

CHARLESON BOULEVARD ITS INFRASTRUCTURE – MONICLAIR STREET TO COMMERCE STREET



<u>SHEET</u>	<u>DWG. NO.</u>	<u>SHEET DESCRIPTION</u>
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SIGNATURE ON FILE



CLARK COUNTY
FUELING OUR FUTURE
NEW ROADS - NEW JOBS

SIGNATURE ON FILE 2/25/19

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES DATE

PROJECT NO. 136138 FIRST APPROVED DATE: _____

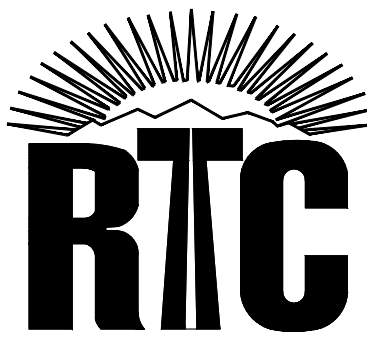
SHEETS G-1, G-3, IC-1 THRU IC-10

[illegible]

ABBREVIATIONS			
AVAR	AIR VACUUM AIR RELIEF VALVE	SL	STREET LIGHT
AVE	AVENUE	SNWA	SOUTHERN NEVADA WATER AUTHORITY
BC	BACK OF CURB	SS	SANITARY SEWER
BLVD	BOULEVARD	STA	STATION
BSW	BACK OF SIDEWALK	STD	STANDARD
CATV	UNDERGROUND CABLE TV	ST	STREET
CCPW	CLARK COUNTY PUBLIC WORKS	STL	STEEL
CCTV	CLOSED CIRCUIT TELEVISION	SV	SPLICE VAULT
CCWRD	CLARK COUNTY WATER RECLAMATION DISTRICT	SW	SOUTHWEST/SIDEWALK
CDCA	COMMUNICATION DISTRIBUTION CABLE ASSEMBLY	TEL	TELEPHONE
CG	CURB AND GUTTER	TS	TRAFFIC SIGNAL
CL	CENTERLINE	TYP	TYPICAL
CONC	CONCRETE	USD	UNIFORM STANDARD DRAWING
DB	DIRECT BURY	USS	UNIFORM STANDARD SPECIFICATIONS
DR	DRIVE	W	WATER or WEST
DWG	DRAWING		
E	EAST	ALIGNMENT ABBREVIATIONS	
EA	EACH	"CB"	CHARLESTON BOULEVARD
ELEC	ELECTRICAL		(MONTCLAIR STREET TO COMMERCE STREET)
EP or EOP	EDGE OF PAVEMENT	"MS"	MONTCLAIR STREET
ESMT	EASEMENT		(DEL REY AVENUE TO CHARLESTON BOULEVARD)
EVP	EMERGENCY VEHICLE PRE-EMPTION		
EX	EXISTING		
FAST	FREEWAY & ARTERIAL SYSTEM OF TRANSPORTATION		
FC	FACE OF CURB		
FT	FOOT/FEET		
GPS	GLOBAL POSITIONING SYSTEM		
IC	INTERCONNECT		
ITS	INTELLIGENT TRANSPORTATION SYSTEM		
LF	LINEAR FEET		
LN	LANE		
LT	LEFT		
LVVWD	LAS VEGAS VALLEY WATER DISTRICT		
MAX	MAXIMUM		
MH	MANHOLE		
MIN	MINIMUM		
N	NORTH		
NDOT	NEVADA DEPARTMENT OF TRANSPORTATION		
NE	NORTHEAST		
NO	NUMBER		
NTS	NOT TO SCALE		
NVE	NV ENERGY		
NW	NORTHWEST		
OC	ON CENTER		
OHP	OVERHEAD POWER LINE		
PB	PULL BOX		
PKWY	PARKWAY		
PP	POWER POLE		
PR	PAIR		
PROP	PROPOSED		
PVMT	PAVEMENT		
RD	ROAD		
RDWY	ROADWAY		
RT	RIGHT		
R/W	RIGHT-OF-WAY		
S	SOUTH		
SD	STORM DRAIN		
SE	SOUTHEAST		
SHT	SHEET		

LEGEND	
	CENTERLINE
	EASEMENT LINE
	EXISTING RIGHT-OF-WAY LINE
	EXISTING TELEPHONE LINE
	EXISTING CABLE TV LINE
	EXISTING STORM DRAIN LINE
	EXISTING UNDERGROUND POWER LINE
	EXISTING OVERHEAD POWER LINE
	EXISTING SANITARY SEWER LINE
	EXISTING GAS LINE
	EXISTING OVERHEAD POWER LINE AND TELEPHONE
	EXISTING NVE TRANSFORMER
	EXISTING 200 AMP PADMOUNTED SERVICE PEDESTAL
	EXISTING POWER POLE
	EXISTING CABLE TV PULL BOX
	EXISTING TELEPHONE PULL BOX
	EXISTING TRAFFIC SIGNAL CONDUIT

REV. NO.	DATE	DESCRIPTION	APPROVED



CHARLESTON BOULEVARD ITS INFRASTRUCTURE

INDEX OF DRAWINGS AND ABBREVIATIONS

REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

RECORD DRAWINGS

ORIGINALLY STAMPED BY
RANDY W. CARROLL
NO. 16131
FEBRUARY 19, 2019
THESE PLANS HAVE BEEN
ACCEPTED AS RECORD
DRAWINGS. REGIONAL
TRANSPORTATION COMMISSION
OF SOUTHERN NEVADA MAKES
NO CLAIM AS TO THE
COMPLETENESS OR ACCURACY
OF THE INFORMATION SHOWN

PROJECT No: TSC1802 DRAWN BY: JAS
DESIGNED BY: JAS CHECKED BY: JSR
APPROVED BY: _____



SCALE

HORIZ: AS SHOWN
VERT: AS SHOWN
FIELD BOOK

DRAWING NO.

G-2
SHT. 2 OF 16
L19-00102
107V7664

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" SHALL BE USED ON LINES TWELVE INCHES (12") OR ABOVE.
7. WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LWWD STANDARDS WHENEVER A SEWER MAIN INTERSECTS 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 AND ACCEPTED FOR CONSTRUCTION.
10. INSTALLATION OF CURVED SEWER REQUIRES THE USE OF C-900 PIPE WHICH ALLows FOR PIPE DEFLECTION AT THE JOINTS.

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 ON THE SITE. DISCHARGE OF POLLUTANTS TO OR ON THE SITE SHALL BE PROHIBITED. 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 TO PREVENT POLLUTANTS FROM ENTERING THE STORMWATER SYSTEM. THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARD IN THE USDOCA AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.

3. EROSION 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 THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR1000000, SECTION III.A.

4. THE MINIMUM, BUT NOT THE MAXIMUM, DISTANCE BETWEEN SIGNS SHALL BE 100 FEET. SIGNS 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 RAIN EVENT OF 0.5 INCHES OR MORE. CONTINGENCY PLANS, UPDATES AND REVISIONS TO THE SIGNAGE PLAN SHALL BE SUBMITTED TO THE PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR 1000000, SECTION III.A.12.

5. THE SIGNAGE PLAN SHALL BE SUBMITTED TO THE CLARK COUNTY WATER DIVISION AND INSTALL ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM TO THEIR ENTIRETY TO CLARK COUNTY AREA STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH CLARK COUNTY AREA STANDARDS. ALL SIGNS SHALL USE TYPE III SHEETING.

LVVWD PROJECT #136138
(REVISED 08/01/2017)

- 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 COMMUNICATIONS SUPPORT CENTER (258-7171) TWO (2) WORKING DAYS BEFORE THE START OF CONSTRUCTION FOR FUTURE INSPECTIONS. REQUESTING INSPECTIONS MUST BE MADE BY BUSINESS DAY PRIOR TO THE REQUESTED LVVWD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT NUMBER IDENTIFIED ABOVE.
- ALL WORK SHALL CONFORM TO 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.
- ALL WORK, EXCEPT FOR THE WORKS SET FORTH IN 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 OFFSITE IMPROVEMENTS, CLARK COUNTY AREA.
- ALL 12" DIO PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
- ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD 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.
- ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED, AND AN ACCEPTABLE PASSING HEALTH WATER SAMPLE OBTAINED, PRIOR TO OPERATION AND RUSH.
- THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL COUNCIL TELEPHONE ROOM, 258-7171, 8002, TWO (2) DAYS PRIOR TO THE START OF CONSTRUCTION.
- ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.14.01, AND APPROVED BY THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN.
- ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD APPROVED PRODUCTS LIST FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS BY SUBMITTING SHOP DRAWINGS.
- TELEPHONE "CALL BEFORE YOU DIG" AT "811" OR 1-800-227-2660.
- THE INSTALLATION OF LVVWD MUNICIPAL WATER FACILITIES WITHIN ALL STREETS IS BEING TO BE IN COMPLIANCE WITH THE UNIFORM STANDARDS, INCLUDING THE PLACEMENT OF ASPHALT PAVING STREET SURFACES. ANY REPAIR WORK DONE BY THE CONTRACTOR TO THE EXISTING ASPHALT PAVING STREET SURFACES SHALL BE IN 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 LVVMD DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVVMD WITH AN APPROPRIATELY SIZED PLAIN FINISH CONCRETE PATCH. THE LVVMD WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE RESTORATION OF ANY DECORATIVE PAVING SURFACE WITH THE STREET. THE LVVMD WILL NOT ATTEMPT TO MATCH COLOR OR FINISH OF ANY ADJACENT MATERIALS.

SIGNATURE ON FILE

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
LVVWD PROJECT NO. 136138 FIRST APPROVED DATE: 2/25/19

1. ALL CONSTRUCTION AND MATERIAL SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLICWORKS CONSTRUCTION OFFSITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA", LATEST ISSUE, THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST REVISED EDITION, THE "SOUTHWESTERN 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 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 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. 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.
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 LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS AND CROSS GUTTERS.
9. CURB AND GUTTER FACING 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. ALL GRADING WORK SHALL CONFORM TO THE SLOPS REPORT AS PREPARED BY THE (COMPANY, REPORT #, DATE) APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
13. 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.
14. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING STATUARY 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.
15. UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOWLINES, AND CROSS CUTS UNLESS WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND THE CITY ENGINEER.

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 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 AN 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 STUB SHALL HAVE AT LEAST ONE GREEN #8 THW WIRE INSTALLED, AS TRACER WIRE. WHEN "ELECTRIC CODE" IS COMPLY AS INSTALLED, THE INSTALLATION IT SHALL HAVE MINIMUM OF 2 #4 AND 1 #8 THW WIRE WITH THE ENDS TAPED OR "SAFE OFF" TAP TO FINAL INSTALLATION.
5. ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL HAVE A MINIMUM CLEARANCE IN ACCORDANCE WITH THE USD NO. 320A.
6. AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE TFO TO PRIOR TO ANY PRE-FINAL INSPECTION. THE AS-BUILT DRAWING NEEDS TO BE STAMPED AS-BUILT AND SIGNED BY THE PREPARER.
7. SERVICE POINT SHALL BE COORDINATED WITH ANY ENERGY COMPANY. WHENEVER POSSIBLE, BE LOCATED IN 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, AND TO NO EXTENT TO THE COMPLY AS REQUIRED BY THE CITY ENGINEER BEFORE ANY INSTALLATION.
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, CONTRACTING, LOGGING, MAINTENANCE AND OPERATIONAL COSTS. SAID POWER 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 SHALL BE COMPLETED PRIOR TO PROJECT COMPLETION. ALL MAINTENANCE AND OPERATIONAL TRANSFERS WITH THE CITY OF LAS VEGAS TRAFFIC ENGINEERING DEPARTMENT (TEO) AT (702) 229-6331.

