

QUANTITIES

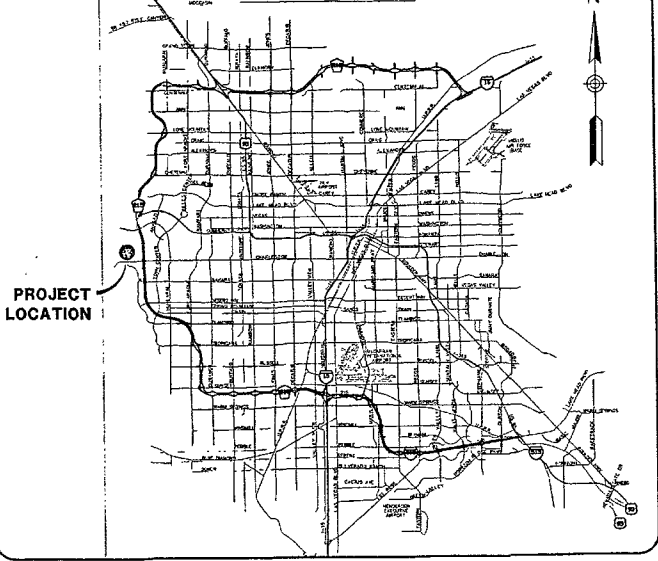
ITEM NO.	ITEM DESCRIPTION	UNIT	QTY
613.01.24	SIDEWALK 4"	SF	965
623.01.55	SIDEWALK RAMP	EA	3
626.00.06	PAVEMENT STRIPING ARTERIAL	LF	425
623.00.12	PULL BOX	EA	10
623.99.MSC	TRAFFIC SIGNAL MISCELLANEOUS	LS	1

NOTE: QUANTITIES PROVIDED ARE FOR BOND ESTIMATE ONLY.
CONTRACTOR SHALL BID BASED ON PLANS.

LEGEND

EXISTING TELEPHONE CABLE	EXISTING NO. 3 1/2 PULL BOX
EXISTING SANITARY SEWER LINE	EXISTING NO. 5 PULL BOX
EXISTING WATER LINE	EXISTING NO. 7 PULL BOX
EXISTING STORM DRAIN LINE	EXISTING P30 PULL BOX
EXISTING ELECTRICAL LINE	EXISTING TYPE 200 SPLICE VAULT
EXISTING OVERHEAD POWER LINE	PROPOSED 400W LED LUMINAIRE (SUMMERLIN)
EXISTING GAS LINE	PROPOSED NO. 3 1/2 PULL BOX
EXISTING CABLE TELEVISION LINE	PROPOSED NO. 5 PULL BOX
EXISTING CURB & GUTTER	PROPOSED DOUBLE-STACKED NO. 7 PULL BOX
EXISTING MANHOLE	PROPOSED P30 PULL BOX
EXISTING VALVE (GAS OR WATER)	PROPOSED TYPE 200 SPLICE VAULT
EXISTING FIRE HYDRANT	PROPOSED CONTROLLER CABINET
EXISTING CONDUIT RUN NO.	PROPOSED SIGNAL POLE
PROPOSED CONDUIT	PROPOSED TRAFFIC SIGN
EXISTING CONDUIT	PROPOSED STREET NAME SIGN (INTERNALLY ILLUMINATED)
RIGHT-OF-WAY LINE	PROPOSED OPTICOM DETECTOR
EASEMENT LINE	PROPOSED RED LIGHT RUNNING INDICATOR
PROPERTY LINE	PROPOSED PEDESTRIAN SIGNAL HEAD
CENTERLINE	PROPOSED PEDESTRIAN PUSH BUTTON
EXISTING STREETLIGHT (SUMMERLIN)	PROPOSED CONDUIT RUN NO.
EXISTING POWER POLE	PROPOSED DETECTOR LOOP (SIZE AS SHOWN)
EXISTING SERVICE PEDESTAL	PROPOSED 3-SECTION SIGNAL HEAD
EXISTING NVE TRANSFORMER	

VICINITY MAP



ABBREVIATIONS

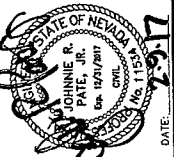
ADV	ADVANCED
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS
CATV	CABLE TELEVISION
CCPW	CLARK COUNTY PUBLIC WORKS
CCRFCD	CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT
CG	CURB & GUTTER
DET	DETECTION
"DE"	DESERT FOOTHILLS DRIVE &
DOC	DOCUMENT
DR	DRIVE
DS	DOUBLE STACKED
"DS"	DESERT SPRINGS ROAD &
DWG	DRAWING
E	EAST
ELEC	ELECTRIC
EDP	EDGE OF PAVEMENT
EG	EASEMENT
ESMT	EXISTING
EX/EXIST	EXISTING
FAST	FREEWAY & ARTERIAL SYSTEM OF TRANSPORTATION
FG	FINISHED GRADE
FT	FEET
G	GRASS
LT	LEFT
LUM	LUMINAIRE
MNM	MINIMUM
N	NORTH
NO.	NUMBER
NVE	NV ENERGY
OHP	OVERHEAD POWER
OP	OPTICOM
P.B.	PULLBOX
PE	POLYETHYLENE
PEO	PEDESTRIAN
PMF	PAVEMENT MARKING FILM
PPM	POLYUREA PAVEMENT MARKINGS
QUAD.	QUADRANT
RD	ROAD
RPM	RAISED PAVEMENT MARKINGS
RT	RIGHT
R/W	RIGHT-OF-WAY
S	SOUTH
SD	STORM DRAIN
S.P.	SERVICE PEDESTAL
SW	SIDEWALK
SM	SIGNAL
ST	STREET
STLT	STREETLIGHT
SS	SANITARY SEWER
STA	STATION
STD	STANDARD
S.V.	SPLICE VAULT
TEL	TELEPHONE
TYP.	TYPICAL
UDACS	UNIFORM DESIGN AND CONSTRUCTION STANDARDS
USGCCA	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
W	WEST OR WATER
W/	WITH

BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT "SLV09 34565", BEING A RIVET & PLATE IN TOP OF CURB AT NW CORNER OF DESERT FOOTHILLS & DESERT SUNRISE
ELEVATION: 3216.32 (FEET)
980.337 (METERS)
CITY OF LAS VEGAS VERTICAL CONTROL - DATE RE-OBSERVED:
2005-2007
BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88)

BASIS OF BEARING

NORTH 89°06'00" EAST, BEING THE BEARING OF THE CENTERLINE OF DESERT SUNRISE ROAD AS SHOWN IN BOOK 108, PAGE 29 OF PLATS ON FILE AT THE CLARK COUNTY, NEVADA RECORDER'S OFFICE.



