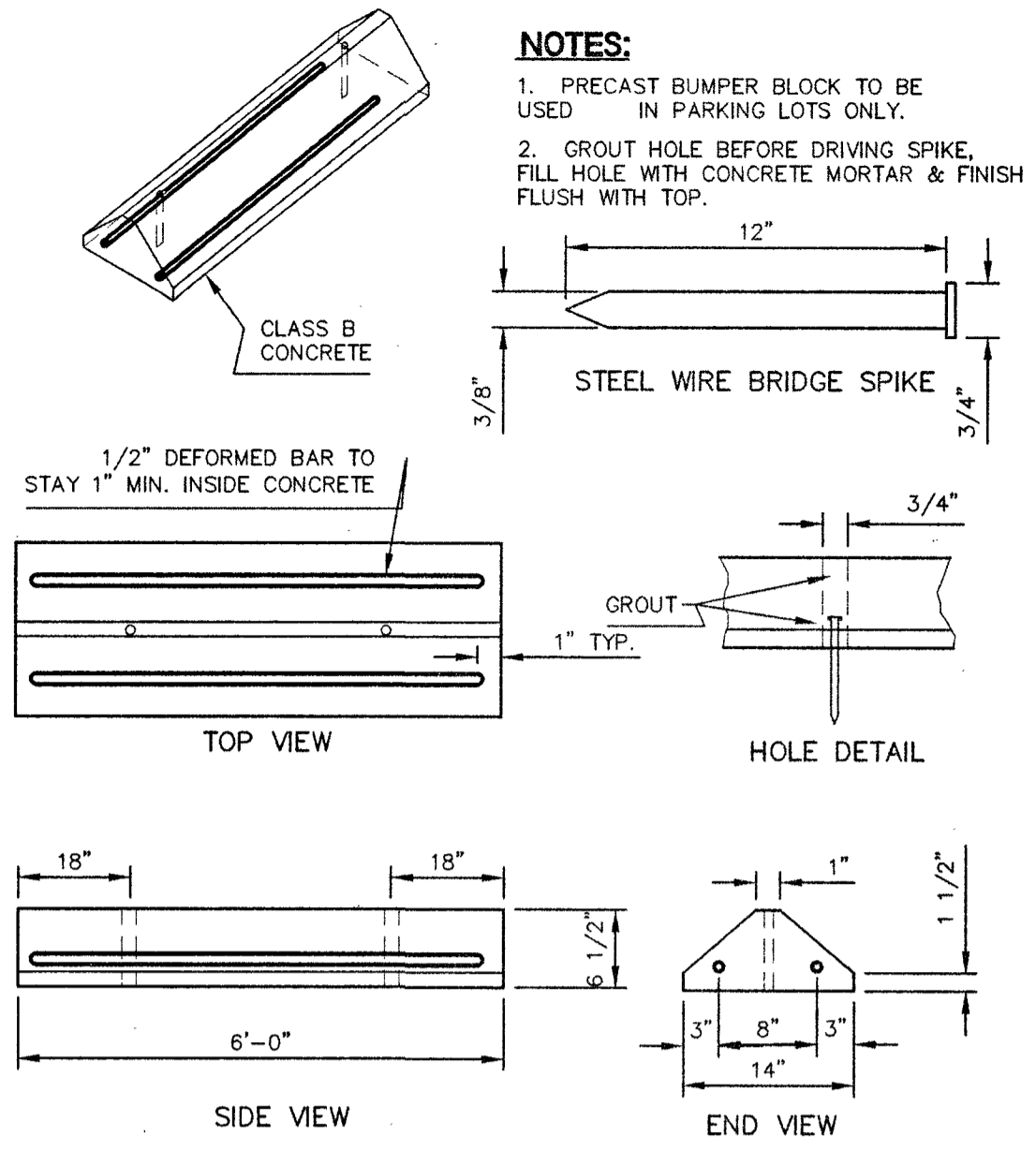
**C EAST SECTION** NOT TO SCALE



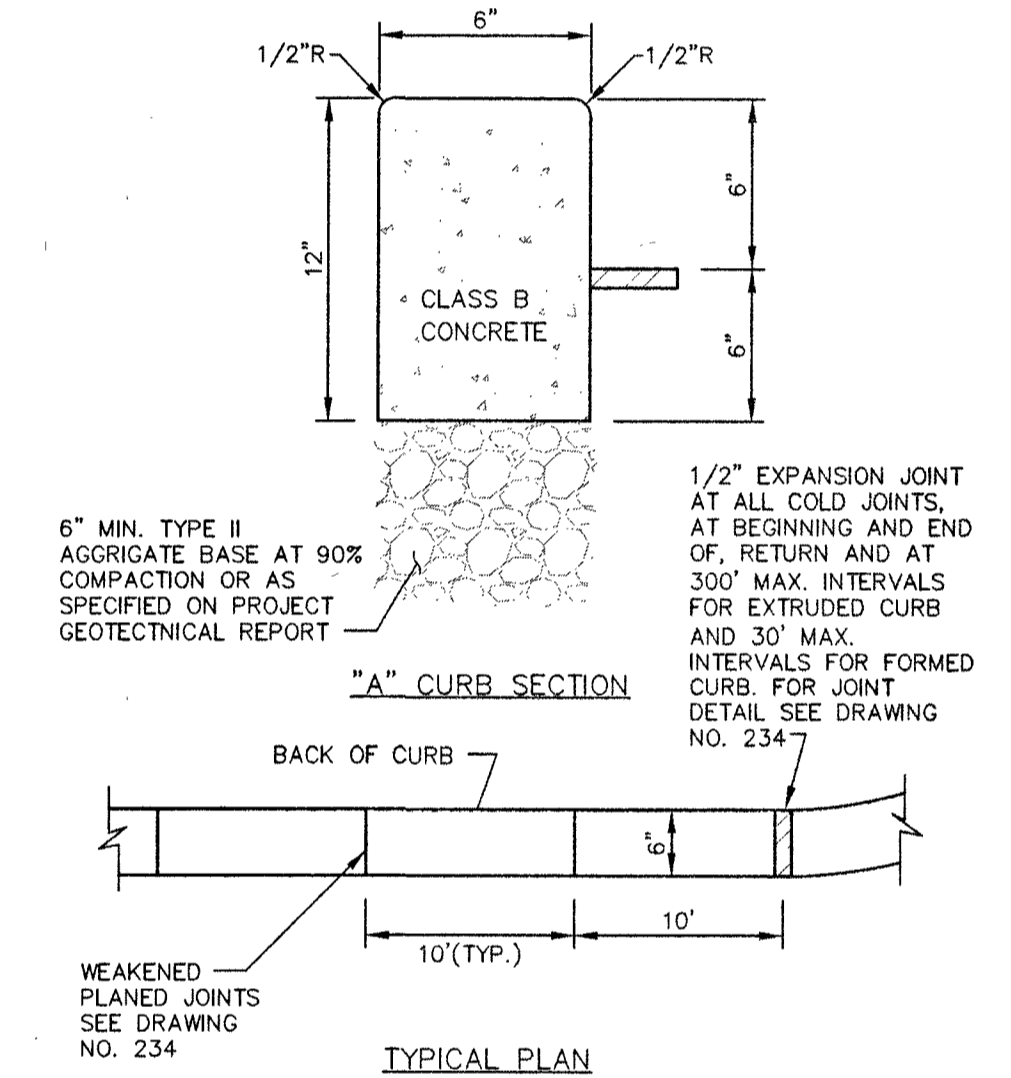
**B SOUTH SECTION** NOT TO SCALE



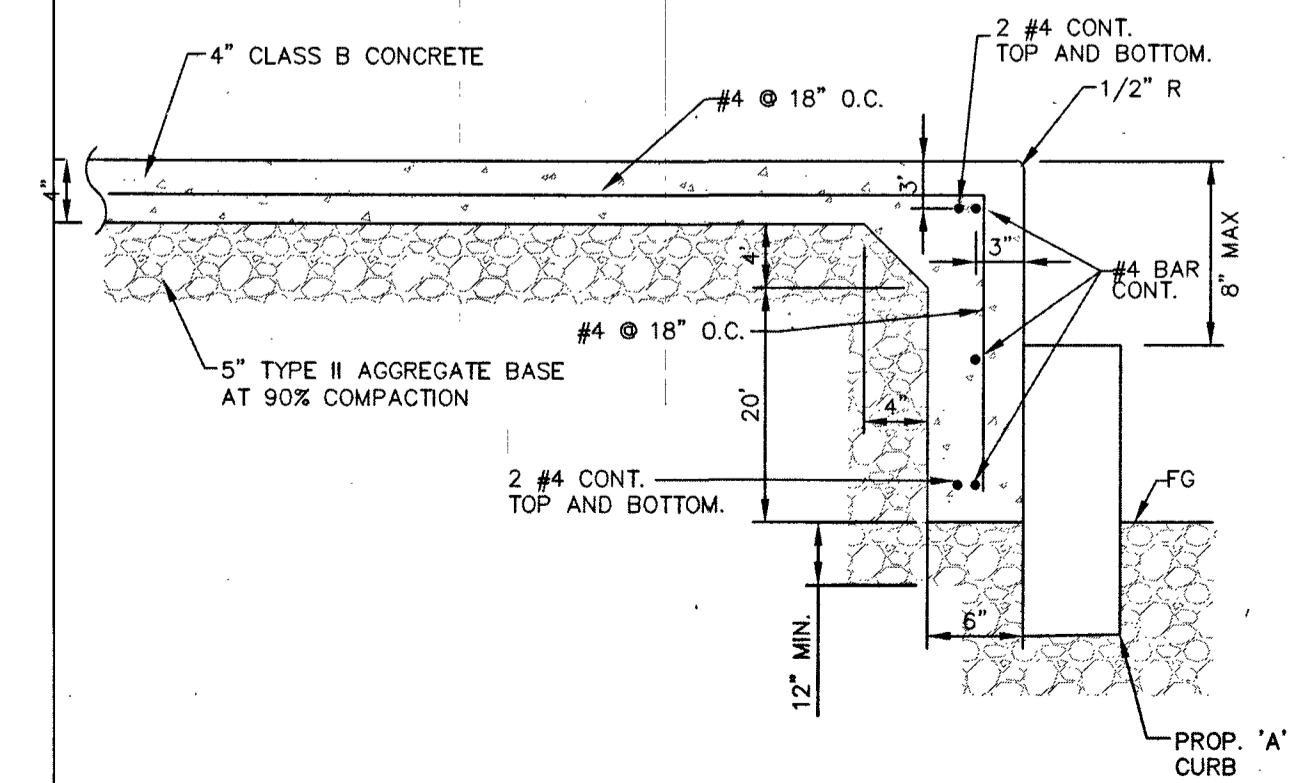
**A WEST SECTION** NOT TO SCALE



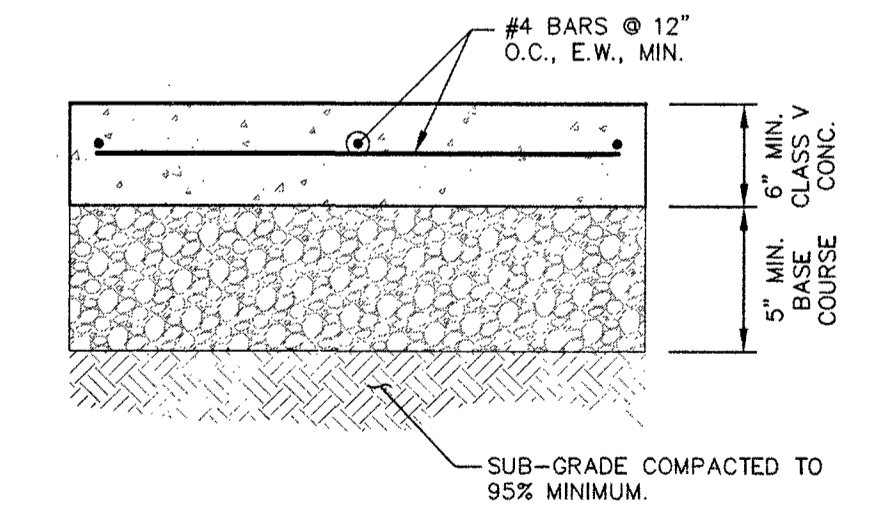
**5 PRECAST BUMPER BLOCK** NOT TO SCALE



**2 ON SITE 'A' CURB DETAIL** NOT TO SCALE



**3 TURNED DOWN SIDEWALK DETAIL** NOT TO SCALE



**1 ON-SITE CONCRETE PAVEMENT SECTION** NOT TO SCALE

DESCRIPTION:

REV: DATE: BY:

6345 South Jones Blvd  
Suite 100  
Phoenix, AZ 85018  
Phone (602) 965-9312  
Fax (602) 965-9317  
www.lochsa.com

**Lochsa**  
engineering

**NOVAT**  
**COMMERCIAL**  
**PHASE II**

**DETAIL SHEETS**  
**SHEET 1 OF 1**

SHEET TITLE

PROJECT No.: 171022

DATE: April 25, 2017

SCALE: NTS

DRAWN BY: MGZ

DESIGNED BY: MGZ

CHECKED BY: JLI

SEAL  
REGISTERED PROFESSIONAL ENGINEER - STATE OF NEW YORK  
No. 11286  
Exp. 12-31-18  
CIVIL  
4/25/2017

SHEET No. 1017649  
**C5.01**  
SHEET 6 OF 6  
CLV No. H#69975