REVISÉ 04/15/10

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LAS VEGAS FIRE AND 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 DISTRICT'S-APPROVED PRODUCTS LIST ARE ALLOWED TO BE INSTALLED.
3. A PERMIT IS REQUIRED FROM LAS VEGAS FIRE AND RESCUE FOR THE INSTALLATION OF ON-SITE WATER MAINS AND HYDRANTS. THE CONTRACTOR'S MATERIAL TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK. [FC § 105.7.12]
4. ON-SITE WATER MAINS AND HYDRANT 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. [FC § 3310, § 3312]
5. TO PROVIDE VISIBILITY TO ALL FIRE HYDRANTS, EACH HYDRANT SHALL HAVE A BLUE REFLECTIVE MARKER AT THE CENTER LINE OF THE STREET ADJACENT TO THE FIRE HYDRANTS. [FC § 507.5.7.3]
6. ALL UNDERGROUND INSPECTIONS, PRESSURE AND FLUSH VERIFICATIONS OF ALL FIRE HYDRANTS AS WELL AS ALL TESTS AND INSPECTIONS OF ALL FIRE HYDRANTS SHALL BE APPROVED BY THE FIRE PROTECTION ENGINEER. GROUND LOADING IS ACCEPTABLE FOR THE HYDRO TESTS WITH PRIOR FIRE PREVENTION APPROVAL. [FC § 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. [FC § 507.2.1, NFPA 1600]
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. [FC § 507]
9. PRIOR TO THE FINAL OCCUPANCY, A FIRE FLOW TEST SHALL BE WITNESSED BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION TO VERIFY AVALIABILITY OF THE REQUIRED FIRE FLOW. [FC § 507]
11. FIRE HYDRANT SPACING SHALL BE AS FOLLOWS: [FC § C102]
 - RESIDENTIAL - 500 FT UNSPRINKLERED; 600 FT SPRINKLERED
 - COMMERCIAL - 300 FT UNSPRINKLERED; 400 FT SPRINKLERED
12. IF THE HYDRANT MAINS ARE EXTENDED TO NEW STREETS ARE INSTALLED WHERE THERE ARE NO FIRE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF THE 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, THE HYDRANT SPACING SHALL BE 1200 FT. IF A STREET IS 100 FT OR MORE WIDE, THE HYDRANT SHALL BE INSTALLED ON THE STREET SPACED AT 500 FT ON AN ALTERNATING BASIS. [FC § C102.8]
13. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN THE RADIUS OF A CUL-DE-SAC OR WITHIN 20 FT OF A 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. [FC § C102.12]
15. A MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A ONE- OR TWO-FAMILY DWELLING SHALL NOT EXCEED 150 FT. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A FIRE DEPARTMENT CONNECTION (FDC) SHALL NOT EXCEED 100 FT, AS MEASURED BY AN APPROVED ROUTE. [FC § C102.7]
17. THE MAXIMUM DISTANCE FROM A HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 250 FT.
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 AT ANY ONE TIME. [FC § 503.3.1]
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. [FC § 503.3.2]
20. THE GRADIENT FOR THE FIRE APPARATUS ACCESS 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%. [FC § 503.3.3]
21. THE TURNING RADIUS OF THE FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 52 FT OUTSIDE AND 28 FT INSIDE TURNING RADIUS. [FC § 503.2.4]
22. VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL NOT BE LESS THAN 13 FT 6 INCHES. [FC § 503.2.5]
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 FLOW LINE TO FLOW LINE WITH PERPENDICULAR PARKING. THERE SHALL BE NO 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 LOT SHALL BE NOT LESS THAN 24 FT. [FC § 503.2.1]
24. FIRE APPARATUS ACCESS ROADS 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. [FC § 503.1.1]
25. FIRE APPARATUS ACCESS ROADS 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 FEET IN HEIGHT, OR EXCEEDING 62,000 SQUARE FEET IN AREA. [FC § 503.1.2]
26. DEAD-ENDS, ALLEYS, DRIVEWAYS, OR PRIVATE DRIVEWAYS, IN EXCESS OF 150 FT IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND HAVING A MINIMUM DIAMETER OF 81 FT. [FC § 503.2.5]
27. ALL FIRE APPARATUS ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE END OF THE ROAD. THE SIGNS SHALL BE PLACED ON ONE SIDE OF THE FIRE LINE AND WITH SIGNS AT INTERVALS OF 100 FT ALONG THE DESIGNATED FIRE LINES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS TO BE PLACED TO INDICATE THE DIRECTION OF TRAVEL. THE SIGNS SHALL BE PLACED ON THE SIDE OF THE ROAD ALONG OR ON THE PAVEMENT OR CEMENT (IF NO CURB IS PROVIDED) SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS. [FC § 503.3]
28. ELECTRICAL/CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE ENTRY/EXIT/RECOVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE FC § 503.6 AND FC APPENDIX M.

1. SLACK SHALL BE PROVIDED IN EACH 300 P.B. (30 FT) AND TYPE 200 S.V. (120 FT) UNLESS OTHERWISE NOTED.
2. PULL BOXES/SPICE VAULTS SHALL NOT BE INSTALLED IN SIDEWALK RAMPS OR DRIVEWAYS.
3. SUMPS/POLES SHALL BE PROVIDED IN ALL NEW AND EXISTING TYPE 200 SPICE VAULTS FOR DRAINAGE.
4. 1-# PR PE CABLE AND INTERCONNECTOR CABLE SHALL BE INSTALLED IN NEW AND EXISTING CONDUIT AS SHOWN IN CONDUIT AND WIRE SCHEDULE.
5. TRENCING FOR NEW CONDUIT SHALL BE PER DETAILS ON DRAWING IC-XX.
6. CONDUIT SHALL BE PROVIDED FOR THE PURPOSE OF THE CONDUIT TO BE PROVIDED TO OFFER FROM ACTUAL INSTALLATION. FINAL LOCATION SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
7. ALL EXISTING ITS INFRASTRUCTURE SHALL BE MAINTAINED UNLESS OTHERWISE DIRECTED BY ENGINEER.
8. LOCATIONS OF THE PROPOSED FIBER OPTIC SYSTEM PULL BOXES SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MARKING THE LOCATION IN THE FIELD. THESE LOCATIONS SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER BEFORE INSTALLATION.

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 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.
5. 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
A. PAVEMENT AREA SUBGRADE	0.1'±	+0.0' TO -0.1'
B. ENGINEERED FILL	0.5'±	+0.1' TO -0.1'
6. COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE. COMPACTION SHALL COMPLY WITH THE REQUIREMENTS OF THE ENGINEER.
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 SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, 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, 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.

1. ALL CONSTRUCTION SIGNS, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE "MANUAL OF 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 ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AND RED FLAG TRIPLEGES TO PROTECT THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL MAINTAIN THESE SIGNS AFTER FIRST GRADING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.
4. WHEN A DESIGNATED "SUGGESTED ROUTE TO SCHOOL" IS ENCLOSED UPON BY A CONSTRUCTION WORK ZONE AND PUBLIC WORKS STAFF IDENTIFIES A NEED FOR STUDENTS TO BE ASSISTED IN THE SAFE CROSSING THROUGH THAT WORK ZONE, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A QUALIFIED "CROSSING GUARD". THE GUARD SHALL BE PRESENT FOR THE FULL DURATION OF TIME THAT CHILDREN ARE CROSSING THE ROAD.
5. IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.
6. ALL TRAFFIC SIGNS SHALL BE FABRICATED WITH 1610 SERIES 1150 ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. ALL TRAFFIC SIGNS SHALL BE FABRICATED WITH 3M SERIES 1150 ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. SCHOOL ZONE SIGNS SHALL HAVE 3M SERIES 1150 ANTI-GRAFFITI 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

NV ENERGY, CENTRAL TELEPHONE CO, DBA CENTURY LINK TELEPHONE, AND SOUTHWEST GAS SHOWN FOR INFORMATIONAL PURPOSES ONLY. REFERENCE NV ENERGY, CENTRAL TELEPHONE CO, DBA CENTURY LINK TELEPHONE, AND SOUTHWEST GAS DRAWINGS FOR CONSTRUCTION DETAILS. CONTRACTOR TO COORDINATE WITH UTILITIES FOR REMOVAL AND INSTALLATION OF FACILITIES.

[illegible]



- CONSTRUCTION NOTES**
1. INSTALL P30 PULL BOX (USDCCA STD. DWG NOS. 761 & 763)
 2. INSTALL TYPE 200 SPICE VAULT (USDCCA STD. DWG NOS. 762 & 763)
 3. REMOVE EXISTING PULL BOX
 4. REPAIR BROKEN CONDUIT (SEE DETAIL 1, DRAWING IC-12 FOR PAVEMENT PATCH)
 5. REPAIR BROKEN CONDUIT (SEE DETAIL 2, DRAWING IC-12 FOR PAVEMENT PATCH)
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 7. INSTALL OPTICOM GPS EVP ON TRAFFIC SIGNAL POLE. ROUTE CABLES/CONDUCTORS THROUGH EXISTING TRAFFIC SIGNAL CONDUIT TO CABINET. INSTALL OPTICOM GPS EVP CABINET EQUIPMENT IN EXISTING RACKS
 8. INSTALL CCTV CAMERA AND EXTENSION ON POLE. ROUTE CABLES/CONDUCTORS THROUGH EXISTING TRAFFIC SIGNAL CONDUIT TO CONTROLLER CABINET. INSTALL CONTROL UNIT AND ENCODER IN CONTROLLER CABINET WITH ALL ASSOCIATED CABLES AND CONDUCTORS
 9. INSTALL TRAFFICAST DSRC AND BLUETOOTH RSU ON MAST ARM. ROUTE CABLES THROUGH MAST ARM, SIGNAL POLE AND EXISTING TRAFFIC SIGNAL CONDUIT TO CONTROLLER CABINET. MOUNT ASSOCIATED CABINET EQUIPMENT IN EXISTING CONTROLLER CABINET
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 11. DISCONNECT LOOP DETECTION EQUIPMENT AND INSTALL NEW VIDEO DETECTION SYSTEM. ROUTE CABLES/CONDUCTORS THROUGH EXISTING TRAFFIC SIGNAL CONDUIT TO CONTROLLER CABINET. INSTALL NEW VIDEO DETECTION CAMERA ON EACH POLE. SEE EQUIPMENT TABLE ON IC-11
 12. REMOVE AND SALVAGE EXISTING VIDEO DETECTION EQUIPMENT IN TRAFFIC SIGNAL CABINET AND REPLACE WITH NEW VIDEO DETECTION EQUIPMENT. EXISTING VIDEO DETECTION CAMERAS AND CABLES/CONDUCTORS SHALL REMAIN. SEE EQUIPMENT TABLE ON IC-11
 13. INSTALL TYPE 100 PULL BOX (USDCCA STD. DWG NO. 763)
 14. INSTALL BLUETOOTH TRAVEL TIME UNIT. ROUTE CABLES THROUGH SIGNAL INFRASTRUCTURE

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 4. WHERE NEW CONDUIT CROSSES EXISTING WATERLINES OR GAS LINES, PROTECT WATERLINE OR GAS LINE IN PLACE. WHERE NEW CONDUIT IS PARALLEL TO EXISTING WATERLINES, MAINTAIN MINIMUM 3 FEET PARALLEL SEPARATION.
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 7. PROTECT IN PLACE AND ADJUST LVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

APPROVED FOR CONSTRUCTION

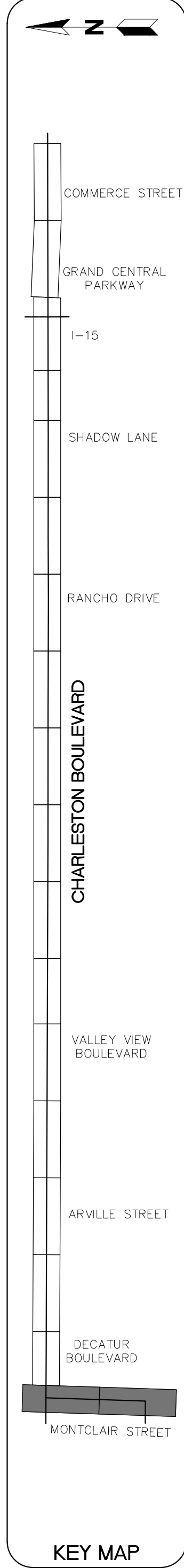
SIGNATURE ON FILE

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 136138 FIRST APPROVED DATE: 2/25/19

Call before you Dig
1-702-432-5300

Call before you Dig
1-800-227-2600

Call before you Dig
1-702-227-2929



REV. NO.	DATE	DESCRIPTION	APPROVED

CHARLESTON BOULEVARD ITS INFRASTRUCTURE
FIBER OPTIC SYSTEM PLAN
"MS" 10+00.00 TO "CB" 45+50.00
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

RECORD DRAWINGS
ORIGINALLY STAMPED BY
RANDY W. CARROLL
NO. 16131
FEBRUARY 19, 2019
THESE PLANS HAVE BEEN
ACCEPTED AS RECORD
DRAWINGS. REGIONAL
TRANSPORTATION COMMISSION
OF SOUTHERN NEVADA MAKES
NO CLAIM AS TO THE
COMPLETENESS OR ACCURACY
OF THE INFORMATION SHOWN

PROJECT No: TSC1802
DESIGNED BY: JAS
APPROVED BY: JAS

DRAWN BY: JAS
CHECKED BY: JSR

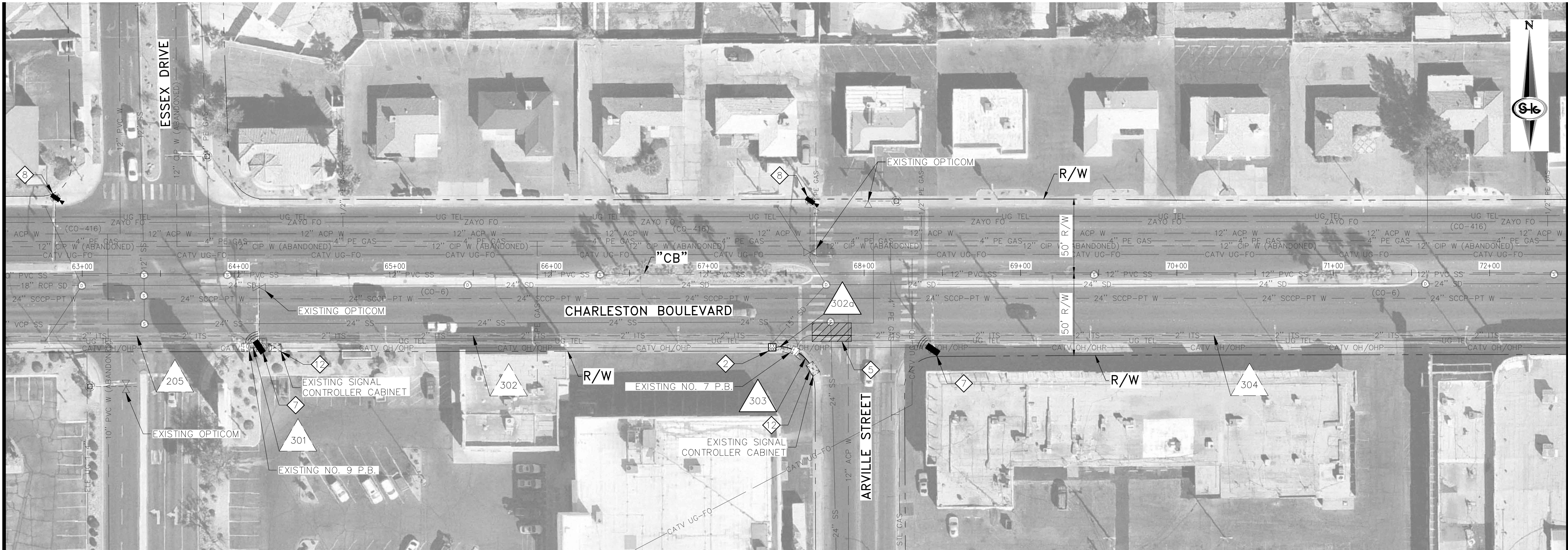
SCALE
HORIZ: AS SHOWN
VERT: AS SHOWN
FIELD BOOK

