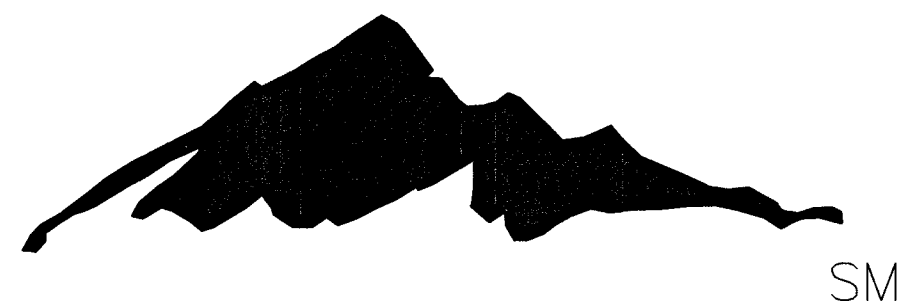


SUMMERLIN



TRAFFIC SIGNAL SYSTEM AT
DESERT FOOTHILLS DRIVE/ALTA DRIVE
2017

SID 808 PROJECT NO 37

DEVELOPER

HOWARD HUGHES COMPANY, LLC.
10801 W. CHARLESTON BLVD., 3RD FLOOR
LAS VEGAS, NEVADA 89135
OFFICE PHONE NO. (702) 791-4300
OFFICE FAX NO. (702) 791-4450

ENGINEER

GCV
ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcvengineering.com

CAUTION TO CONTRACTOR

THE CONTRACTOR SHALL BE RESPONSIBLE TO INVESTIGATE AND
VERIFY THE ACTUAL LOCATION AND DEPTH OF ALL EXISTING
UNDERGROUND FACILITIES AT LEAST 48 HOURS IN ADVANCE OF
THE PERFORMANCE OF ANY WORK.

HOWARD HUGHES COMPANY, LLC.

KEVIN ORROCK
VICE PRESIDENT

4-17-17
DATE

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

PROJECT NO. 125355 DATE: 5/1/17
SHEETS: 1, 3, 4

CLV PLANNING DEPARTMENT

THIS PLAN MEETS THE APPLICABLE STANDARDS OF THE PLANNING AND DEVELOPMENT
DEPARTMENT

NA
CHRIS KNIGHT, BUILDING AND SAFETY DIRECTOR

DATE

"APPROVAL OF THESE PLANS IS LIMITED TO THOSE IMPROVEMENTS CONSTRUCTED IN THE
DEDICATED RIGHTS-OF-WAY AND / OR DEDICATED EASEMENTS. THIS APPROVAL DOES NOT
AUTHORIZE THE CONSTRUCTION OF ANY IMPROVEMENTS THAT DEVIATE FROM ADOPTED
STANDARDS AND / OR SPECIFICATIONS, EXCEPT THOSE SPECIFICALLY LISTED UNDER
DEVIATIONS FROM STANDARD. THE ENGINEER SHALL RESOLVE ANY DEVIATION OTHER THAN
THOSE LISTED IN DEVIATIONS FROM STANDARDS IN FAVOR OF THE UNIFORM STANDARD
DRAWINGS AND SPECIFICATIONS CLARK COUNTY AREA NEVADA."

ALLEN PAVELKA, P.E., P.E. #9029
CITY ENGINEER
CITY OF LAS VEGAS, NEVADA

7-17-17
DATE

INDEX OF SHEETS

SHEET NO.	SHEET DESCRIPTION
1	COVER SHEET
2	LEGEND, ABBREVIATIONS, AND VICINITY MAP
3	GENERAL NOTES
4	TRAFFIC SIGNAL PLAN
5	TRAFFIC SIGNAL SCHEDULES AND DETAILS
6	SIGNING AND STRIPING PLAN
7	ITS IMPROVEMENTS

UTILITY/AGENCY APPROVALS

COX COMMUNICATIONS LAS VEGAS, INC. 4/25/17
DATE

CENTRAL TELEPHONE COMPANY, D/B/A CENTURYLINK 4-24-17
DATE

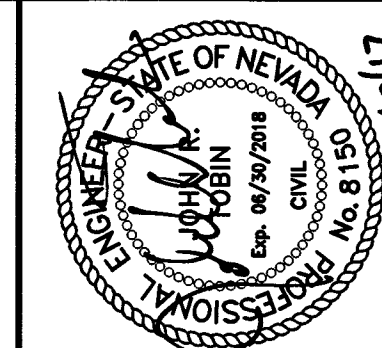
THE AFFIXED CENTURYLINK APPROVAL DOES NOT ASSUME OR GUARANTEE LIABILITY FOR KNOWN
OR UNKNOWN CONFLICTS WITH EXISTING OR PROPOSED IMPROVEMENTS. RESOLUTION OF ANY
CONFLICT WILL BE ACCOMPLISHED PURSUANT TO LOCAL ORDINANCES, NEVADA REVISED STATUTES
AND/OR PUBLIC UTILITY COMMISSION RULES AND REGULATIONS.

NV ENERGY - DISTRIBUTION 4-24-17
DATE

NV ENERGY ACKNOWLEDGES THAT WE HAVE RECEIVED YOUR PLANS AND WILL PROVIDE SERVICE
TO ALL ELECTRICAL NEEDS ASSOCIATED WITH THIS PROJECT. NV ENERGY RESERVES THE
RIGHT TO ADDRESS ANY EXISTING OR FUTURE CONFLICTS ONCE THE FINAL DESIGN IS
COMPLETED. THE NEW SERVICE AND THE RESOLUTION OF ANY CONFLICTS WILL BE
ACCOMPLISHED PURSUANT TO THE NEVADA PUBLIC UTILITY COMMISSION'S RULES AND
REGULATIONS.

NV ENERGY - TRANSMISSION ENGINEERING 4-24-17
DATE

SOUTHWEST GAS CORP. 5/15/17
DATE



REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP	DATE

PROJECT NO. 62023-707
DESIGN: JRT
DRAWN: TJD
CHECK: JRT
PLOT DATE: 04-10-17
PLOT TIME: 10:28:42

1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
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gcvengineering.com

GCV
ENGINEERS \ SURVEYORS
F:\Projects\600\62023-707\DWG\Production\01_DFA_COVER.dwg
Dillon Hines

THE HOWARD HUGHES COMPANY, LLC

TRAFFIC SIGNAL SYSTEM AT
DESERT FOOTHILLS DR/ALTA DR

COVER SHEET

DRAWING
L-69512 1
1 OF 7 SHTS

208 v 262

PROJ# 125355 QS137-34-NE

TEL 4-4"

10" SS

8" W

18" SD

ELE

OHP

4" PE GAS

CATV FO

EXISTING TELEPHONE CABLE

EXISTING SANITARY SEWER LINE

EXISTING WATER LINE

EXISTING STORM DRAIN LINE

EXISTING ELECTRICAL LINE

EXISTING OVERHEAD POWER LINE

EXISTING GAS LINE

EXISTING CABLE TELEVISION LINE

EXISTING CURB & GUTTER

EXISTING MANHOLE

EXISTING VALVE (GAS OR WATER)

EXISTING FIRE HYDRANT

EXISTING CONDUIT RUN NO.