PROJECT NO.	62023-706
DESIGN	JRP
DRAWN	TJC
CHECK	JRT
PLOT DATE	02-09-17
PLOT TIME	10:18:45

1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gowerengineering.com

ENGINEERS & SURVEYORS

F:\Projects\600\62023-706\DWG\Production\02-03_US_G.dwg
Henry Schlerkamp

THE HOWARD HUGHES COMPANY, LLC

TRAFFIC SIGNAL SYSTEM AT
DESERT FOOTHILLS DRIVE/DESERT SUNRISE ROAD

LEGEND, ABBREVIATIONS, AND VICINITY MAP

DRAWING

2

2 OF 8 SHTS

H#67991 20P-V360

1. ALL WORK PERFORMED ON ANY TRAFFIC SIGNAL COMPONENT MUST BE UNDER THE DIRECT ON-SITE SUPERVISION OF AN IWSA CERTIFIED TECHNICIAN. THE LEVEL OF CERTIFICATION REQUIRED SHALL BE LEVEL II.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ALL EXISTING UTILITIES. THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TO VERIFY IN THE FIELD THE LOCATIONS OF THEIR INSTALLATIONS 72 HOURS PRIOR TO CONSTRUCTION.

- [illegible]

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.

1. ALL STREET LIGHTING CONDUITS SHALL HAVE AT LEAST ONE GREEN #8 THW WIRE FOR GROUNDING. THE "GNDTY" CONDUIT IS COMPLETED BY RUNNING FROM PB TO PB, IT SHALL HAVE MINIMUM OF 2 #4 AND 1 #6 THW WIRE WITH THE ENDS TAPPED OR "SAFE OFF" PRIOR TO FINAL INSPECTION.
2. ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL LEAVE A MINIMUM CLEARANCE OF 10 FEET TO THE SIDE OF THE ROAD.
3. AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE TFO PRIOR TO ANY PRE-FINAL INSPECTION OF THE AS-BUILT DRAWING NEEDS TO BE STAMPED AS-BUILT AND SIGNED BY THE PREPARED.
4. 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 PLAN.
5. IT SHALL BE ASSUMED THAT IN THE ABSENCE OF AN EXISTING, OPERABLE CIRCUIT TO ATTACH TO, ALL INSTALLATIONS SHALL REQUIRE A NEW SERVICE FOR OPERATION OF THE CIRCUIT.
6. WHEREVER THERE IS AN OVERHEAD UTILITY THAT WILL CONFLICT WITH THE INSTALLATION OF THE OVERHUNG CIRCUIT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF THE UTILITY. THE DEVELOPER AND THE UTILITIES INVOLVED, AT NO EXPENSE TO THE CITY OF LAS VEGAS, SHALL BE NOTIFIED BY THE CONTRACTOR BASED ON THE DESIGN.
7. THE CONTRACTOR SHALL FURNISH COMPLETE SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON PLANS.
8. 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.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, CONSTRUCTION, TESTING, ETC. OF THE INSTALLATION, CONSTRUCTION, ENERGIZING, MAINTENANCE AND OPERATIONAL COST OF SAID SYSTEMS PRIOR TO THE TRANSFER OF OWNERSHIP OF THE SYSTEMS TO THE CITY OF LAS VEGAS. THE TRANSFER OF OWNERSHIP FROM THE DEVELOPER/OWNER TO THE CITY OF LAS VEGAS WILL BE IN CONJUNCTION WITH THIS PROJECT COMPLETION. COORDINATE ALL ELECTRICAL AND DRAINAGE DESIGN WITH THE CITY OF LAS VEGAS TRAFFIC ENGINEERING DEPARTMENT (TEO) AT (702) 225-4331.

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 "C" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
4. POLYVIA (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 SHALL REQUIRE RETROFIT IF PAVING DOES NOT CONFORM TO CITY STANDARDS AT THE MANHOLE.
6. THE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO 12" IN DIAMETER. LATERALS EXCEEDING 12" IN DIAMETER OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES, IN LINE "7" SHALL BE USED ON LINES TWELVE INCHES (12") OR ABOVE.
7. WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LVWD STANDARDS WHEREVER A WATER MAIN CROSSES OVER A WATER MAIN OR THE SEWER IS LESS THAN FIFTEEN INCH (15") 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 PLAN TO THE LOCATION. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO 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.

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.

- 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. THE CONTRACTOR SHALL MAINTAIN THE EXISTING EARTHWORK AND ELEVATIONS.
- 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.
- 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.
- 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 REGULATIONS.
- 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' - -0.1' | SEE SLOPS REPORT |
| B. ENGINEERED FILL | 0.1% | SEE FILL TO -0.1' | SEE SLOPS REPORT |

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CITY-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA", LATEST EDITION; 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. SUCH STANDARDS SHALL BE THE CLARK COUNTY UNIFORM BUILDING CODES 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 CITY OF LAS VEGAS RECORDS. THE DEPTHS FROM G.L.V PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY STRUCTURES AND LINES SHALL BE PROTECTED BY 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 AVOID THEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST 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 DUE TO THE USE OF THE CONTRACTOR'S EQUIPMENT TO SAME. THE CONTRACTOR SHALL BE RESPONSIBLE TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL BE FOR THE PROPER WRITTEN APPROVAL OF THE CITY ENGINEER.
- TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE USED IN ALL UNDERGROUND STRUCTURES. ALL MIX DESIGNS TO BE APPROVED BY THE CITY, PERMITS ARE REQUIRED ON THE PROJECT.
- PERMITS TO BE OBTAINED 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 30' IN EXTENDED-TYPE CURB.
- AC PAVEMENT TO BE ONE-HALF INCH (1/2") ABOVE UP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS AND CROSS GUTTERS.
- CURB AND GUTTER FOUNT TO BE UNACCEPTABLE TO THE CITY OF LAS VEGAS SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.
- 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 THE CITY ENGINEER.
- 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.
- ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE CONSULTING ENGINEER. DATE _____ APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
- 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.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED AND MAINTAINED PER AVAILABLE RECORDS IN ACCORDANCE WITH N.E.S. STATE N.O. 623.800 & CITY OF LAS VEGAS TITLE 18, APPENDIX D.
- UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOWLINES, AND CROSS GUTTERS. WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND THE CITY ENGINEER.

LWWD PROJECT # 125080

1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVMD, FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN BY 2:00 PM, THE BUSINESS DAY PRIOR TO THE REQUESTED LVVMD INSPECTION. THE WORKING DAYS FROM THE START OF CONSTRUCTION, FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN BY 2:00 PM, THE BUSINESS DAY PRIOR TO THE REQUESTED LVVMD INSPECTION. WHEN MEETING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.
2. ALL WORK SHALL CONFORM TO LVVMD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND TO THE 2010 EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARD SPECIFICATIONS FOR SUPPORT SYSTEMS. 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 SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVMD.
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVMD APPROVED SERVICE SADDLES.
6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, WALKWAY AND CURB OUTLETS.
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 FLEED, DISINFECTED, PRESSURE TESTED, FLUSHED, FLEED, AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVMD DISTRIBUTION SYSTEM.
10. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM THE CLARK COUNTY STORE. TELEPHONE 258-3552 OR 258-3800, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
11. ANY INTERRUPTION OF SERVICE MUST BE PERMITTED IN ACCORDANCE WITH UDACS SECTION 3.14.01, AND APPROVED BY THE LVVMD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
12. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE LISTED ON THE LVVMD PRE-APPROVED MATERIALS AND MANUFACTURER'S LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED FOR THESE PLANS.
13. TELEPHONE "CALL BEFORE YOU DIG" AT 811 OR 1-800-227-2600.

1. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATE

- CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING OR BEING STORED IN THE STORM SEWER SYSTEM.
2. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO THE NEEDS TO MEET THE PERFORMANCE STANDARDS SPECIFIED IN THE CITY OF LAS VEGAS AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BEST MANAGEMENT PRACTICES MANUAL.
3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE DISTURBED AREA HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR000000, SECTION 14.12.
4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE NOT PROTECTED FROM EXPOSURE TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPS WEEKLY, AND WITHIN 24 HOURS AFTER ANY ACTUAL RAIN EVENT OF 0.1 INCH OR MORE. IF THE CONTRACTOR OR HIS AGENT DETERMINES THAT IT IS NECESSARY TO MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY, SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF INSPECTIONS DURING PERIODS OF PROLONGED DRY WEATHER. GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR000000, SECTION 14.12.

NO PORTION OF THE SITE FALLS WITHIN A FEMA DESIGNATED SPECIAL FLOOD HAZARD AREA. SITE LOCATED ON PANEL 32003C2150E, DATED SEPTEMBER 27, 2002, AND PANEL 32003C2145F, DATED NOVEMBER 16, 2011. THIS PANEL SHOWS THAT THE PROJECT IS LOCATED WITHIN A ZONE X AND NOT LOCATED WITHIN A FEMA DESIGNATED 100-YEAR ZONE A OR SPECIAL FLOOD HAZARD AREA.

REVISÉ 4/15/10

REvised 10/28/15

STATE OF NEVADA
JOHNNIE R. PATE, JR.
Exp. 12/31/2017
CIVIL
No. 11-17
DATE: 12-17

PROJECT NO.
62023-706

W BLVD.
89146RAINBOW
GAS, NV

1555 S.
LAS VEGAS

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ANY, LI

COMP A

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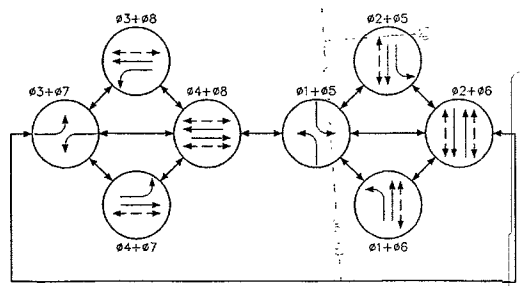
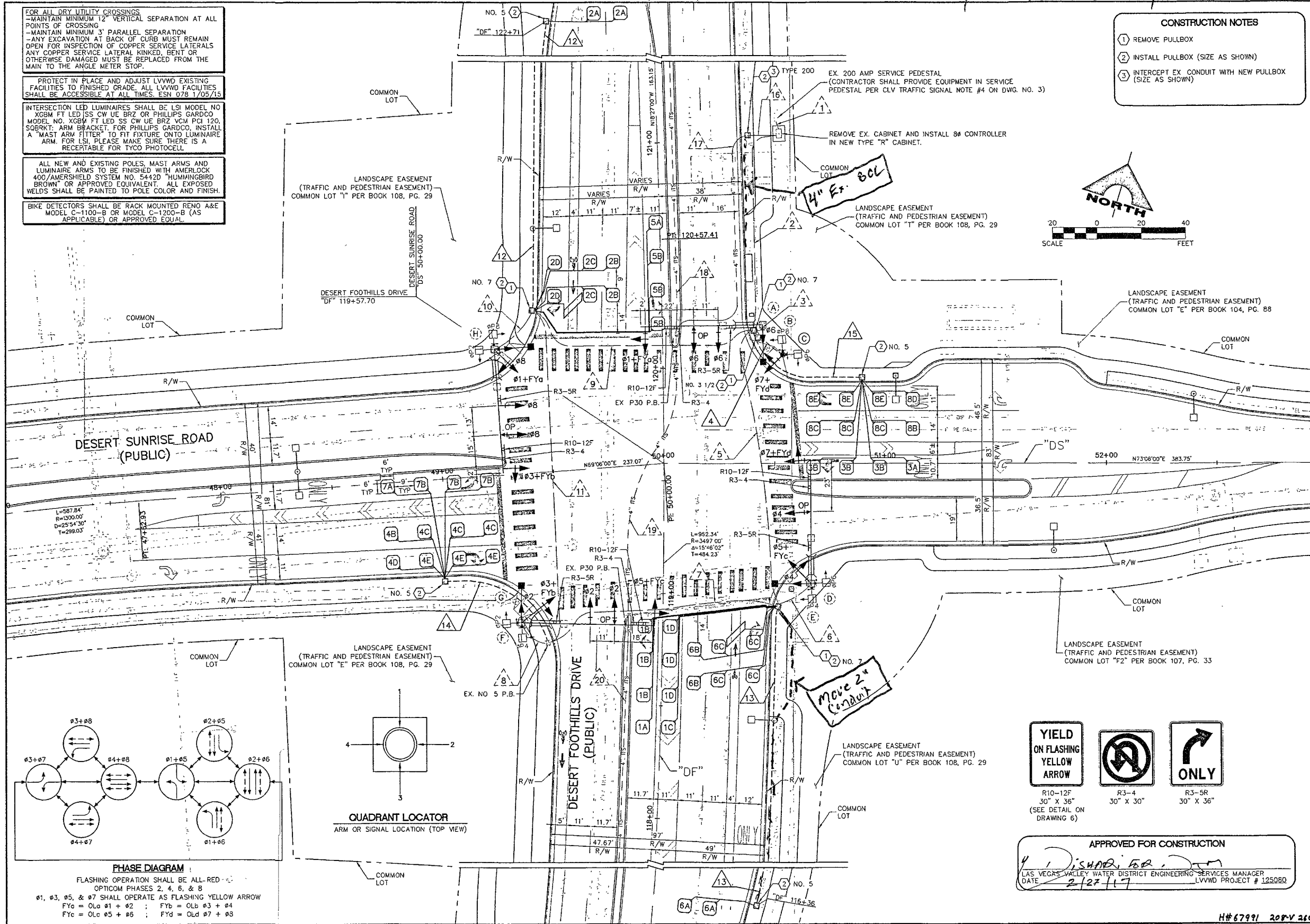
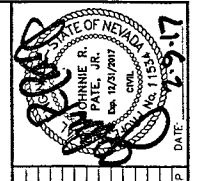
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3

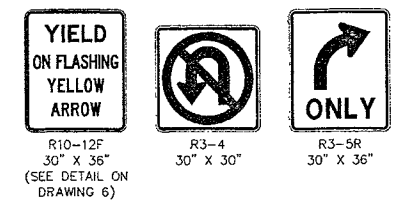
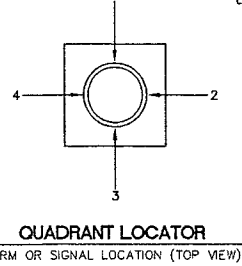
Asbuilt's LVE Bob Shirley Robt Shly 11-2-17