DRAWING NO.
IC-01
SHT. 4 OF 16
L19-00102
107V7664

TRANSORE
3740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5309

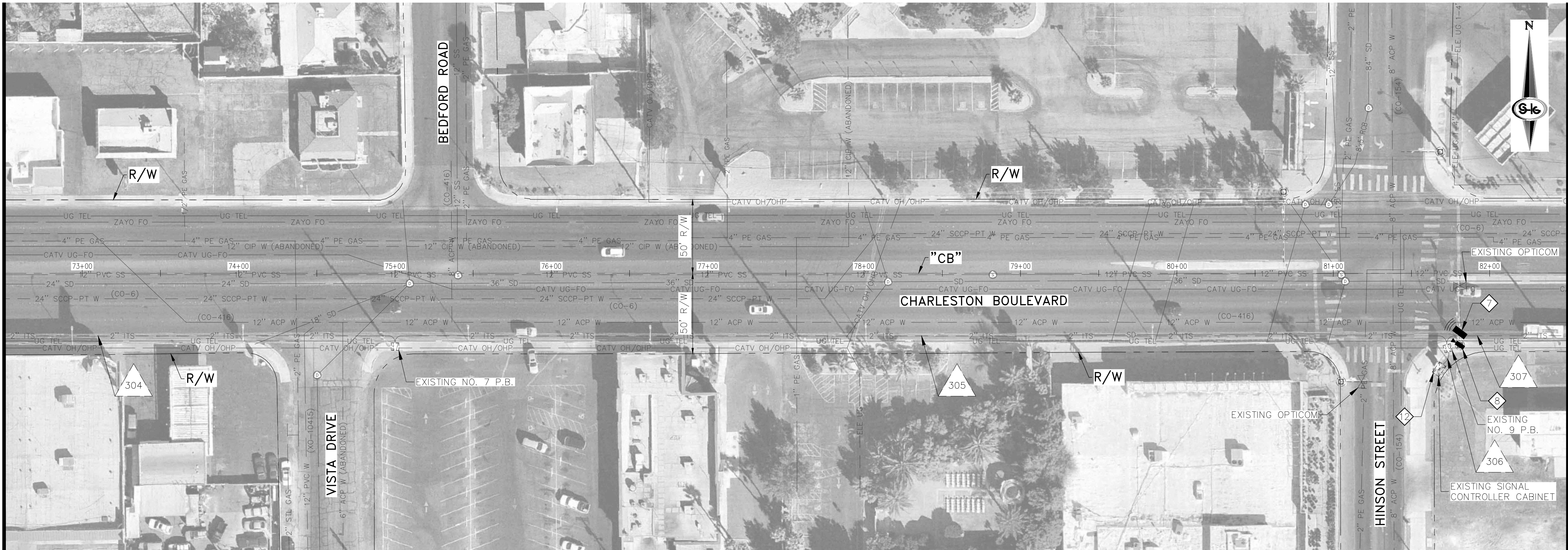
SLATER HANIFAN GROUP
a Westwood team
3740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5309

MATCHLINE "CB" 62+50.00 SEE SHEET IC-02



MATCHLINE "CB" 72+50.00 SEE BELOW LEFT

MATCHLINE "CB" 72+50.00 SEE ABOVE RIGHT



MATCHLINE "CB" 82+50.00 SEE SHEET IC-04

- CONSTRUCTION NOTES**
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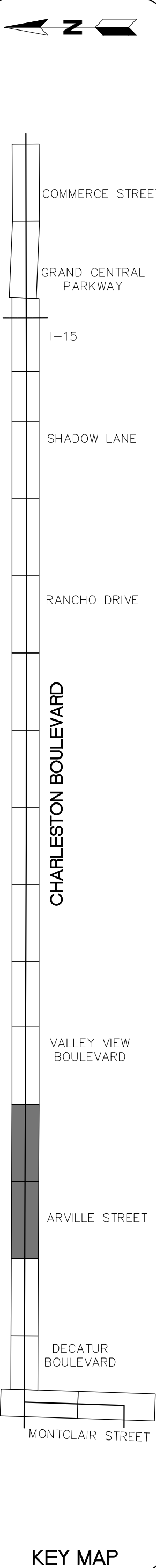
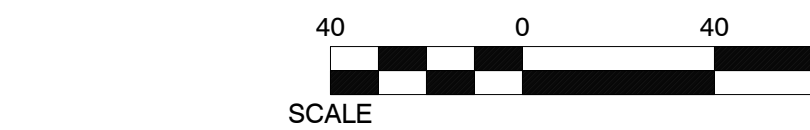
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APPROVED FOR CONSTRUCTION

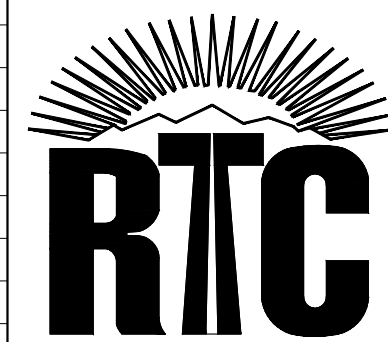
SIGNATURE ON FILE

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT NO. 136138 FIRST APPROVED DATE: 4/25/19



REV. NO.	DATE	DESCRIPTION	APPROVED



CHARLESTON BOULEVARD ITS INFRASTRUCTURE

FIBER OPTIC SYSTEM PLAN

"CB" 62+50.00 TO "CB" 82+50.00

REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

RECORD DRAWINGS

ORIGINALLY STAMPED BY
RANDY W. CARROLL
NO. 16131
FEBRUARY 19, 2019

THESE PLANS HAVE BEEN
ACCEPTED AS RECORD
DRAWINGS. REGIONAL
TRANSPORTATION COMMISSION
OF SOUTHERN NEVADA MAKES
NO CLAIM AS TO THE
COMPLETENESS OR ACCURACY
OF THE INFORMATION SHOWN

PROJECT No: TSC1802 DRAWN BY: JAS
DESIGNED BY: JAS CHECKED BY: JSR
APPROVED BY: _____

SLATER HANIFAN GROUP
a Westwood team
2760 S. ARVILLE STREET #216 LAS VEGAS, NV 89118
PHONE (702) 284-0308 FAX (702) 284-0309

SCALE	DRAWING NO.
HORIZ: AS SHOWN	IC-03
VERT: AS SHOWN	SHT. 6 OF 16
FIELD BOOK	L19-00102
	107V7664

MATCHLINE "CB" 82+50.00 SEE SHEET IC-03



MATCHLINE "CB" 92+50.00 SEE BELOW LEFT

CONSTRUCTION NOTES

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APPROVED FOR CONSTRUCTION

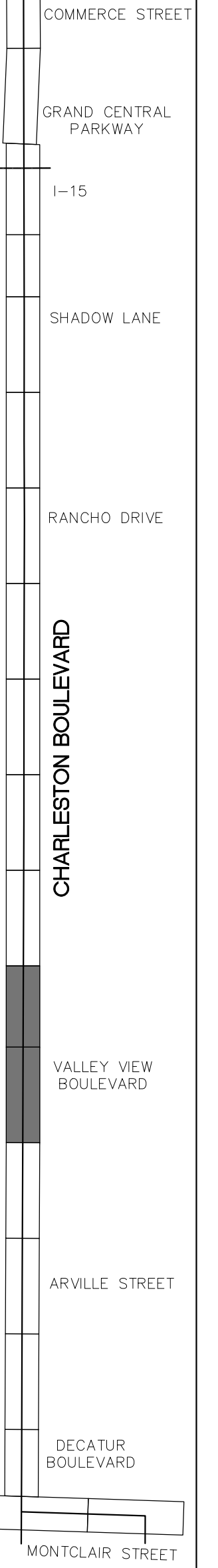
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LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 136138 FIRST APPROVED DATE: 2/25/19



CHARLESTON BOULEVARD

KEY MAP

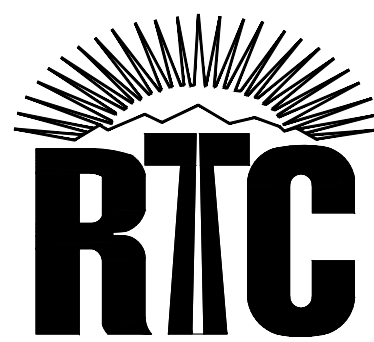


MATCHLINE "CB" 92+50.00 SEE ABOVE RIGHT



MATCHLINE "CB" 101+00.00 SEE SHEET IC-05

REV. NO.	DATE	DESCRIPTION	APPROVED



CHARLESTON BOULEVARD ITS INFRASTRUCTURE

FIBER OPTIC SYSTEM PLAN

"CB" 82+50.00 TO "CB" 101+00.00

REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

RECORD DRAWINGS

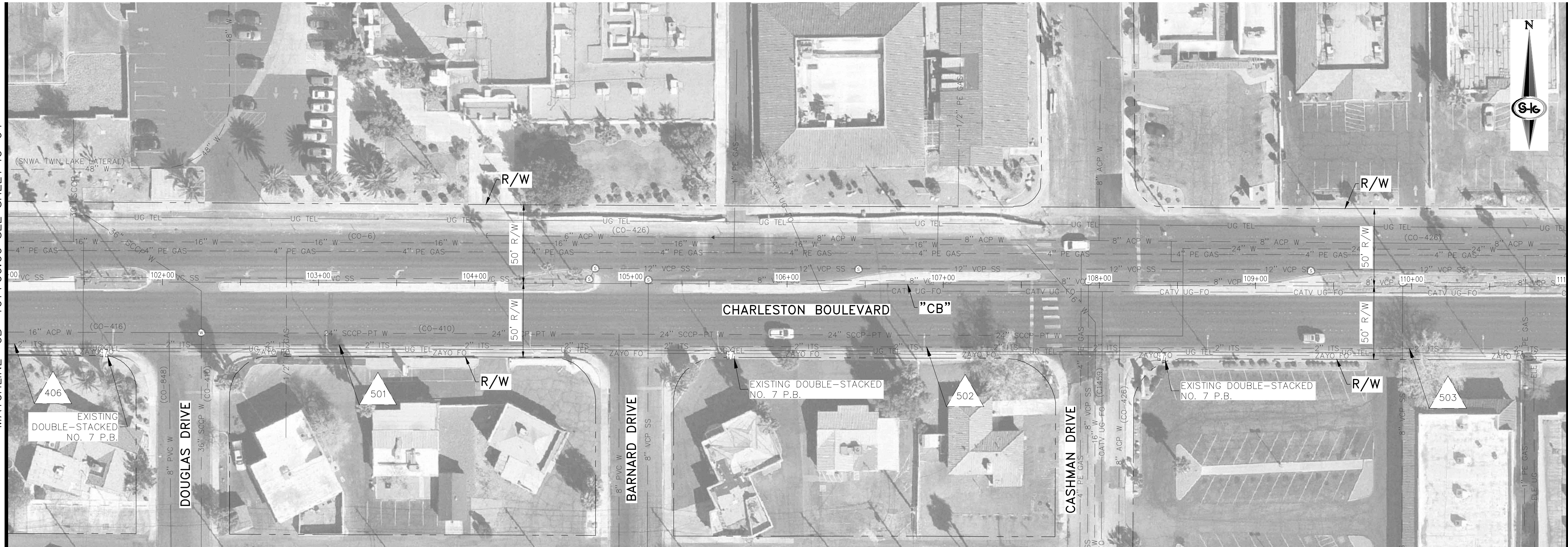
ORIGINALLY STAMPED BY
RANDY W. CARROLL
NO. 16131
FEBRUARY 19, 2019
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NO CLAIM AS TO THE
COMPLETENESS OR ACCURACY
OF THE INFORMATION SHOWN