PROPOSED CONDUIT

EXISTING CONDUIT

RIGHT-OF-WAY LINE

EASEMENT LINE

PROPERTY LINE

CENTERLINE

EXISTING STREETLIGHT (SUMMERLIN)

EXISTING POWER POLE

EXISTING SERVICE PEDESTAL

EXISTING NVE TRANSFORMER

LEGEND

EXISTING NO. 3 1/2 PULL BOX

EXISTING NO. 5 PULL BOX

EXISTING NO. 7 PULL BOX

EXISTING P30 PULL BOX

EXISTING TYPE 200 SPLICE VAULT

PROPOSED LED LUMINAIRE (400W HPS EQUIVALENT-SUMMERLIN)

PROPOSED NO. 3 1/2 PULL BOX

PROPOSED NO. 5 PULL BOX

PROPOSED NO. 7 PULL BOX

PROPOSED P30 PULL BOX

PROPOSED TYPE 200 SPLICE VAULT

PROPOSED CONTROLLER CABINET

PROPOSED SIGNAL POLE

PROPOSED TRAFFIC SIGN

PROPOSED STREET NAME SIGN (INTERNALLY ILLUMINATED)

PROPOSED OPTICOM DETECTOR

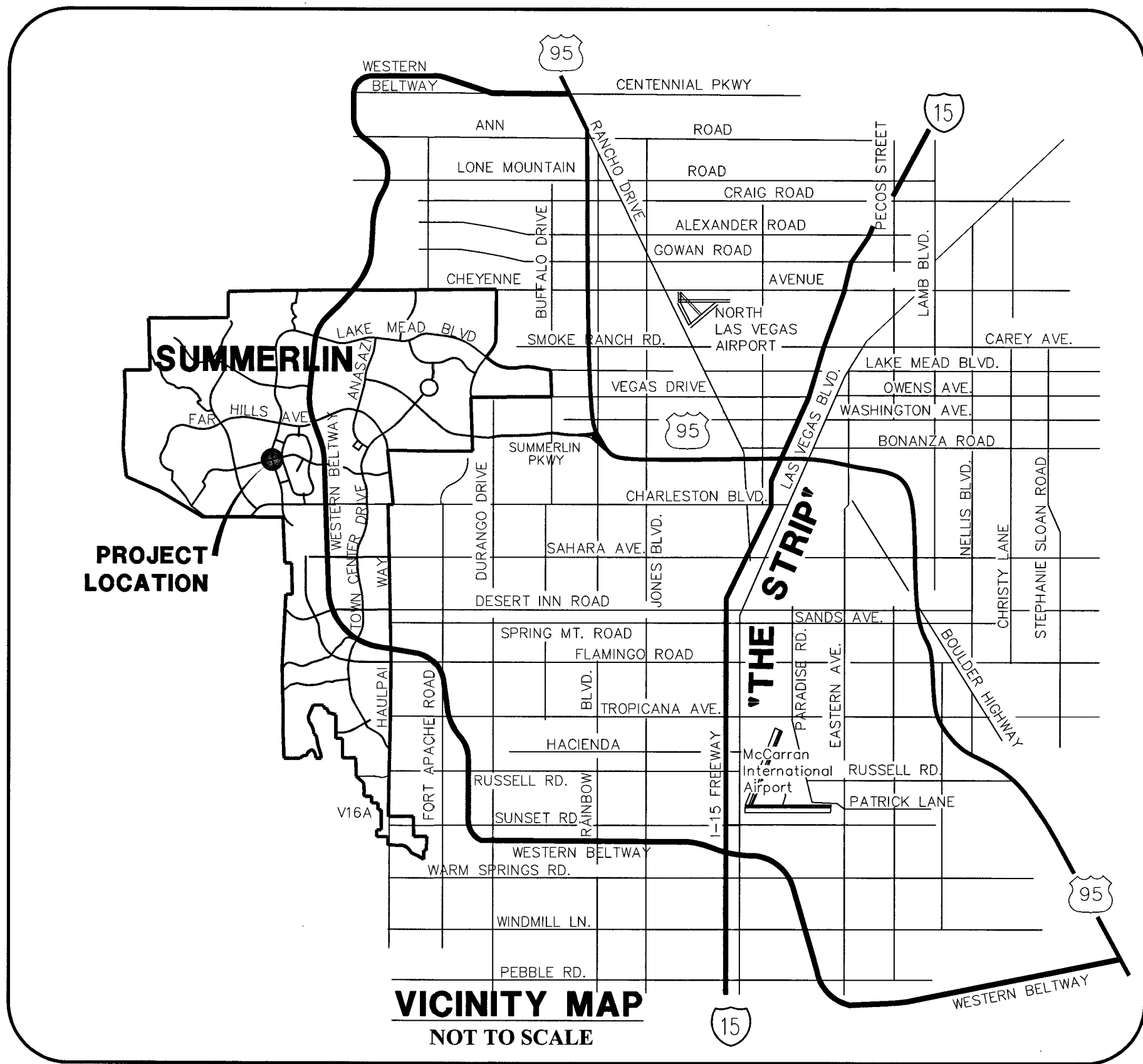
PROPOSED PEDESTRIAN SIGNAL HEAD

PROPOSED PEDESTRIAN PUSH BUTTON

PROPOSED CONDUIT RUN NO.

PROPOSED DETECTOR LOOP (SIZE AS SHOWN)

PROPOSED SIGNAL HEAD



ADV

AL

ASTM

CATV

CCPW

CCFCD

CG

DET

"DF"

DOC

DR

DS

DWG

E

ELEC

EOP

ESMT

EX/EXIST

FAST

FG

FT

G

LT

LUM.

MIN.

N

NO.

NVE

OHP

OP

P.B.

PE

PED.

PMF

PPM

QUAD.

RD

RPM

RT

R/W

S

SD

S.P.

SW

SIG.

ST

STLT

SS

STA

STD

S.V.

TEL

TYP.

UDACS

CONSTRUCTION STANDARDS

USDCCA

CLARK COUNTY AREA

W

W/

ADVANCED

ALTA DRIVE

AMERICAN SOCIETY FOR TESTING & MATERIALS

CABLE TELEVISION

CLARK COUNTY PUBLIC WORKS

CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT

CURB & GUTTER

DETECTION

DESERT FOOTHILLS DRIVE

DOCUMENT

DRIVE

DOUBLE STACKED

DRAWING

EAST

ELECTRIC

EDGE OF PAVEMENT

EASEMENT

EXISTING

FREEWAY & ARTERIAL SYSTEM OF TRANSPORTATION

FINISHED GRADE

FEET

GAS

LEFT

LUMINAIRE

MINIMUM

NORTH

NUMBER

NV ENERGY

OVERHEAD POWER

OPTICOM

PULLBOX

POLYETHYLENE

PEDESTRIAN

PAVEMENT MARKING FILM

POLYUREA PAVEMENT MARKINGS

QUADRANT

ROAD

RAISED PAVEMENT MARKINGS

RIGHT

RIGHT-OF-WAY

SOUTH

STORM DRAIN

SERVICE PEDESTAL

SIDEWALK

SIGNAL

STREET

STREETLIGHT

SANITARY SEWER

STANDARD

SPLICE VAULT

TELEPHONE

TYPICAL

UNIFORM DESIGN AND

UNIFORM STANDARD DRAWINGS

CLARK COUNTY AREA

WEST OR WATER

WITH

BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL POINT 'SLV09 34NE6', BEING A RIVET & PLATE IN TOP OF CURB AT NE CORNER OF DESERT FOOTHILLS & ALTA.

ELEVATION: 3304.45 (FEET)

1007.197 (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°45'05" EAST BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 35, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., AS SHOWN BY MAP ON FILE IN FILE 91, PAGE 28 OF PARCEL MAPS IN THE CLARK COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA.

STATE OF NEVADA

ENGINEER

JOHN R. JOBIN

CIVIL

Exp. 08/29/2015

No. 8190

DATE:

11/24/15

REV

DATE

DESCRIPTION

DATE

AGEN APP

DATE

GCW APP

PROJECT NO.