- FOR ALL DRY UTILITY CROSSINGS
-MAINTAIN MINIMUM 12" VERTICAL SEPARATION AT ALL POINTS OF CROSSING
-MAINTAIN MINIMUM 3" PARALLEL SEPARATION
-ANY EXCAVATION AT BACK OF CURB MUST REMAIN OPEN FOR INSPECTION OF COPPER SERVICE LATERALS
ANY COPPER SERVICE LATERAL KINKED, BENT OR OTHERWISE DAMAGED MUST BE REPLACED FROM THE MAIN TO THE ANGLE METER STOP.
- PROTECT IN PLACE AND ADJUST LVWD EXISTING FACILITIES TO FINISHED GRADE. ALL LVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES. ESN 078 1/05/15
- INTERSECTION LED LUMINAIRES SHALL BE LSI MODEL NO. XGBM FT LED SS CW UE BRZ OR PHILLIPS GARDCO MODEL NO. XGBM FT LED SS CW UE BRZ VCM PGI 120. SOBRT: ARM BRACKET, FOR PHILLIPS GARDCO, INSTALL A "MAST ARM FITTER" TO FIT FIXTURE ONTO LUMINAIRE ARM. FOR LSI, PLEASE MAKE SURE THERE IS A RECEPTACLE FOR TYCO PHOTOCELL.
- ALL NEW AND EXISTING POLES, MAST ARMS AND LUMINAIRE ARMS TO BE FINISHED WITH AMERLOCK 400/AMERLOCK SYSTEM NO. 54-2D "HUMMINGBIRD BROWN" OR APPROVED EQUIVALENT. ALL EXPOSED WELDS SHALL BE PAINTED TO POLE COLOR AND FINISH.
- BIKE DETECTORS SHALL BE RACK MOUNTED RENO A&E MODEL C-1100-B OR MODEL C-1200-B (AS APPLICABLE) OR APPROVED EQUAL.

- CONSTRUCTION NOTES
- 1 REMOVE PULLBOX
 - 2 INSTALL PULLBOX (SIZE AS SHOWN)
 - 3 INTERCEPT EX. CONDUIT WITH NEW PULLBOX (SIZE AS SHOWN)



PHASE DIAGRAM
FLASHING OPERATION SHALL BE ALL-RED-
OPTICOM PHASES 2, 4, 6, & 8
01, 03, 05, & 07 SHALL OPERATE AS FLASHING YELLOW ARROW
FYa = 01a 01 + 02 ; FYb = 01b 03 + 04
FYc = 01c 05 + 06 ; FYd = 01d 07 + 08



APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE 2/27/17
LVWD PROJECT # 125080

PROJECT NO. 62023-706
DESIGN: JRP
DRAWN: TJC
CHECK: TAM
PLOT DATE: 02-09-17
PLOT TIME: 10:19:14

THE HOWARD HUGHES COMPANY, LLC
TRAFFIC SIGNAL SYSTEM AT
DESERT FOOTHILLS DRIVE/DESERT SUNRISE ROAD
TRAFFIC SIGNAL PLAN

4 OF 8 SHTS

H#67991 208-V 260

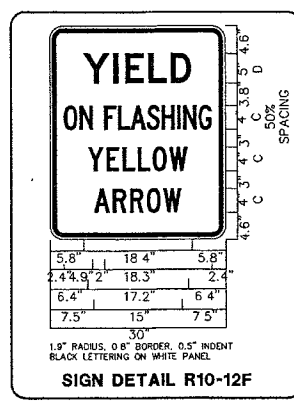
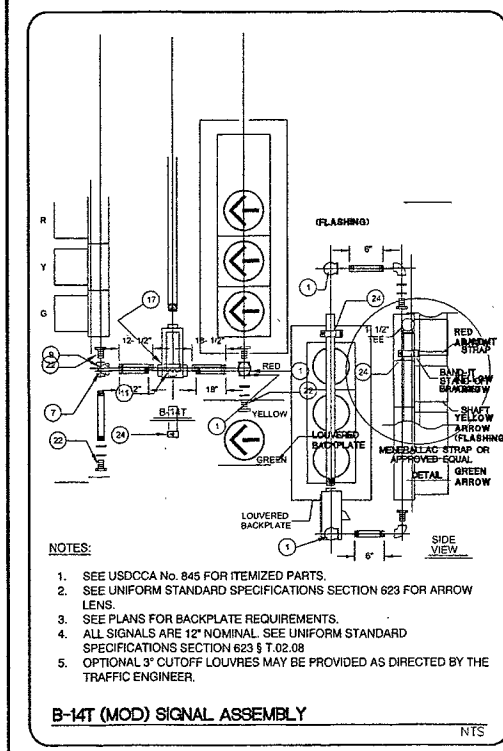
Asbuilt's LVE Bob Shirkley Rght HLG 11-2-17

STREET NAME SIGNS

POLE	TYPE	SIGN LEGEND	
(A)	DOUBLE FACE	12B	5C
W Desert Sunrise Rd 11700			
(D)	DOUBLE FACE	12B	5C
S Desert Foothills Dr 800			
(F)	DOUBLE FACE	12B	5C
S Desert Foothills Dr 700			
(H)	DOUBLE FACE	12B	5C
W Desert Sunrise Rd 11800			

NOTE:
1. SIGN SCHEDULE PER CLV PLANNING DEPARTMENT & TFO.
2. DIRECTION, BLOCK NO., SUFFIX, 5" HWY "D" STREET NAME: 12" UPPERCASE, 3" LOWERCASE HWY "D" OR "C" ONLY IF NECESSARY.
3. BORDER REQUIRED. 3M GREEN ON WHITE DIAMOND SHEETING. DOUBLE-SIDED.
4. POWER ILLUMINATED SIGN WITH LUMINAIRE DIRECTLY ABOVE TRAFFIC SIGNAL MAST ARM.

- 1.) All signal heads to have retro-reflective back plates.
2.) Replace ex. HPS luminaires with LED



POLE SCHEDULE											
POLE	LOCATION STATION (OFFSET)	POLE				SIGNALS (VEH.)		SIGNALS (PED.)		PEDESTRIAN PUSH BUTTON	
		TYPE	SIGNAL ARM QUAD. LENGTH	LUM. ARM QUAD. LENGTH	TYPE	QUAD.	QUAD.	TYPE	QUAD.	QUAD. (CHASE)	SIGN
(A)	EXISTING	XX-A(E)	4	55'	3 4(E)	10'	M-4 M-2(2) B-11	MAST ARM MAST ARM 2	-	-	-
(B)	EXISTING	1-A(E)	-	-	-	-	-	-	-	-	-
(C)	"DR" 120+05.5' 54.3' LT	1-A(E)	-	-	-	T1-4	POST TOP	W-3T	2	1(48) 2(46)	RT LT
(D)	EXISTING	XX-A(E)	1	55'	1(E) 4	10'	M-4 M-2(2) B-14T(M)	MAST ARM MAST ARM 3	W-3T	-	2(46) 3(44)
(E)	EXISTING	1-B(E)	-	-	-	-	-	-	-	-	-
(F)	EXISTING	XX-A(E)	2	60'	1 2(E)	10'	M-4 M-2(2) B-14T(M)	MAST ARM MAST ARM 4	W-3T	-	3(44) 4(42)
(G)	EXISTING	1-A(E)	-	-	-	-	-	-	-	-	-
(H)	EXISTING	XX-A(E)	3	55'	2 3(E)	10'	M-4 M-2(2) B-14T(M)	MAST ARM MAST ARM(2) 1	W-3T	1	1(48) 4(42)