PROJECT No: TSC1802 DRAWN BY: JAS
DESIGNED BY: JAS CHECKED BY: JSR
APPROVED BY: _____

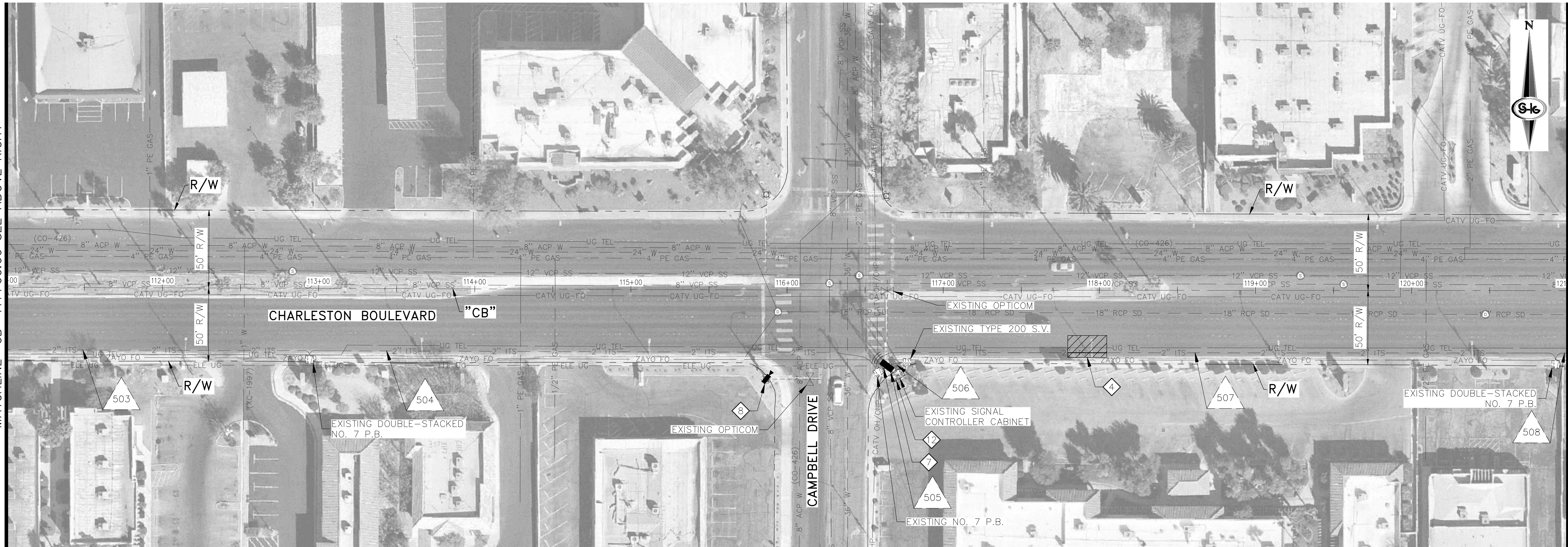


SCALE	DRAWING NO.
HORIZ: AS SHOWN	IC-04
VERT: AS SHOWN	SHT. 7 OF 16
FIELD BOOK	L19-00102
	107V7664

MATCHLINE "CB" 101+00.00 SEE SHEET IC-04



MATCHLINE "CB" 111+00.00 SEE ABOVE RIGHT



MATCHLINE "CB" 111+00.00 SEE BELOW LEFT

MATCHLINE "CB" 121+00.00 SEE SHEET IC-06

CONSTRUCTION NOTES

1. INSTALL P30 PULL BOX (USDCCA STD. DWG NOS. 761 & 763)
2. INSTALL TYPE 200 SPICE VAULT (USDCCA STD. DWG NOS. 762 & 763)
3. REMOVE EXISTING PULL BOX
4. REPAIR BROKEN CONDUIT (SEE DETAIL 1, DRAWING IC-12 FOR PAVEMENT PATCH)
5. REPAIR BROKEN CONDUIT (SEE DETAIL 2, DRAWING IC-12 FOR PAVEMENT PATCH)
6. INTERCEPT AND EXTEND EXISTING CONDUIT TO PULL BOX
7. INSTALL OPTICOM GPS EVP ON TRAFFIC SIGNAL POLE. ROUTE CABLES/CONDUCTORS THROUGH EXISTING TRAFFIC SIGNAL CONDUIT TO CABINET. INSTALL OPTICOM GPS EVP CABINET EQUIPMENT IN EXISTING RACKS
8. INSTALL CCTV CAMERA AND EXTENSION ON POLE. ROUTE CABLES/CONDUCTORS THROUGH EXISTING TRAFFIC SIGNAL CONDUIT TO CONTROLLER CABINET. INSTALL CONTROL UNIT AND ENCODER IN CONTROLLER CABINET WITH ALL ASSOCIATED CABLES AND CONDUCTORS
9. INSTALL TRAFFICAST DSRC AND BLUETOOTH RSU ON MAST ARM. ROUTE CABLES THROUGH MAST ARM, SIGNAL POLE AND EXISTING TRAFFIC SIGNAL CONDUIT TO CONTROLLER CABINET. MOUNT ASSOCIATED CABINET EQUIPMENT IN EXISTING CONTROLLER CABINET
10. COIL ADDITIONAL SLACK IN BOTH THE 72-STRAND AND 96-STRAND FIBER OPTIC CABLE (30 FT P30 P.B. AND 120 FT TYPE 200 S.V.) FOR CITY OF LAS VEGAS FUTURE RELOCATION
11. DISCONNECT LOOP DETECTION EQUIPMENT AND INSTALL NEW VIDEO DETECTION SYSTEM. ROUTE CABLES/CONDUCTORS THROUGH EXISTING TRAFFIC SIGNAL CONDUIT TO CONTROLLER CABINET. INSTALL NEW VIDEO DETECTION CAMERA ON EACH POLE. SEE EQUIPMENT TABLE ON IC-11
12. REMOVE AND SALVAGE EXISTING VIDEO DETECTION EQUIPMENT IN TRAFFIC SIGNAL CABINET AND REPLACE WITH NEW VIDEO DETECTION EQUIPMENT. EXISTING VIDEO DETECTION CAMERAS AND CABLES/CONDUCTORS SHALL REMAIN. SEE EQUIPMENT TABLE ON IC-11
13. INSTALL TYPE 100 PULL BOX (USDCCA STD. DWG NO. 763)
14. INSTALL BLUETOOTH TRAVEL TIME UNIT. ROUTE CABLES THROUGH SIGNAL INFRASTRUCTURE

GENERAL NOTES

1. SEE DRAWING C-3 FOR FIBER OPTIC NOTES.
2. TWO (2) WEEKS PRIOR TO BEGINNING WORK, CONTRACTOR SHALL CALL CITY OF LAS VEGAS TRAFFIC ENGINEERING AT 229-6331 FOR COORDINATION.
3. THE UTILITY LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE ONLY, AND ARE NOT RELIABLE FOR CONSTRUCTION PURPOSES. FOR ACTUAL FIELD LOCATIONS, CALL 1-800-227-2600.
4. WHERE NEW CONDUIT CROSSES EXISTING WATERLINES OR GAS LINES, PROTECT WATERLINE OR GAS LINE IN PLACE. WHERE NEW CONDUIT IS PARALLEL TO EXISTING WATERLINES, MAINTAIN MINIMUM 3 FEET PARALLEL SEPARATION.
5. PROTECT IN PLACE EXISTING STORM DRAIN AND SANITARY SEWER MAINS, LATERALS AND MANHOLES AND STORM DRAIN DROP INLETS DURING CONSTRUCTION.
6. IF EXISTING SIDEWALK AND/OR CURB AND GUTTER IS DAMAGED DURING CONSTRUCTION, CONTRACTOR SHALL REPLACE TO NEAREST EXISTING CONSTRUCTION JOINT.
7. PROTECT IN PLACE AND ADJUST LVWDG EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVWDG FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

APPROVED FOR CONSTRUCTION

SIGNATURE ON FILE
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 136138 FIRST APPROVED DATE: 4/25/19

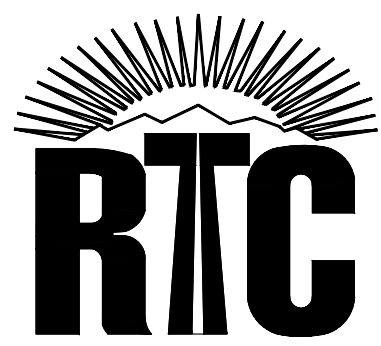


KEY MAP



CHARLESTON BOULEVARD ITS INFRASTRUCTURE

REV. NO.	DATE	DESCRIPTION	APPROVED



CHARLESTON BOULEVARD ITS INFRASTRUCTURE

FIBER OPTIC SYSTEM PLAN

"CB" 101+00.00 TO "CB" 121+00.00

REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

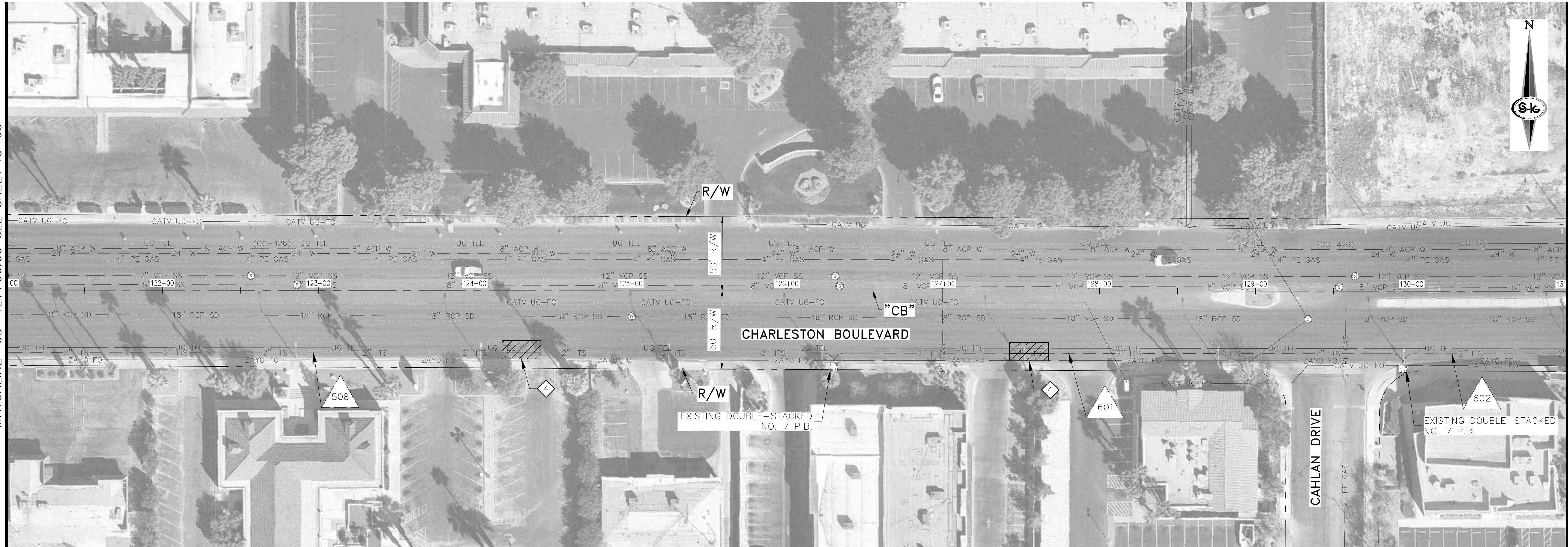
RECORD DRAWINGS
ORIGINALLY STAMPED BY
RANDY W. CARROLL
NO. 16131
FEBRUARY 19, 2019
THESE PLANS HAVE BEEN
ACCEPTED AS RECORD
DRAWINGS. REGIONAL
TRANSPORTATION COMMISSION
OF SOUTHERN NEVADA MAKES
NO CLAIM AS TO THE
COMPLETENESS OR ACCURACY
OF THE INFORMATION SHOWN

PROJECT No: TSC1802 DRAWN BY: JAS
DESIGNED BY: JAS CHECKED BY: JSR
APPROVED BY: _____



SCALE	DRAWING NO.
HORIZ: AS SHOWN	IC-05
VERT: AS SHOWN	SHT. 8 OF 16
FIELD BOOK	L19-00102
	107V7664

MATCHLINE "CB" 121+00.00 SEE SHEET IC-05



MATCHLINE "CB" 131+00.00 SEE BELOW LEFT

MATCHLINE "CB" 131+00.00 SEE ABOVE RIGHT



MATCHLINE "CB" 141+00.00 SEE SHEET IC-07

CONSTRUCTION NOTES

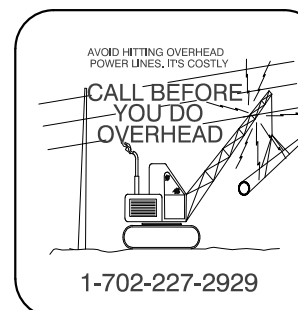
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2. INSTALL TYPE 200 SPICE VAULT (USDCCA STD. DWG NOS. 762 & 763)
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6. INTERCEPT AND EXTEND EXISTING CONDUIT TO PULL BOX
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12. REMOVE AND SALVAGE EXISTING VIDEO DETECTION EQUIPMENT IN TRAFFIC SIGNAL CABINET AND REPLACE WITH NEW VIDEO DETECTION EQUIPMENT. EXISTING VIDEO DETECTION CAMERAS AND CABLES/CONDUCTORS SHALL REMAIN. SEE EQUIPMENT TABLE ON IC-11
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14. INSTALL BLUETOOTH TRAVEL TIME UNIT. ROUTE CABLES THROUGH SIGNAL INFRASTRUCTURE

GENERAL NOTES

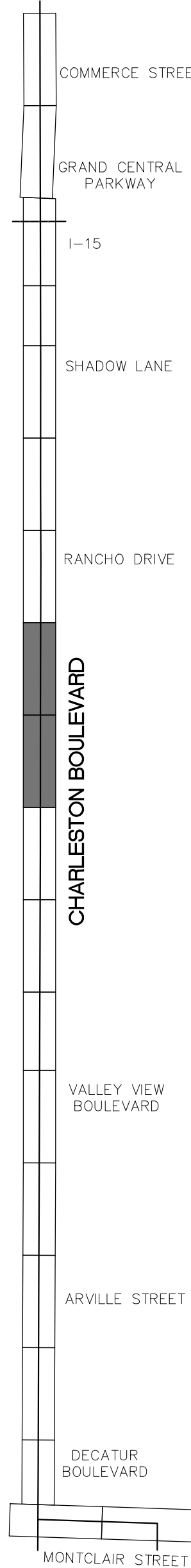
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7. PROTECT IN PLACE AND ADJUST LVWDG EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVWDG FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

APPROVED FOR CONSTRUCTION

SIGNATURE ON FILE
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 136138 FIRST APPROVED DATE: 4/25/19