62023-707

DESIGN: JRT

DRAWN: TUD

CHECK: JRT

PLOT DATE: 05-26-17

PLOT TIME: 09:14:46

THE HOWARD HUGHES COMPANY, LLC

1555 S. RAINBOW BLVD.

LAS VEGAS, NV 89146

T: 702.804.2000

F: 702.804.2299

gceengineering.com

TRAFFIC SIGNAL SYSTEM AT

DESERT FOOTHILLS DR/ALTA DR

LEGEND, ABBREVIATIONS, AND VICINITY MAP

DRAWING

2

2 OF 7 SHTS

CITY OF LAS VEGAS TRAFFIC SIGNAL NOTES

- ALL WORK PERFORMED ON ANY TRAFFIC SIGNAL COMPONENT MUST BE UNDER THE DIRECT ON-SITE SUPERVISION OF AN MSA CERTIFIED TECHNICIAN. THE LEVEL OF CERTIFICATION REQUIRED SHALL BE LEVEL II.
- 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.
CALL-BEFORE-YOU-OVERHEAD 1-702-227-2929
CALL-BEFORE-YOU-DIG 1-800-227-2600
STREETLIGHTS 1-702-227-2600
F.A.S.T. 1-702-432-5300
- ALL TRAFFIC SIGNAL INSTALLATIONS SHALL CONFORM TO THE UNIFORM STANDARD DRAWINGS SPECIFICATIONS AND SPECIAL PROVISIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, VOLUMES 1 AND 4, AS ADOPTED BY THE REGIONAL TRANSPORTATION COMMISSION APRIL 8, 1992 WITH ALL SUBSEQUENT REVISIONS.
- SERVICE SHALL HAVE 1-60 AMP SINGLE POLE BREAKER FOR SIGNAL AND ONE 40 AMP SINGLE POLE BREAKERS FOR STREET LIGHTS. SERVICE SHALL BE 200 AMP PADMOUNT.
- LINE SIZE OF METER TO BE WIRED WITH THREE #3/0 AWG THW. LOAD SIZE SHALL BE WIRED WITH FOUR #4 AWG THW (2 BLACK, 2 WHITE) AND ONE #6 AWG THW (GREEN).
- LUMINAIRES ON ALL SIGNAL POLES SHALL BE 400 WATT HIGH PRESSURE SODIUM CUTOFF (G.E. MACOBA) WITH MC-111 DISTRIBUTION UNLESS OTHERWISE NOTED ON THE PLANS. EACH LUMINAIRE SHALL HAVE AN INDIVIDUAL 1000 WATT P.E. CONTROL. FOR LUMINAIRES THERE SHALL BE 2(W)-#4 AWG THW CONDUCTORS FROM THE SERVICE TO THE CABINET. IN THE CABINET, THE #4 AWG THW CONDUCTORS SHALL BRANCH OFF INTO #10 AWG THW CONDUCTORS INDIVIDUALLY FUSED WITH 10 AMP FUSES. THERE SHALL BE NO SPICES BETWEEN THE CABINET AND LUMINAIRE FIXTURES.
- THE INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL BE WIRED TO THE LUMINAIRES PHOTO CELL FOR CONTROL. WITH #10 AWG THW COPPER STRANDED WIRE SHALL BE WIRED FROM THE PHOTO CELL TO THE LUMINAIRE DIRECTLY ABOVE IT. IN THE EVENT THERE IS NO LUMINAIRE ON THE TRAFFIC SIGNAL POLE, THE 1000 WATT P.E. CONTROL SHALL BE MOUNTED ON THE POLE CAP. ALL NEW ILLUMINATED STREET NAME SIGNS SHALL HAVE LIGHT EMITTING DIODE (LED) LAMPS PER SECTION 623.02.04 OF THE SPECIAL PROVISIONS.
- CHECK CONDUIT AND CABLE SCHEDULE FOR CONDUIT, CABLE, AND WIRE SIZE. VERIFY ALL EXISTING CONDUIT RUNS.
- ALL PULLBOXES SHALL BE IN ACCORDANCE WITH UNIFORM STANDARD DRAWINGS NO. 705, NO. 706, AND NO. 707.
- TRAFFIC SIGNAL CABLE SHALL BE 15 OR 25 CONDUCTOR #14 AWG SOLID (TYPICAL) CABLE AND SHALL CONFORM TO MSA SPEC. NO. 20-1.
- PEDESTRIAN PUSH BUTTONS SHALL BE AUDIBLE TACTILE "POLARA NAVIGATOR" TYPE (2 WIRE SYSTEM) OR CAMPBELL COMPANY ADVANCED ACCESSIBLE PEDESTRIAN SYSTEM BUTTONS WITH AAPS APC (CONTROLLER) IN ACCORDANCE WITH CITY OF LAS VEGAS SPECIAL PROVISIONS AND SECTION 623.02.04 OF THE SPECIAL PROVISIONS. 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 WILL BE IN CONJUNCTION WITH THIS PROJECT COMPLETION. COORDINATE ALL REQUIREMENTS NOT CONFORM TO CITY STANDARDS AT THE CITY OF LAS VEGAS TRAFFIC ENGINEERING DEPARTMENT (TEFO) AT (702) 229-6331.
- THE ROUTING AND TERMINATION OF CONDUITS AND THE PLACING OF POLES AND CABINETS SHALL BE AS INDICATED ON THE PLANS. ALL CHANGES SHALL BE APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL SUPPLY A MALFUNCTION MANAGEMENT UNIT (MMU) AND TRAFFIC SIGNAL CONTROLLER TO THE CITY OF LAS VEGAS TRAFFIC SIGNALS. THE CONTRACTOR SHALL DELIVER 30 DAYS PRIOR TO SIGNAL TURN-ON OR PRIOR TO CONVERTING TO A NEW PHASING SCHEME, FOR TESTING AND PROGRAMMING PURPOSES. THE CONTROLLER SHALL BE MANUFACTURED BY THE CITY OF LAS VEGAS TRAFFIC SIGNALS. THE CONTROLLER WITH LICENSED APOGEE CONTROLLER SOFTWARE, LATEST VERSION, AND THE MMU SHALL BE A MODEL MMU-BRIDGE AS MANUFACTURED BY RENO ARE OR MODEL MMU2-16LES, AS MANUFACTURED BY EMBLE DESIGN, INC. OR APPROVED EQUAL. THE CONTRACTOR SHALL DELIVER THE CONTROLLER AND MMU TO, AND PROGRAM THE CONTROLLER AT 2824 E. CHARLESTON BOULEVARD. CONTRACTOR SHALL NOTIFY THE TRAFFIC SIGNAL REPAIR SHOP (229-6077) SEVEN (7) DAYS PRIOR TO THE PROJECT START DATE. THE CONTRACTOR SHALL PROVIDE A DIFFERENT MODEL OF CONTROLLER OR MMU FOR INITIAL TURN-ON, IN WHICH CASE CITY PERSONNEL WILL SWAP THE CONTROLLER OR MMU AFTER THE PROJECT IS ACCEPTED.
- CONTRACTOR SHALL POTHOLE SIGNAL POLE LOCATIONS PRIOR TO ORDERING OF POLES.
- ALL MAST ARMS TO BE HOT-DIP GALVANIZED BY THE MANUFACTURER. THE MAST ARM IS TO BE FABRICATED WITH END TIE-IN ONLY. THE END TIE-IN SHALL BE FACTORY INSTALLED AND THE REMAINING TIE-INS SHALL BE FABRICATED IN THE FIELD AT THE LOCATION SHOWN ON THE PLANS OR AS DIRECTED BY THE TRAFFIC ENGINEER AND/OR HIS AUTHORIZED REPRESENTATIVE. FOR TIE-IN FABRICATION DETAILS SEE CLARK COUNTY AREA U.S.D. NO. 808 SHEET 2. ALL WELDING SHALL BE TO AWS D-1.1, "SPECIFICATION FOR WELDED HIGHWAYS AND RAILWAY BRIDGES," AND TO ANY ADDITIONAL REQUIREMENTS OF SECTION 623 OF THE SPECIFICATIONS. ALL EXPOSED WELDS SHALL BE PAINTED AS PROVIDED FOR REPAIRING DAMAGED GALVANIZED SURFACES.