(E) = EXISTING
ALL LUMINAIRE ARMS AND FIXTURES SHALL BE PER SUMMERLIN IMPROVEMENT STANDARDS (OWG. E-1 AND E-2)

CONDUIT AND WIRE SCHEDULE																		
WIRE & CABLE	FROM	TO	VIA CONDUIT															
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
EXISTING	SERVICE PEDESTAL(E)	CONTROLLER																
25 CONDUCTOR #14 SIG. CABLE (MSA 20-1)	CONTROLLER	POLE A																
25 CONDUCTOR #14 SIG. CABLE (MSA 20-1)	CONTROLLER	POLE C																
25 CONDUCTOR #14 SIG. CABLE (MSA 20-1)	CONTROLLER	POLE D																
25 CONDUCTOR #14 SIG. CABLE (MSA 20-1)	CONTROLLER	POLE F																
25 CONDUCTOR #14 SIG. CABLE (MSA 20-1)	CONTROLLER	POLE H																
4-#10 AWG. THW-2 OR XHHW-2	CONTROLLER	POLE A LUMINAIRE																
4-#10 AWG. THW-2 OR XHHW-2	CONTROLLER	POLE D LUMINAIRE																
4-#10 AWG. THW-2 OR XHHW-2	CONTROLLER	POLE F LUMINAIRE																
4-#10 AWG. THW-2 OR XHHW-2	CONTROLLER	POLE H LUMINAIRE																
6-PR #18 AWG. MULTI. C. LOOP LEAD-IN CABLE	CONTROLLER	DET #8D, #8C(3), #8D, #8E(3)																
6-PR #18 AWG. MULTI. C. LOOP LEAD-IN CABLE	CONTROLLER	DET #3A, #3B(3)																
6-PR #18 AWG. MULTI. C. LOOP LEAD-IN CABLE	CONTROLLER	DET #6A(2)																
6-PR #18 AWG. MULTI. C. LOOP LEAD-IN CABLE	CONTROLLER	DET #6B(2), #6C(2), #6D(2)																
6-PR #18 AWG. MULTI. C. LOOP LEAD-IN CABLE	CONTROLLER	DET #1A, #1B(3), #1C, #1D(3)																
6-PR #18 AWG. MULTI. C. LOOP LEAD-IN CABLE	CONTROLLER	DET #4B, #4C(3), #4D, #4E(3)																
6-PR #18 AWG. MULTI. C. LOOP LEAD-IN CABLE	CONTROLLER	DET #7A, #7B(3)																
6-PR #18 AWG. MULTI. C. LOOP LEAD-IN CABLE	CONTROLLER	DET #2A(2)																
6-PR #18 AWG. MULTI. C. LOOP LEAD-IN CABLE	CONTROLLER	DET #2B(2), #2C(2), #2D(2)																
6-PR #18 AWG. MULTI. C. LOOP LEAD-IN CABLE	CONTROLLER	DET #5A, #5B(3)																
OPTICOM M-138 CABLE	CONTROLLER	POLE A																
OPTICOM M-138 CABLE	CONTROLLER	POLE D																
OPTICOM M-138 CABLE	CONTROLLER	POLE F																
OPTICOM M-138 CABLE	CONTROLLER	POLE H																
CONDUIT SIZE (E) EXISTING			5-5/8" (E)	1-2" (E)	1-3/4" (E)	2-2" (E)	2-2" (E)	2-2" (E)	2-2" (E)	2-2" (E)	2-2" (E)	2-2" (E)	2-2" (E)	2-2" (E)	2-2" (E)	2-2" (E)	2-2" (E)	2-2" (E)

THE 72-STRAND FIBER FOR THIS SIGNAL'S CONNECTION TO CHARLESTON WILL BE INSTALLED WITH THE ALTA DR./DESERT FOOTHILLS DR. TRAFFIC SIGNAL IMPROVEMENT PACKAGE. CONSTRUCTION OF THE ALTA/DESERT FOOTHILLS SIGNAL IS ANTICIPATED TO FOLLOW THIS SIGNAL INSTALLATION BY NO MORE THAN 30-DAYS

Call before you Dig
811
1-800-227-2600

CALL BEFORE YOU DO OVERHEAD
1-702-227-2929

FAST
Call before you UnderGround.
1-702-482-5300

PROJECT NO. 62023-706
DESIGN: GCH
DRAWN: GCH
CHECK: GCH
DATE: 08-09-17
PLOT TIME: 10:19:21

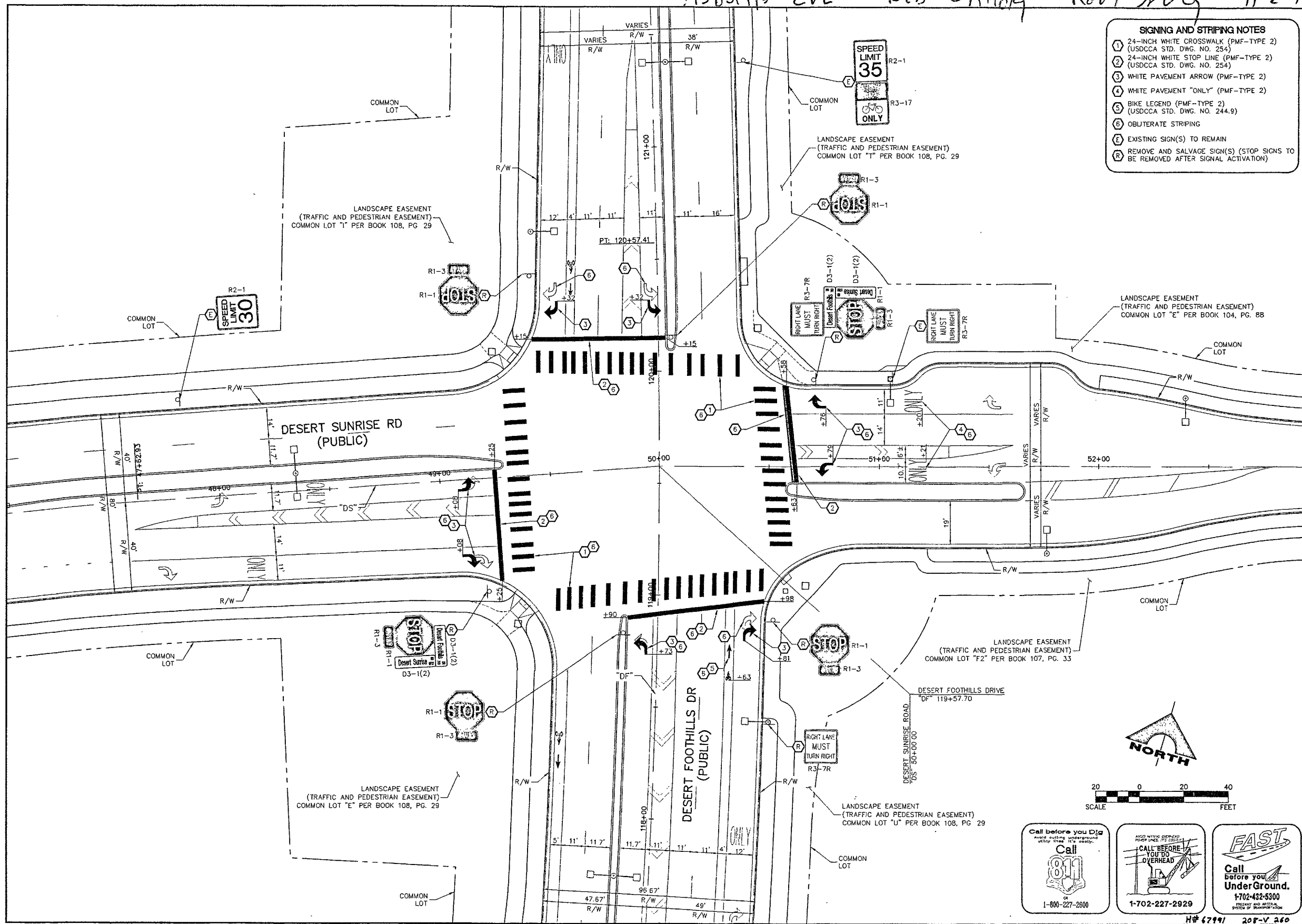
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gchengineering.com