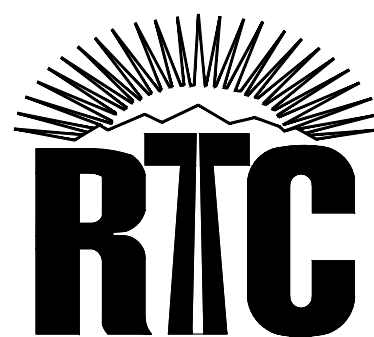


KEY MAP



CHARLESTON BOULEVARD ITS INFRASTRUCTURE

REV. NO.	DATE	DESCRIPTION	APPROVED



CHARLESTON BOULEVARD ITS INFRASTRUCTURE

FIBER OPTIC SYSTEM PLAN

"CB" 121+00.00 TO "CB" 141+00.00

REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

RECORD DRAWINGS

ORIGINALLY STAMPED BY
RANDY W. CARROLL
NO. 16131
FEBRUARY 19, 2019
THESE PLANS HAVE BEEN
ACCEPTED AS RECORD
DRAWINGS. REGIONAL
TRANSPORTATION COMMISSION
OF SOUTHERN NEVADA MAKES
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PROJECT No: TSC1802 DRAWN BY: JAS
DESIGNED BY: JAS CHECKED BY: JSR
APPROVED BY: _____



SCALE	DRAWING NO.
HORIZ: AS SHOWN	IC-06
VERT: AS SHOWN	SHT. 9 OF 16
FIELD BOOK	L19-00102
	107V7664

MATCHLINE "CB" 141+00.00 SEE SHEET IC-06



MATCHLINE "CB" 151+00.00 SEE BELOW LEFT

- ### CONSTRUCTION NOTES
1. INSTALL P30 PULL BOX (USDCCA STD. DWG NOS. 761 & 763)
 2. INSTALL TYPE 200 SPICE VAULT (USDCCA STD. DWG NOS. 762 & 763)
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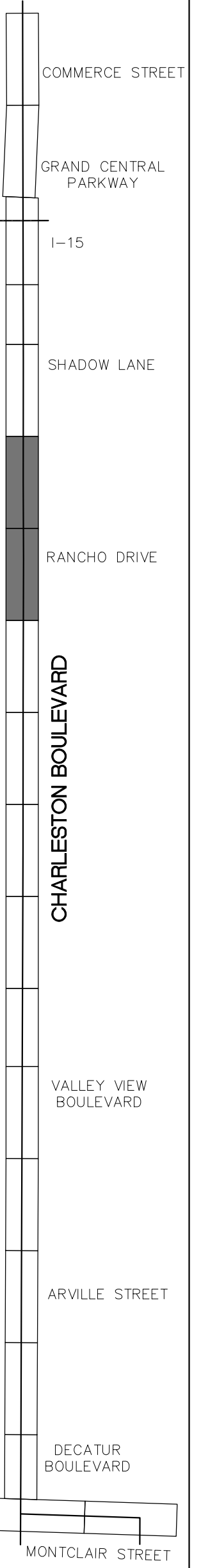
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 7. PROTECT IN PLACE AND ADJUST LVWDV EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVWDV FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

APPROVED FOR CONSTRUCTION

SIGNATURE ON FILE
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 136138 FIRST APPROVED DATE: 4/25/19



KEY MAP



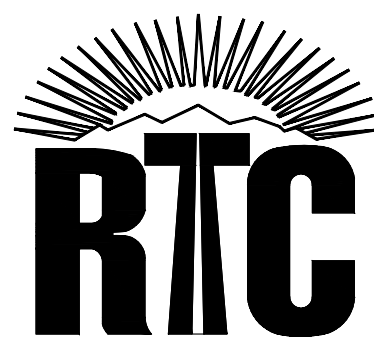
CHARLESTON BOULEVARD ITS INFRASTRUCTURE

MATCHLINE "CB" 151+00.00 SEE ABOVE RIGHT



MATCHLINE "CB" 161+00.00 SEE SHEET IC-08

REV. NO.	DATE	DESCRIPTION	APPROVED



CHARLESTON BOULEVARD ITS INFRASTRUCTURE

FIBER OPTIC SYSTEM PLAN

"CB" 141+00.00 TO "CB" 161+00.00

REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

RECORD DRAWINGS
ORIGINALLY STAMPED BY
RANDY W. CARROLL
NO. 16131
FEBRUARY 19, 2019
THESE PLANS HAVE BEEN
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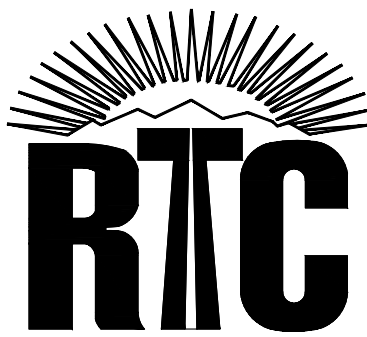
PROJECT No: TSC1802 DRAWN BY: JAS
DESIGNED BY: JAS CHECKED BY: JSR
APPROVED BY: _____



SCALE	DRAWING NO.
HORIZ: AS SHOWN	IC-07
VERT: AS SHOWN	SHT. 10 OF 16
FIELD BOOK	L19-00102
	107V7664

CONDUIT & WIRE SCHEDULE								
CONDUIT NO.	FROM	TO	NO.	SIZE (IN)	LENGTH (FT)	FIBER OPTIC CABLE (# OF STRANDS)	CONDUCTOR	REMARKS
101	P30 P.B. (E)	P30 P.B. (E)	1(E)	3(E)	640(E)	72 (E), 96	6 PR #22 (RS) 6 PR #22	
102	P30 P.B. (E)	P30 P.B. (E)	1(E)	3(E)	740(E)	72 (E), 96	6 PR #22 (RS) 6 PR #22	
103	P30 P.B. (E)	TYPE 200 S.V. (E)	1(E)	3(E)	100(E)	72 (E), 96	6 PR #22 (RS) 6 PR #22	
104	TYPE 200 S.V. (E)	P30 P.B. (E)	1(E)	3(E)	295(E)	72 (E), 96	6 PR #22 (RS) 6 PR #22	
105–200 NOT USED								
201	P30 P.B. (E)	P30 P.B. (E)	1(E)	2(E)	290(E)	72 (E), 96	6 PR #22 (RS) 6 PR #22	
202	P30 P.B. (E)	TYPE 200 S.V. (E)	1(E)	4(E)	155(E)	72 (E), 96	6 PR #22 (RS) 6 PR #22	
203	TYPE 200 S.V. (E)	CONTROLLER CABINET (E)	1(E)	2(E)	10(E)	12 CDCA (E)	6 PR #22 (RS) 6 PR #22	
204	TYPE 200 S.V. (E)	NO. 7 P.B. (E)	1(E)	2(E)	780(E)	96	2 – 25 PR #22 (RS) 6 PR #22	
205	NO. 7 P.B. (E)	NO. 9 P.B. (E)	1(E)	2(E)	600(E)	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
206–300 NOT USED								
301	NO. 9 P.B. (E)	CONTROLLER CABINET (E)	1(E)	2(E)	10(E)	12 CDCA	2 – 25 PR #22 (RS) 2 – 6 PR #22	
302	NO. 9 P.B. (E)	NO. 7 P.B. (E)	1(E)	2(E)	360(E)	96	25 PR #22 (RS) 6 PR #22	
302a	TYPE 200 S.V.	NO. 7 P.B. (E)	1	4	10	96 12 CDCA	6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
303	NO. 7 P.B. (E)	CONTROLLER CABINET (E)	1	2	10	12 CDCA	6 PR #22	RETROFIT EXISTING CONTROLLER CABINET FOUNDATION FOR NEW CONDUIT INSTALLATION
304	NO. 9 P.B. (E)	NO. 7 P.B. (E)	1(E)	2(E)	760(E)	96	25 PR #22 (RS) 6 PR #22	
305	NO. 7 P.B. (E)	NO. 9 P.B. (E)	1(E)	2(E)	690(E)	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
306	NO. 9 P.B. (E)	CONTROLLER CABINET (E)	1(E)	2(E)	10(E)	12 CDCA	2 – 25 PR #22 (RS) 2 – 6 PR #22	
307	NO. 9 P.B. (E)	NO. 7 P.B. (E)	1(E)	2(E)	430(E)	96	25 PR #22 (RS) 6 PR #22	
308–400 NOT USED								
401	NO. 7 P.B. (E)	TYPE 200 S.V. (E)	1(E)	2(E)	415(E)	96	25 PR #22 (RS), LOOP (E) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
402	TYPE 200 S.V. (E)	P30 P.B. (E)	1(E)	4(E)	145(E)	12 CDCA	2 – 25 PR #22 (RS) 2 – 6 PR #22	
403	P30 P.B. (E)	CONTROLLER CABINET (E)	1(E)	2(E)	25(E)	12 CDCA	2 – 25 PR #22 (RS) 2 – 6 PR #22	
404	TYPE 200 S.V. (E)	DOUBLE–STACKED NO. 7 P.B. (E)	1(E)	2(E)	560(E)	96	25 PR #22 (RS) 6 PR #22	
405	DOUBLE–STACKED NO. 7 P.B. (E)	DOUBLE–STACKED NO. 7 P.B. (E)	1(E)	2(E)	450(E)	96	25 PR #22 (RS) 6 PR #22	
406	DOUBLE–STACKED NO. 7 P.B. (E)	DOUBLE–STACKED NO. 7 P.B. (E)	1(E)	2(E)	175(E)	96	25 PR #22 (RS) 6 PR #22	
407–500 NOT USED								
501	DOUBLE–STACKED NO. 7 P.B. (E)	DOUBLE–STACKED NO. 7 P.B. (E)	1(E)	2(E)	405(E)	96	25 PR #22 (RS) 6 PR #22	
502	DOUBLE–STACKED NO. 7 P.B. (E)	DOUBLE–STACKED NO. 7 P.B. (E)	1(E)	2(E)	280(E)	96	25 PR #22 (RS) 6 PR #22	
503	DOUBLE–STACKED NO. 7 P.B. (E)	DOUBLE–STACKED NO. 7 P.B. (E)	1(E)	2(E)	460(E)	96	25 PR #22 (RS) 6 PR #22	
504	DOUBLE–STACKED NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	2(E)	375(E)	96	25 PR #22 (RS) 6 PR #22	
505	NO. 7 P.B. (E)	TYPE 200 S.V. (E)	1(E)	2(E)	15(E)	2 – 96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
506	TYPE 200 S.V. (E)	CONTROLLER CABINET (E)	1(E)	2(E)	10(E)	12 CDCA	2 – 25 PR #22 (RS) 2 – 6 PR #22	
507	TYPE 200 S.V. (E)	DOUBLE–STACKED NO. 7 P.B. (E)	1(E)	2(E)	440(E)	96	25 PR #22 (RS) 6 PR #22	
508	DOUBLE–STACKED NO. 7 P.B. (E)	DOUBLE–STACKED NO. 7 P.B. (E)	1(E)	2(E)	545(E)	96	25 PR #22 (RS) 6 PR #22	
509–600 NOT USED								
601	DOUBLE–STACKED NO. 7 P.B. (E)	DOUBLE–STACKED NO. 7 P.B. (E)	1(E)	2(E)	375(E)	96	25 PR #22 (RS) 6 PR #22	
602	DOUBLE–STACKED NO. 7 P.B. (E)	DOUBLE–STACKED NO. 7 P.B. (E)	1(E)	2(E)	600(E)	96	25 PR #22 (RS) 6 PR #22	
603	DOUBLE–STACKED NO. 7 P.B. (E)	DOUBLE–STACKED NO. 7 P.B. (E)	1(E)	2(E)	270(E)	96	25 PR #22 (RS) 6 PR #22	
604	DOUBLE–STACKED NO. 7 P.B. (E)	DOUBLE–STACKED NO. 7 P.B. (E)	1(E)	2(E)	670(E)	96	25 PR #22 (RS) 6 PR #22	
605–700 NOT USED								
701	DOUBLE–STACKED NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	2(E)	330(E)	96	25 PR #22 (RS) 6 PR #22	
702	NO. 7 P.B. (E)	CONTROLLER CABINET (E)	1(E)	3(E)	15(E)	12 CDCA (E) 12 CDCA	2 – 25 PR #22 (RS) 2 – 6 PR #22	
703	NO. 7 P.B. (E)	TYPE 200 S.V. (E)	1(E)	2(E)	130(E)	2 – 72 (E) 12 CDCA (E) 96, 12 CDCA	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
704	TYPE 200 S.V. (E)	NO. 7 P.B. (E)	1(E)	2(E)	600(E)	96, 72	25 PR #22 (RS) 6 PR #22	
704a	TYPE 100 S.V.	NO. 7 P.B. (E)	1	4	10	96, 72	6 PR #22	COIL 72–STRAND FIBER OPTIC CABLE FOR FUTURE CLV EXTENSION
705	NO. 7 P.B. (E)	TYPE 200 S.V. (E)	1(E)	2(E)	755(E)	96, 72	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
706–800 NOT USED								
801	TYPE 200 S.V. (E)	CONTROLLER CABINET (E)	1(E)	2(E)	10(E)	12 CDCA	2 – 25 PR #22 (RS) 2 – 6 PR #22	