- ALL VEHICLE AND PEDESTRIAN SIGNAL INDICATIONS SHALL HAVE LIGHT EMITTING DIODE (LED) TYPE INDICATORS. IN CONFORMANCE TO CITY OF LAS VEGAS SPECIAL PROVISIONS AND TO SECTION 623 OF THE COA U.S.D. "All pedestrian signal faces shall provide 'Walking Person', 'Hand', and 'Countdown' messages as provided by Durland model #208-000-000, or #209-000-000, or approved equal, the COUNTDOWN MESSAGE SHALL NOT FLASH. WHERE EXISTING SIGNALS ARE MODIFIED, THE CONTRACTOR SHALL VERIFY THAT LED PEDESTRIAN SIGNALS CONFORM TO AWS D-1.1, "SPECIFICATION FOR WELDED HIGHWAYS AND RAILWAY BRIDGES," AND TO ANY ADDITIONAL REQUIREMENTS OF SECTION 623 OF THE SPECIFICATIONS. ALL EXPOSED WELDS SHALL BE PAINTED AS PROVIDED FOR REPAIRING DAMAGED GALVANIZED SURFACES.
- VIDEO DETECTION SYSTEMS WILL BE EITHER ITERS EDGE 2 WITH EDGECONNECT PAK, (IP addressable), PEK Videotek 10 (with Ethernet ports), OR TRAFICON VP WITH VEWCOM (IP ADDRESSABLE). WHEN VIDEO DETECTION IS SPECIFIED ON THE TRAFFIC SIGNAL PLANS, ALL VIDEO DETECTION SYSTEMS WILL BE STAND ALONE SYSTEMS TO INCLUDE ALL NECESSARY EQUIPMENT TO PROGRAM THE VIDEO DETECTION SYSTEM. A PROGRAMMING "MOUSE", KEYBOARD OR LAPTOP COMPUTER (IF REQUIRED FOR PROGRAMMING THE VIDEO DETECTION SYSTEM) AND APPROPRIATE SOFTWARE WILL BE SUPPLIED WITH EACH VIDEO SYSTEM. PERSONAL COMPUTERS (PCs) MAY NOT BE SUBSTITUTED FOR LAPTOPS. A VIDEO MONITOR (COLOR FLAT SCREEN) 9" TO 13" WILL BE SUPPLIED WITH EACH VIDEO DETECTION SYSTEM. EACH VIDEO CAMERA WILL HAVE POWER AND VIDEO CABLE DIRECTLY FROM THE CABINET. COAXIAL CABLE WILL BE TYPE 801 (SOLID CENTER CONDUCTOR). CAMERAS THAT USE A PREFABRICATED CABLE INTEGRATING POWER AND COAXIAL CABLE INTO A SINGLE WEATHERPROOF CONNECTOR ARE ACCEPTABLE. "BNC" ARE THE ONLY ACCEPTABLE TERMINATION OF COAXIAL CABLES. CAMERAS WILL BE MOUNTED PER MANUFACTURER'S RECOMMENDATIONS AND PER CLV TRAFFIC ENGINEER APPROVAL. VIDEO CAMERAS SHALL BE COLOR AND SHALL BE MOUNTED ON A MINIMUM 6 FOOT RISER ON THE SIGNAL MAST ARM WITH EXTERIOR BRACKETS (TYPE AB-0166-5-32 OR EQUIVALENT). THE LOCATION OF THE CAMERA ON THE MAST ARM SHALL BE APPROVED BY THE TRAFFIC SIGNAL SUPERVISOR. A VIDEO FILTER (CROSS-BAND OR EQUIVALENT) WILL BE INSTALLED IN THE SIGNAL CABINET FOR EACH CAMERA VIDEO INPUT. VIDEO DETECTION PROCESSORS AND COMMUNICATION CARDS SHALL BE PROVIDED WITH THE LATEST VERSIONS OF THE MANUFACTURER'S SOFTWARE. THE CONTRACTOR SHALL AM CAMERAS AND PROGRAM AND CONFIGURE THE VIDEO DETECTION PROCESSORS TO PROVIDE A FULLY FUNCTIONING SYSTEM.
- WHERE NEW LOOPS WILL BE OVERLAP WITH NEW PAVEMENT, LOOP DETECTORS SHALL BE PREFORMED LOOPS AS MANUFACTURED BY RENO A & E OR NEVER-FAIL LOOP SYSTEMS AND ALL LOOPS SHALL BE INSTALLED IN THE ROADWAY PRIOR TO PLACEMENT OF THE FINAL PAVEMENT LIFT. WHERE NEW LOOPS ARE INSTALLED THAT ARE NOT OVERLAP WITH NEW PAVEMENT, LOOPS SHALL BE CABLE-IN-DUCT PER SECTION 623.02.04.06 OF THE CITY OF LAS VEGAS SPECIAL PROVISIONS. LOOP LEAD-IN CABLE SHALL BE 6-PAIR 18 AWG MULTIPLE CONDUCTOR CABLE AS SPECIFIED IN SECTION 623.02.04.04 OF THE CLV SPECIAL PROVISIONS. ALL WIRING HARNESSES, RACK POSITIONS, AND LOOP LEAD-IN CABLE SHALL BE CLEARLY MARKED AS TO THE APPROPRIATE PHASE AND LETTER DESIGNATION TO WHICH IT BELONGS AS SHOWN ON THE TRAFFIC SIGNAL PLANS. LOOPS SHALL BE LOCATED AS SHOWN ON THE TRAFFIC SIGNAL PLANS AND APPROVED BY THE CLV TRAFFIC ENGINEERING DIVISION PRIOR TO INSTALLATION. REFER TO SECTION 623.02.04 OF THE CLV SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.
- OPTICAL PREEMPTION UNITS WILL BE GLOBAL TRAFFIC TECHNOLOGIES (ENCODING CAPABLE), MODEL 764 OPTICOM PHASE SELECTOR INSTALLED IN A MODEL 760 RACK WITH A MODEL 768 AUXILIARY INTERFACE PANEL. CAPT MOUNTED IN THE CABINET FOR AND FULLY WIRING FOR GREEN SIGNAL PREEMPTION. GREEN SIGNALS WILL BE MODEL 721 WITH ONE DETECTOR PER DIRECTION, UNLESS SHOWN OTHERWISE IN THE PLANS, AND WILL BE INTERFERED TO THE TRAFFIC SIGNAL CABINET WITH THE PHASE SELECTOR. THE PHASE SELECTOR OR DETECTOR SHALL BE WIRED TO INPUT PREEMPTS ON CHANNEL 1 IN THE PHASE SELECTOR, EASTBOUND ON CHANNEL 2, NORTHBOUND ON CHANNEL 3, AND WESTBOUND ON CHANNEL 4, UNLESS VARIATIONS ARE APPROVED BY THE TRAFFIC SIGNAL SUPERVISOR. WHEN 764 PHASE SELECTORS ARE ADDED TO A CABINET WITHOUT A 768 AIP, THE CONTRACTOR SHALL INSTALL AND WIRE A NEW 768 AIP.
- IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY CONSTRUCTION, TEMPORARY REMOVAL, OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED AT THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE CITY.
- INTERCONNECT CABLE SHALL BE AS SHOWN IN THE WIRE SCHEDULE.
- THE CONTRACTOR SHALL INSTALL CROSSWALKS, STOP BARS, STRIPING AND SIGNS AS IDENTIFIED ON THE PLANS.
- WHERE THE PLANS CALL FOR REMOVAL AND SALVAGE OF EXISTING TRAFFIC SIGNAL EQUIPMENT, THE CONTRACTOR SHALL CONTACT KAR KELLY, THE TRAFFIC SIGNAL SUPERVISOR, AT 702-228-4086 TO ARRANGE FOR DELIVERY TIMES AND LOCATIONS.
- THE CONTRACTOR SHALL MAINTAIN EXISTING SIGNALS THROUGH THE LIFE OF THE PROJECT PER SECTION 623.03.01 OF THE CLV SPECIAL PROVISIONS.