ENGINEERS' SURVEYORS

THE HOWARD HUGHES COMPANY, LLC
TRAFFIC SIGNAL SYSTEM AT
DESERT FOOTHILLS DRIVE/DESERT SUNRISE ROAD
TRAFFIC SIGNAL SCHEDULES AND DETAILS

DRAWING 5
5 OF 8 SHTS

Asbuilt LVE Bob Shinky Rht HLG 11-2-17



- SIGNING AND STRIPING NOTES**
- 1 24-INCH WHITE CROSSWALK (PMF-TYPE 2) (USDCCA STD. DWG. NO. 254)
 - 2 24-INCH WHITE STOP LINE (PMF-TYPE 2) (USDCCA STD. DWG. NO. 254)
 - 3 WHITE PAVEMENT ARROW (PMF-TYPE 2)
 - 4 WHITE PAVEMENT "ONLY" (PMF-TYPE 2)
 - 5 BIKE LEGEND (PMF-TYPE 2) (USDCCA STD. DWG. NO. 244.9)
 - 6 OBLITERATE STRIPING
 - 7 EXISTING SIGN(S) TO REMAIN
 - 8 REMOVE AND SALVAGE SIGN(S) (STOP SIGNS TO BE REMOVED AFTER SIGNAL ACTIVATION)

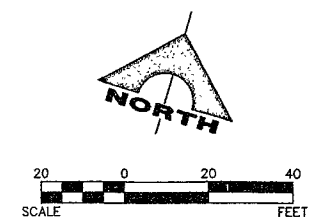


PROJECT NO. 62023-706
DESIGN: JRT
DRAWN: TC
CHECK: [blank]
PLOT DATE: 02-09-17
PLOT TIME: 10:19:41

GCH
ENGINEERS & SURVEYORS
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LAS VEGAS, NV 89146
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F: 702.804.2299
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THE HOWARD HUGHES COMPANY, LLC
TRAFFIC SIGNAL SYSTEM AT
DESERT FOOTHILLS DRIVE/DESERT SUNRISE ROAD
SIGNING AND STRIPING PLAN

DRAWING 6
6 OF 8 SHTS



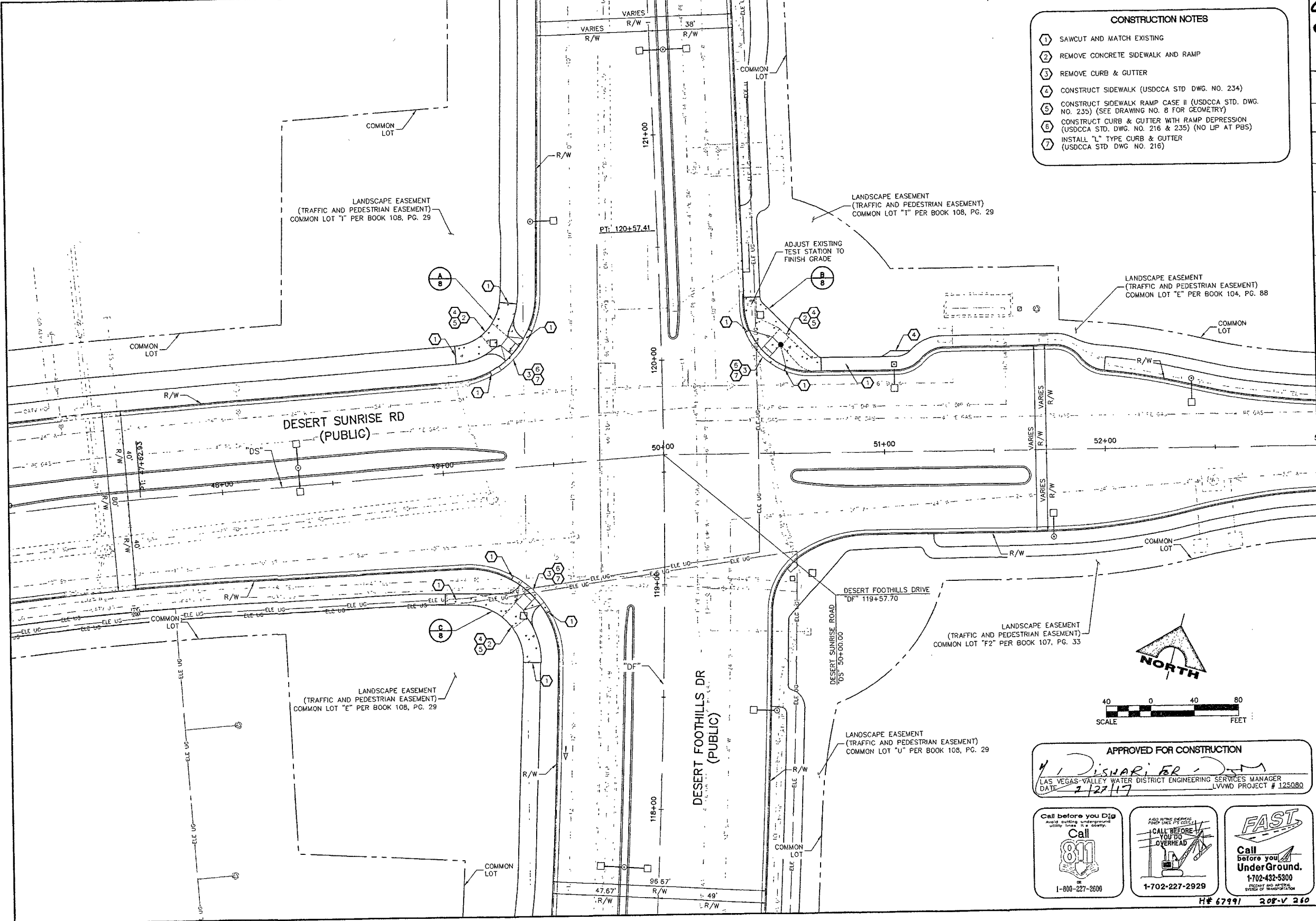
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CALL BEFORE YOU DIG
OVERHEAD
1-702-227-2929