REV. NO.	DATE	DESCRIPTION		APPROVED



CHARLESTON BOULEVARD ITS INFRASTRUCTURE

CONDUIT AND WIRE SCHEDULE

REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

CONDUIT & WIRE SCHEDULE								
CONDUIT NO.	FROM	TO	NO.	SIZE (IN)	LENGTH (FT)	FIBER OPTIC CABLE (# OF STRANDS)	CONDUCTOR	REMARKS
802	TYPE 200 S.V. (E)	TYPE 200 S.V. (E)	1(E)	2(E)	600(E)	96, 72	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
803	TYPE 200 S.V. (E)	TYPE 200 S.V. (E)	1(E)	2(E)	20(E)	12 CDCA	2 – 25 PR #22 (RS) 2 – 6 PR #22	
804	TYPE 200 S.V. (E)	CONTROLLER CABINET (E)	1(E)	2(E)	25(E)	12 CDCA	2 – 25 PR #22 (RS) 2 – 6 PR #22	
805	TYPE 200 S.V. (E)	NO. 7 P.B. (E)	1(E)	2(E)	370(E)	96, 72	25 PR #22 (RS) 6 PR #22	
806	NO. 7 P.B. (E)	P30 P.B. (E)	1	4	650	96, 72	6 PR #22	INSTALL NEW CONDUIT BY DIRECTIONAL DRILLING
807–900 NOT USED								
901	P30 P.B. (E)	P30 P.B. (E)	1(E)	4(E)	125(E)	96, 72	6 PR #22	
902	P30 P.B. (E)	TYPE 200 S.V. (E)	3(E)	4(E)	250(E)	72 (E)		
903	P30 P.B. (E)	P30 P.B. (E)	3(E)	4(E)	565(E)	72 (E)		
903a	P30 P.B. (E)	TYPE 200 S.V.	2	4	10	96, 72	6 PR #22	
904	P30 P.B. (E)	P30 P.B. (E)	1(E)	4(E)	210(E)	96, 72	6 PR #22	
905	P30 P.B. (E)	P30 P.B. (E)	1(E)	4(E)	320(E)	96, 72	6 PR #22	
906	P30 P.B. (E)	P30 P.B. (E)	1(E)	4(E)	370(E)	96, 72	6 PR #22	
907	P30 P.B. (E)	P30 P.B. (E)	1(E)	4(E)	120(E)	72 (E) 96, 72	6 PR #22	
907a	P30 P.B. (E)	P30 P.B. (E)	1(E)	4(E)	150(E)	72 (E) 96, 72	6 PR #22	
908	P30 P.B. (E)	P30 P.B. (E)	2(E)	4(E)	80(E)	12 CDCA 96, 72	6 PR #22	
909	TYPE 200 S.V. (E)	P30 P.B. (E)	2(E)	4(E)	140(E)	12 CDCA 96, 72	6 PR #22	
910	P30 P.B. (E)	CONTROLLER CABINET (E)	1(E)	4(E)	10(E)	12 CDCA 12 CDCA		
911	P30 P.B. (E)	P30 P.B. (E)	1(E)	4(E)	440(E)	96, 72	6 PR #22	
912	P30 P.B. (E)	NO. 7 P.B. (E)	1(E)	4(E)	360(E)	96, 72	6 PR #22	
913–1000 NOT USED								
1001	NO. 7 P.B. (E)	P30 P.B. (E)	1(E)	3(E)	210(E)	96, 72	6 PR #22 (RS) 6 PR #22	
1002	P30 P.B. (E)	TYPE 200 S.V. (E)	1(E)	3(E)	110(E)	96, 72	6 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM. COIL 72–STRAND FIBER OPTIC CABLE FOR FUTURE CLV SPLICE
1003	TYPE 200 S.V. (E)	TYPE 200 S.V. (E)	1(E)	4(E)	110(E)	12 CDCA	25 PR #22 (RS) 6 PR #22	
1004	TYPE 200 S.V. (E)	CONTROLLER CABINET (E)	1(E)	2(E)	10(E)	12 CDCA	25 PR #22 (RS)	

(RS) = REMOVE AND SALVAGE EXISTING, (E) = EXISTING

VEHICLE TO INFRASTRUCTURE & TRAVEL TIME EQUIPMENT SCHEDULE			
INTERSECTION	CABINET LOCATION	DSRC/BT (V2I) SPECTRA RSU	BLUETOOTH TT SPECTRA BLUETOAD
DECATUR BOULEVARD	SE CORNER		SE CORNER
VALLEY VIEW BOULEVARD	NE CORNER		NE CORNER
RANCHO DRIVE	SE CORNER	SE CORNER	
UMC/WESTWOOD (PED X–ING)	EB TRAVEL	EB TRAVEL	
SHADOW LANE	SW CORNER	SW CORNER	
SB15 OFF/MLK	NW CORNER	CENTER MEDIAN	
NB15 ON	NE CORNER	CENTER MEDIAN	
NB15/BONNEVILLE	NW CORNER	NW CORNER	

VIDEO DETECTION EQUIPMENT SCHEDULE					
INTERSECTION	EDGE2–4PAK	EDGE2–SDLC–IM–PAK	VRACK5–PS	EDGE2–TS2–IM–PAK	EDGE2–1N–PAK
DECATUR BOULEVARD	INSTALL	INSTALL	–	–	–
ESSEX DRIVE	INSTALL	–	INSTALL	INSTALL	–
ARVILLE STREET	–	INSTALL	–	–	INSTALL
HINSON STREET	INSTALL	INSTALL	–	–	–
VALLEY VIEW BOULEVARD	INSTALL	INSTALL	–	–	–
CAMPBELL DRIVE	INSTALL	INSTALL	–	–	–
RANCHO DRIVE	INSTALL	INSTALL	–	–	–
SHADOW LANE	INSTALL	–	INSTALL	INSTALL	–
COMMERCE STREET	INSTALL	INSTALL	–	–	–

RECORD DRAWINGS
ORIGINALLY STAMPED BY
RANDY W. CARROLL
NO. 16131
FEBRUARY 19, 2019
THESE PLANS HAVE BEEN
ACCEPTED AS RECORD
DRAWINGS. REGIONAL
TRANSPORTATION COMMISSION
OF SOUTHERN NEVADA MAKES
NO CLAIM AS TO THE
COMPLETENESS OR ACCURACY
OF THE INFORMATION SHOWN

PROJECT No: TSC1802 DRAWN BY: JAS
DESIGNED BY: JAS CHECKED BY: JSR
APPROVED BY: _____

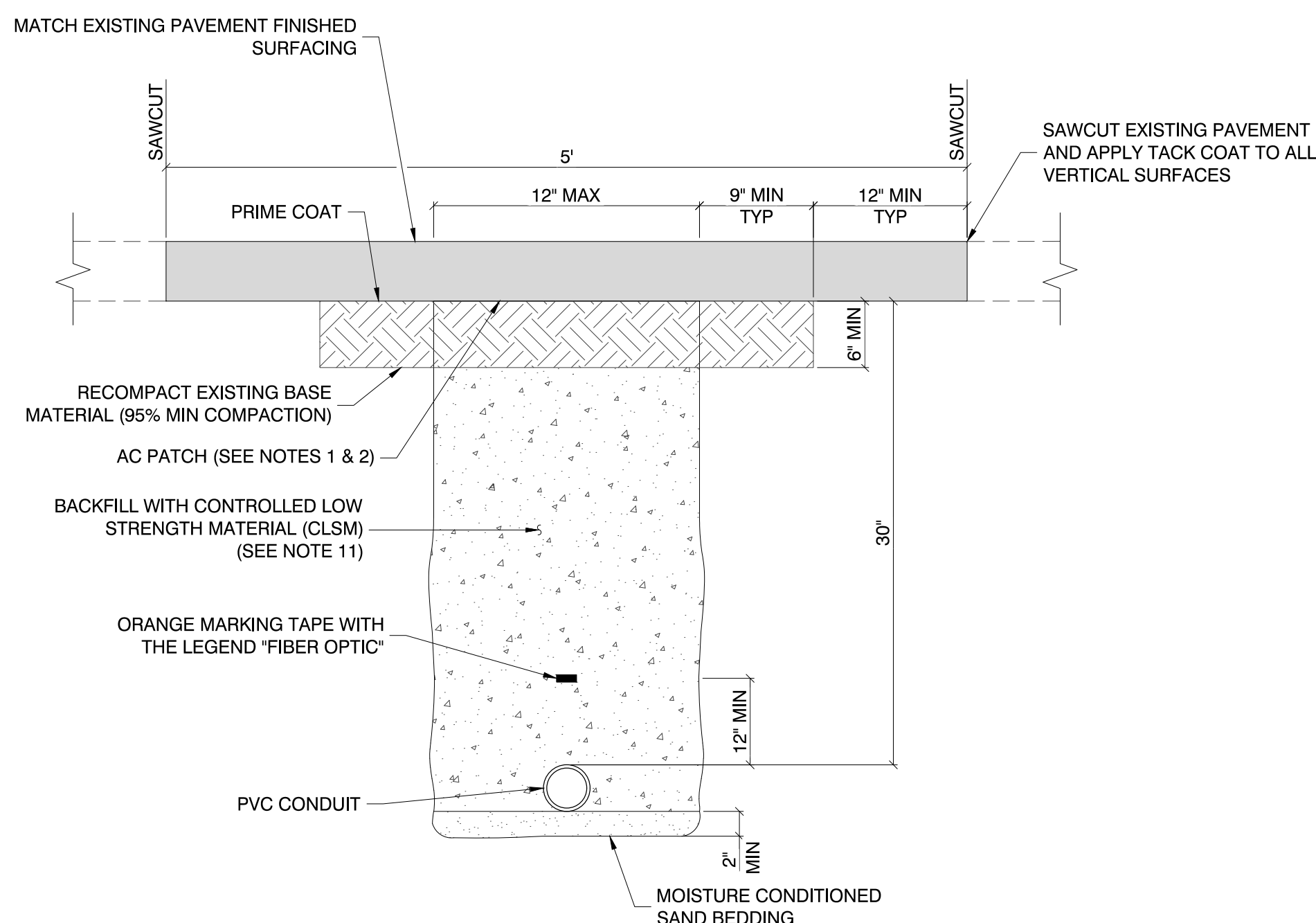
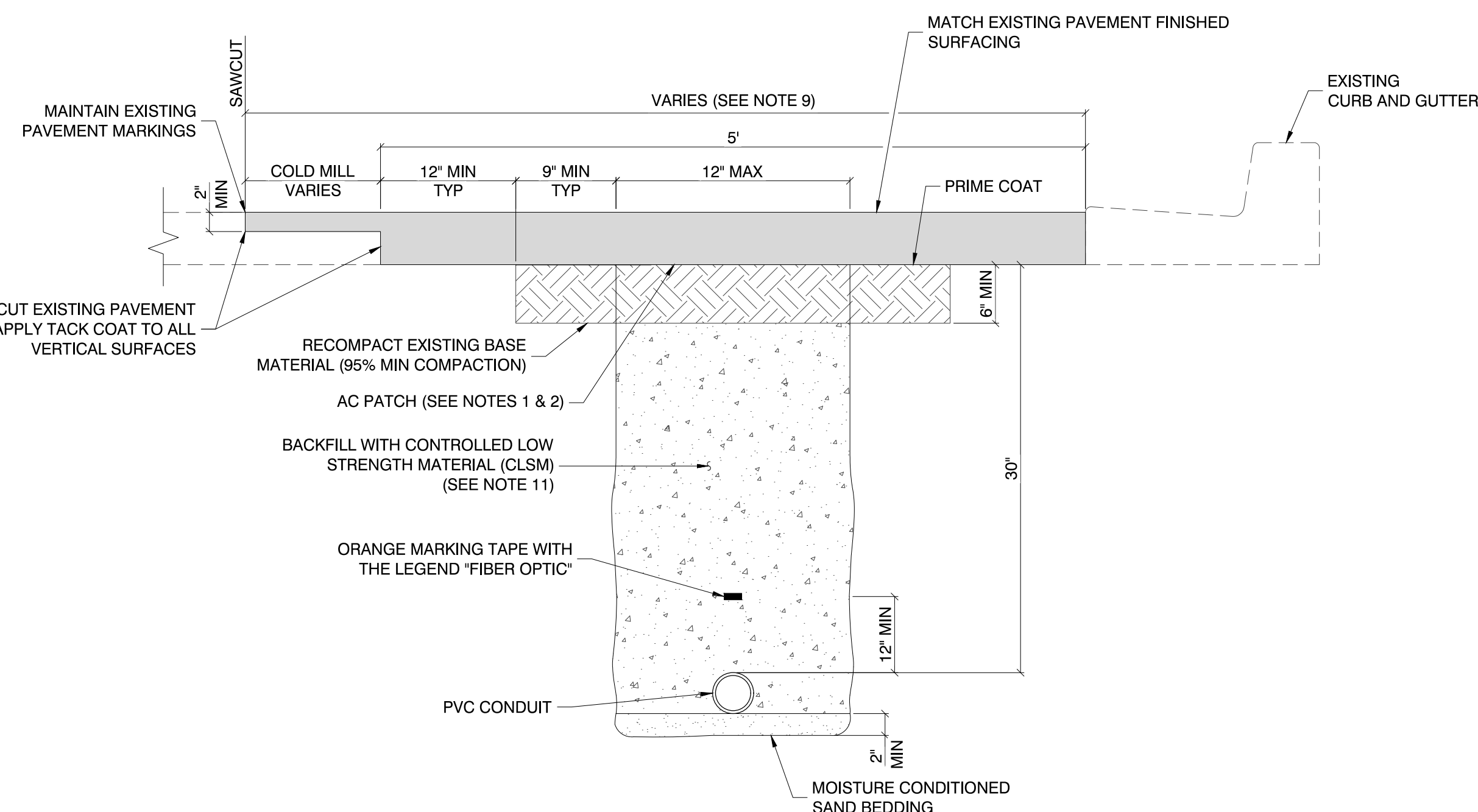
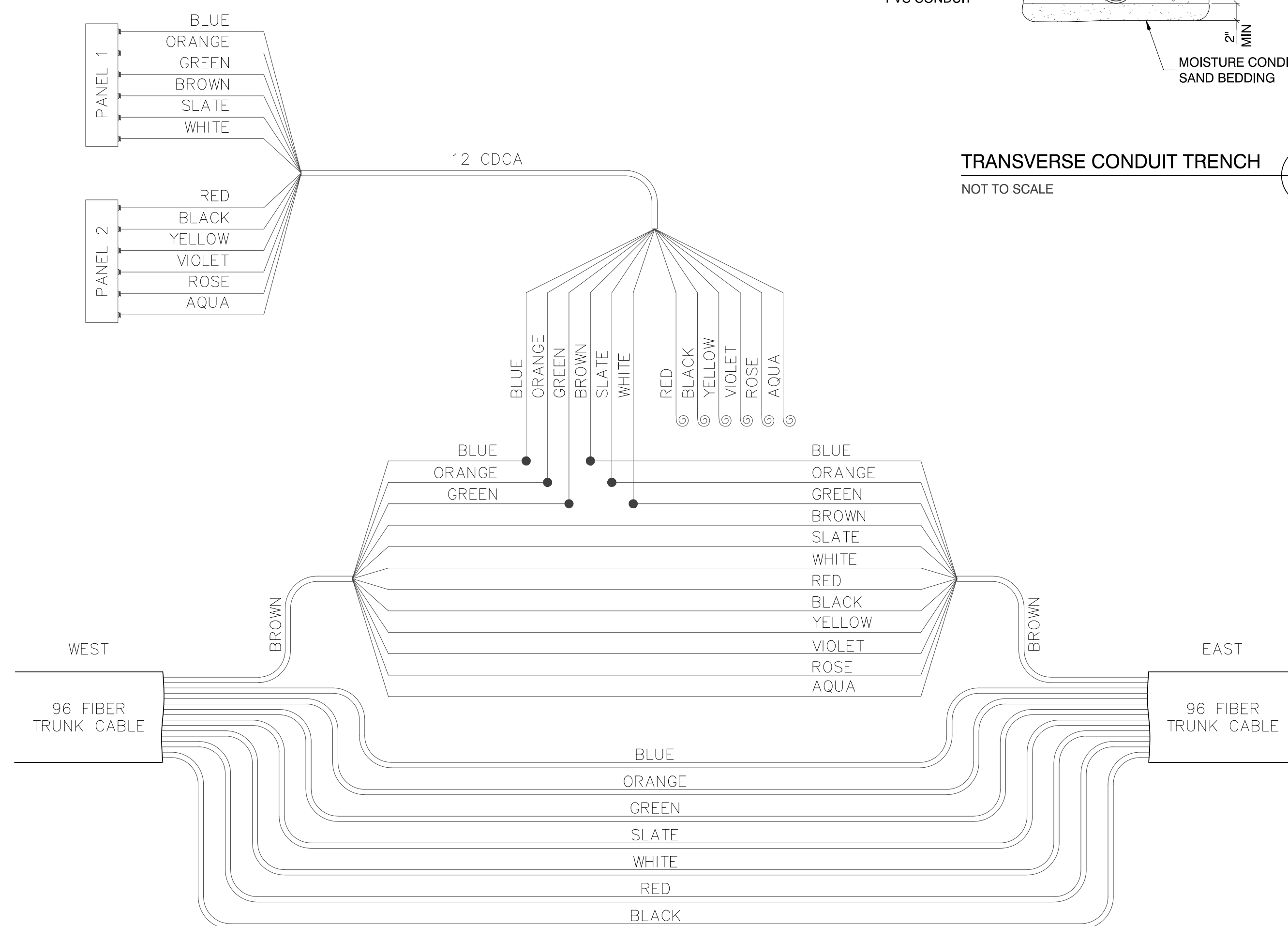
TRANSORE