REVISED 10/28/15

CITY OF LAS VEGAS STREETLIGHT NOTES

- 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.
- NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUITS (ETC.) LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF THE TRAFFIC ENGINEER AND THE CITY ENGINEER.
- ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
- ALL STREET LIGHTING CONDUITS STUD SHALL HAVE AT LEAST ONE GREEN #8 THW WIRE AND SPALLED, AS TRACER WIRE. "EMPTY" CONDUIT IS COMPLETELY INSTALLED FROM PB TO PB, IT SHALL HAVE MINIMUM OF 2 #4 AND 1 #8 THW WIRE WITH THE ENDS TAPED OR "SAFE OFF" PRIOR TO FINAL INSPECTION.
- ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL LEAVE A MINIMUM CLEARANCE IN ACCORDANCE WITH THE USD NO. 320A.
- AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE TETO PRIOR TO ANY PRE-FINAL INSPECTION. THE AS-BUILT DRAWING NEEDS TO BE STAMPED AS-BUILT AND SIGNED BY THE PREPARER.
- 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 PLANS.
- 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.
- 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.
- THE CONTRACTOR SHALL FURNISH COMPLETE SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON PLANS.
- 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 WILL BE IN CONJUNCTION WITH THIS PROJECT COMPLETION. COORDINATE ALL REQUIREMENTS NOT CONFORM TO CITY STANDARDS AT THE CITY OF LAS VEGAS TRAFFIC ENGINEERING DEPARTMENT (TEFO) AT (702) 229-6331.

REVISED 04/15/10

CITY OF LAS VEGAS SEWER NOTES

- 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.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS, NOTIFICATIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CITY ENGINEER.
- CHISEL "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
- POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II AGGREGATE BASE.
- 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 CITY OF LAS VEGAS TRAFFIC ENGINEERING DEPARTMENT (TEFO) AT (702) 229-6331.
- 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.
- WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LVWD STANDARDS WHENEVER A SEWER MAIN CROSSES OVER A WATER MAIN OR THE SEWER IS LESS THAN EIGHTEEN INCH (18") UNDER A WATER MAIN.
- ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CITY OF LAS VEGAS MUST BE STATE OF NEVADA LICENSED CONTRACTORS.
- 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.
- 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 GRADING NOTES

- IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER SHALL BE RESPONSIBLE FOR NOTICED FOR DISCREPANCY.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY GRADING 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.
- 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 PERMIT.
- 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 0.1% HORIZONTAL 0.1% VERTICAL 0.1% COMPACTION
B. ENGINEERED FILL 0.5% HORIZONTAL 0.5% VERTICAL 0.5% COMPACTION
COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE. COMPACTION SHALL COMPLY WITH THE REQUIREMENTS OF THE ENGINEER.
- ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
- 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.
- THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION, ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT.
- ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
- IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, SUCH ITEM SHALL BE PROVIDED, AS DIRECTED BY THE CITY ENGINEER, AT NO EXPENSE TO THE CITY OF LAS VEGAS. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

REVISED 4/15/10

CITY OF LAS VEGAS 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 OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST REVISED EDITION, THE "SUMMERLIN IMPROVEMENT STANDARDS" FOR WORK IN THE SUMMERLIN AREA; AND OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY; THE UNIFORM BUILDING CODE; AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE, EXCEPT AS NOTED ON THIS SHEET AS "DEVIATIONS FROM STANDARDS".
- THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES AS SHOWN FROM CLV PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCE/S WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
- 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.
- 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 DESIGNS TO BE APPROVED BY THE CITY, PRIOR TO THE USE ON THE PROJECT.
- 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.
- AC PAVEMENT TO BE ONE-AND-A-HALF INCH (1 1/2") ABOVE LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS AND CROSS GUTTERS.
- CURB AND GUTTER FOUND 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 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 THE TRANSITIONS TO BE AS SHOWN ON PLANS.
- ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE (COMPANY) REPORT #, 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 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 ADJUSTED TO AVAILABLE RECORDS IN ACCORDANCE WITH N.R.S. STATUTE NO. 625.380 & 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, 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.
- MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NDOT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.
- WHEN INSTALLING UNDERGROUND FACILITIES THAT REQUIRE UNDERGROUND LOCATING SUCH AS SINKER BALLS, LOCATING RIBBON, ETC. THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO THE 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.
- SANITARY SEWER AND STORM DRAIN FACILITY LOCATION MAP(S) SHALL BE PROVIDED TO THE CITY 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. A SEPARATE ELECTRONIC COMMA DELIMITED FILE FOR THE SANITARY SEWER AND STORM DRAIN COORDINATES SHALL ALSO ACCOMPANY THE SANITARY SEWER AND STORM DRAIN FACILITY LOCATION MAP(S).
OR
SANITARY SEWER AND STORM DRAIN FACILITIES SHOWN ON THESE PLANS SHALL BE USED TO MEET THE REQUIREMENTS ON NRS 455 AND SHALL SHOW AT A MINIMUM THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES, 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. ANY DEVIATIONS FROM THE INFORMATION SHOWN SHALL BE NOTED AND SUBMITTED AS A REVISION TO THE PLANS AND APPROVED PRIOR TO ACCEPTANCE OF FACILITY VIDEO INSPECTION.
- 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.
- A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.

REVISED 02/03/15

FLOOD HAZARD NOTE

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.

LAS VEGAS VALLEY WATER DISTRICT (LVWD) STANDARD NOTES

LVWD PROJECT # 125355
(Revised 01/09/2017)

- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVWD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVWD COMMUNICATION SUPPORT CENTER (258-7171) 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 LVWD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.
- ALL WORK SHALL CONFORM TO LVWD 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.
- 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.
- A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVWD.
- SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVWD APPROVED SERVICE SADDLES.
- ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
- ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
- ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE 2010 EDITION OF THE UDACS
- ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED, AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVWD DISTRIBUTION SYSTEM.
- THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVWD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3802, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
- ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.14.01, AND APPROVED BY THE LVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
- ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE LISTED ON THE LVWD PRE-APPROVED MATERIALS AND MANUFACTURER'S LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.
- TELEPHONE "CALL BEFORE YOU DIG" AT 811 OR 1-800-227-2800.
- THE INSTALLATION OF LAS VEGAS VALLEY WATER DISTRICT (LVWD) MUNICIPAL WATER FACILITIES WITHIN ALL STREETS IS ASSUMED TO BE IN COMPLIANCE WITH THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, ANY REPAIR WORK DONE BY THE LVWD 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 OWNERS 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 LVWD DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVWD WITH AN APPROPRIATELY SIZED PLAIN FINISH CONCRETE PATCH. THE LVWD WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE REPAIR OR OPERATION OF ANY DECORATIVE PAVING SURFACE ADJACENT THE STREET. THE LVWD WILL NOT ATTEMPT TO MATCH COLOR OR FINISH OF ANY ADJACENT MATERIALS.
- NO LEAD COMPLIANCE NOTE:
TO COMPLY WITH THE FEDERAL SAFE DRINKING WATER ACT, ALL WATER WORKS BRASS PRODUCTS PROPOSED TO BE RELOCATED, OR INSTALLED AS NEW MUST BE INSTALLED WITH THE LEAD FREE APPROVED PRODUCT. THE OLD LEADED PRODUCT MAY NOT BE REUSED.

APPROVED FOR CONSTRUCTION

Signature
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

PROJECT NO. 125355 DATE: 5/1/17

STORMWATER RUNOFF MANAGEMENT

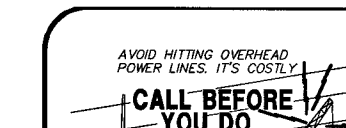
- THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY BE DISCHARGED TO, OR ACCUMULATE IN, THE PUBLIC RIGHTS OF WAYS OF THE CITY OF LAS VEGAS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
- ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN THE CITY OF LAS VEGAS AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BEST MANAGEMENT PRACTICES MANUAL.
- 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 SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY. REFER TO NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.5.
- AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED 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. THE CONTRACTOR OR HIS AGENT SHALL UPDATE, REPAIR, OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.12.
- ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER THE STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.