FAST
Call before you UnderGround.
1-702-432-5300

H# 67991 208-V 260

11-2-17



- 1 SAWCUT AND MATCH EXISTING
- 2 REMOVE CONCRETE SIDEWALK AND RAMP
- 3 REMOVE CURB & GUTTER
- 4 CONSTRUCT SIDEWALK (USDCCA STD DWG. NO. 234)
- 5 CONSTRUCT SIDEWALK RAMP CASE II (USDCCA STD. DWG. NO. 235) (SEE DRAWING NO. 8 FOR GEOMETRY)
- 6 CONSTRUCT CURB & GUTTER WITH RAMP DEPRESSION (USDCCA STD. DWG. NO. 216 & 235) (NO LIP AT PGS)
- 7 INSTALL "L" TYPE CURB & GUTTER (USDCCA STD DWG. NO. 216)

[illegible]

PROJECT NO.	JRT
62023-706	TC
	CHECK:
	PLOT DATE: 02-09-17
	PLOT TIME: 10:20:01

GCW
ENGINEERS & SURVEYORS

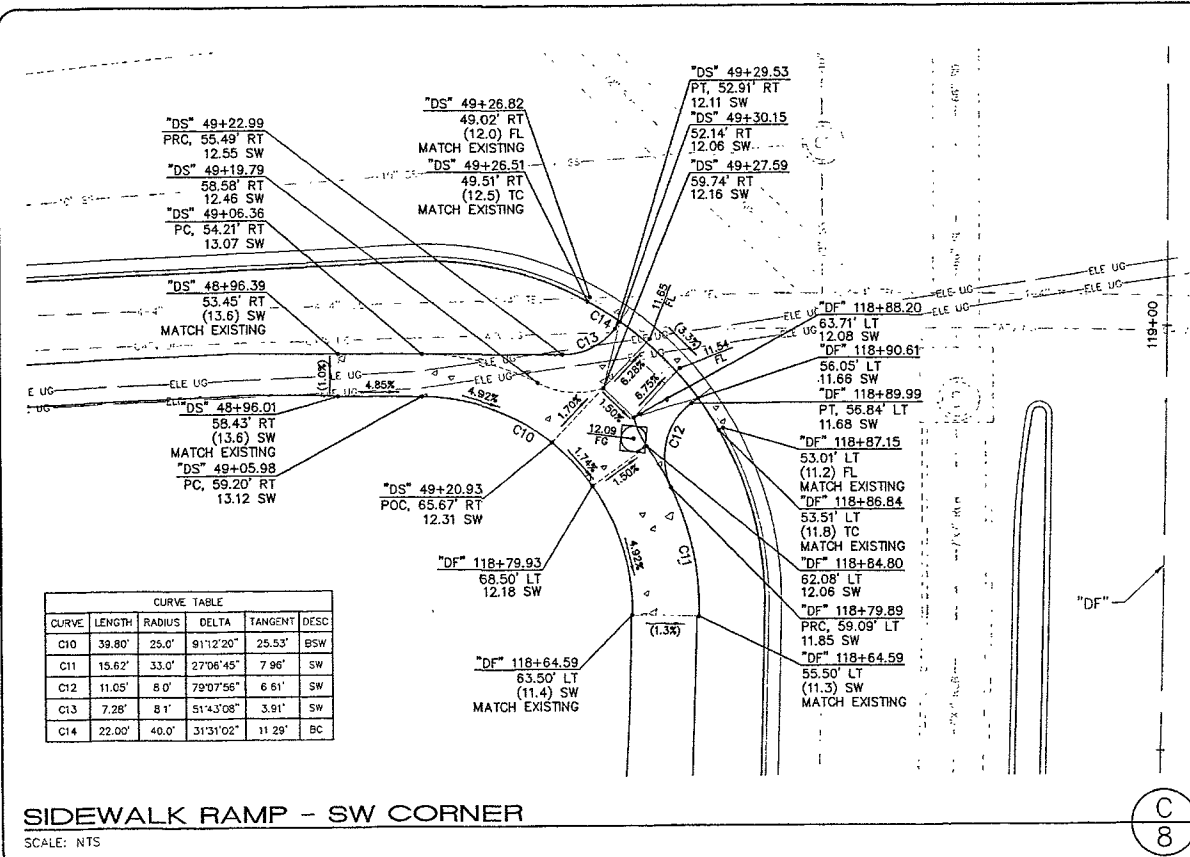
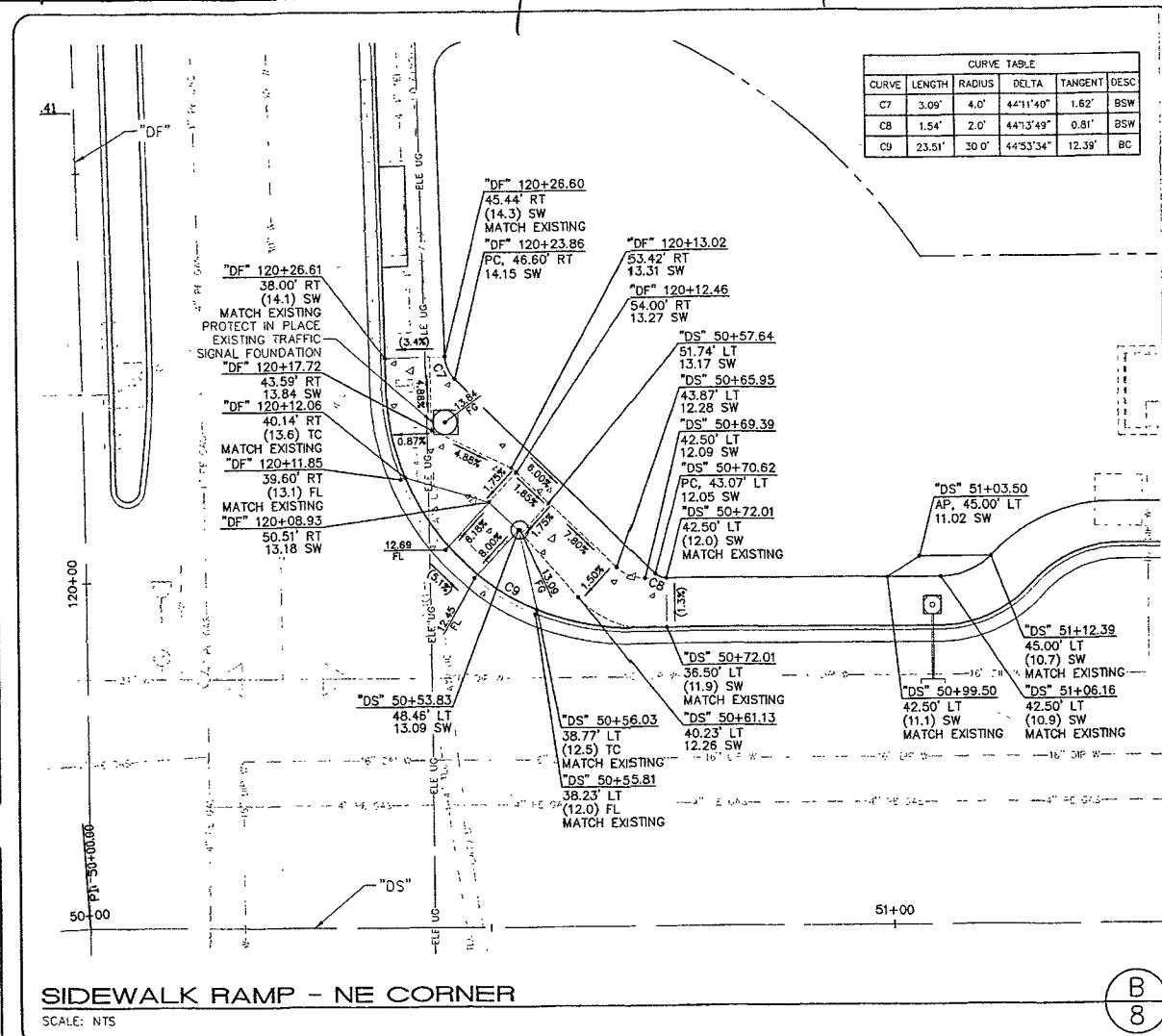
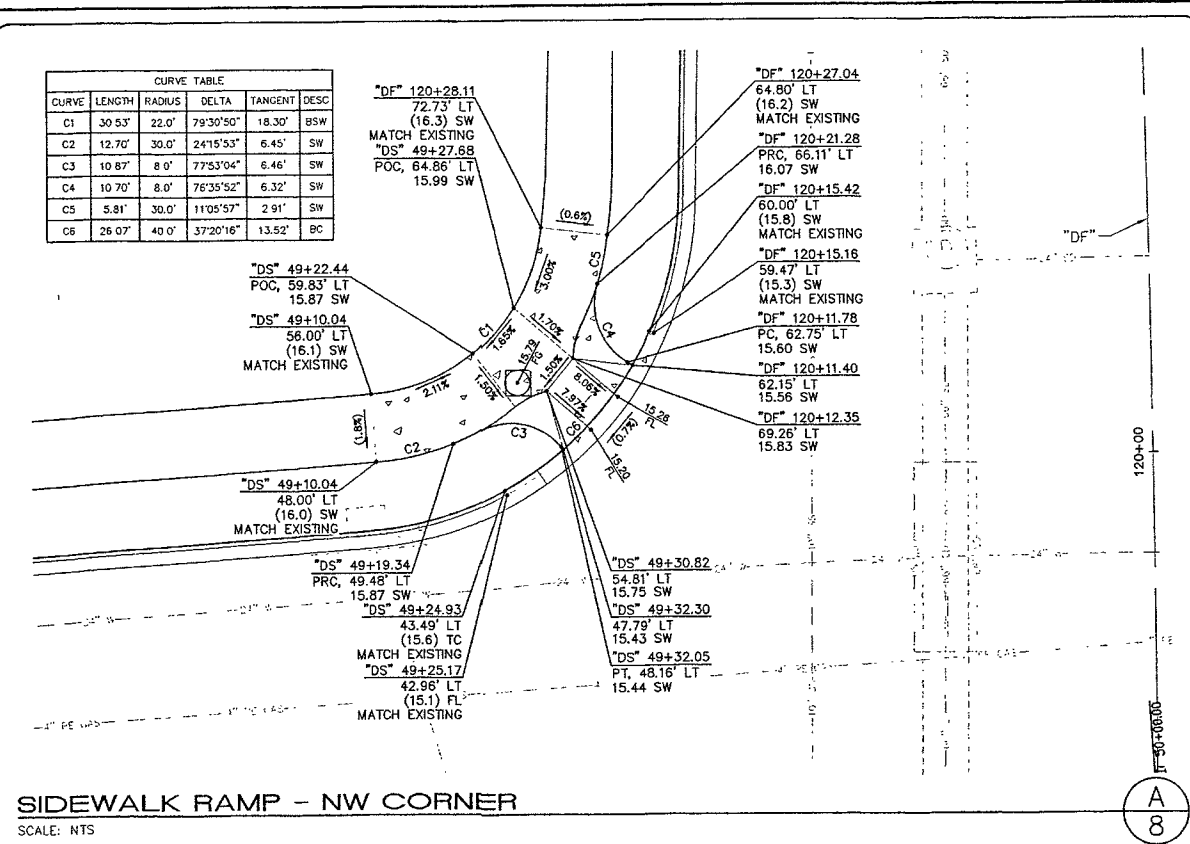
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
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THE HOWARD HUGHES COMPANY, LLC	TRAFFIC SIGNAL SYSTEM AT DESERT FOOTHILLS DRIVE/DESERT SUNRISE ROAD	CONSTRUCTION PLAN	1.
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DRAWING
7
7 OF 8 SHTS