SLATER HANIFAN GROUP
a Westwood team
2760 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
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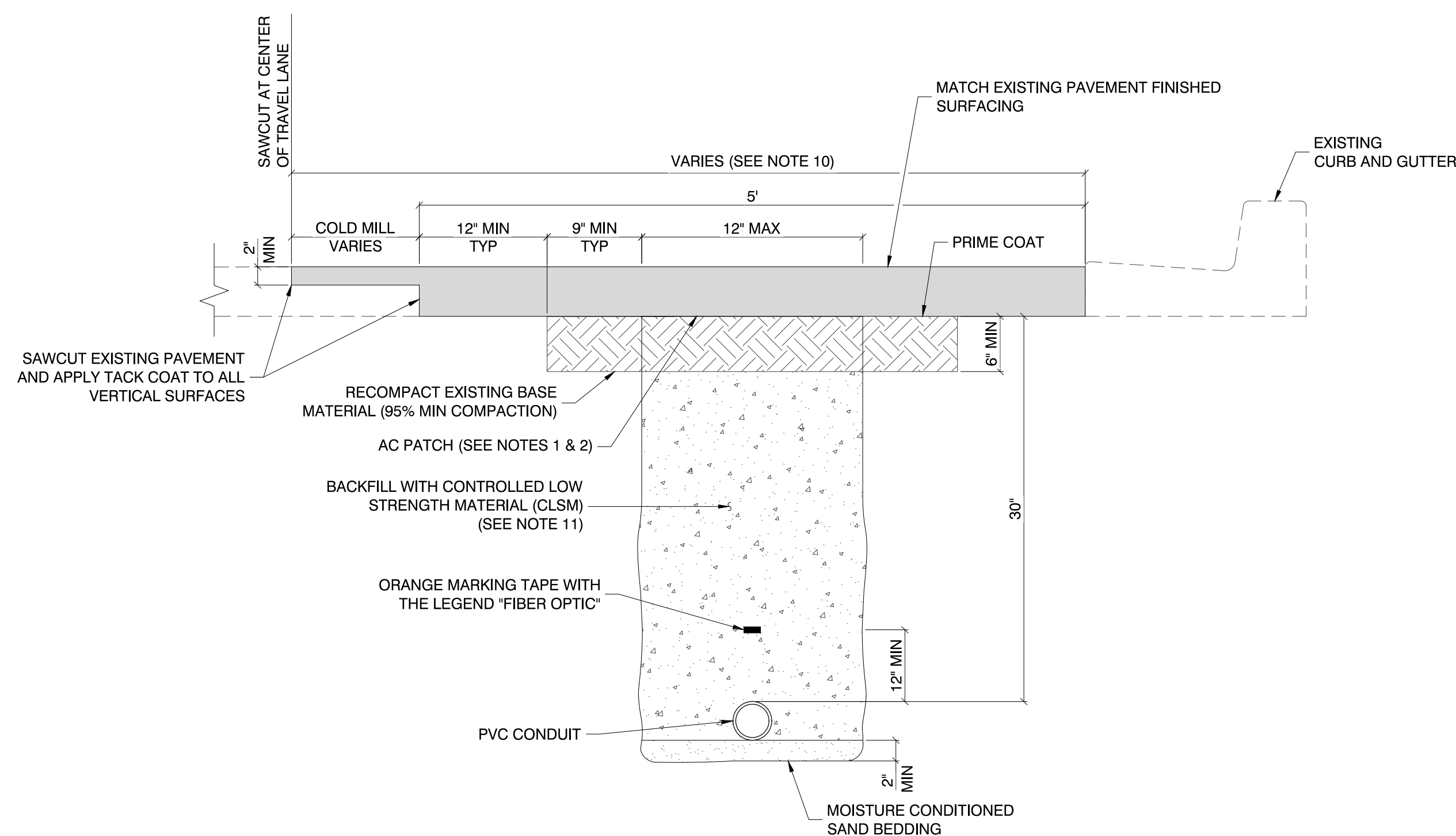
SCALE
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VERT: AS SHOWN
FIELD BOOK

DRAWING NO.
IC–11
SHT. 14 OF 16
L19–00102
107V7664

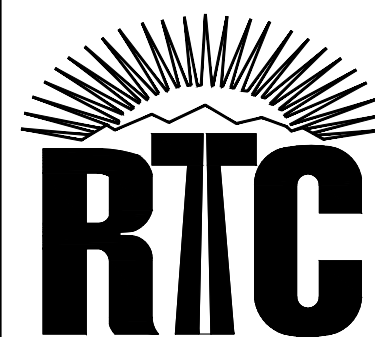
1. DEPTH TO MATCH EXISTING AC PAVEMENT, BUT NOT LESS THAN 4", PLACED IN MULTIPLE LIFTS OF EQUAL THICKNESS.
2. PATCH WIDTH SHALL BE SUFFICIENT TO ACCOMMODATE MECHANICAL PLACEMENT USING AGENCY APPROVED SPREADER BOX OR PAVING MACHINE, ROLLING AND COMPACTION PER UNIFORM STANDARD SPECIFICATION SECTION 401.03.11.
3. IF SAWCUT IS WITHIN 3 FEET OF EDGE OF EXISTING ASPHALT CONCRETE SURFACE OR OTHER PATCH, REMOVE EXISTING PAVEMENT TO THAT EDGE AND REPLACE ENTIRE SECTION.
4. IF 30" COVER IS NOT POSSIBLE, THEN RED CONCRETE ENCASEMENT MIN. 4" ABOVE CONDUIT IS REQUIRED.
5. CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE INSTALLED TO FINAL GRADE FOR TEMPORARY PATCHING.
6. PERMANENT PATCH MIX DESIGN SHALL BE AS REQUIRED BY ENGINEER.
7. NO STONES OR LUMPS GREATER THAN 3" PERMITTED.
8. TRANSVERSE PAVEMENT PATCHES SHALL BE A MINIMUM WIDTH OF 4 FEET.
9. LONGITUDINAL PAVEMENT PATCHES SHALL BE ONE TRAVEL LANE IN WIDTH WITH SAWCUTS MADE AT THE EDGE OF THE TRAVEL LANE, OR THE SHOULDER IF IT IS A PAVED, MARKED SHOULDER, OR THE BIKE LANE IF IT IS A PAVED, MARKED BIKE LANE.
10. LONGITUDINAL PAVEMENT PATCHES WITHIN AREAS TO RECEIVE FUTURE PAVEMENT REHABILITATION (TO BE APPROVED BY AGENCY) SHALL BE TO CENTER OF TRAVEL LANE WITH SAWCUTS MADE AT THE CENTER OF TRAVEL LANE.
11. CONTRACTOR SHALL ENSURE THAT CONDUIT DOES NOT FLOAT OR SHIFT DURING CLSM BACKFILL OPERATIONS.


$$\frac{3}{-}$$

$$\frac{2}{-}$$


CHARLESTON/DECATUR
CHARLESTON/ESSEX
CHARLESTON/ARVILLE
CHARLESTON/HINSON
CHARLESTON/VALLEY VIEW
CHARLESTON/CAMPBELL
CHARLESTON/RANCHO
CHARLESTON/SHADOW


$$\frac{1}{-}$$

REV. NO.	DATE	DESCRIPTION	APPROVED



CHARLESTON BOULEVARD ITS INFRASTRUCTURE
DETAILS
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

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RANDY W. CARROLL
NO. 16131
FEBRUARY 19, 2019