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Under Ground.
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SYSTEM OF TRANSPORTATION



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



1-702-227-2929

PROJECT NO. 62023-707
DESIGN: JRT
DRAWN: TJD
CHECK: JRT
PLOT DATE: 05-26-17
PLOT TIME: 09:14:30

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

ENGINEERS \ SURVEYORS

THE HOWARD HUGHES COMPANY, LLC
TRAFFIC SIGNAL SYSTEM AT
DESERT FOOTHILLS DR/ALTA DR

GENERAL NOTES

DRAWING
L-64512
3 OF 7 SHTS

PROJ. #125355 QS 137-34-NE

PROTECT IN PLACE AND ADJUST LVVWD EXISTING
FACILITIES TO FINISHED GRADE. ALL LVVWD FACILITIES
SHALL BE ACCESSIBLE AT ALL TIMES. ESN 078 1/05/1

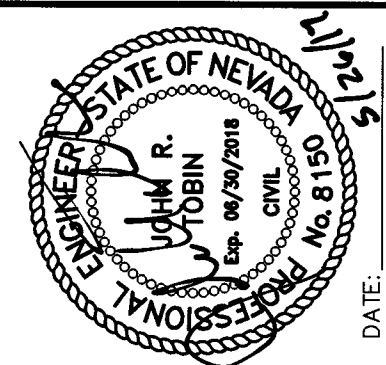
1 INSTALL PULLBOX (SIZE AS SHOWN)

2. INSTALL CCTV CAMERA SYSTEM WITH 10-FT EXTENSION POLE PER USDOCA STD. DWG. NO. 766 AND PROVIDE A VIDEO ENCODER TO RTC/FAST. INSTALL CCTV CABLE COHU MODEL CA295H OR APPROVED EQUIVALENT FROM CCTV CAMERA TO CONTROLLER CABINET (INCLUDES POWER)

CONTRACTOR SHALL COORDINATE WITH THHC ON ANY
MODIFICATIONS TO IRRIGATION OR LANDSCAPING.

TRAFFIC SIGNAL NOTES

1. CONDUIT ROUTING IS SCHEMATIC FOR PLAN CLARITY AND MAY DIFFER FROM ACTUAL INSTALLATION.
2. INTERSECTION LED LUMINAIRES SHALL BE LSI MODEL NO. XGBM FT LED SS CW UE BRZ OR APPROVED EQUAL.
3. ALL NEW AND EXISTING POLES, MAST ARMS AND LUMINAIRE ARMS TO BE FINISHED WITH AMERLOCK 400/AMERSHIELD SYSTEM NO. 5440 "LUMINOUS/BEIGE BROWN" OR APPROVED EQUIVALENT. ALL EXPOSED WELDS SHALL BE PAINTED TO POLE COLOR AND FINISH.
4. DETECTOR LOOPS SHALL BE INSTALLED PER CLV STANDARDS (5/14/2014) AND SPECIAL PROVISIONS.
5. BIKE DETECTOR AMPLIFIERS SHALL BE RACK MOUNTED RENO A&E MODEL C-1100-B (AS APPLICABLE) OR APPROVED EQUAL.
6. BIKE LANE LOOPS SHALL BE 2" IN LENGTH IN THE TRAVEL, INCORPORATE 45° SKEW, AND EXTEND 2' BEYOND BIKE LANE WHERE PBS EXISTS, OR BE ADJACENT TO LIP OF GUTTER.
7. SEE DRAWING 7 FOR ITS IMPROVEMENTS.

[illegible]

PROJECT NO.
62023-707

1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146

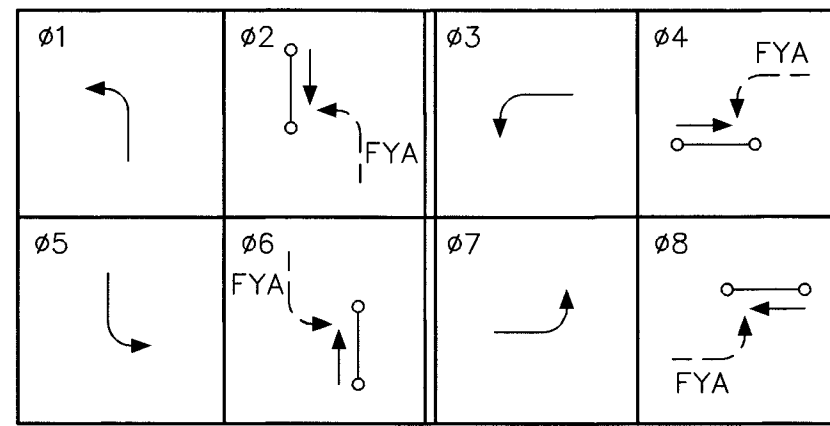
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THE HOWARD HUGHES COMPANY, LLC