5		88-1116-0000 ACB-140270 CS-127 31 SE
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As built LVE Bob Shively Robt Shly 11-2-17



CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	TANGENT	DESC
C7	3.09'	4.0'	44°11'40"	1.62'	BSW
CB	1.54'	2.0'	44°13'49"	0.81'	BSW
C9	23.51'	30.0'	44°53'34"	12.39'	BC

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	TANGENT	DES.
C1	30 53'	22.0'	79°30'50"	18.30'	BSW
C2	12.70'	30.0'	24°15'53"	6.45'	SW
C3	10 87'	8 0'	77°53'04"	6.46'	SW
C4	10 70'	8 0'	76°35'52"	6.32'	SW
C5	5.81'	30.0'	11°05'57"	2 91'	SW
C6	26 07'	40 0'	37°20'16"	13.52'	BC

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	TANGENT	DES
C10	38.80'	25.0'	91°12'20"	25.53'	BSW
C11	15.62'	33.0'	27°06'45"	7.96'	SW
C12	11.05'	8.0'	79°07'56"	6.61'	SW
C13	7.28'	8.1'	51°43'08"	3.91'	SW
C14	22.00'	40.0'	31°31'02"	11.29'	BC

THE HOWARD HUGHES COMPANY, LLC	TRAFFIC SIGNAL SYSTEM AT DESERT FOOTHILLS DRIVE/DESERT SUNRISE ROAD	DETAILED GRADING PLAN	PROJECT NO. 62023-706	DESIGN: ST	DRAWN: ST	CHECK: JRT	PLOT DATE: 02-09-17	PLOT TIME: 10:20:22	F:\Projects\GOW\62023-706\GOW\Production\URL_DS_C0.dwg Henry Schriekomp	1555 S. RAINBOW BLVD. LAS VEGAS, NV 89146 T: 702.804.2000 F: 702.804.2299 gowengineering.com	STATE OF NEVADA PROFESSIONAL ENGINEER J. R. SCHRIEKOMP EXPIRATION DATE: 12/31/2017	DATE:	2-9-17
												(REV)	DATE