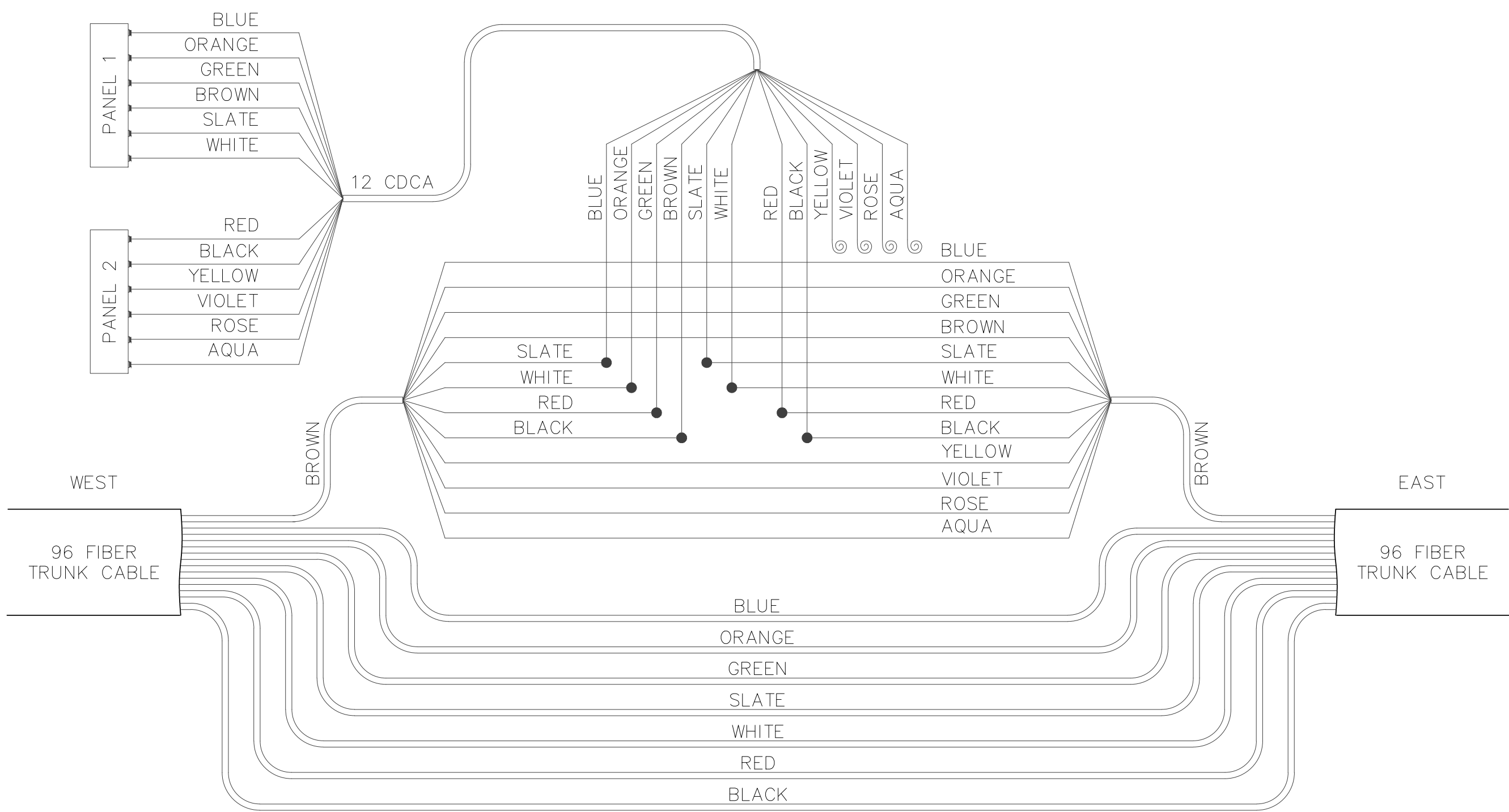
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S-I-E **SLATER
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GROUP**
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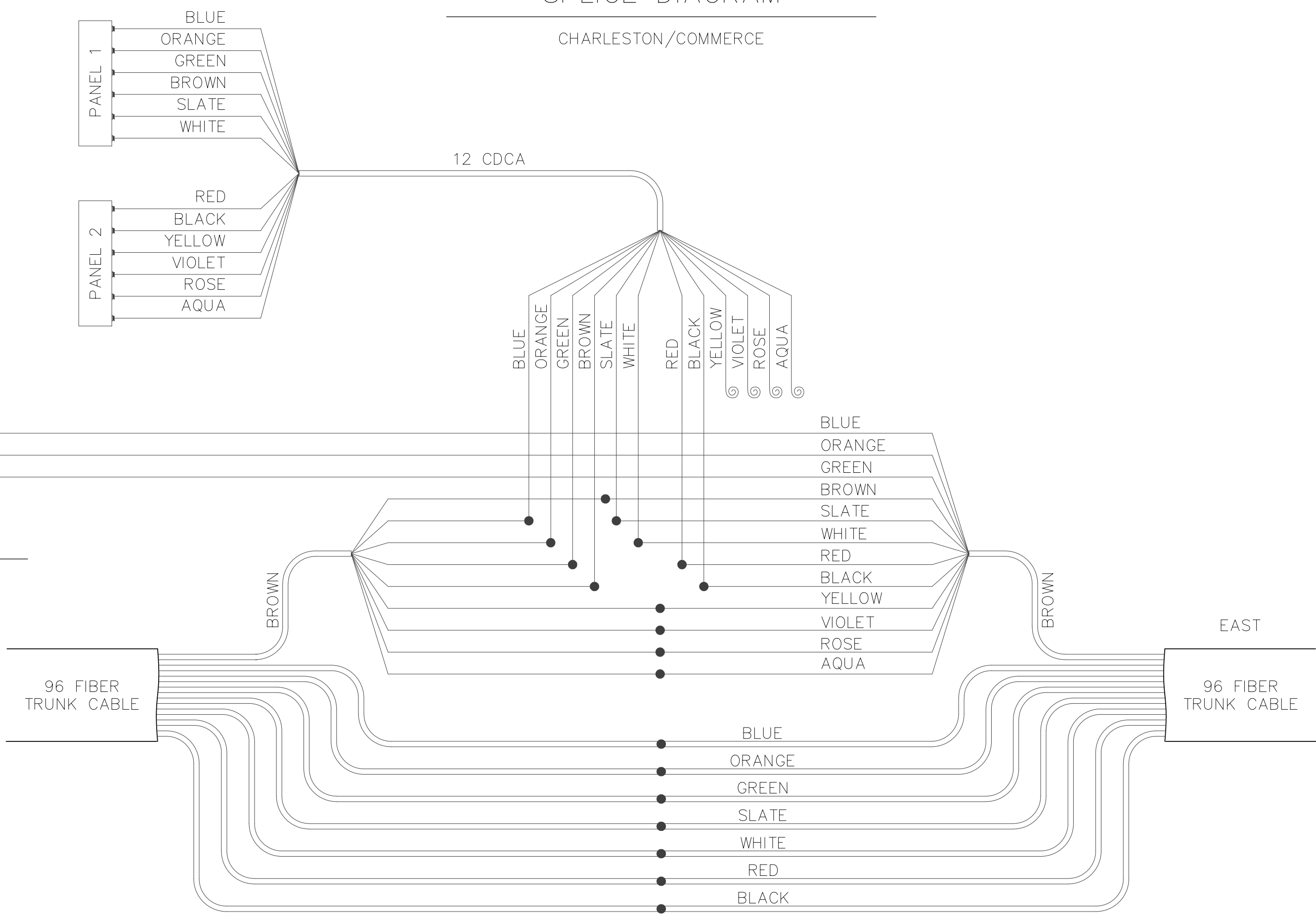
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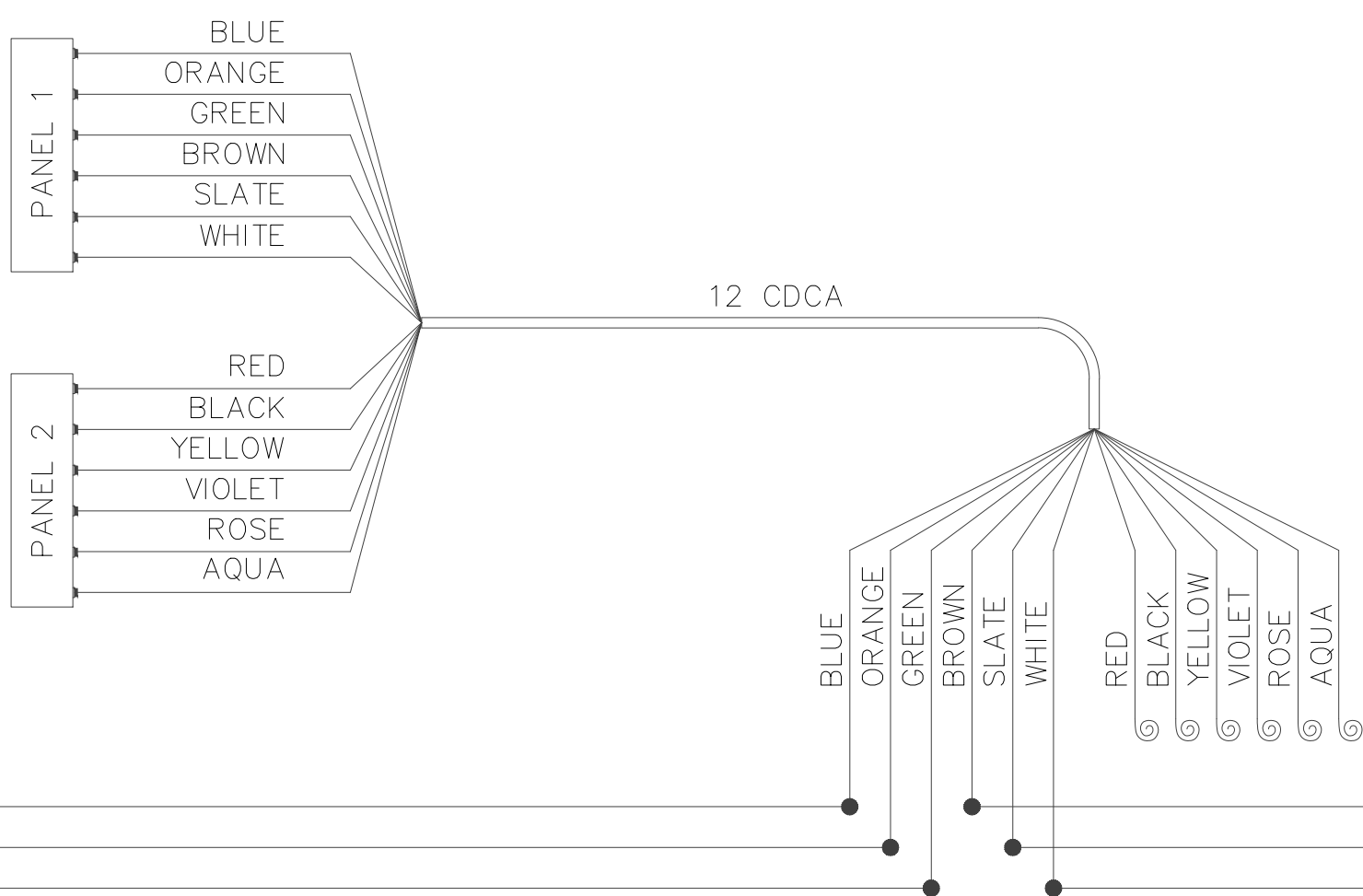
SPLICE DIAGRAM

CHARLESTON/COMMERCE



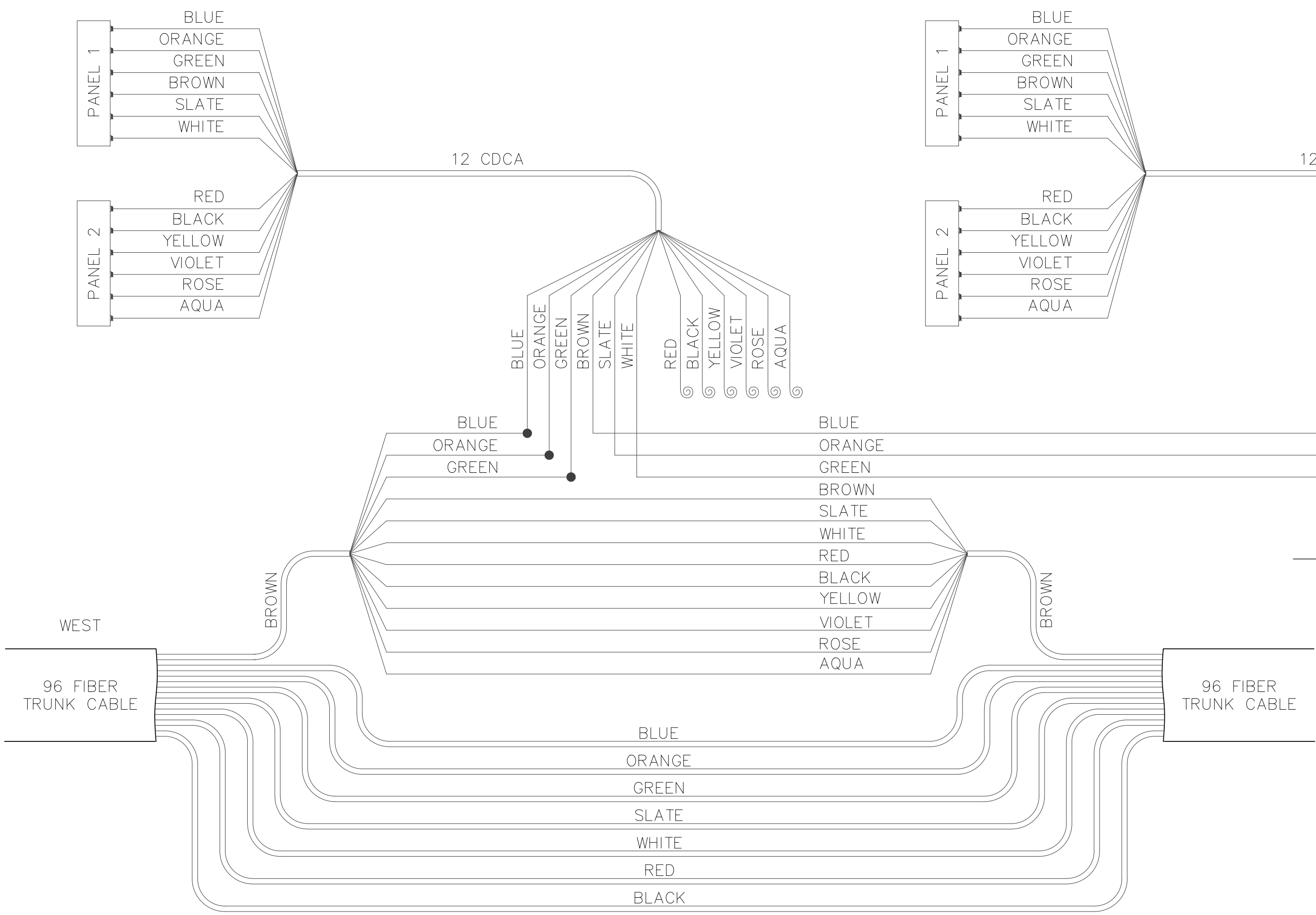
SPLICE DIAGRAM

CHARLESTON/GRAND CENTRAL



SPLICE DIAGRAM

CHARLESTON/E/S OF I-15

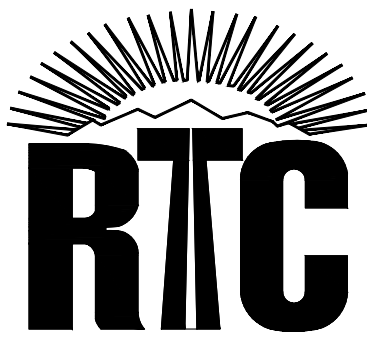


SPLICE DIAGRAM

CHARLESTON/W/S OF I-15

THESE SPLICES
PERFORMED AT GRAND
CENTRAL 200 SPLICE
VAULT

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APPROVED BY: _____
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HORIZ: AS SHOWN	IC-13
VERT: AS SHOWN	SHT. 16 OF 16
FIELD BOOK	L19-00102
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