TRAFFIC SIGNAL SYSTEM AT
DESERT FOOTHILLS DR/ALTA DR

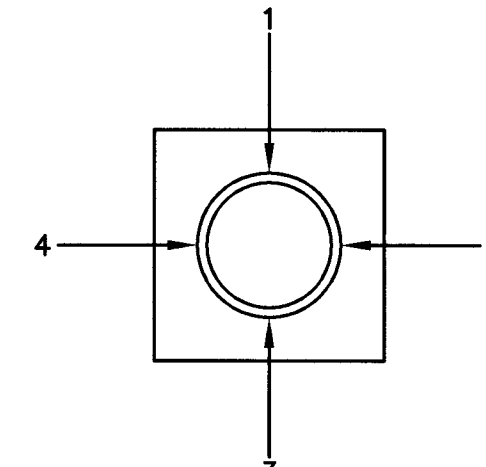
TRAFFIC SIGNAL PLAN

PROJ #125355 QS 137-34-NE



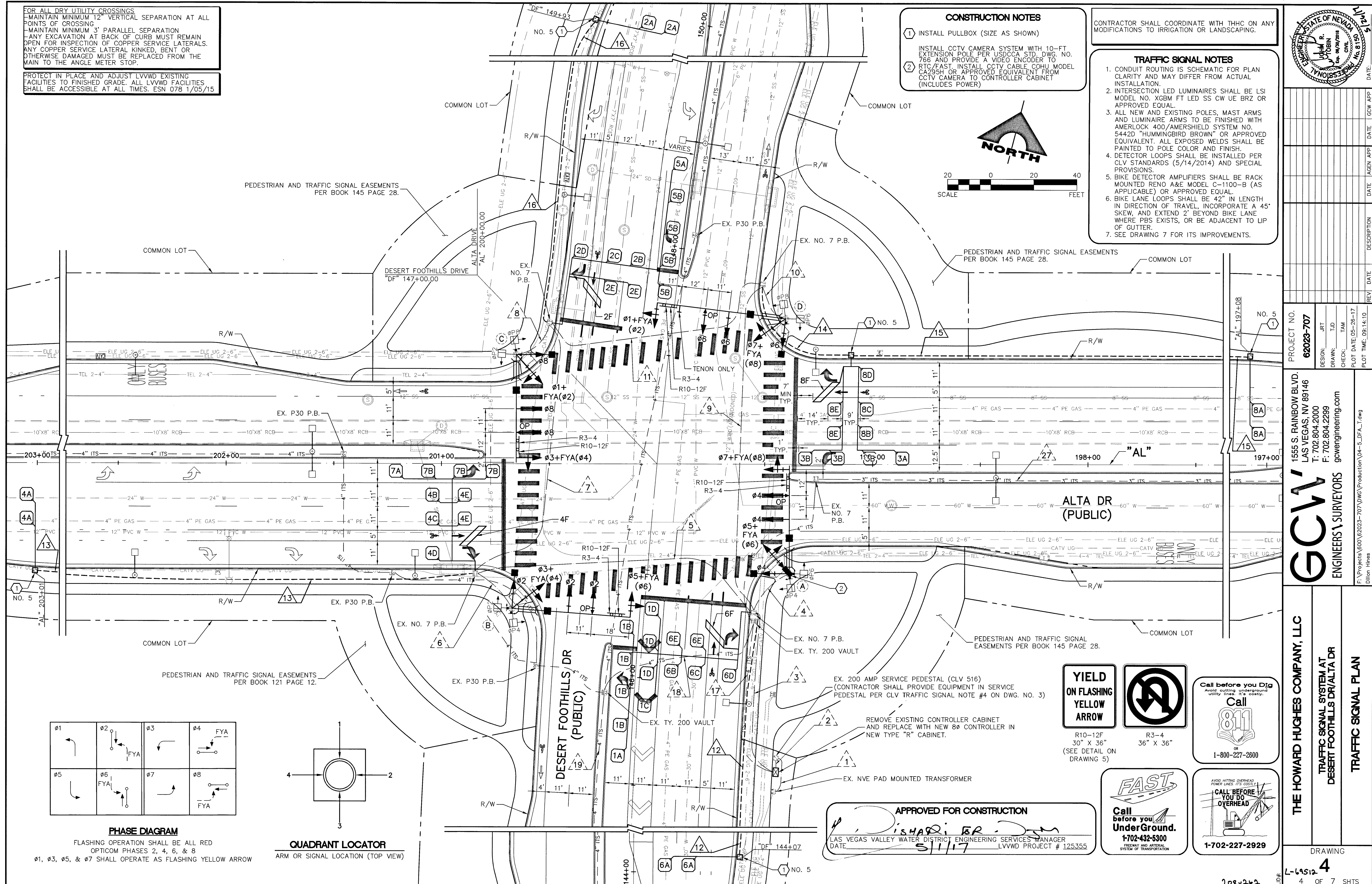
PHASE DIAGRAM

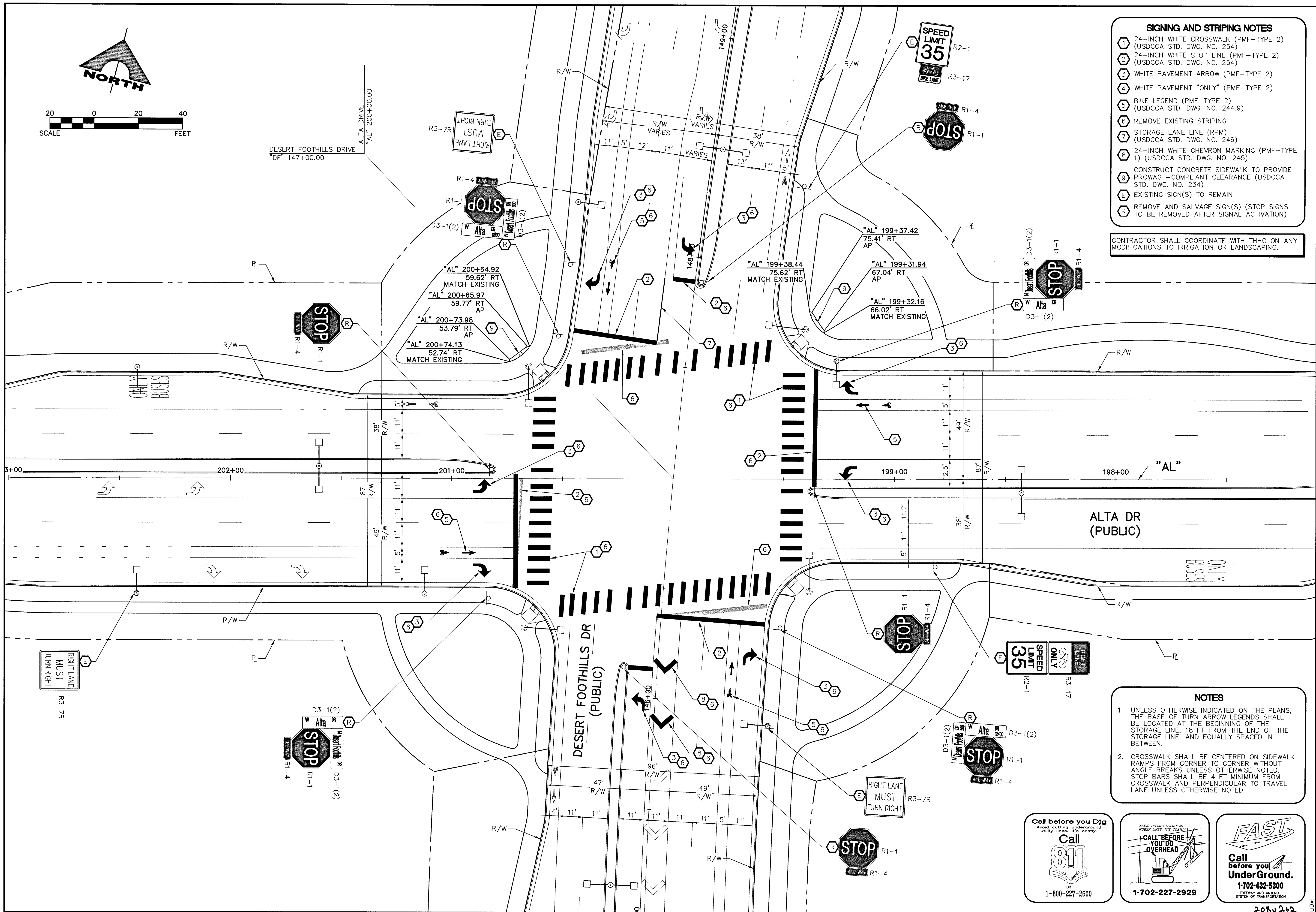
FLASHING OPERATION SHALL BE ALL RED
OPTICOM PHASES 2, 4, 6, & 8
Ø1, Ø3, Ø5, & Ø7 SHALL OPERATE AS FLASHING YELLOW ARROW



QUADRANT I LOCATOR

ARM OR SIGNAL LOCATION (TOP VIEW)





- 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 REMOVE EXISTING STRIPING
 - 7 STORAGE LANE LINE (RPM) (USDCCA STD. DWG. NO. 246)
 - 8 24-INCH WHITE CHEVRON MARKING (PMF-TYPE 1) (USDCCA STD. DWG. NO. 245)
 - 9 CONSTRUCT CONCRETE SIDEWALK TO PROVIDE PROWAG -COMPLIANT CLEARANCE (USDCCA STD. DWG. NO. 234)
 - E EXISTING SIGN(S) TO REMAIN
 - R REMOVE AND SALVAGE SIGN(S) (STOP SIGNS TO BE REMOVED AFTER SIGNAL ACTIVATION)
- CONTRACTOR SHALL COORDINATE WITH THHC ON ANY MODIFICATIONS TO IRRIGATION OR LANDSCAPING.

- NOTES**
1. UNLESS OTHERWISE INDICATED ON THE PLANS, THE BASE OF TURN ARROW LEGENDS SHALL BE LOCATED AT THE BEGINNING OF THE STORAGE LINE, 18 FT FROM THE END OF THE STORAGE LINE, AND EQUALLY SPACED IN BETWEEN.
 2. CROSSWALK SHALL BE CENTERED ON SIDEWALK RAMP FROM CORNER TO CORNER WITHOUT ANGLE BREAKS UNLESS OTHERWISE NOTED. STOP BARS SHALL BE 4 FT MINIMUM FROM CROSSWALK AND PERPENDICULAR TO TRAVEL LANE UNLESS OTHERWISE NOTED.



PROJECT NO. **62023-707**

DESIGN: JRT
DRAWN: TJD
CHECK: TAM
PLOT DATE: 05-28-17
PLOT TIME: 09:12:31

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GCV
ENGINEERS & SURVEYORS

THE HOWARD HUGHES COMPANY, LLC

TRAFFIC SIGNAL SYSTEM AT
DESERT FOOTHILLS DR/ALTA DR

SIGNING AND STRIPING PLAN

DRAWING
6
6 OF 7 SHTS

FIBER OPTIC NOTES

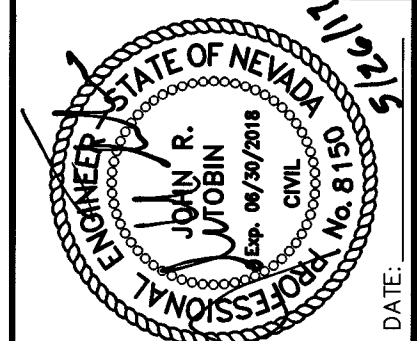
1. CONTRACTOR SHALL CONTACT JESUS MARMOLEGO AT 702-604-7078 TWO(2) WEEKS IN ADVANCE FOR FIBRE OPTIC SPLICE DETAILS.
2. SLACK SHALL BE PROVIDED IN EACH P30 P.B. (30 FT) AND TYPE 200 S.V. (120 FT) UNLESS OTHERWISE NOTED. SEE PULLBOX SCHEDULE FOR P30 LOCATIONS.
3. PULL BOXES/VOLTS SHALL NOT BE INSTALLED IN SIDEWALK RAMPS OR DRIVEWAYS.
4. CONDUIT ROUTING IS SCHEMATIC FOR THE PURPOSE OF CLARITY AND MAY DIFFER FROM ACTUAL INSTALLATION. FINAL LOCATION SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
5. ALL EXISTING ITS INFRASTRUCTURE SHALL BE MAINTAINED UNLESS OTHERWISE SPECIFIED OR DIRECTED BY THE ENGINEER.
6. PULL BOXES, VOLTS, AND CONDUIT SHALL BE INSTALLED WITHIN RIGHT-OF-WAY OR EASEMENTS. CONTRACTOR SHALL VERIFY PRIOR TO INSTALLATION.
7. LOCATIONS OF THE PROPOSED FIBER OPTIC SYSTEM PULL BOXES AND VOLTS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MARKING THE LOCATIONS IN THE FIELD. THESE LOCATIONS SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER BEFORE INSTALLATION.
8. WHERE NEW CONDUIT CROSSES EXISTING SEWER AND WATERLINES, PROTECT SEWER AND WATERLINE IN PLACE. WHERE NEW CONDUIT IS PARALLEL TO EXISTING SEWER AND WATERLINES, MAINTAIN MINIMUM HORIZONTAL CLEARANCE OF 3 FEET. MAINTAIN MINIMUM 6" CLEARANCES AT ALL CROSSINGS.
9. WHERE NEW CONDUIT CROSSES EXISTING GAS LINES, PROTECT GAS LINES IN PLACE.
10. PROTECT IN PLACE EXISTING STORM DRAIN AND SANITARY SEWER MAINS, LATERALS AND MANHOLES AND STORM DRAIN DROP INLETS DURING CONSTRUCTION.
11. IF EXISTING SIDEWALKS AND/OR CURB AND GUTTER IS DAMAGED DURING CONSTRUCTION, CONTRACTOR SHALL REPLACE TO NEAREST EXISTING CONSTRUCTION JOINTS.

CONSTRUCTION NOTES

1. REMOVE EXISTING PULL BOX
2. INSTALL TYPE 100 VAULT (SEE DETAIL "A" ON SHEET 5)
3. INSTALL 72-STRAND FIBER OPTIC CABLE WITH 6PR #22 PE CABLE IN EXISTING CONDUIT FROM EXISTING TYPE 200 S.V. AT NEC OF CHARLESTON/DESERT FOOTHILLS TO EXISTING TYPE 200 S.V. AT SEC ALTA/DESERT FOOTHILLS. SEE PULL BOX SCHEDULE FOR P30 LOCATIONS
4. INSTALL 12-STRAND CDCA IN EXISTING CONDUIT
5. INSTALL SPLICE ENCLOSURE AND PERFORM FIBER OPTIC SPLICE
6. FURNISH TO RTC/FAST A LAYER 2 FIELD-HARDENED ETHERNET SWITCH FOR EACH CDCA (USS. SECTION 684)

PULL BOX SCHEDULE

STATION	LOCATION	REMARKS
"DF" 105+50	MEDIAN	EXISTING P30
"DF" 109+98	MEDIAN	EXISTING P30
"DF" 113+94	MEDIAN	EXISTING P30
"DF" 124+45	MEDIAN	EXISTING P30
"DF" 128+48	MEDIAN	EXISTING P30
"DF" 132+51	MEDIAN	EXISTING P30
"DF" 134+28	MEDIAN	EXISTING P30
"DF" 138+06	MEDIAN	EXISTING P30
"DF" 142+28	MEDIAN	EXISTING P30

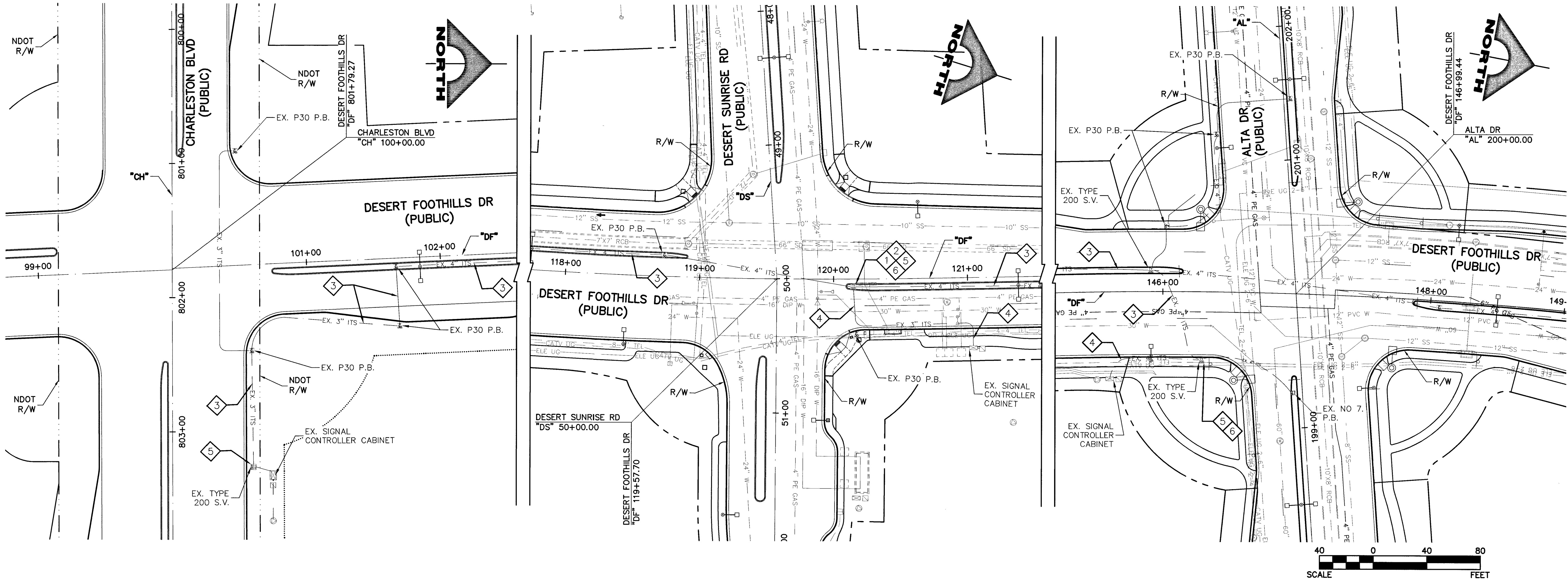


REV	DATE	DESCRIPTION	AGN	APP	DATE	GCW	APP

PROJECT NO. 62023-707
DESIGN: JRT
DRAWN: TLD
CHECK: JRT
PLOT DATE: 05-26-17
PLOT TIME: 09:12:12

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TRAFFIC SIGNAL SYSTEM AT
DESERT FOOTHILLS DR/ALTA DR
ITS IMPROVEMENTS
1555 S. RAINBOW BLVD.
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Dillon Hines

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